

Project No. 7828.000.001

November 5, 2012

Dilan Roe Alameda County Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Jordan Ranch Parcel H (Case # R00002918) Subject:

Dublin, California

RECEIVED

10:36 am, Nov 06, 2012

Alameda County Environmental Health

SOIL GAS SAMPLING REPORT – SECOND ROUND

1. Department of Toxic Substance Control (DTSC); Final Advisory Active Soil References: Gas Investigations; April 2012.

2. ENGEO; Soil Gas Assessment, Jordan Ranch Parcel H (Case # R00002918), Dublin, California; Project No. 7828.000.001; July 24, 2012.

Dear Ms. Roe:

ENGEO conducted a second round of soil gas sampling at the Jordan Ranch Parcel H (Site), located in Dublin, California (Figure 1). The soil gas sampling was performed to evaluate potential vapor intrusion concerns for a proposed apartment complex to be constructed within the former underground storage tank (UST) area (Figure 2).

BACKGROUND

There are currently no structures within the former UST area. Development plans are currently being prepared for proposed residential units within the impacted area (Figure 2). As part of the proposed development, up to five vertical feet of engineered fill may be placed on top of the existing grade for drainage purposes.

We installed four soil gas wells within the primary source area at the Site in June 2012. Details regarding the installation of the wells are provided in our referenced July 2012 soil gas assessment report. The first sampling event, performed at the time of well installation, yielded elevated concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene in one of the four wells. The mean concentrations for the four wells were below the applicable residential environmental screening levels (ESLs) listed in Table E-2 published by the Regional Water Quality Control Board, San Francisco Region (SFRWQCB) and/or California Human Health Screening Levels (CHHSLs) listed in Table 2 published by the Department of Toxic Substances Control (DTSC).

Elevated concentrations of TPHg and benzene have been detected in shallow groundwater (within 20 feet of the ground surface); however, these groundwater zones are present in perched, thin, discontinuous lenses separated by large intervals of dry soil. As a result, the total contaminant mass present in these groundwater zones is relatively minor. The relatively limited

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detections in soil gas may be attributed to the lack of significant quantities of contaminant mass within these groundwater zones. Furthermore, the remedial excavation of the former UST basin in 2011 removed the majority of the soil impacts.

SOIL GAS SAMPLING

We collected soil gas samples from the four soil gas monitoring wells on October 4, 2012. We performed the sample collection in accordance with the 2012 DTSC guidance as follows:

- Prior to the connection of the sampling apparatus ("sample train") to the well casing and system, we performed a "shutin" test to assess potential leaks in the system. The test involved capping the end of the manifold, then applying a vacuum with the vacuum pump, closing the purge valve, and observing the vacuum gauge for two minutes to determine if there is a drop in vacuum. We observed no significant decreases in vacuum during the shut-in tests performed for this sampling event.
- We then connected the sample train to the well casing 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 built in flow controller set to 100-200 ml/min. A purge vacuum pump was attached to the manifold fitting closest to the well casing and the sample canister was connected to the manifold fitting furthest away from the well casing. We then purged three well volumes of soil gas from each wellfollowed by collection of soil gas samples in the summa cannisters provided by the laboratory. Purge specifications are provided in the following Table:

TABLE 1Summary of Purging Process

Casing Length (ft)	Casing Volume Per Foot (ml)	Total Casing Volume (ml)	Sand Pack Pore Volume (ml) (50% Porosity)	Total Well Volume (ml)	Minutes (3x)
9.5	5	47.5	1,390	1437.5	27.8

Notes: Purge minutes are based on a flowrate of 150 ml/min Sandpack is 3" diameter by 2 feet in length

• After purging was completed, we closed the purge valve on the manifold, and removed the vacuum pump so that it could be connected to the next well. Representative samples were collected by opening the sample canister valve and allowing the sample canister to extract soil gas until the vacuum in the sample canister reached approximately 6 to 9-inches of mercury. The leak detection compound 1,1-Diflouroethane was applied by wrapping a doused rag around the manifold fittings during sample collection. The soil gas sample train diagram is shown on Figure 4. We labeled each sample canister with a unique identification number, sampling time, pre and post sample vacuum readings; and the six soil gas samples were submitted to a State certified laboratory for analysis of volatile organic compounds (VOCs), including total petroleum hydrocarbons as gasoline (TPH-g) and naphthalene, by EPA Test Method TO-15.

Exp. 3/31/20

LABORATORY ANALYTICAL RESULTS

TPHg was detected in wells SG-1, SG-2, and SG-3 at concentrations of 650, 450, and 1,500 micrograms per cubic meter ($\mu g/m^3$). TPHg was not detected in well SG-4. Trace concentrations of Freon 11 and carbon disulfide were also detected in wells SG-1, SG-2, and SG-3. The leak check compound 1,1-DFA was detected only in SG-2 at a concentration well below the 10,000- $\mu g/m^3$ threshold that DTSC established for determining if significant leakage has occurred. Attached Table 1 provides a cumulative summary of all soil gas detections for the four monitoring wells.

CONCLUSION

Notable detections during the second round of soil gas sampling were limited to relatively low concentrations of TPH-g at levels below the applicable residential ESL. Based on the two rounds of soil gas sampling, we conclude that there is not a vapor intrusion risk for the proposed residential development. Given that the potential exposure pathway to the soil and groundwater impacts through direct contact will be eliminated under the proposed residential scenario, we conclude that the proposed development will not result in potential health risks to future residents or other land users.

If you have any questions regarding this report, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated

Morgan Johnson

Jeff Adams, PhD, PE

Attachments: Table 1 – Soil Gas Analytical Data

Figures

Eurofins Air Toxics, Inc., Certified Laboratory Report and Chain of Custody

Shawn Munger, CHG

c: Mr. Ravi Nandwana, BJP-ROF Jordan Ranch, LLC Mr. Kevin Fryer, BJP-ROF Jordan Ranch, LLC



Table 1

Soil Gas Analytical Data

Table 1 Soil Gas Analytical Data Jordan Ranch Parcel H

Sample ID	Date	TPHg	Benzene	Toulene	EB	m,p-Xyl	o-Xyl	1,2,4-TMB	1,3,5-TMB	4-ET	Freon 11	Ethanol	Acetone	2-Prop	2,2,4-TMP	1,3-BTD	CDS	Hexane	2-BTN	CLF	CHX	HPT	NPTH	4-MP	1,1-DFA
Sample 1D	Date	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3	μg/m3
SG-1	6/29/2012	3,900	14	9.7	<3.6	7.1	<3.6	6.2	<4.1	<4.1	13	<6.3	64	22	28	4.2	12	10	< 9.9	<4.1	7.9	5.6	<18	<3.4	<9.1
SG-1	10/4/2012	650	<4	<4.7	<5.5	<5.5	<5.5	<6.2	< 6.2	< 6.2	18	<9.5	<30	<12	< 5.9	<2.8	<16	<4.4	<15	<6.2	<4.3	<5.2	<26	<5.2	<14
SG-2-1X	6/29/2012	3,000	11	12	6	18	13	9.7	7.4	12 K	13	12	<26	79	5.5	<2.4	<13	<3.8	<13	<5.2	<3.7	<4.4	<22	<4.4	<12
SG-2-3X	6/29/2012	1,900	6.6	11	<3.5	13	8	7.7	5.3	4	14	7.7	20	<7.9	<3.8	<1.8	<10	<2.8	< 9.5	<3.9	<2.8	<3.3	<17	<3.3	<8.7
SG-2-10X	6/29/2012	1,100	5.2	9.9	<3.4	6.4	3.9	4	<3.8	<3.8	16	12	32	<7.6	<3.6	<1.7	< 9.6	<2.7	< 9.1	<3.8	<2.7	<3.2	<16	<3.2	< 8.4
SG-2	10/4/2012	450	<4	<4.7	<5.5	<5.5	<5.5	<6.2	< 6.2	< 6.2	14	<9.5	<30	<12	< 5.9	<2.8	<16	<4.4	<15	<6.2	<4.3	<5.2	<26	<5.2	98
SG-3	6/29/2012	30,000	94	220	41	140	41	22	<16	16 J	<19	100	2100	<33	<16	110	160	210	57	20	18	120	< 70	<14	<36
SG-3	10/4/2012	1,500	<4.6	< 5.4	<6.3	<6.3	<6.3	<7.1	<7.1	<7.1	8.5	<11	<34	<14	< 6.8	<3.2	37	<5.1	<17	<7	<5	< 5.9	<30	< 5.9	<16
SG-4	6/29/2012	820	5.2	26	5.1	18	5.5	7.8	<4.2	<4.2	<4.8	< 6.4	540	< 8.4	<4	<1.9	<11	<3	<10	<4.2	<2.9	<3.5	<18	3.7	<9.2
SG-4	10/4/2012	<270	<4.2	<5	<5.7	<5.7	<5.7	< 6.5	< 6.5	< 6.5	<7.4	<9.9	<31	<13	<6.2	<2.9	<16	<4.6	<16	<6.4	<4.5	<5.4	<28	< 5.4	<14
CHHSL (Resi	idential - Soil Gas)	NR	36.2	135,000	NR	315,000	315,000	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	0.072	NR	NR
ESL (Table E-	-2 Residential -Soil Gas)	10,000	84	63,000	980	21,000	21,000	NR	NR	NR	NR	NR	660,000	NR	NR	NR	NR	NR	NR	460	NR	NR	72	NR	NR
DTSC 2003 A	Advisory 1,1-DFA	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	10,000

Notes: ET-Ethyltoluene

TMB-Trimethylbenzene

Prop-Propanol
TMP-Trimethylpentane
PCE-Tetrachloroethylene

EB-Ethylbenzene BTD-Butadiene

CDS-Carbon Disulfide

BTN-Butanone

CLF-Chloroform CHX-Cyclohexane

HPT-Heptane 4-MP-4-Methyl-2-pentanone

NPTH-Napthalene

ND-Not detected above laboratroy reporting limits

NR-Not reported J-Estimated Value

K-Potential Interference





Figures

Figure 1 – Site Vicinity Map

Figure 2 – Concentrations of VOCs in Soil Gas

Figure 3 – Soil Gas Well Construction Diagram

Figure 4 – Soil Gas Sample Train Diagram







BASE MAP SOURCE: GOOGLE EARTH



COPYRIGHT

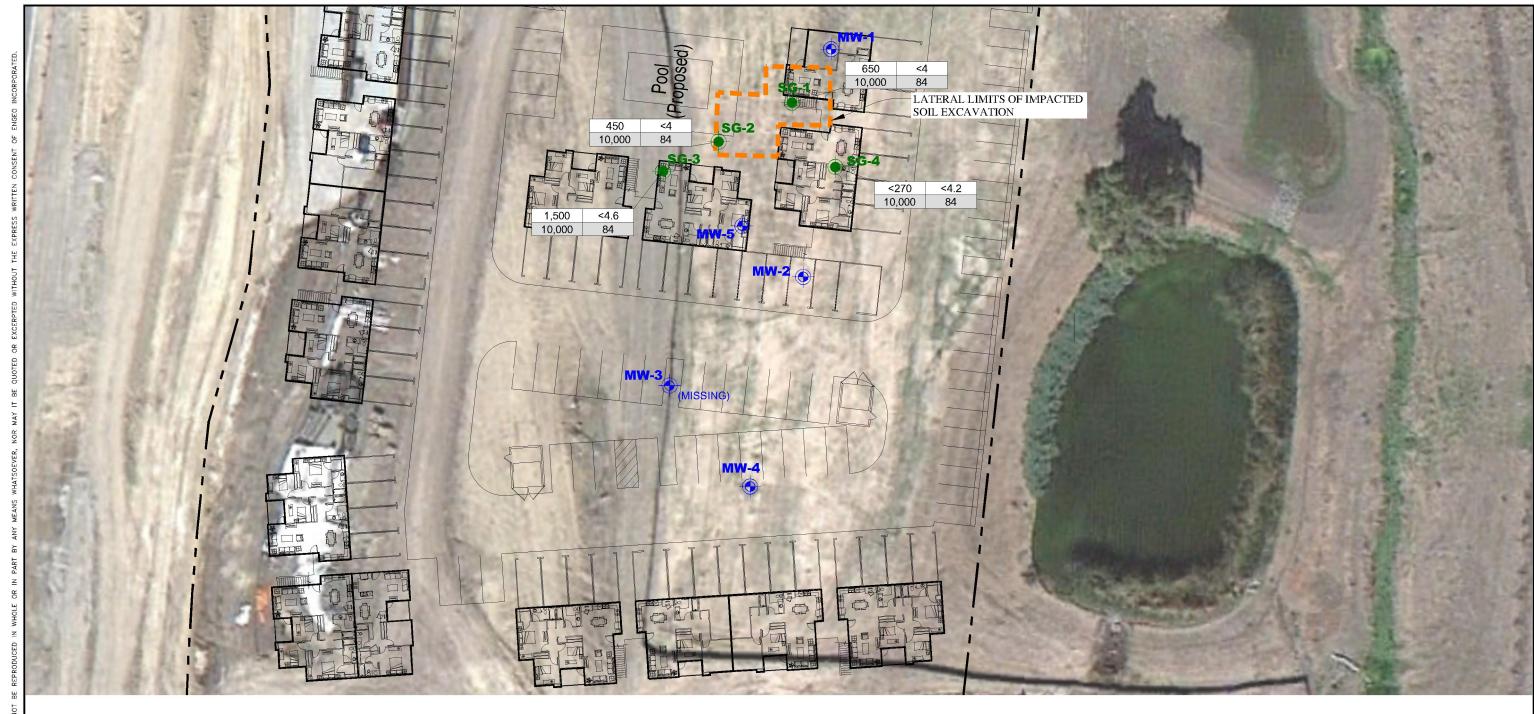
VICINITY MAP JORDAN RANCH - PARCEL H DUBLIN, CALIFORNIA

PROJECT NO.: 7828.000.001 DATE: AS SHOWN

DRAWN BY: SRP

FIGURE NO.

CHECKED BY: SM





MW-5 SG-4

APPROXIMATE LOCATION OF MONITORING WELL

APPROXIMATE LOCATION OF SOIL GAS WELL

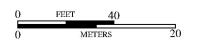
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (TPHg) CONCENTRATION (μg/m3)

BENZENE CONCENTRATION (μg/m3)

<270 <4.2 10,000 84

-ENVIRONMANTAL SCREENING LEVELS (ESLs)





BASE MAP SOURCE: GOOGLE EARTH, ST. ANTON



CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN SOIL GAS - OCTOBER 2012 JORDAN RANCH - PARCEL H DUBLIN, CALIFORNIA

PROJECT NO.: 7828,000,001

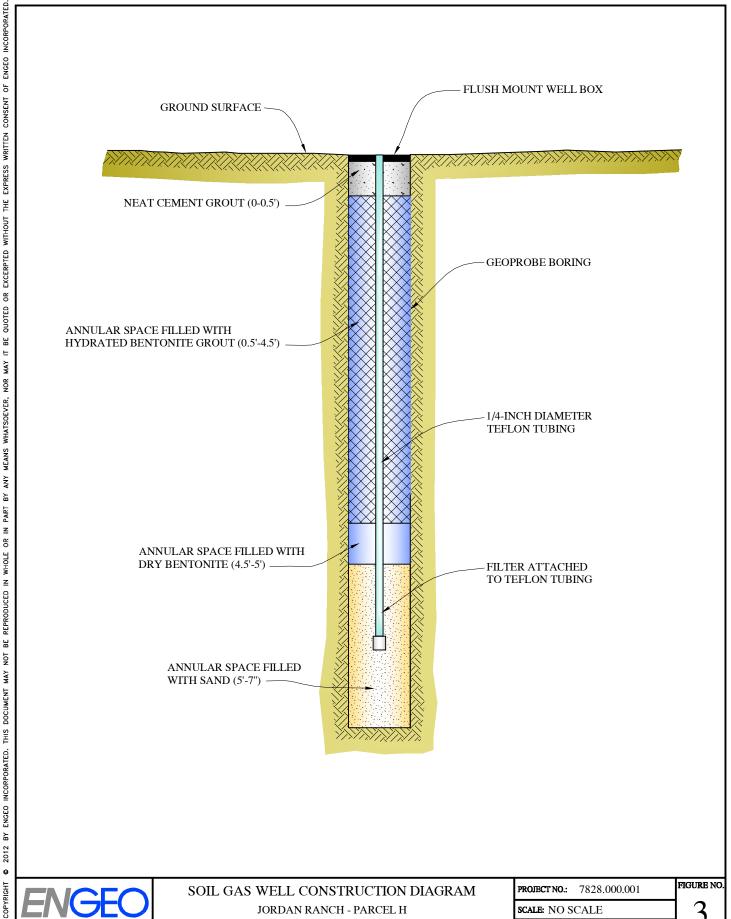
SCALE: AS SHOWN

SCALE: AS SHOWN

DRAWN BY: DLB CHECKED BY: SM

RIGINAL FIGURE PRINTED IN COLOR

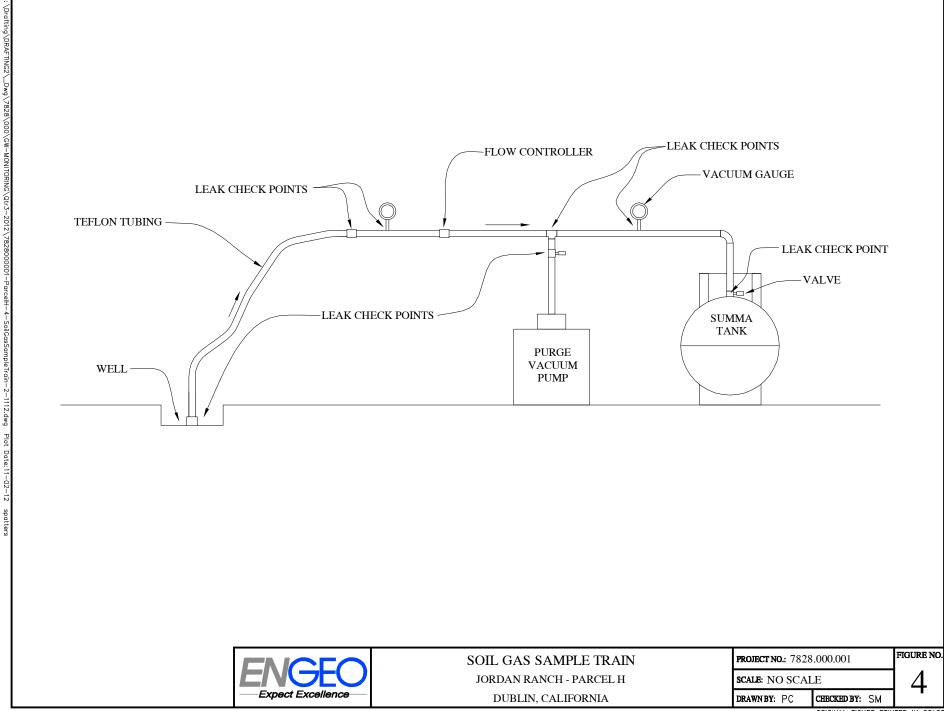
FIGURE NO



JORDAN RANCH - PARCEL H DUBLIN, CALIFORNIA

SCALE: NO SCALE

CHECKED BY: SM ORIGINAL FIGURE PRINTED IN COLOR



ORIGINAL FIGURE PRINTED IN COLOR



Eurofins Air Toxics, Inc.

Certified Laboratory Report and Chain of Custody



10/15/2012 Mr. Morgan Johnson Engeo Inc. 2213 Plaza Dr.

Rocklin CA 95765

Project Name: Jordan Ranch Project #: 7828.000.001 Workorder #: 1210156

Dear Mr. Morgan Johnson

The following report includes the data for the above referenced project for sample(s) received on 10/8/2012 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

July Butte



WORK ORDER #: 1210156

Work Order Summary

CLIENT: Mr. Morgan Johnson BILL TO: Accounts Payable

Engeo Inc. Engeo Inc.

2213 Plaza Dr. 2010 Crow Canyon Place

San Ramon, CA 94583-1545

Rocklin, CA 95765 Suite 250

PHONE: 916-786-8883 **P.O.** #

FAX: 916-786-7891 **PROJECT** # 7828.000.001 Jordan Ranch

DATE RECEIVED: 10/08/2012 **CONTACT:** Kelly Buettner 10/15/2012

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	SG-1	Modified TO-15	6.0 "Hg	15 psi
02A	SG-2	Modified TO-15	6.0 "Hg	15 psi
03A	SG-3	Modified TO-15	9.0 "Hg	15 psi
04A	SG-4	Modified TO-15	7.0 "Hg	15 psi
05A	Lab Blank	Modified TO-15	NA	NA
06A	CCV	Modified TO-15	NA	NA
07A	LCS	Modified TO-15	NA	NA
07AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: DATE: 10/15/12

Technical Director

Certfication numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NY NELAP - 11291, TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, WA NELAP - C935

Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2011, Expiration date: 10/17/2012.

Eurofins Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.







LABORATORY NARRATIVE EPA Method TO-15 Engeo Inc. Workorder# 1210156

Four 1 Liter Summa Canister samples were received on October 08, 2012. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
 - U Compound analyzed for but not detected above the reporting limit.
 - UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
 - N The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-1 Lab ID#: 1210156-01A

	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 11	1.3	3.3	7.1	18
TPH ref. to Gasoline (MW=100)	63	160	260	650

Client Sample ID: SG-2 Lab ID#: 1210156-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.3	2.4	7.1	14
TPH ref. to Gasoline (MW=100)	63	110	260	450
1,1-Difluoroethane	5.0	36	14	98

Client Sample ID: SG-3 Lab ID#: 1210156-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 11	1.4	1.5	8.1	8.5
Carbon Disulfide	5.8	12	18	37
TPH ref. to Gasoline (MW=100)	72	370	300	1500

Client Sample ID: SG-4
Lab ID#: 1210156-04A
No Detections Were Found.



Client Sample ID: SG-1 Lab ID#: 1210156-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101121 Date of Collection: 10/4/12 2:27:00 PM
Dil. Factor: 2.52 Date of Analysis: 10/12/12 11:30 AM

Dil. Factor:	2.52	Date of Analysis: 10/12/12 11:30		
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	1.3	Not Detected	6.2	Not Detected
Freon 114	1.3	Not Detected	8.8	Not Detected
Chloromethane	13	Not Detected	26	Not Detected
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
1,3-Butadiene	1.3	Not Detected	2.8	Not Detected
Bromomethane	13	Not Detected	49	Not Detected
Chloroethane	5.0	Not Detected	13	Not Detected
Freon 11	1.3	3.3	7.1	18
Ethanol	5.0	Not Detected	9.5	Not Detected
Freon 113	1.3	Not Detected	9.6	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Acetone	13	Not Detected	30	Not Detected
2-Propanol	5.0	Not Detected	12	Not Detected
Carbon Disulfide	5.0	Not Detected	16	Not Detected
3-Chloropropene	5.0	Not Detected	16	Not Detected
Methylene Chloride	13	Not Detected	44	Not Detected
Methyl tert-butyl ether	1.3	Not Detected	4.5	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Hexane	1.3	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.1	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.0	Not Detected	15	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.7	Not Detected
Chloroform	1.3	Not Detected	6.2	Not Detected
1,1,1-Trichloroethane	1.3	Not Detected	6.9	Not Detected
Cyclohexane	1.3	Not Detected	4.3	Not Detected
Carbon Tetrachloride	1.3	Not Detected	7.9	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	5.9	Not Detected
Benzene	1.3	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.1	Not Detected
Heptane	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
1,2-Dichloropropane	1.3	Not Detected	5.8	Not Detected
1,4-Dioxane	5.0	Not Detected	18	Not Detected
Bromodichloromethane	1.3	Not Detected	8.4	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	5.7	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.2	Not Detected
Toluene	1.3	Not Detected	4.7	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	5.7	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	6.9	Not Detected
Tetrachloroethene	1.3	Not Detected	8.5	Not Detected
2-Hexanone	5.0	Not Detected	21	Not Detected



Client Sample ID: SG-1 Lab ID#: 1210156-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101121 Date of Collection: 10/4/12 2:27:00 PM
Dil. Factor: 2.52 Date of Analysis: 10/12/12 11:30 AM

				_, ,
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	9.7	Not Detected
Chlorobenzene	1.3	Not Detected	5.8	Not Detected
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	Not Detected	5.5	Not Detected
o-Xylene	1.3	Not Detected	5.5	Not Detected
Styrene	1.3	Not Detected	5.4	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
Cumene	1.3	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	8.6	Not Detected
Propylbenzene	1.3	Not Detected	6.2	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.2	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.5	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
1,2,4-Trichlorobenzene	5.0	Not Detected	37	Not Detected
Hexachlorobutadiene	5.0	Not Detected	54	Not Detected
Naphthalene	5.0	Not Detected	26	Not Detected
TPH ref. to Gasoline (MW=100)	63	160	260	650
1,1-Difluoroethane	5.0	Not Detected	14	Not Detected

Container Type: 1 Liter Summa Canister

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	112	70-130	
4-Bromofluorobenzene	86	70-130	



Client Sample ID: SG-2 Lab ID#: 1210156-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101122 Date of Collection: 10/4/12 1:45:00 PM
Dil. Factor: 2.52 Date of Analysis: 10/12/12 12:02 PM

Compound Rpt. Limit (ppbv) Amount (ppbv) Rpt. Limit (ug/m3) Amount (ug/m3) Amount (ug/m3) Amount (ug/m3) Amount (ug/m3) Limit (ug/m3) Freon 12 1.3 Not Detected 6.2 Not Detected Freon 114 1.3 Not Detected 2.6 Not Detected Chloromethane 1.3 Not Detected 2.8 Not Detected 1.3-Butadiene 1.3 Not Detected 4.9 Not Detected Chloromethane 5.0 Not Detected 4.9 Not Detected Chloromethane 5.0 Not Detected 1.3 Not Detected Freon 11 1.3 2.4 7.1 1.4 Ethanol 5.0 Not Detected 9.5 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 9.6 Not Detected 2-Propanol 5.0 Not Detected 1.0 Not Detected 2-Propanol 5.0 Not Detected 1.6 <th>Dil. Factor:</th> <th>2.52</th> <th>Date</th> <th>of Analysis: 10/1</th> <th>2/12 12:02 PM</th>	Dil. Factor:	2.52	Date	of Analysis: 10/1	2/12 12:02 PM
Freon 12 1.3 Not Detected 6.2 Not Detected Freon 114 1.3 Not Detected 8.8 Not Detected Chloromethane 13 Not Detected 26 Not Detected Vinyl Chloride 1.3 Not Detected 2.8 Not Detected 1,3-Butadiene 1.3 Not Detected 2.8 Not Detected Chloroethane 5.0 Not Detected 49 Not Detected Chloroethane 5.0 Not Detected 9.6 Not Detected Freon 11 1.3 3.0 Not Detected 9.6 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 30 Not Detected Carbon Disulfide 5.0		Rpt. Limit	Amount	Rpt. Limit	Amount
Freon 114 1.3 Not Detected 8.8 Not Detected Chloromethane 13 Not Detected 26 Not Detected Vinyl Chloride 1.3 Not Detected 2.8 Not Detected 1.3-Butadiene 1.3 Not Detected 2.8 Not Detected Brommethane 13 Not Detected 49 Not Detected Chloroethane 5.0 Not Detected 13 Not Detected Freon 11 1.3 2.4 7.1 14 Ethanol 5.0 Not Detected 9.6 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethene 1.3 Not Detected 30 Not Detected 2-Propanol 5.0 Not Detected 30 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected 3-Chloropropene 5.0 Not Detected 16	Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Chloromethane 13 Not Detected 26 Not Detected Vinyl Chloride 1.3 Not Detected 3.2 Not Detected J3-Butadiene 1.3 Not Detected 2.8 Not Detected Bromomethane 1.3 Not Detected 49 Not Detected Chloroethane 5.0 Not Detected 13 Not Detected Freon 11 1.3 2.4 7.1 14 Ethanol 5.0 Not Detected 9.5 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected Acetone 1.3 Not Detected 5.0 Not Detected Acetone 1.3 Not Detected 12 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected 2-Propanol 5.0 Not Detected 16 Not Detected 3-Chloropropene 5.0 Not Detected 16 Not Detected Methyleren Chloride 1.3 Not Detected 4.5 <t< td=""><td>Freon 12</td><td>1.3</td><td>Not Detected</td><td>6.2</td><td>Not Detected</td></t<>	Freon 12	1.3	Not Detected	6.2	Not Detected
Vinyl Chloride 1.3 Not Detected 3.2 Not Detected 1,3-Butadiene 1.3 Not Detected 2.8 Not Detected 13 Not Detected 49 Not Detected Chloroethane 5.0 Not Detected 13 Not Detected Froon 11 1.3 2.4 7.1 14 Ethanol 5.0 Not Detected 9.5 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected Acetone 13 Not Detected 5.0 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected 2-Propanol 5.0 Not Detected 16 Not Detected 2-Propanol 5.0 Not Detected 16 Not Detected 3-Chloropropene 5.0 Not Detected 16 Not Detected 3-Chloropropene 5.0 Not Detected 4.5 Not Detected <	Freon 114	1.3	Not Detected	8.8	Not Detected
1,3-Butadiene 1.3 Not Detected 49 Not Detected Bromomethane 13 Not Detected 49 Not Detected Chloroethane 5.0 Not Detected 13 Not Detected Freon 11 1.3 2.4 7.1 14 Ethanol 5.0 Not Detected 9.5 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected Acetone 13 Not Detected 12 Not Detected Carbon Disulfide 5.0 Not Detected 16 Not Detected Garbon Disulfide 5.0 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 4.5 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected Methyl tert-butyl ether 1.3 Not Det	Chloromethane	13	Not Detected	26	Not Detected
Bromomethane	Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
Chloroethane 5.0 Not Detected 13 Not Detected Freon 11 1.3 2.4 7.1 14 Ethanol 5.0 Not Detected 9.6 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected Acetone 13 Not Detected 12 Not Detected 2-Propanol 5.0 Not Detected 16 Not Detected Carbon Disulfide 5.0 Not Detected 16 Not Detected A-Chloropropene 5.0 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 44 Not Detected Methylene Chloride 1.3 Not Detected 4.5 Not Detected Methylene Chloride 1.3 Not Detected 4.5 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected Hexane 1.3 Not Detected	1,3-Butadiene	1.3	Not Detected	2.8	Not Detected
Freon 11	Bromomethane	13	Not Detected	49	Not Detected
Ethanol 5.0 Not Detected 9.5 Not Detected Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethene 1.3 Not Detected 3.0 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected 2-Propanol 5.0 Not Detected 16 Not Detected 2-Propanol 5.0 Not Detected 16 Not Detected 3.0-Chloropropene 5.0 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 44 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected Hexane 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.1 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.1 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.1 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected 6.1 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected 5.1 Not Detected 6.1	Chloroethane	5.0	Not Detected	13	Not Detected
Freon 113 1.3 Not Detected 9.6 Not Detected 1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected Acetone 13 Not Detected 30 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected Garbon Disulfide 5.0 Not Detected 16 Not Detected 3-Chloropropene 5.0 Not Detected 16 Not Detected Methyl ten-Churide 13 Not Detected 44 Not Detected Methyl ten-burly either 1.3 Not Detected 4.5 Not Detected trans-1,2-Dichloroethene 1.3 Not Detected 4.4 Not Detected Hexane 1.3 Not Detected 4.4 Not Detected Hexane 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethane 1.3 Not Detected 5.1 Not Detected 2-Butanone (Methyl Ethyl Ketone) 5.0 Not Detected 1.5 Not Detected Chichloroethane	Freon 11	1.3	2.4	7.1	14
1,1-Dichloroethene 1.3 Not Detected 5.0 Not Detected Acetone 13 Not Detected 30 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected Carbon Disulfide 5.0 Not Detected 16 Not Detected 3-Chloropropene 5.0 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 44 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected Hexane 1.3 Not Detected 4.5 Not Detected Hexane 1.3 Not Detected 5.0 Not Detected 1,1-Dichloroethane 1.3 Not Detected 5.1 Not Detected 1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Chloroform 1.3 Not Detected 3.7 Not Detected Chloroform 1.3 <td>Ethanol</td> <td>5.0</td> <td>Not Detected</td> <td>9.5</td> <td>Not Detected</td>	Ethanol	5.0	Not Detected	9.5	Not Detected
Acetone 13 Not Detected 30 Not Detected 2-Propanol 5.0 Not Detected 12 Not Detected Carbon Disulfide 5.0 Not Detected 16 Not Detected 3-Chloropropene 5.0 Not Detected 16 Not Detected Methylene Chloride 13 Not Detected 44 Not Detected Methyl tert-butyl ether 1.3 Not Detected 4.5 Not Detected trans-1,2-Dichloroethene 1.3 Not Detected 4.5 Not Detected trans-1,2-Dichloroethene 1.3 Not Detected 4.4 Not Detected trans-1,2-Dichloroethene 1.3 Not Detected 4.4 Not Detected 1,1-Dichloroethane 1.3 Not Detected 4.4 Not Detected 1,1-Dichloroethane 1.3 Not Detected 5.1 Not Detected 2-Butanone (Methyl Ethyl Ketone) 5.0 Not Detected 5.1 Not Detected cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Cis-1,1-Trichloroethane 1.3 Not Detected 5.0 Not Detected Chloroform 1.3 Not Detected 6.2 Not Detected Chloroform 1.3 Not Detected 6.2 Not Detected Cyclohexane 1.3 Not Detected 6.9 Not Detected Cyclohexane 1.3 Not Detected 7.9 Not Detected Carbon Tetrachloride 1.3 Not Detected 7.9 Not Detected Carbon Tetrachloride 1.3 Not Detected 5.9 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.2 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.2 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.2 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.8 Not Detected 1,2-Dichloropropane 1.3 Not Detected 5.8 Not Detected 1,2-Dichloropropane 1.3 Not Detected 5.7 Not Detected 1,2-Dichloropropane 1.3 Not Detected 5.7 Not Detected 1,2-Dichloropropane 1.3 Not Detected 5.7 Not Detected 1,1,1-Trichloroethane 1.3 Not Detected 5.7 Not Detected 1,1,1-Trichloroe	Freon 113	1.3	Not Detected	9.6	Not Detected
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Carbon Disulfide5.0Not Detected16Not Detected3-Chloropropene5.0Not Detected16Not DetectedMethylene Chloride13Not Detected44Not DetectedMethyl tert-butyl ether1.3Not Detected4.5Not Detectedtrans-1,2-Dichloroethene1.3Not Detected5.0Not DetectedHexane1.3Not Detected5.1Not Detected1,1-Dichloroethane1.3Not Detected5.1Not Detected2-Butanone (Methyl Ethyl Ketone)5.0Not Detected5.0Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected6.2Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected6.2Not Detected1.1-1-Tichloroethane1.3Not Detected6.2Not Detected1.1-1-Tichloroethane1.3Not Detected7.9Not Detected2.2-4-Trimethylpentane1.3Not Detected5.9Not Detected2.2-4-Trimethylpentane1.3Not Detected5.1Not Detected3.Not Detected5.1Not Detected5.1Not Detected		13	Not Detected	30	Not Detected
Carbon Disulfide5.0Not Detected16Not Detected3-Chloropropene5.0Not Detected16Not DetectedMethylene Chloride13Not Detected44Not DetectedMethyl tert-butyl ether1.3Not Detected4.5Not Detectedtrans-1,2-Dichloroethene1.3Not Detected5.0Not DetectedHexane1.3Not Detected5.1Not Detected1,1-Dichloroethane1.3Not Detected5.1Not Detected2-Butanone (Methyl Ethyl Ketone)5.0Not Detected5.1Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected5.0Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected6.2Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected6.2Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected6.2Not Detected1,1-Trichloroethane1.3Not Detected7.9Not Detected2,2-Dichloroethane1.3Not Detected4.3Not Detected1,2-Dichloroethane1.3Not Detected5.2Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected<	2-Propanol	5.0	Not Detected	12	Not Detected
Methylene Chloride13Not Detected44Not DetectedMethyl tert-butyl ether1.3Not Detected4.5Not Detectedtrans-1,2-Dichloroethene1.3Not Detected5.0Not DetectedHexane1.3Not Detected4.4Not Detected1,1-Dichloroethane1.3Not Detected5.1Not Detected2-Butanone (Methyl Ethyl Ketone)5.0Not Detected15Not Detectedcis-1,2-Dichloroethene1.3Not Detected5.0Not DetectedChloroform1.3Not Detected3.7Not DetectedChloroform1.3Not Detected6.2Not DetectedChloroform1.3Not Detected6.9Not DetectedCyclohexane1.3Not Detected6.9Not DetectedCyclohexane1.3Not Detected7.9Not DetectedCarbon Tetrachloride1.3Not Detected7.9Not DetectedC,2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected5.9Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedTrichloroethene1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not DetectedTy-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected5.2Not DetectedBromodichloromethane1.3	•	5.0	Not Detected	16	Not Detected
Methyl tert-butyl ether1.3Not Detected4.5Not Detectedtrans-1,2-Dichloroethene1.3Not Detected5.0Not DetectedHexane1.3Not Detected4.4Not Detected1,1-Dichloroethane1.3Not Detected5.1Not Detected2-Butanone (Methyl Ethyl Ketone)5.0Not Detected5.0Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected3.7Not Detected2-Butanone (Methyl Ethyl Ketone)1.3Not Detected6.2Not DetectedChloroform1.3Not Detected6.2Not DetectedChloroform1.3Not Detected6.9Not DetectedCyclohexane1.3Not Detected7.9Not Detected2.2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected5.9Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTichloroethene1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Dete	3-Chloropropene	5.0	Not Detected	16	Not Detected
Methyl terr-butyl ether1.3Not Detected4.5Not Detectedtrans-1,2-Dichloroethene1.3Not Detected5.0Not DetectedHexane1.3Not Detected4.4Not Detected1,1-Dichloroethane1.3Not Detected5.1Not Detected1,1-Dichloroethane1.3Not Detected1.5Not Detected2-Butanone (Methyl Ethyl Ketone)5.0Not Detected1.5Not Detectedcis-1,2-Dichloroethene1.3Not Detected5.0Not DetectedTetrahydrofuran1.3Not Detected3.7Not DetectedChloroform1.3Not Detected6.2Not DetectedChloroform1.3Not Detected6.2Not DetectedCyclohexane1.3Not Detected6.9Not DetectedCyclohexane1.3Not Detected7.9Not DetectedCarbon Tetrachloride1.3Not Detected7.9Not Detected2,2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected5.9Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected5.8Not DetectedBromodichloromethane1.3Not Detected5.7Not DetectedCis-1,3-Dichloropropene <td>Methylene Chloride</td> <td>13</td> <td>Not Detected</td> <td>44</td> <td>Not Detected</td>	Methylene Chloride	13	Not Detected	44	Not Detected
trans-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Hexane 1.3 Not Detected 4.4 Not Detected 1,1-Dichloroethane 1.3 Not Detected 5.1 Not Detected 2-Butanone (Methyl Ethyl Ketone) 5.0 Not Detected 5.1 Not Detected cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Chloroform 1.3 Not Detected 3.7 Not Detected Chloroform 1.3 Not Detected 6.2 Not Detected 1,1,1-Trichloroethane 1.3 Not Detected 6.9 Not Detected 1,1,1-Trichloroethane 1.3 Not Detected 6.9 Not Detected Carbon Tetrachloride 1.3 Not Detected 7.9 Not Detected 2,2,4-Trimethylpentane 1.3 Not Detected 5.9 Not Detected 8.2 Not Detected 8.2 Not Detected 8.2 Not Detected 8.2 Not Detected 8.3 Not Detected 8.4 Not Detected 9.2 Not Detected 9.2 Not Detected 9.2 Not Detected 9.2 Not Detected 9.3 Not Detected 9.3 Not Detected 9.3 Not Detected 9.3 Not Detected 9.4 Not Detected 9.5		1.3	Not Detected	4.5	Not Detected
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2-Butanone (Methyl Ethyl Ketone) cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected cis-1,2-Dichloroethene 1.3 Not Detected 5.0 Not Detected Tetrahydrofuran 1.3 Not Detected 3.7 Not Detected Chloroform 1.3 Not Detected 6.2 Not Detected 1,1,1-Trichloroethane 1.3 Not Detected 6.9 Not Detected Cyclohexane 1.3 Not Detected Carbon Tetrachloride 1.3 Not Detected 7.9 Not Detected Carbon Tetrachloride 1.3 Not Detected 7.9 Not Detected Enzene 1.3 Not Detected 1.4.0 Not Detected 1,2-Dichloroethane 1.3 Not Detected 1,2-Dichloroethane 1.3 Not Detected 1,3 Not Detected 1,2-Dichloropropane 1.3 Not Detected 1,3 Not Detected 1,2-Dichloropropane 1.3 Not Detected 1,3 Not Detected 1,3 Not Detected 1,4-Dioxane 1.3 Not Detected 1,3 Not Detected 1,4-Dioxane 1.3 Not Detected 1,3 Not Detected 1,4-Dioxane 1.3 Not Detected 1,3 Not Detected 1,3 Not Detected 1,4-Dioxane 1.3 Not Detected 1,3 Not Detected 1,4-Dioxane 1,3 1,4-Dioxane 1,5-Dichloropropene 1,5-Dichloropropene 1,5-Dichloropropene 1,5-Dichloropropene 1,6-Dioxane 1,7-Dioxane	Hexane	1.3	Not Detected	4.4	Not Detected
cis-1,2-Dichloroethene1.3Not Detected5.0Not DetectedTetrahydrofuran1.3Not Detected3.7Not DetectedChloroform1.3Not Detected6.2Not Detected1,1,1-Trichloroethane1.3Not Detected6.9Not DetectedCyclohexane1.3Not Detected4.3Not DetectedCarbon Tetrachloride1.3Not Detected7.9Not Detected2,2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected4.0Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected1.8Not DetectedBromodichloromethane1.3Not Detected5.7Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.2Not DetectedTolluene1.3Not Detected5.7Not DetectedTolluene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected6.9Not Detected	1,1-Dichloroethane	1.3	Not Detected	5.1	Not Detected
Tetrahydrofuran 1.3 Not Detected 3.7 Not Detected Chloroform 1.3 Not Detected 6.2 Not Detected 1,1,1-Trichloroethane 1.3 Not Detected 6.9 Not Detected Cyclohexane 1.3 Not Detected 4.3 Not Detected 2,2,4-Trimethylpentane 1.3 Not Detected 5.9 Not Detected 2,2,4-Trimethylpentane 1.3 Not Detected 5.9 Not Detected 8enzene 1.3 Not Detected 4.0 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.1 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.2 Not Detected 1,2-Dichloropropane 1.3 Not Detected 6.8 Not Detected 1,2-Dichloropropane 1.3 Not Detected 6.8 Not Detected 1,4-Dioxane 5.0 Not Detected 1.8 Not Detected 1,4-Dioxane 5.0 Not Detected 8.4 Not Detected 6.3 Not Detected 1,4-Dioxane 1.3 Not Detected 8.4 Not Detected 6.3 Not Detected 1.3 Not Detecte	2-Butanone (Methyl Ethyl Ketone)	5.0	Not Detected	15	Not Detected
Chloroform 1.3 Not Detected 6.2 Not Detected 1,1,1-Trichloroethane 1.3 Not Detected 6.9 Not Detected Cyclohexane 1.3 Not Detected 4.3 Not Detected Carbon Tetrachloride 1.3 Not Detected 7.9 Not Detected 2,2,4-Trimethylpentane 1.3 Not Detected 5.9 Not Detected Benzene 1.3 Not Detected 4.0 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.1 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.1 Not Detected 1,2-Dichloropropane 1.3 Not Detected 5.2 Not Detected 1,2-Dichloropropane 1.3 Not Detected 6.8 Not Detected 1,2-Dichloropropane 1.3 Not Detected 5.8 Not Detected 1,4-Dioxane 5.0 Not Detected 1.8 Not Detected 1.3 Not Detected 5.7 Not Detected 1.3 Not Detected 5.2 Not Detected 1.3 Not Detected 5.2 Not Detected 1.3 Not Detected 5.2 Not Detected 5.3 Not Detected 5.7	cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
1,1,1-Trichloroethane1.3Not Detected6.9Not DetectedCyclohexane1.3Not Detected4.3Not DetectedCarbon Tetrachloride1.3Not Detected7.9Not Detected2,2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected4.0Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected5.7Not DetectedTetrachloroethene1.3Not Detected6.9Not Detected	Tetrahydrofuran	1.3	Not Detected	3.7	Not Detected
Cyclohexane 1.3 Not Detected 4.3 Not Detected 2,2,4-Trimethylpentane 1.3 Not Detected 5.9 Not Detected 2,2,4-Trimethylpentane 1.3 Not Detected 5.9 Not Detected 1,2-Dichloroethane 1.3 Not Detected 4.0 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.1 Not Detected 1,2-Dichloroethane 1.3 Not Detected 5.1 Not Detected 1.3 Not Detected 5.2 Not Detected 1,2-Dichloroptopane 1.3 Not Detected 6.8 Not Detected 1,2-Dichloroptopane 1.3 Not Detected 5.8 Not Detected 1,4-Dioxane 5.0 Not Detected 1.8 Not Detected 1.4-Dioxane 5.0 Not Detected 8.4 Not Detected 6.8-Not Detected 1.3 Not Detected 5.7 Not Detected 1.3 Not Detected 5.2 Not Detected 1.3 Not Detected 5.2 Not Detected 1.3 Not Detected 5.7 Not Detected 1.4 Not Detected 5.7 Not Detected 1.4 Not Detected 5.7 Not Detected 1.4 Not Detected 5.7 Not Detect	Chloroform	1.3	Not Detected	6.2	Not Detected
Carbon Tetrachloride1.3Not Detected7.9Not Detected2,2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected4.0Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	1,1,1-Trichloroethane	1.3	Not Detected	6.9	Not Detected
2,2,4-Trimethylpentane1.3Not Detected5.9Not DetectedBenzene1.3Not Detected4.0Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	Cyclohexane	1.3	Not Detected	4.3	Not Detected
Benzene1.3Not Detected4.0Not Detected1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	Carbon Tetrachloride	1.3	Not Detected	7.9	Not Detected
1,2-Dichloroethane1.3Not Detected5.1Not DetectedHeptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	2,2,4-Trimethylpentane	1.3	Not Detected	5.9	Not Detected
Heptane1.3Not Detected5.2Not DetectedTrichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	Benzene	1.3	Not Detected	4.0	Not Detected
Trichloroethene1.3Not Detected6.8Not Detected1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	1,2-Dichloroethane	1.3	Not Detected	5.1	Not Detected
1,2-Dichloropropane1.3Not Detected5.8Not Detected1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	Heptane	1.3	Not Detected	5.2	Not Detected
1,4-Dioxane5.0Not Detected18Not DetectedBromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	Trichloroethene	1.3	Not Detected	6.8	Not Detected
Bromodichloromethane1.3Not Detected8.4Not Detectedcis-1,3-Dichloropropene1.3Not Detected5.7Not Detected4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	1,2-Dichloropropane			5.8	
cis-1,3-Dichloropropene 1.3 Not Detected 5.7 Not Detected 4-Methyl-2-pentanone 1.3 Not Detected 5.2 Not Detected Toluene 1.3 Not Detected 4.7 Not Detected trans-1,3-Dichloropropene 1.3 Not Detected 5.7 Not Detected 1,1,2-Trichloroethane 1.3 Not Detected 6.9 Not Detected Tetrachloroethene 1.3 Not Detected 8.5 Not Detected	1,4-Dioxane	5.0	Not Detected	18	Not Detected
4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	Bromodichloromethane	1.3	Not Detected	8.4	Not Detected
4-Methyl-2-pentanone1.3Not Detected5.2Not DetectedToluene1.3Not Detected4.7Not Detectedtrans-1,3-Dichloropropene1.3Not Detected5.7Not Detected1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected	cis-1,3-Dichloropropene	1.3	Not Detected	5.7	Not Detected
trans-1,3-Dichloropropene 1.3 Not Detected 5.7 Not Detected 1,1,2-Trichloroethane 1.3 Not Detected 6.9 Not Detected Tetrachloroethene 1.3 Not Detected 8.5 Not Detected		1.3	Not Detected	5.2	Not Detected
1,1,2-Trichloroethane1.3Not Detected6.9Not DetectedTetrachloroethene1.3Not Detected8.5Not Detected		1.3	Not Detected	4.7	Not Detected
Tetrachloroethene 1.3 Not Detected 8.5 Not Detected	trans-1,3-Dichloropropene	1.3		5.7	Not Detected
	1,1,2-Trichloroethane	1.3	Not Detected	6.9	Not Detected
2-Hexanone 5.0 Not Detected 21 Not Detected	Tetrachloroethene	1.3	Not Detected	8.5	Not Detected
	2-Hexanone	5.0	Not Detected	21	Not Detected



Client Sample ID: SG-2 Lab ID#: 1210156-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101122 Date of Collection: 10/4/12 1:45:00 PM
Dil. Factor: 2.52 Date of Analysis: 10/12/12 12:02 PM

DII. Factor.	2.32	Date of Affaiysis. 10/12/12 12:02 Five		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	9.7	Not Detected
Chlorobenzene	1.3	Not Detected	5.8	Not Detected
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	Not Detected	5.5	Not Detected
o-Xylene	1.3	Not Detected	5.5	Not Detected
Styrene	1.3	Not Detected	5.4	Not Detected
Bromoform	1.3	Not Detected	13	Not Detected
Cumene	1.3	Not Detected	6.2	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	8.6	Not Detected
Propylbenzene	1.3	Not Detected	6.2	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.2	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.5	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.6	Not Detected
1,2,4-Trichlorobenzene	5.0	Not Detected	37	Not Detected
Hexachlorobutadiene	5.0	Not Detected	54	Not Detected
Naphthalene	5.0	Not Detected	26	Not Detected
TPH ref. to Gasoline (MW=100)	63	110	260	450
1,1-Difluoroethane	5.0	36	14	98

Container Type: 1 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	85	70-130



Client Sample ID: SG-3 Lab ID#: 1210156-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101123 Date of Collection: 10/4/12 4:00:00 PM
Dil. Factor: 2.89 Date of Analysis: 10/12/12 12:27 PM

Dil. Factor:	2.89	Date	of Analysis: 10/1	2/12 12:27 PM
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	1.4	Not Detected	7.1	Not Detected
Freon 114	1.4	Not Detected	10	Not Detected
Chloromethane	14	Not Detected	30	Not Detected
Vinyl Chloride	1.4	Not Detected	3.7	Not Detected
1,3-Butadiene	1.4	Not Detected	3.2	Not Detected
Bromomethane	14	Not Detected	56	Not Detected
Chloroethane	5.8	Not Detected	15	Not Detected
Freon 11	1.4	1.5	8.1	8.5
Ethanol	5.8	Not Detected	11	Not Detected
Freon 113	1.4	Not Detected	11	Not Detected
1,1-Dichloroethene	1.4	Not Detected	5.7	Not Detected
Acetone	14	Not Detected	34	Not Detected
2-Propanol	5.8	Not Detected	14	Not Detected
Carbon Disulfide	5.8	12	18	37
3-Chloropropene	5.8	Not Detected	18	Not Detected
Methylene Chloride	14	Not Detected	50	Not Detected
Methyl tert-butyl ether	1.4	Not Detected	5.2	Not Detected
trans-1,2-Dichloroethene	1.4	Not Detected	5.7	Not Detected
Hexane	1.4	Not Detected	5.1	Not Detected
1,1-Dichloroethane	1.4	Not Detected	5.8	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.8	Not Detected	17	Not Detected
cis-1,2-Dichloroethene	1.4	Not Detected	5.7	Not Detected
Tetrahydrofuran	1.4	Not Detected	4.3	Not Detected
Chloroform	1.4	Not Detected	7.0	Not Detected
1,1,1-Trichloroethane	1.4	Not Detected	7.9	Not Detected
Cyclohexane	1.4	Not Detected	5.0	Not Detected
Carbon Tetrachloride	1.4	Not Detected	9.1	Not Detected
2,2,4-Trimethylpentane	1.4	Not Detected	6.8	Not Detected
Benzene	1.4	Not Detected	4.6	Not Detected
1,2-Dichloroethane	1.4	Not Detected	5.8	Not Detected
Heptane	1.4	Not Detected	5.9	Not Detected
Trichloroethene	1.4	Not Detected	7.8	Not Detected
1,2-Dichloropropane	1.4	Not Detected	6.7	Not Detected
1,4-Dioxane	5.8	Not Detected	21	Not Detected
Bromodichloromethane	1.4	Not Detected	9.7	Not Detected
cis-1,3-Dichloropropene	1.4	Not Detected	6.6	Not Detected
4-Methyl-2-pentanone	1.4	Not Detected	5.9	Not Detected
Toluene	1.4	Not Detected	5.4	Not Detected
trans-1,3-Dichloropropene	1.4	Not Detected	6.6	Not Detected
1,1,2-Trichloroethane	1.4	Not Detected	7.9	Not Detected
Tetrachloroethene	1.4	Not Detected	9.8	Not Detected
2-Hexanone	5.8	Not Detected	24	Not Detected



Client Sample ID: SG-3 Lab ID#: 1210156-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101123 Date of Collection: 10/4/12 4:00:00 PM
Dil. Factor: 2.89 Date of Analysis: 10/12/12 12:27 PM

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Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.4	Not Detected	12	Not Detected
1,2-Dibromoethane (EDB)	1.4	Not Detected	11	Not Detected
Chlorobenzene	1.4	Not Detected	6.6	Not Detected
Ethyl Benzene	1.4	Not Detected	6.3	Not Detected
m,p-Xylene	1.4	Not Detected	6.3	Not Detected
o-Xylene	1.4	Not Detected	6.3	Not Detected
Styrene	1.4	Not Detected	6.2	Not Detected
Bromoform	1.4	Not Detected	15	Not Detected
Cumene	1.4	Not Detected	7.1	Not Detected
1,1,2,2-Tetrachloroethane	1.4	Not Detected	9.9	Not Detected
Propylbenzene	1.4	Not Detected	7.1	Not Detected
4-Ethyltoluene	1.4	Not Detected	7.1	Not Detected
1,3,5-Trimethylbenzene	1.4	Not Detected	7.1	Not Detected
1,2,4-Trimethylbenzene	1.4	Not Detected	7.1	Not Detected
1,3-Dichlorobenzene	1.4	Not Detected	8.7	Not Detected
1,4-Dichlorobenzene	1.4	Not Detected	8.7	Not Detected
alpha-Chlorotoluene	1.4	Not Detected	7.5	Not Detected
1,2-Dichlorobenzene	1.4	Not Detected	8.7	Not Detected
1,2,4-Trichlorobenzene	5.8	Not Detected	43	Not Detected
Hexachlorobutadiene	5.8	Not Detected	62	Not Detected
Naphthalene	5.8	Not Detected	30	Not Detected
TPH ref. to Gasoline (MW=100)	72	370	300	1500
1,1-Difluoroethane	5.8	Not Detected	16	Not Detected

Container Type: 1 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	112	70-130
1-Bromofluorohenzene	86	70-130



Client Sample ID: SG-4 Lab ID#: 1210156-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101124 Date of Collection: 10/4/12 12:50:00 PM
Dil. Factor: 2.64 Date of Analysis: 10/12/12 12:49 PM

Dil. Factor:	2.64	Date	of Analysis: 10/1	2/12 12:49 PM
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	1.3	Not Detected	6.5	Not Detected
Freon 114	1.3	Not Detected	9.2	Not Detected
Chloromethane	13	Not Detected	27	Not Detected
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,3-Butadiene	1.3	Not Detected	2.9	Not Detected
Bromomethane	13	Not Detected	51	Not Detected
Chloroethane	5.3	Not Detected	14	Not Detected
Freon 11	1.3	Not Detected	7.4	Not Detected
Ethanol	5.3	Not Detected	9.9	Not Detected
Freon 113	1.3	Not Detected	10	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Acetone	13	Not Detected	31	Not Detected
2-Propanol	5.3	Not Detected	13	Not Detected
Carbon Disulfide	5.3	Not Detected	16	Not Detected
3-Chloropropene	5.3	Not Detected	16	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
Methyl tert-butyl ether	1.3	Not Detected	4.8	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Hexane	1.3	Not Detected	4.6	Not Detected
1,1-Dichloroethane	1.3	Not Detected	5.3	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.3	Not Detected	16	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Tetrahydrofuran	1.3	Not Detected	3.9	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
1,1,1-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Cyclohexane	1.3	Not Detected	4.5	Not Detected
Carbon Tetrachloride	1.3	Not Detected	8.3	Not Detected
2,2,4-Trimethylpentane	1.3	Not Detected	6.2	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Heptane	1.3	Not Detected	5.4	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
1,2-Dichloropropane	1.3	Not Detected	6.1	Not Detected
1,4-Dioxane	5.3	Not Detected	19	Not Detected
Bromodichloromethane	1.3	Not Detected	8.8	Not Detected
cis-1,3-Dichloropropene	1.3	Not Detected	6.0	Not Detected
4-Methyl-2-pentanone	1.3	Not Detected	5.4	Not Detected
Toluene	1.3	Not Detected	5.0	Not Detected
trans-1,3-Dichloropropene	1.3	Not Detected	6.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
2-Hexanone	5.3	Not Detected	22	Not Detected



Client Sample ID: SG-4 Lab ID#: 1210156-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101124 Date of Collection: 10/4/12 12:50:00 PM
Dil. Factor: 2.64 Date of Analysis: 10/12/12 12:49 PM

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Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Dibromochloromethane	1.3	Not Detected	11	Not Detected
1,2-Dibromoethane (EDB)	1.3	Not Detected	10	Not Detected
Chlorobenzene	1.3	Not Detected	6.1	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
Styrene	1.3	Not Detected	5.6	Not Detected
Bromoform	1.3	Not Detected	14	Not Detected
Cumene	1.3	Not Detected	6.5	Not Detected
1,1,2,2-Tetrachloroethane	1.3	Not Detected	9.1	Not Detected
Propylbenzene	1.3	Not Detected	6.5	Not Detected
4-Ethyltoluene	1.3	Not Detected	6.5	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected
1,3-Dichlorobenzene	1.3	Not Detected	7.9	Not Detected
1,4-Dichlorobenzene	1.3	Not Detected	7.9	Not Detected
alpha-Chlorotoluene	1.3	Not Detected	6.8	Not Detected
1,2-Dichlorobenzene	1.3	Not Detected	7.9	Not Detected
1,2,4-Trichlorobenzene	5.3	Not Detected	39	Not Detected
Hexachlorobutadiene	5.3	Not Detected	56	Not Detected
Naphthalene	5.3	Not Detected	28	Not Detected
TPH ref. to Gasoline (MW=100)	66	Not Detected	270	Not Detected
1,1-Difluoroethane	5.3	Not Detected	14	Not Detected

Container Type: 1 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	112	70-130
4-Bromofluorobenzene	87	70-130



Client Sample ID: Lab Blank Lab ID#: 1210156-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j101118a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/12/12 09:47 AM

Dil. Factor:	1.00	Date of Analysis: 10/12/12 09:47 AM		2/12 09:47 AM
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 12	0.50	Not Detected	2.5	Not Detected
Freon 114	0.50	Not Detected	3.5	Not Detected
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,3-Butadiene	0.50	Not Detected	1.1	Not Detected
Bromomethane	5.0	Not Detected	19	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
Freon 11	0.50	Not Detected	2.8	Not Detected
Ethanol	2.0	Not Detected	3.8	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
3-Chloropropene	2.0	Not Detected	6.3	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Tetrahydrofuran	0.50	Not Detected	1.5	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Cyclohexane	0.50	Not Detected	1.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
2,2,4-Trimethylpentane	0.50	Not Detected	2.3	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Heptane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
1,2-Dichloropropane	0.50	Not Detected	2.3	Not Detected
1,4-Dioxane	2.0	Not Detected	7.2	Not Detected
Bromodichloromethane	0.50	Not Detected	3.4	Not Detected
cis-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
4-Methyl-2-pentanone	0.50	Not Detected	2.0	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
trans-1,3-Dichloropropene	0.50	Not Detected	2.3	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
2-Hexanone	2.0	Not Detected	8.2	Not Detected



Client Sample ID: Lab Blank Lab ID#: 1210156-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	j101118a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/12/12 09:47 AM

1.00	Dutc	Of Allalysis. 10/12	2/12 03.47 AW
Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
0.50	Not Detected	4.2	Not Detected
0.50	Not Detected	3.8	Not Detected
0.50	Not Detected	2.3	Not Detected
0.50	Not Detected	2.2	Not Detected
0.50	Not Detected	2.2	Not Detected
0.50	Not Detected	2.2	Not Detected
0.50	Not Detected	2.1	Not Detected
0.50	Not Detected	5.2	Not Detected
0.50	Not Detected	2.4	Not Detected
0.50	Not Detected	3.4	Not Detected
0.50	Not Detected	2.4	Not Detected
0.50	Not Detected	2.4	Not Detected
0.50	Not Detected	2.4	Not Detected
0.50	Not Detected	2.4	Not Detected
0.50	Not Detected	3.0	Not Detected
0.50	Not Detected	3.0	Not Detected
0.50	Not Detected	2.6	Not Detected
0.50	Not Detected	3.0	Not Detected
2.0	Not Detected	15	Not Detected
2.0	Not Detected	21	Not Detected
2.0	Not Detected	10	Not Detected
25	Not Detected	100	Not Detected
2.0	Not Detected	5.4	Not Detected
	Rpt. Limit (ppbv) 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.	Rpt. Limit (ppbv) Amount (ppbv) 0.50 Not Detected 2.0 Not Detected 2.0 Not Detected 2.0 Not Detected 2.0 Not Detected	Rpt. Limit (ppbv) Amount (ppbv) Rpt. Limit (ug/m3) 0.50 Not Detected 4.2 0.50 Not Detected 3.8 0.50 Not Detected 2.3 0.50 Not Detected 2.2 0.50 Not Detected 2.2 0.50 Not Detected 2.1 0.50 Not Detected 2.4 0.50 Not Detected 3.0 0.50 Not Detected 3.0

Container Type: NA - Not Applicable

,,		Method
Surrogates	%Recovery	Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	86	70-130



Client Sample ID: CCV Lab ID#: 1210156-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101103 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 10/11/12 09:00 PM

Compound	%Recovery
Freon 12	106
Freon 114	95
Chloromethane	106
Vinyl Chloride	92
1,3-Butadiene	84
Bromomethane	89
Chloroethane	90
Freon 11	108
Ethanol	89
Freon 113	92
1,1-Dichloroethene	85
Acetone	92
2-Propanol	93
Carbon Disulfide	88
3-Chloropropene	84
Methylene Chloride	102
Methyl tert-butyl ether	95
trans-1,2-Dichloroethene	89
Hexane	89
1,1-Dichloroethane	101
2-Butanone (Methyl Ethyl Ketone)	99
cis-1,2-Dichloroethene	95
Tetrahydrofuran	99
Chloroform	109
1,1,1-Trichloroethane	105
Cyclohexane	97
Carbon Tetrachloride	114
2,2,4-Trimethylpentane	93
Benzene	107
1,2-Dichloroethane	120
Heptane	107
Trichloroethene	113
1,2-Dichloropropane	106
1,4-Dioxane	103
Bromodichloromethane	120
cis-1,3-Dichloropropene	113
4-Methyl-2-pentanone	93
Toluene	107
trans-1,3-Dichloropropene	112
1,1,2-Trichloroethane	115
Tetrachloroethene	104
2-Hexanone	98



Client Sample ID: CCV Lab ID#: 1210156-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101103 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 10/11/12 09:00 PM

Compound	%Recovery
Dibromochloromethane	118
1,2-Dibromoethane (EDB)	114
Chlorobenzene	97
Ethyl Benzene	109
m,p-Xylene	106
o-Xylene	106
Styrene	95
Bromoform	109
Cumene	109
1,1,2,2-Tetrachloroethane	122
Propylbenzene	118
4-Ethyltoluene	109
1,3,5-Trimethylbenzene	106
1,2,4-Trimethylbenzene	101
1,3-Dichlorobenzene	104
1,4-Dichlorobenzene	103
alpha-Chlorotoluene	105
1,2-Dichlorobenzene	103
1,2,4-Trichlorobenzene	93
Hexachlorobutadiene	98
Naphthalene	100
TPH ref. to Gasoline (MW=100)	100
1,1-Difluoroethane	98

Container Type: NA - Not Applicable

		Method Limits
Surrogates	%Recovery	
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	110	70-130
4-Bromofluorobenzene	89	70-130



Client Sample ID: LCS Lab ID#: 1210156-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101104 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 10/11/12 09:26 PM

Compound	%Recovery
Freon 12	116
Freon 114	102
Chloromethane	116
Vinyl Chloride	98
1,3-Butadiene	91
Bromomethane	93
Chloroethane	96
Freon 11	115
Ethanol	90
Freon 113	99
1,1-Dichloroethene	95
Acetone	96
2-Propanol	99
Carbon Disulfide	116
3-Chloropropene	104
Methylene Chloride	107
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	108
Hexane	94
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	99
cis-1,2-Dichloroethene	97
Tetrahydrofuran	100
Chloroform	112
1,1,1-Trichloroethane	110
Cyclohexane	99
Carbon Tetrachloride	120
2,2,4-Trimethylpentane	94
Benzene	110
1,2-Dichloroethane	126
Heptane	107
Trichloroethene	118
1,2-Dichloropropane	112
1,4-Dioxane	106
Bromodichloromethane	124
cis-1,3-Dichloropropene	120
4-Methyl-2-pentanone	97
Toluene	109
trans-1,3-Dichloropropene	111
1,1,2-Trichloroethane	111
Tetrachloroethene	102
2-Hexanone	96



Client Sample ID: LCS Lab ID#: 1210156-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101104 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 10/11/12 09:26 PM

Compound	%Recovery
Dibromochloromethane	112
1,2-Dibromoethane (EDB)	113
Chlorobenzene	96
Ethyl Benzene	105
m,p-Xylene	103
o-Xylene	104
Styrene	93
Bromoform	105
Cumene	107
1,1,2,2-Tetrachloroethane	117
Propylbenzene	112
4-Ethyltoluene	90
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	90
1,3-Dichlorobenzene	96
1,4-Dichlorobenzene	96
alpha-Chlorotoluene	96
1,2-Dichlorobenzene	95
1,2,4-Trichlorobenzene	85
Hexachlorobutadiene	88
Naphthalene	100
TPH ref. to Gasoline (MW=100)	Not Spiked
1,1-Difluoroethane	Not Spiked

Container Type: NA - Not Applicable

		Method Limits
Surrogates	%Recovery	
Toluene-d8	108	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	90	70-130



Client Sample ID: LCSD Lab ID#: 1210156-07AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101105 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 10/11/12 09:44 PM

Compound	%Recovery
Freon 12	114
Freon 114	98
Chloromethane	115
Vinyl Chloride	98
1,3-Butadiene	87
Bromomethane	92
Chloroethane	92
Freon 11	114
Ethanol	87
Freon 113	96
1,1-Dichloroethene	93
Acetone	98
2-Propanol	97
Carbon Disulfide	117
3-Chloropropene	100
Methylene Chloride	105
Methyl tert-butyl ether	101
trans-1,2-Dichloroethene	105
Hexane	93
1,1-Dichloroethane	106
2-Butanone (Methyl Ethyl Ketone)	98
cis-1,2-Dichloroethene	98
Tetrahydrofuran	100
Chloroform	113
1,1,1-Trichloroethane	111
Cyclohexane	102
Carbon Tetrachloride	123
2,2,4-Trimethylpentane	96
Benzene	105
1,2-Dichloroethane	119
Heptane	103
Trichloroethene	112
1,2-Dichloropropane	106
1,4-Dioxane	101
Bromodichloromethane	116
cis-1,3-Dichloropropene	111
4-Methyl-2-pentanone	88
Toluene	106
trans-1,3-Dichloropropene	109
1,1,2-Trichloroethane	114
Tetrachloroethene	101
2-Hexanone	96



Client Sample ID: LCSD Lab ID#: 1210156-07AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: j101105 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 10/11/12 09:44 PM

Compound	%Recovery
Dibromochloromethane	114
1,2-Dibromoethane (EDB)	114
Chlorobenzene	96
Ethyl Benzene	105
m,p-Xylene	104
o-Xylene	105
Styrene	93
Bromoform	103
Cumene	108
1,1,2,2-Tetrachloroethane	121
Propylbenzene	117
4-Ethyltoluene	101
1,3,5-Trimethylbenzene	102
1,2,4-Trimethylbenzene	97
1,3-Dichlorobenzene	102
1,4-Dichlorobenzene	100
alpha-Chlorotoluene	100
1,2-Dichlorobenzene	101
1,2,4-Trichlorobenzene	92
Hexachlorobutadiene	92
Naphthalene	106
TPH ref. to Gasoline (MW=100)	Not Spiked
1,1-Difluoroethane	Not Spiked

Container Type: NA - Not Applicable

		Method Limits
Surrogates	%Recovery	
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	89	70-130

CHAIN OF CUSTODY RECORD PROJECT NUMBER.
7628,000,000
SAMPLED BY: (SIGNATURE/PRINT) PROJECT NUMBER: Jordan Ranch PROJECT MANAGER: Johnson REMARKS ROUTING: E-MAIL sjohns@engeo.com i m john son Charlespy Scott Johns REQUIRED DETECTION LIMITS C_{i} SAMPLE NUMBER NUMBER OF DATE CONTAINER MATRIX PRESERVATIVE CONTAINERS 56-1 10/4/12 121:27 Vapo Summer NA 13145 A (20 56-3 16:00 03/2 12:50 X MIA RELINQUISHED BY: (SIGNATURE) RECEIVED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE) RECEIVED BY: (SIGNATURE) 10/4/12/19:00 RECEIVED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE) DATE/TIME RECEIVED BY: (SIGNATURE) RELINQUISHED BY: (SIGNATURE) RECEIVED FOR LABORATORY BY: (SIGNATURE) . Stendard S-Dry TAT **EN** GEO 6399 SAN IGNACIO AVENUE, SUITE 150 · Leak Test Difluoroethane. SAN JOSE, CALIFORNIA 95119 (408) 574-4900 FAX (888) 279-2698 INCORPORATED WWW.ENGEO.COM DISTRIBUTION: ORIGINAL ACCOMPANIES SHIPMENT; COPY TO PROJECT FIELD FILES Y None Temp NIA

Subject:

Jordan Ranch Property - Former Leaking Underground Storage Tank

Dublin, California

PERJURY STATEMENT

"I declare, that to the best of my knowledge at the present time, the information and/or recommendations contained in the attached document are true and correct."

Submitted by Responsible Party:

ROBERT RADADOVICH

BJP-ROF Jordan Ranch, LLC 5000 Hopyard Road, #170

Pleasanton, CA 94588