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February 12, 2016

Ms. Karel Detterman
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

I, Bob Winet, hereby authorize ERAS Environmental, Inc. to submit the Limited Phase II Subsurface Investigation for 1091 Calcot Place, Oakland, California, dated February 12, 2016 to the Alameda County Health Care Services Agency.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Signature: 

Printed Name: Bob Winet

Mr. Bob Winet
East Bay Lofts LLC
36966 Pinto Palm Street
Rancho Mirage, CA 92270
~~bwinet3@verizon.net~~
winetrobent@yahoo.com

ERAS

Environmental, Inc.

1533 B Street

Hayward, CA 94541

Phone (510) 247-9885 Facsimile: (510) 886-5399

info@eras.biz

LIMITED PHASE II SUBSURFACE INVESTIGATION

AT

**1091 Calcot Place
Oakland, California**

ERAS PROJECT NUMBER: 14229D

Prepared for

Mr. Bob Winet
East Bay Lofts LLC
36966 Pinto Palm Street
Rancho Mirage, CA 92270

February 12, 2016

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CERTIFICATION

This **Limited Phase II Subsurface Investigation** at 1019 Calcot Place in Oakland, California, has been prepared by ERAS Environmental, Inc. (ERAS) under the professional supervision of the Registered Geologist whose signature appears hereon.

This report was prepared in general accordance with the accepted standard of practice that exists in Northern California at the time the investigation was performed. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies.

Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted professional practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

This report may be used only by the client and only for the purposes stated within a reasonable time from its issuance. Land use, site conditions (both on-site and off-site) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this report shall notify ERAS of such intended use. Based on the intended use of report, ERAS may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release ERAS from any liability resulting from the use of this report by any unauthorized party.

Sincerely,
ERAS Environmental, Inc.



Curtis Payton
California Registered Professional Geologist 5608



Andrew Savage
Project Geologist

February 12, 2016

1.0 INTRODUCTION

The following report presents the results of the collection of soil and groundwater samples to characterize the lateral and vertical extent of contamination at a commercial site located at 1091 Calcot Place in Oakland, California (the "Property").

A previous subsurface investigation conducted by ERAS on the Property identified contamination including elevated concentrations of petroleum hydrocarbons quantified as diesel and oil range organics (TPH-dro¹, and TPH-oro).

This report was prepared to further investigate contamination near the former fuel oil underground storage tanks (USTs) so that an environmental site case closure can be obtained from the Alameda County Environmental Health Care Services Agency (ACHCSA).

The Property is located on the southeast side of Hegenberger Road near the intersection of Hegenberger Road and Airport Access Road in the southern portion of the City of Oakland. The Property consists of an approximately 1.17-acre rectangular shaped parcel of land that is improved with an approximately 1,300-square foot one story commercial building and associated paved areas. The Property is currently used for a parking lot/storage yard.

The location of the Property is shown on **Figure 1**. The layout of the Property is shown on **Figure 2**.

1.1 BACKGROUND

The history and the description of the Property is based on information obtained during a Phase 1 Environmental Site Assessment conducted by ERAS in 2014.

The Property is located in an area of mixed commercial and residential land uses. The Property was occupied by a parking lot for live/work lofts at 1091 Calcot Place and storage and repair of personal automobiles and vehicles formerly used in movie production.

To the northeast of the Property was Southern Pacific Railroad. To the southeast was Calcot Place and across the street was a commercial building at 1092 Calcot Place. To the west of the Property was Nimitz Freeway (I-880). The Property also wrapped around the 1091 Calcot Building which according to signs was formerly occupied by California Cotton Mills. The building was indicated to have been built in 1883. The former California Cotton Mill building is now occupied by live/work lofts.

The Property contained parking and storage space along with one small building of brick

¹ TPH-gro, TPH-dro, and TPH-oro are methods that compare analytical results to standards for gasoline, diesel and motor oil, respectively. Therefore analytical results are estimates of quantities based on what would be expected for the range of hydrocarbon results for the standard. Gasoline range organics (gro) are those hydrocarbon compounds that are in the range of C6 to C10, diesel range organics (dro) are those hydrocarbon compounds that are in the range of C10 to C23, and oil range organics (oro) are those hydrocarbon compounds that are in the range of C18 to C36. There can be overlap in reporting methods as well as identification of compounds that fall within the standard that may not necessarily be derived from gasoline, diesel, or oil.

construction on a concrete slab foundation. The building was located on the far northwestern corner of the Property. The building was full of vehicles, parts, and various other items for the restoration of vehicles.

The yard area was divided into two areas. The southeastern-most portion was an asphalt paved parking area for the live/work lofts at 1091 Calcot Place. No leaks or spills were observed in this area other than deminimus of oil spotting from parked vehicles. None of the oil spotting was in the area of cracks or drains. The northeastern portion of the Property was an asphalt paved yard area used for the storage of vehicles, storage containers, storage trailers, and various other automotive items.

Septic systems, drywells, monitoring wells or evidence of subsurface investigations were not observed on the Property by ERAS. No evidence of aboveground storage tanks (ASTs) or underground storage tanks (USTs) were observed on the Property by ERAS. No evidence of leakage, spillage, and dumping of regulated material was observed on the Property by ERAS.

1.2 PREVIOUS SUBSURFACE INVESTIGATIONS

ERAS Environmental conducted a subsurface investigation of the Property on December 23, 2014 that included the drilling of three soil borings and the collection of groundwater samples. The soil borings were drilled directly in the area of the former USTs. The results of the analysis are summarized on **Table 2**.

The results of the investigation indicated the former presence of the USTs on the Property have impacted the subsurface environmental conditions beneath the Property at concentrations above the ESLs. ERAS concluded that additional investigations would likely be needed to characterize the nature and extent of the petroleum hydrocarbon contaminants detected as well as typical semi-volatile organic compounds found in fuel and oil blends.

ERAS recommended the report be provided to the Alameda County Department of Environmental Health (ACDEH) and the California Regional Water Quality Control Board (RWQCB) for further oversight.

The ACDEH requested a work plan for further investigation in correspondence dated April 14, 2015. ERAS prepared a work plan dated August 31, 2015 which was approved by the ACDEH in correspondence dated November 20, 2015. The ACDEH requested that soil samples be collected from depth intervals of 0-5 feet bgs and 5-10 feet bgs. The ACDEH also requested that all groundwater and soil samples be analyzed for TPH-gro, TPH-dro, and TPH-oro by EPA Method 8015, full scan volatile organic compounds (VOCs) including naphthalene by EPA Method 8260. It was also requested that all soil samples be analyzed for semi volatile organic compounds (SVOC's) by EPA Method 8270 and that polycyclic aromatic hydrocarbons (PAHs) be analyzed by Select Ion Monitoring (SIM) Mode.

2.0 REGIONAL GEOLOGY/HYDROLOGY

The Property is in the southern part of the City of Oakland in the San Francisco Bay area. The San Francisco Bay area occupies a broad alluvial valley that slopes gently northward toward Oakland Bay and is flanked by alluvial fans deposited at the foot of the Diablo Range to the east and the Santa Cruz Mountains to the west. The northern part of the valley is called the Santa Clara Valley. Surface topography in the immediate vicinity of the Property is gently sloping down to the southwest towards tidally influenced Brooklyn Basin Tidal Canal.

The Property is at an elevation of approximately 15 feet above Mean Sea Level according to the United States Geological Survey (USGS) Oakland East Quadrangle California 7.5 Minute Series topographic map.

Materials underlying the site are unconsolidated deposits of near shore and beach sediments, deposited in Oakland Bay at higher sea level stands. At shallow depths beneath these sediments are chert, greywacke, serpentinite and shale bedrock that are a part of the Cretaceous to Jurassic-aged Franciscan Formation. Bedrock is exposed to the west and north on the upland surfaces.

The subject site is located on the San Francisco Bay Plain in the northernmost part of the Santa Clara Valley Groundwater Basin, (DWR, 1967), the surface of which slopes gently down toward the Brooklyn Basin Tidal Canal.

The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional groundwater flow direction in the area of the Property is estimated to be toward the southwest toward the Brooklyn Basin Tidal Canal.

Based on the subsurface investigation conducted by ERAS, the subsurface vadose zone lithology encountered consisted of silty clay underlain by the water bearing zone which consisted of silt and silty sand. Groundwater was encountered at depths ranging from 3 to 16 feet bgs.

3.0 WORK PERFORMED

3.1 SCOPE OF INVESTIGATION

Scope of work conducted by ERAS for this investigation is as follows.

- Obtained a permit for drilling from the Alameda County Public Works Department (ACPWD).
- Cleared the boring locations for the presence of utilities by notifying Underground Service Alert and employed a private underground locating/clearance service.
- Advanced four borings using a direct push sample rig to approximately 24 feet bgs in the vicinity of the former USTs. These borings were continuously logged by a field geologist.
- A soil sample was collected from a depth range of 0-5 feet bgs and a soil sample was collected from a depth range of 5-10 feet bgs for laboratory analysis.
- A groundwater sample was collected from each boring for chemical analysis.
- The soil samples were analyzed for TPH-gro, TPH-dro, and TPH-oro by EPA Method 8015, volatile organic compounds (VOCs) including naphthalene by EPA Method 8260B, semi volatile organic compounds (SVOCs) by EPA Method 8270, along with polycyclic aromatic hydrocarbons (PAHs) by Select Ion Monitoring (SIM) Mode.
- The groundwater samples from the borings were analyzed for TPH-gro, TPH-dro, and TPH-oro by EPA Method 8015, and VOCs including naphthalene by EPA Method 8260B.

3.2 BORING LOCATIONS AND SAMPLING

ERAS procured a drilling permit from the ACPWD prior to drilling activities which is included in **Appendix A**. The locations of the borings are shown on **Figure 2**. The Standard Operating Procedures for direct-push sampling is included in **Appendix B**.

Four borings (designated B-4, B-5, B-6, and B-7) were advanced using a direct push sample rig to a maximum of approximately 24 feet in the vicinity of the former USTs in an attempt to vertically and horizontally delineate the extent of the contamination. These borings were continuously logged.

Soil was continuously cored for lithologic logging and monitored using an organic vapor meter (OVM) for indications of contamination. The soil cores were logged by ERAS geologist Andrew Savage.

The subsurface lithology encountered consisted of fill including brick, concrete rubble, and gravel to a depth of 1.5-7 feet bgs which was underlain by silty clay to a depth of 14.5-15 feet bgs. The groundwater bearing zone consisted of a thin silty sand or clayey silt zone at 14.5-15 feet bgs underlain by stiff silty clay. Details of subsurface conditions are provided on the soil

boring logs in **Appendix C**.

No evidence of petroleum hydrocarbon impact was observed in the form of strong odors, discoloration or elevated OVM readings in boring B-4. Borings B-5, B-6, and B-7 all yielded petroleum odor.

A soil sample was collected from depth ranges of 0-5 feet and 5-10 feet bgs from each boring. Groundwater samples were collected from each boring. The soil and groundwater samples were kept chilled pending transport under chain-of-custody procedures to a California certified environmental analytical laboratory.

3.3 ANALYTICAL RESULTS

The soil samples were analyzed for TPH-gro, TPH-dro, and TPH-oro by EPA Method 8015, VOCs including naphthalene by EPA Method 8260B, SVOCs by EPA Method 8270, along with PAHs by SIM Mode.

The groundwater samples from the borings were analyzed for TPH-gro, TPH-dro, and TPH-oro by EPA Method 8015, and VOCs including naphthalene by EPA Method 8260B.

Soil

No concentrations of TPH-gro or TPH-oro were detected at concentrations exceeding the ESL set forth by the RWQCB. Boring B-7 contained no concentration of TPH-dro above the method detection limit (MDL) in the shallow 3.5-4 foot bgs sample however a concentration of TPH-dro was detected at a concentration of 470 mg/Kg in the sample collected from 7.5-8 feet bgs which exceeded the ESL of 110 mg/Kg. No other concentrations of TPH-dro were detected at concentrations exceeding the ESL in the remaining samples collected. The tabulated results for petroleum hydrocarbons in soil are displayed on **Table 1**.

No concentrations of VOC's were detected in the soil samples collected with the exception of a concentration of naphthalene which was detected in the deeper 7.5-8 foot sample collected from boring B-7. Naphthalene was detected at a concentration of 2.0 mg/Kg which exceeded the ESL of 1.2 mg/Kg. The tabulated results for VOC's in soil are displayed on **Table 2**.

SVOC's detected in the samples collected which exceeded their respective ESL included 2-methylnaphthalene and phenol. A concentration of 2-methylnaphthalene was detected in the deeper sample collected from 7.5-8 feet bgs in boring B-7. It was detected at a concentration of 8.3 mg/Kg which exceeded the ESL of 0.25 mg/Kg. Phenol was detected at concentrations ranging from 0.30 to 0.59 mg/Kg in the shallower samples collected from 3.5-4 feet bgs in borings B-5, B-6, and B-7 which exceeded the ESL of 0.076 mg/Kg. No concentrations above the MDL were detected in the deeper samples collected from these borings. The tabulated results for SVOC's in soil are displayed on **Table 3**.

Numerous concentrations of PAH's were detected in the soil samples collected, however only two compounds, benzo (a) pyrene and 2-methylnaphthalene, were detected at concentrations exceeding their respective ESL's. Benzo (a) pyrene was detected at a concentration of 0.77

mg/Kg in the shallower sample collected from 3.5-4 feet bgs in boring B-4 which exceeded the ESL of 0.13 mg/Kg. No concentration was detected in the deeper sample collected from 9.5-10 feet bgs. 2-methylnaphthalene was detected at a concentration of 7.5 mg/Kg in the deeper sample collected from 7.5-8 feet bgs in boring B-7 which exceeded the ESL of 0.25 mg/Kg. The tabulated results for PAH's in soil are displayed on **Table 4**.

Groundwater

No concentrations of TPH-gro were detected above the MDL in the groundwater samples collected during this investigation.

TPH-dro was detected at concentrations exceeding the ESL in borings B-5, B-6, and B-7 ranging from 140 µg/L to 6,000 µg/L which exceeds the ESL of 100 µg/L. Boring B-4 contained no concentration of TPH-dro above the MDL.

TPH-oro was only detected above the ESL in the groundwater sample collected from boring B-5 at a concentration of 6,600 µg/L which exceeded the ESL of 100 µg/L. No concentrations of TPH-oro were detected above the ESL in the samples collected from borings B-4, B-6, and B-7.

The only detected VOC above the ESL was naphthalene in boring B-7. Naphthalene was detected at 1.4 µg/L above the ESL of 1.2 µg/L.

The tabulated results for the analysis of groundwater are displayed on **Table 5**.

4.0 UPDATED SITE CONCEPTUAL MODEL

A summary of the current site conceptual model is included on **Table 6** and the current data gaps and proposed investigation are summarized on **Table 7**. A well survey was also conducted and is included in **Appendix E**.

4.1 HYDROGEOLOGIC SETTING

A small shallow (approximately 3 feet bgs) perched water zone appears to be located in the vicinity of the former USTs however water volumes of this zone were not sufficient for sampling during the latest sampling event. The main shallow groundwater zone appears to be present in the 11-15 foot bgs zone. The main shallow water-bearing zone appears to be located in thin clayey sand, sand, clayey silt, and silty sand units interbedded within clay. Groundwater is generally under water-table conditions, but may be locally confined by clay in the upper portion of the water-bearing zone. The base of the shallow water bearing zone appears to be approximately 16 feet bgs and is underlain by a stiff clay which extends to at least 24 feet bgs.

At the time of drilling ERAS noted a large high pressure water line which serviced a fire hydrant in the yard area which ran along the northeastern Property boundary near the former USTs and may act as a conduit along which contamination could migrate.

4.2 EXTENT OF CONTAMINATION

Soil

Shallow soil, 3.5-4 feet bgs, on the Property appears to have been impacted by phenol at concentrations which exceed the ESL and range from 0.30-0.59 mg/Kg. The shallow soil sample collected from boring B-4 was also found to contain a concentration of benzo (a) pyrene (0.77 mg/Kg) which exceeded the ESL. The remaining detected compounds which exceed the ESL were detected in the deeper sample, 7.5-8 feet bgs, collected from boring B-7 which was in a close vicinity to the former USTs. This sample contained concentrations of TPH-dro, naphthalene, and 2-methylnaphthalene which exceeded their respective ESL's.

Groundwater

Based on the results of this investigation the bulk of the contamination which exceeds the ESL's appears to be limited to the area of borings B-1, B-2, B-3, and B-5. The extent of the contamination has been characterized in the down-gradient direction by boring B-4 which did not contain any concentrations of TPH-gro, TPH-dro, TPH-oro, or VOC's above their respective MDL's.

The most up-gradient boring B-7 was located along the Property line and the Western/Southern Pacific Railroad. This boring was found to contain concentrations of TPH-dro and naphthalene just above their respective ESL.

Cross-gradient borings B-5 and B-6 yielded groundwater samples with elevated concentrations of TPH-dro above the ESL. Boring B-5 also yielded a sample with a concentration of TPH—oro above the ESL. Contamination associated with the former UST's may be migrating along a large high pressure fire suppression line observed to have been located in the yard area and ran

along the northeastern Property boundary. Cross gradient boring B-6 was found to only contain a concentration of TPH-dro at 180 µg/L which was just above the ESL of 100 µg/L.

Proposed Work

As indicated on **Table 7** ERAS proposes that two additional borings be advanced along the fire suppression line observed on the Property in an attempt to delineate the extent of petroleum impacted groundwater in the cross-gradient/southeastern direction.

4.3 WELL SURVEY

A well survey has been conducted for the Property. ERAS requested all well data for a 2,000 foot radius from the Alameda County Public Works Department. Only one site was identified which contained a well for commercial or residential water supply. This site was 1100 29th Avenue in Oakland. This site was located approximately 3,200 feet to the southeast of the Property in a cross-gradient direction. Based on the distance and direction contamination associated with the Property is unlikely to impact this well.

A table of identified wells within the 2,000 foot radius and a map displaying the location of 1100 29th Avenue in relation to the Property is included in **Appendix E**.

5.0 REFERENCES

California Department of Water Resources, Evaluation of Ground Water Resources South Bay, Appendix A: Geology, Bulletin 118-1, August 1967.

California Regional Water Quality Control Board, Water Quality Control Plan, San Francisco Bay Basin Region (2), December 1986.

ERAS Environmental, Inc., Limited Soil and Groundwater Investigation Report, APN 19-15-11, 1091 Calcot Place, Oakland, California, January 9, 2015.

ERAS Environmental, Inc., Work Plan for Limited Phase II Subsurface Investigation, 1091 Calcot Place, Oakland, August 31, 2015.

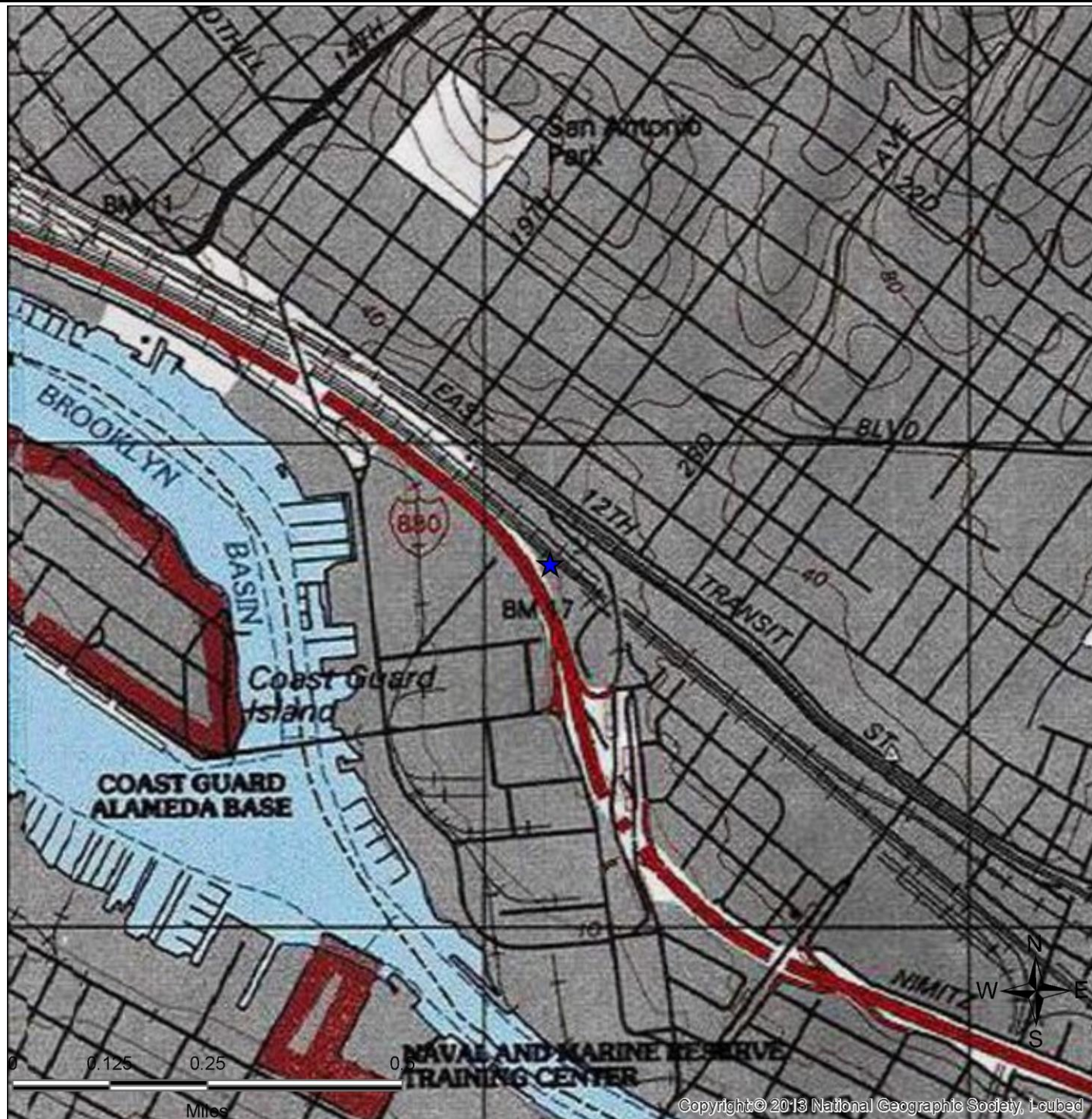
Goldman, Harold B., Geology of Burlingame Bay prepared for Burlingame Bay Conservation and Development Commission, February 1967.

Helley, E.J., La Joie, K.R., Spangle, W.E., and Blair, M.L., Flatland Deposits of the Burlingame Bay Region, California - their geology and engineering properties and their importance to comprehensive planning, U.S. Geological Survey Professional Paper 943, 1974.

P&D Environmental Inc., Groundwater Monitoring and Sampling Report, (October 18, 2011 Sampling Event), Mel Senna Brake Service, 2301 East 12th Street, Oakland, California, December 18, 2013.

Sanborn fire insurance maps were reviewed at the San Francisco Public Library. Sanborn maps dated 1911, 1950, and 1951 were reviewed.

FIGURES



SITE LOCATION TOPOGRAPHIC MAP

U.S. Geological Survey. Oakland East Quadrangle, 7.5 Minute Series

ERAS Environmental, Inc.

19-55-11 Calcot Pl.
Oakland, CA

FIGURE: 1
JOB:
DATE: 10/20/2014

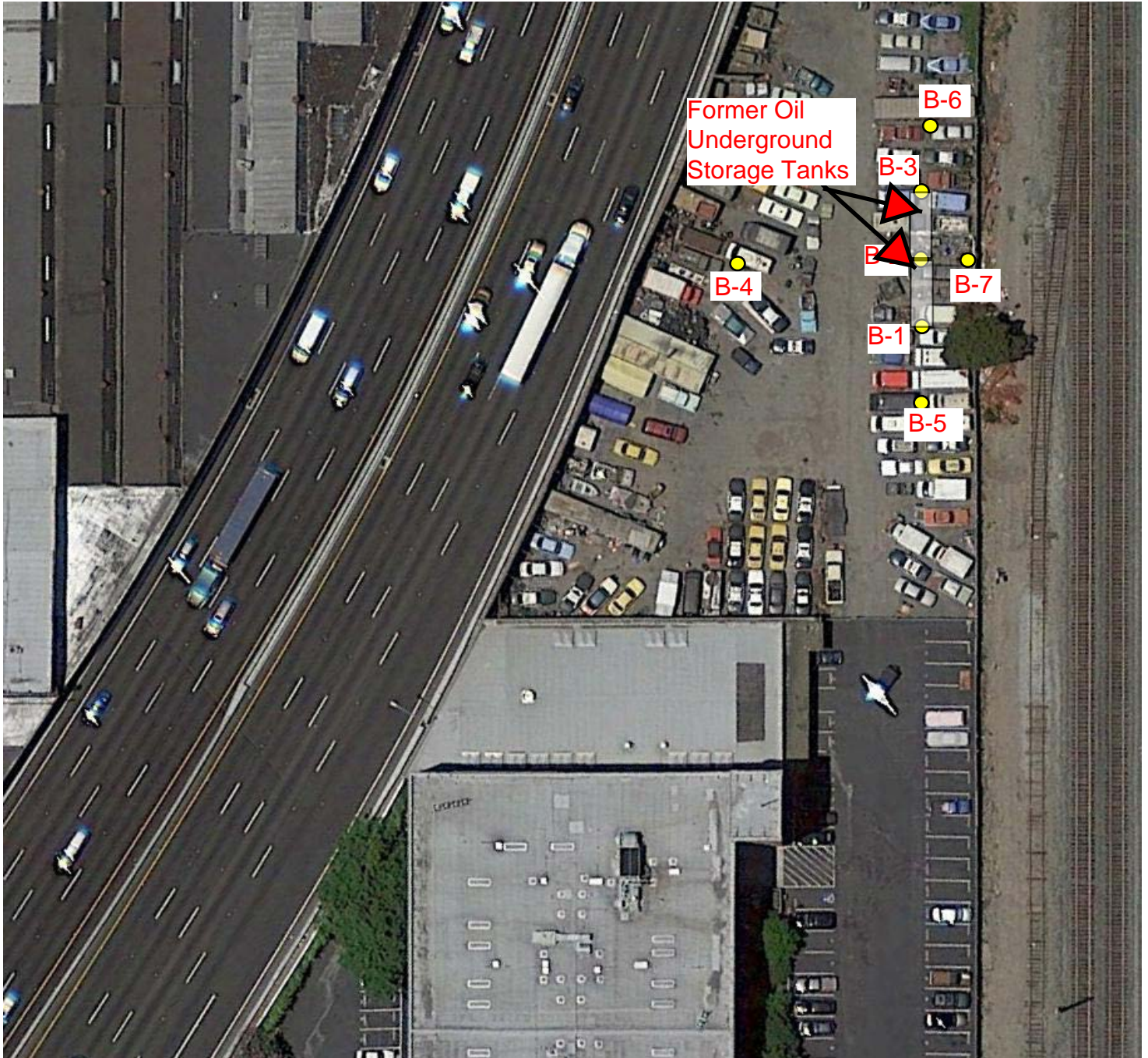
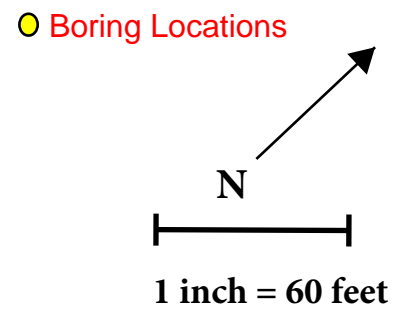


FIGURE 2
BORING LOCATION MAP
1091 Calcot Place, Oakland
ERAS Project # 14229D



TABLES

TABLE 1. ANALYTICAL RESULTS - SOIL - HYDROCARBONS

1091 Calcot Place, Oakland

Sample ID	Date	TPH-gro	TPH-dro	TPH-dro*	TPH-oro	TPH-oro*
		(mg/Kg)				
B-4, 3-3.5	20-Jan-16	<1.0	8.9	NA	78	NA
B-4 9.5-10	20-Jan-16	<1.0	<0.74	NA	3.0 J	NA
B-5, 3.5-4	20-Jan-16	<1.0	<0.74	NA	5.4	NA
B-5, 7.5-8	20-Jan-16	3.1	79	NA	180	NA
B-6, 3.5-4	20-Jan-16	<1.0	<0.74	NA	3.6 J	NA
B-6, 7.5-8	20-Jan-16	3.9	51	NA	63	NA
B-7, 3.5-4	20-Jan-16	<1.0	<0.74	NA	2.8 J	NA
B-7, 7.5-8	20-Jan-16	430	470	NA	190	NA
ESL <3m		500	110		500	
ESL >3m		770	110		1,000	

Notes

NA = Not Analyzed

(mg/Kg) = Milligrams per Kilogram

TPH-gro = Total petroleum hydrocarbons quantified as gasoline range organics

TPH-dro = Total petroleum hydrocarbons quantified as diesel range organics

TPH-oro = Total petroleum hydrocarbons quantified as oil range organics

TPH-dro* = Total petroleum hydrocarbons quantified as diesel range organics run without silica gel cleanup

TPH-oro* = Total petroleum hydrocarbons quantified as oil range organics run without silica gel cleanup

ESL <3m = environmental screening limits set forth by the RWQCO for soil shallower than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

ESL >3m = environmental screening limits set forth by the RWQCO for soil deeper than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

Bold Type Indicates Reported Value Above the ESL.

J indicates an estimated value between the reporting limit and the method detection limit

TABLE 2. ANALYTICAL RESULTS - SOIL - VOC

1091 Calcot Place, Oakland

Sample ID	Date	Naphthalene	MTBE	sec-Butyl-benz	IPB	4-IPT
		(mg/Kg)				
B-4, 3-3.5	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-4, 9.5-10	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-5, 3.5-4	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-5, 7.5-8	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-6, 3.5-4	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-6, 7.5-8	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-7, 3.5-4	20-Jan-16	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
B-7, 7.5-8	20-Jan-16	2.0	<0.10	0.35	0.76	0.12
ESL <3m		1.2	0.023	-	-	-
ESL >3m		1.2	0.023	-	-	-

Notes

NA = Not Analyzed

(mg/Kg) = Milligrams per Kilogram

MTBE = Methyl tert butyl ether

sec-Butyl-benz = sec-Butyl-benzene

IPB = Isopropylbenzene

4-IPT = 4-Isopropyl toluene

ESL <3m = environmental screening limits set forth by the RWQCQ for soil shallower than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

ESL >3m = environmental screening limits set forth by the RWQCQ for soil deeper than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

Bold Type Indicates Reported Value Above the ESL.

TABLE 3. ANALYTICAL RESULTS - SOIL - SVOC

1091 Calcot Place, Oakland

Sample ID	Date	2-Methnap	Phenol	Fluorene
		(mg/Kg)		
B-4, 3-3.5	20-Jan-16	<10	<10	<10
B-4, 9.5-10	20-Jan-16	<0.25	<0.25	<0.25
B-5, 3.5-4	20-Jan-16	<0.25	0.59	<0.25
B-5, 7.5-8	20-Jan-16	<2.0	<2.0	<2.0
B-6, 3.5-4	20-Jan-16	<0.25	0.30	<0.25
B-6, 7.5-8	20-Jan-16	<0.25	<0.25	<0.25
B-7, 3.5-4	20-Jan-16	<0.25	0.53	<0.25
B-7, 7.5-8	20-Jan-16	8.3	<1.2	1.3
ESL <3m		0.25	0.076	8.9
ESL >3m		0.25	0.076	8.9

Notes

NA = Not Analyzed

(mg/Kg) = Miligrams per Kilogram

2-Methnap = 2-Methylnaphthalene

ESL <3m = environmental screening limits set forth by the RWQCQ for soil shallower than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

ESL >3m = environmental screening limits set forth by the RWQCQ for soil deeper than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

Bold Type Indicates Reported Value Above the ESL.

TABLE 4. ANALYTICAL RESULTS - SOIL - PAH

1091 Calcot Place, Oakland

Sample ID	Date	Fluorene	Benzo (a)	1-Methnap	2-Methnap	Naphth	Phenan	Pyrene
		(mg/Kg)						
B-4, 3-3.5	20-Jan-16	<0.020	0.77	<0.020	<0.020	<0.020	0.36	0.84
B-4, 9.5-10	20-Jan-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
B-5, 3.5-4	20-Jan-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
B-5, 7.5-8	20-Jan-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.029
B-6, 3.5-4	20-Jan-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
B-6, 7.5-8	20-Jan-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.037
B-7, 3.5-4	20-Jan-16	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
B-7, 7.5-8	20-Jan-16	1.2	<0.50	3.0	7.5	1.0	0.58	<0.50
ESL <3m		8.9	0.13	-	0.25	1.2	11	85
ESL >3m		8.9	0.13	-	0.25	1.2	11	85

Notes

NA = Not Analyzed

(mg/Kg) = Milligrams per Kilogram

Benzo (a) = Benzo (a) pyrene

1-Methnap = 1-Methylnaphthalene

2-Methnap = 2-Methylnaphthalene

Naphth = Naphthlene

Phenan = Phenanthrene

ESL <3m = environmental screening limits set forth by the RWOCQ for soil shallower than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

ESL >3m = environmental screening limits set forth by the RWOCQ for soil deeper than 3 meters on a commercial Property where groundwater is considered a potential source of drinking water

Bold Type Indicates Reported Value Above the ESL.

TABLE 5. ANALYTICAL RESULTS - GROUNDWATER

1091 Calcot Place, Oakland

Sample ID	Date	TPH-gro	TPH-dro	TPH-dro*	TPH-oro	TPH-oro*	VOC
		(µg/L)					
B-1	23-Dec-14	NA	79	NA	440	NA	NA
B-2	23-Dec-14	NA	6,100	NA	5,100	NA	NA
B-3	23-Dec-14	NA	15,000	20,000	23,000	86,000	NA
B-4	20-Jan-16	<50	<50	NA	<65	NA	ND
B-5	20-Jan-16	<50	6,000	NA	6,600	NA	ND
B-6	20-Jan-16	<50	180	NA	85 J	NA	BESL
B-7	20-Jan-16	<50	140	NA	86 J	NA	1.4¹
ESL		100	100	100	100	100	-

Notes

NA = Not Analyzed

ND = Below laboratory detection limits

BESL = All concentrations detected were below the ESL

(µg/L) = Micrograms per liter

TPH-gro = Total petroleum hydrocarbons quantified as gasoline range organics

TPH-dro = Total petroleum hydrocarbons quantified as diesel range organics

TPH-oro = Total petroleum hydrocarbons quantified as oil range organics

TPH-dro* = Total petroleum hydrocarbons quantified as diesel range organics run without silica gel cleanup

TPH-oro* = Total petroleum hydrocarbons quantified as oil range organics run without silica gel cleanup

VOC = Volatile organic compounds

*1 Naphthalene concentration was detected at 1.4 µg/L with an ESL of 1.2 µg/L.

ESL = environmental screening limits set forth by the RWQCC for drinking water

Bold Type Indicates Reported Value Above the ESL.

J indicates an estimated value between the reporting limit and the method detection limit

TABLE 6 - SITE CONCEPTUAL MODEL
1091 Calcot Place, Oakland

CSM Element	CSM Sub-Element	Description	Potential Data Gap(s)
Geology and Hydrogeology	Regional	The Property is in the southern part of the City of Oakland in the San Francisco Bay area. The San Francisco Bay area occupies a broad alluvial valley that slopes gently northward and is flanked by alluvial fans deposited at the foot of the Diablo Range to the east and the Santa Cruz Mountains to the west. Surface topography in the immediate vicinity of the Property is gently sloping down to the northwest towards Airport Channel. The Property is at an elevation of approximately 15 feet above Mean Sea Level according to the United States Geological Survey (USGS) Oakland East Quadrangle California 7.5 Minute Series topographic map. Materials underlying the site are unconsolidated deposits of near shore and beach sediments, deposited in Oakland Bay at higher sea level stands. At shallow depths beneath these sediments are chert, greywacke, serpentine and shale bedrock that are a part of the Cretaceous to Jurassic-aged Franciscan Formation. Bedrock is exposed to the east-northeast on the upland surfaces. The subject site is located on the San Francisco Bay Plain in the northernmost part of the Santa Clara Valley Groundwater Basin, (DWR, 1967), the surface of which slopes gently down toward west. The regional groundwater flow follows the topography, moving from areas of higher elevation to areas of lower elevation. The regional groundwater flow direction in the area of the Property is estimated to be toward the west toward the Brooklyn Basin.	None
	Site	Geology: Based on lithologic logs prepared from borings on the Property the subsurface lithology consists of silty clay underlain by the water bearing zone which consisted of silt, clayey silt, and silty sand. The groundwater bearing zone is underlain by a stiff silty clay.	None
		Hydrogeology: A small shallow (approximately 3 feet bgs) perched water zone appears to be located in the vicinity of the former USTs however water volumes of this zone were not sufficient for sampling during the latest sampling event. The main shallow groundwater zone appears to be present in the 11-15 foot bgs zone. The main shallow water-bearing zone appears to be located in thin clayey sand, sand, clayey silt, and silty sand units interbedded within clay. Groundwater is generally under water-table conditions, but may be locally confined by clay in the upper portion of the water-bearing zone. The base of the shallow water bearing zone appears to be approximately 16 feet bgs and is underlain by a stiff clay which extends to at least 24 feet bgs.	None
Surface Water Bodies	--	The closest surface water bodies are the Brooklyn Basin, a portion of San Francisco Bay which was located approximately 1/4 of a mile to the west of the Property.	None
Nearby Wells	--	A well survey has not been conducted but has been requested from Alameda County and State of California	Yes
CSM Element	CSM Sub-Element	Description	Potential Data Gap(s)
Constituents of Concern	--	Constituents of concern have been identified by comparing analytical results for soil to ESLs for commercial land use and for groundwater that is considered a current or potential drinking water source. Constituents of concern that have been identified to include petroleum hydrocarbons quantified as diesel and oil range organics (TPH-dro, and TPH-oro), naphthalene, 2-methylnaphthalene, phenol, and benzo (a) pyrene.	None
Potential Sources	On-site	The Property formerly contained two USTs used to store fuel oil.	None
		There is no record of the removal of the USTs but a geophysical survey in the area of the former USTs indicated their absence.	None
CSM Element	CSM Sub-Element	Description	Potential Data Gap(s)
Nature and Extent of Environmental Impacts	Extent in Soil, TPH-dro	A concentration of TPH-dro in soil above the commercial ESL for areas where groundwater is considered a potential source of drinking water have been detected in one soil sample collected from boring B-7 from a depth of 7.5-8 feet bgs at a concentration of 470 milligrams per kilogram (mg/Kg) which exceeded the ESL of 110 mg/Kg. No other concentrations of TPH-dro were detected at concentrations which exceed the ESL. This concentration of TPH-dro appears to be limited in extent and confined to a small area in the vicinity of the former USTs.	None
	Extent in Soil, TPH-oro	Concentrations of TPH-oro in soil above the commercial ESL for areas where groundwater is considered a potential source of drinking water have not been detected.	None
	Extent in Soil, VOCs	A concentration of naphthalene in soil above the commercial ESL for areas where groundwater is considered a potential source of drinking water have been detected in one soil sample collected from boring B-7 from a depth of 7.5-8 feet bgs at a concentration of 2.0 mg/Kg which exceeded the ESL of 1.2 mg/Kg. No other concentrations VOC's were detected above their respective ESL's. This concentration of naphthalene appears to be limited in extent and confined to a small area in the vicinity of the former USTs.	None
	Extent in Soil, SVOCs and PAH	Shallow soil, 3.5-4 feet bgs, on the Property appears to have been impacted by phenol at concentrations which exceed the ESL and range from 0.30-0.59 mg/Kg. Phenol was not detected at deeper depths. The shallow soil sample collected from boring B-4 was also found to contain a concentration of benzo (a) pyrene (0.77 mg/Kg) which exceeded the ESL and again was not detected at deeper depths. The remaining detected compound which exceed the ESL was detected in the deeper sample, 7.5-8 feet bgs, collected from boring B-7 which was in a close vicinity to the former USTs. This sample contained concentrations of 2-methylnaphthalene which exceeded the ESL of 8.3 mg/Kg which was limited in extent.	None

TABLE 6 - SITE CONCEPTUAL MODEL
1091 Calcot Place, Oakland

Nature and Extent of Environmental Impacts	Extent in Groundwater, TPH-dro	Elevated concentrations of TPH-dro in groundwater which exceed the ESL were detected in groundwater samples collected from borings B-2, B-3, B-5, B-6, and B-7 ranging from 140 to 15,000 µg/L. The bulk of the TPH-dro contamination exceeding the ESL appear to be limited to the area of the former UST's extending cross gradient to the location of boring B-5. The down-gradient extent has been defined by boring B-4. The cross gradient extent in the vicinity of boring B-5 has not been delineated.	The cross gradient extent in the vicinity of boring B-5 has not been delineated.
	Extent in Groundwater, TPH-oro	Elevated concentrations of TPH-oro in groundwater which exceed the ESL were detected in groundwater samples collected from borings B-1, B-2, B-3, and B-5 ranging from 440 to 23,000 µg/L. The bulk of the TPH-oro contamination exceeding the ESL appear to be limited to the area of the former UST's extending cross gradient to the location of boring B-5. The down-gradient extent has been defined by boring B-4. The cross gradient extent in the vicinity of boring B-5 has not been delineated.	The cross gradient extent in the vicinity of boring B-5 has not been delineated.
	Extent in Groundwater, VOCs	The only detected VOC in groundwater was naphthalene at a concentration of 1.4 µg/L which exceeded the ELS of 1.2 µg/L. This contaminant appears to be limited in extent and was not detected in the other borings above the ESL.	None
	Extent in Groundwater, SVOCs	No analyses for SVOCs has been conducted.	None
Migration Pathways	Potential Conduits	At the time of drilling ERAS noted a large high pressure water line which serviced a fire hydrant in the yard area which ran along the northeastern Property boundary near the former USTs and may act as a conduit for which contamination to migrate along. This would explain the elevated concentrations of petroleum hydrocarbons detected in boring B-5.	None
Potential Receptors/Risk	On-site	Potable water at the site currently is provided via municipal supply and will continue to be in the foreseeable future. As such, direct contact to groundwater is not contemplated. Receptors at the site could include the following: <ul style="list-style-type: none"> • Future construction worker via soil and groundwater 	Based on evaluation of the data relative to ESLs, it is likely that some risk for longer- term site occupants exists.
Potential Receptors/Risk	Off-site	A well survey has been conducted and the only identified commercial or residential production well identified was located approximately 3,200 feet to the southeast in a cross gradient direction. Based on the distance and location this well is unlikely to be impacted.	None

Notes

1. ERAS Environmental, Inc. Phase 1 Environmental Site Assessment, APN 19-55-11, Oakland, California, November 6, 2014.
2. ERAS Environmental, Inc. Limited Soil and Groundwater Investigation, APN 19-55-11 on Calcot Place, Oakland, California, January 9, 2015.
2. ERAS Environmental, Inc. Limited Soil and Groundwater Investigation, 1091 Calcot Place, Oakland, California, February 12, 2016.

Abbreviations

- bgs = below ground surface
VOCs = volatile organic compounds
SVOCs = semi volatile organic compounds
TPH-dro = total petroleum hydrocarbons quantified as diesel range organics
TPH-oro = total petroleum hydrocarbons as oil range organics
PAH = polynuclear aromatic hydrocarbons
µg/L = micrograms per liter
mg/Kg = milligrams per kilogram

TABLE 7 - DATA GAPS AND PROPOSED INVESTIGATION

1091 Calcot Place, Oakland CA

Item	Data Gap	Proposed Investigation	Rational	Analysis
1	The full extent of the contamination associated with the former USTs has not been determined in the southeast cross-gradient direction	<p>Advance two additional borings southeast of boring B-5 using a direct push sample rig to about 24 feet bgs in an attempt to laterally delineate the extent of the contamination. These borings will be continuously logged.</p> <p>Soil and groundwater samples will be collected from each boring.</p> <p>The soil and groundwater samples will be kept chilled pending transport under chain-of-custody procedures to a California certified environmental analytical laboratory.</p>	Horizontally delineate the extent of the contamination associated with the former USTs which is potentially migrating along a high pressure fire suppression water line along the Property boundary..	The soil and groundwater samples will be analyzed for the presence of TPH-dro and TPH-oro.

Abbreviations

bgs = below ground surface

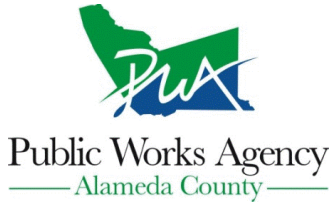
TPH-dro = total petroleum hydrocarbons quantified as diesel range organics

TPH-oro = total petroleum hydrocarbons quantified as oil range organics

APPENDIX A

Permits

Alameda County Public Works Agency - Water Resources Well Permit



399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax: (510)782-1939

Application Approved on: 12/08/2015 By jamesy

Permit Numbers: W2015-1062
Permits Valid from 01/20/2016 to 01/20/2016

Application Id: 1449088065920
Site Location: 1091 Calcot Place, Oakland

City of Project Site: Oakland

Project Start Date: 12/17/2015
Assigned Inspector: Contact Lindsay Furuyama at (925) 956-2311 or Lfuruyama@groundzonees.com
Extension Start Date: 01/20/2016
Extension Count: 1

Completion Date: 12/17/2015
Extension End Date: 01/20/2016
Extended By: jamesy

Applicant: ERAS Environmental, Inc. - Andrew Savage
1533 B Street, Hayward, CA 94541
Phone: 510-247-9885 x302

Property Owner: Bob Winet
36966 Pinto Palm Street, Rancho Mirage, CA 92270
Phone: --

Client: Bob Winet
36966 Pinto Palm Street, Rancho Mirage, CA 92270
Phone: --

Contact: Andrew Savage
Phone: 510-247-9885 x302
Cell: 925-330-8926

	Total Due:	\$265.00
Receipt Number: WR2015-0582	Total Amount Paid:	\$265.00
Payer Name : Andrew Savage	Paid By: MC	PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitoring Study - 4 Boreholes
Driller: Environmental Control Associates (ECA) - Lic #: 695970 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-1062	12/08/2015	03/16/2016	4	2.75 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
4. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.
5. Electronic Reporting Regulations (Chapter 30, Division 3 of Title 23 & Division 3 of Title 27, CCR) require electronic submission of any report or data required by a regulatory agency from a cleanup site. Submission dates are set by a Regional Water Board or by a regulatory agency. Once a report/data is successfully uploaded, as required, you have met

Alameda County Public Works Agency - Water Resources Well Permit

the reporting requirement (i.e. the compliance measure for electronic submittals is the actual upload itself). The upload date should be on or prior to the regulatory due date.

6. NOTE:

Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B

Standard Operating Procedures

STANDARD OPERATING PROCEDURE – DIRECT PUSH BORINGS

SOIL CORING AND SAMPLING PROCEDURES

Prior to drilling, all boreholes will be hand dug to a depth of 4-5 feet below ground surface (bgs) to check for underground utilities.

Soil and groundwater samples are collected for lithologic and chemical analyses using a direct driven soil coring system. A hydraulic hammer drives sampling rods into the ground to collect continuous soil cores. As the rods are advanced, soil is driven into an approximately 2.5-inch-diameter sample barrel that is attached to the end of the rods. Soil samples are collected in sleeves inside the sample barrel as the rods are advanced. After being driven 4 to 5 feet into the ground, the rods are removed from the borehole. The sleeve containing the soil core is removed from the sample barrel, and can then be preserved for chemical analyses, or used for lithologic description. This process is repeated until the desired depth or instrument refusal is reached.

A soil core interval selected for analyses is cut from the sleeve using a pre-cleaned hacksaw. The ends of the tube are covered with aluminum foil or Teflon liner and sealed with plastic caps. The soil-filled liner is labeled with the bore number, sample depth, site location, date, and time. The samples are placed in bags and stored in a cooler containing ice. Soil from the core adjacent to the interval selected for analyses is placed in a plastic zip-top bag. The soil is allowed to volatilize for a period of time, depending on the ambient temperature. The soil is scanned with a flame-ionization detector (FID) or photo-ionization detector (PID).

All sample barrels, rods, and tools (e.g. hacksaw) are cleaned with Alconox or equivalent detergent and de-ionized water. All rinsate from the cleaning is contained in 55-gallon drums at the project site.

GROUNDWATER SAMPLING FROM DIRECT PUSH BORINGS

After the targeted water-bearing zone has been penetrated, the soil-sample barrel is removed from the borehole. Small-diameter well casing with 0.010-inch slotted well screen may be installed in the borehole to facilitate the collection of groundwater samples. Threaded sections of PVC are lowered into the borehole. Groundwater samples may then be collected with a bailer, peristaltic pump, submersible or other appropriate pump until adequate sample volume is obtained. Peristaltic pumps are not used in applications requiring a lift of greater than 1 foot of net head.

Groundwater samples are preserved, stored in an ice-filled cooler, and are delivered, under chain-of-custody, to a laboratory certified by the California Department of Health Services (DHS) for hazardous materials analysis.

BOREHOLE GROUTING FOR DIRECT PUSH BORINGS

Upon completion of soil and water sampling, boreholes will be abandoned with neat cement grout to the surface. If the borehole was advanced into groundwater, the grout is pumped through a grouting tube positioned at the bottom of the borehole.

APPENDIX C
Lithologic Logs

PROJECT: 14229B

ADDRESS: 1091 Calcot Place

JOB NUMBER: 14229D

LOCATION: -

DATE STARTED: 01-20-16

First Water (ft. bgs.): 14.5 DATE: 01-20-16

DATE FINISHED: 01-20-16

TOTAL DEPTH: 24 feet

DRILLING METHOD: Hydraulic Push

GEOLOGIST: Andrew Savage

DRILLING COMPANY: ECA

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0							Asphalt + Base rock + Brick/Rubble Debris	
3.5'				NR				
5								
7'								
10'							Silty Clay (CL), dark yellowish brown (10YR 3/6), damp, medium stiff, medium plasticity, no hydrocarbon (HC) odor	
14'								
15'							Silty Sand (SW), yellowish brown (10YR 4/6), wet, dense, 30% fines, 70% fine to coarse well graded sand, no HC odor	
17'							Silty Clay (CL), yellowish brown (10YR 4/6), damp, very stiff, medium plasticity, no HC odor	
20'								

PROJECT: *14229B*

ADDRESS: *1091 Calcot Place*

JOB NUMBER: *14229D*

LOCATION: -

DATE STARTED: *01-20-16*

First Water (ft. bgs.): *14.5* DATE: *01-20-16*

DATE FINISHED: *01-20-16*

TOTAL DEPTH: *24 feet*

DRILLING METHOD: *Hydraulic Push*

GEOLOGIST: *Andrew Savage*

DRILLING COMPANY: *ECA*

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0							same Silty Clay (CL)	
24							Bottom of Boring 24 feet bgs 01-20-16	
25								
30								
35								
40								

PROJECT: 14229B

ADDRESS: 1091 Calcot Place

JOB NUMBER: 14229D

LOCATION: -

DATE STARTED: 01-20-16

First Water (ft. bgs.): 15 DATE: 01-20-16

DATE FINISHED: 01-20-16

TOTAL DEPTH: 24 feet

DRILLING METHOD: Hydraulic Push

GEOLOGIST: Andrew Savage

DRILLING COMPANY: ECA

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Asphalt + Base rock + Brick/Rubble Debris	
4' 0							Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, no hydrocarbon (HC) odor at 4', color change to dark yellowish brown (10YR 3/6)	
8' 0							at 9', color change to dark (10YR 5/1)	
10							at 10', HC odor present	
11' 0							at 12', no HC odor present, color change to yellowish brown (10YR 3/6)	
14' 0.1							Clayey Silt (ML), yellowish brown (10YR 3/6), wet, medium stiff, low plasticity, no HC odor	
15								
17' 0.1							Silty Clay (CL), yellowish brown (10YR 3/6), damp, medium stiff, medium plasticity, no HC odor	
19' 0'							Silty Sand (SM), yellowish brown (10YR 3/6), damp, dense, 40% fines, 60% fine to coarse well graded sand, no HC odor	
20								

PROJECT: *14229B*

ADDRESS: *1091 Calcot Place*

JOB NUMBER: *14229D*

LOCATION: -

DATE STARTED: *01-20-16*

First Water (ft. bgs.): *15* DATE: *01-20-16*

DATE FINISHED: *01-20-16*

TOTAL DEPTH: *24 feet*

DRILLING METHOD: *Hydraulic Push*

GEOLOGIST: *Andrew Savage*

DRILLING COMPANY: *ECA*

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							same Silty Sand (SM)	
							Silty Clay (CL), yellowish brown (10YR 3/6), damp, stiff, medium plasticity, no HC odor	
25							Bottom of Boring 24 feet bgs 01-20-16	
30								
35								
40								

PROJECT: 14229B

ADDRESS: 1091 Calcot Place

JOB NUMBER: 14229D

LOCATION: -

DATE STARTED: 01-20-16

First Water (ft. bgs.): 15 DATE: 01-20-16

DATE FINISHED: 01-20-16

TOTAL DEPTH: 24 feet

DRILLING METHOD: Hydraulic Push

GEOLOGIST: Andrew Savage

DRILLING COMPANY: ECA

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Asphalt + Base rock + Brick/Rubble Debris	
4'	0.1						Silty Clay (CL), very dark brown (10YR 2/2), damp, medium stiff, medium plasticity, no hydrocarbon (HC) odor at 4', color change to dark yellowish brown (10YR 3/6)	
8'	0						at 9', color change to gray (10YR 5/1) at 9.5', HC odor present	
11'	0.4						at 11', no HC odor present, color change to dark grayish brown (10YR 4/2)	
14'	0.2							
15'						▽	Clayey Silt (ML), yellowish brown (10YR 3/6), wet, medium stiff, low plasticity, no HC odor	
17'	0						Silty Clay (CL), yellowish brown (10YR 3/6), damp, medium stiff, medium plasticity, no HC odor	
20'	0'						Silty Sand (SM), yellowish brown (10YR 3/6), damp, dense, 40% fines, 60% fine to coarse well graded sand, no HC odor	

PROJECT: *14229B*

ADDRESS: *1091 Calcot Place*

JOB NUMBER: *14229D*

LOCATION: -

DATE STARTED: *01-20-16*

First Water (ft. bgs.): *15* DATE: *01-20-16*

DATE FINISHED: *01-20-16*

TOTAL DEPTH: *24 feet*

DRILLING METHOD: *Hydraulic Push*

GEOLOGIST: *Andrew Savage*

DRILLING COMPANY: *ECA*

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
0							Silty Clay (CL), yellowish brown (10YR 3/6), damp, very stiff, medium plasticity, no HC odor	
24							Bottom of Boring 24 feet bgs 01-20-16	
25								
30								
35								
40								

PROJECT: 14229B

ADDRESS: 1091 Calcot Place

JOB NUMBER: 14229D

LOCATION: -

DATE STARTED: 01-20-16

First Water (ft. bgs.): 15 DATE: 01-20-16

DATE FINISHED: 01-20-16

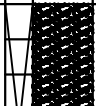
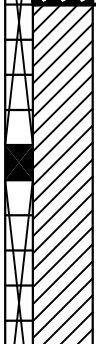
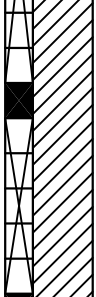
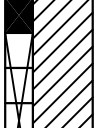
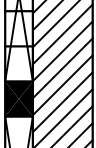


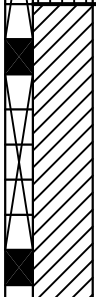

TOTAL DEPTH: 24 feet

DRILLING METHOD: Hydraulic Push

GEOLOGIST: Andrew Savage

DRILLING COMPANY: ECA

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
							Asphalt + Base rock + Brick/Rubble Debris	
4' 0							Silty Clay (CL), dark brown (10YR 2/2), damp, medium stiff, medium plasticity, no hydrocarbon (HC) odor at 4'-4.5', perched water present	
8' 1.5							at 7', color change to gray (10YR 5/1) strong HC odor	
11' 0.5							at 11', HC odor present,	
14' 0.2							at 13', very slight HC odor at 14', color change to yellowish brown (10YR 3/6)	
15							Clayey Silt (ML), yellowish brown (10YR 3/6), wet, medium stiff, low plasticity, no HC odor	
17' 0							Silty Clay (CL), yellowish brown (10YR 3/6), damp, stiff, medium plasticity, 85% fines, 15% fine to course well graded sand, no HC odor present	
20' 0								

PROJECT: *14229B*

ADDRESS: *1091 Calcot Place*

JOB NUMBER: *14229D*

LOCATION: -

DATE STARTED: *01-20-16*

First Water (ft. bgs.): *15* DATE: *01-20-16*

DATE FINISHED: *01-20-16*

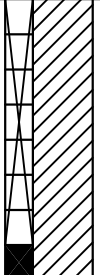
TOTAL DEPTH: *24 feet*

DRILLING METHOD: *Hydraulic Push*

GEOLOGIST: *Andrew Savage*

DRILLING COMPANY: *ECA*

Reviewed By: -

DEPTH ft.	PID (ppm)	BLOWS/ 1/2'	SAMPLE NO.	RECOVERY	GRAPHIC LOG	WATER LEVEL	GEOLOGIC DESCRIPTION	WELL DIAGRAM
24' 0							same Silty Clay (CL)	
25							Bottom of Boring 24 feet bgs 01-20-16	
30								
35								
40								

APPENDIX D
Analytical Results



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1601816 **Amended:** 02/11/2016

Report Created for: ERAS Environmental, Inc.

1533 B Street
Hayward, CA 94541

Project Contact: Andrew Savage

Project P.O.:

Project Name: 14229D; 1091 Calcot

Project Received: 01/22/2016

Analytical Report reviewed & approved for release on 01/29/2016 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: 14229D; 1091 Calcot
WorkOrder: 1601816

Glossary Abbreviation

95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Glossary of Terms & Qualifier Definitions

Client: ERAS Environmental, Inc.
Project: 14229D; 1091 Calcot
WorkOrder: 1601816

Analytical Qualifiers

J	Result is less than the RL/ML but greater than the MDL. The reported concentration is an estimated value.
S	Surrogate spike recovery outside accepted recovery limits
a3	sample diluted due to high organic content.
a4	reporting limits raised due to the sample's matrix prohibiting a full volume extraction.
b1	aqueous sample that contains greater than ~1 vol. % sediment
c1	surrogate recovery outside of the control limits due to the dilution of the sample.
c7	Surrogate value diluted out of range
d7	strongly aged gasoline or diesel range compounds are significant in the TPH(g) chromatogram
d9	no recognizable pattern
e2	diesel range compounds are significant; no recognizable pattern
e3	aged diesel is significant
e7	oil range compounds are significant
e8	kerosene/kerosene range/jet fuel range

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validated the prep batch.
F2	LCS recovery for this compound is outside of acceptance limits.
F3	the surrogate standard recovery and/or RPD is outside of acceptance limits.



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	01/26/2016 01:30
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/26/2016 01:30
Benzene	ND	0.0050	1	01/26/2016 01:30
Bromobenzene	ND	0.0050	1	01/26/2016 01:30
Bromochloromethane	ND	0.0050	1	01/26/2016 01:30
Bromodichloromethane	ND	0.0050	1	01/26/2016 01:30
Bromoform	ND	0.0050	1	01/26/2016 01:30
Bromomethane	ND	0.0050	1	01/26/2016 01:30
2-Butanone (MEK)	ND	0.020	1	01/26/2016 01:30
t-Butyl alcohol (TBA)	ND	0.050	1	01/26/2016 01:30
n-Butyl benzene	ND	0.0050	1	01/26/2016 01:30
sec-Butyl benzene	ND	0.0050	1	01/26/2016 01:30
tert-Butyl benzene	ND	0.0050	1	01/26/2016 01:30
Carbon Disulfide	ND	0.0050	1	01/26/2016 01:30
Carbon Tetrachloride	ND	0.0050	1	01/26/2016 01:30
Chlorobenzene	ND	0.0050	1	01/26/2016 01:30
Chloroethane	ND	0.0050	1	01/26/2016 01:30
Chloroform	ND	0.0050	1	01/26/2016 01:30
Chloromethane	ND	0.0050	1	01/26/2016 01:30
2-Chlorotoluene	ND	0.0050	1	01/26/2016 01:30
4-Chlorotoluene	ND	0.0050	1	01/26/2016 01:30
Dibromochloromethane	ND	0.0050	1	01/26/2016 01:30
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/26/2016 01:30
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/26/2016 01:30
Dibromomethane	ND	0.0050	1	01/26/2016 01:30
1,2-Dichlorobenzene	ND	0.0050	1	01/26/2016 01:30
1,3-Dichlorobenzene	ND	0.0050	1	01/26/2016 01:30
1,4-Dichlorobenzene	ND	0.0050	1	01/26/2016 01:30
Dichlorodifluoromethane	ND	0.0050	1	01/26/2016 01:30
1,1-Dichloroethane	ND	0.0050	1	01/26/2016 01:30
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/26/2016 01:30
1,1-Dichloroethene	ND	0.0050	1	01/26/2016 01:30
cis-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 01:30
trans-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 01:30
1,2-Dichloropropane	ND	0.0050	1	01/26/2016 01:30
1,3-Dichloropropane	ND	0.0050	1	01/26/2016 01:30
2,2-Dichloropropane	ND	0.0050	1	01/26/2016 01:30

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	01/26/2016 01:30
cis-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 01:30
trans-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 01:30
Diisopropyl ether (DIPE)	ND	0.0050	1	01/26/2016 01:30
Ethylbenzene	ND	0.0050	1	01/26/2016 01:30
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/26/2016 01:30
Freon 113	ND	0.0050	1	01/26/2016 01:30
Hexachlorobutadiene	ND	0.0050	1	01/26/2016 01:30
Hexachloroethane	ND	0.0050	1	01/26/2016 01:30
2-Hexanone	ND	0.0050	1	01/26/2016 01:30
Isopropylbenzene	ND	0.0050	1	01/26/2016 01:30
4-Isopropyl toluene	ND	0.0050	1	01/26/2016 01:30
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/26/2016 01:30
Methylene chloride	ND	0.0050	1	01/26/2016 01:30
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/26/2016 01:30
Naphthalene	ND	0.0050	1	01/26/2016 01:30
n-Propyl benzene	ND	0.0050	1	01/26/2016 01:30
Styrene	ND	0.0050	1	01/26/2016 01:30
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 01:30
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 01:30
Tetrachloroethene	ND	0.0050	1	01/26/2016 01:30
Toluene	ND	0.0050	1	01/26/2016 01:30
1,2,3-Trichlorobenzene	ND	0.0050	1	01/26/2016 01:30
1,2,4-Trichlorobenzene	ND	0.0050	1	01/26/2016 01:30
1,1,1-Trichloroethane	ND	0.0050	1	01/26/2016 01:30
1,1,2-Trichloroethane	ND	0.0050	1	01/26/2016 01:30
Trichloroethene	ND	0.0050	1	01/26/2016 01:30
Trichlorofluoromethane	ND	0.0050	1	01/26/2016 01:30
1,2,3-Trichloropropane	ND	0.0050	1	01/26/2016 01:30
1,2,4-Trimethylbenzene	ND	0.0050	1	01/26/2016 01:30
1,3,5-Trimethylbenzene	ND	0.0050	1	01/26/2016 01:30
Vinyl Chloride	ND	0.0050	1	01/26/2016 01:30
Xylenes, Total	ND	0.0050	1	01/26/2016 01:30

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	102	70-130		01/26/2016 01:30
Toluene-d8	109	70-130		01/26/2016 01:30
4-BFB	111	70-130		01/26/2016 01:30
Benzene-d6	91	60-140		01/26/2016 01:30
Ethylbenzene-d10	99	60-140		01/26/2016 01:30
1,2-DCB-d4	82	60-140		01/26/2016 01:30

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	01/26/2016 00:50
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/26/2016 00:50
Benzene	ND	0.0050	1	01/26/2016 00:50
Bromobenzene	ND	0.0050	1	01/26/2016 00:50
Bromochloromethane	ND	0.0050	1	01/26/2016 00:50
Bromodichloromethane	ND	0.0050	1	01/26/2016 00:50
Bromoform	ND	0.0050	1	01/26/2016 00:50
Bromomethane	ND	0.0050	1	01/26/2016 00:50
2-Butanone (MEK)	ND	0.020	1	01/26/2016 00:50
t-Butyl alcohol (TBA)	ND	0.050	1	01/26/2016 00:50
n-Butyl benzene	ND	0.0050	1	01/26/2016 00:50
sec-Butyl benzene	ND	0.0050	1	01/26/2016 00:50
tert-Butyl benzene	ND	0.0050	1	01/26/2016 00:50
Carbon Disulfide	ND	0.0050	1	01/26/2016 00:50
Carbon Tetrachloride	ND	0.0050	1	01/26/2016 00:50
Chlorobenzene	ND	0.0050	1	01/26/2016 00:50
Chloroethane	ND	0.0050	1	01/26/2016 00:50
Chloroform	ND	0.0050	1	01/26/2016 00:50
Chloromethane	ND	0.0050	1	01/26/2016 00:50
2-Chlorotoluene	ND	0.0050	1	01/26/2016 00:50
4-Chlorotoluene	ND	0.0050	1	01/26/2016 00:50
Dibromochloromethane	ND	0.0050	1	01/26/2016 00:50
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/26/2016 00:50
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/26/2016 00:50
Dibromomethane	ND	0.0050	1	01/26/2016 00:50
1,2-Dichlorobenzene	ND	0.0050	1	01/26/2016 00:50
1,3-Dichlorobenzene	ND	0.0050	1	01/26/2016 00:50
1,4-Dichlorobenzene	ND	0.0050	1	01/26/2016 00:50
Dichlorodifluoromethane	ND	0.0050	1	01/26/2016 00:50
1,1-Dichloroethane	ND	0.0050	1	01/26/2016 00:50
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/26/2016 00:50
1,1-Dichloroethene	ND	0.0050	1	01/26/2016 00:50
cis-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 00:50
trans-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 00:50
1,2-Dichloropropane	ND	0.0050	1	01/26/2016 00:50
1,3-Dichloropropane	ND	0.0050	1	01/26/2016 00:50
2,2-Dichloropropane	ND	0.0050	1	01/26/2016 00:50

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	01/26/2016 00:50
cis-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 00:50
trans-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 00:50
Diisopropyl ether (DIPE)	ND	0.0050	1	01/26/2016 00:50
Ethylbenzene	ND	0.0050	1	01/26/2016 00:50
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/26/2016 00:50
Freon 113	ND	0.0050	1	01/26/2016 00:50
Hexachlorobutadiene	ND	0.0050	1	01/26/2016 00:50
Hexachloroethane	ND	0.0050	1	01/26/2016 00:50
2-Hexanone	ND	0.0050	1	01/26/2016 00:50
Isopropylbenzene	ND	0.0050	1	01/26/2016 00:50
4-Isopropyl toluene	ND	0.0050	1	01/26/2016 00:50
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/26/2016 00:50
Methylene chloride	ND	0.0050	1	01/26/2016 00:50
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/26/2016 00:50
Naphthalene	ND	0.0050	1	01/26/2016 00:50
n-Propyl benzene	ND	0.0050	1	01/26/2016 00:50
Styrene	ND	0.0050	1	01/26/2016 00:50
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 00:50
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 00:50
Tetrachloroethene	ND	0.0050	1	01/26/2016 00:50
Toluene	ND	0.0050	1	01/26/2016 00:50
1,2,3-Trichlorobenzene	ND	0.0050	1	01/26/2016 00:50
1,2,4-Trichlorobenzene	ND	0.0050	1	01/26/2016 00:50
1,1,1-Trichloroethane	ND	0.0050	1	01/26/2016 00:50
1,1,2-Trichloroethane	ND	0.0050	1	01/26/2016 00:50
Trichloroethene	ND	0.0050	1	01/26/2016 00:50
Trichlorofluoromethane	ND	0.0050	1	01/26/2016 00:50
1,2,3-Trichloropropane	ND	0.0050	1	01/26/2016 00:50
1,2,4-Trimethylbenzene	ND	0.0050	1	01/26/2016 00:50
1,3,5-Trimethylbenzene	ND	0.0050	1	01/26/2016 00:50
Vinyl Chloride	ND	0.0050	1	01/26/2016 00:50
Xylenes, Total	ND	0.0050	1	01/26/2016 00:50

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	102	70-130		01/26/2016 00:50
Toluene-d8	110	70-130		01/26/2016 00:50
4-BFB	111	70-130		01/26/2016 00:50
Benzene-d6	92	60-140		01/26/2016 00:50
Ethylbenzene-d10	100	60-140		01/26/2016 00:50
1,2-DCB-d4	81	60-140		01/26/2016 00:50

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC10	115699
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	01/25/2016 23:31	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/25/2016 23:31	
Benzene	ND	0.0050	1	01/25/2016 23:31	
Bromobenzene	ND	0.0050	1	01/25/2016 23:31	
Bromochloromethane	ND	0.0050	1	01/25/2016 23:31	
Bromodichloromethane	ND	0.0050	1	01/25/2016 23:31	
Bromoform	ND	0.0050	1	01/25/2016 23:31	
Bromomethane	ND	0.0050	1	01/25/2016 23:31	
2-Butanone (MEK)	ND	0.020	1	01/25/2016 23:31	
t-Butyl alcohol (TBA)	ND	0.050	1	01/25/2016 23:31	
n-Butyl benzene	ND	0.0050	1	01/25/2016 23:31	
sec-Butyl benzene	ND	0.0050	1	01/25/2016 23:31	
tert-Butyl benzene	ND	0.0050	1	01/25/2016 23:31	
Carbon Disulfide	ND	0.0050	1	01/25/2016 23:31	
Carbon Tetrachloride	ND	0.0050	1	01/25/2016 23:31	
Chlorobenzene	ND	0.0050	1	01/25/2016 23:31	
Chloroethane	ND	0.0050	1	01/25/2016 23:31	
Chloroform	ND	0.0050	1	01/25/2016 23:31	
Chloromethane	ND	0.0050	1	01/25/2016 23:31	
2-Chlorotoluene	ND	0.0050	1	01/25/2016 23:31	
4-Chlorotoluene	ND	0.0050	1	01/25/2016 23:31	
Dibromochloromethane	ND	0.0050	1	01/25/2016 23:31	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/25/2016 23:31	
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/25/2016 23:31	
Dibromomethane	ND	0.0050	1	01/25/2016 23:31	
1,2-Dichlorobenzene	ND	0.0050	1	01/25/2016 23:31	
1,3-Dichlorobenzene	ND	0.0050	1	01/25/2016 23:31	
1,4-Dichlorobenzene	ND	0.0050	1	01/25/2016 23:31	
Dichlorodifluoromethane	ND	0.0050	1	01/25/2016 23:31	
1,1-Dichloroethane	ND	0.0050	1	01/25/2016 23:31	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/25/2016 23:31	
1,1-Dichloroethene	ND	0.0050	1	01/25/2016 23:31	
cis-1,2-Dichloroethene	ND	0.0050	1	01/25/2016 23:31	
trans-1,2-Dichloroethene	ND	0.0050	1	01/25/2016 23:31	
1,2-Dichloropropane	ND	0.0050	1	01/25/2016 23:31	
1,3-Dichloropropane	ND	0.0050	1	01/25/2016 23:31	
2,2-Dichloropropane	ND	0.0050	1	01/25/2016 23:31	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	01/25/2016 23:31
cis-1,3-Dichloropropene	ND	0.0050	1	01/25/2016 23:31
trans-1,3-Dichloropropene	ND	0.0050	1	01/25/2016 23:31
Diisopropyl ether (DIPE)	ND	0.0050	1	01/25/2016 23:31
Ethylbenzene	ND	0.0050	1	01/25/2016 23:31
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/25/2016 23:31
Freon 113	ND	0.0050	1	01/25/2016 23:31
Hexachlorobutadiene	ND	0.0050	1	01/25/2016 23:31
Hexachloroethane	ND	0.0050	1	01/25/2016 23:31
2-Hexanone	ND	0.0050	1	01/25/2016 23:31
Isopropylbenzene	ND	0.0050	1	01/25/2016 23:31
4-Isopropyl toluene	ND	0.0050	1	01/25/2016 23:31
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/25/2016 23:31
Methylene chloride	ND	0.0050	1	01/25/2016 23:31
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/25/2016 23:31
Naphthalene	ND	0.0050	1	01/25/2016 23:31
n-Propyl benzene	ND	0.0050	1	01/25/2016 23:31
Styrene	ND	0.0050	1	01/25/2016 23:31
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/25/2016 23:31
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/25/2016 23:31
Tetrachloroethene	ND	0.0050	1	01/25/2016 23:31
Toluene	ND	0.0050	1	01/25/2016 23:31
1,2,3-Trichlorobenzene	ND	0.0050	1	01/25/2016 23:31
1,2,4-Trichlorobenzene	ND	0.0050	1	01/25/2016 23:31
1,1,1-Trichloroethane	ND	0.0050	1	01/25/2016 23:31
1,1,2-Trichloroethane	ND	0.0050	1	01/25/2016 23:31
Trichloroethene	ND	0.0050	1	01/25/2016 23:31
Trichlorofluoromethane	ND	0.0050	1	01/25/2016 23:31
1,2,3-Trichloropropane	ND	0.0050	1	01/25/2016 23:31
1,2,4-Trimethylbenzene	ND	0.0050	1	01/25/2016 23:31
1,3,5-Trimethylbenzene	ND	0.0050	1	01/25/2016 23:31
Vinyl Chloride	ND	0.0050	1	01/25/2016 23:31
Xylenes, Total	ND	0.0050	1	01/25/2016 23:31

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	102	70-130		01/25/2016 23:31
Toluene-d8	109	70-130		01/25/2016 23:31
4-BFB	109	70-130		01/25/2016 23:31
Benzene-d6	95	60-140		01/25/2016 23:31
Ethylbenzene-d10	104	60-140		01/25/2016 23:31
1,2-DCB-d4	86	60-140		01/25/2016 23:31

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	01/26/2016 03:29
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/26/2016 03:29
Benzene	ND	0.0050	1	01/26/2016 03:29
Bromobenzene	ND	0.0050	1	01/26/2016 03:29
Bromochloromethane	ND	0.0050	1	01/26/2016 03:29
Bromodichloromethane	ND	0.0050	1	01/26/2016 03:29
Bromoform	ND	0.0050	1	01/26/2016 03:29
Bromomethane	ND	0.0050	1	01/26/2016 03:29
2-Butanone (MEK)	ND	0.020	1	01/26/2016 03:29
t-Butyl alcohol (TBA)	ND	0.050	1	01/26/2016 03:29
n-Butyl benzene	ND	0.0050	1	01/26/2016 03:29
sec-Butyl benzene	ND	0.0050	1	01/26/2016 03:29
tert-Butyl benzene	ND	0.0050	1	01/26/2016 03:29
Carbon Disulfide	ND	0.0050	1	01/26/2016 03:29
Carbon Tetrachloride	ND	0.0050	1	01/26/2016 03:29
Chlorobenzene	ND	0.0050	1	01/26/2016 03:29
Chloroethane	ND	0.0050	1	01/26/2016 03:29
Chloroform	ND	0.0050	1	01/26/2016 03:29
Chloromethane	ND	0.0050	1	01/26/2016 03:29
2-Chlorotoluene	ND	0.0050	1	01/26/2016 03:29
4-Chlorotoluene	ND	0.0050	1	01/26/2016 03:29
Dibromochloromethane	ND	0.0050	1	01/26/2016 03:29
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/26/2016 03:29
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/26/2016 03:29
Dibromomethane	ND	0.0050	1	01/26/2016 03:29
1,2-Dichlorobenzene	ND	0.0050	1	01/26/2016 03:29
1,3-Dichlorobenzene	ND	0.0050	1	01/26/2016 03:29
1,4-Dichlorobenzene	ND	0.0050	1	01/26/2016 03:29
Dichlorodifluoromethane	ND	0.0050	1	01/26/2016 03:29
1,1-Dichloroethane	ND	0.0050	1	01/26/2016 03:29
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/26/2016 03:29
1,1-Dichloroethene	ND	0.0050	1	01/26/2016 03:29
cis-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 03:29
trans-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 03:29
1,2-Dichloropropane	ND	0.0050	1	01/26/2016 03:29
1,3-Dichloropropane	ND	0.0050	1	01/26/2016 03:29
2,2-Dichloropropane	ND	0.0050	1	01/26/2016 03:29

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC10	115699
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	01/26/2016 03:29	
cis-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 03:29	
trans-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 03:29	
Diisopropyl ether (DIPE)	ND	0.0050	1	01/26/2016 03:29	
Ethylbenzene	ND	0.0050	1	01/26/2016 03:29	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/26/2016 03:29	
Freon 113	ND	0.0050	1	01/26/2016 03:29	
Hexachlorobutadiene	ND	0.0050	1	01/26/2016 03:29	
Hexachloroethane	ND	0.0050	1	01/26/2016 03:29	
2-Hexanone	ND	0.0050	1	01/26/2016 03:29	
Isopropylbenzene	ND	0.0050	1	01/26/2016 03:29	
4-Isopropyl toluene	ND	0.0050	1	01/26/2016 03:29	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/26/2016 03:29	
Methylene chloride	ND	0.0050	1	01/26/2016 03:29	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/26/2016 03:29	
Naphthalene	ND	0.0050	1	01/26/2016 03:29	
n-Propyl benzene	ND	0.0050	1	01/26/2016 03:29	
Styrene	ND	0.0050	1	01/26/2016 03:29	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 03:29	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 03:29	
Tetrachloroethene	ND	0.0050	1	01/26/2016 03:29	
Toluene	ND	0.0050	1	01/26/2016 03:29	
1,2,3-Trichlorobenzene	ND	0.0050	1	01/26/2016 03:29	
1,2,4-Trichlorobenzene	ND	0.0050	1	01/26/2016 03:29	
1,1,1-Trichloroethane	ND	0.0050	1	01/26/2016 03:29	
1,1,2-Trichloroethane	ND	0.0050	1	01/26/2016 03:29	
Trichloroethene	ND	0.0050	1	01/26/2016 03:29	
Trichlorofluoromethane	ND	0.0050	1	01/26/2016 03:29	
1,2,3-Trichloropropane	ND	0.0050	1	01/26/2016 03:29	
1,2,4-Trimethylbenzene	ND	0.0050	1	01/26/2016 03:29	
1,3,5-Trimethylbenzene	ND	0.0050	1	01/26/2016 03:29	
Vinyl Chloride	ND	0.0050	1	01/26/2016 03:29	
Xylenes, Total	ND	0.0050	1	01/26/2016 03:29	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	104	70-130		01/26/2016 03:29
Toluene-d8	110	70-130		01/26/2016 03:29
4-BFB	116	70-130		01/26/2016 03:29
Benzene-d6	94	60-140		01/26/2016 03:29
Ethylbenzene-d10	104	60-140		01/26/2016 03:29
1,2-DCB-d4	89	60-140		01/26/2016 03:29

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	01/26/2016 04:09
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/26/2016 04:09
Benzene	ND	0.0050	1	01/26/2016 04:09
Bromobenzene	ND	0.0050	1	01/26/2016 04:09
Bromochloromethane	ND	0.0050	1	01/26/2016 04:09
Bromodichloromethane	ND	0.0050	1	01/26/2016 04:09
Bromoform	ND	0.0050	1	01/26/2016 04:09
Bromomethane	ND	0.0050	1	01/26/2016 04:09
2-Butanone (MEK)	ND	0.020	1	01/26/2016 04:09
t-Butyl alcohol (TBA)	ND	0.050	1	01/26/2016 04:09
n-Butyl benzene	ND	0.0050	1	01/26/2016 04:09
sec-Butyl benzene	ND	0.0050	1	01/26/2016 04:09
tert-Butyl benzene	ND	0.0050	1	01/26/2016 04:09
Carbon Disulfide	ND	0.0050	1	01/26/2016 04:09
Carbon Tetrachloride	ND	0.0050	1	01/26/2016 04:09
Chlorobenzene	ND	0.0050	1	01/26/2016 04:09
Chloroethane	ND	0.0050	1	01/26/2016 04:09
Chloroform	ND	0.0050	1	01/26/2016 04:09
Chloromethane	ND	0.0050	1	01/26/2016 04:09
2-Chlorotoluene	ND	0.0050	1	01/26/2016 04:09
4-Chlorotoluene	ND	0.0050	1	01/26/2016 04:09
Dibromochloromethane	ND	0.0050	1	01/26/2016 04:09
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/26/2016 04:09
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/26/2016 04:09
Dibromomethane	ND	0.0050	1	01/26/2016 04:09
1,2-Dichlorobenzene	ND	0.0050	1	01/26/2016 04:09
1,3-Dichlorobenzene	ND	0.0050	1	01/26/2016 04:09
1,4-Dichlorobenzene	ND	0.0050	1	01/26/2016 04:09
Dichlorodifluoromethane	ND	0.0050	1	01/26/2016 04:09
1,1-Dichloroethane	ND	0.0050	1	01/26/2016 04:09
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/26/2016 04:09
1,1-Dichloroethene	ND	0.0050	1	01/26/2016 04:09
cis-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 04:09
trans-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 04:09
1,2-Dichloropropane	ND	0.0050	1	01/26/2016 04:09
1,3-Dichloropropane	ND	0.0050	1	01/26/2016 04:09
2,2-Dichloropropane	ND	0.0050	1	01/26/2016 04:09

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	01/26/2016 04:09
cis-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 04:09
trans-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 04:09
Diisopropyl ether (DIPE)	ND	0.0050	1	01/26/2016 04:09
Ethylbenzene	ND	0.0050	1	01/26/2016 04:09
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/26/2016 04:09
Freon 113	ND	0.0050	1	01/26/2016 04:09
Hexachlorobutadiene	ND	0.0050	1	01/26/2016 04:09
Hexachloroethane	ND	0.0050	1	01/26/2016 04:09
2-Hexanone	ND	0.0050	1	01/26/2016 04:09
Isopropylbenzene	ND	0.0050	1	01/26/2016 04:09
4-Isopropyl toluene	ND	0.0050	1	01/26/2016 04:09
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/26/2016 04:09
Methylene chloride	ND	0.0050	1	01/26/2016 04:09
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/26/2016 04:09
Naphthalene	ND	0.0050	1	01/26/2016 04:09
n-Propyl benzene	ND	0.0050	1	01/26/2016 04:09
Styrene	ND	0.0050	1	01/26/2016 04:09
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 04:09
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 04:09
Tetrachloroethene	ND	0.0050	1	01/26/2016 04:09
Toluene	ND	0.0050	1	01/26/2016 04:09
1,2,3-Trichlorobenzene	ND	0.0050	1	01/26/2016 04:09
1,2,4-Trichlorobenzene	ND	0.0050	1	01/26/2016 04:09
1,1,1-Trichloroethane	ND	0.0050	1	01/26/2016 04:09
1,1,2-Trichloroethane	ND	0.0050	1	01/26/2016 04:09
Trichloroethene	ND	0.0050	1	01/26/2016 04:09
Trichlorofluoromethane	ND	0.0050	1	01/26/2016 04:09
1,2,3-Trichloropropane	ND	0.0050	1	01/26/2016 04:09
1,2,4-Trimethylbenzene	ND	0.0050	1	01/26/2016 04:09
1,3,5-Trimethylbenzene	ND	0.0050	1	01/26/2016 04:09
Vinyl Chloride	ND	0.0050	1	01/26/2016 04:09
Xylenes, Total	ND	0.0050	1	01/26/2016 04:09

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	103	70-130		01/26/2016 04:09
Toluene-d8	111	70-130		01/26/2016 04:09
4-BFB	115	70-130		01/26/2016 04:09
Benzene-d6	99	60-140		01/26/2016 04:09
Ethylbenzene-d10	110	60-140		01/26/2016 04:09
1,2-DCB-d4	89	60-140		01/26/2016 04:09

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	01/26/2016 02:49
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/26/2016 02:49
Benzene	ND	0.0050	1	01/26/2016 02:49
Bromobenzene	ND	0.0050	1	01/26/2016 02:49
Bromochloromethane	ND	0.0050	1	01/26/2016 02:49
Bromodichloromethane	ND	0.0050	1	01/26/2016 02:49
Bromoform	ND	0.0050	1	01/26/2016 02:49
Bromomethane	ND	0.0050	1	01/26/2016 02:49
2-Butanone (MEK)	ND	0.020	1	01/26/2016 02:49
t-Butyl alcohol (TBA)	ND	0.050	1	01/26/2016 02:49
n-Butyl benzene	ND	0.0050	1	01/26/2016 02:49
sec-Butyl benzene	ND	0.0050	1	01/26/2016 02:49
tert-Butyl benzene	ND	0.0050	1	01/26/2016 02:49
Carbon Disulfide	ND	0.0050	1	01/26/2016 02:49
Carbon Tetrachloride	ND	0.0050	1	01/26/2016 02:49
Chlorobenzene	ND	0.0050	1	01/26/2016 02:49
Chloroethane	ND	0.0050	1	01/26/2016 02:49
Chloroform	ND	0.0050	1	01/26/2016 02:49
Chloromethane	ND	0.0050	1	01/26/2016 02:49
2-Chlorotoluene	ND	0.0050	1	01/26/2016 02:49
4-Chlorotoluene	ND	0.0050	1	01/26/2016 02:49
Dibromochloromethane	ND	0.0050	1	01/26/2016 02:49
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/26/2016 02:49
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/26/2016 02:49
Dibromomethane	ND	0.0050	1	01/26/2016 02:49
1,2-Dichlorobenzene	ND	0.0050	1	01/26/2016 02:49
1,3-Dichlorobenzene	ND	0.0050	1	01/26/2016 02:49
1,4-Dichlorobenzene	ND	0.0050	1	01/26/2016 02:49
Dichlorodifluoromethane	ND	0.0050	1	01/26/2016 02:49
1,1-Dichloroethane	ND	0.0050	1	01/26/2016 02:49
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/26/2016 02:49
1,1-Dichloroethene	ND	0.0050	1	01/26/2016 02:49
cis-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 02:49
trans-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 02:49
1,2-Dichloropropane	ND	0.0050	1	01/26/2016 02:49
1,3-Dichloropropane	ND	0.0050	1	01/26/2016 02:49
2,2-Dichloropropane	ND	0.0050	1	01/26/2016 02:49

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.0050	1	01/26/2016 02:49
cis-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 02:49
trans-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 02:49
Diisopropyl ether (DIPE)	ND	0.0050	1	01/26/2016 02:49
Ethylbenzene	ND	0.0050	1	01/26/2016 02:49
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/26/2016 02:49
Freon 113	ND	0.0050	1	01/26/2016 02:49
Hexachlorobutadiene	ND	0.0050	1	01/26/2016 02:49
Hexachloroethane	ND	0.0050	1	01/26/2016 02:49
2-Hexanone	ND	0.0050	1	01/26/2016 02:49
Isopropylbenzene	ND	0.0050	1	01/26/2016 02:49
4-Isopropyl toluene	ND	0.0050	1	01/26/2016 02:49
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/26/2016 02:49
Methylene chloride	ND	0.0050	1	01/26/2016 02:49
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/26/2016 02:49
Naphthalene	ND	0.0050	1	01/26/2016 02:49
n-Propyl benzene	ND	0.0050	1	01/26/2016 02:49
Styrene	ND	0.0050	1	01/26/2016 02:49
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 02:49
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 02:49
Tetrachloroethene	ND	0.0050	1	01/26/2016 02:49
Toluene	ND	0.0050	1	01/26/2016 02:49
1,2,3-Trichlorobenzene	ND	0.0050	1	01/26/2016 02:49
1,2,4-Trichlorobenzene	ND	0.0050	1	01/26/2016 02:49
1,1,1-Trichloroethane	ND	0.0050	1	01/26/2016 02:49
1,1,2-Trichloroethane	ND	0.0050	1	01/26/2016 02:49
Trichloroethene	ND	0.0050	1	01/26/2016 02:49
Trichlorofluoromethane	ND	0.0050	1	01/26/2016 02:49
1,2,3-Trichloropropane	ND	0.0050	1	01/26/2016 02:49
1,2,4-Trimethylbenzene	ND	0.0050	1	01/26/2016 02:49
1,3,5-Trimethylbenzene	ND	0.0050	1	01/26/2016 02:49
Vinyl Chloride	ND	0.0050	1	01/26/2016 02:49
Xylenes, Total	ND	0.0050	1	01/26/2016 02:49

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	103	70-130		01/26/2016 02:49
Toluene-d8	111	70-130		01/26/2016 02:49
4-BFB	116	70-130		01/26/2016 02:49
Benzene-d6	95	60-140		01/26/2016 02:49
Ethylbenzene-d10	104	60-140		01/26/2016 02:49
1,2-DCB-d4	86	60-140		01/26/2016 02:49

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	01/26/2016 00:11
tert-Amyl methyl ether (TAME)	ND	0.0050	1	01/26/2016 00:11
Benzene	ND	0.0050	1	01/26/2016 00:11
Bromobenzene	ND	0.0050	1	01/26/2016 00:11
Bromochloromethane	ND	0.0050	1	01/26/2016 00:11
Bromodichloromethane	ND	0.0050	1	01/26/2016 00:11
Bromoform	ND	0.0050	1	01/26/2016 00:11
Bromomethane	ND	0.0050	1	01/26/2016 00:11
2-Butanone (MEK)	ND	0.020	1	01/26/2016 00:11
t-Butyl alcohol (TBA)	ND	0.050	1	01/26/2016 00:11
n-Butyl benzene	ND	0.0050	1	01/26/2016 00:11
sec-Butyl benzene	ND	0.0050	1	01/26/2016 00:11
tert-Butyl benzene	ND	0.0050	1	01/26/2016 00:11
Carbon Disulfide	ND	0.0050	1	01/26/2016 00:11
Carbon Tetrachloride	ND	0.0050	1	01/26/2016 00:11
Chlorobenzene	ND	0.0050	1	01/26/2016 00:11
Chloroethane	ND	0.0050	1	01/26/2016 00:11
Chloroform	ND	0.0050	1	01/26/2016 00:11
Chloromethane	ND	0.0050	1	01/26/2016 00:11
2-Chlorotoluene	ND	0.0050	1	01/26/2016 00:11
4-Chlorotoluene	ND	0.0050	1	01/26/2016 00:11
Dibromochloromethane	ND	0.0050	1	01/26/2016 00:11
1,2-Dibromo-3-chloropropane	ND	0.0040	1	01/26/2016 00:11
1,2-Dibromoethane (EDB)	ND	0.0040	1	01/26/2016 00:11
Dibromomethane	ND	0.0050	1	01/26/2016 00:11
1,2-Dichlorobenzene	ND	0.0050	1	01/26/2016 00:11
1,3-Dichlorobenzene	ND	0.0050	1	01/26/2016 00:11
1,4-Dichlorobenzene	ND	0.0050	1	01/26/2016 00:11
Dichlorodifluoromethane	ND	0.0050	1	01/26/2016 00:11
1,1-Dichloroethane	ND	0.0050	1	01/26/2016 00:11
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	01/26/2016 00:11
1,1-Dichloroethene	ND	0.0050	1	01/26/2016 00:11
cis-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 00:11
trans-1,2-Dichloroethene	ND	0.0050	1	01/26/2016 00:11
1,2-Dichloropropane	ND	0.0050	1	01/26/2016 00:11
1,3-Dichloropropane	ND	0.0050	1	01/26/2016 00:11
2,2-Dichloropropane	ND	0.0050	1	01/26/2016 00:11

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC10	115699
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.0050	1	01/26/2016 00:11	
cis-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 00:11	
trans-1,3-Dichloropropene	ND	0.0050	1	01/26/2016 00:11	
Diisopropyl ether (DIPE)	ND	0.0050	1	01/26/2016 00:11	
Ethylbenzene	ND	0.0050	1	01/26/2016 00:11	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	01/26/2016 00:11	
Freon 113	ND	0.0050	1	01/26/2016 00:11	
Hexachlorobutadiene	ND	0.0050	1	01/26/2016 00:11	
Hexachloroethane	ND	0.0050	1	01/26/2016 00:11	
2-Hexanone	ND	0.0050	1	01/26/2016 00:11	
Isopropylbenzene	ND	0.0050	1	01/26/2016 00:11	
4-Isopropyl toluene	ND	0.0050	1	01/26/2016 00:11	
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	01/26/2016 00:11	
Methylene chloride	ND	0.0050	1	01/26/2016 00:11	
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	01/26/2016 00:11	
Naphthalene	ND	0.0050	1	01/26/2016 00:11	
n-Propyl benzene	ND	0.0050	1	01/26/2016 00:11	
Styrene	ND	0.0050	1	01/26/2016 00:11	
1,1,1,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 00:11	
1,1,2,2-Tetrachloroethane	ND	0.0050	1	01/26/2016 00:11	
Tetrachloroethene	ND	0.0050	1	01/26/2016 00:11	
Toluene	ND	0.0050	1	01/26/2016 00:11	
1,2,3-Trichlorobenzene	ND	0.0050	1	01/26/2016 00:11	
1,2,4-Trichlorobenzene	ND	0.0050	1	01/26/2016 00:11	
1,1,1-Trichloroethane	ND	0.0050	1	01/26/2016 00:11	
1,1,2-Trichloroethane	ND	0.0050	1	01/26/2016 00:11	
Trichloroethene	ND	0.0050	1	01/26/2016 00:11	
Trichlorofluoromethane	ND	0.0050	1	01/26/2016 00:11	
1,2,3-Trichloropropane	ND	0.0050	1	01/26/2016 00:11	
1,2,4-Trimethylbenzene	ND	0.0050	1	01/26/2016 00:11	
1,3,5-Trimethylbenzene	ND	0.0050	1	01/26/2016 00:11	
Vinyl Chloride	ND	0.0050	1	01/26/2016 00:11	
Xylenes, Total	ND	0.0050	1	01/26/2016 00:11	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	101	70-130		01/26/2016 00:11
Toluene-d8	108	70-130		01/26/2016 00:11
4-BFB	107	70-130		01/26/2016 00:11
Benzene-d6	91	60-140		01/26/2016 00:11
Ethylbenzene-d10	101	60-140		01/26/2016 00:11
1,2-DCB-d4	81	60-140		01/26/2016 00:11

Analyst(s): KF



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC10	115699

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	2.0	20	01/27/2016 12:30
tert-Amyl methyl ether (TAME)	ND	0.10	20	01/27/2016 12:30
Benzene	ND	0.10	20	01/27/2016 12:30
Bromobenzene	ND	0.10	20	01/27/2016 12:30
Bromochloromethane	ND	0.10	20	01/27/2016 12:30
Bromodichloromethane	ND	0.10	20	01/27/2016 12:30
Bromoform	ND	0.10	20	01/27/2016 12:30
Bromomethane	ND	0.10	20	01/27/2016 12:30
2-Butanone (MEK)	ND	0.40	20	01/27/2016 12:30
t-Butyl alcohol (TBA)	ND	1.0	20	01/27/2016 12:30
n-Butyl benzene	ND	0.10	20	01/27/2016 12:30
sec-Butyl benzene	0.35	0.10	20	01/27/2016 12:30
tert-Butyl benzene	ND	0.10	20	01/27/2016 12:30
Carbon Disulfide	ND	0.10	20	01/27/2016 12:30
Carbon Tetrachloride	ND	0.10	20	01/27/2016 12:30
Chlorobenzene	ND	0.10	20	01/27/2016 12:30
Chloroethane	ND	0.10	20	01/27/2016 12:30
Chloroform	ND	0.10	20	01/27/2016 12:30
Chloromethane	ND	0.10	20	01/27/2016 12:30
2-Chlorotoluene	ND	0.10	20	01/27/2016 12:30
4-Chlorotoluene	ND	0.10	20	01/27/2016 12:30
Dibromochloromethane	ND	0.10	20	01/27/2016 12:30
1,2-Dibromo-3-chloropropane	ND	0.080	20	01/27/2016 12:30
1,2-Dibromoethane (EDB)	ND	0.080	20	01/27/2016 12:30
Dibromomethane	ND	0.10	20	01/27/2016 12:30
1,2-Dichlorobenzene	ND	0.10	20	01/27/2016 12:30
1,3-Dichlorobenzene	ND	0.10	20	01/27/2016 12:30
1,4-Dichlorobenzene	ND	0.10	20	01/27/2016 12:30
Dichlorodifluoromethane	ND	0.10	20	01/27/2016 12:30
1,1-Dichloroethane	ND	0.10	20	01/27/2016 12:30
1,2-Dichloroethane (1,2-DCA)	ND	0.080	20	01/27/2016 12:30
1,1-Dichloroethene	ND	0.10	20	01/27/2016 12:30
cis-1,2-Dichloroethene	ND	0.10	20	01/27/2016 12:30
trans-1,2-Dichloroethene	ND	0.10	20	01/27/2016 12:30
1,2-Dichloropropane	ND	0.10	20	01/27/2016 12:30
1,3-Dichloropropane	ND	0.10	20	01/27/2016 12:30
2,2-Dichloropropane	ND	0.10	20	01/27/2016 12:30

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC10	115699
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.10	20	01/27/2016 12:30	
cis-1,3-Dichloropropene	ND	0.10	20	01/27/2016 12:30	
trans-1,3-Dichloropropene	ND	0.10	20	01/27/2016 12:30	
Diisopropyl ether (DIPE)	ND	0.10	20	01/27/2016 12:30	
Ethylbenzene	ND	0.10	20	01/27/2016 12:30	
Ethyl tert-butyl ether (ETBE)	ND	0.10	20	01/27/2016 12:30	
Freon 113	ND	0.10	20	01/27/2016 12:30	
Hexachlorobutadiene	ND	0.10	20	01/27/2016 12:30	
Hexachloroethane	ND	0.10	20	01/27/2016 12:30	
2-Hexanone	ND	0.10	20	01/27/2016 12:30	
Isopropylbenzene	0.76	0.10	20	01/27/2016 12:30	
4-Isopropyl toluene	0.12	0.10	20	01/27/2016 12:30	
Methyl-t-butyl ether (MTBE)	ND	0.10	20	01/27/2016 12:30	
Methylene chloride	ND	0.10	20	01/27/2016 12:30	
4-Methyl-2-pentanone (MIBK)	ND	0.10	20	01/27/2016 12:30	
Naphthalene	2.0	0.10	20	01/27/2016 12:30	
n-Propyl benzene	ND	0.10	20	01/27/2016 12:30	
Styrene	ND	0.10	20	01/27/2016 12:30	
1,1,1,2-Tetrachloroethane	ND	0.10	20	01/27/2016 12:30	
1,1,2,2-Tetrachloroethane	ND	0.10	20	01/27/2016 12:30	
Tetrachloroethene	ND	0.10	20	01/27/2016 12:30	
Toluene	ND	0.10	20	01/27/2016 12:30	
1,2,3-Trichlorobenzene	ND	0.10	20	01/27/2016 12:30	
1,2,4-Trichlorobenzene	ND	0.10	20	01/27/2016 12:30	
1,1,1-Trichloroethane	ND	0.10	20	01/27/2016 12:30	
1,1,2-Trichloroethane	ND	0.10	20	01/27/2016 12:30	
Trichloroethene	ND	0.10	20	01/27/2016 12:30	
Trichlorofluoromethane	ND	0.10	20	01/27/2016 12:30	
1,2,3-Trichloropropane	ND	0.10	20	01/27/2016 12:30	
1,2,4-Trimethylbenzene	ND	0.10	20	01/27/2016 12:30	
1,3,5-Trimethylbenzene	ND	0.10	20	01/27/2016 12:30	
Vinyl Chloride	ND	0.10	20	01/27/2016 12:30	
Xylenes, Total	ND	0.10	20	01/27/2016 12:30	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC10	115699

Analytes	Result	Qualifiers	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
Dibromofluoromethane	105		70-130		01/27/2016 12:30
Toluene-d8	91		70-130		01/27/2016 12:30
4-BFB	132	S	70-130		01/27/2016 12:30
Benzene-d6	96		60-140		01/27/2016 12:30
Ethylbenzene-d10	112		60-140		01/27/2016 12:30
1,2-DCB-d4	95		60-140		01/27/2016 12:30

Analyst(s): KF

Analytical Comments: c7



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4	1601816-001B	Water	01/20/2016 13:56	GC28	115820

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/25/2016 15:00
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/25/2016 15:00
Benzene	ND	0.50	1	01/25/2016 15:00
Bromobenzene	ND	0.50	1	01/25/2016 15:00
Bromochloromethane	ND	0.50	1	01/25/2016 15:00
Bromodichloromethane	ND	0.50	1	01/25/2016 15:00
Bromoform	ND	0.50	1	01/25/2016 15:00
Bromomethane	ND	0.50	1	01/25/2016 15:00
2-Butanone (MEK)	ND	2.0	1	01/25/2016 15:00
t-Butyl alcohol (TBA)	ND	2.0	1	01/25/2016 15:00
n-Butyl benzene	ND	0.50	1	01/25/2016 15:00
sec-Butyl benzene	ND	0.50	1	01/25/2016 15:00
tert-Butyl benzene	ND	0.50	1	01/25/2016 15:00
Carbon Disulfide	ND	0.50	1	01/25/2016 15:00
Carbon Tetrachloride	ND	0.50	1	01/25/2016 15:00
Chlorobenzene	ND	0.50	1	01/25/2016 15:00
Chloroethane	ND	0.50	1	01/25/2016 15:00
Chloroform	ND	0.50	1	01/25/2016 15:00
Chloromethane	ND	0.50	1	01/25/2016 15:00
2-Chlorotoluene	ND	0.50	1	01/25/2016 15:00
4-Chlorotoluene	ND	0.50	1	01/25/2016 15:00
Dibromochloromethane	ND	0.50	1	01/25/2016 15:00
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/25/2016 15:00
1,2-Dibromoethane (EDB)	ND	0.50	1	01/25/2016 15:00
Dibromomethane	ND	0.50	1	01/25/2016 15:00
1,2-Dichlorobenzene	ND	0.50	1	01/25/2016 15:00
1,3-Dichlorobenzene	ND	0.50	1	01/25/2016 15:00
1,4-Dichlorobenzene	ND	0.50	1	01/25/2016 15:00
Dichlorodifluoromethane	ND	0.50	1	01/25/2016 15:00
1,1-Dichloroethane	ND	0.50	1	01/25/2016 15:00
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/25/2016 15:00
1,1-Dichloroethene	ND	0.50	1	01/25/2016 15:00
cis-1,2-Dichloroethene	ND	0.50	1	01/25/2016 15:00
trans-1,2-Dichloroethene	ND	0.50	1	01/25/2016 15:00
1,2-Dichloropropane	ND	0.50	1	01/25/2016 15:00
1,3-Dichloropropane	ND	0.50	1	01/25/2016 15:00
2,2-Dichloropropane	ND	0.50	1	01/25/2016 15:00

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4	1601816-001B	Water	01/20/2016 13:56	GC28	115820

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/25/2016 15:00
cis-1,3-Dichloropropene	ND	0.50	1	01/25/2016 15:00
trans-1,3-Dichloropropene	ND	0.50	1	01/25/2016 15:00
Diisopropyl ether (DIPE)	ND	0.50	1	01/25/2016 15:00
Ethylbenzene	ND	0.50	1	01/25/2016 15:00
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/25/2016 15:00
Freon 113	ND	0.50	1	01/25/2016 15:00
Hexachlorobutadiene	ND	0.50	1	01/25/2016 15:00
Hexachloroethane	ND	0.50	1	01/25/2016 15:00
2-Hexanone	ND	0.50	1	01/25/2016 15:00
Isopropylbenzene	ND	0.50	1	01/25/2016 15:00
4-Isopropyl toluene	ND	0.50	1	01/25/2016 15:00
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/25/2016 15:00
Methylene chloride	ND	0.50	1	01/25/2016 15:00
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/25/2016 15:00
Naphthalene	ND	0.50	1	01/25/2016 15:00
n-Propyl benzene	ND	0.50	1	01/25/2016 15:00
Styrene	ND	0.50	1	01/25/2016 15:00
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/25/2016 15:00
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/25/2016 15:00
Tetrachloroethene	ND	0.50	1	01/25/2016 15:00
Toluene	ND	0.50	1	01/25/2016 15:00
1,2,3-Trichlorobenzene	ND	0.50	1	01/25/2016 15:00
1,2,4-Trichlorobenzene	ND	0.50	1	01/25/2016 15:00
1,1,1-Trichloroethane	ND	0.50	1	01/25/2016 15:00
1,1,2-Trichloroethane	ND	0.50	1	01/25/2016 15:00
Trichloroethene	ND	0.50	1	01/25/2016 15:00
Trichlorofluoromethane	ND	0.50	1	01/25/2016 15:00
1,2,3-Trichloropropane	ND	0.50	1	01/25/2016 15:00
1,2,4-Trimethylbenzene	ND	0.50	1	01/25/2016 15:00
1,3,5-Trimethylbenzene	ND	0.50	1	01/25/2016 15:00
Vinyl Chloride	ND	0.50	1	01/25/2016 15:00
Xylenes, Total	ND	0.50	1	01/25/2016 15:00

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4	1601816-001B	Water	01/20/2016 13:56	GC28	115820

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	100	70-130		01/25/2016 15:00
Toluene-d8	101	70-130		01/25/2016 15:00
4-BFB	89	70-130		01/25/2016 15:00

Analyst(s): KF

Analytical Comments: b1



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5	1601816-002B	Water	01/20/2016 12:25	GC28	115820
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	10	1	01/26/2016 16:43	
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/26/2016 16:43	
Benzene	ND	0.50	1	01/26/2016 16:43	
Bromobenzene	ND	0.50	1	01/26/2016 16:43	
Bromochloromethane	ND	0.50	1	01/26/2016 16:43	
Bromodichloromethane	ND	0.50	1	01/26/2016 16:43	
Bromoform	ND	0.50	1	01/26/2016 16:43	
Bromomethane	ND	0.50	1	01/26/2016 16:43	
2-Butanone (MEK)	ND	2.0	1	01/26/2016 16:43	
t-Butyl alcohol (TBA)	ND	2.0	1	01/26/2016 16:43	
n-Butyl benzene	ND	0.50	1	01/26/2016 16:43	
sec-Butyl benzene	ND	0.50	1	01/26/2016 16:43	
tert-Butyl benzene	ND	0.50	1	01/26/2016 16:43	
Carbon Disulfide	ND	0.50	1	01/26/2016 16:43	
Carbon Tetrachloride	ND	0.50	1	01/26/2016 16:43	
Chlorobenzene	ND	0.50	1	01/26/2016 16:43	
Chloroethane	ND	0.50	1	01/26/2016 16:43	
Chloroform	ND	0.50	1	01/26/2016 16:43	
Chloromethane	ND	0.50	1	01/26/2016 16:43	
2-Chlorotoluene	ND	0.50	1	01/26/2016 16:43	
4-Chlorotoluene	ND	0.50	1	01/26/2016 16:43	
Dibromochloromethane	ND	0.50	1	01/26/2016 16:43	
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/26/2016 16:43	
1,2-Dibromoethane (EDB)	ND	0.50	1	01/26/2016 16:43	
Dibromomethane	ND	0.50	1	01/26/2016 16:43	
1,2-Dichlorobenzene	ND	0.50	1	01/26/2016 16:43	
1,3-Dichlorobenzene	ND	0.50	1	01/26/2016 16:43	
1,4-Dichlorobenzene	ND	0.50	1	01/26/2016 16:43	
Dichlorodifluoromethane	ND	0.50	1	01/26/2016 16:43	
1,1-Dichloroethane	ND	0.50	1	01/26/2016 16:43	
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/26/2016 16:43	
1,1-Dichloroethene	ND	0.50	1	01/26/2016 16:43	
cis-1,2-Dichloroethene	ND	0.50	1	01/26/2016 16:43	
trans-1,2-Dichloroethene	ND	0.50	1	01/26/2016 16:43	
1,2-Dichloropropane	ND	0.50	1	01/26/2016 16:43	
1,3-Dichloropropane	ND	0.50	1	01/26/2016 16:43	
2,2-Dichloropropane	ND	0.50	1	01/26/2016 16:43	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5	1601816-002B	Water	01/20/2016 12:25	GC28	115820
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.50	1	01/26/2016 16:43	
cis-1,3-Dichloropropene	ND	0.50	1	01/26/2016 16:43	
trans-1,3-Dichloropropene	ND	0.50	1	01/26/2016 16:43	
Diisopropyl ether (DIPE)	ND	0.50	1	01/26/2016 16:43	
Ethylbenzene	ND	0.50	1	01/26/2016 16:43	
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/26/2016 16:43	
Freon 113	ND	0.50	1	01/26/2016 16:43	
Hexachlorobutadiene	ND	0.50	1	01/26/2016 16:43	
Hexachloroethane	ND	0.50	1	01/26/2016 16:43	
2-Hexanone	ND	0.50	1	01/26/2016 16:43	
Isopropylbenzene	ND	0.50	1	01/26/2016 16:43	
4-Isopropyl toluene	ND	0.50	1	01/26/2016 16:43	
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/26/2016 16:43	
Methylene chloride	ND	0.50	1	01/26/2016 16:43	
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/26/2016 16:43	
Naphthalene	ND	0.50	1	01/26/2016 16:43	
n-Propyl benzene	ND	0.50	1	01/26/2016 16:43	
Styrene	ND	0.50	1	01/26/2016 16:43	
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/26/2016 16:43	
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/26/2016 16:43	
Tetrachloroethene	ND	0.50	1	01/26/2016 16:43	
Toluene	ND	0.50	1	01/26/2016 16:43	
1,2,3-Trichlorobenzene	ND	0.50	1	01/26/2016 16:43	
1,2,4-Trichlorobenzene	ND	0.50	1	01/26/2016 16:43	
1,1,1-Trichloroethane	ND	0.50	1	01/26/2016 16:43	
1,1,2-Trichloroethane	ND	0.50	1	01/26/2016 16:43	
Trichloroethene	ND	0.50	1	01/26/2016 16:43	
Trichlorofluoromethane	ND	0.50	1	01/26/2016 16:43	
1,2,3-Trichloropropane	ND	0.50	1	01/26/2016 16:43	
1,2,4-Trimethylbenzene	ND	0.50	1	01/26/2016 16:43	
1,3,5-Trimethylbenzene	ND	0.50	1	01/26/2016 16:43	
Vinyl Chloride	ND	0.50	1	01/26/2016 16:43	
Xylenes, Total	ND	0.50	1	01/26/2016 16:43	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5	1601816-002B	Water	01/20/2016 12:25	GC28	115820

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	105	70-130		01/26/2016 16:43
Toluene-d8	98	70-130		01/26/2016 16:43
4-BFB	103	70-130		01/26/2016 16:43

Analyst(s): KF

Analytical Comments: b1



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6	1601816-003B	Water	01/20/2016 12:57	GC28	115878

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/26/2016 12:12
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/26/2016 12:12
Benzene	ND	0.50	1	01/26/2016 12:12
Bromobenzene	ND	0.50	1	01/26/2016 12:12
Bromochloromethane	ND	0.50	1	01/26/2016 12:12
Bromodichloromethane	ND	0.50	1	01/26/2016 12:12
Bromoform	ND	0.50	1	01/26/2016 12:12
Bromomethane	ND	0.50	1	01/26/2016 12:12
2-Butanone (MEK)	ND	2.0	1	01/26/2016 12:12
t-Butyl alcohol (TBA)	ND	2.0	1	01/26/2016 12:12
n-Butyl benzene	ND	0.50	1	01/26/2016 12:12
sec-Butyl benzene	ND	0.50	1	01/26/2016 12:12
tert-Butyl benzene	ND	0.50	1	01/26/2016 12:12
Carbon Disulfide	ND	0.50	1	01/26/2016 12:12
Carbon Tetrachloride	ND	0.50	1	01/26/2016 12:12
Chlorobenzene	ND	0.50	1	01/26/2016 12:12
Chloroethane	ND	0.50	1	01/26/2016 12:12
Chloroform	ND	0.50	1	01/26/2016 12:12
Chloromethane	ND	0.50	1	01/26/2016 12:12
2-Chlorotoluene	ND	0.50	1	01/26/2016 12:12
4-Chlorotoluene	ND	0.50	1	01/26/2016 12:12
Dibromochloromethane	ND	0.50	1	01/26/2016 12:12
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/26/2016 12:12
1,2-Dibromoethane (EDB)	ND	0.50	1	01/26/2016 12:12
Dibromomethane	ND	0.50	1	01/26/2016 12:12
1,2-Dichlorobenzene	ND	0.50	1	01/26/2016 12:12
1,3-Dichlorobenzene	ND	0.50	1	01/26/2016 12:12
1,4-Dichlorobenzene	ND	0.50	1	01/26/2016 12:12
Dichlorodifluoromethane	ND	0.50	1	01/26/2016 12:12
1,1-Dichloroethane	ND	0.50	1	01/26/2016 12:12
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/26/2016 12:12
1,1-Dichloroethene	ND	0.50	1	01/26/2016 12:12
cis-1,2-Dichloroethene	ND	0.50	1	01/26/2016 12:12
trans-1,2-Dichloroethene	ND	0.50	1	01/26/2016 12:12
1,2-Dichloropropane	ND	0.50	1	01/26/2016 12:12
1,3-Dichloropropane	ND	0.50	1	01/26/2016 12:12
2,2-Dichloropropane	ND	0.50	1	01/26/2016 12:12

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6	1601816-003B	Water	01/20/2016 12:57	GC28	115878
Analytes	Result	RL	DF	Date Analyzed	
1,1-Dichloropropene	ND	0.50	1	01/26/2016 12:12	
cis-1,3-Dichloropropene	ND	0.50	1	01/26/2016 12:12	
trans-1,3-Dichloropropene	ND	0.50	1	01/26/2016 12:12	
Diisopropyl ether (DIPE)	ND	0.50	1	01/26/2016 12:12	
Ethylbenzene	ND	0.50	1	01/26/2016 12:12	
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/26/2016 12:12	
Freon 113	ND	0.50	1	01/26/2016 12:12	
Hexachlorobutadiene	ND	0.50	1	01/26/2016 12:12	
Hexachloroethane	ND	0.50	1	01/26/2016 12:12	
2-Hexanone	ND	0.50	1	01/26/2016 12:12	
Isopropylbenzene	ND	0.50	1	01/26/2016 12:12	
4-Isopropyl toluene	ND	0.50	1	01/26/2016 12:12	
Methyl-t-butyl ether (MTBE)	1.4	0.50	1	01/26/2016 12:12	
Methylene chloride	ND	0.50	1	01/26/2016 12:12	
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/26/2016 12:12	
Naphthalene	ND	0.50	1	01/26/2016 12:12	
n-Propyl benzene	ND	0.50	1	01/26/2016 12:12	
Styrene	ND	0.50	1	01/26/2016 12:12	
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/26/2016 12:12	
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/26/2016 12:12	
Tetrachloroethene	ND	0.50	1	01/26/2016 12:12	
Toluene	ND	0.50	1	01/26/2016 12:12	
1,2,3-Trichlorobenzene	ND	0.50	1	01/26/2016 12:12	
1,2,4-Trichlorobenzene	ND	0.50	1	01/26/2016 12:12	
1,1,1-Trichloroethane	ND	0.50	1	01/26/2016 12:12	
1,1,2-Trichloroethane	ND	0.50	1	01/26/2016 12:12	
Trichloroethene	ND	0.50	1	01/26/2016 12:12	
Trichlorofluoromethane	ND	0.50	1	01/26/2016 12:12	
1,2,3-Trichloropropane	ND	0.50	1	01/26/2016 12:12	
1,2,4-Trimethylbenzene	ND	0.50	1	01/26/2016 12:12	
1,3,5-Trimethylbenzene	ND	0.50	1	01/26/2016 12:12	
Vinyl Chloride	ND	0.50	1	01/26/2016 12:12	
Xylenes, Total	ND	0.50	1	01/26/2016 12:12	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6	1601816-003B	Water	01/20/2016 12:57	GC28	115878

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	104	70-130		01/26/2016 12:12
Toluene-d8	99	70-130		01/26/2016 12:12
4-BFB	99	70-130		01/26/2016 12:12

Analyst(s): KF

Analytical Comments: b1



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7	1601816-004B	Water	01/20/2016 14:22	GC28	115878

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	01/26/2016 12:50
tert-Amyl methyl ether (TAME)	ND	0.50	1	01/26/2016 12:50
Benzene	ND	0.50	1	01/26/2016 12:50
Bromobenzene	ND	0.50	1	01/26/2016 12:50
Bromochloromethane	ND	0.50	1	01/26/2016 12:50
Bromodichloromethane	ND	0.50	1	01/26/2016 12:50
Bromoform	ND	0.50	1	01/26/2016 12:50
Bromomethane	ND	0.50	1	01/26/2016 12:50
2-Butanone (MEK)	ND	2.0	1	01/26/2016 12:50
t-Butyl alcohol (TBA)	ND	2.0	1	01/26/2016 12:50
n-Butyl benzene	ND	0.50	1	01/26/2016 12:50
sec-Butyl benzene	ND	0.50	1	01/26/2016 12:50
tert-Butyl benzene	0.62	0.50	1	01/26/2016 12:50
Carbon Disulfide	ND	0.50	1	01/26/2016 12:50
Carbon Tetrachloride	ND	0.50	1	01/26/2016 12:50
Chlorobenzene	ND	0.50	1	01/26/2016 12:50
Chloroethane	ND	0.50	1	01/26/2016 12:50
Chloroform	ND	0.50	1	01/26/2016 12:50
Chloromethane	ND	0.50	1	01/26/2016 12:50
2-Chlorotoluene	ND	0.50	1	01/26/2016 12:50
4-Chlorotoluene	ND	0.50	1	01/26/2016 12:50
Dibromochloromethane	ND	0.50	1	01/26/2016 12:50
1,2-Dibromo-3-chloropropane	ND	0.20	1	01/26/2016 12:50
1,2-Dibromoethane (EDB)	ND	0.50	1	01/26/2016 12:50
Dibromomethane	ND	0.50	1	01/26/2016 12:50
1,2-Dichlorobenzene	ND	0.50	1	01/26/2016 12:50
1,3-Dichlorobenzene	ND	0.50	1	01/26/2016 12:50
1,4-Dichlorobenzene	ND	0.50	1	01/26/2016 12:50
Dichlorodifluoromethane	ND	0.50	1	01/26/2016 12:50
1,1-Dichloroethane	ND	0.50	1	01/26/2016 12:50
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	01/26/2016 12:50
1,1-Dichloroethene	ND	0.50	1	01/26/2016 12:50
cis-1,2-Dichloroethene	ND	0.50	1	01/26/2016 12:50
trans-1,2-Dichloroethene	ND	0.50	1	01/26/2016 12:50
1,2-Dichloropropane	ND	0.50	1	01/26/2016 12:50
1,3-Dichloropropane	ND	0.50	1	01/26/2016 12:50
2,2-Dichloropropane	ND	0.50	1	01/26/2016 12:50

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7	1601816-004B	Water	01/20/2016 14:22	GC28	115878

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	01/26/2016 12:50
cis-1,3-Dichloropropene	ND	0.50	1	01/26/2016 12:50
trans-1,3-Dichloropropene	ND	0.50	1	01/26/2016 12:50
Diisopropyl ether (DIPE)	ND	0.50	1	01/26/2016 12:50
Ethylbenzene	ND	0.50	1	01/26/2016 12:50
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	01/26/2016 12:50
Freon 113	ND	0.50	1	01/26/2016 12:50
Hexachlorobutadiene	ND	0.50	1	01/26/2016 12:50
Hexachloroethane	ND	0.50	1	01/26/2016 12:50
2-Hexanone	ND	0.50	1	01/26/2016 12:50
Isopropylbenzene	1.1	0.50	1	01/26/2016 12:50
4-Isopropyl toluene	ND	0.50	1	01/26/2016 12:50
Methyl-t-butyl ether (MTBE)	ND	0.50	1	01/26/2016 12:50
Methylene chloride	ND	0.50	1	01/26/2016 12:50
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	01/26/2016 12:50
Naphthalene	1.4	0.50	1	01/26/2016 12:50
n-Propyl benzene	ND	0.50	1	01/26/2016 12:50
Styrene	ND	0.50	1	01/26/2016 12:50
1,1,1,2-Tetrachloroethane	ND	0.50	1	01/26/2016 12:50
1,1,2,2-Tetrachloroethane	ND	0.50	1	01/26/2016 12:50
Tetrachloroethene	ND	0.50	1	01/26/2016 12:50
Toluene	ND	0.50	1	01/26/2016 12:50
1,2,3-Trichlorobenzene	ND	0.50	1	01/26/2016 12:50
1,2,4-Trichlorobenzene	ND	0.50	1	01/26/2016 12:50
1,1,1-Trichloroethane	ND	0.50	1	01/26/2016 12:50
1,1,2-Trichloroethane	ND	0.50	1	01/26/2016 12:50
Trichloroethene	ND	0.50	1	01/26/2016 12:50
Trichlorofluoromethane	ND	0.50	1	01/26/2016 12:50
1,2,3-Trichloropropane	ND	0.50	1	01/26/2016 12:50
1,2,4-Trimethylbenzene	ND	0.50	1	01/26/2016 12:50
1,3,5-Trimethylbenzene	ND	0.50	1	01/26/2016 12:50
Vinyl Chloride	ND	0.50	1	01/26/2016 12:50
Xylenes, Total	ND	0.50	1	01/26/2016 12:50

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics by P&T and GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7	1601816-004B	Water	01/20/2016 14:22	GC28	115878

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	105	70-130		01/26/2016 12:50
Toluene-d8	98	70-130		01/26/2016 12:50
4-BFB	110	70-130		01/26/2016 12:50

Analyst(s): KF

Analytical Comments: b1



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	0.022	0.020	2	01/26/2016 20:50
Acenaphthylene	0.046	0.020	2	01/26/2016 20:50
Anthracene	0.084	0.020	2	01/26/2016 20:50
Benzo (a) anthracene	0.57	0.020	2	01/26/2016 20:50
Benzo (a) pyrene	0.77	0.020	2	01/26/2016 20:50
Benzo (b) fluoranthene	0.57	0.020	2	01/26/2016 20:50
Benzo (g,h,i) perylene	0.42	0.020	2	01/26/2016 20:50
Benzo (k) fluoranthene	0.29	0.020	2	01/26/2016 20:50
Chrysene	0.52	0.020	2	01/26/2016 20:50
Dibenzo (a,h) anthracene	0.081	0.020	2	01/26/2016 20:50
Fluoranthene	0.72	0.020	2	01/26/2016 20:50
Fluorene	ND	0.020	2	01/26/2016 20:50
Indeno (1,2,3-cd) pyrene	0.33	0.020	2	01/26/2016 20:50
1-Methylnaphthalene	ND	0.020	2	01/26/2016 20:50
2-Methylnaphthalene	ND	0.020	2	01/26/2016 20:50
Naphthalene	ND	0.020	2	01/26/2016 20:50
Phenanthrene	0.36	0.020	2	01/26/2016 20:50
Pyrene	0.84	0.020	2	01/26/2016 20:50

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	119	30-130	01/26/2016 20:50
2-Fluorobiphenyl	106	30-130	01/26/2016 20:50

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
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Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	01/26/2016 21:14
Acenaphthylene	ND	0.010	1	01/26/2016 21:14
Anthracene	ND	0.010	1	01/26/2016 21:14
Benzo (a) anthracene	ND	0.010	1	01/26/2016 21:14
Benzo (a) pyrene	ND	0.010	1	01/26/2016 21:14
Benzo (b) fluoranthene	ND	0.010	1	01/26/2016 21:14
Benzo (g,h,i) perylene	ND	0.010	1	01/26/2016 21:14
Benzo (k) fluoranthene	ND	0.010	1	01/26/2016 21:14
Chrysene	ND	0.010	1	01/26/2016 21:14
Dibenzo (a,h) anthracene	ND	0.010	1	01/26/2016 21:14
Fluoranthene	ND	0.010	1	01/26/2016 21:14
Fluorene	ND	0.010	1	01/26/2016 21:14
Indeno (1,2,3-cd) pyrene	ND	0.010	1	01/26/2016 21:14
1-Methylnaphthalene	ND	0.010	1	01/26/2016 21:14
2-Methylnaphthalene	ND	0.010	1	01/26/2016 21:14
Naphthalene	ND	0.010	1	01/26/2016 21:14
Phenanthrene	ND	0.010	1	01/26/2016 21:14
Pyrene	ND	0.010	1	01/26/2016 21:14

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	130	30-130	01/26/2016 21:14
2-Fluorobiphenyl	118	30-130	01/26/2016 21:14

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	01/26/2016 22:53
Acenaphthylene	ND	0.010	1	01/26/2016 22:53
Anthracene	ND	0.010	1	01/26/2016 22:53
Benzo (a) anthracene	ND	0.010	1	01/26/2016 22:53
Benzo (a) pyrene	ND	0.010	1	01/26/2016 22:53
Benzo (b) fluoranthene	ND	0.010	1	01/26/2016 22:53
Benzo (g,h,i) perylene	ND	0.010	1	01/26/2016 22:53
Benzo (k) fluoranthene	ND	0.010	1	01/26/2016 22:53
Chrysene	ND	0.010	1	01/26/2016 22:53
Dibenzo (a,h) anthracene	ND	0.010	1	01/26/2016 22:53
Fluoranthene	ND	0.010	1	01/26/2016 22:53
Fluorene	ND	0.010	1	01/26/2016 22:53
Indeno (1,2,3-cd) pyrene	ND	0.010	1	01/26/2016 22:53
1-Methylnaphthalene	ND	0.010	1	01/26/2016 22:53
2-Methylnaphthalene	ND	0.010	1	01/26/2016 22:53
Naphthalene	ND	0.010	1	01/26/2016 22:53
Phenanthrene	ND	0.010	1	01/26/2016 22:53
Pyrene	ND	0.010	1	01/26/2016 22:53

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	130	30-130	01/26/2016 22:53
2-Fluorobiphenyl	119	30-130	01/26/2016 22:53

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	01/26/2016 21:39
Acenaphthylene	ND	0.010	1	01/26/2016 21:39
Anthracene	ND	0.010	1	01/26/2016 21:39
Benzo (a) anthracene	ND	0.010	1	01/26/2016 21:39
Benzo (a) pyrene	ND	0.010	1	01/26/2016 21:39
Benzo (b) fluoranthene	ND	0.010	1	01/26/2016 21:39
Benzo (g,h,i) perylene	ND	0.010	1	01/26/2016 21:39
Benzo (k) fluoranthene	ND	0.010	1	01/26/2016 21:39
Chrysene	ND	0.010	1	01/26/2016 21:39
Dibenzo (a,h) anthracene	ND	0.010	1	01/26/2016 21:39
Fluoranthene	ND	0.010	1	01/26/2016 21:39
Fluorene	ND	0.010	1	01/26/2016 21:39
Indeno (1,2,3-cd) pyrene	ND	0.010	1	01/26/2016 21:39
1-Methylnaphthalene	ND	0.010	1	01/26/2016 21:39
2-Methylnaphthalene	ND	0.010	1	01/26/2016 21:39
Naphthalene	ND	0.010	1	01/26/2016 21:39
Phenanthrene	ND	0.010	1	01/26/2016 21:39
Pyrene	0.029	0.010	1	01/26/2016 21:39

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	128	30-130	01/26/2016 21:39
2-Fluorobiphenyl	109	30-130	01/26/2016 21:39

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	01/26/2016 23:17
Acenaphthylene	ND	0.010	1	01/26/2016 23:17
Anthracene	ND	0.010	1	01/26/2016 23:17
Benzo (a) anthracene	ND	0.010	1	01/26/2016 23:17
Benzo (a) pyrene	ND	0.010	1	01/26/2016 23:17
Benzo (b) fluoranthene	ND	0.010	1	01/26/2016 23:17
Benzo (g,h,i) perylene	ND	0.010	1	01/26/2016 23:17
Benzo (k) fluoranthene	ND	0.010	1	01/26/2016 23:17
Chrysene	ND	0.010	1	01/26/2016 23:17
Dibenzo (a,h) anthracene	ND	0.010	1	01/26/2016 23:17
Fluoranthene	ND	0.010	1	01/26/2016 23:17
Fluorene	ND	0.010	1	01/26/2016 23:17
Indeno (1,2,3-cd) pyrene	ND	0.010	1	01/26/2016 23:17
1-Methylnaphthalene	ND	0.010	1	01/26/2016 23:17
2-Methylnaphthalene	ND	0.010	1	01/26/2016 23:17
Naphthalene	ND	0.010	1	01/26/2016 23:17
Phenanthrene	ND	0.010	1	01/26/2016 23:17
Pyrene	ND	0.010	1	01/26/2016 23:17

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	129	30-130	01/26/2016 23:17
2-Fluorobiphenyl	114	30-130	01/26/2016 23:17

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	01/26/2016 22:04
Acenaphthylene	ND	0.010	1	01/26/2016 22:04
Anthracene	ND	0.010	1	01/26/2016 22:04
Benzo (a) anthracene	ND	0.010	1	01/26/2016 22:04
Benzo (a) pyrene	ND	0.010	1	01/26/2016 22:04
Benzo (b) fluoranthene	ND	0.010	1	01/26/2016 22:04
Benzo (g,h,i) perylene	ND	0.010	1	01/26/2016 22:04
Benzo (k) fluoranthene	ND	0.010	1	01/26/2016 22:04
Chrysene	ND	0.010	1	01/26/2016 22:04
Dibenzo (a,h) anthracene	ND	0.010	1	01/26/2016 22:04
Fluoranthene	ND	0.010	1	01/26/2016 22:04
Fluorene	ND	0.010	1	01/26/2016 22:04
Indeno (1,2,3-cd) pyrene	ND	0.010	1	01/26/2016 22:04
1-Methylnaphthalene	ND	0.010	1	01/26/2016 22:04
2-Methylnaphthalene	ND	0.010	1	01/26/2016 22:04
Naphthalene	ND	0.010	1	01/26/2016 22:04
Phenanthrene	ND	0.010	1	01/26/2016 22:04
Pyrene	0.037	0.010	1	01/26/2016 22:04

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	123	30-130	01/26/2016 22:04
2-Fluorobiphenyl	116	30-130	01/26/2016 22:04

Analyst(s): HK



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WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.010	1	01/26/2016 22:28
Acenaphthylene	ND	0.010	1	01/26/2016 22:28
Anthracene	ND	0.010	1	01/26/2016 22:28
Benzo (a) anthracene	ND	0.010	1	01/26/2016 22:28
Benzo (a) pyrene	ND	0.010	1	01/26/2016 22:28
Benzo (b) fluoranthene	ND	0.010	1	01/26/2016 22:28
Benzo (g,h,i) perylene	ND	0.010	1	01/26/2016 22:28
Benzo (k) fluoranthene	ND	0.010	1	01/26/2016 22:28
Chrysene	ND	0.010	1	01/26/2016 22:28
Dibenzo (a,h) anthracene	ND	0.010	1	01/26/2016 22:28
Fluoranthene	ND	0.010	1	01/26/2016 22:28
Fluorene	ND	0.010	1	01/26/2016 22:28
Indeno (1,2,3-cd) pyrene	ND	0.010	1	01/26/2016 22:28
1-Methylnaphthalene	ND	0.010	1	01/26/2016 22:28
2-Methylnaphthalene	ND	0.010	1	01/26/2016 22:28
Naphthalene	ND	0.010	1	01/26/2016 22:28
Phenanthrene	ND	0.010	1	01/26/2016 22:28
Pyrene	ND	0.010	1	01/26/2016 22:28

Surrogates	REC (%)	Limits	Date Analyzed
1-Fluoronaphthalene	130	30-130	01/26/2016 22:28
2-Fluorobiphenyl	112	30-130	01/26/2016 22:28

Analyst(s): HK



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Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC35	115767

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.50	50	01/27/2016 15:30
Acenaphthylene	ND	0.50	50	01/27/2016 15:30
Anthracene	ND	0.50	50	01/27/2016 15:30
Benzo (a) anthracene	ND	0.50	50	01/27/2016 15:30
Benzo (a) pyrene	ND	0.50	50	01/27/2016 15:30
Benzo (b) fluoranthene	ND	0.50	50	01/27/2016 15:30
Benzo (g,h,i) perylene	ND	0.50	50	01/27/2016 15:30
Benzo (k) fluoranthene	ND	0.50	50	01/27/2016 15:30
Chrysene	ND	0.50	50	01/27/2016 15:30
Dibenzo (a,h) anthracene	ND	0.50	50	01/27/2016 15:30
Fluoranthene	ND	0.50	50	01/27/2016 15:30
Fluorene	1.2	0.50	50	01/27/2016 15:30
Indeno (1,2,3-cd) pyrene	ND	0.50	50	01/27/2016 15:30
1-Methylnaphthalene	3.0	0.50	50	01/27/2016 15:30
2-Methylnaphthalene	7.5	0.50	50	01/27/2016 15:30
Naphthalene	1.0	0.50	50	01/27/2016 15:30
Phenanthrene	0.58	0.50	50	01/27/2016 15:30
Pyrene	ND	0.50	50	01/27/2016 15:30

Surrogates	REC (%)	Qualifiers	Limits	Date Analyzed
1-Fluoronaphthalene	218	S	30-130	01/27/2016 15:30
2-Fluorobiphenyl	140	S	30-130	01/27/2016 15:30

Analyst(s): HK

Analytical Comments: c1



Analytical Report

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Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC21	115727
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	10	5	01/28/2016 22:18	
Acenaphthylene	ND	10	5	01/28/2016 22:18	
Acetochlor	ND	10	5	01/28/2016 22:18	
Anthracene	ND	10	5	01/28/2016 22:18	
Benzidine	ND	52	5	01/28/2016 22:18	
Benzo (a) anthracene	ND	10	5	01/28/2016 22:18	
Benzo (a) pyrene	ND	10	5	01/28/2016 22:18	
Benzo (b) fluoranthene	ND	10	5	01/28/2016 22:18	
Benzo (g,h,i) perylene	ND	10	5	01/28/2016 22:18	
Benzo (k) fluoranthene	ND	10	5	01/28/2016 22:18	
Benzyl Alcohol	ND	52	5	01/28/2016 22:18	
1,1-Biphenyl	ND	10	5	01/28/2016 22:18	
Bis (2-chloroethoxy) Methane	ND	10	5	01/28/2016 22:18	
Bis (2-chloroethyl) Ether	ND	10	5	01/28/2016 22:18	
Bis (2-chloroisopropyl) Ether	ND	10	5	01/28/2016 22:18	
Bis (2-ethylhexyl) Adipate	ND	10	5	01/28/2016 22:18	
Bis (2-ethylhexyl) Phthalate	ND	10	5	01/28/2016 22:18	
4-Bromophenyl Phenyl Ether	ND	10	5	01/28/2016 22:18	
Butylbenzyl Phthalate	ND	10	5	01/28/2016 22:18	
4-Chloroaniline	ND	20	5	01/28/2016 22:18	
4-Chloro-3-methylphenol	ND	10	5	01/28/2016 22:18	
2-Chloronaphthalene	ND	10	5	01/28/2016 22:18	
2-Chlorophenol	ND	10	5	01/28/2016 22:18	
4-Chlorophenyl Phenyl Ether	ND	10	5	01/28/2016 22:18	
Chrysene	ND	10	5	01/28/2016 22:18	
Dibenzo (a,h) anthracene	ND	10	5	01/28/2016 22:18	
Dibenzofuran	ND	10	5	01/28/2016 22:18	
Di-n-butyl Phthalate	ND	10	5	01/28/2016 22:18	
1,2-Dichlorobenzene	ND	10	5	01/28/2016 22:18	
1,3-Dichlorobenzene	ND	10	5	01/28/2016 22:18	
1,4-Dichlorobenzene	ND	10	5	01/28/2016 22:18	
3,3-Dichlorobenzidine	ND	20	5	01/28/2016 22:18	
2,4-Dichlorophenol	ND	10	5	01/28/2016 22:18	
Diethyl Phthalate	ND	10	5	01/28/2016 22:18	
2,4-Dimethylphenol	ND	10	5	01/28/2016 22:18	
Dimethyl Phthalate	ND	10	5	01/28/2016 22:18	
4,6-Dinitro-2-methylphenol	ND	52	5	01/28/2016 22:18	

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WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC21	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	250	5	01/28/2016 22:18	
2,4-Dinitrotoluene	ND	10	5	01/28/2016 22:18	
2,6-Dinitrotoluene	ND	10	5	01/28/2016 22:18	
Di-n-octyl Phthalate	ND	20	5	01/28/2016 22:18	
1,2-Diphenylhydrazine	ND	10	5	01/28/2016 22:18	
Fluoranthene	ND	10	5	01/28/2016 22:18	
Fluorene	ND	10	5	01/28/2016 22:18	
Hexachlorobenzene	ND	10	5	01/28/2016 22:18	
Hexachlorobutadiene	ND	10	5	01/28/2016 22:18	
Hexachlorocyclopentadiene	ND	52	5	01/28/2016 22:18	
Hexachloroethane	ND	10	5	01/28/2016 22:18	
Indeno (1,2,3-cd) pyrene	ND	10	5	01/28/2016 22:18	
Isophorone	ND	10	5	01/28/2016 22:18	
2-Methylnaphthalene	ND	10	5	01/28/2016 22:18	
2-Methylphenol (o-Cresol)	ND	10	5	01/28/2016 22:18	
3 & 4-Methylphenol (m,p-Cresol)	ND	10	5	01/28/2016 22:18	
Naphthalene	ND	10	5	01/28/2016 22:18	
2-Nitroaniline	ND	52	5	01/28/2016 22:18	
3-Nitroaniline	ND	52	5	01/28/2016 22:18	
4-Nitroaniline	ND	52	5	01/28/2016 22:18	
Nitrobenzene	ND	10	5	01/28/2016 22:18	
2-Nitrophenol	ND	52	5	01/28/2016 22:18	
4-Nitrophenol	ND	52	5	01/28/2016 22:18	
N-Nitrosodiphenylamine	ND	10	5	01/28/2016 22:18	
N-Nitrosodi-n-propylamine	ND	10	5	01/28/2016 22:18	
Pentachlorophenol	ND	52	5	01/28/2016 22:18	
Phenanthrene	ND	10	5	01/28/2016 22:18	
Phenol	ND	10	5	01/28/2016 22:18	
Pyrene	ND	10	5	01/28/2016 22:18	
1,2,4-Trichlorobenzene	ND	10	5	01/28/2016 22:18	
2,4,5-Trichlorophenol	ND	10	5	01/28/2016 22:18	
2,4,6-Trichlorophenol	ND	10	5	01/28/2016 22:18	

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Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	102	30-130		01/28/2016 22:18
Phenol-d5	100	30-130		01/28/2016 22:18
Nitrobenzene-d5	77	30-130		01/28/2016 22:18
2-Fluorobiphenyl	84	30-130		01/28/2016 22:18
2,4,6-Tribromophenol	51	16-130		01/28/2016 22:18
4-Terphenyl-d14	77	30-130		01/28/2016 22:18

Analyst(s): HK

Analytical Comments: a3,a4



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	0.25	1	01/25/2016 19:23	
Acenaphthylene	ND	0.25	1	01/25/2016 19:23	
Acetochlor	ND	0.25	1	01/25/2016 19:23	
Anthracene	ND	0.25	1	01/25/2016 19:23	
Benzidine	ND	1.3	1	01/25/2016 19:23	
Benzo (a) anthracene	ND	0.25	1	01/25/2016 19:23	
Benzo (a) pyrene	ND	0.25	1	01/25/2016 19:23	
Benzo (b) fluoranthene	ND	0.25	1	01/25/2016 19:23	
Benzo (g,h,i) perylene	ND	0.25	1	01/25/2016 19:23	
Benzo (k) fluoranthene	ND	0.25	1	01/25/2016 19:23	
Benzyl Alcohol	ND	1.3	1	01/25/2016 19:23	
1,1-Biphenyl	ND	0.25	1	01/25/2016 19:23	
Bis (2-chloroethoxy) Methane	ND	0.25	1	01/25/2016 19:23	
Bis (2-chloroethyl) Ether	ND	0.25	1	01/25/2016 19:23	
Bis (2-chloroisopropyl) Ether	ND	0.25	1	01/25/2016 19:23	
Bis (2-ethylhexyl) Adipate	ND	0.25	1	01/25/2016 19:23	
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	01/25/2016 19:23	
4-Bromophenyl Phenyl Ether	ND	0.25	1	01/25/2016 19:23	
Butylbenzyl Phthalate	ND	0.25	1	01/25/2016 19:23	
4-Chloroaniline	ND	0.50	1	01/25/2016 19:23	
4-Chloro-3-methylphenol	ND	0.25	1	01/25/2016 19:23	
2-Chloronaphthalene	ND	0.25	1	01/25/2016 19:23	
2-Chlorophenol	ND	0.25	1	01/25/2016 19:23	
4-Chlorophenyl Phenyl Ether	ND	0.25	1	01/25/2016 19:23	
Chrysene	ND	0.25	1	01/25/2016 19:23	
Dibenzo (a,h) anthracene	ND	0.25	1	01/25/2016 19:23	
Dibenzofuran	ND	0.25	1	01/25/2016 19:23	
Di-n-butyl Phthalate	ND	0.25	1	01/25/2016 19:23	
1,2-Dichlorobenzene	ND	0.25	1	01/25/2016 19:23	
1,3-Dichlorobenzene	ND	0.25	1	01/25/2016 19:23	
1,4-Dichlorobenzene	ND	0.25	1	01/25/2016 19:23	
3,3-Dichlorobenzidine	ND	0.50	1	01/25/2016 19:23	
2,4-Dichlorophenol	ND	0.25	1	01/25/2016 19:23	
Diethyl Phthalate	ND	0.25	1	01/25/2016 19:23	
2,4-Dimethylphenol	ND	0.25	1	01/25/2016 19:23	
Dimethyl Phthalate	ND	0.25	1	01/25/2016 19:23	
4,6-Dinitro-2-methylphenol	ND	1.3	1	01/25/2016 19:23	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	6.3	1	01/25/2016 19:23	
2,4-Dinitrotoluene	ND	0.25	1	01/25/2016 19:23	
2,6-Dinitrotoluene	ND	0.25	1	01/25/2016 19:23	
Di-n-octyl Phthalate	ND	0.50	1	01/25/2016 19:23	
1,2-Diphenylhydrazine	ND	0.25	1	01/25/2016 19:23	
Fluoranthene	ND	0.25	1	01/25/2016 19:23	
Fluorene	ND	0.25	1	01/25/2016 19:23	
Hexachlorobenzene	ND	0.25	1	01/25/2016 19:23	
Hexachlorobutadiene	ND	0.25	1	01/25/2016 19:23	
Hexachlorocyclopentadiene	ND	1.3	1	01/25/2016 19:23	
Hexachloroethane	ND	0.25	1	01/25/2016 19:23	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	01/25/2016 19:23	
Isophorone	ND	0.25	1	01/25/2016 19:23	
2-Methylnaphthalene	ND	0.25	1	01/25/2016 19:23	
2-Methylphenol (o-Cresol)	ND	0.25	1	01/25/2016 19:23	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	01/25/2016 19:23	
Naphthalene	ND	0.25	1	01/25/2016 19:23	
2-Nitroaniline	ND	1.3	1	01/25/2016 19:23	
3-Nitroaniline	ND	1.3	1	01/25/2016 19:23	
4-Nitroaniline	ND	1.3	1	01/25/2016 19:23	
Nitrobenzene	ND	0.25	1	01/25/2016 19:23	
2-Nitrophenol	ND	1.3	1	01/25/2016 19:23	
4-Nitrophenol	ND	1.3	1	01/25/2016 19:23	
N-Nitrosodiphenylamine	ND	0.25	1	01/25/2016 19:23	
N-Nitrosodi-n-propylamine	ND	0.25	1	01/25/2016 19:23	
Pentachlorophenol	ND	1.3	1	01/25/2016 19:23	
Phenanthrene	ND	0.25	1	01/25/2016 19:23	
Phenol	ND	0.25	1	01/25/2016 19:23	
Pyrene	ND	0.25	1	01/25/2016 19:23	
1,2,4-Trichlorobenzene	ND	0.25	1	01/25/2016 19:23	
2,4,5-Trichlorophenol	ND	0.25	1	01/25/2016 19:23	
2,4,6-Trichlorophenol	ND	0.25	1	01/25/2016 19:23	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC17	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	86	30-130		01/25/2016 19:23
Phenol-d5	79	30-130		01/25/2016 19:23
Nitrobenzene-d5	79	30-130		01/25/2016 19:23
2-Fluorobiphenyl	71	30-130		01/25/2016 19:23
2,4,6-Tribromophenol	58	16-130		01/25/2016 19:23
4-Terphenyl-d14	78	30-130		01/25/2016 19:23

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC17	115727

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	01/25/2016 19:52
Acenaphthylene	ND	0.25	1	01/25/2016 19:52
Acetochlor	ND	0.25	1	01/25/2016 19:52
Anthracene	ND	0.25	1	01/25/2016 19:52
Benzidine	ND	1.3	1	01/25/2016 19:52
Benzo (a) anthracene	ND	0.25	1	01/25/2016 19:52
Benzo (a) pyrene	ND	0.25	1	01/25/2016 19:52
Benzo (b) fluoranthene	ND	0.25	1	01/25/2016 19:52
Benzo (g,h,i) perylene	ND	0.25	1	01/25/2016 19:52
Benzo (k) fluoranthene	ND	0.25	1	01/25/2016 19:52
Benzyl Alcohol	ND	1.3	1	01/25/2016 19:52
1,1-Biphenyl	ND	0.25	1	01/25/2016 19:52
Bis (2-chloroethoxy) Methane	ND	0.25	1	01/25/2016 19:52
Bis (2-chloroethyl) Ether	ND	0.25	1	01/25/2016 19:52
Bis (2-chloroisopropyl) Ether	ND	0.25	1	01/25/2016 19:52
Bis (2-ethylhexyl) Adipate	ND	0.25	1	01/25/2016 19:52
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	01/25/2016 19:52
4-Bromophenyl Phenyl Ether	ND	0.25	1	01/25/2016 19:52
Butylbenzyl Phthalate	ND	0.25	1	01/25/2016 19:52
4-Chloroaniline	ND	0.50	1	01/25/2016 19:52
4-Chloro-3-methylphenol	ND	0.25	1	01/25/2016 19:52
2-Chloronaphthalene	ND	0.25	1	01/25/2016 19:52
2-Chlorophenol	ND	0.25	1	01/25/2016 19:52
4-Chlorophenyl Phenyl Ether	ND	0.25	1	01/25/2016 19:52
Chrysene	ND	0.25	1	01/25/2016 19:52
Dibenzo (a,h) anthracene	ND	0.25	1	01/25/2016 19:52
Dibenzofuran	ND	0.25	1	01/25/2016 19:52
Di-n-butyl Phthalate	ND	0.25	1	01/25/2016 19:52
1,2-Dichlorobenzene	ND	0.25	1	01/25/2016 19:52
1,3-Dichlorobenzene	ND	0.25	1	01/25/2016 19:52
1,4-Dichlorobenzene	ND	0.25	1	01/25/2016 19:52
3,3-Dichlorobenzidine	ND	0.50	1	01/25/2016 19:52
2,4-Dichlorophenol	ND	0.25	1	01/25/2016 19:52
Diethyl Phthalate	ND	0.25	1	01/25/2016 19:52
2,4-Dimethylphenol	ND	0.25	1	01/25/2016 19:52
Dimethyl Phthalate	ND	0.25	1	01/25/2016 19:52
4,6-Dinitro-2-methylphenol	ND	1.3	1	01/25/2016 19:52

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	6.3	1	01/25/2016 19:52	
2,4-Dinitrotoluene	ND	0.25	1	01/25/2016 19:52	
2,6-Dinitrotoluene	ND	0.25	1	01/25/2016 19:52	
Di-n-octyl Phthalate	ND	0.50	1	01/25/2016 19:52	
1,2-Diphenylhydrazine	ND	0.25	1	01/25/2016 19:52	
Fluoranthene	ND	0.25	1	01/25/2016 19:52	
Fluorene	ND	0.25	1	01/25/2016 19:52	
Hexachlorobenzene	ND	0.25	1	01/25/2016 19:52	
Hexachlorobutadiene	ND	0.25	1	01/25/2016 19:52	
Hexachlorocyclopentadiene	ND	1.3	1	01/25/2016 19:52	
Hexachloroethane	ND	0.25	1	01/25/2016 19:52	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	01/25/2016 19:52	
Isophorone	ND	0.25	1	01/25/2016 19:52	
2-Methylnaphthalene	ND	0.25	1	01/25/2016 19:52	
2-Methylphenol (o-Cresol)	ND	0.25	1	01/25/2016 19:52	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	01/25/2016 19:52	
Naphthalene	ND	0.25	1	01/25/2016 19:52	
2-Nitroaniline	ND	1.3	1	01/25/2016 19:52	
3-Nitroaniline	ND	1.3	1	01/25/2016 19:52	
4-Nitroaniline	ND	1.3	1	01/25/2016 19:52	
Nitrobenzene	ND	0.25	1	01/25/2016 19:52	
2-Nitrophenol	ND	1.3	1	01/25/2016 19:52	
4-Nitrophenol	ND	1.3	1	01/25/2016 19:52	
N-Nitrosodiphenylamine	ND	0.25	1	01/25/2016 19:52	
N-Nitrosodi-n-propylamine	ND	0.25	1	01/25/2016 19:52	
Pentachlorophenol	ND	1.3	1	01/25/2016 19:52	
Phenanthrene	ND	0.25	1	01/25/2016 19:52	
Phenol	0.59	0.25	1	01/25/2016 19:52	
Pyrene	ND	0.25	1	01/25/2016 19:52	
1,2,4-Trichlorobenzene	ND	0.25	1	01/25/2016 19:52	
2,4,5-Trichlorophenol	ND	0.25	1	01/25/2016 19:52	
2,4,6-Trichlorophenol	ND	0.25	1	01/25/2016 19:52	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC17	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	85	30-130		01/25/2016 19:52
Phenol-d5	77	30-130		01/25/2016 19:52
Nitrobenzene-d5	79	30-130		01/25/2016 19:52
2-Fluorobiphenyl	72	30-130		01/25/2016 19:52
2,4,6-Tribromophenol	60	16-130		01/25/2016 19:52
4-Terphenyl-d14	78	30-130		01/25/2016 19:52

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	2.0	1	01/25/2016 20:21	
Acenaphthylene	ND	2.0	1	01/25/2016 20:21	
Acetochlor	ND	2.0	1	01/25/2016 20:21	
Anthracene	ND	2.0	1	01/25/2016 20:21	
Benzidine	ND	10	1	01/25/2016 20:21	
Benzo (a) anthracene	ND	2.0	1	01/25/2016 20:21	
Benzo (a) pyrene	ND	2.0	1	01/25/2016 20:21	
Benzo (b) fluoranthene	ND	2.0	1	01/25/2016 20:21	
Benzo (g,h,i) perylene	ND	2.0	1	01/25/2016 20:21	
Benzo (k) fluoranthene	ND	2.0	1	01/25/2016 20:21	
Benzyl Alcohol	ND	10	1	01/25/2016 20:21	
1,1-Biphenyl	ND	2.0	1	01/25/2016 20:21	
Bis (2-chloroethoxy) Methane	ND	2.0	1	01/25/2016 20:21	
Bis (2-chloroethyl) Ether	ND	2.0	1	01/25/2016 20:21	
Bis (2-chloroisopropyl) Ether	ND	2.0	1	01/25/2016 20:21	
Bis (2-ethylhexyl) Adipate	ND	2.0	1	01/25/2016 20:21	
Bis (2-ethylhexyl) Phthalate	ND	2.0	1	01/25/2016 20:21	
4-Bromophenyl Phenyl Ether	ND	2.0	1	01/25/2016 20:21	
Butylbenzyl Phthalate	ND	2.0	1	01/25/2016 20:21	
4-Chloroaniline	ND	4.0	1	01/25/2016 20:21	
4-Chloro-3-methylphenol	ND	2.0	1	01/25/2016 20:21	
2-Chloronaphthalene	ND	2.0	1	01/25/2016 20:21	
2-Chlorophenol	ND	2.0	1	01/25/2016 20:21	
4-Chlorophenyl Phenyl Ether	ND	2.0	1	01/25/2016 20:21	
Chrysene	ND	2.0	1	01/25/2016 20:21	
Dibenzo (a,h) anthracene	ND	2.0	1	01/25/2016 20:21	
Dibenzofuran	ND	2.0	1	01/25/2016 20:21	
Di-n-butyl Phthalate	ND	2.0	1	01/25/2016 20:21	
1,2-Dichlorobenzene	ND	2.0	1	01/25/2016 20:21	
1,3-Dichlorobenzene	ND	2.0	1	01/25/2016 20:21	
1,4-Dichlorobenzene	ND	2.0	1	01/25/2016 20:21	
3,3-Dichlorobenzidine	ND	4.0	1	01/25/2016 20:21	
2,4-Dichlorophenol	ND	2.0	1	01/25/2016 20:21	
Diethyl Phthalate	ND	2.0	1	01/25/2016 20:21	
2,4-Dimethylphenol	ND	2.0	1	01/25/2016 20:21	
Dimethyl Phthalate	ND	2.0	1	01/25/2016 20:21	
4,6-Dinitro-2-methylphenol	ND	10	1	01/25/2016 20:21	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	50	1	01/25/2016 20:21	
2,4-Dinitrotoluene	ND	2.0	1	01/25/2016 20:21	
2,6-Dinitrotoluene	ND	2.0	1	01/25/2016 20:21	
Di-n-octyl Phthalate	ND	4.0	1	01/25/2016 20:21	
1,2-Diphenylhydrazine	ND	2.0	1	01/25/2016 20:21	
Fluoranthene	ND	2.0	1	01/25/2016 20:21	
Fluorene	ND	2.0	1	01/25/2016 20:21	
Hexachlorobenzene	ND	2.0	1	01/25/2016 20:21	
Hexachlorobutadiene	ND	2.0	1	01/25/2016 20:21	
Hexachlorocyclopentadiene	ND	10	1	01/25/2016 20:21	
Hexachloroethane	ND	2.0	1	01/25/2016 20:21	
Indeno (1,2,3-cd) pyrene	ND	2.0	1	01/25/2016 20:21	
Isophorone	ND	2.0	1	01/25/2016 20:21	
2-Methylnaphthalene	ND	2.0	1	01/25/2016 20:21	
2-Methylphenol (o-Cresol)	ND	2.0	1	01/25/2016 20:21	
3 & 4-Methylphenol (m,p-Cresol)	ND	2.0	1	01/25/2016 20:21	
Naphthalene	ND	2.0	1	01/25/2016 20:21	
2-Nitroaniline	ND	10	1	01/25/2016 20:21	
3-Nitroaniline	ND	10	1	01/25/2016 20:21	
4-Nitroaniline	ND	10	1	01/25/2016 20:21	
Nitrobenzene	ND	2.0	1	01/25/2016 20:21	
2-Nitrophenol	ND	10	1	01/25/2016 20:21	
4-Nitrophenol	ND	10	1	01/25/2016 20:21	
N-Nitrosodiphenylamine	ND	2.0	1	01/25/2016 20:21	
N-Nitrosodi-n-propylamine	ND	2.0	1	01/25/2016 20:21	
Pentachlorophenol	ND	10	1	01/25/2016 20:21	
Phenanthrene	ND	2.0	1	01/25/2016 20:21	
Phenol	ND	2.0	1	01/25/2016 20:21	
Pyrene	ND	2.0	1	01/25/2016 20:21	
1,2,4-Trichlorobenzene	ND	2.0	1	01/25/2016 20:21	
2,4,5-Trichlorophenol	ND	2.0	1	01/25/2016 20:21	
2,4,6-Trichlorophenol	ND	2.0	1	01/25/2016 20:21	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC17	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	95	30-130		01/25/2016 20:21
Phenol-d5	84	30-130		01/25/2016 20:21
Nitrobenzene-d5	90	30-130		01/25/2016 20:21
2-Fluorobiphenyl	80	30-130		01/25/2016 20:21
2,4,6-Tribromophenol	63	16-130		01/25/2016 20:21
4-Terphenyl-d14	81	30-130		01/25/2016 20:21

Analyst(s): HK

Analytical Comments: a4



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	01/28/2016 20:00
Acenaphthylene	ND	0.25	1	01/28/2016 20:00
Acetochlor	ND	0.25	1	01/28/2016 20:00
Anthracene	ND	0.25	1	01/28/2016 20:00
Benzidine	ND	1.3	1	01/28/2016 20:00
Benzo (a) anthracene	ND	0.25	1	01/28/2016 20:00
Benzo (a) pyrene	ND	0.25	1	01/28/2016 20:00
Benzo (b) fluoranthene	ND	0.25	1	01/28/2016 20:00
Benzo (g,h,i) perylene	ND	0.25	1	01/28/2016 20:00
Benzo (k) fluoranthene	ND	0.25	1	01/28/2016 20:00
Benzyl Alcohol	ND	1.3	1	01/28/2016 20:00
1,1-Biphenyl	ND	0.25	1	01/28/2016 20:00
Bis (2-chloroethoxy) Methane	ND	0.25	1	01/28/2016 20:00
Bis (2-chloroethyl) Ether	ND	0.25	1	01/28/2016 20:00
Bis (2-chloroisopropyl) Ether	ND	0.25	1	01/28/2016 20:00
Bis (2-ethylhexyl) Adipate	ND	0.25	1	01/28/2016 20:00
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	01/28/2016 20:00
4-Bromophenyl Phenyl Ether	ND	0.25	1	01/28/2016 20:00
Butylbenzyl Phthalate	ND	0.25	1	01/28/2016 20:00
4-Chloroaniline	ND	0.50	1	01/28/2016 20:00
4-Chloro-3-methylphenol	ND	0.25	1	01/28/2016 20:00
2-Chloronaphthalene	ND	0.25	1	01/28/2016 20:00
2-Chlorophenol	ND	0.25	1	01/28/2016 20:00
4-Chlorophenyl Phenyl Ether	ND	0.25	1	01/28/2016 20:00
Chrysene	ND	0.25	1	01/28/2016 20:00
Dibenzo (a,h) anthracene	ND	0.25	1	01/28/2016 20:00
Dibenzofuran	ND	0.25	1	01/28/2016 20:00
Di-n-butyl Phthalate	ND	0.25	1	01/28/2016 20:00
1,2-Dichlorobenzene	ND	0.25	1	01/28/2016 20:00
1,3-Dichlorobenzene	ND	0.25	1	01/28/2016 20:00
1,4-Dichlorobenzene	ND	0.25	1	01/28/2016 20:00
3,3-Dichlorobenzidine	ND	0.50	1	01/28/2016 20:00
2,4-Dichlorophenol	ND	0.25	1	01/28/2016 20:00
Diethyl Phthalate	ND	0.25	1	01/28/2016 20:00
2,4-Dimethylphenol	ND	0.25	1	01/28/2016 20:00
Dimethyl Phthalate	ND	0.25	1	01/28/2016 20:00
4,6-Dinitro-2-methylphenol	ND	1.3	1	01/28/2016 20:00

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
2,4-Dinitrophenol	ND	6.3	1	01/28/2016 20:00
2,4-Dinitrotoluene	ND	0.25	1	01/28/2016 20:00
2,6-Dinitrotoluene	ND	0.25	1	01/28/2016 20:00
Di-n-octyl Phthalate	ND	0.50	1	01/28/2016 20:00
1,2-Diphenylhydrazine	ND	0.25	1	01/28/2016 20:00
Fluoranthene	ND	0.25	1	01/28/2016 20:00
Fluorene	ND	0.25	1	01/28/2016 20:00
Hexachlorobenzene	ND	0.25	1	01/28/2016 20:00
Hexachlorobutadiene	ND	0.25	1	01/28/2016 20:00
Hexachlorocyclopentadiene	ND	1.3	1	01/28/2016 20:00
Hexachloroethane	ND	0.25	1	01/28/2016 20:00
Indeno (1,2,3-cd) pyrene	ND	0.25	1	01/28/2016 20:00
Isophorone	ND	0.25	1	01/28/2016 20:00
2-Methylnaphthalene	ND	0.25	1	01/28/2016 20:00
2-Methylphenol (o-Cresol)	ND	0.25	1	01/28/2016 20:00
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	01/28/2016 20:00
Naphthalene	ND	0.25	1	01/28/2016 20:00
2-Nitroaniline	ND	1.3	1	01/28/2016 20:00
3-Nitroaniline	ND	1.3	1	01/28/2016 20:00
4-Nitroaniline	ND	1.3	1	01/28/2016 20:00
Nitrobenzene	ND	0.25	1	01/28/2016 20:00
2-Nitrophenol	ND	1.3	1	01/28/2016 20:00
4-Nitrophenol	ND	1.3	1	01/28/2016 20:00
N-Nitrosodiphenylamine	ND	0.25	1	01/28/2016 20:00
N-Nitrosodi-n-propylamine	ND	0.25	1	01/28/2016 20:00
Pentachlorophenol	ND	1.3	1	01/28/2016 20:00
Phenanthrene	ND	0.25	1	01/28/2016 20:00
Phenol	0.30	0.25	1	01/28/2016 20:00
Pyrene	ND	0.25	1	01/28/2016 20:00
1,2,4-Trichlorobenzene	ND	0.25	1	01/28/2016 20:00
2,4,5-Trichlorophenol	ND	0.25	1	01/28/2016 20:00
2,4,6-Trichlorophenol	ND	0.25	1	01/28/2016 20:00

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	93	30-130		01/28/2016 20:00
Phenol-d5	92	30-130		01/28/2016 20:00
Nitrobenzene-d5	77	30-130		01/28/2016 20:00
2-Fluorobiphenyl	79	30-130		01/28/2016 20:00
2,4,6-Tribromophenol	51	16-130		01/28/2016 20:00
4-Terphenyl-d14	78	30-130		01/28/2016 20:00

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	0.25	1	01/28/2016 21:50
Acenaphthylene	ND	0.25	1	01/28/2016 21:50
Acetochlor	ND	0.25	1	01/28/2016 21:50
Anthracene	ND	0.25	1	01/28/2016 21:50
Benzidine	ND	1.3	1	01/28/2016 21:50
Benzo (a) anthracene	ND	0.25	1	01/28/2016 21:50
Benzo (a) pyrene	ND	0.25	1	01/28/2016 21:50
Benzo (b) fluoranthene	ND	0.25	1	01/28/2016 21:50
Benzo (g,h,i) perylene	ND	0.25	1	01/28/2016 21:50
Benzo (k) fluoranthene	ND	0.25	1	01/28/2016 21:50
Benzyl Alcohol	ND	1.3	1	01/28/2016 21:50
1,1-Biphenyl	ND	0.25	1	01/28/2016 21:50
Bis (2-chloroethoxy) Methane	ND	0.25	1	01/28/2016 21:50
Bis (2-chloroethyl) Ether	ND	0.25	1	01/28/2016 21:50
Bis (2-chloroisopropyl) Ether	ND	0.25	1	01/28/2016 21:50
Bis (2-ethylhexyl) Adipate	ND	0.25	1	01/28/2016 21:50
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	01/28/2016 21:50
4-Bromophenyl Phenyl Ether	ND	0.25	1	01/28/2016 21:50
Butylbenzyl Phthalate	ND	0.25	1	01/28/2016 21:50
4-Chloroaniline	ND	0.50	1	01/28/2016 21:50
4-Chloro-3-methylphenol	ND	0.25	1	01/28/2016 21:50
2-Chloronaphthalene	ND	0.25	1	01/28/2016 21:50
2-Chlorophenol	ND	0.25	1	01/28/2016 21:50
4-Chlorophenyl Phenyl Ether	ND	0.25	1	01/28/2016 21:50
Chrysene	ND	0.25	1	01/28/2016 21:50
Dibenzo (a,h) anthracene	ND	0.25	1	01/28/2016 21:50
Dibenzofuran	ND	0.25	1	01/28/2016 21:50
Di-n-butyl Phthalate	ND	0.25	1	01/28/2016 21:50
1,2-Dichlorobenzene	ND	0.25	1	01/28/2016 21:50
1,3-Dichlorobenzene	ND	0.25	1	01/28/2016 21:50
1,4-Dichlorobenzene	ND	0.25	1	01/28/2016 21:50
3,3-Dichlorobenzidine	ND	0.50	1	01/28/2016 21:50
2,4-Dichlorophenol	ND	0.25	1	01/28/2016 21:50
Diethyl Phthalate	ND	0.25	1	01/28/2016 21:50
2,4-Dimethylphenol	ND	0.25	1	01/28/2016 21:50
Dimethyl Phthalate	ND	0.25	1	01/28/2016 21:50
4,6-Dinitro-2-methylphenol	ND	1.3	1	01/28/2016 21:50

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC21	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	6.3	1	01/28/2016 21:50	
2,4-Dinitrotoluene	ND	0.25	1	01/28/2016 21:50	
2,6-Dinitrotoluene	ND	0.25	1	01/28/2016 21:50	
Di-n-octyl Phthalate	ND	0.50	1	01/28/2016 21:50	
1,2-Diphenylhydrazine	ND	0.25	1	01/28/2016 21:50	
Fluoranthene	ND	0.25	1	01/28/2016 21:50	
Fluorene	ND	0.25	1	01/28/2016 21:50	
Hexachlorobenzene	ND	0.25	1	01/28/2016 21:50	
Hexachlorobutadiene	ND	0.25	1	01/28/2016 21:50	
Hexachlorocyclopentadiene	ND	1.3	1	01/28/2016 21:50	
Hexachloroethane	ND	0.25	1	01/28/2016 21:50	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	01/28/2016 21:50	
Isophorone	ND	0.25	1	01/28/2016 21:50	
2-Methylnaphthalene	ND	0.25	1	01/28/2016 21:50	
2-Methylphenol (o-Cresol)	ND	0.25	1	01/28/2016 21:50	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	01/28/2016 21:50	
Naphthalene	ND	0.25	1	01/28/2016 21:50	
2-Nitroaniline	ND	1.3	1	01/28/2016 21:50	
3-Nitroaniline	ND	1.3	1	01/28/2016 21:50	
4-Nitroaniline	ND	1.3	1	01/28/2016 21:50	
Nitrobenzene	ND	0.25	1	01/28/2016 21:50	
2-Nitrophenol	ND	1.3	1	01/28/2016 21:50	
4-Nitrophenol	ND	1.3	1	01/28/2016 21:50	
N-Nitrosodiphenylamine	ND	0.25	1	01/28/2016 21:50	
N-Nitrosodi-n-propylamine	ND	0.25	1	01/28/2016 21:50	
Pentachlorophenol	ND	1.3	1	01/28/2016 21:50	
Phenanthrene	ND	0.25	1	01/28/2016 21:50	
Phenol	ND	0.25	1	01/28/2016 21:50	
Pyrene	ND	0.25	1	01/28/2016 21:50	
1,2,4-Trichlorobenzene	ND	0.25	1	01/28/2016 21:50	
2,4,5-Trichlorophenol	ND	0.25	1	01/28/2016 21:50	
2,4,6-Trichlorophenol	ND	0.25	1	01/28/2016 21:50	

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Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	103	30-130		01/28/2016 21:50
Phenol-d5	102	30-130		01/28/2016 21:50
Nitrobenzene-d5	80	30-130		01/28/2016 21:50
2-Fluorobiphenyl	85	30-130		01/28/2016 21:50
2,4,6-Tribromophenol	34	16-130		01/28/2016 21:50
4-Terphenyl-d14	87	30-130		01/28/2016 21:50

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
Acenaphthene	ND	0.25	1	01/27/2016 14:56	
Acenaphthylene	ND	0.25	1	01/27/2016 14:56	
Acetochlor	ND	0.25	1	01/27/2016 14:56	
Anthracene	ND	0.25	1	01/27/2016 14:56	
Benzidine	ND	1.3	1	01/27/2016 14:56	
Benzo (a) anthracene	ND	0.25	1	01/27/2016 14:56	
Benzo (a) pyrene	ND	0.25	1	01/27/2016 14:56	
Benzo (b) fluoranthene	ND	0.25	1	01/27/2016 14:56	
Benzo (g,h,i) perylene	ND	0.25	1	01/27/2016 14:56	
Benzo (k) fluoranthene	ND	0.25	1	01/27/2016 14:56	
Benzyl Alcohol	ND	1.3	1	01/27/2016 14:56	
1,1-Biphenyl	ND	0.25	1	01/27/2016 14:56	
Bis (2-chloroethoxy) Methane	ND	0.25	1	01/27/2016 14:56	
Bis (2-chloroethyl) Ether	ND	0.25	1	01/27/2016 14:56	
Bis (2-chloroisopropyl) Ether	ND	0.25	1	01/27/2016 14:56	
Bis (2-ethylhexyl) Adipate	ND	0.25	1	01/27/2016 14:56	
Bis (2-ethylhexyl) Phthalate	ND	0.25	1	01/27/2016 14:56	
4-Bromophenyl Phenyl Ether	ND	0.25	1	01/27/2016 14:56	
Butylbenzyl Phthalate	ND	0.25	1	01/27/2016 14:56	
4-Chloroaniline	ND	0.50	1	01/27/2016 14:56	
4-Chloro-3-methylphenol	ND	0.25	1	01/27/2016 14:56	
2-Chloronaphthalene	ND	0.25	1	01/27/2016 14:56	
2-Chlorophenol	ND	0.25	1	01/27/2016 14:56	
4-Chlorophenyl Phenyl Ether	ND	0.25	1	01/27/2016 14:56	
Chrysene	ND	0.25	1	01/27/2016 14:56	
Dibenzo (a,h) anthracene	ND	0.25	1	01/27/2016 14:56	
Dibenzofuran	ND	0.25	1	01/27/2016 14:56	
Di-n-butyl Phthalate	ND	0.25	1	01/27/2016 14:56	
1,2-Dichlorobenzene	ND	0.25	1	01/27/2016 14:56	
1,3-Dichlorobenzene	ND	0.25	1	01/27/2016 14:56	
1,4-Dichlorobenzene	ND	0.25	1	01/27/2016 14:56	
3,3-Dichlorobenzidine	ND	0.50	1	01/27/2016 14:56	
2,4-Dichlorophenol	ND	0.25	1	01/27/2016 14:56	
Diethyl Phthalate	ND	0.25	1	01/27/2016 14:56	
2,4-Dimethylphenol	ND	0.25	1	01/27/2016 14:56	
Dimethyl Phthalate	ND	0.25	1	01/27/2016 14:56	
4,6-Dinitro-2-methylphenol	ND	1.3	1	01/27/2016 14:56	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC17	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	6.3	1	01/27/2016 14:56	
2,4-Dinitrotoluene	ND	0.25	1	01/27/2016 14:56	
2,6-Dinitrotoluene	ND	0.25	1	01/27/2016 14:56	
Di-n-octyl Phthalate	ND	0.50	1	01/27/2016 14:56	
1,2-Diphenylhydrazine	ND	0.25	1	01/27/2016 14:56	
Fluoranthene	ND	0.25	1	01/27/2016 14:56	
Fluorene	ND	0.25	1	01/27/2016 14:56	
Hexachlorobenzene	ND	0.25	1	01/27/2016 14:56	
Hexachlorobutadiene	ND	0.25	1	01/27/2016 14:56	
Hexachlorocyclopentadiene	ND	1.3	1	01/27/2016 14:56	
Hexachloroethane	ND	0.25	1	01/27/2016 14:56	
Indeno (1,2,3-cd) pyrene	ND	0.25	1	01/27/2016 14:56	
Isophorone	ND	0.25	1	01/27/2016 14:56	
2-Methylnaphthalene	ND	0.25	1	01/27/2016 14:56	
2-Methylphenol (o-Cresol)	ND	0.25	1	01/27/2016 14:56	
3 & 4-Methylphenol (m,p-Cresol)	ND	0.25	1	01/27/2016 14:56	
Naphthalene	ND	0.25	1	01/27/2016 14:56	
2-Nitroaniline	ND	1.3	1	01/27/2016 14:56	
3-Nitroaniline	ND	1.3	1	01/27/2016 14:56	
4-Nitroaniline	ND	1.3	1	01/27/2016 14:56	
Nitrobenzene	ND	0.25	1	01/27/2016 14:56	
2-Nitrophenol	ND	1.3	1	01/27/2016 14:56	
4-Nitrophenol	ND	1.3	1	01/27/2016 14:56	
N-Nitrosodiphenylamine	ND	0.25	1	01/27/2016 14:56	
N-Nitrosodi-n-propylamine	ND	0.25	1	01/27/2016 14:56	
Pentachlorophenol	ND	1.3	1	01/27/2016 14:56	
Phenanthrene	ND	0.25	1	01/27/2016 14:56	
Phenol	0.53	0.25	1	01/27/2016 14:56	
Pyrene	ND	0.25	1	01/27/2016 14:56	
1,2,4-Trichlorobenzene	ND	0.25	1	01/27/2016 14:56	
2,4,5-Trichlorophenol	ND	0.25	1	01/27/2016 14:56	
2,4,6-Trichlorophenol	ND	0.25	1	01/27/2016 14:56	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC17	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	85	30-130		01/27/2016 14:56
Phenol-d5	76	30-130		01/27/2016 14:56
Nitrobenzene-d5	80	30-130		01/27/2016 14:56
2-Fluorobiphenyl	72	30-130		01/27/2016 14:56
2,4,6-Tribromophenol	52	16-130		01/27/2016 14:56
4-Terphenyl-d14	81	30-130		01/27/2016 14:56

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
Acenaphthene	ND	1.2	5	01/28/2016 20:28
Acenaphthylene	ND	1.2	5	01/28/2016 20:28
Acetochlor	ND	1.2	5	01/28/2016 20:28
Anthracene	ND	1.2	5	01/28/2016 20:28
Benzidine	ND	6.5	5	01/28/2016 20:28
Benzo (a) anthracene	ND	1.2	5	01/28/2016 20:28
Benzo (a) pyrene	ND	1.2	5	01/28/2016 20:28
Benzo (b) fluoranthene	ND	1.2	5	01/28/2016 20:28
Benzo (g,h,i) perylene	ND	1.2	5	01/28/2016 20:28
Benzo (k) fluoranthene	ND	1.2	5	01/28/2016 20:28
Benzyl Alcohol	ND	6.5	5	01/28/2016 20:28
1,1-Biphenyl	ND	1.2	5	01/28/2016 20:28
Bis (2-chloroethoxy) Methane	ND	1.2	5	01/28/2016 20:28
Bis (2-chloroethyl) Ether	ND	1.2	5	01/28/2016 20:28
Bis (2-chloroisopropyl) Ether	ND	1.2	5	01/28/2016 20:28
Bis (2-ethylhexyl) Adipate	ND	1.2	5	01/28/2016 20:28
Bis (2-ethylhexyl) Phthalate	ND	1.2	5	01/28/2016 20:28
4-Bromophenyl Phenyl Ether	ND	1.2	5	01/28/2016 20:28
Butylbenzyl Phthalate	ND	1.2	5	01/28/2016 20:28
4-Chloroaniline	ND	2.5	5	01/28/2016 20:28
4-Chloro-3-methylphenol	ND	1.2	5	01/28/2016 20:28
2-Chloronaphthalene	ND	1.2	5	01/28/2016 20:28
2-Chlorophenol	ND	1.2	5	01/28/2016 20:28
4-Chlorophenyl Phenyl Ether	ND	1.2	5	01/28/2016 20:28
Chrysene	ND	1.2	5	01/28/2016 20:28
Dibenzo (a,h) anthracene	ND	1.2	5	01/28/2016 20:28
Dibenzofuran	ND	1.2	5	01/28/2016 20:28
Di-n-butyl Phthalate	ND	1.2	5	01/28/2016 20:28
1,2-Dichlorobenzene	ND	1.2	5	01/28/2016 20:28
1,3-Dichlorobenzene	ND	1.2	5	01/28/2016 20:28
1,4-Dichlorobenzene	ND	1.2	5	01/28/2016 20:28
3,3-Dichlorobenzidine	ND	2.5	5	01/28/2016 20:28
2,4-Dichlorophenol	ND	1.2	5	01/28/2016 20:28
Diethyl Phthalate	ND	1.2	5	01/28/2016 20:28
2,4-Dimethylphenol	ND	1.2	5	01/28/2016 20:28
Dimethyl Phthalate	ND	1.2	5	01/28/2016 20:28
4,6-Dinitro-2-methylphenol	ND	6.5	5	01/28/2016 20:28

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC21	115727
Analytes	Result	RL	DF	Date Analyzed	
2,4-Dinitrophenol	ND	32	5	01/28/2016 20:28	
2,4-Dinitrotoluene	ND	1.2	5	01/28/2016 20:28	
2,6-Dinitrotoluene	ND	1.2	5	01/28/2016 20:28	
Di-n-octyl Phthalate	ND	2.5	5	01/28/2016 20:28	
1,2-Diphenylhydrazine	ND	1.2	5	01/28/2016 20:28	
Fluoranthene	ND	1.2	5	01/28/2016 20:28	
Fluorene	1.3	1.2	5	01/28/2016 20:28	
Hexachlorobenzene	ND	1.2	5	01/28/2016 20:28	
Hexachlorobutadiene	ND	1.2	5	01/28/2016 20:28	
Hexachlorocyclopentadiene	ND	6.5	5	01/28/2016 20:28	
Hexachloroethane	ND	1.2	5	01/28/2016 20:28	
Indeno (1,2,3-cd) pyrene	ND	1.2	5	01/28/2016 20:28	
Isophorone	ND	1.2	5	01/28/2016 20:28	
2-Methylnaphthalene	8.3	1.2	5	01/28/2016 20:28	
2-Methylphenol (o-Cresol)	ND	1.2	5	01/28/2016 20:28	
3 & 4-Methylphenol (m,p-Cresol)	ND	1.2	5	01/28/2016 20:28	
Naphthalene	ND	1.2	5	01/28/2016 20:28	
2-Nitroaniline	ND	6.5	5	01/28/2016 20:28	
3-Nitroaniline	ND	6.5	5	01/28/2016 20:28	
4-Nitroaniline	ND	6.5	5	01/28/2016 20:28	
Nitrobenzene	ND	1.2	5	01/28/2016 20:28	
2-Nitrophenol	ND	6.5	5	01/28/2016 20:28	
4-Nitrophenol	ND	6.5	5	01/28/2016 20:28	
N-Nitrosodiphenylamine	ND	1.2	5	01/28/2016 20:28	
N-Nitrosodi-n-propylamine	ND	1.2	5	01/28/2016 20:28	
Pentachlorophenol	ND	6.5	5	01/28/2016 20:28	
Phenanthrene	ND	1.2	5	01/28/2016 20:28	
Phenol	ND	1.2	5	01/28/2016 20:28	
Pyrene	ND	1.2	5	01/28/2016 20:28	
1,2,4-Trichlorobenzene	ND	1.2	5	01/28/2016 20:28	
2,4,5-Trichlorophenol	ND	1.2	5	01/28/2016 20:28	
2,4,6-Trichlorophenol	ND	1.2	5	01/28/2016 20:28	

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg

Semi-Volatile Organics by GC/MS (Basic Target List)

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC21	115727

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorophenol	109	30-130		01/28/2016 20:28
Phenol-d5	107	30-130		01/28/2016 20:28
Nitrobenzene-d5	99	30-130		01/28/2016 20:28
2-Fluorobiphenyl	101	30-130		01/28/2016 20:28
2,4,6-Tribromophenol	65	16-130		01/28/2016 20:28
4-Terphenyl-d14	105	30-130		01/28/2016 20:28

Analyst(s): HK



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC19	115808

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	01/26/2016 18:32
MTBE	---	0.050	1	01/26/2016 18:32
Benzene	---	0.0050	1	01/26/2016 18:32
Toluene	---	0.0050	1	01/26/2016 18:32
Ethylbenzene	---	0.0050	1	01/26/2016 18:32
Xylenes	---	0.015	1	01/26/2016 18:32
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	108	70-130		01/26/2016 18:32

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC3	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	01/24/2016 02:57
MTBE	---	0.050	1	01/24/2016 02:57
Benzene	---	0.0050	1	01/24/2016 02:57
Toluene	---	0.0050	1	01/24/2016 02:57
Ethylbenzene	---	0.0050	1	01/24/2016 02:57
Xylenes	---	0.015	1	01/24/2016 02:57
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	96	70-130		01/24/2016 02:57

Analyst(s): TD



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC19	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	01/25/2016 14:40
MTBE	---	0.050	1	01/25/2016 14:40
Benzene	---	0.0050	1	01/25/2016 14:40
Toluene	---	0.0050	1	01/25/2016 14:40
Ethylbenzene	---	0.0050	1	01/25/2016 14:40
Xylenes	---	0.015	1	01/25/2016 14:40
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	108	70-130		01/25/2016 14:40

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC19	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	3.1	1.0	1	01/25/2016 15:11
MTBE	---	0.050	1	01/25/2016 15:11
Benzene	---	0.0050	1	01/25/2016 15:11
Toluene	---	0.0050	1	01/25/2016 15:11
Ethylbenzene	---	0.0050	1	01/25/2016 15:11
Xylenes	---	0.015	1	01/25/2016 15:11
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	111	70-130		01/25/2016 15:11

Analyst(s): IA

Analytical Comments: d7

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC19	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	01/25/2016 16:44
MTBE	---	0.050	1	01/25/2016 16:44
Benzene	---	0.0050	1	01/25/2016 16:44
Toluene	---	0.0050	1	01/25/2016 16:44
Ethylbenzene	---	0.0050	1	01/25/2016 16:44
Xylenes	---	0.015	1	01/25/2016 16:44
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	109	70-130		01/25/2016 16:44

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC19	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	3.9	1.0	1	01/25/2016 17:15
MTBE	---	0.050	1	01/25/2016 17:15
Benzene	---	0.0050	1	01/25/2016 17:15
Toluene	---	0.0050	1	01/25/2016 17:15
Ethylbenzene	---	0.0050	1	01/25/2016 17:15
Xylenes	---	0.015	1	01/25/2016 17:15
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	113	70-130		01/25/2016 17:15

Analyst(s): IA

Analytical Comments: d7



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16-1/26/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC7	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	1.0	1	01/25/2016 12:40
MTBE	---	0.050	1	01/25/2016 12:40
Benzene	---	0.0050	1	01/25/2016 12:40
Toluene	---	0.0050	1	01/25/2016 12:40
Ethylbenzene	---	0.0050	1	01/25/2016 12:40
Xylenes	---	0.015	1	01/25/2016 12:40
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	93	70-130		01/25/2016 12:40

Analyst(s): TD

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC7	115666

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	430	100	100	01/25/2016 13:10
MTBE	---	5.0	100	01/25/2016 13:10
Benzene	---	0.50	100	01/25/2016 13:10
Toluene	---	0.50	100	01/25/2016 13:10
Ethylbenzene	---	0.50	100	01/25/2016 13:10
Xylenes	---	1.5	100	01/25/2016 13:10
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
2-Fluorotoluene	114	70-130		01/25/2016 13:10

Analyst(s): TD

Analytical Comments: d7,d9



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/27/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4	1601816-001A	Water	01/20/2016 13:56	GC3	115781

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	01/25/2016 18:44
MTBE	---	5.0	1	01/25/2016 18:44
Benzene	---	0.50	1	01/25/2016 18:44
Toluene	---	0.50	1	01/25/2016 18:44
Ethylbenzene	---	0.50	1	01/25/2016 18:44
Xylenes	---	1.5	1	01/25/2016 18:44

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	97	70-130	01/25/2016 18:44

Analyst(s): IA

Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5	1601816-002A	Water	01/20/2016 12:25	GC3	115781

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	01/27/2016 01:06
MTBE	---	5.0	1	01/27/2016 01:06
Benzene	---	0.50	1	01/27/2016 01:06
Toluene	---	0.50	1	01/27/2016 01:06
Ethylbenzene	---	0.50	1	01/27/2016 01:06
Xylenes	---	1.5	1	01/27/2016 01:06

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	106	70-130	01/27/2016 01:06

Analyst(s): IA

Analytical Comments: b1

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/25/16-1/27/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-6	1601816-003A	Water	01/20/2016 12:57	GC3	115781

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	01/27/2016 02:34
MTBE	---	5.0	1	01/27/2016 02:34
Benzene	---	0.50	1	01/27/2016 02:34
Toluene	---	0.50	1	01/27/2016 02:34
Ethylbenzene	---	0.50	1	01/27/2016 02:34
Xylenes	---	1.5	1	01/27/2016 02:34

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	100	70-130	01/27/2016 02:34

Analyst(s): IA

Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-7	1601816-004A	Water	01/20/2016 14:22	GC3	115781

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	01/25/2016 21:47
MTBE	---	5.0	1	01/25/2016 21:47
Benzene	---	0.50	1	01/25/2016 21:47
Toluene	---	0.50	1	01/25/2016 21:47
Ethylbenzene	---	0.50	1	01/25/2016 21:47
Xylenes	---	1.5	1	01/25/2016 21:47

Surrogates	REC (%)	Limits	Date Analyzed
aaa-TFT	106	70-130	01/25/2016 21:47

Analyst(s): IA

Analytical Comments: b1



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 3-3.5	1601816-005A	Soil	01/20/2016 08:34	GC11B	115654

Analytes	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	8.9	3.7	5.0	5	01/24/2016 11:55
TPH-Motor Oil (C18-C36)	78	10	25	5	01/24/2016 11:55

Surrogates	REC (%)	Limits
C9	102	70-130

Analyst(s): TK

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4, 9.5-10	1601816-006A	Soil	01/20/2016 08:40	GC11B	115654

Analytes	Result	Qualifiers	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND		0.74	1.0	1	01/24/2016 00:30
TPH-Motor Oil (C18-C36)	3.0	J	2.1	5.0	1	01/24/2016 00:30

Surrogates	REC (%)	Limits
C9	109	70-130

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5, 3.5-4	1601816-007A	Soil	01/20/2016 09:25	GC11B	115654

Analytes	Result	MDL	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	0.74	1.0	1	01/24/2016 02:47
TPH-Motor Oil (C18-C36)	5.4	2.1	5.0	1	01/24/2016 02:47

Surrogates	REC (%)	Limits
C9	110	70-130

Analyst(s): TK

Analytical Comments: e7

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-5, 7.5-8	1601816-008A	Soil	01/20/2016 09:30	GC11A	115654	
<u>Analytes</u>	<u>Result</u>		<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	79		1.5	2.0	2	01/24/2016 03:56
TPH-Motor Oil (C18-C36)	180		4.2	10	2	01/24/2016 03:56
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
C9	93			70-130		01/24/2016 03:56
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e7,e2			

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-6, 3.5-4	1601816-009A	Soil	01/20/2016 10:25	GC11B	115654	
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		0.74	1.0	1	01/24/2016 06:13
TPH-Motor Oil (C18-C36)	3.6	J	2.1	5.0	1	01/24/2016 06:13
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
C9	109			70-130		01/24/2016 06:13
<u>Analyst(s):</u> TK						

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-6, 7.5-8	1601816-010A	Soil	01/20/2016 10:29	GC11B	115654	
<u>Analytes</u>	<u>Result</u>		<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	51		0.74	1.0	1	01/24/2016 05:04
TPH-Motor Oil (C18-C36)	63		2.1	5.0	1	01/24/2016 05:04
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
C9	109			70-130		01/24/2016 05:04
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e3,e7			

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-7, 3.5-4	1601816-011A	Soil	01/20/2016 11:14	GC11B	115654	
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		0.74	1.0	1	01/24/2016 01:38
TPH-Motor Oil (C18-C36)	2.8	J	2.1	5.0	1	01/24/2016 01:38
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
C9	109			70-130		01/24/2016 01:38
<u>Analyst(s):</u> TK						

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-7, 7.5-8	1601816-012A	Soil	01/20/2016 11:19	GC11B	115654	
<u>Analytes</u>	<u>Result</u>		<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	470		0.74	1.0	1	01/24/2016 07:21
TPH-Motor Oil (C18-C36)	190		2.1	5.0	1	01/24/2016 07:21
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
C9	117			70-130		01/24/2016 07:21
<u>Analyst(s):</u> TK	<u>Analytical Comments:</u> e8,e2,e7					



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-4	1601816-001A	Water	01/20/2016 13:56	GC11B	115664
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	24	50	1	01/22/2016 19:31
TPH-Motor Oil (C18-C36)	ND	65	250	1	01/22/2016 19:31
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	108		70-130		01/22/2016 19:31
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> b1		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
B-5	1601816-002A	Water	01/20/2016 12:25	GC2A	115664
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	6000	24	50	1	01/22/2016 19:48
TPH-Motor Oil (C18-C36)	6600	65	250	1	01/22/2016 19:48
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	95		70-130		01/22/2016 19:48
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e3,e7,b1		

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-6	1601816-003A	Water	01/20/2016 12:57	GC2B	115664	
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	180		24	50	1	01/25/2016 11:23
TPH-Motor Oil (C18-C36)	85	J	65	250	1	01/25/2016 11:23
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
C9	91		70-130		01/25/2016 11:23	
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e2,b1			

(Cont.)



Analytical Report

Client: ERAS Environmental, Inc.
Date Received: 1/22/16 13:12
Date Prepared: 1/22/16
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID	
B-7	1601816-004A	Water	01/20/2016 14:22	GC2A	115664	
<u>Analytes</u>	<u>Result</u>	<u>Qualifiers</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	140		24	50	1	01/22/2016 22:21
TPH-Motor Oil (C18-C36)	86	J	65	250	1	01/22/2016 22:21
<u>Surrogates</u>	<u>REC (%)</u>			<u>Limits</u>		
C9	97			70-130		01/22/2016 22:21
<u>Analyst(s):</u> TK				<u>Analytical Comments:</u> e2,b1		



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/22/16
Date Analyzed: 1/22/16
Instrument: GC18
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115699
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-115699
 1601530-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0533	0.0050	0.050	-	107	53-116
Benzene	ND	0.0545	0.0050	0.050	-	109	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.209	0.050	0.20	-	105	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0602	0.0050	0.050	-	120	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0549	0.0040	0.050	-	110	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0527	0.0040	0.050	-	105	58-135
1,1-Dichloroethene	ND	0.0480	0.0050	0.050	-	96	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/22/16
Date Analyzed: 1/22/16
Instrument: GC18
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115699
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-115699
 1601530-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
Diisopropyl ether (DIPE)	ND	0.0576	0.0050	0.050	-	115	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0560	0.0050	0.050	-	112	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0532	0.0050	0.050	-	106	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0536	0.0050	0.050	-	107	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0691	0.0050	0.050	-	138, F2	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/22/16
Date Analyzed: 1/22/16
Instrument: GC18
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115699
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-115699
 1601530-004AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	0.142	0.142		0.12	113	113	70-130
Toluene-d8	0.154	0.137		0.12	123	109	70-130
4-BFB	0.00960	0.0107		0.012	77	85	70-130
Benzene-d6	0.119	0.118		0.10	119	118	60-140
Ethylbenzene-d10	0.122	0.125		0.10	122	125	60-140
1,2-DCB-d4	0.115	0.114		0.10	115	114	60-140

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0619	0.0603	0.050	ND	124,F1	121,F1	56-94	2.66	20
Benzene	0.0603	0.0576	0.050	ND	121,F1	115,F1	60-106	4.52	20
t-Butyl alcohol (TBA)	0.267	0.258	0.20	ND	133	129	56-140	3.61	20
Chlorobenzene	0.0667	0.0631	0.050	ND	133,F1	126,F1	61-108	5.50	20
1,2-Dibromoethane (EDB)	0.0653	0.0614	0.050	ND	131,F1	123,F1	54-119	6.07	20
1,2-Dichloroethane (1,2-DCA)	0.0603	0.0587	0.050	ND	121,F1	117,F1	48-115	2.64	20
1,1-Dichloroethene	0.0539	0.0515	0.050	ND	108	103	46-111	4.57	20
Diisopropyl ether (DIPE)	0.0629	0.0608	0.050	ND	126,F1	122,F1	53-111	3.29	20
Ethyl tert-butyl ether (ETBE)	0.0624	0.0612	0.050	ND	125,F1	122,F1	61-104	1.80	20
Methyl-t-butyl ether (MTBE)	0.0622	0.0608	0.050	ND	124,F1	122,F1	58-107	2.33	20
Toluene	0.0591	0.0556	0.050	ND	118,F1	111	64-114	6.10	20
Trichloroethene	0.0759	0.0723	0.050	ND	152,F1	145,F1	60-116	4.88	20

Surrogate Recovery									
Dibromofluoromethane	0.143	0.145	0.12		115	116	70-130	0.940	20
Toluene-d8	0.135	0.134	0.12		108	107	70-130	0.682	20
4-BFB	0.0106	0.0107	0.012		85,F3	86,F3	88-121	1.24	20
Benzene-d6	0.130	0.124	0.10		130	124	60-140	4.28	20
Ethylbenzene-d10	0.136	0.126	0.10		136	126	60-140	7.69	20
1,2-DCB-d4	0.129	0.121	0.10		129	121	60-140	6.53	20



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/25/16
Instrument: GC28
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115820
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115820
 1601800-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	6.81	0.50	10	-	68	54-140
Benzene	ND	8.68	0.50	10	-	87	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	43.8	2.0	40	-	110	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	8.95	0.50	10	-	90	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.39	0.50	10	-	94	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	7.68	0.50	10	-	77	66-125
1,1-Dichloroethene	ND	10.6	0.50	10	-	106	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/25/16
Instrument: GC28
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115820
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115820
 1601800-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	8.72	0.50	10	-	87	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	8.25	0.50	10	-	82	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.72	0.50	10	-	97	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.18	0.50	10	-	92	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.1	0.50	10	-	101	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/25/16
Instrument: GC28
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115820
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115820
 1601800-001CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	25.8	26.1		25	103	104	70-130
Toluene-d8	25.4	25.3		25	102	101	70-130
4-BFB	2.11	2.81		2.5	84	112	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	7.19	7.93	10	ND	72	79	69-139	9.77	20
Benzene	8.62	8.92	10	ND	86	89	69-141	3.46	20
t-Butyl alcohol (TBA)	51.2	56.7	40	ND	125	138	41-152	10.2	20
Chlorobenzene	8.93	9.16	10	ND	89	92	77-120	2.54	20
1,2-Dibromoethane (EDB)	10.2	10.8	10	ND	102	108	76-135	5.42	20
1,2-Dichloroethane (1,2-DCA)	7.76	8.25	10	ND	78	82	73-139	6.08	20
1,1-Dichloroethene	10.3	10.8	10	ND	103	108	59-140	3.90	20
Diisopropyl ether (DIPE)	8.61	9.20	10	ND	86	92	72-140	6.55	20
Ethyl tert-butyl ether (ETBE)	8.29	8.96	10	ND	83	90	71-140	7.79	20
Methyl-t-butyl ether (MTBE)	10.5	11.0	10	ND	105	110	73-139	4.90	20
Toluene	9.10	9.31	10	ND	91	93	71-128	2.28	20
Trichloroethene	11.1	11.4	10	ND	111	115	64-132	2.73	20
Surrogate Recovery									
Dibromofluoromethane	26.1	26.8	25		104	107	70-130	2.86	20
Toluene-d8	25.1	24.7	25		100	99	70-130	1.56	20
4-BFB	2.88	2.93	2.5		115	117	70-130	1.79	20

(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/26/16
Date Analyzed: 1/26/16
Instrument: GC28
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115878
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115878
 1601765-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	7.26	0.50	10	-	73	54-140
Benzene	ND	9.00	0.50	10	-	90	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	46.7	2.0	40	-	117	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.29	0.50	10	-	93	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	10.0	0.50	10	-	100	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	8.18	0.50	10	-	82	66-125
1,1-Dichloroethene	ND	10.9	0.50	10	-	109	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/26/16
Date Analyzed: 1/26/16
Instrument: GC28
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115878
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115878
 1601765-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	9.11	0.50	10	-	91	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	8.53	0.50	10	-	85	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.1	0.50	10	-	101	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.42	0.50	10	-	94	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.6	0.50	10	-	106	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/26/16
Date Analyzed: 1/26/16
Instrument: GC28
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115878
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-115878
 1601765-006AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	26.0	26.4		25	104	106	70-130
Toluene-d8	25.1	24.9		25	100	100	70-130
4-BFB	2.03	2.89		2.5	81	115	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	8.49	8.84	10	ND	85	88	69-139	4.07	20
Benzene	9.41	9.72	10	ND	94	97	69-141	3.19	20
t-Butyl alcohol (TBA)	47.0	59.4	40	ND	118	148	41-152	23.2,F1	20
Chlorobenzene	9.23	9.48	10	ND	92	95	77-120	2.71	20
1,2-Dibromoethane (EDB)	10.5	11.2	10	ND	105	112	76-135	6.33	20
1,2-Dichloroethane (1,2-DCA)	8.93	9.33	10	ND	89	93	73-139	4.38	20
1,1-Dichloroethene	11.0	10.8	10	ND	110	108	59-140	1.41	20
Diisopropyl ether (DIPE)	9.56	9.98	10	ND	96	100	72-140	4.25	20
Ethyl tert-butyl ether (ETBE)	9.46	9.47	10	ND	95	95	71-140	0	20
Methyl-t-butyl ether (MTBE)	11.2	11.6	10	ND	112	116	73-139	3.48	20
Toluene	9.45	9.49	10	ND	94	95	71-128	0.482	20
Trichloroethene	12.7	13.0	10	ND	127	130	64-132	2.29	20
Surrogate Recovery									
Dibromofluoromethane	26.9	27.0	25		108	108	73-131	0	20
Toluene-d8	24.3	24.3	25		97	97	72-117	0	20
4-BFB	3.00	2.96	2.5		120	118	74-116	1.57	20



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/26/16
Instrument: GC35
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115767
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg
Sample ID: MB/LCS-115767
 1601816-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	-	0.010	-	-	-	-
Acenaphthylene	ND	-	0.010	-	-	-	-
Anthracene	ND	-	0.010	-	-	-	-
Benzo (a) anthracene	ND	-	0.010	-	-	-	-
Benzo (a) pyrene	ND	0.174	0.010	0.20	-	87	30-130
Benzo (b) fluoranthene	ND	-	0.010	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.010	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.010	-	-	-	-
Chrysene	ND	0.178	0.010	0.20	-	89	30-130
Dibenzo (a,h) anthracene	ND	-	0.010	-	-	-	-
Fluoranthene	ND	-	0.010	-	-	-	-
Fluorene	ND	-	0.010	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.010	-	-	-	-
1-Methylnaphthalene	ND	0.194	0.010	0.20	-	97	30-130
2-Methylnaphthalene	ND	0.201	0.010	0.20	-	100	30-130
Naphthalene	ND	-	0.010	-	-	-	-
Phenanthrene	ND	0.191	0.010	0.20	-	96	30-130
Pyrene	ND	0.166	0.010	0.20	-	83	30-130
Surrogate Recovery							
1-Fluoronaphthalene	0.575	0.517		0.50	115	103	30-130
2-Fluorobiphenyl	0.534	0.507		0.50	107	101	30-130



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/26/16
Instrument: GC35
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115767
Extraction Method: SW3550B
Analytical Method: SW8270C-SIM
Unit: mg/kg
Sample ID: MB/LCS-115767
 1601816-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Benzo (a) pyrene	NR	NR		0.77	NR	NR	-	NR	
Chrysene	NR	NR		0.52	NR	NR	-	NR	
1-Methylnaphthalene	NR	NR		ND<0.02	NR	NR	-	NR	
2-Methylnaphthalene	NR	NR		ND<0.02	NR	NR	-	NR	
Phenanthrene	NR	NR		0.36	NR	NR	-	NR	
Pyrene	NR	NR		0.84	NR	NR	-	NR	
Surrogate Recovery									
1-Fluoronaphthalene	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/22/16
Date Analyzed: 1/22/16 - 1/23/16
Instrument: GC17
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115727
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-115727
 1601816-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acenaphthene	ND	3.45	0.25	5	-	69	30-130
Acenaphthylene	ND	-	0.25	-	-	-	-
Acetochlor	ND	-	0.25	-	-	-	-
Anthracene	ND	-	0.25	-	-	-	-
Benzidine	ND	-	1.3	-	-	-	-
Benzo (a) anthracene	ND	-	0.25	-	-	-	-
Benzo (a) pyrene	ND	-	0.25	-	-	-	-
Benzo (b) fluoranthene	ND	-	0.25	-	-	-	-
Benzo (g,h,i) perylene	ND	-	0.25	-	-	-	-
Benzo (k) fluoranthene	ND	-	0.25	-	-	-	-
Benzyl Alcohol	ND	-	1.3	-	-	-	-
1,1-Biphenyl	ND	-	0.25	-	-	-	-
Bis (2-chloroethoxy) Methane	ND	-	0.25	-	-	-	-
Bis (2-chloroethyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-chloroisopropyl) Ether	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Adipate	ND	-	0.25	-	-	-	-
Bis (2-ethylhexyl) Phthalate	ND	-	0.25	-	-	-	-
4-Bromophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Butylbenzyl Phthalate	ND	-	0.25	-	-	-	-
4-Chloroaniline	ND	-	0.50	-	-	-	-
4-Chloro-3-methylphenol	ND	3.88	0.25	5	-	78	30-130
2-Chloronaphthalene	ND	-	0.25	-	-	-	-
2-Chlorophenol	ND	3.64	0.25	5	-	73	30-130
4-Chlorophenyl Phenyl Ether	ND	-	0.25	-	-	-	-
Chrysene	ND	-	0.25	-	-	-	-
Dibenzo (a,h) anthracene	ND	-	0.25	-	-	-	-
Dibenzofuran	ND	-	0.25	-	-	-	-
Di-n-butyl Phthalate	ND	-	0.25	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.25	-	-	-	-
1,4-Dichlorobenzene	ND	3.29	0.25	5	-	66	30-130
3,3-Dichlorobenzidine	ND	-	0.50	-	-	-	-
2,4-Dichlorophenol	ND	-	0.25	-	-	-	-
Diethyl Phthalate	ND	-	0.25	-	-	-	-
2,4-Dimethylphenol	ND	-	0.25	-	-	-	-
Dimethyl Phthalate	ND	-	0.25	-	-	-	-
4,6-Dinitro-2-methylphenol	ND	-	1.3	-	-	-	-

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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/22/16
Date Analyzed: 1/22/16 - 1/23/16
Instrument: GC17
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115727
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-115727
 1601816-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
2,4-Dinitrophenol	ND	-	6.3	-	-	-	-
2,4-Dinitrotoluene	ND	3.19	0.25	5	-	64	30-130
2,6-Dinitrotoluene	ND	-	0.25	-	-	-	-
Di-n-octyl Phthalate	ND	-	0.50	-	-	-	-
1,2-Diphenylhydrazine	ND	-	0.25	-	-	-	-
Fluoranthene	ND	-	0.25	-	-	-	-
Fluorene	ND	-	0.25	-	-	-	-
Hexachlorobenzene	ND	-	0.25	-	-	-	-
Hexachlorobutadiene	ND	-	0.25	-	-	-	-
Hexachlorocyclopentadiene	ND	-	1.3	-	-	-	-
Hexachloroethane	ND	-	0.25	-	-	-	-
Indeno (1,2,3-cd) pyrene	ND	-	0.25	-	-	-	-
Isophorone	ND	-	0.25	-	-	-	-
2-Methylnaphthalene	ND	-	0.25	-	-	-	-
2-Methylphenol (o-Cresol)	ND	-	0.25	-	-	-	-
3 & 4-Methylphenol (m,p-Cresol)	ND	-	0.25	-	-	-	-
Naphthalene	ND	-	0.25	-	-	-	-
2-Nitroaniline	ND	-	1.3	-	-	-	-
3-Nitroaniline	ND	-	1.3	-	-	-	-
4-Nitroaniline	ND	-	1.3	-	-	-	-
Nitrobenzene	ND	-	0.25	-	-	-	-
2-Nitrophenol	ND	-	1.3	-	-	-	-
4-Nitrophenol	ND	3.96	1.3	5	-	79	30-130
N-Nitrosodiphenylamine	ND	-	0.25	-	-	-	-
N-Nitrosodi-n-propylamine	ND	3.71	0.25	5	-	74	30-130
Pentachlorophenol	ND	4.35	1.3	5	-	87	30-130
Phenanthrene	ND	-	0.25	-	-	-	-
Phenol	ND	3.56	0.25	5	-	71	30-130
Pyrene	ND	3.82	0.25	5	-	76	30-130
1,2,4-Trichlorobenzene	ND	3.63	0.25	5	-	73	30-130
2,4,5-Trichlorophenol	ND	-	0.25	-	-	-	-
2,4,6-Trichlorophenol	ND	-	0.25	-	-	-	-

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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/22/16
Date Analyzed: 1/22/16 - 1/23/16
Instrument: GC17
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115727
Extraction Method: SW3550B
Analytical Method: SW8270C
Unit: mg/Kg
Sample ID: MB/LCS-115727
 1601816-005AMS/MSD

QC Summary Report for SW8270C

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
2-Fluorophenol	3.45	3.33		5	69	67	30-130
Phenol-d5	3.19	3.10		5	64	62	30-130
Nitrobenzene-d5	3.28	3.32		5	66	66	30-130
2-Fluorobiphenyl	2.91	2.89		5	58	58	30-130
2,4,6-Tribromophenol	3.04	3.14		5	61	63	16-130
4-Terphenyl-d14	2.95	3.07		5	59	61	30-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acenaphthene	NR	NR		ND<10	NR	NR	-	NR	
4-Chloro-3-methylphenol	NR	NR		ND<10	NR	NR	-	NR	
2-Chlorophenol	NR	NR		ND<10	NR	NR	-	NR	
1,4-Dichlorobenzene	NR	NR		ND<10	NR	NR	-	NR	
2,4-Dinitrotoluene	NR	NR		ND<10	NR	NR	-	NR	
4-Nitrophenol	NR	NR		ND<52	NR	NR	-	NR	
N-Nitrosodi-n-propylamine	NR	NR		ND<10	NR	NR	-	NR	
Pentachlorophenol	NR	NR		ND<52	NR	NR	-	NR	
Phenol	NR	NR		ND<10	NR	NR	-	NR	
Pyrene	NR	NR		ND<10	NR	NR	-	NR	
1,2,4-Trichlorobenzene	NR	NR		ND<10	NR	NR	-	NR	
Surrogate Recovery									
2-Fluorophenol	NR	NR			NR	NR	-	NR	
Phenol-d5	NR	NR			NR	NR	-	NR	
Nitrobenzene-d5	NR	NR			NR	NR	-	NR	
2-Fluorobiphenyl	NR	NR			NR	NR	-	NR	
2,4,6-Tribromophenol	NR	NR			NR	NR	-	NR	
4-Terphenyl-d14	NR	NR			NR	NR	-	NR	



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/21/16
Date Analyzed: 1/22/16
Instrument: GC7
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115666
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-115666
 1601787-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.524	0.40	0.60	-	87	70-130
MTBE	ND	0.0884	0.050	0.10	-	88	70-130
Benzene	ND	0.0935	0.0050	0.10	-	93	70-130
Toluene	ND	0.0935	0.0050	0.10	-	94	70-130
Ethylbenzene	ND	0.0974	0.0050	0.10	-	97	70-130
Xylenes	ND	0.308	0.015	0.30	-	103	70-130

Surrogate Recovery

2-Fluorotoluene	0.111	0.111		0.10	111	111	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.476	0.502	0.60	ND	79	84	70-130	5.27	20
MTBE	0.0813	0.0750	0.10	ND	81	75	70-130	8.06	20
Benzene	0.0841	0.0856	0.10	ND	84	86	70-130	1.73	20
Toluene	0.0863	0.0874	0.10	ND	84	86	70-130	1.32	20
Ethylbenzene	0.0890	0.0897	0.10	ND	89	90	70-130	0.789	20
Xylenes	0.286	0.281	0.30	ND	94	93	70-130	1.88	20

Surrogate Recovery

2-Fluorotoluene	0.102	0.103	0.10		102	103	70-130	1.57	20
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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/26/16
Instrument: GC3
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115808
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: mg/Kg
Sample ID: MB/LCS-115808
 1601934-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	0.587	0.40	0.60	-	98	70-130
MTBE	ND	0.0802	0.050	0.10	-	80	70-130
Benzene	ND	0.0901	0.0050	0.10	-	90	70-130
Toluene	ND	0.0943	0.0050	0.10	-	94	70-130
Ethylbenzene	ND	0.0954	0.0050	0.10	-	95	70-130
Xylenes	ND	0.290	0.015	0.30	-	97	70-130

Surrogate Recovery

2-Fluorotoluene	0.103	0.0982		0.10	103	98	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	0.464	0.473	0.60	ND	77	79	70-130	2.01	20
MTBE	0.0642	0.0665	0.10	ND	64,F1	67,F1	70-130	3.59	20
Benzene	0.0674	0.0688	0.10	ND	65,F1	66,F1	70-130	1.94	20
Toluene	0.0734	0.0750	0.10	ND	70	72	70-130	2.17	20
Ethylbenzene	0.0752	0.0773	0.10	ND	75	77	70-130	2.71	20
Xylenes	0.229	0.235	0.30	ND	74	76	70-130	2.65	20

Surrogate Recovery

2-Fluorotoluene	0.0760	0.0760	0.10		76	76	70-130	0	20
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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/25/16
Date Analyzed: 1/25/16
Instrument: GC3
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115781
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L
Sample ID: MB/LCS-115781
 1601759-002AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	57.6	40	60	-	96	70-130
MTBE	ND	9.73	5.0	10	-	97	70-130
Benzene	ND	9.80	0.50	10	-	98	70-130
Toluene	ND	10.1	0.50	10	-	101	70-130
Ethylbenzene	ND	10.2	0.50	10	-	102	70-130
Xylenes	ND	30.7	1.5	30	-	102	70-130

Surrogate Recovery

aaa-TFT	9.65	9.32		10	97	93	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	60.7	68.2	60	ND	101	114	70-130	11.6	20
MTBE	8.81	10.1	10	ND	88	101	70-130	13.3	20
Benzene	8.62	9.92	10	ND	86	99	70-130	14.0	20
Toluene	9.21	10.6	10	ND	90	104	70-130	13.9	20
Ethylbenzene	9.22	10.7	10	ND	92	107	70-130	15.1	20
Xylenes	28.0	32.4	30	ND	93	108	70-130	14.6	20

Surrogate Recovery

aaa-TFT	9.04	9.38	10		90	94	70-130	3.68	20
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Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/21/16
Date Analyzed: 1/21/16
Instrument: GC11B
Matrix: Soil
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115654
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg
Sample ID: MB/LCS-115654
 1601775-003AMS/MSD

QC Report for SW8015B with Silica Gel Clean-Up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	39.6	0.74	1.0	40	-	99	70-130
TPH-Motor Oil (C18-C36)	ND	-	2.1	5.0	-	-	-	-
Surrogate Recovery								
C9	26.6	26.8			25	107	107	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	53.8	53.1	40	6.580	118	116	70-130	1.31	30
Surrogate Recovery									
C9	26.8	26.7	25		107	107	70-130	0	30



Quality Control Report

Client: ERAS Environmental, Inc.
Date Prepared: 1/21/16
Date Analyzed: 1/22/16
Instrument: GC6B
Matrix: Water
Project: 14229D; 1091 Calcot

WorkOrder: 1601816
BatchID: 115664
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-115664

QC Report for SW8015B w/ SG Clean-Up

Analyte	MB Result	LCS Result	MDL	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1180	24	50	1000	-	118	59-151
TPH-Motor Oil (C18-C36)	ND	-	65	250	-	-	-	-
Surrogate Recovery								
C9	677	674			625	108	108	65-122



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1601816

ClientCode: ERAS

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Report to:

Andrew Savage
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541
(510) 247-9885 FAX: (510) 886-5399

Email: info@eras.biz; andrew@eras.biz
cc/3rd Party:
PO:
ProjectNo: 14229D; 1091 Calcot

Bill to:

Kasey Cordoza
ERAS Environmental, Inc.
1533 B Street
Hayward, CA 94541

Requested TAT: 5 days;

Date Received: 01/21/2016

Date Logged: 01/22/2016

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1601816-001	B-4	Water	1/20/2016 13:56	<input type="checkbox"/>		B				A	A		A			
1601816-002	B-5	Water	1/20/2016 12:25	<input type="checkbox"/>		B				A			A			
1601816-003	B-6	Water	1/20/2016 12:57	<input type="checkbox"/>		B				A			A			
1601816-004	B-7	Water	1/20/2016 14:22	<input type="checkbox"/>		B				A			A			
1601816-005	B-4, 3-3.5	Soil	1/20/2016 8:34	<input type="checkbox"/>	A		A	A	A			A				
1601816-006	B-4, 9.5-10	Soil	1/20/2016 8:40	<input type="checkbox"/>	A		A	A	A			A				
1601816-007	B-5, 3.5-4	Soil	1/20/2016 9:25	<input type="checkbox"/>	A		A	A	A			A				
1601816-008	B-5, 7.5-8	Soil	1/20/2016 9:30	<input type="checkbox"/>	A		A	A	A			A				
1601816-009	B-6, 3.5-4	Soil	1/20/2016 10:25	<input type="checkbox"/>	A		A	A	A			A				
1601816-010	B-6, 7.5-8	Soil	1/20/2016 10:29	<input type="checkbox"/>	A		A	A	A			A				
1601816-011	B-7, 3.5-4	Soil	1/20/2016 11:14	<input type="checkbox"/>	A		A	A	A			A				
1601816-012	B-7, 7.5-8	Soil	1/20/2016 11:19	<input type="checkbox"/>	A		A	A	A			A				

Test Legend:

1	8260B_S	2	8260B_W	3	8270_PNA_S	4	8270_S
5	G-MBTX_S	6	G-MBTX_W	7	PREFD REPORT	8	TPH(DMO)WSG_S
9	TPH(DMO)WSG_W	10		11		12	

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A, 010A, 011A, 012A contain testgroup.

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.

QC Level: LEVEL 2

Work Order: 1601816

Project: 14229D; 1091 Calcot

Client Contact: Andrew Savage

Date Logged: 1/22/2016

Comments:

Contact's Email: info@eras.biz; andrew@eras.biz

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1601816-001A	B-4	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	1/20/2016 13:56	5 days	1%+	<input type="checkbox"/>	
				2	ILA	<input type="checkbox"/>					
1601816-001B	B-4	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	1/20/2016 13:56	5 days	1%+	<input type="checkbox"/>	
1601816-002A	B-5	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	1/20/2016 12:25	5 days	1%+	<input type="checkbox"/>	
				2	la	<input type="checkbox"/>					
1601816-002B	B-5	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	1/20/2016 12:25	5 days	1%+	<input type="checkbox"/>	
1601816-003A	B-6	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	1/20/2016 12:57	5 days	1%+	<input type="checkbox"/>	
				2	la	<input type="checkbox"/>					
1601816-003B	B-6	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	1/20/2016 12:57	5 days	1%+	<input type="checkbox"/>	
1601816-004A	B-7	Water	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	1/20/2016 14:22	5 days	1%+	<input type="checkbox"/>	
				2	ILA	<input type="checkbox"/>					
1601816-004B	B-7	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	1/20/2016 14:22	5 days	1%+	<input type="checkbox"/>	
1601816-005A	B-4, 3-3.5	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 8:34	5 days		<input type="checkbox"/>	
						<input type="checkbox"/>					
					SW8270C (SVOCs)	<input type="checkbox"/>					
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.

QC Level: LEVEL 2

Work Order: 1601816

Project: 14229D; 1091 Calcot

Client Contact: Andrew Savage

Date Logged: 1/22/2016

Comments:

Contact's Email: info@eras.biz; andrew@eras.biz

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1601816-005A	B-4, 3-3.5	Soil	SW8260B (VOCs)	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 8:34	5 days		<input type="checkbox"/>	
1601816-006A	B-4, 9.5-10	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 8:40	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1601816-007A	B-5, 3.5-4	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 9:25	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1601816-008A	B-5, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 9:30	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1601816-009A	B-6, 3.5-4	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 10:25	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: ERAS ENVIRONMENTAL, INC.

QC Level: LEVEL 2

Work Order: 1601816

Project: 14229D; 1091 Calcot

Client Contact: Andrew Savage

Date Logged: 1/22/2016

Comments:

Contact's Email: info@eras.biz; andrew@eras.biz

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1601816-009A	B-6, 3.5-4	Soil	SW8270C (PAHs/PNAs)	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 10:25	5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1601816-010A	B-6, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 10:29	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1601816-011A	B-7, 3.5-4	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 11:14	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1601816-012A	B-7, 7.5-8	Soil	Multi-Range TPH(g,d,mo) w/ S.G. Clean-Up	1	Acetate Liner	<input type="checkbox"/>	1/20/2016 11:19	5 days		<input type="checkbox"/>	
			SW8270C (SVOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8270C (PAHs/PNAs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			SW8260B (VOCs)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1601816

CHAIN OF CUSTODY FORM

McC Campbell Analytical, Inc
1534 Willow Pass Rd.
Pittsburg, CA 94565
877.252.9262
925.252.9269 - fax

Turnaround Time: Rush 24Hr 48 Hr 72 Hr 5 Day
 Geotracker: EDF Excel Write On (DW)

Report To: ERAS Bill To: ERAS
 Company: ERAS Environmental, Inc.

Telephone: 510-247-9885 Fax: 510-886-5399
 Email: info@eras.biz

Project # 14229D
 Project location 1091 Calcot
 Sampler: Andrew Savage

Sample ID	Location/Field Point Name	Sampling		# of Containers	Container Type	Matrix			Preservative				
		Date	Time			Soil	Water	Waste	HCL	H2SO4	HNO3	ICE	None
B-4		1/20/2016	13:56	2	1-L	X							X
B-4		1/20/2016	13:56	6	VOA	X			X				
B-5		1/20/2016	12:25	2	1-L	X							X
B-5		1/20/2016	12:25	6	VOA	X			X				
B-6		1/20/2016	12:57	2	1-L	X							X
B-6		1/20/2016	12:57	6	VOA	X			X				
B-7		1/20/2016	14:22	2	1-L	X							X
B-7		1/20/2016	14:22	6	VOA	X			X				
B-4, 3-3.5		1/20/2016	8:34	1	Tube	X							X
B-4, 9.5-10		1/20/2016	8:40	1	Tube	X							X
B-5, 3.5-4		1/20/2016	9:25	1	Tube	X							X
B-5, 7.5-8		1/20/2016	9:30	1	Tube	X							X
B-6, 3.5-4		1/20/2016	10:25	1	Tube	X							X
B-6, 7.5-8		1/20/2016	10:29	1	Tube	X							X

Analysis Requested										Other	Comments	
TPH-diesel and oil with silica gel cleanup by EPA Method 8015												
TPH-g by EPA Method 8015												
VOCs including Naphthalene by EPA Method 8260 Full List												
SVOCs Full list by EPA Method 8270												
PAHs including naphthalene by Selected Ion Monitoring (SIM)												
X												
X	X											
X												
X	X											
X												
X	X											
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								
X	X	X	X	X								

B-4
B-5
B-6
B-7

RELINQUISHED BY:			RECEIVED BY:		
Relinquished by:	Date: <u>1/21/16</u>	Time: <u>1415</u>	Received by:	Date: <u>1/21</u>	Time: <u>1825</u>
Relinquished by:	Date: <u>1/21</u>	Time: <u>1825</u>	Received by:		
Relinquished by:	Date:	Time:	Received by:		

ICE/Condition: <u>GOOD</u>	ICE# <u>119</u>	Comments: Please PDF APPROPRIATE CONTAINERS PRESERVED IN LAB
Head space absent: <u>HEAD SPACE ABSENT</u>	<u>DECHLORINATED IN LAB</u>	
Dechlorinated in lab: <u>DECHLORINATED IN LAB</u>	VOAS <input type="checkbox"/> O&G <input type="checkbox"/>	METALS <input type="checkbox"/> OTHER <input type="checkbox"/>
Appropriate containers: <u>PRESERVATION</u>		
Preserved in Lab: <u>PRESERVATION</u>	VOA's <input type="checkbox"/> O&G <input type="checkbox"/> Metals <input type="checkbox"/> Other <input type="checkbox"/>	
Preservation: <u>PRESERVATION</u>	pH < 2 <input type="checkbox"/>	



Sample Receipt Checklist

Client Name:	ERAS Environmental, Inc.	Date and Time Received:	1/21/2016 18:25
Project Name:	14229D; 1091 Calcot	Date Logged:	1/22/2016
WorkOrder №:	1601816	Matrix:	<u>Soil/Water</u>
Carrier:	<u>Benjamin Yslas (MAI Courier)</u>	Received by:	Maria Venegas
		Logged by:	Maria Venegas

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample/Temp Blank temperature		Temp: 1.9°C	NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

* NOTE: If the "No" box is checked, see comments below.

Comments:

APPENDIX E

Well Survey

WELL SURVEY
2,000 Foot Radius
1091 Calcot Place, Oakland

Address	Longcity	Owner	Update	Xcoord	Ycoord	Tsrgg	City	Drilldate	Elevation	Totaldepth	Waterdepth	Diameter	Use
2142 E. 12TH ST	Oakland	SHELL OIL	1/24/1990	122234914	37784549	2S/3W 6L	OAK	Mar-89	0	20	15	6	BOR*
2345 E 14th St	Oakland	Aaron & Stanley Wong	8/21/1997	122234104	37782910	2S/3W 6L	OAK	7/93	0	34	13	2	MON
2200 E. 14th St	Oakland	Exxon Company USA	2/4/1998	122236581	37784510	2S/3W 6L	OAK	9/95	0	20	14	2	MON
2200 EAST 12TH ST	Oakland	TEXACO STA #62488000088	12/16/1988	122234914	37784549	2S/3W 6L	OAK	Jun-88	100	18	6	2	MON
E. 12th St && 22nd Av	Oakland	Union Pacific Railroad	3/12/1998	122236791	37783122	2S/3W 6L	OAK	Oct-95	0	17	9	2	MON
2345 E 14th St	Oakland	Aaron & Stanley Wong	8/21/1997	122234104	37782910	2S/3W 6L	OAK	7/93	0	24	13	2	MON
2200 E. 14th St	Oakland	Exxon Company USA	2/4/1998	122236581	37784510	2S/3W 6L	OAK	9/95	0	20	9	2	MON
2200 EAST 12TH ST	Oakland	TEXACO STA #62488000088	12/16/1988	122234914	37784549	2S/3W 6L	OAK	Jun-88	99	20	6	2	MON
2200 EAST 12TH ST	Oakland	TEXACO STA #62488000088	12/16/1988	122234914	37784549	2S/3W 6L	OAK	Jun-88	100	17	6	2	MON
2200 EAST 12TH ST.	Oakland	TEXACO	6/28/1989	122234914	37784549	2S/3W 6L	OAK	Dec-88	0	17	11	4	MON
2200 E. 12th St.	Oakland	Texaco	3/12/1991	122234914	37784549	2S/3W 6L	OAK	Nov-90	0	0	0	0	BOR*
2200 EAST 12TH ST.	Oakland	TEXACO	6/28/1989	122234914	37784549	2S/3W 6L	OAK	Dec-88	0	19	10	4	MON
2200 EAST 12TH ST.	Oakland	TEXACO	6/28/1989	122234914	37784549	2S/3W 6L	OAK	Dec-88	0	16	13	4	MON
2200 EAST 12TH ST.	Oakland	TEXACO	6/28/1989	122234914	37784549	2S/3W 6L	OAK	Dec-88	0	17	13	4	MON
2200 EAST 12TH ST.	Oakland	TEXACO	6/28/1989	122234914	37784549	2S/3W 6L	OAK	Dec-88	0	17	14	4	MON
2142 East 12th Street	Oakland	Shell Oil Company	7/24/1990	122234914	37784549	2S/3W 6L	OAK	Oct-89	0	21	6	2	MON
2142 East 12th Street	Oakland	Shell Oil Company	7/24/1990	122234914	37784549	2S/3W 6L	OAK	Oct-89	0	20	6	2	MON
2142 East 12th Street	Oakland	Shell Oil Company	7/24/1990	122234914	37784549	2S/3W 6L	OAK	Oct-89	0	22	6	2	MON
2142 East 12th Street	Oakland	Shell Oil Company	7/24/1990	122234914	37784549	2S/3W 6L	OAK	Oct-89	0	20	6	2	MON
2200 E. 12th St.	Oakland	Texaco	3/12/1991	122234914	37784549	2S/3W 6L	OAK	Nov-90	0	14	7	19	DES
2200 E 14th Street	Oakland	Lili Goode	3/28/1991	122236594	37784516	2S/3W 6L	OAK	9/90	0	15	11	4	MON
2200 E 14th Street	Oakland	Lili Goode	3/28/1991	122236594	37784516	2S/3W 6L	OAK	8/90	0	19	6	4	MON
2345 East 14th Street	Oakland	Stanley Wong	11/18/1991	122234121	37782937	2S/3W 6L	OAK	8/91	36	27	15	4	MON
2345 E. 14th St	Oakland	Stanley Wong MW2	8/14/1992	122234121	37782937	2S/3W 6L	OAK	8/91	0	35	20	2	TES
2345 E. 14th St	Oakland	Stanley Wong MW3	8/14/1992	122234121	37782937	2S/3W 6L	OAK	8/91	0	35	19	2	TES
2345 E. 14th St	Oakland	Stanley Wong MW1	8/21/1992	122234121	37782937	2S/3W 6L	OAK	5/91	0	35	19	2	MON
2301 E 12th St	Oakland	B + B Inc. MW-1	9/21/1992	122234600	37783399	2S/3W 6L	OAK	Dec-91	0	28	21	2	MON
2301 E 12th St	Oakland	B + B Inc. MW-2	6/23/1993	122235379	37782463	2S/3W 6L	OAK	7/92	0	19	9	2	MON
2301 E 12th St	Oakland	B + B Inc. MW-3	6/23/1993	122235379	37782463	2S/3W 6L	OAK	7/92	0	19	9	2	MON
2032 East 12th St	Oakland	Stanley Wong	8/28/1991	122240563	37784549	2S/3W 6M	OAK	6/91	0	19	0	2	MON
2200 E 12th St	Oakland	Stanley Wong MW-1	9/8/1992	122238470	37784566	2S/3W 6L	OAK	5/91	0	27	6	2	TES
2032 East 12th St	Oakland	Stanley Wong	8/28/1991	122240563	37784549	2S/3W 6M	OAK	5/91	0	27	9	2	TES
2200 E 12th St	Oakland	Stanley Wong MW-2	9/8/1992	122238470	37784566	2S/3W 6L	OAK	5/91	0	27	6	2	TES
2032 East 12th St	Oakland	Stanley Wong	8/28/1991	122240563	37784549	2S/3W 6M	OAK	5/91	0	27	6	2	TES
2200 E 14th Street	Oakland	Lili Goode	3/28/1991	122236594	37784516	2S/3W 6L	OAK	8/90	0	21	10	4	MON
2200 E 12th St	Oakland	Stanley Wong MW-3	9/8/1992	122238470	37784566	2S/3W 6L	OAK	5/91	0	27	6	2	TES
1200 20th Av	Oakland		7/22/1997	122239453	37784990	2S/3W 6M	OAK	2/95	0	30	0	2	MON
1200 20th Av	Oakland		7/22/1997	122239453	37784990	2S/3W 6M	OAK	2/95	0	35	0	2	MON
1200 20th Av	Oakland		7/22/1997	122239453	37784990	2S/3W 6M	OAK	2/95	0	30	0	2	MON
1832 E 12th St	Oakland		7/22/1997	122241379	37786197	2S/3W 6M	OAK	2/95	0	30	0	2	MON
1832 E 12th St	Oakland		7/22/1997	122241379	37786197	2S/3W 6M	OAK	2/95	0	30	0	2	MON
2000 Embarcadero	Oakland	Western Federal Savings &	9/11/1990	122241358	37780427	2S/3W 6N	OAK	Jul-90	0	30	25	6	BOR
P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	2S/3W 6N	OAK	Jun-88	0	22	7	2	MON
P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	2S/3W 6N	OAK	Nov-88	0	20	5	2	DES
P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	2S/3W 6N	OAK	Jun-88	0	23	9	2	MON
EMBARCADERO ST	Oakland	PORT OF OAKLAND	6/28/1989	122297000	37801400	2S/3W 6N	OAK	Nov-88	0	20	6	2	DES
				0	0	2S/3W 6N		Jun-88	0	20	5	2	MON
P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	2S/3W 6N	OAK	Jun-88	0	47	9	2	MON
P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	2S/3W 6N	OAK	Jun-88	0	20	7	2	MON
P.O. BOX 2064	Oakland	PORT OF OAKLAND	12/16/1988	122240557	37781079	2S/3W 6N	OAK		0	0	0		

WELL SURVEY
2,000 Foot Radius
1091 Calcot Place, Oakland

EMBARCADERO ST	Oakland	PORT OF OAKLAND	6/28/1989	122297000	37801400	2S/3W 6N	OAK	Nov-88	0	20	7	2	MON
2100 Livingston St.	Oakland	Kipatrick's Bakeries MW1	6/23/1993	122239616	37780850	2S/3W 6N	OAK	9/92	0	25	9	2	MON
Embarcadero & Dennison St	Oakland	Port of Oakland W-9R	7/15/1993	122241472	37779429	2S/3W 6N	OAK	Oct-92	0	20	0	4	MON
Embarcadero & Dennison St	Oakland	Port of Oakland W-9	7/22/1993	122241466	37779424	2S/3W 6N	OAK	Oct-92	0	24	0	2	DES
1050 22nd Av	Oakland	Cottonmill	12/26/1997	122239203	37782018	2S/3W 6N	OAK	5/94	0	28	15	2	MON
1091 CALCOT ST	Oakland	SPACE 4 U MGMT	7/30/1984	122236818	37781262	2S/3W 6P	OAK	/17	0	345	37	0	ABN
E14TH & 25TH AVE	Oakland	STANDARD BRANDS PAINT CO	5/21/1986	122230469	37781079	2S/3W 6Q	OAK	Sep-85	0	31	17	0	MON
2530 East 14th Street	Oakland	Stark, Wells, Rahl & Schw	6/21/1990	122232180	37781897	2S/3W 6Q	OAK	3/90	0	19	8	2	TES
2530 East 14th Street	Oakland	Stark, Wells, Rahl & Schw	6/21/1990	122232180	37781897	2S/3W 6Q	OAK	3/90	0	18	9	2	TES
2530 East 14th Street	Oakland	Stark, Wells, Rahl & Schw	6/21/1990	122232180	37781897	2S/3W 6Q	OAK	3/90	0	18	7	2	TES
2509 East 14th Street	Oakland	East Bay Asian Local Deve	7/3/1990	122232492	37781855	2S/3W 6Q	OAK	Dec-89	0	29	15	2	TES
2509 East 14th Street	Oakland	East Bay Asian Local Deve	7/3/1990	122232492	37781855	2S/3W 6Q	OAK	Dec-89	0	25	16	2	TES
2509 East 14th Street	Oakland	East Bay Asian Local Deve	7/3/1990	122232492	37781855	2S/3W 6Q	OAK	Dec-89	0	23	15	2	TES
2530 E. 14th St. MW-15	Oakland	Oakland Community Housing	4/17/1995	122232163	37781897	2S/3W 6Q	OAK	6/94	27	18	7	2	MON
2530 E. 14th St. MW-16	Oakland	Oakland Community Housing	4/17/1995	122232163	37781897	2S/3W 6Q	OAK	6/94	26	17	6	2	MON
2530 E. 14th St. MW-17	Oakland	Oakland Community Housing	4/17/1995	122232163	37781897	2S/3W 6Q	OAK	6/94	26	17	12	2	MON
1100 29TH AVE	Oakland	DEL MONTE CORP. See history search	7/30/1984	122229770	37777290	2S/3W 7B	OAK	4/25	0	875	0	12	DES
1100 29TH AVE	Oakland	DEL MONTE CORP See history search	8/7/1984	122229770	37777290	2S/3W 7B	OAK	?	0	873	87	0	IND
1100 29TH Ave	Oakland	DEL MONTE CORP See history search	8/1/1984	122157622	37722364	2S/3W 7B	OAK	7/54	48	704	0	14	IND
1100 29TH Ave	Oakland	DEL MONTE CORP. See history search	8/1/1984	122157622	37722364	2S/3W 7B	OAK	/19 2006	48	385	0	14	IND
955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW1	6/23/1993	122237258	37778954	2S/3W 7C	OAK	8/92	0	25	9	2	MON
955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW2	6/23/1993	122237258	37778954	2S/3W 7C	OAK	8/92	0	30	10	3	MON
955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW3	6/23/1993	122237258	37778954	2S/3W 7C	OAK	8/92	0	27	9	2	MON
955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW4	6/23/1993	122237258	37778954	2S/3W 7C	OAK	8/92	0	34	10	2	MON
955 Kennedy St.	Oakland	Kilpatrick's Bakeries MW5	6/23/1993	122237258	37778954	2S/3W 7C	OAK	8/92	0	34	13	2	MON
646 Kennedy St	Oakland	Fidelity Packaging	9/11/1997	122236083	37775792	2S/3W 7C	OAK	5/93	0	16	11	2	MON
646 Kennedy St	Oakland	Fidelity Packaging	9/11/1997	122236083	37775792	2S/3W 7C	OAK	5/93	0	17	15	2	MON
800 Kennedy St	Oakland	Holt Graphics	9/19/1997	122236488	37777328	2S/3W 7C	OAK	Dec-93	0	20	11	2	MON
727 Kennedy St	Oakland	Glen Duncan for Saroni Fo	2/17/1998	122236534	37776748	2S/3W 7C	OAK	8/95	0	17	7	2	MON

Industrial Production Well

