

ExxonMobil
Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
510 547 8706 Facsimile

Jennifer C. Sedlachek
Project Manager

RECEIVED

2:15 pm, Mar 29, 2011
Alameda County
Environmental Health

ExxonMobil

March 28, 2011

Ms. Barbara Jakub
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Subject: Fuel Leak Case No. RO0000445
Former Mobil Station 99105, 6301 San Pablo Avenue, Oakland, California

Dear Ms. Jakub:

Attached for your review and comment is a copy of the *Soil Vapor Survey Report* for the above-referenced site. The report, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, details the results of the soil vapor well installation and sampling events in November 2010.

Upon information and belief, I declare, under penalty of perjury, that the information contained in the document is true and correct.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

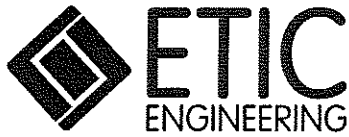


Jennifer C. Sedlachek
Project Manager

Attachment: ETIC Soil Vapor Survey Report

c: w/ attachment:
Ms. Connie Lam (property owner)

c: w/o attachment:
Ms. Christa Marting – ETIC Engineering, Inc.



Soil Vapor Survey Report

**Former Mobil Station 99105
6301 San Pablo Avenue
Oakland, California**

Prepared for

ExxonMobil Oil Corporation

Prepared by

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, California 94523
(925) 602-4710

Yuko Mamiya
Project Geologist

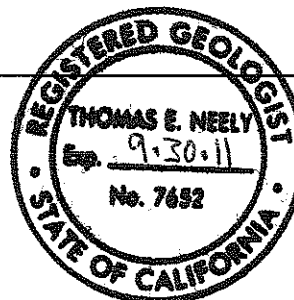
3/30/11

Date

Thomas E. Neely, PG, CHG, REA II
Senior Hydrogeologist

3/28/11

Date



March 2011

CONTENTS

	<u>Page</u>
LIST OF FIGURES AND TABLES	
SITE CONTACTS	
1. INTRODUCTION	1
2. SITE BACKGROUND.....	2
2.1 SITE LOCATION AND LAND USE	2
2.2 REGIONAL GEOLOGY AND HYDROGEOLOGY.....	2
2.3 SITE HYDROGEOLOGY	3
2.4 SUMMARY OF PREVIOUS INVESTIGATION ACTIVITIES.....	3
2.5 SUMMARY OF PREVIOUS INTERIM REMEDIAL MEASURES.....	4
3. SUBSURFACE INVESTIGATION.....	6
3.1 ADVANCEMENT OF SOIL BORINGS AND SOIL SAMPLING	6
3.2 SOIL VAPOR MONITORING WELL INSTALLATION.....	6
3.3 SOIL VAPOR SAMPLE COLLECTION	7
3.4 WELL SURVEYING	7
3.5 WASTE CONTAINMENT AND DISPOSAL.....	7
4. RESULTS	8
4.1 LOCAL GEOLOGY AND HYDROGEOLOGY.....	8
4.2 SOIL SAMPLE ANALYTICAL METHODS AND RESULTS	8
4.3 SOIL VAPOR SAMPLE ANALYTICAL METHODS AND RESULTS	8
5. VAPOR INTRUSION EVALUATION.....	10
6. SUMMARY.....	11
REFERENCES	12

FIGURES

TABLES

APPENDIX A:	Regulatory Correspondence
APPENDIX B:	Permits
APPENDIX C:	Soil Boring Logs, Well Completion Diagrams, and DWR Forms
APPENDIX D:	Field Protocols
APPENDIX E:	Field Documents
APPENDIX F:	Survey Data
APPENDIX G:	Laboratory Analytical Reports and Chain-of-Custody Documentation
APPENDIX H:	Waste Documentation

LIST OF FIGURES AND TABLES

Former Mobil Station 99105

<u>Number</u>	<u>Description</u>
Figures	
1	Site location and topographic map.
2	Site map showing soil borings and monitoring well locations.
3	Site map showing groundwater elevations and analytical results (17 September 2010).
4	Site map showing soil sample analytical results (1 and 2 November 2010).
5	Site map showing soil vapor sample analytical results (9 November 2010).
Tables	
1	Well construction details.
2	Soil sample analytical results.
3	Groundwater sample analytical results for temporary borings.
4	Groundwater monitoring data.
5	Groundwater sample analytical results for oxygenates and additives.
6	Physical properties analytical results for soil samples.
7	Soil vapor sample analytical results.
8	Tier I environmental screening levels for shallow soil vapor.

SITE CONTACTS

Station Name: Former Mobil Station 99105

Station Address: 6301 San Pablo Avenue
Oakland, California

ExxonMobil Project Manager: Jennifer C. Sedlachek
ExxonMobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
(510) 547-8196

Consultant to ExxonMobil: ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, California 94523
(925) 602-4710

ETIC Project Manager: Hamidou Barry

Regulatory Oversight: Barbara Jakub
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502
(510) 639-1287

1. INTRODUCTION

At the request of ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation (ExxonMobil), ETIC Engineering, Inc. (ETIC) has prepared this Soil Vapor Survey Report for former Mobil Station 99105, located at 6301 San Pablo Avenue, Oakland, California (Figure 1).

The investigation was conducted in general accordance with in the Vapor Intrusion Assessment and Well Installation Work Plan dated December 2008 (ETIC 2008) and Work Plan Addendum dated October 2009 (ETIC 2009). The work plan outlined the proposed scope of work for the collection of soil and soil vapor samples to evaluate the potential risk from potential exposure to hydrocarbons beneath the site via vapor intrusion (ETIC 2008). In a letter dated 20 July 2010, ETIC notified the Alameda County Health Care Services Agency (ACHCSA) that the proposed work would be implemented. The regulatory correspondence is attached as Appendix A.

This report documents the installation of five soil vapor monitoring wells and presents the results of the soil vapor sampling and vapor intrusion evaluation.

Scope of Work

The work consisted of the following activities:

- On 1 and 2 November 2010, a total of five borings were advanced to a total depth of 6 feet below ground surface (bgs) using an air knife and a hand auger.
- Soil samples were collected from each location. Soil samples collected from 5 to 5.5 feet bgs and from 5.5 to 6 feet bgs were submitted for laboratory analysis.
- The borings were completed as soil vapor monitoring wells VW1 through VW5 for the collection of soil vapor samples.
- On 9 November 2010, soil vapor samples were collected from vapor wells VW1 through VW5 in 1-liter SUMMA canisters and submitted for laboratory analysis.
- On 15 December 2010, the wells were surveyed by a licensed land surveying company.

2. SITE BACKGROUND

2.1 SITE LOCATION AND LAND USE

Former Mobil Station 99105 is located at 6301 San Pablo Avenue, Oakland, California, on the northwestern corner of the intersection of San Pablo Avenue and 63rd Street (Figure 1). The site was used as a Mobil service station from 1951 to 1980. The site was subsequently used as a car rental lot and is currently an automobile oil change facility. The former four 2,000-gallon gasoline underground storage tanks (USTs) and one 350-gallon used-oil UST were not in use after 1980 and were removed in 1994 (Figure 2). Commercial properties are situated to the north along San Pablo Avenue. To the east, across San Pablo Avenue, is an elementary school, and to the west and south are residential properties.

2.2 REGIONAL GEOLOGY AND HYDROGEOLOGY

The Site is located in the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin. The East Bay Plain Subbasin is a northwest trending alluvial plain bounded on the north by San Pablo Bay, on the east by the contact with Franciscan Basement rock, and on the south by the Niles Cone Groundwater Basin. The East Bay Plain Basin extends beneath San Francisco Bay to the west. Numerous creeks including San Pablo Creek, Wildcat Creek, San Leandro Creek, and San Lorenzo Creek flow from the western slope of the Coast Ranges westward across the plain and into the San Francisco Bay. The East Bay Plain Subbasin aquifer system consists of unconsolidated deposits of Quaternary age. Deposits include the early Pleistocene Santa Clara Formation, the late Pleistocene Alameda Formation, the early Holocene Temescal Formation, and Artificial Fill. The cumulative thickness of the unconsolidated deposits is about 1,000 feet (Department of Water Resources [DWR] 2003).

Early Pleistocene Santa Clara Formation

The Santa Clara Formation consists of alluvial fan deposits inter-fingered with lake, swamp, river channel, and flood plain deposits. The formation ranges from 300 to 600 feet thick (DWR 2003).

Late Pleistocene Alameda Formation

The Alameda Formation includes a sequence of alluvial fan deposits. The formation was deposited primarily in an estuarine environment and ranges from 26 to 245 feet thick (DWR 2003).

Early Holocene Temescal Formation

The Temescal Formation is an alluvial deposit consisting primarily of silt and clay with some gravel layers. The formation ranges from 1 to 50 feet thick (DWR 2003).

Artificial Fill

Artificial fill is found mostly along the bay front and wetlands areas and is derived primarily from dredging as well as quarrying, construction, demolition debris, and municipal waste. The fill ranges in thickness from 1 to 50 feet with the thickest deposits found closer to San Francisco Bay (DWR 2003).

2.3 SITE HYDROGEOLOGY

The depth to groundwater beneath the site has ranged from approximately 3 to 12.5 feet bgs. The groundwater flow direction reportedly has varied from the northwest to the southwest. The hydraulic gradient during the most recent groundwater monitoring event in September 2010 was calculated to be 0.07 foot per foot toward the southwest (ETIC 2010). The most recent groundwater flow direction and analytical results are shown on Figure 3.

2.4 SUMMARY OF PREVIOUS INVESTIGATION ACTIVITIES

Previous environmental activities conducted at the site are listed below and were obtained from the Risk-Based Corrective Action Report prepared by TRC Alton Geoscience (TRC), dated October 2002 (TRC 2002). Soil boring and well locations are shown on Figure 2.

In March 1996, four groundwater monitoring wells (MW1 through MW4) were installed (Alisto 1996).

In March 1998, 13 soil borings (AB-1 through AB-13) were drilled to characterize the extent of hydrocarbons in soil and groundwater onsite (Alton 1998).

On 19 November 1998, a dual-phase extraction (DPE) event was conducted. Six temporary monitoring points (MP-1 through MP-6) were advanced to further characterize the extent of hydrocarbon-impacted vadose zone soil and to obtain vacuum readings and groundwater depths during the DPE event. Groundwater and soil vapor were extracted from wells MW3 and MW4. Vacuum response and groundwater depths were measured in the temporary monitoring points and monitoring wells during the DPE event. Approximately 21 pounds of vapor-phase hydrocarbons and 75 gallons of hydrocarbon-impacted groundwater were recovered during the event (Alton 1999). Following the extraction event, monitoring points MP-1 through MP-6 were abandoned in-place.

In early 1999, more than 200 cubic yards of soil was removed from the northeastern portion of the site during redevelopment activities conducted by the property owner. Monitoring well MW4 was inadvertently destroyed during the construction activities (TRC 2002).

In July 1999, MW1 was properly destroyed in preparation for the construction activities (TRC 1999).

In January 2000, one soil boring (HA-1) was advanced in the footprint area of the oil change facility (i.e., prior to construction of the building) to confirm the absence of hydrocarbon impacts in this

area.

In the fall of 2000, two (MW2 and MW3) of the three monitoring wells damaged during construction activities conducted by the property owner in 1999 were rehabilitated and the third well (MW4) was replaced by well MW5. The remaining three wells (MW2, MW3, and MW5) were monitored on a quarterly basis until January 2004.

In September 2010, monitoring wells MW2, MW3, and MW5 were re-developed, and groundwater samples were collected from these wells (ETIC 2010).

Well construction details are presented in Table 1, historical soil sample analytical results are presented in Table 2, historical groundwater sample analytical results for temporary borings are presented in Table 3, and groundwater monitoring data are summarized in Tables 4 and 5.

2.5 SUMMARY OF PREVIOUS INTERIM REMEDIAL MEASURES

In August 1994, four 2,000-gallon gasoline USTs and one 350-gallon used-oil UST were excavated and removed from the site. Holes were observed in two of the gasoline tanks. Analysis of soil samples collected from the bottom of the gasoline tank excavation at 11 feet bgs indicated maximum concentrations of 520 milligrams per kilogram (mg/kg) of Total Petroleum Hydrocarbons as gasoline (TPH-g) and 0.18 mg/kg of benzene. Liquid-phase hydrocarbons were observed in the groundwater of the gasoline tank excavation. Analysis of the soil sample from the bottom of the used-oil tank excavation indicated a maximum concentration of 21 mg/kg of TPH-g, 1.2 mg/kg of Total Petroleum Hydrocarbons as diesel (TPH-d), and 94 mg/kg of Total Oil and Grease (TOG). Benzene was not reported above the laboratory detection limit (Alisto 1996).

In January 1996, additional compliance soil samples were collected from the UST excavations. A total of six soil samples were collected from the sidewalls of the gasoline tank excavation and a total of two soil samples were collected from the bottom of the used-oil tank excavation. Analysis of the soil samples from the gasoline tank excavation indicated maximum concentrations of 9.5 mg/kg of TPH-g, 44 mg/kg of TPH-d, and 0.11 mg/kg of benzene. Analysis of the soil samples from the used-oil tank excavation indicated maximum concentrations of 2.9 mg/kg of TPH-d and 10 mg/kg of TOG. Benzene was not reported above the laboratory detection limit (Alisto 1996).

In February 1996, the standing water in the gasoline tank excavation, which had risen to approximately 3 feet bgs, was pumped from the excavation. Non-hazardous waste manifests in the Alisto Engineering Group 1996 report show a total of 16,170 gallons of water was removed from the site at this time. Additional soil samples were collected from the bottom of the gasoline tank excavation. Analysis of those samples indicated a maximum concentration of 640 mg/kg of TPH-g and 160 mg/kg of TPH-d. Benzene was not reported above the laboratory detection limit (Alisto 1996).

Also in February 1996, three 2-inch-diameter fiberglass and two 2-inch-diameter steel fuel pipelines were excavated and removed from the site. No holes were observed in the fiberglass piping. The steel piping showed signs of rust and staining was apparent at the pipe stub-ups near the northwest

end of the former dispenser island. The excavation of the product lines was approximately 3 feet wide by 3 feet deep by 50 feet long, from the southeastern corner of the gasoline tank excavation to the dispenser islands. An area of approximately 16 feet long by 11 feet wide by 5 feet deep was overexcavated near the northwestern end of the former dispenser island to remove apparent petroleum hydrocarbon-impacted soils. Compliance soil samples were collected every 20 linear feet from the former product line excavation. Analysis of those samples indicated a maximum concentration of 240 mg/kg of TPH-g, 37 mg/kg of TPH-d, and 0.30 mg/kg of benzene (Alisto 1996).

An estimated 367 cubic yards of soil was excavated and removed from the site during the UST and piping removals (Alisto 1996).

On 19 November 1998, a DPE event was conducted. Six temporary monitoring points (MP-1 through MP-6) were advanced to further characterize the extent of hydrocarbon-impacted vadose zone soil and to obtain vacuum readings and groundwater depths during the DPE event. Groundwater and soil vapor were extracted from wells MW3 and MW4. Vacuum response and groundwater depths were measured in the temporary monitoring points and monitoring wells during the DPE event. Approximately 21 pounds of vapor-phase hydrocarbons and 75 gallons of hydrocarbon-impacted groundwater were recovered during the event (Alton 1999). Following the extraction event, monitoring points MP-1 through MP-6 were abandoned in-place.

In early 1999, more than 200 cubic yards of soil were removed from the north area of the site during redevelopment activities conducted by the property owner. Monitoring well MW4 was inadvertently destroyed during the construction activities (TRC 2002).

3. SUBSURFACE INVESTIGATION

On 1 and 2 November 2010, ETIC observed the installation of five soil vapor monitoring wells (VW1 through VW5). A permit was obtained from Alameda County Public Works Agency (ACPWA). A copy of the permit is attached as Appendix B. A site-specific health and safety plan was used for this work. The locations of the soil vapor monitoring wells are shown on Figure 2.

The locations of the proposed soil vapor monitoring wells were selected based on the historical hydrocarbon concentrations beneath the site, groundwater flow direction, and locations of onsite structures.

An advisory published by the Department of Toxic Substances Control (DTSC) and the Los Angeles Regional Water Quality Control Board (DTSC/LARWQCB 2003) and vapor intrusion evaluation guidelines published by the DTSC (DTSC 2004) and Interstate Technology & Regulatory Council (ITRC 2007) were used as guidelines for the work detailed below.

3.1 ADVANCEMENT OF SOIL BORINGS AND SOIL SAMPLING

On 1 and 2 November 2010, soil borings VW1 through VW5 were advanced by Cascade Drilling, LP. of Rancho Cordova, California (C57 license #938110) with an air knife and a hand auger to a depth of approximately 6 feet bgs.

Soil samples were collected in clean liners using a slide hammer hand sampler at depths of 5 to 5.5 feet bgs and 5.5 to 6 feet bgs. Soil was examined and characteristics were recorded on the soil boring logs presented in Appendix C. The soil sample liners were sealed with Teflon tape, capped, labeled, placed in a cooler with ice, and submitted under chain-of-custody protocol to a state-certified laboratory for analysis. Reusable sampling equipment was decontaminated after each use. Field methods and procedures are described in the protocols, presented in Appendix D.

3.2 SOIL VAPOR MONITORING WELL INSTALLATION

Borings VW1 through VW5 were completed as soil vapor monitoring wells. The wells were completed in accordance with the protocols provided in Appendix D. An ACPWA inspector observed and approved the installation of each well.

The soil vapor monitoring wells were constructed with 0.25-inch-diameter stainless steel tubing connected to a 0.4-inch-diameter, 6-inch-long, stainless steel 0.0057-inch pore screen. All connections were sealed with Swagelok®-type fittings. The screen was capped at the bottom, connected to the tubing with a Swagelok®-type fitting, and placed from approximately 5.25 to 5.75 feet bgs in the borehole. A filter pack consisting of #2/12 Sand was placed between approximately 5 and 6 feet bgs. The top of the stainless steel tubing was sealed with a Swagelok®-type valve. A 1-foot layer (from approximately 4 to 5 feet bgs) of dry granular bentonite was placed in the annular space of the borehole to separate the filter pack from the overlying grout seal. Hydrated granular

bentonite was used to fill the annular space of the borehole to just below ground surface. The well construction details are provided in Table 1 and are shown on the boring logs in Appendix C.

3.3 SOIL VAPOR SAMPLE COLLECTION

On 9 November 2010, a purge test was conducted for well VW5 which involved purging the well of 1, 3, and 7 purge volumes and screening the samples with a photoionization detector to determine the relative hydrocarbon content. Based on the results of this purge test, a purge volume of 3 purge volumes was determined to be the preferred amount for the remaining samples to be collected at the site.

On 9 November 2010, soil vapor samples were collected after purging 3 volumes from each well using SUMMA canisters. The initial pressure and the final pressure readings taken from the gauges on the SUMMA canisters were recorded. During sampling, helium was used to check for potential leaks. The samples were submitted under chain-of-custody protocol to a state-certified laboratory for analysis. Field protocols are provided in Appendix D. The field documents are included in Appendix E.

3.4 WELL SURVEYING

On 15 December 2010, the location and top of traffic box elevation of each soil vapor monitoring well was surveyed by Morrow Surveying, a licensed land surveyor. The surveyor's report is provided in Appendix F.

3.5 WASTE CONTAINMENT AND DISPOSAL

Waste generated during soil vapor monitoring well installation activities was collected in 55-gallon drums and stored onsite. Soil samples were collected from the drums and submitted to Calscience Environmental Laboratories, Inc. (Calscience), a state-certified laboratory in Garden Grove, California. The samples were analyzed for TPH-g, benzene, toluene, ethylbenzene, and total xylenes (BTEX), and total lead in order to characterize the soil for proper disposal. The laboratory analytical reports and chain-of-custody documentation are included in Appendix G. The drums were removed from the site on 15 December 2010 by Dillard Environmental Services and transported for disposal to Republic Landfill in Livermore, California. Waste documentation is included in Appendix H.

4. RESULTS

4.1 LOCAL GEOLOGY AND HYDROGEOLOGY

The soil encountered during this investigation generally consisted of clay with gravel to approximately 3 to 4 feet bgs. The clay with gravel was underlain by clay with silt in borings VW1 and VW5, clayey silt with trace sand in borings VW3 and VW4, and sandy gravel in borings VW2 to 6 feet bgs, the total depth explored during this investigation. Groundwater was not encountered during this investigation. Detailed soil descriptions are presented in the boring logs in Appendix C.

4.2 SOIL SAMPLE ANALYTICAL METHODS AND RESULTS

Soil samples collected at depths from 5.5 to 6 feet bgs from borings VW1 through VW5 were submitted to Calscience and analyzed for TPH-d and TPH-g by EPA Method 8015B (M), BTEX by EPA Method 8021B, and methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), 1,2-dichloroethane (1,2-DCA), diisopropyl ether (DIPE), 1,2-dibromoethane (1,2-DBA, ethylene dibromide, or EDB), ethyl tertiary butyl ether (ETBE), and tertiary amyl methyl ether (TAME) by EPA Method 8260B. The analytical results are summarized in Table 2 and Figure 4. The laboratory analytical reports and chain-of-custody documentation are included in Appendix G.

- TPH-g was detected at a maximum concentration of 3.7 mg/kg (VW4).
- Ethylbenzene and total xylenes were each detected at a maximum concentration of 0.0050 mg/kg (VW4).
- No other analytes were detected at or above reporting limits in the soil samples.

Soil samples collected at depths from 5 to 5.5 feet bgs from borings VW1 through VW5 were also submitted to Calscience and analyzed for moisture content by ASTM D2216 and porosity and bulk density by API RP40. The analytical results are summarized in Table 6. The moisture content of the soil samples ranged from 14.6 to 22.0 percent by weight. The bulk density ranged from 1.47 to 1.55 grams per cubic centimeter. The total porosity ranged from 41.7 to 44.6 percent by volume. The laboratory analytical reports and chain-of-custody documentation are included in Appendix G.

4.3 SOIL VAPOR SAMPLE ANALYTICAL METHODS AND RESULTS

Soil vapor samples collected from wells VW1 through VW5 were submitted to Calscience for analysis. The samples were analyzed for TPH-g by EPA Method TO-3 (M) and BTEX, MTBE, TBA, 1,2-DCA, DIPE, 1,2-DBA, ETBE, and TAME by EPA Method TO-15. The samples were also analyzed for oxygen, methane, and carbon dioxide by ASTM D1946, and select samples were analyzed for helium by ASTM D1946 (M). Field measurements were collected for helium using a helium detector. The field measurements and analytical results for the soil vapor samples are presented in Table 7 and on Figure 5.

- Benzene was detected at concentrations up to 16,000 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

(VW4).

- Toluene was detected at concentrations up to 9,200 $\mu\text{g}/\text{m}^3$ (VW4).
- Ethylbenzene was detected at concentrations up to 71,000 $\mu\text{g}/\text{m}^3$ (VW4).
- Total xylenes was detected at concentrations up to 60,000 $\mu\text{g}/\text{m}^3$ (VW4).
- TPH-g was detected at concentrations up to 250,000,000 $\mu\text{g}/\text{m}^3$ (VW4).
- 1,2-DCA was detected at concentrations up to 4.8 $\mu\text{g}/\text{m}^3$ (VW2).
- No other analytes were detected at or above reporting limits.
- Methane was detected at concentrations up to 14.2 percent by volume (VW4).
- Helium was detected at concentrations up to 18,000 parts per million in the field measurements when sampling soil vapor from wells VW4 and VW5. The equipment vendor indicated that the helium field instrument can detect and record hydrocarbons if elevated concentrations are present. Laboratory analysis for helium was performed on the samples from VW4 and VW5 to evaluate the field detections.
- Helium was not detected in the laboratory analysis of soil vapor samples from wells VW4 and VW5.

5. VAPOR INTRUSION EVALUATION

As requested by the ACHCSA, the potential health risks associated with hydrocarbon vapor intrusion to indoor air were evaluated. The objective of this evaluation was to assess the potential for risk to human health from exposure to chemicals of potential concern (COPCs) in indoor air via subsurface vapor intrusion. Soil vapor samples were collected from soil vapor monitoring wells VW1 through VW5 to evaluate subsurface concentrations (Figure 2). The primary COPCs for vapor intrusion are identified as BTEX, TPH-g, and 1,2-DCA.

This analysis consisted of comparison of the site maximum soil vapor concentrations to relevant Environmental Screening Levels (ESLs) developed by the Regional Water Quality Control Board San Francisco Bay Region (RWQCB-SF 2008). The ESLs adopted by the RWQCB correspond to a target carcinogenic risk level of 1×10^{-6} and a target non-carcinogenic hazard quotient of 0.2.

Table 8 lists the lowest relevant ESLs for potential vapor intrusion concerns corresponding to residential and commercial/industrial land use (Table E-2, RWQCB-SF 2008).

Of the compounds detected:

- Benzene concentrations for soil vapor samples from VW4 and VW5 exceeded the ESLs for residential and commercial land use.
- Ethylbenzene and total xylenes concentrations for soil vapor sample from VW4 exceeded the ESLs for residential and commercial land use.
- TPH-g concentrations exceeded ESLs for commercial land use in samples collected from wells VW1, VW3, VW4, and VW5 and exceeded the ESL for residential land use in the sample collected from wells VW1 through VW5.
- Toluene and 1,2-DCA were not detected at concentrations exceeding the ESLs for residential or commercial land use in the samples collected.

6. SUMMARY

On 1 and 2 November 2010 ETIC observed the installation of five soil vapor monitoring wells (VW1 through VW5) at former Mobil Station 99105, located at 6301 San Pablo Avenue, Oakland, California. Relatively low levels of TPH-g, ethylbenzene, and xylenes were detected in the soil sample collected from boring VW4 at 5.5 to 6 feet bgs. TPH-g, TPH-d, BTEX, MTBE, DIPE, ETBE, TAME, TBA, 1,2-DCA, and EDB were not detected in the other soil samples. Soil samples were also collected from each boring for analysis of physical properties.

On 9 November 2010, soil vapor samples were collected from wells VW1 through VW5. TPH-g, BTEX, and 1,2-DCA were detected in the soil vapor samples. A vapor intrusion evaluation which consisted of a comparison of the site maximum shallow soil vapor concentrations to relevant ESLs was performed. Concentrations of TPH-g, benzene, ethylbenzene, and xylenes in some soil vapor samples exceeded ESLs.

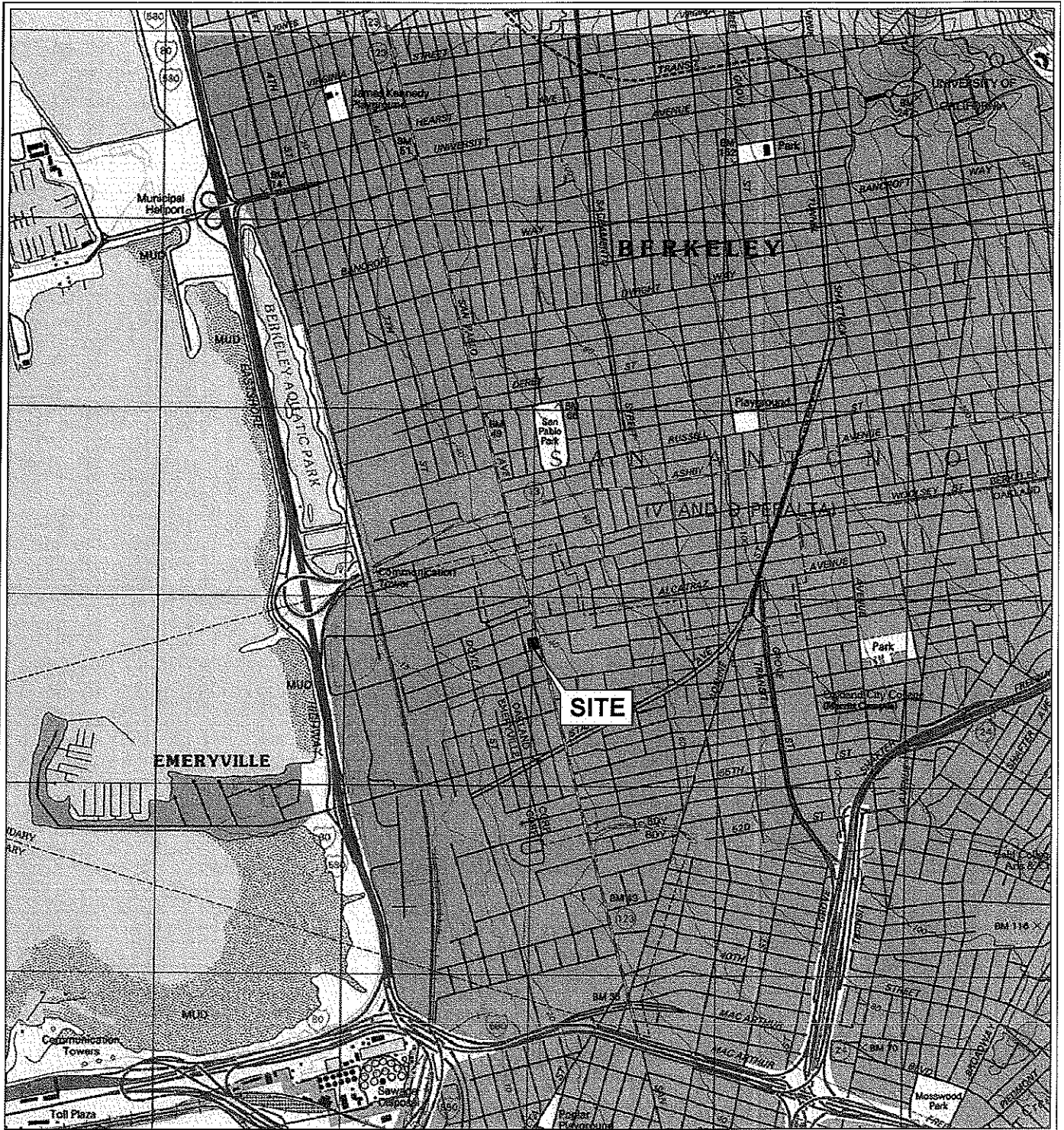
Recommendations based on the vapor intrusion evaluation will be submitted under separate cover.

REFERENCES

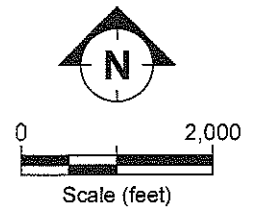
- Alisto (Alisto Engineering Group). 1996. Additional Tank Closure and Preliminary Site Investigation Report, Former Mobil Oil Corporation, Station 99-105, 6301 San Pablo Avenue, Oakland, California, 15 April.
- Alton (Alton Geoscience). 1998. Supplemental Site Assessment Report, Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California, 15 July.
- Alton (Alton Geoscience). 1999. Interim Remedial Action Report, Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California, 18 May.
- DTSC/LARWQCB (Department of Toxic Substances Control and California Regional Water Quality Control Board – Los Angeles Region). 2003. Advisory – Active Soil Gas Investigations. DTSC and LARWQCB, Glendale and Los Angeles, California. 28 January.
- DTSC (Department of Toxic Substances Control). 2004. Guidance for the Evaluation and Mitigation of Substance Vapor Intrusion to Indoor Air – Interim Final. 15 December.
- DWR (Department of Water Resources). 2003. California's Groundwater, Bulletin 118, Update 2003, San Francisco Bay Hydrologic Region, Santa Clara Valley Groundwater Basin, East Bay Plain Subbasin. DWR, Sacramento, California.
- ETIC (ETIC Engineering, Inc.). 2008. Vapor Intrusion Assessment and Well Installation Work Plan, Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California. ETIC, Pleasant Hill, California. December.
- ETIC (ETIC Engineering, Inc.). 2009. Work Plan Addendum, Former Mobil Station 99105, 6301 San Pablo Avenue, Oakland, California. ETIC, Pleasant Hill, California. October.
- ETIC (ETIC Engineering, Inc.). 2010. Report of Groundwater Monitoring, Third Quarter 2010, Former Mobil Station 99105, 6301 San Pablo Avenue, Oakland, California. ETIC, Pleasant Hill, California. November.
- ITRC (Interstate Technology and Regulatory Council). 2007. Technical and Regulatory Guidance, Vapor Intrusion Pathway: A Practical Guideline. January.
- RWQCB (California Regional Water Quality Control Board). 1995. Water Quality Control Plan, San Francisco Bay Basin (Region 2), June 21.
- TRC (TRC Alton Geoscience). 1999. Progress Report and Work Plan for the Installation of One Soil Boring, Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California. 3 November.
- TRC (TRC Alton Geoscience). 2001. Quarterly Progress Report, Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California. 24 July.

TRC (TRC Alton Geoscience). 2002. Risk-Based Corrective Action Report, Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California. October.

Figures



(Map Source: USGS Topographic Map)



FILENAME: TPO0903.DWG 10/01/03

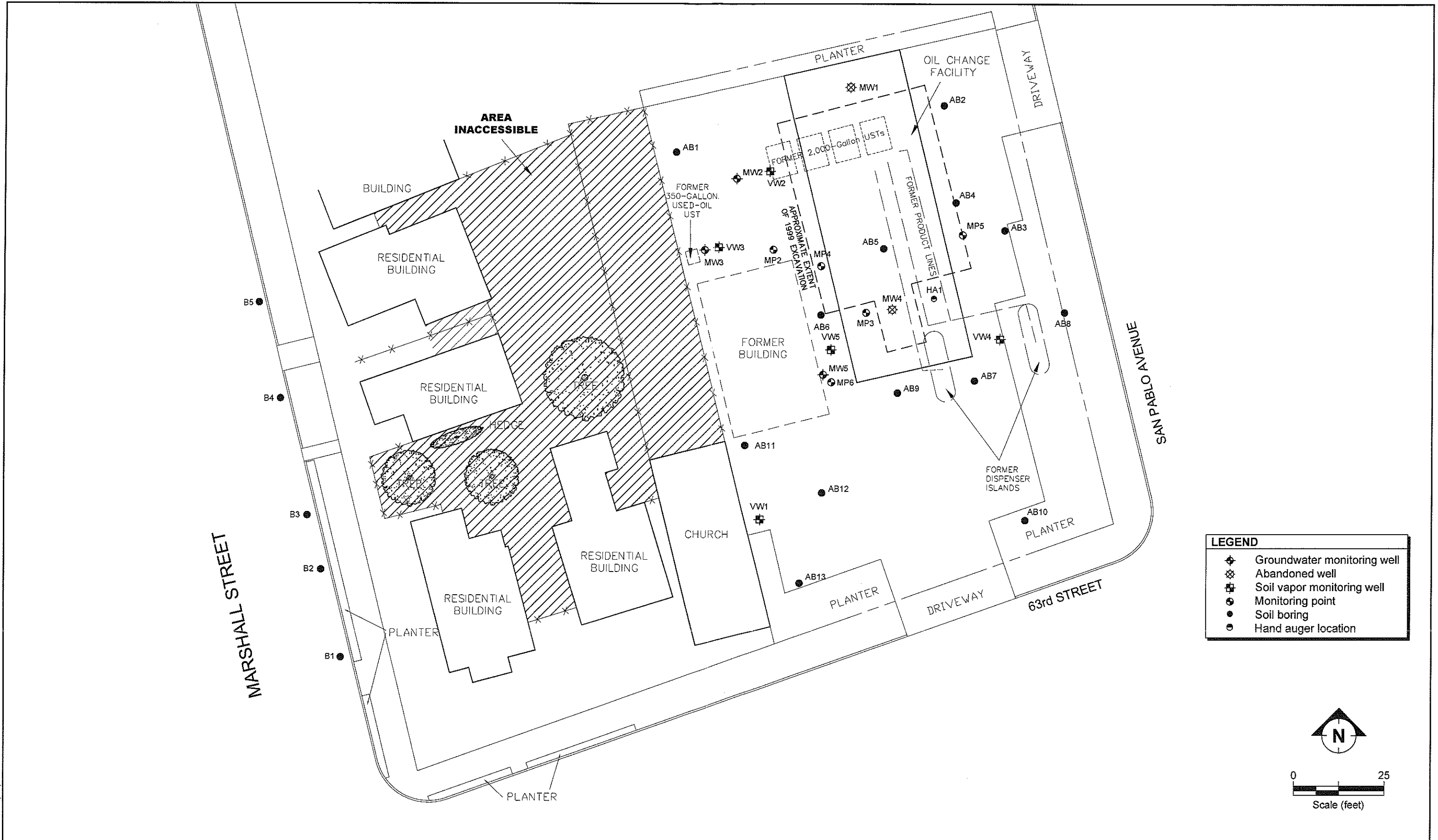


SITE LOCATION AND TOPOGRAPHIC MAP
 FORMER MOBIL STATION 99105
 6301 SAN PABLO AVENUE
 OAKLAND, CALIFORNIA

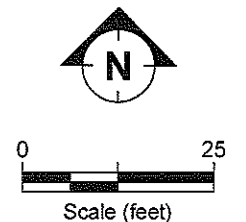
FIGURE:

1

FILENAME: S01011.DWG 1/11/11



LEGEND	
	Groundwater monitoring well
	Abandoned well
	Soil vapor monitoring well
	Monitoring point
	Soil boring
	Hand auger location



SITE MAP SHOWING SOIL BORINGS AND MONITORING WELL LOCATIONS
 FORMER MOBIL STATION 99105
 6301 SAN PABLO AVENUE
 OAKLAND, CALIFORNIA

FIGURE:
2

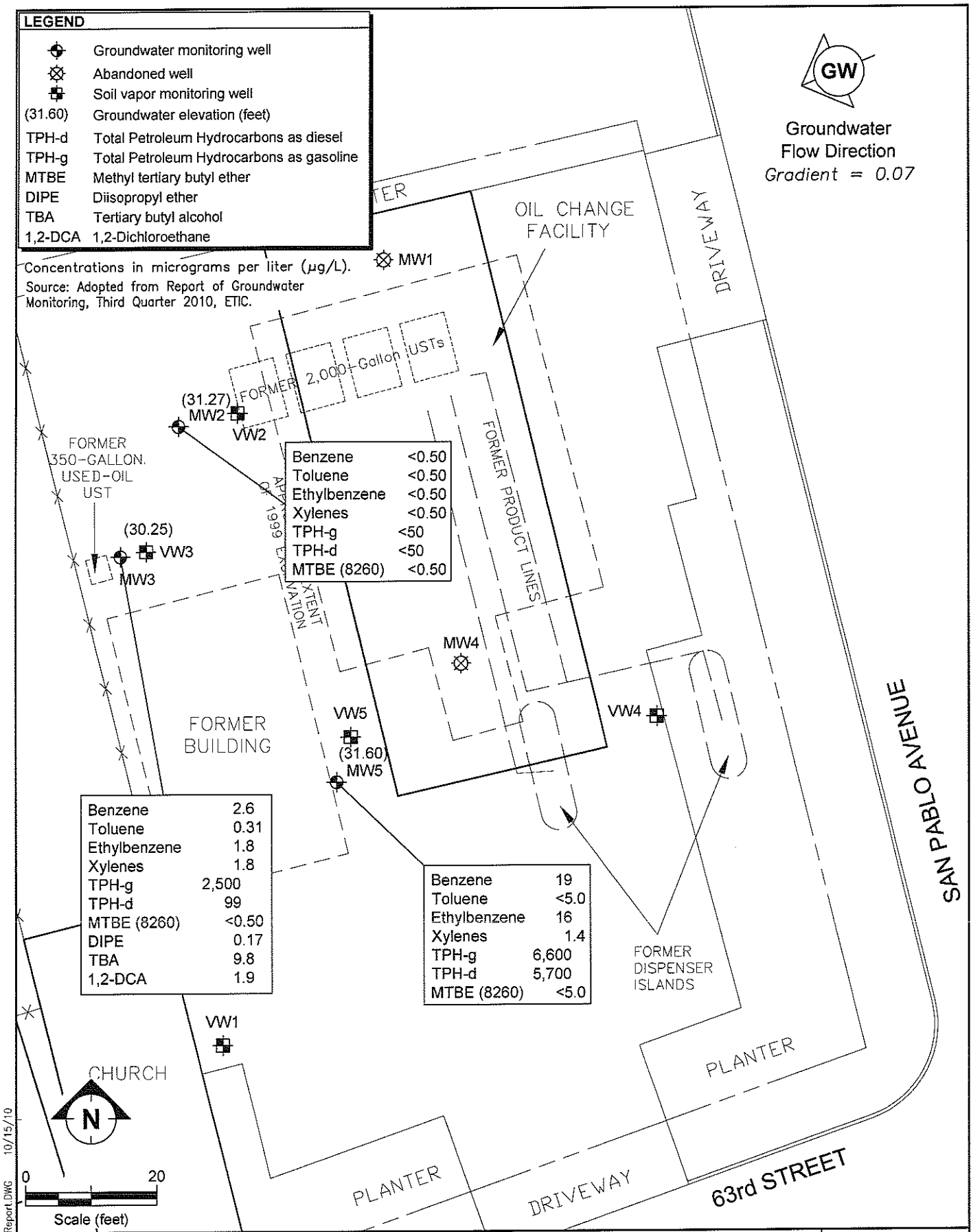
LEGEND

- ⊕ Groundwater monitoring well
- ⊗ Abandoned well
- ⊕ Soil vapor monitoring well
- (31.60) Groundwater elevation (feet)
- TPH-d Total Petroleum Hydrocarbons as diesel
- TPH-g Total Petroleum Hydrocarbons as gasoline
- MTBE Methyl tertiary butyl ether
- DIPE Diisopropyl ether
- TBA Tertiary butyl alcohol
- 1,2-DCA 1,2-Dichloroethane

Concentrations in micrograms per liter (µg/L).
 Source: Adopted from Report of Groundwater Monitoring, Third Quarter 2010, ETIC.



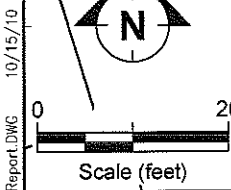
Groundwater Flow Direction
 Gradient = 0.07



Benzene	<0.50
Toluene	<0.50
Ethylbenzene	<0.50
Xylenes	<0.50
TPH-g	<50
TPH-d	<50
MTBE (8260)	<0.50

Benzene	2.6
Toluene	0.31
Ethylbenzene	1.8
Xylenes	1.8
TPH-g	2,500
TPH-d	99
MTBE (8260)	<0.50
DIPE	0.17
TBA	9.8
1,2-DCA	1.9

Benzene	19
Toluene	<5.0
Ethylbenzene	16
Xylenes	1.4
TPH-g	6,600
TPH-d	5,700
MTBE (8260)	<5.0



SITE MAP SHOWING GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS
 FORMER MOBIL STATION 99105
 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA
 17 SEPTEMBER 2010

FIGURE:
3

FILENAME: WellDevReport.DWG 10/15/10



Depth	5.5-6
Benzene	<0.0050
Toluene	<0.0050
Ethylbenzene	<0.0050
Xylenes	<0.010
TPH-g	<0.50
TPH-d	<5.0
MTBE	<0.0050

LEGEND

- ⊕ Groundwater monitoring well
- ⊗ Abandoned well
- ⊕ Soil vapor monitoring well
- Soil boring

TPH-g Total Petroleum Hydrocarbons as gasoline
 TPH-d Total Petroleum Hydrocarbons as diesel
 MTBE Methyl tertiary butyl ether

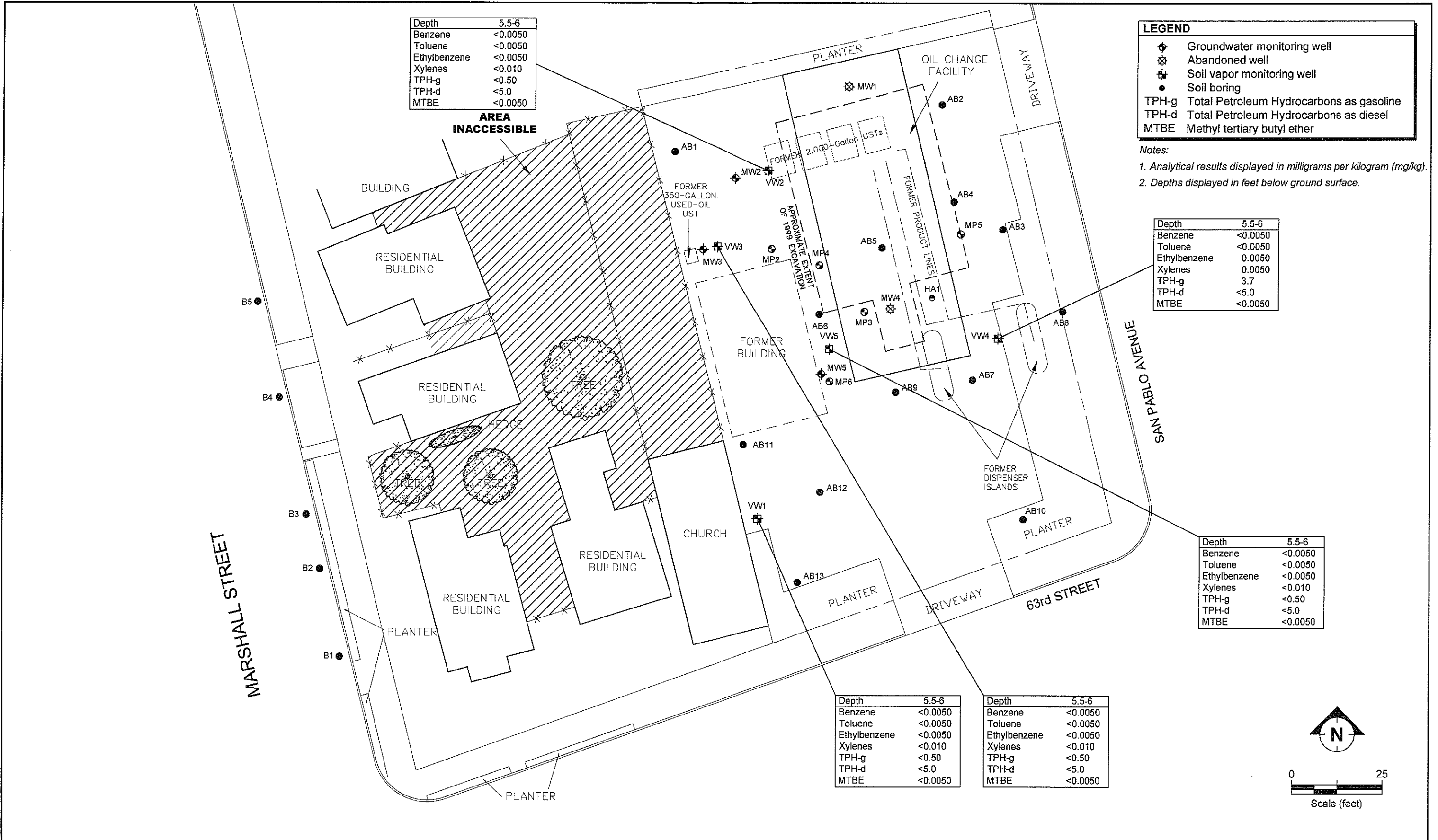
Notes:
 1. Analytical results displayed in milligrams per kilogram (mg/kg).
 2. Depths displayed in feet below ground surface.

Depth	5.5-6
Benzene	<0.0050
Toluene	<0.0050
Ethylbenzene	0.0050
Xylenes	0.0050
TPH-g	3.7
TPH-d	<5.0
MTBE	<0.0050

Depth	5.5-6
Benzene	<0.0050
Toluene	<0.0050
Ethylbenzene	<0.0050
Xylenes	<0.010
TPH-g	<0.50
TPH-d	<5.0
MTBE	<0.0050

Depth	5.5-6
Benzene	<0.0050
Toluene	<0.0050
Ethylbenzene	<0.0050
Xylenes	<0.010
TPH-g	<0.50
TPH-d	<5.0
MTBE	<0.0050

Depth	5.5-6
Benzene	<0.0050
Toluene	<0.0050
Ethylbenzene	<0.0050
Xylenes	<0.010
TPH-g	<0.50
TPH-d	<5.0
MTBE	<0.0050



SITE MAP SHOWING SOIL SAMPLE ANALYTICAL RESULTS
 FORMER MOBIL STATION 99105
 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA
 1 AND 2 NOVEMBER 2010

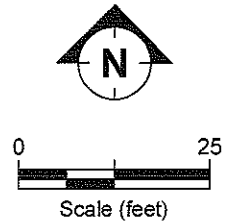


FIGURE:
4

FILENAME: S01011.DWG 1/11/11



Benzene	<2.2
Toluene	<2.6
Ethylbenzene	<3.0
Xylenes	<12
TPH-g	20,000
MTBE	<9.8
1,2-DCA	4.8

AREA INACCESSIBLE

	Groundwater monitoring well
	Abandoned well
	Soil vapor monitoring well
	Soil boring
TPH-g	Total Petroleum Hydrocarbons as gasoline
MTBE	Methyl tertiary butyl ether
1,2-DCA	1,2-Dichloroethane

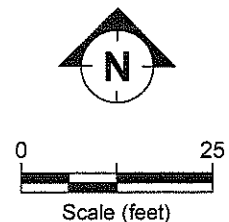
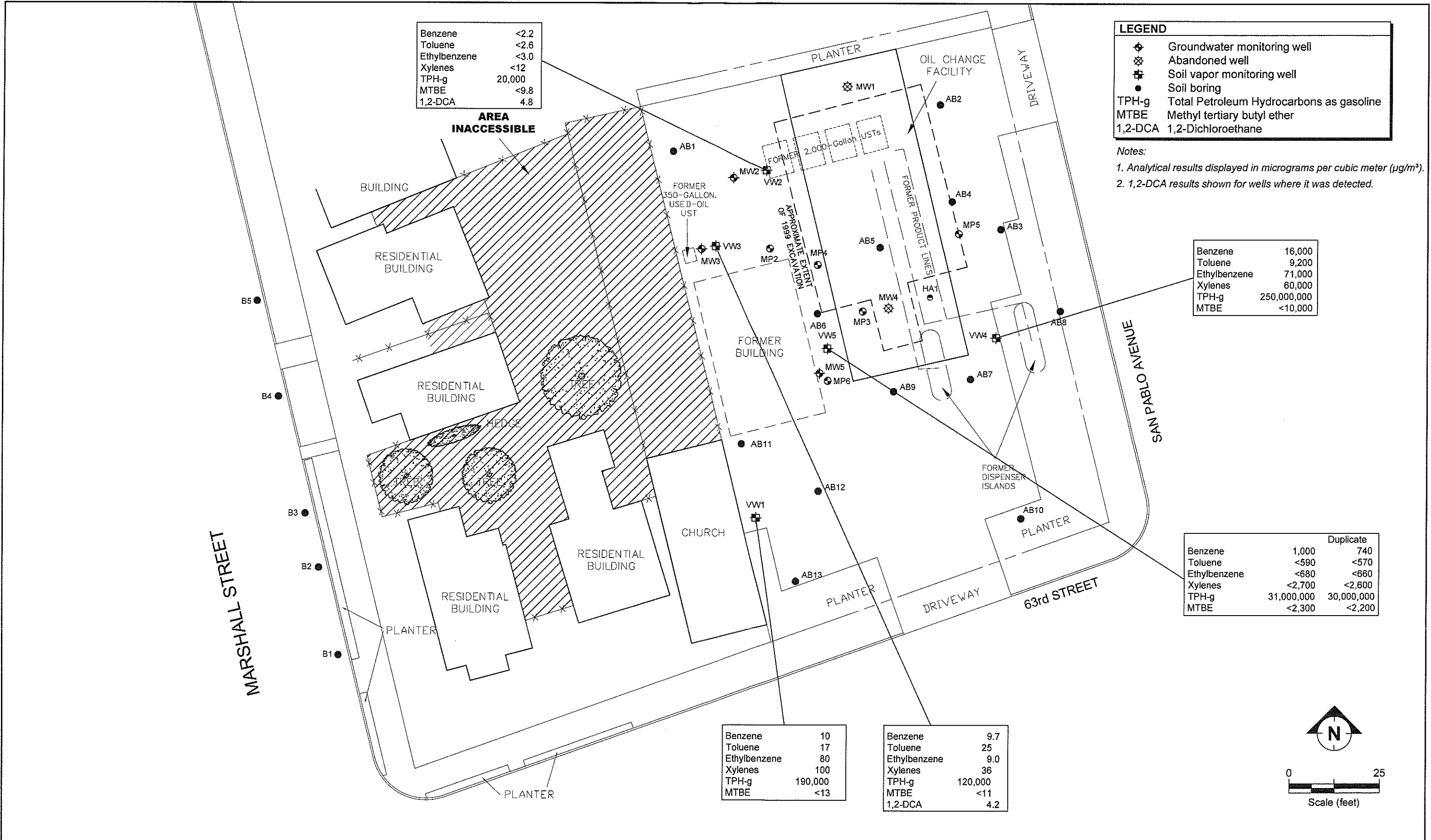
Notes:
 1. Analytical results displayed in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).
 2. 1,2-DCA results shown for wells where it was detected.

Benzene	16,000
Toluene	9,200
Ethylbenzene	71,000
Xylenes	60,000
TPH-g	250,000,000
MTBE	<10,000

		Duplicate
Benzene	1,000	740
Toluene	<590	<570
Ethylbenzene	<680	<660
Xylenes	<2,700	<2,600
TPH-g	31,000,000	30,000,000
MTBE	<2,300	<2,200

Benzene	10
Toluene	17
Ethylbenzene	80
Xylenes	100
TPH-g	190,000
MTBE	<13

Benzene	9.7
Toluene	25
Ethylbenzene	9.0
Xylenes	36
TPH-g	120,000
MTBE	<11
1,2-DCA	4.2



SITE MAP SHOWING SOIL VAPOR SAMPLE ANALYTICAL RESULTS
 FORMER MOBIL STATION 99105
 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA
 9 NOVEMBER 2010

Tables

TABLE 1 WELL CONSTRUCTION DETAILS, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Well Number	Well Installation Date	Elevation TOC (feet)	Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
MW1	b 03/01/96	--	PVC	21.5	20	10	4	5 - 20	0.010	4.5 - 21.5	#12 Sand
MW2	a 03/01/96	42.24	PVC	21.5	20	10	4	5 - 20	0.010	4.5 - 21.5	#12 Sand
MW3	a 03/01/96	42.18	PVC	21.5	20	10	4	5 - 20	0.010	4.5 - 21.5	#12 Sand
MW4	b 03/01/96	--	PVC	26.5	25	10	4	5 - 25	0.010	4.5 - 21.5	#12 Sand
MW5	a 09/06/00	41.86	PVC	21.5	20	10	4	5 - 20	0.010	4 - 21.5	#2/12 Sand
VW1	a 11/01/10	--	SS	6	6	4	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW2	a 11/02/10	--	SS	6	6	4	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW3	a 11/01/10	--	SS	6	6	4	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW4	a 11/02/10	--	SS	6	6	4	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand
VW5	a 11/02/10	--	SS	6	6	4	0.25	5.25 - 5.75	0.0057	5 - 6	#2/12 Sand

a Well surveyed on 12/15/10 by Morrow Surveying.

b Well destroyed.

PVC Polyvinyl chloride.

SS Stainless steel.

TOC Top of casing.

-- Information not available.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Sample Number	Date	Sample Depth (feet bgs)	Concentration (mg/kg)															
			Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	MTBE	MTBE (8260B)	TOG	Lead	TBA	DIPE	ETBE	1,2-DCA	TAME	1,2-DBA
MW1	03/01/96	5 - 5.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	3.4	--	--	--	<2.5	--	--	--	--	--	--
MW1	03/01/96	10 - 10.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	--	--	--	<2.5	--	--	--	--	--	--
MW1	03/01/96	15 - 15.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	4.2	--	--	--	<2.5	--	--	--	--	--	--
MW2	03/01/96	5 - 5.5	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	2.4	--	--	--	<2.5	--	--	--	--	--	--
MW2	03/01/96	10 - 10.5	1.2	1.4	2.7	14	220	57	--	--	--	<2.5	--	--	--	--	--	--
MW2	03/01/96	15 - 15.5	<0.0050	<0.0050	0.0063	0.035	<1.0	<1.0	--	--	--	<2.5	--	--	--	--	--	--
MW3	03/01/96	5.5 - 6	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	1.1	--	--	9	<2.5	--	--	--	--	--	--
MW3	03/01/96	10.5 - 11	0.032	0.43	0.65	0.93	53	72	--	--	290	<2.5	--	--	--	--	--	--
MW3	03/01/96	15.5 - 16	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<1.0	--	--	10	<2.5	--	--	--	--	--	--
MW4	03/01/96	5.5 - 6	1.2	1	4.1	19	280	34	--	--	--	<2.5	--	--	--	--	--	--
MW4	03/01/96	10.5 - 11	0.11	<0.0050	0.11	0.093	6	7.7	--	--	--	<2.5	--	--	--	--	--	--
MW4	03/01/96	15.5 - 16	0.076	0.023	0.083	0.07	6	2.1	--	--	--	<2.5	--	--	--	--	--	--
AB-1	03/05/98	5 - 6	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	--
AB-2	03/05/98	4 - 5	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	--
AB-3	03/05/98	5.5	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	--
AB-4	03/05/98	5 - 6	ND	ND	ND	ND	18	--	ND	--	--	--	--	--	--	--	--	--
AB-5	03/05/98	3 - 4	ND	ND	0.65	ND	170	--	ND	--	--	--	--	--	--	--	--	--
AB-6	03/05/98	5	ND	ND	ND	ND	230	--	ND	--	--	--	--	--	--	--	--	--
AB-7	03/05/98	4-5	ND	ND	0.032	ND	19	--	ND	--	--	--	--	--	--	--	--	--
AB-8	03/05/98	5'	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	--
AB-9	03/05/98	4	0.006	ND	0.028	ND	16	--	ND	--	--	--	--	--	--	--	--	--
AB-10	03/05/98	4	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	--
AB-11	03/05/98	5 - 6	ND	ND	ND	ND	3.9	--	ND	--	--	--	--	--	--	--	--	--

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Sample Number	Date	Sample Depth (feet bgs)	Concentration (mg/kg)															
			Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	MTBE	MTBE (8260B)	TOG	Lead	TBA	DIPE	ETBE	1,2-DCA	TAME	1,2-DBA
AB-12	03/16/98	5 - 6	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	
AB-13	03/16/98	5 - 6	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	
MP-1	11/16/98	7.5	ND	0.007	0.013	ND	10	--	ND	--	--	--	--	--	--	--	--	
MP-2	11/16/98	7	ND	0.03	0.29	2.1	270	--	ND	--	--	--	--	--	--	--	--	
MP-2	11/16/98	10.5	0.08	ND	0.31	ND	140	--	0.15	--	--	--	--	--	--	--	--	
MP-3	11/16/98	7.5	ND	0.1	1.6	ND	230	--	0.28	--	--	--	--	--	--	--	--	
MP-4	11/16/98	5	ND	ND	0.35	ND	120	--	0.19	--	--	--	--	--	--	--	--	
MP-4	11/16/98	10	ND	0.013	0.07	0.086	18	--	ND	--	--	--	--	--	--	--	--	
MP-5	11/16/98	6.5	ND	ND	0.015	0.022	6.4	--	ND	--	--	--	--	--	--	--	--	
MP-5	11/16/98	10.5	ND	ND	1.4	3	220	--	0.52	--	--	--	--	--	--	--	--	
MP-6	11/16/98	7	ND	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	--	--	
MP-6	11/16/98	10	ND	ND	1.6	4.2	240	--	0.92	ND	--	--	--	--	--	--	--	
HA-1	01/25/00	5	<0.0050	<0.0050	<0.0050	<0.010	<0.50	--	<0.025	--	--	--	--	--	--	--	--	
Comp-1	01/25/00	Composite	<0.0050	<0.0050	<0.0050	<0.010	<0.50	--	<0.025	--	--	8.04	--	--	--	--	--	
VW1	11/01/10	5.5-6	<0.0050	<0.0050	<0.0050	<0.010	<0.50	<5.0b	--	<0.0050	--	--	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050
VW2	11/02/10	5.5-6	<0.0050	<0.0050	<0.0050	<0.010	<0.50	<5.0b	--	<0.0050	--	--	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050
VW3	11/01/10	5.5-6	<0.0050	<0.0050	<0.0050	<0.010	<0.50	<5.0b	--	<0.0050	--	--	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050
VW4	11/02/10	5.5-6	<0.0050	<0.0050	0.0050	0.0050a	3.7c	<5.0b	--	<0.0050	--	--	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050
VW5	11/02/10	5.5-6	<0.0050	<0.0050	<0.0050	<0.010	<0.50	<5.0b	--	<0.0050	--	--	<0.050	<0.010	<0.010	<0.0050	<0.010	<0.0050

Notes: This table was adapted from the Risk-Based Corrective Action Report, Table 1, dated October 2002 by TRC. Results for B1 through B5 are reported under separate cover.

TABLE 2 SOIL SAMPLE ANALYTICAL RESULTS, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Sample Number	Date	Sample Depth (feet bgs)	Concentration (mg/kg)												
			Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-g	TPH-d	MTBE	MTBE (8260B)	TOG	Lead	TBA	DIPE	ETBE

- a Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
- b The sample extract was subjected to Silica Gel treatment prior to analysis.
- c The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.

- bgs Below ground surface.
- mg/kg Milligrams per kilogram.
- 1,2-DBA 1,2-Dibromoethane or ethylene dibromide (EDB).
- 1,2-DCA 1,2-Dichloroethane.
- DIPE Diisopropyl ether.
- ETBE Ethyl tertiary butyl ether.
- MTBE Methyl tertiary butyl ether.
- ND Not detected.
- TAME Tertiary amyl methyl ether.
- TBA Tertiary butyl alcohol.
- TOG Total Oil and Grease.
- TPH-d Total Petroleum Hydrocarbons as diesel.
- TPH-g Total Petroleum Hydrocarbons as gasoline.
- Not analyzed.

TABLE 3 GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR TEMPORARY BORINGS,
FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Sample Number	Date	Concentrations (µg/L)					MTBE (8020 or 8021)
		TPH-g	Benzene	Toluene	Ethylbenzene	Total Xylenes	
AB1	03/05/98	1,600	31	5.3	79	130	ND
AB2	03/05/98	ND	ND	2.9	0.9	5.7	ND
AB3	03/05/98	6,800	680	100	1,500	2,300	230
AB4	03/05/98	8,500	240	ND	260	720	ND
AB6	03/05/98	12,000	350	ND	310	100	ND
AB9	03/05/98	1,000	57	12	44	93	ND
AB10	03/05/98	200	3.0	1.2	3.2	2.8	ND
AB11	03/05/98	ND	ND	ND	ND	ND	ND
AB12	03/05/98	8,800	660	50	630	940	37
AB13	03/05/98	210	11	0.8	10	15	ND
HA1	01/25/00	<500	<0.3	<0.3	<0.3	<0.6	<5.0

Notes: This table was adapted from the Risk-Based Corrective Action Report, Table 2, dated October 2002 by TRC.

MTBE Methyl tertiary butyl ether.
 ND Not detected at or above laboratory reporting limit.
 TPH-g Total Petroleum Hydrocarbons as gasoline.
 -- Not measured/not analyzed.
 µg/L Micrograms per liter.

TABLE 4 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness	Concentrations (µg/L)							
						TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020/8021)	MTBE (8240/8260)
TW1	01/04/96	--	6.00	--	0.00	ND	700	ND	ND	ND	ND	--	--
WW1	01/04/96	--	3.00	--	0.00	ND	--	ND	ND	ND	ND	--	--
MW1	03/14/96	32.79	4.50	28.29	0.00	610	450	0.75	0.54	1.5	59	--	--
MW1	05/21/96	32.79	5.64	27.15	0.00	ND	ND	ND	ND	ND	ND	--	--
MW1	08/13/96	32.79	9.76	23.03	0.00	ND	ND	ND	ND	ND	ND	--	--
MW1	11/08/96	32.79	10.24	22.55	0.00	ND	ND	ND	0.92	ND	2.1	ND	--
MW1	01/31/97	32.79	3.83	28.96	0.00	ND	ND	ND	0.85	ND	ND	2.6	ND
MW1	04/22/97	32.79	9.14	23.65	0.00	ND	ND	ND	ND	ND	ND	ND	--
MW1 ^a	07/29/97	32.79	10.18	22.61	0.00	ND	60 ^c	0.84	0.95	ND	1.6	36	--
MW1 ^a	10/09/97	32.79	10.46	22.33	0.00	ND	56 ^c	ND	ND	ND	ND	ND	--
MW1 ^a	01/23/98	32.79	3.95	28.84	0.00	ND	33	ND	ND	ND	ND	ND	--
MW1	04/22/98	32.79	5.33	27.46	0.00	ND	ND	ND	ND	ND	ND	ND	--
MW1	07/21/98	32.79	9.17	23.62	0.00	ND	--	ND	ND	ND	ND	ND	--
MW1	10/20/98	32.79	10.41	22.38	0.00	ND	--	ND	ND	ND	ND	ND	--
MW1	01/27/99	32.79	5.51	27.28	0.00	ND	--	ND	ND	ND	ND	ND	--
MW1	Destroyed during construction activities in April 1999												
MW2	03/14/96	32.80	4.51	28.29	0.00	560	250	2.0	0.96	4.3	11	--	--
MW2	05/21/96	32.80	5.65	27.15	0.00	730	560	5.1	1.4	6.7	5.9	--	--
MW2	08/13/96	32.80	10.14	22.66	0.00	490	380 ^b	25	3.5	7.2	13	--	--
MW2	11/08/96	32.80	10.70	22.10	0.00	520	160 ^d	80	2.7	14	66	6.1	--
MW2	01/31/97	32.80	3.84	28.96	0.00	74	130 ^b	ND	ND	ND	ND	ND	--
MW2	04/22/97	32.80	9.61	23.19	0.00	260	430	2.7	ND	2.5	ND	ND	--
MW2 ^a	07/29/97	32.80	10.53	22.27	0.00	320	150 ^d	28	1.2	10	ND	ND	--
MW2 ^a	10/09/97	32.80	10.87	21.93	0.00	460	160 ^b	43	2.8	2.0	2.6	2.6	--
MW2 ^a	01/23/98	32.80	3.75	29.05	0.00	ND	54	ND	ND	ND	ND	ND	--
MW2	04/22/98	32.80	5.36	27.44	0.00	180	540	1.2	0.3	0.4	ND	ND	--
MW2	07/21/98	32.80	9.55	23.25	0.00	80	--	8.9	2.1	0.6	2.5	ND	--
MW2	10/20/98	32.80	10.75	22.05	0.00	50	--	0.8	0.7	ND	0.8	ND	--
MW2	01/27/99	32.80	5.53	27.27	0.00	ND	--	0.6	ND	ND	ND	ND	--
MW2	07/27/99	32.80	6.20	26.60	0.00	ND	--	ND	0.6	ND	ND	ND	--
MW2	12/08/99	32.80	9.98	22.82	0.00	ND	--	1.2	0.43	ND	ND	ND	--
MW2	10/25/00	39.34	11.30	28.04	0.00	<20	--	2.0	0.59	0.46	1.3	<0.30	--

TABLE 4 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness	Concentrations (µg/L)							
						TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020/8021)	MTBE (8240/8260)
MW2	01/15/01	39.34	9.41	29.93	0.00	<20	--	<0.20	0.46	<0.20	<0.60	<0.30	--
MW2	04/10/01	39.34	6.16	33.18	0.00	23	--	0.28	<0.20	<0.20	<0.60	<1.0	--
MW2	07/24/01	39.34	10.70	28.64	0.00	<50	--	<0.20	0.93	<0.20	0.82	<0.30	--
MW2	11/27/01	39.34	10.15	29.19	0.00	<50	--	1.2	0.22	<0.20	<0.60	<0.30	--
MW2	01/18/02	41.99	5.46	36.53	0.00	<50.0	--	<0.50	<0.50	<0.50	<0.50	1.40	--
MW2	04/10/02	41.99	6.48	35.51	0.00	<50.0	--	<0.50	<0.50	<0.50	<0.50	1.80	--
MW2	07/12/02	41.99	10.45	31.54	0.00	<50.0	--	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW2	10/14/02	41.99	11.46	30.53	0.00	<50.0	--	<0.5	4.1	0.6	4.0	<0.5	--
MW2	01/20/03	41.99	5.39	36.60	0.00	<50.0	--	<0.50	<0.50	<0.50	<0.50	0.6	--
MW2	04/28/03	41.99	5.87	36.12	0.00	<50.0	--	<0.50	<0.50	<0.50	<0.50	<0.50	--
MW2	07/15/03	41.99	10.31	31.68	0.00	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW2	10/08/03	41.99	11.20	30.79	0.00	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	--
MW2	01/15/04	41.99	5.36	36.63	0.00	63.3	--	0.70	<0.5	<0.5	<0.5	1.0	--
MW2	09/17/10	41.99	10.72	31.27	0.00	<50	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50
MW3	03/14/96	32.80	9.55	23.25	0.00	4,200	1,200	220	30	140	520	--	--
MW3	05/21/96	32.80	10.16	22.64	0.00	8,500	2,800	710	110	440	1,700	--	--
MW3	08/13/96	32.80	11.18	21.62	0.00	5,000	2,300 ^c	430	ND	200	360	--	--
MW3	11/08/96	32.80	11.51	21.29	0.00	8,400	2,900 ^b	890	82	790	1,700	73	ND
MW3	01/31/97	32.80	7.90	24.90	0.00	16,000	7,500 ^b	660	85	960	1,800	ND	--
MW3	04/22/97	32.80	10.64	22.16	0.00	8,000	2,700	340	33	400	490	200	ND
MW3 ^a	07/29/97	32.80	11.36	21.44	0.00	9,800	2,300 ^b	330	ND	530	530	ND	--
MW3 ^a	10/09/97	32.80	11.52	21.28	0.00	7,300	2,600 ^b	300	ND	430	460	270	ND
MW3 ^a	01/23/98	32.80	7.50	25.30	0.00	6,100	2,300	190	23	330	320	ND	--
MW3	04/22/98	32.80	6.81	25.99	0.00	4,900	2,600	140	12	250	230	ND	ND
MW3	07/21/98	32.80	10.65	22.15	0.00	7,400	--	250	16	400	370	74	ND
MW3	10/20/98	32.80	11.57	21.23	0.00	6,700	--	200	18	350	350	ND	ND
MW3	01/27/99	32.80	9.11	23.69	0.00	3,100	--	74	4	94	39	13	--
MW3	07/27/99	32.80	7.27	25.53	0.00	8,900	--	170	21	360	440	ND	--
MW3	12/08/99	32.80	10.63	22.17	0.00	4,800	--	94	13	170	210	ND	--
MW3	10/25/00	39.27	12.08	27.19	0.00	3,800	--	63	2.9	100	65	<50	<5
MW3	01/15/01	39.27	10.29	28.98	0.00	4,300	--	76	9.5	47	76	<5.0	--
MW3	04/10/01	39.27	10.11	29.16	0.00	2,700	--	55	4.4	100	37	<20	--
MW3	07/24/01	39.27	11.57	27.70	0.00	3,100	--	110	6.9	110	81	<1.0	--
MW3	11/27/01	39.27	10.93	28.34	0.00	2,400	--	47	8.9	25	35	<0.30	--
MW3	01/18/02	41.71	9.47	32.24	0.00	1,130	--	15.3	2.30	42.0	24.6	13.6	--

TABLE 4 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness	Concentrations (µg/L)							
						TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020/8021)	MTBE (8240/8260)
MW3	04/10/02	41.71	10.14	31.57	0.00	916	--	35.1	3.00	22.5	13.8	11.2	--
MW3	07/12/02	41.71	11.34	30.37	0.00	2,330	--	60.5	2.90	39.8	50.9	15.4	--
MW3	10/14/02	41.71	12.10	29.61	0.00	2,550	--	36.9	3.8	20.3	48.0	<0.5	--
MW3	01/20/03	41.71	9.20	32.51	0.00	1,750	--	20.4	304.0	60.7	22.0	10.7	--
MW3	04/28/03	41.71	9.37	32.34	0.00	2,730	--	10.0	2.7	42.7	20.1	11.2	--
MW3	07/15/03	41.71	11.15	30.56	0.00	1,790	--	68.8	3.6	39.0	44.7	5.6	--
MW3	10/08/03	41.71	11.89	29.82	0.00	1,320	--	35.1	4.0	23.6	31.8	7.1	--
MW3	01/15/04	41.71	9.16	32.55	0.00	791	--	24.4	1.3	40.1	14.7	3.4	--
MW3	09/17/10	41.71	11.46	30.25	0.00	2,500	99	2.6	0.31 ^f	1.8	1.8	--	<0.50
MW4	03/14/96	31.50	4.92	26.58	0.00	12,000	3,500	2,200	140	880	2,000	--	--
MW4	05/21/96	31.50	8.60	22.90	0.00	11,000	4,200	1,700	ND	930	470	--	--
MW4	08/13/96	31.50	10.02	21.50	0.02	--	--	--	--	--	--	--	--
MW4	11/08/96	31.50	10.28	21.33	0.15	--	--	--	--	--	--	--	--
MW4	01/31/97	31.50	7.88	23.62	0.00	23,000	8,200 ^b	980	68	1,100	1,400	ND	--
MW4	04/22/97	31.50	7.40	24.10	0.00	8,800	4,500	950	ND	610	130	ND	--
MW4	07/29/97	31.50	9.85	21.74	0.12	--	--	--	--	--	--	--	--
MW4	10/09/97	31.50	10.35	21.38	0.30	--	--	--	--	--	--	--	--
MW4	01/23/98	31.50	4.68	27.51	0.92	--	--	--	--	--	--	--	--
MW4	04/22/98	31.50	6.39	25.22	0.14	--	--	--	--	--	--	--	--
MW4	07/21/98	31.50	7.10	24.55	0.20	--	--	--	--	--	--	--	--
MW4	10/20/98	31.50	9.03	22.60	0.17	--	--	--	--	--	--	--	--
MW4	01/27/99	31.50	5.37	26.18	0.07	--	--	--	--	--	--	--	--
MW4	Destroyed during construction activities in April 1999												
MW5	10/25/00	39.18	10.92	28.26	0.00	2,500	--	79	3.8	66	<20	<20	--
MW5	01/15/01	39.18	8.32	30.86	0.00	3,900	--	120	7.9	280	52	<5.0	--
MW5	04/10/01	39.18	7.21	31.97	0.00	8,000	--	280	4.4	410	100	<50	<5
MW5	07/24/01	39.18	9.54	29.64	0.00	7,000	--	360	7.4	380	67	<1.0	--
MW5	11/27/01	39.18	8.84	30.34	0.00	5,000	--	64	11	340	52	8.9	<2
MW5	01/18/02	41.59	6.52	35.07	0.00	6,330	--	99.1	2.30	103	19.6	21.8	--
MW5	04/10/02	41.59	7.20	34.39	0.00	2,140	--	275	8.00	183	24.5	<2.50	--
MW5	07/12/02	41.59	8.83	32.76	0.00	3,940	--	350	<0.50	268	14	20	<0.50
MW5	10/14/02	41.59	10.74	30.85	0.00	4,040	--	98.5	9.0	169	29.0	<2.5	--
MW5	01/20/03	41.59	6.45	35.14	0.00	7,660	--	421	10.0	743	96.0	59	<0.50
MW5	04/28/03	41.59	6.68	34.91	0.00	7,510	--	403	5.5	524	50.5	47	<0.50
MW5	07/15/03	41.59	8.68	32.91	0.00	6,080	--	406	19.8	412	34.7	52.9	<2.5

TABLE 4 GROUNDWATER MONITORING DATA, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness	Concentrations (µg/L)							
						TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8020/8021)	MTBE (8240/8260)
MW5	10/08/03	41.59	10.56	31.03	0.00	2,460	--	160	12.8	173	31.7	54.3	<0.5
MW5	01/15/04	41.59	6.56	35.03	0.00	4,630	--	181	6.0	312	38.5	37.4	<0.5
MW5	09/17/10	41.59	9.99	31.60	0.00	6,600	5,700	19	<5.0	16	1.4 ^f	--	<5.0

Notes: Adapted from Report of Groundwater Monitoring, Third Quarter 2010, ETIC.

- a Well sampled using no-purge method.
 - b Diesel and unidentified hydrocarbons <C15.
 - c Diesel and unidentified hydrocarbons <C15>C25.
 - d Diesel and unidentified hydrocarbons >C20.
 - e Unidentified hydrocarbons >C18.
 - f Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit.
-
- LPH Liquid-phase hydrocarbons.
 - MTBE Methyl tertiary butyl ether.
 - ND Not detected at or above laboratory reporting limit.
 - TOC Top of casing.
 - TPH-d Total Petroleum Hydrocarbons as diesel.
 - TPH-g Total Petroleum Hydrocarbons as gasoline.
-
- Not measured/not analyzed.
 - µg/L Micrograms per liter.

TABLE 5 GROUNDWATER SAMPLE ANALYTICAL RESULTS FOR OXYGENATES AND ADDITIVES, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Concentrations (µg/L)						
		MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	1,2-DBA
MW2	09/17/10	<0.50	<0.50	<0.50	<0.50	<10	<0.50	<0.50
MW3	09/17/10	<0.50	0.17 ^a	<0.50	<0.50	9.8 ^a	1.9	<0.50
MW5	09/17/10	<5.0	<5.0	<5.0	<5.0	<100	<5.0	<5.0

Notes: All analytes were analyzed by EPA Method 8260B.
Adapted from Report of Groundwater Monitoring, Third Quarter 2010, ETIC.

a Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

1,2-DBA 1,2-Dibromoethane or ethylene dibromide (EDB).

1,2-DCA 1,2-Dichloroethane.

DIPE Diisopropyl ether.

ETBE Ethyl tertiary butyl ether.

MTBE Methyl tertiary butyl ether.

TAME Tertiary amyl methyl ether.

TBA Tertiary butyl alcohol.

µg/L Micrograms per liter.

TABLE 6 PHYSICAL PROPERTIES ANALYTICAL RESULTS FOR SOIL SAMPLES,
FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Boring ID	Sample Date	Sample Depth (feet bgs)	Moisture Content (% by weight)	Total Porosity (% of bulk volume)	Bulk Density (gm/cc)
VW1	11/01/10	5-5.5	22.0	44.5	1.47
VW2	11/02/10	5-5.5	14.6	41.7	1.55
VW3	11/01/10	5-5.5	17.2	44.6	1.47
VW4	11/02/10	5-5.5	21.6	43.8	1.49
VW5	11/02/10	5-5.5	22.0	42.0	1.54

feet bgs Feet below ground surface.
gm/cc Grams per cubic centimeter.
% Percent.

TABLE 7 SOIL VAPOR SAMPLE ANALYTICAL RESULTS, FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Boring ID	Depth (feet bgs)	Date	Concentration (% by Volume)				Concentration ($\mu\text{g}/\text{m}^3$)													
			Oxygen and Argon	Methane	Carbon Dioxide	Field Helium (ppm)	Lab Helium	Benzene	Toluene	Ethyl- benzene	Total Xylenes	TPH-g	MTBE	TBA	DIPE	ETBE	1,2-DCA	TAME	1,2-DBA	
VW1	5 - 6	11/9/10	3.75	<0.895	14.0	0.0	--	10	17	80	100	190,000	<13	<11	<15	<15	<3.6	<15	<6.9	
VW2	5 - 6	11/9/10	18.5	<0.680	3.02	0.0	--	<2.2	<2.6	<3.0	<12	20,000	<9.8	<8.2	<11	<11	4.8	<11	<5.2	
VW3	5 - 6	11/9/10	1.55	<0.765	16.6	0.0	--	9.7	25	9.0	36	120,000	<11	<9.3	<13	<13	4.2	<13	<5.9	
VW4	5 - 6	11/9/10	1.59	14.2	14.1	18,000	<16,400	16,000	9,200	71,000	60,000	250,000,000	<10,000	<8,500	<12,000	<12,000	<2,900	<12,000	<5,400	
VW5	5 - 6	11/9/10	10.3	6.61	12.5	10,000	<16,400	1,000	<590	<680	<2,700	31,000,000	<2,300	<1,900	<2,600	<2,600	<640	<2,600	<1,200	
VW5 (DUP)	5 - 6	11/9/10	9.10	6.44	13.1	--	<16,400	740	<570	<660	<2,600	30,000,000	<2,200	<1,800	<2,500	<2,500	<610	<2,500	<1,200	

Notes:

- feet bgs Feet below ground surface.
- 1,2-DBA 1,2-Dibromoethane or ethylene dibromide (EDB).
- 1,2-DCA 1,2-Dichloroethane.
- DIPE Diisopropyl ether.
- DUP Duplicate.
- ETBE Ethyl tertiary butyl ether.
- MTBE Methyl tertiary butyl ether.
- ppm Parts per million.
- TAME Tertiary amyl methyl ether.
- TBA Tertiary butyl alcohol.
- TPH-g Total Petroleum Hydrocarbons as gasoline.
- Not analyzed, not measured, or not applicable.
- $\mu\text{g}/\text{m}^3$ Micrograms per cubic meter.

TABLE 8 TIER I ENVIRONMENTAL SCREENING LEVELS FOR SHALLOW SOIL VAPOR
FORMER MOBIL STATION 99105, 6301 SAN PABLO AVENUE, OAKLAND, CALIFORNIA

Chemical	Date	Sample ID	Depth (feet bgs)	Maximum Detected Soil Vapor Concentration ($\mu\text{g}/\text{m}^3$)	Tier I ESLs for Potential Vapor Intrusion Concern*			
					Residential Land Use		Commercial/Industrial Land Use	
					Carcinogenic Effects ($\mu\text{g}/\text{m}^3$)	Non-Carcinogenic Effects ($\mu\text{g}/\text{m}^3$)	Carcinogenic Effects ($\mu\text{g}/\text{m}^3$)	Non-Carcinogenic Effects ($\mu\text{g}/\text{m}^3$)
Benzene	11/09/10	VW4	5-6	16,000	84	6,300	280	18,000
Toluene	11/09/10	VW4	5-6	9,200	NA	63,000	NA	180,000
Ethylbenzene	11/09/10	VW4	5-6	71,000	980	210,000	3,300	580,000
Total Xylenes	11/09/10	VW4	5-6	60,000	NA	21,000	NA	58,000
TPH-g	11/09/10	VW4	5-6	250,000,000	NA	10,000	NA	29,000
1,2-DCA**	11/09/10	VW2	5-6	4.8	94	1,000	310	2,900

Notes:

bgs Below ground surface.
 ESL Environmental Screening Level.
 1,2-DCA 1,2-Dichloroethane.
 TPH-g Total Petroleum Hydrocarbons as gasoline.
 NA Not applicable.

$\mu\text{g}/\text{m}^3$ Micrograms per cubic meter.

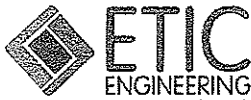
* From Table E-2: Shallow soil gas screening levels for evaluation of potential vapor intrusion concerns.

** All other oxygenates and additives were not detected above the laboratory reporting limits.

Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - Interim Final, San Francisco Regional Water Quality Control Board, November, 2007 (Revised May 2008).

Tier I ESLs adopted by RWQCB correspond to a 1×10^{-6} target risk level and a target hazard quotient of 0.2.

Appendix A
Regulatory Correspondence



20 July 2010

Ms. Barbara Jakub
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Implementation of Vapor Intrusion Assessment and Well Installation Work Plan and Work Plan Addendum
Former Mobil Station 99105, 6301 San Pablo Avenue, Oakland, California
Fuel Leak Case No. RO0000445 / GeoTracker Global ID T0600101855

Dear Ms. Jakub:

At the request of ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation, ETIC Engineering, Inc. (ETIC) submitted a Vapor Intrusion Assessment and Well Installation Work Plan dated December 2008 and Work Plan Addendum dated October 2009 for the above referenced site to the Alameda County Health Care Services Agency (ACHCSA).

The scope of work outlined in these documents includes vapor intrusion assessment with the collection of soil vapor samples following the installation of soil vapor wells, the advancement of offsite borings and the redevelopment and sampling of the existing groundwater monitoring wells.

As of the date of this letter, the ACHCSA has not issued a written response to the referenced Work Plan Addendum. Therefore, ETIC hereby notifies ACHCSA of its intent to invoke the "60-day policy" under Title 23, Chapter 16, Section 2722 of the California Underground Storage Tank Regulations, and implement the proposed scope of work outlined in the Vapor Intrusion Assessment and Well Installation Work Plan dated December 2008 and Work Plan Addendum dated October 2009. The proposed work including the submittal of all necessary permits will begin on or after 30 July 2010.

Unless we hear otherwise from you, ETIC trusts that this notification meets your requirement. Should you need additional information regarding this project, please contact me at (925) 602-4710 ext. 24.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan Campbell".

Bryan Campbell
Program Manager

cc: Ms. Jennifer Sedlachek, ExxonMobil Environmental Services Company
Ms. Connie Lam, Property Owner

Appendix B

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: 10/22/2010 By jamesy

Permit Numbers: W2010-0779
Permits Valid from 11/01/2010 to 11/02/2010

Application Id: 1287181534981
Site Location: Former Mobil Station 99105,
6301 San Pablo Avenue, Oakland, CA

City of Project Site:Oakland

Project Start Date: 11/01/2010
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Completion Date:11/02/2010

Applicant: ETIC Engineering, Inc. - Bryan Campbell
2285 Morello Avenue, Pleasant Hill, CA 94523
Property Owner: Connie Lam
200 Dorado Terrace, San Francisco, CA 94112
Client: ExxonMobil Environmental Services Agency
4096 Piedmont Avenue, #194, Oakland, CA 94611
Contact: Hamidou Barry

Phone: 925-602-4710 x24
Phone: 510-654-5550
Phone: 510-547-8196
Phone: 925-602-4710 x34
Cell: --

	Total Due:	\$265.00
Receipt Number: WR2010-0360	Total Amount Paid:	\$265.00
Payer Name : ETIC Engineering, Inc.	Paid By: CHECK	PAID IN FULL

Works Requesting Permits:

Well Construction-Vapor monitoring well-Vapor monitoring well - 5 Wells
Driller: Cascade Drilling, L.P. - Lic #: 938110 - Method: Hand

Work Total: \$265.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2010-0779	10/22/2010	01/30/2011	VW1	4.00 in.	0.25 in.	4.00 ft	6.00 ft
W2010-0779	10/22/2010	01/30/2011	VW2	4.00 in.	0.25 in.	4.00 ft	6.00 ft
W2010-0779	10/22/2010	01/30/2011	VW3	4.00 in.	0.25 in.	4.00 ft	6.00 ft
W2010-0779	10/22/2010	01/30/2011	VW4	4.00 in.	0.25 in.	4.00 ft	6.00 ft
W2010-0779	10/22/2010	01/30/2011	VW5	4.00 in.	0.25 in.	4.00 ft	6.00 ft

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

2. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate state reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days, including permit number and site map.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend

Alameda County Public Works Agency - Water Resources Well Permit

and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

5. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an 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.

6. No changes in construction procedures or well type shall change, as described on this permit application. This permit may be voided if it contains incorrect information.

7. 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.

8. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

9. 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.

10. Vapor monitoring wells above water level constructed with tubing maybe be backfilled with pancake-batter consistency bentonite. Minimum surface seal thickness is two inches of cement grout around well box.

Vapor monitoring wells above water level constructed with pvc pipe shall have a minimum seal depth (Neat Cement Seal) of 2 feet below ground surface (BGS). Minimum surface seal thickness is two inches of cement grout around well box. All other conditions for monitoring well construction shall apply.

Appendix C

Soil Boring Logs, Well Completion Diagrams, and DWR Forms

MAJOR DIVISIONS			TYPICAL NAMES			
COARSE-GRAINED SOILS More than half is coarser than No. 200 sieve	GRAVELS more than half coarse fraction is larger than No. 4 sieve size	Clean gravels with little or no fines	GW		Well graded gravels with or without sand, little or no fines.	
		Gravels with over 12% fines	GP		Poorly graded gravels with or without sand, little or no fines.	
		SANDS more than half coarse fraction is smaller than No. 4 sieve size	Clean sands with little or no fines	SW		Well graded sands with or without gravel, little or no fines.
			Sands with over 12% fines	SP		Poorly graded sands with or without gravels, little or no fines.
	FINE-GRAINED SOILS More than half is finer than No. 200 sieve	SILTS AND CLAYS liquid limit 50% or less	Silty sands with or without gravel.	SM		Silty sands with or without gravel.
			Clayey sands with or without gravel.	SC		Clayey sands with or without gravel.
			Inorganic silts and very fine sands, rock flour, silts with sands and gravels.	ML		Inorganic silts and very fine sands, rock flour, silts with sands and gravels.
			Inorganic clays of low to medium plasticity, clays with sands and gravels, lean clays.	CL		Inorganic clays of low to medium plasticity, clays with sands and gravels, lean clays.
SILTS AND CLAYS liquid limit greater than 50%		Organic silts or clays of low plasticity.	OL		Organic silts or clays of low plasticity.	
		Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils, elastic silts.	MH		Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils, elastic silts.	
		Inorganic clays of high plasticity, fat clays	CH		Inorganic clays of high plasticity, fat clays	
		Organic clays or clays of medium to high plasticity.	OH		Organic clays or clays of medium to high plasticity.	
HIGHLY ORGANIC SOILS			PT		Peat and other highly organic soils.	
SYMBOLS			DRILL LOG ROCK TYPES			
		Samples Air Soil Water Open Hole	Limestone Dolomite Mudstone Siltstone Sandstone Igneous			



UNIFIED SOIL CLASSIFICATION SYSTEM DESCRIPTIONS AND SYMBOLS USED ON ETIC DRILL LOGS



CLIENT ExxonMobil	SITE NUMBER 99105	LOCATION 6301 San Pablo Ave. Oakland, California
----------------------	----------------------	--

LOG OF SOIL BORING: **VW1**

DRILLING AND SAMPLING METHODS: Borehole advanced to 6 feet below ground surface using an air knife and a 4-inch diameter hand auger. Sampled with a slide hammer and 6-inch long liners.

COORDINATES: N2135321.4 :E6046250.4
 ELEVATION TOP OF CASING:
 CASING BELOW SURFACE:

WATER LEVEL				START TIME 1050	FINISH TIME 1300
TIME				DATE 11/1/10	DATE 11/1/10
DATE					
REFERENCE					

DRILLING COMPANY: Cascade Drilling
 LICENSE NUMBER: C57-938110

INCHES		BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE RECOVERED	GRAPHIC LOG	SURFACE CONDITIONS	
DRIVEN	RECOVER								Concrete	
				0					DESCRIPTION BY: Yuko Mamiya	DETAILS
				0				CONCRETE	CONCRETE from surface to 6 inches below ground surface.	Single-bolt, Morrison well box, set in concrete. Swagelok valve and cap
				1				CL	CLAY WITH SOME GRAVEL - dark yellowish brown (10YR 4/4), very stiff, angular gravel up to 1 inch in diameter, slightly moist.	Hydrated granular bentonite to 4 feet below ground surface.
				2				CL		4-inch diameter borehole.
				3				CL	CLAY WITH SOME SILT - olive (5Y 5/4), hard, low to medium plasticity, slightly moist.	0.25-inch diameter 316L stainless steel tubing to 5.25 feet below ground surface.
				4				CL		
				5						Dry granular bentonite from 4 to 5 feet below ground surface.
6	6			6						#2/12 sand from 5 to 6 feet below ground surface.
6	6		0.2	6					Borehole terminated at 6 feet below ground surface.	0.4-inch diameter 0.0057-inch pore size stainless steel screen from 5.25 to 5.75 feet below ground surface.
				7						Implant anchor
				8						
				9						
				10						

LOG OF SOIL BORING 99105.GPJ ETIC.GDT 3/16/11



CLIENT ExxonMobil	SITE NUMBER 99105	LOCATION 6301 San Pablo Ave. Oakland, California
----------------------	----------------------	--

LOG OF SOIL BORING: **VW2**

DRILLING AND SAMPLING METHODS: Borehole advanced to 6 feet below ground surface using an air knife and a 4-inch diameter hand auger. Sampled with a slide hammer and 6-inch long liners.

COORDINATES: N2135416.9 :E6046252.6
ELEVATION TOP OF CASING:
CASING BELOW SURFACE:

WATER LEVEL				START TIME 0830	FINISH TIME 1000
TIME				DATE 11/2/10	DATE 11/2/10
DATE					
REFERENCE					

DRILLING COMPANY: Cascade Drilling
LICENSE NUMBER: C57-938110

INCHES				DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE RECOVERED	GRAPHIC LOG	SURFACE CONDITIONS		DESCRIPTION BY: Yuko Mamiya	DETAILS
DRIVEN	RECOVER	BLOWS / 6" SAMPLER	OVA READING						Concrete	Concrete		
				0					Concrete	Concrete	CONCRETE from surface to 6 inches below ground surface.	<p>Single-bolt, Morrison well box, set in concrete. Swagelok valve and cap</p> <p>Hydrated granular bentonite to 4 feet below ground surface.</p> <p>4-inch diameter borehole.</p> <p>0.25-Inch diameter 316L stainless steel tubing to 5.25 feet below ground surface.</p> <p>Dry granular bentonite from 4 to 5 feet below ground surface.</p> <p>#2/12 sand from 5 to 6 feet below ground surface.</p> <p>0.4-inch diameter 0.0057-inch pore size stainless steel screen from 5.25 to 5.75 feet below ground surface.</p> <p>Implant anchor</p>
				1					CLAY WITH GRAVEL	CLAY WITH GRAVEL	CLAY WITH GRAVEL - dark yellowish brown (10YR 4/4), hard, low plasticity, angular gravel up to 1 inch in diameter, moist.	
				2					CL	CL		
				3								
				4								
				5							SANDY GRAVEL	
				6							SANDY GRAVEL - dark yellowish brown (10YR 4/4), medium dense, fine to coarse grained sand, subangular gravel up to 0.5 inches in diameter, slightly moist.	
6	6			6							Borehole terminated at 6 feet below ground surface.	
6	6		0.1	6								
				7								
				8								
				9								
				10								

LOG OF SOIL BORING: 99105.GPJ ETIC.GDT 3/16/11



CLIENT ExxonMobil	SITE NUMBER 99105	LOCATION 6301 San Pablo Ave. Oakland, California
----------------------	----------------------	--

LOG OF SOIL BORING:

VW3

DRILLING AND SAMPLING METHODS Borehole advanced to 6 feet below ground surface using an air knife and a 4-inch diameter hand auger. Sampled with a slide hammer and 6-inch long liners.

COORDINATES: N2135395.9 :E6046238.8
 ELEVATION TOP OF CASING:
 CASING BELOW SURFACE:

WATER LEVEL				
TIME			START TIME 1310	FINISH TIME 1430
DATE			DATE 11/1/10	DATE 11/1/10
REFERENCE				

DRILLING COMPANY: Cascade Drilling
 LICENSE NUMBER: C57-938110

INCHES		BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE RECOVERED	GRAPHIC LOG	SURFACE CONDITIONS	
DRIVEN	RECOVER								Concrete	
				0					DESCRIPTION BY: Yuko Mamiya	DETAILS
				0				CONCRETE	CONCRETE from surface to 6 inches below ground surface.	
				1				CL	CLAY WITH GRAVEL - dark yellowish brown (10YR 4/4), hard, low to medium plasticity, angular gravel up to 2 inches in diameter, slightly moist.	
				2						
				3						
				4						
				5				ML	CLAYEY SILT WITH TRACE SAND - olive (5Y 5/4), very stiff, low to medium plasticity, coarse grained sand, dry to slightly moist.	
6	6			6					Borehole terminated at 6 feet below ground surface.	
6	6		0.1	6						
				7						
				8						
				9						
				10						

LOG OF SOIL BORING 99105.GPJ ETIC.GDT 3/16/11



LOG OF SOIL BORING:

VW4

COORDINATES: N2135370.9 :E6046316.5
 ELEVATION TOP OF CASING:
 CASING BELOW SURFACE:

DRILLING COMPANY: Cascade Drilling
 LICENSE NUMBER: C57-938110

CLIENT ExxonMobil	SITE NUMBER 99105	LOCATION 6301 San Pablo Ave. Oakland, California
DRILLING AND SAMPLING METHODS Borehole advanced to 6 feet below ground surface using an air knife and a 4-inch diameter hand auger. Sampled with a slide hammer and 6-inch long liners.		
WATER LEVEL		
TIME		START TIME 1300
DATE		FINISH TIME 1435
REFERENCE		DATE 11/2/10
		DATE 11/2/10

INCHES		BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE RECOVERED	GRAPHIC LOG	SURFACE CONDITIONS	
DRIVEN	RECOVER								Concrete	
DESCRIPTION BY: Yuko Mamiya									DETAILS	
				0				CONCRETE	CONCRETE from surface to 6 inches below ground surface.	
				1			AC/AB	AGGREGATE BASE from 6 inches to 1 foot below ground surface.		
				2			CL	CLAY WITH GRAVEL - dark yellowish brown (10YR 4/4), very stiff, low plasticity, angular gravel up to 2 inches in diameter, slightly moist to moist.		
				3				CLAYEY SILT WITH TRACE SAND - olive (5Y 5/4), hard, low plasticity, fine grained sand, slightly moist.		
			10	4			ML			
6	6			5						
6	6		0.4	6				Borehole terminated at 6 feet below ground surface.		
				7						
				8						
				9						
				10						

LOG OF SOIL BORING 99105.GPJ ETIC.GDT 3/16/11



LOG OF SOIL BORING:

VW5

COORDINATES: N2135367.9 :E6046269.8

ELEVATION TOP OF CASING:

CASING BELOW SURFACE:

DRILLING COMPANY: Cascade Drilling

LICENSE NUMBER: C57-938110

CLIENT
ExxonMobil

SITE NUMBER
99105

LOCATION
6301 San Pablo Ave.
Oakland, California

DRILLING AND SAMPLING METHODS
Borehole advanced to 6 feet below ground surface using an air knife and a 4-inch diameter hand auger. Sampled with a slide hammer and 6-inch long liners.

WATER LEVEL				START	FINISH
TIME				TIME	TIME
DATE				1015	1100
REFERENCE				DATE	DATE
				11/2/10	11/2/10

INCHES		BLOWS / 6" SAMPLER	OVA READING	DEPTH (feet)	AIR SAMPLE	WATER SAMPLE	SOIL SAMPLE RECOVERED	GRAPHIC LOG	SURFACE CONDITIONS	
DRIVEN	RECOVER								Concrete	
DESCRIPTION BY: Yuko Mamiya									DETAILS	
				0				CONCRETE	CONCRETE from surface to 6 inches below ground surface.	<p>Single-bolt, Morrison well box, set in concrete. Swagelok valve and cap</p> <p>Hydrated granular bentonite to 4 feet below ground surface.</p> <p>4-inch diameter borehole.</p> <p>0.25-inch diameter 316L stainless steel tubing to 5.25 feet below ground surface.</p> <p>Dry granular bentonite from 4 to 5 feet below ground surface.</p> <p>#2/12 sand from 5 to 6 feet below ground surface.</p> <p>0.4-inch diameter 0.0057-inch pore size stainless steel screen from 5.25 to 5.75 feet below ground surface.</p> <p>Implant anchor</p>
				1				CLAY WITH GRAVEL	CLAY WITH GRAVEL - dark yellowish brown (10YR 4/4), hard, low plasticity, angular gravel up to 1 inch in diameter, moist.	
				2				CL		
				3						
				4				CLAY WITH SOME SILT	CLAY WITH SOME SILT - olive (5Y 5/4), hard, medium plasticity, slightly moist to moist.	
				5				CL		
6	6			6					Borehole terminated at 6 feet below ground surface.	
6	6		0.2							
				7						
				8						
				9						
				10						

LOG OF SOIL BORING 99105.GPJ ETIC.GDT 3/16/11

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

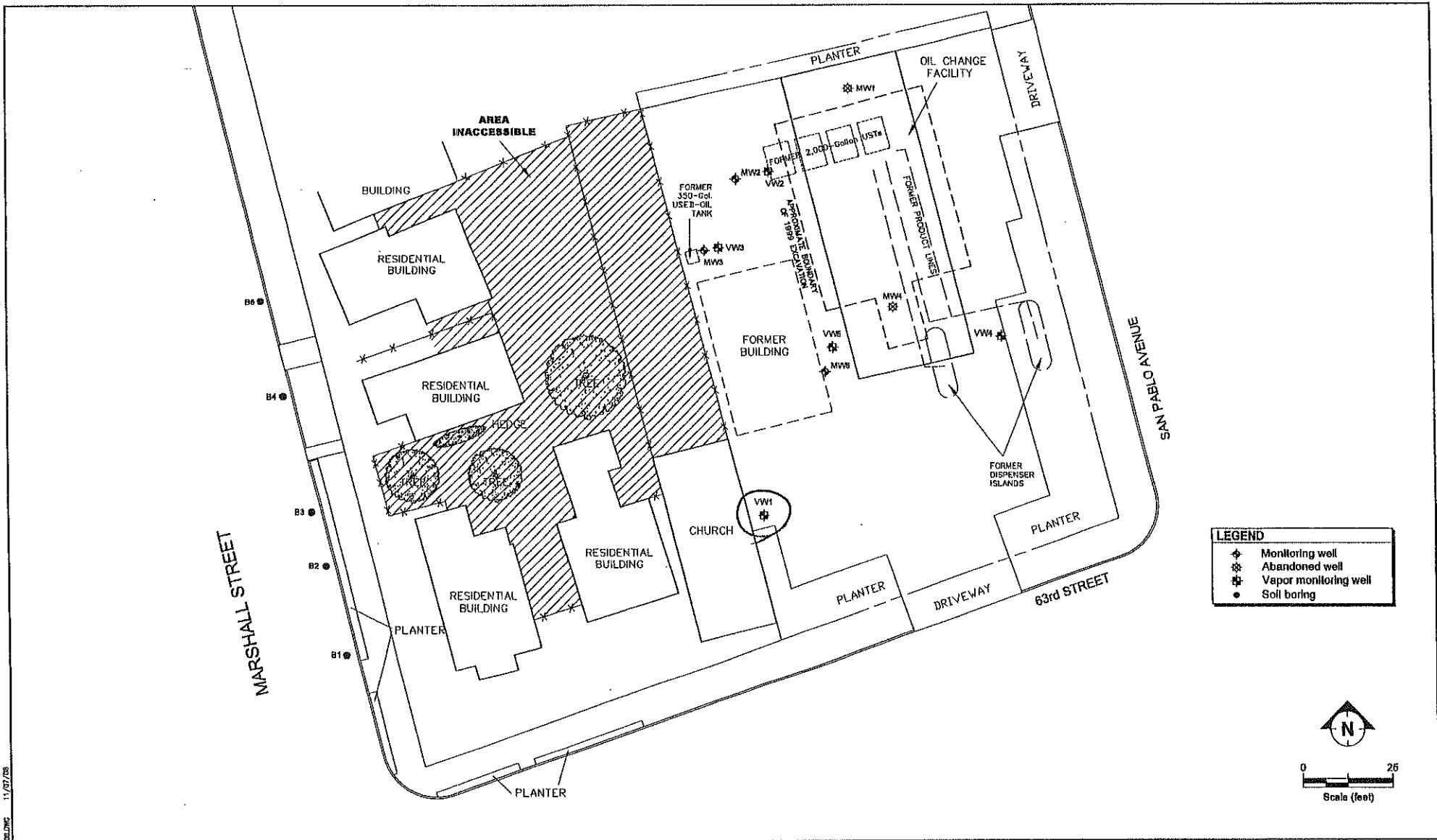
REMOVED

REVISION: Borehole Logging 11/07/05

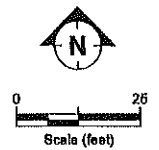


SITE MAP
FORMER MOBIL STATION 99105
6301 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

FIGURE:
1



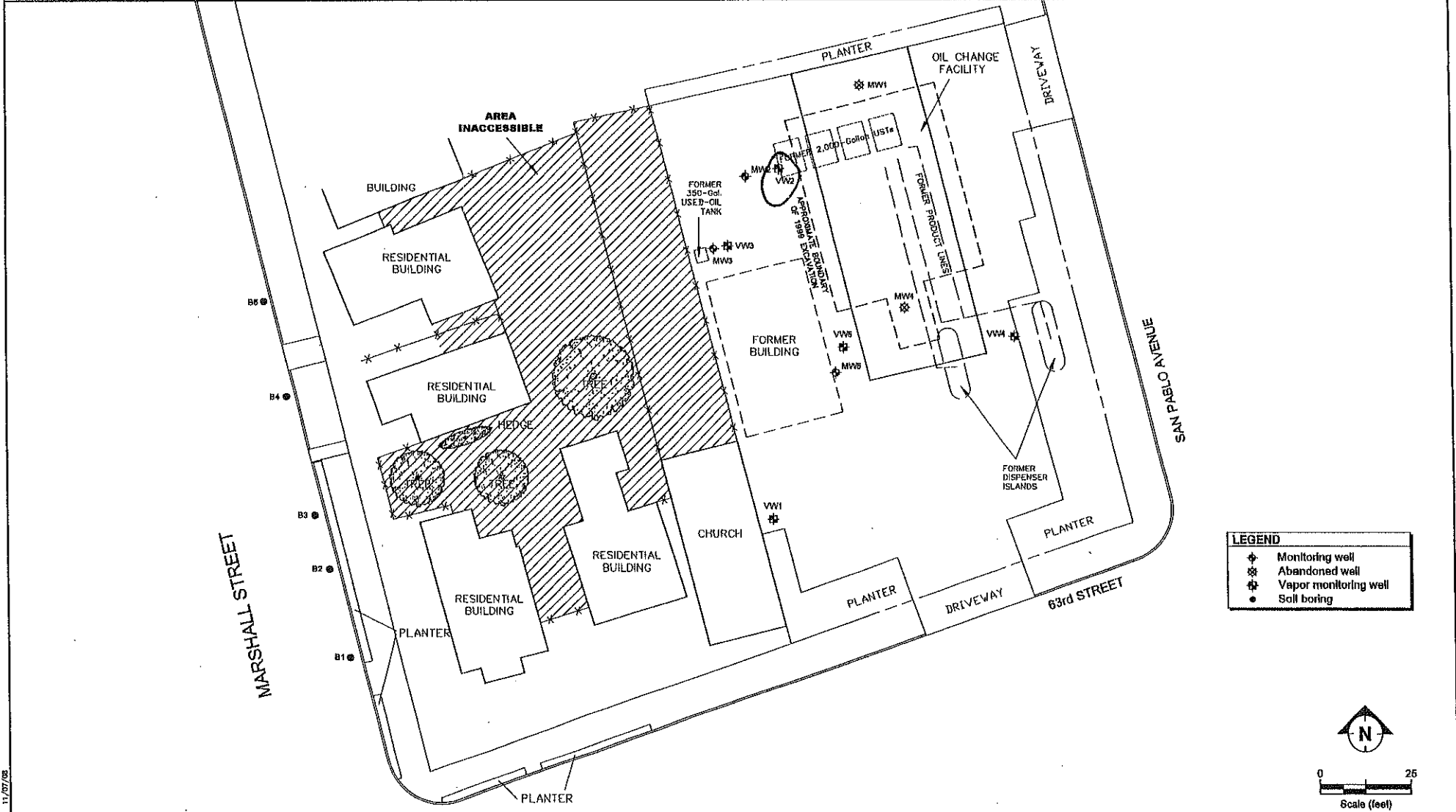
LEGEND	
	Monitoring well
	Abandoned well
	Vapor monitoring well
	Soil boring



CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



FILE NAME: B0081101.DWG 11/07/03



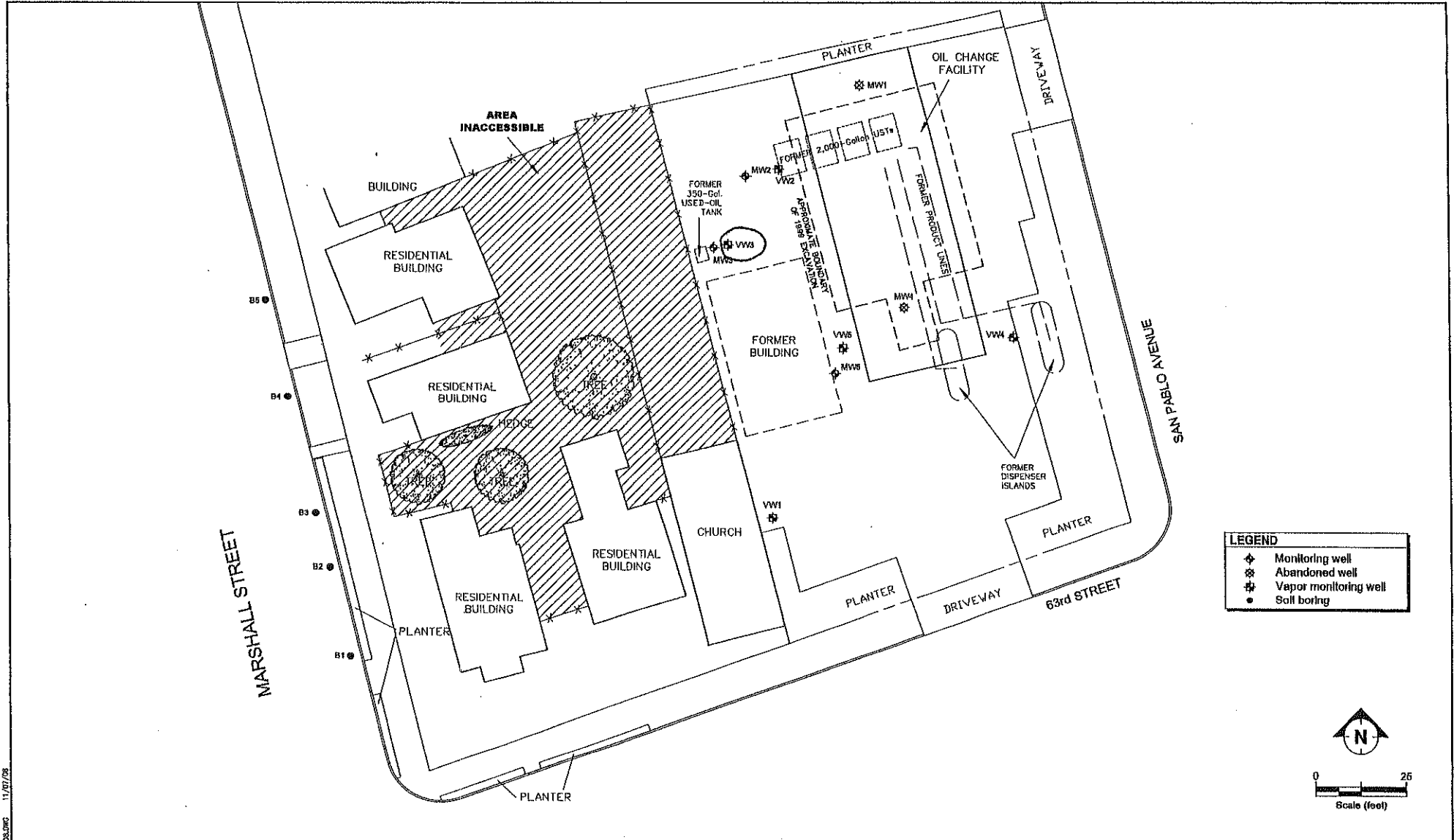
SITE MAP
FORMER MOBIL STATION 99105
6301 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

FIGURE:
1

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



REVISION: 11/07/08



SITE MAP
FORMER MOBIL STATION 99105
6301 SAN PABLO AVENUE
OAKLAND, CALIFORNIA

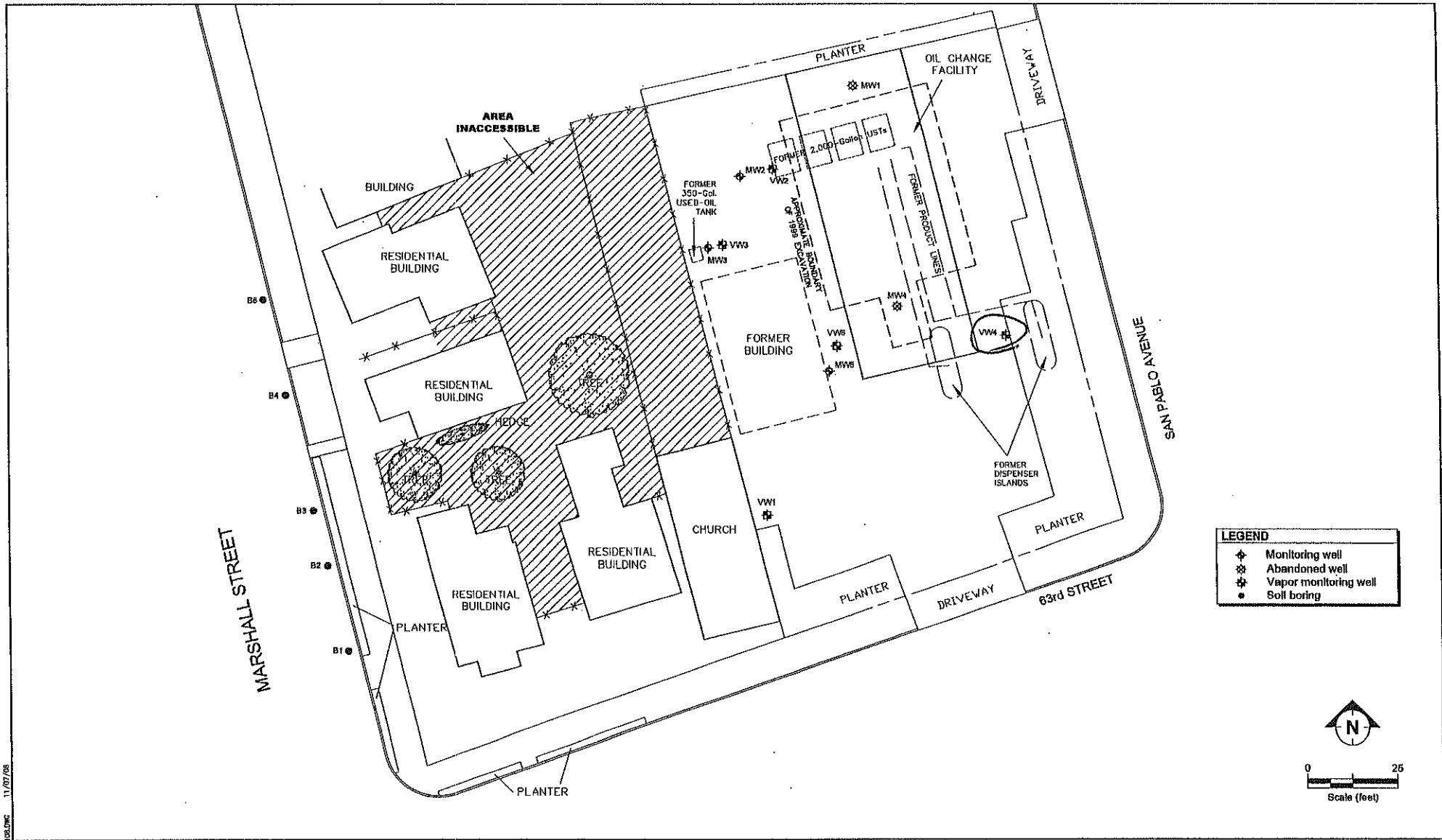
FIGURE:

1

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

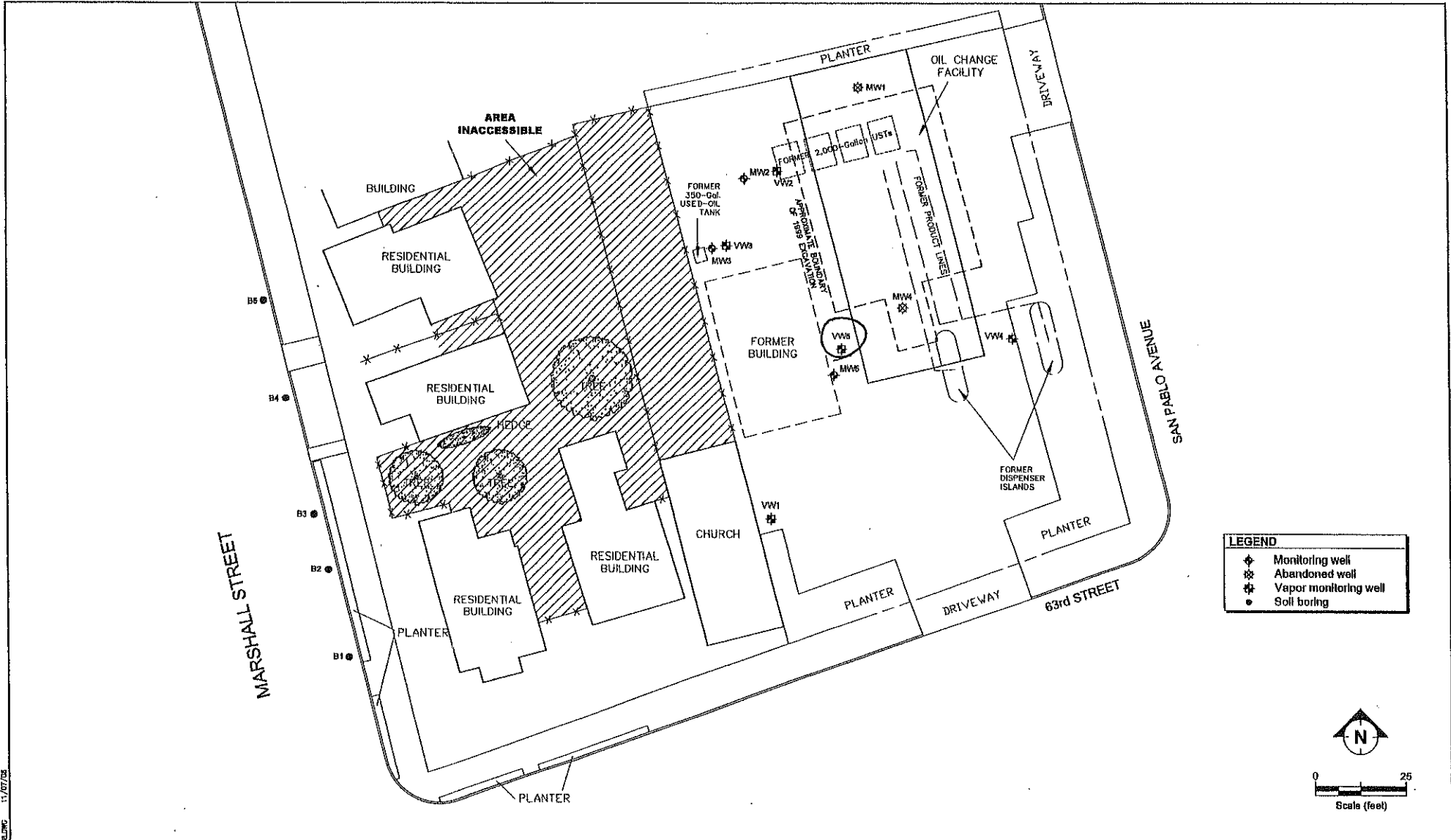
REMOVED



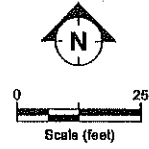
CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED



LEGEND	
	Monitoring well
	Abandoned well
	Vapor monitoring well
	Soil boring



SITE MAP
 FORMER MOBIL STATION 09105
 6301 SAN PABLO AVENUE
 OAKLAND, CALIFORNIA

FIGURE:
1

Appendix D

Field Protocols

PROTOCOLS FOR INSTALLATION AND SAMPLING OF SOIL VAPOR WELLS

SUBSURFACE CLEARANCE SURVEY PROCEDURES

Prior to drilling, the proposed locations of borings are marked with white paint. Underground Service Alert (USA) is contacted prior to subsurface activities and a “ticket” is issued for this investigation. USA members mark underground utilities in the delineated areas using standard color code identifiers.

Once USA has marked the site, all proposed borehole locations are investigated by subsurface clearance surveys to identify possible buried hazards (pipelines, drums, tanks). Subsurface clearance surveys use several geophysical methods to locate shallow buried man-made objects. The geophysical methods include electromagnetic induction (EMI) profiling, ground penetrating radar (GPR), and/or magnetic surveying. The choice of methods depends on the target object and potential interference from surrounding features.

Prior to drilling, all boreholes are cleared of underground utilities to a depth of at least 4 feet below ground surface (bgs) in “non-critical zones” and to 8 feet bgs in “critical zones”. Critical zones are defined as locations that are within 10 feet from the furthest edge of any underground storage tank (UST), within 10 feet of the product dispenser islands, the entire area between the UST field and the product dispenser islands, and within 10 feet of any suspected underground line. An 8- to 12-inch-diameter circle is cut in the surface cover at each boring location. A hole is then cleared at each boring location using a 4-inch diameter hand auger.

SOIL SAMPLING

Shallow soil samples are collected using a 6-inch long sample barrel connected to a slide hammer, containing a 6-inch long stainless steel sample liner. After driving the hammer 6 inches, the rods and sample barrel are withdrawn from the borehole and the sample liner is removed.

Soil from the hand auger is removed and placed in a sealed plastic bag. The soil is scanned with an organic vapor analyzer (OVA) equipped with a flame ionization detector (FID) or photoionization detector (PID) and the readings are noted on the soil boring logs. The remaining soil from the hand auger is examined and classified according to the Unified Soil Classification System (USCS).

Soil samples are delivered, under chain of custody, to a laboratory certified by the California Department of Health Services (DHS) for analyses.

SOIL VAPOR MONITORING WELL INSTALLATION PROCEDURES

The soil vapor monitoring wells are constructed with 0.25-inch-diameter stainless steel tubing connected to 0.4-inch-diameter vapor sampling implant with a 6-inch-long, 0.0057-inch pore size stainless steel screen and bottom implant anchor. All connections are sealed with Swagelok® type fittings. A filter pack of 1 foot of #2/12 sand is placed at the screened interval and approximately 3 inches above and below the screen for each well. The filter pack is separated from the annular grout

seal, using 1 foot of dry granular bentonite. Hydrated granular bentonite is used to fill and seal the annular space in the borehole to near ground surface. The tubing is sealed at the surface with a stainless steel Swagelok® valve and a stainless steel cap.

The wells are finished at the surface with a slightly raised, steel traffic-rated box set in concrete. The lid on the traffic-rated box is bolted to the rim of the well box.

SOIL VAPOR SAMPLING PROCEDURES

To allow for subsurface conditions to equilibrate, the wells are not disturbed for a period of at least 48 hours.

To ensure air-tight connections between the tubing, sampling port, valves, and other connections, a vacuum tightness test is performed on each well. The test consists of the application of a vacuum and monitoring of vacuum tightness using vacuum gauges and/or flow meter for 5 to 10 minutes. A leak would be evident if the vacuum gauges registered a decrease in the vacuum or flow was recorded on the meter.

A purge test is conducted for one well to determine the purge volume for subsequent wells. The selected well should be the one with the highest expected concentrations. The test consists of the collection of soil vapor samples using Tedlar bags after purging the well of one (1), three (3), and seven (7) purge volumes by drawing vapor into the Tedlar bag using a vacuum chamber and vacuum pump. The purge volume is estimated based on the internal volume of the tubing used, the volume of the screen, and the voids in the sand pack within the annular space around the screen. The samples are collected through a particulate filter and flow controller which regulates the flow of soil vapor to no more than 200 milliliters per minute. The purge test samples are analyzed in the field using a PID. The results of the purge test are used to dictate the purge volume to be used during the sampling of subsequent wells.

The soil vapor samples are collected in 1-liter stainless steel Summa canisters. The samples are collected through a particulate filter and flow controller which regulates the flow of soil vapor to no more than 200 milliliters per minute. To ensure an air-tight connection at the well head and that ambient air does not enter the well at the well head, a tracer is applied. The tracer used is helium gas. To apply the tracer, a small shroud is placed over the well head and the tracer gas is allowed to fill the shroud at a constant rate. A hand-held helium detector is used in the field to measure the tracer within the shroud. Soil vapor is drawn into a Tedlar bag from the well using a vacuum chamber and vacuum pump. A leak would be evident if the concentration of the tracer in the well exceeds 10% of the concentration of the tracer in the shroud.

The 1-liter Summa canisters are labeled and packaged for delivery to a state-certified laboratory for chemical analysis. The initial pressure and the final vacuum readings taken from the gauges on the Summa canisters are recorded. A small vacuum of about 5 inches of mercury is left inside the sample canister and is recorded on the chain-of-custody. Upon receipt, the laboratory checks the pressure in the sample canister and compare it to the pressure recorded on the chain-of-custody for quality control purposes.

Appendix E
Field Documents



Purge Volume Test Form

Site: 99105	Project #: UP99105 6.12	Page: 1 of 1
Date: 11/9/2010	Personnel: Yuko Mamiya	Purge Test Well: VWS

Purge Volume Calculation								
WELL PURGE VOLUME CALCULATION	Tubing Volume (ML)	Screen Volume (ML)	Pore Space Volume (ML)	Volume (ML)	Purge Volumes	Total Purge Volume (ML)	Flow Rate (ML/minute)	Estimated Time to Purge (Minutes)
	23.42	⊕ 12.35	⊕ 810.98	⊖ 846.75	⊗ 1 vol.	847	200	4
					⊖ 3 vol.	2,540	200	8
					7 vol.	5,927	200	21

Purge Data							Purge Cannister Volume: 6 L
Purge Volumes	Purge Canister Serial Number	Flow Regulator Serial Number	Initial Purge Canister Vacuum (Inches Hg)	Start Time	Stop Time	Final Purge Canister Vacuum (Inches Hg)	PID Reading
1	D302	A288	-30	1135	1143	-25	18.6
3	D302	A288	-25	1151	1227	-16	190
7	D302	A288	-16	1235	 	-0.5	

Notes: Leak check: ^{Initial} Purge canister vac.

-30 @ 1131 → -30 @ 1135
(Inches Hg) (Time) (Inches Hg) (Time)

Due to slow purge rate. Purge test for 7 purge volumes was not conducted



SUMMA Canister Soil Vapor Sampling Form

Site: Former Mobil Station 99105
 Address: 6301 San Pablo Avenue, Oakland, CA
 Project #: UP99105 6.12
 Date: 11/9/2010

Personnel: Yuko Mamiya
 Page: 1 of 1
 Purge Canister Volume (liters): 6
 Sample Canister Volume (liters): 1

Temperature: ~61 °F
 Barometric Pressure: ~30.10 inches Hg
 Precipitation: 0.0
 Relative Humidity: ~50 %
 Purge Volume: 3
 Flow Rate: 200 liters/minute

Sampling Location	Purge Canister Serial Number	Sample Canister Serial Number	Flow Regulator Serial Number	Leak Check 1		Initial Purge Canister Vacuum (Inches Hg)	Leak Check 2		Purge Canister Vacuum (Inches Hg)	Vapor Purge		Final Purge Canister Vacuum (Inches Hg)	Initial Sample Canister Vacuum (Inches Hg)	Vapor Sample		Final Sample Canister Vacuum (Inches Hg)
				Ambient He Concentration (ppm)	Tubing He Concentration (ppm)		Start Time	Stop Time		Start Time	Stop Time			Start Time	Stop Time	
VW1	0275	LC247	A331	40,000 60,000	0.0	-30	1607	1615	-30	1615	1636	-17	-30	1636	1646	-5
VW2	0252	LC165	A253	80,000	0.0	-30	1435	1440	-30	1440	1504	-12	-30	1504	1519	-1
VW3	D246	LC297	A07	30,000	0.0	-30	1355	1400	-30	1400	1421	-14.5	-30	1421	1427	-2
VW4	D691	LC164	A272	90,000 100,000	Hydrocarbon -18,000	-30	1523	1528	-30	1528	1545	-16.5	-30	1552	1575	-1
VW5	D302	LC456	A288	80,000 100,000	10,000 Hydrocarbon	-30	1131	1135	-30	See the Purge Test Form		-30	-30	1416	1439	-5
VW5 (DUP)	/	/	A288	/	/	-30	1531	1536	-30	/		-30	-30	1536	1610	-5

General Weather Conditions: Sunny

Other:

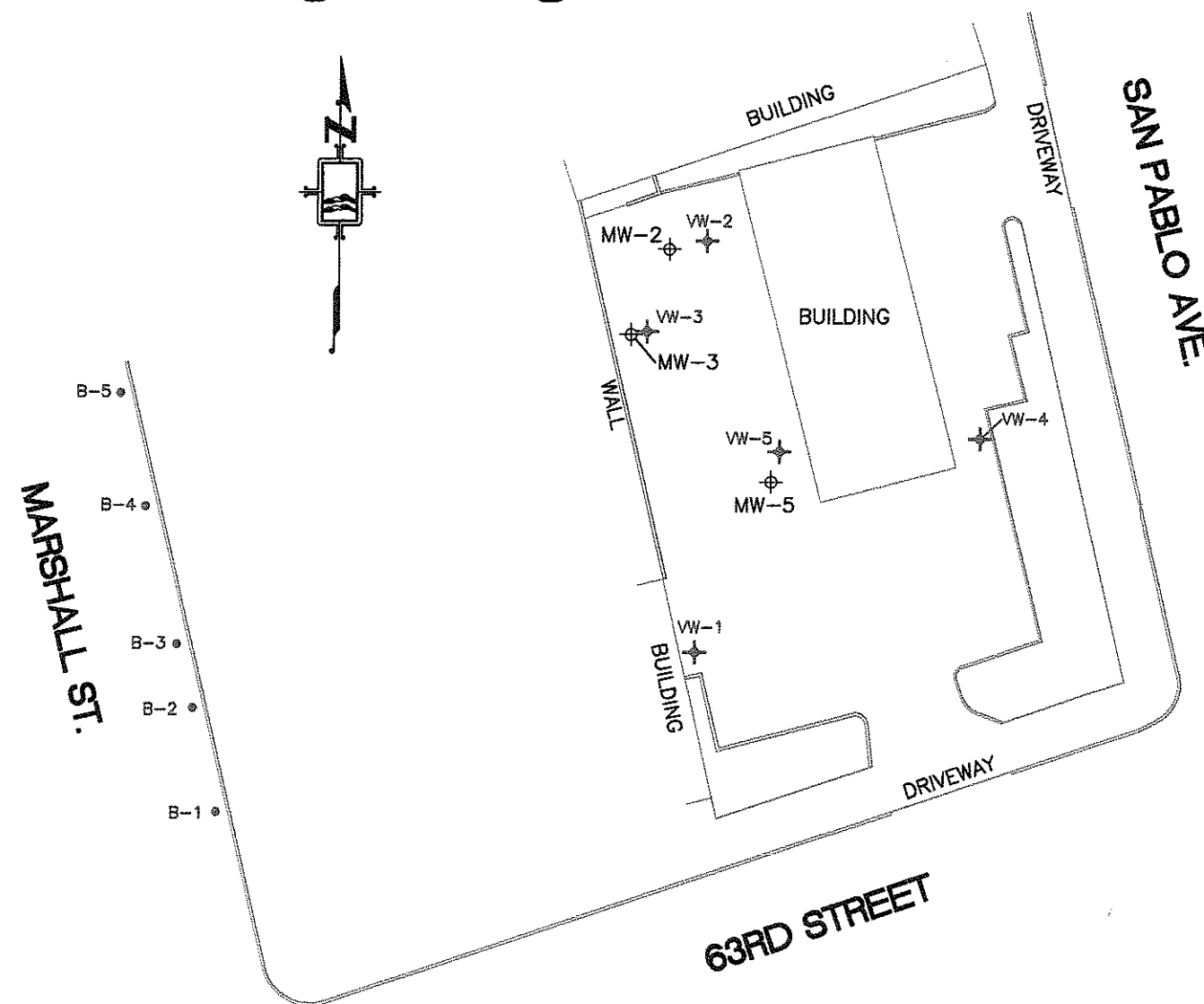
Appendix F

Survey Data

Monitoring Well Exhibit

Prepared For:

ETIC Engineering



BASIS OF COORDINATES AND ELEVATIONS:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING CSDS VIRTUAL SURVEY NETWORK.

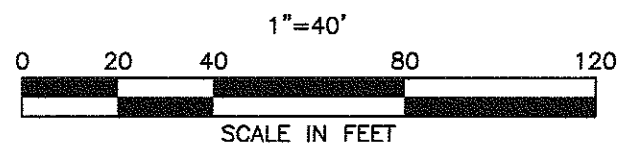
COORDINATE DATUM IS NAD 83.

REFERENCE GEOID IS GEOID03.

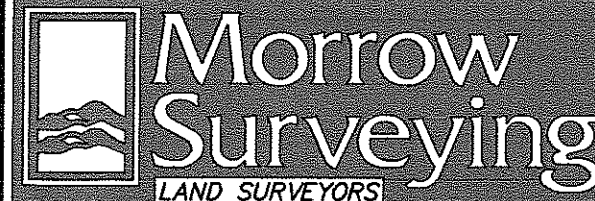
VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS.

DESC.	NORTHING	EASTING	LATITUDE	LONGITUDE	EL. PVC	EL. RIM
MW-2	2135415.1	6046243.7	37.8459707	-122.2851518	42.24	42.54
MW-3	2135395.2	6046234.9	37.8459157	-122.2851810	42.18	42.44
MW-5	2135361.0	6046267.8	37.8458234	-122.2850651	41.86	42.21
VW-1	2135321.4	6046250.4	37.8457136	-122.2851225		41.03
VW-2	2135416.9	6046252.6	37.8459762	-122.2851214		42.49
VW-3	2135395.9	6046238.8	37.8459177	-122.2851677		42.38
VW-4	2135370.9	6046316.5	37.8458532	-122.2848969		42.44
VW-5	2135367.9	6046269.8	37.8458426	-122.2850585		42.29
B-1	2135284.3	6046139.2	37.8456062	-122.2855053		
B-2	2135308.4	6046133.7	37.8456721	-122.2855259		
B-3	2135323.3	6046129.8	37.8457127	-122.2855402		
B-4	2135355.4	6046122.4	37.8458004	-122.2855681		
B-5	2135381.7	6046116.4	37.8458724	-122.2855905		

**NOTE: SITE FEATURES AND ALL WELLS DEPICTED ON THIS EXHIBIT WERE SURVEYED ON 12-15-10.



Former Mobile Station 99105
6301 San Pablo Ave.
Oakland
Alameda County
California

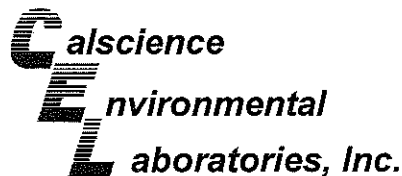


1255 Starboard Drive
West Sacramento
California 95691
(916) 372-8124
mark@morrrowsurveying.com

Date: December, 2010
Scale: 1"=40'
Sheet 1 of 1
Field Survey: 12-15-10
Revised:
Field Book: MW-52
Dwg. No. 1893-070 MAM

Appendix G

Laboratory Analytical Reports and Chain-of-Custody Documentation



November 18, 2010

Hamidou Barry
ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Subject: Calscience Work Order No.: 10-11-0371
Client Reference: ExxonMobil 99105

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/4/2010 and analyzed in accordance with the attached chain-of-custody.

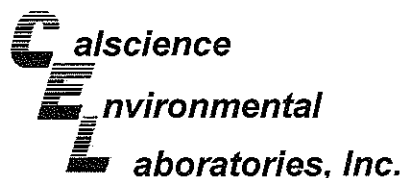
Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

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

Sincerely,

Calscience Environmental
Laboratories, Inc.
Cecile deGuia
Project Manager



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: ExxonMobil 99105

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW1@5.5-6.0	10-11-0371-1-A	11/01/10 11:33	Solid	GC 48	11/05/10	11/07/10 04:27	101105B16

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

-Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Diesel	ND	5.0	4.8	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
Decachlorobiphenyl	113	61-145				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW3@5.5-6.0	10-11-0371-2-A	11/01/10 14:25	Solid	GC 48	11/05/10	11/07/10 04:42	101105B16

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

-Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Diesel	ND	5.0	4.8	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
Decachlorobiphenyl	117	61-145				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2@5.5-6.0	10-11-0371-3-A	11/02/10 09:25	Solid	GC 48	11/05/10	11/07/10 04:57	101105B16

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

-Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Diesel	ND	5.0	4.8	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
Decachlorobiphenyl	112	61-145				

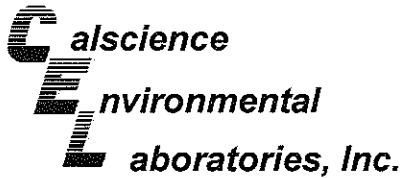
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW5@5.5-6.0	10-11-0371-4-A	11/02/10 11:00	Solid	GC 48	11/05/10	11/07/10 05:12	101105B16

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

-Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Diesel	ND	5.0	4.8	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
Decachlorobiphenyl	108	61-145				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 3550B
Method: EPA 8015B (M)

Project: ExxonMobil 99105

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4@5.5-6.0	10-11-0371-5-A	11/02/10 14:20	Solid	GC 48	11/05/10	11/07/10 05:27	101105B16

Comment(s): -The sample extract was subjected to Silica Gel treatment prior to analysis.

-Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Diesel	ND	5.0	4.8	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
Decachlorobiphenyl	108	61-145				

Method Blank	099-12-275-3,738	N/A	Solid	GC 48	11/05/10	11/06/10 22:06	101105B16
---------------------	-------------------------	------------	--------------	--------------	-----------------	---------------------------	------------------

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Diesel	ND	5.0	4.8	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
Decachlorobiphenyl	63	61-145				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8021B
Units: mg/kg

Project: ExxonMobil 99105

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW1@5.5-6.0	10-11-0371-1-A	11/01/10 11:33	Solid	GC 21	11/09/10	11/09/10 17:38	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.0012	1	U	Ethylbenzene	ND	0.0050	0.0011	1	U
Toluene	ND	0.0050	0.0012	1	U	Xylenes (total)	ND	0.010	0.0023	1	U

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	51-129	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW3@5.5-6.0	10-11-0371-2-A	11/01/10 14:25	Solid	GC 21	11/09/10	11/09/10 15:51	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.0012	1	U	Ethylbenzene	ND	0.0050	0.0011	1	U
Toluene	ND	0.0050	0.0012	1	U	Xylenes (total)	ND	0.010	0.0023	1	U

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	51-129	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2@5.5-6.0	10-11-0371-3-A	11/02/10 09:25	Solid	GC 21	11/09/10	11/09/10 18:13	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.0012	1	U	Ethylbenzene	ND	0.0050	0.0011	1	U
Toluene	ND	0.0050	0.0012	1	U	Xylenes (total)	ND	0.010	0.0023	1	U

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	51-129	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW5@5.5-6.0	10-11-0371-4-A	11/02/10 11:00	Solid	GC 21	11/09/10	11/09/10 18:49	101109B01

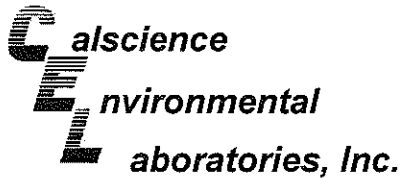
Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.0012	1	U	Ethylbenzene	ND	0.0050	0.0011	1	U
Toluene	ND	0.0050	0.0012	1	U	Xylenes (total)	ND	0.010	0.0023	1	U

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	93	51-129	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8021B
Units: mg/kg

Project: ExxonMobil 99105

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4@5.5-6.0	10-11-0371-5-A	11/02/10 14:20	Solid	GC 21	11/09/10	11/09/10 19:24	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.0012	1	U	Ethylbenzene	0.0050	0.0050	0.0011	1	U
Toluene	ND	0.0050	0.0012	1	U	Xylenes (total)	0.0050	0.010	0.0023	1	J

Surrogates:	REC. (%)	Control Limits	Qual
1,4-Bromofluorobenzene	98	51-129	

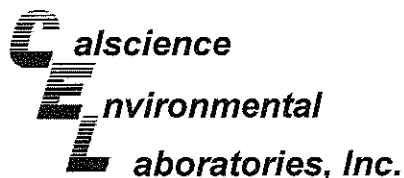
Method Blank	099-12-657-651	N/A	Solid	GC 21	11/09/10	11/09/10 13:29	101109B01
--------------	----------------	-----	-------	-------	----------	-------------------	-----------

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.0012	1	U	Ethylbenzene	ND	0.0050	0.0011	1	U
Toluene	ND	0.0050	0.0012	1	U	Xylenes (total)	ND	0.010	0.0023	1	U

Surrogates:	REC. (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	51-129	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 99105

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW1@5.5-6.0	10-11-0371-1-A	11/01/10 11:33	Solid	GC 4	11/09/10	11/09/10 21:52	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	83	42-126				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW3@5.5-6.0	10-11-0371-2-A	11/01/10 14:25	Solid	GC 4	11/09/10	11/09/10 22:24	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	83	42-126				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2@5.5-6.0	10-11-0371-3-A	11/02/10 09:25	Solid	GC 4	11/09/10	11/09/10 22:57	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

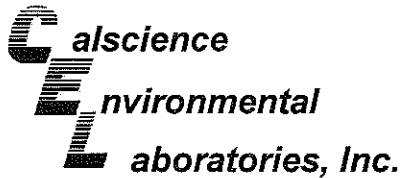
Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	85	42-126				

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW5@5.5-6.0	10-11-0371-4-A	11/02/10 11:00	Solid	GC 4	11/09/10	11/09/10 23:29	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	85	42-126				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 99105

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4@5.5-6.0	10-11-0371-5-A	11/02/10 14:20	Solid	GC 4	11/09/10	11/10/10 00:01	101109B01

Comment(s): -The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard.
Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
-Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	3.7	0.50	0.42	1		mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	87	42-126				

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
	099-12-279-4,078	N/A	Solid	GC 4	11/09/10	11/09/10 10:34	101109B01

Comment(s): -Results were evaluated to the MDL, concentrations \geq to the MDL but $<$ RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene - FID	93	42-126				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/kg

Project: ExxonMobil 99105

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW1@5.5-6.0	10-11-0371-1-A	11/01/10 11:33	Solid	GC/MS V V	11/04/10	11/06/10 18:09	101106L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1,2-Dibromoethane	ND	0.0050	0.00025	1	U	Diisopropyl Ether (DIPE)	ND	0.010	0.00034	1	U
1,2-Dichloroethane	ND	0.0050	0.00026	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.010	0.00028	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	0.00025	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.010	0.00026	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	0.022	1	U						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	63-141		1,2-Dichloroethane-d4	100	62-146	
Toluene-d8	99	80-120		1,4-Bromofluorobenzene	97	60-132	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW3@5.5-6.0	10-11-0371-2-A	11/01/10 14:25	Solid	GC/MS V V	11/04/10	11/06/10 15:31	101106L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1,2-Dibromoethane	ND	0.0050	0.00025	1	U	Diisopropyl Ether (DIPE)	ND	0.010	0.00034	1	U
1,2-Dichloroethane	ND	0.0050	0.00026	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.010	0.00028	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	0.00025	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.010	0.00026	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	0.022	1	U						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	63-141		1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	99	80-120		1,4-Bromofluorobenzene	97	60-132	

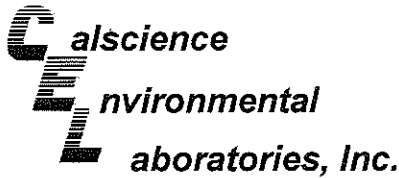
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2@5.5-6.0	10-11-0371-3-A	11/02/10 09:25	Solid	GC/MS V V	11/04/10	11/06/10 18:36	101106L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1,2-Dibromoethane	ND	0.0050	0.00025	1	U	Diisopropyl Ether (DIPE)	ND	0.010	0.00034	1	U
1,2-Dichloroethane	ND	0.0050	0.00026	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.010	0.00028	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	0.00025	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.010	0.00026	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	0.022	1	U						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	63-141		1,2-Dichloroethane-d4	102	62-146	
Toluene-d8	100	80-120		1,4-Bromofluorobenzene	97	60-132	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/kg

Project: ExxonMobil 99105

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW5@5.5-6.0	10-11-0371-4-A	11/02/10 11:00	Solid	GC/MS V V	11/04/10	11/06/10 19:02	101106L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1,2-Dibromoethane	ND	0.0050	0.00025	1	U	Diisopropyl Ether (DIPE)	ND	0.010	0.00034	1	U
1,2-Dichloroethane	ND	0.0050	0.00026	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.010	0.00028	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	0.00025	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.010	0.00026	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	0.022	1	U						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	108	63-141		1,2-Dichloroethane-d4	106	62-146	
Toluene-d8	100	80-120		1,4-Bromofluorobenzene	99	60-132	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4@5.5-6.0	10-11-0371-5-A	11/02/10 14:20	Solid	GC/MS V V	11/04/10	11/06/10 19:29	101106L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1,2-Dibromoethane	ND	0.0050	0.00025	1	U	Diisopropyl Ether (DIPE)	ND	0.010	0.00034	1	U
1,2-Dichloroethane	ND	0.0050	0.00026	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.010	0.00028	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	0.00025	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.010	0.00026	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	0.022	1	U						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	63-141		1,2-Dichloroethane-d4	101	62-146	
Toluene-d8	102	80-120		1,4-Bromofluorobenzene	100	60-132	

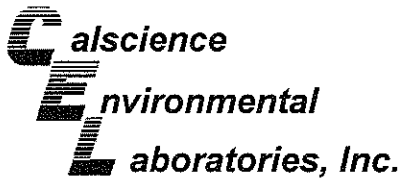
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-4,080	N/A	Solid	GC/MS V V	11/06/10	11/06/10 15:04	101106L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
1,2-Dibromoethane	ND	0.0050	0.00025	1	U	Diisopropyl Ether (DIPE)	ND	0.010	0.00034	1	U
1,2-Dichloroethane	ND	0.0050	0.00026	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.010	0.00028	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.0050	0.00025	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.010	0.00026	1	U
Tert-Butyl Alcohol (TBA)	ND	0.050	0.022	1	U						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	63-141		1,2-Dichloroethane-d4	99	62-146	
Toluene-d8	99	80-120		1,4-Bromofluorobenzene	98	60-132	

RL - Reporting Limit, DF - Dilution Factor, Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

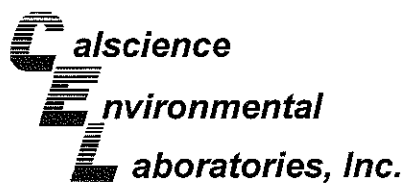
Date Received: 11/04/10
 Work Order No: 10-11-0371
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-11-0475-79	Solid	GC 48	11/05/10	11/06/10	101105S16

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	100	112	64-130	11	0-15	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

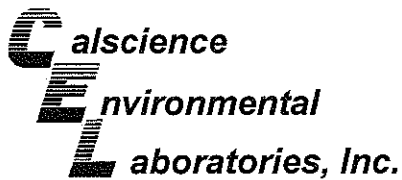
Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8021B

Project ExxonMobil 99105

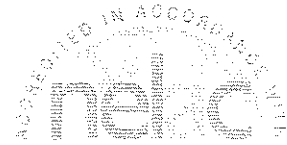
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
VW3@5.5-6.0	Solid	GC 21	11/09/10	11/09/10	101109S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	106	58-118	1	0-24	
Toluene	96	97	61-109	1	0-20	
Ethylbenzene	95	96	59-113	1	0-20	
Xylenes (total)	95	97	56-110	2	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

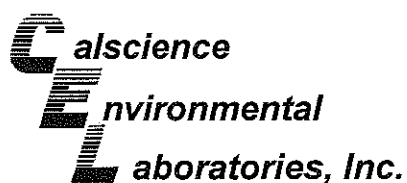
Date Received: 11/04/10
 Work Order No: 10-11-0371
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-11-0701-1	Solid	GC 4	11/09/10	11/09/10	101109S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	89	89	48-114	0	0-23	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

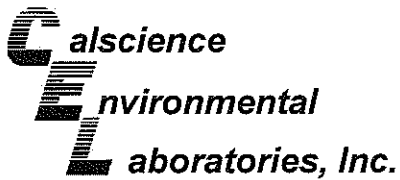
Date Received: 11/04/10
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8260B

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
VW3@5.5-6.0	Solid	GC/MS V V	11/04/10	11/06/10	101106S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2-Dibromoethane	94	96	64-124	2	0-20	
1,2-Dichloroethane	92	91	80-120	1	0-20	
Methyl-t-Butyl Ether (MTBE)	87	88	57-123	1	0-21	
Tert-Butyl Alcohol (TBA)	92	90	30-168	2	0-34	
Diisopropyl Ether (DIPE)	89	87	57-129	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	93	91	55-127	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	90	89	58-124	2	0-20	
Ethanol	93	89	17-167	4	0-47	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

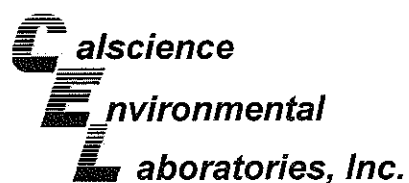
Date Received: N/A
 Work Order No: 10-11-0371
 Preparation: EPA 3550B
 Method: EPA 8015B (M)

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-275-3,738	Solid	GC 48	11/05/10	11/06/10	101105B16

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	97	92	75-123	6	0-12	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

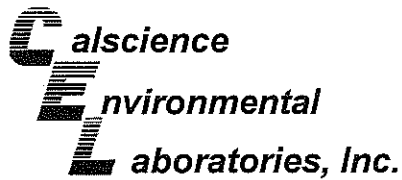
Date Received: N/A
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8021B

Project: ExxonMobil 99105

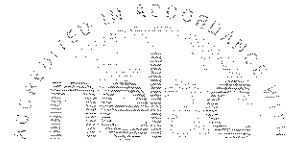
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-657-651	Solid	GC 21	11/09/10	11/09/10	101109B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	109	110	70-118	1	0-7	
Toluene	102	102	71-107	0	0-8	
Ethylbenzene	101	101	66-120	0	0-7	
Xylenes (total)	101	101	66-114	0	0-8	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

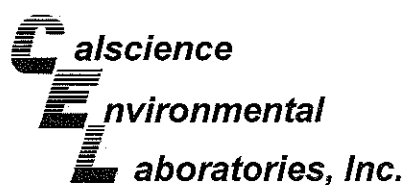
Date Received: N/A
 Work Order No: 10-11-0371
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-4,078	Solid	GC 4	11/09/10	11/09/10	101109B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	108	108	70-124	0	0-18	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: N/A
Work Order No: 10-11-0371
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-4,080	Solid	GC/MS V V	11/06/10	11/06/10	101106L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
1,2-Dibromoethane	105	106	80-120	1	0-20	
1,2-Dichloroethane	99	101	80-120	1	0-20	
Methyl-t-Butyl Ether (MTBE)	96	99	77-120	3	0-20	
Tert-Butyl Alcohol (TBA)	97	96	68-122	2	0-20	
Diisopropyl Ether (DIPE)	92	94	78-120	3	0-20	
Ethyl-t-Butyl Ether (ETBE)	98	100	78-120	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	97	100	75-120	2	0-20	
Ethanol	93	90	56-140	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Work Order Number: 10-11-0371

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
I	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS recovery percentage is within LCS ME control limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.



0371



< WebShip > > > >
800-322-5555 www.gso.com

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
\$0.00

Reference:
ACTON-MICKELSON, ERI, CONOCO PHILLIPS, ETIC,
AM IN

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 515285259



ORC

GARDEN GROVE

D92843A



86038457

NPS

D

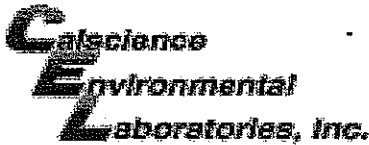
REGISTERED MAIL

RECEIVED

DATE: 11/03/10
TIME: 13:07

CHECK FOR RECEIPT & RETURN

Print Date: 11/03/10 13:07 PM



WORK ORDER #: 10-11-0371

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ETIC

DATE: 11/04/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0°C – 6.0°C, not frozen)

Temperature 3.1 °C + 0.5°C (CF) = 3.6 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: JP

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: JP

Sample _____ No (Not Intact) Not Present Initial: WB

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (S) EnCores® TerraCores® _____

Water: VOA VOA_h VOA_{na2} 125AGB 125AGB_h 125AGB_p 1AGB 1AGB_{na2} 1AGB_s

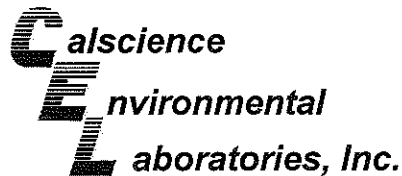
500AGB 500AGJ 500AGJ_s 250AGB 250CGB 250CGB_s 1PB 500PB 500PB_{na}

250PB 250PB_n 125PB 125PB_{znna} 100PJ 100PJ_{na2} _____ _____ _____

Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: WB

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: JP

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ znna: ZnAc₂+NaOH f: Field-filtered Scanned by: ES



December 07, 2010

Hamidou Barry
ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Subject: Calscience Work Order No.: 10-11-0370
Client Reference: ExxonMobil 99105

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/04/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

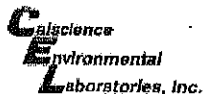
Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

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

Sincerely,

Calscience Environmental
Laboratories, Inc.
Cecile deGuia
Project Manager





7440 LINCOLN WAY
 GARDEN GROVE, CA 92841-1432
 TEL: (714) 895-5494 . FAX: (714) 894-7501

Site Name

Provide MRN for retail or AFE for major projects

Retail Project (MRN)	
Major Project (AFE)	E1.1996.60135
Project Name	Former Mobil 99105

CHAIN OF CUSTODY RECORD

DATE: 11/2/10
 PAGE: 1 OF 1

ExxonMobil Engr:

LABORATORY CLIENT: ExxonMobil c/o ETIC Engineering				GLOBAL ID # COELT LOG CODE: GLOBAL ID# T0600101855				P.O. 4512012692				
ADDRESS: 2285 Morello Avenue				PROJECT CONTACT: Hamidou Barry, ETIC Engineering, Inc.				LAB USE ONLY: 11-0370				
CITY: Pleasant Hill, CA 94523				SAMPLER(S): (SIGNATURE) 				COOLER RECEIPT: Temp = _____ °C				
TEL: 925-602-4710 Ext. 34		FAX: 925-602-4720		REQUESTED ANALYSIS								
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> 10 DAYS												
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL ____/____/____				MOISTURE CONTENT BY D2216 POROSITY AND BULK DENSITY BY API RP40								
SPECIAL INSTRUCTIONS: edf file required, GLOBAL ID# T0600101855 email report to eticlabreports@eticeng.com												
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		MAT- RIX	NO. OF CONT.					CONTAINER TYPE	
			DATE	TIME								
	1 VW1@50-55		11/1/10	1125	Soil	1	X	X				6" ss sleeve
	2 VW2@50-55		11/1/10	1415	Soil	1	X	X				6" ss sleeve
	3 VW20@50-55		11/2/10	0920	Soil	1	X	X				6" ss sleeve
	4 VW5@50-55			1055	Soil	1	X	X				6" ss sleeve
	5 VW4@50-55		↓	1415	Soil	1	X	X				6" ss sleeve
Relinquished by: (Signature)				Received by: (Signature)				Date, & Time: 11/3/10 1235				
Relinquished by: (Signature)				Received by: (Signature)				Date, & Time: 11/4/10 1030				
Relinquished by: (Signature)				Received by: (Signature)				Date, & Time:				

CDC199105 COC_soil

Page 1 of 8

0370



WebShip 800-322-5555 www.gso.com

Ship From: ALAN KEMP CAL SCIENCE- CONCORD 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To: SAMPLE RECEIVING CEL 7440 LINCOLN WAY GARDEN GROVE, CA 92841

COD: \$0.00

Reference: ACTON-MICKELSON, ERI, CONOCO PHILLIPS, ETIC, AM IN

Delivery Instructions:

Signature Type: SIGNATURE REQUIRED

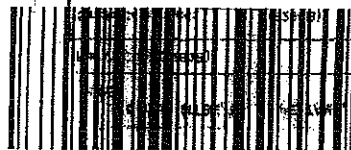
Tracking #: 515285259



ORC

GARDEN GROVE

D92843A



86038457

NPS

D

Print Date : 11/03/10 13:07 PM

Package 1 of 1

Process to match of Catalog Record

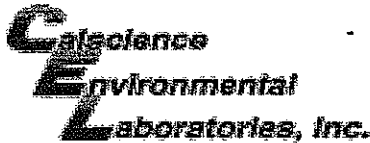
DATE 11/03/10 13:07

0 5 0 2 0 1 8 2

CHECK FOR MODEL & RATE

INCIDENTAL (EMA:2814282)

REMARKS



WORK ORDER #: 10-11-0370

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ETIC

DATE: 11/04/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0°C – 6.0°C, not frozen)

Temperature 3.1 °C + 0.5°C (CF) = 3.6 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: JP

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: JP

Sample _____ No (Not Intact) Not Present Initial: WS

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (S) EnCores® TerraCores® _____

Water: VOA VOA_h VOA_{na2} 125AGB 125AGB_h 125AGB_p 1AGB 1AGB_{na2} 1AGB_s

500AGB 500AGJ 500AGJ_s 250AGB 250CGB 250CGB_s 1PB 500PB 500PB_{na}

250PB 250PB_n 125PB 125PB_{znna} 100PJ 100PJ_{na2} _____ _____ _____

Air: Tedlar® Summa® **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** WS

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** JP

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ znna: ZnAc₂+NaOH f: Field-filtered **Scanned by:** WS



8100 Secura Way • Santa Fe Springs, CA 90670
Telephone (562) 347-2500 • Fax (562) 907-3610

December 7, 2010

Cecile de Guia
Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1432

Re: PTS File No: 40818
Physical Properties Data
10-11-0370

Dear Ms. de Guia:

Please find enclosed report for Physical Properties analyses conducted upon cores received from your 10-11-0370 project. All analyses were performed by applicable ASTM, EPA, or API methodologies. An electronic version of the report has previously been sent to your attention via the internet. The samples are currently in storage and will be retained for thirty days past completion of testing at no charge. Please note that the samples will be disposed of at that time. You may contact me regarding storage, disposal, or return of the samples.

PTS Laboratories appreciates the opportunity to be of service. If you have any questions or require additional information, please give Rachel Spitz a call at (562) 347-2504.

Sincerely,
PTS Laboratories

For Rachel Spitz

Michael Mark Brady, P.G.
District Manager

Encl.

Project Name: N/A
 Project Number: 10-11-0370

PTS File No: 40818
 Client: Calscience

TEST PROGRAM

CORE ID	Depth ft.	Core Recovery ft.	Moisture Content ASTM D2216	Dry Bulk Density API RP 40	Total Porosity API RP 40			Notes
		Plugs:	Grab	Vert. 1*	Vert. 1*			
Date Received: 11/5/10								
VW1 @ 5.0-5.5	N/A	0.50	X	X	X			
VW3 @ 5.0-5.5	N/A	0.50	X	X	X			
VW2 @ 5.0-5.5	N/A	0.50	X	X	X			
VW5 @ 5.0-5.5	N/A	0.50	X	X	X			
VW4 @ 5.0-5.5	N/A	0.50	X	X	X			
TOTALS:	5 cores	2.50	5	5	5			

Laboratory Test Program Notes

PTS File No: 40818
 Client: Calscience

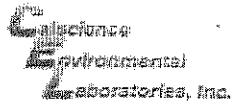
PHYSICAL PROPERTIES DATA

PROJECT NAME: N/A
 PROJECT NO: 10-11-0370

SAMPLE ID.	DEPTH, ft.	METHODS:		API RP 40 /	API RP 40	API RP 40
		SAMPLE ORIENTATION (1)	ASTM D2216	MOISTURE CONTENT, % weight	BULK DENSITY, g/cc	TOTAL POROSITY, %Vb (2)
VW1 @ 5.0-5.5	N/A	V		22.0	1.47	44.5
VW3 @ 5.0-5.5	N/A	V		17.2	1.47	44.6
VW2 @ 5.0-5.5	N/A	V		14.6	1.55	41.7
VW5 @ 5.0-5.5	N/A	V		22.0	1.54	42.0
VW4 @ 5.0-5.5	N/A	V		21.6	1.49	43.8

(1) Sample Orientation: H = horizontal; V = vertical

(2) Total Porosity = all interconnected pore channels; Air Filled = pore channels not occupied by pore fluids
 Vb = Bulk Volume, cc



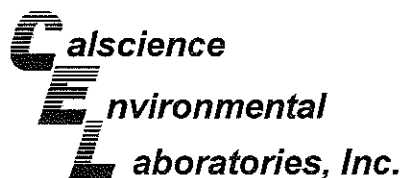
7440 LINCOLN WAY
 GARDEN GROVE, CA 92841-1432
 TEL: (714) 895-5494 . FAX: (714) 854-7501

TO: **PTS - SFS**

4-318

CHAIN OF CUSTODY RECORD
 DATE: 11/05/10
 PAGE: 1 OF 1

LABORATORY CLIENT: CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.						CLIENT PROJECT NAME/TITLE/ADDRESS: 10-11-0370						P.O. NO.:																																																																																																																																												
ADDRESS: 7440 LINCOLN WAY						PROJECT CONTACT: Cacile de Guia						LAB USE ONLY																																																																																																																																												
GARDEN GROVE, CA 92841-1427						SAMPLER(S); (PRINT NAME)						COOLER RECEIPT																																																																																																																																												
TEL: 714-895-5494		FAX:		E-MAIL: cdeguia@calscience.com		COELT LOG CODE			Temp = <u>40°F</u> °C																																																																																																																																															
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> STANDARD						REQUESTED ANALYSIS						COOLER RECEIPT																																																																																																																																												
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> COELT EDF <input type="checkbox"/>												Temp = <u>40°F</u> °C																																																																																																																																												
SPECIAL INSTRUCTIONS						<table border="1"> <tr> <th rowspan="2">LAB USE ONLY</th> <th rowspan="2">SAMPLE ID</th> <th colspan="2">SAMPLING</th> <th rowspan="2">MAT. RX</th> <th rowspan="2">NO. OF CONT.</th> <th rowspan="2">API RP40: Total Porosity and Bulk Density</th> <th rowspan="2">ASTM D2216 Moisture Content</th> <th colspan="10">REQUESTED ANALYSIS</th> <th rowspan="2">CONTAINER TYPE</th> </tr> <tr> <th>DATE</th> <th>TIME</th> <th colspan="10"></th> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>VW1 @ 5.0-5.5</td> <td>11/01/10</td> <td>1125</td> <td>soil</td> <td>1</td> <td>X</td> <td>X</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6" ss sleeve</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>VW3 @ 5.0-5.5</td> <td>11/01/10</td> <td>1415</td> <td>soil</td> <td>1</td> <td>X</td> <td>X</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6" ss sleeve</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>VW2 @ 5.0-5.5</td> <td>11/02/10</td> <td>0920</td> <td>soil</td> <td>1</td> <td>X</td> <td>X</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6" ss sleeve</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>VW5 @ 5.0-5.5</td> <td>11/02/10</td> <td>1055</td> <td>soil</td> <td>1</td> <td>X</td> <td>X</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6" ss sleeve</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td>VW4 @ 5.0-5.5</td> <td>11/02/10</td> <td>1415</td> <td>soil</td> <td>1</td> <td>X</td> <td>X</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>6" ss sleeve</td> </tr> </table>						LAB USE ONLY	SAMPLE ID	SAMPLING		MAT. RX	NO. OF CONT.	API RP40: Total Porosity and Bulk Density	ASTM D2216 Moisture Content	REQUESTED ANALYSIS										CONTAINER TYPE	DATE	TIME											<input checked="" type="checkbox"/>	VW1 @ 5.0-5.5	11/01/10	1125	soil	1	X	X														6" ss sleeve	<input checked="" type="checkbox"/>	VW3 @ 5.0-5.5	11/01/10	1415	soil	1	X	X														6" ss sleeve	<input checked="" type="checkbox"/>	VW2 @ 5.0-5.5	11/02/10	0920	soil	1	X	X														6" ss sleeve	<input checked="" type="checkbox"/>	VW5 @ 5.0-5.5	11/02/10	1055	soil	1	X	X														6" ss sleeve	<input checked="" type="checkbox"/>	VW4 @ 5.0-5.5	11/02/10	1415	soil	1	X	X														6" ss sleeve
LAB USE ONLY	SAMPLE ID	SAMPLING		MAT. RX	NO. OF CONT.	API RP40: Total Porosity and Bulk Density	ASTM D2216 Moisture Content	REQUESTED ANALYSIS												CONTAINER TYPE																																																																																																																																				
		DATE	TIME																																																																																																																																																					
<input checked="" type="checkbox"/>	VW1 @ 5.0-5.5	11/01/10	1125	soil	1	X	X														6" ss sleeve																																																																																																																																			
<input checked="" type="checkbox"/>	VW3 @ 5.0-5.5	11/01/10	1415	soil	1	X	X														6" ss sleeve																																																																																																																																			
<input checked="" type="checkbox"/>	VW2 @ 5.0-5.5	11/02/10	0920	soil	1	X	X														6" ss sleeve																																																																																																																																			
<input checked="" type="checkbox"/>	VW5 @ 5.0-5.5	11/02/10	1055	soil	1	X	X														6" ss sleeve																																																																																																																																			
<input checked="" type="checkbox"/>	VW4 @ 5.0-5.5	11/02/10	1415	soil	1	X	X														6" ss sleeve																																																																																																																																			
Relinquished by: (Signature) 						Received by: (Signature / Affiliation) 						Date: <u>11/5/10</u>																																																																																																																																												
Relinquished by: (Signature)						Received by: (Signature / Affiliation)						Time: <u>11:26 AM</u>																																																																																																																																												
Relinquished by: (Signature)						Received by: (Signature / Affiliation)						Date:																																																																																																																																												
Relinquished by: (Signature)						Received by: (Signature / Affiliation)						Time:																																																																																																																																												



November 29, 2010

Hamidou Barry
ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Subject: **Calscience Work Order No.: 10-11-0931**
Client Reference: **ExxonMobil 99105**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/11/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

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

Sincerely,

A handwritten signature in black ink, appearing to read "Cecile deGuia".

Calscience Environmental
Laboratories, Inc.
Cecile deGuia
Project Manager

A handwritten signature in black ink, appearing to read "Cecile deGuia".

Case Narrative

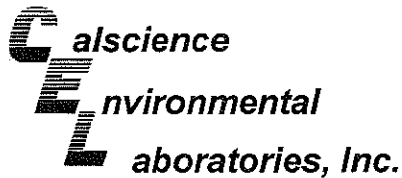
Work Order # 10-11-0931

Modified EPA TO-14A or EPA TO-15

EPA Methods TO-14A and TO-15 describe gas chromatographic procedures that will allow for that separation of volatile organic compounds and their qualitative and quantitative analysis by mass spectrometry (GC/MS). A known volume of sample is directed from the container (Summa® canister or Tedlar™ bag) through a solid multi-module (glass beads, tenex, cryofocuser) concentrator. Following concentration, the VOCs are thermally desorbed onto a gas chromatographic column for separation and then detected on a mass selective detector.

Comparison of EPA TO-14A/TO-15 versus Calscience EPA TO-14A/TO-15 (Modified)

Requirement	EPA Method	Calscience Modifications
BFB Acceptance Criteria	CLP Protocol	SW846 Protocol
Initial Calibration	Allowable % RSD for each Target Analyte \leq 30%, two analytes allowed \leq 40%	Allowable % RSD for each Target Analyte \leq 30%, 10% of analytes allowed \leq 40%
Initial Calibration Verification (ICV) - Second Source Standard (LCS)	Not Mentioned	Analytes contained in the LCS standard evaluated against historical control limits for the LCS
Daily Calibration Verification (CCV)	Allowable % Difference for each Target Analyte is \leq 30%	Full List Analysis: Allowable % Difference for each CCC analyte is \leq 30%
		Target List Analysis: Allowable % Difference for each target analytes is \leq 30%
Daily Calibration Verification (CCV) - Internal Standard Area Response	Allowable +/- 40% (Range: 60% to 140%)	Allowable +/- 50% (Range: 50% to 150%)
Method Blank, Laboratory Control Sample and Sample - Internal Standard Area Response	Allowable +/- 40% of the mean area response of most recent Initial Calibration (Range: 60% to 140%)	Allowable +/- 50% of the mean area response of the most recent Calibration Verification (Range: 50% to 150%)
Surrogates	Not Mentioned	1,4-Bromofluorobenzene, 1,2-Dichloroethane-d4 and Toluene-d8 - % Recoveries based upon historical control limits +/-3S



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

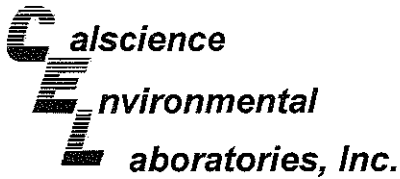
Date Received: 11/11/10
Work Order No: 10-11-0931
Preparation: N/A
Method: ASTM D-1946
Units: %v

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID		
VW1	10-11-0931-1-A	11/09/10 16:46	Air	GC 36	N/A	11/11/10 17:10	101111L01		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.895	1.79	U	Oxygen + Argon	3.75	0.895	1.79	
Carbon Dioxide	14.0	0.895	1.79						
VW2	10-11-0931-2-A	11/09/10 15:19	Air	GC 36	N/A	11/11/10 17:37	101111L01		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.680	1.36	U	Oxygen + Argon	18.5	0.680	1.36	
Carbon Dioxide	3.02	0.680	1.36						
VW3	10-11-0931-3-A	11/09/10 14:27	Air	GC 36	N/A	11/11/10 18:01	101111L01		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.765	1.53	U	Oxygen + Argon	1.55	0.765	1.53	
Carbon Dioxide	16.6	0.765	1.53						
VW4	10-11-0931-4-A	11/09/10 15:52	Air	GC 36	N/A	11/11/10 18:34	101111L01		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	14.2	0.705	1.41		Oxygen + Argon	1.59	0.705	1.41	
Carbon Dioxide	14.1	0.705	1.41						
VW5	10-11-0931-5-A	11/09/10 14:39	Air	GC 36	N/A	11/11/10 19:00	101111L01		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	6.61	0.785	1.57		Oxygen + Argon	10.3	0.785	1.57	
Carbon Dioxide	12.5	0.785	1.57						
VW5(DUP)	10-11-0931-6-A	11/09/10 16:10	Air	GC 36	N/A	11/11/10 19:22	101111L01		
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	6.44	0.755	1.51		Oxygen + Argon	9.10	0.755	1.51	
Carbon Dioxide	13.1	0.755	1.51						
Method Blank	099-03-002-1,173	N/A			Air	GC 36	N/A	11/11/10 08:37	101111L01
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Methane	ND	0.500	1	U	Oxygen + Argon	ND	0.500	1	U
Carbon Dioxide	ND	0.500	1	U					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/11/10
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-3M

Project: ExxonMobil 99105

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW1	10-11-0931-1-A	11/09/10 16:46	Air	GC 53	N/A	11/11/10 19:06	101111L03

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	190000	13000	1.79		ug/m3

VW2	10-11-0931-2-A	11/09/10 15:19	Air	GC 53	N/A	11/11/10 19:19	101111L03
-----	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	20000	9500	1.36		ug/m3

VW3	10-11-0931-3-A	11/09/10 14:27	Air	GC 53	N/A	11/11/10 19:35	101111L03
-----	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	120000	11000	1.53		ug/m3

VW4	10-11-0931-4-A	11/09/10 15:52	Air	GC 53	N/A	11/11/10 21:07	101111L03
-----	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	250000000	2000000	282		ug/m3

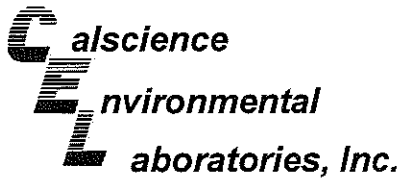
VW5	10-11-0931-5-A	11/09/10 14:39	Air	GC 53	N/A	11/11/10 21:29	101111L03
-----	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	31000000	550000	78.5		ug/m3

VW5(DUP)	10-11-0931-6-A	11/09/10 16:10	Air	GC 53	N/A	11/11/10 21:57	101111L03
----------	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	30000000	530000	75.5		ug/m3

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

Date Received: 11/11/10
 Work Order No: 10-11-0931
 Preparation: N/A
 Method: EPA TO-3M

Project: ExxonMobil 99105

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	098-01-005-2,737	N/A	Air	GC 53	N/A	11/11/10 18:14	101111L03

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	7000	1	U	ug/m3

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/11/10
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: ExxonMobil 99105

Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW1	10-11-0931-1-A	11/09/10 16:46	Air	GC/MS K	N/A	11/15/10 15:08	101115L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	10	2.9	1.79		Methyl-t-Butyl Ether (MTBE)	ND	13	1.79	U
Diisopropyl Ether (DIPE)	ND	15	1.79	U	Xylenes (total)	100	16	1.79	
1,2-Dibromoethane	ND	6.9	1.79	U	Tert-Amyl-Methyl Ether (TAME)	ND	15	1.79	U
1,2-Dichloroethane	ND	3.6	1.79	U	Tert-Butyl Alcohol (TBA)	ND	11	1.79	U
Ethyl-t-Butyl Ether (ETBE)	ND	15	1.79	U	Toluene	17	3.4	1.79	
Ethylbenzene	80	3.9	1.79						
Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	114	57-129			1,2-Dichloroethane-d4	130	47-137		
Toluene-d8	74	78-156	2						

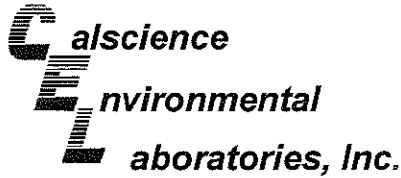
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2	10-11-0931-2-A	11/09/10 15:19	Air	GC/MS K	N/A	11/13/10 23:10	101113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	2.2	1.36	U	Methyl-t-Butyl Ether (MTBE)	ND	9.8	1.36	U
Diisopropyl Ether (DIPE)	ND	11	1.36	U	Xylenes (total)	ND	12	1.36	U
1,2-Dibromoethane	ND	5.2	1.36	U	Tert-Amyl-Methyl Ether (TAME)	ND	11	1.36	U
1,2-Dichloroethane	4.8	2.8	1.36		Tert-Butyl Alcohol (TBA)	ND	8.2	1.36	U
Ethyl-t-Butyl Ether (ETBE)	ND	11	1.36	U	Toluene	ND	2.6	1.36	U
Ethylbenzene	ND	3.0	1.36	U					
Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	106	57-129			1,2-Dichloroethane-d4	109	47-137		
Toluene-d8	104	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW3	10-11-0931-3-A	11/09/10 14:27	Air	GC/MS K	N/A	11/16/10 16:45	101116L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	9.7	2.4	1.53		Methyl-t-Butyl Ether (MTBE)	ND	11	1.53	U
Diisopropyl Ether (DIPE)	ND	13	1.53	U	Xylenes (total)	36	13	1.53	
1,2-Dibromoethane	ND	5.9	1.53	U	Tert-Amyl-Methyl Ether (TAME)	ND	13	1.53	U
1,2-Dichloroethane	4.2	3.1	1.53		Tert-Butyl Alcohol (TBA)	ND	9.3	1.53	U
Ethyl-t-Butyl Ether (ETBE)	ND	13	1.53	U	Toluene	25	2.9	1.53	
Ethylbenzene	9.0	3.3	1.53						
Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>		Surrogates:	<u>REC (%)</u>	<u>Control Limits</u>	<u>Qual</u>	
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	100	47-137		
Toluene-d8	78	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/11/10
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: ExxonMobil 99105

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4	10-11-0931-4-A	11/09/10 15:52	Air	GC/MS K	N/A	11/15/10 21:04	101115L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	16000	2300	1410		Methyl-t-Butyl Ether (MTBE)	ND	10000	1410	U
Diisopropyl Ether (DIPE)	ND	12000	1410	U	Xylenes (total)	60000	12000	1410	
1,2-Dibromoethane	ND	5400	1410	U	Tert-Amyl-Methyl Ether (TAME)	ND	12000	1410	U
1,2-Dichloroethane	ND	2900	1410	U	Tert-Butyl Alcohol (TBA)	ND	8500	1410	U
Ethyl-t-Butyl Ether (ETBE)	ND	12000	1410	U	Toluene	9200	2700	1410	
Ethylbenzene	71000	3100	1410						
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	102	57-129			1,2-Dichloroethane-d4	102	47-137		
Toluene-d8	92	78-156							

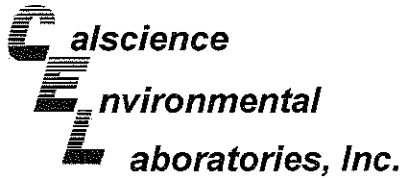
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW5	10-11-0931-5-A	11/09/10 14:39	Air	GC/MS K	N/A	11/15/10 19:26	101115L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	1000	500	314		Methyl-t-Butyl Ether (MTBE)	ND	2300	314	U
Diisopropyl Ether (DIPE)	ND	2600	314	U	Xylenes (total)	ND	2700	314	U
1,2-Dibromoethane	ND	1200	314	U	Tert-Amyl-Methyl Ether (TAME)	ND	2600	314	U
1,2-Dichloroethane	ND	640	314	U	Tert-Butyl Alcohol (TBA)	ND	1900	314	U
Ethyl-t-Butyl Ether (ETBE)	ND	2600	314	U	Toluene	ND	590	314	U
Ethylbenzene	ND	680	314	U					
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	109	47-137		
Toluene-d8	97	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW5(DUP)	10-11-0931-6-A	11/09/10 16:10	Air	GC/MS K	N/A	11/15/10 20:15	101115L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	740	480	302		Methyl-t-Butyl Ether (MTBE)	ND	2200	302	U
Diisopropyl Ether (DIPE)	ND	2500	302	U	Xylenes (total)	ND	2600	302	U
1,2-Dibromoethane	ND	1200	302	U	Tert-Amyl-Methyl Ether (TAME)	ND	2500	302	U
1,2-Dichloroethane	ND	610	302	U	Tert-Butyl Alcohol (TBA)	ND	1800	302	U
Ethyl-t-Butyl Ether (ETBE)	ND	2500	302	U	Toluene	ND	570	302	U
Ethylbenzene	ND	660	302	U					
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	104	57-129			1,2-Dichloroethane-d4	105	47-137		
Toluene-d8	97	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/11/10
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: ExxonMobil 99105

Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-8,823	N/A	Air	GC/MS K	N/A	11/13/10 13:27	101113L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1	U	Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	U
Diisopropyl Ether (DIPE)	ND	8.4	1	U	Xylenes (total)	ND	8.7	1	U
1,2-Dibromoethane	ND	3.8	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1	U
1,2-Dichloroethane	ND	2.0	1	U	Tert-Butyl Alcohol (TBA)	ND	6.1	1	U
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1	U	Toluene	ND	1.9	1	U
Ethylbenzene	ND	2.2	1	U					
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	103	57-129			1,2-Dichloroethane-d4	110	47-137		
Toluene-d8	99	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-8,835	N/A	Air	GC/MS K	N/A	11/15/10 13:54	101115L01

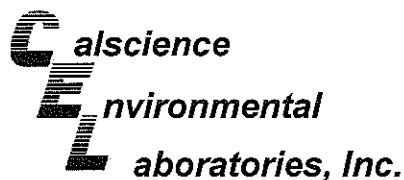
Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1	U	Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	U
Diisopropyl Ether (DIPE)	ND	8.4	1	U	Xylenes (total)	ND	8.7	1	U
1,2-Dibromoethane	ND	3.8	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1	U
1,2-Dichloroethane	ND	2.0	1	U	Tert-Butyl Alcohol (TBA)	ND	6.1	1	U
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1	U	Toluene	ND	1.9	1	U
Ethylbenzene	ND	2.2	1	U					
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	107	47-137		
Toluene-d8	98	78-156							

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	095-01-021-8,836	N/A	Air	GC/MS K	N/A	11/16/10 13:02	101116L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	1.6	1	U	Methyl-t-Butyl Ether (MTBE)	ND	7.2	1	U
Diisopropyl Ether (DIPE)	ND	8.4	1	U	Xylenes (total)	ND	8.7	1	U
1,2-Dibromoethane	ND	3.8	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1	U
1,2-Dichloroethane	ND	2.0	1	U	Tert-Butyl Alcohol (TBA)	ND	6.1	1	U
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1	U	Toluene	ND	1.9	1	U
Ethylbenzene	ND	2.2	1	U					
Surrogates:	REC (%)	Control Limits	Qual		Surrogates:	REC (%)	Control Limits	Qual	
1,4-Bromofluorobenzene	105	57-129			1,2-Dichloroethane-d4	114	47-137		
Toluene-d8	98	78-156							

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/11/10
Work Order No: 10-11-0931
Preparation: N/A
Method: ASTM D-1946 (M)

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4	10-11-0931-4-A	11/09/10 15:52	Air	GC 55	N/A	11/11/10 00:00	101111L01

Parameter	Result	RL	DF	Qual	Units
Helium	ND	16400	1	U	ug/m3

VW5	10-11-0931-5-A	11/09/10 14:39	Air	GC 55	N/A	11/11/10 00:00	101111L01
-----	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
Helium	ND	16400	1	U	ug/m3

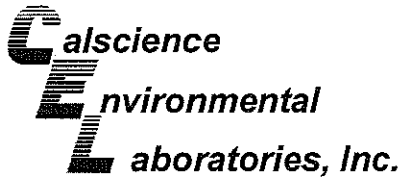
VW5(DUP)	10-11-0931-6-A	11/09/10 16:10	Air	GC 55	N/A	11/11/10 00:00	101111L01
----------	----------------	-------------------	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
Helium	ND	16400	1	U	ug/m3

Method Blank	099-12-872-59	N/A	Air	GC 55	N/A	11/11/10 00:00	101111L01
--------------	---------------	-----	-----	-------	-----	-------------------	-----------

Parameter	Result	RL	DF	Qual	Units
Helium	ND	16400	1	U	ug/m3
Hydrogen	ND	8250	1	U	ug/m3

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

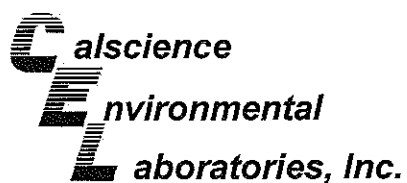
Date Received: 11/11/10
 Work Order No: 10-11-0931
 Preparation: N/A
 Method: EPA TO-3M

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared:	Date Analyzed:	Duplicate Batch Number
10-11-0926-2	Air	GC 53	N/A	11/11/10	101111D03

Parameter	Sample Conc	DUP Conc	RPD	RPD CL	Qualifiers
TPH as Gasoline	144000	143400	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

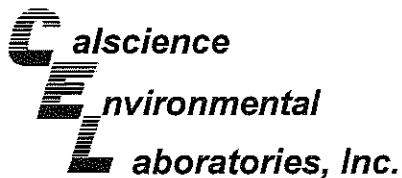
Date Received: N/A
Work Order No: 10-11-0931
Preparation: N/A
Method: ASTM D-1946

Project: ExxonMobil 99105

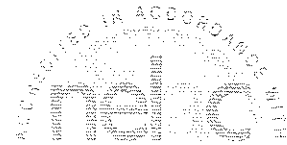
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-03-002-1,173	Air	GC 36	N/A	11/11/10	101111L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Carbon Dioxide	98	97	80-120	0	0-30	
Oxygen + Argon	90	90	80-120	0	0-30	
Nitrogen	90	91	80-120	1	0-30	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: N/A
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-15

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
095-01-021-8,823	Air	GC/MS K	N/A	11/13/10	101113L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	99	96	60-156	44-172	3	0-40	
Carbon Tetrachloride	114	110	64-154	49-169	3	0-32	
1,2-Dibromoethane	113	107	54-144	39-159	5	0-36	
1,2-Dichlorobenzene	91	86	34-160	13-181	6	0-47	
1,2-Dichloroethane	107	105	69-153	55-167	1	0-30	
1,2-Dichloropropane	102	99	67-157	52-172	3	0-35	
1,4-Dichlorobenzene	92	87	36-156	16-176	5	0-47	
c-1,3-Dichloropropene	124	120	61-157	45-173	3	0-35	
Ethylbenzene	115	109	52-154	35-171	5	0-38	
Xylenes (total)	111	105	52-148	36-164	5	0-38	
Tetrachloroethene	107	101	56-152	40-168	6	0-40	
Toluene	106	100	56-146	41-161	6	0-43	
Trichloroethene	102	99	63-159	47-175	2	0-34	
1,1,2-Trichloroethane	101	98	65-149	51-163	3	0-37	
Vinyl Chloride	117	115	45-177	23-199	2	0-36	

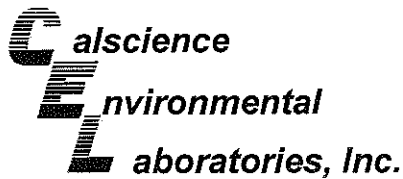
Total number of LCS compounds : 15

Total number of ME compounds : 0

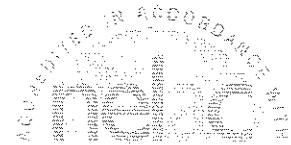
Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: N/A
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-15

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
095-01-021-8,835	Air	GC/MS K	N/A	11/15/10	101115L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	106	106	60-156	44-172	0	0-40	
Carbon Tetrachloride	120	121	64-154	49-169	1	0-32	
1,2-Dibromoethane	116	117	54-144	39-159	1	0-36	
1,2-Dichlorobenzene	98	97	34-160	13-181	1	0-47	
1,2-Dichloroethane	114	116	69-153	55-167	1	0-30	
1,2-Dichloropropane	110	110	67-157	52-172	0	0-35	
1,4-Dichlorobenzene	99	97	36-156	16-176	2	0-47	
c-1,3-Dichloropropene	132	132	61-157	45-173	0	0-35	
Ethylbenzene	121	119	52-154	35-171	1	0-38	
Xylenes (total)	118	115	52-148	36-164	2	0-38	
Tetrachloroethene	110	110	56-152	40-168	0	0-40	
Toluene	109	110	56-146	41-161	0	0-43	
Trichloroethene	109	108	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	105	106	65-149	51-163	1	0-37	
Vinyl Chloride	127	128	45-177	23-199	1	0-36	

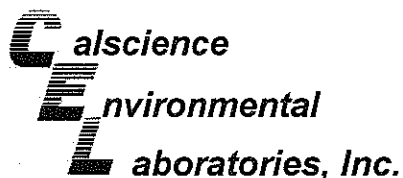
Total number of LCS compounds : 15

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: N/A
Work Order No: 10-11-0931
Preparation: N/A
Method: EPA TO-15

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number		
095-01-021-8,836	Air	GC/MS K	N/A	11/16/10	101116L01		
Parameter	LCS %REC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	101	101	60-156	44-172	0	0-40	
Carbon Tetrachloride	115	116	64-154	49-169	1	0-32	
1,2-Dibromoethane	112	112	54-144	39-159	0	0-36	
1,2-Dichlorobenzene	95	92	34-160	13-181	3	0-47	
1,2-Dichloroethane	110	111	69-153	55-167	1	0-30	
1,2-Dichloropropane	105	105	67-157	52-172	0	0-35	
1,4-Dichlorobenzene	95	92	36-156	16-176	3	0-47	
c-1,3-Dichloropropene	125	126	61-157	45-173	1	0-35	
Ethylbenzene	113	114	52-154	35-171	1	0-38	
Xylenes (total)	110	110	52-148	36-164	0	0-38	
Tetrachloroethene	106	106	56-152	40-168	0	0-40	
Toluene	104	104	56-146	41-161	1	0-43	
Trichloroethene	104	103	63-159	47-175	0	0-34	
1,1,2-Trichloroethane	101	101	65-149	51-163	1	0-37	
Vinyl Chloride	123	123	45-177	23-199	0	0-36	

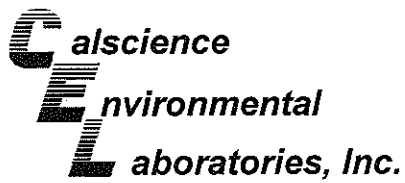
Total number of LCS compounds : 15

Total number of ME compounds : 0

Total number of ME compounds allowed : 1

LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: N/A
Work Order No: 10-11-0931
Preparation: N/A
Method: ASTM D-1946 (M)

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-872-59	Air	GC 55	N/A	11/11/10	101111L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Helium	113	101	80-120	11	0-30	
Hydrogen	112	99	80-120	12	0-30	

RPD - Relative Percent Difference , CL - Control Limit

Glossary of Terms and Qualifiers

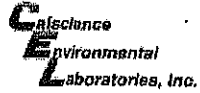


Work Order Number: 10-11-0931

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
I	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS recovery percentage is within LCS ME control limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.





7440 LINCOLN WAY
 GARDEN GROVE, CA 92841-1432
 TEL: (714) 895-5494 . FAX: (714) 894-7501

Site Name [REDACTED]

Provide MRN for retail or AFE for major projects

Retail Project (MRN)

Major Project (AFE) E1.1996.60135

Project Name Former Mobil 99105

CHAIN OF CUSTODY RECORD

DATE: 11/9/2010

PAGE: 1 OF 1

ExxonMobil Engr:

LABORATORY CLIENT: ExxonMobil c/o ETIC Engineering		GLOBAL ID # COELT LOG CODE: GLOBAL ID# T0600101855	P.O. 4512012692
ADDRESS: 2285 Morello Avenue		PROJECT CONTACT: Hamidou Barry, ETIC Engineering, Inc.	LAB USE ONLY: 110931 1/2
CITY: Pleasant Hill, CA 94523		SAMPLER(S): (SIGNATURE) 	COOLER RECEIPT: Temp = _____ °C
TEL: 925-602-4710 Ext. 34	FAX: 925-602-4720		

TURNAROUND TIME
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS 10 DAYS

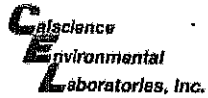
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
 RWQCB REPORTING ARCHIVE SAMPLES UNTIL ____/____/____

SPECIAL INSTRUCTIONS:
edf file required, GLOBAL ID# T0600101855
 email report to eticlabreports@eticeng.com
 Please use µg/m3 for TPHg, MTBE, TBA, BTEX and Helium.
 * 7 Oxygenates include MTBE, TBA, TAME, ETBE, DIPE, EDB, AND 1,2-DCA.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		MAT- RIX	NO. OF CONT.	TPHg (EPA TO-3(M))	7 Oxygenates (EPA TO-15)*	BTEX (TO-15)	Oxygen & argon, Methane, Carbon dioxide (ASTM D-1946)	Helium (ASTM D-1946 (M))									CONTAINER TYPE
			DATE	TIME																
	1 VW1	-5" Hg vac left	11/9/2010	1646	Vapor	1	X	X	X	X										1-Liter Summa Canister
	2 VW2	-1" Hg vac left	11/9/2010	1519	Vapor	1	X	X	X	X										1-Liter Summa Canister
	3 VW3	-2" Hg vac left	11/9/2010	1427	Vapor	1	X	X	X	X										1-Liter Summa Canister
	4 VW4	-1" Hg vac left	11/9/2010	1552	Vapor	1	X	X	X	X										1-Liter Summa Canister
	5 VW5	-5" Hg vac left	11/9/2010	1439	Vapor	1	X	X	X	X										1-Liter Summa Canister
	6 VW5 (DUP)	-5" Hg vac left	11/9/2010	1610	Vapor	1	X	X	X	X										1-Liter Summa Canister

Relinquished by: (Signature) 	Received by: (Signature) CEL	Date, & Time: 11-10-10 1345
Relinquished by: (Signature)	Received by: (Signature) 	Date, & Time: 11-11-10 1200
Relinquished by: (Signature)	Received by: (Signature) 	Date, & Time:



7440 LINCOLN WAY
 GARDEN GROVE, CA 92841-1432
 TEL: (714) 895-5494 . FAX: (714) 894-7501

Site Name	
Provide MRN for retail or AFE for major projects	
Retail Project (MRN)	
Major Project (AFE)	E1.1996.60135
Project Name	Former Mobil 99105

CHAIN OF CUSTODY RECORD

DATE: 11/19/2010
 PAGE: 1 OF 1

ExxonMobil Engr:

LABORATORY CLIENT: ExxonMobil c/o ETIC Engineering		GLOBAL ID # COELT LOG CODE: GLOBAL ID# T0600101855	P.O. 4512012692
ADDRESS: 2285 Morello Avenue		PROJECT CONTACT: Hamidou Barry, ETIC Engineering, Inc.	LAB USE ONLY: 110431
CITY: Pleasant Hill, CA 94523		SAMPLER(S): (SIGNATURE) 	COOLER RECEIPT Temp = _____ °C
TEL: 925-602-4710 Ext. 34	FAX: 925-602-4720		

TURNAROUND TIME
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
 RWQCB REPORTING ARCHIVE SAMPLES UNTIL _____/_____/_____

SPECIAL INSTRUCTIONS:

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		MAT- RIX	NO. OF CONT.	REQUESTED ANALYSIS										CONTAINER TYPE		
			DATE	TIME															
7	VW5	-12 inches Hg left	11/9/10		Vapor	1	DO NOT ANALYZE												6-Liter Summa Canister
8	VW1	-17 inches Hg left			Vapor	1	DO NOT ANALYZE												6-Liter Summa Canister
9	VW2	-12" Hg left			Vapor	1	DO NOT ANALYZE												6-Liter Summa Canister
10	VW3	-14.5" Hg left			Vapor	1	DO NOT ANALYZE												6-Liter Summa Canister
11	VW4	-16.5" Hg left			Vapor	1	DO NOT ANALYZE												6-Liter Summa Canister
					Vapor	1	DO NOT ANALYZE												6-Liter Summa Canister

Relinquished by: (Signature) 	Received by: (Signature) CEL	Date, & Time: 11-10-10 1345
Relinquished by: (Signature)	Received by: (Signature) CEL	Date, & Time: 11-11-10 1000
Relinquished by: (Signature)	Received by: (Signature)	Date, & Time:

COC\73326 COC vapor



< WebShip > > > >
800-322-5555 www.gso.com

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
\$0.00

Reference:
ETIC

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 515334923



NPS

ORC

D

GARDEN GROVE

D92843A



86239399

Print Date: 11/10/10 14:36 PM

Package 1 of 3



< WebShip > > > >
800-322-5555 www.gso.com

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
\$0.00

Reference:
ETIC

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 515334925



NPS

ORC

D

GARDEN GROVE

D92843A



86239401

Print Date: 11/10/10 14:36 PM

Package 3 of 3

Send Label To Printer

Print All

Edit Shipment

Finish

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email

Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or \$100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is \$500. For other shipments the highest declared value is \$10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is \$500. Items of "extraordinary value" include, but are not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.



< WebShip > > > >
800-322-5555 www.gso.com

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

COD:
\$0.00

Reference:
ETIC

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 515334924



NPS

ORC

D

GARDEN GROVE

D92843A



86239400

Print Date: 11/10/10 14:36 PM

Package 2 of 3

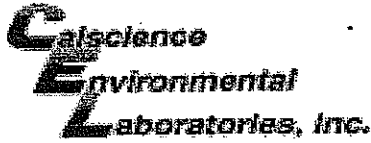
Send Label To Printer

Print All

Edit Shipment

Finish

LABEL INSTRUCTIONS:



WORK ORDER #: 10-11-0931

SAMPLE RECEIPT FORM

Box 1 of 3

CLIENT: ETIC

DATE: 11/11/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature _____ °C + 0.5 °C (CF) = _____ °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: NC

CUSTODY SEALS INTACT:

Box _____ No (Not Intact) Not Present N/A Initial: NC

Sample _____ No (Not Intact) Not Present Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Water: VOA VOAh VOAna₂ 125AGB 125AGBh 125AGBp 1AGB 1AGBna₂ 1AGBs

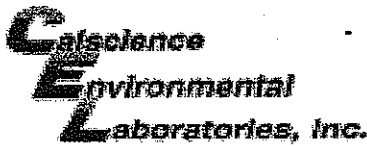
500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBna

250PB 250PBn 125PB 125PBzanna 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Summa® **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** NC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** NC

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ zanna: ZnAc₂+NaOH f: Field-filtered **Scanned by:** NC



WORK ORDER #: 10-11-0931

SAMPLE RECEIPT FORM

Box 2 of 3

CLIENT: ETIC

DATE: 11/11/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature _____ °C + 0.5 °C (CF) = _____ °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: NC

CUSTODY SEALS INTACT:

Box _____ No (Not Intact) Not Present N/A Initial: NC

Sample _____ No (Not Intact) Not Present Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Water: VOA VOA_h VOAn₂ 125AGB 125AGB_h 125AGB_p 1AGB 1AGBn₂ 1AGBs

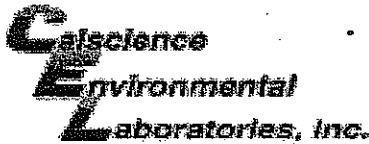
500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBn_a

250PB 250PBn 125PB 125PBz_{nna} 100PJ 100PJn₂ _____ _____ _____

Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: NC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: NC

Preservative: h: HCL n: HNO₃ n₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ z_{nna}: ZnAc₂+NaOH f: Field-filtered Scanned by: NC



WORK ORDER #: 10-11-0931

SAMPLE RECEIPT FORM

Box 3 of 3

CLIENT: ETIC

DATE: 11/11/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature _____ °C + 0.5 °C (CF) = _____ °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: NC

CUSTODY SEALS INTACT:

Box _____ No (Not Intact) Not Present N/A Initial: NC

Sample _____ No (Not Intact) Not Present Initial: NC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (____) EnCores® TerraCores® _____

Water: VOA VOA_h VOA_{na2} 125AGB 125AGB_h 125AGB_p 1AGB 1AGB_{na2} 1AGB_s

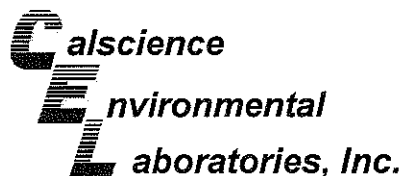
500AGB 500AGJ 500AGJ_s 250AGB 250CGB 250CGB_s 1PB 500PB 500PB_{na}

250PB 250PB_n 125PB 125PB_{znna} 100PJ 100PJ_{na2} _____ _____ _____

Air: Tedlar® Summa® Other: _____ Trip Blank Lot#: _____ Labeled/Checked by: NC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: NC

Preservative: h: HCL n: HNO₃ na₂:Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ znna: ZnAc₂*NaOH f: Field-filtered Scanned by: NC



November 16, 2010

Hamidou Barry
ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Subject: **Calscience Work Order No.: 10-11-0372**
Client Reference: **ExxonMobil 99105**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/4/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

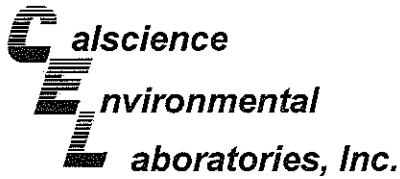
If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in cursive script, appearing to read "Cecile deGuia".

Calscience Environmental
Laboratories, Inc.
Cecile deGuia
Project Manager

A handwritten signature in cursive script, appearing to read "M. Williams".



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0372
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Drum 2&3)	10-11-0372-3-A	11/02/10 00:00	Solid	GC 4	11/09/10	11/09/10 18:39	101109B02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	140	20	17	40		mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	102	42-126				

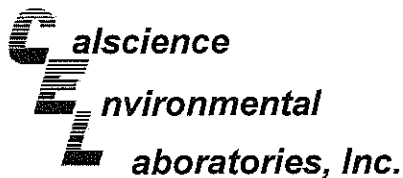
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-279-4,079	N/A	Solid	GC 4	11/09/10	11/09/10 12:11	101109B02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	4.0	3.4	8	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene - FID	87	42-126				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers





Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
Work Order No: 10-11-0372
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/kg

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Drum 2&3)	10-11-0372-3-A	11/02/10 00:00	Solid	GC/MS Z	11/04/10	11/10/10 06:28	101109L02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

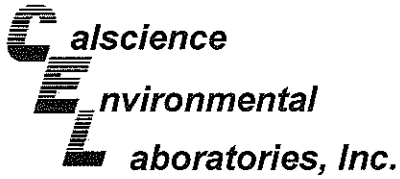
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	0.035	0.50	0.020	100	J	Toluene	ND	0.50	0.029	100	U
Ethylbenzene	1.1	0.50	0.016	100		Xylenes (total)	1.6	0.50	0.032	100	
Surrogates:			REC (%)	Control Limits	Qual	Surrogates:			REC (%)	Control Limits	Qual
Dibromofluoromethane	97	63-141				1,2-Dichloroethane-d4	91	62-146			
Toluene-d8	101	80-120				1,4-Bromofluorobenzene	98	60-132			

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-796-4,096	N/A	Solid	GC/MS Z	11/09/10	11/10/10 02:37	101109L02

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.50	0.020	100	U	Toluene	ND	0.50	0.029	100	U
Ethylbenzene	ND	0.50	0.016	100	U	Xylenes (total)	ND	0.50	0.032	100	U
Surrogates:			REC (%)	Control Limits	Qual	Surrogates:			REC (%)	Control Limits	Qual
Dibromofluoromethane	103	63-141				1,2-Dichloroethane-d4	97	62-146			
Toluene-d8	100	80-120				1,4-Bromofluorobenzene	96	60-132			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

Date Received: 11/04/10
 Work Order No: 10-11-0372
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Composite (Drum 2&3)	10-11-0372-3-A	11/02/10 00:00	Solid	ICP 5300	11/05/10	11/06/10 14:32	101105L07

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

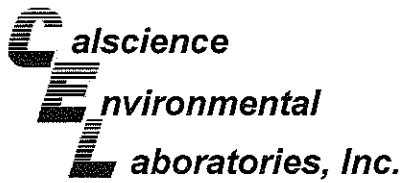
Parameter	Result	RL	MDL	DF	Qual	Units
Lead	17.2	0.500	0.181	1		mg/kg

Method Blank	097-01-002-14,284	N/A	Solid	ICP 5300	11/05/10	11/05/10 21:13	101105L07
---------------------	--------------------------	------------	--------------	-----------------	-----------------	-----------------------	------------------

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Lead	ND	0.500	0.181	1	U	mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

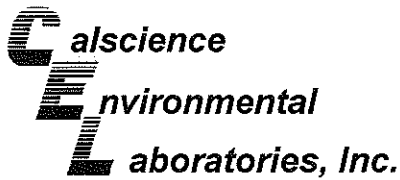
Date Received: 11/04/10
 Work Order No: 10-11-0372
 Preparation: EPA 3050B
 Method: EPA 6010B

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-11-0475-66	Solid	ICP 5300	11/05/10	11/05/10	101105S07

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	100	102	75-125	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit



Quality Control - PDS / PSDS



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

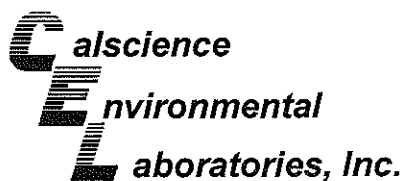
Date Received 11/04/10
 Work Order No: 10-11-0372
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PSDS Batch Number
10-11-0475-86	Solid	ICP 5300	11/05/10	11/05/10	101105S07

Parameter	PDS %REC	PSDS %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	101	100	75-125	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

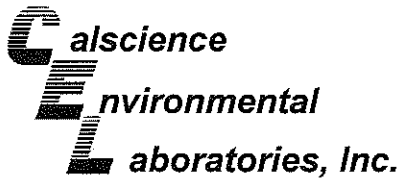
Date Received: 11/04/10
Work Order No: 10-11-0372
Preparation: EPA 5030C
Method: EPA 8260B

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-11-0759-1	Solid	GC/MS Z	11/09/10	11/09/10	101109S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	108	103	61-127	5	0-20	
Ethylbenzene	106	100	57-129	6	0-22	
Toluene	103	99	63-123	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

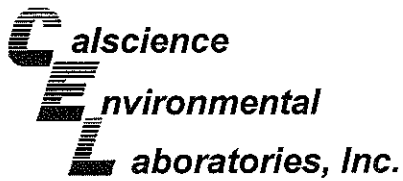
Date Received: N/A
 Work Order No: 10-11-0372
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-14,284	Solid	ICP 5300	11/05/10	11/05/10	101105L07

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	107	107	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

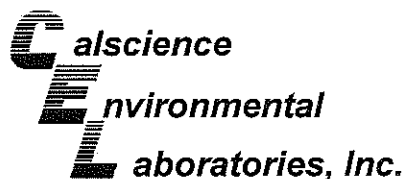
Date Received: N/A
 Work Order No: 10-11-0372
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-4,079	Solid	GC 4	11/09/10	11/09/10	101109B02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	108	108	70-124	0	0-18	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

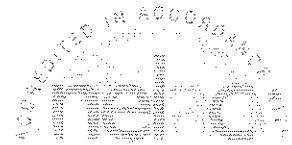
Date Received: N/A
Work Order No: 10-11-0372
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-4,096	Solid	GC/MS Z	11/09/10	11/10/10	101109L02

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	98	78-120	3	0-20	
Ethylbenzene	84	84	76-120	0	0-20	
Toluene	92	91	77-120	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit

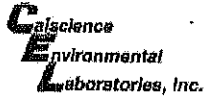


Work Order Number: 10-11-0372

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
I	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS recovery percentage is within LCS ME control limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

A handwritten signature in black ink, appearing to be a stylized name.



7440 LINCOLN WAY
 GARDEN GROVE, CA 92841-1432
 TEL: (714) 895-5494 . FAX: (714) 894-7501

Site Name [REDACTED]

Provide MRN for retail or AFE for major projects

Retail Project (MRN) [REDACTED]

Major Project (AFE) E1.1996.60135

Project Name Former Mobil 99105

CHAIN OF CUSTODY RECORD

DATE: 11/2/10
 PAGE: 1 OF 1

ExxonMobil Engr:

LABORATORY CLIENT: ExxonMobil c/o ETIC Engineering						GLOBAL ID # COELT LOG CODE: GLOBAL ID# T0600101855						P.O. 4512012692											
ADDRESS: 2285 Morello Avenue						PROJECT CONTACT: Hamidou Barry, ETIC Engineering, Inc.						LAB USE ONLY 11-0372											
CITY: Pleasant Hill, CA 94523						SAMPLER(S): (SIGNATURE) 						COOLER RECEIPT Temp: _____ °C											
TEL: 925-602-4710 Ext. 34			FAX: 925-602-4720			REQUESTED ANALYSIS																	
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input checked="" type="checkbox"/> 10 DAYS																							
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL ____/____/____																							
SPECIAL INSTRUCTIONS: edf file required, GLOBAL ID# T0600101855 email report to eticlabreports@eticeng.com																							
LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		MAT- RIX	NO. OF CONT.	TPH-g BY 8015B	BTEX BY 8260B	TOTAL LEAD BY 6010	CONTAINER TYPE													
			DATE	TIME						6" ss sleeve													
	1	Drum 2	11/2/10	1520	Soil	1	X	X	X	Composite samples as													
	2	Drum 3	11/2/10	1523	Soil	1	X	X	X	"Drum 2 and 3"													
Relinquished by: (Signature)						Received by: (Signature)						Date, & Time: 11/3/10 1235											
Relinquished by: (Signature)						Received by: (Signature)						Date, & Time: 11/4/10 1030											
Relinquished by: (Signature)						Received by: (Signature)						Date, & Time:											

0372



WebShip 800-322-5555 www.gso.com

Ship From: ALAN KEMP CAL SCIENCE- CONCORD 5063 COMMERCIAL CIRCLE #H CONCORD, CA 94520

Ship To: SAMPLE RECEIVING CEL 7440 LINCOLN WAY GARDEN GROVE, CA 92841

COD: \$0.00

Reference: ACTON-MICKELSON, ERI, CONOCO PHILLIPS, ETIC, AM IN

Delivery Instructions:

Signature Type: SIGNATURE REQUIRED

Tracking #: 515285259



ORC

GARDEN GROVE

D92843A



86038457

NPS

D

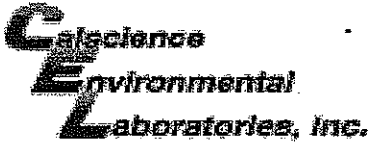
Print Date: 11/03/10 13:07 PM

Package 1 of 1

Handwritten notes: 6, 5, 2/11/10, 2/11/10

Vertical text: CHECK IN NO RECEIPT & WRITE

Vertical text: Chain of Custody Record



WORK ORDER #: 10-11-0372

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ETDC

DATE: 11/04/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.1 °C + 0.5 °C (CF) = 3.6 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: JP

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: JP

Sample _____ No (Not Intact) Not Present Initial: RP

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (5) EnCores® TerraCores® _____

Water: VOA VOA_h VOA_{na2} 125AGB 125AGB_h 125AGB_p 1AGB 1AGB_{na2} 1AGB_s

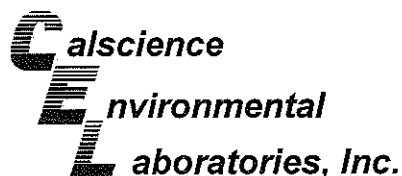
500AGB 500AGJ 500AGJ_s 250AGB 250CGB 250CGB_s 1PB 500PB 500PB_{na}

250PB 250PB_n 125PB 125PB_{znna} 100PJ 100PJ_{na2} _____ _____ _____

Air: Tedlar® Summa® **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** RP

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** RP

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ znna: ZnAc₂+NaOH f: Field-filtered **Scanned by:** RP



November 29, 2010

Hamidou Barry
ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Subject: **Calscience Work Order No.: 10-11-1701**
Client Reference: **ExxonMobil 99105**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 11/20/2010 and analyzed in accordance with the attached chain-of-custody.

Calscience Environmental Laboratories certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

Note that the Chain-of-Custody Record and Sample Receipt Form are integral parts of this report.

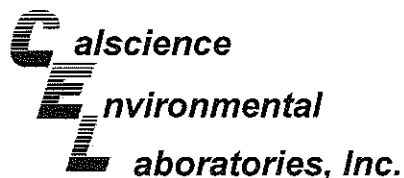
If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in cursive script that reads "Cecile deGuia".

Calscience Environmental
Laboratories, Inc.
Cecile deGuia
Project Manager





Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/20/10
Work Order No: 10-11-1701
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Drum 4	10-11-1701-1-A	11/17/10 16:10	Solid	GC 22	11/22/10	11/22/10 20:46	101122B01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

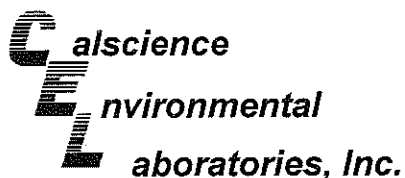
Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene	78	42-126				

Method Blank	099-12-279-4,111	N/A	Solid	GC 22	11/22/10	11/22/10 13:49	101122B01
--------------	------------------	-----	-------	-------	----------	-------------------	-----------

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
TPH as Gasoline	ND	0.50	0.42	1	U	mg/kg
<u>Surrogates:</u>	<u>REC (%)</u>	<u>Control Limits</u>			<u>Qual</u>	
1,4-Bromofluorobenzene - FID	80	42-126				

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 11/20/10
Work Order No: 10-11-1701
Preparation: EPA 5030C
Method: EPA 8260B
Units: mg/kg

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Drum 4	10-11-1701-1-A	11/17/10 16:10	Solid	GC/MS QQ	11/20/10	11/22/10 14:40	101122L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

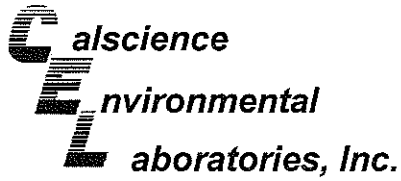
Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.00020	1	U	Toluene	ND	0.0050	0.00029	1	U
Ethylbenzene	ND	0.0050	0.00016	1	U	Xylenes (total)	ND	0.0050	0.00032	1	U
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:			REC (%)	Control Limits	Qual		
Dibromofluoromethane	99	63-141				1,2-Dichloroethane-d4	116	62-146			
Toluene-d8	98	80-120				1,4-Bromofluorobenzene	98	60-132			

Method Blank	099-12-796-4,185	N/A	Solid	GC/MS QQ	11/22/10	11/22/10 13:47	101122L01
--------------	------------------	-----	-------	----------	----------	----------------	-----------

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Parameter	Result	RL	MDL	DF	Qual
Benzene	ND	0.0050	0.00020	1	U	Toluene	ND	0.0050	0.00029	1	U
Ethylbenzene	ND	0.0050	0.00016	1	U	Xylenes (total)	ND	0.0050	0.00032	1	U
Surrogates:	REC (%)	Control Limits	Qual	Surrogates:			REC (%)	Control Limits	Qual		
Dibromofluoromethane	99	63-141				1,2-Dichloroethane-d4	113	62-146			
Toluene-d8	100	80-120				1,4-Bromofluorobenzene	98	60-132			

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Analytical Report



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

Date Received: 11/20/10
 Work Order No: 10-11-1701
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: ExxonMobil 99105

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Drum 4	10-11-1701-1-A	11/17/10 16:10	Solid	ICP 5300	11/22/10	11/22/10 17:11	101122L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

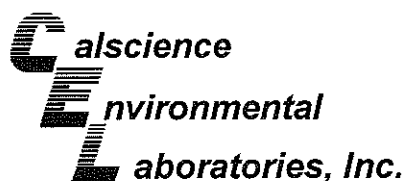
Parameter	Result	RL	MDL	DF	Qual	Units
Lead	6.12	0.500	0.181	1		mg/kg

Method Blank	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	097-01-002-14,378	N/A	Solid	ICP 5300	11/22/10	11/22/10 17:07	101122L01

Comment(s): -Results were evaluated to the MDL, concentrations >= to the MDL but < RL, if found, are qualified with a "J" flag.

Parameter	Result	RL	MDL	DF	Qual	Units
Lead	ND	0.500	0.181	1	U	mg/kg

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

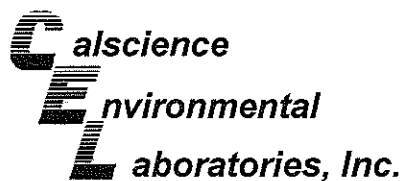
Date Received: 11/20/10
Work Order No: 10-11-1701
Preparation: EPA 3050B
Method: EPA 6010B

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-11-0093-3	Solid	ICP 5300	11/22/10	11/22/10	101122S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	102	105	75-125	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - PDS / PSD



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

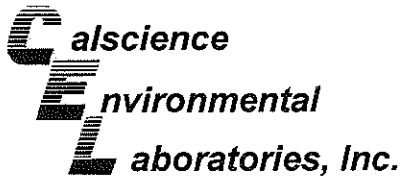
Date Received 11/20/10
 Work Order No: 10-11-1701
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: ExxonMobil 99105

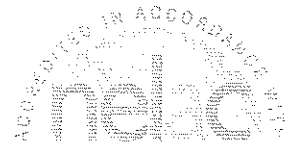
Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS / PSD Batch Number
10-11-0093-3	Solid	ICP 5300	11/22/10	11/22/10	101122S01

Parameter	PDS %REC	PSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	103	104	75-125	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

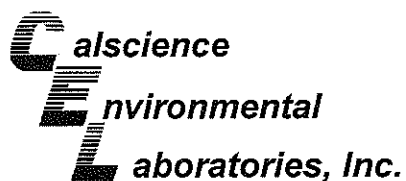
Date Received: 11/20/10
Work Order No: 10-11-1701
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
10-11-1503-1	Solid	GC 22	11/22/10	11/22/10	101122S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	68	75	48-114	8	0-23	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - Spike/Spike Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

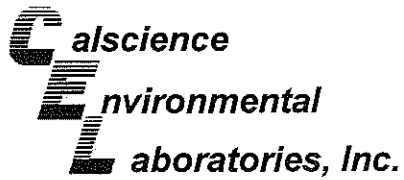
Date Received: 11/20/10
Work Order No: 10-11-1701
Preparation: EPA 5030C
Method: EPA 8260B

Project ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
Drum 4	Solid	GC/MS QQ	11/20/10	11/22/10	101122S01

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	81	79	61-127	2	0-20	
Ethylbenzene	84	84	57-129	0	0-22	
Toluene	81	79	63-123	2	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

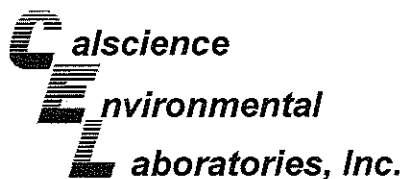
Date Received: N/A
 Work Order No: 10-11-1701
 Preparation: EPA 3050B
 Method: EPA 6010B

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-14,378	Solid	ICP 5300	11/22/10	11/22/10	101122L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	112	112	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

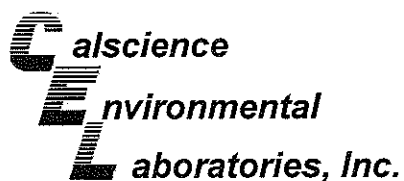
Date Received: N/A
 Work Order No: 10-11-1701
 Preparation: EPA 5030C
 Method: EPA 8015B (M)

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-279-4,111	Solid	GC 22	11/22/10	11/22/10	101122B01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	102	100	70-124	2	0-18	

RPD - Relative Percent Difference , CL - Control Limit



Quality Control - LCS/LCS Duplicate



ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: N/A
Work Order No: 10-11-1701
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 99105

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-796-4,185	Solid	GC/MS QQ	11/22/10	11/22/10	101122L01

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	88	86	78-120	1	0-20	
Ethylbenzene	92	92	76-120	0	0-20	
Toluene	89	89	77-120	1	0-20	

RPD - Relative Percent Difference, CL - Control Limit

Work Order Number: 10-11-1701

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
I	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS recovery percentage is within LCS ME control limit range.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.





1701

GSO
 < WebShip > > > >
 800-322-5555 www.gso.com

Ship From:
 ALAN KEMP
 CAL SCIENCE- CONCORD
 5063 COMMERCIAL CIRCLE #H
 CONCORD, CA 94520

Ship To:
 SAMPLE RECEIVING
 CEL
 7440 LINCOLN WAY
 GARDEN GROVE, CA 92841

COD:
 \$0.00

Reference:
 ETIC,CRA

Delivery Instructions:

Signature Type:
 SIGNATURE REQUIRED

Tracking #: 515398969

SDS

ORC

D

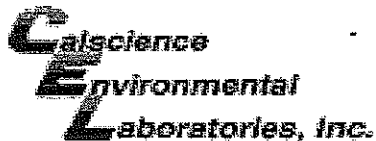
GARDEN GROVE

D92843A

86499203

Print Date : 11/19/10 14:45 PM

Package 1 of 1



WORK ORDER #: 10-11-

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: ETIC

DATE: 11/20/10

TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.5 °C + 0.5 °C (CF) = 3.0 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____).

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter Initial: YL

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Initial: YL

Sample _____ No (Not Intact) Not Present Initial: WJC

SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
<input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pH / Residual Chlorine / Dissolved Sulfide received within 24 hours.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONTAINER TYPE:

Solid: 4ozCGJ 8ozCGJ 16ozCGJ Sleeve (5) EnCores® TerraCores® _____

Water: VOA VOA_h VOAn₂ 125AGB 125AGB_h 125AGB_p 1AGB 1AGBn₂ 1AGBs

500AGB 500AGJ 500AGJs 250AGB 250CGB 250CGBs 1PB 500PB 500PBna

250PB 250PBn 125PB 125PBz_{na} 100PJ 100PJna₂ _____ _____ _____

Air: Tedlar® Summa® **Other:** _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** WJC

Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** _____

Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ zna: ZnAc₂+NaOH f: Field-filtered **Scanned by:** _____

Appendix H
Waste Documentation

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: _____

2. Page 1 of 1

3. Emergency Response Phone: 800-675-1055

4. Waste Tracking Number: 911221-121510

5. Generator's Name and Mailing Address: ExxonMobil Oil Corporation (9105), 3700 W. 190th St, Torrance, CA 90504 USA

Generator's Site Address (if different than mailing address): 6501 San Pablo Avenue, Oakland, CA, USA

Generator's Phone: 925-212-2935-35

6. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SERVICES

U.S. EPA ID Number: CAD962523433

7. Transporter 2 Company Name: _____

U.S. EPA ID Number: _____

8. Designated Facility Name and Site Address: REPUBLIC SERVICES (VASCO ROAD LANDFILL), 4001 N VASCO ROAD, LIVERMORE, CA 94550 USA

Facility's Phone: 925-447-0491

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. Non Hazardous Waste Soil, (Drill Cuttings)	3	DM	1500	P
2. Non Hazardous Waste Solids, (Construction Debris)	1	DM	500	P
3.				
4.				

13. Special Handling Instructions and Additional Information: DES Job# 911-221

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

Generator's/Officer's Printed/Typed Name: *Don McCall at Republic Services* Signature: *[Signature]* Month: 12 Day: 15 Year: 10

15. International Shipments: Import to U.S. Export from U.S. Port of export: _____ Date leaving U.S.: _____

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: *David Burke* Signature: *[Signature]* Month: 12 Day: 15 Year: 10

Transporter 2 Printed/Typed Name: _____ Signature: _____

17. Discrepancy

17a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection

17b. Alternate Facility (of Generator): _____ U.S. EPA ID Number: _____

Facility's Phone: _____

17c. Signature of Alternate Facility (of Generator): _____

18. Designated Facility Owner or Operator, Certification of receipt of materials covered by this manifest except as noted in item 17a

Printed/Typed Name: _____ Signature: *[Signature]* Month: 12 Day: 15 Year: 10

RECEIVED

DEC 20 2010

Dillard Tracking, Inc.

Elmer, CA

DESIGNATED FACILITY TO GENERATOR