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December 20, 2024

TRC Project No. 579271

Ms. Kislev Ang, MS, REHS
Environmental Supervisors
External Affairs Division | LA Sanitation and Environment
Department of Public Works | City of Los Angeles

VIA EMAIL

**Subject: Offsite Soil Vapor Investigation Report
(Middle of Avenue 34 and Pasadena Avenue)**

**Site: Avenue 34 Site
West Avenue 34 and Pasadena Avenue
141 West Avenue 34
Los Angeles, California 90031**

Dear Ms. Kislev:

TRC Solutions, Inc. (TRC) has prepared this Offsite Soil Vapor Investigation Report for site assessment activities performed adjacent to Avenue 34 Site and along the middle of West Avenue 34 and the middle of Pasadena Avenue in Los Angeles, California (the Site, see **Figure 1**). This investigation, conducted according to the Offsite Investigation Work Plan dated May 31, 2024, evaluates potential contamination under Avenue 34 and Pasadena Avenue.

1.0 BACKGROUND

The property's previous use for commercial and industrial purposes between 1920 and 2000, and the residual contamination, prompted the property owner to enter into a Voluntary Cleanup Agreement and develop an approved Removal Action Workplan with the Department of Toxic Substances Control (DTSC) to assess and remediate the Site. Historical investigations indicated the presence of total petroleum hydrocarbons volatiles (TPHv) and volatile organic compounds (VOCs), mainly tetrachloroethene (PCE) and trichloroethene (TCE) in soil, soil vapor, and groundwater. Additional contaminants, including arsenic, hexavalent chromium, and lead in soil, as well as VOCs in groundwater, were also detected. Onsite remedial excavations were performed along with operation of a vapor extraction system under the jurisdiction of the DTSC. Reports for these activities are provided in the DTSC Envirostor website.

Immediately north of the Site is the former Welch's facility. The Welch's facility is an open clean-up case with DTSC that operated as a uniform laundry business from 1920 until 1988. The Welch's site historically had 17 underground storage tanks (USTs) on the property that were used to store petroleum hydrocarbons, including fuels and solvents (PCE and TCE). Historical investigations have indicated the presence of TPHv and VOCs (mainly PCE and TCE) in soil, soil vapor, and groundwater. The site has undergone remedial activities including SVE and obtained a "no further action" status from DTSC in August 2016. The site is currently conducting annual groundwater monitoring. The historical groundwater gradient has consistently been 0.01 foot/foot in the southwesterly direction (DTSC EnviroStor).

An elementary school and residential housing are located east and southeast across Pasadena Avenue from the Avenue 34 and Welch's Sites. Residences are located south of the Avenue 34 Site across Avenue 34. The City of Los Angeles Sanitation and Environment (LASAN) is working with City Departments, DTSC, and the affected communities to supplement data for the current ongoing investigations in the areas adjacent to the Avenue 34 Site. LASAN performed the current investigation to

detect offsite contamination adjacent to the Avenue 34 redevelopment worksite that may be a result of prior onsite operations to provide additional information to the project proponent and the DTSC to further protect the health and safety of the public.

2.0 OBJECTIVE

To address concerns from LASAN and the neighboring community regarding offsite contamination from the Avenue 34 Site, TRC conducted a supplemental subsurface soil vapor investigation as a supplement to the ongoing investigation overseen by DTSC. This investigation focused on the potential presence of chemicals of concern (COCs), specifically PCE, TCE, and TPHv, near the sewer main and select historic lateral locations from the Site, with objectives as follows:

- East-West Trending Sewer Main (Avenue 34): Subsurface conditions in the vicinity of the east-west trending sewer main (Pipe IDs: 4950606949506071A and 4950607149506073A) beneath the middle of Avenue 34, south of the Site, were assessed. Soil borings (SB-1 through SB-4) and soil vapor probes (TRC-SVP-1 through TRC-SVP-4) were placed to assess this area. SB-2 and SB-4 were selected to investigate known historic laterals from the Site connected to the Avenue 34 sewer main, including a lateral formerly connected to an onsite clarifier.
- North-South Trending Sewer Main (Pasadena Avenue): Subsurface conditions in the vicinity of the north-south trending sewer main (Pipe ID: 4950605749506056A) beneath Pasadena Avenue, east of the Site, were assessed. Soil borings (SB-6 through SB-7) and soil vapor probes (TRC-SVP-6 through TRC-SVP-7) targeted a historic lateral connection to the main. Additionally, a boring/vapor probe was located at an upgradient position (SB-8/TRC-SVP-8) of the Pasadena Avenue sewer main, with a downgradient boring/vapor probe (SB-5/TRC-SVP-5) positioned at the southern end of the project area, north of the intersection with Avenue 34. It should be noted that three soil vapor probes (TRC-SVP-6, TRC-SVP-7, and TRC-SVP-8) were located in the street between the Avenue 34 Project and the Hillside Elementary School (see Figures 2 and 3).

The results of this investigation were compared to the Site-Specific Cleanup Goals and regulatory screening levels (California Environmental, 2024). See the Site Plan in Figure 2 showing the existing sewer main and boring/vapor probe locations.

3.0 PRE-FIELD ACTIVITIES

3.1 Permitting

An encroachment permit was acquired on August 16, 2024, from the City of Los Angeles, Department of Public Works, Bureau of Engineering (BOE) to access soil vapor locations in the public right-of-way. On August 30, 2024, TRC and Bureau of Contract Administration Inspector conducted a pre-construction meeting to discuss the traffic control plans, soil boring locations, and asphalt completion guidelines.

3.2 Underground Service Alert Notification

Prior to the drilling and sampling activities, TRC visited the Site to evaluate the proposed boring locations and mark the Site for Underground Service Alert (USA; Dig-Alert). On August 26, 2024, TRC notified USA of the planned drilling activities.

3.3 Health and Safety

A Health and Safety Plan (HASP) was developed to address Site-specific health and safety issues during implementation of the work including potential contaminants of concern, personal protective equipment, and location of the nearest hospital.

4.0 SUBSURFACE ASSESSMENT

4.1 Geophysical Survey

A geophysical survey investigation was completed on September 10, 2024, by GPRS, Inc. (GPRS), a state-licensed geophysical contractor. The purpose of the geophysical survey was to locate utilities and trenches in possible conflict with the proposed boring locations of potential subsurface obstructions. GPRS utilized a combination of underground scanning GPR antenna, electromagnetic pipe locator, traceable rod, and a handheld GPS unit. The summary figures provided by GPRS is included in **Appendix A**.

4.2 Drilling, Sampling, and Soil Vapor Probe Construction

Borehole clearing activities were conducted on September 10 through 12, 2024, followed by drilling, soil sampling, and vapor probe construction activities on September 10 through 12 and 17, at the Site. Each borehole was cleared using a 3.25-inch diameter hand auger to 5 feet below ground surface (bgs) or until refusal was encountered. The soil vapor probes were advanced using a truck-mounted direct push rig. Soil samples were recovered in 4-foot-long acetate sleeves and were continuously logged until refusal was encountered. Soil samples were collected at approximately 5-foot intervals, screened for VOCs using a photoionization detector (PID), and observed for potential impacts. Samples SB-1-15, SB-3-11, and SB-3-15 were collected by using Environmental Protection Agency (EPA) Method 5035 sampling kits, then placed in laboratory provided containers, sealed, labeled, submitted to the lab under a chain-of-custody, and analyzed by EPA Method 8260. Due to refusal encountered and collapsing borehole, soil borings SB-1 through SB-8 terminal depths ranged from 6 to 22 feet bgs. Observations were recorded on boring logs with soil descriptions, following the Unified Soil Classification System (USCS). Copies of the boring logs are provided in Appendix B.

Fifteen soil vapor probes were installed to depths ranging from 5 to 18 feet bgs by H&P Mobile Geochemistry Inc. (H&P) and were constructed using 1/8-inch Nylaflow tubing with a plastic implant tip. Each probe was set within 12 inches of sand pack (#3 Monterey sand), with 6-inches of dry bentonite above the sand pack, and hydrated bentonite within the remaining annular space. The Standard Operating Procedure (SOP) for H&P Mobile Geochemistry (H&P) are provided in Appendix C.

Table A
Sample Location and Description

Soil Boring ID	Description	Depth of Boring (feet bgs)	Vapor Probe Installed (feet bgs)	Soil Sample Depth (feet bgs)
Avenue 34				
SB-1	Near Sewer Line - Upgradient	22*	5, 15, 18	15
SB-2	Near Historic Lateral Sewer Line	7**	5	--
SB-3	Near Historic Lateral Sewer Line	16**	5, 15	10, 20
SB-4	Near Historic Lateral Sewer Line & Downgradient	6**	5	--
Pasadena Ave				
SB-5	Near Sewer Line & Downgradient	16*	5, 15	--
SB-6	Near Historic Lateral Sewer Line	15.5*	5, 15	--
SB-7	Near 90 Degree Junctions in Sewer Line	15.5*	5, 15	--
SB-8	Near Sewer Line - Upgradient	15.5*	5, 15	--

* = Soil boring encountered refusal, ** = Soil boring collapsed and encountered refusal.

On September 20, 2024, a helium shroud was used for leak check procedures to assess possible cross-contamination, and as an annular seal check performed for quality assurance purposes. The flow and vacuum check were performed by connecting a pump to the probe and running at a flow rate of 200 milliliter per minute (ml/min) until the vacuum stabilized. During purging and sampling, the vacuum was monitored for each sub-slab vapor sample location to make sure that it remained below 100 inches in water (in. H₂O). The soil vapor samples were collected in batch certified clean 400-milliliter Summa canisters equipped with vacuum gauges and flow regulators. Fifteen soil vapor samples and one duplicate sample were collected, labeled TRC-SVP-(Soil Boring #)-(Sample Depth), transported to H&P, a state-certified laboratory, and analyzed for VOCs and TPHv by EPA Method TO-15.

4.3 Borehole Abandonment

Following completion of the sampling activities, soil vapor probes were abandoned, backfilled with bentonite gel slurry, and covered with temporary cold patch asphalt. Pavement resurfacing was performed on December 5, 2024, and each soil boring location was completed in accordance with the City of Los Angeles Bureau of Engineering requirements.

4.4 Waste Disposal

The soil cuttings generated during drilling and sampling activities were placed in two 55-gallon Department of Transportation (DOT) approved steel drum. On November 11, 2024, the two drums of soil cuttings were transported to Environmental Waste Solutions, located at 31915 Industrial Lane, Parker South, Arizona. A copy of the waste disposal manifest is included in **Appendix D**.

5.0 LABORATORY ANALYTICAL FINDINGS

Soil vapor concentrations were compared to 141 West Avenue 34 Site-Specific Cleanup Goals (California Environmental, 2024), DTSC Residential/Commercial Screening Levels (SLs) for cancer and the San Francisco Regional Water Board Quality Control Board (SFRWQCB) Environmental Screening Levels (ESL) for cancer use as shown in **Table 1**. The analytical results are summarized in **Figure 3** and **Tables 1** and **2**. The official laboratory reports are included in **Appendix E**.

5.1 Soil Vapor Analytical Results

Soil vapor results are summarized below:

- **PCE:** PCE was detected in 14 of the 15 soil vapor samples with concentrations ranging from 17 to 2,200 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). Concentrations exceeded the Site-Specific Cleanup Goal ($460 \mu\text{g}/\text{m}^3$) in SVP-1 at 5', 15', and 18'; SVP-2 at 5'; and SVP-8 at 5'.
- **TCE:** TCE was detected in 2 of the 15 soil vapor samples at 55 and $10 \mu\text{g}/\text{m}^3$ in SVP-1 and SVP-2, respectively. Concentrations were below the Site-Specific Cleanup Goal ($480 \mu\text{g}/\text{m}^3$).
- **TPHv:** TPHv was detected in all 15 soil vapor samples ranging from 1,800 to 200,000 $\mu\text{g}/\text{m}^3$. Concentrations exceeded the Site-Specific Cleanup Goal ($3,100 \mu\text{g}/\text{m}^3$) in SVP-2 through SVP-8.
- **Benzene:** Benzene was detected in 10 of the 15 soil vapor samples ranging from 3.5 to 3,700 $\mu\text{g}/\text{m}^3$.
- **Ethylbenzene:** Ethylbenzene was detected in 15 soil vapor samples ranging from 4.6 to 370 $\mu\text{g}/\text{m}^3$.
- All other VOCs were below Site-Specific Cleanup Goals, ESLs, and SLs.

5.2 Soil Analytical Results

Soil samples were collected in laboratory-provided containers and were delivered to Advanced Technology Laboratories, a state-certified laboratory and analyzed for VOCs by EPA 8260B. Naphthalene was detected in SB-1-15, SB-3-11, and SB-3-15 ranging from 7.2 to 7.9 mg/kg. It should be noted that naphthalene was detected above the PQL in the method blank. No other VOCs were detected.

6.0 CONCLUSIONS

Based on the findings above, including the detected vapor concentrations of PCE, TCE, and TPHv collected in September 2024 in the middle of Avenue 34 and Pasadena Avenue, the following general conclusions are presented:

- The eight soil vapor probes (TRC-SVP-1 through TRC-SVP-8) exhibited PCE and TPHv vapor concentrations that exceeded DTSC-approved site-specific cleanup goals for PCE and TPHv (California Environmental, 2024) (see Figure 3). All vapor samples were below the DTSC-approved site-specific cleanup goals for TCE.
- PCE and TPHv vapor concentrations exceeded their respective DTSC-approved site-specific soil vapor cleanup goals collected between Avenue 34 site and Hillside Elementary School (soil vapor probes TRC-SVP-6, TRC-SVP-7, and TRC-SVP-8).
- PCE, TCE, and TPHv vapor concentrations are lower in the middle of the street compared to the Avenue 34 Site onsite maximum concentrations.
- The elevated PCE and TPHv vapor concentrations, including the $200,000 \mu\text{g}/\text{m}^3$ TPHv concentration in soil vapor probe TRC-SVP-3, warrant further evaluation.

- The current investigation's findings and conclusions should be compared to the findings from recent California Environmental's site investigations as the data becomes available to determine if the findings of the current investigation are consistent with onsite and offsite data.

7.0 REFERENCE

California Environmental, 2024, California Environmental Evaluation of Potential Releases from Site Utility (Sewer) Lines, Avenue 34 Project Site –135, 141 and 153 West Ave 34 and 3401 and 3433 Pasadena Ave. Los Angeles, CA 90031, Revised January 5.

Avenue 34 Redevelopment Offsite Investigation Report
West Avenue 34 & Pasadena Avenue, Los Angeles, California
December 20, 2024

Should you have any questions about the investigation, results, or this report please contact Gil Fry by email at gfry@trccompanies.com.

Sincerely,

TRC Solutions, Inc.



Paul Kee
Project Geologist



Gil Fry, PG
Principal Geologist



Attachments:

Figure 1: Site Vicinity Map

Figure 2: Soil Boring and Vapor Probe Locations

Figure 3: Soil Vapor Results (PCE, TCE, and TPHv)

Table 1: Soil Vapor Analytical Results

Table 2: Soil Analytical Results – Volatile Organic Compounds

Appendix A: Geophysical Utility Survey Figures (GRPS)

Appendix B: Boring Logs

Appendix C: Standard Operating Procedure (SOP) for H&P Mobile Geochemistry (H&P)

Appendix D: Waste Manifest

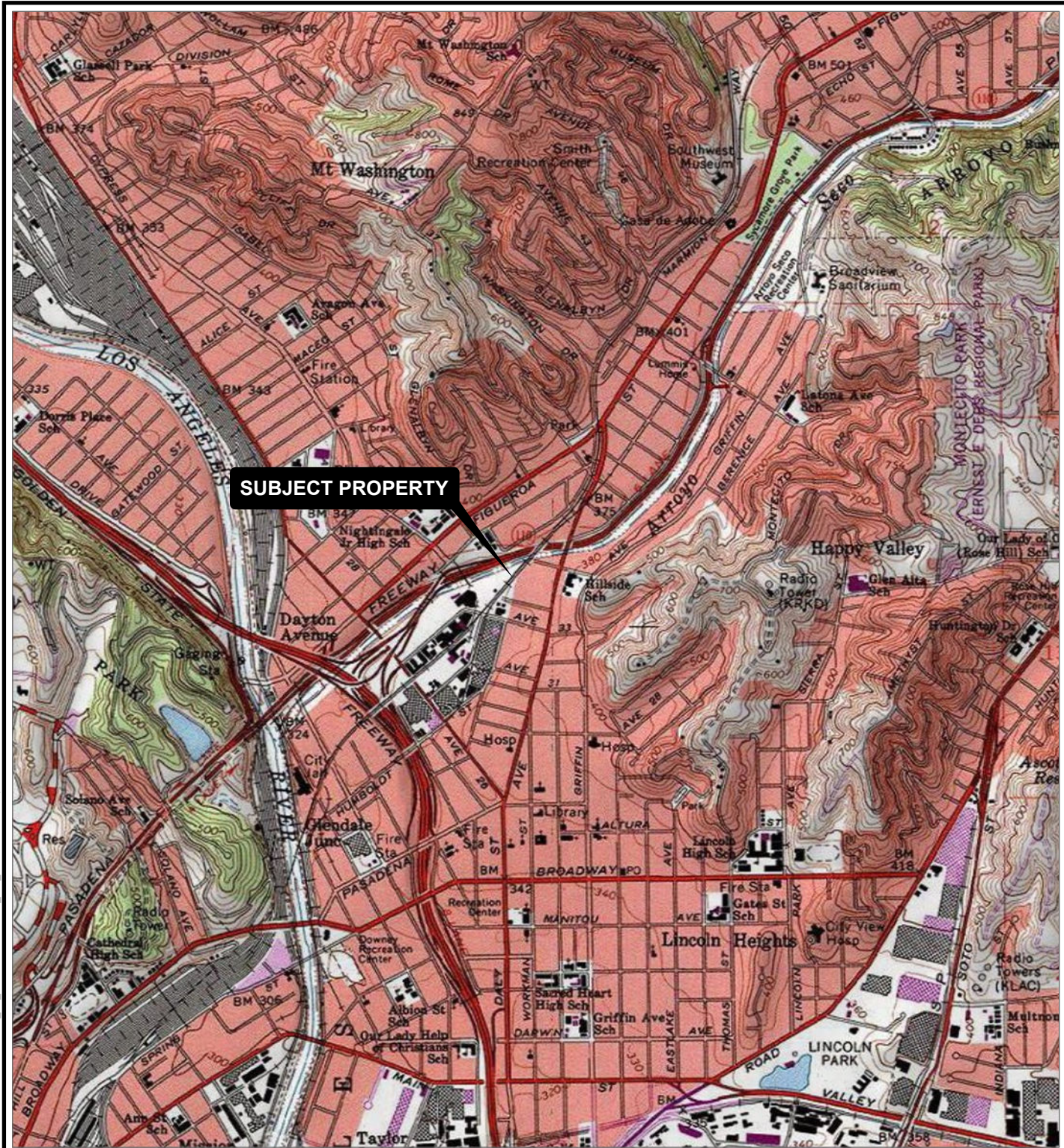
Appendix E: Laboratory Analysis Report

FIGURES

Figure 1: Site Vicinity Map

Figure 2: Soil Boring and Soil Vapor Probe Locations

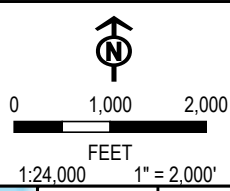
Figure 3: Soil Vapor Results (PCE, TCE, and TPHv)



SUBJECT PROPERTY

COORDINATE SYSTEM: NAD 1983 STATEPLANE CALIFORNIA V FIPS 0405 FEET; MAP ROTATION: 0
 - SAVED BY: RCOLLINS ON 12/6/2024, 15:44:17 PM; FILE PATH: T:\1-PROJECTS\LASANS579271_S\17312-APRX\LASAN_173_SAMPLING.APRX; LAYOUT NAME: FIGURE 1

BASE MAP: USGS COLOR ORTHO IMAGERY
 DATA SOURCES: TRC



PROJECT: **LASAN TOS SN-173**
AVENUE 34 REDEVELOPMENT OFFSITE INVESTIGATION
LOS ANGELES, CA 90031

TITLE: **SITE VICINITY MAP**

DRAWN BY:	R. COLLINS	PROJ. NO.:	579271.0000.0000
CHECKED BY:	D. CRUZ	FIGURE 1	
APPROVED BY:	G. FRY		
DATE:	DECEMBER 2024		


 707 WILSHIRE BOULEVARD
 SUITE 3250
 LOS ANGELES, CA 90017
 PHONE: 213.213.9400
 FILE: LASAN_173_SAMPLING

Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet; Map Rotation: 13.5
 Saved By: RCOLLINS on 12/26/2024, 15:44:17 PM; File Path: T:\PROJECTS\LASan_173_Sampling.aprx; Layout Name: FIGURE 2

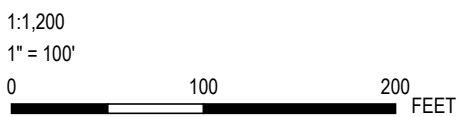


LEGEND

- TRC SOIL VAPOR PROBE NEAR SEWER
- VAPOR MONITORING PROBE - NESTED AT 5', 15', 25' & 28' (RESPONSIBLE PARTY PER DTSC)
- MAN HOLE
- SANITARY SEWER SYSTEM
- FORMER SANITARY SEWER SYSTEM
- SEWER PIPE
- APPROXIMATE PARCEL BOUNDARY
- STREET CENTER LINE
- DEPTH OF SEWER LINE
- APPROXIMATE PROPERTY BOUNDARY

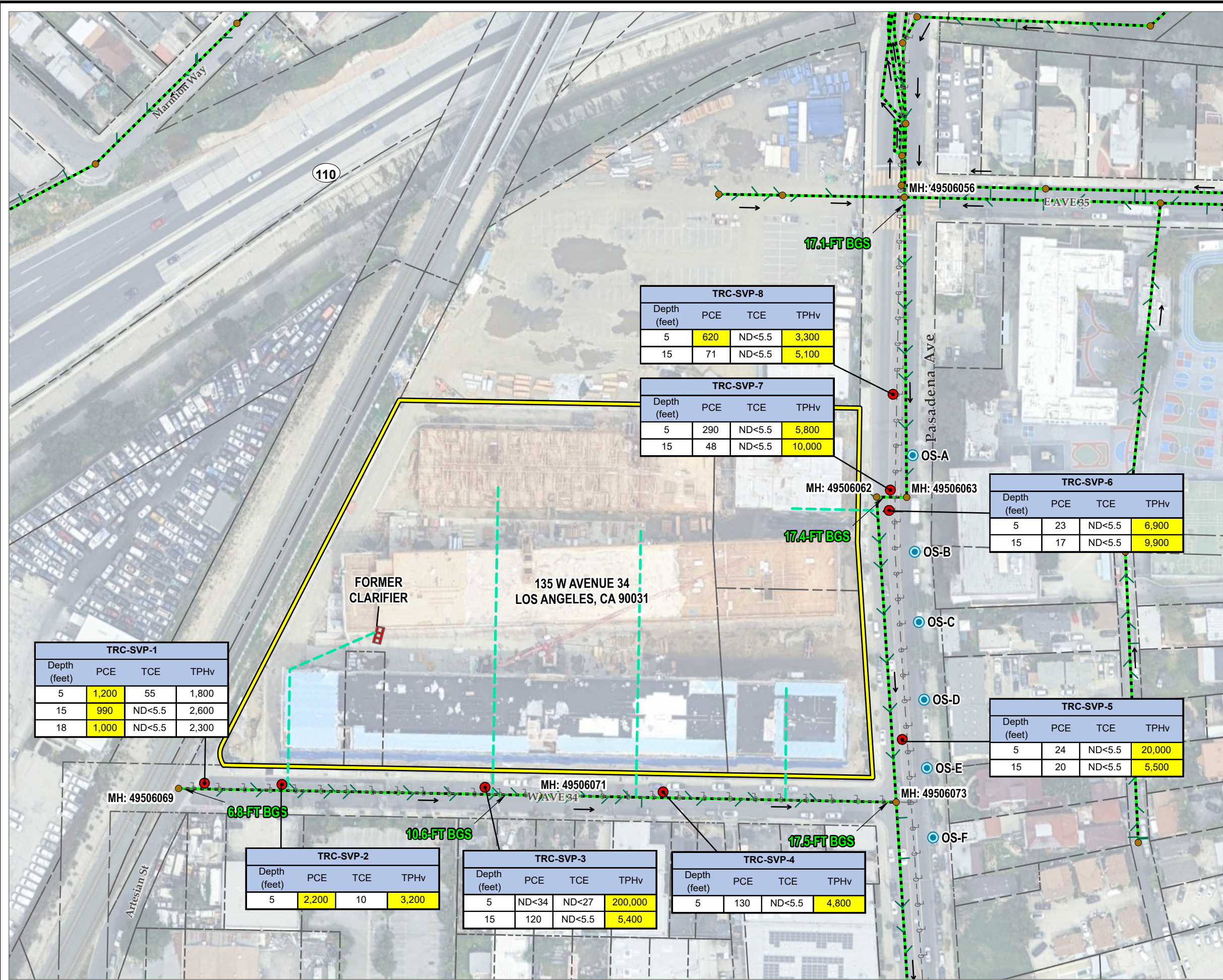
NOTES:

- 1: DTSC = DEPARTMENT OF TOXIC SUBSTANCES CONTROL.
 - 2: SANITARY SEWER SYSTEM AND STORM PIPES DATA PROVIDED BY LOS ANGELES OPEN DATA, CITY OF LOS ANGELES.
 - 3: BORING / POTHOLING SHALL BE SET A MINIMUM OF 2' OFF THE FACE OF THE GUTTER. BORING SHALL BE A MINIMUM 5' CLEAR FROM THE EDGE OF EXISTING STORM DRAIN PIPES AND SEWER PIPES (INCLUDING SEWER LATERALS), AND MINIMUM 2' CLEAR FROM OTHER UTILITIES TYPICAL. NO DRILLING / POTHOLING IS PERMITTED IN THE CONCRETE GUTTER AREA, BUS PAD AREA, AND SIDEWALK AREA.
 - 4: BGS = BELOW GROUND SURFACE.
- BASE MAP: "GOOGLE EARTH SATELLITE IMAGERY" ONLINE SERVICE LAYER, (5/8/2022). DATA SOURCES: TRC



PROJECT: LASAN TOS SN-173 AVENUE 34 REDEVELOPMENT OFFSITE INVESTIGATION LOS ANGELES, CA 90031	
TITLE: SOIL BORING AND SOIL VAPOR PROBE LOCATIONS	
DRAWN BY: R. COLLINS	PROJ. NO.: 579271.0000.0000
CHECKED BY: D. CRUZ	FIGURE 2
APPROVED BY: G. FRY	
DATE: DECEMBER 2024	
707 WILSHIRE BOULEVARD SUITE 3250 LOS ANGELES, CA 90017 PHONE: 213.213.9400	
FILE:	LASan_173_Sampling.aprx

Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet; Map Rotation: 13.5
 Saved By: RCOLLINS on 12/20/24, 15:44:17 PM; File Path: T:\PROJECTS\LASan_173_Sampling.aprx; Layout Name: FIGURE 3



TRC-SVP-1			
Depth (feet)	PCE	TCE	TPHv
5	1,200	55	1,800
15	990	ND<5.5	2,600
18	1,000	ND<5.5	2,300

TRC-SVP-2			
Depth (feet)	PCE	TCE	TPHv
5	2,200	10	3,200

TRC-SVP-3			
Depth (feet)	PCE	TCE	TPHv
5	ND<34	ND<27	200,000
15	120	ND<5.5	5,400

TRC-SVP-4			
Depth (feet)	PCE	TCE	TPHv
5	130	ND<5.5	4,800

TRC-SVP-8			
Depth (feet)	PCE	TCE	TPHv
5	620	ND<5.5	3,300
15	71	ND<5.5	5,100

TRC-SVP-7			
Depth (feet)	PCE	TCE	TPHv
5	290	ND<5.5	5,800
15	48	ND<5.5	10,000

TRC-SVP-6			
Depth (feet)	PCE	TCE	TPHv
5	23	ND<5.5	6,900
15	17	ND<5.5	9,900

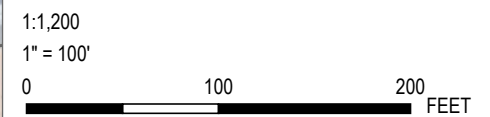
TRC-SVP-5			
Depth (feet)	PCE	TCE	TPHv
5	24	ND<5.5	20,000
15	20	ND<5.5	5,500

LEGEND

- TRC SOIL VAPOR PROBE NEAR SEWER
- VAPOR MONITORING PROBE - NESTED AT 5', 15', 25' & 28' (RESPONSIBLE PARTY PER DTSC)
- MAN HOLE
- SANITARY SEWER SYSTEM
- FORMER SANITARY SEWER SYSTEM
- SEWER PIPE
- APPROXIMATE PARCEL BOUNDARY
- STREET CENTER LINE
- 17.4-FT BGS DEPTH OF SEWER LINE
- APPROXIMATE PROPERTY BOUNDARY

NOTES:

- 1: DTSC = DEPARTMENT OF TOXIC SUBSTANCES CONTROL.
 - 2: TCE = TRICHLOROETHENE.
 - 3: PCE = TETRACHLOROETHENE.
 - 4: TPHv = TOTAL PETROLEUM HYDROCARBON - VOLATILES.
 - 5: RESULTS IN $\mu\text{g}/\text{m}^3$.
 - 6: SANITARY SEWER SYSTEM AND STORM PIPES DATA PROVIDED BY LOS ANGELES OPEN DATA, CITY OF LOS ANGELES.
 - 7: BORING / POTHOLING SHALL BE SET A MINIMUM OF 2' OFF THE FACE OF THE GUTTER. BORING SHALL BE A MINIMUM 5' CLEAR FROM THE EDGE OF EXISTING STORM DRAIN PIPES AND SEWER PIPES (INCLUDING SEWER LATERALS), AND MINIMUM 2' CLEAR FROM OTHER UTILITIES TYPICAL. NO DRILLING / POTHOLING IS PERMITTED IN THE CONCRETE GUTTER AREA, BUS PAD AREA, AND SIDEWALK AREA.
 - 8: BGS = BELOW GROUND SURFACE.
 - 9: **YELLOW HIGHLIGHTED TEXT** SHOWS EXCEEDANCES COMPARED TO DTSC-APPROVED SITE-SPECIFIC SOIL VAPOR CLEANUP GOALS FOR PCE ($460 \mu\text{g}/\text{m}^3$), TCE ($480 \mu\text{g}/\text{m}^3$), AND TPHv ($3,100 \mu\text{g}/\text{m}^3$).
- BASE MAP: "GOOGLE EARTH SATELLITE IMAGERY" ONLINE SERVICE LAYER, (5/8/2022). Data Sources: TRC



PROJECT:		LASAN TOS SN-173 AVENUE 34 REDEVELOPMENT OFFSITE INVESTIGATION LOS ANGELES, CA 90031	
TITLE: SOIL VAPOR RESULTS - PCE, TCE, and TPHv			
DRAWN BY:	R. COLLINS	PROJ. NO.:	579271.0000.0000
CHECKED BY:	D. CRUZ	FIGURE 3	
APPROVED BY:	G. FRY		
DATE:	DECEMBER 2024		
		707 WILSHIRE BOULEVARD SUITE 3250 LOS ANGELES, CA 90017 PHONE: 213.213.9400	
FILE:	LASan_173_Sampling.aprx		

TABLES

Table 1: Soil Vapor Analytical Results

Table 2: Soil Analytical Results – Volatile Organic Compounds

Table 1
SOIL VAPOR ANALYTICAL RESULTS
AVENUE 34 OFFSITE
LOS ANGELES, CA 90031

Sample ID	Sample Date	EPA Method TO-15 (µg/m³)															
		TPHv (C5-C12)	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Tetrachloroethene (PCE)	Trichloroethene (TCE)	Carbon disulfide	Chloromethane	Dichlorodifluoromethane (F12)	2-Butanone (MEK)	4-Ethyltoluene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	ALL OTHER VOCs
Avenue 34																	
TRC-SVP-1-5'	9/20/2024	1,800	5.5	7.8	5.3	18	11	1,200	55	56	2.6	11	38	ND<5.0	ND<5.0	20	
TRC-SVP-1-15'	9/20/2024	2,600	ND<3.2	5.0	5.5	17	10	990	ND<5.5	10	ND<2.1	15	ND<30	6.3	6.1	25	ND
TRC-SVP-1-18'	9/20/2024	2,300	ND<3.2	5.5	7.4	25	15	1,000	ND<5.5	22	ND<2.1	17	ND<30	11	12	43	ND
TRC-SVP-2-5'	9/20/2024	3,200	ND<3.2	ND<3.8	4.6	17	11	2,200	10	11	3.0	5.3	ND<30	6.1	6.2	24	ND
TRC-SVP-3-5'	9/20/2024	200,000 E	3,700	1,400	370	1,800	500	ND<34	ND<27	ND<32	ND<10	ND<25	ND<150	90	160	280	ND
TRC-SVP-3-15'	9/20/2024	5,400	28	12	5.1	31	9.6	120	ND<5.5	ND<6.3	ND<2.1	7.2	ND<30	ND<5.0	ND<5.0	11	ND
TRC-SVP-4-5'	9/20/2024	4,800	ND<3.2	ND<3.8	11	51	37	130	ND<5.5	ND<6.3	ND<2.1	5.2	ND<30	33	40	150	ND
Pasadena Avenue																	
TRC-SVP-5-5'	9/20/2024	20,000	12	22	16	49	21	24	ND<5.5	96	ND<2.1	ND<5.0	ND<30	7.8	6.9	26	ND
TRC-SVP-5-15'	9/20/2024	5,500	27	24	22	76	32	20	ND<5.5	14	ND<2.1	ND<5.0	46	15	11	40	
TRC-SVP-6-5'	9/20/2024	6,000	4.3	14	9.3	28	14	23	ND<5.5	60	ND<2.1	ND<5.0	ND<30	8.3	5.4	23	ND
TRC-SVP-6-5' Dup	9/20/2024	6,900	3.5	12	10	29	15	26	ND<5.5	74	ND<2.1	ND<5.0	ND<30	10	5.8	24	ND
TRC-SVP-6-15'	9/20/2024	9,900	6.2	31	36	130	62	17	ND<5.5	18	ND<2.1	ND<5.0	50	43	32	130	ND
TRC-SVP-7-5'	9/20/2024	5,800	4.8	42	19	84	31	290	ND<5.5	28	ND<2.1	ND<5.0	59	11	8.9	37	
TRC-SVP-7-15'	9/20/2024	10,000	4.5	24	57	190	94	48	ND<5.5	6.3	ND<2.1	5.5	89	69	48	190	ND
TRC-SVP-8-5'	9/20/2024	3,300	3.7	8.5	6.3	16	7.8	620	ND<5.5	55	ND<2.1	ND<5.0	ND<30	ND<5.0	ND<5.0	9.7	ND
TRC-SVP-8-15'	9/20/2024	5,100	ND<3.2	10	12	37	17	71	ND<5.5	36	ND<2.1	ND<5.0	ND<30	11	6.0	23	ND
141 W. Avenue 34 Site-Specific Soil Vapor Cleanup Goals*		3100	--	--	--	--	--	460	480	--	--	--	--	--	--	--	--
DTSC Residential Cancer SLs* (SFRWQCB ESL)		20,000	3.20	10,000	36.7	3,300	3,300	15.3	16	--	--	--	--	--	--	--	--
DTSC Commercial Cancer SLs* (SFRWQCB ESL)		83,000	14.00	43,000	163	15,000	15,000	67	100	--	--	--	--	--	--	--	--

Notes: 1,1,2-Trichlorotrifluoroethane (F113) = 11µg/m³, Chlorobenzene = 11µg/m³, 2-Hexanone (MBK) = 9.2µg/m³

EPA = Environmental Protection Agency

TPHv = Total Petroleum Hydrocarbons-Volatiles (C5-C12). Estimated from TO-15 analysis.

BOLD = Analyte detected above laboratory Reporting Limit (RL).

ND< = Not detected above indicated reporting limit (RL).

µg/m³ = micrograms per cubic meter

VOCs = Volatile organic compounds

E = The concentration indicated for this analyte is an estimated value above the calibration range of the instrument.

Yellow background = Analyte detected at concentrations above the Site-Specific Soil Vapor Cleanup Goals

Light Green background = Analyte detected at concentrations above respective Residential Screening Level (SL).

Light Blue background = Analyte detected at concentrations above respective Commercial Screening Level (SL).

* = Site-Specific Soil Vapor Cleanup Goals, SLs, and ESLs Provided in Transmittal of Laboratory Test Data, Offsite Soil/Soil Gas Investigation, Metro Railroad Right-of-Way (ROW), Mixed-Use Redevelopment Project, APNs 5205-004-003, -005, -007 & -011, West Ave. 34 and Pasadena Ave. Los Angeles, California 90031 (Site) (California Environmental, January 18, 2024).

Table 2
SOIL ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS
(VOCs) AVENUE 34 OFFSITE
LOS ANGELES, CA 90031

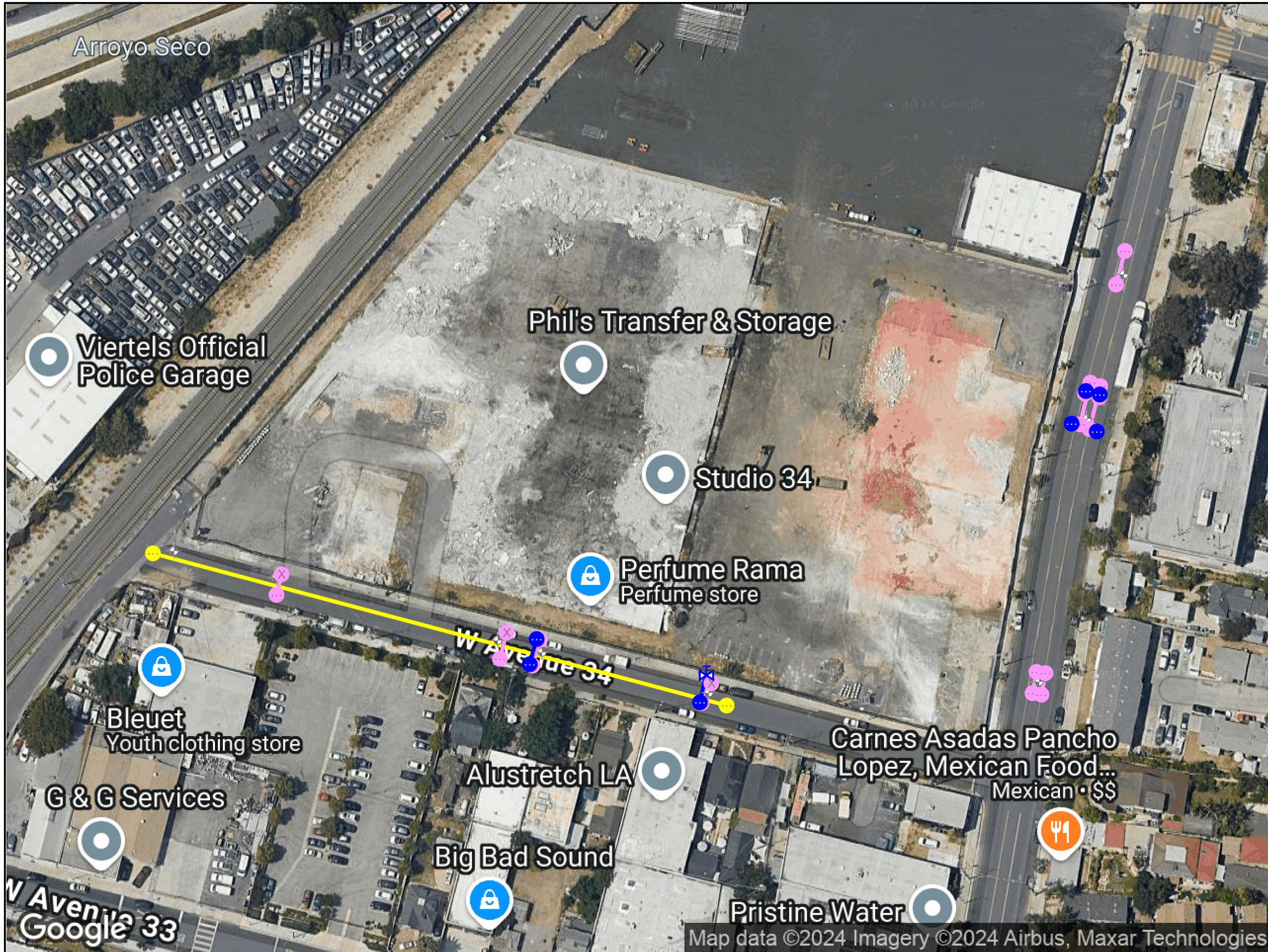
BORING ID	SAMPLE DATE	SAMPLE DEPTH (ft. bgs.)	EPA Method 8260B (mg/kg)	
			Naphthalene	All Other VOCs
SB-1-15	9/10/2024	15.0	7.9 B	ND
SB-3-11	9/11/2024	10.0	7.2 B	ND
SB-3-15	8/11/2024	20.0	7.8 B	ND

Notes:

- BOLD** = Analyte detected above laboratory Reporting Limit (RL)
- EPA** = Environmental Protection Agency
- mg/kg = milligrams per kilogram
- ft. bgs. = feet below ground surface
- PQL = Practical Quantitation Limit
- ND = Analyte is not detected at or above the Practical Quantitation Limit (PQL)
- B** = Analyte detected in the associated method blank above the PQL

APPENDIX A

Geophysical Utility Survey Figures (GRPS)

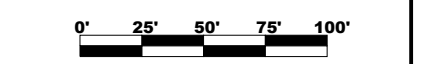


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6. PRIVATE UTILITY LOCATING IS NEVER A REPLACEMENT FOR ONE CALL/811 SERVICES. STATE LAW REQUIRES 811 TO BE CALLED PRIOR TO ANY AND ALL EXCAVATION ACTIVITIES.

LEGEND

- FUEL/GAS/OIL
- MISCELLANEOUS
- UNKNOWN
- WATER



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FOR INFORMATION ONLY

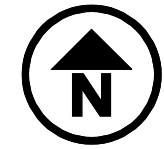
GPRS FINDINGS MAP

PREPARED FOR:
NINYO AND MOORE

LOCATION:
**34084209 118214583
34084209 118214583
LOS ANGELES, CA**

PROJECT MANAGER:
**JOSEPH HURTADO
JOSEPH.HURTADO@GPRS.COM**

DATE	2024 SEP 10
DRAWING NO.	1 REV. 0



AIR_COMPRESSOR	ELEC_BOX	FUEL_AST	MISC_CONTINUOUS	STEAM_CONTINUOUS	UNKN_CONTINUOUS
AIR_CONTINUOUS	ELEC_CABINET	FUEL_CONTINUOUS	MISC_DEPTH	STEAM_EOI	UNKN_EOI
AIR_EOI	ELEC_CONTINUOUS	FUEL_EOI	MISC_EOI	STEAM_MANHOLE	UNKN_MANHOLE
AIR_MANHOLE	ELEC_EOI	FUEL_MANHOLE	MISC_MANHOLE	STEAM_VALVE	UNKN_MISC
AIR_MISC	ELEC_EQUIPMENT	FUEL_MISC	MISC_POINT	STRM_CATCHBASINROUND	UNKN_VALVE
AIR_PUMP	ELEC_LANDSCAPELIGHT	FUEL_PUMP	MISC_VALVE	STRM_CATCHBASINSQUARE	WTR_BACKFLOWPREVENTOR
AIR_RISER	ELEC_MANHOLE	FUEL_RISER	OIL_CONTINUOUS	STRM_CLEANOUT	WTR_CONTINUOUS
CHEM_AST	ELEC_METER	FUEL_UST	OIL_EOI	STRM_CONTINUOUS	WTR_EOI
CHEM_CONTINUOUS	ELEC_MISC	FUEL_VALVE	OIL_MANHOLE	STRM_ENDPIPE	WTR_HYDRANT
CHEM_EOI	ELEC_PANEL	FUEL_VAULT	OIL_MISC	STRM_EOI	WTR_MANHOLE
CHEM_MANHOLE	ELEC_POWERPOLE	FUEL_VENT	OIL_PUMP	STRM_LIFTSTATION	WTR_METER
CHEM_MISC	ELEC_SIGN	GAS_AST	OIL_RISER	STRM_MANHOLE	WTR_MISC
CHEM_PUMP	ELEC_SITELIGHT	GAS_CONTINUOUS	OIL_TANK	STRM_MISC	WTR_POSTINDICATORVALVE
CHEM_TANK	ELEC_TRANSFORMER	GAS_EOI	OIL_UST	STRM_ROOFDRAIN	WTR_RISER
CHEM_VALVE	ELEC_UTILITYPOLE	GAS_MANHOLE	OIL_VALVE	STRM_TRENCHDRAIN	WTR_VALVE
COMM_BOX	ELEC_VAULT	GAS_METER	OIL_VAULT	STRM_UST	WTR_WELLHEAD
COMM_CAMERA	FIRE_BACKFLOWPREVENTOR	GAS_MISC	OIL_VENT	STRM_VAULT	BUILDING CORNER
COMM_CONTINUOUS	FIRE_CONTINUOUS	GAS_PUMP	SAN_CLEANOUT	STRM_VENT	FLAGPOLE
COMM_EOI	FIRE_EOI	GAS_RISER	SAN_CONTINUOUS	STRM_YARDBASIN	GRAVE
COMM_MANHOLE	FIRE_HYDRANT	GAS_UST	SAN_EOI	TRAF_BOX	GRAVE
COMM_MISC	FIRE_MANHOLE	GAS_VALVE	SAN_GREASETRAP	TRAF_CABINET	HEADSTONE NO GRAVE
COMM_PEDESTAL	FIRE_METER	GAS_VAULT	SAN_INVERT	TRAF_CONTINUOUS	MAILBOX
COMM_POLE	FIRE_MISC	GAS_VENT	SAN_LIFTSTATION	TRAF_EOI	POST
COMM_VAULT	FIRE_POSTINDICATORVALVE	IRR_BACKFLOWPREVENTOR	SAN_MANHOLE	TRAF_MANHOLE	PROPOSED BY OTHERS
LD_HYDRANT LEAK	FIRE_RISER	IRR_CONTINUOUS	SAN_MARKER	TRAF_MISC	SATELLITE
LD_MAIN BREAK	FIRE_VALVE	IRR_CONTROL VALVE	SAN_MISC	TRAF_PARKINGMETER	SIGN
LD_SERVICE LEAK		IRR_EOI	SAN_SEPTICTANK	TRAF_POLE	SOIL BORING MARKER
LD_VALVE LEAK		IRR_MISC	SAN_VAULT	TRAF_SIGN	
		IRR_RISER	SAN_VENT	TRAF_SIGNAL	
		IRR_SPRINKLER		TRAF_STREETLIGHT	
				TREE_CONIFEROUS	
				TREE_DECIDUOUS	

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LEGEND

- FUEL/GAS/OIL
- MISCELLANEOUS
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FOR INFORMATION ONLY

GPRS FINDINGS MAP

PREPARED FOR:
NINYO AND MOORE

LOCATION:
**34084209 118214583
34084209 118214583
LOS ANGELES, CA**

PROJECT MANAGER:
**JOSEPH HURTADO
JOSEPH.HURTADO@GPRSINC.COM**

DATE	2024 SEP 10		
DRAWING NO.	2	REV.	0

APPENDIX B

Boring Logs



WELL CONSTRUCTION LOG

WELL NO. SB-1

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/10/2024	Date Drilling Completed: 9/10/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 22.0
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 5' BELOW GRADE, SURFACE ASPHALT TO 7". SILTY SAND [SM], dark yellowish brown, medium density, dry, fine-grained, trace cobble.	SM			0.1	Nylaflo Diameter: 1/8" Hand Auger Diameter: 3.25" Strataprobe Diameter: 2.25" Hydrated Granular Bentonite (4"-4') Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5') Dry Granular Bentonite (5.5'-6') Hydrated Granular Bentonite (6'-14')
CS	100		5	POORLY GRADED SAND [SP], pale yellowish brown, medium density, dry, medium-coarse grained with gravel.	SP			0.1	
CS	100		10	Same as above, yellowish brown, moist.	SP			0.1	
CS	100		15	Same as above, pale gray, few silts, few cobble.	SP			0.1	Dry Granular Bentonite (14'-14.5') #3 Sand Filter Pack (14.5'-15.5') 1" Airstone Filter Probe (15') Dry Granular Bentonite (15.5'-16') Hydrated Granular Bentonite (16'-17') Dry Granular Bentonite (17'-17.5') #3 Sand Filter Pack (17.5'-18.5') 1" Airstone Filter Probe (18') Dry Granular Bentonite (18.5'-19') Hydrated Granular Bentonite (19'-22')
CS	100		20	SILTY SAND [SM], yellowish brown, medium density, dry, fine-grained. 7" of cobble from 21' to 21.7' below grade.	SM			0	
				END OF BORING, REFUSAL AT 22' BELOW GRADE.					

SOIL BORING WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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WELL CONSTRUCTION LOG

WELL NO. SB-2

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/10/2024	Date Drilling Completed: 9/10/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Hand Augered	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 7.0
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Hand Auger
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA			5	HAND AUGERED TO 7' BELOW GRADE, SURFACE ASPHALT TO 7". SILTY SAND [SM], dark brown, medium density, moist, fine grained, trace cobble and gravel.	SM			0	Nylaflo Diameter: 1/8" Hand Auger Diameter: 3.25" Hydrated Granular Bentonite (0'-4') Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5') Dry Granular Bentonite (5.5'-6') Hydrated Granular Bentonite (6'-7')
			10	END OF BORING, REFUSAL AT 7' BELOW GRADE.					
			15						
			20						

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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WELL CONSTRUCTION LOG

WELL NO. SB-3

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/11/2024	Date Drilling Completed: 9/11/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 16.0
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 4' BELOW GRADE, SURFACE ASPHALT TO 7". SAND-SILTY SAND (SP-SM), dark brown, medium density, fine-medium grained, poorly graded.					Nylaflo Diameter: 1/8" Hand Auger Diameter: 3.25" Strataprobe Diameter: 2.25"
CS	25		5	Same as above, gray, moist, few cobbles and gravels.	SP-SM				Hydrated Granular Bentonite (0'-4') Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5')
CS	100		10	Same as above, 4" of brown sand at 9.5' below grade.	SP			0	Dry Granular Bentonite (5.5'-6') Hydrated Granular Bentonite (6'-14')
CS	100		15	Same as above, yellowish brown.				0	Dry Granular Bentonite (14'-14.5') #3 Sand Filter Pack (14.5'-15.5') 1" Airstone Filter Probe (15')
				END OF BORING, REFUSAL AT 16' BELOW GRADE.					Dry Granular Bentonite (15.5'-16')

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

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WELL CONSTRUCTION LOG

WELL NO. SB-4

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/12/2024	Date Drilling Completed: 9/12/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 6.0
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 3' BELOW GRADE, SURFACE ASPHALT TO 7". POORLY GRADED SAND [SP], grayish brown, dense, moist, medium-coarse grained, trace gravels and cobbles.					Nylaflow Diameter: 1/8" Hand Auger Diameter: 3.25" Strataprobe Diameter: 2.25"
CS	100		5	Same as above, dark grayish brown, coarsed grained.	SP			0	Hydrated Granular Bentonite (0'-4') Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5') Dry Granular Bentonite (5.5'-6')
				END OF BORING, REFUSAL AT 6' BELOW GRADE.					

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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WELL CONSTRUCTION LOG

WELL NO. SB-5

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/11/2024	Date Drilling Completed: 9/17/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 16.0
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 5' BELOW GRADE, SURFACE MATERIAL: 11" Asphalt, 6" Concrete.					Nylaflo Diameter: 1/8"
			5	POORLY GRADED SAND [SP], brown, dense, moist, coarse grained, few gravels and cobbles.					Hand Auger Diameter: 3.25"
CS	100								Strataprobe Diameter: 2.25"
			5						Hydrated Granular Bentonite (0'-4')
			5						Dry Granular Bentonite (4'-4.5')
			5						#3 Sand Filter Pack (4.5'-5.5')
			5						1" Airstone Filter Probe (5')
			5						Dry Granular Bentonite (5.5'-6')
			5						Hydrated Granular Bentonite (6'-14')
CS	100		10		SP				
			10	Same as above, medium grained, large cobbles.					
CS	100		15						
			15						Dry Granular Bentonite (14'-14.5')
			15						#3 Sand Filter Pack (14.5'-15.5')
			15						1" Airstone Filter Probe (15')
			15						Dry Granular Bentonite (15.5'-16')
			16	END OF BORING, REFUSAL AT 16' BELOW GRADE.					

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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WELL CONSTRUCTION LOG

WELL NO. SB-6

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/11/2024	Date Drilling Completed: 9/17/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 15.5
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 3' BELOW GRADE, SURFACE MATERIAL: 11" Asphalt, 6" Concrete. POORLY GRADED SAND [SP], brown, medium density, moist, medium grained, few gravels, trace cobbles.					Nylaflow Diameter: 1/8" Hand Auger Diameter: 3.25" Strataprobe Diameter: 2.25"
CS	75		5	Rock encountered at 6' below grade.				0	Hydrated Granular Bentonite (0'-4')
CS	88		10	Same as above, fine grained.	SP			0	Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5')
CS	100		15	Same as above, gray, fine-medium grained.				0	Dry Granular Bentonite (5.5'-6') Hydrated Granular Bentonite (6'-14')
				END OF BORING, REFUSAL AT 15.5' BELOW GRADE.					Dry Granular Bentonite (14'-14.5') #3 Sand Filter Pack (14.5'-15.5') 1" Airstone Filter Probe (15')

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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WELL CONSTRUCTION LOG

WELL NO. SB-7

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/11/2024	Date Drilling Completed: 9/17/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 15.5
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 3' BELOW GRADE, SURFACE MATERIAL: 11" Asphalt, 6" Concrete.					Nylaflo Diameter: 1/8" Hand Auger Diameter: 3.25" Strataprobe Diameter: 2.25"
CS	75		5	POORLY GRADED SAND [SP], brown, dense, moist, fine-medium grained, few gravels and cobbles.	SP			0	Hydrated Granular Bentonite (0'-4') Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5') Dry Granular Bentonite (5.5'-6') Hydrated Granular Bentonite (6'-14')
CS	80		10	Same as above, Coarse Grained				0	
CS	100		15	MACROCORE REFUSAL AT 12' BELOW GRADE, DROP TIP USED UNTIL 15.5' BELOW GRADE.				0	Drop Tip Diameter: 1.25"
			20	END OF BORING, REFUSAL AT 15.5' BELOW GRADE.					Dry Granular Bentonite (14'-14.5') #3 Sand Filter Pack (14.5'-15.5') 1" Airstone Filter Probe (15')

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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WELL CONSTRUCTION LOG

WELL NO. SB-8

Page 1 of 1

Facility/Project Name: City of Los Angeles - Avenue 34		Date Drilling Started: 9/11/2024	Date Drilling Completed: 9/17/2024	Project Number: 579271.0000.0000
Drilling Firm: H&P	Drilling Method: Direct Push Technology	Surface Elev. (ft) ---	TOC Elevation (ft) ---	Total Depth (ft bgs) 15.5
Boring Location: Avenue 34 Site, 3401 Pasadena Ave., Los Angeles, California, 90031		Personnel Logged By - Paul Kee Driller - H&P		Drilling Equipment: Strataprobe
Civil Town/City/or Village: Pasadena	County: Los Angeles	State: California	Water Level Observations: While Drilling: After Drilling:	

SAMPLE INTERVAL	RECOVERY (%)	BLOW COUNTS	DEPTH IN FEET	LITHOLOGIC DESCRIPTION	USCS	GRAPHIC LOG	WELL DIAGRAM	PID (PPM)	COMMENTS
HA				HAND AUGERED TO 3' BELOW GRADE, SURFACE MATERIAL: 11" Asphalt, 6" Concrete.					Nylaflow Diameter: 1/8" Hand Auger Diameter: 3.25" Strataprobe Diameter: 2.25"
CS	100		5	POORLY GRADED SAND [SP], brown, dense, moist, coarse grained, few gravels and cobbles.	SP			0	Hydrated Granular Bentonite (0'-4') Dry Granular Bentonite (4'-4.5') #3 Sand Filter Pack (4.5'-5.5') 1" Airstone Filter Probe (5') Dry Granular Bentonite (5.5'-6') Hydrated Granular Bentonite (6'-14')
CS	75		10	Same as above, gray, fine-coarse grained. Same as above, brown, trace cobble.				0	
				MACROCORE REFUSAL AT 11' BELOW GRADE, DROP TIP USED UNTIL 15.5' BELOW GRADE.					Drop Tip Diameter: 1.25"
			15	END OF BORING, REFUSAL AT 15.5' BELOW GRADE.					Dry Granular Bentonite (14'-14.5') #3 Sand Filter Pack (14.5'-15.5') 1" Airstone Filter Probe (15')
			20						

SOIL BORING-WELL CONSTRUCTION LOG AVENUE 34.GPJ 579271.0000.0000 12/2/24

Signature:	Firm: TRC Companies Inc. 6 Executive Circle #200 Irvine, CA, 92614	Phone 9497279336 Fax
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APPENDIX C

Standard Operating Procedure (SOP) for H&P Mobile Geochemistry (H&P)

H&P Soil Vapor Installation and Sampling Standard Operating Procedures

*The information contained in this SOP is intended for use with H&P services only.
Any distribution or disclosure for any other purpose is prohibited.*

SOPS 003

Revision 8

Revised: October 22, 2024

Effective: November 1, 2024

Approved:



10/22/2024

Dave Balkenbush
Facilities Manager

Date



10/30/24

Eric Corson
Field Services Manager

Date

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Appendix B Soil Vapor Sampling using a Gaseous Leak Check Compound
Appendix C Sampling Log Sheets and Chain of Custody

FOREWORD

These soil vapor sampling procedures are the standard policies and practices for H&P Mobile Geochemistry, Inc. These procedures are followed only in accordance and by acceptance from the client under contract for work being performed. Each client specific project is handled on a case by case basis, and H&P can modify and/or amend these procedures to accommodate different agency or work plan requirements. As additional information, experience and new agency procedural developments are learned, these procedures may be modified as deemed appropriate.

1.0 Soil Vapor Probe Installation Methods

1.1 Soil Vapor Probe Installation

1.1.1 Soil Vapor Probe Materials

1.1.1.1 Tubing

H&P most commonly uses 1/8" Nylaflow® tubing for all soil vapor probe applications. If requested, 1/4" Nylaflow® or Teflon® tubing can be used for probe construction as well. For subslab installations, stainless steel tubing can also be used per client request. Only clean, new tubing is used for all soil gas probes. Prior to construction of the soil vapor probes, all tubing is flushed with lab grade Nitrogen to ensure that any unknown contaminants have not compromised the tubing during mobilization to the jobsite.

As per request, an equipment blank of the assembled soil vapor probe, including tubing and filter, may be done prior to commencement of work to confirm its cleanliness.

1.1.1.2 Filters

There are several different types of soil vapor filters which can be attached to the leading end of the soil vapor probe tubing. For temporary soil vapor probe installations, a plastic "airstone" filter is typically used as effective, cost efficient option. For more permanent soil vapor probe installations, it is recommended that a stainless steel mesh filter be used. These filters come in a variation of sizes. A small, 1" long implant screen is most commonly used by H&P unless otherwise requested by client. Other options include 6" or 12" stainless steel mesh filters.

1.1.1.3 Soil Vapor Probe Termination/Valve

The above ground soil vapor probe tubing is terminated at the end with a small plastic on/off stopcock valve. The open end of the valve has a female luer fitting that allows for easy attachment of the sample train when sampling is to commence.

Other terminations such as Swagelok® compression fittings, different size/type valves, or vinyl slip caps may also be attached to the tubing per request of the client.

1.1.1.4 Sand

All soil vapor probe filters are encased in #3 medium aquarium 8 x 20, ARB Certified, washed/cleaned/kiln dried sand unless otherwise requested.

1.1.1.5 Bentonite

Temporary soil vapor probes are typically constructed by sealing void spaces using a granular bentonite product composed of polymer-free, dried bentonite in 8-20 mesh size which is derived from natural Wyoming sodium bentonite.

Per request, temporary soil vapor probes can be constructed using a powdered, sodium-based bentonite grout which is mixed at the surface and poured down the borehole with the aid of a PVC tremie pipe.

1.1.1.6 Portland Cement

Per request, permanent soil vapor probes can be constructed using a non-alkali, neat Portland cement. The cement is typically mixed at the surface and a bentonite content of 5 percent is added.

1.1.2 Installing Temporary Soil Vapor Probes using Direct Push Rig

At each vapor probe location, H&P's truck-mounted hydraulic direct push rig may be used to advance interconnected 4 ft. lengths of 1.5" stainless steel probe rod to the desired probe depth. The rod is then removed and the soil vapor probe tubing, with a small filter attached to the end, is inserted into the open borehole. The probe tubing is gently lifted up to a height which places the filter in the approximate center of the sandpack, and 6" to 1' of sand is poured down the borehole. Above the sandpack, 6" to 1' of dry granular bentonite is added to prevent moisture from infiltrating the sandpack. The borehole is then completed to the surface with hydrated bentonite. For deep probe installation with multiple soil vapor probe depths the borehole is initially advanced to the deepest location and the deepest vapor probe is installed first. The borehole is then constructed to the surface by carefully measuring and installing the remaining vapor probes at the desired depths. All depth requirements can be confirmed by advancing a tape measure down the borehole during stages of well construction. A 6" dry bentonite zone is placed below, and above the desired sandpack zone for all nested probes not at the deepest depth. In unstable soil conditions, a larger casing probe rod can be advanced down to depth and the well can be constructed inside of the rod. The probe tubing, filter and materials can be inserted into the probe rod and the soil vapor well can be constructed as it is retracted. After completion, an airtight valve is attached to the end of the probe. See Figure 1

Each soil vapor probe is labeled with an identification tag that indicates: sample ID (with probe depth), time probe was installed, diameter and height of the sand pack, diameter and height of the dry bentonite, and total length of tubing used.

1.1.3 Installing Soil Vapor Probes Using Manually Driven Hand Probes

In stable soil conditions, H&Ps manually driven probe rods may also be used to set soil vapor implants. With a hardened 7/8" steel tip on the end of the 3/4" probe rod, the

probe is driven with an electric rotary hammer to depth (usually 5' or less). The rod is then removed and the soil vapor probe tubing, with a small filter attached to the end, is inserted into the open borehole. The probe tubing is gently lifted up to a height that places the filter in the approximate center of the sandpack, and 6" to 1' of sand is poured down the borehole. Above the sandpack, approximately 6" to 1' of dry granular bentonite is poured down the borehole and then the well is completed to the surface with hydrated bentonite. An airtight valve is attached to the end of the probe.

Each soil vapor probe is labeled with an identification tag that indicates: sample ID (with probe depth), time probe was installed, diameter and height of the sand pack, diameter and height of the dry bentonite, and total length of tubing used.

1.1.4 Installing Soil Vapor Probes Using Hand Auger Equipment

The use of hand auger equipment may also be used to install soil vapor probes. Most commonly, a 3.5" auger bucket is used to remove the soil from the borehole. Once the desired depth is reached, 1/8" (or 1/4" if requested) Nylaflo® or Teflon® tubing with a small airstone filter attached to the end is inserted into the open borehole. The probe is gently lifted up approximately 6" and sand is poured down the borehole to encase the filter with 1' of sandpack. Approximately 1' of dry granular bentonite is poured down the borehole and then the well can be completed to the surface with hydrated bentonite.

1.1.5 Installing Semi-permanent or Permanent Soil Vapor Probes

For semi-permanent and/or permanent installations where monitoring of the soil vapor probe is required, a traffic rated well box can be installed at the surface. These are most commonly constructed of a 5" well box set in a 8" to 12" diameter concrete seal using high strength concrete. The probe tubing can be left coiled in the well box itself, or can be emplaced in PVC within the well box and finished with a locking cap protection of the probes.

If protection of the soil vapor probe tubing is desired, but the use of a well box is not necessary, another option is to insert a length of PVC at the surface of the borehole. The tubing can be protected inside the PVC and the top is covered with a PVC cap.

Examples of surface completion options can be seen in Figure 2.

Upon request, permanent soil vapor probes can be constructed with a Portland cement slurry to fill the annulus space. The slurry is a mix of 95% Portland cement and 5% bentonite material that is mixed at the surface and fed down the borehole via the use of a tremie pipe.

1.2 Post Run Tubing (PRT)/ Manual Through the Rod Sampling

1.2.1 PRT Soil Vapor Sampling Using Direct Push Rig

Soil vapor samples are obtained by using a 1.5" O.D. PRT (post run tubing) point holder and a hardened stainless steel drop-off point. The point holder is threaded onto the leading end of a 1.5" O.D. probe rod and advanced to depth using H&P's direct push rig. Once the desired depth is reached, a 3/8" PRT fitting connected to 1/8" (or 1/4" if requested) Nylaflow® or Teflon® tubing is then inserted into the rod and lowered to the bottom fitting. The tubing is then threaded onto the drop-off point holder by applying downward pressure on the tubing while rotating. A small rubber o-ring on the PRT fitting ensures an airtight seal. The probe rod is then retracted slightly to disengage the expendable point, exposing the vapor sampling port. Hydrated bentonite is placed around the drive rod at the ground surface to prevent ambient air intrusion from occurring.

1.2.2 Manual Probe Rod / Drive Point Method Soil Vapor Sampling

H&P's manually driven soil vapor probes are constructed of 0.625" outside diameter steel and equipped with a hardened steel tip. The probes can reach a depth of 5' below ground surface. To construct the probe rod, 1/8" Nylaflow® tubing is threaded down the center of the probe and connected to a sampling port just above the tip prior to the sample rod being driven into the subsurface. This internal sample tubing design eliminates any contact between the sample port and the vapor sample.

The probe is then driven into the ground by an electric rotary hammer. Once inserted to the desired depth, the probe is rotated approximately 3 turns to open the tip and expose the vapor sampling port. This design helps to prevent clogging of the sampling port and cross-contamination from soils during insertion. Hydrated bentonite is placed around the drive rod at the ground surface to prevent ambient air intrusion from occurring.

1.3 Subslab Probe Installation

1.3.1 H&P Standard Subslab Installation

Using an electric rotary hammer with a 1" masonry drill bit, a hole is drilled through the concrete, penetrating the slab and advancing 2-3 inches into the engineered fill below the slab. All drill cuttings are removed from the borehole. Subslab probes are constructed of 1/8" or 1/4" tubing with either an airstone or stainless steel mesh filter attached. Tubing material can be Nylaflow®, Teflon® or Stainless steel. The probe is inserted into the borehole and the filter is emplaced in a 3" sandpack. A small layer of dry granular bentonite is placed above the sandpack and the borehole is completed to the surface with hydrated bentonite. For temporary subslab locations, the tubing length

extends above the slab approximately 1 – 1.5' and an airtight valve is attached to the probe.

Each soil vapor probe is labeled with an identification tag that indicates: sample ID (with probe depth), time probe was installed, total length of tubing used, and purge volume.

For permanent subslab installations, the tubing is completed with a Swagelok® compression fitting that is set flush in the slab using a cement grout. These installations allow for monitoring of the subslab locations for any period of time. A diagram of this installation can be seen in Figure 3. (For detailed installation instructions, refer to FSG 005.)

1.3.2 Cox Colvin Vapor Pin™ Installation

Per request, H&P can install the Cox Colvin Vapor Pin™ for the use of subslab sampling. Installation of the Vapor Pin is done following the recommended Standard Operating Procedures for installing the permanent Vapor Pin with Drilling Guide and Secure Cover. (For detailed installation instructions, refer to Cox Colvin Standard Operating Procedure- Use of the Vapor Pin™ Drill guide and Secure Cover).

1.4 Drilling Refusals

Drilling refusals can, and often do, happen with any type of soil vapor drilling method mentioned above. If refusal occurs, the H&P operator will inform the client that the target depth was not achieved. The client may then decide to install the soil vapor probe at the depth reached, or attempt to step over to a new location and try again to advance to the target depth. All step out locations must have proper utility clearance in order for the operator to proceed. If refusal still occurs after three attempts, the client should then decide if they wish to install the soil vapor probe at the shallower depth, or abandon that location. If deeper depths must be achieved, an alternative drilling method may be required. Any requests from the client to continue attempting step out locations beyond three attempts should be discussed with the H&P project manager or supervisor.

1.5 Decommissioning Soil Vapor Probes

1.5.1 Standard Temporary Soil Vapor Probes

After final sample collection and analysis of the soil vapor well has been completed, the probe tubing is removed from the well by pulling it out from the surface. Complete removal of the tubing may not be possible on deeper wells, in which case the tubing is cut as far below grade as possible. Because of the small diameter size of the tubing and the construction of the well with hydrated bentonite, it is assumed that any open pore space left from the tubing is minimal and is sealed with the expansion of the hydrated bentonite. If there is any indication that the removal of the tubing has created an open pore space, thus creating a potential conduit, additional bentonite or a bentonite slurry

may be added to the borehole to properly seal the void space. The surface of the well is restored to its original condition of concrete, asphalt, soil, or vegetation unless requested otherwise.

1.5.2 Semi-permanent Soil Vapor Wells set in Well Boxes

After final sample collection and analysis of the semi-permanent soil vapor well has been completed, the cement well box containing the probe is broken up and removed from the ground surface. It can be broken up using the direct push rig, rotary hammer drill, or a breaker bar. The probe tubing is removed from the probe, as described above, and the annulus space created from the removal of the well box construction is filled with native material, concrete or asphalt to match the original surface condition.

1.5.3 Subslab Points

After final sample collection and analysis of the subslab point has been completed, the semi-permanent subslab point is destroyed by pulling out the tubing from the borehole. A screwdriver, or other implement, is then used to clear out the hydrated bentonite within the slab. Once removed, the hole in the slab is filled with high strength rapid set cement. For permanent installations, the Swagelok compression fitting is removed from the surface and the open pore space is filled in with high strength rapid set cement.

1.6 Decontamination

All probe construction materials, including tubing and filters, are clean and unused so they do not require decontamination. However, as an added precaution, prior to construction of the soil vapor probes, all tubing is flushed with lab grade Nitrogen to ensure that any unknown contaminants have not compromised the tubing during storage and/or mobilization to the jobsite. All reusable equipment, such as the probe rods and point holders, are cleaned of any observed soil cuttings and/or foreign material. Decontamination of the equipment using a three-stage process consisting of a wash with a non-phosphate detergent, a rinse with tap water, and a final rinse of de-ionized water can be done upon request.

2.0 Soil Vapor Sample Collection

2.1 Equilibration Time

Each individual soil vapor project may have a specific equilibration time required for each soil vapor probe installation method used, based on the project plan and/or agency oversight requirements. See Table 1 for a chart listing the different government agencies requirements for these equilibration times.

2.2 Soil Vapor Purge Volumes

Soil Vapor probe purge volumes are determined by adding the volume of the tubing used in the probe construction, the volume of the sandpack zone, and the volume of the dry bentonite zone.

2.2.1 Calculating Purge Volumes of Soil Vapor Wells

Purge volume of a soil vapor well is defined as the internal volume of the length of tubing used in the construction of the soil gas well added to the “dead space volume” of the sand pack around the probe tip/filter along with the “dead space volume” of the dry bentonite zone.

The inner diameter of the tubing is used to calculate the volume of the tubing. Once the ID is measured, the volume is calculated using the formula for volume of a cylinder:

$$V = \pi r^2 h$$

Whereas the radius equals ½ of the internal diameter of the tubing and the height is equal to the length of tubing. H&P most commonly uses 1/8” Nylaflow tubing with an internal diameter of 0.078” which calculates to approximately 1 cc/ft. Larger tubing sizes, such as ¼”, can be calculated using the same method.

In order to calculate the volume of the sand pack, the individual parameters of the sand pack must be known. These include the diameter of the borehole, the height of the sand pack, and the porosity of the sand. The width of the borehole equates to the outer diameter of the probe rod or auger used to install the vapor well. The height of the sand pack is the amount of sand poured down the borehole encasing the probe filter, typically 6” to 1’. The porosity, or pore space, is the amount of air space between

the sand particles within the sand pack. This is typically around 30-40%. H&P calculates the porosity at 40%. Therefore, in order to calculate the total volume of the sand pack, you use the same formula for volume as described above, and then multiply by the porosity:

$$V = \pi r^2 h (.40)$$

Whereas the radius equals ½ of the borehole diameter and the height is equal the length of the column of sand emplaced around the probe filter.

In order to calculate the volume of the dry bentonite zone, the same formula is used, but the porosity is changed to 50%.

$$V = \pi r^2 h (.50)$$

Once the volume of the tubing, sand pack and dry bentonite zone have been determined, these volumes are added together to equal one volume of the soil vapor probe. This volume can then be multiplied by 3 in order to get the standard 3 Purge Volumes of the soil vapor probe.

Note: For projects being completed under the 2012 DTSC advisory for active soil gas investigations, the sand pack is assumed to have porosity of 40%, and the purge volume must also include the void space of the dry bentonite emplaced above the sandpack. The volume of which can be calculated using the same formula as used above for the sandpack. The assumed porosity of the dry bentonite is 50%. This volume is added to the volume of the sandpack plus the internal volume of the vapor probe tubing to give one purge volume of the soil vapor system.

2.2.2 Calculating Purge Volumes of PRT Sample Method

The purge volume of the PRT sample system is defined as the internal volume of the length of tubing used, added to the internal diameter of the PRT drop off point holder fitting. This fitting has a calculated internal volume of 20cc which is added to the internal volume of the length of tubing being used. These volumes added together equal one volume of the PRT system.

2.2.3 Calculating Purge Volumes of Manual Probe Rod

The purge volume of the Manual Probe Rod sampling with the tubing attached through the rod is defined as the internal volume of the length of tubing used, added to the internal diameter of the slotted point holder at the end of the rod. This fitting has a calculated internal volume of 10cc, which is added to the internal volume of the length

of tubing being used. These volumes added together equal one volume of the manual probe rod system.

2.2.4 Calculating Purge Volumes for Subslab Probes and Vapor Pins

Purge volumes for Subslab probes are determined in the same manner as a soil vapor probe. One purge volume of the probe is calculated by adding the volume of the subslab tubing to the volume of the sandpack, to the volume of the dry bentonite. This volume is then multiplied by 3 in order to determine 3 purge volumes of the probe.

Purge volumes for Vapor Pins are determined by calculating the volume of ambient air space from the bottom of the Vapor Pin, to the bottom of the borehole. This volume is then added to the internal volume of the Vapor Pin (= 1mL) and then multiplied by 3 in order to determine 3 purge volumes of the probe.

2.3 Purge Volume for Semi-Permanent/Permanent Soil Vapor Probes

For permanent, or semi-permanent, soil vapor probes subject to frequent sampling events, the purge volume can be reduced to one purge volume of the system, or one purge volume of the tubing if the soil vapor well has been previously purged and sampled and sufficient time has transpired between sampling events. This is entirely site specific and these volumes are determined by clients of H&P based on their project work plans.

2.4 Shut-In Test

Prior to purging and sampling, a shut-in test is conducted on the sampling train to check for leaks in the above-ground fittings. The shut-in test is conducted by attaching the complete sample train assembly to the termination valve on the soil vapor probe. With the valve attached to the soil vapor probe in the “off” position, a purge syringe or vacuum pump is used to evacuate the sample train of air to a minimum measured vacuum of approximately 100 inches of water. The vacuum is observed on a in-line vacuum gauge which is positioned prior to the purge syringe or vacuum pump. The vacuum gauge is observed for one minute and all above ground connections will be considered “air-tight” if the pressure on the gauge does not noticeably dissipate. If there is a observable loss in vacuum, the fittings in the sample assembly are checked and tightened, and the test is repeated. Sampling is not commenced until the above ground fittings are deemed air-tight.

2.5 Leak Test

A leak test, using a liquid tracer or a gaseous tracer, is performed on each individual soil vapor sample probe in order to test the integrity of the entire sampling system. Its purpose is to evaluate whether an adequate seal is established at the soil vapor probe

interface with the ground surface, as well as a leak check of all above ground fittings to ensure that the samples collected are not being diluted by ambient air.

2.5.1 Liquid Leak Check Compounds

Liquid leak check compounds, such as Difluoroethane (DFA) or Tetrafluoroethane (PFA) can be used to evaluate sample integrity. The liquid tracer compound is applied to a towel and kept in a closed plastic ziplock bag until it is ready to be used. Prior to purging and sampling of the soil vapor probe, the towel is emptied from the plastic bag and placed directly at the point of entry of the soil vapor probe into the borehole. This is used to test the integrity of the construction of the soil vapor probe. Additional saturated towels can also be set near all above ground sample train connections to ensure there are no leaks in the above ground fittings as well. The towel used for the leak detection can be reused between samples and should be refreshed with the liquid compound prior to each purging and sampling event. If the purging and sampling collection takes longer than five minutes in duration, the liquid tracer should be reapplied to the cloth, or steps should be made to contain the compound within an enclosure.

This method is most commonly used with an on-site mobile laboratory because any detections of the leak tracer compound in the sample can be quantified on site. This allows for the probe to be re-sampled after adequate steps to correct the leak have been attempted.

Liquid leak check compounds can also be used to identify potential leaks of the sample system when sampling with summa canisters for off-site analysis as well, but any detections of the leak compound in the sample will not be known until after the summa canisters have been analyzed.

2.5.1.1 Corrective Actions Taken for Leak Check Compound Detections

The DTSC 2015 ASGI recommends a liquid leak check (LCC) threshold of 10x the reporting limit of the LCC compound. When the LCC detection exceeds this threshold, H&P has consistent corrective action procedures to be communicated and performed as follows:

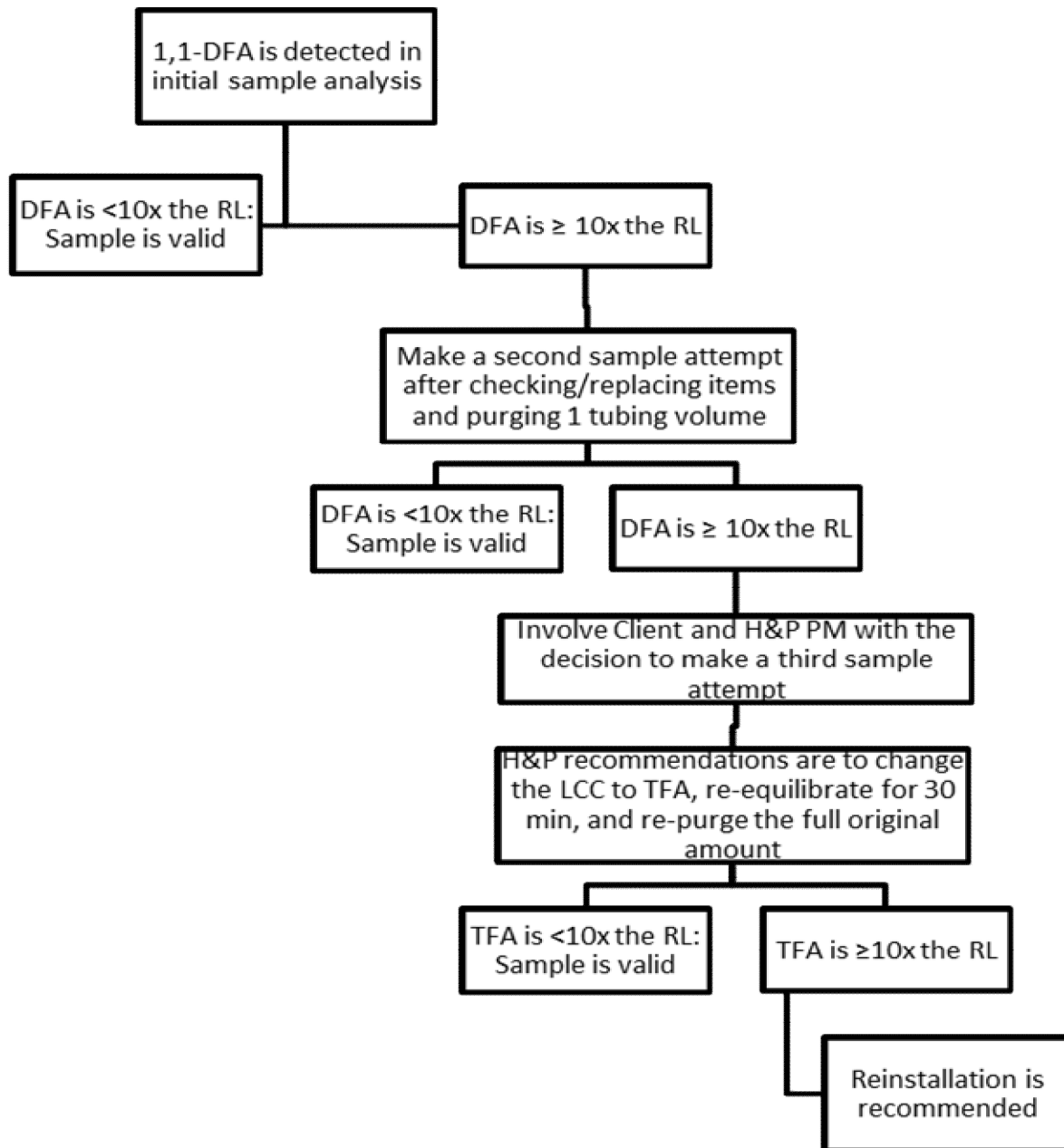
If the leak check 1,1 DFA is detected over the threshold of 10x the RL, a second sample attempt is made. Prior to the collection of this sample, extra precautions are made to assure that there are no leaks in the sample train. These include: checking the termination valve, checking the integrity of the probe tubing, and checking the condition of the probe sealing material. A second shut-in test is also performed on the sample train.

If the leak check 1,1 DFA is detected over the threshold again, the decision about how to proceed will involve the client for the project. In this situation, H&P will make the following recommendations:

- Change the LCC to a new compound (i.e. 1,1,1,2-Tetrafluoroethane) and attempt one more resample of the existing probe.
 - The reason for the change is because a) DFA could be present at the location and/or b) the probe materials could be contaminated with DFA carryover due to the previous leakages.
- Equilibration: Resampling should occur after 30 minutes or more have passed since the last sample attempt.
 - Because the probe will be re-purged, it is recommended to let the soil vapor re-equilibrate for 30 minutes after the previous sampling events.
- Purging: The existing probe should be re-purged the full original amount (i.e. 3PV).
 - The reason for this recommendation is to flush the probe completely in an effort to test the entire system for leaks with the new compound.

If the leak check 1,1,1,2-TFA is detected over the threshold on the 3rd sample attempt, the probe is considered to be invalid. At this point it is the recommendation of H&P that the soil vapor probe cannot be adequately sampled and should be re-installed at an adjacent location.

2.5.1.2 Corrective Action Flow Chart for LCC Detection



2.5.2 Gaseous Leak Check Compounds

Gaseous tracer compounds, such as helium, can also be used to evaluate sample integrity. The tracer gas is contained in a shroud which is then placed over the soil vapor probe location, or the entire sample train, evaluating any leaks in the sampling system. Procedures for conducting this leak test are described in Appendix B. (For detailed instructions refer to FSG 009)

2.6 Purging Soil Vapor Probes

Depending on the volume of purge air that is required to be removed from the soil vapor probe, there are two options that can be used for purging. For smaller purge volumes, a plastic, gas-tight, calibrated syringe is used to purge the probe. For larger purge volumes, a vacuum pump is used. The purging device is attached to a 3-way valve (or a tee fitting) which is then connected to the on/off valve on the soil vapor probe. This 3-valve allows the sample train to be connected to one port on the valve, and the purge equipment to be attached to the other. This ensures that all of the sample train assembly being used for the collection of the sample will be upstream of the purging device, and therefore eliminates any potential for cross contamination.

2.6.1 Using a Syringe to Purge

H&P uses small plastic, calibrated syringes which allow for careful monitoring of purge volumes and flow rates when dealing with smaller volume soil vapor probes. Attached to the syringe is an air tight 3-way valve which allows the purge air to be drawn into the syringe and then evacuated out the side port on the valve. The syringe is attached to an in-line vacuum gauge so that probe vacuum can be monitored as the plunger draws in the purge vapor. The sampling technician can also feel the suction applied to the plunger while it is being withdrawn. During purging, the flow rate is timed so that it does not exceed 200 mL/per minute. This is accomplished by withdrawing the plunger on the 60 mL syringe at a constant rate for 20 seconds. This procedure ensures adequate purge vapor flow is obtained without excessive pumping of air or introduction of surface air into the sample.

2.6.2 Using a Vacuum Pump to Purge

For soil vapor wells with larger purge volumes, a vacuum pump is used to evacuate the purge air. Depending on the volume of purge air required to be evacuated and the proper flow rate needed, different sized pumps may be used. H&P most commonly uses a portable battery operated pump box which has the capability to adjust flow rates from 50 mL/min up to 4 L/min. For faster flow rates, a single-head diaphragm vacuum pump is used which has the capability to adjust flow rates from 1 L/min – 30 L/min. The high volume vacuum pumps require a power source to be used. All pumps used have flow meters attached so the flow rates can be accurately recorded along with in-line vacuum gauges so that probe vacuum can be monitored while purging.

2.7 Purge/Sample Flow Rate and Applied Vacuum

2.7.1 Sampling a Standard Construction Soil Vapor Well

Flow rates between 100 to 200 mL/min and probe vacuum pressures of less than 100 inches of water are maintained during purging and sampling of the soil vapor probe to minimize stripping, and to prevent ambient air from diluting the soil vapor samples.

When using a syringe for purging and sample collection, flow rates can be monitored by timing the interval at which the plunger is drawn. A 60 mL syringe will take approximately 20 seconds to fill in order to maintain a 200 mL/min flow rate. When using a vacuum pump, in-line calibrated flow meters are used to accurately monitor flow rates. These flow meters have metering valves which allow the flow rates to be increased or decreased to the appropriate rate.

An in-line vacuum gauge is used when purging with a syringe or a pump in order to maintain probe vacuum pressures less than 100" water. If, while purging, vacuum pressure exceeds 100" water, the client will be informed that the soil vapor probe location appears to be in a low-permeable soil formation. The sample technician will then slow the purge flow rate to a rate of 100 mL/min in attempt to maintain flow and keep the applied vacuum below 100" water. If it is not possible to maintain this flow rate without applying excess vacuum, alternative sampling methods can then be attempted to collect a sample in these prohibitive, low flow conditions.

2.7.2 Alternative Sampling Method in Low Flow Soil Conditions

After discussion and approval from the client, a modified purging and sampling procedure may be attempted when low flow soil conditions are encountered. After the vacuum threshold of 100" water is applied to the soil vapor probe and a flow rate of 100 mL/min is determined to be unattainable, the probe valve is closed to allow the vacuum to dissipate and all the soil vapor to slowly enter the sand pack and tubing from the surrounding soils. Using the vacuum gauge to monitor that the probe vacuum has completely dissipated, the probe valve is reopened and more vapor is purged until the vacuum threshold is met again. This procedure is repeated until the soil vapor probe is adequately purged and sampled. Because it may be unreasonable to purge and collect larger volumes due to time constraints, this method may not be appropriate when collecting samples in larger containers such as Summa canisters and/or Tedlar bags.

If this procedure is not feasible due to time/cost implications, H&P can provide an alternative option to reduce the purge volume to a total of 1 system volume (rather than 3 system volumes). This option is NOT outlined by DTSC, but can be implemented with the understanding that a vacuum condition may be interpreted as an indication that the ambient air within the probe construction materials has been evacuated, and that the air now being removed from the soil vapor probe is representative of the surrounding soil.

If there is no observed loss in probe vacuum once it has been applied and the valve has been closed, the client is informed that the soil vapor well is in a “no flow” situation and collection of soil vapor is not possible at that location. The client can then determine if they want to eliminate that location or to re-install another probe.

2.7.3 Sampling Soil Vapor Wells with Large Purge Volumes

Soil Vapor Wells constructed in large diameter boreholes, and/or wells constructed with PVC, will often have very large purge volumes. As a result, purging at the standard flow rate of 200 mL/min may be impractical due to time constraints. In such cases, it is recommended that the flow rates be increased to a rate which makes the sample times reasonable in order to complete the scope of work within the time frame desired. Some common increased flow rates used are 500 mL/min, 1 L/min, 5 L/min and 10 L/min. It is important to note that the probe vacuum applied is carefully monitored using a vacuum gauge in order to ensure that the vacuum pressure remains below 100” water during the entire purging process.

If connecting to a PVC well, a slip cap with a barb and a valve attachment may be connected to the PVC to provide sample access. The high flow vacuum pump is then attached to a 3-way valve (or a tee fitting) which is then connected to the on/off valve attached to the PVC cap. This 3-valve allows the sample train to be connected to one port on the valve, and the purge equipment to be attached to the other. This ensures that all of the sample train assembly being used for the collection of the sample will be upstream of the purging device, and therefore eliminates any potential for cross contamination.

Once the sample train is connected to the Soil Vapor Well, and just prior to purging, a shut in test is conducted in the same manner as described for a standard Soil Vapor Well. The use of a Leak Check Compound is also used in a similar manner as described for sampling a standard Soil Vapor Well.

2.8 Equipment Blanks for Soil Vapor Sampling

Upon request, H&P will collect a blank sample through the soil vapor equipment for QA/QC purposes. Standard procedure is to pull a sample of ambient air through the entire equipment train and into the applicable sampling container. The soil vapor train typically includes a pre-constructed soil vapor probe before installation (filter, tubing, termination), as well as the surface fittings and sampling train. If the soil vapor probes are already installed and not subject to the equipment blank, the equipment can include just the fittings and the sampling train. As part of the QA/QC process, H&P recommends also collecting a grab sample of the ambient air used as the source of the equipment blank, in order to identify the source of any contamination (i.e. ambient conditions or the actual equipment). Alternative equipment blank procedures as proposed in client work plans may also be followed upon request.

2.9 Sample Containers

Soil Vapor samples are collected in the appropriate gas-tight container required for specific projects and analysis needed. All sample collection assemblies and containers should be attached to the soil vapor probe via a 3-way valve prior to the purging device in order to avoid cross contamination.

2.9.1 Glass Syringes

H&P uses an airtight calibrated glass syringes for sample collection to be analyzed by the mobile on-site laboratory. The glass syringe is attached via a luer lock connection to a 3-way valve, which allows sample to be drawn into the syringe and then sealed off by rotating the valve. The syringe is attached to the “T” fitting (or 3-way valve) connected to the soil vapor probe on/off valve, and prior to the purging device. After purging of the soil vapor probe has been completed, the valve is rotated so that the flow path of the soil vapor probe is diverted towards the sample syringe. The plunger is then slowly drawn back at a flow rate of 200 mL/min or less. When the plunger is pulled back and the soil vapor sample has been drawn into the syringe, the valve is shut off at the syringe. It is then disconnected and immediately wrapped in aluminum foil, or transferred to a cool, dark bag to prevent photo degradation of the target analytes from direct sunlight. The soil vapor holding time in the syringe should not exceed 15 minutes before it is transferred to the sample instrument. (See FSG 014)

2.9.2 Summa Canisters

H&P most commonly uses 400 mL summa canisters for collection of soil vapor samples. If higher detection limits are needed, the use of 1 L canister may be required. The use of 6 L summa canisters is not recommended for soil vapor sampling. The summa canisters are attached to a sample assembly (also called a flow regulator or flow restrictor) via a quick-connect fitting. The sample assembly contains a vacuum gauge which is used to monitor the summa canister vacuum pressure, and a critical orifice which restricts the flow of air through the device at the desired rate. The leading end of the sample assembly contains a barb fitting which is attached to the “T” fitting (or 3-way valve) connected to the soil vapor probe on/off valve, and prior to the purging device. After purging of the soil vapor probe has been completed, the valve is rotated so that the flow path of the soil vapor probe is diverted towards the sample assembly and summa canister. The valve on the summa canister is then opened and sampling is commenced. Canister vacuum pressures are recorded prior to sampling, and again after sampling has been completed. ~~It is H&P's procedure to allow the vacuum pressure to zero with the collection of the sample. This allows the canister to be under zero pressure and thus, along with the shut-off male quick connect fitting and the canister valve, assures that there is no potential for unwanted air to enter the canister should a leak occur during transit. If requested, slight vacuum (two to four inches of mercury) may be left in the canister at the commencement of sampling. (See FSG 001 and FSG 002).~~ **It is H&P's standard procedure that slight vacuum is left on the soil gas summa canisters (approximately -5" to -2") after sampling to comply with regulatory agency requests. A vacuum of zero, if specified by client workplan or otherwise, can also be performed.**

Summa canisters should be kept out of direct sun light and kept at room temperature until received by the laboratory. The soil vapor holding time in a summa canister should not exceed 30 days.

2.9.3 Tedlar® Bags

The use of Tedlar bags (or polymer bags) can be an effective and economical approach for the collection of soil vapor samples for both the stationary or mobile lab. Soil vapor samples can be collected in Tedlar bags using one of two methods.

A disposable plastic syringe can be used by drawing the sample into the syringe, and then evacuating it through a side port in the 3-way valve into the Tedlar bag. This process is repeated until the proper amount of sample is collected in the bag. (See FSG 006 and FSG 007)

The use of a “lung box” may also be used to collect the soil vapor sample in the Tedlar bag. The lung box fills the bag with sample directly from the soil vapor probe using the pressure difference caused by creating a vacuum condition within the box through the use of a vacuum pump. The vacuum inside the container forces the Tedlar bag to expand and to draw in a sample directly from the soil vapor probe.

Samples collected in Tedlar bags should not be exposed to sunlight or extreme temperatures. Photo degradation of target analytes is possible with light exposure. The soil vapor holding time for Tedlar bags should not exceed 3 days.

2.9.4 Sorbent Tubes

The use of sorbent tubes can be used as a effective method for obtaining soil vapor samples, particularly when heavier compounds such as Naphthalene are of concern. The sorbent sample method, TO-17, can be used to collect VOC's over a wider volatility range than the more common canister-based TO-15 method.

The sorbent tube is attached upstream of a syringe or sample pump. The leading end of the sorbent tube is attached to the “T” fitting (or 3-way valve) connected to the soil vapor probe on/off valve, and prior to the purging device. After purging of the soil vapor probe has been completed, the valve is rotated so that the flow path of the soil vapor probe is diverted towards the sorbent tube set up, and the soil vapor sample is carefully drawn through the tube. The flow rates and volume of soil vapor sample drawn through the sorbent tube are critical to achieving the data quality objectives and must be discussed with the laboratory prior to sample collection. (See FSG 010 and FSG 011)

After sample collection, sorbent tubes should be wrapped in aluminum foil and kept in a cooler at a temperature of approximately 4° C (39° F) until received by the laboratory. The soil vapor hold time for sorbent tubes should not exceed 30 days. Complete sorbent tube sample procedures are available upon request.

3.0 Field Records

A copy of all log sheets and the chain of custody are located in Appendix C.

3.1 Soil Vapor Probe Installation Log Sheet

Following installation of each soil vapor probe, the H&P technician documents all the pertinent information for the construction of the soil vapor probe on a Soil Vapor Probe Installation Log Sheet. The soil vapor probe installation logsheets are kept in a project folder specifically made for each job performed.

Each logsheet contains the following information:

- Project site address
- Client
- Soil vapor point ID's
- Time and Date of each probe installation
- Probe depth
- Tubing: Length, Type, Diameter
- Filter Type
- Sand pack and Dry Bentonite dimensions (bore hole dimension)
- Probe Termination
- Date the Probes are Abandoned
- Additional Notes

3.2 Soil Vapor Sampling Log Sheets

All soil vapor samples collected by H&P personnel are documented on task specific Soil Vapor Sampling Log Sheets. Depending of the sample container and sample method used, appropriate log sheets with all pertinent information are documented for each sample collected. Each log sheet contains the following information:

- Project site address
- Client
- Soil Vapor Point ID's
- Sample Time
- Probe Specs: Probe Depth, Tubing Length and Diameter, Sand Pack and Dry Bentonite dimensions

- Purge Volume Information
- Pump Run Time (if used)
- Flow Rate
- Shut-in Test
- Probe Pressure
- Leak Check Compound used and Procedure used to apply
- Additional Field Notes

3.2.1 Soil Vapor Sampling with Mobile Lab (Syringe) Log Sheet

In addition to the information listed under Soil Vapor Sampling Log Sheet, the following information is also included on the Soil Vapor Sampling with Mobile Lab log sheets:

- Syringe ID

3.2.2 Soil Vapor Sampling into Summa Log Sheet

In addition to the information listed under Soil Vapor Sampling Log Sheet, the following information is also included on the Soil Vapor Sampling into Summa Log Sheets:

- Summa canister #
- Sample Assembly #
- Sample Collection Start and End Times
- Summa Canister Initial and Final Vacuum Pressures

3.2.3 Soil Vapor Sampling With Helium Shroud Log Sheet

In addition to the information listed under Soil Vapor Sampling Log Sheet and Sampling Into Summa Log Sheet, the following information is also included on the Soil Vapor Sampling With Helium Shroud Log Sheets:

- Helium Percentages in Shroud Before and After Sampling
- Helium Concentration Found in Probe
- Shroud Procedure Collection Summary

3.2.4 TO-17 Sorbent Tube Soil Vapor Sampling Log Sheet

In addition to the information listed under Soil Vapor Sampling Log Sheet, the following information is included on the TO-17 Sorbent Tube Soil Vapor Sampling Log Sheets:

- Sorbent Tube ID
- Sample Start and End Times

- Total Sample Time
- Total Sample Volume

3.3 Chain of Custody Records

Each soil vapor sample collected that is to be analyzed must be documented on a Chain of Custody Record (COC). The COC is a record of receipt for all samples and designates which analysis will be performed on each sample. H&P personnel may help document information on the COC, but it is the clients responsibility that all sample ID's and analysis marked are correct. The client must sign the "Relinquished By:" signature line confirming that sample information is correct and the analysis to be performed is accurate. The client is given a copy of the COC upon signature of both parties. The COC is then used as a sample custody record upon receipt by the laboratory.

TABLE 1

Equilibration Times

Equilibration times are dictated by client work plans and local guidance and regulations. Below are common equilibration times per regulatory agencies in Southern California, for example.

Installation Method	San Diego County SAM Manual 2011	DTSC ASGI 2015
Vapor Well w/ Sand Pack and Dry Bentonite	8 hours	120 minutes
Drive Point Handprobe	30 minutes	Not specified
PRT Sampling	60 minutes	Not specified
Hand Auger or Auger Rig	48 hours	48 hours
Sub Slab probes (semi- permanent)	Not specified	120 minutes
Sub Slab probes (permanent)	Not specified	120 minutes

Figure 1

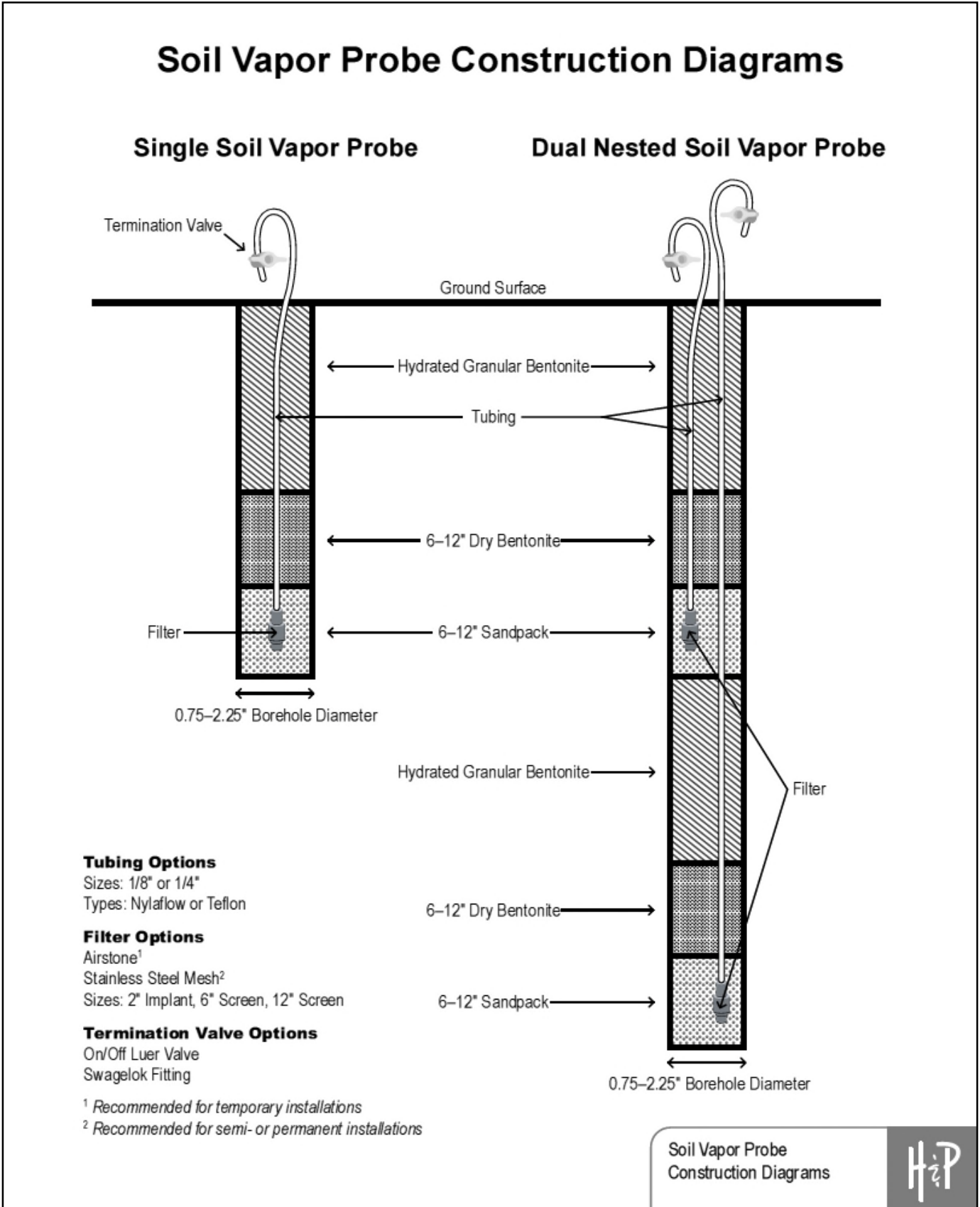
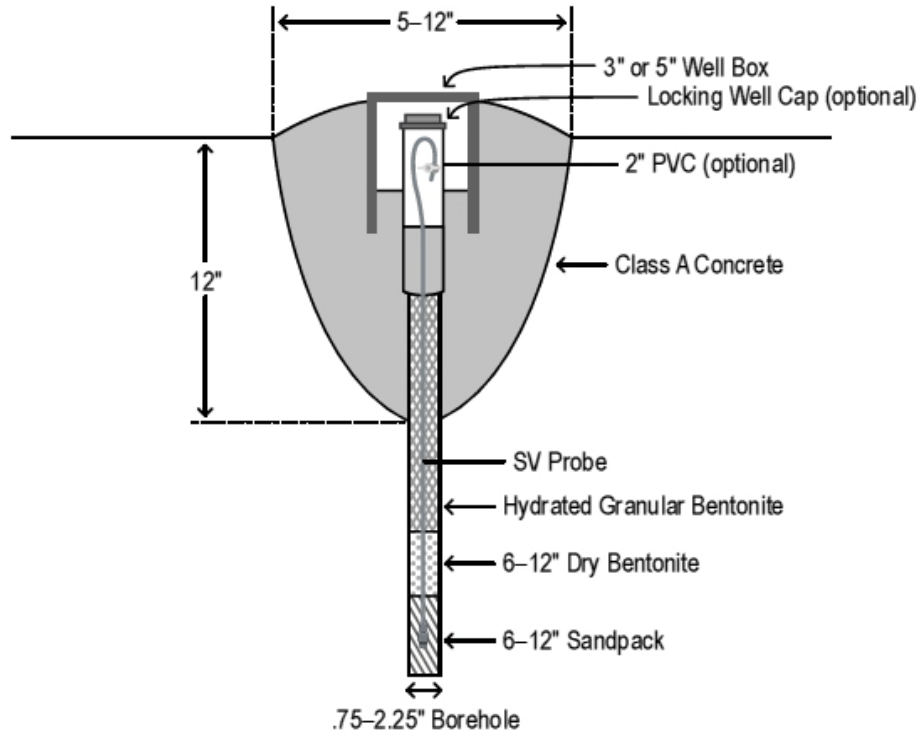
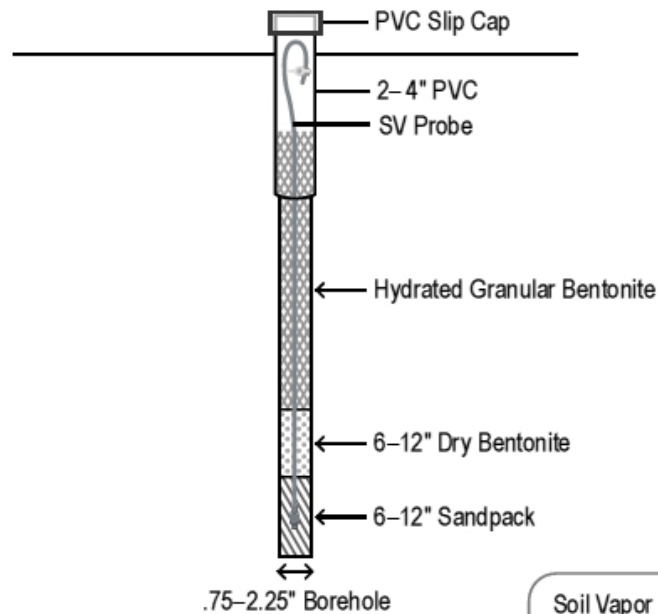


Figure 2

Soil Vapor Monitoring Well Construction Diagram



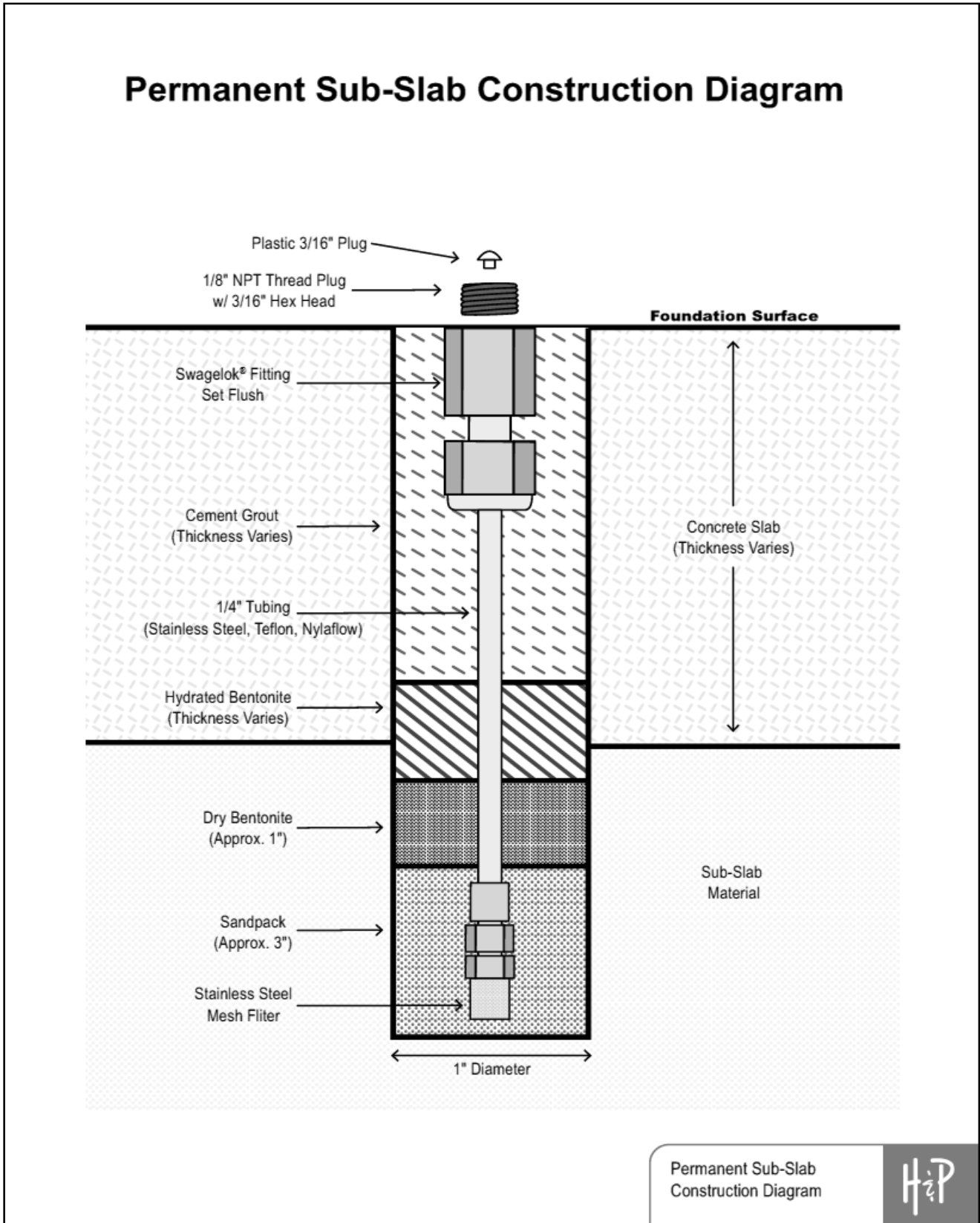
Soil Vapor Semi-permanent Monitoring Well Construction Diagram



Soil Vapor Monitoring Well
Construction Diagram



Figure 3



APPENDIX D

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

N/A

2. Page 1 of

1

3. Emergency Response Phone

302-584-8830

4. Waste Tracking Number

NM-LASAN-DM1024

5. Generator's Name and Mailing Address

Generator's Site Address (if different than mailing address)

External Affairs Division - LA Sanitation and Environment

1149 S. Broadway, Los Angeles, CA 90015

Generator's Phone:

213-847-5182

3505 Pasadena Avenue

Los Angeles, CA 90031

6. Transporter 1 Company Name

U.S. EPA ID Number

Environmental Management Technologies

ph: 828-575-0027

CAR 000 183 574

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Environmental Waste Solutions

31915 Industrial Lane, Parker South, AZ 85344

Facility's Phone:

828-575-0027

AZR 000 520 478

9. Waste Shipping Name and Description

10. Containers

11. Total Quantity

12. Unit Wt./Vol.

No.

Type

1.

Non-Hazardous, Waste Solid Soil

2

DM

1600

P

2.

3.

4.

13. Special Handling Instructions and Additional Information

1. Approval # EWS35028

Capitol Environmental Services - Job# TWALT

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offoror's Printed/Typed Name

Signature

Kidewthy for LA City Bureau of Sanitation

[Signature]

Month Day Year

10 29 29

GENERATOR
INT'L
TRANSPORTER
DESIGNATED FACILITY

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Date leaving U.S.:

Transporter Signature (for exports only):

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Signature

LEO GERANTES

[Signature]

Month Day Year

11 11 24

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

Manifest Reference Number:

U.S. EPA ID Number

17b. Alternate Facility (or Generator)

Facility's Phone:

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Signature

Month Day Year

Printed/Typed Name

APPENDIX E

Laboratory Analysis Reports

30 October 2024

Dan Cruz
TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

H&P Project: TRC092424-11 Rev1
Client Project: Pac Services, W Ave 34

Dear Dan Cruz:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 20-Sep-24 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody
- Sampling Logs (if applicable)

Unless otherwise noted, I certify that all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

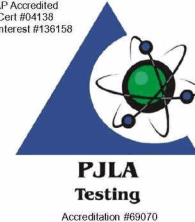


Lisa Eminhizer
Laboratory Director

H&P Mobile Geochemistry, Inc. is certified under the National Environmental Laboratory Accreditation Conference (NELAC) for the fields of proficiency and analytes listed on those certificates. H&P is approved as an Environmental Testing Laboratory in accordance with the DoD -ELAP Program and ISO/IEC 17025:2005 programs for the fields of proficiency and analytes included in the certification process and to the extent offered by the accreditation agency. Unless otherwise noted, accreditation certificate numbers, expiration of certificates, and scope of accreditation can be found at: www.handpmg.com/accreditations. Fields of services and analytes contained in this report that are not listed on the certificates should be considered uncertified or unavailable for certification.



NELAP Accredited
TNI Cert #04138
Agency Interest #136158



Accreditation #69070

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TRC-SVP-2-5'	E409059-01	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-3-5'	E409059-02	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-3-15'	E409059-03	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-5-5'	E409059-04	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-5-15'	E409059-05	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-4-5'	E409059-06	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-1-5'	E409060-01	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-1-15'	E409060-02	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-1-18'	E409060-03	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-8-5'	E409060-04	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-8-15'	E409060-05	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-7-5'	E409060-06	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-7-15'	E409060-07	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-6-5'	E409060-08	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-6-5' Dup	E409060-09	Vapor	20-Sep-24	20-Sep-24
TRC-SVP-6-15'	E409060-10	Vapor	20-Sep-24	20-Sep-24

October 30, 2024 (REV 1): Final has been revised to include TPH results.

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

DETECTIONS SUMMARY

Sample ID: TRC-SVP-2-5'

Laboratory ID: E409059-01

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	5.3	5.0		ug/m3	EPA TO-15	
Chloromethane	3.0	2.1		ug/m3	EPA TO-15	
Carbon disulfide	11	6.3		ug/m3	EPA TO-15	
Trichloroethene	10	5.5		ug/m3	EPA TO-15	
Tetrachloroethene	2200	6.9		ug/m3	EPA TO-15	
Ethylbenzene	4.6	4.4		ug/m3	EPA TO-15	
m,p-Xylene	17	8.8		ug/m3	EPA TO-15	
o-Xylene	11	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	6.1	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	6.2	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	24	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	3200	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-3-5'

Laboratory ID: E409059-02

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Benzene	3700	16		ug/m3	EPA TO-15	
Toluene	1400	19		ug/m3	EPA TO-15	
Ethylbenzene	370	22		ug/m3	EPA TO-15	
m,p-Xylene	1800	44		ug/m3	EPA TO-15	
o-Xylene	500	22		ug/m3	EPA TO-15	
4-Ethyltoluene	90	25		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	160	25		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	280	25		ug/m3	EPA TO-15	
TPHv (C5 - C12)	200000	510		ug/m3	EPA TO-15	E

Sample ID: TRC-SVP-3-15'

Laboratory ID: E409059-03

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	7.2	5.0		ug/m3	EPA TO-15	
Benzene	28	3.2		ug/m3	EPA TO-15	
Toluene	12	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	120	6.9		ug/m3	EPA TO-15	
Ethylbenzene	5.1	4.4		ug/m3	EPA TO-15	
m,p-Xylene	31	8.8		ug/m3	EPA TO-15	
o-Xylene	9.6	4.4		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	11	5.0		ug/m3	EPA TO-15	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Sample ID: TRC-SVP-3-15'

Laboratory ID: E409059-03

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
TPHv (C5 - C12)	5400	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-5-5'

Laboratory ID: E409059-04

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	96	6.3		ug/m3	EPA TO-15	
Benzene	12	3.2		ug/m3	EPA TO-15	
Toluene	22	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	24	6.9		ug/m3	EPA TO-15	
Ethylbenzene	16	4.4		ug/m3	EPA TO-15	
m,p-Xylene	49	8.8		ug/m3	EPA TO-15	
o-Xylene	21	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	7.8	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	6.9	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	26	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	20000	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-5-15'

Laboratory ID: E409059-05

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	14	6.3		ug/m3	EPA TO-15	
2-Butanone (MEK)	46	30		ug/m3	EPA TO-15	
Benzene	27	3.2		ug/m3	EPA TO-15	
Toluene	24	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	20	6.9		ug/m3	EPA TO-15	
Chlorobenzene	11	4.7		ug/m3	EPA TO-15	
Ethylbenzene	22	4.4		ug/m3	EPA TO-15	
m,p-Xylene	76	8.8		ug/m3	EPA TO-15	
o-Xylene	32	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	15	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	11	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	40	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	5500	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-4-5'

Laboratory ID: E409059-06

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	5.2	5.0		ug/m3	EPA TO-15	
Tetrachloroethene	130	6.9		ug/m3	EPA TO-15	

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Sample ID: TRC-SVP-4-5'

Laboratory ID: E409059-06

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Ethylbenzene	11	4.4		ug/m3	EPA TO-15	
m,p-Xylene	51	8.8		ug/m3	EPA TO-15	
o-Xylene	37	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	33	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	40	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	150	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	4800	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-1-5'

Laboratory ID: E409060-01

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	11	5.0		ug/m3	EPA TO-15	
Chloromethane	2.6	2.1		ug/m3	EPA TO-15	
1,1,2-Trichlorotrifluoroethane (F113)	11	7.7		ug/m3	EPA TO-15	
Carbon disulfide	56	6.3		ug/m3	EPA TO-15	
2-Butanone (MEK)	38	30		ug/m3	EPA TO-15	
Benzene	5.5	3.2		ug/m3	EPA TO-15	
Trichloroethene	55	5.5		ug/m3	EPA TO-15	
Toluene	7.8	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	1200	6.9		ug/m3	EPA TO-15	
Ethylbenzene	5.3	4.4		ug/m3	EPA TO-15	
m,p-Xylene	18	8.8		ug/m3	EPA TO-15	
o-Xylene	11	4.4		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	20	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	1800	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-1-15'

Laboratory ID: E409060-02

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	15	5.0		ug/m3	EPA TO-15	
Carbon disulfide	10	6.3		ug/m3	EPA TO-15	
Toluene	5.0	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	990	6.9		ug/m3	EPA TO-15	
Ethylbenzene	5.5	4.4		ug/m3	EPA TO-15	
m,p-Xylene	17	8.8		ug/m3	EPA TO-15	
o-Xylene	10	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	6.3	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	6.1	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	25	5.0		ug/m3	EPA TO-15	

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Sample ID: TRC-SVP-1-15'

Laboratory ID: E409060-02

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
TPHv (C5 - C12)	2600	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-1-18'

Laboratory ID: E409060-03

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	17	5.0		ug/m3	EPA TO-15	
Carbon disulfide	22	6.3		ug/m3	EPA TO-15	
Toluene	5.5	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	1000	6.9		ug/m3	EPA TO-15	
Ethylbenzene	7.4	4.4		ug/m3	EPA TO-15	
m,p-Xylene	25	8.8		ug/m3	EPA TO-15	
o-Xylene	15	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	11	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	12	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	43	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	2300	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-8-5'

Laboratory ID: E409060-04

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	55	6.3		ug/m3	EPA TO-15	
Benzene	3.7	3.2		ug/m3	EPA TO-15	
Toluene	8.5	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	620	6.9		ug/m3	EPA TO-15	
Ethylbenzene	6.3	4.4		ug/m3	EPA TO-15	
m,p-Xylene	16	8.8		ug/m3	EPA TO-15	
o-Xylene	7.8	4.4		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	9.7	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	3300	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-8-15'

Laboratory ID: E409060-05

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Helium (LCC)	0.36	0.10		%	ASTM D1945M	
Carbon disulfide	36	6.3		ug/m3	EPA TO-15	
Toluene	10	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	71	6.9		ug/m3	EPA TO-15	
Ethylbenzene	12	4.4		ug/m3	EPA TO-15	
m,p-Xylene	37	8.8		ug/m3	EPA TO-15	

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Sample ID: TRC-SVP-8-15'

Laboratory ID: E409060-05

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
o-Xylene	17	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	11	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	6.0	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	23	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	5100	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-7-5'

Laboratory ID: E409060-06

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	28	6.3		ug/m3	EPA TO-15	
2-Butanone (MEK)	59	30		ug/m3	EPA TO-15	
Benzene	4.8	3.2		ug/m3	EPA TO-15	
Toluene	42	3.8		ug/m3	EPA TO-15	
2-Hexanone (MBK)	9.2	8.3		ug/m3	EPA TO-15	
Tetrachloroethene	290	6.9		ug/m3	EPA TO-15	
Ethylbenzene	19	4.4		ug/m3	EPA TO-15	
m,p-Xylene	84	8.8		ug/m3	EPA TO-15	
o-Xylene	31	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	11	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	8.9	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	37	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	5800	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-7-15'

Laboratory ID: E409060-07

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Dichlorodifluoromethane (F12)	5.5	5.0		ug/m3	EPA TO-15	
Carbon disulfide	6.3	6.3		ug/m3	EPA TO-15	
2-Butanone (MEK)	89	30		ug/m3	EPA TO-15	
Benzene	4.5	3.2		ug/m3	EPA TO-15	
Toluene	24	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	48	6.9		ug/m3	EPA TO-15	
Ethylbenzene	57	4.4		ug/m3	EPA TO-15	
m,p-Xylene	190	8.8		ug/m3	EPA TO-15	
o-Xylene	94	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	69	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	48	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	190	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	10000	100		ug/m3	EPA TO-15	

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Sample ID: TRC-SVP-6-5'

Laboratory ID: E409060-08

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	60	6.3		ug/m3	EPA TO-15	
Benzene	4.3	3.2		ug/m3	EPA TO-15	
Toluene	14	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	23	6.9		ug/m3	EPA TO-15	
Ethylbenzene	9.3	4.4		ug/m3	EPA TO-15	
m,p-Xylene	28	8.8		ug/m3	EPA TO-15	
o-Xylene	14	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	8.3	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	5.4	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	23	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	6000	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-6-5' Dup

Laboratory ID: E409060-09

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	74	6.3		ug/m3	EPA TO-15	
Benzene	3.5	3.2		ug/m3	EPA TO-15	
Toluene	12	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	26	6.9		ug/m3	EPA TO-15	
Ethylbenzene	10	4.4		ug/m3	EPA TO-15	
m,p-Xylene	29	8.8		ug/m3	EPA TO-15	
o-Xylene	15	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	10	5.0		ug/m3	EPA TO-15	
1,3,5-Trimethylbenzene	5.8	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	24	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	6900	100		ug/m3	EPA TO-15	

Sample ID: TRC-SVP-6-15'

Laboratory ID: E409060-10

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
Carbon disulfide	18	6.3		ug/m3	EPA TO-15	
2-Butanone (MEK)	50	30		ug/m3	EPA TO-15	
Benzene	6.2	3.2		ug/m3	EPA TO-15	
Toluene	31	3.8		ug/m3	EPA TO-15	
Tetrachloroethene	17	6.9		ug/m3	EPA TO-15	
Ethylbenzene	36	4.4		ug/m3	EPA TO-15	
m,p-Xylene	130	8.8		ug/m3	EPA TO-15	
o-Xylene	62	4.4		ug/m3	EPA TO-15	
4-Ethyltoluene	43	5.0		ug/m3	EPA TO-15	

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Sample ID: **TRC-SVP-6-15'**

Laboratory ID: **E409060-10**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,3,5-Trimethylbenzene	32	5.0		ug/m3	EPA TO-15	
1,2,4-Trimethylbenzene	130	5.0		ug/m3	EPA TO-15	
TPHv (C5 - C12)	9900	100		ug/m3	EPA TO-15	

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Soil Vapor/Air Analysis by ASTM D1945M

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-2-5' (E409059-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-3-5' (E409059-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-3-15' (E409059-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-5-5' (E409059-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-5-15' (E409059-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-4-5' (E409059-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-1-5' (E409060-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-1-15' (E409060-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-1-18' (E409060-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	

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Reported:
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Soil Vapor/Air Analysis by ASTM D1945M

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-8-5' (E409060-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-8-15' (E409060-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	0.36	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-7-5' (E409060-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-7-15' (E409060-07) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-6-5' (E409060-08) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-6-5' Dup (E409060-09) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	
TRC-SVP-6-15' (E409060-10) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Helium (LCC)	ND	0.10	%	1	EI42708	26-Sep-24	26-Sep-24	ASTM D1945M	

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Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-2-5' (E409059-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	5.3	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	3.0	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	11	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	10	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	2200	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	4.6	4.4	"	"	"	"	"	"	
m,p-Xylene	17	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	11	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-2-5' (E409059-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	6.1	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	6.2	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	24	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

98.0 % 76-134

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Surrogate: Toluene-d8

103 % 78-125

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Surrogate: 4-Bromofluorobenzene

101 % 77-127

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TRC-SVP-3-5' (E409059-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	ND	25	ug/m3	5	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	10	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	35	"	"	"	"	"	"	
Vinyl chloride	ND	13	"	"	"	"	"	"	
Bromomethane	ND	79	"	"	"	"	"	"	
Chloroethane	ND	40	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	28	"	"	"	"	"	"	
1,1-Dichloroethene	ND	20	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	39	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	18	"	"	"	"	"	"	
Carbon disulfide	ND	32	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	40	"	"	"	"	"	"	
1,1-Dichloroethane	ND	21	"	"	"	"	"	"	
2-Butanone (MEK)	ND	150	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	20	"	"	"	"	"	"	
Chloroform	ND	25	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	28	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	21	"	"	"	"	"	"	
Benzene	3700	16	"	"	"	"	"	"	
Carbon tetrachloride	ND	32	"	"	"	"	"	"	
Trichloroethene	ND	27	"	"	"	"	"	"	
1,2-Dichloropropane	ND	47	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Project: TRC092424-11 Rev1
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Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-3-5' (E409059-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	34	ug/m3	5	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	23	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	41	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	23	"	"	"	"	"	"	
Toluene	1400	19	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	28	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	41	"	"	"	"	"	"	
Dibromochloromethane	ND	43	"	"	"	"	"	"	
Tetrachloroethane	ND	34	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	39	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	35	"	"	"	"	"	"	
Chlorobenzene	ND	23	"	"	"	"	"	"	
Ethylbenzene	370	22	"	"	"	"	"	"	
m,p-Xylene	1800	44	"	"	"	"	"	"	
Styrene	ND	22	"	"	"	"	"	"	
o-Xylene	500	22	"	"	"	"	"	"	
Bromoform	ND	52	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	35	"	"	"	"	"	"	
4-Ethyltoluene	90	25	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	160	25	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	280	25	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	61	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	190	"	"	"	"	"	"	
Hexachlorobutadiene	ND	270	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4
Surrogate: Toluene-d8
Surrogate: 4-Bromofluorobenzene

104 % 76-134 " " " "
86.4 % 78-125 " " " "
95.1 % 77-127 " " " "

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-3-15' (E409059-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	7.2	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	28	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	12	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	120	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	5.1	4.4	"	"	"	"	"	"	
m,p-Xylene	31	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	9.6	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-3-15' (E409059-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	11	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

99.0 % 76-134

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Surrogate: Toluene-d8

101 % 78-125

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"

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Surrogate: 4-Bromofluorobenzene

101 % 77-127

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TRC-SVP-5-5' (E409059-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	96	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	12	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Project: TRC092424-11 Rev1
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Project Manager: Dan Cruz

Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-5-5' (E409059-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	22	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	24	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	16	4.4	"	"	"	"	"	"	
m,p-Xylene	49	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	21	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	7.8	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	6.9	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	26	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	97.9 %	76-134	"	"	"	"	"	"
Surrogate: Toluene-d8	98.3 %	78-125	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	91.3 %	77-127	"	"	"	"	"	"

TRC Solutions - Los Angeles
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Project: TRC092424-11 Rev1
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Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-5-15' (E409059-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	14	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	46	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	27	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	24	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	20	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	11	4.7	"	"	"	"	"	"	
Ethylbenzene	22	4.4	"	"	"	"	"	"	
m,p-Xylene	76	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	32	4.4	"	"	"	"	"	"	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-5-15' (E409059-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	15	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	11	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	40	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

100 % 76-134

"

"

"

"

Surrogate: Toluene-d8

101 % 78-125

"

"

"

"

Surrogate: 4-Bromofluorobenzene

102 % 77-127

"

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"

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TRC-SVP-4-5' (E409059-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	5.2	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	ND	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-4-5' (E409059-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	ND	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	130	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	11	4.4	"	"	"	"	"	"	
m,p-Xylene	51	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	37	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	33	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	40	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	150	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4
Surrogate: Toluene-d8
Surrogate: 4-Bromofluorobenzene

99.1 % 76-134 " " " "
103 % 78-125 " " " "
99.1 % 77-127 " " " "

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-1-5' (E409060-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	11	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	2.6	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	11	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	56	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	38	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	5.5	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	55	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	7.8	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	1200	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	5.3	4.4	"	"	"	"	"	"	
m,p-Xylene	18	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	11	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-1-5' (E409060-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	20	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

97.2 % 76-134

"

"

"

"

Surrogate: Toluene-d8

102 % 78-125

"

"

"

"

Surrogate: 4-Bromofluorobenzene

99.1 % 77-127

"

"

"

"

TRC-SVP-1-15' (E409060-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	15	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	10	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-1-15' (E409060-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	5.0	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	990	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	5.5	4.4	"	"	"	"	"	"	
m,p-Xylene	17	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	10	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	6.3	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	6.1	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	25	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	98.8 %	76-134	"	"	"	"	"	"
Surrogate: Toluene-d8	101 %	78-125	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	101 %	77-127	"	"	"	"	"	"

TRC Solutions - Los Angeles
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Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-1-18' (E409060-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	17	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	22	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	5.5	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	1000	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	7.4	4.4	"	"	"	"	"	"	
m,p-Xylene	25	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	15	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-1-18' (E409060-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	11	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	12	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	43	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	98.6 %	76-134	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>	103 %	78-125	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>	103 %	77-127	"	"	"	"	"	"

TRC-SVP-8-5' (E409060-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	55	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	3.7	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-8-5' (E409060-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	8.5	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	620	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	6.3	4.4	"	"	"	"	"	"	
m,p-Xylene	16	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	7.8	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	ND	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	ND	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	9.7	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4
Surrogate: Toluene-d8
Surrogate: 4-Bromofluorobenzene

97.3 % 76-134 " " " "
101 % 78-125 " " " "
96.1 % 77-127 " " " "

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-8-15' (E409060-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	36	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	ND	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	10	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	71	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	12	4.4	"	"	"	"	"	"	
m,p-Xylene	37	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	17	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-8-15' (E409060-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	11	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	6.0	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	23	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

100 % 76-134

"

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"

"

Surrogate: Toluene-d8

101 % 78-125

"

"

"

"

Surrogate: 4-Bromofluorobenzene

95.5 % 77-127

"

"

"

"

TRC-SVP-7-5' (E409060-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	28	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	59	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	4.8	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-7-5' (E409060-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	42	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	9.2	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	290	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	19	4.4	"	"	"	"	"	"	
m,p-Xylene	84	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	31	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	11	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	8.9	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	37	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	97.3 %	76-134	"	"	"	"	"	"
Surrogate: Toluene-d8	100 %	78-125	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	96.0 %	77-127	"	"	"	"	"	"

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-7-15' (E409060-07) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	5.5	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	6.3	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	89	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	4.5	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	24	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	48	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	57	4.4	"	"	"	"	"	"	
m,p-Xylene	190	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	94	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-7-15' (E409060-07) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	69	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	48	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	190	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

98.7 % 76-134

"

"

"

"

Surrogate: Toluene-d8

98.6 % 78-125

"

"

"

"

Surrogate: 4-Bromofluorobenzene

101 % 77-127

"

"

"

"

TRC-SVP-6-5' (E409060-08) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	60	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	4.3	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
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Los Angeles, CA 90017

Project: TRC092424-11 Rev1
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Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-6-5' (E409060-08) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	14	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	23	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	9.3	4.4	"	"	"	"	"	"	
m,p-Xylene	28	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	14	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	8.3	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	5.4	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	23	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	96.4 %	76-134	"	"	"	"	"
Surrogate: Toluene-d8	101 %	78-125	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	95.1 %	77-127	"	"	"	"	"

TRC Solutions - Los Angeles
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Project: TRC092424-11 Rev1
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Project Manager: Dan Cruz

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30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-6-5' Dup (E409060-09) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	27-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	74	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	ND	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	3.5	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	
Bromodichloromethane	ND	6.8	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	12	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	26	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	10	4.4	"	"	"	"	"	"	
m,p-Xylene	29	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	15	4.4	"	"	"	"	"	"	

TRC Solutions - Los Angeles
707 Wilshire Blvd, Suite 3250
Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-6-5' Dup (E409060-09) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromoform	ND	10	ug/m3	1	EI42610	26-Sep-24	27-Sep-24	EPA TO-15	
1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	10	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	5.8	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	24	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4

99.1 % 76-134

"

"

"

"

Surrogate: Toluene-d8

102 % 78-125

"

"

"

"

Surrogate: 4-Bromofluorobenzene

96.1 % 77-127

"

"

"

"

TRC-SVP-6-15' (E409060-10) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24

Dichlorodifluoromethane (F12)	ND	5.0	ug/m3	1	EI42610	26-Sep-24	27-Sep-24	EPA TO-15	
Chloromethane	ND	2.1	"	"	"	"	"	"	
Dichlorotetrafluoroethane (F114)	ND	7.1	"	"	"	"	"	"	
Vinyl chloride	ND	2.6	"	"	"	"	"	"	
Bromomethane	ND	16	"	"	"	"	"	"	
Chloroethane	ND	8.0	"	"	"	"	"	"	
Trichlorofluoromethane (F11)	ND	5.6	"	"	"	"	"	"	
1,1-Dichloroethene	ND	4.0	"	"	"	"	"	"	
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"	"	"	"	"	"	
Methylene chloride (Dichloromethane)	ND	3.5	"	"	"	"	"	"	
Carbon disulfide	18	6.3	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	8.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	4.1	"	"	"	"	"	"	
2-Butanone (MEK)	50	30	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	4.0	"	"	"	"	"	"	
Chloroform	ND	4.9	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	5.5	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	4.1	"	"	"	"	"	"	
Benzene	6.2	3.2	"	"	"	"	"	"	
Carbon tetrachloride	ND	6.4	"	"	"	"	"	"	
Trichloroethene	ND	5.5	"	"	"	"	"	"	
1,2-Dichloropropane	ND	9.4	"	"	"	"	"	"	

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Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-6-15' (E409060-10) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
Bromodichloromethane	ND	6.8	ug/m3	1	EI42610	26-Sep-24	27-Sep-24	EPA TO-15	
cis-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
4-Methyl-2-pentanone (MIBK)	ND	8.3	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	4.6	"	"	"	"	"	"	
Toluene	31	3.8	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	5.5	"	"	"	"	"	"	
2-Hexanone (MBK)	ND	8.3	"	"	"	"	"	"	
Dibromochloromethane	ND	8.6	"	"	"	"	"	"	
Tetrachloroethene	17	6.9	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	7.8	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
Chlorobenzene	ND	4.7	"	"	"	"	"	"	
Ethylbenzene	36	4.4	"	"	"	"	"	"	
m,p-Xylene	130	8.8	"	"	"	"	"	"	
Styrene	ND	4.3	"	"	"	"	"	"	
o-Xylene	62	4.4	"	"	"	"	"	"	
Bromoform	ND	10	"	"	"	"	"	"	
1,1,1,2,2-Tetrachloroethane	ND	7.0	"	"	"	"	"	"	
4-Ethyltoluene	43	5.0	"	"	"	"	"	"	
1,3,5-Trimethylbenzene	32	5.0	"	"	"	"	"	"	
1,2,4-Trimethylbenzene	130	5.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	12	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	38	"	"	"	"	"	"	
Hexachlorobutadiene	ND	54	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4	98.3 %	76-134	"	"	"	"	"	"
Surrogate: Toluene-d8	97.3 %	78-125	"	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene	97.2 %	77-127	"	"	"	"	"	"

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Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Petroleum Hydrocarbon Analysis by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-2-5' (E409059-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	3200	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-3-5' (E409059-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	200000	510	ug/m3	5	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	E
TRC-SVP-3-15' (E409059-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	5400	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-5-5' (E409059-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	20000	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-5-15' (E409059-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	5500	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-4-5' (E409059-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	4800	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-1-5' (E409060-01) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	1800	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-1-15' (E409060-02) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	2600	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-1-18' (E409060-03) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	2300	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	

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Project: TRC092424-11 Rev1
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Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Petroleum Hydrocarbon Analysis by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TRC-SVP-8-5' (E409060-04) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	3300	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-8-15' (E409060-05) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	5100	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-7-5' (E409060-06) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	5800	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-7-15' (E409060-07) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	10000	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-6-5' (E409060-08) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	6000	100	ug/m3	1	EI42610	26-Sep-24	26-Sep-24	EPA TO-15	
TRC-SVP-6-5' Dup (E409060-09) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	6900	100	ug/m3	1	EI42610	26-Sep-24	27-Sep-24	EPA TO-15	
TRC-SVP-6-15' (E409060-10) Vapor Sampled: 20-Sep-24 Received: 20-Sep-24									
TPHv (C5 - C12)	9900	100	ug/m3	1	EI42610	26-Sep-24	27-Sep-24	EPA TO-15	

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Project: TRC092424-11 Rev1
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Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Soil Vapor/Air Analysis by ASTM D1945M - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EI42708 - GC

Blank (EI42708-BLK1)

Prepared & Analyzed: 26-Sep-24

Helium (LCC)	ND	0.10	%							
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TRC Solutions - Los Angeles
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Los Angeles, CA 90017

Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EI42610 - TO-15

Blank (EI42610-BLK1)

Prepared & Analyzed: 26-Sep-24

Dichlorodifluoromethane (F12)	ND	5.0	ug/m3							
Chloromethane	ND	2.1	"							
Dichlorotetrafluoroethane (F114)	ND	7.1	"							
Vinyl chloride	ND	2.6	"							
Bromomethane	ND	16	"							
Chloroethane	ND	8.0	"							
Trichlorofluoromethane (F11)	ND	5.6	"							
1,1-Dichloroethene	ND	4.0	"							
1,1,2-Trichlorotrifluoroethane (F113)	ND	7.7	"							
Methylene chloride (Dichloromethane)	ND	3.5	"							
Carbon disulfide	ND	6.3	"							
trans-1,2-Dichloroethene	ND	8.0	"							
1,1-Dichloroethane	ND	4.1	"							
2-Butanone (MEK)	ND	30	"							
cis-1,2-Dichloroethene	ND	4.0	"							
Chloroform	ND	4.9	"							
1,1,1-Trichloroethane	ND	5.5	"							
1,2-Dichloroethane (EDC)	ND	4.1	"							
Benzene	ND	3.2	"							
Carbon tetrachloride	ND	6.4	"							
Trichloroethene	ND	5.5	"							
1,2-Dichloropropane	ND	9.4	"							
Bromodichloromethane	ND	6.8	"							
cis-1,3-Dichloropropene	ND	4.6	"							
4-Methyl-2-pentanone (MIBK)	ND	8.3	"							
trans-1,3-Dichloropropene	ND	4.6	"							
Toluene	ND	3.8	"							
1,1,2-Trichloroethane	ND	5.5	"							
2-Hexanone (MBK)	ND	8.3	"							
Dibromochloromethane	ND	8.6	"							
Tetrachloroethene	ND	6.9	"							
1,2-Dibromoethane (EDB)	ND	7.8	"							
1,1,1,2-Tetrachloroethane	ND	7.0	"							
Chlorobenzene	ND	4.7	"							

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Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EI42610 - TO-15

Blank (EI42610-BLK1)

Prepared & Analyzed: 26-Sep-24

Ethylbenzene	ND	4.4	ug/m3							
m,p-Xylene	ND	8.8	"							
Styrene	ND	4.3	"							
o-Xylene	ND	4.4	"							
Bromoform	ND	10	"							
1,1,2,2-Tetrachloroethane	ND	7.0	"							
4-Ethyltoluene	ND	5.0	"							
1,3,5-Trimethylbenzene	ND	5.0	"							
1,2,4-Trimethylbenzene	ND	5.0	"							
1,3-Dichlorobenzene	ND	12	"							
1,4-Dichlorobenzene	ND	12	"							
1,2-Dichlorobenzene	ND	12	"							
1,2,4-Trichlorobenzene	ND	38	"							
Hexachlorobutadiene	ND	54	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	208		"	214		97.2	76-134			
<i>Surrogate: Toluene-d8</i>	216		"	208		104	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	365		"	363		100	77-127			

LCS (EI42610-BS1)

Prepared & Analyzed: 26-Sep-24

Dichlorodifluoromethane (F12)	90	5.0	ug/m3	101		88.9	59-128			
Vinyl chloride	48	2.6	"	52.0		92.5	64-127			
Chloroethane	48	8.0	"	53.6		88.6	63-127			
Trichlorofluoromethane (F11)	100	5.6	"	113		89.2	62-126			
1,1-Dichloroethene	51	4.0	"	80.8		62.9	61-133			
1,1,2-Trichlorotrifluoroethane (F113)	130	7.7	"	155		85.7	66-126			
Methylene chloride (Dichloromethane)	56	3.5	"	70.8		79.4	62-115			
trans-1,2-Dichloroethene	60	8.0	"	80.8		74.8	67-124			
1,1-Dichloroethane	63	4.1	"	82.4		75.9	68-126			
cis-1,2-Dichloroethene	62	4.0	"	80.0		77.6	70-121			
Chloroform	82	4.9	"	99.2		82.9	68-123			
1,1,1-Trichloroethane	91	5.5	"	111		81.7	68-125			
1,2-Dichloroethane (EDC)	67	4.1	"	82.4		81.2	65-128			
Benzene	50	3.2	"	64.8		77.7	69-119			

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Reported:
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Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EI42610 - TO-15

LCS (EI42610-BS1)

Prepared & Analyzed: 26-Sep-24

Carbon tetrachloride	120	6.4	ug/m3	128		91.4	68-132			
Trichloroethene	87	5.5	"	110		79.1	71-123			
Toluene	76	3.8	"	76.8		99.3	66-119			
1,1,2-Trichloroethane	88	5.5	"	111		79.3	73-119			
Tetrachloroethene	110	6.9	"	138		77.7	66-124			
1,1,1,2-Tetrachloroethane	130	7.0	"	140		89.9	67-129			
Ethylbenzene	77	4.4	"	88.4		86.6	70-124			
m,p-Xylene	85	8.8	"	88.4		95.6	61-134			
o-Xylene	70	4.4	"	88.4		79.7	67-125			
1,1,2,2-Tetrachloroethane	120	7.0	"	140		82.2	65-127			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	213		"	214		100	76-134			
<i>Surrogate: Toluene-d8</i>	198		"	208		95.4	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	363		"	363		100	77-127			

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Project Manager: Dan Cruz

Reported:
30-Oct-24 14:19

Petroleum Hydrocarbon Analysis by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EI42610 - TO-15

Blank (EI42610-BLK1)

Prepared & Analyzed: 26-Sep-24

TPHv (C5 - C12)	ND	100	ug/m3							
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Project: TRC092424-11 Rev1
Project Number: Pac Services, W Ave 34
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Reported:
30-Oct-24 14:19

Notes and Definitions

E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
LCC	Leak Check Compound
ND	Analyte NOT DETECTED at or above the reporting limit
MDL	Method Detection Limit
%REC	Percent Recovery
RPD	Relative Percent Difference

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory and Mobile Laboratory in accordance with the DoD-ELAP Program and ISO/IEC 17025:2005 programs through PJLA, accreditation number 69070 for EPA Method TO-15 and H&P 8260SV.

H&P is approved by the State of Louisiana Department of Environmental Quality under the National Environmental Laboratory Accreditation Conference (NELAC) certification number 04138

The complete list of stationary and mobile laboratory certifications along with the fields of testing (FOTs) and analyte lists are available at www.handpmg.com/accreditations.

VAPOR / AIR Chain of Custody

DATE: 9/20/24
Page 1 of 2

Lab Client and Project Information		
Lab Client/Consultant: TRC	Project Name / #: PAC SERVICES	
Lab Client Project Manager: DAN CRUZ	Project Location: W AVE 34	
Lab Client Address: 707 WILSHIRE BLVD #3250	Report E-Mail(s): DCRUZ@TRCCOMPANIES.COM PKEE*	
Lab Client City, State, Zip: LOS ANGELES CA 90017		
Phone Number: 213 213 9413		
Reporting Requirements	Turnaround Time	Sampler Information
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input checked="" type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> Standard (7 days for preliminary report, 10 days for final report) <input type="checkbox"/> Rush (specify): _____	Sampler(s): C. WHITE Signature: <i>C. White</i> Date: 9/20/24

Sample Receipt (Lab Use Only)	
Date Rec'd: 9/24/24	Control # 240490.04
H&P Project # TRC092424-11	
Lab Work Order # E409059	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: 60206	Temp: RT
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: MA	

Additional Instructions to Laboratory:																
* Preferred VOC units (please choose one): <input type="checkbox"/> µg/L <input checked="" type="checkbox"/> µg/m ³ <input type="checkbox"/> ppbv <input type="checkbox"/> ppmv																
SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc.	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List <input type="checkbox"/> 8260SV <input checked="" type="checkbox"/> TO-15	VOCs Short List / Project List <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	TPHv as Gas <input type="checkbox"/> 8260SV/m <input checked="" type="checkbox"/> TO-15m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Leak Check Compound <input type="checkbox"/> DFA <input type="checkbox"/> IPA <input checked="" type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2
TRC-SVP-2-5'		09/20/24	0832	SV	400	701	5	/				<input checked="" type="checkbox"/>	/			
TRC-SVP-3-5'			1357			725	5	/					/			
TRC-SVP-3-15'			1004			728	6	/					/			
TRC-SVP-5-5'			1228			700	6	/					/			
TRC-SVP-5-15'			1246			722	6	/					/			
TRC-SVP-4-5'			1359			731	6	/					/			
Approved/Relinquished by: <i>[Signature]</i>	Company: TRC	Date: 9/20/24	Time: 1430	Received by: C. WHITE	Company: H&P	Date: 9/20/24	Time: 1430									
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:									
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:									

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back. Appendix 6A1, Rev 1/9/2019, Effective 1/21/2019

VAPOR / AIR Chain of Custody

DATE: 9-20-24
Page 2 of 2
108 108

Lab Client and Project Information		
Lab Client/Consultant: <u>TBC</u>	Project Name / #: <u>Pac Services</u>	
Lab Client Project Manager: <u>Dan Cruz</u>	Project Location: <u>W Ave 34</u>	
Lab Client Address: <u>707 Wilshire Blvd # 3250</u>	Report E-Mail(s): <u>DCruz @ TBCcompany.com</u>	
Lab Client City, State, Zip: <u>Los Angeles CA 90017</u>		
Phone Number: <u>213 213 9413</u>		
Reporting Requirements	Turnaround Time	Sampler Information
<input checked="" type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input checked="" type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> Standard (7 days for preliminary report, 10 days for final report) <input type="checkbox"/> Rush (specify): _____	Sampler(s): <u>J. Arellano</u> Signature: _____ Date: <u>9-20-24</u>

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>9/24/24</u>	Control #: <u>240490.04</u>
H&P Project # <u>TRC092424-11</u>	
Lab Work Order # <u>E409060</u>	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: <u>60206</u>	Temp: <u>RT</u>
Outside Lab:	
Receipt Notes/Tracking #:	
Lab PM Initials: <u>MA</u>	

Additional Instructions to Laboratory:																				
* Preferred VOC units (please choose one): <input type="checkbox"/> µg/L <input checked="" type="checkbox"/> µg/m ³ <input type="checkbox"/> ppbv <input type="checkbox"/> ppmv																				
SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa, Tedlar, Tube, etc	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List <input type="checkbox"/> 8260SV <input checked="" type="checkbox"/> TO-15	VOCs Short List / Project List <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	TPHV as Gas <input type="checkbox"/> 8260SV/m <input checked="" type="checkbox"/> TO-15m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Leak Check Compound <input type="checkbox"/> DFA <input type="checkbox"/> IPA <input checked="" type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2				
TBC-SVP-1-5'		9-20-24	0827	SV	450ml	721	5	/				<input checked="" type="checkbox"/>	/	/						
TBC-SVP-1-15'			0848			703	6	/					/	/						
TBC-SVP-1-18'			0907			702	3	/					/	/						
TBC-SVP-8-5'			1008			723	5	/					/	/						
TBC-SVP-8-15'			1020			724	6	/					/	/						
TBC-SVP-7-5'			1104			726	5	/					/	/						
TBC-SVP-7-15'			1214			729	6	/					/	/						
TBC-SVP-6-5'			1248			732	8	/					/	/						
TBC-SVP-6-5' PUP			1248			727	5	/					/	/						
TBC-SVP-6-15'			1308			730	7	/					/	/						
Approved/Relinquished by: <u>[Signature]</u>	Company: <u>TBC</u>	Date: <u>9/20/24</u>	Time: <u>1430</u>	Received by: <u>J. Arellano</u>	Company: <u>H&P</u>	Date: <u>9-20-24</u>	Time: <u>1430</u>													
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:													
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:													

Log Sheet: Soil Vapor Sampling with Helium Shroud

H&P Project #: TRC092024-TECH/TECH
 Site Address: W AVE 34
 Consultant: TRC
 Consultant Rep(s): PAUL

Date: 9/20/24
 Page: 1 of 2
 H&P Rep(s): C. WHITE J ARELLANO

Reviewed: EC
 Scanned: BY

Equipment Info	Purge Volume	MGD 2002 Helium Detector Calibration	Shroud Procedure:															
Inline Gauge ID#: <u>—</u>	PV Amount: <u>3pv</u>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Time</th> <th>Helium (%)</th> </tr> </thead> <tbody> <tr> <td>Calibration Standard</td> <td>n/a</td> <td>2.5</td> </tr> <tr> <td>Opening Calibration</td> <td><u>0751</u></td> <td><u>2.7</u></td> </tr> <tr> <td>Closing Calibration</td> <td><u>1405</u></td> <td><u>2.8</u></td> </tr> <tr> <td>Acceptable Range</td> <td>n/a</td> <td>2.1 - 2.9</td> </tr> </tbody> </table>		Time	Helium (%)	Calibration Standard	n/a	2.5	Opening Calibration	<u>0751</u>	<u>2.7</u>	Closing Calibration	<u>1405</u>	<u>2.8</u>	Acceptable Range	n/a	2.1 - 2.9	<u>HE SOP</u>
	Time	Helium (%)																
Calibration Standard	n/a	2.5																
Opening Calibration	<u>0751</u>	<u>2.7</u>																
Closing Calibration	<u>1405</u>	<u>2.8</u>																
Acceptable Range	n/a	2.1 - 2.9																
Pump ID#: <u>039</u>	PV Includes:																	
He Meter ID#: <u>1b</u>	<input checked="" type="checkbox"/> Tubing																	
Shroud ID#: <u>47</u>	<input checked="" type="checkbox"/> Sand 40%																	
	<input checked="" type="checkbox"/> Dry Bent 50%																	

Sample and Summa Information							Probe Specs							Purge & Collection Information					Shroud Info			
Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac ("Hg)	End / Sample Time	End Vac ("Hg)	Probe Depth (ft)	Tube Length (ft)	Tube OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min: sec)	Sample Flow Rate (mL/min)	ProbeVac <input type="checkbox"/> Hg <input checked="" type="checkbox"/> H ₂ O	He % Before	He % After	Probe ppmv
1	TRC-SVP-2-S	701 329	0830	-30	0832	-5	5	7	1/8	12	3.5	12	3.5	/	5128	200	25:38	200	0	52.8	53.6	0
2	TRC-SVP-3-S	725 420	1355	-27	1357	-5	5	7	1/8	12	2.25	12	2.25	/	2131	200	10:39	200	0	53.2	54.3	9.92
3	-5DUP						5	7	1/8	12	2.25	12	2.25	/	-	-	-	200	-	53.2		
4	-15	728 425	1002	-27	1004	-5	15	17	1/8	12	2.25	6	2.25	/	1573	200	7:52	200	0	54.2	51.1	0
5	TRC-SVP-5-S	700 232	1226	-28	1228	-5	5	7	1/8	6/6	3.5/2.25	6/6	3.5/2.25	/	3629	200	18:09	200	0	58.7	51.2	0
6	-15	722 196	1244	-29	1246	-5	15	17	1/8	12	2.25	6	2.25	/	1573	200	7:52	200	0	53.8	58.7	0
7	TRC-SVP-4-S	731 232	1357	-28	1359	-5	5	7	1/8	12	2.25	6	2.25	/	1544	200	7:43	200	0	59.2	51.3	0
8																						
9																						
10																						

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
2,3 - PROBE PPMV CHECKED 1/2 WAY OF PURGE -10%, REPLACE/CHECK ALL CONNECTIONS, RESTART PURGE AND FINAL PPMV 10%; TROUBLE SHOOT ALL CONNECTIONS AND PURGE ADDITIONAL 300 MLS, -10% PPMV, SEAL CRACKS W/ BENTONITE, PURGE ADDITIONAL 300 ML, 10% PPMV
PROBE 7 FLOW KIT USED 2ND TIME, APPROVED BY TRC - FLUSHED W/ NITROGEN
PURGED ADD. 300 ML
TOTAL PURGE VOLUME 3031 ML

Log Sheet: Soil Vapor Sampling with Helium Shroud

H&P Project #: TBC092024-TECH/TECH
 Site Address: W. Ave 34th Los Angeles
 Consultant: TBC
 Consultant Rep(s): Paul

Date: 9-20-24
 Page: 2 of 2
 H&P Rep(s): J. Arellano
C. White

Reviewed: EC
 Scanned: [Signature]

Equipment Info	
Inline Gauge ID#:	—
Pump ID#:	015
He Meter ID#:	017
Shroud ID#:	046

Purge Volume	
PV Amount:	3PV
PV Includes:	<input checked="" type="checkbox"/> Tubing <input checked="" type="checkbox"/> Sand 40% <input checked="" type="checkbox"/> Dry Bent 50%

MGD 2002 Helium Detector Calibration		
	Time	Helium (%)
Calibration Standard	n/a	2.5
Opening Calibration	0759	2.8
Closing Calibration	1409	2.9
Acceptable Range	n/a	2.1 - 2.9

Shroud Procedure:
H&P He Shroud sor

Sample and Summa Information							Probe Specs							Purge & Collection Information					Shroud Info				
Point ID	Summa ID #	Sample Kit ID #	Start Time	Initial Vac ("Hg)	End / Sample Time	End Vac ("Hg)	Probe Depth (ft)	Tube Length (ft)	Tube OD (in.)	Sand Ht (in.)	Sand Dia (in.)	Dry Bent. Ht (in.)	Dry Bent. Dia (in.)	Shut In Test 60 sec (✓)	Purge Vol (mL)	Purge Flow Rate (mL/min)	Pump Time (min: sec)	Sample Flow Rate (mL/min)	ProbeVac <input type="checkbox"/> Hg <input checked="" type="checkbox"/> H ₂ O	He % Before	He % After	Probe ppmv	
1	TBC-SVP-1-5'	721	171	0824	-30	0827	-5	5	7	1/8	6/6	2.25	6/6	2.25	✓	3629	200	18:09	200	-5	55.5	50.2	0
2	TBC-SVP-1-15'	703	165	0846	-25.5	0848	-5	15	17	1/8	12	2.25	12	2.25	✓	2159	200	10:48	200	-10	56.7	53.9	0
3	TBC-SVP-1-18'	702	224	0904	-28.5	0907	-2.5	18	20	1/8	12	2.25	6	2.25	✓	1547	200	7:58	200	-5	57.4	51.8	0
4	TBC-SVP-8-5'	723	012	1005	-29.0	1008	-5	5	7	1/8	12	2.25	12	2.25	✓	2131	200	10:39	200	0	57.0	54.3	0
5	TBC-SVP-8-15'	724	353	1016	-28	1020	-5	15	17	1/8	12	1.5	6	1.5	✓	726	200	3:39	200	-5	54.9	52.5	0
6	TBC-SVP-7-5'	726	403	1101	-26.5	1104	-4	5	7	1/8	12	2.25	12	2.25	✓	2131	200	10:39	200	0	57.1	56.2	0
7	TBC-SVP-7-15'	729	238	1212	-27	1214	-4.5	15	17	1/8	12	1.5	6	1.5	✓	726	200	3:39	200	-5	59.4	56.1	0
8	TBC-SVP-6-5	732	218	1245	-29	1248	-6.5	5	7	1/8	12	2.25	12	2.25	✓	2131	200	10:39	200	0	57.3	55.7	0
9	TBC-SVP-6-5' DUP	727	426	1245	-28	1248	-3	5	7	1/8	12	2.25	12	2.25	✓	2131	200	10:39	200	0	57.3	55.7	0
10	TBC-SVP-6-15'	730	248	1305	-25.5	1308	-5	15	17	1/8	12	2.25	6	2.25	✓	1573	200	7:52	200	0	59.1	57.8	0

Site Notes such as weather, visitors, scope deviations, health & safety issues, etc. (When making sample specific notes, reference the line number above):
 1:

September 20, 2024

Daniel Cruz
TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017
Tel: (213) 213-9400
Fax: (818) 772-1926

ELAP No.: 3101
CSDLAC No.: 10196

Re: ATL Work Order Number : 2401463
Client Reference : Ave 34 offsite Investigation / 579271

Enclosed are the results for sample(s) received on September 12, 2024 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or Project.Management@atlglobal.com.

Sincerely,



Lena Davidkov, Client Services
lena.davidkov@atlglobal.com
Authorized to Release on 09/20/24 07:37 on Behalf of



Amy Leung
Laboratory Director

The test results in this report relate exclusively to the samples as received by the laboratory, and meet the requirements of the methodology under which they were reported; any exceptions are noted within the report and/ or case narrative.

The cover letter/ signature page and the case narrative are integral parts of this analytical report; the absence of any portion of the report renders the report invalid. This report shall not be reproduced except in full, and shall have the express written approval of the laboratory, and the original client firm to do so

The electronic signature on this report is signed by an authorized signatory of Advanced Technology Laboratories, and is intended to be legally binding as the equivalent of a handwritten signature.



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles , CA 90017

Project Number : Ave 34 offsite Investigation / 579271
Report To : Daniel Cruz
Reported : 09/20/2024

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SB-1-5	2401463-01	Soil	9/10/24 10:45	9/12/24 14:16
SB-1-15	2401463-02	Soil	9/10/24 11:10	9/12/24 14:16
SB-2-5	2401463-03	Soil	9/10/24 14:35	9/12/24 14:16
SB-3-5	2401463-04	Soil	9/11/24 9:35	9/12/24 14:16
SB-3-11	2401463-05	Soil	9/11/24 10:05	9/12/24 14:16
SB-3-15	2401463-06	Soil	9/11/24 10:15	9/12/24 14:16
SB-5-5	2401463-07	Soil	9/11/24 11:50	9/12/24 14:16
SB-4-5	2401463-08	Soil	9/12/24 8:25	9/12/24 14:16



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271
Report To : Daniel Cruz
Reported : 09/20/2024

Notes and Definitions

S12	Surrogate recovery outside in-house established limit but within method default criteria.
L3	Laboratory control sample outside in-house established limits but within method criteria.
B	Analyte detected in the associated method blank above the PQL.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:

- (1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
- (2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
- (3) Results are wet unless otherwise specified.



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271
Report To : Daniel Cruz
Reported : 09/20/2024

Client Sample ID: SB-1-15

Lab ID: 2401463-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: NP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,1,1-Trichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,1,2,2-Tetrachloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,1,2-Trichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,1-Dichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,1-Dichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,1-Dichloropropene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2,3-Trichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2,3-Trichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2,4-Trichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2,4-Trimethylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2-Dibromo-3-chloropropane	ND	7.3	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2-Dibromoethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2-Dichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2-Dichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,2-Dichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,3,5-Trimethylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,3-Dichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,3-Dichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
1,4-Dichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
2,2-Dichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
2-Chlorotoluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
4-Chlorotoluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
4-Isopropyltoluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Benzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Bromobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Bromochloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Bromodichloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Bromoform	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Bromomethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Carbon disulfide	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Carbon tetrachloride	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Chlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Chloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Chloroform	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Chloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
cis-1,2-Dichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
cis-1,3-Dichloropropene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Di-isopropyl ether	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Dibromochloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271

Report To : Daniel Cruz

Reported : 09/20/2024

Client Sample ID: SB-1-15

Lab ID: 2401463-02

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: NP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Dichlorodifluoromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Ethyl Acetate	ND	36	1	B4I0699	09/12/2024	09/13/24 14:49	
Ethyl Ether	ND	36	1	B4I0699	09/12/2024	09/13/24 14:49	
Ethyl tert-butyl ether	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Ethylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Freon-113	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Hexachlorobutadiene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Isopropylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
m,p-Xylene	ND	7.3	1	B4I0699	09/12/2024	09/13/24 14:49	
Methylene chloride	ND	7.3	1	B4I0699	09/12/2024	09/13/24 14:49	
MTBE	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
n-Butylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
n-Propylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Naphthalene	7.9	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	B
o-Xylene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
sec-Butylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Styrene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
tert-Amyl methyl ether	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
tert-Butanol	ND	73	1	B4I0699	09/12/2024	09/13/24 14:49	
tert-Butylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Tetrachloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Toluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
trans-1,2-Dichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
trans-1,3-Dichloropropene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Trichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Trichlorofluoromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
Vinyl acetate	ND	36	1	B4I0699	09/12/2024	09/13/24 14:49	
Vinyl chloride	ND	3.6	1	B4I0699	09/12/2024	09/13/24 14:49	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>153 %</i>	<i>50.7 - 181</i>		B4I0699	09/12/2024	<i>09/13/24 14:49</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>85.8 %</i>	<i>69.2 - 119</i>		B4I0699	09/12/2024	<i>09/13/24 14:49</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>142 %</i>	<i>76.2 - 140</i>		B4I0699	09/12/2024	<i>09/13/24 14:49</i>	S12
<i>Surrogate: Toluene-d8</i>	<i>121 %</i>	<i>85.6 - 120</i>		B4I0699	09/12/2024	<i>09/13/24 14:49</i>	S12



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271
Report To : Daniel Cruz
Reported : 09/20/2024

Client Sample ID: SB-3-11

Lab ID: 2401463-05

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: NP

Analyte	Result	PQL	Dilution	Batch	Prepared	Date/Time	Notes
	(ug/kg)	(ug/kg)				Analyzed	
1,1,1,2-Tetrachloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,1,1-Trichloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,1,2,2-Tetrachloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,1,2-Trichloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,1-Dichloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,1-Dichloroethene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,1-Dichloropropene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2,3-Trichloropropane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2,3-Trichlorobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2,4-Trichlorobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2,4-Trimethylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2-Dibromo-3-chloropropane	ND	6.7	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2-Dibromoethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2-Dichlorobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2-Dichloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,2-Dichloropropane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,3,5-Trimethylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,3-Dichlorobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,3-Dichloropropane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
1,4-Dichlorobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
2,2-Dichloropropane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
2-Chlorotoluene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
4-Chlorotoluene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
4-Isopropyltoluene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Benzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Bromobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Bromochloromethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Bromodichloromethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Bromoform	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Bromomethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Carbon disulfide	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Carbon tetrachloride	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Chlorobenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Chloroethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Chloroform	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Chloromethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
cis-1,2-Dichloroethene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
cis-1,3-Dichloropropene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Di-isopropyl ether	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Dibromochloromethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	



Certificate of Analysis

TRC
 707 Wilshire Blvd., Suite 3250
 Los Angeles , CA 90017

Project Number : Ave 34 offsite Investigation / 579271
 Report To : Daniel Cruz
 Reported : 09/20/2024

Client Sample ID: SB-3-11
Lab ID: 2401463-05

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: NP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Dichlorodifluoromethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Ethyl Acetate	ND	34	1	B4I0699	09/12/2024	09/13/24 15:15	
Ethyl Ether	ND	34	1	B4I0699	09/12/2024	09/13/24 15:15	
Ethyl tert-butyl ether	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Ethylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Freon-113	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Hexachlorobutadiene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Isopropylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
m,p-Xylene	ND	6.7	1	B4I0699	09/12/2024	09/13/24 15:15	
Methylene chloride	ND	6.7	1	B4I0699	09/12/2024	09/13/24 15:15	
MTBE	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
n-Butylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
n-Propylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Naphthalene	7.2	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	B
o-Xylene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
sec-Butylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Styrene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
tert-Amyl methyl ether	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
tert-Butanol	ND	67	1	B4I0699	09/12/2024	09/13/24 15:15	
tert-Butylbenzene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Tetrachloroethene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Toluene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
trans-1,2-Dichloroethene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
trans-1,3-Dichloropropene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Trichloroethene	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Trichlorofluoromethane	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
Vinyl acetate	ND	34	1	B4I0699	09/12/2024	09/13/24 15:15	
Vinyl chloride	ND	3.4	1	B4I0699	09/12/2024	09/13/24 15:15	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>151 %</i>	<i>50.7 - 181</i>		B4I0699	09/12/2024	<i>09/13/24 15:15</i>	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>79.9 %</i>	<i>69.2 - 119</i>		B4I0699	09/12/2024	<i>09/13/24 15:15</i>	
<i>Surrogate: Dibromofluoromethane</i>	<i>135 %</i>	<i>76.2 - 140</i>		B4I0699	09/12/2024	<i>09/13/24 15:15</i>	
<i>Surrogate: Toluene-d8</i>	<i>116 %</i>	<i>85.6 - 120</i>		B4I0699	09/12/2024	<i>09/13/24 15:15</i>	



Certificate of Analysis

TRC
 707 Wilshire Blvd., Suite 3250
 Los Angeles , CA 90017

Project Number : Ave 34 offsite Investigation / 579271

Report To : Daniel Cruz

Reported : 09/20/2024

Client Sample ID: SB-3-15

Lab ID: 2401463-06

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: NP

Analyte	Result	PQL	Dilution	Batch	Prepared	Date/Time	Notes
	(ug/kg)	(ug/kg)				Analyzed	
1,1,1,2-Tetrachloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,1,1-Trichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,1,2,2-Tetrachloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,1,2-Trichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,1-Dichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,1-Dichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,1-Dichloropropene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2,3-Trichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2,3-Trichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2,4-Trichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2,4-Trimethylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2-Dibromo-3-chloropropane	ND	7.3	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2-Dibromoethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2-Dichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2-Dichloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,2-Dichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,3,5-Trimethylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,3-Dichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,3-Dichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
1,4-Dichlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
2,2-Dichloropropane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
2-Chlorotoluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
4-Chlorotoluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
4-Isopropyltoluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Benzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Bromobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Bromochloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Bromodichloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Bromoform	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Bromomethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Carbon disulfide	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Carbon tetrachloride	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Chlorobenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Chloroethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Chloroform	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Chloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
cis-1,2-Dichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
cis-1,3-Dichloropropene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Di-isopropyl ether	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Dibromochloromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271

Report To : Daniel Cruz

Reported : 09/20/2024

Client Sample ID: SB-3-15

Lab ID: 2401463-06

Volatile Organic Compounds by EPA 5035 / EPA 8260B

Analyst: NP

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Dibromomethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Dichlorodifluoromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Ethyl Acetate	ND	36	1	B4I0699	09/12/2024	09/13/24 15:41	
Ethyl Ether	ND	36	1	B4I0699	09/12/2024	09/13/24 15:41	
Ethyl tert-butyl ether	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Ethylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Freon-113	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Hexachlorobutadiene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Isopropylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
m,p-Xylene	ND	7.3	1	B4I0699	09/12/2024	09/13/24 15:41	
Methylene chloride	ND	7.3	1	B4I0699	09/12/2024	09/13/24 15:41	
MTBE	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
n-Butylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
n-Propylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Naphthalene	7.8	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	B
o-Xylene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
sec-Butylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Styrene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
tert-Amyl methyl ether	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
tert-Butanol	ND	73	1	B4I0699	09/12/2024	09/13/24 15:41	
tert-Butylbenzene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Tetrachloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Toluene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
trans-1,2-Dichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
trans-1,3-Dichloropropene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Trichloroethene	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Trichlorofluoromethane	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
Vinyl acetate	ND	36	1	B4I0699	09/12/2024	09/13/24 15:41	
Vinyl chloride	ND	3.6	1	B4I0699	09/12/2024	09/13/24 15:41	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>149 %</i>	<i>50.7 - 181</i>		B4I0699	09/12/2024	09/13/24 15:41	
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>89.8 %</i>	<i>69.2 - 119</i>		B4I0699	09/12/2024	09/13/24 15:41	
<i>Surrogate: Dibromofluoromethane</i>	<i>144 %</i>	<i>76.2 - 140</i>		B4I0699	09/12/2024	09/13/24 15:41	S12
<i>Surrogate: Toluene-d8</i>	<i>127 %</i>	<i>85.6 - 120</i>		B4I0699	09/12/2024	09/13/24 15:41	S12



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271

Report To : Daniel Cruz

Reported : 09/20/2024

QUALITY CONTROL SECTION

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
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Batch B4I0699 - MSVOA_S

Blank (B4I0699-BLK1)

Prepared: 9/12/2024 Analyzed: 9/13/2024

1,1,1,2-Tetrachloroethane	ND	5.0	2.0
1,1,1-Trichloroethane	ND	5.0	2.5
1,1,2,2-Tetrachloroethane	ND	5.0	1.6
1,1,2-Trichloroethane	ND	5.0	2.3
1,1-Dichloroethane	ND	5.0	1.9
1,1-Dichloroethene	ND	5.0	2.4
1,1-Dichloropropene	ND	5.0	3.9
1,2,3-Trichloropropane	ND	5.0	1.7
1,2,3-Trichlorobenzene	ND	5.0	1.9
1,2,4-Trichlorobenzene	ND	5.0	1.7
1,2,4-Trimethylbenzene	ND	5.0	2.4
1,2-Dibromo-3-chloropropane	ND	10	3.4
1,2-Dibromoethane	ND	5.0	1.9
1,2-Dichlorobenzene	ND	5.0	1.8
1,2-Dichloroethane	ND	5.0	1.8
1,2-Dichloropropane	ND	5.0	3.4
1,3,5-Trimethylbenzene	ND	5.0	2.0
1,3-Dichlorobenzene	ND	5.0	1.9
1,3-Dichloropropane	ND	5.0	1.7
1,4-Dichlorobenzene	ND	5.0	1.6
2,2-Dichloropropane	ND	5.0	4.0
2-Chlorotoluene	ND	5.0	2.3
4-Chlorotoluene	ND	5.0	1.6
4-Isopropyltoluene	ND	5.0	2.3
Benzene	ND	5.0	2.0
Bromobenzene	ND	5.0	1.5
Bromochloromethane	ND	5.0	1.6
Bromodichloromethane	ND	5.0	3.2
Bromoform	ND	5.0	1.5
Bromomethane	ND	5.0	2.8
Carbon disulfide	ND	5.0	2.8
Carbon tetrachloride	ND	5.0	2.2
Chlorobenzene	ND	5.0	1.3
Chloroethane	ND	5.0	3.4
Chloroform	ND	5.0	2.0
Chloromethane	ND	5.0	2.5
cis-1,2-Dichloroethene	ND	5.0	3.5
cis-1,3-Dichloropropene	ND	5.0	3.5
Di-isopropyl ether	ND	5.0	2.0
Dibromochloromethane	ND	5.0	1.6
Dibromomethane	ND	5.0	4.6
Dichlorodifluoromethane	ND	5.0	3.1



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TRC
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Project Number : Ave 34 offsite Investigation / 579271
Report To : Daniel Cruz
Reported : 09/20/2024

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec Limits	RPD RPD	Limit Limit	Notes
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Batch B4I0699 - MSVOA_S (continued)

Blank (B4I0699-BLK1) - Continued

Prepared: 9/12/2024 Analyzed: 9/13/2024

Ethyl Acetate	ND	50	19						
Ethyl Ether	ND	50	13						
Ethyl tert-butyl ether	ND	5.0	1.8						
Ethylbenzene	ND	5.0	2.0						
Freon-113	ND	5.0	3.9						
Hexachlorobutadiene	ND	5.0	1.8						
Isopropylbenzene	ND	5.0	2.4						
m,p-Xylene	ND	10	3.1						
Methylene chloride	ND	10	2.1						
MTBE	ND	5.0	1.9						
n-Butylbenzene	ND	5.0	2.2						
n-Propylbenzene	ND	5.0	2.0						
Naphthalene	10.6900	5.0	1.4						
o-Xylene	ND	5.0	1.8						
sec-Butylbenzene	ND	5.0	2.3						
Styrene	ND	5.0	1.5						
tert-Amyl methyl ether	ND	5.0	3.5						
tert-Butanol	ND	100	13						
tert-Butylbenzene	ND	5.0	2.1						
Tetrachloroethene	ND	5.0	3.4						
Toluene	ND	5.0	1.7						
trans-1,2-Dichloroethene	ND	5.0	2.0						
trans-1,3-Dichloropropene	ND	5.0	2.8						
Trichloroethene	ND	5.0	2.1						
Trichlorofluoromethane	ND	5.0	3.4						
Vinyl acetate	ND	50	46						
Vinyl chloride	ND	5.0	2.1						

<i>Surrogate: 1,2-Dichloroethane-d4</i>	63.96			62.5000		102	50.7 - 181		
<i>Surrogate: 4-Bromofluorobenzene</i>	40.96			62.5000		65.5	69.2 - 119		S12
<i>Surrogate: Dibromofluoromethane</i>	66.17			62.5000		106	76.2 - 140		
<i>Surrogate: Toluene-d8</i>	60.00			62.5000		96.0	85.6 - 120		

LCS (B4I0699-BS1)

Prepared: 9/12/2024 Analyzed: 9/13/2024

1,1,1,2-Tetrachloroethane	51.9700	5.0	2.0	50.0000		104	68.1 - 128		
1,1,1-Trichloroethane	52.3300	5.0	2.5	50.0000		105	66.7 - 140		
1,1,2,2-Tetrachloroethane	70.7000	5.0	1.6	50.0000		141	70.2 - 127		L3
1,1,2-Trichloroethane	78.0700	5.0	2.3	50.0000		156	79.6 - 122		L3
1,1-Dichloroethane	58.5700	5.0	1.9	50.0000		117	69.6 - 138		
1,1-Dichloroethene	54.2600	5.0	2.4	50.0000		109	72.5 - 139		
1,1-Dichloropropene	60.9100	5.0	3.9	50.0000		122	79.5 - 132		
1,2,3-Trichloropropane	69.1400	5.0	1.7	50.0000		138	70.6 - 122		L3
1,2,3-Trichlorobenzene	62.5300	5.0	1.9	50.0000		125	72.2 - 126		
1,2,4-Trichlorobenzene	61.6000	5.0	1.7	50.0000		123	72.8 - 125		
1,2,4-Trimethylbenzene	65.6000	5.0	2.4	50.0000		131	76.4 - 124		L3
1,2-Dibromo-3-chloropropane	58.4200	10	3.4	50.0000		117	56.8 - 124		



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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec Limits	% Rec Limits	RPD	Limit	Notes
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Batch B4I0699 - MSVOA_S (continued)

LCS (B4I0699-BS1) - Continued

Prepared: 9/12/2024 Analyzed: 9/13/2024

1,2-Dibromoethane	70.5100	5.0	1.9	50.0000	141	82.3 - 122				L3
1,2-Dichlorobenzene	69.2600	5.0	1.8	50.0000	139	78.7 - 122				L3
1,2-Dichloroethane	69.1200	5.0	1.8	50.0000	138	55.8 - 143				
1,2-Dichloropropane	60.9600	5.0	3.4	50.0000	122	76.6 - 125				
1,3,5-Trimethylbenzene	55.5200	5.0	2.0	50.0000	111	76.3 - 127				
1,3-Dichlorobenzene	70.4500	5.0	1.9	50.0000	141	78 - 127				L3
1,3-Dichloropropane	52.9800	5.0	1.7	50.0000	106	78.2 - 118				
1,4-Dichlorobenzene	62.0300	5.0	1.6	50.0000	124	78.2 - 123				L3
2,2-Dichloropropane	61.2600	5.0	4.0	50.0000	123	67 - 134				
2-Chlorotoluene	55.6400	5.0	2.3	50.0000	111	75.5 - 125				
4-Chlorotoluene	59.8700	5.0	1.6	50.0000	120	75.2 - 124				
4-Isopropyltoluene	67.1900	5.0	2.3	50.0000	134	77.3 - 127				L3
Benzene	50.9900	5.0	2.0	50.0000	102	83.3 - 122				
Bromobenzene	65.8300	5.0	1.5	50.0000	132	78.4 - 124				L3
Bromochloromethane	63.5600	5.0	1.6	50.0000	127	78.2 - 136				
Bromodichloromethane	64.2400	5.0	3.2	50.0000	128	72.3 - 129				
Bromoform	55.0200	5.0	1.5	50.0000	110	62 - 128				
Bromomethane	45.9700	5.0	2.8	50.0000	91.9	35 - 190				
Carbon disulfide	51.9300	5.0	2.8	50.0000	104	50.4 - 143				
Carbon tetrachloride	49.5600	5.0	2.2	50.0000	99.1	60.3 - 147				
Chlorobenzene	44.7800	5.0	1.3	50.0000	89.6	79.5 - 121				
Chloroethane	54.4200	5.0	3.4	50.0000	109	56.1 - 168				
Chloroform	65.3500	5.0	2.0	50.0000	131	73.1 - 136				
Chloromethane	44.1900	5.0	2.5	50.0000	88.4	23.9 - 158				
cis-1,2-Dichloroethene	57.9700	5.0	3.5	50.0000	116	73.8 - 137				
cis-1,3-Dichloropropene	39.5400	5.0	3.5	50.0000	79.1	76.1 - 120				
Di-isopropyl ether	52.8100	5.0	2.0	50.0000	106	45.3 - 157				
Dibromochloromethane	50.1400	5.0	1.6	50.0000	100	66.9 - 126				
Dibromomethane	49.2400	5.0	4.6	50.0000	98.5	78.2 - 121				
Dichlorodifluoromethane	35.0500	5.0	3.1	50.0000	70.1	-56.8 - 214				
Ethyl Acetate	363.510	50	19	500.000	72.7	34.1 - 177				
Ethyl Ether	684.130	50	13	500.000	137	44.6 - 178				
Ethyl tert-butyl ether	63.9100	5.0	1.8	50.0000	128	70.9 - 137				
Ethylbenzene	45.4700	5.0	2.0	50.0000	90.9	78.3 - 122				
Freon-113	58.6200	5.0	3.9	50.0000	117	33.9 - 192				
Hexachlorobutadiene	58.4600	5.0	1.8	50.0000	117	68.4 - 132				
Isopropylbenzene	48.0700	5.0	2.4	50.0000	96.1	77.8 - 126				
m,p-Xylene	108.960	10	3.1	100.000	109	79.7 - 125				
Methylene chloride	66.3600	10	2.1	50.0000	133	58.7 - 146				
MTBE	55.1000	5.0	1.9	50.0000	110	63.6 - 150				
n-Butylbenzene	62.9200	5.0	2.2	50.0000	126	74.9 - 128				
n-Propylbenzene	64.4900	5.0	2.0	50.0000	129	77.4 - 127				L3
Naphthalene	58.6000	5.0	1.4	50.0000	117	68.3 - 124				B
o-Xylene	56.8700	5.0	1.8	50.0000	114	74.1 - 123				
sec-Butylbenzene	63.4300	5.0	2.3	50.0000	127	79.1 - 126				L3



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Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	Limit	Notes
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Batch B4I0699 - MSVOA_S (continued)

LCS (B4I0699-BS1) - Continued

Prepared: 9/12/2024 Analyzed: 9/13/2024

Styrene	53.4800	5.0	1.5	50.0000		107	76.8 - 123			
tert-Amyl methyl ether	58.0700	5.0	3.5	50.0000		116	69.8 - 143			
tert-Butanol	481.210	100	13	250.000		192	55.9 - 133			L3
tert-Butylbenzene	66.3400	5.0	2.1	50.0000		133	75.6 - 128			L3
Tetrachloroethene	40.2500	5.0	3.4	50.0000		80.5	69.2 - 129			
Toluene	48.6800	5.0	1.7	50.0000		97.4	85.3 - 123			
trans-1,2-Dichloroethene	58.1100	5.0	2.0	50.0000		116	75 - 139			
trans-1,3-Dichloropropene	65.0500	5.0	2.8	50.0000		130	71.2 - 123			L3
Trichloroethene	59.7600	5.0	2.1	50.0000		120	86.4 - 123			
Trichlorofluoromethane	57.8100	5.0	3.4	50.0000		116	63.8 - 151			
Vinyl acetate	ND	50	46	500.000		NR	28.4 - 168			L3
Vinyl chloride	51.4200	5.0	2.1	50.0000		103	46.5 - 153			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>73.81</i>			<i>62.5000</i>		<i>118</i>	<i>50.7 - 181</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>49.26</i>			<i>62.5000</i>		<i>78.8</i>	<i>69.2 - 119</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>69.91</i>			<i>62.5000</i>		<i>112</i>	<i>76.2 - 140</i>			
<i>Surrogate: Toluene-d8</i>	<i>58.98</i>			<i>62.5000</i>		<i>94.4</i>	<i>85.6 - 120</i>			

Matrix Spike (B4I0699-MS1)

Source: 2401465-03

Prepared: 9/12/2024 Analyzed: 9/13/2024

1,1,1,2-Tetrachloroethane	49.8917	4.9	2.0	98.4252	ND	50.7	39.7 - 134			
1,1,1-Trichloroethane	53.2579	4.9	2.5	98.4252	ND	54.1	54.6 - 145			L3
1,1,2,2-Tetrachloroethane	57.3917	4.9	1.6	98.4252	ND	58.3	9.26 - 160			
1,1,2-Trichloroethane	45.4626	4.9	2.3	98.4252	ND	46.2	56 - 129			L3
1,1-Dichloroethane	53.6909	4.9	1.9	98.4252	ND	54.5	56.7 - 139			L3
1,1-Dichloroethene	50.1870	4.9	2.4	98.4252	ND	51.0	58.4 - 154			L3
1,1-Dichloropropene	52.4213	4.9	3.8	98.4252	ND	53.3	48.2 - 153			
1,2,3-Trichloropropane	56.6339	4.9	1.7	98.4252	ND	57.5	41.7 - 135			
1,2,3-Trichlorobenzene	63.1988	4.9	1.9	98.4252	ND	64.2	-20.5 - 152			
1,2,4-Trichlorobenzene	58.9961	4.9	1.7	98.4252	ND	59.9	-22 - 157			
1,2,4-Trimethylbenzene	62.2638	4.9	2.3	98.4252	ND	63.3	10.3 - 150			
1,2-Dibromo-3-chloropropane	58.0118	9.8	3.4	98.4252	3.65000	55.2	28.7 - 132			
1,2-Dibromoethane	50.6102	4.9	1.8	98.4252	ND	51.4	52.2 - 133			L3
1,2-Dichlorobenzene	62.5000	4.9	1.8	98.4252	ND	63.5	13.4 - 145			
1,2-Dichloroethane	51.3287	4.9	1.8	98.4252	ND	52.2	49.8 - 129			
1,2-Dichloropropane	47.4902	4.9	3.3	98.4252	ND	48.2	49 - 133			L3
1,3,5-Trimethylbenzene	64.0354	4.9	2.0	98.4252	ND	65.1	15.7 - 151			
1,3-Dichlorobenzene	61.4468	4.9	1.9	98.4252	ND	62.4	13.3 - 149			
1,3-Dichloropropane	49.1929	4.9	1.6	98.4252	ND	50.0	53.1 - 124			L3
1,4-Dichlorobenzene	60.6890	4.9	1.6	98.4252	ND	61.7	14.1 - 146			
2,2-Dichloropropane	56.2500	4.9	4.0	98.4252	ND	57.2	51 - 143			
2-Chlorotoluene	59.7342	4.9	2.3	98.4252	ND	60.7	14 - 156			
4-Chlorotoluene	60.0689	4.9	1.6	98.4252	ND	61.0	19.5 - 146			
4-Isopropyltoluene	63.6909	4.9	2.3	98.4252	ND	64.7	-3.25 - 166			
Benzene	47.7756	4.9	2.0	98.4252	ND	48.5	58.3 - 133			L3
Bromobenzene	62.8740	4.9	1.5	98.4252	ND	63.9	31.5 - 139			
Bromochloromethane	50.7677	4.9	1.6	98.4252	ND	51.6	60.2 - 136			L3



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Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	RPD Limit	Notes
Batch B4I0699 - MSVOA_S (continued)										
Matrix Spike (B4I0699-MS1) - Continued			Source: 2401465-03			Prepared: 9/12/2024 Analyzed: 9/13/2024				
Bromodichloromethane	47.4606	4.9	3.2	98.4252	ND	48.2	53.6 - 127			L3
Bromoform	54.0945	4.9	1.5	98.4252	ND	55.0	35.7 - 132			
Bromomethane	44.4390	4.9	2.8	98.4252	ND	45.2	23.9 - 178			
Carbon disulfide	50.3445	4.9	2.7	98.4252	ND	51.2	30.9 - 157			
Carbon tetrachloride	50.0689	4.9	2.1	98.4252	ND	50.9	45.2 - 150			
Chlorobenzene	53.6811	4.9	1.3	98.4252	ND	54.5	38.2 - 137			
Chloroethane	45.7480	4.9	3.3	98.4252	ND	46.5	29.3 - 176			
Chloroform	47.1063	4.9	2.0	98.4252	ND	47.9	59.1 - 136			L3
Chloromethane	41.1516	4.9	2.5	98.4252	ND	41.8	28.4 - 147			
cis-1,2-Dichloroethene	48.9862	4.9	3.4	98.4252	ND	49.8	53.5 - 144			L3
cis-1,3-Dichloropropene	44.2913	4.9	3.5	98.4252	ND	45.0	42.1 - 130			
Di-isopropyl ether	48.2677	4.9	2.0	98.4252	ND	49.0	42.7 - 140			
Dibromochloromethane	50.6890	4.9	1.6	98.4252	ND	51.5	44.1 - 127			
Dibromomethane	50.1181	4.9	4.5	98.4252	ND	50.9	52.7 - 126			L3
Dichlorodifluoromethane	33.2972	4.9	3.0	98.4252	ND	33.8	-46.3 - 204			
Ethyl Acetate	327.618	49	19	984.252	ND	33.3	-29 - 190			
Ethyl Ether	473.199	49	13	984.252	ND	48.1	36.7 - 168			
Ethyl tert-butyl ether	51.8307	4.9	1.8	98.4252	ND	52.7	52.5 - 140			
Ethylbenzene	53.0709	4.9	2.0	98.4252	ND	53.9	33.4 - 140			
Freon-113	49.5276	4.9	3.8	98.4252	ND	50.3	20.9 - 202			
Hexachlorobutadiene	65.1181	4.9	1.7	98.4252	ND	66.2	-27.8 - 150			
Isopropylbenzene	62.9331	4.9	2.4	98.4252	ND	63.9	22.3 - 153			
m,p-Xylene	108.701	9.8	3.0	196.850	ND	55.2	26.6 - 146			
Methylene chloride	48.3366	9.8	2.1	98.4252	ND	49.1	48.6 - 134			
MTBE	51.3287	4.9	1.9	98.4252	ND	52.2	52.1 - 144			
n-Butylbenzene	64.1043	4.9	2.1	98.4252	ND	65.1	-8.23 - 162			
n-Propylbenzene	62.3917	4.9	2.0	98.4252	ND	63.4	16.3 - 154			
Naphthalene	55.0984	4.9	1.4	98.4252	10.7200	45.1	-5.79 - 153			B
o-Xylene	54.0846	4.9	1.7	98.4252	ND	55.0	27.2 - 139			
sec-Butylbenzene	63.7106	4.9	2.3	98.4252	ND	64.7	1.73 - 161			
Styrene	52.1457	4.9	1.5	98.4252	ND	53.0	26.3 - 144			
tert-Amyl methyl ether	49.9016	4.9	3.5	98.4252	ND	50.7	48.5 - 151			
tert-Butanol	249.705	98	12	492.126	ND	50.7	35.6 - 148			
tert-Butylbenzene	63.4842	4.9	2.1	98.4252	ND	64.5	9.48 - 158			
Tetrachloroethene	50.5118	4.9	3.4	98.4252	ND	51.3	28.6 - 149			
Toluene	48.9764	4.9	1.7	98.4252	ND	49.8	39.5 - 146			
trans-1,2-Dichloroethene	50.8071	4.9	2.0	98.4252	ND	51.6	55.1 - 151			L3
trans-1,3-Dichloropropene	50.9744	4.9	2.7	98.4252	ND	51.8	45.9 - 125			
Trichloroethene	52.5098	4.9	2.0	98.4252	ND	53.3	36.3 - 176			
Trichlorofluoromethane	52.8445	4.9	3.3	98.4252	ND	53.7	39.4 - 169			
Vinyl acetate	283.622	49	45	984.252	ND	28.8	-65 - 182			
Vinyl chloride	45.2165	4.9	2.1	98.4252	ND	45.9	47.5 - 156			L3
Surrogate: 1,2-Dichloroethane-d4	55.74			125.000		44.6	50.7 - 181			L3
Surrogate: 4-Bromofluorobenzene	50.29			125.000		40.2	69.2 - 119			L3
Surrogate: Dibromofluoromethane	60.00			125.000		48.0	76.2 - 140			L3



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Reported : 09/20/2024

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD RPD	Limit	Notes
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Batch B4I0699 - MSVOA_S (continued)

Matrix Spike (B4I0699-MS1) - Continued

Source: 2401465-03

Prepared: 9/12/2024 Analyzed: 9/13/2024

Surrogate: Toluene-d8	56.27		125.000		45.0	85.6 - 120			L3
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Matrix Spike Dup (B4I0699-MSD1)

Source: 2401465-03

Prepared: 9/12/2024 Analyzed: 9/13/2024

1,1,1,2-Tetrachloroethane	46.2974	5.0	2.0	99.8004	ND	46.4	39.7 - 134	7.47	20	
1,1,1-Trichloroethane	49.1716	5.0	2.5	99.8004	ND	49.3	54.6 - 145	7.98	20	L3
1,1,2,2-Tetrachloroethane	61.5369	5.0	1.6	99.8004	ND	61.7	9.26 - 160	6.97	20	
1,1,2-Trichloroethane	50.1198	5.0	2.3	99.8004	ND	50.2	56 - 129	9.74	20	L3
1,1-Dichloroethane	50.8483	5.0	1.9	99.8004	ND	51.0	56.7 - 139	5.44	20	L3
1,1-Dichloroethene	48.1736	5.0	2.4	99.8004	ND	48.3	58.4 - 154	4.09	20	L3
1,1-Dichloropropene	49.1916	5.0	3.9	99.8004	ND	49.3	48.2 - 153	6.36	20	
1,2,3-Trichloropropane	58.1936	5.0	1.7	99.8004	ND	58.3	41.7 - 135	2.72	20	
1,2,3-Trichlorobenzene	65.7385	5.0	1.9	99.8004	ND	65.9	-20.5 - 152	3.94	20	
1,2,4-Trichlorobenzene	59.9701	5.0	1.7	99.8004	ND	60.1	-22 - 157	1.64	20	
1,2,4-Trimethylbenzene	65.1098	5.0	2.3	99.8004	ND	65.2	10.3 - 150	4.47	20	
1,2-Dibromo-3-chloropropane	62.4651	10	3.4	99.8004	3.65000	58.9	28.7 - 132	7.39	20	
1,2-Dibromoethane	50.3293	5.0	1.9	99.8004	ND	50.4	52.2 - 133	0.557	20	L3
1,2-Dichlorobenzene	63.1238	5.0	1.8	99.8004	ND	63.2	13.4 - 145	0.993	20	
1,2-Dichloroethane	50.9980	5.0	1.8	99.8004	ND	51.1	49.8 - 129	0.646	20	
1,2-Dichloropropane	46.9561	5.0	3.4	99.8004	ND	47.0	49 - 133	1.13	20	L3
1,3,5-Trimethylbenzene	64.2116	5.0	2.0	99.8004	ND	64.3	15.7 - 151	0.275	20	
1,3-Dichlorobenzene	61.9860	5.0	1.9	99.8004	ND	62.1	13.3 - 149	0.874	20	
1,3-Dichloropropane	45.4691	5.0	1.7	99.8004	ND	45.6	53.1 - 124	7.87	20	L3
1,4-Dichlorobenzene	62.1756	5.0	1.6	99.8004	ND	62.3	14.1 - 146	2.42	20	
2,2-Dichloropropane	50.5589	5.0	4.0	99.8004	ND	50.7	51 - 143	10.7	20	L3
2-Chlorotoluene	60.1297	5.0	2.3	99.8004	ND	60.3	14 - 156	0.660	20	
4-Chlorotoluene	61.5569	5.0	1.6	99.8004	ND	61.7	19.5 - 146	2.45	20	
4-Isopropyltoluene	65.1397	5.0	2.3	99.8004	ND	65.3	-3.25 - 166	2.25	20	
Benzene	48.4730	5.0	2.0	99.8004	ND	48.6	58.3 - 133	1.45	20	L3
Bromobenzene	67.1158	5.0	1.5	99.8004	ND	67.2	31.5 - 139	6.53	20	
Bromochloromethane	49.8703	5.0	1.6	99.8004	ND	50.0	60.2 - 136	1.78	20	L3
Bromodichloromethane	49.1916	5.0	3.2	99.8004	ND	49.3	53.6 - 127	3.58	20	L3
Bromoform	52.1657	5.0	1.5	99.8004	ND	52.3	35.7 - 132	3.63	20	
Bromomethane	43.2834	5.0	2.8	99.8004	ND	43.4	23.9 - 178	2.63	20	
Carbon disulfide	46.5070	5.0	2.8	99.8004	ND	46.6	30.9 - 157	7.92	20	
Carbon tetrachloride	49.2914	5.0	2.2	99.8004	ND	49.4	45.2 - 150	1.56	20	
Chlorobenzene	49.2714	5.0	1.3	99.8004	ND	49.4	38.2 - 137	8.57	20	
Chloroethane	47.2954	5.0	3.4	99.8004	ND	47.4	29.3 - 176	3.33	20	
Chloroform	48.6228	5.0	2.0	99.8004	ND	48.7	59.1 - 136	3.17	20	L3
Chloromethane	38.4631	5.0	2.5	99.8004	ND	38.5	28.4 - 147	6.75	20	
cis-1,2-Dichloroethene	46.2076	5.0	3.5	99.8004	ND	46.3	53.5 - 144	5.84	20	L3
cis-1,3-Dichloropropene	43.2435	5.0	3.5	99.8004	ND	43.3	42.1 - 130	2.39	20	
Di-isopropyl ether	46.5469	5.0	2.0	99.8004	ND	46.6	42.7 - 140	3.63	20	
Dibromochloromethane	46.7864	5.0	1.6	99.8004	ND	46.9	44.1 - 127	8.01	20	
Dibromomethane	50.5988	5.0	4.6	99.8004	ND	50.7	52.7 - 126	0.955	20	L3
Dichlorodifluoromethane	32.0758	5.0	3.1	99.8004	ND	32.1	-46.3 - 204	3.74	20	



Certificate of Analysis

TRC
707 Wilshire Blvd., Suite 3250
Los Angeles, CA 90017

Project Number : Ave 34 offsite Investigation / 579271

Report To : Daniel Cruz

Reported : 09/20/2024

Volatile Organic Compounds by EPA 5035 / EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec % Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B4I0699 - MSVOA_S (continued)										
Matrix Spike Dup (B4I0699-MSD1) - Continued			Source: 2401465-03			Prepared: 9/12/2024 Analyzed: 9/13/2024				
Ethyl Acetate	332.495	50	19	998.004	ND	33.3	-29 - 190	1.48	20	
Ethyl Ether	467.615	50	13	998.004	ND	46.9	36.7 - 168	1.19	20	
Ethyl tert-butyl ether	51.8264	5.0	1.8	99.8004	ND	51.9	52.5 - 140	0.00841	20	L3
Ethylbenzene	47.2854	5.0	2.0	99.8004	ND	47.4	33.4 - 140	11.5	20	
Freon-113	48.8124	5.0	3.9	99.8004	ND	48.9	20.9 - 202	1.45	20	
Hexachlorobutadiene	58.9920	5.0	1.8	99.8004	ND	59.1	-27.8 - 150	9.87	20	
Isopropylbenzene	63.4331	5.0	2.4	99.8004	ND	63.6	22.3 - 153	0.791	20	
m,p-Xylene	97.9142	10	3.1	199.601	ND	49.1	26.6 - 146	10.4	20	
Methylene chloride	46.9361	10	2.1	99.8004	ND	47.0	48.6 - 134	2.94	20	L3
MTBE	49.9900	5.0	1.9	99.8004	ND	50.1	52.1 - 144	2.64	20	L3
n-Butylbenzene	62.4252	5.0	2.2	99.8004	ND	62.6	-8.23 - 162	2.65	20	
n-Propylbenzene	63.5629	5.0	2.0	99.8004	ND	63.7	16.3 - 154	1.86	20	
Naphthalene	56.8862	5.0	1.4	99.8004	10.7200	46.3	-5.79 - 153	3.19	20	B
o-Xylene	49.2415	5.0	1.8	99.8004	ND	49.3	27.2 - 139	9.37	20	
sec-Butylbenzene	64.1617	5.0	2.3	99.8004	ND	64.3	1.73 - 161	0.705	20	
Styrene	50.1697	5.0	1.5	99.8004	ND	50.3	26.3 - 144	3.86	20	
tert-Amyl methyl ether	50.1896	5.0	3.5	99.8004	ND	50.3	48.5 - 151	0.576	20	
tert-Butanol	276.138	100	13	499.002	ND	55.3	35.6 - 148	10.1	20	
tert-Butylbenzene	64.5509	5.0	2.1	99.8004	ND	64.7	9.48 - 158	1.67	20	
Tetrachloroethene	47.8742	5.0	3.4	99.8004	ND	48.0	28.6 - 149	5.36	20	
Toluene	48.8623	5.0	1.7	99.8004	ND	49.0	39.5 - 146	0.233	20	
trans-1,2-Dichloroethene	48.6926	5.0	2.0	99.8004	ND	48.8	55.1 - 151	4.25	20	L3
trans-1,3-Dichloropropene	53.0140	5.0	2.8	99.8004	ND	53.1	45.9 - 125	3.92	20	
Trichloroethene	50.4990	5.0	2.1	99.8004	ND	50.6	36.3 - 176	3.90	20	
Trichlorofluoromethane	46.8862	5.0	3.4	99.8004	ND	47.0	39.4 - 169	11.9	20	
Vinyl acetate	255.389	50	46	998.004	ND	25.6	-65 - 182	10.5	20	
Vinyl chloride	41.4072	5.0	2.1	99.8004	ND	41.5	47.5 - 156	8.80	20	L3
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>57.39</i>			<i>125.000</i>		<i>45.9</i>	<i>50.7 - 181</i>			L3
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>46.64</i>			<i>125.000</i>		<i>37.3</i>	<i>69.2 - 119</i>			L3
<i>Surrogate: Dibromofluoromethane</i>	<i>60.17</i>			<i>125.000</i>		<i>48.1</i>	<i>76.2 - 140</i>			L3
<i>Surrogate: Toluene-d8</i>	<i>60.33</i>			<i>125.000</i>		<i>48.3</i>	<i>85.6 - 120</i>			L3

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

2401463

		For Laboratory Use Only			ATLCOG Ver: 20210101			
Method of Transport		Sample Conditions Upon Receipt						
		Condition		Y	N	Condition		Y
<input checked="" type="checkbox"/> Client	<input type="checkbox"/> ATL	1. CHILLED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. # OF SAMPLES MATCH COC		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> FedEx	<input type="checkbox"/> OnTrac	2. HEADSPACE (VOA) < 6mm	<input type="checkbox"/>	<input type="checkbox"/>	6. PRESERVED		<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> GSO		3. CONTAINER INTACT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. COOLER TEMP, deg C:		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Other: _____		4. SEALED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. THERMOMETER ID:		<input type="checkbox"/>	<input type="checkbox"/>

CUSTOMER

Company: <u>TLC</u>		Address: <u>6 Executive Circle, Suite 200</u>		City: <u>Irvine</u>		State: <u>CA</u>		Zip: <u>92614</u>		Tel: _____	
SEND REPORT TO:				SEND INVOICE TO:				<input type="checkbox"/> same as SEND REPORT TO			
Attn: <u>Dan Cruz</u>		Email: <u>DCruz@TLC.com</u>		Attn: <u>Dan Cruz</u>		Email: <u>DCruz@TLC.com</u>		EDD		QA/QC	
Company: <u>TLC</u>		Address: <u>6 Executive Circle, Suite 200</u>		City: <u>Irvine</u>		State: <u>CA</u>		Zip: <u>92614</u>		<input type="checkbox"/> Excel	
Attn: _____		Email: _____		Attn: _____		Email: _____		<input type="checkbox"/> EDF		<input type="checkbox"/> Routine	
Company: _____		Address: _____		City: _____		State: _____		Zip: _____		<input type="checkbox"/> Caltrans	
Attn: _____		Email: _____		Attn: _____		Email: _____		<input type="checkbox"/> Equis		<input type="checkbox"/> Legal	
Company: _____		Address: _____		City: _____		State: _____		Zip: _____		<input type="checkbox"/> RWQCB	
Attn: _____		Email: _____		Attn: _____		Email: _____		<input type="checkbox"/> _____		<input type="checkbox"/> Level IV	

PROJECT SAMPLES

Project Name: <u>Ave 34 off-site Investigation</u>		Quote #: _____		Requested Analysis										Sample Matrix		Container		Remarks																
Project No.: <u>579271</u>		PO #: <u>221360</u>																																
Sampler: <u>Paul Kee</u>				VOLs, BTEX, PAHs, MTBE, TAME, DIBP, TBA, ETBE by vs EPA 8260B by EPA 8260B										Turnaround Time (TAT)		Quantity		Type: 1-Tube; 2-VOA; 3-Liter; 4-Pint; 5-Jar; 6-Bedlar; 7-Canister Material: 1-Glass; 2-Plastic; 3-Metal Preservative: 1-HCl; 2-HNO3; 3-H2SO4; 4-AC; 5-20%Ac2; 6-NaOH; 7-NA2S2O3																
ITEM	Lab ID (For Lab Use Only)	Sample Description																																
		Sample ID	Location																	Date	Time													
1	1	SB-1-5																		9/10/24	1045										5	3/5	1	Hold
2	2	SB-1-15																		9/10/24	1110	✓	✓	✓	✓	✓					5			Hold
3	3	SB-2-5																		9/10/24	1435	✓	✓	✓	✓	✓					5			Hold
4	4	SB-3-5																		9/11/24	935	✓	✓	✓	✓	✓					5			Hold
5	5	SB-3-11																		9/11/24	1005	✓	✓	✓	✓	✓					5			
6	6	SB-3-15																		9/11/24	1015	✓	✓	✓	✓	✓					5			
7	7	SB-5-5																		9/11/24	1150										5			Hold
8	8	SB-4-5		9/12/24	835										5			Hold																
9																																		
10																																		

(Special Instructions, Comments, Notes, etc.)
 run VOLs, BTEX, PAHs: MTBE, TAME, DIBP, TBA, ETBE by vs EPA 8260B on SB-1-15, SB-3-11, SB-3-15. Hold all other samples.
 5-Day TAT

Page 17 of 17

By relinquishing samples to ATL, I hereby agree that I have read and accept ATL's Terms and Conditions, as stated in www.atlglobal.com/terms-and-conditions .		Relinquished by: (Signature and Printed Name) <u>Paul Kee</u>	Date: <u>9/12/24</u>	Time: <u>1416</u>	Received by: (Signature and Printed Name) <u>Dan Cruz</u>	Date: <u>9/12/24</u>	Time: <u>14216</u>
		Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
		Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time: