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April 16, 2020

County of Santa Cruz
Department of Public Works
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701 Ocean Street, Room 410
Santa Cruz, CA 95060

Update: ***Data Submittal Package: Soil Vapor, Groundwater and Soil Sample Results***
- **Expedited Site Characterization for an Imminent Multi-Use Development**

Site: **County of Santa Cruz Redevelopment Parcels**
1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz (see *Location Map*, Figure 1)

1.0 INTRODUCTION

This data submittal package documents our recent 2020 field mobilization (completed April 1-2) and includes summary figures/tables, State-certified laboratory results, and field data (logs and photos). This sampling mobilization was completed in accordance with our February 17th, *Workplan*[(1)] (WHA, 2020a) and follow-up March 20th, *Update*[(2)], which were submitted to the Central Coast Regional Water Quality Control Board. The 2 step approach included:

1. A preliminary screening mobilization that included the collection of 44 passive soil gas samples.
2. A follow-up round of soil, soil gas, and groundwater samples based on the results data obtained from the initial round of passive sample results.

This data package documents field work and laboratory testing of soil gas (active), groundwater and soil samples that were collected to target the approximate lateral limits and potential hot-spot locations of PCE (tetrachloroethylene) recently detected during completion of the initial shallow, passive soil vapor survey. Follow-up sampling (Step 2) was designed to evaluate impacts of an encroaching dry cleaning solvent release that appears to have originated from the adjoining property to the east (see *Site-Vicinity Aerial Map,* Figure 2). The results of the current round of testing further documents on-site conditions, confirms the source of the detected PCE is from the adjoining property, and provides data needed for the design of vapor barriers that will be needed for an imminent, multi-use development project planned.

1: *Workplan link:* *Workplan (Passive Soil Gas & GW), February 17.*

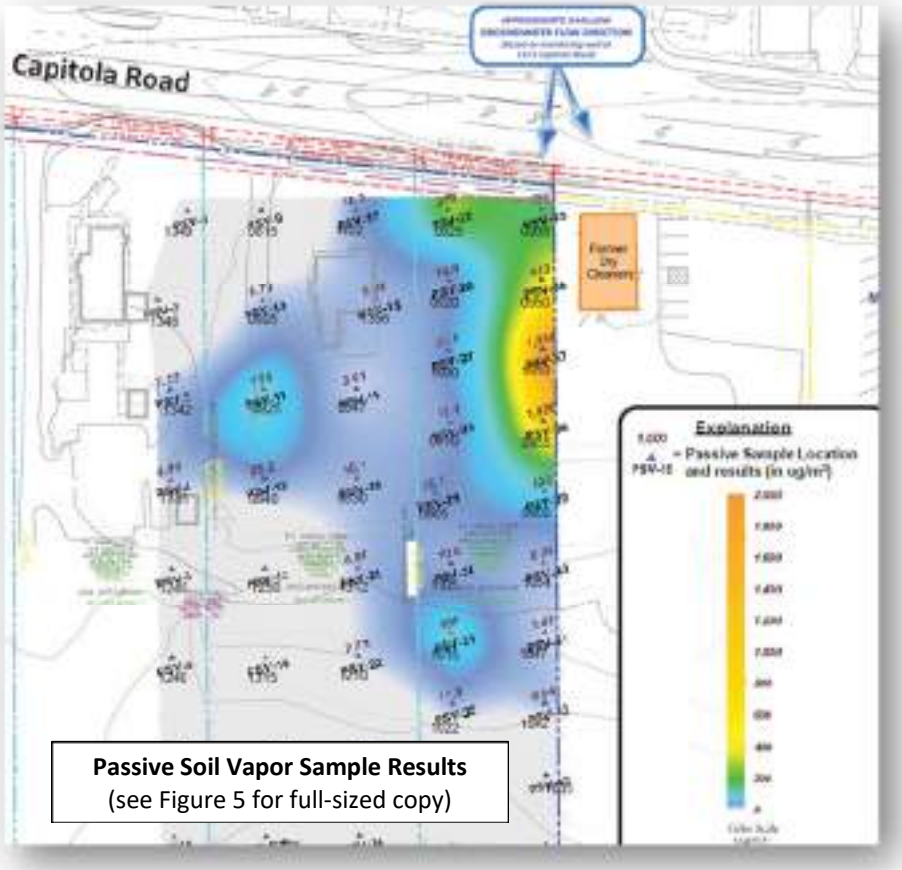
2: Update Link: *Passive Soil Gas Results & Planned Follow-up Sampling, March 20, 2020*.

2.0 BACKGROUND

A recent property screening assessment (RRM, 2020b) was completed in advance of a major redevelopment project that is about to break ground at the 3.7-acre subject site[3]. The property screening consisted of the collection of two (2), shallow soil vapor samples obtained along the northeastern property line, and the lab results contained detected elevated concentrations of the dry cleaning solvent PCE in (see Figure 2). A follow-up review of historic land use at, and in the vicinity of the site indicates the source of the detected property line contamination is from a former dry cleaning business that operated on the adjoining property to the east (i.e., Former Fairway Dry Cleaners, 1600 Capitola Road).

2.1 Passive Soil Gas Screening

On February 25, 2020, forty-four (44) passive soil gas samplers were installed in a grid pattern that extended outward from the property boundary adjoining the former Fairway Dry Cleaners. The passive samples were analyzed by the State-certified testing laboratory for a standard suite of chlorinated solvents by EPA Method 8260, including the dry cleaning solvent PCE and its volatile degradation compounds: Trichloroethene (TCE), cis-1,2-Dichloroethene (DCE), and Vinyl Chloride. The soil gas sample results have been tabulated (Table 1) along with agency-established, health-based threshold limits for commercial and residential land uses (i.e., the *Environmental Screening Levels, ESLs)* (RWQCB-SFB, 2019). The passive soil vapor results are shown on a plan view map (see Figure 5, and clip to the right). The passive sample results indicated the following:



Passive Soil Vapor Sample Results
(see Figure 5 for full-sized copy)

[3]: Grants have been acquired to redevelop the underutilized vacant site into a mixed-use development consisting of a medical clinic (Santa Cruz Community Health Center} and dental office (Dientes), and 56 affordable apartments (residential). Development environmental planning permits are due in April and initial grading earthwork is scheduled for June 2020. The planned building layout is shown on Figure 3.

- The former Fairway Dry Cleaners located along the northeastern property boundary (see Figure 2) appears to be the source of the detected volatile solvents (i.e., **PCE**). The highest concentrations of PCE were detected along the property boundary (PSV-37 : **1,830 ug/m^3**). The agency threshold limits for **commercial and residential land uses are 67 and 15 ug/m3,** respectively.
- The grid of shallow passive soil sampling data indicates that concentrations of all chlorinated solvents drop off (attenuate) as you move westward on the property. This preliminary screening suggested the extent of elevated PCE concentrations are somewhat limited in extent (see Figure 5).

3.0 CURRENT FIELD WORK AND LABORATORY RESULTS

The follow-up, sampling mobilization (Step 2) was completed on April 1-2. Field documentation is contained in Appendix A, which includes drilling logs, photos, observation notes and sampling protocols. The groundwater, soil vapor and discrete soil samples were collected to evaluate the following:

3.1 PCE Plume Encroachment (Figure 4, Table 3):

Six (6) groundwater samples (GW-1 through GW-6) were collected to define the limits of dissolved solvent compounds (i.e., the PCE-impacted groundwater plume) that could potentially be an off-gassing source for elevated PCE concentrations detected in shallow, passive soil vapor samples.

Groundwater was encountered at depths of approximately 22 to 26 feet below ground surface and is assumed to flow in the south-southeast direction based on nearby monitoring network measurements. The solvent detections in groundwater are presented on Figure 4 and Table 3. In addition, Figure 4 presents an approximate footprint of the 100-ug/L concentration, dissolved PCE plume. Note: the agency threshold limit for a potential drinking water resource is 5 ug/L, and the ESL threshold for potential off-gassing of PCE-impacted groundwater to soil is a concentration of 0.64 ug/L (see Table 3).

Dissolved concentrations in groundwater (i.e., the PCE plume) acts like a tracer and can be used to find the source of a contaminant release. The shape of the plume (Figure 4) suggests that the source of the PCE release is the adjoining property to the east where a dry cleaner business formerly operated.

3.2 Soil Vapor Encroachment (Figure 6, Table 2)

Active soil gas samples were collected on April 1st to help calibrate the preliminary sample results obtained in February (i.e., the shallow, passive soil sample results). Subsurface soil vapor was acquired using laboratory-provided, vacuum sample cannisters that “actively” extracted soil vapors from targeted depths of 5-feet and 15-feet below ground surface (photos in Appendix A). Figure 6 presents a plan view of the site, sample locations, and analytical results. Figures 7a and 7b present separate plan view, isocontour maps of PCE concentrations detected at 5- and 15-foot sample depths, respectively.

Comparing the concentration changes in soil gas concentrations from across the site at the two (2) depths at (i.e., 5- and 15-foot) provides insight regarding the likely source of detected PCE contamination. The Isocontour maps provide the following information:

1) Shallow soil gas sample results (Figure 7a) suggest the former dry cleaner building, located just across the northeast property boundary is the source for elevated PCE concentrations detected in shallow (5-foot) vapor samples. And,

2) Elevated concentrations detected in the deeper, 15-foot soil gas samples (Figure 7b), suggest the encroaching, dissolved PCE plume (described in Section 3.1, above) is a significant, secondary source of PCE (i.e., off-gassing from the dissolved PCE plume). Note: much higher PCE concentrations were detected in a majority of the deeper sample locations (i.e., SV-3, -4, -5, and -6, Figure 6).

3.3 Soil Sampling Results (Table 4)

Soil samples were collected from six (6) locations to evaluate whether there are any detections of solvent concentrations that would be indicative of an on-site source. A total of twenty-two (22) soil samples were laboratory analyzed and tested for volatile contaminant compounds including chlorinated solvents (i.e., PCE), and fuel constituents (i.e., Benzene). Samples for testing were acquired:

- At shallow depths (3-ft below ground surface) to determine if a near surface source of PCE was present at each soil core location (sample locations shown on Figure 4).
- Generally, at the interface of a lithological change from shallow clayey sand to a silty sand (4.5-to-6 feet below ground surface).
- At an intermediate depth (12-feet below ground surface). And
- At the groundwater interface.

Table 4 shows that some elevated PCE concentrations were detected in shallow soils collected at the property boundary immediately adjacent to the former dry cleaner building (i.e., sample locations SS3 and GW-5).

4.0 CONCLUSION AND RECOMMENDATION

Elevated concentrations, primarily as the volatile solvent compound PCE, were detected in groundwater and soil vapor (shallow and deep detections). Collected data indicates the source of the contamination is from the adjoining property to the east where a dry cleaning business formerly operated in the existing building that currently houses a laundromat (1600 Capitola Road). Based on the results of this assessment:

1) This data package should be forwarded to the Regional Water Quality Control Board, Central Coast Region (RWQCB-CC) as the overseeing agency so the agency can notify the adjoining

property owner of site conditions and direct them to take responsibility for the characterization and cleanup of the PCE release.

2) This data package will provide the basis for vapor barrier abatement that can be designed to be protective of future commercial and residential occupants. Based on soil vapor concentrations detected, this vapor barrier mitigation will be required for any residential or commercial development of the site and abatement design specifications should be forwarded to the RWQCB-CC for their review and approval.

Limitations: Our service consists of professional opinions and recommendations made in accordance with generally accepted geologic and engineering principles and practices. This warranty is in lieu of all others, either express or implied. The analysis and conclusions in this report are based on sampling and testing which are necessarily limited. Additional data from future work may lead to modification of the opinions expressed herein. If you have any questions regarding this report, or any aspect of this project, please contact us at (831) 722-3580.

Sincerely,

WEBER, HAYES AND ASSOCIATES

By _____

Pat Hoban, PG
Principal Geologist

Figure 1: Location Map (topographic)
Figure 2: Vicinity Map (aerial)
Figure 3: Site Map with Sample Locations
Figure 4: Groundwater Sample Results (w/ dissolved PCE plume)
Figure 5: Passive Soil Vapor Survey Results
Figure 6: Active Soil Vapor Results
Figure 7: a) Isocontour Map of 5-ft Soil Vapor Detections
b) Isocontour Map of 15-ft Soil Vapor Detections

Table 1: Passive Soil Vapor Sample Results
Table 2: Active Soil Vapor Sample Results
Table 3: Groundwater Sample Results
Table 4: Discrete Soil Sample Results

Appendix A: Field Documentation (Observations, Logs, Photos & Methodology)
Appendix B: State Certified Laboratory Reports (Soil, Soil Vapor & Groundwater Analysis)

REFERENCES

California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB-SFB):

- (CRWQCB-SFB, 2019) guideline document: "Screening for Environmental Concerns at Sites with Contaminated Soil and *Groundwater*", Final January.
  - *https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html*

California Regional Water Quality Control Board, Central Coast Region (RWQCB-CC):

- (GeoTracker, SC-Development Properties): *GeoTracker (agency) archive of site-specific reports for the 1412, 1438, 1500 and 1514 Capitola Road properties, are at:*
  - *https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T10000014098*

Earth Systems report regarding (1412, 1438, 1500, and 1514 Capitola Road:

- (Earth Systems, 2018), *Revised Geotechnical Engineering Report*, October 24.

Remediation Risk Management, Inc. (RRM) reports regarding 1412, 1438, 1500, and 1514 Capitola Road:

- (RRM, 1994): *Remedial Action Summary Report for 1438 Capitola Road,* October 3.
- (RRM, 2020a): *Phase I Environmental Site Assessment (ESA),* January 6.
  - *https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/7879534065/2020.01.06%20Phase%20I%20ESA%20(17th%20&%20Capitola%20Rd)%20(RRM).pdf*
- (RRM, 2020b): *Limited Soil Vapor Investigation (Phase II),* January 20.
  - *https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/1517800450/2020-01-24_Phase%202%20Vapor%20(Draft)%20(RRM).pdf*

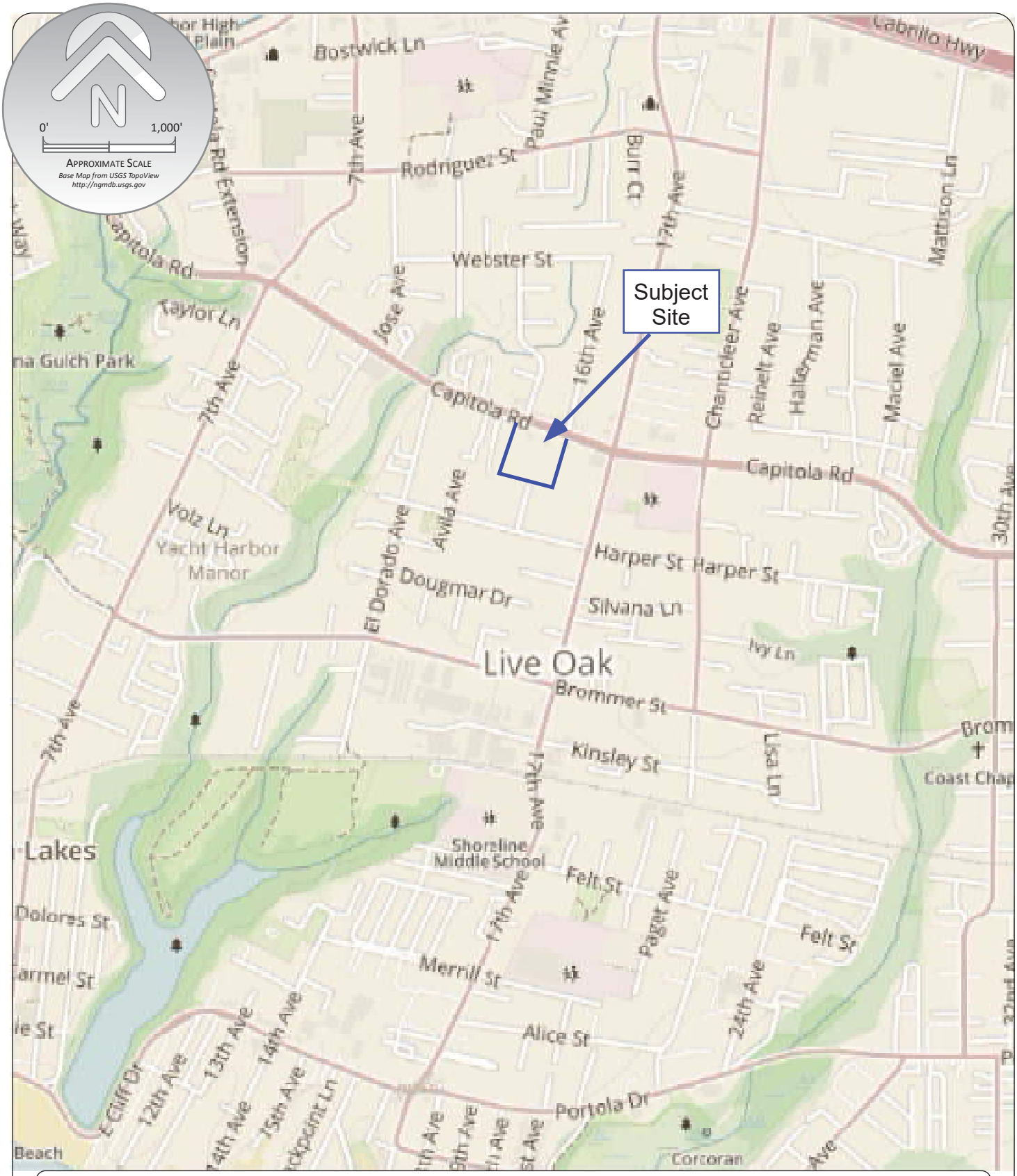
Reports summarizing the Live Oak Texaco fuel leak case (1990-2012) at 1671 Capitola Road:

- (AES, 2012): A+ Environmental Solutions report: *Groundwater Monitoring Report & Request for Case Closure, May 18.*
- (Clearwater Group, 2011): *Site Conceptual Model (SCM) Report,* June
- (GeoTracker, Texaco): *Geotracker Archive of site-specific reports for this fuel leak site are at:*
  - *https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0608700286*

Weber, Hayes and Associates (WHA) reports for 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz:

- (WHA, 2020a): *Workplan – Expedited Site Characterization for an Imminent Multi-use Redevelopment,* Feb 17.
  - *https://drive.google.com/open?id=182qjxlPfFHPRDrzmWrDbf3YC3lVRQFEo*
- (WHA, 2020b): *Update: Passive Soil Gas Sample Results & Planned Follow-up Sampling,* Mar-20.
  - *https://documents.geotracker.waterboards.ca.gov/regulators/deliverable_documents/9783261954/2020-03-20%20Update%20to%20Workplan.pdf*

Figures



Location Map

Supplemental Property Screening Assessment

Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz

Date: April 2020

Revisions/Notes:

FIGURE 1
Project 2t009

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Vicinity Map

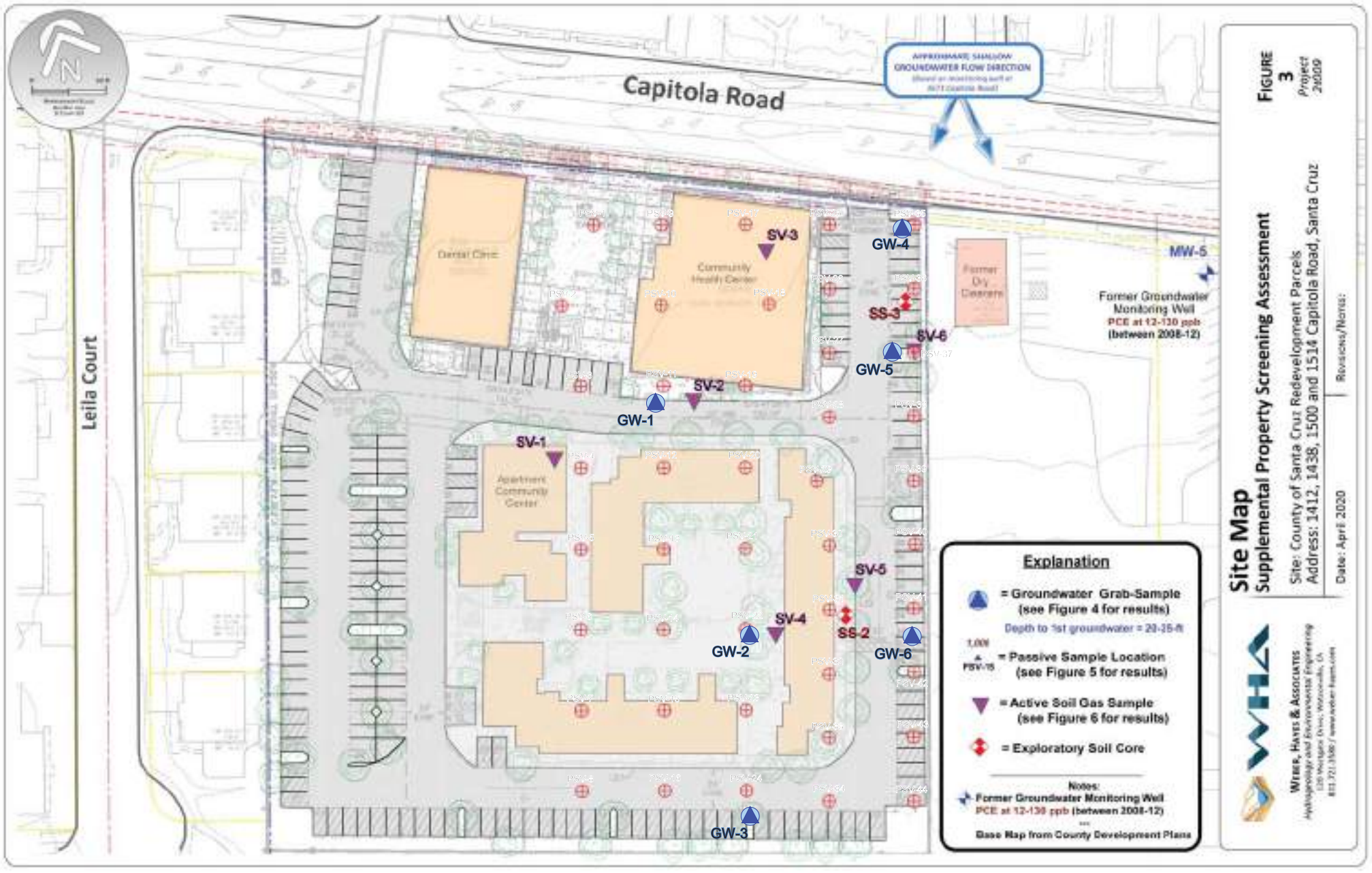
Supplemental Property Screening Assessment

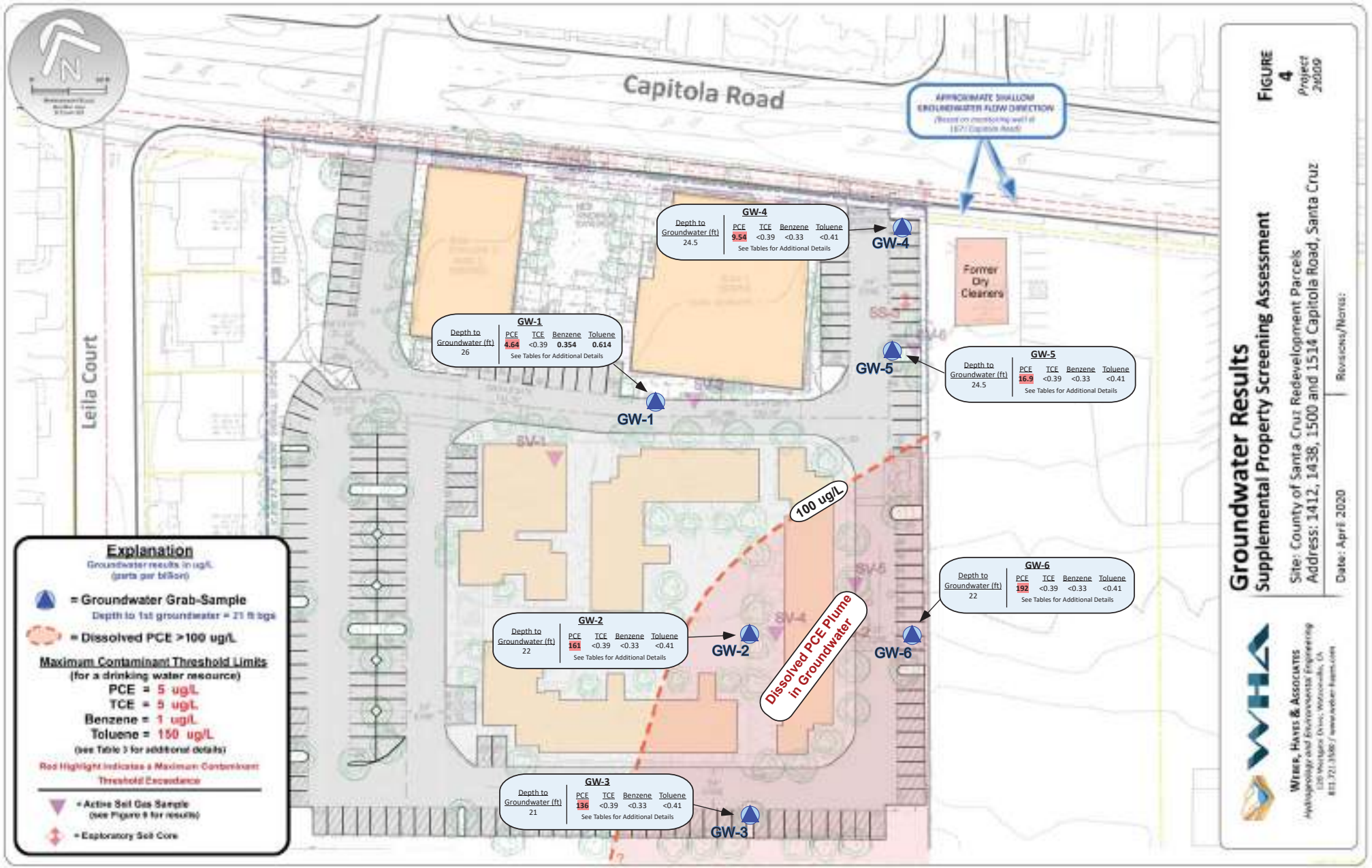
Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz

Date: April 2020

REVISIONS/NOTES:

FIGURE 2
Project 2t009


Capitola Road
Leila Court
APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
Dental Clinic
Community Health Center
Apartment Community Center
Former Dry Cleaners
GW-1
GW-2
GW-3
GW-4
GW-5
GW-6
SV-1
SV-2
SV-3
SV-4
SV-5
SV-6
SS-2
SS-3
MW-5
Former Groundwater Monitoring Well
PCE at 12-130 ppb (between 2008-12)
Explanation
= Groundwater Grab-Sample (see Figure 4 for results)
Depth to 1st groundwater = 28-35-ft
= Passive Sample Location (see Figure 5 for results)
= Active Soil Gas Sample (see Figure 6 for results)
= Exploratory Soil Core
Notes:
Former Groundwater Monitoring Well PCE at 12-130 ppb (between 2008-12)
Base Map from County Development Plans
Site Map
Supplemental Property Screening Assessment
Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz
Date: April 2020
Revisions/Notes:
FIGURE 3
Project 2009
WEBER, HAYES & ASSOCIATES



Groundwater Results
Supplemental Property Screening Assessment

Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz

Date: April 2020 | Revisions/Notes:

FIGURE 4
Project 2009

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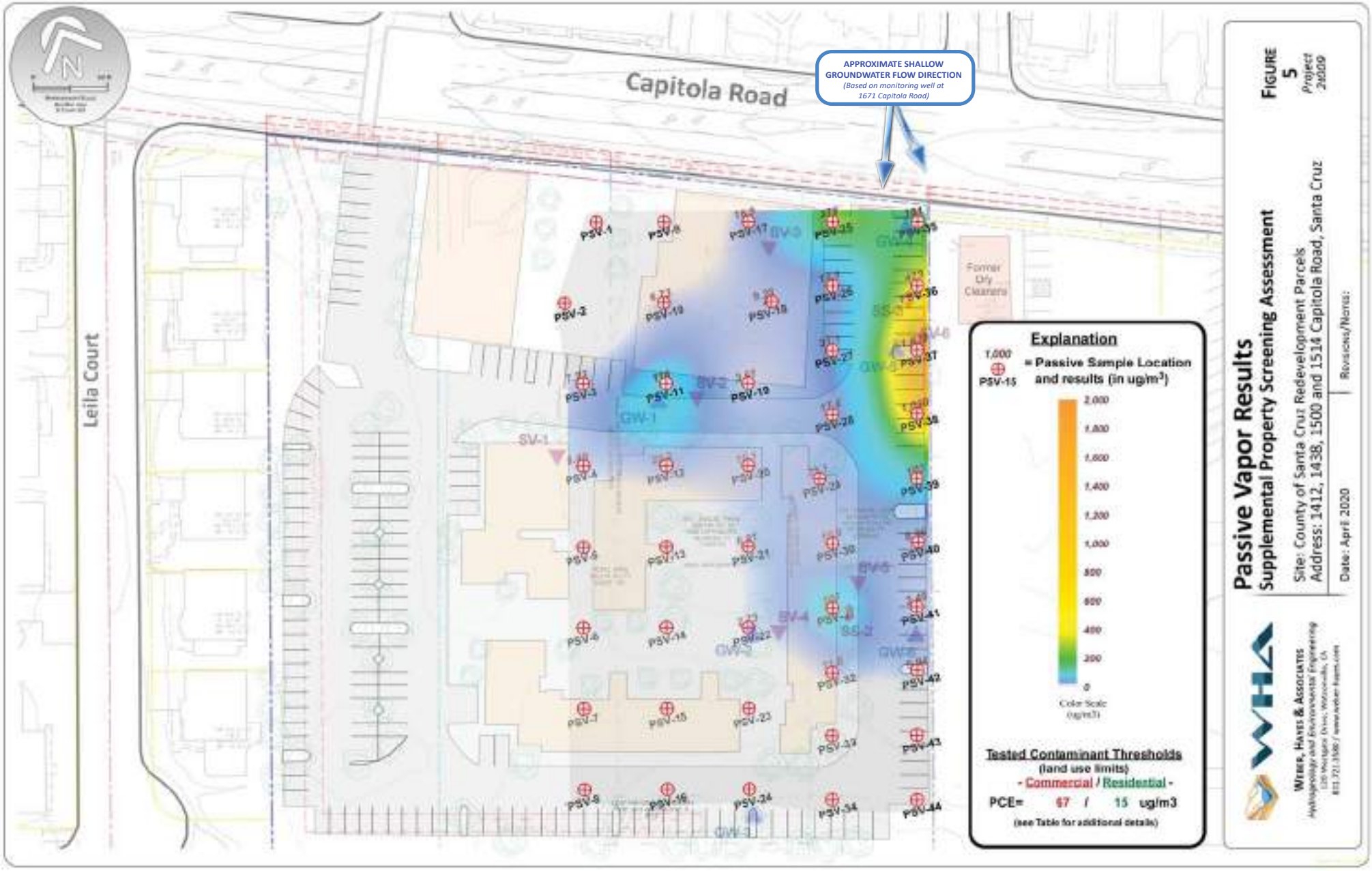

Passive Vapor Results
Supplemental Property Screening Assessment

Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz

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FIGURE 5
Project 2009

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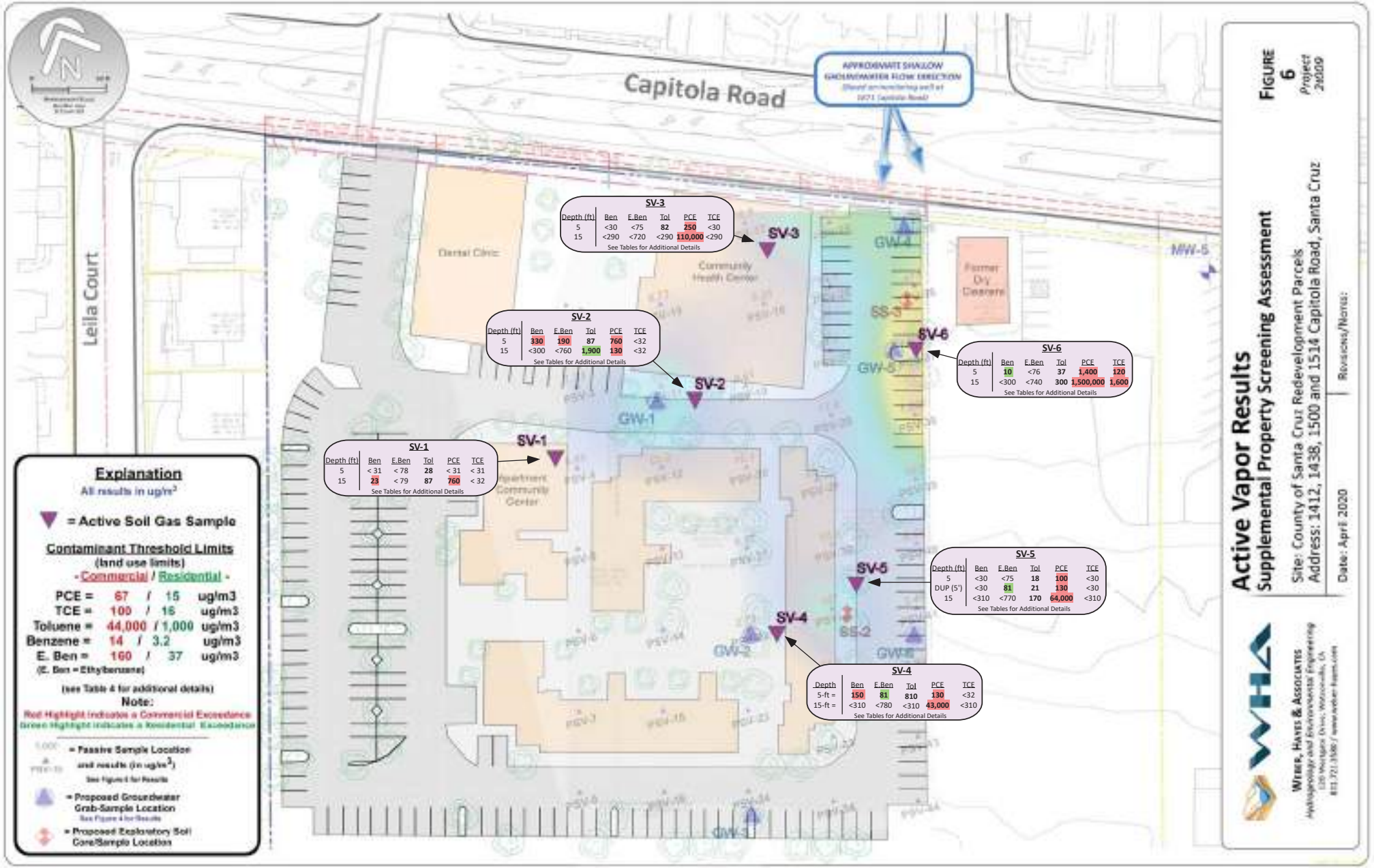

Active Vapor Results
Supplemental Property Screening Assessment

Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz

Date: April 2020

Revisions/Notes:

FIGURE 6
Project 2499

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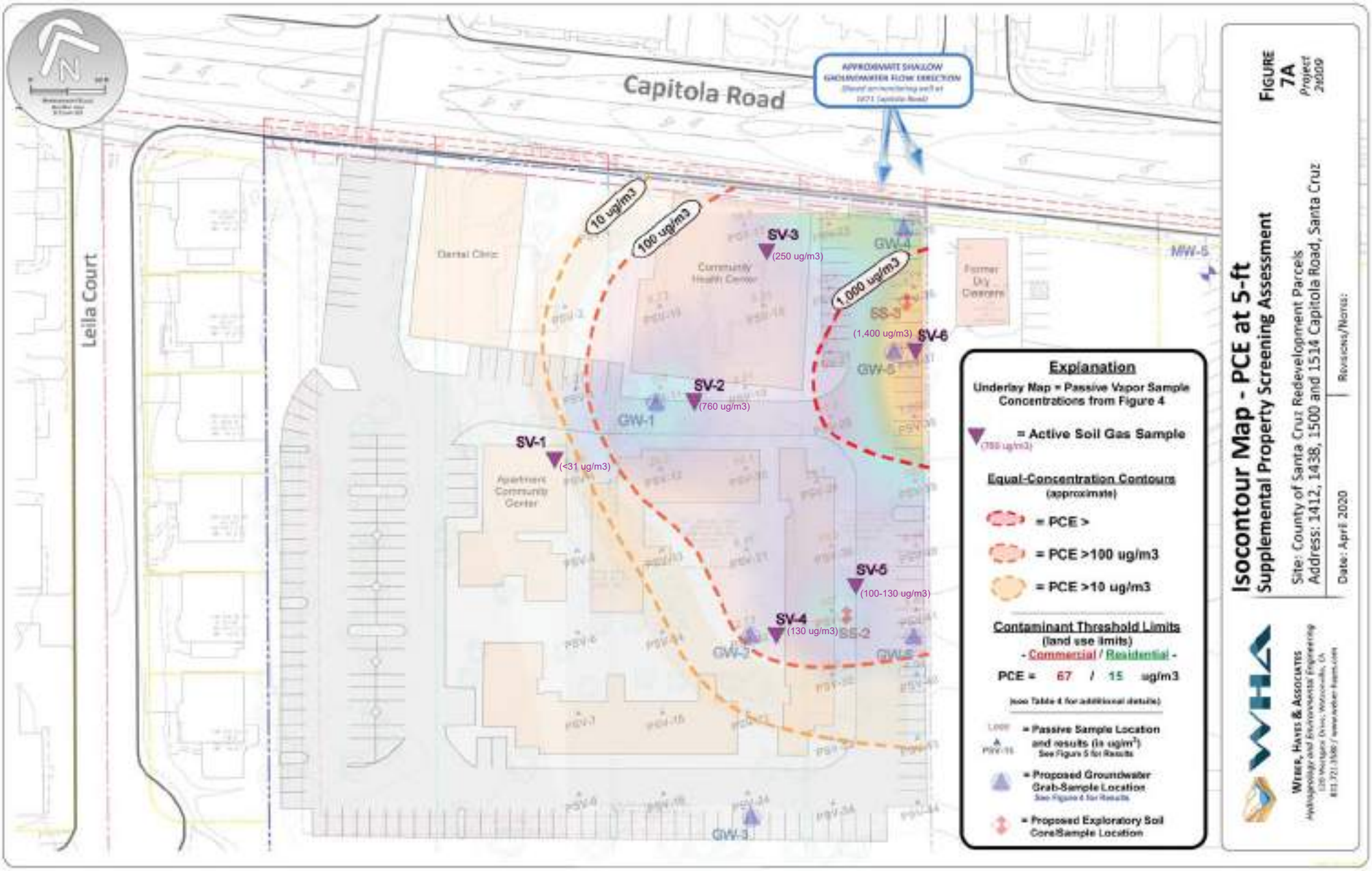
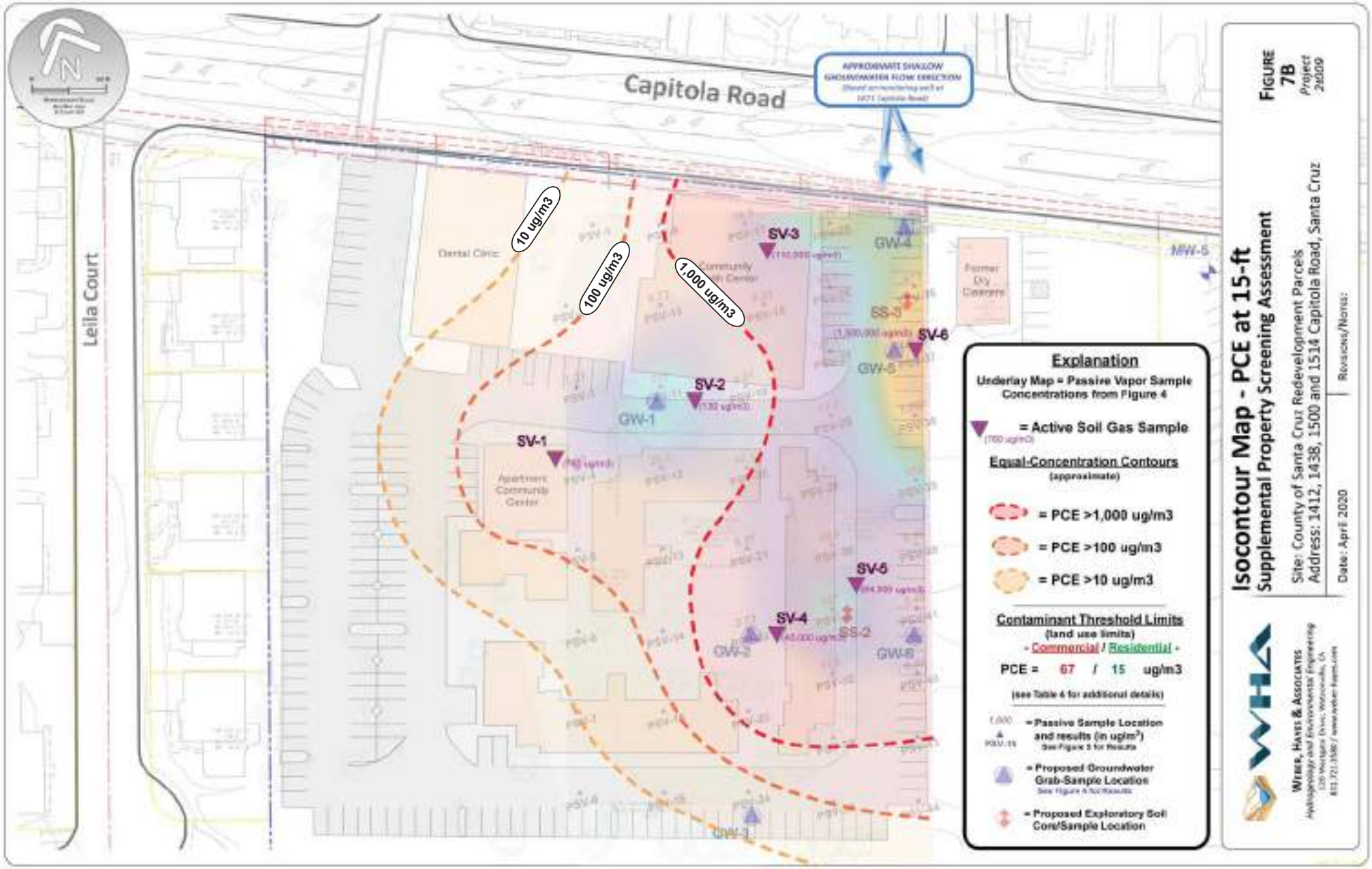

Capitola Road
Leila Court
APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
10 ug/m3
100 ug/m3
1,000 ug/m3
SV-1
(<31 ug/m3)
SV-2
(760 ug/m3)
SV-3
(250 ug/m3)
SV-4
(130 ug/m3)
SV-5
(100-130 ug/m3)
SV-6
(1,400 ug/m3)
GW-1
GW-2
GW-3
GW-4
GW-5
SS-2
SS-3
MW-5
Dental Clinic
Community Health Center
Former Dry Cleaners
Apartment Community Center
Explanation
Underlay Map = Passive Vapor Sample Concentrations from Figure 4
= Active Soil Gas Sample
Equal-Concentration Contours
(approximate)
= PCE >
= PCE >100 ug/m3
= PCE >10 ug/m3
Contaminant Threshold Limits
(land use limits)
- Commercial / Residential -
PCE = 67 / 15 ug/m3
(see Table 4 for additional details)
= Passive Sample Location and results (is ug/m3)
See Figure 5 for Results
= Proposed Groundwater Grab-Sample Location
See Figure 6 for Results
= Proposed Exploratory Soil Core/Sample Location
FIGURE 7A
Project 24009
Isocontour Map - PCE at 5-ft
Supplemental Property Screening Assessment
Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz
Date: April 2020
Revisions/Notes:
WHA
Wyeth, Hayes & Associates


Capitola Road
Leila Court
APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
Based on monitoring well set at 1621 Capitola Road
10 ug/m3
100 ug/m3
1,000 ug/m3
Dental Clinic
Community Center
Apartment Community Center
Former Dry Cleaners
SV-1
SV-2
SV-3
SV-4
SV-5
SV-6
GW-1
GW-2
GW-3
GW-4
GW-5
GW-6
SS-2
SS-3
MW-5
Explanation
Underlay Map = Passive Vapor Sample Concentrations from Figure 4
= Active Soil Gas Sample
Equal-Concentration Contours
(approximate)
= PCE >1,000 ug/m3
= PCE >100 ug/m3
= PCE >10 ug/m3
Contaminant Threshold Limits
(land use limits)
- Commercial / Residential -
PCE = 67 / 15 ug/m3
(see Table 4 for additional details)
= Passive Sample Location and results (in ug/m3)
See Figure 5 for Results
= Proposed Groundwater Grab-Sample Location
See Figure 6 for Results
= Proposed Exploratory Soil Core/Sample Location
FIGURE 7B
Project 2x009
Isocontour Map - PCE at 15-ft
Supplemental Property Screening Assessment
Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz
Date: April 2020
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Tables

Table 1

Passive Soil Gas Sampling

Volatile Dry Cleaning Solvent Compound Testing Results

Seven Day Sampling Event (February 25-March 3, 2020)

1412-1514 Capitola Road
Santa Cruz

Sample Information		*Laboratory Analytical Results* *All soil vapor results are in ug/m³*								
Sample ID	*Sample Depth (feet below ground surface)*	*PCE (Tetrachloroethene)*	*TCE (Trichloroethene)*	*Dichloroethene (DCE)*		*Vinyl Chloride*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*
				cis-1,2-DCE	*trans-1,2-DCE*					
PSV-1	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	4.76	<6.05	<2.99	<2.88
PSV-2	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	2.56 J	26.6	<2.99	<2.88
PSV-3	3 ft	7.23	<2.92	<1.84	<2.25	<1.29	6.74	17.3	<2.99	<2.88
PSV-4	3 ft	6.49	<2.92	<1.84	<2.25	<1.29	3.62 J	<6.05	<2.99	<2.88
PSV-5	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	4.58 J	<6.05	<2.99	8.38
PSV-6	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	4.31 J	<6.05	<2.99	12.68
PSV-7	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	3.08 J	<6.05	<2.99	<2.88
PSV-8	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	2.98 J	<6.05	<2.99	<2.88
PSV-9	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-10	3 ft	6.73	<2.92	<1.84	<2.25	<1.29	3.37 J	<6.05	<2.99	<2.88
PSV-11	3 ft	118	5.58	<1.84	<2.25	<1.29	7.26	10.9	<2.99	<2.88
PSV-12	3 ft	25.2	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-13	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-14	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	11	<2.99	<2.88
PSV-15	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-16	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	3.61 J	<6.05	<2.99	<2.88
PSV-17	3 ft	18.9	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-18	3 ft	9.28	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-19	3 ft	3.61	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-20	3 ft	10.1	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-20-dup	3 ft	10.8	<2.92	<1.84	<2.25	<1.29	1.91 J	<6.05	<2.99	<2.88
PSV-21	3 ft	6.91	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-22	3 ft	2.73	<2.92	<1.84	<2.25	<1.29	1.90 J	<6.05	<2.99	<2.88
PSV-23	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	3.16 J	<6.05	<2.99	<2.88
PSV-24	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	3.54 J	<6.05	<2.99	<2.88
PSV-25	3 ft	378	19.7	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-26	3 ft	18.8	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-27	3 ft	31.1	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-28	3 ft	17.4	<2.92	<1.84	<2.25	<1.29	1.95 J	<6.05	<2.99	<2.88
California DTSC-Modified Soil Gas Levels [2] Residential / Commercial Land Use		15 / 67	16 / 100	280 / 1,200	2,800 / 12,000	0.32 / 5.2	3.2 / 14	10,333 / 43,333	N E	N E
Environmental Screening Levels [1] Residential / Commercial		15 / 67	16 / 100	280 / 1,200	2,800 / 12,000	0.32 / 5.2	3.2 / 14	10,000 / 44,000	37 / 160	3,500 / 15,000

Table 1

Passive Soil Gas Sampling

Volatile Dry Cleaning Solvent Compound Testing Results

Seven Day Sampling Event (February 25-March 3, 2020)

1412-1514 Capitola Road
Santa Cruz

Sample Information		*Laboratory Analytical Results* *All soil vapor results are in ug/m³*								
Sample ID	*Sample Depth (feet below ground surface)*	*PCE (Tetrachloroethene)*	*TCE (Trichloroethene)*	*Dichloroethene (DCE)*		*Vinyl Chloride*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*
				cis-1,2-DCE	*trans-1,2-DCE*					
PSV-29	3 ft	22.1	<2.92	<1.84	<2.25	<1.29	<1.84	8.86	<2.99	<2.88
PSV-30	3 ft	10.6	<2.92	<1.84	<2.25	<1.29	4.26 J	<6.05	<2.99	<2.88
PSV-31	3 ft	107	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-32	3 ft	11.8	<2.92	<1.84	<2.25	<1.29	3.73 J	42.8	<2.99	<2.88
PSV-33	3 ft	<2.42	<2.92	<1.84	<2.26	<1.29	2.03 J	<6.05	<2.99	<2.88
PSV-34	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	7.94	<2.99	<2.88
PSV-35	3 ft	181	<2.92	<1.84	<2.25	<1.29	2.28 J	<6.05	<2.99	<2.88
PSV-35-dup	3 ft	240	5.26	<1.84	<2.25	<1.29	2.56 J	<6.05	<2.99	<2.88
PSV-36	3 ft	473	9.74	<1.84	<2.25	<1.29	1.98 J	<6.05	<2.99	<2.88
PSV-37	3 ft	1,830	16.1	2.38	<2.25	<1.29	<1.84	24.5	<2.99	<2.88
PSV-38	3 ft	1,020	18.5	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-39	3 ft	103	<2.92	<1.84	<2.25	<1.29	3.16 J	<6.05	<2.99	<2.88
PSV-39-dup	3 ft	80.7	<2.92	<1.84	<2.25	<1.29	2.95 J	<6.05	<2.99	<2.88
PSV-40	3 ft	6.96	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-41	3 ft	3.48	<2.92	<1.84	<2.25	<1.29	2.75 J	11.6	<2.99	<2.88
PSV-42	3 ft	6.94	<2.92	<1.84	<2.25	<1.29	2.10 J	<6.05	<2.99	<2.88
PSV-43	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-44	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
PSV-44-dup	3 ft	<2.42	<2.92	<1.84	<2.25	<1.29	<1.84	<6.05	<2.99	<2.88
California DTSC-Modified Soil Gas Levels (2) Residential / Commercial Land Use		15 / 67	16 / 100	280 / 1,200	2,800 / 12,000	0.32 / 5.2	3.2 / 14	10,333 / 43,333	N E	N E
Environmental Screening Levels (1) Residential / Commercial		15 / 67	16 / 100	280 / 1,200	2,800 / 12,000	0.32 / 5.2	3.2 / 14	10,000 / 44,000	37 / 160	3,500 / 15,000

Notes:

1 = **CA DTSC Modified Air Screening Levels:** Human health risk thresholds established by the California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note Number 3, Table 3, **April 2019.**
- < https://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-June-2018.pdf >

2 = **Environmental Screening Levels (ESLs):** Human health risk thresholds established by the San Francisco Bay Regional Water Quality Control Board. Source: the *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater* (Interim Final, Jan 2019)
- <https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESLs.html >.
- Note: The ESLs for all media (soil, soil vapor, groundwater were generated to to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted based on chemical transport and their effect on receptors (i.e. human health, groundwater resources, ecological). The ESLs listed in this summary table are the most conservative, "Tier 1 ESLs", and are based on shallow soils (<3m), groundwater is a current or potential source of drinking water.

BOLD = Indicates the compound was detected.

< X = Constituent not detected above laboratory's Method Detection Limit (MDL), X.

BOLD = Analytical result exceeds **Commercial** US EPA RSL, CA DTSC or ESL threshold.

BOLD = Analytical result exceeds **Residential** US EPA RSL, CA DTSC or ESL threshold.

PCE = Tetrachloroethene

TCE= Trichloroethene

DCE = Dichloroethene

Note: TCE and DCE are degradation (daughter products) of PCE

NE = Not Established

Table 2

Active Soil Vapor Analytical Results

Volatile Organic Compounds

1412-1514 Capitola Road

All soil vapor results are in micrograms per meter cubed (ug/m^3)

Sample Information			Volatile Organic Compounds (VOCs) (by Laboratory Analysis by EPA Method TO-15)										Field Leak Check Monitoring (Isopropyl Alcohol)		
					Dichloroethene (DCE)										
Sample Date	Sample ID	Depth (feet below ground surface)	PCE (Tetrachloroethene)	TCE (Trichloroethene)	cis-1,2-DCE	trans-1,2-DCE	Vinyl chloride	Benzene	Toluene	Ethylbenzene	Xylenes	Other VOCs	Field Shroud Concentration (avg., in ppm)	Laboratory Results (in ug/m^3)	Calculated Leakage (percent, %)
April 1st, 2020	SV-1	5 ft	<5.3^	<5.9^	<31	<31	**<4.5^***	<2.5^	**28**	<5.6^	<160	Acetone = 91 Propylene = 2,000' Carbon Disulfide = 11 n-Heptane = 19 Hexane = 48 All Other VOC's =ND	133.33	< 7.3	0%
		15 ft	760	<6^	<32	<32	**<4.6^***	23	**87**	<5.7^	**42**	Acetone = 36 Cyclohexane = 95 n-Heptane = 32 Hexane = 61 All Other VOC's =ND	100	< 7.4	0%
	SV-2	5 ft	130	<6.1^	<32	<32	**<4.6^***	330	1,900	190	**870**	Acetone = 62 Propylene = 360 Cyclohexane = 99 Ethanol = 810 n-Heptane = 490 Hexane = 150 1-Ethyl-4-methylbenzene = 72 1,2,4-Trimethylbenzene = 71 1,3,5-Trimethylbenzene = 34 All Other VOC's =ND	100	< 7.5	0%
		15 ft	38,000	**<57^***	<35^	<300	**<44^***	**<24^***	**170**	**<54^***	<1,500	All Other VOC's = ND	88.33	< 71	3%
	SV-3	5 ft	250	<5.7^	**21**	<30	**<4.4^***	<2.4^	**82**	<5.4^	<150	Acetone = 120 Propylene = 400 carbon disulfide = 21 n-Heptane = 15 All Other VOC's =ND	125	< 7	0%
		15 ft	110,000	**<55^***	<33^	<290	**<42^***	**<23^***	<290	**<52^***	<1,400	Propylene =150 Hexane = 470 All Other VOC's =ND	95	< 68	3%
	SV-4	5 ft	130	<6^	<32	<32	**<4.6^***	150	**810**	81	**370**	Acetone = 150 Propylene = 2,800 Ethanol = 63 1 -Ethyl-4-methylbenzene = 28 n-Heptane = 180 Hexane = 79 1,2,4-Triethylbenzene = 26 All Other VOC's =ND	136.66	< 7.5	0%
		15 ft	43,000	**<60^***	<36^	<310	**<46^***	**<25^***	<310	**<57^***	<1,600	Hexane = 770 All Other VOC's =ND	175	< 74	2%
	SV-5	5-ft	100	<5.7^	<30	<30	**<4.4^***	<2.4^	**18**	<5.4^	<150	Propylene = 230 n-Heptane = 16 Hexane = 46 All Other VOC's =ND	68.3	< 30	2%
		Duplicate A (5-ft)	130	<5.7^	<30	<30	**<4.4^***	<2.4^	**21**	81	**310**	Acetone = 79 Propylene = 270 1,2,4-Trimethylbenzene = 210 Ethanol = 14 1-Ethyl-4-methylbenzene = 170 n-Heptane = 18 Hexane = 53 1,2,4-Trimethylbenzene = 210 1,3,5-Trimethylbenzene = 56 All Other VOC's =ND	68.3	**220**	13%
		15 ft	64,000	**<59^***	<35^	<310	**<45^***	**<25^***	**170**	**<55^***	<1,500	Hexane = 910 All Other VOC's =ND	53.33	< 72	5%
	SV-6	5 ft	1,400	120	**170**	<31	**<4.4^***	10	**37**	<5.5^	<150	Propylene = 220 Hexane = 41 All Other VOC's =ND	162.5	< 7.2	0%
		15 ft	1,500,000	1,600	<34^	<300	**<43^***	**<24^***	**300**	**<53^***	<1,500	All Other VOC's = ND	212.5	< 70	1%
Environmental Screening Levels [1] Residential / Commercial Land Use (ATTENUATION FACTOR: 0.03)			15 / 67	16 / 100	280 / 1,200	2,800 / 12,000	0.32 / 5.2	3.2 / 14	1,000 / 44,000	37 / 160	3,500 / 15,000	Acetone = 1,100,000 / 4,500,000 All Other Detected VOC's = NE			
California DTSC-Modified Soil Gas Levels [2] Residential / Commercial Land Use (ATTENUATION FACTOR: 0.03)			15 / 67	16 / 100	280 / 1,200	2,800 / 12,000	0.32 / 5.2	3.2 / 14	1,033 / 43,333	NE	NE	All Other Detected VOC's = NE			

Notes

1 = **Environmental Screening Levels (ESLs):** from *User's Guide: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater,* set by the San Francisco Bay Regional Water Quality Control Board (Interim Final, Jan 2019) <https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/ESLs.html >. The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted. The ESLs used in this table were obtained from the above referenced document,"Tier 1 ESLs", based on shallow soils (<3m), groundwater is a current or potential source of drinking water.

2 = **CA DTSC Modified Air Screening Levels:** From the California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note Number 3, Table 3, **April 2019.** < **https://www.dtsc.ca.gov/AssessingRisk/upload/HHRA-Note-3-June-2018.pdf** >

< X = Constituent not detected above laboratory's Practical Quantiation Limit (PQL), X.

^ = Laboratory Method Detection Limit (MDL) was used due to the PQL being higher than an established screening level

< X^* = Constituent was non-detected however the Method Detction Limit (MDL) was above the ESL or DTSC threshold.

BOLD = Analytical result exceeds **Commercial** US EPA RSL, CA DTSC or ESL threshold.

BOLD = Analytical result exceeds **Residential** US EPA RSL, CA DTSC or ESL threshold.

BOLD = Compound detected.

J = Laboratory note: Estimated value between the laboratory method detection limit and PQL

ND = Not Detected

-- = Sample was not analyzed for this constituent

NE = Not Established

Table 3
Groundwater Analytical Results
Volatile Organic Compounds (VOCs)
1412-1514 Capitola Road, Santa Cruz
All water results are in micrograms per liter (ug/L)

Sample Information			***Volatile Organic Compounds*** *by EPA Method 8260B*						
			Solvents		**Fuel Constituents**				
Location ID	**Depth To Water (in feet, below goround surface)**	**Screen Interval (in feet, below ground surface)**	**PCE**	**TCE**	**Benzene**	**Toluene**	**Ethyl-benzene**	**Xylenes**	**Other VOC's**
GW-1	**26-ft**	**23-28 ft**	**4.64**	<1.00	**0.354 J**	**0.614 J**	<1.00	<3.00	Acetone = 14 J Chloromethane = 0.428 J All Other VOC'S = ND
GW-2	**22-ft**	**19-24 ft**	**161**	<1.00	<1.00	<1.00	<1.00	<3.00	Di-Isopropyl Ether = 0.417 J All Other VOC's = ND
GW-3	**21-ft**	**19-24 ft**	**136**	<1.00	<1.00	<1.00	<1.00	<3.00	All Other VOC's = ND
GW-4	**24.5-ft**	**23-28 ft**	**9.54**	<1.00	<1.00	<1.00	<1.00	<3.00	All Other VOC's = ND
GW-5	**24.5-ft**	**27-32 ft**	**16.9**	<1.00	<1.00	<1.00	<1.00	<3.00	All Other VOC's = ND
GW-6	**22-ft**	**23-28 ft**	**192**	**0.403 J**	<1.00	<1.00	<1.00	<3.00	All Other VOC's = ND
Laboratory Reported Detection Limit (RDL)			*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*3.0*	*Varies*
Maximum Contamination Limit (MCL) [(1)] *(+ Human Health ESL if no MCL established)*			**5**	**5**	**1**	**150**	**300**	**1,750**	**Acetone = 14,000** **Chloromethane = 190**
Environmental Screening Levels (ESLs) [(2)]			**0.64** (Vapor Intrusion)	**1.2** (Vapor Intrusion)	**0.42** (vapor intrusion)	**40** (odor nuisance)	**3.5** (vapor intrusion)	**20** (odor nuisance)	**Acetone = 1,500** **Chloromethane = 190**

Notes

1 = ***Water Quality Goals*** **(WQGs):** The listed ***Water Quality Goals*** listed are based on ***Maximum Contaminant Levels (MCLs)*** - see note below. However, if a MCL does not exist for a constituent, the listed WQG is based on ***Environmental Screening Levels (ESLs)*** - constituents with a WQG based on an ESLs are identified with an asterisk ("(*)", see note below.

Maximum Contaminant Levels (MCLs): < https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chemicalcontaminants.html >. **MCL's** are drinking water standards established in Title 22 of the California Code of Regulations for safe water coming from a tap or a drinking water aquifer. If no MCL is available the corresponding ***Environmental Screening Level (ESL, below)*** **health based pathway** will be used in its place.

2 = ***Environmental Screening Levels*** **(ESLs):** < https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.html> The ESLs are agency-stablished threshold concentrations intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted based on risk pathways (protection of human heath, groundwater and/or ecological). Source: The Regional Water Quality Control Board (San Francisco Bay Region) guideline document: Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater (Final version, 2019).

BOLD **= Red highlight indictates the laboratory-detected concentration is equal to or greater than the corresponding MCL or ESL**

< X = Constituent *not detected* above the laboratory-*Reported Detection Limit (RDL* , X). Refer to laboratory reports for detection limits.

RDL = **Reported Detection Limit** = is the laboratory-determined value that is 2 to 5 times above the Method Detection Limit (MDL) that can be reproduced in a manner that results in a 99% confidence level and is both accurate and precise (based on Laboratory's Blank (QA/QC).

MDL = **Method Detection Limit** - The minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero.

J = This **"J-Flag"** is a lab-reported value that is detected at a concentration that is below the laboratory's RDL but above the MDL - the detection is considered an accurate detection of the compound, but it is an estimated value.

bgs= below ground surface

NE= Not Established

Table 4
Summary of Soil Analytical Results
Volatile Organic Compounds
1412-1514 Capitola Road, Santa Cruz
All soil results are in milligrams per Kilogram (mg/Kg)

Sample Information			Volatile Organic Compounds (VOCs) by EPA Method 8260B								
Sample Date	Sample ID	Depth (feet bgs)	PCE (Tetrachloroethene)	TCE (Trichloroethene)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Naphthalene	Other Compounds
April 1st & 2nd, 2020	SS-2	3	**0.00162 J**	<0.00114	<0.00114	<0.00569	<0.00285	<0.00740	<0.00114	<0.0142	2-Butanone (MEK) = 0.0223 J All Other VOC's = ND
		4.5	**0.00132 J**	<0.00119	<0.00119	<0.00594	<0.00297	<0.00773	<0.00119	<0.0149	2-Butanone (MEK) = 0.0308 All Other VOC's = ND
		12	**0.0871**	<0.00107	<0.00107	<0.00537	<0.00268	<0.00698	<0.00107	<0.0134	2-Butanone (MEK) = 0.0160 J All Other VOC's = ND
	SS-3	3	**0.02**	**0.00423**	<0.00126	<0.00629	<0.00315	<0.00818	<0.00126	<0.0157	2-Butanone (MEK) = 0.0488 All Other VOC's = ND
		6	**0.484**	**0.00253**	<0.00117	<0.00585	<0.00292	<0.00760	<0.00117	<0.0146	2-Butanone (MEK) = 0.0475 All Other VOC's = ND
		12	**0.103**	<0.00109	<0.00109	<0.00546	<0.00273	<0.00710	<0.00109	<0.0137	2-Butanone (MEK) = 0.0247 J All Other VOC's = ND
	GW-1	3	**0.00213 J**	<0.00124	<0.00124	<0.00618	<0.00309	<0.00803	<0.00124	<0.0155	2-Butanone (MEK) = 0.0607 All Other VOC's = ND
		7	**0.005**	<0.00118	<0.00118	<0.00590	<0.00295	<0.00767	<0.00118	<0.0147	2-Butanone (MEK) = 0.0438 All Other VOC's = ND
		12	**0.00137 J**	<0.00110	<0.00110	**0.00375 J**	<0.00274	<0.00713	<0.00110	<0.0137	2-Butanone (MEK) = 0.0386 All Other VOC's = ND
		24	<0.00308	<0.00123	<0.00123	**0.00258 J**	<0.00308	<0.00801	<0.00123	<0.0154	2-Butanone (MEK) = 0.0175 J All Other VOC's = ND
	GW-3	3	<0.00306	<0.00122	<0.00122	**0.0176**	**0.000929 J**	<0.00795	<0.00122	<0.0153	2-Butanone (MEK) = 0.0322 All Other VOC's = ND
		6	<0.00303	<0.00121	<0.00121	**0.00192 J**	<0.00303	<0.00788	<0.00121	<0.0152	2-Butanone (MEK) = 0.0198 J All Other VOC's = ND
		12	<0.00287	<0.00115	<0.00115	<0.00573	<0.00287	<0.00745	<0.00115	<0.0143	2-Butanone (MEK) = 0.0368 All Other VOC's = ND
		19	**0.00698**	<0.00119	<0.00119	<0.00595	<0.00297	<0.00773	<0.00119	<0.0149	2-Butanone (MEK) = 0.0429 All Other VOC's = ND
	GW-4	3	**0.0196**	<0.00126	<0.00126	<0.00628	<0.00314	<0.00817	<0.00126	<0.0157	2-Butanone (MEK) = 0.0584 All Other VOC's = ND
		6	**0.00922**	<0.00147	<0.00147	<0.00734	<0.00367	<0.00955	<0.00147	<0.0184	2-Butanone (MEK) = 0.05 All Other VOC's = ND
		12	**0.0259**	<0.00107	<0.00107	**0.00908**	<0.00268	<0.00696	<0.00107	<0.0134	2-Butanone (MEK) = 0.0255 J Acetone = 0.0206 J All Other VOC's = ND
		23	**0.0934**	<0.00106	<0.00106	<0.00532	<0.00266	<0.00691	<0.00106	<0.0133	2-Butanone (MEK) = 0.0165 J All Other VOC's = ND
	GW-5	3	**0.0179**	**0.00309**	<0.00128	<0.00639	<0.00319	<0.00830	<0.00128	<0.0160	2-Butanone (MEK) = 0.0487 All Other VOC's = ND
		6	**0.164**	**0.000665 J**	<0.00117	<0.00587	<0.00294	<0.00764	<0.00117	<0.0147	2-Butanone (MEK) = 0.0204 J All Other VOC's = ND
		12	**0.0338**	<0.00112	<0.00112	<0.00560	<0.00280	<0.00727	<0.00112	<0.0140	2-Butanone (MEK) = 0.0489 All Other VOC's = ND
		27	**0.22**	<0.00116	<0.00116	<0.00580	<0.00290	<0.00754	<0.00116	<0.0145	2-Butanone (MEK) = 0.0303 All Other VOC's = ND
DTSC **Human Healt, Risk-Based Screening Levels** **Residential / Commercial Land Uses** [2]			0.59 / 22.7	NE	0.33 / 1.4	1,100 / 5,300	5.8 / 25	580 / 2,500	47 / 210	3.3 / 14	2-Butanone (MEK) = NE
Environmental Screening Levels (ESLs) [1] **Residential / Commercial Land Uses** **(Construction Worker)**			0.59 / 2.7 (33)	0.95 / 6.1 (130)	0.33 / 1.4 (33)	1,100 / 5,300 (4,700)	5.9 / 26 (540)	580 / 2,500 (2,400)	47 / 210 (4,100)	3.8 / 17 (400)	2-Butanone (MEK) = 27,000 / 200,000
"Tier 1 ESL" **(lowest of all possible pathways & land uses)** Basis = Human Health **(HH)**, Leachability **(L)**, Ecologic **(Eco)**, or Odor **(O)**			**0.08** (L)	**0.085** (L)	**0.025** (L)	**3.2** (L)	**0.43** (L)	**2.1** (L)	**0.028** (L)	**0.033** (L)	2-Butanone (MEK) = 6.1 (L)

See Notes on Next Page

Table 4
Summary of Soil Analytical Results
Volatile Organic Compounds
1412-1514 Capitola Road, Santa Cruz
All soil results are in milligrams per Kilogram (mg/Kg)

Notes

1 = **CA DTSC Soil Screening Levels:** From the California Department of Toxic Substances Control (DTSC), Office of Human and Ecological Risk (HERO), Human Health Risk Assessment (HHRA) Note Number 3, Table 1, April 2019. **If no DTSC screening level is established then the corresponding US EPA RSL is provided.**

2 = **Environmental Screening Levels (ESLs):** Regional Water Quality Control Board (San Francisco Bay Region) guideline document: *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater* (Final version, 2019). The ESLs are intended to provide quantitative risk-based guidance on whether further assessment or remediation of contamination is warranted <**https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/ESL/new/ESL_Summary_Tables_24Jan19_Rev1.pdf** >

TIER 1 ESL = The most conservative Environmental Screening Level (ESL) across all potential pathways for all land uses (residential & commerical). Pathways include leaching (groundwater protection) , human health, ecologic ("Terrestrial Habitat"), & volatilization (inhalation).

L = Indicates the lowest ESL is based on a **potential Leaching pathway** (for groundwater protection).
HH = Indicates the lowest ESL is based on a **potential Human Health & Safety Pathway** (ingestion, inhalation, dermal).
ECO = Indicates the lowest ESL is based on a **potential Terrestrial Habitat pathway.**
O = Indicates the lowest ESL is based on a **potential "odor nuisance"** (i.e. 100 mg/kg for gasoline).

RDL = **Reported Detection Limit** = is the laboratory-determined value that is 2 to 5 times above the Method Detection Limit (MDL) that can be reproduced in a manner that results in a 99% confidence level and is both accurate and precise.

J = Laboratory reports that the detection value is between MDL and RDL, and should be considered an estimate.

^ = Detection and Quantitation Limits are raised due to sample dilution

-- = Not Analyzed

ND = Non Detection

< = A "less than" symbol indicates no detectable concentrations (i.e., the laboratory **did not** detect the contaminant at the concentration shown).

BOLD =	A **bold** concentration indicates the laboratory detected the contaminant at the concentration shown.
BOLD =	Orange highlight indicates the analytical result is detected at a concentration that is ***above the Commercial land use ESL.***
BOLD =	Green highlight indicates the analytical result is detected at a concentration that is ***above the Residential land use ESL.***
BOLD =	Blue highlight indicates the analytical result is detected at a concentration that is ***above the most conservative ESL*** (Tier I)

Appendix A

Field Documentation

1) **Geologic Logs**
2) **Passive Soil Vapor Sample Installation**
3) **Passive Soil Vapor Sample Collection**
4) **Active Soil Vapor Sampling**
5) **Groundwater and Soil Sampling**
6) **Field Methodology**

1) Geologic Logs

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-1**

Sheet 1 of 2

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
0 – 2						CL	**Sandy CLAY,** dark brown (3/3 10YR), moist to wet, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, organics and roots at surface, no odor, no discoloration. - Gradational Contact
2 – 7			GW-1-d3 0.7 ppm GW-1-d7			SC	**Clayey SAND,** olive (5/3 5Y), moist, appears medium dense to dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration. - Abrupt Contact
7 – 14			2.7 ppm GW-1-d12			SM	**Silty SAND,** pale brown (6/3 10YR), dry, very stiff, dominantly fine to medium sand, 20-30% silt, trace clays, localized oxidation staining, no odor, no discoloration. - formation becomes loose from 10-14' bgs. - Gradational Contact
14 – 18			1.2 ppm			SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
18 – 20			1.2 ppm			SP	**Poorly Graded SAND,** pale brown (6/3 10YR), damp to moist, appears loose, dominantly fine to medium sand, no odor, no discoloration. - terminate boring at 15.5' bgs.

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-1**

Sheet 2 of 2

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
20–21						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), damp to moist, appears loose, dominantly fine to medium sand, no odor, no discoloration. - Gradational Contact
21–23						SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), wet to saturated, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
23–25			GW-1-d24 0.7 ppm			SP	**Poorly Graded SAND,** pale brown (6/3 10YR), wet to saturated, appears loose, dominantly fine to medium sand, no odor, no discoloration
25–28			0.1 ppm			SW	**Well Graded SAND w/ Gravels,** light yellowish brown (6/4 10YR) saturated, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, trace mica, no odor, no discoloration.
28–40							- Terminate boring at 28 feet bgs due to clear saturation.

AJOB\2t006\FIGURES\LOGS\GW-1.CNV

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-3**

Sheet 1 of 2

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
0–2						CL	**Sandy CLAY,** dark brown (3/3 10YR), wet to saturated, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, organics and roots at surface, no odor, no discoloration. - Gradational Contact
2–6			GW-3-d3 0.1 ppm; GW-3-d6			SC	**Clayey SAND,** olive (5/3 5Y), wet to saturated, appears medium dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration. - Gradational Contact
6–8			0.0 ppm			SM	**Silty SAND,** pale brown (6/3 10YR), damp to moist, very stiff, dominantly fine to medium sand, 20-30% silt, trace clays, localized oxidation staining, no odor, no discoloration. - Gradational Contact
8–11						SC	**Clayey SAND,** pale brown (6/3 10YR), moist to wet, appears medium dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration. - Gradational Contact
11–13			GW-3-d12 0.2 ppm			SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), moist to wet, appears medium dense, dominantly fine to medium sand, 20% coarse sand, 15% fine gravels, localized oxidation staining, no odor, no discoloration. - Gradational Contact
13–16			0.3 ppm			SP	**Poorly Graded SAND,** pale brown (6/3 10YR), moist to wet, appears loose, dominantly fine to medium sand, no odor, no discoloration. - Gradational Contact
16–19			GW-3-d19 0.3 ppm	▽		SW	**Well Graded Gravels w/ Sand,** yellowish red (5/8 5YR), wet, appears medium dense, dominantly fine to medium sand, 20% coarse sand, 20% fine gravels, localized oxidation staining, significant diversification in color (rangling from bright orange to black), no odor, no discoloration. - Gradational Contact

AJOB\2t006\FIGURES\LOGS\GW-3.CNV

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-3**

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
20						SP	**Poorly Graded SAND w/ Gravels,** yellowish red (5/6 5YR), saturated, appears loose to medium dense, dominantly medium sand, localized fine gravels, localized oxidation staining, no odor, no discoloration.
21							
22							- Localized coarse rounded sands from 21.5 to 22' bgs
23							
24			0.1 ppm				- Localized coarse rounded sands from 23.5' to 24' bgs. -
							Terminate boring at 24 feet bgs due to clear saturation.
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

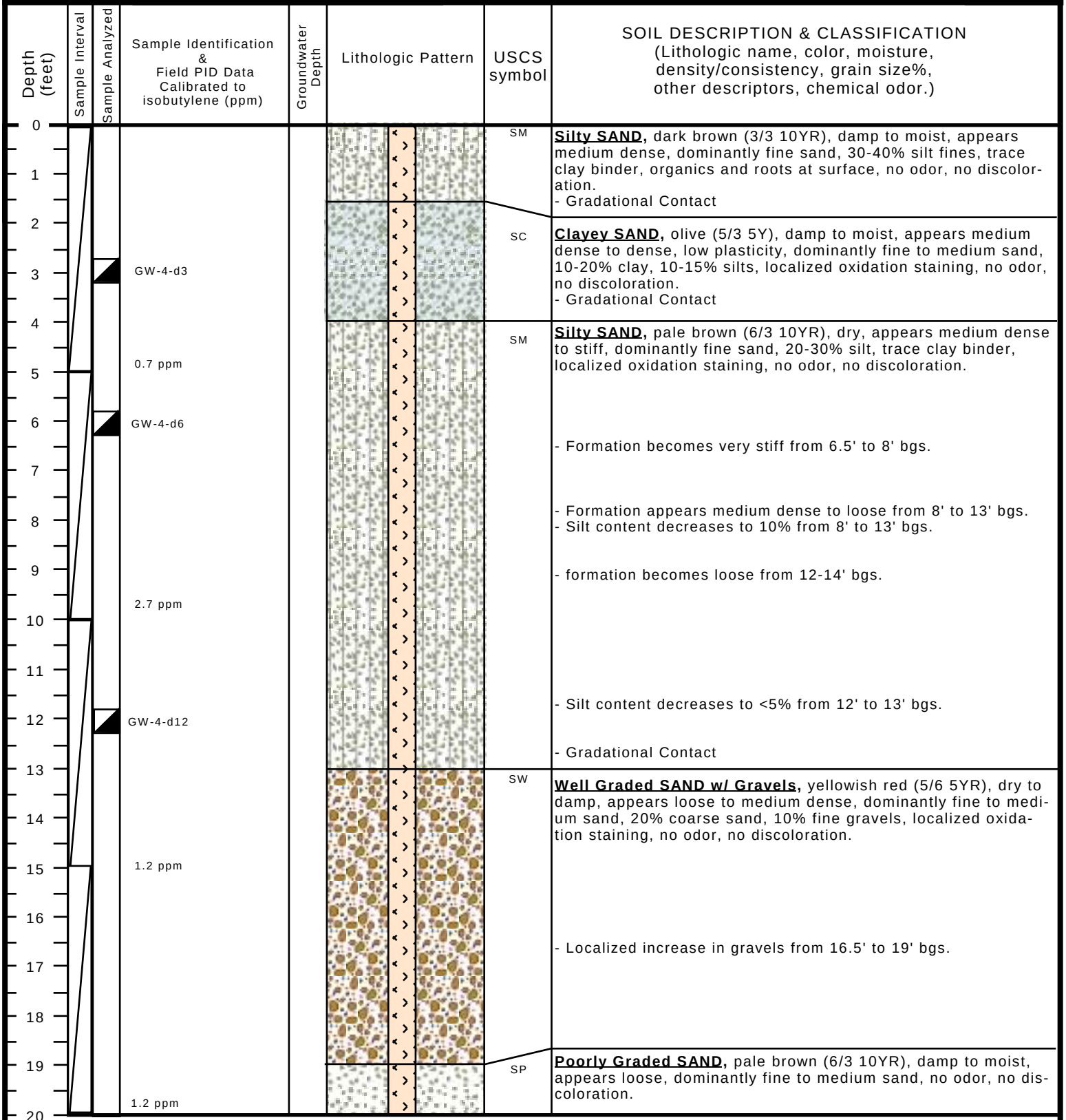
GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-4**

Sheet 1 of 2



Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
0						SM	**Silty SAND,** dark brown (3/3 10YR), damp to moist, appears medium dense, dominantly fine sand, 30-40% silt fines, trace clay binder, organics and roots at surface, no odor, no discoloration. - Gradational Contact
2						SC	**Clayey SAND,** olive (5/3 5Y), damp to moist, appears medium dense to dense, low plasticity, dominantly fine to medium sand, 10-20% clay, 10-15% silts, localized oxidation staining, no odor, no discoloration. - Gradational Contact
3			GW-4-d3				
4						SM	**Silty SAND,** pale brown (6/3 10YR), dry, appears medium dense to stiff, dominantly fine sand, 20-30% silt, trace clay binder, localized oxidation staining, no odor, no discoloration.
5			0.7 ppm				
6			GW-4-d6				- Formation becomes very stiff from 6.5' to 8' bgs.
8							- Formation appears medium dense to loose from 8' to 13' bgs. - Silt content decreases to 10% from 8' to 13' bgs.
9							- formation becomes loose from 12-14' bgs.
10			2.7 ppm				
12			GW-4-d12				- Silt content decreases to <5% from 12' to 13' bgs.
13							- Gradational Contact
13						SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
15			1.2 ppm				
16							- Localized increase in gravels from 16.5' to 19' bgs.
19						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), damp to moist, appears loose, dominantly fine to medium sand, no odor, no discoloration.
20			1.2 ppm				

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-4**

Sheet 2 of 2

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
20						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), damp to moist, appears loose, dominantly fine to medium sand, no odor, no discoloration.
21							- Gradational Contact
22						SW	**Well Graded SAND,** yellowish red (5/6 5YR), damp to moist, appears loose to medium dense, dominantly fine to medium sand 20% coarse sand, trace localized gravels, no odor, no discoloration.
23			GW-4-d23				
24							
25			0.7 ppm				- Localized saturated fine gravels from 25' to 26' bgs.
26							- Abrupt Contact
27						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), saturated, appears loose, dominantly fine to medium sand, trace mica, no odor, no discoloration
28			0.3 ppm				- Terminate boring at 28 feet bgs due to clear saturation.
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-5**

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
0						CL	**Sandy CLAY,** dark brown (3/3 10YR), moist to wet, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, organics and roots at surface, no odor, no discoloration.
1							- Gradational Contact
2						SC	**Clayey SAND,** olive (6/3 5Y), moist, appears medium dense to dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration.
3			GW-5-d3				
4			0.0 ppm				
5							
6			GW-5-d6				- Gradational Contact
7						SM	**Silty SAND,** pale brown (6/3 10YR), dry, very stiff, dominantly fine to medium sand, 20-30% silt, trace clays, localized oxidation staining, no odor, no discoloration.
8			0.0 ppm				
9							
10							
11							- formation becomes loose from 12-14' bgs.
12			GW-5-d12				
13			0.0 ppm				
14							- Gradational Contact
15						SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
16			0.1 ppm				
17							
18							- Gradational Contact
19						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), damp to moist, appears loose, dominantly fine to medium sand, no odor, no discoloration.
20			0.0 ppm				

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **GW-5**

Sheet 2 of 2

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
20						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), damp to moist, appears loose, dominantly fine to medium sand, no odor, no discoloration. - Gradational Contact
21						SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), wet to saturated, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
22							
23							
24			0.0 ppm				
25						SP	**Poorly Graded SAND,** pale brown (6/3 10YR), wet to saturated, appears loose, dominantly fine to medium sand, no odor, no discoloration
26							
27			GW-5-d27				- Localized fine Gravels from 27' to 28' bgs
28			0.1 ppm				- Formation becomes saturated from 28' to 32' bgs. - Formation contains trace mica from 28' to 32' bgs.
29							
30							
31							
32			0.1 ppm				- Terminate boring at 32 feet bgs.
33							
34							
35							
36							
37							
38							
39							
40			1.2 ppm				

AJOB\2t006\FIGURES\LOGS\GW-5.CNV

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SS-2**

Sheet 1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
0						SP	**Silty SAND,** dark brown (3/3 10YR), damp to moist, appears medium dense, dominantly fine sand, 30-40% silt fines, trace clay binder, organics and roots at surface, no odor, no discoloration.
1							- Gradational Contact
2							**Clayey SAND,** olive (4/3 5Y), damp to moist, appears medium dense to dense, low plasticity, dominantly fine to medium sand, 10-20% clay, 10-15% silts, localized oxidation staining, no odor, no discoloration.
3			SS-2-d3				- Silt content increases to 20-30% from 3.5' to 5' bgs
4			0.0 ppm				
5			SS-2-d4.5				- Gradational Contact
6							**Silty SAND,** greyish brown (5/2 10YR), dry, appears very stiff, dominantly fine sand, 20-30% silt, trace clay binder, localized oxidation staining, no odor, no discoloration.
7							
8			0.0 ppm				- Formation becomes loose from 8'-12' bgs.
9						CL	
10							- Gradational Contact
11							**Well Graded SAND,** brownish yellow (6/6 10YR), damp to moist, appears loose to medium dense, dominantly fine to medium sand 20% coarse sand, trace localized gravels, no odor, no discoloration.
12			SS-2-d12 0.0 ppm				- Terminate boring at 12' bgs.
13							
14							
15							
16							
17							
18							
19							
20							

AJOB\2t006\FIGURES\LOGS\SS-2.CNV

GEOLOGIC LOG

Hydraulic Driven Geo-Probe Boring

JOB NO.: 2t009 DATE: April 2, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SS-3**

Sheet 1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data Calibrated to isobutylene (ppm)	Groundwater Depth	Lithologic Pattern	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, chemical odor.)
0						SM	**Silty SAND,** dark brown (3/3 10YR), damp to moist, appears medium dense, dominantly fine sand, 30-40% silt fines, trace clay binder, organics and roots at surface, no odor, no discolor-ation. - Gradational Contact
2						SC	**Clayey SAND,** olive (4/3 5Y), damp to moist, appears medium dense to dense, low plasticity, dominantly fine to medium sand, 10-20% clay, 10-15% silts, localized oxidation staining, no odor, no discoloration.
3			SS-3-d3				
4			0.0 ppm				
5							- Silt content increases to 20-30% from 4.5' to 6.5' bgs
6			SS-3-d6				- Gradational Contact
7						SM	**Silty SAND,** greyish brown (5/2 10YR), dry, appears very stiff, dominantly fine sand, 20-30% silt, trace clay binder, localized oxidation staining, no odor, no discoloration.
8			0.0 ppm				
10							- Formation appears medium dense from 9.5' to 11' bgs.
11							- Formation becomes loose from 11-12' bgs.
12			SS-3-d12 0.0 ppm				- Terminate broing at 12' bgs.
13							
14							
15							
16							
17							
18							
19							
20							

GEOLOGIC LOG

Hydraulic Driven
Geo-Probe Boring
Temporary Soil Vapor Probe

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SV-1**
Sheet 1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data (ppm) Calibrated to isobutylene Standard	Groundwater Depth	Lithologic Pattern & Probe Construction	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						--	- asphalt from 0-0.5'
1						SC	**Sandy CLAY,** dark brown (3/3 10YR), moist to wet, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, localized oxidation staining, no odor, no discoloration.
2							
3							- Gradational Contact
4			0.1 ppm			SC	**Clayey SAND,** olive (4/3 5Y), moist to wet, appears medium dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration.
5			SV-1-d5				
6							- Gradational Contact
7						SM	**Silty SAND,** greyish brown (5/2 10YR), dry, very stiff, dominantly fine to medium sand, 10-15% silt, trace clays, localized oxidation staining, no odor, no discoloration.
8			0.2 ppm				
9							- changes to medium dense to loose from 9-14' bgs - Silt increases to 20-25% from 9-14' bgs.
10							
11							
12			0.3 ppm				- Gradational Contact
13						SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
14							
15			SV-1- d15 0.3 ppm				
16							- Terminate boring at 15.5' bgs.
17							
18							
19							
20							

AJOB\2t009\FIGURES\LOGS\SV-1.CNV

GEOLOGIC LOG

Hydraulic Driven
Geo-Probe Boring
Temporary Soil Vapor Probe

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SV-2**
Sheet 1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data (ppm) Calibrated to isobutylene Standard	Groundwater Depth	Lithologic Pattern & Probe Construction	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0–3						SP	**Poorly Graded SAND,** reddish brown (5/4 5YR), dry, appears loose, dominantly fine to medium sand, no odor, no discoloration. "Fill?"
1–3						CL	**Sandy CLAY,** dark brown (3/3 10YR), moist, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, localized oxidation staining, no odor, no discoloration. - Gradational Contact
4–5			0.2 ppm SV-2-d5			ML	**Sandy SILT,** olive (4/3 5Y), damp to moist, appears medium dense, some plasticity, dominantly silt, 40% fine grained sand, trace clay fines, localized oxidation staining, no odor, no discoloration. - Gradational Contact
6–14			0.1 ppm 0.0 ppm			SM	**Silty SAND,** greyish brown (5/2 10YR), dry, very stiff, dominantly fine to medium sand, 10-15% silt, trace clays, localized oxidation staining, no odor, no discoloration. - changes to medium dense to loose from 8-14' bgs - Silt increases to 20-25% from 8-14' bgs.
14–15			SV-2-d15 0.0 ppm			SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
15							- Terminate boring at 15.5' bgs.

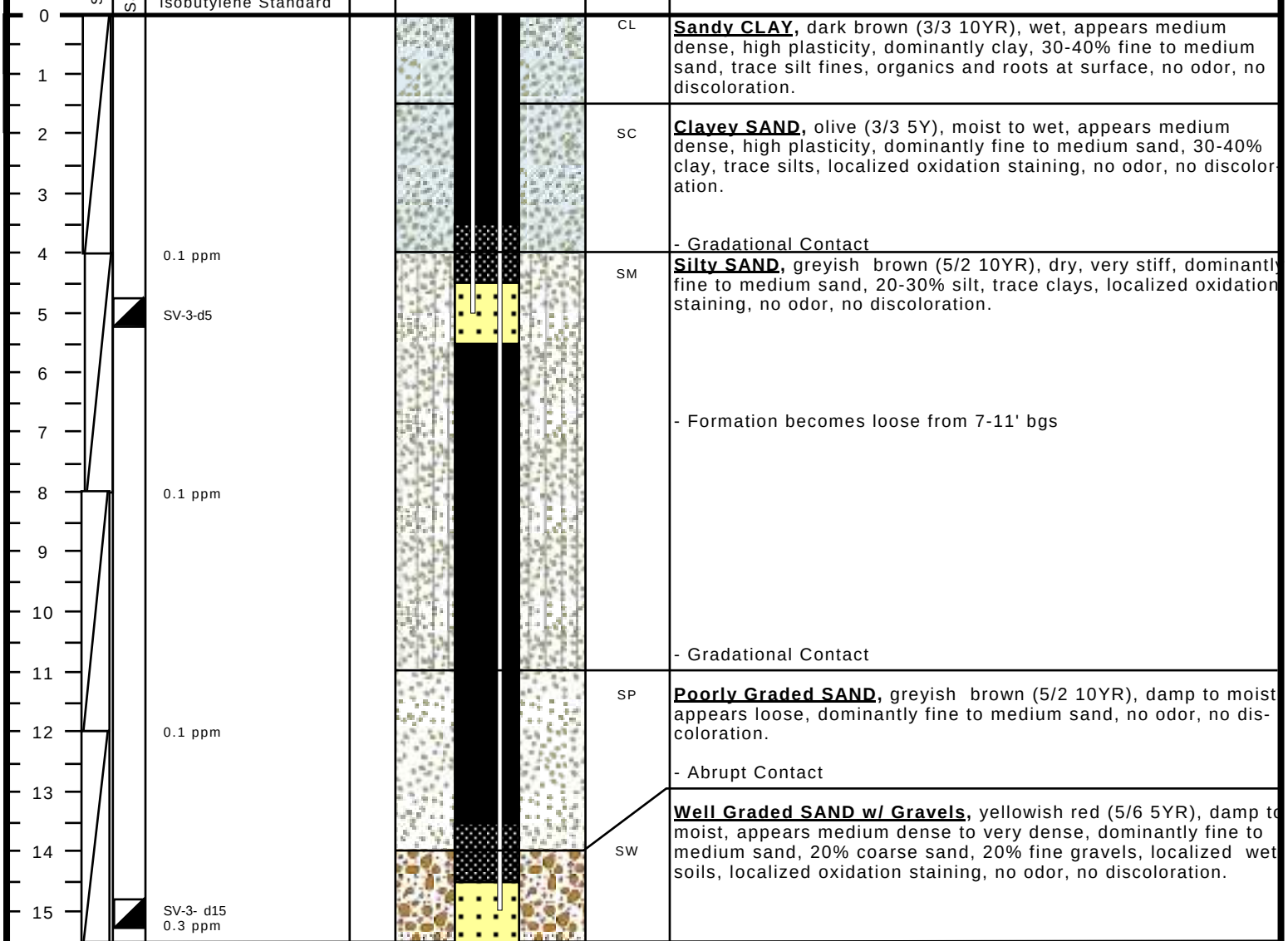
AJOB\2t009\FIGURES\LOGS\SV-2.CNV

GEOLOGIC LOG

Hydraulic Driven
Geo-Probe Boring
Temporary Soil Vapor Probe

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SV-3**
Sheet 1 of 1



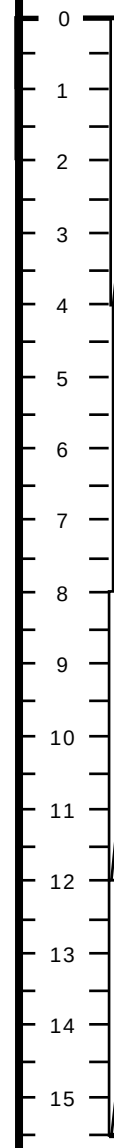
AJOB\2t009\FIGURES\LOGS\SV-3.CNV

GEOLOGIC LOG

Hydraulic Driven
Geo-Probe Boring
Temporary Soil Vapor Probe

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SV-4**
Sheet 1 of 1



Sample Interval	Sample Analyzed	Sample Identification & Field PID Data (ppm) Calibrated to isobutylene Standard	Groundwater Depth	Lithologic Pattern & Probe Construction	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
					CL	**Sandy CLAY,** dark brown (3/3 10YR), moist to wet, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, organics and roots at surface, no odor, no discoloration.
					SC	**Clayey SAND,** olive (4/3 5Y), moist, appears medium dense to dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration. - Gradational Contact
		0.0 ppm			SM	**Silty SAND,** greyish brown (5/2 10YR), dry, very stiff, dominantly fine to medium sand, 20-30% silt, trace clays, localized oxidation staining, no odor, no discoloration.
		SV-4-d5				
		0.2 ppm				- clay increases to 10% from 8-11' bgs - formation becomes damp to wet from 8-11' bgs - formation becomes loose and plastic from 8-11' bgs.
						- Gradational Contact
		0.2 ppm			SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized oxidation staining, no odor, no discoloration.
		SV-4- d15 0.1 ppm				
						- Terminate boring at 15.5' bgs.

AJOB\2t009\FIGURES\LOGS\SV-4.CNV

GEOLOGIC LOG

Hydraulic Driven
Geo-Probe Boring
Temporary Soil Vapor Probe

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SV-5**
Sheet 1 of 1

Depth (feet)	Sample Interval	Sample Analyzed	Sample Identification & Field PID Data (ppm) Calibrated to isobutylene Standard	Groundwater Depth	Lithologic Pattern & Probe Construction	USCS symbol	SOIL DESCRIPTION & CLASSIFICATION (Lithologic name, color, moisture, density/consistency, grain size%, other descriptors, HC odor.)
0						CL	**Sandy CLAY,** dark brown (3/3 10YR), moist to wet, appears medium dense, high plasticity, dominantly clay, 30-40% fine to medium sand, trace silt fines, organics and roots at surface, no odor, no discoloration.
1							
2						SC	**Clayey SAND,** olive (4/3 5Y), moist, appears medium dense to dense, high plasticity, dominantly fine to medium sand, 30-40% clay, trace silts, localized oxidation staining, no odor, no discoloration. - Gradational Contact
3							
4			0.1 ppm			SM	**Silty SAND,** greyish brown (5/2 10YR), dry, very stiff, dominantly fine to medium sand, 20-30% silt, trace clays, localized oxidation staining, no odor, no discoloration.
5			SV-5-d5				
6							
7							
8			0.1 ppm				- formation becomes loose from 8-11' bgs
9							
10							
11							- Gradational Contact
12			0.1 ppm			SW	**Well Graded SAND w/ Gravels,** yellowish red (5/6 5YR), dry to damp, appears loose to medium dense, dominantly fine to medium sand, 20% coarse sand, 10% fine gravels, localized wet soils around gravels, localized oxidation staining, no odor, no discoloration.
13							
14							
15			SV-5- d15 0.1 ppm				- Terminate boring at 15.5 feet bgs; construct soil vapor probe as depicted in diagram.
16							
17							
18							
19							
20							

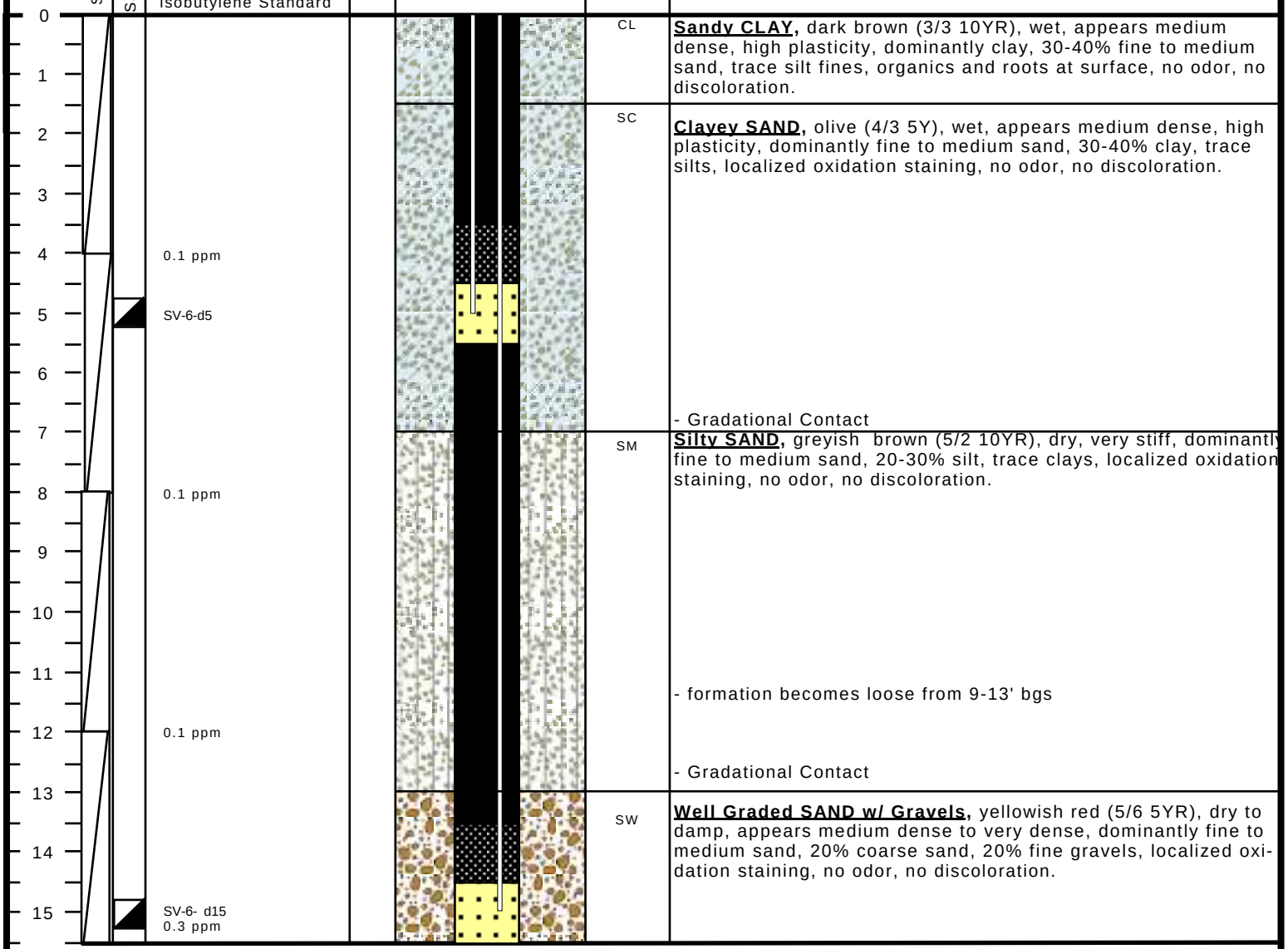
AJOB\2t009\FIGURES\LOGS\SV-5.CNV

GEOLOGIC LOG

Hydraulic Driven
Geo-Probe Boring
Temporary Soil Vapor Probe

JOB NO.: 2t009 DATE: April 1, 2020
CLIENT: Santa Cruz County Department of Public Works
LOCATION: 1412, 1438, 1500, and 1514 Capitola Road, Santa Cruz
LOGGED BY: R. Nyberg
DRILLER: Cascade (Arturo)
DRILL METHOD: Hydraulic Driven Macro Core Probes

BORING # **SV-6**
Sheet 1 of 1



AJOB\2t009\FIGURES\LOGS\SV-6.CNV

2) Passive Vapor Sample Installation

WHA

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
831.722.3580 www.weber-hayes.com

Field Page 1 / 1

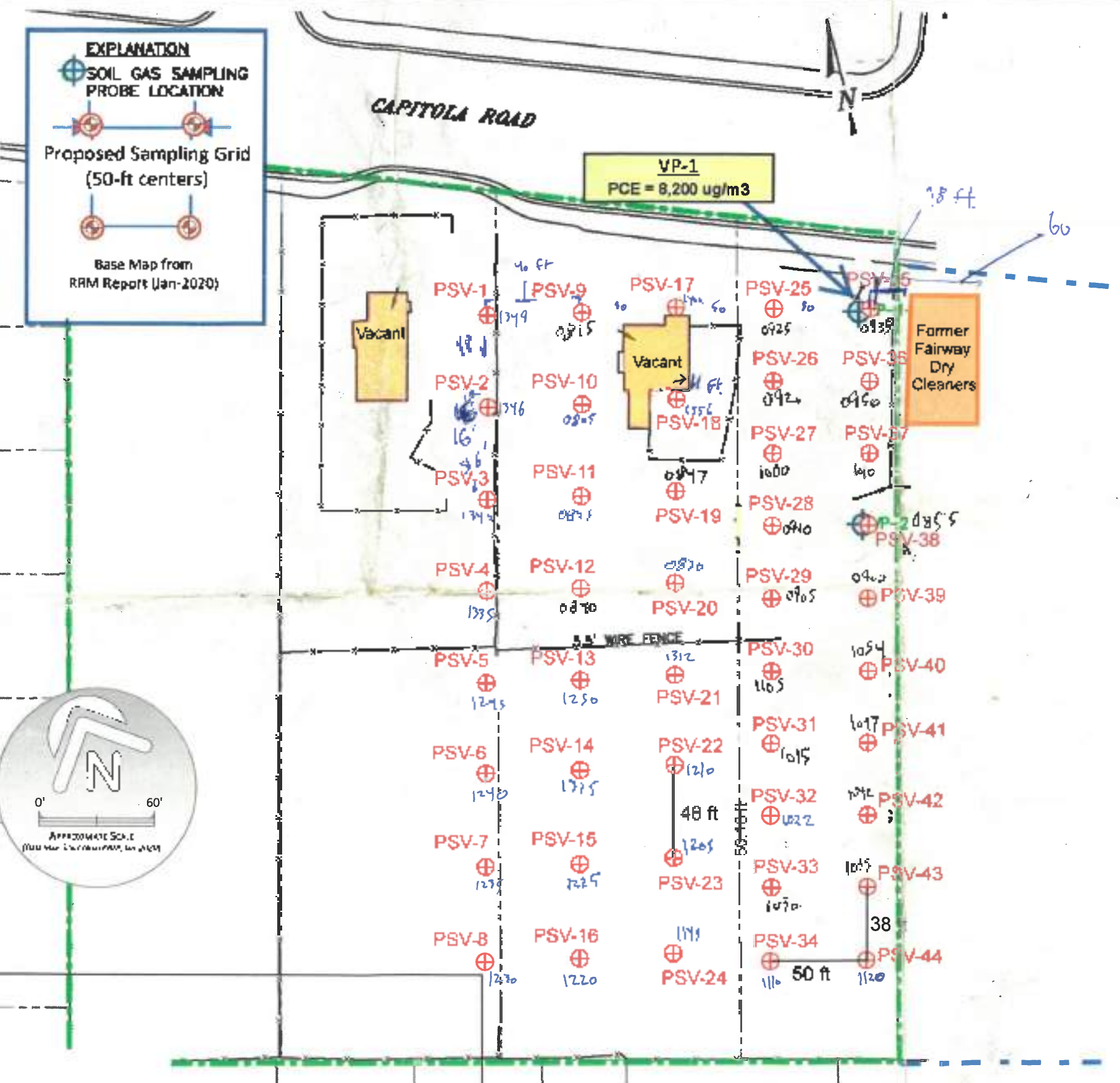
INDICATE ATTACHMENTS THAT APPLY
- X Site Map
- ___ Data Sheets
- ___ Geologic Logs
- X Photo Sheets
- ___ COC
- ___ Disposable Materials

Job Name: Former Fairway Cleaners	Date: 2/25/20
Site Location: Capitola Road Santa Cruz	Study #: 27009
Field Tasks: [X] Drilling [X] Sampling [ ] Other (See below): Passive Soil Vapor Sampling	Weather Conditions: Morning cool - no clouds - sun
Personnel / Company On-Site: Hunter Hicks, Ryan Nyberg (WHA)	

TIME:

0715	Arrive on-site and discuss scope of work:
	- drill and install 44 sample locations for passive soil gas adsorbent tubes
	- Protocol for installation (e.g. depths, diameter, etc.) will follow Beacon laboratory
	guidance.
	- See attached fieldsheet for additional sample location specific details.
	- See photo sheets for additional detail.
	Note: Hazardous encampment present on-site → adjusted location of PSV-28 for safety.
0730	Begin drilling → Ryan will complete drilling at each location. I will deploy samplers. See
	Ryan's fieldsheets for drilling detail.
0945	Continue drilling and deploying passive soil vapor tubes. Difficult drilling conditions at
	PSV-36.
	Drilling continues → Passive vapor tube installation continues.
1120	- Break for lunch
1140	Continue drilling and sample deployment.
	- Pat Hoban (WHA) on-site to photo document & observe sampling. Discuss
	project progress.
1215	- Pat departs
	Continue drilling and sample deployment
	All samples deployed. Will return in 7 days to retrieve samples. Sample locations
	marked w/pin flags.
1430	Pack equipment and demobilize.

[signature] 2/25/20
Signature of Field Personnel & Date


EXPLANATION
SOIL GAS SAMPLING PROBE LOCATION
Proposed Sampling Grid (50-ft centers)
Base Map from RRM Report (Jan-2020)
CAPITOLA ROAD
N
VP-1
PCE = 8,200 ug/m3
Vacant
Vacant
Former Fairway Dry Cleaners
PSV-1
PSV-2
PSV-3
PSV-4
PSV-5
PSV-6
PSV-7
PSV-8
PSV-9
PSV-10
PSV-11
PSV-12
PSV-13
PSV-14
PSV-15
PSV-16
PSV-17
PSV-18
PSV-19
PSV-20
PSV-21
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PSV-26
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PSV-28
PSV-29
PSV-30
PSV-31
PSV-32
PSV-33
PSV-34
PSV-35
PSV-36
PSV-37
PSV-38
PSV-39
PSV-40
PSV-41
PSV-42
PSV-43
PSV-44
6' WIRE FENCE
48 ft
38
50 ft
0'
60'
APPROXIMATE SCALE

Drilling for Installation of Passive Soil Gas Sampler

Passive Soil Gas Sampler

Sampler Installed for 7 days

Samples Retrieved Following Laboratory Protocols

Passive Soil Vapor Sampling Fieldsheet
Capitola Road

Sample ID	Installation Date	Installation Time	Odor or Discoloration?	Geology	Other Observations
PSV-1	2/25	1349	none	clayey Sand	Boring near road/across driveway. (Dry 0-1') (Damp 1-3')
PSV-2		1346	none	clayey Sand	Boring near roadway.
PSV-3		1342	none	Asphalt + basecrock 0-0.5' clayey Sand 0.5-3'	Boring in asphalt driveway Dry 0-3'
PSV-4		1335	none	Asphalt + basecrock 0-0.5' clayey Sand 0.5-3'	Boring in asphalt driveway Dry 0-3'
PSV-5		1245	none	hard clay w/sand (light brown)	- dry 0-2'. very stiff. Hard to drill - damp 2'-3'
PSV-6		1240	none	"	"
PSV-7		1235	none	- clayey sand (dark brown) (0-1') - sandy clay (brownish orange) (1'-3')	- dry (0-1') - damp/moist (1-3')
PSV-8		1230	none	"	"
PSV-9		0815	none	clayey SAND	water/moist at 3' bgs. Compacted surface
PSV-10		0805	none	clayey SAND	"

Petroleum Soil Vapor Sampling Worksheet
Capitola Area

Sample ID	Installation Date	Installation Time	Odor or Discoloration?	Geology	Other Observations
PSV-11	2/25	0825	None	- imported coarse SAND 0'-3'	compacted driveway gravel and sand. - moist at 2.5' 3' bgs
PSV-12		0840	none	clayey SAND (dark brown)	moist from surface - 3'
PSV-13		1250	none	- clayey sand (dark brown) (0-1') - sandy clay (light orange) (1'-3')	- dry - dry to damp
PSV-14		1315	none	"	"
PSV-15		1225	None	- clayey SAND (dark brown)	- damp/moist from 2'-3' - signs of gophers.
PSV-16		1220	none	"	- damp to moist 1.5-2' bgs
PSV-17		1402	none	sandy clay (dark brown) (0-3')	- damp to moist from (0.5'-3')
PSV-18		1356	none	sandy clay (dark brown) (0-3')	- damp to moist from (0.5'-3')
PSV-19		0847	None	clayey SAND	moist from surface to 3'
PSV-20		0830	None	Sandy CLAY from 1'-3' bgs (light brown orange) clayey SAND 0-1' bgs	moist from surface to 3' - damp

Passive Soil Vapor Sampling Fieldsheet
Copitalo Road

Sample ID	Installation Date	Installation Time	Odor or Discoloration?	Geology	Other Observations
PSV-21	2/25 ↓	1312	none	" ↑	" ↑
PSV-22		1210	none	Clayey SAND (dark brown)	- wet/firm 2.5-3' - dry/loose 0-1' bgs - gopher signs
PSV-23		1205	none	"	- damp/moist 2-3' - damp/dry 1-2' - gopher signs
PSV-24		1143	none	"	"
PSV-25		0915	none	Clayey SAND (dark brown) - 0-1' Sandy CLAY (light orange brown) to 1-3'	→ Saturated (muddy water coming up with the large diameter 0-1' → damp to moist. * Some very loose/cavernous like gopher holes within (0'-1' bgs)
PSV-26		0920	none	Clayey SAND (dark brown) - 0'-1.5' - Sandy Clay (orange brown) - 1.5-3'	- moist/saturated from surface to 3'.
PSV-27		1000	none	- Clayey SAND (dark brown) to 0-3'	- damp from surface - 3'
PSV-28		0910	none	Sandy CLAY (yellowish tan orange) (1'-3') - surficial dark brown silt 0-1'	moist from surface to 3'.
PSV-29		0905	none	"	"
PSV-30	↓	1105	none	- Clayey SAND (dark brown)	- damp - 1'-3' - dry loose 0-1'

Passive Soil Vapor Sampling Worksheet
Capitola Road

Sample ID	Installation Date	Installation Time	Odor or Discoloration?	Geology	Other Observations
PSV-31	2/25	1015	none	dark brown Silty SAND w/clay (loose, gopher signs)	- gopher signs - wet/moist 2'-3'
PSV-32		1012	none	dark brown clayey SAND	- moist. 0 - 3'
PSV-33		1032	none	"	"
PSV-34		1110		"	"
PSV-35		0935	none	harder soil at surface (0-1.5') Ld dark brown clayey SAND clay (orange brown) (1.5'-3')	- wet/damp at 2'-3' bgs - dup
PSV-36		0950	None	Mostly large to small rounded gravels from	
PSV-37		1010	none	- some small rounded pebbles - SAND w/ clay	- damp from 2'-3'
PSV-38		0855	None	- loose light tan brown Silty SAND (very fine)	- very loose. - moist from 1-3'
PSV-39		0900	none	- loose light tan brown SilySAND Ld 0-1' - orange tan clay 1'-3'	- moist from surface - 3' - Dup
PSV-40		1054	none	- mostly dark brown clayey sand	- wet from surface - 3'

Passive Soil Vapor Sampling Worksheet
Capitola Road

Sample ID	Installation Date	Installation Time	Vapor Discoloration?	Geology	Other Observations
PSV-41	2/25	1047	none	Clayey SAND dark brown 0-3'	wet/moist surface to 3' bgs
PSV-42		1042	none	"	"
PSV-43		1035	none	very muddy (wet-saturated at surface) -dark brown clayey SAND	-Soil collected from 0-3'
PSV-44		1120	none	"	" -Dup

3) Passive Vapor Sample Collection

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr, Watsonville, CA 95076
831.722.3580 / www.weber-hayes.com

Project / Client: County of Santa Cruz	Project #: 21009
Site Location: 1441, 1455, 1504, & 1514 Capitola Rd	Date: 3-3-20
Field tasks: Passive Soil Vapor Sample Collection	Weather: Sunny
Personnel / Company On-Site: RW (WHA)	
Attachments: Site Map___ Data Sheets___ Gauging Logs___ Photos CDC___ Chargeable Materials___	

Time:	Notes:
	~~- [illegible] [illegible] [illegible],~~
	~~- [illegible] ([illegible] [illegible] [illegible])~~
0745	Arrived onsite with Harrison Preping Passive Soil Vapor Sample collection. First sample was placed a week ago at 0805
0800	- Beginning sampling at 0805 at PSV-10. Harrison planning to take off soon.
1002	- PSV-27 has some dirt inside and the foil was moved (gophers? dogs?)
1030	(Same thing happened @ PSV-33.
1110	- Lunch Break. Working on COC and organizing sample bags.
1143	- Starting up again (PSV-24). Working on southwest corner of site.
12:35	- PSV-7 had foil displaced and soil in metal tube.
12:50	- PSV-13 is submerged in water (no significant odors of liquid so hopefully it is water). Sample was completely submerged.
1410	- Finishing up mobilization. Checking over field notes and COCs. Reviewing Beacon checklist for sample delivery.
1430	- Mobilizing to Fed Ex to drop off samples.

[signature]

Signature of Field Personnel / Date

Capitola Road

Leila Court

PSV-1 1349
PSV-2 1346
PSV-3 1342
PSV-4 1340
PSV-5 1245
PSV-6 1240
PSV-7 1235
PSV-8 1230
PSV-9 0815
PSV-10 0805
PSV-11 0825
PSV-12 0840
PSV-13 1250
PSV-14 1315
PSV-15 1225
PSV-16 1220
PSV-17 1402
PSV-18 1356
PSV-19 0847
PSV-20 0830
PSV-21 1312
PSV-22 1210
PSV-23 1205
PSV-24 1143
PSV-25 0925
PSV-26 0920
PSV-27 1000
PSV-28 0910
PSV-29 0905
PSV-30 1105
PSV-31 1015
PSV-32 1022
PSV-33 1030
PSV-34 1110
PSV-35 0935
PSV-36 0950
PSV-37 1010
PSV-38 0855
PSV-39 0900
PSV-40 1054
PSV-41 1047
PSV-42 1042
PSV-43 1035
PSV-44 1120

50 ft
48 ft
38 ft

APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION

N

0 40-ft

FIGURE 2
Project 21009

Site Map
Supplemental Property Screening Assessment

Site: County of Santa Cruz Redevelopment Parcels
Address: 1412, 1438, 1500 and 1514 Capitola Road, Santa Cruz

Date: February 2020

REVISIONS/NOTES:

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
130 Westgate Drive, Watsonville, CA
831.722.3580 / www.weber-hayes.com

4) Active Vapor Sampling

WHA

WEBER, HAYES & ASSOCIATES
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
831 722-3580 ✦ www.weber-hayes.com

Field Page 1 : 2

INDICATE ATTACHMENTS THAT APPLY

- X Site Map
- ___ Data Sheets
- ___ Boring Logs
- X Photo Sheets
- ___ COCs
- ___ Chargeable Materials

Job Name: 17th & Capitola - Former Fairway Cleaners			Date: 4/1/20
Site Location: 17th Avenue & Capitola - Santa Cruz			Study #: 2T005b
Field Tasks: [X] Drilling	[X] Sampling	[ ] Other (see below):	Weather Conditions:
Soil, Soil vapor, and Groundwater Sampling			Cool - Few clouds - Morning
Personnel / Company On-Site: Harrison Hucks (WHA), Ryan Nyberg (WHA), Cascade Drilling			

TIME:	
0745	Arrive on-site and meet w/ Ryan Nyberg (WHA). Prepare equipment to complete
	soil, soil vapor, and groundwater sampling.
0800	Cascade Drilling (Arturo & Carlos) arrive on-site. Discuss drilling, mobilization,
	sampling, and timeline.
	- Review site health and safety plan and utility locations.
	Cascade begins preparations for soil vapor installs starting at SV-2
	- Dual depth nested vapor probes set at 15' & 5' bgs.
	- See Ryan Nyberg's field sheets for drilling details, logs, etc. → Ryan
	will complete soil & GW sampling.
	Soil Vapor Samples will be collected 2 hours following equilibration time.
	Cascade begins drilling
0910	- Probe is set at 0910 → SV-2.
	Mob. to SV-1 and prepare to drill.
	- Probes set at 0945
	Mob. to SV-4 and prepare to drill.
	- Probes set at 1040
	Mob. to SV-5 and prepare to drill
	- Probes set at 1120
	Mob. to SV-6 and prepare to drill.
1110	Begin purge at SV-2. Purge complete. See attached soil vapor field sheets
	for additional detail. See photo sheets for additional detail.
	- Sample collected @ SV-2-d15
	Begin Purge at SV-2-d5. Purge complete.
	- Sample collected @ SV-2-d5. Low-flow conditions.

Signature of Field Personnel & Date: [signature] 4/1/20

Total Pages 2 / 2

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Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
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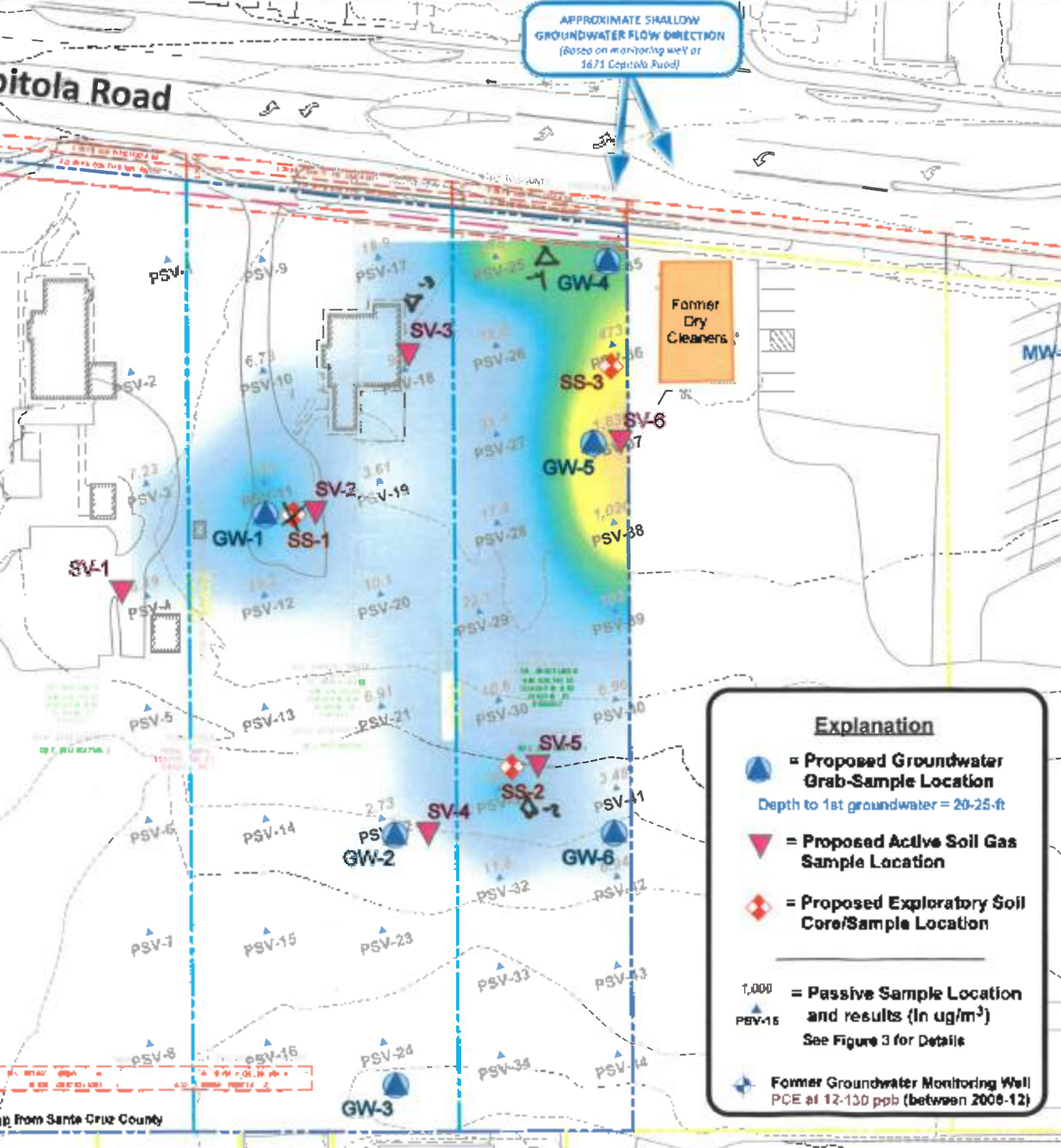
INDICATE ATTACHMENTS THAT APPLY:
- X Site Map
- ___ Data Sheets
- ___ Geologic Logs
- X Photo Sheets
- ___ COCs
- ___ Composite Sheets

Job Name: 17th & Capitola – Former Fairway Cleaners	Date: 4/1/20
Site Location: 17th Avenue & Capitola Road, Santa Cruz	Study #: ZF 0096
Field Tasks: [x] Drilling [x] Sampling [ ] Other (see below): Soil vapor sampling	Weather Conditions: No clouds – Warm
Personnel / Company On-Site: Harrison Hicks, Ryan Nyberg (WHA), Cascade Drilling	

TIME:

Time	
1200	Drillers break for lunch.
	Mob. to SV-1-d15 and prepare to purge → purge complete
	– Sample collected.
	Pat Hoban arrives on site. Discuss drilling progress and field mod.
	Begin purge of SV-1-d5 → purge complete
1305	– Sample collected
1305	– Pat Hoban departs. Drillers mob. to SV-3 and begin probe installation.
	Mob. to SV-4-d15 and begin purge → purge complete.
	– Sample collected.
	Mob. to SV-4-d5 and begin purge → complete.
	– Sample collected.
	Mob. to SV-5-d15 and begin purge → purge complete
1421	– Sample collected
	Begin purge of SV-5-d5 → purge complete.
	– Sample collected. Note: Dup-A collected here.
	Mob. to SV-6-d15 and begin purge → purge complete
1528	– Sample collected. Note: Probes set @ SV-3 : 1150
	Begin purge of SV-6-d5 → purge complete
	– low flow conditions. Sample collected.
	Mob. to SV-3-d15 and begin purge → purge complete
1633	– Sample collected. Ryan Nyberg departs.
	Begin purge of SV-3-d5 → purge complete.
	– Sample collected. Pack equipment and prepare to demob.
1700	Drillers demob. Will meet w/ lab courier and drop vapor samples
	under chain of custody.
1730	Samples delivered to courier.

[signature] 4/1/20
Signature of Field Personnel & Date


APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
(Based on monitoring well at 1671 Capitola Road)
itola Road
Former Dry Cleaners
GW-1
GW-2
GW-3
GW-4
GW-5
GW-6
SV-1
SV-2
SV-3
SV-4
SV-5
SV-6
SS-1
SS-2
SS-3
Explanation
= Proposed Groundwater Grab-Sample Location
Depth to 1st groundwater = 20-25-ft
= Proposed Active Soil Gas Sample Location
= Proposed Exploratory Soil Core/Sample Location
1,000
PSV-15
= Passive Sample Location and results (in ug/m3)
See Figure 3 for Details
Former Groundwater Monitoring Well
PCE at 12-130 ppb (between 2008-12)
p from Santa Cruz County

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 27008b* | Date: *April 1, 2020*

Sample I.D.: SV-1-05 | Canister No: 2900 | Manifold No: 1224, 1261

Samplers Name: *Harrison Hucks* | Recorded by: HH

Sample Analysis Information

Requested Analyses (circle all that apply):

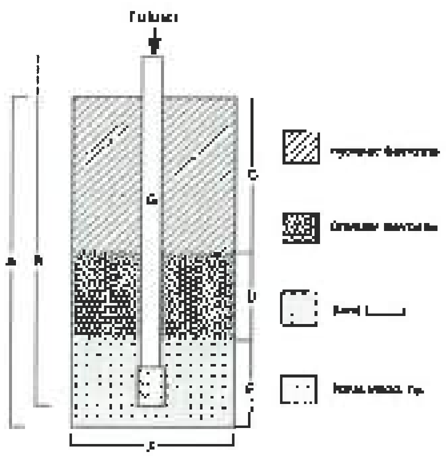
(VOCs by EPA Method TO-15 or) TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 | Methane, CO_2, O_2 by ASTM D-1946 | IPA by TO-15

Sample Collection Media: 1.4-L Summa Canister

Lab: BC Labs | Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 6.0'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (ID/OD): 1/8-inch (id) tubing = 2.4 mL/ft; (3/16-inch (id) tubing = 5.4 mL/ft) [circled]

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity): 8-inch boring = 3,361 mL/ft; (2.25-inch boring = 264 mL/ft) [circled]; 2.75-inch boring = 385 mL/ft

Annular Dead Space Volume [(D+E) x Annular Volume Conversion]: 528 ml

Tubing Dead Space Volume [B x Tubing Volume Conversion]: 43.2 ml

Total Dead Space Volume (Tubing + Annular): 571.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1713.6 ml = 6.5 "Hg Δ = (Total Dead Space Vol / Sample Flow Rate)

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L | Manifold Shut-in check duration: 1 minute | Manifold Leaking: Yes / (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1257	0	-.-	<1	30
1259	2	50-150	<1	20
1301	4	120-200	<1	10
1303	6	100-200	<1	4

H.H.

Average:

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID Data log #4 - 4/1/20
TVOC reading: 0.1 ppm

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 2T0086* **Date:** *April 1, 2020*

Sample I.D.: SV-1-d15 **Canister No:** 5190 **Manifold No:** 1109, 1474

Samplers Name: *Harrison Hucke* **Recorded by:** HH

Sample Analysis Information

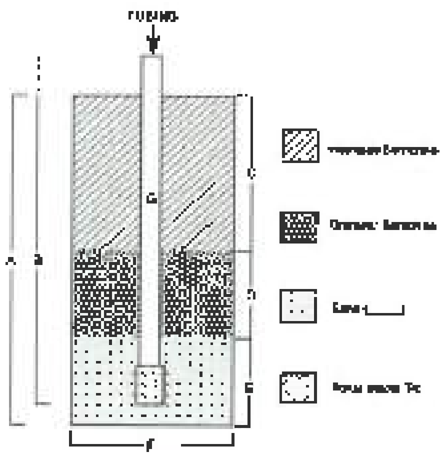
Requested Analyses (circle all that apply): **Sample Collection Media:**

VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15, Naphthalene by EPA Method TO-15 — *1.4-L Summa Canister*

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Lab: *BC Labs* **Transportation:** *Courier*

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 15.0'

A: 15.5'
B: 18.0'
C: 13.5'
D: 1'
E: 1'
F: 2.25"
G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (Teraflon): 1/8-inch (ID) tubing = 2.4 mL/ft; 3/16-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.3% porosity):
- 8-inch boring = 3,341 mL/ft
- 2.25-inch boring = 264 mL/ft (circled)
- 2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: [(D+E) x Annulus Volume Conversion]: 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion]: 97.2 ml

Total Dead Space Volume (Tubing + Annular): 625.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1875.6 ml = 9.38 "Hg Δ = (Total Dead Space/Sample Flow Rate)

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-in check duration: 1 minute Manifold Leaking: Yes / No (No circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1230	0	--	<1	30
1232	2	50-100	<1	22
1234	4	50-100	<1	15
1236	6	100-150	<1	10
1239	8	50-200	<1	5

(Diagonal line drawn through empty rows, initialed H.H.)

Initial canister vacuum: 30 "Hg

Final canister vacuum: 5 "Hg

Post-Sample PID Reading: TVOCs Average:

Comments: PID details #3 - 4/1/20
TVOC reading: 0.4 ppm

A:\DSA_Forms\A_WHA Forms-MC\Draft-FIELD Forms\Vapor-Field_Summa_Summa

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 2T0096* Date: April 1, 2020

Sample I.D.: SV-2-d5 Canister No: 5173 Manifold No: 1125, 1278

Samplers Name: Harrison Hughs Recorded by: HH

Sample Analysis Information

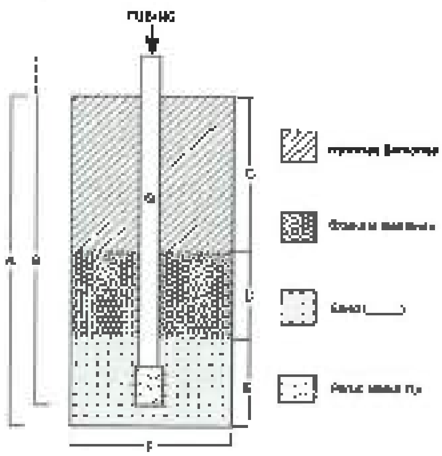
~~Requested Analyses (circle all that apply)~~: Sample Collection Media: 1.4-L Summa Canister

(VOCs by EPA Method TO-15 or) TO-14; M-BTEX & TBA by EPA Method TO-15, Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Lab: BC Labs Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8.0'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28.317 mL/ft³):

Tubing (HydroFlex): 1/8-inch (id) tubing = 2.4 mL/ft; (3/16-inch (id) tubing = 5.4 mL/ft)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (32.8% porosity)

6-inch boring = 3,341 mL/ft

(2.25-inch boring = 264 mL/ft)

2.75-inch boring = 398 mL/ft

Annular Dead Space Volume [(D+E) x Annulus Volume Conversion]: 528 ml

Tubing Dead Space Volume [B x Tubing Volume Conversion]: 43.2 ml

Total Dead Space Volume (Tubing + Annular): 571.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1713.6 ml = 8.5 "Hg Δ = (Total Dead Space Vol.) / (Canister Flow Rate)

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-in check duration: 1 minute Manifold Leaking: Yes (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1157	0	--	2	30
1159	2	50-140	4	20
1201	4	50-200	4	13
1203	6	50-150	5	8
1205	8	50-150	5	4

H.H.

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: (TVOCs) Average:

Comments: PID data, #2 - 4/1/20

Total VOC: 0.0 ppm

Low-flow conditions.

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 270096* Date: *April 1, 2020*

Sample I.D.: SV-2-15 Canister No: 6124 Manifold No: 1166

Samplers Name: *Harrison Hocke* Recorded by: HH

Sample Analysis Information

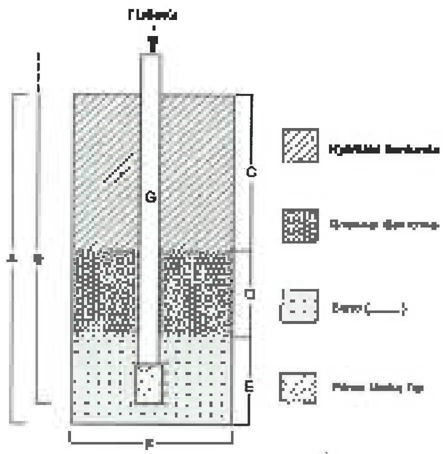
Requested Analyses (circle all that apply): Sample Collection Media:

VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15 1.4-L Summa Canister

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Lab: BC Labs Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 15.0'

A: 15.5'
B: 18.0'
C: 13.5'
D: 1'
E: 1'
F: 2.25"
G: 3/16"

Volumetric Conversions (28.317 mL/ft³):

Tubing (Nylaflow): 1/8-inch (id) tubing = 2.4 mL/ft; 3/16-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (30.0% porosity):
8-inch boring = 3,341 mL/ft
2.25-inch boring = 264 mL/ft (circled)
2.75-inch boring = 396 mL/ft

Annular Dead Space Volume: [(D+E) x Annulus Volume Conversion] 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion] 97.2 ml

Total Dead Space Volume (Tubing + Annular): 625.2 ml

System Purge Information

Required System Volumes to Purge (based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1875.6 ml = 9.38 "Hg Δ = [Total Dead Space Vol] / [Sample Flow Rate]

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-in check duration: 1 minute Manifold Leaking: Yes / No (No circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1123	0	--	<1	30
1125	2	40-70	<1	20
1127	4	70-100	<1	11
1129	6	100-150	<1	4

H.H

Average:

Final canister vacuum: 9 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID duty #1 - 4/1/20
Total PID detection: 2.4 ppm

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 2T0096* Date: *April 1, 2020*

Sample I.D.: SV-3-d5 Canister No: 2#72 Manifold No: 1266, 1620

Sampler Name: *Harrison Uncle* Recorded by: HH

Sample Analysis Information

Requested Analyses (circle all that apply):

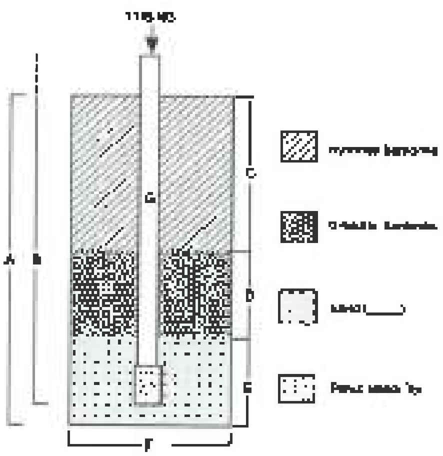
VOCs by EPA Method TO-15 or TO-14, M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946, IPA by TO-15

Sample Collection Media: 1.4-L Summa Canister

Lab: BC Labs Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8.0'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (Nylaflow): 1/8-inch (id) tubing = 2.4 mL/ft; 3/4-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (30-8% porosity): 8-inch boring = 3,341 mL/ft; 2.25-inch boring = 264 mL/ft (circled); 2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: [(D+E) x Annular Volume Conversion] 528 ml

Tubing Dead Space Volume [B x Tubing Volume Conversion] 43.2 ml

Total Dead Space Volume (Tubing + Annular): 571.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1713.6 ml = 8.5 "Hg Δ =

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-In check duration: 1 minute Manifold Leaking: Yes / No (No circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1650	0	--	<1	30
1652	2	50 - 150	<1	23
1654	4	50 - 150	<1	16
1656	6	50 - 150	<1	9
1657	7	50 - 180	<1	5

H.H.

Average:

Final canister vacuum: 5 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID data #12 - 4/1/20

TVOC reading: 0.1 ppm

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 270006* Date: *April 1, 2020*

Sample I.D.: SV-3-d15 Canister No: 00942 Manifold No: 1271, 1023

Samplers Name: Harrison Hudis Recorded by: HH

Sample Analysis Information

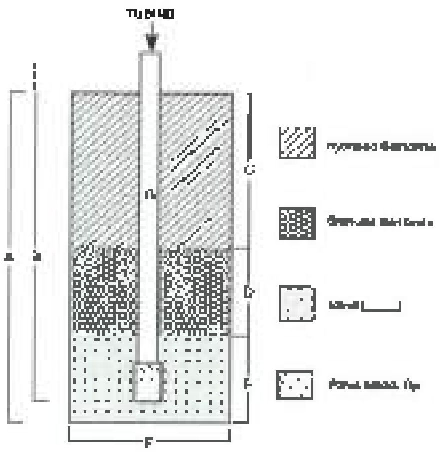
Requested Analyses (circle all that apply): Sample Collection Media:

VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15 — 1.4-L Summa Canister

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Lab: JEC Labs Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 15.0'

A: 15.5'

B: 18.0'

C: 13.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³)

Tubing (Nylaflow): 1/8-inch (id) tubing = 2.4 mL/ft

3/16-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.7% porosity):

3-inch boring = 3.341 mL/ft

2.25-inch boring = 264 mL/ft (circled)

2.75-inch boring = 396 mL/ft

Annular Dead Space Volume: [C+E] x Annulus Volume Conversion]: 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion]: 97.2 ml

Total Dead Space Volume (Tubing + Annular): 625.2 ml

System Purge Information

Required System Volumes to Purged based on DTSC Guidance for vapor probe sampled = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1875.6 ml = 9.38 "Hg Δ = [Tot. Dead Space Vol] / [Sample Flow Rate]

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-in check duration: 1 minute Manifold Leaking: Yes / No (circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1627	0	--	<1	30
1629	2	50-100	<1	20
1631	4	70-150	<1	11
1633	6	50-150	<1	4

HH

Initial canister vacuum: 30 "Hg

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: TVOCs Average:

Comments: PID data log #11 - 4/1/20
TVOC reading: 9.2 ppm

AJ/DSA_Forms/A_WHA Forms-MOCA/27-FIELD Forms/Vapor-Field_Summa - Summa

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 2T009b* **Date:** *April 1, 2020*

Sample I.D.: SV-4-5 **Canister No:** 1946 **Manifold No:** 643

Samplers Name: *Harrison Nucks* **Recorded by:** HH

Sample Analysis Information

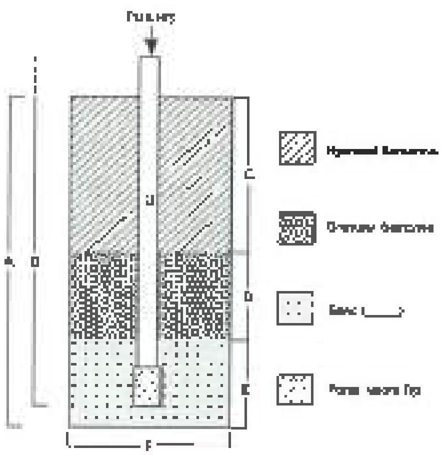
Requested Analyses (circle all that apply): **Sample Collection Media:**

VOCs by EPA Method TO-15 or TO-14 M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15 — 1.4-L Summa Canister

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Lab: **BC Labs** **Transportation:** **Courier**

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8.0'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing: 1/8-inch (id) tubing = 2.4 mL/ft

2/16-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity)

8-inch boring = 3,341 mL/ft

2.25-inch boring = 264 mL/ft (circled)

2.75-inch boring = 385 mL/ft

Annular Dead Space Volume: [(C+E) x Annulus Volume Conversion] 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion] 43.2 ml

Total Dead Space Volume (Tubing + Annular) 571.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1713.6 ml - 8.5 "Hg A = Total Dead Space/Sample Flow Rate

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-in check duration: 1 minute Manifold Leaking: Yes / No (No circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1346	0	--	<1	30
1348	2	20-50	<1	30
1350	4	100-200	<1	17
1352	6	150-300	<1	4
	Average:			

H.H.

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID data log #6

TVOC reading: 6.9 ppm

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.:	Former Fairway Cleaners - 2T006b	Date:	April 1, 2020
Sample I.D.:	SV-4-d15	Canister No: 2898	Manifold No: 1043
Samplers Name:	Harrison Hucks		Recorded by: HH

Sample Analysis Information

Requested Analyses (circle all that apply):

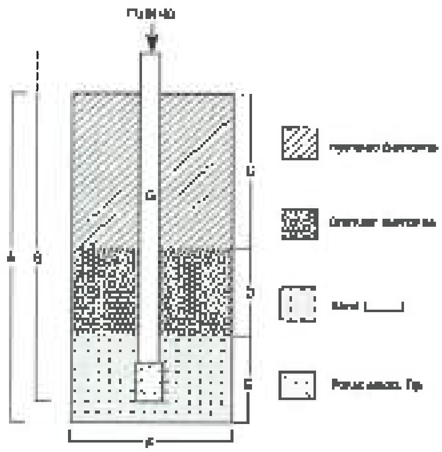
(VOCs by EPA Method TO-15 or) TO-14; M-BTEX & TBA by EPA Method TO-15, Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 — Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Sample Collection Media: 1.4-L Summa Canister

Lab: BC Labs — Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 15.0'

A: 15.5'
B: 18.5'
C: 13.5'
D: 1'
E: 1'
F: 2.25"
G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing (inner diam): 1/8-inch (id) tubing = 2.4 mL/ft; (3/16-inch (id) tubing = 5.4 mL/ft) [circled]

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.5% porosity):
8-inch boring = 3,341 mL/ft
(2.25-inch boring = 284 mL/ft) [circled]
2.75-inch boring = 385 mL/ft

Annular Dead Space Volume: [D+E] x Annular Volume Conversion]: 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion]: 97.2 ml

Total Dead Space Volume (Tubing + Annular): 625.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1875.6 ml = 9.38 "Hg Δ = Total Dead Space Vol / (Sample Flow Rate)

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L — Manifold Shut-in check duration: 1 minute — Manifold Leaking: Yes / (No)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1325	0	--	<1	30
1327	2	50-100	<1	21
1329	4	100-200	<1	↓
1331	6	200-400	<1	4
		Average:		

HH

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID daily #5 - 4/1/20 TVOC reading: 4.1 ppm

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 270095* Date: *April 1, 2020*

Sample I.D.: SV-5-d5 Canister No: 2378 Manifold No: 1201 / 1016

Samplers Name: Matthew Hecke Pot: 1135 Recorded by: HH

Sample Analysis Information

Requested Analyses (circle all that apply):

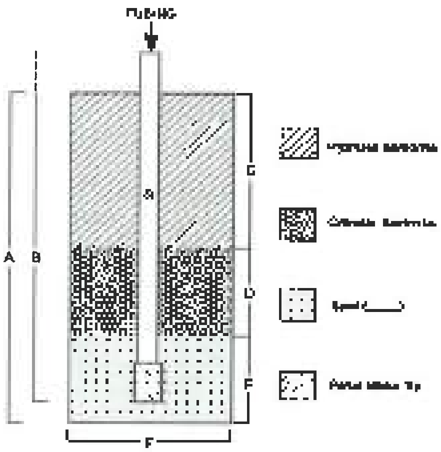
VOCs by EPA Method TO-15 (circled) or TO-14; M-BTEX & TEA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Sample Collection Media: *1.4-L Summa Canister*

Lab: SC Labs Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8.0'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28.317 mL/ft³):

Tubing (Nylaflow): 1/8-inch (id) tubing = 2.4 mL/ft; 3/16-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.6% porosity): 8-inch boring = 3,341 mL/ft; 2.25-inch boring = 264 mL/ft (circled); 2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: [D+E x Annular Volume Conversion] 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion] 43.2 ml

Total Dead Space Volume (Tubing + Annular): 571.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1713.6 ml = 8.5 "Hg Δ = (Total Dead Space Vol / Sample Flow Rate)

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut In check duration: 1 minute Manifold Leaking: Yes / No (circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1439	0	--	<1	30
1441	2	10-20	<1	25
1443	4	50-100	<1	21
1445	6	50-60	<1	17
1447	8	50-150	<1	13
1449	10	50-140	<1	9
1451	12	50-150	<1	5

H.H.

Initial canister vacuum: 30 "Hg

Final canister vacuum: 5 "Hg

Post-Sample PID Reading: TVOCs Average:

Comments: PID data log #8 - 4/1/20

TVOC reading: 0.0 ppm

DUP-A collected here.

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: Former Fairway Cleaners - 270095 | Date: April 1, 2020

Sample I.D.: SV-5-d15 | Canister No: 5162 | Manifold No: 1026 1123

Samplers Name: Harrison Hacks | Recorded by: HH

Sample Analysis Information

Requested Analyses (circle all that apply):

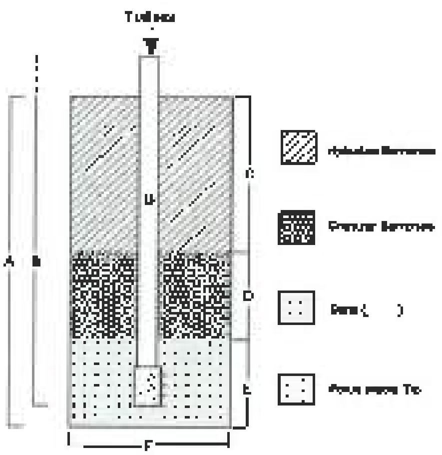
VOCs by EPA Method TO-15 or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15 | Methane, CO_2, O_2 by ASTM D-1946, IPA by TO-15

Sample Collection Media: 1.4-L Summa Canister

Lab: BC Labs | Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 15.0'

A: 15.5'

B: 18.0'

C: 13.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28,317 mL/ft³):

Tubing: 1/8-inch (id) tubing = 2.4 mL/ft

3/16-inch (id) tubing = 5.4 mL/ft

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity):

8-inch boring = 3,341 mL/ft

2.25-inch boring = 284 mL/ft

2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: 528 ml

Tubing Dead Space Volume: 97.2 ml

Total Dead Space Volume (Tubing + Annular): 625.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1875.6 ml = 9.18 "Hg Δ = (Total Vol. to be purged / Sample Flow Rate)

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L | Manifold Shut-in check duration: 1 minute | Manifold Leaking: Yes / No

Leak Check Tracer Compound: IPA (leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1415	0	--	<1	30
1417	2	20-50	<1	20
1419	4	40-60	<1	10
1421	6	50-100	<1	4
		Average:		

H.H.

Initial canister vacuum: 30 "Hg

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID daily #7 - 4/1/20
TVOC reading: 8.4 ppm

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: *Former Fairway Cleaners - 2T009b* **Date:** *April 1, 2020*

Sample I.D.: SV-6-d5 **Canister No:** 6022 **Manifold No:** 1104, 1124

Samplers Name: *Harrison Hucks* **Recorded by:** HH

Sample Analysis Information

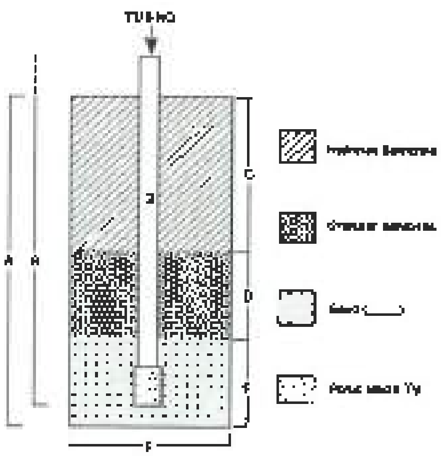
Requested Analyses (circle all that apply): **Sample Collection Media:** 1.4-L Summa Canister

(VOCs by EPA Method TO-15 or TO-14; M BTEX & TBA by EPA Method TO-15) (circled); Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15; Methane, CO_2, O_2 by ASTM D-1946; IPA by TO-15

Lab: BC Labs **Transportation:** Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 5.0'

A: 5.5'

B: 8.0'

C: 3.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (28.317 mL/ft³)

Tubing (Nylaflow): 1/8-inch (id) tubing = 2.4 mL/ft; 3/16-inch (id) tubing = 5.4 mL/ft (circled)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.8% porosity)

2-inch boring = 3.341 mL/ft; 2.25-inch boring = 264 mL/ft (circled); 2.75-inch boring = 395 mL/ft

Annular Dead Space Volume: (D+E) × Annular Volume Conversion): 528 ml

Tubing Dead Space Volume: (B × Tubing Volume Conversion): 43.2 ml

Total Dead Space Volume (Tubing + Annular): 571.2 ml

System Purge Information

Required **System Volume** to Purge based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1713.6 ml ≈ 8.5 "Hg Δ = Total Dead Space Vol / Sample Flow Rate

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L Manifold Shut-in check duration: 1 minute Manifold Leaking: Yes / No (No circled)

Leak Check Tracer Compound: IPA (leak tracer compound applied in shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1549	0	--	2	30
1551	2	100-200	3	22
1553	4	100-300	4	15
1555	6	100-200	5	10
1557	8	100-200	5	5
		Average:		

H.H.

Final canister vacuum: 5 "Hg

Post-Sample PID Reading: TVOCs

Comments: PID cal... #10: 4/1/20

TVOC reading: 0.2 ppm

Low flow conditions

ACTIVE SOIL VAPOR SAMPLING FIELD DATA SHEET

Sample Location Information

Project Name/No.: Former Fairway Cleaners - 2T009b

Date: April 1, 2020

Sample I.D.: SV-6-d15

Canister No: 10315

Manifold No: 1142, 1088

Samplers Name: Harrison Hucks

Recorded by: HH

Sample Analysis Information

Requested Analyses (circle all that apply):

(VOCs by EPA Method TO-15) or TO-14; M-BTEX & TBA by EPA Method TO-15; Naphthalene by EPA Method TO-15

TPH-gas by EPA Method TO-15

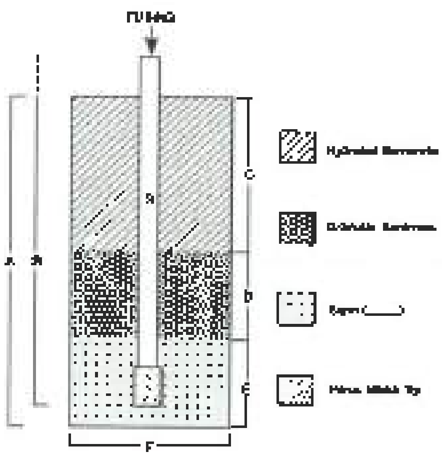
Methane, CO_2, O_2 by ASTM D-1946, IPA by TO-15

Sample Collection Media: 1.4-L Summa Canister

Lab: BC Labs

Transportation: Courier

Semi-Permanent Vapor Probe Construction Details



Probe Tip Set Depth / Sample Depth: 15.0'

A: 15.5'

B: 18.0'

C: 13.5'

D: 1'

E: 1'

F: 2.25"

G: 3/16"

Volumetric Conversions (20.317 mL/in³):

Tubing (Inside/Outer): 1/8-inch (od) tubing = 2.4 mL/ft; (3/16-inch (id) tubing = 5.4 mL/ft)

Annulus: Sand (#3 or #2/12) & Granular Bentonite (33.9% porosity)

5-inch boring = 3,341 mL/ft

(2.25-inch boring = 264 mL/ft)

2.75-inch boring = 398 mL/ft

Annular Dead Space Volume: [(D+E) x Annular Volume Conversion]: 528 ml

Tubing Dead Space Volume: [B x Tubing Volume Conversion]: 97.2 ml

Total Dead Space Volume (Tubing + Annular): 625.2 ml

System Purge Information

Required System Volume to Purged based on DTSC Guidance for vapor probe samples = 3 System ("dead space") Volumes

Total Site Specific Purge Volume = Total Dead Space Volume x # of System Volumes = 1875.6 ml = 9.38 "Hg Δ = [Total Dead Space Vol] / [Sample Flow Rate]

Sampling and Leak Check Information

Summa Canister:

Canister Volume: 1.4-L

Manifold Shut-In check duration: 1 minute

Manifold Leaking: Yes / (No)

Leak Check Tracer Compound: IPA

(leak tracer compound applied to shroud encapsulating entire system)

Begin Sample Collection:

Canister Sample Rate: 180 mL/min

PID Calibration:

Initial canister vacuum: 30 "Hg

Time	Elapsed Time	Shroud leak tracer concentration (ppm)	Vapor Probe Vacuum ("Hg)	Canister Vacuum ("Hg)
1521	0	--	<1	30
1523	2	100 - 300	<1	22
1525	4	100 - 200	<1	15
1527	6	200 - 300	<1	8
1528	7	200 - 300	<1	4

H.H.

Final canister vacuum: 4 "Hg

Post-Sample PID Reading: TVOCs

Average:

Comments: PID datalog #9: 4/1/20

TVOC reading: 105.4 ppm

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Drive, Watsonville, CA 95076
(831) 722-3580 / www.weber-hayes.com

SITE HEALTH & SAFETY PLAN

Driven Probe Soil, Soil Vapor, and Groundwater Sampling

This Site Health and Safety Plan has been prepared pursuant to
the California Occupational Health and Safety Administration Title 8, Section 5192
Hazardous Waste Operations and Emergency Response, and
the U.S. Occupational Health and Safety Administration 29 CFR 1910.120
Hazardous Waste Operations and Emergency Response

1.0 PROJECT INFORMATION/CONTACTS

Job Name and Job Number: [illegible] / [illegible]
Site Location: 1500 Capitola Road, Santa Cruz, CA

Client: Santa Cruz County
Type of Facility: Vacant; Residential; Adjoining Former [illegible] dry cleaning facility

Subcontractors On-Site:

Cascade Drilling Incorporated
[illegible]
Attn: [illegible]
Phone: [illegible]

Regulatory Agency Contact(s):

Lead Regulatory Agency:
Central Coast Regional Water Quality Control Board
Case Officer: Greg Bishop
Phone: 805-549-3132

2.0 EXPECTED SCOPE OF WORK

Soil Vapor Sampling:

- Install, sample, and destroy soil vapor probes at the Site location

Soil and Groundwater Sampling:

- Install, sample, and destroy soil cores to groundwater at the Site location

Key Field Personnel:

[illegible] – Weber, Hayes and Associates	Environmental Engineer & Site Safety Officer	Office: (831) 722-3580 Cell: [illegible]
[illegible] – Weber, Hayes and Associates	Site Safety Officer	Office: (831) 722-3580 Cell: [illegible]
[illegible] – Cascade Drilling	Certified Driller	Cell: [illegible]

3.0 HAZARD ASSESSMENT & SITE CONTROL MEASURES

The Site contains solvents used in the operation of a dry cleaning facility. The primary health and safety concerns at the Site will be from physical activities with equipment. The exposure pathways of concern are inhalation of chlorinated solvents, ingestion, and dermal contact. Site workers will only be exposed to these elevated concentrations for a very limited amount of time and Level D PPE will be used during these tasks.

Site Tasks:

- Drilling and coring with Geoprobe Rig & installation of temporary soil vapor probes
- Sampling of the soil vapor probes
- Removal/destruction of the temporary soil vapor probes and backfilling with cement grout
- Installation and proper destruction of soil borings to groundwater (approximately 20 feet bgs)

Anticipated Physical Hazards:

- **Traffic:** Truck and heavy equipment traffic hazards within exclusion zone will be avoided by maintaining eye contact and using hand signals. All heavy equipment will be required to have working audible reverse signals.
- **Heavy Equipment:** Potential physical hazards associated with drilling equipment and noise will be mitigated with proper Level D PPE and exclusion of personnel other than those authorized in the drilling areas.
- **Underground Hazards:** Utilities to be cleared by Underground Service Alert (USA).

4.0 PERSONAL PROTECTIVE EQUIPMENT & SITE MONITORING

Personal Protective Equipment:

(See required Personal Protective Equipment below)

Based on the scope and nature of this field program the following appropriate level of personal protective equipment is required: A ☐ B ☐ C ☐ D Yes

R = required, A = as needed

Hard Hat - R	Eyewear [illegible] A
Safety Boots - R	Respirator (Level C Organic Cartridges)
Orange Vest - R	Filter (Particle & Organic Vapor & Particulate)
Hearing Protection - A	[illegible] A
Tyvek Coveralls - A	

Site Monitoring:

- As noted in the Site Control Section (above), a portable photoionization detector will be used to periodically monitor air quality in the work zone.
- Personnel monitoring will be conducted by means of the "buddy system". Appropriate precautions and/or medical/emergency response will be implemented if signs of co-worker distress or fatigue are apparent or injury occurs.

Confined Space Entry Procedures:

Confined space entry is not a component of this field investigation.

Tailgate Meetings:

The Field Superintendent will conduct daily Tailgate Safety Meetings prior to commencing work at the Site. In addition, the following minimum information will be provided to all Site personnel involved with the project:

- Name of personnel and alternate responsible for Site safety and health
- Safety, health, and other hazards present at the Site
- Hospital directions
- General safety procedures and practices to minimize risks from hazards at the Site
- Task specific procedures and practices
- Instructions for safe use of equipment
- Instructions for safe use of personal protective equipment
- Recognition of symptoms and signs which might indicate overexposure to hazards
- Site control measures
- Social Distancing protocol

Anticipated Chemical Hazards:

NAME (CAS #)	EXPECTED CONCENTRATION (Soil / Water / Air)	HEALTH EFFECTS
PCE (127-18-4)	Max soil vapor concentration 67,000 ug/m3 (2020) COMPARE 100 ppm (678,000 ug/m3)	Irritation eyes, nose, throat, respiratory system, dizziness, drowsiness, headache, nausea. See ATTACHED NIOSH Pocket Guide to Chemical Hazards for details)

Site Control Measures:

Ingestion Exposure & Control Measures:

- Ingestion of impacted materials is a primary (potential) exposure route of concern. This exposure pathway can be controlled with the implementation of proper hygienic practices (i.e., wearing gloves and washing before eating, smoking, or using the restroom).
- Inhalation of contaminant vapors is a primary (potential) exposure route of concern. A portable photoionization detector will be used to periodically monitor air quality in the work zone. If concentrations of VOC exceed 200 ppm for greater than 5 minutes then the work zone will be evacuated, or Class C PPE will be donned (i.e., half-face respirator with organic filter cartridges and goggles).

Traffic Control Measures (pedestrian and vehicle):

- No pedestrians will be allowed in the work area other than authorized personnel.
- Truck and heavy equipment traffic hazards within exclusion zone will be avoided by maintaining eye contact and using hand signals. All heavy equipment will be required to have working backup reverse signals.

Decontamination Procedures:

- Alconox, tap water / fresh water / DI water. All decon water will be properly containerized and properly disposed of following the field investigation.

Google Maps 1500 Capitola Road, Santa Cruz, CA to Dominican Hospital Drive [illegible]

1500 Capitola Rd

1. Head east on Capitola Rd toward 15th Ave
2. Turn left onto 17th Ave
3. Use any lane to turn left onto Soquel Ave
4. Sharp right onto Soquel Dr

0.3 mi

5. Turn left
6. Turn left

62 ft

7. Turn right

161 ft

Dominican Hospital

- Emergency/Contingency procedures

5.0 MEDICAL SURVEILLANCE AND EMERGENCY RESPONSE

Medical surveillance practices for all Site employees will be maintained in accordance with Title 8 California Code of Regulations, Section 5192(f)[illegible]

Appropriate level D PPE will be donned on an as needed basis to mitigate potential physical hazards.

In the event of minor physical injury, appropriate first aid will be administered and worker transport to the emergency room if necessary. In the event of significant physical injury beyond the level of first aid response, emergency response personnel will be contacted immediately by calling 911.

Hospital Directions: See attached Map

Hospital/Clinic: Dominican Hospital 1555 Soquel Drive Santa Cruz, CA	**Fire Department Phone Number:** 911 **Paramedic Phone Number:** 911 **Police Department Phone Number:** 911

DISCLAIMER AND SIGNATURES

Site Hazard Information Provided By: Harrison [illegible] – Site Safety Officer

______________________ Date ______________________
Harrison [illegible], Site Safety Officer

Note: All contractors and subcontractors [illegible] are responsible for maintaining the safety of [illegible] construction [illegible]. This Site Safety Plan is designed to provide worker right to know information on the contaminants of concern [illegible]. [illegible] professional [illegible] of Weber, Hayes and Associates [illegible] Weber, Hayes and Associates [illegible] Weber, Hayes and Associates [illegible]

PRINT NAME & INITIAL FOLLOWING TAILGATE MEETING AND SAFETY INSPECTION

[illegible] Sanchez		
Carlos [illegible]		

WHA

5) Groundwater and Soil Sampling

WHA

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering

Project / Client: City of Santa Cruz	Project #: 21009
Site Location: Capitola Rd., Santa Cruz	Date: 4-1-20
Field tasks: SV, GW, Soil Sampling	Weather: cloudy morning
Personnel / Company On-Site: Cascade (Arturo & Carlos) ; WHA (HH, RN)	
Attachments: Site Map____ Data Sheets____ Geologic Logs__ Photos____ COC Chargeable Materials____	

Time:	Notes:
0745	- Arrived onsite with Harrison. Cascade is to arrive around 0800. Plan to log and set up soil vapor (dual depth) probes (SV-1 through SV-6). Logging all continuously cored borings 5' & 15' bgs
0910	- Site Safety Meeting addressed COVID 19 and to stay 6' away from each other. Also PPE is not mainly contaminants of concern (COC).
0830	- Starting on SV-2 in the initial driveway. Taking samples (4 pint sealed metal tubes samples) at 5' and 15' bgs for soil vapor backup samples.
	- Storing Soil Drum (55-gal) directly south of the central house.
	- SV-2 setting time 0910.
0930	- Starting SV-1. Set time 0945.
0958	- Finished logging SV-1 and SV-2. Counting decon drilling equipment. Soil Logging highlight notes: Confining dense silty SAND layer (very stiff) @ 5'-6' bgs. Change to a loose silty SAND → well graded SAND w/Gravels from 9-15.5' bgs
1040	- SV-4 set at 1040. Finished logging (very similar with the other two soil vapor
1050	- Moving to SV-5. SV-5 set at 1110.
1150	- SV-6 set at 1150. Taking backup samples with Terra core kits because this location is in the contaminated area.
1207	- Moving to the last soil vapor SV-3. SV-6 was very similar to all the rest of the borings.
1210	- Taking Lunch
1230	- Pat arrived onsite. Talked about taking additional samples below the confining dense silty SAND, at @ 5'-10' bgs. Samples will be taken at @ 13-16' bgs in the well graded sand w/Gravels zone from 12-18' bgs to insure there is no below confining layer contamination. We will have a better idea where this sample should be taken after a groundwater sample location. Holding all of these additional samples except for the locations in that zones.
1310	- Starting on SV-3. Drillers note it is very hard (compacted) to drill SV-3. SV-3 set time 1340
1409	- Moving to GW-1. Targeting first encountered saturated zone (@ 20-30' bgs expected)
1437	- Groundwater at 20-28' bgs in well graded SAND w/Gravels, start to saturated starting from 21-26'. Sample taken 2' above saturated zone at 24' (GW-1-0424)

Signature of Field Personnel & Date

Project / Client:	Project # :
Site Location:	Date:
Field tasks:	Weather:
Personnel / Company On-Site:	

Attachments: Site Map___ Data Sheets___ Geologic Logs___ Photos___ COC Chargeable Materials___

Time:	Notes:
1430	- Setting up groundwater sampling using Cascades peri-pump. Sampling with a 5-foot screen from 2.5'-28' bgs. Sample ID: GW-1. - Only able to fit one VOA after purging. Going to have to redrive the casing and push further. New screen is from 21'-28'. Finished sampling the GW-1 samples. GW-1-d3; GW-1-d7, (GW-1-d10, GW-1-d12 can be saved in casing)
1620	- Finishing up pulling GW-1 and packing up for today. Planning on coming back tomorrow at 0700. Still need to continuously core 3 GW samples and 2 soil samples and hydropunch 2 GW samples.
0700	- Arrived onsite with Arturo and Carlos. Today's plan is to continuously core GW-4, GW-3, and GW-5 and log these in detail. Also continuously core SS-3 and SS-2 to 12-feet or deeper if visible contamination is found. And also hydropunch GW-2 and GW-6 to a target screen of 25'-30' bgs.
0720	- Starting at GW-5 (hottest zone). Continuous coring to 28'-30' bgs unless shallower saturated zone.
0806	- GW at 24.42 and total depth is 32' bgs. ~7.68' of water in boring. 10' screen from 22' - 32' bgs.
0826	- Finished GW-5. Moving to GW-4.
0915	- GW-4 depth is 28' (screened from 23'-28' bgs). water level from 24.42' bgs (3.6' of water) 5' screen
1000	- Finished SS-3. Took sample at (SS-3-d3') 3' to check shallow source, 6' to check directly above very stiff confining layer, and 12' to check below confining layer
1042	- Moved to GW-3. Saturated from surface to confining very dense silty SAND/SILT GW at 21'-24' bgs. Screening from 19'-24' (5' screen)
1120	- Harper came to check in. Working on GW-2 (hydropunching to 24' bgs.)
	- GW-2 screened from 19'-24'. Tagged water at 22.1' (1.9' of water)
1154	- Starting SS-2. Got samples at 3' (shallow), 4.5' (above confining layer), and 12' (below confining layer)
1230	- Lunch time
1340	- Redrilling GW-6 (no water screened from 19-24' bgs.
1358	- Screened from 20'-25' and got water from 22-25 (3-ft).
1430	- Finished. Going to Fed Ex to ship samples overnight.

Signature of Field Personnel & Date

(8) VOC GW Samples (28) VOCs Soil Samples Driller: Arturo Cell: (530) 383-9523 Carlos (helper)

Capitola Road

APPROXIMATE SHALLOW GROUNDWATER FLOW DIRECTION
(Based on monitoring well at 1671 Capitola Road)

Former Dry Cleaners

GW-1 C.C.
GW-2 H.P.
GW-3 C.C.
GW-4 C.C.
GW-5 C.C.
GW-6 H.P.
SS-1
SS-2
SS-3
SV-1
SV-2
SV-3
SV-4
SV-5
SV-6
MW-5

GW-1 & 4-5
- 5' Sample
- 0.5' above lithology change
- 2' above saturated zone
- 1' below confining layer (~5-8' bgs)

SS-2 & SS-3
- 3'
Lithology change @ 12'
1' below confining layer (~15-16' bgs)

PSV-1 PSV-2 PSV-3 PSV-4 PSV-5 PSV-6 PSV-7 PSV-8 PSV-9 PSV-10 PSV-11 PSV-12 PSV-13 PSV-14 PSV-15 PSV-16 PSV-17 PSV-18 PSV-19 PSV-20 PSV-21 PSV-22 PSV-23 PSV-24 PSV-25 PSV-26 PSV-27 PSV-28 PSV-29 PSV-30 PSV-31 PSV-32 PSV-33 PSV-34

Base map from Santa Cruz County

Explanation

= Proposed Groundwater Grab-Sample Location
Depth to 1st groundwater = 20-25-ft

= Proposed Active Soil Gas Sample Location

= Proposed Exploratory Soil Core/Sample Location

1,000 PSV-15 = Passive Sample Location and results (in ug/m³)
See Figure 3 for Details

Former Groundwater Monitoring Well
PCE at 12-130 ppb (between 2008-12)

FIGURE

Step-out Groundwater, Soil Vapor, & Soil Sample Locations

WHA

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information:
Accounts Payable- Laura Garcia
120 Westgate Drive
Watsonville, CA 95076

Report to: Ryan Nyberg

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Phone: 831-722-3580

Client Project #: 20009

Lab Project #: WEBHAYWCA-27009

Collected by (print): Ryan Nyberg

Site/Facility ID #: 1541 CAPITOLA RD SANTA

P.O. #: 27009

Quote #

Rush? (Lab MUST Be Notified)

Pace Analytical®

SDG # L1205565 A198

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844

Analysis / Container / Preservative: water VOC 8260 40mlAmb-HCl; soil dry weight 2ozCir-NoPres; soil VOC 8260 40mlAmb/MeOH/NaHSO4

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs				Sample # (lab only)
GW-1		GW		4/1/20		9			X	03
GW-2		GW		4/1/20					X	04
GW-3		GW							X	05
GW-4		GW							X	06
GW-5		GW							X	07
GW-6		GW							X	08
SV-5-d5		SS	5	4/1/20		2				HOLD
SV-5-d15		SS	15			2				HOLD
SV-6-d5		SS	5			2				HOLD
SV-6-d15		SS	15			2				HOLD

* Matrix: SS - Soil AIR - Air F - Filter; GW - Groundwater B - Bioassay; WW - WasteWater; DW - Drinking Water; OT - Other

Remarks:

Tracking #: 127586039226

Relinquished by: (Signature) Date: 4/1/20 Time: 3:30pm Received by: (Signature) FedEx

Temp: 2.4

Received for lab by: (Signature) Sandy Yousef Date: 4/3/20 Time: 8:30

04-0020

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information:
Accounts Payable- Laura Garcia
120 Westgate Drive
Watsonville, CA 95076

Report to: Ryan Nyberg

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Phone: 831-722-3580

Client Project #: 20009

Lab Project #: WEBHAYWCA-27009

Collected by (print): Ryan Nyberg

Site/Facility ID #: 1541 CAPITOLA RD SANTA

P.O. #: 27009

Quote #

Rush? (Lab MUST Be Notified)

Pace Analytical®

SDG # L1205565 A198

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844

Analysis / Container / Preservative: soil VOC 8260 40mlAmb/MeOH/NaHSO4; soil dry weight 2ozCir-NoPres; water VOC 8260 40mlAmb-HCl

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs				Sample # (lab only)
SS-2-d3		SS	3'			2	X	X		09
SS-2-d4.5		SS	4.5'				X	X		10
SS-2-d12		SS	12'				X	X		11
SS-3-d3		SS	3'				X	X		12
SS-3-d6		SS	6'				X	X		13
SS-3-d12		SS	12'				X	X		14
GW-1-d3		SS	3'	4/1/20			X	X		15
GW-1-d7		SS	7'				X	X		16
GW-1-d12		SS	12'				X	X		17
GW-1-d20		SS	20'				X	X		18

* Matrix: SS - Soil AIR - Air F - Filter; GW - Groundwater B - Bioassay; WW - WasteWater; DW - Drinking Water; OT - Other

Remarks:

Tracking #: 127586039226

Relinquished by: (Signature) Date: 4-1-20 Time: 3:30pm Received by: (Signature) FedEx

Temp: 2.0

Received for lab by: (Signature) Sandy Yousef Date: 4/3/20 Time: 8:30

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information: Accounts Payable- Laura Garcia, 120 Westgate Drive, Watsonville, CA 95076

Report to: Ryan Nyberg

Email To: [illegible]@weber-hayes.com; [illegible]@weber-hayes.com

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Phone: 831-722-3580

Client Project #: 21009

Lab Project #: WEBHAYWCA-21009

Collected by (print): Ryan Nyberg

Site/Facility ID #: 1541 CAPITOLA RD SANTA

P.O. #: 21009

Collected by (signature): [signature]

Immediately Packed on Ice: N ___ Y X

Pace Analytical®

SDG #: L1205566 A200

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	soil VOCs 8260	soil dry weight	water VOCs 8260	Remarks	Sample # (lab only)
GV-3-d3		SS	3	4/3/20		2	X	X			-19
GV-3-d6		SS	6				X	X			-20
GV-3-d12		SS	12				X	X			-21
GV-3-d19		SS	19				X	X			-22
GV-4-d3		SS	3				X	X			-23
GV-4-d6		SS	6				X	X			-24
GV-4-d12		SS	12				X	X			-25
GV-4-d23		SS	23				X	X			-26
SV-1-d5		SS	5	4/1/20		1				HOLD	
SV-1-d15		SS	15	4/1/20						HOLD	

* Matrix: SS - Soil, AIR - Air, F - Filter, GW - Groundwater, B - Bioassay, WW - WasteWater, DW - Drinking Water, OT - Other

Remarks:

Tracking #: 1275860 39226

Relinquished by: (Signature) [signature] — Date: 4/1/20 — Time: 3:30pm — Received by: (Signature) FedEx

Temp: 1.0-1=.9 °C — Bottles Received: 19

Received for lab by: (Signature) Sandy yossef — Date: 4/3/20 — Time: 8:30

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information: Accounts Payable- Laura Garcia, 120 Westgate Drive, Watsonville, CA 95076

Report to: Ryan Nyberg

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Phone: 831-722-3580

Client Project #: 21009

Lab Project #: WEBHAYWCA-21009

Collected by (print): Ryan N

Site/Facility ID #: 1541 CAPITOLA RD SANTA

P.O. #: 21009

Collected by (signature): [signature]

Immediately Packed on Ice: N ___ Y X

Pace Analytical®

SDG #: L1205566 A201

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	soil VOCs 8260	soil dry weight	water VOCs 8260	Remarks	Sample # (lab only)
GV-5-d3		SS	3	4/2/20		2	X	X			-27
GV-5-d6		SS	6				X	X			-28
GV-5-d12		SS	12				X	X			-29
GV-5-d27		SS	27				X	X			-30
SV-2-d5		SS	5	4/1/20		1				HOLD	
SV-2-d15		SS	15			1					
SV-3-d5		SS	5			1					
SV-3-d15		SS	15			1					
SV-4-d5		SS	5			1					
SV-4-d15		SS	15			1					

* Matrix: SS - Soil, AIR - Air, F - Filter, GW - Groundwater, B - Bioassay, WW - WasteWater, DW - Drinking Water, OT - Other

Remarks:

Tracking #: 1275860 39226

Relinquished by: (Signature) [signature] — Date: 4/1/20 — Time: 3:30pm — Received by: (Signature) FedEx

Temp: 1.0-1=.9 °C — Bottles Received: 14

Received for lab by: (Signature) Sandy yossef — Date: 4/3/20 — Time: 8:30

6) Field Methodology

- **Passive Soil Gas Sampling**
- **Hydraulic Driven Probe Sampling**
- **Active Soil Gas Sampling**

Passive Soil Gas Sampling

FIELD KIT GUIDE
FOR
PASSIVE SOIL-GAS INVESTIGATIONS
[READ ENTIRE GUIDE BEFORE STARTING SURVEY]

I. General Information

A. BEACON assembled this kit for **Weber, Hayes & Associates** to perform sampling on the **17th Ave & Capitola Rd. PCE Site in Santa Cruz, CA.** To meet the project objectives, retrieve Samplers **7 days after installation**. Contact BEACON, following installation of the samplers, at Ryan.Schneider@beacon-usa.com or (800) 878-5510 to schedule analysis in BEACON's laboratory.

B. Inventory the contents of the kit ***before going to the field***, check items against the enclosed list to verify and familiarize. The components are thoroughly cleaned prior to shipment. Conduct inventory without opening the plastic bags. Note that Trip Blanks are to remain sealed throughout the Survey.

C. Prior to returning the Kit to BEACON, verify the caps are tight on each Passive Soil-Gas (PSG) Sampler, Samplers are individually bagged and sealed in the small Sampler Bags, and packed together in the larger Return Shipment Bag, containing an adsorbent pak.

D. Upon completion of the survey, fill in the Chain-of-Custody Form with the following information: (i) Field Sample IDs, (ii) the name and contact phone number of the person submitting the samples, (iii) the unique number of the custody seal that will be used, and (iv) signature and date of person relinquishing samples. Return the Chain-of-Custody Form with the Field Kit to BEACON. Retain photocopies or photographs for your record. Next, pack the Samplers in their own 3x4 white labeled bag & put those in a return shipment bag *(Please label the 3x4 bags)*, containers, and requisite documentation (in a protective bag) in the Field Kit.

Note: Place the Return Shipment Bag, containing the individually bagged PSG Samplers, in the upper tray and place the tools in the lower compartment of the Kit to avoid Sampler damage. Include one trip blank with each Return Shipment Bag containing samplers.

Affix the tug-tight custody seal to the latch on the Field Kit. Pack kit in its original cardboard shipping container, attach the provided return label, and relinquish the package to the nearest Fedex pickup location.

NOTE: DO NOT USE STYRENE PEANUTS, NEWSPAPER, OR OTHER PACKING MATERIALS THAT MAY CONTAMINATE THE SAMPLES. AVOID SMOKING WHILE HANDLING SAMPLERS.

II. Contents

A. This Field Kit contains the components needed for a **45**-point soil-gas survey, plus **2** trip blanks (labeled **Trip-1 and Trip-2**, not to be opened), **4** extra Samplers for use in the event of breakage or accidental contamination, and **4** extra transport vials provided in case a Sampler Vial breaks during retrieval. **Do not open bags until deployment.**

Code/Item		Quantity
(1)	PASSIVE SOIL-GAS SAMPLERS (Orange labels)	**49**
(2)	TRIP BLANKS (Blue labels)	**2**
(3)	EXTRA TRANSPORT VIALS (Green labels)	**4**
(4)	SAMPLING CAPS (in container)	**50**
(5)	CAP STORAGE CONTAINERS	**1**
(6)	GAUZE CLOTHS	**55**
(7)	3" x 4" PLASTIC SAMPLER BAGS (for return shipment of samples)	**60**
(8)	12″ LENGTHS OF PIPE	**49**
(9)	12" x 12" PLASTIC RETURN SHIPMENT BAG	**3**
(10)	WIRE CUTTERS	**1**
(11)	PIPE CUTTER	**1**
(12)	VISE GRIPS	**1**
(13)	TAPPING DOWEL	**1**
(14)	FEDEX RETURN LABEL	**1**

B. In addition to the materials found in the kit, field teams will need:

- NITRILE GLOVES
- CLEAN TOWEL
- HAMMER
- ELECTRIC ROTARY HAMMER DRILL WITH:
  ½"-DIAMETER BIT WITH AT LEAST 36 INCHES OF CUTTING LENGTH and
  1¼" to 1½" DIAMETER BIT WITH AT LEAST 12 INCHES OF CUTTING LENGTH
- PIPE WRENCH (to dislodge drill bits should they become stuck)
- BALL-POINT PEN and CLIPBOARD
- PIN FLAGS, WOODEN STAKES, or OTHER LOCATION MARKERS
- SMALL SCREWDRIVER or SCRATCH AWL
- FLAGGING TAPE
- BOX OF ALUMINUM FOIL

C. Additional materials necessary only for deployment through asphalt or concrete:

Note: Do not use pre-mixed patching compounds. They contain solvents.

- DRY CONCRETE MORTAR MIX and ASSOCIATED EQUIPMENT (for temporary patching of the sample holes) including:
- SMALL PAIL, WATER, SMALL PLASTIC PUTTY KNIFE
- CHISEL or SCREWDRIVER (to remove the temporary patch)
- ASPHALT COLD PATCH or CEMENT (for final repair of the sample holes)

III. Instructions

A. GENERAL:

Deployment and retrieval of Samplers requires only one person. Separate step-by-step procedures are detailed below for sampling through vegetation or bare soils and areas covered by asphalt, concrete, or gravel. **Keep exposure of sample cartridges to ambient air to a minimum.**

Note: Do not deploy Samplers within 10 feet of a monitoring well, penetrometer, hydropunch shaft, or other intrusive sampling apparatus that potentially creates a preferential pathway for gases.

REMEMBER: TRIP BLANKS ARE TO REMAIN CLOSED.

B. SAMPLER DEPLOYMENT:

Duplicates:

Duplicate analysis can be performed on/for any field sample because each sampler contains two sets of adsorbent cartridges. To select field sample duplicates, note them on the CoC; a second (co-located) sample is not necessary. Add a second entry to the CoC with the field sample ID followed by "D" or "Dup" (i.e., PSG-08-Dup is the duplicate for PSG-08). There is an additional per sample charge for analysis of any duplicates.

Vegetation or Bare Soils:

1. At each survey point, clear vegetation as necessary and, using a hammer drill and drill bit, create a 1¼"- to 1½"-diameter hole approximately 12-14 inches deep. Using the ½" drill bit, extend the hole to a three-foot depth.

Note: **In areas of very organic topsoil or landscaped areas (i.e., mulched areas, gardens, etc.) it is imperative to get beneath the organic soil layer to the underlying soil below.**

2. When the holes have been drilled, take a 12-inch length of 1"-diameter metal pipe and lower it into the sample hole, being careful not to touch the inside of the pipe. Any portion of pipe above grade is cut flush with the ground surface, using the pipe cutter. With the tapping dowel and a hammer, push or tap the pipe one inch into the base of the drilled hole (see **attached figure**).

3. Remove one of the Samplers (a glass vial containing ***two sets of hydrophobic*** adsorbent cartridges) and unwind the retrieval wire wrapped around it. Holding the capped end of the vial in one hand, pull the wire tight (to straighten it) with the other hand. Remove the solid cap on the Sampler Vial and replace it with a Sampling Cap (a one-hole cap with a screen meshing insert). Place the solid cap in the Field Kit.

Note: At each sampling location, verify that the (black) sampling cap is on the vial before installing the Sampler.

4. Lower the Sampler, open-end down, into the metal pipe approximately four inches so that the retrieval wire sticks out of the hole. Cover the open end of the pipe with a balled up **wad** of aluminum foil, pressing it tightly on top of the pipe with the tapping dowel. Next, cover the hole to grade with local soils or sand, leaving the end of the wire exposed above the surface of the ground. Use a hammer to collapse the soils above the Sampler. **Coil the wire and lay it flat on the ground surface**. Place the solid cap in the Cap Storage Container. Mark the sample location with a pin flag or wooden stake.

5. Close the Field Kit. Record on the Chain-of-Custody: (a) sample-point number; (b) date/time of emplacement (to nearest minute); (c) other relevant information (*e.g.*, soil type, vegetation, proximity to potential source areas). Mark the sample location and take detailed notes (*i.e.*, compass bearings and distances from fixed reference points).

6. Move to next location.

7. After installing all field samples; place the Trip Blank in a 3" x 4" Sampler Bag. Store the bagged Trip Blank in the "Return Shipment" bags until retrieval, with one (1) Trip Blank in each Return Shipment bag.

Concrete, Asphalt, or Gravel Covered Areas:

1. At each survey point, drill a 1¼"- to 1½"-diameter hole through the asphalt/concrete/gravel to bare soil using a rotary hammer drill or comparable equipment. This hole should be approximately 12-14 inches deep.

Note: **When one person is performing fieldwork, it is often more efficient to drill all sample-point holes before beginning Sampler deployment.**

2. When the hole through concrete/asphalt/gravel has been completed, using the ½" drill bit, extend the hole to a three-foot depth. Next, take a 12-inch length of 1"-diameter metal pipe and lower it into the sample hole, being careful not to touch the inside of the pipe. Any portion of pipe above grade is cut flush with the ground surface, using the pipe cutter. Use the tapping dowel and a hammer to push or tap the pipe one inch into the base of the drilled hole (see **attached figure**).

3. Remove one of the Samplers (a glass vial containing ***two sets of hydrophobic*** adsorbent cartridges) and unwind the retrieval wire wrapped around it. Holding the capped end of the vial in one hand, pull the wire tight (to straighten it) with the other hand. Remove the white solid cap on the Sampler Vial. Place the solid cap in the Field Kit and screw a black Sampling Cap (a one-hole cap with a screen meshing insert) on the vial.

Note: At each sampling location, verify that the (black) sampling cap is on the vial before installing the Sampler.

4. Lower the Sampler, open-end down, into the metal pipe approximately four inches.

   If sampling through asphalt or concrete, bend the end of the wire over the top of the pipe so that the coil of wire hangs over the top and outside of the pipe. Next, plug the top of the hole with a wad of aluminum foil. Using the tapping dowel, push down the aluminum foil so it forms a seal on the metal pipe and rests ¼" below the surfacing. Cover the hole to grade with a **¼" thick** concrete patch. [**Note**: A ¼" thick patch is all that is required. If it is thicker it will be difficult to remove during retrieval.] Next, place the solid cap in the Cap Storage Container.

   If sampling through gravel, extend the retrieval wire out of the pipe and plug the pipe with a wad of aluminum foil. Using the tapping dowel, push down the aluminum foil so it forms a seal on the metal pipe. Bend the wire over the aluminum foil plug and while the wire is extended out of the hole, cover the aluminum foil with local soil or sand. **Coil the wire and lay it flat on the ground surface.** Next, place the solid cap in the Cap Storage Container.

If a hole deeper than 12 inches is created, it will be necessary to use more than one wad of aluminum foil. In these situations, extend the wire out of the pipe. While holding onto the wire, plug the top of the pipe and hole loosely with as many wads as needed. Before inserting the last wad of foil, bend the wire so it rests below the uppermost wad of foil. This will make it easier to retrieve the Sampler.

5. Close the Field Kit. Record on the Chain-of-Custody: (a) sample-point number; (b) date and time of emplacement (to nearest minute); (c) type of surfacing and approximate thickness; and (d) other relevant information (*e.g.*, surfacing material, proximity to potential source areas). Mark the sample location and take detailed notes (*i.e.*, compass bearings and distances from fixed reference points).

6. Move to next location.

7. After installing all field samples place the Trip Blank in a 3" x 4" Sampler Bag. Store the bagged Trip Blank in the "Return Shipment" bags until retrieval, with one (1) Trip Blank in each Return Shipment bag.

C. SAMPLER RETRIEVAL:

Prior to retrieving samples, seal each Trip Blank in a 3"x4" Sampler Bag, and place the bagged Trip Blank in a separate larger bag marked "Return Shipment Bag." Include one trip blank with each Return Shipment Bag. Stow the sampler blocks, with the Transport vials and extra samplers, in the lower compartment of the kit. The sampler blocks are to be returned to BEACON's lab along with the samples.

Duplicates:

Duplicate analysis can be performed on/for any field sample because each sampler contains two sets of adsorbent cartridges. To select field sample duplicates, note them on the CoC; a second (co-located) sample is not necessary. Add a second entry to the CoC with the field sample ID followed by "D" or "Dup" (i.e., PSG-08-Dup is the duplicate for PSG-08). There is an additional per sample charge for analysis of any duplicates.

Vegetation or Bare Soils:

1. At each sample location open the Field Kit and place it and the wire cutters within easy reach. Remove a square of gauze cloth and place it and a clean towel on the open Kit. Remove a solid cap from the Cap Storage Container and place it on the Kit.

2. Remove the aluminum foil plug, using vise grips and the scratch awl or small screwdriver and retrieve the Sampler from the hole.

3. Hold the Sampler upright; clean the sides of the vial with the clean towel (especially close to the Sampling Cap). Remove the Sampling Cap, cut all wire from the vial with the wire cutters, and clean the vial threads completely with the gauze cloth.

Note: **Remove all wire to ensure a tight cap seal on the vial**.

4. Firmly screw the solid cap on the Sampler Vial and clean the vial completely with the gauze cloth. Use a **ballpoint pen** to record the sample number, corresponding to the sample location, on the cap's label.

Note: **Do not use a Sharpie marker.**

5. Place the sealed and labeled Sampler Vial in the smaller 3" x 4" plastic Sampler Bag and record the sample number on the white block using a ballpoint pen. Then place the individually bagged and labeled sampler into the larger bag labeled "Return Shipment Bag."

Note: **Each Sampler must be individually bagged and placed in a Return Shipment Bag with approximately 23 samplers and one trip blank per bag. If you know or suspect some sample(s) collected unusually high levels of contaminants, separately place these sample(s) in the extra bag provided.**

6. Record on the Chain-of-Custody: (a) date and time of retrieval (to nearest minute); and (b) any other relevant information.

7. After all samples have been retrieved, verify that the caps on each Sampler are sealed tightly and that the seals on the Sampler Bags are closed. Verify all Samplers are stored in the Return Shipment Bag, containing an adsorbent pak. Seal the Return Shipment Bag and place it in the upper tray of the Field Kit, and place the provided tools and materials in the lower compartment of the Field Kit.

Note: Do not return use sampling caps, used pipe, or the wire with the Field Kit as they may bias the samplers. Return *all* the other materials and equipment (blocks, extra samplers, tools, containers, *etc.*).

8. Cover sampling holes to grade with surrounding soil, as necessary.

9. Affix the tug-tight custody seal to the latch on the Field Kit. Pack kit in its original cardboard shipping container, attach the provided return label, and relinquish the package to the nearest Fedex pickup location.

<u>Asphalt, Concrete, or Gravel:</u>

1. At each sample point covered by gravel, clear away the soil or sand to expose the aluminum-foil plug. For those locations covered by asphalt or concrete, use a small chisel and hammer to remove the concrete patch to expose the aluminum foil.

2. Next, open the Field Kit; place it and the wire cutters within easy reach. Remove a square of gauze cloth and place it and a clean towel on the open Kit. Remove a solid cap from the Cap Storage Container and place it on the Kit, also.

3. While securely holding onto the retrieval wire, remove the aluminum-foil plug, using the scratch awl or small screwdriver, as necessary. Holding the Sampler upright, clean the sides of the vial with the clean towel (especially close to the Sampling Cap). Remove the Sampling Cap, cut all the wire from the vial with the wire cutters, and clean the vial threads completely with gauze cloth.

Note: **Remove all wire to ensure a tight cap seal on the vial**.

4. Firmly screw the solid cap on the Sampler Vial and clean the vial completely with the gauze cloth. With a **ballpoint pen** record the sample number, corresponding to the sample location, on the cap's label.

Note: **Do not use a Sharpie marker.**

5. Place the sealed and labeled Sampler Vial in the smaller 3" x 4" plastic Sampler Bag and record the sample number on the white block using a ballpoint pen. Then place the individually bagged and labeled sampler into the larger bag labeled "Return Shipment Bag."

Note: **Each Sampler must be individually bagged and placed in a Return Shipment Bag with approximately 23 samplers and one trip blank per bag. If you know or suspect some sample(s) collected unusually high levels of contaminants, separately place these sample(s) in the extra bag provided.**

6. Record on the Chain-of-Custody: (a) date and time of retrieval (to nearest minute); and (b) any other relevant information.

7. After all samples have been retrieved, verify that the caps on each Sampler are sealed tightly and that the seals on the Sampler Bags are closed. Verify that all Samplers are stored in the Return Shipment Bag, containing an adsorbent pak. Seal the Return Shipment Bag and place it in the upper tray of the Field Kit, and place the provided tools and materials in the lower compartment of the Field Kit.

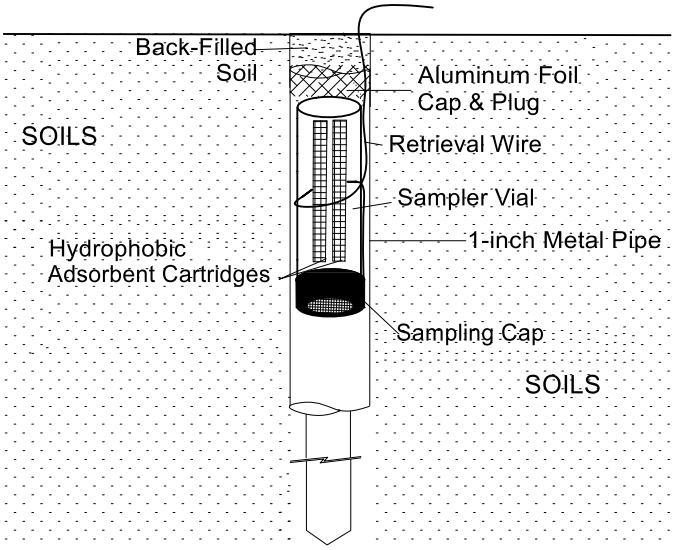
Note: Do not return used sampling caps, used pipe, or the wire with the Field Kit as they may bias the samplers. Return *all* the other materials and equipment (blocks, extra samplers, tools, containers, *etc.*).

8. Fill sampling holes to grade with an asphalt cold patch or cement.

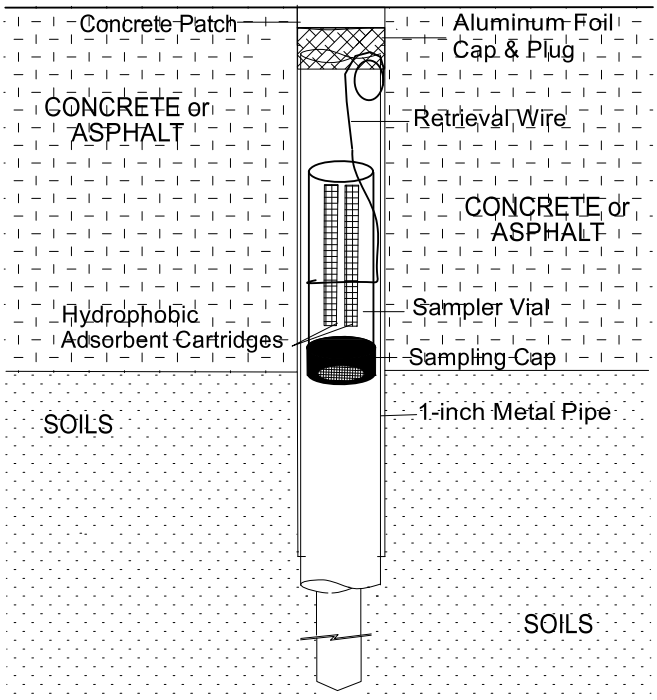
9. Affix the tug-tight custody seal to the latch on the Field Kit. Pack kit in its original cardboard shipping container, attach the provided return label, and relinquish the package to the nearest Fedex pickup location.

BEACON'S PASSIVE SOIL-GAS SAMPLER

DEPLOYMENT THROUGH SOILS



DEPLOYMENT THROUGH AN ASPHALT/CONCRETE CAP



Please, remember:

- ☐ Remove all wire from the sampler vials
- ☐ Label, seal, and individually bag Soil-Gas Samplers in 3"x4" bags provided, with all the samples in the larger bag marked "Return Shipment" with approximately 30 Samplers plus a Trip Blank in each bag
- ☐ Include the signed and dated Chain-of-Custody Form
- ☐ Return all tools (including wooden blocks and all containers)
- ☐ Return any unused pipe
- ☐ Use the blue numbered tug tight custody seal on the front of the Kit
- ☐ Only use approved packaging materials (*i.e.*, no Styrofoam peanuts, etc.)
- ☐ E-mail a CAD version of the Site Map showing soil-gas sample locations to Ryan Schneider at BEACON (ryan.schneider@beacon-usa.com)
- ☐ Notify BEACON's laboratory that samples are being returned

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THE FOLLOWING TOOLS WERE INCLUDED WITH YOUR FIELD KIT(S).

PLEASE CHECK-OFF (√) IN THE COLUMN BELOW TO VERIFY THAT THE TOTAL NUMBER OF EACH TOOL HAS BEEN PACKAGED IN THE KIT(S) FOR RETURN SHIPMENT.

Tool	Number	Returned
TAPPING DOWELS	**1**	
WIRE CUTTERS	**1**	
PIPE CUTTER	**1**	
VISE GRIPS	**1**	
UNUSED METAL PIPE		

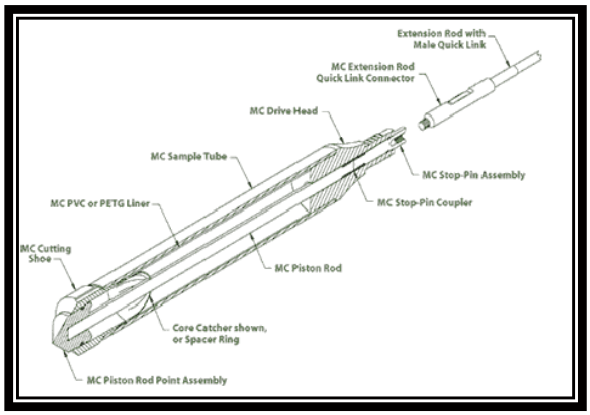
Please return any unused pipes included in the Field Kit; however, do not return any of the used pipes.

THANK YOU!

Hydraulic Driven Probe Sampling

FIELD METHODOLOGY FOR:
HYDRAULIC DRIVEN PROBES

Using Macro-Core®, Large Bore® or Dual Tube®
Hydraulic Driven Probes



Direct push exploratory borings are "drilled" with a Hydraulic Driven Probe drill rig, which hydraulically vibrates and drives steel probes into the soil. This sampling technology has the ability for either continuous or discrete sampling using a 4-foot long nickel-plated sampling probes fitted with clear acetate liners. During coring operations, the sampler remains open as it is driven into undisturbed soil over its entire 4-foot sampling interval.

The soil cores are logged by an experienced geologist using the Unified Soil Classification System (USCS), noting in particular, the lithology of the soils, moisture content, and any unusual odor or discoloration. Relatively undisturbed soil samples are obtained for both lithologic logging and laboratory analysis. A portion of individual soil cores are stored in a sealed plastic bags for field screening of hydrocarbons and/or volatile organic compounds by an Photoionization Detector (PID). Vapor readings in parts per million (ppm) are recorded on the boring logs. The PID is also used during drilling for monitoring the work area for site safety.

All drilling equipment is decontaminated prior to arriving on-site to prevent possible transfer of contamination from another site. The sampling probe and all other soil sampling equipment are thoroughly cleaned between each borehole by washing in a Liqui-Nox or Alconox solution followed by a double rinsing with distilled water to prevent the transfer of contamination.

After drilling, all exploratory boreholes are grouted with continuous pour neat cement grout from the bottom of the borehole to the ground surface.

<u>Samples Targeted for Laboratory Analysis</u>:

Soil samples targeted for laboratory analysis are immediately cut from the acetate sample liner and protected at both ends with Teflon tape, sealed with non-reactive caps, taped, labeled, placed in a plastic ZipLock baggie, and immediately stored in an insulated container chilled to a temperature of 4 degree Celsius. Soil samples selected for Volatile Organic Compound (VOC) analysis will follow field preservation protocols according to EPA Method 5035, as described in DTSC's *Guidance Document for the Implementation of United States Environmental Protection Agency Method 5035:*

Methodologies for Collection, Preservation, Storage, and Preparation of Soils to be Analyzed for Volatile Organic Compounds, dated November 2004.

Groundwater samples are collected after temporary PVC casing is placed in the hole and at least one borehole volume is purged and groundwater is visually observed to be free of sediment. Relatively representative groundwater samples are either: 1) collected with a peristaltic pump and dedicated polyethylene tubing and dispensed directly into containers specifically prepared for the analyses (groundwater encountered at depths of less than 27 feet bgs) or 2) collected by mechanically lifting groundwater through a clean stainless steel foot valve and dedicated polyethylene and dispensed directly into containers specifically prepared for the analyses (groundwater encountered at depths greater than 27 feet bgs where a peristaltic pump cannot be used). Samples being analyzed for dissolved metals will be preserved and acidified by the testing laboratory following their receipt of samples. Once collected, groundwater sample containers are placed in ZipLock bags and are stored in an insulated container chilled to a temperature of 4 degree Celsius.

All samples are transported in chilled coolers to a State-certified laboratory under appropriate chain-of-custody documents. Soil samples that may be put on "hold" for potential future analysis will be stored in a dedicated sample freezer, be frozen, and stored under chain-of-custody documentation. Hold times will be confirmed with the testing laboratory to ensure that potential analysis of any "hold" samples will be analyzed within the laboratory hold times.

Active Soil Gas Sampling

Field Methodology for Active Soil Gas Sampling

Active soil gas / soil vapor (we use the terms interchangeably) sampling is conducted in general accordance with the procedures outlined in the CalEPA's/DTSC/LARWQCB/SFRWQCB *Advisory – Active Soil Gas Investigations* (July 2015)[1], and the DTSC/CalEPA's final *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)* (October 2011). We use the terms soil gas and soil vapor interchangeably. The field methodology for active soil gas/vapor sampling entails:

- Constructing Soil Gas Sample Points/Probes
- Setting up the sampling and leak testing equipment; and
- Soil Vapor Sampling

Constructing & Decommissioning Soil Vapor Sample Points/Probes

Soil vapor sample points can be either semi-permanent or temporary. A semi-permanent sample probe is constructed with a secure surface completion consisting of bolt-down flush-mounted well vault so it can be reused. A field geologist or engineer logs the soils encountered using the Unified Soil Classification System (USCS), unless the site is already well characterized geologically.

Shallow soil vapor probe installation via GeoProbe drill rig

Shallow Soil Vapor Probe: The soil vapor/gas probe is installed to the target sampling depth via a Geo-Probe drill rig, which hydraulically drives and vibrates steel probes into the soil. The soil is cored out using a 4-foot long nickel-plated sampling barrel fitted with a clear acetate liner. During coring operations, the sample barrel remains open as it is driven into undisturbed soil over its entire 4-foot sampling interval. Alternatively, the soil gas probe borehole can be created via a hollow stem auger or hand auger. Shallow soil gas / soil vapor sample depths will be no less than 5 feet deep (if possible) in order to avoid breakthrough of ambient air from the surface. Shallow and deeper soil gas points are constructed in a similar manner. Once the probe hole is cored to the desired sample depth, a length of 3/16–inch inner diameter Teflon or Nylaflo tubing (Teflon is preferred, especially if testing for naphthalene) having a porous media tip (i.e., ceramic filter stone) attached at the down-hole end of the tubing is inserted through a

[1]: https://www.dtsc.ca.gov/SiteCleanup/upload/VI_ActiveSoilGasAdvisory_FINAL.pdf

1-inch diameter tremie-pipe that is extended down to 6-inches above the base of the borehole. The sample tubing end with the ceramic filter stone is also placed approximately 6-inches above the base of the borehole. A minimum of a one-foot sand pack is emplaced at the base of the borehole (the grain size of the sand pack is larger than the grain size of the adjacent formation), followed by at least one foot of dry granular bentonite. The probe tip is emplaced midway within the sand pack. While the sand pack and granular bentonite is slowly added to the borehole, the tremie-pipe is correspondingly pulled out of the boring (with the bottom of the tremie pipe periodically "tapping" the top surface of sand pack and granular bentonite to ensure that no bridging occurs). The remainder of the borehole is sealed to the ground surface with hydrated bentonite gel for temporary points or neat cement mixed with 1% – 5% bentonite, which are both pre-mixed at the ground surface; this ensures a sound surface seal and/or seal between multi-depth nested probe sample intervals.

Decommissioning Shallow Soil Vapor Points: Following sample collection the vapor probe is properly decommissioned by one of the following regulatory approved techniques:

- The sample tubing is completely removed from the ground surface (if possible) allowing the bentonite gel slurry to flow into the small vertical void thereby sealing the borehole. Subsequently, approximately 6-inches of bentonite slurry is removed below the ground surface and the surface is patched to match the existing grade.
- The sample tubing is properly destroyed by injecting neat cement grout into the tubing via a syringe. The volume of grout injected into the tubing is monitored to ensure that the entire tubing is completely sealed. Subsequently, the tubing is cut off approximately 6-inches below the ground surface and the surface is patched to match the existing grade.
- The vapor probe is properly destroyed by over-drilling the sample tubing and annular seal material. Once the material has been removed, the subsequent borehole is filled with neat cement grout to within about 6-inches of the ground surface and the surface is patched to match the existing grade.

Sub-Slab Soil Vapor Probe: The emplacement of the sub-slab soil vapor sampling probe is conducted by coring a 1 to 1-1/4-inch diameter hole via an electric hand rotary hammer drill through the slab foundation. The sub-slab borehole is advanced approximately 3 to 4-inches below the base of the slab and into the sub-slab material. Once the probe hole is cored to the desired sample depth a length of 3/16–inch inner diameter Teflon or Nylaflo or inert, cleaned metal tubing with a porous media tip (i.e., ceramic filter stone) attached at the down-hole end of the tubing is inserted into the borehole. The probe tip is emplaced 1 to 2-inches above the base of the bore hole. A minimum of 2 to 4-inches of sand pack is emplaced at the base of the borehole followed by at least 1 to 2-inches of dry granular bentonite to above the base of the

slab. The probe tip is emplaced midway within the sand pack. The remainder of the borehole is sealed to the ground surface with hydrated bentonite for temporary points or hydrated bentonite followed by neat cement for permanent points to ensure a sound surface seal. Permanent points have a flush-mount inert metal fitting for providing a good seal when connecting the above-ground sample tubing and for plugging between sampling events. Following sample collection from a temporary probe the sample tubing is removed and the subsequent void is sealed with hydrated bentonite and the surface is patched with concrete.

Purging

Prior to soil gas sample collection, a purge volume or "dead space volume" will be calculated in order to purge ambient or stagnant air from the sampling system to ensure that collected samples are representative.

Per the procedures outlined in the CalEPA's Advisory, a default of three purge volumes will be extracted prior to sampling. The purge volume consists of approximately three system volumes (i.e. tubing and annular space) of soil gas, while capturing the purge effluent. One system volume is calculated by summing the inner diameter (id) tubing volume (i.e., id area times the length of tubing) and the annular pore space volume (i.e., area of the borehole times the length of sand pack and granular bentonite surrounding the ceramic filter stone tip times an estimated sand-pack pore space volume of 33.8%). The purge rate will be conducted at the same rate soil gas is sampled (approximately 200-mL/min flow). We note that Cal-EPA guidance recommends purging or sampling at rates between 100 to 200-mL/min for soil vapor points at all depths, including sub-slab vapor points, to limit air stripping and to prevent ambient air form diluting the sample. After the specific pre-determined purge volume is removed, a soil vapor/gas sample is collected for laboratory analyses for the site-specific target compounds as discussed below.

Sample Collection

Before purging the appropriate "dead space volume" from the soil vapor/gas probe, the probe seal is allowed to cure and the subsurface is allowed to equilibrate for the appropriate amount of time per the procedures outlined in the CalEPA's Advisory. We note that an equilibration time of 2-hours is required for soil vapor/gas points installed via a direct push drill rig and 48-hours for soil vapor/gas points installed via a hollow stem auger drill rig, hand-auger, or an electric hand rotary hammer drill. Once the appropriate "dead space volume" has been purged, the sample tubing will be attached to a laboratory prepared soil vapor manifold and 1 or 6-liter Summa canister or sorbent sampling media depending on required laboratory analysis. We note that the choice between using a 1-L or 6-L canister is typically dependent on the purpose of the site investigation. However, for soil vapor/gas samples collected at a depth

less than 5-feet, including sub-slab vapor points, a 1-L canister should be used to avoid excessive air removal and to prevent ambient air from entering the sub-surface and sample. When sampling for ambient indoor air, a 6-L canister is nearly always required because of the extremely low detection limits required to meet Indoor Air ESLs. For soil vapor collection, a 1-L canister may be all that is necessary if the site is known to contain high concentrations of contaminants of interest that make achieving low detection limits a secondary concern. In those cases, only a small volume of the 1-L collected is necessary for analysis of both the TO-15 and the TO-3 compounds. However, if a site does not have historical data indicating that it is significantly contaminated, or if multiple analytical runs become necessary to achieve reporting limit/CHHSL/ESL goals, it becomes critical to have a larger initial volume of collected sample. A 6-L volume allows the laboratory to provide the lowest possible detection for the compounds of interest for full list TO-15 while providing enough volume for the additional analysis of individual compounds that may require dilution to bring them within the instrument calibration range. The 6-L volume will provide enough residual sample to analyze for additional contaminants (e.g., EPA Method TO-3) and/or fixed Gases (ASTM D1946) including Helium, which may be used as a tracer or leak check compound in the investigation. A consultation with the selected testing laboratory will be conducted for each investigation to ensure that appropriate sample volumes are obtained.

Sample collection with Summa canisters

The following sample collection procedures are followed for each sample collection media:

- The Summa canisters will be supplied by the analytical laboratory with a vacuum of approximately 30-inches of mercury and outfitted with a 200-mL/min flow control valve. The tubing will be connected to the soil vapor manifold and Summa canister using airtight stainless-steel or brass fittings. The flow control valve will then be opened slowly to draw the vapor sample from the target depth.

Sample collection with sorbent tube

- Laboratory sorbent media and canister with a vacuum of approximately 30-inches of mercury and outfitted with a 200- mL/min flow control valve or sampling pump (10 to 200 mL/min) will be supplied by the analytical laboratory. The tubing will be connected to the sorbent media sample tube, upstream of the vacuum canister/sample pump/syringe using airtight stainless-steel or brass fittings. The sample

vacuum canister/ pump/syringe will then be activated to draw approximately 1 to 3-L of sample volume for TO-17 analysis from the target depth at a flow rate of 200- mL/min or less per sorbent media sample tube manufacturer and/or laboratory guidelines.

Schematic diagrams of sample configurations for the different sampling media (i.e., Summa canister and sorbent media) and probe construction (i.e., shallow soil and sub-slab) are included as attachments 1, 2, and 3 of this field methodology.

Leak Detection Monitoring

Monitoring leak check compound within shroud during sample collection

Leak detection monitoring will be conducted during soil gas sampling by applying a tracer compound (i.e., isopropyl alcohol [isopropanol, IPA] or helium) to the sample system connections and bentonite seal. Specifically, a shroud will be used to encapsulate the entire system (i.e., the sample canister and surface bentonite seal) so as to trap the applied tracer compound. The leak detection monitoring configuration is graphically depicted on attachments 1, 2, and 3 of this field methodology. The concentration of the leak check compound within the shroud will be monitored periodically throughout the sample collection period with a PID calibrated to the specific tracer gas compound and these values will be recorded into the field notes. The tracer compound (i.e., IPA or helium) is maintained within the shroud at a concentration of approximately two (2) orders of magnitude higher than the detection limit of the field meter used throughout the duration of sample collection. The testing laboratory will screen for this compound in all analyzed air samples when IPA is used. If helium is used the laboratory can screen for this compound if collected in Summa canisters, or the sample effluent after passing through the sorbent media will be field screened for the presence of the helium.

Prior to purging and sample collection, a “shut-in test” is performed to check the above-ground sample system connections downstream from the top of the soil vapor/gas probe, including the laboratory provided sample manifold (“sample train”). The “shut-in test” is completed in the field by closing off all valves to the laboratory provided soil vapor manifold and the soil vapor/gas probe tubing, and subsequently opening the valve to the connected “purge” Summa canister to increase the vacuum in the sample train to a minimum of 30-inches of mercury, at which point the purge canister is closed. Then the vacuum gauge on the sample train is observed for at least 1-minute to confirm it remains stable.

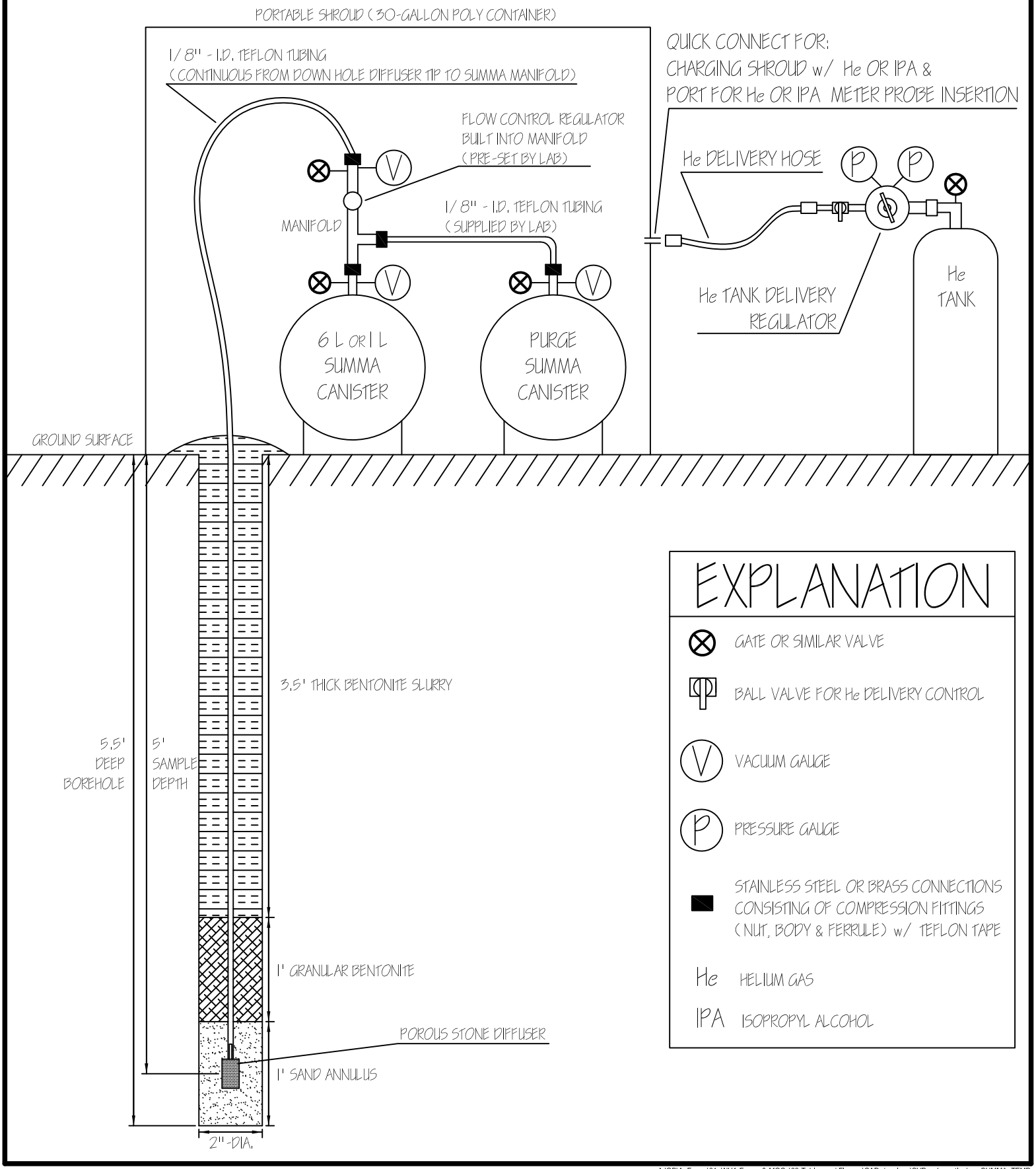
Low Flow Sampling Conditions

A low flow sampling condition is characterized as a condition where the sample probe cannot sustain a flow rate of 100-mL/min for more than three minutes while maintaining an applied vacuum of less than 100-inches of water (or 7.4-inches of mercury). The vacuum applied to the sample probe will be measured and monitored via a vacuum gauge installed between the sample probe and the sample collection flow regulator. If the vacuum measured within the sample probe exceeds 100-inches of water during dead space volume purging, then one of the following sample collection procedures will be employed:

- If the lithology observed during sample probe installation indicates potential for low permeability / low flow conditions a representative soil sample at the soil vapor sample depth will be collected and put on ice for possible laboratory analysis.
- If extreme low flow conditions are observed during purging, excessive time will be required to purge and collect a sample. We will contact the regulating agency to confirm collecting a purge volume approximating one dead space volume (i.e., volume of the sample tube plus the volume of the sand pack pore space and granular bentonite pore space surrounding the probe tip) will be evacuated prior to sample collection. Sample collection will proceed until the sample probe vacuum equals 100-inches of water. The sample system will then be closed off to allow the probe to relax and equilibrate. Over time the vacuum will eventually dissipate, the rate of which can be monitored via an in-line vacuum gauge installed as described above. Once the vacuum in the sample probe has dissipated, sampling will resume as described above. This process will be repeated until an adequate sample volume has been obtained for the required laboratory analysis.
- If during low flow sampling as stated above, the sample system when closed off to allow the probe to relax and equilibrate the probe vacuum does not reduce by 13.5 inches of water (1 inch of mercury) in 3-minutes, soil vapor sampling will cease and the previously collected soil sample will be submitted to the laboratory for potential analysis for site specific constituents.

Sample Storage and Transport

Once collected, the soil gas samples are then transported to a State-certified laboratory under appropriate chain-of-custody documentation. Sorbent media are wrapped in foil and placed in individual zip-lock type bags and immediately placed in a chilled cooler (chilled to 4 degrees Celsius) for storage and transport to the testing laboratory. Summa canisters are placed in laboratory provided cardboard boxes and stored at ambient temperature for transport to the testing laboratory.



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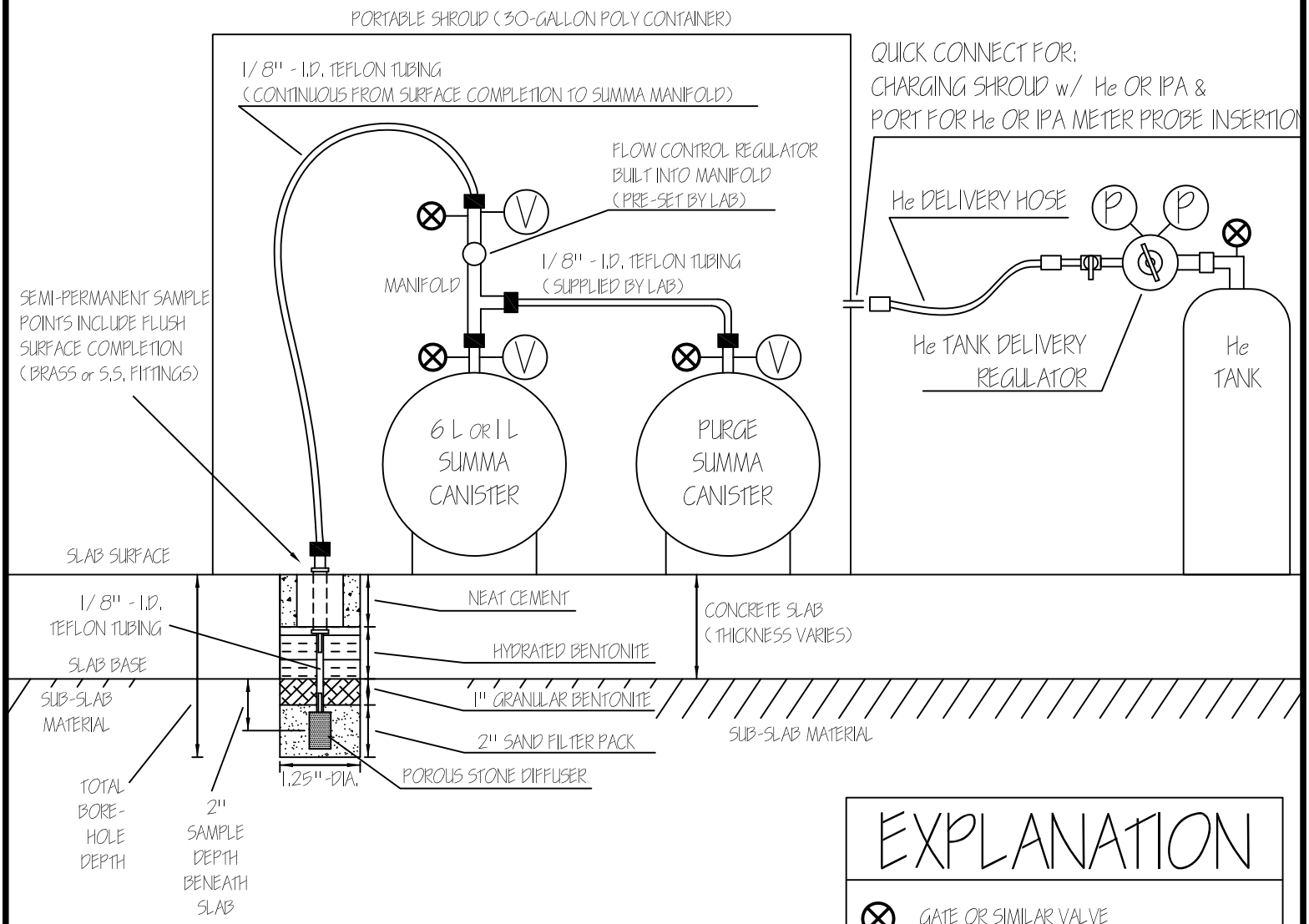
Weber, Hayes & Associates
Hydrogeology and EnvIronmental EngIneerIng
120 Westgate Drive, Watsonville, CA 95076
(831)722-3580 Fax (831)722-1159
www.weber-hayes.com

Temporary Soil Vapor Probe Construction Details

Figure B



EXPLANATION

- GATE OR SIMILAR VALVE
- BALL VALVE FOR PURGE / SAMPLING CONTROL & He DELIVERY CONTROL
- P — PRESSURE GAUGE
- STAINLESS STEEL OR BRASS CONNECTIONS CONSISTING OF COMPRESSION FITTINGS (NUT, BODY & FERRULE) w/ TEFLON TAPE
- He — HELIUM GAS
- IPA — ISOPROPYL ALCOHOL

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Hydrogeology and Environmental Engineering
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Semi-Permanent, Sub-Slab Soil Vapor Probe Construction Details

Figure A

Appendix B

State Certified Laboratory Reports

- **Soil and Groundwater Analysis – Pace Analytical Laboratory**
- **Soil Vapor Analysis – BC Laboratories, Inc.**

Soil and Groundwater Analysis

–

Pace Analytical

ANALYTICAL REPORT

April 10, 2020

Weber, Hayes & Associates - CA

Sample Delivery Group:	L1205565
Samples Received:	04/03/2020
Project Number:	2t009
Description:	Capitola Rd
Site:	1541 CAPITOLA RD SANTA CRUZ
Report To:	Ryan Nyberg 120 Westgate Drive Watsonville, CA 95076

Entire Report Reviewed By: Brian Ford

Brian Ford
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.

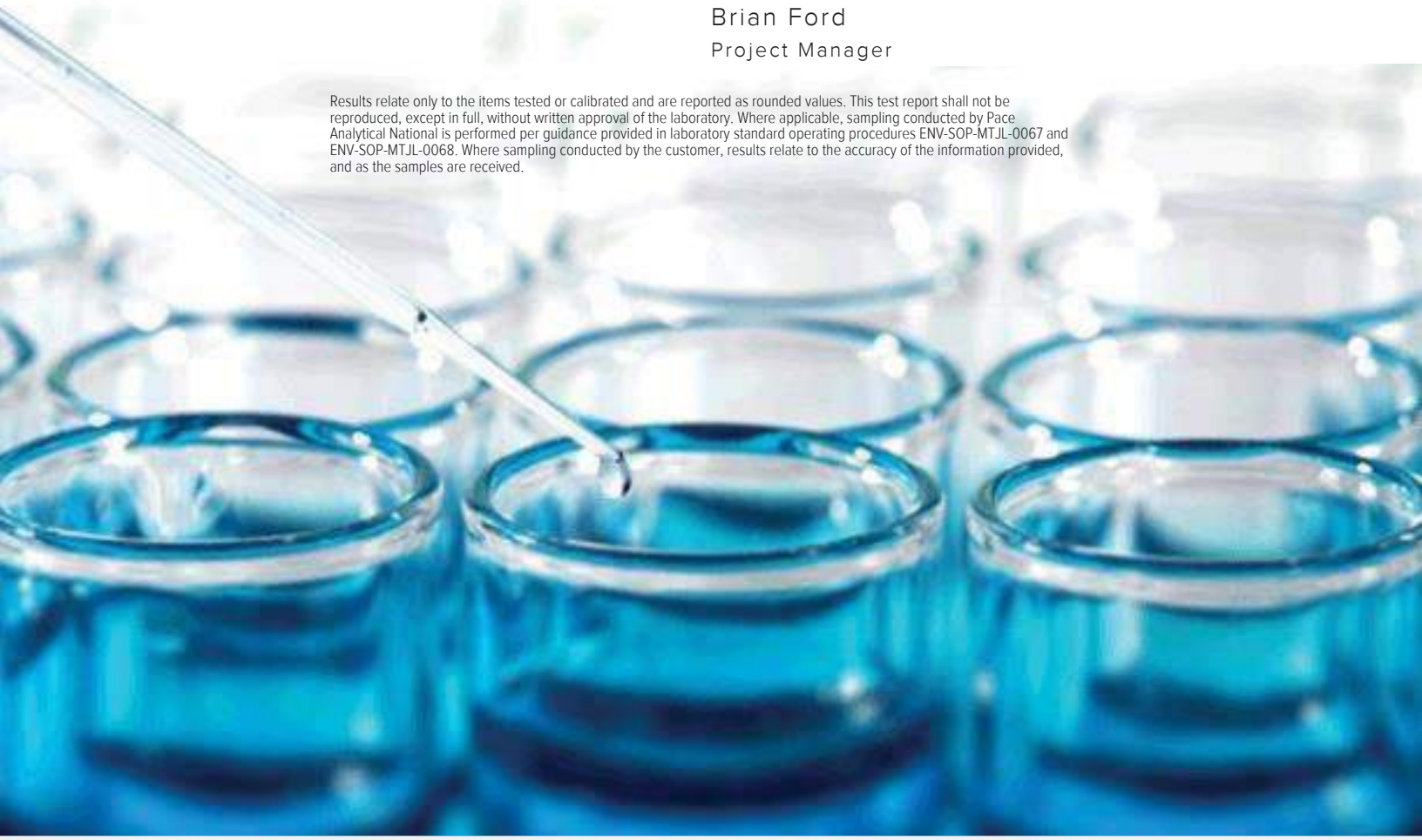


TABLE OF CONTENTS

GW-1 L1205565-03 GW

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455716	1	04/04/20 19:02	04/04/20 19:02	JCP	Mt. Juliet, TN

GW-2 L1205565-04 GW

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455716	1	04/04/20 19:22	04/04/20 19:22	JCP	Mt. Juliet, TN

GW-3 L1205565-05 GW

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455716	1	04/04/20 19:42	04/04/20 19:42	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1458412	10	04/09/20 21:03	04/09/20 21:03	ADM	Mt. Juliet, TN

GW-4 L1205565-06 GW

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455716	1	04/04/20 20:02	04/04/20 20:02	JCP	Mt. Juliet, TN

GW-5 L1205565-07 GW

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455716	1	04/04/20 20:22	04/04/20 20:22	JCP	Mt. Juliet, TN

GW-6 L1205565-08 GW

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455716	1	04/04/20 20:42	04/04/20 20:42	JCP	Mt. Juliet, TN

SS-2-D3 L1205565-09 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456965	1	04/08/20 21:52	04/08/20 22:08	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 04:56	BMB	Mt. Juliet, TN

SS-2-D4.5 L1205565-10 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 05:15	BMB	Mt. Juliet, TN

SS-2-D12 L1205565-11 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 05:34	BMB	Mt. Juliet, TN

SS-3-D3 L1205565-12 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 05:53	BMB	Mt. Juliet, TN

SS-3-D6 L1205565-13 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 06:12	BMB	Mt. Juliet, TN

SS-3-D12 L1205565-14 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 06:31	BMB	Mt. Juliet, TN

GW-1-D3 L1205565-15 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 06:50	BMB	Mt. Juliet, TN

GW-1-D7 L1205565-16 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 07:09	BMB	Mt. Juliet, TN

GW-1-D12 L1205565-17 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 07:28	BMB	Mt. Juliet, TN

GW-1-D24 L1205565-18 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/01/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/01/20 00:00	04/05/20 07:47	BMB	Mt. Juliet, TN

GW-3-D3 L1205565-19 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456966	1	04/08/20 21:31	04/08/20 21:48	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 08:06	BMB	Mt. Juliet, TN

GW-3-D6 L1205565-20 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 08:25	BMB	Mt. Juliet, TN

GW-3-D12 L1205565-21 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 08:45	BMB	Mt. Juliet, TN

GW-3-D19 L1205565-22 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 09:04	BMB	Mt. Juliet, TN

GW-4-D3 L1205565-23 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 09:23	BMB	Mt. Juliet, TN

GW-4-D6 L1205565-24 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 09:42	BMB	Mt. Juliet, TN

GW-4-D12 L1205565-25 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 10:01	BMB	Mt. Juliet, TN

GW-4-D23 L1205565-26 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 10:20	BMB	Mt. Juliet, TN

GW-5-D3 L1205565-27 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455717	1	04/02/20 00:00	04/05/20 10:39	BMB	Mt. Juliet, TN

GW-5-D6 L1205565-28 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455731	1	04/02/20 00:00	04/04/20 22:47	BMB	Mt. Juliet, TN

GW-5-D12 L1205565-29 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456967	1	04/08/20 21:14	04/08/20 21:27	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455731	1	04/02/20 00:00	04/04/20 23:06	BMB	Mt. Juliet, TN

GW-5-D27 L1205565-30 Solid

Collected by: Ryan Nyberg | Collected date/time: 04/02/20 00:00 | Received date/time: 04/03/20 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Total Solids by Method 2540 G-2011	WG1456968	1	04/08/20 19:21	04/08/20 19:42	KDW	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1455731	1	04/02/20 00:00	04/04/20 23:25	BMB	Mt. Juliet, TN

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.

Brian Ford
Project Manager

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	14.0	J	10.0	50.0	1	04/04/2020 19:02	WG1455716
Acrolein	U	J4	8.87	50.0	1	04/04/2020 19:02	WG1455716
Acrylonitrile	U		1.87	10.0	1	04/04/2020 19:02	WG1455716
Benzene	0.354	J	0.331	1.00	1	04/04/2020 19:02	WG1455716
Bromobenzene	U	J4	0.352	1.00	1	04/04/2020 19:02	WG1455716
Bromodichloromethane	U		0.380	1.00	1	04/04/2020 19:02	WG1455716
Bromoform	U		0.469	1.00	1	04/04/2020 19:02	WG1455716
Bromomethane	U		0.866	5.00	1	04/04/2020 19:02	WG1455716
n-Butylbenzene	U		0.361	1.00	1	04/04/2020 19:02	WG1455716
sec-Butylbenzene	U		0.365	1.00	1	04/04/2020 19:02	WG1455716
tert-Butylbenzene	U		0.399	1.00	1	04/04/2020 19:02	WG1455716
Carbon tetrachloride	U		0.379	1.00	1	04/04/2020 19:02	WG1455716
Chlorobenzene	U		0.348	1.00	1	04/04/2020 19:02	WG1455716
Chlorodibromomethane	U		0.327	1.00	1	04/04/2020 19:02	WG1455716
Chloroethane	U		0.453	5.00	1	04/04/2020 19:02	WG1455716
Chloroform	U		0.324	5.00	1	04/04/2020 19:02	WG1455716
Chloromethane	0.428	J	0.276	2.50	1	04/04/2020 19:02	WG1455716
2-Chlorotoluene	U		0.375	1.00	1	04/04/2020 19:02	WG1455716
4-Chlorotoluene	U		0.351	1.00	1	04/04/2020 19:02	WG1455716
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	04/04/2020 19:02	WG1455716
1,2-Dibromoethane	U		0.381	1.00	1	04/04/2020 19:02	WG1455716
Dibromomethane	U		0.346	1.00	1	04/04/2020 19:02	WG1455716
1,2-Dichlorobenzene	U		0.349	1.00	1	04/04/2020 19:02	WG1455716
1,3-Dichlorobenzene	U		0.220	1.00	1	04/04/2020 19:02	WG1455716
1,4-Dichlorobenzene	U		0.274	1.00	1	04/04/2020 19:02	WG1455716
Dichlorodifluoromethane	U		0.551	5.00	1	04/04/2020 19:02	WG1455716
1,1-Dichloroethane	U		0.259	1.00	1	04/04/2020 19:02	WG1455716
1,2-Dichloroethane	U		0.361	1.00	1	04/04/2020 19:02	WG1455716
1,1-Dichloroethene	U		0.398	1.00	1	04/04/2020 19:02	WG1455716
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/04/2020 19:02	WG1455716
trans-1,2-Dichloroethene	U		0.396	1.00	1	04/04/2020 19:02	WG1455716
1,2-Dichloropropane	U		0.306	1.00	1	04/04/2020 19:02	WG1455716
1,1-Dichloropropene	U		0.352	1.00	1	04/04/2020 19:02	WG1455716
1,3-Dichloropropane	U		0.366	1.00	1	04/04/2020 19:02	WG1455716
cis-1,3-Dichloropropene	U		0.418	1.00	1	04/04/2020 19:02	WG1455716
trans-1,3-Dichloropropene	U		0.419	1.00	1	04/04/2020 19:02	WG1455716
2,2-Dichloropropane	U		0.321	1.00	1	04/04/2020 19:02	WG1455716
Di-isopropyl ether	U		0.320	1.00	1	04/04/2020 19:02	WG1455716
Ethylbenzene	U		0.384	1.00	1	04/04/2020 19:02	WG1455716
Hexachloro-1,3-butadiene	U		0.256	1.00	1	04/04/2020 19:02	WG1455716
Isopropylbenzene	U		0.326	1.00	1	04/04/2020 19:02	WG1455716
p-Isopropyltoluene	U		0.350	1.00	1	04/04/2020 19:02	WG1455716
2-Butanone (MEK)	U		3.93	10.0	1	04/04/2020 19:02	WG1455716
Methylene Chloride	U		1.00	5.00	1	04/04/2020 19:02	WG1455716
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	04/04/2020 19:02	WG1455716
Methyl tert-butyl ether	U		0.367	1.00	1	04/04/2020 19:02	WG1455716
Naphthalene	U		1.00	5.00	1	04/04/2020 19:02	WG1455716
n-Propylbenzene	U		0.349	1.00	1	04/04/2020 19:02	WG1455716
Styrene	U		0.307	1.00	1	04/04/2020 19:02	WG1455716
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	04/04/2020 19:02	WG1455716
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/04/2020 19:02	WG1455716
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	04/04/2020 19:02	WG1455716
Tetrachloroethene	4.64		0.372	1.00	1	04/04/2020 19:02	WG1455716
Toluene	0.614	J	0.412	1.00	1	04/04/2020 19:02	WG1455716
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2020 19:02	WG1455716
1,2,4-Trichlorobenzene	U		0.355	1.00	1	04/04/2020 19:02	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/04/2020 19:02	WG1455716
1,1,2-Trichloroethane	U		0.383	1.00	1	04/04/2020 19:02	WG1455716
Trichloroethene	U		0.398	1.00	1	04/04/2020 19:02	WG1455716
Trichlorofluoromethane	U		1.20	5.00	1	04/04/2020 19:02	WG1455716
1,2,3-Trichloropropane	U	J4	0.807	2.50	1	04/04/2020 19:02	WG1455716
1,2,4-Trimethylbenzene	U		0.373	1.00	1	04/04/2020 19:02	WG1455716
1,2,3-Trimethylbenzene	U		0.321	1.00	1	04/04/2020 19:02	WG1455716
1,3,5-Trimethylbenzene	U	J4	0.387	1.00	1	04/04/2020 19:02	WG1455716
Vinyl chloride	U		0.259	1.00	1	04/04/2020 19:02	WG1455716
Xylenes, Total	U		1.06	3.00	1	04/04/2020 19:02	WG1455716
(S) Toluene-d8	*113*			*80.0-120*		*04/04/2020 19:02*	WG1455716
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*04/04/2020 19:02*	WG1455716
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/04/2020 19:02*	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/04/2020 19:22	WG1455716
Acrolein	U	J4	8.87	50.0	1	04/04/2020 19:22	WG1455716
Acrylonitrile	U		1.87	10.0	1	04/04/2020 19:22	WG1455716
Benzene	U		0.331	1.00	1	04/04/2020 19:22	WG1455716
Bromobenzene	U	J4	0.352	1.00	1	04/04/2020 19:22	WG1455716
Bromodichloromethane	U		0.380	1.00	1	04/04/2020 19:22	WG1455716
Bromoform	U		0.469	1.00	1	04/04/2020 19:22	WG1455716
Bromomethane	U		0.866	5.00	1	04/04/2020 19:22	WG1455716
n-Butylbenzene	U		0.361	1.00	1	04/04/2020 19:22	WG1455716
sec-Butylbenzene	U		0.365	1.00	1	04/04/2020 19:22	WG1455716
tert-Butylbenzene	U		0.399	1.00	1	04/04/2020 19:22	WG1455716
Carbon tetrachloride	U		0.379	1.00	1	04/04/2020 19:22	WG1455716
Chlorobenzene	U		0.348	1.00	1	04/04/2020 19:22	WG1455716
Chlorodibromomethane	U		0.327	1.00	1	04/04/2020 19:22	WG1455716
Chloroethane	U		0.453	5.00	1	04/04/2020 19:22	WG1455716
Chloroform	U		0.324	5.00	1	04/04/2020 19:22	WG1455716
Chloromethane	U		0.276	2.50	1	04/04/2020 19:22	WG1455716
2-Chlorotoluene	U		0.375	1.00	1	04/04/2020 19:22	WG1455716
4-Chlorotoluene	U		0.351	1.00	1	04/04/2020 19:22	WG1455716
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	04/04/2020 19:22	WG1455716
1,2-Dibromoethane	U		0.381	1.00	1	04/04/2020 19:22	WG1455716
Dibromomethane	U		0.346	1.00	1	04/04/2020 19:22	WG1455716
1,2-Dichlorobenzene	U		0.349	1.00	1	04/04/2020 19:22	WG1455716
1,3-Dichlorobenzene	U		0.220	1.00	1	04/04/2020 19:22	WG1455716
1,4-Dichlorobenzene	U		0.274	1.00	1	04/04/2020 19:22	WG1455716
Dichlorodifluoromethane	U		0.551	5.00	1	04/04/2020 19:22	WG1455716
1,1-Dichloroethane	U		0.259	1.00	1	04/04/2020 19:22	WG1455716
1,2-Dichloroethane	U		0.361	1.00	1	04/04/2020 19:22	WG1455716
1,1-Dichloroethene	U		0.398	1.00	1	04/04/2020 19:22	WG1455716
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/04/2020 19:22	WG1455716
trans-1,2-Dichloroethene	U		0.396	1.00	1	04/04/2020 19:22	WG1455716
1,2-Dichloropropane	U		0.306	1.00	1	04/04/2020 19:22	WG1455716
1,1-Dichloropropene	U		0.352	1.00	1	04/04/2020 19:22	WG1455716
1,3-Dichloropropane	U		0.366	1.00	1	04/04/2020 19:22	WG1455716
cis-1,3-Dichloropropene	U		0.418	1.00	1	04/04/2020 19:22	WG1455716
trans-1,3-Dichloropropene	U		0.419	1.00	1	04/04/2020 19:22	WG1455716
2,2-Dichloropropane	U		0.321	1.00	1	04/04/2020 19:22	WG1455716
Di-isopropyl ether	0.417	J	0.320	1.00	1	04/04/2020 19:22	WG1455716
Ethylbenzene	U		0.384	1.00	1	04/04/2020 19:22	WG1455716
Hexachloro-1,3-butadiene	U		0.256	1.00	1	04/04/2020 19:22	WG1455716
Isopropylbenzene	U		0.326	1.00	1	04/04/2020 19:22	WG1455716
p-Isopropyltoluene	U		0.350	1.00	1	04/04/2020 19:22	WG1455716
2-Butanone (MEK)	U		3.93	10.0	1	04/04/2020 19:22	WG1455716
Methylene Chloride	U		1.00	5.00	1	04/04/2020 19:22	WG1455716
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	04/04/2020 19:22	WG1455716
Methyl tert-butyl ether	U		0.367	1.00	1	04/04/2020 19:22	WG1455716
Naphthalene	U		1.00	5.00	1	04/04/2020 19:22	WG1455716
n-Propylbenzene	U		0.349	1.00	1	04/04/2020 19:22	WG1455716
Styrene	U		0.307	1.00	1	04/04/2020 19:22	WG1455716
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	04/04/2020 19:22	WG1455716
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/04/2020 19:22	WG1455716
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	04/04/2020 19:22	WG1455716
Tetrachloroethene	161		0.372	1.00	1	04/04/2020 19:22	WG1455716
Toluene	U		0.412	1.00	1	04/04/2020 19:22	WG1455716
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2020 19:22	WG1455716
1,2,4-Trichlorobenzene	U		0.355	1.00	1	04/04/2020 19:22	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/04/2020 19:22	WG1455716
1,1,2-Trichloroethane	U		0.383	1.00	1	04/04/2020 19:22	WG1455716
Trichloroethene	U		0.398	1.00	1	04/04/2020 19:22	WG1455716
Trichlorofluoromethane	U		1.20	5.00	1	04/04/2020 19:22	WG1455716
1,2,3-Trichloropropane	U	J4	0.807	2.50	1	04/04/2020 19:22	WG1455716
1,2,4-Trimethylbenzene	U		0.373	1.00	1	04/04/2020 19:22	WG1455716
1,2,3-Trimethylbenzene	U		0.321	1.00	1	04/04/2020 19:22	WG1455716
1,3,5-Trimethylbenzene	U	J4	0.387	1.00	1	04/04/2020 19:22	WG1455716
Vinyl chloride	U		0.259	1.00	1	04/04/2020 19:22	WG1455716
Xylenes, Total	U		1.06	3.00	1	04/04/2020 19:22	WG1455716
(S) Toluene-d8	*116*			*80.0-120*		*04/04/2020 19:22*	WG1455716
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*04/04/2020 19:22*	WG1455716
(S) 1,2-Dichloroethane-d4	*99.5*			*70.0-130*		*04/04/2020 19:22*	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/04/2020 19:42	WG1455716
Acrolein	U	J4	8.87	50.0	1	04/04/2020 19:42	WG1455716
Acrylonitrile	U		1.87	10.0	1	04/04/2020 19:42	WG1455716
Benzene	U		0.331	1.00	1	04/04/2020 19:42	WG1455716
Bromobenzene	U	J4	0.352	1.00	1	04/04/2020 19:42	WG1455716
Bromodichloromethane	U		0.380	1.00	1	04/04/2020 19:42	WG1455716
Bromoform	U		0.469	1.00	1	04/04/2020 19:42	WG1455716
Bromomethane	U		0.866	5.00	1	04/04/2020 19:42	WG1455716
n-Butylbenzene	U		0.361	1.00	1	04/04/2020 19:42	WG1455716
sec-Butylbenzene	U		0.365	1.00	1	04/04/2020 19:42	WG1455716
tert-Butylbenzene	U		0.399	1.00	1	04/04/2020 19:42	WG1455716
Carbon tetrachloride	U		0.379	1.00	1	04/04/2020 19:42	WG1455716
Chlorobenzene	U		0.348	1.00	1	04/04/2020 19:42	WG1455716
Chlorodibromomethane	U		0.327	1.00	1	04/04/2020 19:42	WG1455716
Chloroethane	U		0.453	5.00	1	04/04/2020 19:42	WG1455716
Chloroform	U		0.324	5.00	1	04/04/2020 19:42	WG1455716
Chloromethane	U		0.276	2.50	1	04/04/2020 19:42	WG1455716
2-Chlorotoluene	U		0.375	1.00	1	04/04/2020 19:42	WG1455716
4-Chlorotoluene	U		0.351	1.00	1	04/04/2020 19:42	WG1455716
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	04/04/2020 19:42	WG1455716
1,2-Dibromoethane	U		0.381	1.00	1	04/04/2020 19:42	WG1455716
Dibromomethane	U		0.346	1.00	1	04/04/2020 19:42	WG1455716
1,2-Dichlorobenzene	U		0.349	1.00	1	04/04/2020 19:42	WG1455716
1,3-Dichlorobenzene	U		0.220	1.00	1	04/04/2020 19:42	WG1455716
1,4-Dichlorobenzene	U		0.274	1.00	1	04/04/2020 19:42	WG1455716
Dichlorodifluoromethane	U		0.551	5.00	1	04/04/2020 19:42	WG1455716
1,1-Dichloroethane	U		0.259	1.00	1	04/04/2020 19:42	WG1455716
1,2-Dichloroethane	U		0.361	1.00	1	04/04/2020 19:42	WG1455716
1,1-Dichloroethene	U		0.398	1.00	1	04/04/2020 19:42	WG1455716
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/04/2020 19:42	WG1455716
trans-1,2-Dichloroethene	U		0.396	1.00	1	04/04/2020 19:42	WG1455716
1,2-Dichloropropane	U		0.306	1.00	1	04/04/2020 19:42	WG1455716
1,1-Dichloropropene	U		0.352	1.00	1	04/04/2020 19:42	WG1455716
1,3-Dichloropropane	U		0.366	1.00	1	04/04/2020 19:42	WG1455716
cis-1,3-Dichloropropene	U		0.418	1.00	1	04/04/2020 19:42	WG1455716
trans-1,3-Dichloropropene	U		0.419	1.00	1	04/04/2020 19:42	WG1455716
2,2-Dichloropropane	U		0.321	1.00	1	04/04/2020 19:42	WG1455716
Di-isopropyl ether	U		0.320	1.00	1	04/04/2020 19:42	WG1455716
Ethylbenzene	U		0.384	1.00	1	04/04/2020 19:42	WG1455716
Hexachloro-1,3-butadiene	U		0.256	1.00	1	04/04/2020 19:42	WG1455716
Isopropylbenzene	U		0.326	1.00	1	04/04/2020 19:42	WG1455716
p-Isopropyltoluene	U		0.350	1.00	1	04/04/2020 19:42	WG1455716
2-Butanone (MEK)	U		3.93	10.0	1	04/04/2020 19:42	WG1455716
Methylene Chloride	U		1.00	5.00	1	04/04/2020 19:42	WG1455716
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	04/04/2020 19:42	WG1455716
Methyl tert-butyl ether	U		0.367	1.00	1	04/04/2020 19:42	WG1455716
Naphthalene	U		1.00	5.00	1	04/04/2020 19:42	WG1455716
n-Propylbenzene	U		0.349	1.00	1	04/04/2020 19:42	WG1455716
Styrene	U		0.307	1.00	1	04/04/2020 19:42	WG1455716
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	04/04/2020 19:42	WG1455716
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/04/2020 19:42	WG1455716
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	04/04/2020 19:42	WG1455716
Tetrachloroethene	136		3.72	10.0	10	04/09/2020 21:03	WG1458412
Toluene	U		0.412	1.00	1	04/04/2020 19:42	WG1455716
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2020 19:42	WG1455716
1,2,4-Trichlorobenzene	U		0.355	1.00	1	04/04/2020 19:42	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/04/2020 19:42	WG1455716
1,1,2-Trichloroethane	U		0.383	1.00	1	04/04/2020 19:42	WG1455716
Trichloroethene	U		0.398	1.00	1	04/04/2020 19:42	WG1455716
Trichlorofluoromethane	U		1.20	5.00	1	04/04/2020 19:42	WG1455716
1,2,3-Trichloropropane	U	J4	0.807	2.50	1	04/04/2020 19:42	WG1455716
1,2,4-Trimethylbenzene	U		0.373	1.00	1	04/04/2020 19:42	WG1455716
1,2,3-Trimethylbenzene	U		0.321	1.00	1	04/04/2020 19:42	WG1455716
1,3,5-Trimethylbenzene	U	J4	0.387	1.00	1	04/04/2020 19:42	WG1455716
Vinyl chloride	U		0.259	1.00	1	04/04/2020 19:42	WG1455716
Xylenes, Total	U		1.06	3.00	1	04/04/2020 19:42	WG1455716
(S) Toluene-d8	*115*			*80.0-120*		*04/04/2020 19:42*	WG1455716
(S) Toluene-d8	*106*			*80.0-120*		*04/09/2020 21:03*	WG1458412
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*04/04/2020 19:42*	WG1455716
(S) 4-Bromofluorobenzene	*94.4*			*77.0-126*		*04/09/2020 21:03*	WG1458412
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/04/2020 19:42*	WG1455716
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/09/2020 21:03*	WG1458412

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/04/2020 20:02	WG1455716
Acrolein	U	J4	8.87	50.0	1	04/04/2020 20:02	WG1455716
Acrylonitrile	U		1.87	10.0	1	04/04/2020 20:02	WG1455716
Benzene	U		0.331	1.00	1	04/04/2020 20:02	WG1455716
Bromobenzene	U	J4	0.352	1.00	1	04/04/2020 20:02	WG1455716
Bromodichloromethane	U		0.380	1.00	1	04/04/2020 20:02	WG1455716
Bromoform	U		0.469	1.00	1	04/04/2020 20:02	WG1455716
Bromomethane	U		0.866	5.00	1	04/04/2020 20:02	WG1455716
n-Butylbenzene	U		0.361	1.00	1	04/04/2020 20:02	WG1455716
sec-Butylbenzene	U		0.365	1.00	1	04/04/2020 20:02	WG1455716
tert-Butylbenzene	U		0.399	1.00	1	04/04/2020 20:02	WG1455716
Carbon tetrachloride	U		0.379	1.00	1	04/04/2020 20:02	WG1455716
Chlorobenzene	U		0.348	1.00	1	04/04/2020 20:02	WG1455716
Chlorodibromomethane	U		0.327	1.00	1	04/04/2020 20:02	WG1455716
Chloroethane	U		0.453	5.00	1	04/04/2020 20:02	WG1455716
Chloroform	U		0.324	5.00	1	04/04/2020 20:02	WG1455716
Chloromethane	U		0.276	2.50	1	04/04/2020 20:02	WG1455716
2-Chlorotoluene	U		0.375	1.00	1	04/04/2020 20:02	WG1455716
4-Chlorotoluene	U		0.351	1.00	1	04/04/2020 20:02	WG1455716
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	04/04/2020 20:02	WG1455716
1,2-Dibromoethane	U		0.381	1.00	1	04/04/2020 20:02	WG1455716
Dibromomethane	U		0.346	1.00	1	04/04/2020 20:02	WG1455716
1,2-Dichlorobenzene	U		0.349	1.00	1	04/04/2020 20:02	WG1455716
1,3-Dichlorobenzene	U		0.220	1.00	1	04/04/2020 20:02	WG1455716
1,4-Dichlorobenzene	U		0.274	1.00	1	04/04/2020 20:02	WG1455716
Dichlorodifluoromethane	U		0.551	5.00	1	04/04/2020 20:02	WG1455716
1,1-Dichloroethane	U		0.259	1.00	1	04/04/2020 20:02	WG1455716
1,2-Dichloroethane	U		0.361	1.00	1	04/04/2020 20:02	WG1455716
1,1-Dichloroethene	U		0.398	1.00	1	04/04/2020 20:02	WG1455716
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/04/2020 20:02	WG1455716
trans-1,2-Dichloroethene	U		0.396	1.00	1	04/04/2020 20:02	WG1455716
1,2-Dichloropropane	U		0.306	1.00	1	04/04/2020 20:02	WG1455716
1,1-Dichloropropene	U		0.352	1.00	1	04/04/2020 20:02	WG1455716
1,3-Dichloropropane	U		0.366	1.00	1	04/04/2020 20:02	WG1455716
cis-1,3-Dichloropropene	U		0.418	1.00	1	04/04/2020 20:02	WG1455716
trans-1,3-Dichloropropene	U		0.419	1.00	1	04/04/2020 20:02	WG1455716
2,2-Dichloropropane	U		0.321	1.00	1	04/04/2020 20:02	WG1455716
Di-isopropyl ether	U		0.320	1.00	1	04/04/2020 20:02	WG1455716
Ethylbenzene	U		0.384	1.00	1	04/04/2020 20:02	WG1455716
Hexachloro-1,3-butadiene	U		0.256	1.00	1	04/04/2020 20:02	WG1455716
Isopropylbenzene	U		0.326	1.00	1	04/04/2020 20:02	WG1455716
p-Isopropyltoluene	U		0.350	1.00	1	04/04/2020 20:02	WG1455716
2-Butanone (MEK)	U		3.93	10.0	1	04/04/2020 20:02	WG1455716
Methylene Chloride	U		1.00	5.00	1	04/04/2020 20:02	WG1455716
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	04/04/2020 20:02	WG1455716
Methyl tert-butyl ether	U		0.367	1.00	1	04/04/2020 20:02	WG1455716
Naphthalene	U		1.00	5.00	1	04/04/2020 20:02	WG1455716
n-Propylbenzene	U		0.349	1.00	1	04/04/2020 20:02	WG1455716
Styrene	U		0.307	1.00	1	04/04/2020 20:02	WG1455716
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	04/04/2020 20:02	WG1455716
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/04/2020 20:02	WG1455716
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	04/04/2020 20:02	WG1455716
Tetrachloroethene	9.54		0.372	1.00	1	04/04/2020 20:02	WG1455716
Toluene	U		0.412	1.00	1	04/04/2020 20:02	WG1455716
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2020 20:02	WG1455716
1,2,4-Trichlorobenzene	U		0.355	1.00	1	04/04/2020 20:02	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/04/2020 20:02	WG1455716
1,1,2-Trichloroethane	U		0.383	1.00	1	04/04/2020 20:02	WG1455716
Trichloroethene	U		0.398	1.00	1	04/04/2020 20:02	WG1455716
Trichlorofluoromethane	U		1.20	5.00	1	04/04/2020 20:02	WG1455716
1,2,3-Trichloropropane	U	J4	0.807	2.50	1	04/04/2020 20:02	WG1455716
1,2,4-Trimethylbenzene	U		0.373	1.00	1	04/04/2020 20:02	WG1455716
1,2,3-Trimethylbenzene	U		0.321	1.00	1	04/04/2020 20:02	WG1455716
1,3,5-Trimethylbenzene	U	J4	0.387	1.00	1	04/04/2020 20:02	WG1455716
Vinyl chloride	U		0.259	1.00	1	04/04/2020 20:02	WG1455716
Xylenes, Total	U		1.06	3.00	1	04/04/2020 20:02	WG1455716
(S) Toluene-d8	*117*			*80.0-120*		*04/04/2020 20:02*	WG1455716
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*04/04/2020 20:02*	WG1455716
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*04/04/2020 20:02*	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/04/2020 20:22	WG1455716
Acrolein	U	J4	8.87	50.0	1	04/04/2020 20:22	WG1455716
Acrylonitrile	U		1.87	10.0	1	04/04/2020 20:22	WG1455716
Benzene	U		0.331	1.00	1	04/04/2020 20:22	WG1455716
Bromobenzene	U	J4	0.352	1.00	1	04/04/2020 20:22	WG1455716
Bromodichloromethane	U		0.380	1.00	1	04/04/2020 20:22	WG1455716
Bromoform	U		0.469	1.00	1	04/04/2020 20:22	WG1455716
Bromomethane	U		0.866	5.00	1	04/04/2020 20:22	WG1455716
n-Butylbenzene	U		0.361	1.00	1	04/04/2020 20:22	WG1455716
sec-Butylbenzene	U		0.365	1.00	1	04/04/2020 20:22	WG1455716
tert-Butylbenzene	U		0.399	1.00	1	04/04/2020 20:22	WG1455716
Carbon tetrachloride	U		0.379	1.00	1	04/04/2020 20:22	WG1455716
Chlorobenzene	U		0.348	1.00	1	04/04/2020 20:22	WG1455716
Chlorodibromomethane	U		0.327	1.00	1	04/04/2020 20:22	WG1455716
Chloroethane	U		0.453	5.00	1	04/04/2020 20:22	WG1455716
Chloroform	U		0.324	5.00	1	04/04/2020 20:22	WG1455716
Chloromethane	U		0.276	2.50	1	04/04/2020 20:22	WG1455716
2-Chlorotoluene	U		0.375	1.00	1	04/04/2020 20:22	WG1455716
4-Chlorotoluene	U		0.351	1.00	1	04/04/2020 20:22	WG1455716
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	04/04/2020 20:22	WG1455716
1,2-Dibromoethane	U		0.381	1.00	1	04/04/2020 20:22	WG1455716
Dibromomethane	U		0.346	1.00	1	04/04/2020 20:22	WG1455716
1,2-Dichlorobenzene	U		0.349	1.00	1	04/04/2020 20:22	WG1455716
1,3-Dichlorobenzene	U		0.220	1.00	1	04/04/2020 20:22	WG1455716
1,4-Dichlorobenzene	U		0.274	1.00	1	04/04/2020 20:22	WG1455716
Dichlorodifluoromethane	U		0.551	5.00	1	04/04/2020 20:22	WG1455716
1,1-Dichloroethane	U		0.259	1.00	1	04/04/2020 20:22	WG1455716
1,2-Dichloroethane	U		0.361	1.00	1	04/04/2020 20:22	WG1455716
1,1-Dichloroethene	U		0.398	1.00	1	04/04/2020 20:22	WG1455716
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/04/2020 20:22	WG1455716
trans-1,2-Dichloroethene	U		0.396	1.00	1	04/04/2020 20:22	WG1455716
1,2-Dichloropropane	U		0.306	1.00	1	04/04/2020 20:22	WG1455716
1,1-Dichloropropene	U		0.352	1.00	1	04/04/2020 20:22	WG1455716
1,3-Dichloropropane	U		0.366	1.00	1	04/04/2020 20:22	WG1455716
cis-1,3-Dichloropropene	U		0.418	1.00	1	04/04/2020 20:22	WG1455716
trans-1,3-Dichloropropene	U		0.419	1.00	1	04/04/2020 20:22	WG1455716
2,2-Dichloropropane	U		0.321	1.00	1	04/04/2020 20:22	WG1455716
Di-isopropyl ether	U		0.320	1.00	1	04/04/2020 20:22	WG1455716
Ethylbenzene	U		0.384	1.00	1	04/04/2020 20:22	WG1455716
Hexachloro-1,3-butadiene	U		0.256	1.00	1	04/04/2020 20:22	WG1455716
Isopropylbenzene	U		0.326	1.00	1	04/04/2020 20:22	WG1455716
p-Isopropyltoluene	U		0.350	1.00	1	04/04/2020 20:22	WG1455716
2-Butanone (MEK)	U		3.93	10.0	1	04/04/2020 20:22	WG1455716
Methylene Chloride	U		1.00	5.00	1	04/04/2020 20:22	WG1455716
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	04/04/2020 20:22	WG1455716
Methyl tert-butyl ether	U		0.367	1.00	1	04/04/2020 20:22	WG1455716
Naphthalene	U		1.00	5.00	1	04/04/2020 20:22	WG1455716
n-Propylbenzene	U		0.349	1.00	1	04/04/2020 20:22	WG1455716
Styrene	U		0.307	1.00	1	04/04/2020 20:22	WG1455716
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	04/04/2020 20:22	WG1455716
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/04/2020 20:22	WG1455716
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	04/04/2020 20:22	WG1455716
Tetrachloroethene	16.9		0.372	1.00	1	04/04/2020 20:22	WG1455716
Toluene	U		0.412	1.00	1	04/04/2020 20:22	WG1455716
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2020 20:22	WG1455716
1,2,4-Trichlorobenzene	U		0.355	1.00	1	04/04/2020 20:22	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/04/2020 20:22	WG1455716
1,1,2-Trichloroethane	U		0.383	1.00	1	04/04/2020 20:22	WG1455716
Trichloroethene	U		0.398	1.00	1	04/04/2020 20:22	WG1455716
Trichlorofluoromethane	U		1.20	5.00	1	04/04/2020 20:22	WG1455716
1,2,3-Trichloropropane	U	J4	0.807	2.50	1	04/04/2020 20:22	WG1455716
1,2,4-Trimethylbenzene	U		0.373	1.00	1	04/04/2020 20:22	WG1455716
1,2,3-Trimethylbenzene	U		0.321	1.00	1	04/04/2020 20:22	WG1455716
1,3,5-Trimethylbenzene	U	J4	0.387	1.00	1	04/04/2020 20:22	WG1455716
Vinyl chloride	U		0.259	1.00	1	04/04/2020 20:22	WG1455716
Xylenes, Total	U		1.06	3.00	1	04/04/2020 20:22	WG1455716
(S) Toluene-d8	*112*			*80.0-120*		*04/04/2020 20:22*	WG1455716
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*04/04/2020 20:22*	WG1455716
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/04/2020 20:22*	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	04/04/2020 20:42	WG1455716
Acrolein	U	J4	8.87	50.0	1	04/04/2020 20:42	WG1455716
Acrylonitrile	U		1.87	10.0	1	04/04/2020 20:42	WG1455716
Benzene	U		0.331	1.00	1	04/04/2020 20:42	WG1455716
Bromobenzene	U	J4	0.352	1.00	1	04/04/2020 20:42	WG1455716
Bromodichloromethane	U		0.380	1.00	1	04/04/2020 20:42	WG1455716
Bromoform	U		0.469	1.00	1	04/04/2020 20:42	WG1455716
Bromomethane	U		0.866	5.00	1	04/04/2020 20:42	WG1455716
n-Butylbenzene	U		0.361	1.00	1	04/04/2020 20:42	WG1455716
sec-Butylbenzene	U		0.365	1.00	1	04/04/2020 20:42	WG1455716
tert-Butylbenzene	U		0.399	1.00	1	04/04/2020 20:42	WG1455716
Carbon tetrachloride	U		0.379	1.00	1	04/04/2020 20:42	WG1455716
Chlorobenzene	U		0.348	1.00	1	04/04/2020 20:42	WG1455716
Chlorodibromomethane	U		0.327	1.00	1	04/04/2020 20:42	WG1455716
Chloroethane	U		0.453	5.00	1	04/04/2020 20:42	WG1455716
Chloroform	U		0.324	5.00	1	04/04/2020 20:42	WG1455716
Chloromethane	U		0.276	2.50	1	04/04/2020 20:42	WG1455716
2-Chlorotoluene	U		0.375	1.00	1	04/04/2020 20:42	WG1455716
4-Chlorotoluene	U		0.351	1.00	1	04/04/2020 20:42	WG1455716
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	04/04/2020 20:42	WG1455716
1,2-Dibromoethane	U		0.381	1.00	1	04/04/2020 20:42	WG1455716
Dibromomethane	U		0.346	1.00	1	04/04/2020 20:42	WG1455716
1,2-Dichlorobenzene	U		0.349	1.00	1	04/04/2020 20:42	WG1455716
1,3-Dichlorobenzene	U		0.220	1.00	1	04/04/2020 20:42	WG1455716
1,4-Dichlorobenzene	U		0.274	1.00	1	04/04/2020 20:42	WG1455716
Dichlorodifluoromethane	U		0.551	5.00	1	04/04/2020 20:42	WG1455716
1,1-Dichloroethane	U		0.259	1.00	1	04/04/2020 20:42	WG1455716
1,2-Dichloroethane	U		0.361	1.00	1	04/04/2020 20:42	WG1455716
1,1-Dichloroethene	U		0.398	1.00	1	04/04/2020 20:42	WG1455716
cis-1,2-Dichloroethene	U		0.260	1.00	1	04/04/2020 20:42	WG1455716
trans-1,2-Dichloroethene	U		0.396	1.00	1	04/04/2020 20:42	WG1455716
1,2-Dichloropropane	U		0.306	1.00	1	04/04/2020 20:42	WG1455716
1,1-Dichloropropene	U		0.352	1.00	1	04/04/2020 20:42	WG1455716
1,3-Dichloropropane	U		0.366	1.00	1	04/04/2020 20:42	WG1455716
cis-1,3-Dichloropropene	U		0.418	1.00	1	04/04/2020 20:42	WG1455716
trans-1,3-Dichloropropene	U		0.419	1.00	1	04/04/2020 20:42	WG1455716
2,2-Dichloropropane	U		0.321	1.00	1	04/04/2020 20:42	WG1455716
Di-isopropyl ether	U		0.320	1.00	1	04/04/2020 20:42	WG1455716
Ethylbenzene	U		0.384	1.00	1	04/04/2020 20:42	WG1455716
Hexachloro-1,3-butadiene	U		0.256	1.00	1	04/04/2020 20:42	WG1455716
Isopropylbenzene	U		0.326	1.00	1	04/04/2020 20:42	WG1455716
p-Isopropyltoluene	U		0.350	1.00	1	04/04/2020 20:42	WG1455716
2-Butanone (MEK)	U		3.93	10.0	1	04/04/2020 20:42	WG1455716
Methylene Chloride	U		1.00	5.00	1	04/04/2020 20:42	WG1455716
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	04/04/2020 20:42	WG1455716
Methyl tert-butyl ether	U		0.367	1.00	1	04/04/2020 20:42	WG1455716
Naphthalene	U		1.00	5.00	1	04/04/2020 20:42	WG1455716
n-Propylbenzene	U		0.349	1.00	1	04/04/2020 20:42	WG1455716
Styrene	U		0.307	1.00	1	04/04/2020 20:42	WG1455716
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	04/04/2020 20:42	WG1455716
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	04/04/2020 20:42	WG1455716
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	04/04/2020 20:42	WG1455716
Tetrachloroethene	192		0.372	1.00	1	04/04/2020 20:42	WG1455716
Toluene	U		0.412	1.00	1	04/04/2020 20:42	WG1455716
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2020 20:42	WG1455716
1,2,4-Trichlorobenzene	U		0.355	1.00	1	04/04/2020 20:42	WG1455716

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,1-Trichloroethane	U		0.319	1.00	1	04/04/2020 20:42	WG1455716
1,1,2-Trichloroethane	U		0.383	1.00	1	04/04/2020 20:42	WG1455716
Trichloroethene	0.403	J	0.398	1.00	1	04/04/2020 20:42	WG1455716
Trichlorofluoromethane	U		1.20	5.00	1	04/04/2020 20:42	WG1455716
1,2,3-Trichloropropane	U	J4	0.807	2.50	1	04/04/2020 20:42	WG1455716
1,2,4-Trimethylbenzene	U		0.373	1.00	1	04/04/2020 20:42	WG1455716
1,2,3-Trimethylbenzene	U		0.321	1.00	1	04/04/2020 20:42	WG1455716
1,3,5-Trimethylbenzene	U	J4	0.387	1.00	1	04/04/2020 20:42	WG1455716
Vinyl chloride	U		0.259	1.00	1	04/04/2020 20:42	WG1455716
Xylenes, Total	U		1.06	3.00	1	04/04/2020 20:42	WG1455716
(S) Toluene-d8	*119*			*80.0-120*		*04/04/2020 20:42*	WG1455716
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/04/2020 20:42*	WG1455716
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*04/04/2020 20:42*	WG1455716

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.9		1	04/08/2020 22:08	WG1456965

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0156	0.0285	1	04/05/2020 04:56	WG1455717
Acrylonitrile	U		0.00216	0.0142	1	04/05/2020 04:56	WG1455717
Benzene	U		0.000455	0.00114	1	04/05/2020 04:56	WG1455717
Bromobenzene	U		0.00120	0.0142	1	04/05/2020 04:56	WG1455717
Bromodichloromethane	U		0.000897	0.00285	1	04/05/2020 04:56	WG1455717
Bromoform	U		0.00681	0.0285	1	04/05/2020 04:56	WG1455717
Bromomethane	U		0.00421	0.0142	1	04/05/2020 04:56	WG1455717
n-Butylbenzene	U		0.00437	0.0142	1	04/05/2020 04:56	WG1455717
sec-Butylbenzene	U		0.00288	0.0142	1	04/05/2020 04:56	WG1455717
tert-Butylbenzene	U		0.00176	0.00569	1	04/05/2020 04:56	WG1455717
Carbon tetrachloride	U		0.00123	0.00569	1	04/05/2020 04:56	WG1455717
Chlorobenzene	U		0.000652	0.00285	1	04/05/2020 04:56	WG1455717
Chlorodibromomethane	U		0.000512	0.00285	1	04/05/2020 04:56	WG1455717
Chloroethane	U		0.00123	0.00569	1	04/05/2020 04:56	WG1455717
Chloroform	U		0.000472	0.00285	1	04/05/2020 04:56	WG1455717
Chloromethane	U		0.00158	0.0142	1	04/05/2020 04:56	WG1455717
2-Chlorotoluene	U		0.00105	0.00285	1	04/05/2020 04:56	WG1455717
4-Chlorotoluene	U		0.00129	0.00569	1	04/05/2020 04:56	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00581	0.0285	1	04/05/2020 04:56	WG1455717
1,2-Dibromoethane	U		0.000598	0.00285	1	04/05/2020 04:56	WG1455717
Dibromomethane	U		0.00114	0.00569	1	04/05/2020 04:56	WG1455717
1,2-Dichlorobenzene	U		0.00165	0.00569	1	04/05/2020 04:56	WG1455717
1,3-Dichlorobenzene	U		0.00194	0.00569	1	04/05/2020 04:56	WG1455717
1,4-Dichlorobenzene	U		0.00224	0.00569	1	04/05/2020 04:56	WG1455717
Dichlorodifluoromethane	U	J4	0.000931	0.00285	1	04/05/2020 04:56	WG1455717
1,1-Dichloroethane	U		0.000655	0.00285	1	04/05/2020 04:56	WG1455717
1,2-Dichloroethane	U		0.000541	0.00285	1	04/05/2020 04:56	WG1455717
1,1-Dichloroethene	U		0.000569	0.00285	1	04/05/2020 04:56	WG1455717
cis-1,2-Dichloroethene	U		0.000785	0.00285	1	04/05/2020 04:56	WG1455717
trans-1,2-Dichloroethene	U		0.00163	0.00569	1	04/05/2020 04:56	WG1455717
1,2-Dichloropropane	U	J4	0.00145	0.00569	1	04/05/2020 04:56	WG1455717
1,1-Dichloropropene	U		0.000797	0.00285	1	04/05/2020 04:56	WG1455717
1,3-Dichloropropane	U		0.00199	0.00569	1	04/05/2020 04:56	WG1455717
cis-1,3-Dichloropropene	U		0.000772	0.00285	1	04/05/2020 04:56	WG1455717
trans-1,3-Dichloropropene	U		0.00174	0.00569	1	04/05/2020 04:56	WG1455717
2,2-Dichloropropane	U		0.000903	0.00285	1	04/05/2020 04:56	WG1455717
Di-isopropyl ether	U		0.000398	0.00114	1	04/05/2020 04:56	WG1455717
Ethylbenzene	U		0.000603	0.00285	1	04/05/2020 04:56	WG1455717
Hexachloro-1,3-butadiene	U		0.0145	0.0285	1	04/05/2020 04:56	WG1455717
Isopropylbenzene	U		0.000982	0.00285	1	04/05/2020 04:56	WG1455717
p-Isopropyltoluene	U		0.00265	0.00569	1	04/05/2020 04:56	WG1455717
2-Butanone (MEK)	0.0223	B J	0.0142	0.0285	1	04/05/2020 04:56	WG1455717
Methylene Chloride	U		0.00756	0.0285	1	04/05/2020 04:56	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0114	0.0285	1	04/05/2020 04:56	WG1455717
Methyl tert-butyl ether	U		0.000336	0.00114	1	04/05/2020 04:56	WG1455717
Naphthalene	U		0.00355	0.0142	1	04/05/2020 04:56	WG1455717
n-Propylbenzene	U		0.00134	0.00569	1	04/05/2020 04:56	WG1455717
Styrene	U		0.00311	0.0142	1	04/05/2020 04:56	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000569	0.00285	1	04/05/2020 04:56	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000444	0.00285	1	04/05/2020 04:56	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000768	0.00285	1	04/05/2020 04:56	WG1455717
Tetrachloroethene	0.00162	J	0.000797	0.00285	1	04/05/2020 04:56	WG1455717
Toluene	U		0.00142	0.00569	1	04/05/2020 04:56	WG1455717
1,2,3-Trichlorobenzene	U		0.000711	0.0142	1	04/05/2020 04:56	WG1455717
1,2,4-Trichlorobenzene	U		0.00549	0.0142	1	04/05/2020 04:56	WG1455717
1,1,1-Trichloroethane	U		0.000313	0.00285	1	04/05/2020 04:56	WG1455717
1,1,2-Trichloroethane	U		0.00101	0.00285	1	04/05/2020 04:56	WG1455717
Trichloroethene	U		0.000455	0.00114	1	04/05/2020 04:56	WG1455717
Trichlorofluoromethane	U		0.000569	0.00285	1	04/05/2020 04:56	WG1455717
1,2,3-Trichloropropane	U		0.00581	0.0142	1	04/05/2020 04:56	WG1455717
1,2,4-Trimethylbenzene	U		0.00132	0.00569	1	04/05/2020 04:56	WG1455717
1,2,3-Trimethylbenzene	U		0.00131	0.00569	1	04/05/2020 04:56	WG1455717
1,3,5-Trimethylbenzene	U		0.00123	0.00569	1	04/05/2020 04:56	WG1455717
Vinyl chloride	U		0.000777	0.00285	1	04/05/2020 04:56	WG1455717
Xylenes, Total	U		0.00544	0.00740	1	04/05/2020 04:56	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 04:56*	WG1455717
(S) 4-Bromofluorobenzene	*98.6*			*67.0-138*		*04/05/2020 04:56*	WG1455717
(S) 1,2-Dichloroethane-d4	*93.8*			*70.0-130*		*04/05/2020 04:56*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.1		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0163	0.0297	1	04/05/2020 05:15	WG1455717
Acrylonitrile	U		0.00226	0.0149	1	04/05/2020 05:15	WG1455717
Benzene	U		0.000475	0.00119	1	04/05/2020 05:15	WG1455717
Bromobenzene	U		0.00125	0.0149	1	04/05/2020 05:15	WG1455717
Bromodichloromethane	U		0.000937	0.00297	1	04/05/2020 05:15	WG1455717
Bromoform	U		0.00711	0.0297	1	04/05/2020 05:15	WG1455717
Bromomethane	U		0.00440	0.0149	1	04/05/2020 05:15	WG1455717
n-Butylbenzene	U		0.00456	0.0149	1	04/05/2020 05:15	WG1455717
sec-Butylbenzene	U		0.00301	0.0149	1	04/05/2020 05:15	WG1455717
tert-Butylbenzene	U		0.00184	0.00594	1	04/05/2020 05:15	WG1455717
Carbon tetrachloride	U		0.00128	0.00594	1	04/05/2020 05:15	WG1455717
Chlorobenzene	U		0.000681	0.00297	1	04/05/2020 05:15	WG1455717
Chlorodibromomethane	U		0.000535	0.00297	1	04/05/2020 05:15	WG1455717
Chloroethane	U		0.00128	0.00594	1	04/05/2020 05:15	WG1455717
Chloroform	U		0.000493	0.00297	1	04/05/2020 05:15	WG1455717
Chloromethane	U		0.00165	0.0149	1	04/05/2020 05:15	WG1455717
2-Chlorotoluene	U		0.00109	0.00297	1	04/05/2020 05:15	WG1455717
4-Chlorotoluene	U		0.00134	0.00594	1	04/05/2020 05:15	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00606	0.0297	1	04/05/2020 05:15	WG1455717
1,2-Dibromoethane	U		0.000624	0.00297	1	04/05/2020 05:15	WG1455717
Dibromomethane	U		0.00119	0.00594	1	04/05/2020 05:15	WG1455717
1,2-Dichlorobenzene	U		0.00172	0.00594	1	04/05/2020 05:15	WG1455717
1,3-Dichlorobenzene	U		0.00202	0.00594	1	04/05/2020 05:15	WG1455717
1,4-Dichlorobenzene	U		0.00234	0.00594	1	04/05/2020 05:15	WG1455717
Dichlorodifluoromethane	U	J4	0.000972	0.00297	1	04/05/2020 05:15	WG1455717
1,1-Dichloroethane	U		0.000683	0.00297	1	04/05/2020 05:15	WG1455717
1,2-Dichloroethane	U		0.000565	0.00297	1	04/05/2020 05:15	WG1455717
1,1-Dichloroethene	U		0.000594	0.00297	1	04/05/2020 05:15	WG1455717
cis-1,2-Dichloroethene	U		0.000820	0.00297	1	04/05/2020 05:15	WG1455717
trans-1,2-Dichloroethene	U		0.00170	0.00594	1	04/05/2020 05:15	WG1455717
1,2-Dichloropropane	U	J4	0.00151	0.00594	1	04/05/2020 05:15	WG1455717
1,1-Dichloropropene	U		0.000832	0.00297	1	04/05/2020 05:15	WG1455717
1,3-Dichloropropane	U		0.00208	0.00594	1	04/05/2020 05:15	WG1455717
cis-1,3-Dichloropropene	U		0.000806	0.00297	1	04/05/2020 05:15	WG1455717
trans-1,3-Dichloropropene	U		0.00182	0.00594	1	04/05/2020 05:15	WG1455717
2,2-Dichloropropane	U		0.000942	0.00297	1	04/05/2020 05:15	WG1455717
Di-isopropyl ether	U		0.000416	0.00119	1	04/05/2020 05:15	WG1455717
Ethylbenzene	U		0.000630	0.00297	1	04/05/2020 05:15	WG1455717
Hexachloro-1,3-butadiene	U		0.0151	0.0297	1	04/05/2020 05:15	WG1455717
Isopropylbenzene	U		0.00103	0.00297	1	04/05/2020 05:15	WG1455717
p-Isopropyltoluene	U		0.00277	0.00594	1	04/05/2020 05:15	WG1455717
2-Butanone (MEK)	0.0308	B	0.0149	0.0297	1	04/05/2020 05:15	WG1455717
Methylene Chloride	U		0.00789	0.0297	1	04/05/2020 05:15	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0119	0.0297	1	04/05/2020 05:15	WG1455717
Methyl tert-butyl ether	U		0.000351	0.00119	1	04/05/2020 05:15	WG1455717
Naphthalene	U		0.00371	0.0149	1	04/05/2020 05:15	WG1455717
n-Propylbenzene	U		0.00140	0.00594	1	04/05/2020 05:15	WG1455717
Styrene	U		0.00324	0.0149	1	04/05/2020 05:15	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000594	0.00297	1	04/05/2020 05:15	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000464	0.00297	1	04/05/2020 05:15	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000802	0.00297	1	04/05/2020 05:15	WG1455717
Tetrachloroethene	0.00132	J	0.000832	0.00297	1	04/05/2020 05:15	WG1455717
Toluene	U		0.00149	0.00594	1	04/05/2020 05:15	WG1455717
1,2,3-Trichlorobenzene	U		0.000743	0.0149	1	04/05/2020 05:15	WG1455717
1,2,4-Trichlorobenzene	U		0.00573	0.0149	1	04/05/2020 05:15	WG1455717
1,1,1-Trichloroethane	U		0.000327	0.00297	1	04/05/2020 05:15	WG1455717
1,1,2-Trichloroethane	U		0.00105	0.00297	1	04/05/2020 05:15	WG1455717
Trichloroethene	U		0.000475	0.00119	1	04/05/2020 05:15	WG1455717
Trichlorofluoromethane	U		0.000594	0.00297	1	04/05/2020 05:15	WG1455717
1,2,3-Trichloropropane	U		0.00606	0.0149	1	04/05/2020 05:15	WG1455717
1,2,4-Trimethylbenzene	U		0.00138	0.00594	1	04/05/2020 05:15	WG1455717
1,2,3-Trimethylbenzene	U		0.00137	0.00594	1	04/05/2020 05:15	WG1455717
1,3,5-Trimethylbenzene	U		0.00128	0.00594	1	04/05/2020 05:15	WG1455717
Vinyl chloride	U		0.000812	0.00297	1	04/05/2020 05:15	WG1455717
Xylenes, Total	U		0.00568	0.00773	1	04/05/2020 05:15	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 05:15*	WG1455717
(S) 4-Bromofluorobenzene	*98.5*			*67.0-138*		*04/05/2020 05:15*	WG1455717
(S) 1,2-Dichloroethane-d4	*94.0*			*70.0-130*		*04/05/2020 05:15*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.1		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0147	0.0268	1	04/05/2020 05:34	WG1455717
Acrylonitrile	U		0.00204	0.0134	1	04/05/2020 05:34	WG1455717
Benzene	U		0.000430	0.00107	1	04/05/2020 05:34	WG1455717
Bromobenzene	U		0.00113	0.0134	1	04/05/2020 05:34	WG1455717
Bromodichloromethane	U		0.000846	0.00268	1	04/05/2020 05:34	WG1455717
Bromoform	U		0.00642	0.0268	1	04/05/2020 05:34	WG1455717
Bromomethane	U		0.00397	0.0134	1	04/05/2020 05:34	WG1455717
n-Butylbenzene	U		0.00412	0.0134	1	04/05/2020 05:34	WG1455717
sec-Butylbenzene	U		0.00272	0.0134	1	04/05/2020 05:34	WG1455717
tert-Butylbenzene	U		0.00166	0.00537	1	04/05/2020 05:34	WG1455717
Carbon tetrachloride	U		0.00116	0.00537	1	04/05/2020 05:34	WG1455717
Chlorobenzene	U		0.000615	0.00268	1	04/05/2020 05:34	WG1455717
Chlorodibromomethane	U		0.000483	0.00268	1	04/05/2020 05:34	WG1455717
Chloroethane	U		0.00116	0.00537	1	04/05/2020 05:34	WG1455717
Chloroform	U		0.000446	0.00268	1	04/05/2020 05:34	WG1455717
Chloromethane	U		0.00149	0.0134	1	04/05/2020 05:34	WG1455717
2-Chlorotoluene	U		0.000988	0.00268	1	04/05/2020 05:34	WG1455717
4-Chlorotoluene	U		0.00121	0.00537	1	04/05/2020 05:34	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00548	0.0268	1	04/05/2020 05:34	WG1455717
1,2-Dibromoethane	U		0.000564	0.00268	1	04/05/2020 05:34	WG1455717
Dibromomethane	U		0.00107	0.00537	1	04/05/2020 05:34	WG1455717
1,2-Dichlorobenzene	U		0.00156	0.00537	1	04/05/2020 05:34	WG1455717
1,3-Dichlorobenzene	U		0.00183	0.00537	1	04/05/2020 05:34	WG1455717
1,4-Dichlorobenzene	U		0.00212	0.00537	1	04/05/2020 05:34	WG1455717
Dichlorodifluoromethane	U	J4	0.000878	0.00268	1	04/05/2020 05:34	WG1455717
1,1-Dichloroethane	U		0.000617	0.00268	1	04/05/2020 05:34	WG1455717
1,2-Dichloroethane	U		0.000510	0.00268	1	04/05/2020 05:34	WG1455717
1,1-Dichloroethene	U		0.000537	0.00268	1	04/05/2020 05:34	WG1455717
cis-1,2-Dichloroethene	U		0.000741	0.00268	1	04/05/2020 05:34	WG1455717
trans-1,2-Dichloroethene	U		0.00154	0.00537	1	04/05/2020 05:34	WG1455717
1,2-Dichloropropane	U	J4	0.00136	0.00537	1	04/05/2020 05:34	WG1455717
1,1-Dichloropropene	U		0.000752	0.00268	1	04/05/2020 05:34	WG1455717
1,3-Dichloropropane	U		0.00188	0.00537	1	04/05/2020 05:34	WG1455717
cis-1,3-Dichloropropene	U		0.000728	0.00268	1	04/05/2020 05:34	WG1455717
trans-1,3-Dichloropropene	U		0.00164	0.00537	1	04/05/2020 05:34	WG1455717
2,2-Dichloropropane	U		0.000852	0.00268	1	04/05/2020 05:34	WG1455717
Di-isopropyl ether	U		0.000376	0.00107	1	04/05/2020 05:34	WG1455717
Ethylbenzene	U		0.000569	0.00268	1	04/05/2020 05:34	WG1455717
Hexachloro-1,3-butadiene	U		0.0136	0.0268	1	04/05/2020 05:34	WG1455717
Isopropylbenzene	U		0.000927	0.00268	1	04/05/2020 05:34	WG1455717
p-Isopropyltoluene	U		0.00250	0.00537	1	04/05/2020 05:34	WG1455717
2-Butanone (MEK)	0.0160	B J	0.0134	0.0268	1	04/05/2020 05:34	WG1455717
Methylene Chloride	U		0.00713	0.0268	1	04/05/2020 05:34	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0268	1	04/05/2020 05:34	WG1455717
Methyl tert-butyl ether	U		0.000317	0.00107	1	04/05/2020 05:34	WG1455717
Naphthalene	U		0.00335	0.0134	1	04/05/2020 05:34	WG1455717
n-Propylbenzene	U		0.00127	0.00537	1	04/05/2020 05:34	WG1455717
Styrene	U		0.00293	0.0134	1	04/05/2020 05:34	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000537	0.00268	1	04/05/2020 05:34	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000419	0.00268	1	04/05/2020 05:34	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000725	0.00268	1	04/05/2020 05:34	WG1455717
Tetrachloroethene	0.0871		0.000752	0.00268	1	04/05/2020 05:34	WG1455717
Toluene	U		0.00134	0.00537	1	04/05/2020 05:34	WG1455717
1,2,3-Trichlorobenzene	U		0.000671	0.0134	1	04/05/2020 05:34	WG1455717
1,2,4-Trichlorobenzene	U		0.00518	0.0134	1	04/05/2020 05:34	WG1455717
1,1,1-Trichloroethane	U		0.000295	0.00268	1	04/05/2020 05:34	WG1455717
1,1,2-Trichloroethane	U		0.000948	0.00268	1	04/05/2020 05:34	WG1455717
Trichloroethene	U		0.000430	0.00107	1	04/05/2020 05:34	WG1455717
Trichlorofluoromethane	U		0.000537	0.00268	1	04/05/2020 05:34	WG1455717
1,2,3-Trichloropropane	U		0.00548	0.0134	1	04/05/2020 05:34	WG1455717
1,2,4-Trimethylbenzene	U		0.00125	0.00537	1	04/05/2020 05:34	WG1455717
1,2,3-Trimethylbenzene	U		0.00123	0.00537	1	04/05/2020 05:34	WG1455717
1,3,5-Trimethylbenzene	U		0.00116	0.00537	1	04/05/2020 05:34	WG1455717
Vinyl chloride	U		0.000733	0.00268	1	04/05/2020 05:34	WG1455717
Xylenes, Total	U		0.00513	0.00698	1	04/05/2020 05:34	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 05:34*	WG1455717
(S) 4-Bromofluorobenzene	*97.8*			*67.0-138*		*04/05/2020 05:34*	WG1455717
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*04/05/2020 05:34*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.5		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0172	0.0315	1	04/05/2020 05:53	WG1455717
Acrylonitrile	U		0.00239	0.0157	1	04/05/2020 05:53	WG1455717
Benzene	U		0.000503	0.00126	1	04/05/2020 05:53	WG1455717
Bromobenzene	U		0.00132	0.0157	1	04/05/2020 05:53	WG1455717
Bromodichloromethane	U		0.000991	0.00315	1	04/05/2020 05:53	WG1455717
Bromoform	U		0.00752	0.0315	1	04/05/2020 05:53	WG1455717
Bromomethane	U		0.00466	0.0157	1	04/05/2020 05:53	WG1455717
n-Butylbenzene	U		0.00483	0.0157	1	04/05/2020 05:53	WG1455717
sec-Butylbenzene	U		0.00318	0.0157	1	04/05/2020 05:53	WG1455717
tert-Butylbenzene	U		0.00195	0.00629	1	04/05/2020 05:53	WG1455717
Carbon tetrachloride	U		0.00136	0.00629	1	04/05/2020 05:53	WG1455717
Chlorobenzene	U		0.000721	0.00315	1	04/05/2020 05:53	WG1455717
Chlorodibromomethane	U		0.000566	0.00315	1	04/05/2020 05:53	WG1455717
Chloroethane	U		0.00136	0.00629	1	04/05/2020 05:53	WG1455717
Chloroform	U		0.000522	0.00315	1	04/05/2020 05:53	WG1455717
Chloromethane	U		0.00175	0.0157	1	04/05/2020 05:53	WG1455717
2-Chlorotoluene	U		0.00116	0.00315	1	04/05/2020 05:53	WG1455717
4-Chlorotoluene	U		0.00142	0.00629	1	04/05/2020 05:53	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00642	0.0315	1	04/05/2020 05:53	WG1455717
1,2-Dibromoethane	U		0.000661	0.00315	1	04/05/2020 05:53	WG1455717
Dibromomethane	U		0.00126	0.00629	1	04/05/2020 05:53	WG1455717
1,2-Dichlorobenzene	U		0.00182	0.00629	1	04/05/2020 05:53	WG1455717
1,3-Dichlorobenzene	U		0.00214	0.00629	1	04/05/2020 05:53	WG1455717
1,4-Dichlorobenzene	U		0.00248	0.00629	1	04/05/2020 05:53	WG1455717
Dichlorodifluoromethane	U	J4	0.00103	0.00315	1	04/05/2020 05:53	WG1455717
1,1-Dichloroethane	U		0.000723	0.00315	1	04/05/2020 05:53	WG1455717
1,2-Dichloroethane	U		0.000598	0.00315	1	04/05/2020 05:53	WG1455717
1,1-Dichloroethene	U		0.000629	0.00315	1	04/05/2020 05:53	WG1455717
cis-1,2-Dichloroethene	U		0.000868	0.00315	1	04/05/2020 05:53	WG1455717
trans-1,2-Dichloroethene	U		0.00180	0.00629	1	04/05/2020 05:53	WG1455717
1,2-Dichloropropane	U	J4	0.00160	0.00629	1	04/05/2020 05:53	WG1455717
1,1-Dichloropropene	U		0.000881	0.00315	1	04/05/2020 05:53	WG1455717
1,3-Dichloropropane	U		0.00220	0.00629	1	04/05/2020 05:53	WG1455717
cis-1,3-Dichloropropene	U		0.000853	0.00315	1	04/05/2020 05:53	WG1455717
trans-1,3-Dichloropropene	U		0.00193	0.00629	1	04/05/2020 05:53	WG1455717
2,2-Dichloropropane	U		0.000998	0.00315	1	04/05/2020 05:53	WG1455717
Di-isopropyl ether	U		0.000440	0.00126	1	04/05/2020 05:53	WG1455717
Ethylbenzene	U		0.000667	0.00315	1	04/05/2020 05:53	WG1455717
Hexachloro-1,3-butadiene	U		0.0160	0.0315	1	04/05/2020 05:53	WG1455717
Isopropylbenzene	U		0.00109	0.00315	1	04/05/2020 05:53	WG1455717
p-Isopropyltoluene	U		0.00293	0.00629	1	04/05/2020 05:53	WG1455717
2-Butanone (MEK)	0.0488	B	0.0157	0.0315	1	04/05/2020 05:53	WG1455717
Methylene Chloride	U		0.00835	0.0315	1	04/05/2020 05:53	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0126	0.0315	1	04/05/2020 05:53	WG1455717
Methyl tert-butyl ether	U		0.000371	0.00126	1	04/05/2020 05:53	WG1455717
Naphthalene	U		0.00393	0.0157	1	04/05/2020 05:53	WG1455717
n-Propylbenzene	U		0.00148	0.00629	1	04/05/2020 05:53	WG1455717
Styrene	U		0.00343	0.0157	1	04/05/2020 05:53	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000629	0.00315	1	04/05/2020 05:53	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000491	0.00315	1	04/05/2020 05:53	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000849	0.00315	1	04/05/2020 05:53	WG1455717
Tetrachloroethene	0.0200		0.000881	0.00315	1	04/05/2020 05:53	WG1455717
Toluene	U		0.00157	0.00629	1	04/05/2020 05:53	WG1455717
1,2,3-Trichlorobenzene	U		0.000786	0.0157	1	04/05/2020 05:53	WG1455717
1,2,4-Trichlorobenzene	U		0.00606	0.0157	1	04/05/2020 05:53	WG1455717
1,1,1-Trichloroethane	U		0.000346	0.00315	1	04/05/2020 05:53	WG1455717
1,1,2-Trichloroethane	U		0.00111	0.00315	1	04/05/2020 05:53	WG1455717
Trichloroethene	0.00423		0.000503	0.00126	1	04/05/2020 05:53	WG1455717
Trichlorofluoromethane	U		0.000629	0.00315	1	04/05/2020 05:53	WG1455717
1,2,3-Trichloropropane	U		0.00642	0.0157	1	04/05/2020 05:53	WG1455717
1,2,4-Trimethylbenzene	U		0.00146	0.00629	1	04/05/2020 05:53	WG1455717
1,2,3-Trimethylbenzene	U		0.00145	0.00629	1	04/05/2020 05:53	WG1455717
1,3,5-Trimethylbenzene	U		0.00136	0.00629	1	04/05/2020 05:53	WG1455717
Vinyl chloride	U		0.000859	0.00315	1	04/05/2020 05:53	WG1455717
Xylenes, Total	U		0.00601	0.00818	1	04/05/2020 05:53	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 05:53*	WG1455717
(S) 4-Bromofluorobenzene	*98.4*			*67.0-138*		*04/05/2020 05:53*	WG1455717
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*04/05/2020 05:53*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.5		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0160	0.0292	1	04/05/2020 06:12	WG1455717
Acrylonitrile	U		0.00222	0.0146	1	04/05/2020 06:12	WG1455717
Benzene	U		0.000468	0.00117	1	04/05/2020 06:12	WG1455717
Bromobenzene	U		0.00123	0.0146	1	04/05/2020 06:12	WG1455717
Bromodichloromethane	U		0.000922	0.00292	1	04/05/2020 06:12	WG1455717
Bromoform	U		0.00700	0.0292	1	04/05/2020 06:12	WG1455717
Bromomethane	U		0.00433	0.0146	1	04/05/2020 06:12	WG1455717
n-Butylbenzene	U		0.00449	0.0146	1	04/05/2020 06:12	WG1455717
sec-Butylbenzene	U		0.00296	0.0146	1	04/05/2020 06:12	WG1455717
tert-Butylbenzene	U		0.00181	0.00585	1	04/05/2020 06:12	WG1455717
Carbon tetrachloride	U		0.00126	0.00585	1	04/05/2020 06:12	WG1455717
Chlorobenzene	U		0.000670	0.00292	1	04/05/2020 06:12	WG1455717
Chlorodibromomethane	U		0.000526	0.00292	1	04/05/2020 06:12	WG1455717
Chloroethane	U		0.00126	0.00585	1	04/05/2020 06:12	WG1455717
Chloroform	U		0.000485	0.00292	1	04/05/2020 06:12	WG1455717
Chloromethane	U		0.00163	0.0146	1	04/05/2020 06:12	WG1455717
2-Chlorotoluene	U		0.00108	0.00292	1	04/05/2020 06:12	WG1455717
4-Chlorotoluene	U		0.00132	0.00585	1	04/05/2020 06:12	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00597	0.0292	1	04/05/2020 06:12	WG1455717
1,2-Dibromoethane	U		0.000614	0.00292	1	04/05/2020 06:12	WG1455717
Dibromomethane	U		0.00117	0.00585	1	04/05/2020 06:12	WG1455717
1,2-Dichlorobenzene	U		0.00170	0.00585	1	04/05/2020 06:12	WG1455717
1,3-Dichlorobenzene	U		0.00199	0.00585	1	04/05/2020 06:12	WG1455717
1,4-Dichlorobenzene	U		0.00230	0.00585	1	04/05/2020 06:12	WG1455717
Dichlorodifluoromethane	U	J4	0.000957	0.00292	1	04/05/2020 06:12	WG1455717
1,1-Dichloroethane	U		0.000673	0.00292	1	04/05/2020 06:12	WG1455717
1,2-Dichloroethane	U		0.000556	0.00292	1	04/05/2020 06:12	WG1455717
1,1-Dichloroethene	U		0.000585	0.00292	1	04/05/2020 06:12	WG1455717
cis-1,2-Dichloroethene	U		0.000807	0.00292	1	04/05/2020 06:12	WG1455717
trans-1,2-Dichloroethene	U		0.00167	0.00585	1	04/05/2020 06:12	WG1455717
1,2-Dichloropropane	U	J4	0.00149	0.00585	1	04/05/2020 06:12	WG1455717
1,1-Dichloropropene	U		0.000819	0.00292	1	04/05/2020 06:12	WG1455717
1,3-Dichloropropane	U		0.00205	0.00585	1	04/05/2020 06:12	WG1455717
cis-1,3-Dichloropropene	U		0.000793	0.00292	1	04/05/2020 06:12	WG1455717
trans-1,3-Dichloropropene	U		0.00179	0.00585	1	04/05/2020 06:12	WG1455717
2,2-Dichloropropane	U		0.000928	0.00292	1	04/05/2020 06:12	WG1455717
Di-isopropyl ether	U		0.000409	0.00117	1	04/05/2020 06:12	WG1455717
Ethylbenzene	U		0.000620	0.00292	1	04/05/2020 06:12	WG1455717
Hexachloro-1,3-butadiene	U		0.0149	0.0292	1	04/05/2020 06:12	WG1455717
Isopropylbenzene	U		0.00101	0.00292	1	04/05/2020 06:12	WG1455717
p-Isopropyltoluene	U		0.00273	0.00585	1	04/05/2020 06:12	WG1455717
2-Butanone (MEK)	0.0475	B	0.0146	0.0292	1	04/05/2020 06:12	WG1455717
Methylene Chloride	U		0.00777	0.0292	1	04/05/2020 06:12	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0292	1	04/05/2020 06:12	WG1455717
Methyl tert-butyl ether	U		0.000345	0.00117	1	04/05/2020 06:12	WG1455717
Naphthalene	U		0.00365	0.0146	1	04/05/2020 06:12	WG1455717
n-Propylbenzene	U		0.00138	0.00585	1	04/05/2020 06:12	WG1455717
Styrene	U		0.00319	0.0146	1	04/05/2020 06:12	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000585	0.00292	1	04/05/2020 06:12	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000456	0.00292	1	04/05/2020 06:12	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000790	0.00292	1	04/05/2020 06:12	WG1455717
Tetrachloroethene	0.484		0.000819	0.00292	1	04/05/2020 06:12	WG1455717
Toluene	U		0.00146	0.00585	1	04/05/2020 06:12	WG1455717
1,2,3-Trichlorobenzene	U		0.000731	0.0146	1	04/05/2020 06:12	WG1455717
1,2,4-Trichlorobenzene	U		0.00564	0.0146	1	04/05/2020 06:12	WG1455717
1,1,1-Trichloroethane	U		0.000322	0.00292	1	04/05/2020 06:12	WG1455717
1,1,2-Trichloroethane	U		0.00103	0.00292	1	04/05/2020 06:12	WG1455717
Trichloroethene	0.00253		0.000468	0.00117	1	04/05/2020 06:12	WG1455717
Trichlorofluoromethane	U		0.000585	0.00292	1	04/05/2020 06:12	WG1455717
1,2,3-Trichloropropane	U		0.00597	0.0146	1	04/05/2020 06:12	WG1455717
1,2,4-Trimethylbenzene	U		0.00136	0.00585	1	04/05/2020 06:12	WG1455717
1,2,3-Trimethylbenzene	U		0.00135	0.00585	1	04/05/2020 06:12	WG1455717
1,3,5-Trimethylbenzene	U		0.00126	0.00585	1	04/05/2020 06:12	WG1455717
Vinyl chloride	U		0.000799	0.00292	1	04/05/2020 06:12	WG1455717
Xylenes, Total	U		0.00559	0.00760	1	04/05/2020 06:12	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 06:12*	WG1455717
(S) 4-Bromofluorobenzene	*96.9*			*67.0-138*		*04/05/2020 06:12*	WG1455717
(S) 1,2-Dichloroethane-d4	*90.1*			*70.0-130*		*04/05/2020 06:12*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.6		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0150	0.0273	1	04/05/2020 06:31	WG1455717
Acrylonitrile	U		0.00207	0.0137	1	04/05/2020 06:31	WG1455717
Benzene	U		0.000437	0.00109	1	04/05/2020 06:31	WG1455717
Bromobenzene	U		0.00115	0.0137	1	04/05/2020 06:31	WG1455717
Bromodichloromethane	U		0.000860	0.00273	1	04/05/2020 06:31	WG1455717
Bromoform	U		0.00653	0.0273	1	04/05/2020 06:31	WG1455717
Bromomethane	U		0.00404	0.0137	1	04/05/2020 06:31	WG1455717
n-Butylbenzene	U		0.00419	0.0137	1	04/05/2020 06:31	WG1455717
sec-Butylbenzene	U		0.00276	0.0137	1	04/05/2020 06:31	WG1455717
tert-Butylbenzene	U		0.00169	0.00546	1	04/05/2020 06:31	WG1455717
Carbon tetrachloride	U		0.00118	0.00546	1	04/05/2020 06:31	WG1455717
Chlorobenzene	U		0.000626	0.00273	1	04/05/2020 06:31	WG1455717
Chlorodibromomethane	U		0.000491	0.00273	1	04/05/2020 06:31	WG1455717
Chloroethane	U		0.00118	0.00546	1	04/05/2020 06:31	WG1455717
Chloroform	U		0.000453	0.00273	1	04/05/2020 06:31	WG1455717
Chloromethane	U		0.00152	0.0137	1	04/05/2020 06:31	WG1455717
2-Chlorotoluene	U		0.00100	0.00273	1	04/05/2020 06:31	WG1455717
4-Chlorotoluene	U		0.00123	0.00546	1	04/05/2020 06:31	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00557	0.0273	1	04/05/2020 06:31	WG1455717
1,2-Dibromoethane	U		0.000573	0.00273	1	04/05/2020 06:31	WG1455717
Dibromomethane	U		0.00109	0.00546	1	04/05/2020 06:31	WG1455717
1,2-Dichlorobenzene	U		0.00158	0.00546	1	04/05/2020 06:31	WG1455717
1,3-Dichlorobenzene	U		0.00186	0.00546	1	04/05/2020 06:31	WG1455717
1,4-Dichlorobenzene	U		0.00215	0.00546	1	04/05/2020 06:31	WG1455717
Dichlorodifluoromethane	U	J4	0.000893	0.00273	1	04/05/2020 06:31	WG1455717
1,1-Dichloroethane	U		0.000628	0.00273	1	04/05/2020 06:31	WG1455717
1,2-Dichloroethane	U		0.000519	0.00273	1	04/05/2020 06:31	WG1455717
1,1-Dichloroethene	U		0.000546	0.00273	1	04/05/2020 06:31	WG1455717
cis-1,2-Dichloroethene	U		0.000753	0.00273	1	04/05/2020 06:31	WG1455717
trans-1,2-Dichloroethene	U		0.00156	0.00546	1	04/05/2020 06:31	WG1455717
1,2-Dichloropropane	U	J4	0.00139	0.00546	1	04/05/2020 06:31	WG1455717
1,1-Dichloropropene	U		0.000764	0.00273	1	04/05/2020 06:31	WG1455717
1,3-Dichloropropane	U		0.00191	0.00546	1	04/05/2020 06:31	WG1455717
cis-1,3-Dichloropropene	U		0.000740	0.00273	1	04/05/2020 06:31	WG1455717
trans-1,3-Dichloropropene	U		0.00167	0.00546	1	04/05/2020 06:31	WG1455717
2,2-Dichloropropane	U		0.000866	0.00273	1	04/05/2020 06:31	WG1455717
Di-isopropyl ether	U		0.000382	0.00109	1	04/05/2020 06:31	WG1455717
Ethylbenzene	U		0.000579	0.00273	1	04/05/2020 06:31	WG1455717
Hexachloro-1,3-butadiene	U		0.0139	0.0273	1	04/05/2020 06:31	WG1455717
Isopropylbenzene	U		0.000942	0.00273	1	04/05/2020 06:31	WG1455717
p-Isopropyltoluene	U		0.00254	0.00546	1	04/05/2020 06:31	WG1455717
2-Butanone (MEK)	0.0247	B J	0.0137	0.0273	1	04/05/2020 06:31	WG1455717
Methylene Chloride	U		0.00725	0.0273	1	04/05/2020 06:31	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0109	0.0273	1	04/05/2020 06:31	WG1455717
Methyl tert-butyl ether	U		0.000322	0.00109	1	04/05/2020 06:31	WG1455717
Naphthalene	U		0.00341	0.0137	1	04/05/2020 06:31	WG1455717
n-Propylbenzene	U		0.00129	0.00546	1	04/05/2020 06:31	WG1455717
Styrene	U		0.00298	0.0137	1	04/05/2020 06:31	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000546	0.00273	1	04/05/2020 06:31	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000426	0.00273	1	04/05/2020 06:31	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000737	0.00273	1	04/05/2020 06:31	WG1455717
Tetrachloroethene	0.103		0.000764	0.00273	1	04/05/2020 06:31	WG1455717
Toluene	U		0.00137	0.00546	1	04/05/2020 06:31	WG1455717
1,2,3-Trichlorobenzene	U		0.000683	0.0137	1	04/05/2020 06:31	WG1455717
1,2,4-Trichlorobenzene	U		0.00526	0.0137	1	04/05/2020 06:31	WG1455717
1,1,1-Trichloroethane	U		0.000300	0.00273	1	04/05/2020 06:31	WG1455717
1,1,2-Trichloroethane	U		0.000964	0.00273	1	04/05/2020 06:31	WG1455717
Trichloroethene	U		0.000437	0.00109	1	04/05/2020 06:31	WG1455717
Trichlorofluoromethane	U		0.000546	0.00273	1	04/05/2020 06:31	WG1455717
1,2,3-Trichloropropane	U		0.00557	0.0137	1	04/05/2020 06:31	WG1455717
1,2,4-Trimethylbenzene	U		0.00127	0.00546	1	04/05/2020 06:31	WG1455717
1,2,3-Trimethylbenzene	U		0.00126	0.00546	1	04/05/2020 06:31	WG1455717
1,3,5-Trimethylbenzene	U		0.00118	0.00546	1	04/05/2020 06:31	WG1455717
Vinyl chloride	U		0.000746	0.00273	1	04/05/2020 06:31	WG1455717
Xylenes, Total	U		0.00522	0.00710	1	04/05/2020 06:31	WG1455717
(S) Toluene-d8	*107*			*75.0-131*		*04/05/2020 06:31*	WG1455717
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*04/05/2020 06:31*	WG1455717
(S) 1,2-Dichloroethane-d4	*93.0*			*70.0-130*		*04/05/2020 06:31*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.9		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0169	0.0309	1	04/05/2020 06:50	WG1455717
Acrylonitrile	U		0.00235	0.0155	1	04/05/2020 06:50	WG1455717
Benzene	U		0.000494	0.00124	1	04/05/2020 06:50	WG1455717
Bromobenzene	U		0.00130	0.0155	1	04/05/2020 06:50	WG1455717
Bromodichloromethane	U		0.000974	0.00309	1	04/05/2020 06:50	WG1455717
Bromoform	U		0.00739	0.0309	1	04/05/2020 06:50	WG1455717
Bromomethane	U		0.00457	0.0155	1	04/05/2020 06:50	WG1455717
n-Butylbenzene	U		0.00475	0.0155	1	04/05/2020 06:50	WG1455717
sec-Butylbenzene	U		0.00313	0.0155	1	04/05/2020 06:50	WG1455717
tert-Butylbenzene	U		0.00192	0.00618	1	04/05/2020 06:50	WG1455717
Carbon tetrachloride	U		0.00133	0.00618	1	04/05/2020 06:50	WG1455717
Chlorobenzene	U		0.000708	0.00309	1	04/05/2020 06:50	WG1455717
Chlorodibromomethane	U		0.000556	0.00309	1	04/05/2020 06:50	WG1455717
Chloroethane	U		0.00133	0.00618	1	04/05/2020 06:50	WG1455717
Chloroform	U		0.000513	0.00309	1	04/05/2020 06:50	WG1455717
Chloromethane	U		0.00172	0.0155	1	04/05/2020 06:50	WG1455717
2-Chlorotoluene	U		0.00114	0.00309	1	04/05/2020 06:50	WG1455717
4-Chlorotoluene	U		0.00140	0.00618	1	04/05/2020 06:50	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00630	0.0309	1	04/05/2020 06:50	WG1455717
1,2-Dibromoethane	U		0.000649	0.00309	1	04/05/2020 06:50	WG1455717
Dibromomethane	U		0.00124	0.00618	1	04/05/2020 06:50	WG1455717
1,2-Dichlorobenzene	U		0.00179	0.00618	1	04/05/2020 06:50	WG1455717
1,3-Dichlorobenzene	U		0.00210	0.00618	1	04/05/2020 06:50	WG1455717
1,4-Dichlorobenzene	U		0.00244	0.00618	1	04/05/2020 06:50	WG1455717
Dichlorodifluoromethane	U	J4	0.00101	0.00309	1	04/05/2020 06:50	WG1455717
1,1-Dichloroethane	U		0.000711	0.00309	1	04/05/2020 06:50	WG1455717
1,2-Dichloroethane	U		0.000587	0.00309	1	04/05/2020 06:50	WG1455717
1,1-Dichloroethene	U		0.000618	0.00309	1	04/05/2020 06:50	WG1455717
cis-1,2-Dichloroethene	U		0.000853	0.00309	1	04/05/2020 06:50	WG1455717
trans-1,2-Dichloroethene	U		0.00177	0.00618	1	04/05/2020 06:50	WG1455717
1,2-Dichloropropane	U	J4	0.00157	0.00618	1	04/05/2020 06:50	WG1455717
1,1-Dichloropropene	U		0.000865	0.00309	1	04/05/2020 06:50	WG1455717
1,3-Dichloropropane	U		0.00216	0.00618	1	04/05/2020 06:50	WG1455717
cis-1,3-Dichloropropene	U		0.000838	0.00309	1	04/05/2020 06:50	WG1455717
trans-1,3-Dichloropropene	U		0.00189	0.00618	1	04/05/2020 06:50	WG1455717
2,2-Dichloropropane	U		0.000980	0.00309	1	04/05/2020 06:50	WG1455717
Di-isopropyl ether	U		0.000433	0.00124	1	04/05/2020 06:50	WG1455717
Ethylbenzene	U		0.000655	0.00309	1	04/05/2020 06:50	WG1455717
Hexachloro-1,3-butadiene	U		0.0157	0.0309	1	04/05/2020 06:50	WG1455717
Isopropylbenzene	U		0.00107	0.00309	1	04/05/2020 06:50	WG1455717
p-Isopropyltoluene	U		0.00288	0.00618	1	04/05/2020 06:50	WG1455717
2-Butanone (MEK)	0.0607	B	0.0155	0.0309	1	04/05/2020 06:50	WG1455717
Methylene Chloride	U		0.00821	0.0309	1	04/05/2020 06:50	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0124	0.0309	1	04/05/2020 06:50	WG1455717
Methyl tert-butyl ether	U		0.000365	0.00124	1	04/05/2020 06:50	WG1455717
Naphthalene	U		0.00386	0.0155	1	04/05/2020 06:50	WG1455717
n-Propylbenzene	U		0.00146	0.00618	1	04/05/2020 06:50	WG1455717
Styrene	U		0.00337	0.0155	1	04/05/2020 06:50	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000618	0.00309	1	04/05/2020 06:50	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000482	0.00309	1	04/05/2020 06:50	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000834	0.00309	1	04/05/2020 06:50	WG1455717
Tetrachloroethene	0.00213	J	0.000865	0.00309	1	04/05/2020 06:50	WG1455717
Toluene	U		0.00155	0.00618	1	04/05/2020 06:50	WG1455717
1,2,3-Trichlorobenzene	U		0.000773	0.0155	1	04/05/2020 06:50	WG1455717
1,2,4-Trichlorobenzene	U		0.00596	0.0155	1	04/05/2020 06:50	WG1455717
1,1,1-Trichloroethane	U		0.000340	0.00309	1	04/05/2020 06:50	WG1455717
1,1,2-Trichloroethane	U		0.00109	0.00309	1	04/05/2020 06:50	WG1455717
Trichloroethene	U		0.000494	0.00124	1	04/05/2020 06:50	WG1455717
Trichlorofluoromethane	U		0.000618	0.00309	1	04/05/2020 06:50	WG1455717
1,2,3-Trichloropropane	U		0.00630	0.0155	1	04/05/2020 06:50	WG1455717
1,2,4-Trimethylbenzene	U		0.00143	0.00618	1	04/05/2020 06:50	WG1455717
1,2,3-Trimethylbenzene	U		0.00142	0.00618	1	04/05/2020 06:50	WG1455717
1,3,5-Trimethylbenzene	U		0.00133	0.00618	1	04/05/2020 06:50	WG1455717
Vinyl chloride	U		0.000844	0.00309	1	04/05/2020 06:50	WG1455717
Xylenes, Total	U		0.00591	0.00803	1	04/05/2020 06:50	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 06:50*	WG1455717
(S) 4-Bromofluorobenzene	*97.4*			*67.0-138*		*04/05/2020 06:50*	WG1455717
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*04/05/2020 06:50*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.8		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0162	0.0295	1	04/05/2020 07:09	WG1455717
Acrylonitrile	U		0.00224	0.0147	1	04/05/2020 07:09	WG1455717
Benzene	U		0.000472	0.00118	1	04/05/2020 07:09	WG1455717
Bromobenzene	U		0.00124	0.0147	1	04/05/2020 07:09	WG1455717
Bromodichloromethane	U		0.000930	0.00295	1	04/05/2020 07:09	WG1455717
Bromoform	U		0.00705	0.0295	1	04/05/2020 07:09	WG1455717
Bromomethane	U		0.00436	0.0147	1	04/05/2020 07:09	WG1455717
n-Butylbenzene	U		0.00453	0.0147	1	04/05/2020 07:09	WG1455717
sec-Butylbenzene	U		0.00298	0.0147	1	04/05/2020 07:09	WG1455717
tert-Butylbenzene	U		0.00183	0.00590	1	04/05/2020 07:09	WG1455717
Carbon tetrachloride	U		0.00127	0.00590	1	04/05/2020 07:09	WG1455717
Chlorobenzene	U		0.000676	0.00295	1	04/05/2020 07:09	WG1455717
Chlorodibromomethane	U		0.000531	0.00295	1	04/05/2020 07:09	WG1455717
Chloroethane	U		0.00127	0.00590	1	04/05/2020 07:09	WG1455717
Chloroform	U		0.000490	0.00295	1	04/05/2020 07:09	WG1455717
Chloromethane	U		0.00164	0.0147	1	04/05/2020 07:09	WG1455717
2-Chlorotoluene	U		0.00109	0.00295	1	04/05/2020 07:09	WG1455717
4-Chlorotoluene	U		0.00133	0.00590	1	04/05/2020 07:09	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00602	0.0295	1	04/05/2020 07:09	WG1455717
1,2-Dibromoethane	U		0.000619	0.00295	1	04/05/2020 07:09	WG1455717
Dibromomethane	U		0.00118	0.00590	1	04/05/2020 07:09	WG1455717
1,2-Dichlorobenzene	U		0.00171	0.00590	1	04/05/2020 07:09	WG1455717
1,3-Dichlorobenzene	U		0.00201	0.00590	1	04/05/2020 07:09	WG1455717
1,4-Dichlorobenzene	U		0.00232	0.00590	1	04/05/2020 07:09	WG1455717
Dichlorodifluoromethane	U	J4	0.000965	0.00295	1	04/05/2020 07:09	WG1455717
1,1-Dichloroethane	U		0.000678	0.00295	1	04/05/2020 07:09	WG1455717
1,2-Dichloroethane	U		0.000560	0.00295	1	04/05/2020 07:09	WG1455717
1,1-Dichloroethene	U		0.000590	0.00295	1	04/05/2020 07:09	WG1455717
cis-1,2-Dichloroethene	U		0.000814	0.00295	1	04/05/2020 07:09	WG1455717
trans-1,2-Dichloroethene	U		0.00169	0.00590	1	04/05/2020 07:09	WG1455717
1,2-Dichloropropane	U	J4	0.00150	0.00590	1	04/05/2020 07:09	WG1455717
1,1-Dichloropropene	U		0.000826	0.00295	1	04/05/2020 07:09	WG1455717
1,3-Dichloropropane	U		0.00206	0.00590	1	04/05/2020 07:09	WG1455717
cis-1,3-Dichloropropene	U		0.000800	0.00295	1	04/05/2020 07:09	WG1455717
trans-1,3-Dichloropropene	U		0.00180	0.00590	1	04/05/2020 07:09	WG1455717
2,2-Dichloropropane	U		0.000935	0.00295	1	04/05/2020 07:09	WG1455717
Di-isopropyl ether	U		0.000413	0.00118	1	04/05/2020 07:09	WG1455717
Ethylbenzene	U		0.000625	0.00295	1	04/05/2020 07:09	WG1455717
Hexachloro-1,3-butadiene	U		0.0150	0.0295	1	04/05/2020 07:09	WG1455717
Isopropylbenzene	U		0.00102	0.00295	1	04/05/2020 07:09	WG1455717
p-Isopropyltoluene	U		0.00275	0.00590	1	04/05/2020 07:09	WG1455717
2-Butanone (MEK)	0.0438	B	0.0147	0.0295	1	04/05/2020 07:09	WG1455717
Methylene Chloride	U		0.00783	0.0295	1	04/05/2020 07:09	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0118	0.0295	1	04/05/2020 07:09	WG1455717
Methyl tert-butyl ether	U		0.000348	0.00118	1	04/05/2020 07:09	WG1455717
Naphthalene	U		0.00368	0.0147	1	04/05/2020 07:09	WG1455717
n-Propylbenzene	U		0.00139	0.00590	1	04/05/2020 07:09	WG1455717
Styrene	U		0.00322	0.0147	1	04/05/2020 07:09	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000590	0.00295	1	04/05/2020 07:09	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000460	0.00295	1	04/05/2020 07:09	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000796	0.00295	1	04/05/2020 07:09	WG1455717
Tetrachloroethene	0.00500		0.000826	0.00295	1	04/05/2020 07:09	WG1455717
Toluene	U		0.00147	0.00590	1	04/05/2020 07:09	WG1455717
1,2,3-Trichlorobenzene	U		0.000737	0.0147	1	04/05/2020 07:09	WG1455717
1,2,4-Trichlorobenzene	U		0.00569	0.0147	1	04/05/2020 07:09	WG1455717
1,1,1-Trichloroethane	U		0.000324	0.00295	1	04/05/2020 07:09	WG1455717
1,1,2-Trichloroethane	U		0.00104	0.00295	1	04/05/2020 07:09	WG1455717
Trichloroethene	U		0.000472	0.00118	1	04/05/2020 07:09	WG1455717
Trichlorofluoromethane	U		0.000590	0.00295	1	04/05/2020 07:09	WG1455717
1,2,3-Trichloropropane	U		0.00602	0.0147	1	04/05/2020 07:09	WG1455717
1,2,4-Trimethylbenzene	U		0.00137	0.00590	1	04/05/2020 07:09	WG1455717
1,2,3-Trimethylbenzene	U		0.00136	0.00590	1	04/05/2020 07:09	WG1455717
1,3,5-Trimethylbenzene	U		0.00127	0.00590	1	04/05/2020 07:09	WG1455717
Vinyl chloride	U		0.000806	0.00295	1	04/05/2020 07:09	WG1455717
Xylenes, Total	U		0.00564	0.00767	1	04/05/2020 07:09	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 07:09*	WG1455717
(S) 4-Bromofluorobenzene	*99.7*			*67.0-138*		*04/05/2020 07:09*	WG1455717
(S) 1,2-Dichloroethane-d4	*94.1*			*70.0-130*		*04/05/2020 07:09*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.2		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0150	0.0274	1	04/05/2020 07:28	WG1455717
Acrylonitrile	U		0.00208	0.0137	1	04/05/2020 07:28	WG1455717
Benzene	U		0.000439	0.00110	1	04/05/2020 07:28	WG1455717
Bromobenzene	U		0.00115	0.0137	1	04/05/2020 07:28	WG1455717
Bromodichloromethane	U		0.000864	0.00274	1	04/05/2020 07:28	WG1455717
Bromoform	U		0.00656	0.0274	1	04/05/2020 07:28	WG1455717
Bromomethane	U		0.00406	0.0137	1	04/05/2020 07:28	WG1455717
n-Butylbenzene	U		0.00421	0.0137	1	04/05/2020 07:28	WG1455717
sec-Butylbenzene	U		0.00277	0.0137	1	04/05/2020 07:28	WG1455717
tert-Butylbenzene	U		0.00170	0.00548	1	04/05/2020 07:28	WG1455717
Carbon tetrachloride	U		0.00118	0.00548	1	04/05/2020 07:28	WG1455717
Chlorobenzene	U		0.000628	0.00274	1	04/05/2020 07:28	WG1455717
Chlorodibromomethane	U		0.000493	0.00274	1	04/05/2020 07:28	WG1455717
Chloroethane	U		0.00118	0.00548	1	04/05/2020 07:28	WG1455717
Chloroform	U		0.000455	0.00274	1	04/05/2020 07:28	WG1455717
Chloromethane	U		0.00152	0.0137	1	04/05/2020 07:28	WG1455717
2-Chlorotoluene	U		0.00101	0.00274	1	04/05/2020 07:28	WG1455717
4-Chlorotoluene	U		0.00124	0.00548	1	04/05/2020 07:28	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00559	0.0274	1	04/05/2020 07:28	WG1455717
1,2-Dibromoethane	U		0.000576	0.00274	1	04/05/2020 07:28	WG1455717
Dibromomethane	U		0.00110	0.00548	1	04/05/2020 07:28	WG1455717
1,2-Dichlorobenzene	U		0.00159	0.00548	1	04/05/2020 07:28	WG1455717
1,3-Dichlorobenzene	U		0.00186	0.00548	1	04/05/2020 07:28	WG1455717
1,4-Dichlorobenzene	U		0.00216	0.00548	1	04/05/2020 07:28	WG1455717
Dichlorodifluoromethane	U	J4	0.000897	0.00274	1	04/05/2020 07:28	WG1455717
1,1-Dichloroethane	U		0.000630	0.00274	1	04/05/2020 07:28	WG1455717
1,2-Dichloroethane	U		0.000521	0.00274	1	04/05/2020 07:28	WG1455717
1,1-Dichloroethene	U		0.000548	0.00274	1	04/05/2020 07:28	WG1455717
cis-1,2-Dichloroethene	U		0.000756	0.00274	1	04/05/2020 07:28	WG1455717
trans-1,2-Dichloroethene	U		0.00157	0.00548	1	04/05/2020 07:28	WG1455717
1,2-Dichloropropane	U	J4	0.00139	0.00548	1	04/05/2020 07:28	WG1455717
1,1-Dichloropropene	U		0.000767	0.00274	1	04/05/2020 07:28	WG1455717
1,3-Dichloropropane	U		0.00192	0.00548	1	04/05/2020 07:28	WG1455717
cis-1,3-Dichloropropene	U		0.000743	0.00274	1	04/05/2020 07:28	WG1455717
trans-1,3-Dichloropropene	U		0.00168	0.00548	1	04/05/2020 07:28	WG1455717
2,2-Dichloropropane	U		0.000869	0.00274	1	04/05/2020 07:28	WG1455717
Di-isopropyl ether	U		0.000384	0.00110	1	04/05/2020 07:28	WG1455717
Ethylbenzene	U		0.000581	0.00274	1	04/05/2020 07:28	WG1455717
Hexachloro-1,3-butadiene	U		0.0139	0.0274	1	04/05/2020 07:28	WG1455717
Isopropylbenzene	U		0.000946	0.00274	1	04/05/2020 07:28	WG1455717
p-Isopropyltoluene	U		0.00255	0.00548	1	04/05/2020 07:28	WG1455717
2-Butanone (MEK)	0.0386	B	0.0137	0.0274	1	04/05/2020 07:28	WG1455717
Methylene Chloride	U		0.00728	0.0274	1	04/05/2020 07:28	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0110	0.0274	1	04/05/2020 07:28	WG1455717
Methyl tert-butyl ether	U		0.000323	0.00110	1	04/05/2020 07:28	WG1455717
Naphthalene	U		0.00342	0.0137	1	04/05/2020 07:28	WG1455717
n-Propylbenzene	U		0.00129	0.00548	1	04/05/2020 07:28	WG1455717
Styrene	U		0.00299	0.0137	1	04/05/2020 07:28	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000548	0.00274	1	04/05/2020 07:28	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000428	0.00274	1	04/05/2020 07:28	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000740	0.00274	1	04/05/2020 07:28	WG1455717
Tetrachloroethene	0.00137	J	0.000767	0.00274	1	04/05/2020 07:28	WG1455717
Toluene	0.00375	J	0.00137	0.00548	1	04/05/2020 07:28	WG1455717
1,2,3-Trichlorobenzene	U		0.000685	0.0137	1	04/05/2020 07:28	WG1455717
1,2,4-Trichlorobenzene	U		0.00528	0.0137	1	04/05/2020 07:28	WG1455717
1,1,1-Trichloroethane	U		0.000301	0.00274	1	04/05/2020 07:28	WG1455717
1,1,2-Trichloroethane	U		0.000968	0.00274	1	04/05/2020 07:28	WG1455717
Trichloroethene	U		0.000439	0.00110	1	04/05/2020 07:28	WG1455717
Trichlorofluoromethane	U		0.000548	0.00274	1	04/05/2020 07:28	WG1455717
1,2,3-Trichloropropane	U		0.00559	0.0137	1	04/05/2020 07:28	WG1455717
1,2,4-Trimethylbenzene	U		0.00127	0.00548	1	04/05/2020 07:28	WG1455717
1,2,3-Trimethylbenzene	U		0.00126	0.00548	1	04/05/2020 07:28	WG1455717
1,3,5-Trimethylbenzene	U		0.00118	0.00548	1	04/05/2020 07:28	WG1455717
Vinyl chloride	U		0.000749	0.00274	1	04/05/2020 07:28	WG1455717
Xylenes, Total	U		0.00524	0.00713	1	04/05/2020 07:28	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 07:28*	WG1455717
(S) 4-Bromofluorobenzene	*98.2*			*67.0-138*		*04/05/2020 07:28*	WG1455717
(S) 1,2-Dichloroethane-d4	*90.6*			*70.0-130*		*04/05/2020 07:28*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.2		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0169	0.0308	1	04/05/2020 07:47	WG1455717
Acrylonitrile	U		0.00234	0.0154	1	04/05/2020 07:47	WG1455717
Benzene	U		0.000493	0.00123	1	04/05/2020 07:47	WG1455717
Bromobenzene	U		0.00129	0.0154	1	04/05/2020 07:47	WG1455717
Bromodichloromethane	U		0.000971	0.00308	1	04/05/2020 07:47	WG1455717
Bromoform	U		0.00737	0.0308	1	04/05/2020 07:47	WG1455717
Bromomethane	U		0.00456	0.0154	1	04/05/2020 07:47	WG1455717
n-Butylbenzene	U		0.00473	0.0154	1	04/05/2020 07:47	WG1455717
sec-Butylbenzene	U		0.00312	0.0154	1	04/05/2020 07:47	WG1455717
tert-Butylbenzene	U		0.00191	0.00616	1	04/05/2020 07:47	WG1455717
Carbon tetrachloride	U		0.00133	0.00616	1	04/05/2020 07:47	WG1455717
Chlorobenzene	U		0.000706	0.00308	1	04/05/2020 07:47	WG1455717
Chlorodibromomethane	U		0.000554	0.00308	1	04/05/2020 07:47	WG1455717
Chloroethane	U		0.00133	0.00616	1	04/05/2020 07:47	WG1455717
Chloroform	U		0.000511	0.00308	1	04/05/2020 07:47	WG1455717
Chloromethane	U		0.00171	0.0154	1	04/05/2020 07:47	WG1455717
2-Chlorotoluene	U		0.00113	0.00308	1	04/05/2020 07:47	WG1455717
4-Chlorotoluene	U		0.00139	0.00616	1	04/05/2020 07:47	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00628	0.0308	1	04/05/2020 07:47	WG1455717
1,2-Dibromoethane	U		0.000647	0.00308	1	04/05/2020 07:47	WG1455717
Dibromomethane	U		0.00123	0.00616	1	04/05/2020 07:47	WG1455717
1,2-Dichlorobenzene	U		0.00179	0.00616	1	04/05/2020 07:47	WG1455717
1,3-Dichlorobenzene	U		0.00209	0.00616	1	04/05/2020 07:47	WG1455717
1,4-Dichlorobenzene	U		0.00243	0.00616	1	04/05/2020 07:47	WG1455717
Dichlorodifluoromethane	U	J4	0.00101	0.00308	1	04/05/2020 07:47	WG1455717
1,1-Dichloroethane	U		0.000708	0.00308	1	04/05/2020 07:47	WG1455717
1,2-Dichloroethane	U		0.000585	0.00308	1	04/05/2020 07:47	WG1455717
1,1-Dichloroethene	U		0.000616	0.00308	1	04/05/2020 07:47	WG1455717
cis-1,2-Dichloroethene	U		0.000850	0.00308	1	04/05/2020 07:47	WG1455717
trans-1,2-Dichloroethene	U		0.00176	0.00616	1	04/05/2020 07:47	WG1455717
1,2-Dichloropropane	U	J4	0.00156	0.00616	1	04/05/2020 07:47	WG1455717
1,1-Dichloropropene	U		0.000863	0.00308	1	04/05/2020 07:47	WG1455717
1,3-Dichloropropane	U		0.00216	0.00616	1	04/05/2020 07:47	WG1455717
cis-1,3-Dichloropropene	U		0.000835	0.00308	1	04/05/2020 07:47	WG1455717
trans-1,3-Dichloropropene	U		0.00189	0.00616	1	04/05/2020 07:47	WG1455717
2,2-Dichloropropane	U		0.000977	0.00308	1	04/05/2020 07:47	WG1455717
Di-isopropyl ether	U		0.000431	0.00123	1	04/05/2020 07:47	WG1455717
Ethylbenzene	U		0.000653	0.00308	1	04/05/2020 07:47	WG1455717
Hexachloro-1,3-butadiene	U		0.0156	0.0308	1	04/05/2020 07:47	WG1455717
Isopropylbenzene	U		0.00106	0.00308	1	04/05/2020 07:47	WG1455717
p-Isopropyltoluene	U		0.00287	0.00616	1	04/05/2020 07:47	WG1455717
2-Butanone (MEK)	0.0175	B J	0.0154	0.0308	1	04/05/2020 07:47	WG1455717
Methylene Chloride	U		0.00818	0.0308	1	04/05/2020 07:47	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0123	0.0308	1	04/05/2020 07:47	WG1455717
Methyl tert-butyl ether	U		0.000363	0.00123	1	04/05/2020 07:47	WG1455717
Naphthalene	U		0.00384	0.0154	1	04/05/2020 07:47	WG1455717
n-Propylbenzene	U		0.00145	0.00616	1	04/05/2020 07:47	WG1455717
Styrene	U		0.00336	0.0154	1	04/05/2020 07:47	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000616	0.00308	1	04/05/2020 07:47	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000481	0.00308	1	04/05/2020 07:47	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000832	0.00308	1	04/05/2020 07:47	WG1455717
Tetrachloroethene	U		0.000863	0.00308	1	04/05/2020 07:47	WG1455717
Toluene	0.00258	J	0.00154	0.00616	1	04/05/2020 07:47	WG1455717
1,2,3-Trichlorobenzene	U		0.000770	0.0154	1	04/05/2020 07:47	WG1455717
1,2,4-Trichlorobenzene	U		0.00594	0.0154	1	04/05/2020 07:47	WG1455717
1,1,1-Trichloroethane	U		0.000339	0.00308	1	04/05/2020 07:47	WG1455717
1,1,2-Trichloroethane	U		0.00109	0.00308	1	04/05/2020 07:47	WG1455717
Trichloroethene	U		0.000493	0.00123	1	04/05/2020 07:47	WG1455717
Trichlorofluoromethane	U		0.000616	0.00308	1	04/05/2020 07:47	WG1455717
1,2,3-Trichloropropane	U		0.00628	0.0154	1	04/05/2020 07:47	WG1455717
1,2,4-Trimethylbenzene	U		0.00143	0.00616	1	04/05/2020 07:47	WG1455717
1,2,3-Trimethylbenzene	U		0.00142	0.00616	1	04/05/2020 07:47	WG1455717
1,3,5-Trimethylbenzene	U		0.00133	0.00616	1	04/05/2020 07:47	WG1455717
Vinyl chloride	U		0.000842	0.00308	1	04/05/2020 07:47	WG1455717
Xylenes, Total	U		0.00589	0.00801	1	04/05/2020 07:47	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 07:47*	WG1455717
(S) 4-Bromofluorobenzene	*95.4*			*67.0-138*		*04/05/2020 07:47*	WG1455717
(S) 1,2-Dichloroethane-d4	*92.1*			*70.0-130*		*04/05/2020 07:47*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	81.7		1	04/08/2020 21:48	WG1456966

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0168	0.0306	1	04/05/2020 08:06	WG1455717
Acrylonitrile	U		0.00233	0.0153	1	04/05/2020 08:06	WG1455717
Benzene	U		0.000490	0.00122	1	04/05/2020 08:06	WG1455717
Bromobenzene	U		0.00128	0.0153	1	04/05/2020 08:06	WG1455717
Bromodichloromethane	U		0.000964	0.00306	1	04/05/2020 08:06	WG1455717
Bromoform	U		0.00732	0.0306	1	04/05/2020 08:06	WG1455717
Bromomethane	U		0.00453	0.0153	1	04/05/2020 08:06	WG1455717
n-Butylbenzene	U		0.00470	0.0153	1	04/05/2020 08:06	WG1455717
sec-Butylbenzene	U		0.00310	0.0153	1	04/05/2020 08:06	WG1455717
tert-Butylbenzene	U		0.00190	0.00612	1	04/05/2020 08:06	WG1455717
Carbon tetrachloride	U		0.00132	0.00612	1	04/05/2020 08:06	WG1455717
Chlorobenzene	U		0.000701	0.00306	1	04/05/2020 08:06	WG1455717
Chlorodibromomethane	U		0.000551	0.00306	1	04/05/2020 08:06	WG1455717
Chloroethane	U		0.00132	0.00612	1	04/05/2020 08:06	WG1455717
Chloroform	U		0.000508	0.00306	1	04/05/2020 08:06	WG1455717
Chloromethane	U		0.00170	0.0153	1	04/05/2020 08:06	WG1455717
2-Chlorotoluene	U		0.00113	0.00306	1	04/05/2020 08:06	WG1455717
4-Chlorotoluene	U		0.00138	0.00612	1	04/05/2020 08:06	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00624	0.0306	1	04/05/2020 08:06	WG1455717
1,2-Dibromoethane	U		0.000642	0.00306	1	04/05/2020 08:06	WG1455717
Dibromomethane	U		0.00122	0.00612	1	04/05/2020 08:06	WG1455717
1,2-Dichlorobenzene	U		0.00177	0.00612	1	04/05/2020 08:06	WG1455717
1,3-Dichlorobenzene	U		0.00208	0.00612	1	04/05/2020 08:06	WG1455717
1,4-Dichlorobenzene	U		0.00241	0.00612	1	04/05/2020 08:06	WG1455717
Dichlorodifluoromethane	U	J4	0.00100	0.00306	1	04/05/2020 08:06	WG1455717
1,1-Dichloroethane	U		0.000704	0.00306	1	04/05/2020 08:06	WG1455717
1,2-Dichloroethane	U		0.000581	0.00306	1	04/05/2020 08:06	WG1455717
1,1-Dichloroethene	U		0.000612	0.00306	1	04/05/2020 08:06	WG1455717
cis-1,2-Dichloroethene	U		0.000844	0.00306	1	04/05/2020 08:06	WG1455717
trans-1,2-Dichloroethene	U		0.00175	0.00612	1	04/05/2020 08:06	WG1455717
1,2-Dichloropropane	U	J4	0.00155	0.00612	1	04/05/2020 08:06	WG1455717
1,1-Dichloropropene	U		0.000857	0.00306	1	04/05/2020 08:06	WG1455717
1,3-Dichloropropane	U		0.00214	0.00612	1	04/05/2020 08:06	WG1455717
cis-1,3-Dichloropropene	U		0.000830	0.00306	1	04/05/2020 08:06	WG1455717
trans-1,3-Dichloropropene	U		0.00187	0.00612	1	04/05/2020 08:06	WG1455717
2,2-Dichloropropane	U		0.000970	0.00306	1	04/05/2020 08:06	WG1455717
Di-isopropyl ether	U		0.000428	0.00122	1	04/05/2020 08:06	WG1455717
Ethylbenzene	0.000929	J	0.000649	0.00306	1	04/05/2020 08:06	WG1455717
Hexachloro-1,3-butadiene	U		0.0155	0.0306	1	04/05/2020 08:06	WG1455717
Isopropylbenzene	U		0.00106	0.00306	1	04/05/2020 08:06	WG1455717
p-Isopropyltoluene	U		0.00285	0.00612	1	04/05/2020 08:06	WG1455717
2-Butanone (MEK)	0.0322	B	0.0153	0.0306	1	04/05/2020 08:06	WG1455717
Methylene Chloride	U		0.00813	0.0306	1	04/05/2020 08:06	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0122	0.0306	1	04/05/2020 08:06	WG1455717
Methyl tert-butyl ether	U		0.000361	0.00122	1	04/05/2020 08:06	WG1455717
Naphthalene	U		0.00382	0.0153	1	04/05/2020 08:06	WG1455717
n-Propylbenzene	U		0.00144	0.00612	1	04/05/2020 08:06	WG1455717
Styrene	U		0.00334	0.0153	1	04/05/2020 08:06	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000612	0.00306	1	04/05/2020 08:06	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000477	0.00306	1	04/05/2020 08:06	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000826	0.00306	1	04/05/2020 08:06	WG1455717
Tetrachloroethene	U		0.000857	0.00306	1	04/05/2020 08:06	WG1455717
Toluene	0.0176		0.00153	0.00612	1	04/05/2020 08:06	WG1455717
1,2,3-Trichlorobenzene	U		0.000765	0.0153	1	04/05/2020 08:06	WG1455717
1,2,4-Trichlorobenzene	U		0.00590	0.0153	1	04/05/2020 08:06	WG1455717
1,1,1-Trichloroethane	U		0.000337	0.00306	1	04/05/2020 08:06	WG1455717
1,1,2-Trichloroethane	U		0.00108	0.00306	1	04/05/2020 08:06	WG1455717
Trichloroethene	U		0.000490	0.00122	1	04/05/2020 08:06	WG1455717
Trichlorofluoromethane	U		0.000612	0.00306	1	04/05/2020 08:06	WG1455717
1,2,3-Trichloropropane	U		0.00624	0.0153	1	04/05/2020 08:06	WG1455717
1,2,4-Trimethylbenzene	U		0.00142	0.00612	1	04/05/2020 08:06	WG1455717
1,2,3-Trimethylbenzene	U		0.00141	0.00612	1	04/05/2020 08:06	WG1455717
1,3,5-Trimethylbenzene	U		0.00132	0.00612	1	04/05/2020 08:06	WG1455717
Vinyl chloride	U		0.000836	0.00306	1	04/05/2020 08:06	WG1455717
Xylenes, Total	U		0.00585	0.00795	1	04/05/2020 08:06	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 08:06*	WG1455717
(S) 4-Bromofluorobenzene	*96.7*			*67.0-138*		*04/05/2020 08:06*	WG1455717
(S) 1,2-Dichloroethane-d4	*91.7*			*70.0-130*		*04/05/2020 08:06*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	82.5		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0166	0.0303	1	04/05/2020 08:25	WG1455717
Acrylonitrile	U		0.00230	0.0152	1	04/05/2020 08:25	WG1455717
Benzene	U		0.000485	0.00121	1	04/05/2020 08:25	WG1455717
Bromobenzene	U		0.00127	0.0152	1	04/05/2020 08:25	WG1455717
Bromodichloromethane	U		0.000956	0.00303	1	04/05/2020 08:25	WG1455717
Bromoform	U		0.00725	0.0303	1	04/05/2020 08:25	WG1455717
Bromomethane	U		0.00449	0.0152	1	04/05/2020 08:25	WG1455717
n-Butylbenzene	U		0.00466	0.0152	1	04/05/2020 08:25	WG1455717
sec-Butylbenzene	U		0.00307	0.0152	1	04/05/2020 08:25	WG1455717
tert-Butylbenzene	U		0.00188	0.00606	1	04/05/2020 08:25	WG1455717
Carbon tetrachloride	U		0.00131	0.00606	1	04/05/2020 08:25	WG1455717
Chlorobenzene	U		0.000695	0.00303	1	04/05/2020 08:25	WG1455717
Chlorodibromomethane	U		0.000546	0.00303	1	04/05/2020 08:25	WG1455717
Chloroethane	U		0.00131	0.00606	1	04/05/2020 08:25	WG1455717
Chloroform	U		0.000503	0.00303	1	04/05/2020 08:25	WG1455717
Chloromethane	U		0.00169	0.0152	1	04/05/2020 08:25	WG1455717
2-Chlorotoluene	U		0.00112	0.00303	1	04/05/2020 08:25	WG1455717
4-Chlorotoluene	U		0.00137	0.00606	1	04/05/2020 08:25	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00618	0.0303	1	04/05/2020 08:25	WG1455717
1,2-Dibromoethane	U		0.000637	0.00303	1	04/05/2020 08:25	WG1455717
Dibromomethane	U		0.00121	0.00606	1	04/05/2020 08:25	WG1455717
1,2-Dichlorobenzene	U		0.00176	0.00606	1	04/05/2020 08:25	WG1455717
1,3-Dichlorobenzene	U		0.00206	0.00606	1	04/05/2020 08:25	WG1455717
1,4-Dichlorobenzene	U		0.00239	0.00606	1	04/05/2020 08:25	WG1455717
Dichlorodifluoromethane	U	J4	0.000992	0.00303	1	04/05/2020 08:25	WG1455717
1,1-Dichloroethane	U		0.000697	0.00303	1	04/05/2020 08:25	WG1455717
1,2-Dichloroethane	U		0.000576	0.00303	1	04/05/2020 08:25	WG1455717
1,1-Dichloroethene	U		0.000606	0.00303	1	04/05/2020 08:25	WG1455717
cis-1,2-Dichloroethene	U		0.000837	0.00303	1	04/05/2020 08:25	WG1455717
trans-1,2-Dichloroethene	U		0.00173	0.00606	1	04/05/2020 08:25	WG1455717
1,2-Dichloropropane	U	J4	0.00154	0.00606	1	04/05/2020 08:25	WG1455717
1,1-Dichloropropene	U		0.000849	0.00303	1	04/05/2020 08:25	WG1455717
1,3-Dichloropropane	U		0.00212	0.00606	1	04/05/2020 08:25	WG1455717
cis-1,3-Dichloropropene	U		0.000822	0.00303	1	04/05/2020 08:25	WG1455717
trans-1,3-Dichloropropene	U		0.00186	0.00606	1	04/05/2020 08:25	WG1455717
2,2-Dichloropropane	U		0.000962	0.00303	1	04/05/2020 08:25	WG1455717
Di-isopropyl ether	U		0.000424	0.00121	1	04/05/2020 08:25	WG1455717
Ethylbenzene	U		0.000643	0.00303	1	04/05/2020 08:25	WG1455717
Hexachloro-1,3-butadiene	U		0.0154	0.0303	1	04/05/2020 08:25	WG1455717
Isopropylbenzene	U		0.00105	0.00303	1	04/05/2020 08:25	WG1455717
p-Isopropyltoluene	U		0.00283	0.00606	1	04/05/2020 08:25	WG1455717
2-Butanone (MEK)	0.0198	B J	0.0152	0.0303	1	04/05/2020 08:25	WG1455717
Methylene Chloride	U		0.00805	0.0303	1	04/05/2020 08:25	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0121	0.0303	1	04/05/2020 08:25	WG1455717
Methyl tert-butyl ether	U		0.000358	0.00121	1	04/05/2020 08:25	WG1455717
Naphthalene	U		0.00378	0.0152	1	04/05/2020 08:25	WG1455717
n-Propylbenzene	U		0.00143	0.00606	1	04/05/2020 08:25	WG1455717
Styrene	U		0.00331	0.0152	1	04/05/2020 08:25	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000606	0.00303	1	04/05/2020 08:25	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000473	0.00303	1	04/05/2020 08:25	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000819	0.00303	1	04/05/2020 08:25	WG1455717
Tetrachloroethene	U		0.000849	0.00303	1	04/05/2020 08:25	WG1455717
Toluene	0.00192	J	0.00152	0.00606	1	04/05/2020 08:25	WG1455717
1,2,3-Trichlorobenzene	U		0.000758	0.0152	1	04/05/2020 08:25	WG1455717
1,2,4-Trichlorobenzene	U		0.00585	0.0152	1	04/05/2020 08:25	WG1455717
1,1,1-Trichloroethane	U		0.000333	0.00303	1	04/05/2020 08:25	WG1455717
1,1,2-Trichloroethane	U		0.00107	0.00303	1	04/05/2020 08:25	WG1455717
Trichloroethene	U		0.000485	0.00121	1	04/05/2020 08:25	WG1455717
Trichlorofluoromethane	U		0.000606	0.00303	1	04/05/2020 08:25	WG1455717
1,2,3-Trichloropropane	U		0.00618	0.0152	1	04/05/2020 08:25	WG1455717
1,2,4-Trimethylbenzene	U		0.00141	0.00606	1	04/05/2020 08:25	WG1455717
1,2,3-Trimethylbenzene	U		0.00139	0.00606	1	04/05/2020 08:25	WG1455717
1,3,5-Trimethylbenzene	U		0.00131	0.00606	1	04/05/2020 08:25	WG1455717
Vinyl chloride	U		0.000828	0.00303	1	04/05/2020 08:25	WG1455717
Xylenes, Total	U		0.00580	0.00788	1	04/05/2020 08:25	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 08:25*	WG1455717
(S) 4-Bromofluorobenzene	*96.5*			*67.0-138*		*04/05/2020 08:25*	WG1455717
(S) 1,2-Dichloroethane-d4	*91.8*			*70.0-130*		*04/05/2020 08:25*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.2		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0157	0.0287	1	04/05/2020 08:45	WG1455717
Acrylonitrile	U		0.00218	0.0143	1	04/05/2020 08:45	WG1455717
Benzene	U		0.000459	0.00115	1	04/05/2020 08:45	WG1455717
Bromobenzene	U		0.00120	0.0143	1	04/05/2020 08:45	WG1455717
Bromodichloromethane	U		0.000903	0.00287	1	04/05/2020 08:45	WG1455717
Bromoform	U		0.00686	0.0287	1	04/05/2020 08:45	WG1455717
Bromomethane	U		0.00424	0.0143	1	04/05/2020 08:45	WG1455717
n-Butylbenzene	U		0.00440	0.0143	1	04/05/2020 08:45	WG1455717
sec-Butylbenzene	U		0.00290	0.0143	1	04/05/2020 08:45	WG1455717
tert-Butylbenzene	U		0.00178	0.00573	1	04/05/2020 08:45	WG1455717
Carbon tetrachloride	U		0.00124	0.00573	1	04/05/2020 08:45	WG1455717
Chlorobenzene	U		0.000657	0.00287	1	04/05/2020 08:45	WG1455717
Chlorodibromomethane	U		0.000516	0.00287	1	04/05/2020 08:45	WG1455717
Chloroethane	U		0.00124	0.00573	1	04/05/2020 08:45	WG1455717
Chloroform	U		0.000476	0.00287	1	04/05/2020 08:45	WG1455717
Chloromethane	U		0.00159	0.0143	1	04/05/2020 08:45	WG1455717
2-Chlorotoluene	U		0.00105	0.00287	1	04/05/2020 08:45	WG1455717
4-Chlorotoluene	U		0.00130	0.00573	1	04/05/2020 08:45	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00585	0.0287	1	04/05/2020 08:45	WG1455717
1,2-Dibromoethane	U		0.000602	0.00287	1	04/05/2020 08:45	WG1455717
Dibromomethane	U		0.00115	0.00573	1	04/05/2020 08:45	WG1455717
1,2-Dichlorobenzene	U		0.00166	0.00573	1	04/05/2020 08:45	WG1455717
1,3-Dichlorobenzene	U		0.00195	0.00573	1	04/05/2020 08:45	WG1455717
1,4-Dichlorobenzene	U		0.00226	0.00573	1	04/05/2020 08:45	WG1455717
Dichlorodifluoromethane	U	J4	0.000938	0.00287	1	04/05/2020 08:45	WG1455717
1,1-Dichloroethane	U		0.000659	0.00287	1	04/05/2020 08:45	WG1455717
1,2-Dichloroethane	U		0.000545	0.00287	1	04/05/2020 08:45	WG1455717
1,1-Dichloroethene	U		0.000573	0.00287	1	04/05/2020 08:45	WG1455717
cis-1,2-Dichloroethene	U		0.000791	0.00287	1	04/05/2020 08:45	WG1455717
trans-1,2-Dichloroethene	U		0.00164	0.00573	1	04/05/2020 08:45	WG1455717
1,2-Dichloropropane	U	J4	0.00146	0.00573	1	04/05/2020 08:45	WG1455717
1,1-Dichloropropene	U		0.000802	0.00287	1	04/05/2020 08:45	WG1455717
1,3-Dichloropropane	U		0.00201	0.00573	1	04/05/2020 08:45	WG1455717
cis-1,3-Dichloropropene	U		0.000777	0.00287	1	04/05/2020 08:45	WG1455717
trans-1,3-Dichloropropene	U		0.00175	0.00573	1	04/05/2020 08:45	WG1455717
2,2-Dichloropropane	U		0.000909	0.00287	1	04/05/2020 08:45	WG1455717
Di-isopropyl ether	U		0.000401	0.00115	1	04/05/2020 08:45	WG1455717
Ethylbenzene	U		0.000608	0.00287	1	04/05/2020 08:45	WG1455717
Hexachloro-1,3-butadiene	U		0.0146	0.0287	1	04/05/2020 08:45	WG1455717
Isopropylbenzene	U		0.000989	0.00287	1	04/05/2020 08:45	WG1455717
p-Isopropyltoluene	U		0.00267	0.00573	1	04/05/2020 08:45	WG1455717
2-Butanone (MEK)	0.0368	B	0.0143	0.0287	1	04/05/2020 08:45	WG1455717
Methylene Chloride	U		0.00761	0.0287	1	04/05/2020 08:45	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0115	0.0287	1	04/05/2020 08:45	WG1455717
Methyl tert-butyl ether	U		0.000338	0.00115	1	04/05/2020 08:45	WG1455717
Naphthalene	U		0.00358	0.0143	1	04/05/2020 08:45	WG1455717
n-Propylbenzene	U		0.00135	0.00573	1	04/05/2020 08:45	WG1455717
Styrene	U		0.00313	0.0143	1	04/05/2020 08:45	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000573	0.00287	1	04/05/2020 08:45	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000447	0.00287	1	04/05/2020 08:45	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000774	0.00287	1	04/05/2020 08:45	WG1455717
Tetrachloroethene	U		0.000802	0.00287	1	04/05/2020 08:45	WG1455717
Toluene	U		0.00143	0.00573	1	04/05/2020 08:45	WG1455717
1,2,3-Trichlorobenzene	U		0.000717	0.0143	1	04/05/2020 08:45	WG1455717
1,2,4-Trichlorobenzene	U		0.00553	0.0143	1	04/05/2020 08:45	WG1455717
1,1,1-Trichloroethane	U		0.000315	0.00287	1	04/05/2020 08:45	WG1455717
1,1,2-Trichloroethane	U		0.00101	0.00287	1	04/05/2020 08:45	WG1455717
Trichloroethene	U		0.000459	0.00115	1	04/05/2020 08:45	WG1455717
Trichlorofluoromethane	U		0.000573	0.00287	1	04/05/2020 08:45	WG1455717
1,2,3-Trichloropropane	U		0.00585	0.0143	1	04/05/2020 08:45	WG1455717
1,2,4-Trimethylbenzene	U		0.00133	0.00573	1	04/05/2020 08:45	WG1455717
1,2,3-Trimethylbenzene	U		0.00132	0.00573	1	04/05/2020 08:45	WG1455717
1,3,5-Trimethylbenzene	U		0.00124	0.00573	1	04/05/2020 08:45	WG1455717
Vinyl chloride	U		0.000783	0.00287	1	04/05/2020 08:45	WG1455717
Xylenes, Total	U		0.00548	0.00745	1	04/05/2020 08:45	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 08:45*	WG1455717
(S) 4-Bromofluorobenzene	*97.6*			*67.0-138*		*04/05/2020 08:45*	WG1455717
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*04/05/2020 08:45*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	84.1		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0163	0.0297	1	04/05/2020 09:04	WG1455717
Acrylonitrile	U		0.00226	0.0149	1	04/05/2020 09:04	WG1455717
Benzene	U		0.000476	0.00119	1	04/05/2020 09:04	WG1455717
Bromobenzene	U		0.00125	0.0149	1	04/05/2020 09:04	WG1455717
Bromodichloromethane	U		0.000937	0.00297	1	04/05/2020 09:04	WG1455717
Bromoform	U		0.00711	0.0297	1	04/05/2020 09:04	WG1455717
Bromomethane	U		0.00440	0.0149	1	04/05/2020 09:04	WG1455717
n-Butylbenzene	U		0.00457	0.0149	1	04/05/2020 09:04	WG1455717
sec-Butylbenzene	U		0.00301	0.0149	1	04/05/2020 09:04	WG1455717
tert-Butylbenzene	U		0.00184	0.00595	1	04/05/2020 09:04	WG1455717
Carbon tetrachloride	U		0.00128	0.00595	1	04/05/2020 09:04	WG1455717
Chlorobenzene	U		0.000682	0.00297	1	04/05/2020 09:04	WG1455717
Chlorodibromomethane	U		0.000535	0.00297	1	04/05/2020 09:04	WG1455717
Chloroethane	U		0.00128	0.00595	1	04/05/2020 09:04	WG1455717
Chloroform	U		0.000494	0.00297	1	04/05/2020 09:04	WG1455717
Chloromethane	U		0.00165	0.0149	1	04/05/2020 09:04	WG1455717
2-Chlorotoluene	U		0.00109	0.00297	1	04/05/2020 09:04	WG1455717
4-Chlorotoluene	U		0.00134	0.00595	1	04/05/2020 09:04	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00607	0.0297	1	04/05/2020 09:04	WG1455717
1,2-Dibromoethane	U		0.000625	0.00297	1	04/05/2020 09:04	WG1455717
Dibromomethane	U		0.00119	0.00595	1	04/05/2020 09:04	WG1455717
1,2-Dichlorobenzene	U		0.00173	0.00595	1	04/05/2020 09:04	WG1455717
1,3-Dichlorobenzene	U		0.00202	0.00595	1	04/05/2020 09:04	WG1455717
1,4-Dichlorobenzene	U		0.00234	0.00595	1	04/05/2020 09:04	WG1455717
Dichlorodifluoromethane	U	J4	0.000973	0.00297	1	04/05/2020 09:04	WG1455717
1,1-Dichloroethane	U		0.000684	0.00297	1	04/05/2020 09:04	WG1455717
1,2-Dichloroethane	U		0.000565	0.00297	1	04/05/2020 09:04	WG1455717
1,1-Dichloroethene	U		0.000595	0.00297	1	04/05/2020 09:04	WG1455717
cis-1,2-Dichloroethene	U		0.000821	0.00297	1	04/05/2020 09:04	WG1455717
trans-1,2-Dichloroethene	U		0.00170	0.00595	1	04/05/2020 09:04	WG1455717
1,2-Dichloropropane	U	J4	0.00151	0.00595	1	04/05/2020 09:04	WG1455717
1,1-Dichloropropene	U		0.000833	0.00297	1	04/05/2020 09:04	WG1455717
1,3-Dichloropropane	U		0.00208	0.00595	1	04/05/2020 09:04	WG1455717
cis-1,3-Dichloropropene	U		0.000807	0.00297	1	04/05/2020 09:04	WG1455717
trans-1,3-Dichloropropene	U		0.00182	0.00595	1	04/05/2020 09:04	WG1455717
2,2-Dichloropropane	U		0.000943	0.00297	1	04/05/2020 09:04	WG1455717
Di-isopropyl ether	U		0.000416	0.00119	1	04/05/2020 09:04	WG1455717
Ethylbenzene	U		0.000631	0.00297	1	04/05/2020 09:04	WG1455717
Hexachloro-1,3-butadiene	U		0.0151	0.0297	1	04/05/2020 09:04	WG1455717
Isopropylbenzene	U		0.00103	0.00297	1	04/05/2020 09:04	WG1455717
p-Isopropyltoluene	U		0.00277	0.00595	1	04/05/2020 09:04	WG1455717
2-Butanone (MEK)	0.0429	B	0.0149	0.0297	1	04/05/2020 09:04	WG1455717
Methylene Chloride	U		0.00790	0.0297	1	04/05/2020 09:04	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0119	0.0297	1	04/05/2020 09:04	WG1455717
Methyl tert-butyl ether	U		0.000351	0.00119	1	04/05/2020 09:04	WG1455717
Naphthalene	U		0.00371	0.0149	1	04/05/2020 09:04	WG1455717
n-Propylbenzene	U		0.00140	0.00595	1	04/05/2020 09:04	WG1455717
Styrene	U		0.00325	0.0149	1	04/05/2020 09:04	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000595	0.00297	1	04/05/2020 09:04	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000464	0.00297	1	04/05/2020 09:04	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000803	0.00297	1	04/05/2020 09:04	WG1455717
Tetrachloroethene	0.00698		0.000833	0.00297	1	04/05/2020 09:04	WG1455717
Toluene	U		0.00149	0.00595	1	04/05/2020 09:04	WG1455717
1,2,3-Trichlorobenzene	U		0.000744	0.0149	1	04/05/2020 09:04	WG1455717
1,2,4-Trichlorobenzene	U		0.00573	0.0149	1	04/05/2020 09:04	WG1455717
1,1,1-Trichloroethane	U		0.000327	0.00297	1	04/05/2020 09:04	WG1455717
1,1,2-Trichloroethane	U		0.00105	0.00297	1	04/05/2020 09:04	WG1455717
Trichloroethene	U		0.000476	0.00119	1	04/05/2020 09:04	WG1455717
Trichlorofluoromethane	U		0.000595	0.00297	1	04/05/2020 09:04	WG1455717
1,2,3-Trichloropropane	U		0.00607	0.0149	1	04/05/2020 09:04	WG1455717
1,2,4-Trimethylbenzene	U		0.00138	0.00595	1	04/05/2020 09:04	WG1455717
1,2,3-Trimethylbenzene	U		0.00137	0.00595	1	04/05/2020 09:04	WG1455717
1,3,5-Trimethylbenzene	U		0.00128	0.00595	1	04/05/2020 09:04	WG1455717
Vinyl chloride	U		0.000813	0.00297	1	04/05/2020 09:04	WG1455717
Xylenes, Total	U		0.00569	0.00773	1	04/05/2020 09:04	WG1455717
(S) Toluene-d8	*104*			*75.0-131*		*04/05/2020 09:04*	WG1455717
(S) 4-Bromofluorobenzene	*95.9*			*67.0-138*		*04/05/2020 09:04*	WG1455717
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*04/05/2020 09:04*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.6		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0172	0.0314	1	04/05/2020 09:23	WG1455717
Acrylonitrile	U		0.00239	0.0157	1	04/05/2020 09:23	WG1455717
Benzene	U		0.000503	0.00126	1	04/05/2020 09:23	WG1455717
Bromobenzene	U		0.00132	0.0157	1	04/05/2020 09:23	WG1455717
Bromodichloromethane	U		0.000990	0.00314	1	04/05/2020 09:23	WG1455717
Bromoform	U		0.00752	0.0314	1	04/05/2020 09:23	WG1455717
Bromomethane	U		0.00465	0.0157	1	04/05/2020 09:23	WG1455717
n-Butylbenzene	U		0.00483	0.0157	1	04/05/2020 09:23	WG1455717
sec-Butylbenzene	U		0.00318	0.0157	1	04/05/2020 09:23	WG1455717
tert-Butylbenzene	U		0.00195	0.00628	1	04/05/2020 09:23	WG1455717
Carbon tetrachloride	U		0.00136	0.00628	1	04/05/2020 09:23	WG1455717
Chlorobenzene	U		0.000720	0.00314	1	04/05/2020 09:23	WG1455717
Chlorodibromomethane	U		0.000566	0.00314	1	04/05/2020 09:23	WG1455717
Chloroethane	U		0.00136	0.00628	1	04/05/2020 09:23	WG1455717
Chloroform	U		0.000522	0.00314	1	04/05/2020 09:23	WG1455717
Chloromethane	U		0.00175	0.0157	1	04/05/2020 09:23	WG1455717
2-Chlorotoluene	U		0.00116	0.00314	1	04/05/2020 09:23	WG1455717
4-Chlorotoluene	U		0.00142	0.00628	1	04/05/2020 09:23	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00641	0.0314	1	04/05/2020 09:23	WG1455717
1,2-Dibromoethane	U		0.000660	0.00314	1	04/05/2020 09:23	WG1455717
Dibromomethane	U		0.00126	0.00628	1	04/05/2020 09:23	WG1455717
1,2-Dichlorobenzene	U		0.00182	0.00628	1	04/05/2020 09:23	WG1455717
1,3-Dichlorobenzene	U		0.00214	0.00628	1	04/05/2020 09:23	WG1455717
1,4-Dichlorobenzene	U		0.00248	0.00628	1	04/05/2020 09:23	WG1455717
Dichlorodifluoromethane	U	J4	0.00103	0.00314	1	04/05/2020 09:23	WG1455717
1,1-Dichloroethane	U		0.000723	0.00314	1	04/05/2020 09:23	WG1455717
1,2-Dichloroethane	U		0.000597	0.00314	1	04/05/2020 09:23	WG1455717
1,1-Dichloroethene	U		0.000628	0.00314	1	04/05/2020 09:23	WG1455717
cis-1,2-Dichloroethene	U		0.000867	0.00314	1	04/05/2020 09:23	WG1455717
trans-1,2-Dichloroethene	U		0.00180	0.00628	1	04/05/2020 09:23	WG1455717
1,2-Dichloropropane	U	J4	0.00160	0.00628	1	04/05/2020 09:23	WG1455717
1,1-Dichloropropene	U		0.000880	0.00314	1	04/05/2020 09:23	WG1455717
1,3-Dichloropropane	U		0.00220	0.00628	1	04/05/2020 09:23	WG1455717
cis-1,3-Dichloropropene	U		0.000852	0.00314	1	04/05/2020 09:23	WG1455717
trans-1,3-Dichloropropene	U		0.00192	0.00628	1	04/05/2020 09:23	WG1455717
2,2-Dichloropropane	U		0.000997	0.00314	1	04/05/2020 09:23	WG1455717
Di-isopropyl ether	U		0.000440	0.00126	1	04/05/2020 09:23	WG1455717
Ethylbenzene	U		0.000666	0.00314	1	04/05/2020 09:23	WG1455717
Hexachloro-1,3-butadiene	U		0.0160	0.0314	1	04/05/2020 09:23	WG1455717
Isopropylbenzene	U		0.00108	0.00314	1	04/05/2020 09:23	WG1455717
p-Isopropyltoluene	U		0.00293	0.00628	1	04/05/2020 09:23	WG1455717
2-Butanone (MEK)	0.0584	B	0.0157	0.0314	1	04/05/2020 09:23	WG1455717
Methylene Chloride	U		0.00835	0.0314	1	04/05/2020 09:23	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0126	0.0314	1	04/05/2020 09:23	WG1455717
Methyl tert-butyl ether	U		0.000371	0.00126	1	04/05/2020 09:23	WG1455717
Naphthalene	U		0.00392	0.0157	1	04/05/2020 09:23	WG1455717
n-Propylbenzene	U		0.00148	0.00628	1	04/05/2020 09:23	WG1455717
Styrene	U		0.00343	0.0157	1	04/05/2020 09:23	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000628	0.00314	1	04/05/2020 09:23	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000490	0.00314	1	04/05/2020 09:23	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000848	0.00314	1	04/05/2020 09:23	WG1455717
Tetrachloroethene	0.0196		0.000880	0.00314	1	04/05/2020 09:23	WG1455717
Toluene	U		0.00157	0.00628	1	04/05/2020 09:23	WG1455717
1,2,3-Trichlorobenzene	U		0.000786	0.0157	1	04/05/2020 09:23	WG1455717
1,2,4-Trichlorobenzene	U		0.00606	0.0157	1	04/05/2020 09:23	WG1455717
1,1,1-Trichloroethane	U		0.000346	0.00314	1	04/05/2020 09:23	WG1455717
1,1,2-Trichloroethane	U		0.00111	0.00314	1	04/05/2020 09:23	WG1455717
Trichloroethene	U		0.000503	0.00126	1	04/05/2020 09:23	WG1455717
Trichlorofluoromethane	U		0.000628	0.00314	1	04/05/2020 09:23	WG1455717
1,2,3-Trichloropropane	U		0.00641	0.0157	1	04/05/2020 09:23	WG1455717
1,2,4-Trimethylbenzene	U		0.00146	0.00628	1	04/05/2020 09:23	WG1455717
1,2,3-Trimethylbenzene	U		0.00145	0.00628	1	04/05/2020 09:23	WG1455717
1,3,5-Trimethylbenzene	U		0.00136	0.00628	1	04/05/2020 09:23	WG1455717
Vinyl chloride	U		0.000859	0.00314	1	04/05/2020 09:23	WG1455717
Xylenes, Total	U		0.00601	0.00817	1	04/05/2020 09:23	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 09:23*	WG1455717
(S) 4-Bromofluorobenzene	*93.5*			*67.0-138*		*04/05/2020 09:23*	WG1455717
(S) 1,2-Dichloroethane-d4	*95.4*			*70.0-130*		*04/05/2020 09:23*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	68.1		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0201	0.0367	1	04/05/2020 09:42	WG1455717
Acrylonitrile	U		0.00279	0.0184	1	04/05/2020 09:42	WG1455717
Benzene	U		0.000588	0.00147	1	04/05/2020 09:42	WG1455717
Bromobenzene	U		0.00154	0.0184	1	04/05/2020 09:42	WG1455717
Bromodichloromethane	U		0.00116	0.00367	1	04/05/2020 09:42	WG1455717
Bromoform	U		0.00878	0.0367	1	04/05/2020 09:42	WG1455717
Bromomethane	U		0.00543	0.0184	1	04/05/2020 09:42	WG1455717
n-Butylbenzene	U		0.00564	0.0184	1	04/05/2020 09:42	WG1455717
sec-Butylbenzene	U		0.00372	0.0184	1	04/05/2020 09:42	WG1455717
tert-Butylbenzene	U		0.00228	0.00734	1	04/05/2020 09:42	WG1455717
Carbon tetrachloride	U		0.00159	0.00734	1	04/05/2020 09:42	WG1455717
Chlorobenzene	U		0.000842	0.00367	1	04/05/2020 09:42	WG1455717
Chlorodibromomethane	U		0.000661	0.00367	1	04/05/2020 09:42	WG1455717
Chloroethane	U		0.00159	0.00734	1	04/05/2020 09:42	WG1455717
Chloroform	U		0.000610	0.00367	1	04/05/2020 09:42	WG1455717
Chloromethane	U		0.00204	0.0184	1	04/05/2020 09:42	WG1455717
2-Chlorotoluene	U		0.00135	0.00367	1	04/05/2020 09:42	WG1455717
4-Chlorotoluene	U		0.00166	0.00734	1	04/05/2020 09:42	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00749	0.0367	1	04/05/2020 09:42	WG1455717
1,2-Dibromoethane	U		0.000771	0.00367	1	04/05/2020 09:42	WG1455717
Dibromomethane	U		0.00147	0.00734	1	04/05/2020 09:42	WG1455717
1,2-Dichlorobenzene	U		0.00213	0.00734	1	04/05/2020 09:42	WG1455717
1,3-Dichlorobenzene	U		0.00250	0.00734	1	04/05/2020 09:42	WG1455717
1,4-Dichlorobenzene	U		0.00289	0.00734	1	04/05/2020 09:42	WG1455717
Dichlorodifluoromethane	U	J4	0.00120	0.00367	1	04/05/2020 09:42	WG1455717
1,1-Dichloroethane	U		0.000845	0.00367	1	04/05/2020 09:42	WG1455717
1,2-Dichloroethane	U		0.000698	0.00367	1	04/05/2020 09:42	WG1455717
1,1-Dichloroethene	U		0.000734	0.00367	1	04/05/2020 09:42	WG1455717
cis-1,2-Dichloroethene	U		0.00101	0.00367	1	04/05/2020 09:42	WG1455717
trans-1,2-Dichloroethene	U		0.00210	0.00734	1	04/05/2020 09:42	WG1455717
1,2-Dichloropropane	U	J4	0.00187	0.00734	1	04/05/2020 09:42	WG1455717
1,1-Dichloropropene	U		0.00103	0.00367	1	04/05/2020 09:42	WG1455717
1,3-Dichloropropane	U		0.00257	0.00734	1	04/05/2020 09:42	WG1455717
cis-1,3-Dichloropropene	U		0.000996	0.00367	1	04/05/2020 09:42	WG1455717
trans-1,3-Dichloropropene	U		0.00225	0.00734	1	04/05/2020 09:42	WG1455717
2,2-Dichloropropane	U		0.00116	0.00367	1	04/05/2020 09:42	WG1455717
Di-isopropyl ether	U		0.000514	0.00147	1	04/05/2020 09:42	WG1455717
Ethylbenzene	U		0.000779	0.00367	1	04/05/2020 09:42	WG1455717
Hexachloro-1,3-butadiene	U		0.0187	0.0367	1	04/05/2020 09:42	WG1455717
Isopropylbenzene	U		0.00127	0.00367	1	04/05/2020 09:42	WG1455717
p-Isopropyltoluene	U		0.00342	0.00734	1	04/05/2020 09:42	WG1455717
2-Butanone (MEK)	0.0527	B	0.0184	0.0367	1	04/05/2020 09:42	WG1455717
Methylene Chloride	U		0.00975	0.0367	1	04/05/2020 09:42	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0147	0.0367	1	04/05/2020 09:42	WG1455717
Methyl tert-butyl ether	U		0.000433	0.00147	1	04/05/2020 09:42	WG1455717
Naphthalene	U		0.00458	0.0184	1	04/05/2020 09:42	WG1455717
n-Propylbenzene	U		0.00173	0.00734	1	04/05/2020 09:42	WG1455717
Styrene	U		0.00401	0.0184	1	04/05/2020 09:42	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000734	0.00367	1	04/05/2020 09:42	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000573	0.00367	1	04/05/2020 09:42	WG1455717

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

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000992	0.00367	1	04/05/2020 09:42	WG1455717
Tetrachloroethene	0.00922		0.00103	0.00367	1	04/05/2020 09:42	WG1455717
Toluene	U		0.00184	0.00734	1	04/05/2020 09:42	WG1455717
1,2,3-Trichlorobenzene	U		0.000918	0.0184	1	04/05/2020 09:42	WG1455717
1,2,4-Trichlorobenzene	U		0.00708	0.0184	1	04/05/2020 09:42	WG1455717
1,1,1-Trichloroethane	U		0.000404	0.00367	1	04/05/2020 09:42	WG1455717
1,1,2-Trichloroethane	U		0.00130	0.00367	1	04/05/2020 09:42	WG1455717
Trichloroethene	U		0.000588	0.00147	1	04/05/2020 09:42	WG1455717
Trichlorofluoromethane	U		0.000734	0.00367	1	04/05/2020 09:42	WG1455717
1,2,3-Trichloropropane	U		0.00749	0.0184	1	04/05/2020 09:42	WG1455717
1,2,4-Trimethylbenzene	U		0.00170	0.00734	1	04/05/2020 09:42	WG1455717
1,2,3-Trimethylbenzene	U		0.00169	0.00734	1	04/05/2020 09:42	WG1455717
1,3,5-Trimethylbenzene	U		0.00159	0.00734	1	04/05/2020 09:42	WG1455717
Vinyl chloride	U		0.00100	0.00367	1	04/05/2020 09:42	WG1455717
Xylenes, Total	U		0.00702	0.00955	1	04/05/2020 09:42	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 09:42*	WG1455717
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*04/05/2020 09:42*	WG1455717
(S) 1,2-Dichloroethane-d4	*91.4*			*70.0-130*		*04/05/2020 09:42*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0206	J	0.0147	0.0268	1	04/05/2020 10:01	WG1455717
Acrylonitrile	U		0.00203	0.0134	1	04/05/2020 10:01	WG1455717
Benzene	U		0.000428	0.00107	1	04/05/2020 10:01	WG1455717
Bromobenzene	U		0.00112	0.0134	1	04/05/2020 10:01	WG1455717
Bromodichloromethane	U		0.000844	0.00268	1	04/05/2020 10:01	WG1455717
Bromoform	U		0.00640	0.0268	1	04/05/2020 10:01	WG1455717
Bromomethane	U		0.00396	0.0134	1	04/05/2020 10:01	WG1455717
n-Butylbenzene	U		0.00411	0.0134	1	04/05/2020 10:01	WG1455717
sec-Butylbenzene	U		0.00271	0.0134	1	04/05/2020 10:01	WG1455717
tert-Butylbenzene	U		0.00166	0.00535	1	04/05/2020 10:01	WG1455717
Carbon tetrachloride	U		0.00116	0.00535	1	04/05/2020 10:01	WG1455717
Chlorobenzene	U		0.000614	0.00268	1	04/05/2020 10:01	WG1455717
Chlorodibromomethane	U		0.000482	0.00268	1	04/05/2020 10:01	WG1455717
Chloroethane	U		0.00116	0.00535	1	04/05/2020 10:01	WG1455717
Chloroform	U		0.000444	0.00268	1	04/05/2020 10:01	WG1455717
Chloromethane	U		0.00149	0.0134	1	04/05/2020 10:01	WG1455717
2-Chlorotoluene	U		0.000985	0.00268	1	04/05/2020 10:01	WG1455717
4-Chlorotoluene	U		0.00121	0.00535	1	04/05/2020 10:01	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00546	0.0268	1	04/05/2020 10:01	WG1455717
1,2-Dibromoethane	U		0.000562	0.00268	1	04/05/2020 10:01	WG1455717
Dibromomethane	U		0.00107	0.00535	1	04/05/2020 10:01	WG1455717
1,2-Dichlorobenzene	U		0.00155	0.00535	1	04/05/2020 10:01	WG1455717
1,3-Dichlorobenzene	U		0.00182	0.00535	1	04/05/2020 10:01	WG1455717
1,4-Dichlorobenzene	U		0.00211	0.00535	1	04/05/2020 10:01	WG1455717
Dichlorodifluoromethane	U	J4	0.000876	0.00268	1	04/05/2020 10:01	WG1455717
1,1-Dichloroethane	U		0.000616	0.00268	1	04/05/2020 10:01	WG1455717
1,2-Dichloroethane	U		0.000509	0.00268	1	04/05/2020 10:01	WG1455717
1,1-Dichloroethene	U		0.000535	0.00268	1	04/05/2020 10:01	WG1455717
cis-1,2-Dichloroethene	U		0.000739	0.00268	1	04/05/2020 10:01	WG1455717
trans-1,2-Dichloroethene	U		0.00153	0.00535	1	04/05/2020 10:01	WG1455717
1,2-Dichloropropane	U	J4	0.00136	0.00535	1	04/05/2020 10:01	WG1455717
1,1-Dichloropropene	U		0.000750	0.00268	1	04/05/2020 10:01	WG1455717
1,3-Dichloropropane	U		0.00187	0.00535	1	04/05/2020 10:01	WG1455717
cis-1,3-Dichloropropene	U		0.000726	0.00268	1	04/05/2020 10:01	WG1455717
trans-1,3-Dichloropropene	U		0.00164	0.00535	1	04/05/2020 10:01	WG1455717
2,2-Dichloropropane	U		0.000849	0.00268	1	04/05/2020 10:01	WG1455717
Di-isopropyl ether	U		0.000375	0.00107	1	04/05/2020 10:01	WG1455717
Ethylbenzene	U		0.000568	0.00268	1	04/05/2020 10:01	WG1455717
Hexachloro-1,3-butadiene	U		0.0136	0.0268	1	04/05/2020 10:01	WG1455717
Isopropylbenzene	U		0.000924	0.00268	1	04/05/2020 10:01	WG1455717
p-Isopropyltoluene	U		0.00250	0.00535	1	04/05/2020 10:01	WG1455717
2-Butanone (MEK)	0.0255	B J	0.0134	0.0268	1	04/05/2020 10:01	WG1455717
Methylene Chloride	U		0.00711	0.0268	1	04/05/2020 10:01	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0107	0.0268	1	04/05/2020 10:01	WG1455717
Methyl tert-butyl ether	U		0.000316	0.00107	1	04/05/2020 10:01	WG1455717
Naphthalene	U		0.00334	0.0134	1	04/05/2020 10:01	WG1455717
n-Propylbenzene	U		0.00126	0.00535	1	04/05/2020 10:01	WG1455717
Styrene	U		0.00292	0.0134	1	04/05/2020 10:01	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000535	0.00268	1	04/05/2020 10:01	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000418	0.00268	1	04/05/2020 10:01	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000723	0.00268	1	04/05/2020 10:01	WG1455717
Tetrachloroethene	0.0259		0.000750	0.00268	1	04/05/2020 10:01	WG1455717
Toluene	0.00908		0.00134	0.00535	1	04/05/2020 10:01	WG1455717
1,2,3-Trichlorobenzene	U		0.000669	0.0134	1	04/05/2020 10:01	WG1455717
1,2,4-Trichlorobenzene	U		0.00516	0.0134	1	04/05/2020 10:01	WG1455717
1,1,1-Trichloroethane	U		0.000295	0.00268	1	04/05/2020 10:01	WG1455717
1,1,2-Trichloroethane	U		0.000946	0.00268	1	04/05/2020 10:01	WG1455717
Trichloroethene	U		0.000428	0.00107	1	04/05/2020 10:01	WG1455717
Trichlorofluoromethane	U		0.000535	0.00268	1	04/05/2020 10:01	WG1455717
1,2,3-Trichloropropane	U		0.00546	0.0134	1	04/05/2020 10:01	WG1455717
1,2,4-Trimethylbenzene	U		0.00124	0.00535	1	04/05/2020 10:01	WG1455717
1,2,3-Trimethylbenzene	U		0.00123	0.00535	1	04/05/2020 10:01	WG1455717
1,3,5-Trimethylbenzene	U		0.00116	0.00535	1	04/05/2020 10:01	WG1455717
Vinyl chloride	U		0.000731	0.00268	1	04/05/2020 10:01	WG1455717
Xylenes, Total	U		0.00512	0.00696	1	04/05/2020 10:01	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 10:01*	WG1455717
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*04/05/2020 10:01*	WG1455717
(S) 1,2-Dichloroethane-d4	*93.4*			*70.0-130*		*04/05/2020 10:01*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.1		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0146	0.0266	1	04/05/2020 10:20	WG1455717
Acrylonitrile	U		0.00202	0.0133	1	04/05/2020 10:20	WG1455717
Benzene	U		0.000425	0.00106	1	04/05/2020 10:20	WG1455717
Bromobenzene	U		0.00112	0.0133	1	04/05/2020 10:20	WG1455717
Bromodichloromethane	U		0.000838	0.00266	1	04/05/2020 10:20	WG1455717
Bromoform	U		0.00636	0.0266	1	04/05/2020 10:20	WG1455717
Bromomethane	U		0.00393	0.0133	1	04/05/2020 10:20	WG1455717
n-Butylbenzene	U		0.00408	0.0133	1	04/05/2020 10:20	WG1455717
sec-Butylbenzene	U		0.00269	0.0133	1	04/05/2020 10:20	WG1455717
tert-Butylbenzene	U		0.00165	0.00532	1	04/05/2020 10:20	WG1455717
Carbon tetrachloride	U		0.00115	0.00532	1	04/05/2020 10:20	WG1455717
Chlorobenzene	U		0.000609	0.00266	1	04/05/2020 10:20	WG1455717
Chlorodibromomethane	U		0.000478	0.00266	1	04/05/2020 10:20	WG1455717
Chloroethane	U		0.00115	0.00532	1	04/05/2020 10:20	WG1455717
Chloroform	U		0.000441	0.00266	1	04/05/2020 10:20	WG1455717
Chloromethane	U		0.00148	0.0133	1	04/05/2020 10:20	WG1455717
2-Chlorotoluene	U		0.000978	0.00266	1	04/05/2020 10:20	WG1455717
4-Chlorotoluene	U		0.00120	0.00532	1	04/05/2020 10:20	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00542	0.0266	1	04/05/2020 10:20	WG1455717
1,2-Dibromoethane	U		0.000558	0.00266	1	04/05/2020 10:20	WG1455717
Dibromomethane	U		0.00106	0.00532	1	04/05/2020 10:20	WG1455717
1,2-Dichlorobenzene	U		0.00154	0.00532	1	04/05/2020 10:20	WG1455717
1,3-Dichlorobenzene	U		0.00181	0.00532	1	04/05/2020 10:20	WG1455717
1,4-Dichlorobenzene	U		0.00209	0.00532	1	04/05/2020 10:20	WG1455717
Dichlorodifluoromethane	U	J4	0.000870	0.00266	1	04/05/2020 10:20	WG1455717
1,1-Dichloroethane	U		0.000611	0.00266	1	04/05/2020 10:20	WG1455717
1,2-Dichloroethane	U		0.000505	0.00266	1	04/05/2020 10:20	WG1455717
1,1-Dichloroethene	U		0.000532	0.00266	1	04/05/2020 10:20	WG1455717
cis-1,2-Dichloroethene	U		0.000734	0.00266	1	04/05/2020 10:20	WG1455717
trans-1,2-Dichloroethene	U		0.00152	0.00532	1	04/05/2020 10:20	WG1455717
1,2-Dichloropropane	U	J4	0.00135	0.00532	1	04/05/2020 10:20	WG1455717
1,1-Dichloropropene	U		0.000744	0.00266	1	04/05/2020 10:20	WG1455717
1,3-Dichloropropane	U		0.00186	0.00532	1	04/05/2020 10:20	WG1455717
cis-1,3-Dichloropropene	U		0.000721	0.00266	1	04/05/2020 10:20	WG1455717
trans-1,3-Dichloropropene	U		0.00163	0.00532	1	04/05/2020 10:20	WG1455717
2,2-Dichloropropane	U		0.000843	0.00266	1	04/05/2020 10:20	WG1455717
Di-isopropyl ether	U		0.000372	0.00106	1	04/05/2020 10:20	WG1455717
Ethylbenzene	U		0.000563	0.00266	1	04/05/2020 10:20	WG1455717
Hexachloro-1,3-butadiene	U		0.0135	0.0266	1	04/05/2020 10:20	WG1455717
Isopropylbenzene	U		0.000917	0.00266	1	04/05/2020 10:20	WG1455717
p-Isopropyltoluene	U		0.00248	0.00532	1	04/05/2020 10:20	WG1455717
2-Butanone (MEK)	0.0165	B J	0.0133	0.0266	1	04/05/2020 10:20	WG1455717
Methylene Chloride	U		0.00706	0.0266	1	04/05/2020 10:20	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0106	0.0266	1	04/05/2020 10:20	WG1455717
Methyl tert-butyl ether	U		0.000314	0.00106	1	04/05/2020 10:20	WG1455717
Naphthalene	U		0.00332	0.0133	1	04/05/2020 10:20	WG1455717
n-Propylbenzene	U		0.00125	0.00532	1	04/05/2020 10:20	WG1455717
Styrene	U		0.00290	0.0133	1	04/05/2020 10:20	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000532	0.00266	1	04/05/2020 10:20	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000415	0.00266	1	04/05/2020 10:20	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000718	0.00266	1	04/05/2020 10:20	WG1455717
Tetrachloroethene	0.0934		0.000744	0.00266	1	04/05/2020 10:20	WG1455717
Toluene	U		0.00133	0.00532	1	04/05/2020 10:20	WG1455717
1,2,3-Trichlorobenzene	U		0.000664	0.0133	1	04/05/2020 10:20	WG1455717
1,2,4-Trichlorobenzene	U		0.00512	0.0133	1	04/05/2020 10:20	WG1455717
1,1,1-Trichloroethane	U		0.000292	0.00266	1	04/05/2020 10:20	WG1455717
1,1,2-Trichloroethane	U		0.000939	0.00266	1	04/05/2020 10:20	WG1455717
Trichloroethene	U		0.000425	0.00106	1	04/05/2020 10:20	WG1455717
Trichlorofluoromethane	U		0.000532	0.00266	1	04/05/2020 10:20	WG1455717
1,2,3-Trichloropropane	U		0.00542	0.0133	1	04/05/2020 10:20	WG1455717
1,2,4-Trimethylbenzene	U		0.00123	0.00532	1	04/05/2020 10:20	WG1455717
1,2,3-Trimethylbenzene	U		0.00122	0.00532	1	04/05/2020 10:20	WG1455717
1,3,5-Trimethylbenzene	U		0.00115	0.00532	1	04/05/2020 10:20	WG1455717
Vinyl chloride	U		0.000726	0.00266	1	04/05/2020 10:20	WG1455717
Xylenes, Total	U		0.00508	0.00691	1	04/05/2020 10:20	WG1455717
(S) Toluene-d8	*106*			*75.0-131*		*04/05/2020 10:20*	WG1455717
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*04/05/2020 10:20*	WG1455717
(S) 1,2-Dichloroethane-d4	*93.1*			*70.0-130*		*04/05/2020 10:20*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.3		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0175	0.0319	1	04/05/2020 10:39	WG1455717
Acrylonitrile	U		0.00243	0.0160	1	04/05/2020 10:39	WG1455717
Benzene	U		0.000511	0.00128	1	04/05/2020 10:39	WG1455717
Bromobenzene	U		0.00134	0.0160	1	04/05/2020 10:39	WG1455717
Bromodichloromethane	U		0.00101	0.00319	1	04/05/2020 10:39	WG1455717
Bromoform	U		0.00764	0.0319	1	04/05/2020 10:39	WG1455717
Bromomethane	U		0.00473	0.0160	1	04/05/2020 10:39	WG1455717
n-Butylbenzene	U		0.00491	0.0160	1	04/05/2020 10:39	WG1455717
sec-Butylbenzene	U		0.00323	0.0160	1	04/05/2020 10:39	WG1455717
tert-Butylbenzene	U		0.00198	0.00639	1	04/05/2020 10:39	WG1455717
Carbon tetrachloride	U		0.00138	0.00639	1	04/05/2020 10:39	WG1455717
Chlorobenzene	U		0.000732	0.00319	1	04/05/2020 10:39	WG1455717
Chlorodibromomethane	U		0.000575	0.00319	1	04/05/2020 10:39	WG1455717
Chloroethane	U		0.00138	0.00639	1	04/05/2020 10:39	WG1455717
Chloroform	U		0.000530	0.00319	1	04/05/2020 10:39	WG1455717
Chloromethane	U		0.00178	0.0160	1	04/05/2020 10:39	WG1455717
2-Chlorotoluene	U		0.00118	0.00319	1	04/05/2020 10:39	WG1455717
4-Chlorotoluene	U		0.00144	0.00639	1	04/05/2020 10:39	WG1455717
1,2-Dibromo-3-Chloropropane	U		0.00652	0.0319	1	04/05/2020 10:39	WG1455717
1,2-Dibromoethane	U		0.000671	0.00319	1	04/05/2020 10:39	WG1455717
Dibromomethane	U		0.00128	0.00639	1	04/05/2020 10:39	WG1455717
1,2-Dichlorobenzene	U		0.00185	0.00639	1	04/05/2020 10:39	WG1455717
1,3-Dichlorobenzene	U		0.00217	0.00639	1	04/05/2020 10:39	WG1455717
1,4-Dichlorobenzene	U		0.00252	0.00639	1	04/05/2020 10:39	WG1455717
Dichlorodifluoromethane	U	J4	0.00104	0.00319	1	04/05/2020 10:39	WG1455717
1,1-Dichloroethane	U		0.000735	0.00319	1	04/05/2020 10:39	WG1455717
1,2-Dichloroethane	U		0.000607	0.00319	1	04/05/2020 10:39	WG1455717
1,1-Dichloroethene	U		0.000639	0.00319	1	04/05/2020 10:39	WG1455717
cis-1,2-Dichloroethene	0.00189	J	0.000881	0.00319	1	04/05/2020 10:39	WG1455717
trans-1,2-Dichloroethene	U		0.00183	0.00639	1	04/05/2020 10:39	WG1455717
1,2-Dichloropropane	U	J4	0.00162	0.00639	1	04/05/2020 10:39	WG1455717
1,1-Dichloropropene	U		0.000894	0.00319	1	04/05/2020 10:39	WG1455717
1,3-Dichloropropane	U		0.00224	0.00639	1	04/05/2020 10:39	WG1455717
cis-1,3-Dichloropropene	U		0.000866	0.00319	1	04/05/2020 10:39	WG1455717
trans-1,3-Dichloropropene	U		0.00195	0.00639	1	04/05/2020 10:39	WG1455717
2,2-Dichloropropane	U		0.00101	0.00319	1	04/05/2020 10:39	WG1455717
Di-isopropyl ether	U		0.000447	0.00128	1	04/05/2020 10:39	WG1455717
Ethylbenzene	U		0.000677	0.00319	1	04/05/2020 10:39	WG1455717
Hexachloro-1,3-butadiene	U		0.0162	0.0319	1	04/05/2020 10:39	WG1455717
Isopropylbenzene	U		0.00110	0.00319	1	04/05/2020 10:39	WG1455717
p-Isopropyltoluene	U		0.00298	0.00639	1	04/05/2020 10:39	WG1455717
2-Butanone (MEK)	0.0487	B	0.0160	0.0319	1	04/05/2020 10:39	WG1455717
Methylene Chloride	U		0.00848	0.0319	1	04/05/2020 10:39	WG1455717
4-Methyl-2-pentanone (MIBK)	U		0.0128	0.0319	1	04/05/2020 10:39	WG1455717
Methyl tert-butyl ether	U		0.000377	0.00128	1	04/05/2020 10:39	WG1455717
Naphthalene	U		0.00399	0.0160	1	04/05/2020 10:39	WG1455717
n-Propylbenzene	U		0.00151	0.00639	1	04/05/2020 10:39	WG1455717
Styrene	U		0.00349	0.0160	1	04/05/2020 10:39	WG1455717
1,1,1,2-Tetrachloroethane	U		0.000639	0.00319	1	04/05/2020 10:39	WG1455717
1,1,2,2-Tetrachloroethane	U		0.000498	0.00319	1	04/05/2020 10:39	WG1455717

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000862	0.00319	1	04/05/2020 10:39	WG1455717
Tetrachloroethene	0.0179		0.000894	0.00319	1	04/05/2020 10:39	WG1455717
Toluene	U		0.00160	0.00639	1	04/05/2020 10:39	WG1455717
1,2,3-Trichlorobenzene	U		0.000798	0.0160	1	04/05/2020 10:39	WG1455717
1,2,4-Trichlorobenzene	U		0.00616	0.0160	1	04/05/2020 10:39	WG1455717
1,1,1-Trichloroethane	U		0.000351	0.00319	1	04/05/2020 10:39	WG1455717
1,1,2-Trichloroethane	U		0.00113	0.00319	1	04/05/2020 10:39	WG1455717
Trichloroethene	0.00309		0.000511	0.00128	1	04/05/2020 10:39	WG1455717
Trichlorofluoromethane	U		0.000639	0.00319	1	04/05/2020 10:39	WG1455717
1,2,3-Trichloropropane	U		0.00652	0.0160	1	04/05/2020 10:39	WG1455717
1,2,4-Trimethylbenzene	U		0.00148	0.00639	1	04/05/2020 10:39	WG1455717
1,2,3-Trimethylbenzene	U		0.00147	0.00639	1	04/05/2020 10:39	WG1455717
1,3,5-Trimethylbenzene	U		0.00138	0.00639	1	04/05/2020 10:39	WG1455717
Vinyl chloride	U		0.000873	0.00319	1	04/05/2020 10:39	WG1455717
Xylenes, Total	U		0.00611	0.00830	1	04/05/2020 10:39	WG1455717
(S) Toluene-d8	*105*			*75.0-131*		*04/05/2020 10:39*	WG1455717
(S) 4-Bromofluorobenzene	*95.0*			*67.0-138*		*04/05/2020 10:39*	WG1455717
(S) 1,2-Dichloroethane-d4	*89.0*			*70.0-130*		*04/05/2020 10:39*	WG1455717

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.1		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0161	0.0294	1	04/04/2020 22:47	WG1455731
Acrylonitrile	U		0.00223	0.0147	1	04/04/2020 22:47	WG1455731
Benzene	U		0.000470	0.00117	1	04/04/2020 22:47	WG1455731
Bromobenzene	U		0.00123	0.0147	1	04/04/2020 22:47	WG1455731
Bromodichloromethane	U		0.000926	0.00294	1	04/04/2020 22:47	WG1455731
Bromoform	U		0.00703	0.0294	1	04/04/2020 22:47	WG1455731
Bromomethane	U		0.00435	0.0147	1	04/04/2020 22:47	WG1455731
n-Butylbenzene	U		0.00451	0.0147	1	04/04/2020 22:47	WG1455731
sec-Butylbenzene	U		0.00297	0.0147	1	04/04/2020 22:47	WG1455731
tert-Butylbenzene	U		0.00182	0.00587	1	04/04/2020 22:47	WG1455731
Carbon tetrachloride	U		0.00127	0.00587	1	04/04/2020 22:47	WG1455731
Chlorobenzene	U		0.000673	0.00294	1	04/04/2020 22:47	WG1455731
Chlorodibromomethane	U		0.000529	0.00294	1	04/04/2020 22:47	WG1455731
Chloroethane	U		0.00127	0.00587	1	04/04/2020 22:47	WG1455731
Chloroform	U		0.000488	0.00294	1	04/04/2020 22:47	WG1455731
Chloromethane	U		0.00163	0.0147	1	04/04/2020 22:47	WG1455731
2-Chlorotoluene	U		0.00108	0.00294	1	04/04/2020 22:47	WG1455731
4-Chlorotoluene	U		0.00133	0.00587	1	04/04/2020 22:47	WG1455731
1,2-Dibromo-3-Chloropropane	U		0.00599	0.0294	1	04/04/2020 22:47	WG1455731
1,2-Dibromoethane	U		0.000617	0.00294	1	04/04/2020 22:47	WG1455731
Dibromomethane	U		0.00117	0.00587	1	04/04/2020 22:47	WG1455731
1,2-Dichlorobenzene	U		0.00170	0.00587	1	04/04/2020 22:47	WG1455731
1,3-Dichlorobenzene	U		0.00200	0.00587	1	04/04/2020 22:47	WG1455731
1,4-Dichlorobenzene	U		0.00231	0.00587	1	04/04/2020 22:47	WG1455731
Dichlorodifluoromethane	U		0.000961	0.00294	1	04/04/2020 22:47	WG1455731
1,1-Dichloroethane	U		0.000676	0.00294	1	04/04/2020 22:47	WG1455731
1,2-Dichloroethane	U		0.000558	0.00294	1	04/04/2020 22:47	WG1455731
1,1-Dichloroethene	U		0.000587	0.00294	1	04/04/2020 22:47	WG1455731
cis-1,2-Dichloroethene	U		0.000811	0.00294	1	04/04/2020 22:47	WG1455731
trans-1,2-Dichloroethene	U		0.00168	0.00587	1	04/04/2020 22:47	WG1455731
1,2-Dichloropropane	U		0.00149	0.00587	1	04/04/2020 22:47	WG1455731
1,1-Dichloropropene	U		0.000822	0.00294	1	04/04/2020 22:47	WG1455731
1,3-Dichloropropane	U		0.00206	0.00587	1	04/04/2020 22:47	WG1455731
cis-1,3-Dichloropropene	U		0.000797	0.00294	1	04/04/2020 22:47	WG1455731
trans-1,3-Dichloropropene	U		0.00180	0.00587	1	04/04/2020 22:47	WG1455731
2,2-Dichloropropane	U		0.000932	0.00294	1	04/04/2020 22:47	WG1455731
Di-isopropyl ether	U		0.000411	0.00117	1	04/04/2020 22:47	WG1455731
Ethylbenzene	U		0.000623	0.00294	1	04/04/2020 22:47	WG1455731
Hexachloro-1,3-butadiene	U		0.0149	0.0294	1	04/04/2020 22:47	WG1455731
Isopropylbenzene	U		0.00101	0.00294	1	04/04/2020 22:47	WG1455731
p-Isopropyltoluene	U		0.00274	0.00587	1	04/04/2020 22:47	WG1455731
2-Butanone (MEK)	0.0204	B J	0.0147	0.0294	1	04/04/2020 22:47	WG1455731
Methylene Chloride	U		0.00780	0.0294	1	04/04/2020 22:47	WG1455731
4-Methyl-2-pentanone (MIBK)	U		0.0117	0.0294	1	04/04/2020 22:47	WG1455731
Methyl tert-butyl ether	U		0.000347	0.00117	1	04/04/2020 22:47	WG1455731
Naphthalene	U		0.00367	0.0147	1	04/04/2020 22:47	WG1455731
n-Propylbenzene	U		0.00139	0.00587	1	04/04/2020 22:47	WG1455731
Styrene	U		0.00321	0.0147	1	04/04/2020 22:47	WG1455731
1,1,1,2-Tetrachloroethane	U		0.000587	0.00294	1	04/04/2020 22:47	WG1455731
1,1,2,2-Tetrachloroethane	U		0.000458	0.00294	1	04/04/2020 22:47	WG1455731

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000793	0.00294	1	04/04/2020 22:47	WG1455731
Tetrachloroethene	0.164		0.000822	0.00294	1	04/04/2020 22:47	WG1455731
Toluene	U		0.00147	0.00587	1	04/04/2020 22:47	WG1455731
1,2,3-Trichlorobenzene	U		0.000734	0.0147	1	04/04/2020 22:47	WG1455731
1,2,4-Trichlorobenzene	U		0.00566	0.0147	1	04/04/2020 22:47	WG1455731
1,1,1-Trichloroethane	U		0.000323	0.00294	1	04/04/2020 22:47	WG1455731
1,1,2-Trichloroethane	U		0.00104	0.00294	1	04/04/2020 22:47	WG1455731
Trichloroethene	0.000665	J	0.000470	0.00117	1	04/04/2020 22:47	WG1455731
Trichlorofluoromethane	U		0.000587	0.00294	1	04/04/2020 22:47	WG1455731
1,2,3-Trichloropropane	U		0.00599	0.0147	1	04/04/2020 22:47	WG1455731
1,2,4-Trimethylbenzene	U		0.00136	0.00587	1	04/04/2020 22:47	WG1455731
1,2,3-Trimethylbenzene	U		0.00135	0.00587	1	04/04/2020 22:47	WG1455731
1,3,5-Trimethylbenzene	U		0.00127	0.00587	1	04/04/2020 22:47	WG1455731
Vinyl chloride	U		0.000802	0.00294	1	04/04/2020 22:47	WG1455731
Xylenes, Total	U		0.00562	0.00764	1	04/04/2020 22:47	WG1455731
(S) Toluene-d8	*115*			*75.0-131*		*04/04/2020 22:47*	WG1455731
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*		*04/04/2020 22:47*	WG1455731
(S) 1,2-Dichloroethane-d4	*89.2*			*70.0-130*		*04/04/2020 22:47*	WG1455731

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

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	04/08/2020 21:27	WG1456967

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0153	0.0280	1	04/04/2020 23:06	WG1455731
Acrylonitrile	U		0.00213	0.0140	1	04/04/2020 23:06	WG1455731
Benzene	U		0.000448	0.00112	1	04/04/2020 23:06	WG1455731
Bromobenzene	U		0.00118	0.0140	1	04/04/2020 23:06	WG1455731
Bromodichloromethane	U		0.000882	0.00280	1	04/04/2020 23:06	WG1455731
Bromoform	U		0.00669	0.0280	1	04/04/2020 23:06	WG1455731
Bromomethane	U		0.00414	0.0140	1	04/04/2020 23:06	WG1455731
n-Butylbenzene	U		0.00430	0.0140	1	04/04/2020 23:06	WG1455731
sec-Butylbenzene	U		0.00283	0.0140	1	04/04/2020 23:06	WG1455731
tert-Butylbenzene	U		0.00173	0.00560	1	04/04/2020 23:06	WG1455731
Carbon tetrachloride	U		0.00121	0.00560	1	04/04/2020 23:06	WG1455731
Chlorobenzene	U		0.000641	0.00280	1	04/04/2020 23:06	WG1455731
Chlorodibromomethane	U		0.000504	0.00280	1	04/04/2020 23:06	WG1455731
Chloroethane	U		0.00121	0.00560	1	04/04/2020 23:06	WG1455731
Chloroform	U		0.000464	0.00280	1	04/04/2020 23:06	WG1455731
Chloromethane	U		0.00156	0.0140	1	04/04/2020 23:06	WG1455731
2-Chlorotoluene	U		0.00103	0.00280	1	04/04/2020 23:06	WG1455731
4-Chlorotoluene	U		0.00126	0.00560	1	04/04/2020 23:06	WG1455731
1,2-Dibromo-3-Chloropropane	U		0.00571	0.0280	1	04/04/2020 23:06	WG1455731
1,2-Dibromoethane	U		0.000588	0.00280	1	04/04/2020 23:06	WG1455731
Dibromomethane	U		0.00112	0.00560	1	04/04/2020 23:06	WG1455731
1,2-Dichlorobenzene	U		0.00162	0.00560	1	04/04/2020 23:06	WG1455731
1,3-Dichlorobenzene	U		0.00190	0.00560	1	04/04/2020 23:06	WG1455731
1,4-Dichlorobenzene	U		0.00220	0.00560	1	04/04/2020 23:06	WG1455731
Dichlorodifluoromethane	U		0.000915	0.00280	1	04/04/2020 23:06	WG1455731
1,1-Dichloroethane	U		0.000643	0.00280	1	04/04/2020 23:06	WG1455731
1,2-Dichloroethane	U		0.000532	0.00280	1	04/04/2020 23:06	WG1455731
1,1-Dichloroethene	U		0.000560	0.00280	1	04/04/2020 23:06	WG1455731
cis-1,2-Dichloroethene	U		0.000772	0.00280	1	04/04/2020 23:06	WG1455731
trans-1,2-Dichloroethene	U		0.00160	0.00560	1	04/04/2020 23:06	WG1455731
1,2-Dichloropropane	U		0.00142	0.00560	1	04/04/2020 23:06	WG1455731
1,1-Dichloropropene	U		0.000783	0.00280	1	04/04/2020 23:06	WG1455731
1,3-Dichloropropane	U		0.00196	0.00560	1	04/04/2020 23:06	WG1455731
cis-1,3-Dichloropropene	U		0.000759	0.00280	1	04/04/2020 23:06	WG1455731
trans-1,3-Dichloropropene	U		0.00171	0.00560	1	04/04/2020 23:06	WG1455731
2,2-Dichloropropane	U		0.000887	0.00280	1	04/04/2020 23:06	WG1455731
Di-isopropyl ether	U		0.000392	0.00112	1	04/04/2020 23:06	WG1455731
Ethylbenzene	U		0.000593	0.00280	1	04/04/2020 23:06	WG1455731
Hexachloro-1,3-butadiene	U		0.0142	0.0280	1	04/04/2020 23:06	WG1455731
Isopropylbenzene	U		0.000966	0.00280	1	04/04/2020 23:06	WG1455731
p-Isopropyltoluene	U		0.00261	0.00560	1	04/04/2020 23:06	WG1455731
2-Butanone (MEK)	0.0489	B	0.0140	0.0280	1	04/04/2020 23:06	WG1455731
Methylene Chloride	U		0.00743	0.0280	1	04/04/2020 23:06	WG1455731
4-Methyl-2-pentanone (MIBK)	U		0.0112	0.0280	1	04/04/2020 23:06	WG1455731
Methyl tert-butyl ether	U		0.000330	0.00112	1	04/04/2020 23:06	WG1455731
Naphthalene	U		0.00349	0.0140	1	04/04/2020 23:06	WG1455731
n-Propylbenzene	U		0.00132	0.00560	1	04/04/2020 23:06	WG1455731
Styrene	U		0.00306	0.0140	1	04/04/2020 23:06	WG1455731
1,1,1,2-Tetrachloroethane	U		0.000560	0.00280	1	04/04/2020 23:06	WG1455731
1,1,2,2-Tetrachloroethane	U		0.000436	0.00280	1	04/04/2020 23:06	WG1455731

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

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000755	0.00280	1	04/04/2020 23:06	WG1455731
Tetrachloroethene	0.0338		0.000783	0.00280	1	04/04/2020 23:06	WG1455731
Toluene	U		0.00140	0.00560	1	04/04/2020 23:06	WG1455731
1,2,3-Trichlorobenzene	U		0.000699	0.0140	1	04/04/2020 23:06	WG1455731
1,2,4-Trichlorobenzene	U		0.00539	0.0140	1	04/04/2020 23:06	WG1455731
1,1,1-Trichloroethane	U		0.000308	0.00280	1	04/04/2020 23:06	WG1455731
1,1,2-Trichloroethane	U		0.000988	0.00280	1	04/04/2020 23:06	WG1455731
Trichloroethene	U		0.000448	0.00112	1	04/04/2020 23:06	WG1455731
Trichlorofluoromethane	U		0.000560	0.00280	1	04/04/2020 23:06	WG1455731
1,2,3-Trichloropropane	U		0.00571	0.0140	1	04/04/2020 23:06	WG1455731
1,2,4-Trimethylbenzene	U		0.00130	0.00560	1	04/04/2020 23:06	WG1455731
1,2,3-Trimethylbenzene	U		0.00129	0.00560	1	04/04/2020 23:06	WG1455731
1,3,5-Trimethylbenzene	U		0.00121	0.00560	1	04/04/2020 23:06	WG1455731
Vinyl chloride	U		0.000764	0.00280	1	04/04/2020 23:06	WG1455731
Xylenes, Total	U		0.00535	0.00727	1	04/04/2020 23:06	WG1455731
(S) Toluene-d8	*114*			*75.0-131*		*04/04/2020 23:06*	WG1455731
(S) 4-Bromofluorobenzene	*89.2*			*67.0-138*		*04/04/2020 23:06*	WG1455731
(S) 1,2-Dichloroethane-d4	*87.1*			*70.0-130*		*04/04/2020 23:06*	WG1455731

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.2		1	04/08/2020 19:42	WG1456968

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0159	0.0290	1	04/04/2020 23:25	WG1455731
Acrylonitrile	U		0.00220	0.0145	1	04/04/2020 23:25	WG1455731
Benzene	U		0.000464	0.00116	1	04/04/2020 23:25	WG1455731
Bromobenzene	U		0.00122	0.0145	1	04/04/2020 23:25	WG1455731
Bromodichloromethane	U		0.000914	0.00290	1	04/04/2020 23:25	WG1455731
Bromoform	U		0.00694	0.0290	1	04/04/2020 23:25	WG1455731
Bromomethane	U		0.00429	0.0145	1	04/04/2020 23:25	WG1455731
n-Butylbenzene	U		0.00446	0.0145	1	04/04/2020 23:25	WG1455731
sec-Butylbenzene	U		0.00294	0.0145	1	04/04/2020 23:25	WG1455731
tert-Butylbenzene	U		0.00180	0.00580	1	04/04/2020 23:25	WG1455731
Carbon tetrachloride	U		0.00125	0.00580	1	04/04/2020 23:25	WG1455731
Chlorobenzene	U		0.000665	0.00290	1	04/04/2020 23:25	WG1455731
Chlorodibromomethane	U		0.000522	0.00290	1	04/04/2020 23:25	WG1455731
Chloroethane	U		0.00125	0.00580	1	04/04/2020 23:25	WG1455731
Chloroform	U		0.000482	0.00290	1	04/04/2020 23:25	WG1455731
Chloromethane	U		0.00161	0.0145	1	04/04/2020 23:25	WG1455731
2-Chlorotoluene	U		0.00107	0.00290	1	04/04/2020 23:25	WG1455731
4-Chlorotoluene	U		0.00131	0.00580	1	04/04/2020 23:25	WG1455731
1,2-Dibromo-3-Chloropropane	U		0.00592	0.0290	1	04/04/2020 23:25	WG1455731
1,2-Dibromoethane	U		0.000609	0.00290	1	04/04/2020 23:25	WG1455731
Dibromomethane	U		0.00116	0.00580	1	04/04/2020 23:25	WG1455731
1,2-Dichlorobenzene	U		0.00168	0.00580	1	04/04/2020 23:25	WG1455731
1,3-Dichlorobenzene	U		0.00197	0.00580	1	04/04/2020 23:25	WG1455731
1,4-Dichlorobenzene	U		0.00229	0.00580	1	04/04/2020 23:25	WG1455731
Dichlorodifluoromethane	U		0.000949	0.00290	1	04/04/2020 23:25	WG1455731
1,1-Dichloroethane	U		0.000667	0.00290	1	04/04/2020 23:25	WG1455731
1,2-Dichloroethane	U		0.000551	0.00290	1	04/04/2020 23:25	WG1455731
1,1-Dichloroethene	U		0.000580	0.00290	1	04/04/2020 23:25	WG1455731
cis-1,2-Dichloroethene	U		0.000801	0.00290	1	04/04/2020 23:25	WG1455731
trans-1,2-Dichloroethene	U		0.00166	0.00580	1	04/04/2020 23:25	WG1455731
1,2-Dichloropropane	U		0.00147	0.00580	1	04/04/2020 23:25	WG1455731
1,1-Dichloropropene	U		0.000812	0.00290	1	04/04/2020 23:25	WG1455731
1,3-Dichloropropane	U		0.00203	0.00580	1	04/04/2020 23:25	WG1455731
cis-1,3-Dichloropropene	U		0.000787	0.00290	1	04/04/2020 23:25	WG1455731
trans-1,3-Dichloropropene	U		0.00178	0.00580	1	04/04/2020 23:25	WG1455731
2,2-Dichloropropane	U		0.000920	0.00290	1	04/04/2020 23:25	WG1455731
Di-isopropyl ether	U		0.000406	0.00116	1	04/04/2020 23:25	WG1455731
Ethylbenzene	U		0.000615	0.00290	1	04/04/2020 23:25	WG1455731
Hexachloro-1,3-butadiene	U		0.0147	0.0290	1	04/04/2020 23:25	WG1455731
Isopropylbenzene	U		0.00100	0.00290	1	04/04/2020 23:25	WG1455731
p-Isopropyltoluene	U		0.00270	0.00580	1	04/04/2020 23:25	WG1455731
2-Butanone (MEK)	0.0303	B	0.0145	0.0290	1	04/04/2020 23:25	WG1455731
Methylene Chloride	U		0.00770	0.0290	1	04/04/2020 23:25	WG1455731
4-Methyl-2-pentanone (MIBK)	U		0.0116	0.0290	1	04/04/2020 23:25	WG1455731
Methyl tert-butyl ether	U		0.000342	0.00116	1	04/04/2020 23:25	WG1455731
Naphthalene	U		0.00362	0.0145	1	04/04/2020 23:25	WG1455731
n-Propylbenzene	U		0.00137	0.00580	1	04/04/2020 23:25	WG1455731
Styrene	U		0.00317	0.0145	1	04/04/2020 23:25	WG1455731
1,1,1,2-Tetrachloroethane	U		0.000580	0.00290	1	04/04/2020 23:25	WG1455731
1,1,2,2-Tetrachloroethane	U		0.000453	0.00290	1	04/04/2020 23:25	WG1455731

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.000783	0.00290	1	04/04/2020 23:25	WG1455731
Tetrachloroethene	0.220		0.000812	0.00290	1	04/04/2020 23:25	WG1455731
Toluene	U		0.00145	0.00580	1	04/04/2020 23:25	WG1455731
1,2,3-Trichlorobenzene	U		0.000725	0.0145	1	04/04/2020 23:25	WG1455731
1,2,4-Trichlorobenzene	U		0.00559	0.0145	1	04/04/2020 23:25	WG1455731
1,1,1-Trichloroethane	U		0.000319	0.00290	1	04/04/2020 23:25	WG1455731
1,1,2-Trichloroethane	U		0.00102	0.00290	1	04/04/2020 23:25	WG1455731
Trichloroethene	U		0.000464	0.00116	1	04/04/2020 23:25	WG1455731
Trichlorofluoromethane	U		0.000580	0.00290	1	04/04/2020 23:25	WG1455731
1,2,3-Trichloropropane	U		0.00592	0.0145	1	04/04/2020 23:25	WG1455731
1,2,4-Trimethylbenzene	U		0.00135	0.00580	1	04/04/2020 23:25	WG1455731
1,2,3-Trimethylbenzene	U		0.00133	0.00580	1	04/04/2020 23:25	WG1455731
1,3,5-Trimethylbenzene	U		0.00125	0.00580	1	04/04/2020 23:25	WG1455731
Vinyl chloride	U		0.000792	0.00290	1	04/04/2020 23:25	WG1455731
Xylenes, Total	U		0.00555	0.00754	1	04/04/2020 23:25	WG1455731
(S) Toluene-d8	*118*			*75.0-131*		*04/04/2020 23:25*	WG1455731
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*		*04/04/2020 23:25*	WG1455731
(S) 1,2-Dichloroethane-d4	*88.1*			*70.0-130*		*04/04/2020 23:25*	WG1455731

Method Blank (MB)

(MB) R3517112-1 04/08/20 22:08

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00400			

L1205553-31 Original Sample (OS) • Duplicate (DUP)

(OS) L1205553-31 04/08/20 22:08 • (DUP) R3517112-3 04/08/20 22:08

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	86.0	85.6	1	0.564		10

Laboratory Control Sample (LCS)

(LCS) R3517112-2 04/08/20 22:08

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3517107-1 04/08/20 21:48

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00200			

L1205565-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1205565-10 04/08/20 21:48 • (DUP) R3517107-3 04/08/20 21:48

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	84.1	84.5	1	0.372		10

Laboratory Control Sample (LCS)

(LCS) R3517107-2 04/08/20 21:48

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3517104-1 04/08/20 21:27

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1205565-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1205565-20 04/08/20 21:27 • (DUP) R3517104-3 04/08/20 21:27

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	82.5	83.2	1	0.844		10

Laboratory Control Sample (LCS)

(LCS) R3517104-2 04/08/20 21:27

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) R3517102-1 04/08/20 19:42

Analyte	MB Result %	MB Qualifier	MB MDL %	MB RDL %
Total Solids	0.00100			

L1205570-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1205570-01 04/08/20 19:42 • (DUP) R3517102-3 04/08/20 19:42

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	71.1	70.8	1	0.424		10

Laboratory Control Sample (LCS)

(LCS) R3517102-2 04/08/20 19:42

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) R3517265-3 04/04/20 18:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Hexachloro-1,3-butadiene	U		0.256	1.00

Method Blank (MB)

(MB) R3517265-3 04/04/20 18:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*119*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3517265-2 04/04/20 17:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	30.2	121	19.0-160	
Acrolein	25.0	0.779	3.12	10.0-160	J4
Acrylonitrile	25.0	21.9	87.6	55.0-149	
Benzene	5.00	4.76	95.2	70.0-123	

Laboratory Control Sample (LCS)

(LCS) R3517265-2 04/04/20 17:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromobenzene	5.00	6.14	123	73.0-121	J4
Bromodichloromethane	5.00	4.68	93.6	75.0-120	
Bromoform	5.00	4.44	88.8	68.0-132	
Bromomethane	5.00	3.84	76.8	10.0-160	
n-Butylbenzene	5.00	6.10	122	73.0-125	
sec-Butylbenzene	5.00	5.63	113	75.0-125	
tert-Butylbenzene	5.00	6.22	124	76.0-124	
Carbon tetrachloride	5.00	4.79	95.8	68.0-126	
Chlorobenzene	5.00	5.09	102	80.0-121	
Chlorodibromomethane	5.00	5.22	104	77.0-125	
Chloroethane	5.00	3.36	67.2	47.0-150	
Chloroform	5.00	4.76	95.2	73.0-120	
Chloromethane	5.00	4.84	96.8	41.0-142	
2-Chlorotoluene	5.00	6.16	123	76.0-123	
4-Chlorotoluene	5.00	6.06	121	75.0-122	
1,2-Dibromo-3-Chloropropane	5.00	4.59	91.8	58.0-134	
1,2-Dibromoethane	5.00	5.42	108	80.0-122	
Dibromomethane	5.00	4.67	93.4	80.0-120	
1,2-Dichlorobenzene	5.00	5.61	112	79.0-121	
1,3-Dichlorobenzene	5.00	5.12	102	79.0-120	
1,4-Dichlorobenzene	5.00	4.96	99.2	79.0-120	
Dichlorodifluoromethane	5.00	6.56	131	51.0-149	
1,1-Dichloroethane	5.00	4.72	94.4	70.0-126	
1,2-Dichloroethane	5.00	4.56	91.2	70.0-128	
1,1-Dichloroethene	5.00	4.70	94.0	71.0-124	
cis-1,2-Dichloroethene	5.00	4.90	98.0	73.0-120	
trans-1,2-Dichloroethene	5.00	4.77	95.4	73.0-120	
1,2-Dichloropropane	5.00	4.62	92.4	77.0-125	
1,1-Dichloropropene	5.00	4.74	94.8	74.0-126	
1,3-Dichloropropane	5.00	5.24	105	80.0-120	
cis-1,3-Dichloropropene	5.00	4.50	90.0	80.0-123	
trans-1,3-Dichloropropene	5.00	4.69	93.8	78.0-124	
2,2-Dichloropropane	5.00	5.23	105	58.0-130	
Di-isopropyl ether	5.00	4.45	89.0	58.0-138	
Ethylbenzene	5.00	4.91	98.2	79.0-123	
Hexachloro-1,3-butadiene	5.00	5.76	115	54.0-138	
Isopropylbenzene	5.00	5.21	104	76.0-127	
p-Isopropyltoluene	5.00	5.19	104	76.0-125	
2-Butanone (MEK)	25.0	24.4	97.6	44.0-160	
Methylene Chloride	5.00	4.98	99.6	67.0-120	

Laboratory Control Sample (LCS)

(LCS) R3517265-2 04/04/20 17:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
4-Methyl-2-pentanone (MIBK)	25.0	21.9	87.6	68.0-142	
Methyl tert-butyl ether	5.00	4.40	88.0	68.0-125	
Naphthalene	5.00	4.58	91.6	54.0-135	
n-Propylbenzene	5.00	6.12	122	77.0-124	
Styrene	5.00	4.68	93.6	73.0-130	
1,1,1,2-Tetrachloroethane	5.00	5.23	105	75.0-125	
1,1,2,2-Tetrachloroethane	5.00	6.33	127	65.0-130	
Tetrachloroethene	5.00	5.10	102	72.0-132	
Toluene	5.00	5.11	102	79.0-120	
1,1,2-Trichlorotrifluoroethane	5.00	4.47	89.4	69.0-132	
1,2,3-Trichlorobenzene	5.00	4.97	99.4	50.0-138	
1,2,4-Trichlorobenzene	5.00	5.28	106	57.0-137	
1,1,1-Trichloroethane	5.00	5.16	103	73.0-124	
1,1,2-Trichloroethane	5.00	5.44	109	80.0-120	
Trichloroethene	5.00	4.72	94.4	78.0-124	
Trichlorofluoromethane	5.00	6.18	124	59.0-147	
1,2,3-Trichloropropane	5.00	6.84	137	73.0-130	J4
1,2,3-Trimethylbenzene	5.00	5.43	109	77.0-120	
1,2,4-Trimethylbenzene	5.00	5.60	112	76.0-121	
1,3,5-Trimethylbenzene	5.00	6.36	127	76.0-122	J4
Vinyl chloride	5.00	4.21	84.2	67.0-131	
Xylenes, Total	15.0	15.2	101	79.0-123	
(S) Toluene-d8			*115*	*80.0-120*	
(S) 4-Bromofluorobenzene			*107*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*100*	*70.0-130*	

Method Blank (MB)

(MB) R3517527-3 04/09/20 18:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Tetrachloroethene	U		0.372	1.00
(S) Toluene-d8	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*94.2*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

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

(LCS) R3517527-1 04/09/20 16:23 • (LCSD) R3517527-2 04/09/20 16:43

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	5.00	4.36	4.51	87.2	90.2	72.0-132			3.38	20
(S) Toluene-d8				*105*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*93.8*	*95.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*111*	*111*	*70.0-130*				

Method Blank (MB)

(MB) R3517285-2 04/05/20 03:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3517285-2 04/05/20 03:49

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0223	J	0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*108*			*75.0-131*
(S) 4-Bromofluorobenzene	*99.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*96.3*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3517285-1 04/05/20 02:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.767	123	10.0-160	
Acrylonitrile	0.625	0.725	116	45.0-153	
Benzene	0.125	0.109	87.2	70.0-123	
Bromobenzene	0.125	0.132	106	73.0-121	
Bromodichloromethane	0.125	0.111	88.8	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3517285-1 04/05/20 02:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.137	110	64.0-132	
Bromomethane	0.125	0.131	105	56.0-147	
n-Butylbenzene	0.125	0.135	108	68.0-135	
sec-Butylbenzene	0.125	0.134	107	74.0-130	
tert-Butylbenzene	0.125	0.119	95.2	75.0-127	
Carbon tetrachloride	0.125	0.107	85.6	66.0-128	
Chlorobenzene	0.125	0.140	112	76.0-128	
Chlorodibromomethane	0.125	0.119	95.2	74.0-127	
Chloroethane	0.125	0.132	106	61.0-134	
Chloroform	0.125	0.0949	75.9	72.0-123	
Chloromethane	0.125	0.117	93.6	51.0-138	
2-Chlorotoluene	0.125	0.140	112	75.0-124	
4-Chlorotoluene	0.125	0.142	114	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.122	97.6	59.0-130	
1,2-Dibromoethane	0.125	0.131	105	74.0-128	
Dibromomethane	0.125	0.136	109	75.0-122	
1,2-Dichlorobenzene	0.125	0.131	105	76.0-124	
1,3-Dichlorobenzene	0.125	0.131	105	76.0-125	
1,4-Dichlorobenzene	0.125	0.120	96.0	77.0-121	
Dichlorodifluoromethane	0.125	0.201	161	43.0-156	J4
1,1-Dichloroethane	0.125	0.107	85.6	70.0-127	
1,2-Dichloroethane	0.125	0.0891	71.3	65.0-131	
1,1-Dichloroethene	0.125	0.126	101	65.0-131	
cis-1,2-Dichloroethene	0.125	0.111	88.8	73.0-125	
trans-1,2-Dichloroethene	0.125	0.123	98.4	71.0-125	
1,2-Dichloropropane	0.125	0.164	131	74.0-125	J4
1,1-Dichloropropene	0.125	0.119	95.2	73.0-125	
1,3-Dichloropropane	0.125	0.125	100	80.0-125	
cis-1,3-Dichloropropene	0.125	0.144	115	76.0-127	
trans-1,3-Dichloropropene	0.125	0.135	108	73.0-127	
2,2-Dichloropropane	0.125	0.109	87.2	59.0-135	
Di-isopropyl ether	0.125	0.131	105	60.0-136	
Ethylbenzene	0.125	0.134	107	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.115	92.0	57.0-150	
Isopropylbenzene	0.125	0.139	111	72.0-127	
p-Isopropyltoluene	0.125	0.131	105	72.0-133	
2-Butanone (MEK)	0.625	0.730	117	30.0-160	
Methylene Chloride	0.125	0.111	88.8	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.773	124	56.0-143	
Methyl tert-butyl ether	0.125	0.118	94.4	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3517285-1 04/05/20 02:52

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.108	86.4	59.0-130	
n-Propylbenzene	0.125	0.136	109	74.0-126	
Styrene	0.125	0.157	126	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.127	102	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.130	104	68.0-128	
Tetrachloroethene	0.125	0.124	99.2	70.0-136	
Toluene	0.125	0.116	92.8	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.140	112	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.120	96.0	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.109	87.2	62.0-137	
1,1,1-Trichloroethane	0.125	0.119	95.2	69.0-126	
1,1,2-Trichloroethane	0.125	0.112	89.6	78.0-123	
Trichloroethene	0.125	0.135	108	76.0-126	
Trichlorofluoromethane	0.125	0.120	96.0	61.0-142	
1,2,3-Trichloropropane	0.125	0.134	107	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.116	92.8	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.115	92.0	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.114	91.2	73.0-127	
Vinyl chloride	0.125	0.164	131	63.0-134	
Xylenes, Total	0.375	0.415	111	72.0-127	
(S) Toluene-d8			*106*	*75.0-131*	
(S) 4-Bromofluorobenzene			*104*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*94.5*	*70.0-130*	

L1205502-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1205502-08 04/05/20 04:37 • (MS) R3517285-3 04/05/20 10:58 • (MSD) R3517285-4 04/05/20 11:18

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.701	0.0711	0.643	0.550	81.5	68.3	1	10.0-160			15.6	40
Acrylonitrile	0.701	U	0.800	0.769	114	110	1	10.0-160			4.01	40
Benzene	0.140	U	0.151	0.158	108	113	1	10.0-149			4.35	37
Bromobenzene	0.140	U	0.181	0.182	129	130	1	10.0-156			0.619	38
Bromodichloromethane	0.140	U	0.148	0.151	106	108	1	10.0-143			2.25	37
Bromoform	0.140	U	0.145	0.153	103	109	1	10.0-146			5.28	36
Bromomethane	0.140	U	0.129	0.142	92.0	102	1	10.0-149			9.92	38
n-Butylbenzene	0.140	U	0.190	0.204	135	146	1	10.0-160			7.41	40
sec-Butylbenzene	0.140	U	0.187	0.204	134	146	1	10.0-159			8.60	39
tert-Butylbenzene	0.140	U	0.167	0.183	119	130	1	10.0-156			8.97	39

L1205502-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1205502-08 04/05/20 04:37 • (MS) R3517285-3 04/05/20 10:58 • (MSD) R3517285-4 04/05/20 11:18

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.140	U	0.144	0.157	102	112	1	10.0-145			8.96	37
Chlorobenzene	0.140	U	0.182	0.186	130	133	1	10.0-152			2.44	39
Chlorodibromomethane	0.140	U	0.144	0.149	102	106	1	10.0-146			3.83	37
Chloroethane	0.140	U	0.117	0.111	83.2	79.1	1	10.0-146			5.03	40
Chloroform	0.140	U	0.140	0.137	100	97.6	1	10.0-146			2.43	37
Chloromethane	0.140	U	0.168	0.187	120	134	1	10.0-159			10.7	37
2-Chlorotoluene	0.140	U	0.191	0.202	136	144	1	10.0-159			5.71	38
4-Chlorotoluene	0.140	U	0.200	0.208	142	148	1	10.0-155			3.86	39
1,2-Dibromo-3-Chloropropane	0.140	U	0.113	0.140	80.8	100	1	10.0-151			21.2	39
1,2-Dibromoethane	0.140	U	0.163	0.166	116	118	1	10.0-148			2.05	34
Dibromomethane	0.140	U	0.176	0.172	126	122	1	10.0-147			2.58	35
1,2-Dichlorobenzene	0.140	U	0.171	0.180	122	128	1	10.0-155			5.13	37
1,3-Dichlorobenzene	0.140	U	0.171	0.182	122	130	1	10.0-153			6.37	38
1,4-Dichlorobenzene	0.140	U	0.159	0.167	114	119	1	10.0-151			4.81	38
Dichlorodifluoromethane	0.140	U	0.258	0.306	184	218	1	10.0-160	J5	J5	17.1	35
1,1-Dichloroethane	0.140	U	0.151	0.151	108	108	1	10.0-147			0.000	37
1,2-Dichloroethane	0.140	U	0.121	0.121	86.4	86.4	1	10.0-148			0.000	35
1,1-Dichloroethene	0.140	U	0.174	0.193	124	138	1	10.0-155			10.4	37
cis-1,2-Dichloroethene	0.140	U	0.153	0.151	109	108	1	10.0-149			0.738	37
trans-1,2-Dichloroethene	0.140	U	0.172	0.175	122	125	1	10.0-150			1.94	37
1,2-Dichloropropane	0.140	U	0.231	0.227	165	162	1	10.0-148	J5	J5	1.96	37
1,1-Dichloropropene	0.140	U	0.165	0.176	118	126	1	10.0-153			6.58	35
1,3-Dichloropropane	0.140	U	0.163	0.168	116	120	1	10.0-154			3.39	35
cis-1,3-Dichloropropene	0.140	U	0.195	0.205	139	146	1	10.0-151			5.04	37
trans-1,3-Dichloropropene	0.140	U	0.172	0.180	122	128	1	10.0-148			4.47	37
2,2-Dichloropropane	0.140	U	0.113	0.131	80.8	93.6	1	10.0-138			14.7	36
Di-isopropyl ether	0.140	U	0.177	0.186	126	133	1	10.0-147			4.94	36
Ethylbenzene	0.140	U	0.173	0.185	123	132	1	10.0-160			6.90	38
Hexachloro-1,3-butadiene	0.140	U	0.127	0.156	90.4	111	1	10.0-160			20.6	40
Isopropylbenzene	0.140	U	0.172	0.181	122	129	1	10.0-155			5.10	38
p-Isopropyltoluene	0.140	U	0.180	0.200	128	142	1	10.0-160			10.7	40
2-Butanone (MEK)	0.701	0.0233	0.822	0.785	114	109	1	10.0-160			4.61	40
Methylene Chloride	0.140	U	0.160	0.172	114	122	1	10.0-141			6.76	37
4-Methyl-2-pentanone (MIBK)	0.701	U	0.898	0.901	128	128	1	10.0-160			0.374	35
Methyl tert-butyl ether	0.140	U	0.128	0.136	91.2	96.8	1	11.0-147			5.96	35
Naphthalene	0.140	U	0.114	0.144	81.6	102	1	10.0-160			22.6	36
n-Propylbenzene	0.140	U	0.201	0.209	143	149	1	10.0-158			3.84	38
Styrene	0.140	U	0.195	0.202	139	144	1	10.0-160			3.39	40
1,1,1,2-Tetrachloroethane	0.140	U	0.146	0.153	104	109	1	10.0-149			4.51	39

L1205502-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1205502-08 04/05/20 04:37 • (MS) R3517285-3 04/05/20 10:58 • (MSD) R3517285-4 04/05/20 11:18

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	0.140	U	0.174	0.183	124	130	1	10.0-160			5.03	35
Tetrachloroethene	0.140	U	0.159	0.171	114	122	1	10.0-156			6.80	39
Toluene	0.140	U	0.154	0.160	110	114	1	10.0-156			4.29	38
1,1,2-Trichlorotrifluoroethane	0.140	U	0.183	0.214	130	153	1	10.0-160			15.8	36
1,2,3-Trichlorobenzene	0.140	U	0.137	0.176	97.6	126	1	10.0-160			25.1	40
1,2,4-Trichlorobenzene	0.140	U	0.121	0.151	86.4	108	1	10.0-160			22.2	40
1,1,1-Trichloroethane	0.140	U	0.160	0.173	114	123	1	10.0-144			7.41	35
1,1,2-Trichloroethane	0.140	U	0.145	0.144	103	102	1	10.0-160			0.778	35
Trichloroethene	0.140	U	0.175	0.185	125	132	1	10.0-156			5.61	38
Trichlorofluoromethane	0.140	U	0.105	0.105	75.0	74.6	1	10.0-160			0.428	40
1,2,3-Trichloropropane	0.140	U	0.169	0.182	121	130	1	10.0-156			7.03	35
1,2,3-Trimethylbenzene	0.140	U	0.158	0.169	113	121	1	10.0-160			6.85	36
1,2,4-Trimethylbenzene	0.140	U	0.162	0.171	115	122	1	10.0-160			5.41	36
1,3,5-Trimethylbenzene	0.140	U	0.164	0.168	117	120	1	10.0-160			2.70	38
Vinyl chloride	0.140	U	0.235	0.267	167	190	1	10.0-160	J5	J5	13.0	37
Xylenes, Total	0.421	U	0.516	0.537	123	128	1	10.0-160			4.05	38
(S) Toluene-d8					*102*	*104*		*75.0-131*				
(S) 4-Bromofluorobenzene					*96.1*	*96.5*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*98.9*	*91.9*		*70.0-130*				

Method Blank (MB)

(MB) R3517312-1 04/04/20 21:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0137	0.0250
Acrylonitrile	U		0.00190	0.0125
Benzene	U		0.000400	0.00100
Bromobenzene	U		0.00105	0.0125
Bromodichloromethane	U		0.000788	0.00250
Bromoform	U		0.00598	0.0250
Bromomethane	U		0.00370	0.0125
n-Butylbenzene	U		0.00384	0.0125
sec-Butylbenzene	U		0.00253	0.0125
tert-Butylbenzene	U		0.00155	0.00500
Carbon tetrachloride	U		0.00108	0.00500
Chlorobenzene	U		0.000573	0.00250
Chlorodibromomethane	U		0.000450	0.00250
Chloroethane	U		0.00108	0.00500
Chloroform	U		0.000415	0.00250
Chloromethane	U		0.00139	0.0125
2-Chlorotoluene	U		0.000920	0.00250
4-Chlorotoluene	U		0.00113	0.00500
1,2-Dibromo-3-Chloropropane	U		0.00510	0.0250
1,2-Dibromoethane	U		0.000525	0.00250
Dibromomethane	U		0.00100	0.00500
1,2-Dichlorobenzene	U		0.00145	0.00500
1,3-Dichlorobenzene	U		0.00170	0.00500
1,4-Dichlorobenzene	U		0.00197	0.00500
Dichlorodifluoromethane	U		0.000818	0.00250
1,1-Dichloroethane	U		0.000575	0.00250
1,2-Dichloroethane	U		0.000475	0.00250
1,1-Dichloroethene	U		0.000500	0.00250
cis-1,2-Dichloroethene	U		0.000690	0.00250
trans-1,2-Dichloroethene	U		0.00143	0.00500
1,2-Dichloropropane	U		0.00127	0.00500
1,1-Dichloropropene	U		0.000700	0.00250
1,3-Dichloropropane	U		0.00175	0.00500
cis-1,3-Dichloropropene	U		0.000678	0.00250
trans-1,3-Dichloropropene	U		0.00153	0.00500
2,2-Dichloropropane	U		0.000793	0.00250
Di-isopropyl ether	U		0.000350	0.00100
Ethylbenzene	U		0.000530	0.00250
Hexachloro-1,3-butadiene	U		0.0127	0.0250
Isopropylbenzene	U		0.000863	0.00250

Method Blank (MB)

(MB) R3517312-1 04/04/20 21:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.00233	0.00500
2-Butanone (MEK)	0.0274		0.0125	0.0250
Methylene Chloride	U		0.00664	0.0250
4-Methyl-2-pentanone (MIBK)	U		0.0100	0.0250
Methyl tert-butyl ether	U		0.000295	0.00100
Naphthalene	U		0.00312	0.0125
n-Propylbenzene	U		0.00118	0.00500
Styrene	U		0.00273	0.0125
1,1,1,2-Tetrachloroethane	U		0.000500	0.00250
1,1,2,2-Tetrachloroethane	U		0.000390	0.00250
Tetrachloroethene	U		0.000700	0.00250
Toluene	U		0.00125	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000675	0.00250
1,2,3-Trichlorobenzene	U		0.000625	0.0125
1,2,4-Trichlorobenzene	U		0.00482	0.0125
1,1,1-Trichloroethane	U		0.000275	0.00250
1,1,2-Trichloroethane	U		0.000883	0.00250
Trichloroethene	U		0.000400	0.00100
Trichlorofluoromethane	U		0.000500	0.00250
1,2,3-Trichloropropane	U		0.00510	0.0125
1,2,3-Trimethylbenzene	U		0.00115	0.00500
1,2,4-Trimethylbenzene	U		0.00116	0.00500
1,3,5-Trimethylbenzene	U		0.00108	0.00500
Vinyl chloride	U		0.000683	0.00250
Xylenes, Total	U		0.00478	0.00650
(S) Toluene-d8	*116*			*75.0-131*
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*87.4*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3517312-2 04/04/20 22:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.625	0.466	74.6	10.0-160	
Acrylonitrile	0.625	0.692	111	45.0-153	
Benzene	0.125	0.112	89.6	70.0-123	
Bromobenzene	0.125	0.123	98.4	73.0-121	
Bromodichloromethane	0.125	0.108	86.4	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3517312-2 04/04/20 22:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromoform	0.125	0.112	89.6	64.0-132	
Bromomethane	0.125	0.110	88.0	56.0-147	
n-Butylbenzene	0.125	0.0936	74.9	68.0-135	
sec-Butylbenzene	0.125	0.106	84.8	74.0-130	
tert-Butylbenzene	0.125	0.0992	79.4	75.0-127	
Carbon tetrachloride	0.125	0.106	84.8	66.0-128	
Chlorobenzene	0.125	0.115	92.0	76.0-128	
Chlorodibromomethane	0.125	0.102	81.6	74.0-127	
Chloroethane	0.125	0.124	99.2	61.0-134	
Chloroform	0.125	0.118	94.4	72.0-123	
Chloromethane	0.125	0.131	105	51.0-138	
2-Chlorotoluene	0.125	0.105	84.0	75.0-124	
4-Chlorotoluene	0.125	0.109	87.2	75.0-124	
1,2-Dibromo-3-Chloropropane	0.125	0.119	95.2	59.0-130	
1,2-Dibromoethane	0.125	0.112	89.6	74.0-128	
Dibromomethane	0.125	0.106	84.8	75.0-122	
1,2-Dichlorobenzene	0.125	0.113	90.4	76.0-124	
1,3-Dichlorobenzene	0.125	0.115	92.0	76.0-125	
1,4-Dichlorobenzene	0.125	0.111	88.8	77.0-121	
Dichlorodifluoromethane	0.125	0.171	137	43.0-156	
1,1-Dichloroethane	0.125	0.113	90.4	70.0-127	
1,2-Dichloroethane	0.125	0.124	99.2	65.0-131	
1,1-Dichloroethene	0.125	0.114	91.2	65.0-131	
cis-1,2-Dichloroethene	0.125	0.116	92.8	73.0-125	
trans-1,2-Dichloroethene	0.125	0.122	97.6	71.0-125	
1,2-Dichloropropane	0.125	0.117	93.6	74.0-125	
1,1-Dichloropropene	0.125	0.106	84.8	73.0-125	
1,3-Dichloropropane	0.125	0.113	90.4	80.0-125	
cis-1,3-Dichloropropene	0.125	0.107	85.6	76.0-127	
trans-1,3-Dichloropropene	0.125	0.110	88.0	73.0-127	
2,2-Dichloropropane	0.125	0.103	82.4	59.0-135	
Di-isopropyl ether	0.125	0.114	91.2	60.0-136	
Ethylbenzene	0.125	0.120	96.0	74.0-126	
Hexachloro-1,3-butadiene	0.125	0.114	91.2	57.0-150	
Isopropylbenzene	0.125	0.107	85.6	72.0-127	
p-Isopropyltoluene	0.125	0.0996	79.7	72.0-133	
2-Butanone (MEK)	0.625	0.607	97.1	30.0-160	
Methylene Chloride	0.125	0.111	88.8	68.0-123	
4-Methyl-2-pentanone (MIBK)	0.625	0.589	94.2	56.0-143	
Methyl tert-butyl ether	0.125	0.118	94.4	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3517312-2 04/04/20 22:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	0.125	0.120	96.0	59.0-130	
n-Propylbenzene	0.125	0.106	84.8	74.0-126	
Styrene	0.125	0.105	84.0	72.0-127	
1,1,1,2-Tetrachloroethane	0.125	0.114	91.2	74.0-129	
1,1,2,2-Tetrachloroethane	0.125	0.134	107	68.0-128	
Tetrachloroethene	0.125	0.131	105	70.0-136	
Toluene	0.125	0.121	96.8	75.0-121	
1,1,2-Trichlorotrifluoroethane	0.125	0.123	98.4	61.0-139	
1,2,3-Trichlorobenzene	0.125	0.131	105	59.0-139	
1,2,4-Trichlorobenzene	0.125	0.124	99.2	62.0-137	
1,1,1-Trichloroethane	0.125	0.117	93.6	69.0-126	
1,1,2-Trichloroethane	0.125	0.120	96.0	78.0-123	
Trichloroethene	0.125	0.106	84.8	76.0-126	
Trichlorofluoromethane	0.125	0.117	93.6	61.0-142	
1,2,3-Trichloropropane	0.125	0.112	89.6	67.0-129	
1,2,3-Trimethylbenzene	0.125	0.0963	77.0	74.0-124	
1,2,4-Trimethylbenzene	0.125	0.0992	79.4	70.0-126	
1,3,5-Trimethylbenzene	0.125	0.111	88.8	73.0-127	
Vinyl chloride	0.125	0.152	122	63.0-134	
Xylenes, Total	0.375	0.337	89.9	72.0-127	
(S) Toluene-d8			*113*	*75.0-131*	
(S) 4-Bromofluorobenzene			*94.4*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*95.4*	*70.0-130*	

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

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	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.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.

Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.
* 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 National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	n/a
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	LAO00356
Kentucky [1 6]	90010	South Carolina	84004
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana [1]	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

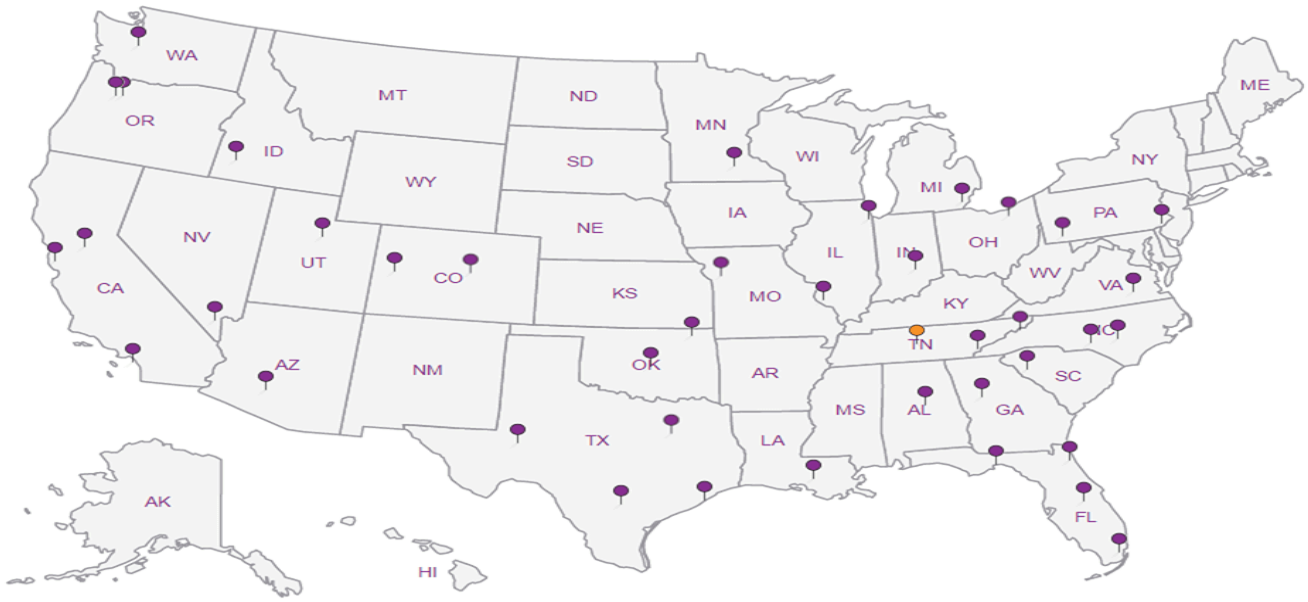
Third Party Federal Accreditations

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

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information:
Accounts Payable- Laura Garcia
120 Westgate Drive
Watsonville, CA 95076

Email To: Lab@weber-hayes.com;ryan@weber-hayes.com;harrison@weber-hayes.com

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Ryan Nyberg

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Please Circle: PT MT CT ET

Phone: 831-722-3580
Fax:

Client Project # 2t009

Lab Project # WEBHAYWCA-2T009

SDG # L1205565
A198

Collected by (print): Ryan Nyberg

Site/Facility ID # 1541 CAPITOLA RD SANTA

P.O. # 2t009

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844
PM: 110 - Brian Ford
PB:
Shipped Via:

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	soil VOCs 8260 40mlAmb/MeOH5ml/Syr	soil dry weight 2ozClr-NoPres	water VOCs 8260 40mlAmb-HCl							Remarks	Sample # (lab only)
GW-1		GW		4/1/20		3			X								~~-01~~ 03
GW-2		GW		4/2/20		↓			X								~~-02~~ 04
GW-3		GW		↓		↓			X								~~-03~~ 05
GW-4		GW		↓		↓			X								~~-04~~ 06
GW-5		GW		↓		↓			X								~~-05~~ 07
GW-6		GW		↓		↓			X								~~-06~~ 08
SV-5-d5		SS ~~GW~~	5	4/1/20		4										HOLD	
SV-5-d15		SS ~~GW~~	15	↓		4										HOLD	
SV-6-d5		SS	5	↓		2										HOLD	
SV-6-d15		SS	15	↓		2										HOLD	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ______

Remarks:

pH ______ Temp ______
Flow ______ Other ______

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Samples returned via:
___ UPS ___ FedEx ___ Courier ______

Tracking # 1275 8660 3922 8

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
[signature]	4/2/20	3:30pm	Fed Ex	2

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C	Bottles Received:	If preservation required by Login: Date/Time
				1.0-.1=.9	24	

Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date:	Time:	Hold:	Condition: NCF / OK
			Sandy yossef	4/3/20	8:20		OK

04-0028

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information:
Accounts Payable- Laura Garcia
120 Westgate Drive
Watsonville, CA 95076

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Ryan Nyberg

Email To: Lab@weber-hayes.com;ryan@weber-hayes.com;harrison@weber-hayes.com

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Please Circle: PT MT CT ET

SDG # L1205565
A199

Phone: 831-722-3580
Fax:

Client Project # 2t009

Lab Project # WEBHAYWCA-2T009

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844
PM: 110 - Brian Ford
PB:
Shipped Via:

Collected by (print): Ryan Nyberg

Site/Facility ID # 1541 CAPITOLA RD SANTA

P.O. # 2t009

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	soil VOCs 8260 40mlAmb/MeOH5ml/Syr	soil dry weight 2oz Clr-NoPres	water VOCs 8260 40mlAmb-HCl	Remarks	Sample # (lab only)
SS-2-d3		SS	3'			2	X	X			-07
SS-2-d4.5		SS	4.5'				X	X			-08
SS-2-d12		SS	12'				X	X			-09
SS-3-d3		SS	3'				X	X			-10
SS-3-d6		SS	6'				X	X			-11
SS-3-d12		SS	12'				X	X			-12
GW-1-d3		SS	3'	4/1/20			X	X			-13
GW-1-d7		SS	7'				X	X			-14
GW-1-d12		SS	12'				X	X			-15
GW-1-d24		SS	24'	↓			X	X			-16

09 10 11 12 13 14 15 16 17 18

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks:

pH ___ Temp ___

Flow ___ Other ___

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: Y N

Samples returned via: ___ UPS ___ FedEx ___ Courier ___

Tracking # 127586039226

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	4-2-20	3:30pm	FedEx
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
			Sandy Yosef

Trip Blank Received: Yes (No) HCL / MeoH TBR

Temp: 1.0 -.1 = .9 AVG

Bottles Received: 20

Date: 4/3/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information:
Accounts Payable- Laura Garcia
120 Westgate Drive
Watsonville, CA 95076

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Report to: Ryan Nyberg

Email To: Lab@weber-hayes.com;ryan@weber-hayes.com;harrison@weber-hayes.com

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Please Circle: PT MT CT ET

SDG # L1205526

Table A200

Phone: 831-722-3580
Fax:

Client Project # 2t009

Lab Project # WEBHAYWCA-2T009

Acctnum: WEBHAYWCA

Template: T165307

Prelogin: P763844

PM: 110 - Brian Ford

PB:

Collected by (print): Ryan Nyberg

Site/Facility ID # 1541 CAPITOLA RD SANTA

P.O. # 2t009

Shipped Via:

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

No. of Cntrs

soil VOCs 8260 40ml Amb/MeOH 5ml/Syr

soil dry weight 2oz Clr-No Pres

water VOCs 8260 40ml Amb-HCl

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	soil VOCs 8260 40ml Amb/MeOH 5ml/Syr	soil dry weight 2oz Clr-No Pres	water VOCs 8260 40ml Amb-HCl	Remarks	Sample # (lab only)	
GW-5-d3		SS	3	4/2/20		2	X	X			-17	19
GW-3-d6		SS	6				X	X			-18	20
GW-3-d12		SS	12				X	X			-19	21
GW-3-d19		SS	19				X	X			-20	22
GW-4-d3		SS	3				X	X			-21	23
GW-4-d6		SS	6				X	X			-22	24
GW-4-d12		SS	12				X	X			-23	25
GW-4-d23		SS	23				X	X			-24	26
SV-1-d5		SS	5	4/1/20						HOLD		
SV-1 d15		SS	15	4/1/20						HOLD		

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other ___

Remarks:

pH ___ Temp ___

Flow ___ Other ___

Sample Receipt Checklist

COC Seal Present/Intact:	Y	N
COC Signed/Accurate:	Y	N
Bottles arrive intact:	Y	N
Correct bottles used:	Y	N
Sufficient volume sent:	Y	N
If Applicable		
VOA Zero Headspace:	Y	N
Preservation Correct/Checked:	Y	N
RAD Screen <0.5 mR/hr:	Y	N

Samples returned via: ___ UPS ___ FedEx ___ Courier ___

Tracking # 127586039226

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	4/2/20	3:30pm	FedEx
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)
			Sandy Yossef

Trip Blank Received: Yes / No (HCL / MeOH / TBR)

Temp: 1.0-1.9 °C

Bottles Received: 18

Date: 4/3/20 Time: 8:30

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Weber, Hayes & Associates - CA

120 Westgate Drive
Watsonville, CA 95076

Billing Information:
Accounts Payable- Laura Garcia
120 Westgate Drive
Watsonville, CA 95076

Price Chk

Report to: Ryan Nyberg

Email To: Lab@weber-hayes.com;ryan@weber-hayes.com;harrison@weber-hayes.com

Project Description: Capitola Rd

City/State Collected: Santa Cruz

Please Circle: PT MT CT ET

Phone: 831-722-3580
Fax:

Client Project # 2t009

Lab Project # WEBHAYWCA-2T009

Collected by (print): Ryan N

Site/Facility ID # 1541 CAPITOLA RD SANTA

P.O. # 2t009

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No of Cntrs	soil VOCs 8260 40ml Amb/MeOH 5ml/5yr	soil dry weight 2oz Clr-NoPres	water VOCs 8260 40ml Amb-HCl									
GW-5-d3		SS	3	4/2/20		2	X	X									35	27
GW-5-d6		SS	6				X	X									26	28
GW-5-d12		SS	12				X	X									27	29
GW-5-d27		SS	27				X	X									28	30
SV-2-d5		SS	5	4/1/20		1										HOLD		
SV-2-d15		SS	15			1												
SV-3-d5		SS	5			1												
SV-3-d15		SS	15			1												
SV-4-d5		SS	5			1												
SV-4-d15		SS	15			1												

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1205565
Table # A201

Acctnum: WEBHAYWCA
Template: T165307
Prelogin: P763844
PM: 110 - Brian Ford
PB:
Shipped Via:

Remarks | Sample # (lab only)

* Matrix
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
___ UPS ___ FedEx ___ Courier _____

Tracking # 127586039126

Sample Receipt Checklist
COC Seal Present/Intact: ___Y ___N
COC Signed/Accurate: ___Y ___N
Bottles arrive intact: ___Y ___N
Correct bottles used: ___Y ___N
Sufficient volume sent: ___Y ___N
If Applicable
VOA Zero Headspace: ___Y ___N
Preservation Correct/Checked: ___Y ___N
RAD Screen <0.5 mR/hr: ___Y ___N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TSP
	4/2/20	3:30pm	FedEx	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.0-1=.9 °C Bottles Received: 14
				If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 4/3/20 Time: 8:30
			Sandy Yossef	Hold: Condition: NCF / OK

Soil Vapor Analysis

–

BC Laboratories, Inc.

Date of Report: 04/08/2020

Harrison Hucks

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Client Project:	Former Fairway Cleaners - 2T009b
BCL Project:	Air Samples - COELT
BCL Work Order:	2009861
Invoice ID:	B376815

Enclosed are the results of analyses for samples received by the laboratory on 4/3/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Sandoval
Client Service Rep

Stuart Buttram
Technical Director

Table of Contents

Chain of Custody and Cooler Receipt Form for 2009861 Page 1 of 3

Weber, Hayes & Associates
Hydrogeology and Environmental Engineering
120 Westgate Dr., Watsonville, CA 95076
(831) 722-3580 Fax: (831) 722-1159
www.weber-hayes.com

CHAIN -OF-CUSTODY RECORD

PAGE 1 OF 1

PROJECT NAME AND JOB #: Former Fairway Cleaners - 2T009b
SEND CERTIFIED RESULTS TO: Weber, Hayes & Associates - Attn: Harrison Hucks
ELECTRONIC DELIVERABLE FORMAT: [X] YES [ ] NO
Sampler: Harrison/Hucks
Date: 4/1/20

LABORATORY: BC Labs
TURNAROUND TIME: [Standard Five-Day] 24hr Rush 48hr Rush 72hr Rush
GLOBAL I.D.: T10000014098

20-09861

GeoTracker Field Point Name (FPN)	Sample ID	Date Sampled	Matrix	SAMPLE CONTAINERS: 40 mL VOAs (preserved)	1.4 L Summa	Tube Sorbent Tube	Liner Acetate or Brass	REQUESTED ANALYSIS – Total Petroleum Hydrocarbons: Extractable as Diesel & Motor Oil with Silica Gel Cleanup	Gasoline by TO-15 GRO	Napthalene by TO-17	Volatile Organics: Full List VOCs EPA Method TO-15 SIM	Full List VOCs EPA Method TO-15	IPA (LCC) EPA Method TO-15	Additional Analysis: Helium (LCC) ASTM D-1946	Oxygen ASTM D-1946	HOLD
SV-1 -1	SV-1-d5	4/1/20	Air		X							X				
SV-1 -2	SV-1-d15											X				
SV-2 -3	SV-2-d5											X				
SV-2 -4	SV-2-d15											X				
SV-3 -5	SV-3-d5											X				
SV-3 -6	SV-3-d15											X				
SV-4 -7	SV-4-d5											X				
SV-4 -8	SV-4-d15											X				
SV-5 -9	SV-5-d5											X				
SV-5 -10	SV-5-d15											X				
SV-6 -11	SV-6-d5											X				
SV-6 -12	SV-6-d15											X				
-13	DUP-A											X				

CHK BY / DISTRIBUTION / SUB-OUT

	RELEASED BY:	Date & Time	RECEIVED BY:	Date & Time	SAMPLE CONDITION: (circle 1)		
1.)	Harrison Hucks	4/1/20 - 1730	PBINS BCL	4/1/20 1730	(Ambient)	Refrigerated	Frozen
2.)	BCL VIA GSO	4/2/20 1610		4/3/20 930	Ambient	Refrigerated	Frozen
3.)					Ambient	Refrigerated	Frozen
4.)					Ambient	Refrigerated	Frozen
5.)					Ambient	Refrigerated	Frozen

NOTES:
[X] Please use MDL (Minimum Detection Limit) for any diluted samples.

ADDITIONAL COMMENTS
*Please email Results to: lab@weber-hayes.com & harrison@weber-hayes.com
* Please Report all Results in ug/m^3.

K:\A\JOBA\JOB2009_Capitola Rd PCE (County & Mid Pen)\Field\Air COC - Summa

Chain of Custody and Cooler Receipt Form for 2009861 Page 2 of 3

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 2

Submission #: 20-09861

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐	Ice Chest ☐ None ☐ Box ☑	YES ☐ NO ☐
BC Lab Field Service ☐ Other ☑ (Specify) GSO	Other ☐ (Specify)	W / S

Refrigerant: Ice ☐ Blue Ice ☐ None ☑ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: — Container: Summa Thermometer ID: —

Temperature: (A) — °C / (C) Room temp °C

Date/Time 4/3/20 @

Analyst Init DWL 930

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER	A	A	A	A	A	A	A	A	A	A

Comments: No flow on Glick

Sample Numbering Completed By: Date/Time: 4.3.20 9.42

A = Actual / C = Corrected

Rev 21 05/23/2016

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Chain of Custody and Cooler Receipt Form for 2009861 Page 3 of 3

BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 2

Submission #: 20-098601

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐ BC Lab Field Service ☐ Other ☑ (Specify) 960	Ice Chest ☐ None ☐ Box ☑ Other ☐ (Specify)_____	YES ☐ NO ☐ W / S

Refrigerant: Ice ☐ Blue Ice ☐ None ☑ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: — Container: Sumas Thermometer ID: —

Temperature: (A) — Room temp °C / (C) — °C

Date/Time 4/3/20 @

Analyst Init DWL 930

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
PT EPA 508/608/8080										
PT EPA 515.1/8150										
PT EPA 525										
PT EPA 525 TRAVEL BLANK										
1ml EPA 547										
1ml EPA 531.1										
oz EPA 548										
T EPA 549										
E EPA 8015M										
T EPA 8270										
z / 16oz / 32oz AMBER										
z / 16oz / 32oz JAR										
IL SLEEVE										
E VIAL										
ASTIC BAG										
EDLAR BAG										
RROUS IRON										
CORE										
ART KIT										
MMA CANISTER	A	A	A							

Comments:

Sample Numbering Completed By: JHH Date/Time: 4.3.20 9.42

A = Actual / C = Corrected

Rev 21 05/23/2016

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2009861-01	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-1-d5	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
			Delivery Work Order:	
			Global ID: T10000014098	
			Location ID (FieldPoint): SV-1-d5	
			Matrix: GS	
			Sample QC Type (SACode): CS	
			Cooler ID:	
2009861-02	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-1-d15	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
			Delivery Work Order:	
			Global ID: T10000014098	
			Location ID (FieldPoint): SV-1-d15	
			Matrix: GS	
			Sample QC Type (SACode): CS	
			Cooler ID:	
2009861-03	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-2-d5	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
			Delivery Work Order:	
			Global ID: T10000014098	
			Location ID (FieldPoint): SV-2-d5	
			Matrix: GS	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2009861-04	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-2-d15	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
	Delivery Work Order:			
	Global ID: T10000014098			
	Location ID (FieldPoint): SV-2-d15			
	Matrix: GS			
	Sample QC Type (SACode): CS			
	Cooler ID:			
2009861-05	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-3-d5	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
	Delivery Work Order:			
	Global ID: T10000014098			
	Location ID (FieldPoint): SV-3-d5			
	Matrix: GS			
	Sample QC Type (SACode): CS			
	Cooler ID:			
2009861-06	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-3-d15	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
	Delivery Work Order:			
	Global ID: T10000014098			
	Location ID (FieldPoint): SV-3-d15			
	Matrix: GS			
	Sample QC Type (SACode): CS			
	Cooler ID:			

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Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
2009861-07	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-4-d5	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
	Delivery Work Order:			
	Global ID: T10000014098			
	Location ID (FieldPoint): SV-4-d5			
	Matrix: GS			
	Sample QC Type (SACode): CS			
	Cooler ID:			
2009861-08	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-4-d15	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
	Delivery Work Order:			
	Global ID: T10000014098			
	Location ID (FieldPoint): SV-4-d15			
	Matrix: GS			
	Sample QC Type (SACode): CS			
	Cooler ID:			
2009861-09	**COC Number:**	---	**Receive Date:**	04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:**	04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SV-5-d5	**Lab Matrix:**	Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:**	Vapor or Air
	Delivery Work Order:			
	Global ID: T10000014098			
	Location ID (FieldPoint): SV-5-d5			
	Matrix: GS			
	Sample QC Type (SACode): CS			
	Cooler ID:			

Weber, Hayes & Associates
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Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
2009861-10	**COC Number:**	---	**Receive Date:** 04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:** 04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	SV-5-d15	**Lab Matrix:** Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:** Vapor or Air
			Delivery Work Order:
			Global ID: T10000014098
			Location ID (FieldPoint): SV-5-d15
			Matrix: GS
			Sample QC Type (SACode): CS
			Cooler ID:
2009861-11	**COC Number:**	---	**Receive Date:** 04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:** 04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	SV-6-d5	**Lab Matrix:** Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:** Vapor or Air
			Delivery Work Order:
			Global ID: T10000014098
			Location ID (FieldPoint): SV-6-d5
			Matrix: GS
			Sample QC Type (SACode): CS
			Cooler ID:
2009861-12	**COC Number:**	---	**Receive Date:** 04/03/2020 09:30
	Project Number:	Former Fairway Cleaners	**Sampling Date:** 04/01/2020 00:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	SV-6-d15	**Lab Matrix:** Air
	Sampled By:	Harrison Hucks of WHAW	**Sample Type:** Vapor or Air
			Delivery Work Order:
			Global ID: T10000014098
			Location ID (FieldPoint): SV-6-d15
			Matrix: GS
			Sample QC Type (SACode): CS
			Cooler ID:

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Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information

2009861-13

COC Number: ---
Project Number: Former Fairway Cleaners
Sampling Location: ---
Sampling Point: DUP-A
Sampled By: Harrison Hucks of WHAW

Receive Date: 04/03/2020 09:30
Sampling Date: 04/01/2020 00:00
Sample Depth: ---
Lab Matrix: Air
Sample Type: Vapor or Air
Delivery Work Order:
Global ID: T10000014098
Location ID (FieldPoint): DUP-A
Matrix: GS
Sample QC Type (SACode): CS
Cooler ID:

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120 Westgate Drive
Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-01 | **Client Sample Name:** Former Fairway Cleaners, SV-1-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**91**	**ug/m3**	**78**	**6.0**	**EPA-TO-15**	ND	**A01**	1
Acrylonitrile	ND	ug/m3	31	3.4	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	31	4.0	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	31	2.5	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	160	9.8	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	78	6.2	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	160	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	31	8.5	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	31	3.9	EPA-TO-15	ND	A01	1
Carbon disulfide	**11**	**ug/m3**	**31**	**2.5**	**EPA-TO-15**	ND	**J,A01**	1
Carbon tetrachloride	ND	ug/m3	78	5.9	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	78	5.1	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	31	5.0	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	78	3.9	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	31	4.5	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	31	2.8	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	78	6.7	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	78	6.4	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	78	6.0	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	78	9.5	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	78	8.5	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	78	5.9	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	78	4.3	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	78	3.3	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	78	3.1	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	31	3.6	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	31	3.1	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	78	4.6	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	78	3.6	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	78	4.6	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	78	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	78	31	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	31	8.4	EPA-TO-15	ND	A01	1

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-01 | **Client Sample Name:** Former Fairway Cleaners, SV-1-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	31	11	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	31	6.2	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	78	5.6	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	78	8.5	EPA-TO-15	ND	A01	1
n-Heptane	**19**	**ug/m3**	**31**	**4.6**	**EPA-TO-15**	ND	**J,A01**	1
Hexachlorobutadiene	ND	ug/m3	160	39	EPA-TO-15	ND	A01	1
Hexane	**48**	**ug/m3**	**78**	**3.1**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	78	5.3	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	31	7.3	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	160	3.7	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	31	6.5	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	78	11	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	31	5.6	EPA-TO-15	ND	A01	1
Propylene	**2000**	**ug/m3**	**62**	**12**	**EPA-TO-15**	ND	**A01**	2
Styrene	ND	ug/m3	78	5.9	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	78	17	EPA-TO-15	ND	A01	1
Tetrachloroethene	ND	ug/m3	31	5.3	EPA-TO-15	ND	A01	1
Tetrahydrofuran	ND	ug/m3	31	6.5	EPA-TO-15	ND	A01	1
Toluene	**28**	**ug/m3**	**31**	**2.9**	**EPA-TO-15**	ND	**J,A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	160	9.0	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	78	4.3	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	78	4.3	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	31	5.9	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	78	4.6	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	78	6.0	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	78	9.9	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	78	23	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	31	4.8	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	31	4.5	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	78	13	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	78	8.2	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	160	22	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	97.3	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

Weber, Hayes & Associates
120 Westgate Drive
Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-01 | **Client Sample Name:** Former Fairway Cleaners, SV-1-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	93.4	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-TO-15	04/07/20 08:56	04/07/20 13:32	BEP	MS-A1	15.500	B074789	EPA TO-15
2	EPA-TO-15	04/07/20 08:56	04/07/20 15:01	BEP	MS-A1	31	B074789	EPA TO-15

Weber, Hayes & Associates
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Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-02 | **Client Sample Name:** Former Fairway Cleaners, SV-1-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**36**	**ug/m3**	**79**	**6.2**	**EPA-TO-15**	ND	**J,A01**	1
Acrylonitrile	ND	ug/m3	32	3.5	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	32	4.1	EPA-TO-15	ND	A01	1
Benzene	**23**	**ug/m3**	**32**	**2.5**	**EPA-TO-15**	ND	**J,A01**	1
Benzyl chloride	ND	ug/m3	160	10	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	79	6.3	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	160	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	32	8.7	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	32	4.0	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	32	2.5	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	79	6.0	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	79	5.2	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	32	5.1	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	79	4.0	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	32	4.6	EPA-TO-15	ND	A01	1
Cyclohexane	**95**	**ug/m3**	**32**	**2.8**	**EPA-TO-15**	ND	**A01**	1
Dibromochloromethane	ND	ug/m3	79	6.8	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	79	6.5	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	79	6.2	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	79	9.6	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	79	8.7	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	79	6.0	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	79	4.4	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	79	3.3	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	79	3.2	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	32	3.6	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	32	3.2	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	79	4.7	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	79	3.6	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	79	4.7	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	79	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	79	32	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	32	8.5	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-02 | **Client Sample Name:** Former Fairway Cleaners, SV-1-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	32	12	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	32	6.3	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	79	5.7	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	79	8.7	EPA-TO-15	ND	A01	1
n-Heptane	**32**	**ug/m3**	**32**	**4.7**	**EPA-TO-15**	ND	**A01**	1
Hexachlorobutadiene	ND	ug/m3	160	40	EPA-TO-15	ND	A01	1
Hexane	**61**	**ug/m3**	**79**	**3.2**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	79	5.4	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	32	7.4	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	160	3.8	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	32	6.6	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	79	11	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	32	5.7	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	32	6.3	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	79	6.0	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	79	17	EPA-TO-15	ND	A01	1
Tetrachloroethene	**760**	**ug/m3**	**32**	**5.4**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	32	6.6	EPA-TO-15	ND	A01	1
Toluene	**87**	**ug/m3**	**32**	**3.0**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	160	9.2	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	79	4.4	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	79	4.4	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	32	6.0	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	79	4.7	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	79	6.2	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	79	10	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	79	24	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	32	4.9	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	32	4.6	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**42**	**ug/m3**	**79**	**13**	**EPA-TO-15**	ND	**J,A01**	1
o-Xylene	ND	ug/m3	79	8.4	EPA-TO-15	ND	A01	1
Total Xylenes	**42**	**ug/m3**	**160**	**22**	**EPA-TO-15**	ND	**J,A01**	1
4-Bromofluorobenzene (Surrogate)	95.7	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-02 | **Client Sample Name:** Former Fairway Cleaners, SV-1-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 14:01	BEP	MS-A1	15.800	B074789	EPA TO-15

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-03 | **Client Sample Name:** Former Fairway Cleaners, SV-2-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**62**	**ug/m3**	**80**	**6.2**	**EPA-TO-15**	ND	**J,A01**	1
Acrylonitrile	ND	ug/m3	32	3.5	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	32	4.2	EPA-TO-15	ND	A01	1
Benzene	**330**	**ug/m3**	**32**	**2.6**	**EPA-TO-15**	ND	**A01**	1
Benzyl chloride	ND	ug/m3	160	10	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	80	6.4	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	160	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	32	8.8	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	32	4.0	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	32	2.6	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	80	6.1	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	80	5.3	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	32	5.1	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	80	4.0	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	32	4.6	EPA-TO-15	ND	A01	1
Cyclohexane	**99**	**ug/m3**	**32**	**2.9**	**EPA-TO-15**	ND	**A01**	1
Dibromochloromethane	ND	ug/m3	80	6.9	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	80	6.6	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	80	6.2	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	80	9.8	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	80	8.8	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	80	6.1	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	80	4.5	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	80	3.4	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	80	3.2	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	32	3.7	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	32	3.2	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	80	4.8	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	80	3.7	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	80	4.8	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	80	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	80	32	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	32	8.6	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-03 | **Client Sample Name:** Former Fairway Cleaners, SV-2-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	**810**	**ug/m3**	**32**	**12**	**EPA-TO-15**	ND	**A01**	1
Ethyl acetate	ND	ug/m3	32	6.4	EPA-TO-15	ND	A01	1
Ethylbenzene	**190**	**ug/m3**	**80**	**5.8**	**EPA-TO-15**	ND	**A01**	1
1-Ethyl-4-methylbenzene	**72**	**ug/m3**	**80**	**8.8**	**EPA-TO-15**	ND	**J,A01**	1
n-Heptane	**490**	**ug/m3**	**32**	**4.8**	**EPA-TO-15**	ND	**A01**	1
Hexachlorobutadiene	ND	ug/m3	160	40	EPA-TO-15	ND	A01	1
Hexane	**150**	**ug/m3**	**80**	**3.2**	**EPA-TO-15**	ND	**A01**	1
2-Hexanone	ND	ug/m3	80	5.4	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	32	7.5	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	160	3.8	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	32	6.7	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	80	11	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	32	5.8	EPA-TO-15	ND	A01	1
Propylene	**360**	**ug/m3**	**32**	**6.4**	**EPA-TO-15**	ND	**A01**	1
Styrene	ND	ug/m3	80	6.1	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	80	18	EPA-TO-15	ND	A01	1
Tetrachloroethene	**130**	**ug/m3**	**32**	**5.4**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	32	6.7	EPA-TO-15	ND	A01	1
Toluene	**1900**	**ug/m3**	**32**	**3.0**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	160	9.3	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	80	4.5	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	80	4.5	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	32	6.1	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	80	4.8	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	80	6.2	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	**71**	**ug/m3**	**80**	**10**	**EPA-TO-15**	ND	**J,A01**	1
1,3,5-Trimethylbenzene	**34**	**ug/m3**	**80**	**24**	**EPA-TO-15**	ND	**J,A01**	1
Vinyl acetate	ND	ug/m3	32	5.0	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	32	4.6	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**680**	**ug/m3**	**80**	**13**	**EPA-TO-15**	ND	**A01**	1
o-Xylene	**200**	**ug/m3**	**80**	**8.5**	**EPA-TO-15**	ND	**A01**	1
Total Xylenes	**870**	**ug/m3**	**160**	**22**	**EPA-TO-15**	ND	**A01**	1
4-Bromofluorobenzene (Surrogate)	97.5	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2009861-03	**Client Sample Name:**	Former Fairway Cleaners, SV-2-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 14:31	BEP	MS-A1	16	B074789	EPA TO-15

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-04 | **Client Sample Name:** Former Fairway Cleaners, SV-2-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	760	59	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	300	33	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	300	39	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	300	24	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	1500	95	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	760	60	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	1500	110	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	300	83	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	300	38	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	300	24	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	760	57	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	760	50	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	300	48	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	760	38	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	300	44	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	300	27	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	760	65	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	760	62	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	760	59	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	760	92	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	760	83	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	760	57	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	760	42	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	760	32	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	760	30	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	300	35	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	300	30	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	760	45	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	760	35	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	760	45	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	760	120	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	760	300	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	300	82	EPA-TO-15	ND	A01	1

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Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-04 | **Client Sample Name:** Former Fairway Cleaners, SV-2-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	300	110	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	300	60	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	760	54	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	760	83	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	300	45	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	1500	380	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	760	30	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	760	51	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	300	71	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	1500	36	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	300	63	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	760	110	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	300	54	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	300	60	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	760	57	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	760	170	EPA-TO-15	ND	A01	1
Tetrachloroethene	**38000**	**ug/m3**	**300**	**51**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	300	63	EPA-TO-15	ND	A01	1
Toluene	**170**	**ug/m3**	**300**	**29**	**EPA-TO-15**	ND	**J,A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	1500	88	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	760	42	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	760	42	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	300	57	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	760	45	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	760	59	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	760	97	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	760	230	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	300	47	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	300	44	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	760	130	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	760	80	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	1500	210	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	104	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2009861-04	**Client Sample Name:**	Former Fairway Cleaners, SV-2-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 17:32	BEP	MS-A1	151	B074789	EPA TO-15

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Watsonville, CA 95076

Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-05 | **Client Sample Name:** Former Fairway Cleaners, SV-3-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**120**	**ug/m3**	**75**	**5.8**	**EPA-TO-15**	ND	**A01**	1
Acrylonitrile	ND	ug/m3	30	3.3	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	30	3.9	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	30	2.4	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	150	9.4	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	75	6.0	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	150	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	30	8.2	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	30	3.8	EPA-TO-15	ND	A01	1
Carbon disulfide	**21**	**ug/m3**	**30**	**2.4**	**EPA-TO-15**	ND	**J,A01**	1
Carbon tetrachloride	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	75	5.0	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	30	4.8	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	75	3.8	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	30	4.4	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	30	2.7	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	75	6.4	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	75	6.2	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	75	9.2	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	75	8.2	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	75	3.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	75	3.0	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	**21**	**ug/m3**	**30**	**3.4**	**EPA-TO-15**	ND	**J,A01**	1
trans-1,2-Dichloroethene	ND	ug/m3	30	3.0	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	75	3.4	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	75	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	75	30	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	30	8.1	EPA-TO-15	ND	A01	1

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-05 | **Client Sample Name:** Former Fairway Cleaners, SV-3-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	30	11	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	30	6.0	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	75	5.4	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	75	8.2	EPA-TO-15	ND	A01	1
n-Heptane	**15**	**ug/m3**	**30**	**4.5**	**EPA-TO-15**	ND	**J,A01**	1
Hexachlorobutadiene	ND	ug/m3	150	38	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	75	3.0	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	75	5.1	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	30	7.0	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	150	3.6	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	30	6.3	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	75	10	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	30	5.4	EPA-TO-15	ND	A01	1
Propylene	**400**	**ug/m3**	**30**	**6.0**	**EPA-TO-15**	ND	**A01**	1
Styrene	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	75	16	EPA-TO-15	ND	A01	1
Tetrachloroethene	**250**	**ug/m3**	**30**	**5.1**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	30	6.3	EPA-TO-15	ND	A01	1
Toluene	**82**	**ug/m3**	**30**	**2.8**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	150	8.7	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	30	5.7	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	75	9.6	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	75	22	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	30	4.6	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	30	4.4	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	75	12	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	75	8.0	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	150	21	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	95.5	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-05 | **Client Sample Name:** Former Fairway Cleaners, SV-3-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 15:29	BEP	MS-A1	15	B074789	EPA TO-15

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-06 | **Client Sample Name:** Former Fairway Cleaners, SV-3-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	720	56	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	290	32	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	290	37	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	290	23	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	1400	91	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	720	58	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	1400	100	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	290	79	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	290	36	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	290	23	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	720	55	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	720	48	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	290	46	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	720	36	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	290	42	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	290	26	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	720	62	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	720	59	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	720	56	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	720	88	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	720	79	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	720	55	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	720	40	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	720	30	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	720	29	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	290	33	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	290	29	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	720	43	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	720	33	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	720	43	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	720	110	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	720	290	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	290	78	EPA-TO-15	ND	A01	1

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-06 | **Client Sample Name:** Former Fairway Cleaners, SV-3-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	290	110	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	290	58	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	720	52	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	720	79	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	290	43	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	1400	360	EPA-TO-15	ND	A01	1
Hexane	**470**	**ug/m3**	**720**	**29**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	720	49	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	290	68	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	1400	35	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	290	60	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	720	100	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	290	52	EPA-TO-15	ND	A01	1
Propylene	**150**	**ug/m3**	**290**	**58**	**EPA-TO-15**	ND	**J,A01**	1
Styrene	ND	ug/m3	720	55	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	720	160	EPA-TO-15	ND	A01	1
Tetrachloroethene	**110000**	**ug/m3**	**2900**	**490**	**EPA-TO-15**	ND	**A01**	2
Tetrahydrofuran	ND	ug/m3	290	60	EPA-TO-15	ND	A01	1
Toluene	ND	ug/m3	290	27	EPA-TO-15	ND	A01	1
1,2,4-Trichlorobenzene	ND	ug/m3	1400	84	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	720	40	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	720	40	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	290	55	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	720	43	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	720	56	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	720	92	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	720	220	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	290	45	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	290	42	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	720	120	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	720	76	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	1400	200	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	106	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-06 | **Client Sample Name:** Former Fairway Cleaners, SV-3-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	96.2	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-TO-15	04/07/20 08:56	04/07/20 18:07	BEP	MS-A1	144	B074789	EPA TO-15
2	EPA-TO-15	04/07/20 08:56	04/07/20 21:21	BEP	MS-A1	1440	B074789	EPA TO-15

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-07 | **Client Sample Name:** Former Fairway Cleaners, SV-4-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**150**	**ug/m3**	**80**	**6.2**	**EPA-TO-15**	ND	**A01**	1
Acrylonitrile	ND	ug/m3	32	3.5	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	32	4.1	EPA-TO-15	ND	A01	1
Benzene	**150**	**ug/m3**	**32**	**2.5**	**EPA-TO-15**	ND	**A01**	1
Benzyl chloride	ND	ug/m3	160	10	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	80	6.4	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	160	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	32	8.7	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	32	4.0	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	32	2.5	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	80	6.0	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	80	5.2	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	32	5.1	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	80	4.0	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	32	4.6	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	32	2.9	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	80	6.8	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	80	6.5	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	80	6.2	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	80	9.7	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	80	8.7	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	80	6.0	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	80	4.5	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	80	3.3	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	80	3.2	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	32	3.7	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	32	3.2	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	80	4.8	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	80	3.7	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	80	4.8	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	80	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	80	32	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	32	8.6	EPA-TO-15	ND	A01	1

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-07 | **Client Sample Name:** Former Fairway Cleaners, SV-4-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	**63**	**ug/m3**	**32**	**12**	**EPA-TO-15**	ND	**A01**	1
Ethyl acetate	ND	ug/m3	32	6.4	EPA-TO-15	ND	A01	1
Ethylbenzene	**81**	**ug/m3**	**80**	**5.7**	**EPA-TO-15**	ND	**A01**	1
1-Ethyl-4-methylbenzene	**28**	**ug/m3**	**80**	**8.7**	**EPA-TO-15**	ND	**J,A01**	1
n-Heptane	**180**	**ug/m3**	**32**	**4.8**	**EPA-TO-15**	ND	**A01**	1
Hexachlorobutadiene	ND	ug/m3	160	40	EPA-TO-15	ND	A01	1
Hexane	**79**	**ug/m3**	**80**	**3.2**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	80	5.4	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	32	7.5	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	160	3.8	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	32	6.7	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	80	11	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	32	5.7	EPA-TO-15	ND	A01	1
Propylene	**2800**	**ug/m3**	**64**	**13**	**EPA-TO-15**	ND	**A01**	2
Styrene	ND	ug/m3	80	6.0	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	80	17	EPA-TO-15	ND	A01	1
Tetrachloroethene	**130**	**ug/m3**	**32**	**5.4**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	32	6.7	EPA-TO-15	ND	A01	1
Toluene	**810**	**ug/m3**	**32**	**3.0**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	160	9.2	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	80	4.5	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	80	4.5	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	32	6.0	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	80	4.8	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	80	6.2	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	**26**	**ug/m3**	**80**	**10**	**EPA-TO-15**	ND	**J,A01**	1
1,3,5-Trimethylbenzene	ND	ug/m3	80	24	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	32	4.9	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	32	4.6	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**280**	**ug/m3**	**80**	**13**	**EPA-TO-15**	ND	**A01**	1
o-Xylene	**83**	**ug/m3**	**80**	**8.4**	**EPA-TO-15**	ND	**A01**	1
Total Xylenes	**370**	**ug/m3**	**160**	**22**	**EPA-TO-15**	ND	**A01**	1
4-Bromofluorobenzene (Surrogate)	97.8	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-07 | **Client Sample Name:** Former Fairway Cleaners, SV-4-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	104	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-TO-15	04/07/20 08:56	04/07/20 15:58	BEP	MS-A1	15.900	B074789	EPA TO-15
2	EPA-TO-15	04/07/20 08:56	04/07/20 22:55	BEP	MS-A1	31.800	B074789	EPA TO-15

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-08 | **Client Sample Name:** Former Fairway Cleaners, SV-4-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	780	61	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	310	35	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	310	41	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	310	25	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	1600	99	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	780	63	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	1600	110	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	310	86	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	310	39	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	310	25	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	780	60	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	780	52	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	310	50	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	780	39	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	310	46	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	310	28	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	780	68	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	780	64	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	780	61	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	780	96	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	780	86	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	780	60	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	780	44	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	780	33	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	780	31	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	310	36	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	310	31	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	780	47	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	780	36	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	780	47	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	780	120	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	780	310	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	310	85	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-08 | **Client Sample Name:** Former Fairway Cleaners, SV-4-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	310	120	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	310	63	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	780	57	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	780	86	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	310	47	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	1600	390	EPA-TO-15	ND	A01	1
Hexane	**770**	**ug/m3**	**780**	**31**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	780	53	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	310	74	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	1600	38	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	310	66	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	780	110	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	310	57	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	310	63	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	780	60	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	780	170	EPA-TO-15	ND	A01	1
Tetrachloroethene	**43000**	**ug/m3**	**310**	**53**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	310	66	EPA-TO-15	ND	A01	1
Toluene	ND	ug/m3	310	30	EPA-TO-15	ND	A01	1
1,2,4-Trichlorobenzene	ND	ug/m3	1600	91	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	780	44	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	780	44	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	310	60	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	780	47	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	780	61	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	780	100	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	780	240	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	310	49	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	310	46	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	780	130	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	780	83	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	1600	220	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	108	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2009861-08	**Client Sample Name:**	Former Fairway Cleaners, SV-4-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 18:43	BEP	MS-A1	157	B074789	EPA TO-15

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-09 | **Client Sample Name:** Former Fairway Cleaners, SV-5-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	30	3.3	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	30	3.9	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	30	2.4	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	150	9.4	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	75	6.0	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	150	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	30	8.2	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	30	3.8	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	30	2.4	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	75	5.0	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	30	4.8	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	75	3.8	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	30	4.4	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	30	2.7	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	75	6.4	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	75	6.2	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	75	9.2	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	75	8.2	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	75	3.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	75	3.0	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	30	3.4	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	30	3.0	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	75	3.4	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	75	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	75	30	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	30	8.1	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-09 | **Client Sample Name:** Former Fairway Cleaners, SV-5-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	30	11	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	30	6.0	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	75	5.4	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	75	8.2	EPA-TO-15	ND	A01	1
n-Heptane	**16**	**ug/m3**	**30**	**4.5**	**EPA-TO-15**	ND	**J,A01**	1
Hexachlorobutadiene	ND	ug/m3	150	38	EPA-TO-15	ND	A01	1
Hexane	**46**	**ug/m3**	**75**	**3.0**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	75	5.1	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	30	7.0	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	150	3.6	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	30	6.3	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	75	10	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	30	5.4	EPA-TO-15	ND	A01	1
Propylene	**230**	**ug/m3**	**30**	**6.0**	**EPA-TO-15**	ND	**A01**	1
Styrene	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	75	16	EPA-TO-15	ND	A01	1
Tetrachloroethene	**100**	**ug/m3**	**30**	**5.1**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	30	6.3	EPA-TO-15	ND	A01	1
Toluene	**18**	**ug/m3**	**30**	**2.8**	**EPA-TO-15**	ND	**J,A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	150	8.7	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	30	5.7	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	75	9.6	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	75	22	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	30	4.6	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	30	4.4	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	75	12	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	75	8.0	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	150	21	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	93.6	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2009861-09	**Client Sample Name:**	Former Fairway Cleaners, SV-5-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 16:28	BEP	MS-A1	15	B074789	EPA TO-15

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-10 | **Client Sample Name:** Former Fairway Cleaners, SV-5-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	770	60	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	310	34	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	310	40	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	310	25	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	1500	97	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	770	62	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	1500	110	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	310	85	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	310	38	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	310	25	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	770	59	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	770	51	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	310	49	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	770	38	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	310	45	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	310	28	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	770	66	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	770	63	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	770	60	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	770	94	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	770	85	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	770	59	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	770	43	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	770	32	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	770	31	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	310	35	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	310	31	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	770	46	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	770	35	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	770	46	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	770	120	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	770	310	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	310	83	EPA-TO-15	ND	A01	1

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Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-10 | **Client Sample Name:** Former Fairway Cleaners, SV-5-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	310	110	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	310	62	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	770	55	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	770	85	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	310	46	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	1500	380	EPA-TO-15	ND	A01	1
Hexane	**910**	**ug/m3**	**770**	**31**	**EPA-TO-15**	ND	**A01**	1
2-Hexanone	ND	ug/m3	770	52	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	310	72	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	1500	37	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	310	65	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	770	110	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	310	55	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	310	62	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	770	59	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	770	170	EPA-TO-15	ND	A01	1
Tetrachloroethene	**64000**	**ug/m3**	**3100**	**520**	**EPA-TO-15**	ND	**A01**	2
Tetrahydrofuran	ND	ug/m3	310	65	EPA-TO-15	ND	A01	1
Toluene	**170**	**ug/m3**	**310**	**29**	**EPA-TO-15**	ND	**J,A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	1500	89	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	770	43	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	770	43	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	310	59	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	770	46	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	770	60	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	770	99	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	770	230	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	310	48	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	310	45	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	770	130	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	770	82	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	1500	220	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	108	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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120 Westgate Drive
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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-10 | **Client Sample Name:** Former Fairway Cleaners, SV-5-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	100	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-TO-15	04/07/20 08:56	04/07/20 19:18	BEP	MS-A1	154	B074789	EPA TO-15
2	EPA-TO-15	04/07/20 08:56	04/07/20 21:50	BEP	MS-A1	1540	B074789	EPA TO-15

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-11 | **Client Sample Name:** Former Fairway Cleaners, SV-6-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	76	6.0	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	31	3.4	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	31	4.0	EPA-TO-15	ND	A01	1
Benzene	**10**	**ug/m3**	**31**	**2.4**	**EPA-TO-15**	ND	**J,A01**	1
Benzyl chloride	ND	ug/m3	150	9.6	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	76	6.1	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	150	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	31	8.4	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	31	3.8	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	31	2.4	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	76	5.8	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	76	5.0	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	31	4.9	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	76	3.8	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	31	4.4	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	31	2.8	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	76	6.6	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	76	6.3	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	76	6.0	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	76	9.3	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	76	8.4	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	76	5.8	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	76	4.3	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	76	3.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	76	3.1	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	**170**	**ug/m3**	**31**	**3.5**	**EPA-TO-15**	ND	**A01**	1
trans-1,2-Dichloroethene	ND	ug/m3	31	3.1	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	76	4.6	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	76	3.5	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	76	4.6	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	76	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	76	31	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	31	8.3	EPA-TO-15	ND	A01	1

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-11 | **Client Sample Name:** Former Fairway Cleaners, SV-6-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	31	11	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	31	6.1	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	76	5.5	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	76	8.4	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	31	4.6	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	150	38	EPA-TO-15	ND	A01	1
Hexane	**41**	**ug/m3**	**76**	**3.1**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	76	5.2	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	31	7.2	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	150	3.7	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	31	6.4	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	76	11	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	31	5.5	EPA-TO-15	ND	A01	1
Propylene	**220**	**ug/m3**	**31**	**6.1**	**EPA-TO-15**	ND	**A01**	1
Styrene	ND	ug/m3	76	5.8	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	76	17	EPA-TO-15	ND	A01	1
Tetrachloroethene	**1400**	**ug/m3**	**31**	**5.2**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	31	6.4	EPA-TO-15	ND	A01	1
Toluene	**37**	**ug/m3**	**31**	**2.9**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	150	8.9	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	76	4.3	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	76	4.3	EPA-TO-15	ND	A01	1
Trichloroethene	**120**	**ug/m3**	**31**	**5.8**	**EPA-TO-15**	ND	**A01**	1
Trichlorofluoromethane	ND	ug/m3	76	4.6	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	76	6.0	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	76	9.8	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	76	23	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	31	4.7	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	31	4.4	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	76	13	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	76	8.1	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	150	21	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	93.4	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID:	2009861-11	**Client Sample Name:**	Former Fairway Cleaners, SV-6-d5, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 16:57	BEP	MS-A1	15.300	B074789	EPA TO-15

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-12 | **Client Sample Name:** Former Fairway Cleaners, SV-6-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	ND	ug/m3	740	58	EPA-TO-15	ND	A01	1
Acrylonitrile	ND	ug/m3	300	33	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	300	38	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	300	24	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	1500	93	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	740	59	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	1500	110	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	300	81	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	300	37	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	300	24	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	740	56	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	740	49	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	300	47	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	740	37	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	300	43	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	300	27	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	740	64	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	740	61	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	740	58	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	740	90	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	740	81	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	740	56	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	740	41	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	740	31	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	740	30	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	300	34	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	300	30	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	740	44	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	740	34	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	740	44	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	740	110	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	740	300	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	300	80	EPA-TO-15	ND	A01	1

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Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-12 | **Client Sample Name:** Former Fairway Cleaners, SV-6-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	ND	ug/m3	300	110	EPA-TO-15	ND	A01	1
Ethyl acetate	ND	ug/m3	300	59	EPA-TO-15	ND	A01	1
Ethylbenzene	ND	ug/m3	740	53	EPA-TO-15	ND	A01	1
1-Ethyl-4-methylbenzene	ND	ug/m3	740	81	EPA-TO-15	ND	A01	1
n-Heptane	ND	ug/m3	300	44	EPA-TO-15	ND	A01	1
Hexachlorobutadiene	ND	ug/m3	1500	370	EPA-TO-15	ND	A01	1
Hexane	ND	ug/m3	740	30	EPA-TO-15	ND	A01	1
2-Hexanone	ND	ug/m3	740	50	EPA-TO-15	ND	A01	1
Isopropyl alcohol	ND	ug/m3	300	70	EPA-TO-15	ND	A01	1
Methylene chloride	ND	ug/m3	1500	36	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	300	62	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	740	100	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	300	53	EPA-TO-15	ND	A01	1
Propylene	ND	ug/m3	300	59	EPA-TO-15	ND	A01	1
Styrene	ND	ug/m3	740	56	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	740	160	EPA-TO-15	ND	A01	1
Tetrachloroethene	**1500000**	**ug/m3**	**30000**	**5000**	**EPA-TO-15**	ND	**A01**	2
Tetrahydrofuran	ND	ug/m3	300	62	EPA-TO-15	ND	A01	1
Toluene	**300**	**ug/m3**	**300**	**28**	**EPA-TO-15**	ND	**A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	1500	86	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	740	41	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	740	41	EPA-TO-15	ND	A01	1
Trichloroethene	**1600**	**ug/m3**	**300**	**56**	**EPA-TO-15**	ND	**A01**	1
Trichlorofluoromethane	ND	ug/m3	740	44	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	740	58	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	ND	ug/m3	740	95	EPA-TO-15	ND	A01	1
1,3,5-Trimethylbenzene	ND	ug/m3	740	220	EPA-TO-15	ND	A01	1
Vinyl acetate	ND	ug/m3	300	46	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	300	43	EPA-TO-15	ND	A01	1
p- & m-Xylenes	ND	ug/m3	740	120	EPA-TO-15	ND	A01	1
o-Xylene	ND	ug/m3	740	78	EPA-TO-15	ND	A01	1
Total Xylenes	ND	ug/m3	1500	210	EPA-TO-15	ND	A01	1
4-Bromofluorobenzene (Surrogate)	112	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-12 | **Client Sample Name:** Former Fairway Cleaners, SV-6-d15, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
4-Bromofluorobenzene (Surrogate)	109	%	70 - 130 (LCL - UCL)		EPA-TO-15			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-TO-15	04/07/20 08:56	04/07/20 19:54	BEP	MS-A1	148	B074789	EPA TO-15
2	EPA-TO-15	04/07/20 08:56	04/07/20 22:25	BEP	MS-A1	14800	B074789	EPA TO-15

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-13 | **Client Sample Name:** Former Fairway Cleaners, DUP-A, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acetone	**79**	**ug/m3**	**75**	**5.8**	**EPA-TO-15**	ND	**A01**	1
Acrylonitrile	ND	ug/m3	30	3.3	EPA-TO-15	ND	A01	1
Allyl chloride	ND	ug/m3	30	3.9	EPA-TO-15	ND	A01	1
Benzene	ND	ug/m3	30	2.4	EPA-TO-15	ND	A01	1
Benzyl chloride	ND	ug/m3	150	9.4	EPA-TO-15	ND	A01	1
Bromodichloromethane	ND	ug/m3	75	6.0	EPA-TO-15	ND	A01	1
Bromoform	ND	ug/m3	150	11	EPA-TO-15	ND	A01	1
Bromomethane	ND	ug/m3	30	8.2	EPA-TO-15	ND	A01	1
1,3-Butadiene	ND	ug/m3	30	3.8	EPA-TO-15	ND	A01	1
Carbon disulfide	ND	ug/m3	30	2.4	EPA-TO-15	ND	A01	1
Carbon tetrachloride	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
Chlorobenzene	ND	ug/m3	75	5.0	EPA-TO-15	ND	A01	1
Chloroethane	ND	ug/m3	30	4.8	EPA-TO-15	ND	A01	1
Chloroform	ND	ug/m3	75	3.8	EPA-TO-15	ND	A01	1
Chloromethane	ND	ug/m3	30	4.4	EPA-TO-15	ND	A01	1
Cyclohexane	ND	ug/m3	30	2.7	EPA-TO-15	ND	A01	1
Dibromochloromethane	ND	ug/m3	75	6.4	EPA-TO-15	ND	A01	1
1,2-Dibromoethane	ND	ug/m3	75	6.2	EPA-TO-15	ND	A01	1
1,2-Dichlorobenzene	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
1,3-Dichlorobenzene	ND	ug/m3	75	9.2	EPA-TO-15	ND	A01	1
1,4-Dichlorobenzene	ND	ug/m3	75	8.2	EPA-TO-15	ND	A01	1
Dichlorodifluoromethane	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
1,1-Dichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
1,2-Dichloroethane	ND	ug/m3	75	3.2	EPA-TO-15	ND	A01	1
1,1-Dichloroethene	ND	ug/m3	75	3.0	EPA-TO-15	ND	A01	1
cis-1,2-Dichloroethene	ND	ug/m3	30	3.4	EPA-TO-15	ND	A01	1
trans-1,2-Dichloroethene	ND	ug/m3	30	3.0	EPA-TO-15	ND	A01	1
1,2-Dichloropropane	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
cis-1,3-Dichloropropene	ND	ug/m3	75	3.4	EPA-TO-15	ND	A01	1
trans-1,3-Dichloropropene	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ug/m3	75	12	EPA-TO-15	ND	A01	1
1,1-Difluoroethane	ND	ug/m3	75	30	EPA-TO-15	ND	A01	1
1,4-Dioxane	ND	ug/m3	30	8.1	EPA-TO-15	ND	A01	1

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Reported: 04/08/2020 14:55
Project: Air Samples - COELT
Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-13 | **Client Sample Name:** Former Fairway Cleaners, DUP-A, 4/1/2020 12:00:00AM, Harrison Hucks

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol	**14**	**ug/m3**	**30**	**11**	**EPA-TO-15**	ND	**J,A01**	1
Ethyl acetate	ND	ug/m3	30	6.0	EPA-TO-15	ND	A01	1
Ethylbenzene	**81**	**ug/m3**	**75**	**5.4**	**EPA-TO-15**	ND	**A01**	1
1-Ethyl-4-methylbenzene	**170**	**ug/m3**	**75**	**8.2**	**EPA-TO-15**	ND	**A01**	1
n-Heptane	**18**	**ug/m3**	**30**	**4.5**	**EPA-TO-15**	ND	**J,A01**	1
Hexachlorobutadiene	ND	ug/m3	150	38	EPA-TO-15	ND	A01	1
Hexane	**53**	**ug/m3**	**75**	**3.0**	**EPA-TO-15**	ND	**J,A01**	1
2-Hexanone	ND	ug/m3	75	5.1	EPA-TO-15	ND	A01	1
Isopropyl alcohol	**220**	**ug/m3**	**30**	**7.0**	**EPA-TO-15**	ND	**A01**	1
Methylene chloride	ND	ug/m3	150	3.6	EPA-TO-15	ND	A01	1
Methyl ethyl ketone	ND	ug/m3	30	6.3	EPA-TO-15	ND	A01	1
Methyl isobutyl ketone	ND	ug/m3	75	10	EPA-TO-15	ND	A01	1
Methyl t-butyl ether	ND	ug/m3	30	5.4	EPA-TO-15	ND	A01	1
Propylene	**270**	**ug/m3**	**30**	**6.0**	**EPA-TO-15**	ND	**A01**	1
Styrene	ND	ug/m3	75	5.7	EPA-TO-15	ND	A01	1
1,1,2,2-Tetrachloroethane	ND	ug/m3	75	16	EPA-TO-15	ND	A01	1
Tetrachloroethene	**130**	**ug/m3**	**30**	**5.1**	**EPA-TO-15**	ND	**A01**	1
Tetrahydrofuran	ND	ug/m3	30	6.3	EPA-TO-15	ND	A01	1
Toluene	**21**	**ug/m3**	**30**	**2.8**	**EPA-TO-15**	ND	**J,A01**	1
1,2,4-Trichlorobenzene	ND	ug/m3	150	8.7	EPA-TO-15	ND	A01	1
1,1,1-Trichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
1,1,2-Trichloroethane	ND	ug/m3	75	4.2	EPA-TO-15	ND	A01	1
Trichloroethene	ND	ug/m3	30	5.7	EPA-TO-15	ND	A01	1
Trichlorofluoromethane	ND	ug/m3	75	4.5	EPA-TO-15	ND	A01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/m3	75	5.8	EPA-TO-15	ND	A01	1
1,2,4-Trimethylbenzene	**210**	**ug/m3**	**75**	**9.6**	**EPA-TO-15**	ND	**A01**	1
1,3,5-Trimethylbenzene	**56**	**ug/m3**	**75**	**22**	**EPA-TO-15**	ND	**J,A01**	1
Vinyl acetate	ND	ug/m3	30	4.6	EPA-TO-15	ND	A01	1
Vinyl chloride	ND	ug/m3	30	4.4	EPA-TO-15	ND	A01	1
p- & m-Xylenes	**240**	**ug/m3**	**75**	**12**	**EPA-TO-15**	ND	**A01**	1
o-Xylene	**74**	**ug/m3**	**75**	**8.0**	**EPA-TO-15**	ND	**J,A01**	1
Total Xylenes	**310**	**ug/m3**	**150**	**21**	**EPA-TO-15**	ND	**A01**	1
4-Bromofluorobenzene (Surrogate)	102	%	70 - 130 (LCL - UCL)		EPA-TO-15			1

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Project Number: Former Fairway Cleaners - 2T009b
Project Manager: Harrison Hucks

Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

BCL Sample ID: 2009861-13 | **Client Sample Name:** Former Fairway Cleaners, DUP-A, 4/1/2020 12:00:00AM, Harrison Hucks

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	
1	EPA-TO-15	04/07/20 08:56	04/07/20 20:52	BEP	MS-A1	15	B074789	EPA TO-15

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B074789						
Acetone	B074789-BLK1	ND	ug/m3	5.0	0.39	
Acrylonitrile	B074789-BLK1	ND	ug/m3	2.0	0.22	
Allyl chloride	B074789-BLK1	ND	ug/m3	2.0	0.26	
Benzene	B074789-BLK1	ND	ug/m3	2.0	0.16	
Benzyl chloride	B074789-BLK1	ND	ug/m3	10	0.63	
Bromodichloromethane	B074789-BLK1	ND	ug/m3	5.0	0.40	
Bromoform	B074789-BLK1	ND	ug/m3	10	0.71	
Bromomethane	B074789-BLK1	ND	ug/m3	2.0	0.55	
1,3-Butadiene	B074789-BLK1	ND	ug/m3	2.0	0.25	
Carbon disulfide	B074789-BLK1	ND	ug/m3	2.0	0.16	
Carbon tetrachloride	B074789-BLK1	ND	ug/m3	5.0	0.38	
Chlorobenzene	B074789-BLK1	ND	ug/m3	5.0	0.33	
Chloroethane	B074789-BLK1	ND	ug/m3	2.0	0.32	
Chloroform	B074789-BLK1	ND	ug/m3	5.0	0.25	
Chloromethane	B074789-BLK1	ND	ug/m3	2.0	0.29	
Cyclohexane	B074789-BLK1	ND	ug/m3	2.0	0.18	
Dibromochloromethane	B074789-BLK1	ND	ug/m3	5.0	0.43	
1,2-Dibromoethane	B074789-BLK1	ND	ug/m3	5.0	0.41	
1,2-Dichlorobenzene	B074789-BLK1	ND	ug/m3	5.0	0.39	
1,3-Dichlorobenzene	B074789-BLK1	ND	ug/m3	5.0	0.61	
1,4-Dichlorobenzene	B074789-BLK1	ND	ug/m3	5.0	0.55	
Dichlorodifluoromethane	B074789-BLK1	ND	ug/m3	5.0	0.38	
1,1-Dichloroethane	B074789-BLK1	ND	ug/m3	5.0	0.28	
1,2-Dichloroethane	B074789-BLK1	ND	ug/m3	5.0	0.21	
1,1-Dichloroethene	B074789-BLK1	ND	ug/m3	5.0	0.20	
cis-1,2-Dichloroethene	B074789-BLK1	ND	ug/m3	2.0	0.23	
trans-1,2-Dichloroethene	B074789-BLK1	ND	ug/m3	2.0	0.20	
1,2-Dichloropropane	B074789-BLK1	ND	ug/m3	5.0	0.30	
cis-1,3-Dichloropropene	B074789-BLK1	ND	ug/m3	5.0	0.23	
trans-1,3-Dichloropropene	B074789-BLK1	ND	ug/m3	5.0	0.30	
1,2-Dichloro-1,1,2,2-tetrafluoroethane	B074789-BLK1	ND	ug/m3	5.0	0.77	
1,1-Difluoroethane	B074789-BLK1	ND	ug/m3	5.0	2.0	
1,4-Dioxane	B074789-BLK1	ND	ug/m3	2.0	0.54	
Ethanol	B074789-BLK1	ND	ug/m3	2.0	0.74	

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B074789						
Ethyl acetate	B074789-BLK1	ND	ug/m3	2.0	0.40	
Ethylbenzene	B074789-BLK1	ND	ug/m3	5.0	0.36	
1-Ethyl-4-methylbenzene	B074789-BLK1	ND	ug/m3	5.0	0.55	
n-Heptane	B074789-BLK1	ND	ug/m3	2.0	0.30	
Hexachlorobutadiene	B074789-BLK1	ND	ug/m3	10	2.5	
Hexane	B074789-BLK1	ND	ug/m3	5.0	0.20	
2-Hexanone	B074789-BLK1	ND	ug/m3	5.0	0.34	
Isopropyl alcohol	B074789-BLK1	ND	ug/m3	2.0	0.47	
Methylene chloride	B074789-BLK1	ND	ug/m3	10	0.24	
Methyl ethyl ketone	B074789-BLK1	ND	ug/m3	2.0	0.42	
Methyl isobutyl ketone	B074789-BLK1	ND	ug/m3	5.0	0.70	
Methyl t-butyl ether	B074789-BLK1	ND	ug/m3	2.0	0.36	
Propylene	B074789-BLK1	ND	ug/m3	2.0	0.40	
Styrene	B074789-BLK1	ND	ug/m3	5.0	0.38	
1,1,2,2-Tetrachloroethane	B074789-BLK1	ND	ug/m3	5.0	1.1	
Tetrachloroethene	B074789-BLK1	ND	ug/m3	2.0	0.34	
Tetrahydrofuran	B074789-BLK1	ND	ug/m3	2.0	0.42	
Toluene	B074789-BLK1	ND	ug/m3	2.0	0.19	
1,2,4-Trichlorobenzene	B074789-BLK1	ND	ug/m3	10	0.58	
1,1,1-Trichloroethane	B074789-BLK1	ND	ug/m3	5.0	0.28	
1,1,2-Trichloroethane	B074789-BLK1	ND	ug/m3	5.0	0.28	
Trichloroethene	B074789-BLK1	ND	ug/m3	2.0	0.38	
Trichlorofluoromethane	B074789-BLK1	ND	ug/m3	5.0	0.30	
1,1,2-Trichloro-1,2,2-trifluoroethane	B074789-BLK1	ND	ug/m3	5.0	0.39	
1,2,4-Trimethylbenzene	B074789-BLK1	ND	ug/m3	5.0	0.64	
1,3,5-Trimethylbenzene	B074789-BLK1	ND	ug/m3	5.0	1.5	
Vinyl acetate	B074789-BLK1	ND	ug/m3	2.0	0.31	
Vinyl chloride	B074789-BLK1	ND	ug/m3	2.0	0.29	
p- & m-Xylenes	B074789-BLK1	ND	ug/m3	5.0	0.83	
o-Xylene	B074789-BLK1	ND	ug/m3	5.0	0.53	
Total Xylenes	B074789-BLK1	ND	ug/m3	10	1.4	
4-Bromofluorobenzene (Surrogate)	**B074789-BLK1**	**93.6**	%	**70 - 130 (LCL - UCL)**		

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Volatile Organic Compounds by GC/MS (EPA Method TO-15 at STP)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B074789										
Benzene	B074789-BS1	LCS	14.613	15.974	ug/m3	91.5		70 - 130		
	B074789-BSD1	LCSD	14.820	15.974	ug/m3	92.8	1.4	70 - 130	30	
Chloroform	B074789-BS1	LCS	24.379	24.413	ug/m3	99.9		70 - 130		
	B074789-BSD1	LCSD	25.150	24.413	ug/m3	103	3.1	70 - 130	30	
Ethylbenzene	B074789-BS1	LCS	20.126	21.711	ug/m3	92.7		70 - 130		
	B074789-BSD1	LCSD	20.095	21.711	ug/m3	92.6	0.2	70 - 130	30	
Tetrachloroethene	B074789-BS1	LCS	31.844	33.913	ug/m3	93.9		70 - 130		
	B074789-BSD1	LCSD	32.522	33.913	ug/m3	95.9	2.1	70 - 130	30	
Toluene	B074789-BS1	LCS	17.764	18.842	ug/m3	94.3		70 - 130		
	B074789-BSD1	LCSD	17.780	18.842	ug/m3	94.4	0.1	70 - 130	30	
Trichloroethene	B074789-BS1	LCS	25.525	26.869	ug/m3	95.0		70 - 130		
	B074789-BSD1	LCSD	25.735	26.869	ug/m3	95.8	0.8	70 - 130	30	
Trichlorofluoromethane	B074789-BS1	LCS	30.704	28.092	ug/m3	109		70 - 130		
	B074789-BSD1	LCSD	31.227	28.092	ug/m3	111	1.7	70 - 130	30	
1,1,2-Trichloro-1,2,2-trifluoroethane	B074789-BS1	LCS	38.425	38.318	ug/m3	100		70 - 130		
	B074789-BSD1	LCSD	39.429	38.318	ug/m3	103	2.6	70 - 130	30	
p- & m-Xylenes	B074789-BS1	LCS	42.014	43.421	ug/m3	96.8		70 - 130		
	B074789-BSD1	LCSD	42.991	43.421	ug/m3	99.0	2.3	70 - 130	30	
o-Xylene	B074789-BS1	LCS	20.768	21.711	ug/m3	95.7		70 - 130		
	B074789-BSD1	LCSD	21.298	21.711	ug/m3	98.1	2.5	70 - 130	30	
Total Xylenes	B074789-BS1	LCS	62.783	65.132	ug/m3	96.4		70 - 130		
	B074789-BSD1	LCSD	64.290	65.132	ug/m3	98.7	2.4	70 - 130	30	
4-Bromofluorobenzene (Surrogate)	B074789-BS1	LCS	78.4	71.6	ug/m3	109		70 - 130		
	B074789-BSD1	LCSD	79.7	71.6	ug/m3	111	1.6	70 - 130		

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Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.