

Project No.
14121.001.000

December 20, 2018

Mr. Tom Jodry
TC Agoge Associates, LLC
101 California Street, Suite 2200
San Francisco, CA 94111

Subject: 354-358 Royal Avenue & 365 Bird Avenue
San Jose, California

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Reference: ENGEO, Phase I Environmental Site Assessment, 354-358 Royal Avenue & 365 Bird Avenue, San Jose, California, DRAFT; December 17, 2018.

Dear Mr. Jodry:

We are pleased to submit the findings of our phase II environmental site assessment (ESA) undertaken at the subject property (Property) in San Jose, California. The purpose of this phase II ESA is to determine if potential subsurface impairments associated with past land use are present at the Property and the potential migration of offsite impact from neighboring sites.

BACKGROUND

The Property is located at 354-358 Royal Avenue and 365 Bird Avenue in San Jose, California (Property) (Figures 1 and 2). An additional address associated with the Property is 375 Bird Avenue. The approximately 0.5-acre Property consists of four parcels identified as Assessor's Parcel Numbers (APN) 264-20-008, 264-20-009, 264-20-010, and 264-20-021.

The Property consists of two buildings; one used as a convenience store, and the second used as an automotive repair shop, along with associated parking and landscaping. The Property is bounded by Royal Avenue to the west, Bird Avenue to the east, commercial developments to the north, and a gasoline service station and Auzerai Avenue to the south. Surrounding land use is a combination of commercial, light industrial, and residential uses.

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the Property; however, the following potential environmental concerns were identified for the Property.

- Based on both the review of regulatory databases and the area's historic industrial land uses, as well as the use of the Property as an automotive repair shop, potential sources of groundwater and soil gas impact exist within the vicinity of the Property.
- Given the age of the existing structures on the Property, it is conceivable that both lead-based paint and asbestos-containing material are present within the structures.

A limited phase II ESA was recommended to evaluate potential impacts due to the past use of the Property as an automotive repair shop, as well as other offsite sources.

SCOPE OF FIELD EXPLORATION

Field sampling activities associated with the phase II ESA were performed on December 13, 2018. Prior to drilling, an ENGEO representative contacted USA North Service Alert for identification of underground utilities at the Property. In addition, as a precautionary measure, a private utility locator was retained to clear the sample locations.

A C-57 licensed drilling contractor was retained to advance borings using a Geoprobe® direct-push rig. Soil gas samples were collected from three locations on the Property (SG-1 through SG-3), and groundwater samples were collected from two locations (GW-1 and GW-2), as presented on Figure 2. Details pertaining to each of these tasks are presented below.

Task 1: Grab Groundwater Assessment

Two direct-push borings were advanced at the Property to a total depth of approximately 25 feet below ground surface, until groundwater was first encountered (Figure 2). Grab groundwater samples were recovered from the two borings. Groundwater was encountered at a depth of approximately 19 to 23 feet below the ground surface. Temporary PVC casings were used in each borehole to facilitate sample collection.

Upon collection, groundwater samples were placed into laboratory-provided sample containers. Each container was labeled with a sample identification, sample location, date and time of collection, and sampler's identification. The groundwater samples were then placed in an ice-cooled chest and submitted under documented chain-of-custody to Torrent Laboratory, Inc., a State-certified laboratory located in Milpitas, California.

The grab groundwater samples were analyzed for the presence of total petroleum hydrocarbons as gasoline (TPH-g) and volatile organic compounds (VOCs) (EPA Method 8260), total petroleum hydrocarbons as diesel (TPH-d) and total petroleum hydrocarbons as motor oil (TPH-mo) (EPA Method 8015M with silica gel cleanup), and CAM-17 metals (EPA Method 6010/7471).

Following sample recovery, the temporary well points were removed and backfilled with neat cement grout.

Task 2: Soil Gas Assessment

In order to evaluate potential vapor intrusion issues at the Property, soil gas samples were collected from three locations (SG-1 through SG-3) at the Property (Figure 2).

The installation and sampling of the soil gas borings were performed in general conformance with the Department of Toxic Substances Control (DTSC) *Final Advisory Active Soil Gas Investigations* (July 2015), using the following procedures:

- The temporary soil vapor monitoring well casings were constructed with ¼-inch-diameter Teflon® tubing equipped with a 6-inch stainless steel filter at the base of the tubing. The

temporary well installation was performed with a Geoprobe® direct-push rig, which advanced an approximately 2-inch-diameter boring to a depth of 6 feet below the ground surface.

- The bottom of the well casing was equipped with a 6-inch-long filter centered in the middle of a 2-foot layer of No. 3 sand. Six inches of dry bentonite was installed on top of the sand, and the remaining annular space was filled with hydrated bentonite grout to the surface.
- Following installation of the annular seal, the well casings were sealed, and the mandatory 2-hour equilibration time began. The sample train was connected to the well tubing by threading the permanent Swagelok® fitting on the well casing onto the manifold. The sample train consisted of a stainless steel twin summa manifold with a built-in flow controller set to 100 to 200 milliliters per minute (ml/min).
- Following the mandatory equilibration time, a purge canister was attached to the manifold connection closest to the well casing and the sample canister was connected to the manifold fitting furthest away from the well casing. Prior to connecting the sample train to the well casing, a shut-in test was performed to assess for potential leaks. The shut-in test consisted of capping the end of the manifold, then applying a vacuum with the purge canister, closing the purge valve, and observing the vacuum gauge for 2 minutes to determine if there is a drop in vacuum.
- A minimum of three well volumes were purged from the wells. Once purging was complete, the valve on the purge canister was closed. Samples were collected by opening the sample canister valve and allowing the sample canister to extract soil vapor until the vacuum in the sample canister reached approximately 5 inches of mercury. The leak detection compound 1,1-difluoroethane (1,1-DFA) was applied by wrapping a doused rag around the manifold fittings during sample collection.
- Each sample canister was labeled with a unique identification number, sampling time, and pre- and post-sample vacuum readings. Three soil gas samples were collected and submitted to Torrent Laboratory, Inc. under documented chain-of-custody for analysis of TPH-gasoline and VOCs, by EPA Test Method TO-15.

ANALYTICAL RESULTS

Groundwater

Review of the laboratory test results found detectable concentrations of several metallic analytes, including barium, chromium, molybdenum, selenium, nickel, and zinc in the grab groundwater samples collected from the Property. The detectable concentrations of all metals are below the corresponding San Francisco Regional Water Quality Control Board's (SFRWQCB) Environmental Screening Levels (ESLs) for groundwater established by the SFRWQCB¹.

As presented in Table A, TPH-g and TPH-d were detected at low concentrations in the grab groundwater samples. Concentrations of TPH-d in both grab groundwater samples exceeded the corresponding ESL. TPH-mo was not detected in the groundwater samples collected from the Property.

¹ San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels (ESLs), MCL Priority (Table GW-1) February 2016, Revision 3.

Xylene(s) and ethylbenzene were the only VOCs detected in one groundwater sample (GW-1), at concentrations below their corresponding ESL.

A summary of the groundwater analytical results is presented in Table A. The analytical laboratory reports are presented in their entirety in Appendix A.

Soil Gas

VOCs, including 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 2-butanone, acetone, benzene, carbon disulfide, ethylbenzene, toluene, naphthalene, hexane, xylene(s), methyl tert-butyl ether (MTBE), and TPH-g were detected in the soil gas samples collected from the Property. Results were compared to the corresponding SFRWQCB's ESLs for vapor intrusion for both residential and commercial land use^{2,3}.

As presented in Table B, concentrations of all VOCs were below the corresponding residential and commercial/industrial ESLs in the soil gas samples collected from the Property, with the exception of TPH-g, ethylbenzene, naphthalene, and xylene(s).

- TPH-g was detected at a concentration of 1,170,000 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), in soil gas sample SG-2, exceeding its corresponding residential ESL of 300,000 $\mu\text{g}/\text{m}^3$. However, this concentration is below the corresponding commercial/industrial ESL.
- Ethylbenzene was detected at a concentration of 30,000 $\mu\text{g}/\text{m}^3$ in soil gas sample SG-2, exceeding its corresponding residential and commercial/industrial ESLs.
- Total xylene(s) were detected at a concentration of 204,000 $\mu\text{g}/\text{m}^3$ in soil gas sample SG-2, exceeding its corresponding residential ESL of 52,000 $\mu\text{g}/\text{m}^3$, but below its corresponding commercial/industrial ESL.
- Naphthalene was detected at a concentration of 53 $\mu\text{g}/\text{m}^3$ in soil gas sample SG-3, exceeding its corresponding residential ESL of 41 $\mu\text{g}/\text{m}^3$, but below its corresponding commercial/industrial ESL.

A summary of the soil gas analytical results is presented in Table B. The analytical laboratory reports are presented in their entirety in Appendix A.

DISCUSSION AND CONCLUSION

- Both grab groundwater samples recovered from the Property exhibited concentrations of TPH-d in excess of the corresponding ESL for groundwater.

² San Francisco RWQCB Table SG-1, Vapor Intrusion Residential Environmental Screening Levels, Revision 3, February 2016.

³ San Francisco RWQCB Table SG-1, Vapor Intrusion Commercial/Industrial Environmental Screening Levels, Revision 3, February 2016.

- Concentrations of select VOCs (TPH-g, naphthalene, ethylbenzene, and total xylene(s)) were detected at concentrations exceeding their corresponding residential and/or commercial/industrial ESLs in the soil gas samples collected from the Property.

Based on the analytical results, we believe that the Property may have been adversely impacted due to its past use as an automotive repair shop or due to potential offsite sources.

Additional sampling is recommended to further evaluate the extent of soil gas impacts and potential vapor intrusion at the Property. Additionally, given the past use of the Property, preparation of a Site Management Plan (SMP) is recommended to outline procedures and protocols to handle impacted materials.

LIMITATIONS

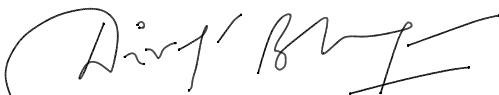
We strived to perform our professional services in accordance with generally accepted engineering principles and practices currently employed in the area (prevailing practice); no warranty is expressed or implied. This report is based upon field and other conditions discovered at the time of report preparation. We developed our conclusions with limited subsurface exploration data and assumed the test results are representative of the actual subsurface conditions across the Property. If unexpected conditions are encountered, notify ENGEO immediately to review these conditions and provide additional and/or modified conclusions, as necessary.

Because prevailing practice and applicable regulatory standards may change over time, our conclusions are limited to the circumstances under which we performed our services. In addition, the samples recovered and tested as part of this assessment are only representative of the noted locations/depths and the analytes tested. We are unable to eliminate all risks nor provide insurance; therefore, we are unable to guarantee or warrant the results of our services.

If you have any questions regarding this report, please contact us.

Sincerely,

ENGEO Incorporated



Divya Bhargava, PE
db/jaa/bvv



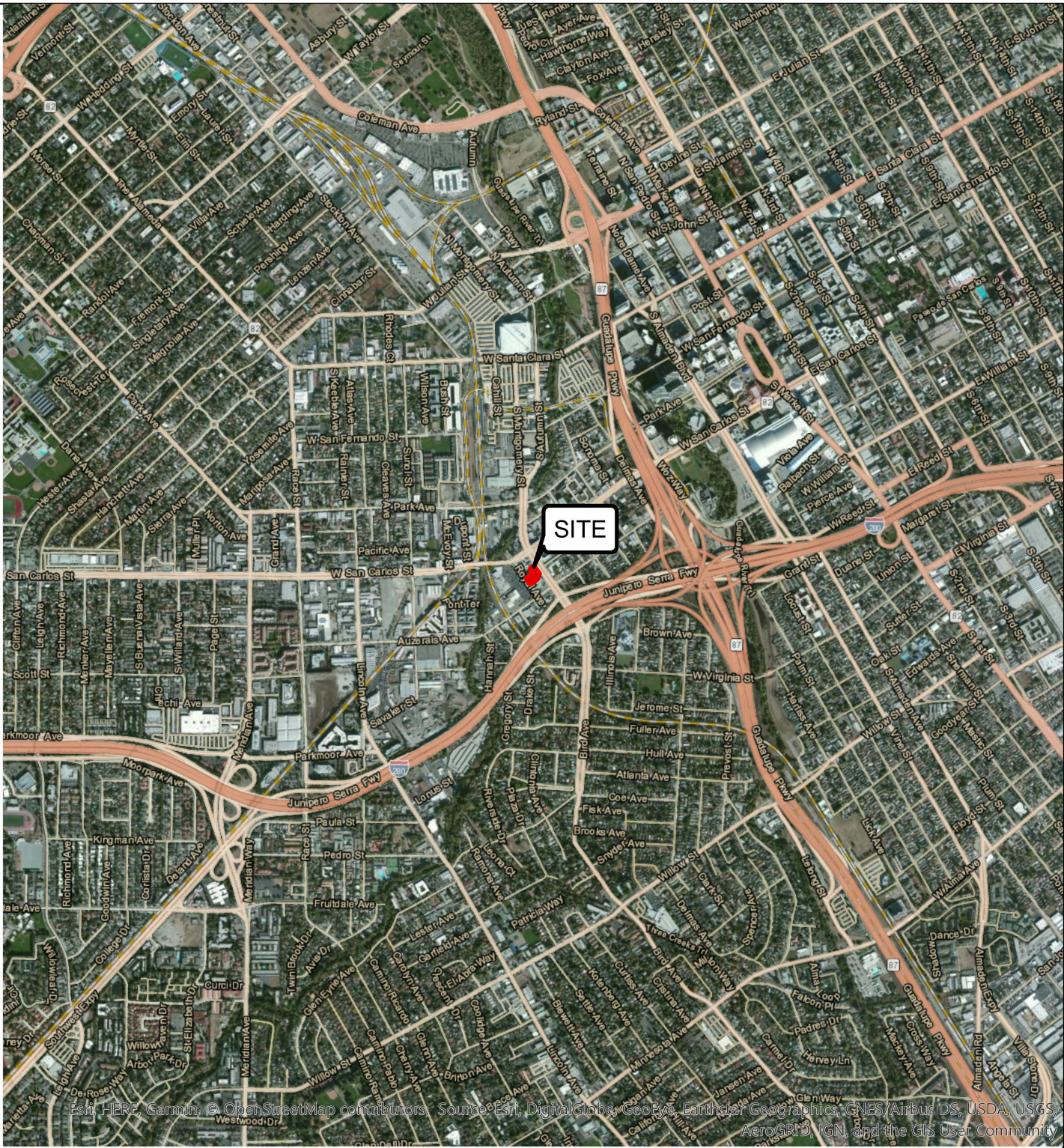
Jeffrey A. Adams, PhD, PE

Attachments: Figures
Tables
Appendix A – Laboratory Analytical Reports

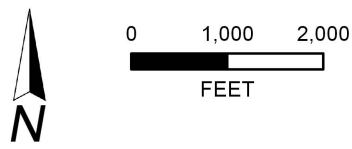
FIGURES

Figure 1 – Vicinity Map
Figure 2 – Site Plan

COPYRIGHT © 2018, BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER. NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



Esri, HERE, Garmin, © OpenStreetMap contributors, Source Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



VICINITY MAP
354-358 ROYAL AVENUE, 365 BIRD AVENUE
SAN JOSE, CALIFORNIA

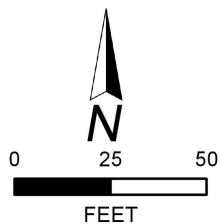
PROJECT NO. : 14121.001.000
SCALE: AS SHOWN
DRAWN BY: QRL CHECKED BY: JAA

FIGURE NO.
1

COPYRIGHT © 2018 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.






SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR, GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEROGRIID, IGN, AND THE GIS USER COMMUNITY



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

-  PROJECT SITE
-  GW-2 GROUND WATER BORING (ENGEO, 2018)
-  SG-3 SOIL GAS BORING (ENGEO, 2018)



SITE PLAN
354-358 ROYAL AVENUE, 365 BIRD AVENUE
SAN JOSE, CALIFORNIA

PROJECT NO. : 14121.001.000

SCALE: AS SHOWN

DRAWN BY: QRL

CHECKED BY: JAA

FIGURE NO.

2

TABLES

Table A – Summary of Groundwater Analytical Results

Table B – Summary of Soil Gas Analytical Results

TABLE A - Summary of Groundwater Analytical Results

Sample ID	Date	Metals								VOCs					
		Barium	Chromium	Molybdenum	Selenium	Nickel	Zinc	Vanadium	Other Metals	TPH-g	TPH-d	TPH-mo	Ethylbenzene	Total Xylenes	Other VOCs
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L	µg/L	µg/L	µg/L
MCL Priority ESLs¹		1	0.05	0.1	0.05	0.1	5	0.05	--	220	0.15	--	30	20	--
GW-1	12/13/2018	0.04	0.015	<0.002	0.031	0.023	0.0082	0.032	ND	<29	0.171	<0.12	0.74	4.2	ND
GW-2	12/13/2018	0.036	0.005	0.013	0.027	0.0086	<0.002	0.028	ND	37.6	0.278	<0.16	<0.5	<0.31	ND

Notes -

NA = not analyzed

ND = non-detect

mg/L - milligrams per liter

µg/L - micrograms per liter

¹ San Francisco RWQCB Table GW-1, MCL Priority Environmental Screening Levels, Rev 3 February 2016.

Bold concentrations exceed ESLs.

TABLE B - Summary of Soil Gas Analytical Results

Sample ID	VOCs													
	TPH-Gasoline	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Carbon Disulfide	2-butanone	Acetone	Benzene	Toluene	Ethyl Benzene	Hexane	Naphthalene	Total Xylenes	MTBE	Other VOCs
	µg/m ³	µg/m ³	µg/m ⁹	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ³	µg/m ¹³	µg/m ³
Residential ESLs¹	3.0E+05	--	--	--	2.6E+06	1.6E+07	48	1.6E+05	560	--	41	5.2E+04	5.4E+03	--
Commercial ESLs²	2.5E+06	--	--	--	2.2E+07	1.4E+08	420	1.3E+06	4900	--	360	4.4E+05	4.7E+04	--
SG-1	102,000	15.0	<1.5	10	64	190	13	130	140	34	<6.4	820	<2.2	ND
SG-2	1,170,000	<600	<300	<370	<390	<400	<440	<750	30,000	<460	<1,300	204,000	<440	ND
SG-3	9,980	17	9.8	22	63	170	22	130	63	36	53	430	12	ND

Notes:

µg/m³ - micrograms per cubic meter

NA = not analyzed

ND = non-detect

¹ San Francisco RWQCB Table SG-1, Vapor Intrusion Residential Environmental Screening Levels, Rev 3 February 2016.

² San Francisco RWQCB Table SG-1, Vapor Intrusion Commercial/Industrial Environmental Screening Levels, Rev 3 February 2016.

200 - Concentration exceeds ESLs for Residential

200 - Concentration exceeds ESLs for both Residential and Commercial

APPENDIX A

Laboratory Analytical Reports



Engeo (San Ramon)
2010 Crow Canyon Place, #250
San Ramon, California 94583
Tel: (925) 866-9000
Fax: (925) 866-0199
RE: 354-358 Royal Ave

Work Order No.: 1812089

Dear Divya Bhargava:

Torrent Laboratory, Inc. received 2 sample(s) on December 13, 2018 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

December 14, 2018

Date



Date: 12/14/2018

Client: Engeo (San Ramon)

Project: 354-358 Royal Ave

Work Order: 1812089

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.



Sample Result Summary

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date Received: 12/13/18

Date Reported: 12/14/18

GW-1

1812089-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
Barium (Dissolved)	SW6010B	1	0.00050	0.0050	0.040	mg/L
Chromium (Dissolved)	SW6010B	1	0.00090	0.0050	0.015	mg/L
Nickel (Dissolved)	SW6010B	1	0.0020	0.0050	0.023	mg/L
Selenium (Dissolved)	SW6010B	1	0.0073	0.010	0.031	mg/L
Vanadium (Dissolved)	SW6010B	1	0.0010	0.0050	0.032	mg/L
Zinc (Dissolved)	SW6010B	1	0.0020	0.0050	0.0082	mg/L
TPH as Diesel	SW8015B	1	0.041	0.11	0.171	mg/L
Ethyl Benzene	SW8260B	1	0.20	0.50	0.74	ug/L
m,p-Xylene	SW8260B	1	0.39	1.0	3.0	ug/L
o-Xylene	SW8260B	1	0.15	0.50	1.2	ug/L

GW-2

1812089-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results</u>	<u>Unit</u>
TPH(Gasoline)	8260TPH	1.17	34	59	37.6	ug/L
Barium (Dissolved)	SW6010B	1	0.00050	0.0050	0.036	mg/L
Chromium (Dissolved)	SW6010B	1	0.00090	0.0050	0.0050	mg/L
Molybdenum (Dissolved)	SW6010B	1	0.0020	0.010	0.013	mg/L
Nickel (Dissolved)	SW6010B	1	0.0020	0.0050	0.0086	mg/L
Selenium (Dissolved)	SW6010B	1	0.0073	0.010	0.027	mg/L
Vanadium (Dissolved)	SW6010B	1	0.0010	0.0050	0.028	mg/L
TPH as Diesel	SW8015B	1	0.051	0.14	0.278	mg/L



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-1	Lab Sample ID:	1812089-001A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 9:15		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/13/18 1:16:00PM
Prep Batch ID: 1109856	Prep Analyst: BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	SW8260B	1	0.26	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Chloromethane	SW8260B	1	0.17	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Vinyl Chloride	SW8260B	1	0.21	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Bromomethane	SW8260B	1	0.21	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Chloroethane	SW8260B	1	0.11	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Trichlorofluoromethane	SW8260B	1	0.19	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,1-Dichloroethene	SW8260B	1	0.14	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Freon 113	SW8260B	1	0.34	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Methylene Chloride	SW8260B	1	0.13	1.0	ND		ug/L	12/13/18	22:47	BP	436180
trans-1,2-Dichloroethene	SW8260B	1	0.16	0.50	ND		ug/L	12/13/18	22:47	BP	436180
MTBE	SW8260B	1	0.077	0.50	ND		ug/L	12/13/18	22:47	BP	436180
tert-Butanol	SW8260B	1	7.4	10	ND		ug/L	12/13/18	22:47	BP	436180
Diisopropyl ether (DIPE)	SW8260B	1	0.12	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,1-Dichloroethane	SW8260B	1	0.12	0.50	ND		ug/L	12/13/18	22:47	BP	436180
ETBE	SW8260B	1	0.064	0.50	ND		ug/L	12/13/18	22:47	BP	436180
cis-1,2-Dichloroethene	SW8260B	1	0.15	0.50	ND		ug/L	12/13/18	22:47	BP	436180
2,2-Dichloropropane	SW8260B	1	0.094	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Bromochloromethane	SW8260B	1	0.15	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Chloroform	SW8260B	1	0.12	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Carbon Tetrachloride	SW8260B	1	0.16	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,1,1-Trichloroethane	SW8260B	1	0.16	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,1-Dichloropropene	SW8260B	1	0.19	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Benzene	SW8260B	1	0.16	0.50	ND		ug/L	12/13/18	22:47	BP	436180
TAME	SW8260B	1	0.072	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,2-Dichloroethane	SW8260B	1	0.11	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Trichloroethylene	SW8260B	1	0.15	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Dibromomethane	SW8260B	1	0.11	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,2-Dichloropropane	SW8260B	1	0.089	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Bromodichloromethane	SW8260B	1	0.076	0.50	ND		ug/L	12/13/18	22:47	BP	436180
cis-1,3-Dichloropropene	SW8260B	1	0.078	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Toluene	SW8260B	1	0.14	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Tetrachloroethylene	SW8260B	1	0.24	0.50	ND		ug/L	12/13/18	22:47	BP	436180
trans-1,3-Dichloropropene	SW8260B	1	0.22	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,1,2-Trichloroethane	SW8260B	1	0.076	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Dibromochloromethane	SW8260B	1	0.18	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,3-Dichloropropane	SW8260B	1	0.22	0.50	ND		ug/L	12/13/18	22:47	BP	436180



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-1	Lab Sample ID:	1812089-001A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 9:15		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/13/18 1:16:00PM
Prep Batch ID: 1109856	Prep Analyst: BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
1,2-Dibromoethane	SW8260B	1	0.079	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Chlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Ethyl Benzene	SW8260B	1	0.20	0.50	0.74		ug/L	12/13/18	22:47	BP	436180
1,1,1,2-Tetrachloroethane	SW8260B	1	0.087	0.50	ND		ug/L	12/13/18	22:47	BP	436180
m,p-Xylene	SW8260B	1	0.39	1.0	3.0		ug/L	12/13/18	22:47	BP	436180
o-Xylene	SW8260B	1	0.15	0.50	1.2		ug/L	12/13/18	22:47	BP	436180
Styrene	SW8260B	1	0.11	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Bromoform	SW8260B	1	0.076	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Isopropyl Benzene	SW8260B	1	0.22	0.50	ND		ug/L	12/13/18	22:47	BP	436180
n-Propylbenzene	SW8260B	1	0.30	0.50	ND		ug/L	12/13/18	22:47	BP	436180
Bromobenzene	SW8260B	1	0.15	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,1,2,2-Tetrachloroethane	SW8260B	1	0.079	0.50	ND		ug/L	12/13/18	22:47	BP	436180
2-Chlorotoluene	SW8260B	1	0.25	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,3,5-Trimethylbenzene	SW8260B	1	0.24	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,2,3-Trichloropropane	SW8260B	1	0.15	0.50	ND		ug/L	12/13/18	22:47	BP	436180
4-Chlorotoluene	SW8260B	1	0.22	0.50	ND		ug/L	12/13/18	22:47	BP	436180
tert-Butylbenzene	SW8260B	1	0.26	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,2,4-Trimethylbenzene	SW8260B	1	0.23	0.50	ND		ug/L	12/13/18	22:47	BP	436180
sec-Butyl Benzene	SW8260B	1	0.30	0.50	ND		ug/L	12/13/18	22:47	BP	436180
p-Isopropyltoluene	SW8260B	1	0.27	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,3-Dichlorobenzene	SW8260B	1	0.17	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,4-Dichlorobenzene	SW8260B	1	0.18	0.50	ND		ug/L	12/13/18	22:47	BP	436180
n-Butylbenzene	SW8260B	1	0.27	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,2-Dichlorobenzene	SW8260B	1	0.16	0.50	ND		ug/L	12/13/18	22:47	BP	436180
1,2-Dibromo-3-Chloropropane	SW8260B	1	0.76	2.0	ND		ug/L	12/13/18	22:47	BP	436180
Hexachlorobutadiene	SW8260B	1	0.62	2.0	ND		ug/L	12/13/18	22:47	BP	436180
1,2,4-Trichlorobenzene	SW8260B	1	0.93	2.0	ND		ug/L	12/13/18	22:47	BP	436180
Naphthalene	SW8260B	1	1.2	2.0	ND		ug/L	12/13/18	22:47	BP	436180
1,2,3-Trichlorobenzene	SW8260B	1	1.2	2.0	ND		ug/L	12/13/18	22:47	BP	436180
(S) Dibromofluoromethane	SW8260B		61.2 - 131		102		%	12/13/18	22:47	BP	436180
(S) Toluene-d8	SW8260B		75.1 - 127		93.2		%	12/13/18	22:47	BP	436180
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		108		%	12/13/18	22:47	BP	436180

Prep Method: 5030GRO	Prep Batch Date/Time: 12/13/18 1:16:00PM
Prep Batch ID: 1109859	Prep Analyst: BPATEL



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-1	Lab Sample ID:	1812089-001A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 9:15		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/13/18	1:16:00PM
Prep Batch ID:	1109859	Prep Analyst:	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH(Gasoline)	8260TPH	1	29	50	ND		ug/L	12/13/18	22:47	BP	436180
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		101		%	12/13/18	22:47	BP	436180



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-1	Lab Sample ID:	1812089-001B
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 9:15		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	12/13/18 6:56:00PM
Prep Batch ID:	1109843	Prep Analyst:	LIMBAT

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.041	0.11	0.171	x	mg/L	12/14/18	1:26	AW	436190
TPH as Motor Oil	SW8015B	1	0.12	0.44	ND		mg/L	12/14/18	1:26	AW	436190
Acceptance Limits											
Pentacosane (S)	SW8015B		59 - 129		108		%	12/14/18	1:26	AW	436190

NOTE: x-Diesel value the result of overlap of Oil range into Diesel range



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-1	Lab Sample ID:	1812089-001C
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 9:15		
SDG:			

Prep Method: 7470AP	Prep Batch Date/Time: 12/13/18 5:15:00PM
Prep Batch ID: 1109854	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury (Dissolved)	SW7470A	1	0.00013	0.00020	ND		mg/L	12/14/18	13:05	BJAY	436197

Prep Method: 3010B	Prep Batch Date/Time: 12/14/18 5:00:00PM
Prep Batch ID: 1109849	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony (Dissolved)	SW6010B	1	0.0050	0.010	ND		mg/L	12/14/18	10:39	ERR	436187
Arsenic (Dissolved)	SW6010B	1	0.0040	0.010	ND		mg/L	12/14/18	10:39	ERR	436187
Barium (Dissolved)	SW6010B	1	0.00050	0.0050	0.040		mg/L	12/14/18	10:39	ERR	436187
Beryllium (Dissolved)	SW6010B	1	0.00020	0.0050	ND		mg/L	12/14/18	10:39	ERR	436187
Cadmium (Dissolved)	SW6010B	1	0.0020	0.0050	ND		mg/L	12/14/18	10:39	ERR	436187
Chromium (Dissolved)	SW6010B	1	0.00090	0.0050	0.015		mg/L	12/14/18	10:39	ERR	436187
Cobalt (Dissolved)	SW6010B	1	0.00050	0.0050	ND		mg/L	12/14/18	10:39	ERR	436187
Copper (Dissolved)	SW6010B	1	0.0020	0.0050	ND		mg/L	12/14/18	10:39	ERR	436187
Lead (Dissolved)	SW6010B	1	0.0040	0.010	ND		mg/L	12/14/18	10:39	ERR	436187
Molybdenum (Dissolved)	SW6010B	1	0.0020	0.010	ND		mg/L	12/14/18	10:39	ERR	436187
Nickel (Dissolved)	SW6010B	1	0.0020	0.0050	0.023		mg/L	12/14/18	10:39	ERR	436187
Selenium (Dissolved)	SW6010B	1	0.0073	0.010	0.031		mg/L	12/14/18	10:39	ERR	436187
Silver (Dissolved)	SW6010B	1	0.0040	0.010	ND		mg/L	12/14/18	10:39	ERR	436187
Thallium (Dissolved)	SW6010B	1	0.0040	0.015	ND		mg/L	12/14/18	10:39	ERR	436187
Vanadium (Dissolved)	SW6010B	1	0.0010	0.0050	0.032		mg/L	12/14/18	10:39	ERR	436187
Zinc (Dissolved)	SW6010B	1	0.0020	0.0050	0.0082		mg/L	12/14/18	10:39	ERR	436187



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-2	Lab Sample ID:	1812089-002A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:15		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/13/18 1:16:00PM
Prep Batch ID: 1109856	Prep Analyst: BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
-------------	-----------------	----	-----	-----	---------	---	-------	----------	------	----	------------------

The results shown below are reported using their MDL.

Dichlorodifluoromethane	SW8260B	1.17	0.31	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Chloromethane	SW8260B	1.17	0.20	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Vinyl Chloride	SW8260B	1.17	0.24	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Bromomethane	SW8260B	1.17	0.25	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Chloroethane	SW8260B	1.17	0.13	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Trichlorofluoromethane	SW8260B	1.17	0.22	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1-Dichloroethene	SW8260B	1.17	0.17	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Freon 113	SW8260B	1.17	0.40	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Methylene Chloride	SW8260B	1.17	0.15	1.2	ND		ug/L	12/13/18	23:15	BP	436180
trans-1,2-Dichloroethene	SW8260B	1.17	0.19	0.59	ND		ug/L	12/13/18	23:15	BP	436180
MTBE	SW8260B	1.17	0.090	0.59	ND		ug/L	12/13/18	23:15	BP	436180
tert-Butanol	SW8260B	1.17	8.6	12	ND		ug/L	12/13/18	23:15	BP	436180
Diisopropyl ether (DIPE)	SW8260B	1.17	0.14	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1-Dichloroethane	SW8260B	1.17	0.14	0.59	ND		ug/L	12/13/18	23:15	BP	436180
ETBE	SW8260B	1.17	0.075	0.59	ND		ug/L	12/13/18	23:15	BP	436180
cis-1,2-Dichloroethene	SW8260B	1.17	0.18	0.59	ND		ug/L	12/13/18	23:15	BP	436180
2,2-Dichloropropane	SW8260B	1.17	0.11	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Bromochloromethane	SW8260B	1.17	0.17	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Chloroform	SW8260B	1.17	0.14	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Carbon Tetrachloride	SW8260B	1.17	0.18	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1,1-Trichloroethane	SW8260B	1.17	0.19	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1-Dichloropropene	SW8260B	1.17	0.22	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Benzene	SW8260B	1.17	0.18	0.59	ND		ug/L	12/13/18	23:15	BP	436180
TAME	SW8260B	1.17	0.084	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2-Dichloroethane	SW8260B	1.17	0.13	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Trichloroethylene	SW8260B	1.17	0.17	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Dibromomethane	SW8260B	1.17	0.13	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2-Dichloropropane	SW8260B	1.17	0.10	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Bromodichloromethane	SW8260B	1.17	0.089	0.59	ND		ug/L	12/13/18	23:15	BP	436180
cis-1,3-Dichloropropene	SW8260B	1.17	0.091	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Toluene	SW8260B	1.17	0.17	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Tetrachloroethylene	SW8260B	1.17	0.28	0.59	ND		ug/L	12/13/18	23:15	BP	436180
trans-1,3-Dichloropropene	SW8260B	1.17	0.25	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1,2-Trichloroethane	SW8260B	1.17	0.089	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Dibromochloromethane	SW8260B	1.17	0.21	0.59	ND		ug/L	12/13/18	23:15	BP	436180



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-2	Lab Sample ID:	1812089-002A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:15		
SDG:			

Prep Method: 5030VOC	Prep Batch Date/Time: 12/13/18 1:16:00PM
Prep Batch ID: 1109856	Prep Analyst: BPATEL

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
<i>The results shown below are reported using their MDL.</i>											
1,3-Dichloropropane	SW8260B	1.17	0.25	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2-Dibromoethane	SW8260B	1.17	0.092	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Chlorobenzene	SW8260B	1.17	0.19	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Ethyl Benzene	SW8260B	1.17	0.23	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1,1,2-Tetrachloroethane	SW8260B	1.17	0.10	0.59	ND		ug/L	12/13/18	23:15	BP	436180
m,p-Xylene	SW8260B	1.17	0.46	1.2	ND		ug/L	12/13/18	23:15	BP	436180
o-Xylene	SW8260B	1.17	0.18	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Styrene	SW8260B	1.17	0.13	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Bromoform	SW8260B	1.17	0.089	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Isopropyl Benzene	SW8260B	1.17	0.25	0.59	ND		ug/L	12/13/18	23:15	BP	436180
n-Propylbenzene	SW8260B	1.17	0.35	0.59	ND		ug/L	12/13/18	23:15	BP	436180
Bromobenzene	SW8260B	1.17	0.17	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,1,2,2-Tetrachloroethane	SW8260B	1.17	0.092	0.59	ND		ug/L	12/13/18	23:15	BP	436180
2-Chlorotoluene	SW8260B	1.17	0.29	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,3,5-Trimethylbenzene	SW8260B	1.17	0.28	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2,3-Trichloropropane	SW8260B	1.17	0.17	0.59	ND		ug/L	12/13/18	23:15	BP	436180
4-Chlorotoluene	SW8260B	1.17	0.25	0.59	ND		ug/L	12/13/18	23:15	BP	436180
tert-Butylbenzene	SW8260B	1.17	0.31	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2,4-Trimethylbenzene	SW8260B	1.17	0.27	0.59	ND		ug/L	12/13/18	23:15	BP	436180
sec-Butyl Benzene	SW8260B	1.17	0.35	0.59	ND		ug/L	12/13/18	23:15	BP	436180
p-Isopropyltoluene	SW8260B	1.17	0.31	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,3-Dichlorobenzene	SW8260B	1.17	0.20	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,4-Dichlorobenzene	SW8260B	1.17	0.20	0.59	ND		ug/L	12/13/18	23:15	BP	436180
n-Butylbenzene	SW8260B	1.17	0.32	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2-Dichlorobenzene	SW8260B	1.17	0.19	0.59	ND		ug/L	12/13/18	23:15	BP	436180
1,2-Dibromo-3-Chloropropane	SW8260B	1.17	0.89	2.3	ND		ug/L	12/13/18	23:15	BP	436180
Hexachlorobutadiene	SW8260B	1.17	0.72	2.3	ND		ug/L	12/13/18	23:15	BP	436180
1,2,4-Trichlorobenzene	SW8260B	1.17	1.1	2.3	ND		ug/L	12/13/18	23:15	BP	436180
Naphthalene	SW8260B	1.17	1.4	2.3	ND		ug/L	12/13/18	23:15	BP	436180
1,2,3-Trichlorobenzene	SW8260B	1.17	1.4	2.3	ND		ug/L	12/13/18	23:15	BP	436180
(S) Dibromofluoromethane	SW8260B		61.2 - 131		103		%	12/13/18	23:15	BP	436180
(S) Toluene-d8	SW8260B		75.1 - 127		95.6		%	12/13/18	23:15	BP	436180
(S) 4-Bromofluorobenzene	SW8260B		64.1 - 120		108		%	12/13/18	23:15	BP	436180

NOTE: Reporting limits were raised due to sediment in all VOAs.



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-2	Lab Sample ID:	1812089-002A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:15		
SDG:			

Prep Method:	5030GRO	Prep Batch Date/Time:	12/13/18	1:16:00PM
Prep Batch ID:	1109859	Prep Analyst:	BPATEL	

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
<i>The results shown below are reported using their MDL.</i>											
TPH(Gasoline)	8260TPH	1.17	34	59	37.6	J	ug/L	12/13/18	23:15	BP	436180
(S) 4-Bromofluorobenzene	8260TPH		41.5 - 125		91.1		%	12/13/18	23:15	BP	436180

NOTE: Raised reporting limit - see comment for 8260B analysis.



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-2	Lab Sample ID:	1812089-002B
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:15		
SDG:			

Prep Method:	3510_TPH	Prep Batch Date/Time:	12/13/18 6:56:00PM
Prep Batch ID:	1109843	Prep Analyst:	LIMBAT

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
TPH as Diesel	SW8015B	1	0.051	0.14	0.278	x	mg/L	12/14/18	1:50	AW	436190
TPH as Motor Oil	SW8015B	1	0.16	0.56	ND		mg/L	12/14/18	1:50	AW	436190
			Acceptance Limits								
Pentacosane (S)	SW8015B		59 - 129		99.4		%	12/14/18	1:50	AW	436190

NOTE: x-Diesel value the result of overlap of Oil range into Diesel range



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	GW-2	Lab Sample ID:	1812089-002C
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Groundwater
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:15		
SDG:			

Prep Method: 7470AP	Prep Batch Date/Time: 12/13/18 5:15:00PM
Prep Batch ID: 1109854	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Mercury (Dissolved)	SW7470A	1	0.00013	0.00020	ND		mg/L	12/14/18	13:07	BJAY	436197

Prep Method: 3010B	Prep Batch Date/Time: 12/14/18 5:00:00PM
Prep Batch ID: 1109849	Prep Analyst: BJAY

Parameters:	Analysis Method	DF	MDL	PQL	Results	Q	Units	Analyzed	Time	By	Analytical Batch
Antimony (Dissolved)	SW6010B	1	0.0050	0.010	ND		mg/L	12/14/18	10:51	ERR	436187
Arsenic (Dissolved)	SW6010B	1	0.0040	0.010	ND		mg/L	12/14/18	10:51	ERR	436187
Barium (Dissolved)	SW6010B	1	0.00050	0.0050	0.036		mg/L	12/14/18	10:51	ERR	436187
Beryllium (Dissolved)	SW6010B	1	0.00020	0.0050	ND		mg/L	12/14/18	10:51	ERR	436187
Cadmium (Dissolved)	SW6010B	1	0.0020	0.0050	ND		mg/L	12/14/18	10:51	ERR	436187
Chromium (Dissolved)	SW6010B	1	0.00090	0.0050	0.0050		mg/L	12/14/18	10:51	ERR	436187
Cobalt (Dissolved)	SW6010B	1	0.00050	0.0050	ND		mg/L	12/14/18	10:51	ERR	436187
Copper (Dissolved)	SW6010B	1	0.0020	0.0050	ND		mg/L	12/14/18	10:51	ERR	436187
Lead (Dissolved)	SW6010B	1	0.0040	0.010	ND		mg/L	12/14/18	10:51	ERR	436187
Molybdenum (Dissolved)	SW6010B	1	0.0020	0.010	0.013		mg/L	12/14/18	10:51	ERR	436187
Nickel (Dissolved)	SW6010B	1	0.0020	0.0050	0.0086		mg/L	12/14/18	10:51	ERR	436187
Selenium (Dissolved)	SW6010B	1	0.0073	0.010	0.027		mg/L	12/14/18	10:51	ERR	436187
Silver (Dissolved)	SW6010B	1	0.0040	0.010	ND		mg/L	12/14/18	10:51	ERR	436187
Thallium (Dissolved)	SW6010B	1	0.0040	0.015	ND		mg/L	12/14/18	10:51	ERR	436187
Vanadium (Dissolved)	SW6010B	1	0.0010	0.0050	0.028		mg/L	12/14/18	10:51	ERR	436187
Zinc (Dissolved)	SW6010B	1	0.0020	0.0050	ND		mg/L	12/14/18	10:51	ERR	436187



MB Summary Report

Work Order:	1812089	Prep Method:	3510_TPH	Prep Date:	12/13/18	Prep Batch:	1109843
Matrix:	Water	Analytical Method:	SW8015B	Analyzed Date:	12/14/2018	Analytical Batch:	436190
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
TPH as Diesel	0.037	0.10	ND		
TPH as Motor Oil	0.11	0.40	ND		
Pentacosane (S)			115		

Work Order:	1812089	Prep Method:	3010B	Prep Date:	12/14/18	Prep Batch:	1109849
Matrix:	Water	Analytical Method:	SW6010B	Analyzed Date:	12/14/2018	Analytical Batch:	436187
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Antimony (Dissolved)	0.0050	0.010	ND		
Arsenic (Dissolved)	0.0040	0.010	ND		
Barium (Dissolved)	0.00050	0.0050	0.000500		
Beryllium (Dissolved)	0.00020	0.0050	0.000300		
Cadmium (Dissolved)	0.0020	0.0050	ND		
Chromium (Dissolved)	0.00090	0.0050	ND		
Cobalt (Dissolved)	0.00050	0.0050	ND		
Copper (Dissolved)	0.0020	0.0050	ND		
Lead (Dissolved)	0.0040	0.010	ND		
Molybdenum (Dissolved)	0.0020	0.010	ND		
Nickel (Dissolved)	0.0020	0.0050	ND		
Selenium (Dissolved)	0.0073	0.010	ND		
Silver (Dissolved)	0.0040	0.010	ND		
Thallium (Dissolved)	0.0040	0.015	ND		
Vanadium (Dissolved)	0.0010	0.0050	ND		
Zinc (Dissolved)	0.0020	0.0050	ND		

Work Order:	1812089	Prep Method:	7470AP	Prep Date:	12/13/18	Prep Batch:	1109854
Matrix:	Water	Analytical Method:	SW7470A	Analyzed Date:	12/14/2018	Analytical Batch:	436197
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier	
Mercury (Dissolved)	0.00013	0.00020	ND		



MB Summary Report

Work Order:	1812089	Prep Method:	5030VOC	Prep Date:	12/13/18	Prep Batch:	1109856
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/13/2018	Analytical Batch:	436180
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.26	0.50	ND	
Chloromethane	0.17	0.50	ND	
Vinyl Chloride	0.21	0.50	ND	
Bromomethane	0.21	0.50	ND	
Chloroethane	0.11	0.50	ND	
Trichlorofluoromethane	0.19	0.50	ND	
1,1-Dichloroethene	0.14	0.50	ND	
Freon 113	0.34	0.50	ND	
Methylene Chloride	0.13	1.0	ND	
trans-1,2-Dichloroethene	0.16	0.50	ND	
MTBE	0.077	0.50	ND	
tert-Butanol	7.4	10	ND	
Diisopropyl ether (DIPE)	0.12	0.50	ND	
1,1-Dichloroethane	0.12	0.50	ND	
ETBE	0.064	0.50	ND	
cis-1,2-Dichloroethene	0.15	0.50	ND	
2,2-Dichloropropane	0.094	0.50	ND	
Bromochloromethane	0.15	0.50	ND	
Chloroform	0.12	0.50	ND	
Carbon Tetrachloride	0.16	0.50	ND	
1,1,1-Trichloroethane	0.16	0.50	ND	
1,1-Dichloropropene	0.19	0.50	ND	
Benzene	0.16	0.50	ND	
TAME	0.072	0.50	ND	
1,2-Dichloroethane	0.11	0.50	ND	
Trichloroethylene	0.15	0.50	ND	
Dibromomethane	0.11	0.50	ND	
1,2-Dichloropropane	0.089	0.50	ND	
Bromodichloromethane	0.076	0.50	ND	
cis-1,3-Dichloropropene	0.078	0.50	ND	
Toluene	0.14	0.50	ND	
Tetrachloroethylene	0.24	0.50	ND	
trans-1,3-Dichloropropene	0.22	0.50	ND	
1,1,2-Trichloroethane	0.076	0.50	ND	
Dibromochloromethane	0.18	0.50	ND	
1,3-Dichloropropane	0.22	0.50	ND	
1,2-Dibromoethane	0.079	0.50	ND	
Chlorobenzene	0.16	0.50	ND	
Ethyl Benzene	0.20	0.50	ND	
1,1,1,2-Tetrachloroethane	0.087	0.50	ND	
m,p-Xylene	0.39	1.0	ND	
o-Xylene	0.15	0.50	ND	



MB Summary Report

Work Order:	1812089	Prep Method:	5030VOC	Prep Date:	12/13/18	Prep Batch:	1109856
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/13/2018	Analytical Batch:	436180
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Styrene	0.11	0.50	ND	
Bromoform	0.076	0.50	ND	
Isopropyl Benzene	0.22	0.50	ND	
n-Propylbenzene	0.30	0.50	ND	
Bromobenzene	0.15	0.50	ND	
1,1,2,2-Tetrachloroethane	0.079	0.50	ND	
2-Chlorotoluene	0.25	0.50	ND	
1,3,5-Trimethylbenzene	0.24	0.50	ND	
1,2,3-Trichloropropane	0.15	0.50	ND	
4-Chlorotoluene	0.22	0.50	ND	
tert-Butylbenzene	0.26	0.50	ND	
1,2,4-Trimethylbenzene	0.23	0.50	ND	
sec-Butyl Benzene	0.30	0.50	ND	
p-Isopropyltoluene	0.27	0.50	ND	
1,3-Dichlorobenzene	0.17	0.50	ND	
1,4-Dichlorobenzene	0.18	0.50	ND	
n-Butylbenzene	0.27	0.50	ND	
1,2-Dichlorobenzene	0.16	0.50	ND	
1,2-Dibromo-3-Chloropropane	0.76	2.0	ND	
Hexachlorobutadiene	0.62	2.0	ND	
1,2,4-Trichlorobenzene	0.93	2.0	ND	
Naphthalene	1.2	2.0	ND	
1,2,3-Trichlorobenzene	1.2	2.0	ND	
(S) Dibromofluoromethane			113	
(S) Toluene-d8			93.5	
(S) 4-Bromofluorobenzene			100	

Work Order:	1812089	Prep Method:	5030GRO	Prep Date:	12/13/18	Prep Batch:	1109859
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/13/2018	Analytical Batch:	436180
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH(Gasoline)	29	50	35	
(S) 4-Bromofluorobenzene			89.0	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1812089	Prep Method:	3510_TPH	Prep Date:	12/13/18	Prep Batch:	1109843
Matrix:	Water	Analytical Method:	SW8015B	Analyzed Date:	12/14/2018	Analytical Batch:	436190
Units:	mg/Kg						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH as Diesel	0.037	0.10	ND	1.0	90.1	96.7	7.07	52 - 115	30	
Pentacosane (S)				200	99.2	110		59 - 129		

Work Order:	1812089	Prep Method:	3010B	Prep Date:	12/14/18	Prep Batch:	1109849
Matrix:	Water	Analytical Method:	SW6010B	Analyzed Date:	12/14/2018	Analytical Batch:	436187
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Antimony (Dissolved)	0.0050	0.010	ND	1.0	100	105	4.88	80 - 120	20	
Arsenic (Dissolved)	0.0040	0.010	ND	1.0	102	107	4.78	80 - 120	20	
Barium (Dissolved)	0.00050	0.0050	0.000500	1.0	99.3	103	3.66	80 - 120	20	
Beryllium (Dissolved)	0.00020	0.0050	0.000300	1.0	101	106	4.83	80 - 120	20	
Cadmium (Dissolved)	0.0020	0.0050	ND	1.0	101	106	4.83	80 - 120	20	
Chromium (Dissolved)	0.00090	0.0050	ND	1.0	99.2	103	3.76	80 - 120	20	
Cobalt (Dissolved)	0.00050	0.0050	ND	1.0	98.0	101	3.02	80 - 120	20	
Copper (Dissolved)	0.0020	0.0050	ND	1.0	98.9	102	3.09	80 - 120	20	
Lead (Dissolved)	0.0040	0.010	ND	1.0	100	104	3.92	80 - 120	20	
Molybdenum (Dissolved)	0.0020	0.010	ND	1.0	99.4	103	3.56	80 - 120	20	
Nickel (Dissolved)	0.0020	0.0050	ND	1.0	99.9	103	3.06	80 - 120	20	
Selenium (Dissolved)	0.0073	0.010	ND	1.0	105	111	5.56	80 - 120	20	
Silver (Dissolved)	0.0040	0.010	ND	1.0	99.7	103	3.26	80 - 120	20	
Thallium (Dissolved)	0.0040	0.015	ND	1.0	97.0	98.0	1.03	80 - 120	20	
Vanadium (Dissolved)	0.0010	0.0050	ND	1.0	96.4	99.0	2.66	80 - 120	20	
Zinc (Dissolved)	0.0020	0.0050	ND	1.0	101	106	4.83	80 - 120	20	

Work Order:	1812089	Prep Method:	7470AP	Prep Date:	12/13/18	Prep Batch:	1109854
Matrix:	Water	Analytical Method:	SW7470A	Analyzed Date:	12/14/2018	Analytical Batch:	436197
Units:	mg/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
Mercury (Dissolved)	0.00013	0.00020	ND	0.015	103	105	1.92	80 - 120	20	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1812089	Prep Method:	5030VOC	Prep Date:	12/13/18	Prep Batch:	1109856
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/13/2018	Analytical Batch:	436180
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.14	0.50	ND	17.9	103	96.2	6.74	61.4 - 129	30	
Benzene	0.16	0.50	ND	17.9	106	100	5.43	66.9 - 140	30	
Trichloroethylene	0.15	0.50	ND	17.9	107	98.7	8.17	69.3 - 144	30	
Toluene	0.14	0.50	ND	17.9	110	108	2.06	76.6 - 123	30	
Chlorobenzene	0.16	0.50	ND	17.9	105	102	3.24	73.9 - 137	30	
(S) Dibromofluoromethane				17.9	113	111		61.2 - 131		
(S) Toluene-d8				17.9	104	102		75.1 - 127		
(S) 4-Bromofluorobenzene				17.9	107	104		64.1 - 120		

Work Order:	1812089	Prep Method:	5030GRO	Prep Date:	12/13/18	Prep Batch:	1109859
Matrix:	Water	Analytical Method:	SW8260B	Analyzed Date:	12/13/2018	Analytical Batch:	436180
Units:	ug/L						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH(Gasoline)	29	50	35	238	91.4	89.6	2.32	52.4 - 127	30	
(S) 4-Bromofluorobenzene				11.9	89.4	106		41.5 - 125		



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H- Indicates that the recommended holding time for the analyte or compound has been exceeded
J- Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R- The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S- Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Engeo (San Ramon)

Project Name: 354-358 Royal Ave

Work Order No.: 1812089

Date and Time Received: 12/13/2018 2:50:00PM

Received By: Helena Ueng

Physically Logged By: Helena Ueng

Checklist Completed By: Helena Ueng

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>	
Container/Temp Blank temperature in compliance?	<u>Yes</u>	Temperature: 3.0 °C
Water-VOA vials have zero headspace?	<u>Yes</u>	
Water-pH acceptable upon receipt?		
pH Checked by: Helena Ueng	pH Adjusted by: Helena Ueng	

Comments:



Login Summary Report

Client ID: TL5123 Engeo (San Ramon)

QC Level: II

Project Name: 354-358 Royal Ave

TAT Requested: 1 Day Rush:1

Project # : 14121.001.000

Date Received: 12/13/2018

Report Due Date: 12/14/2018

Time Received: 2:50 pm

Comments:

Analyze for dissolved metals per client e-mail 12/13

Work Order # : **1812089**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1812089-001A	GW-1	12/13/18 9:15	Water	01/27/19			VOC_W_8260B VOC_W_GRO	
Sample Note: *1-DAY RUSH! VOCs/TPHg								
1812089-001B	GW-1	12/13/18 9:15	Water	01/27/19			TPHDO_W_8015B(M)	
Sample Note: *1-DAY RUSH! TPHd/mo								
1812089-001C	GW-1	12/13/18 9:15	Water	01/27/19			Hg_W_7470ADis Met_6010BDiss CAM17	
Sample Note: *1-DAY RUSH! **LAB-FILTER & Preserve for Dissolved CAM17 metals								
1812089-002A	GW-2	12/13/18 10:15	Water	01/27/19			VOC_W_8260B VOC_W_GRO	
1812089-002B	GW-2	12/13/18 10:15	Water	01/27/19			TPHDO_W_8015B(M)	
1812089-002C	GW-2	12/13/18 10:15	Water	01/27/19			Hg_W_7470ADis Met_6010BDiss CAM17	

1812089

[illegible]

EN GEO
INCORPORATED

2010 CROW CANYON PLACE SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000 FAX (925) 866-0199
WWW.ENGEO.COM

24 hour rush

DISTRIBUTION: ORIGINAL ACCOMPANIES SHIPMENT; COPY TO PROJECT FIELD FILES

Temp = 3°C ± 2 Swimmer canisters received at ambient temp



Engeo (San Ramon)
2010 Crow Canyon Place, #250
San Ramon, California 94583
Tel: (925) 866-9000
Fax: (925) 866-0199
RE: 354-358 Royal Ave

Work Order No.: 1812090

Dear Divya Bhargava:

Torrent Laboratory, Inc. received 3 sample(s) on December 13, 2018 for the analyses presented in the following Report.

All data for associated QC met EPA or laboratory specification(s) except where noted in the case narrative.

Torrent Laboratory, Inc. is certified by the State of California, ELAP #1991. If you have any questions regarding these test results, please feel free to contact the Project Management Team at (408)263-5258; ext 204.

A handwritten signature in blue ink, appearing to read "Patti L. Sandrock", is written over a light blue horizontal line.

Patti L Sandrock
QA Officer

December 14, 2018

Date



Date: 12/14/2018

Client: Engeo (San Ramon)

Project: 354-358 Royal Ave

Work Order: 1812090

CASE NARRATIVE

Unless otherwise indicated in the following narrative, no issues encountered with the receiving, preparation, analysis or reporting of the results associated with this work order.

Unless otherwise indicated in the following narrative, no results have been method and/or field blank corrected.

Reported results relate only to the items/samples tested by the laboratory.

This report shall not be reproduced, except in full, without the written approval of Torrent Analytical, Inc.



Sample Result Summary

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date Received: 12/13/18

Date Reported: 12/14/18

SG-1

1812090-001

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Carbon Disulfide	ETO15	5	1.9	7.8	10
Acetone	ETO15	5	2.0	60	190
Hexane	ETO15	5	2.3	8.8	34
2-Butanone (MEK)	ETO15	5	1.9	7.4	64
Benzene	ETO15	5	2.2	8.0	13
Toluene	ETO15	5	3.8	9.4	130
Ethyl Benzene	ETO15	5	3.1	11	140
m,p-Xylene	ETO15	5	4.9	11	590
o-Xylene	ETO15	5	1.5	11	230
1,2,4-Trimethylbenzene	ETO15	5	3.0	12	15
TPH-Gasoline	TO-15	5	200	880	10200

SG-2

1812090-002

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Ethyl Benzene	ETO15	1000	630	2200	30000
m,p-Xylene	ETO15	1000	980	2200	150000
o-Xylene	ETO15	1000	300	2200	54000
TPH-Gasoline	TO-15	400	16000	70000	1170000

SG-3

1812090-003

<u>Parameters:</u>	<u>Analysis Method</u>	<u>DF</u>	<u>MDL</u>	<u>PQL</u>	<u>Results ug/m3</u>
Carbon Disulfide	ETO15	3.5	1.3	5.4	22
Acetone	ETO15	3.5	1.4	42	170
Hexane	ETO15	3.5	1.6	6.2	36
MTBE	ETO15	3.5	1.6	6.3	12
2-Butanone (MEK)	ETO15	3.5	1.4	5.2	63
Benzene	ETO15	3.5	1.5	5.6	22
Toluene	ETO15	3.5	2.6	6.6	130
Ethyl Benzene	ETO15	3.5	2.2	7.6	63
m,p-Xylene	ETO15	3.5	3.4	7.6	310
o-Xylene	ETO15	3.5	1.1	7.6	120
1,3,5-Trimethylbenzene	ETO15	3.5	1.1	8.6	9.8
1,2,4-Trimethylbenzene	ETO15	3.5	2.1	8.6	17
Naphthalene	ETO15	3.5	4.5	9.2	53
TPH-Gasoline	TO-15	3.5	140	620	9980



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-1	Lab Sample ID:	1812090-001A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 13:45	Certified Clean WO # :	
Canister/Tube ID:	A11723	Received PSI :	10.5
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-P	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109860	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	5.00	7.8	12	ND	ND		12/13/18	22:34	BA	436183
1,1-Difluoroethane	ETO15	5.00	1.7	68	ND	ND		12/13/18	22:34	BA	436183
1,2-Dichlorotetrafluoroethane	ETO15	5.00	140	280	ND	ND		12/13/18	22:34	BA	436183
Chloromethane	ETO15	5.00	10	21	ND	ND		12/13/18	22:34	BA	436183
Vinyl Chloride	ETO15	5.00	1.1	6.4	ND	ND		12/13/18	22:34	BA	436183
1,3-Butadiene	ETO15	5.00	1.7	5.5	ND	ND		12/13/18	22:34	BA	436183
Bromomethane	ETO15	5.00	3.3	9.7	ND	ND		12/13/18	22:34	BA	436183
Chloroethane	ETO15	5.00	4.1	6.6	ND	ND		12/13/18	22:34	BA	436183
Trichlorofluoromethane	ETO15	5.00	2.8	14	ND	ND		12/13/18	22:34	BA	436183
1,1-Dichloroethene	ETO15	5.00	4.1	9.9	ND	ND		12/13/18	22:34	BA	436183
Freon 113	ETO15	5.00	5.1	19	ND	ND		12/13/18	22:34	BA	436183
Carbon Disulfide	ETO15	5.00	1.9	7.8	10	3.22		12/13/18	22:34	BA	436183
2-Propanol (Isopropyl Alcohol)	ETO15	5.00	6.4	62	ND	ND		12/13/18	22:34	BA	436183
Methylene Chloride	ETO15	5.00	3.5	52	ND	ND		12/13/18	22:34	BA	436183
Acetone	ETO15	5.00	2.0	60	190	79.83		12/13/18	22:34	BA	436183
trans-1,2-Dichloroethene	ETO15	5.00	2.4	9.9	ND	ND		12/13/18	22:34	BA	436183
Hexane	ETO15	5.00	2.3	8.8	34	9.66		12/13/18	22:34	BA	436183
MTBE	ETO15	5.00	2.2	9.0	ND	ND		12/13/18	22:34	BA	436183
tert-Butanol	ETO15	5.00	3.1	7.6	ND	ND		12/13/18	22:34	BA	436183
Diisopropyl ether (DIPE)	ETO15	5.00	3.7	10	ND	ND		12/13/18	22:34	BA	436183
1,1-Dichloroethane	ETO15	5.00	2.7	10	ND	ND		12/13/18	22:34	BA	436183
ETBE	ETO15	5.00	1.6	10	ND	ND		12/13/18	22:34	BA	436183
cis-1,2-Dichloroethene	ETO15	5.00	4.2	9.9	ND	ND		12/13/18	22:34	BA	436183
Chloroform	ETO15	5.00	4.8	12	ND	ND		12/13/18	22:34	BA	436183
Vinyl Acetate	ETO15	5.00	3.8	8.8	ND	ND		12/13/18	22:34	BA	436183
Carbon Tetrachloride	ETO15	5.00	5.5	16	ND	ND		12/13/18	22:34	BA	436183
1,1,1-Trichloroethane	ETO15	5.00	4.0	14	ND	ND		12/13/18	22:34	BA	436183
2-Butanone (MEK)	ETO15	5.00	1.9	7.4	64	21.69		12/13/18	22:34	BA	436183
Ethyl Acetate	ETO15	5.00	2.4	9.0	ND	ND		12/13/18	22:34	BA	436183
Tetrahydrofuran	ETO15	5.00	2.2	7.4	ND	ND		12/13/18	22:34	BA	436183
Benzene	ETO15	5.00	2.2	8.0	13	4.08		12/13/18	22:34	BA	436183
TAME	ETO15	5.00	3.4	10	ND	ND		12/13/18	22:34	BA	436183
1,2-Dichloroethane (EDC)	ETO15	5.00	2.1	10	ND	ND		12/13/18	22:34	BA	436183



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-1	Lab Sample ID:	1812090-001A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 13:45	Certified Clean WO # :	
Canister/Tube ID:	A11723	Received PSI :	10.5
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-P	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109860	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Trichloroethylene	ETO15	5.00	4.0	13	ND	ND		12/13/18	22:34	BA	436183
1,2-Dichloropropane	ETO15	5.00	3.8	12	ND	ND		12/13/18	22:34	BA	436183
Bromodichloromethane	ETO15	5.00	3.7	17	ND	ND		12/13/18	22:34	BA	436183
1,4-Dioxane	ETO15	5.00	9.0	18	ND	ND		12/13/18	22:34	BA	436183
trans-1,3-Dichloropropene	ETO15	5.00	5.3	11	ND	ND		12/13/18	22:34	BA	436183
Toluene	ETO15	5.00	3.8	9.4	130	34.48		12/13/18	22:34	BA	436183
4-Methyl-2-Pentanone (MIBK)	ETO15	5.00	3.7	10	ND	ND		12/13/18	22:34	BA	436183
cis-1,3-Dichloropropene	ETO15	5.00	2.1	11	ND	ND		12/13/18	22:34	BA	436183
Tetrachloroethylene	ETO15	5.00	7.3	17	ND	ND		12/13/18	22:34	BA	436183
1,1,2-Trichloroethane	ETO15	5.00	2.9	14	ND	ND		12/13/18	22:34	BA	436183
Dibromochloromethane	ETO15	5.00	5.6	21	ND	ND		12/13/18	22:34	BA	436183
1,2-Dibromoethane (EDB)	ETO15	5.00	3.7	19	ND	ND		12/13/18	22:34	BA	436183
2-Hexanone	ETO15	5.00	3.3	10	ND	ND		12/13/18	22:34	BA	436183
Ethyl Benzene	ETO15	5.00	3.1	11	140	32.26		12/13/18	22:34	BA	436183
Chlorobenzene	ETO15	5.00	3.0	12	ND	ND		12/13/18	22:34	BA	436183
1,1,1,2-Tetrachloroethane	ETO15	5.00	4.2	17	ND	ND		12/13/18	22:34	BA	436183
m,p-Xylene	ETO15	5.00	4.9	11	590	135.94		12/13/18	22:34	BA	436183
o-Xylene	ETO15	5.00	1.5	11	230	53.00		12/13/18	22:34	BA	436183
Styrene	ETO15	5.00	2.3	11	ND	ND		12/13/18	22:34	BA	436183
Bromoform	ETO15	5.00	6.5	26	ND	ND		12/13/18	22:34	BA	436183
1,1,2,2-Tetrachloroethane	ETO15	5.00	4.1	17	ND	ND		12/13/18	22:34	BA	436183
4-Ethyl Toluene	ETO15	5.00	2.7	12	ND	ND		12/13/18	22:34	BA	436183
1,3,5-Trimethylbenzene	ETO15	5.00	1.5	12	ND	ND		12/13/18	22:34	BA	436183
1,2,4-Trimethylbenzene	ETO15	5.00	3.0	12	15	3.05		12/13/18	22:34	BA	436183
1,4-Dichlorobenzene	ETO15	5.00	3.7	15	ND	ND		12/13/18	22:34	BA	436183
1,3-Dichlorobenzene	ETO15	5.00	6.7	15	ND	ND		12/13/18	22:34	BA	436183
1,2-Dichlorobenzene	ETO15	5.00	5.3	15	ND	ND		12/13/18	22:34	BA	436183
Hexachlorobutadiene	ETO15	5.00	9.3	27	ND	ND		12/13/18	22:34	BA	436183
1,2,4-Trichlorobenzene	ETO15	5.00	11	19	ND	ND		12/13/18	22:34	BA	436183
Naphthalene	ETO15	5.00	6.4	13	ND	ND		12/13/18	22:34	BA	436183
(S) 4-Bromofluorobenzene	ETO15	5.00	50	150	93 %			12/13/18	22:34	BA	436183



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-1	Lab Sample ID:	1812090-001A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 13:45	Certified Clean WO # :	
Canister/Tube ID:	A11723	Received PSI :	10.5
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-GRO

Prep Batch Date/Time: 12/13/18 3:00:00PM

Prep Batch ID: 1109863

Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
TPH-Gasoline	TO-15	5.00	200	880	10200	2,897.73	x	12/13/18	22:34	BA	436183

NOTE: x -Although gasoline constituents are present, results are elevated due to the presence of non-gasoline compounds within the C5-C12 Gasoline quantitation range.



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-2	Lab Sample ID:	1812090-002A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:30	Certified Clean WO # :	
Canister/Tube ID:	A11733	Received PSI :	11.8
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-P	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109860	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	1,000	1600	2500	ND	ND		12/13/18	21:12	BA	436183
1,1-Difluoroethane	ETO15	1,000	350	14000	ND	ND		12/13/18	21:12	BA	436183
1,2-Dichlorotetrafluoroethane	ETO15	1,000	28000	56000	ND	ND		12/13/18	21:12	BA	436183
Chloromethane	ETO15	1,000	2000	4100	ND	ND		12/13/18	21:12	BA	436183
Vinyl Chloride	ETO15	1,000	230	1300	ND	ND		12/13/18	21:12	BA	436183
1,3-Butadiene	ETO15	1,000	340	1100	ND	ND		12/13/18	21:12	BA	436183
Bromomethane	ETO15	1,000	660	1900	ND	ND		12/13/18	21:12	BA	436183
Chloroethane	ETO15	1,000	810	1300	ND	ND		12/13/18	21:12	BA	436183
Trichlorofluoromethane	ETO15	1,000	560	2800	ND	ND		12/13/18	21:12	BA	436183
1,1-Dichloroethene	ETO15	1,000	830	2000	ND	ND		12/13/18	21:12	BA	436183
Freon 113	ETO15	1,000	1000	3800	ND	ND		12/13/18	21:12	BA	436183
Carbon Disulfide	ETO15	1,000	370	1600	ND	ND		12/13/18	21:12	BA	436183
2-Propanol (Isopropyl Alcohol)	ETO15	1,000	1300	12000	ND	ND		12/13/18	21:12	BA	436183
Methylene Chloride	ETO15	1,000	700	10000	ND	ND		12/13/18	21:12	BA	436183
Acetone	ETO15	1,000	400	12000	ND	ND		12/13/18	21:12	BA	436183
trans-1,2-Dichloroethene	ETO15	1,000	480	2000	ND	ND		12/13/18	21:12	BA	436183
Hexane	ETO15	1,000	460	1800	ND	ND		12/13/18	21:12	BA	436183
MTBE	ETO15	1,000	440	1800	ND	ND		12/13/18	21:12	BA	436183
tert-Butanol	ETO15	1,000	620	1500	ND	ND		12/13/18	21:12	BA	436183
Diisopropyl ether (DIPE)	ETO15	1,000	740	2100	ND	ND		12/13/18	21:12	BA	436183
1,1-Dichloroethane	ETO15	1,000	540	2000	ND	ND		12/13/18	21:12	BA	436183
ETBE	ETO15	1,000	330	2100	ND	ND		12/13/18	21:12	BA	436183
cis-1,2-Dichloroethene	ETO15	1,000	830	2000	ND	ND		12/13/18	21:12	BA	436183
Chloroform	ETO15	1,000	970	2400	ND	ND		12/13/18	21:12	BA	436183
Vinyl Acetate	ETO15	1,000	760	1800	ND	ND		12/13/18	21:12	BA	436183
Carbon Tetrachloride	ETO15	1,000	1100	3100	ND	ND		12/13/18	21:12	BA	436183
1,1,1-Trichloroethane	ETO15	1,000	790	2700	ND	ND		12/13/18	21:12	BA	436183
2-Butanone (MEK)	ETO15	1,000	390	1500	ND	ND		12/13/18	21:12	BA	436183
Ethyl Acetate	ETO15	1,000	480	1800	ND	ND		12/13/18	21:12	BA	436183
Tetrahydrofuran	ETO15	1,000	450	1500	ND	ND		12/13/18	21:12	BA	436183
Benzene	ETO15	1,000	440	1600	ND	ND		12/13/18	21:12	BA	436183
TAME	ETO15	1,000	670	2100	ND	ND		12/13/18	21:12	BA	436183
1,2-Dichloroethane (EDC)	ETO15	1,000	420	2000	ND	ND		12/13/18	21:12	BA	436183



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-2	Lab Sample ID:	1812090-002A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:30	Certified Clean WO # :	
Canister/Tube ID:	A11733	Received PSI :	11.8
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-P	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109860	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Trichloroethylene	ETO15	1,000	810	2700	ND	ND		12/13/18	21:12	BA	436183
1,2-Dichloropropane	ETO15	1,000	760	2300	ND	ND		12/13/18	21:12	BA	436183
Bromodichloromethane	ETO15	1,000	740	3400	ND	ND		12/13/18	21:12	BA	436183
1,4-Dioxane	ETO15	1,000	1800	3600	ND	ND		12/13/18	21:12	BA	436183
trans-1,3-Dichloropropene	ETO15	1,000	1100	2300	ND	ND		12/13/18	21:12	BA	436183
Toluene	ETO15	1,000	750	1900	ND	ND		12/13/18	21:12	BA	436183
4-Methyl-2-Pentanone (MIBK)	ETO15	1,000	750	2100	ND	ND		12/13/18	21:12	BA	436183
cis-1,3-Dichloropropene	ETO15	1,000	420	2300	ND	ND		12/13/18	21:12	BA	436183
Tetrachloroethylene	ETO15	1,000	1500	3400	ND	ND		12/13/18	21:12	BA	436183
1,1,2-Trichloroethane	ETO15	1,000	580	2700	ND	ND		12/13/18	21:12	BA	436183
Dibromochloromethane	ETO15	1,000	1100	4300	ND	ND		12/13/18	21:12	BA	436183
1,2-Dibromoethane (EDB)	ETO15	1,000	740	3800	ND	ND		12/13/18	21:12	BA	436183
2-Hexanone	ETO15	1,000	650	2100	ND	ND		12/13/18	21:12	BA	436183
Ethyl Benzene	ETO15	1,000	630	2200	30000	6,912.44		12/13/18	21:12	BA	436183
Chlorobenzene	ETO15	1,000	600	2300	ND	ND		12/13/18	21:12	BA	436183
1,1,1,2-Tetrachloroethane	ETO15	1,000	840	3400	ND	ND		12/13/18	21:12	BA	436183
m,p-Xylene	ETO15	1,000	980	2200	150000	34,562.21		12/13/18	21:12	BA	436183
o-Xylene	ETO15	1,000	300	2200	54000	12,442.40		12/13/18	21:12	BA	436183
Styrene	ETO15	1,000	460	2100	ND	ND		12/13/18	21:12	BA	436183
Bromoform	ETO15	1,000	1300	5200	ND	ND		12/13/18	21:12	BA	436183
1,1,2,2-Tetrachloroethane	ETO15	1,000	820	3400	ND	ND		12/13/18	21:12	BA	436183
4-Ethyl Toluene	ETO15	1,000	550	2500	ND	ND		12/13/18	21:12	BA	436183
1,3,5-Trimethylbenzene	ETO15	1,000	300	2500	ND	ND		12/13/18	21:12	BA	436183
1,2,4-Trimethylbenzene	ETO15	1,000	600	2500	ND	ND		12/13/18	21:12	BA	436183
1,4-Dichlorobenzene	ETO15	1,000	750	3000	ND	ND		12/13/18	21:12	BA	436183
1,3-Dichlorobenzene	ETO15	1,000	1300	3000	ND	ND		12/13/18	21:12	BA	436183
1,2-Dichlorobenzene	ETO15	1,000	1100	3000	ND	ND		12/13/18	21:12	BA	436183
Hexachlorobutadiene	ETO15	1,000	1900	5300	ND	ND		12/13/18	21:12	BA	436183
1,2,4-Trichlorobenzene	ETO15	1,000	2200	3700	ND	ND		12/13/18	21:12	BA	436183
Naphthalene	ETO15	1,000	1300	2600	ND	ND		12/13/18	21:12	BA	436183
(S) 4-Bromofluorobenzene	ETO15	1,000	50	150	96 %			12/13/18	21:12	BA	436183



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-2	Lab Sample ID:	1812090-002A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 10:30	Certified Clean WO # :	
Canister/Tube ID:	A11733	Received PSI :	11.8
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-GRO	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109863	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
TPH-Gasoline	TO-15	400.0	16000	70000	1170000	332,386.36	x	12/13/18	23:15	BA	436183

NOTE: x - Sample chromatogram does not resemble gasoline standard pattern (possible aged gasoline). Reported value is the result of presence of hydrocarbons within range of C5-C12 quantified as Gasoline.



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-3	Lab Sample ID:	1812090-003A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 11:00	Certified Clean WO # :	
Canister/Tube ID:	A7474	Received PSI :	11.6
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-P	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109860	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Dichlorodifluoromethane	ETO15	3.50	5.5	8.7	ND	ND		12/14/18	8:42	BA	436183
1,1-Difluoroethane	ETO15	3.50	1.2	47	ND	ND		12/14/18	8:42	BA	436183
1,2-Dichlorotetrafluoroethane	ETO15	3.50	99	200	ND	ND		12/14/18	8:42	BA	436183
Chloromethane	ETO15	3.50	7.2	14	ND	ND		12/14/18	8:42	BA	436183
Vinyl Chloride	ETO15	3.50	0.79	4.5	ND	ND		12/14/18	8:42	BA	436183
1,3-Butadiene	ETO15	3.50	1.2	3.9	ND	ND		12/14/18	8:42	BA	436183
Bromomethane	ETO15	3.50	2.3	6.8	ND	ND		12/14/18	8:42	BA	436183
Chloroethane	ETO15	3.50	2.8	4.6	ND	ND		12/14/18	8:42	BA	436183
Trichlorofluoromethane	ETO15	3.50	1.9	9.8	ND	ND		12/14/18	8:42	BA	436183
1,1-Dichloroethene	ETO15	3.50	2.9	6.9	ND	ND		12/14/18	8:42	BA	436183
Freon 113	ETO15	3.50	3.6	13	ND	ND		12/14/18	8:42	BA	436183
Carbon Disulfide	ETO15	3.50	1.3	5.4	22	7.07		12/14/18	8:42	BA	436183
2-Propanol (Isopropyl Alcohol)	ETO15	3.50	4.5	43	ND	ND		12/14/18	8:42	BA	436183
Methylene Chloride	ETO15	3.50	2.5	36	ND	ND		12/14/18	8:42	BA	436183
Acetone	ETO15	3.50	1.4	42	170	71.43		12/14/18	8:42	BA	436183
trans-1,2-Dichloroethene	ETO15	3.50	1.7	6.9	ND	ND		12/14/18	8:42	BA	436183
Hexane	ETO15	3.50	1.6	6.2	36	10.23		12/14/18	8:42	BA	436183
MTBE	ETO15	3.50	1.6	6.3	12	3.32		12/14/18	8:42	BA	436183
tert-Butanol	ETO15	3.50	2.2	5.3	ND	ND		12/14/18	8:42	BA	436183
Diisopropyl ether (DIPE)	ETO15	3.50	2.6	7.3	ND	ND		12/14/18	8:42	BA	436183
1,1-Dichloroethane	ETO15	3.50	1.9	7.1	ND	ND		12/14/18	8:42	BA	436183
ETBE	ETO15	3.50	1.1	7.3	ND	ND		12/14/18	8:42	BA	436183
cis-1,2-Dichloroethene	ETO15	3.50	2.9	6.9	ND	ND		12/14/18	8:42	BA	436183
Chloroform	ETO15	3.50	3.4	8.5	ND	ND		12/14/18	8:42	BA	436183
Vinyl Acetate	ETO15	3.50	2.6	6.2	ND	ND		12/14/18	8:42	BA	436183
Carbon Tetrachloride	ETO15	3.50	3.9	11	ND	ND		12/14/18	8:42	BA	436183
1,1,1-Trichloroethane	ETO15	3.50	2.8	9.6	ND	ND		12/14/18	8:42	BA	436183
2-Butanone (MEK)	ETO15	3.50	1.4	5.2	63	21.36		12/14/18	8:42	BA	436183
Ethyl Acetate	ETO15	3.50	1.7	6.3	ND	ND		12/14/18	8:42	BA	436183
Tetrahydrofuran	ETO15	3.50	1.6	5.2	ND	ND		12/14/18	8:42	BA	436183
Benzene	ETO15	3.50	1.5	5.6	22	6.90		12/14/18	8:42	BA	436183
TAME	ETO15	3.50	2.4	7.3	ND	ND		12/14/18	8:42	BA	436183
1,2-Dichloroethane (EDC)	ETO15	3.50	1.5	7.1	ND	ND		12/14/18	8:42	BA	436183



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-3	Lab Sample ID:	1812090-003A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000		
Date/Time Sampled:	12/13/18 / 11:00	Certified Clean WO # :	
Canister/Tube ID:	A7474	Received PSI :	11.6
Collection Volume (L):		Corrected PSI :	
SDG:			

Prep Method: TO15-P	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109860	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
Trichloroethylene	ETO15	3.50	2.8	9.4	ND	ND		12/14/18	8:42	BA	436183
1,2-Dichloropropane	ETO15	3.50	2.7	8.1	ND	ND		12/14/18	8:42	BA	436183
Bromodichloromethane	ETO15	3.50	2.6	12	ND	ND		12/14/18	8:42	BA	436183
1,4-Dioxane	ETO15	3.50	6.3	13	ND	ND		12/14/18	8:42	BA	436183
trans-1,3-Dichloropropene	ETO15	3.50	3.7	7.9	ND	ND		12/14/18	8:42	BA	436183
Toluene	ETO15	3.50	2.6	6.6	130	34.48		12/14/18	8:42	BA	436183
4-Methyl-2-Pentanone (MIBK)	ETO15	3.50	2.6	7.2	ND	ND		12/14/18	8:42	BA	436183
cis-1,3-Dichloropropene	ETO15	3.50	1.5	7.9	ND	ND		12/14/18	8:42	BA	436183
Tetrachloroethylene	ETO15	3.50	5.1	12	ND	ND		12/14/18	8:42	BA	436183
1,1,2-Trichloroethane	ETO15	3.50	2.0	9.6	ND	ND		12/14/18	8:42	BA	436183
Dibromochloromethane	ETO15	3.50	3.9	15	ND	ND		12/14/18	8:42	BA	436183
1,2-Dibromoethane (EDB)	ETO15	3.50	2.6	13	ND	ND		12/14/18	8:42	BA	436183
2-Hexanone	ETO15	3.50	2.3	7.2	ND	ND		12/14/18	8:42	BA	436183
Ethyl Benzene	ETO15	3.50	2.2	7.6	63	14.52		12/14/18	8:42	BA	436183
Chlorobenzene	ETO15	3.50	2.1	8.1	ND	ND		12/14/18	8:42	BA	436183
1,1,1,2-Tetrachloroethane	ETO15	3.50	2.9	12	ND	ND		12/14/18	8:42	BA	436183
m,p-Xylene	ETO15	3.50	3.4	7.6	310	71.43		12/14/18	8:42	BA	436183
o-Xylene	ETO15	3.50	1.1	7.6	120	27.65		12/14/18	8:42	BA	436183
Styrene	ETO15	3.50	1.6	7.5	ND	ND		12/14/18	8:42	BA	436183
Bromoform	ETO15	3.50	4.6	18	ND	ND		12/14/18	8:42	BA	436183
1,1,2,2-Tetrachloroethane	ETO15	3.50	2.9	12	ND	ND		12/14/18	8:42	BA	436183
4-Ethyl Toluene	ETO15	3.50	1.9	8.6	ND	ND		12/14/18	8:42	BA	436183
1,3,5-Trimethylbenzene	ETO15	3.50	1.1	8.6	9.8	1.99		12/14/18	8:42	BA	436183
1,2,4-Trimethylbenzene	ETO15	3.50	2.1	8.6	17	3.46		12/14/18	8:42	BA	436183
1,4-Dichlorobenzene	ETO15	3.50	2.6	11	ND	ND		12/14/18	8:42	BA	436183
1,3-Dichlorobenzene	ETO15	3.50	4.7	11	ND	ND		12/14/18	8:42	BA	436183
1,2-Dichlorobenzene	ETO15	3.50	3.7	11	ND	ND		12/14/18	8:42	BA	436183
Hexachlorobutadiene	ETO15	3.50	6.5	19	ND	ND		12/14/18	8:42	BA	436183
1,2,4-Trichlorobenzene	ETO15	3.50	7.5	13	ND	ND		12/14/18	8:42	BA	436183
Naphthalene	ETO15	3.50	4.5	9.2	53	10.11		12/14/18	8:42	BA	436183
(S) 4-Bromofluorobenzene	ETO15	3.50	50	150	91 %			12/14/18	8:42	BA	436183



SAMPLE RESULTS

Report prepared for: Divya Bhargava
Engeo (San Ramon)

Date/Time Received: 12/13/18, 2:50 pm
Date Reported: 12/14/18

Client Sample ID:	SG-3	Lab Sample ID:	1812090-003A
Project Name/Location:	354-358 Royal Ave	Sample Matrix:	Soil Vapor
Project Number:	14121.001.000	Certified Clean WO # :	
Date/Time Sampled:	12/13/18 / 11:00	Received PSI :	11.6
Canister/Tube ID:	A7474	Corrected PSI :	
Collection Volume (L):			
SDG:			

Prep Method: TO15-GRO	Prep Batch Date/Time: 12/13/18 3:00:00PM
Prep Batch ID: 1109863	Prep Analyst: BALI

Parameters:	Analysis Method	DF	MDL ug/m3	PQL ug/m3	Results ug/m3	Results ppbv	Q	Analyzed	Time	By	Analytical Batch
TPH-Gasoline	TO-15	3.50	140	620	9980	2,835.23	x	12/14/18	8:42	BA	436183

NOTE: x -Although gasoline constituents are present, results are elevated due to the presence of non-gasoline compounds within the C5-C12 Gasoline quantitation range.



MB Summary Report

Work Order:	1812090	Prep Method:	TO15-P	Prep Date:	12/13/18	Prep Batch:	1109860
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	12/13/2018	Analytical Batch:	436183
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
Dichlorodifluoromethane	0.32	0.50	ND	
1,1-Difluoroethane	0.13	5.0	ND	
1,2-Dichlorotetrafluoroethane	4.0	8.0	ND	
Chloromethane	0.99	2.0	ND	
Vinyl Chloride	0.088	0.50	ND	
1,3-Butadiene	0.15	0.50	ND	
Bromomethane	0.17	0.50	ND	
Chloroethane	0.31	0.50	ND	
Trichlorofluoromethane	0.099	0.50	ND	
1,1-Dichloroethene	0.21	0.50	ND	
Freon 113	0.13	0.50	ND	
Carbon Disulfide	0.12	0.50	ND	
2-Propanol (Isopropyl Alcohol)	0.52	5.0	ND	
Methylene Chloride	0.20	3.0	ND	
Acetone	0.17	5.0	ND	
trans-1,2-Dichloroethene	0.12	0.50	ND	
Hexane	0.13	0.50	ND	
MTBE	0.12	0.50	ND	
tert-Butanol	0.20	0.50	ND	
Diisopropyl ether (DIPE)	0.18	0.50	ND	
1,1-Dichloroethane	0.13	0.50	ND	
ETBE	0.078	0.50	ND	
cis-1,2-Dichloroethene	0.21	0.50	ND	
Chloroform	0.20	0.50	ND	
Vinyl Acetate	0.22	0.50	ND	
Carbon Tetrachloride	0.18	0.50	ND	
1,1,1-Trichloroethane	0.15	0.50	ND	
2-Butanone (MEK)	0.13	0.50	ND	
Ethyl Acetate	0.13	0.50	ND	
Tetrahydrofuran	0.15	0.50	ND	
Benzene	0.14	0.50	ND	
TAME	0.16	0.50	ND	
1,2-Dichloroethane (EDC)	0.10	0.50	ND	
Trichloroethylene	0.15	0.50	ND	
1,2-Dichloropropane	0.17	0.50	ND	
Bromodichloromethane	0.11	0.50	ND	
1,4-Dioxane	0.50	1.0	ND	
trans-1,3-Dichloropropene	0.23	0.50	ND	
Toluene	0.20	0.50	ND	
4-Methyl-2-Pentanone (MIBK)	0.18	0.50	ND	
cis-1,3-Dichloropropene	0.093	0.50	ND	
Tetrachloroethylene	0.22	0.50	ND	



MB Summary Report

Work Order:	1812090	Prep Method:	TO15-P	Prep Date:	12/13/18	Prep Batch:	1109860
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	12/13/2018	Analytical Batch:	436183
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
1,1,2-Trichloroethane	0.11	0.50	ND	
Dibromochloromethane	0.13	0.50	ND	
1,2-Dibromoethane (EDB)	0.096	0.50	ND	
2-Hexanone	0.16	0.50	ND	
Ethyl Benzene	0.15	0.50	ND	
Chlorobenzene	0.13	0.50	ND	
1,1,1,2-Tetrachloroethane	0.12	0.50	ND	
m,p-Xylene	0.23	0.50	ND	
o-Xylene	0.070	0.50	0.12	
Styrene	0.11	0.50	ND	
Bromoform	0.13	0.50	ND	
1,1,2,2-Tetrachloroethane	0.12	0.50	ND	
4-Ethyl Toluene	0.11	0.50	ND	
1,3,5-Trimethylbenzene	0.061	0.50	ND	
1,2,4-Trimethylbenzene	0.12	0.50	ND	
1,4-Dichlorobenzene	0.12	0.50	ND	
1,3-Dichlorobenzene	0.22	0.50	ND	
1,2-Dichlorobenzene	0.18	0.50	ND	
Hexachlorobutadiene	0.17	0.50	ND	
1,2,4-Trichlorobenzene	0.29	0.50	ND	
Naphthalene	0.24	0.50	ND	
(S) 4-Bromofluorobenzene			89	

Work Order:	1812090	Prep Method:	TO15-GRO	Prep Date:	12/13/18	Prep Batch:	1109863
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	12/13/2018	Analytical Batch:	436183
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Lab Qualifier
TPH-Gasoline	11	50	ND	



LCS/LCSD Summary Report

Raw values are used in quality control assessment.

Work Order:	1812090	Prep Method:	TO15-P	Prep Date:	12/13/18	Prep Batch:	1109860
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	12/13/2018	Analytical Batch:	436183
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
1,1-Dichloroethene	0.21	0.50	ND	8.00	107	114	6.45	65 - 135	30	
Benzene	0.14	0.50	ND	8.00	91.0	92.7	1.90	65 - 135	30	
Trichloroethylene	0.15	0.50	ND	8.00	94.1	95.6	1.71	65 - 135	30	
Toluene	0.20	0.50	ND	8.00	112	112	0.446	65 - 135	30	
Chlorobenzene	0.13	0.50	ND	8.00	109	114	4.38	65 - 135	30	
(S) 4-Bromofluorobenzene				20.0	101	106		50 - 150		

Work Order:	1812090	Prep Method:	TO15-GRO	Prep Date:	12/13/18	Prep Batch:	1109863
Matrix:	Air	Analytical Method:	ETO15	Analyzed Date:	12/14/2018	Analytical Batch:	436183
Units:	ppbv						

Parameters	MDL	PQL	Method Blank Conc.	Spike Conc.	LCS % Recovery	LCSD % Recovery	LCS/LCSD % RPD	% Recovery Limits	% RPD Limits	Lab Qualifier
TPH-Gasoline	11	50	ND	500	84.4	108	24.7	65 - 135	30	



Laboratory Qualifiers and Definitions

DEFINITIONS:

Accuracy/Bias (% Recovery) - The closeness of agreement between an observed value and an accepted reference value.
Blank (Method/Preparation Blank) -MB/PB - An analyte-free matrix to which all reagents are added in the same volumes/proportions as used in sample processing. The method blank is used to document contamination resulting from the analytical process.
Duplicate - a field sample and/or laboratory QC sample prepared in duplicate following all of the same processes and procedures used on the original sample (sample duplicate, LCSD, MSD)
Laboratory Control Sample (LCS ad LCSD) - A known matrix spiked with compounds representative of the target analyte(s). This is used to document laboratory performance.
Matrix - the component or substrate that contains the analyte of interest (e.g., - groundwater, sediment, soil, waste water, etc)
Matrix Spike (MS/MSD) - Client sample spiked with identical concentrations of target analyte (s). The spiking occurs prior to the sample preparation and analysis. They are used to document the precision and bias of a method in a given sample matrix.
Method Detection Limit (MDL) - the minimum concentration of a substance that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero
Practical Quantitation Limit/Reporting Limit/Limit of Quantitation (PQL/RL/LOQ) - a laboratory determined value at 2 to 5 times above the MDL that can be reproduced in a manner that results in a 99% confidence level that the result is both accurate and precise. PQLs/RLs/LODs reflect all preparation factors and/or dilution factors that have been applied to the sample during the preparation and/or analytical processes.
Precision (%RPD) - The agreement among a set of replicate/duplicate measurements without regard to known value of the replicates
Surrogate (S) or (Surr) - An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. Surrogates are used in most organic analysis to demonstrate matrix compatibility with the chosen method of analysis
Tentatively Identified Compound (TIC) - A compound not contained within the analytical calibration standards but present in the GCMS library of defined compounds. When the library is searched for an unknown compound, it can frequently give a tentative identification to the compound based on retention time and primary and secondary ion match. TICs are reported as estimates and are candidates for further investigation.
Units: the unit of measure used to express the reported result - mg/L and mg/Kg (equivalent to PPM - parts per million in liquid and solid), ug/L and ug/Kg (equivalent to PPB - parts per billion in liquid and solid), ug/m3 , mg/m3 , ppbv and ppmv (all units of measure for reporting concentrations in air), % (equivalent to 10000 ppm or 1,000,000 ppb), ug/Wipe (concentration found on the surface of a single Wipe usually taken over a 100cm ² surface)

LABORATORY QUALIFIERS:

B - Indicates when the analyte is found in the associated method or preparation blank
D - Surrogate is not recoverable due to the necessary dilution of the sample
E - Indicates the reportable value is outside of the calibration range of the instrument but within the linear range of the instrument (unless otherwise noted) Values reported with an E qualifier should be considered as estimated.
H - Indicates that the recommended holding time for the analyte or compound has been exceeded
J - Indicates a value between the method MDL and PQL and that the reported concentration should be considered as estimated rather the quantitative
NA - Not Analyzed
N/A - Not Applicable
ND - Not Detected at a concentration greater than the PQL/RL or, if reported to the MDL, at greater than the MDL.
NR - Not recoverable - a matrix spike concentration is not recoverable due to a concentration within the original sample that is greater than four times the spike concentration added
R - The % RPD between a duplicate set of samples is outside of the absolute values established by laboratory control charts
S - Spike recovery is outside of established method and/or laboratory control limits. Further explanation of the use of this qualifier should be included within a case narrative
X -Used to indicate that a value based on pattern identification is within the pattern range but not typical of the pattern found in standards. Further explanation may or may not be provided within the sample footnote and/or the case narrative.



Sample Receipt Checklist

Client Name: Engeo (San Ramon)

Project Name: 354-358 Royal Ave

Work Order No.: 1812090

Date and Time Received: 12/13/2018 2:50:00PM

Received By: Helena Ueng

Physically Logged By: Helena Ueng

Checklist Completed By: Helena Ueng

Carrier Name: Client Drop Off

Chain of Custody (COC) Information

Chain of custody present?	<u>Yes</u>
Chain of custody signed when relinquished and received?	<u>Yes</u>
Chain of custody agrees with sample labels?	<u>Yes</u>
Custody seals intact on sample bottles?	<u>Not Present</u>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	<u>Not Present</u>
Shipping Container/Cooler In Good Condition?	<u>Yes</u>
Samples in proper container/bottle?	<u>Yes</u>
Samples containers intact?	<u>Yes</u>
Sufficient sample volume for indicated test?	<u>Yes</u>

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	<u>Yes</u>
Container/Temp Blank temperature in compliance?	Temperature: °C
Water-VOA vials have zero headspace?	<u>No VOA vials submitted</u>
Water-pH acceptable upon receipt?	<u>N/A</u>
pH Checked by: N/A	pH Adjusted by: N/A

Comments:

Summa canisters received at ambient temperature.



Login Summary Report

Client ID: TL5123 Engeo (San Ramon)

QC Level: II

Project Name: 354-358 Royal Ave

TAT Requested: 1 Day Rush:1

Project # : 14121.001.000

Date Received: 12/13/2018

Report Due Date: 12/14/2018

Time Received: 2:50 pm

Comments:

Work Order # : **1812090**

<u>WO Sample ID</u>	<u>Client Sample ID</u>	<u>Collection Date/Time</u>	<u>Matrix</u>	<u>Scheduled Disposal</u>	<u>Sample On Hold</u>	<u>Test On Hold</u>	<u>Requested Tests</u>	<u>Subbed</u>
1812090-001A	SG-1	12/13/18 13:45	Air	06/11/19			VOC_A_TO15 VOC_A_TO15GRO	
Sample Note: *1-DAY RUSH! TO15-VOCs (incl.DFA), TPHg								
1812090-002A	SG-2	12/13/18 10:30	Air				VOC_A_TO15 VOC_A_TO15GRO	
1812090-003A	SG-3	12/13/18 11:00	Air				VOC_A_TO15 VOC_A_TO15GRO	



CHAIN OF CUSTODY RECORD

1812090

PROJECT NUMBER 14121.001.000		PROJECT NAME 354-358 Royal ave					VOC's & TPH's (TO-15)		TPH's (TO-15)		CML (TO-15)		VOC's & TPH's (TO-15)		DFA		REMARKS REQUIRED DETECTION LIMITS														
SAMPLED BY: (SIGNATURE/PRINT) Cathy Johnson		PROJECT MANAGER: (SIGNATURE/PRINT) D. J. J.																													
ROUTING: E-MAIL DJohnson@enggeo.com		HARD COPY Johnson@enggeo.com																													
SAMPLE NUMBER	DATE	TIME	MATRIX	NUMBER OF CONTAINERS	CONTAINER SIZE	PRESERVATIVE	VOC's & TPH's (TO-15)	TPH's (TO-15)	CML (TO-15)	VOC's & TPH's (TO-15)	DFA																				
GW-1	12/13	9:15	water	7	vary	HCL	X	X	X																						
GW-2	12/13	10:15	water	7	vary	HCL	X	X	X																						
SG-1	12/13	13:45	gas	1	vary	---				X	X	A11723																			
SG-2	12/13	10:30	gas	1	vary	---				X	X	A11733																			
SG-3	12/13	11:00	gas	1	---	---				X	X	A7474																			
<div style="text-align: center; color: red; font-weight: bold; font-size: 2em;">RUSH 1 DAY</div>																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED BY: (SIGNATURE)		DATE/TIME		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED BY: (SIGNATURE)	
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED BY: (SIGNATURE)		DATE/TIME		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED BY: (SIGNATURE)	
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					
																		RELINQUISHED BY: (SIGNATURE)		DATE/TIME		RECEIVED FOR LABORATORY BY: (SIGNATURE)		DATE/TIME		REMARKS					

ENGEO
INCORPORATED

2010 CROW CANYON PLACE SUITE 250
SAN RAMON, CALIFORNIA 94583
(925) 866-9000 FAX (925) 866-0199
WWW.ENGEO.COM

24 hour rush

DISTRIBUTION: ORIGINAL ACCOMPANIES SHIPMENT; COPY TO PROJECT FIELD FILES

Temp = 3°C #2 Summer canisters received at ambient temp.