Carryl MacLeod
Project Manager, Marketing Business Unit

August 11, 2017

Mr. Mark Detterman
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Dear Mr. Detterman:

Attached for your review is the *Site Assessment Report and Request for Closure* for former Chevron-branded service station 90517, located at 3900 Piedmont Avenue in Oakland, California (Case #: RO0000138). This report was prepared by Stantec Consulting Services Inc. (Stantec), upon whose assistance and advice I have relied. I have read and acknowledge the content, recommendations, and/or conclusions contained in the attached report submitted on my behalf to Alameda County Environmental Health's FTP server and the State Water Resources Control Board's GeoTracker™ Website.

If you should have any further questions, please do not hesitate to contact me or the Stantec project manager, Travis Flora, at (408) 356-6124 ext. 238, or travis.flora@stantec.com.

Sincerely,

Carryl MacLeod

Carryl MacLeod
Project Manager

Chevron Environmental Management Company
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Site Assessment Report and Request for Closure

Former Chevron 90517
3900 Piedmont Avenue
Oakland, California

Prepared for:
Chevron Environmental
Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583

Prepared by:
Stantec Consulting Services Inc.
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August 11, 2017

Sign-off Sheet

Former Chevron 90517, 3900 Piedmont Avenue, Oakland, California
August 11, 2017

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1.0 INTRODUCTION

On behalf of Chevron Environmental Management Company (CEMC), Stantec Consulting Services Inc. (Stantec) is pleased to submit this *Site Assessment Report and Request for Closure* for former Chevron station 90517, which is located at 3900 Piedmont Avenue, Oakland, Alameda County, California (the Site; shown on **Figure 1**).

1.1 PURPOSE

The purpose of this Site assessment was to address data gaps associated with the lateral extent of petroleum hydrocarbons in soil, and to evaluate the potential on-site and off-site vapor intrusion pathways. Stantec submitted a *Site Conceptual Model and Data Gap Work Plan*, dated March 21, 2014, and a *Scope of Work Update* letter, dated Feb. 22, 2017, which was approved by the Alameda County Department of Environmental Health (ACDEH) in a letter dated March 10, 2017 (included in **Appendix A**).

1.2 SCOPE

The proposed scope of work included advancement of five soil borings (B-1 through B-5) and collection of soil samples. Soil analytical data were compared to the media-specific criteria of the State Water Resources Control Board (SWRCB) Low-Threat Underground Storage Tank (UST) Case Closure Policy (LTCP) (SWRCB, 2012). In addition to the soil assessment, four sub-slab vapor probes (SS-1 through SS-4) were installed inside the on-Site building to evaluate potential vapor intrusion risk to the on-site building, which was a modification from the original scope of work and approved by ACDEH. Indoor air and outdoor ambient air and crawl space samples were also collected. Locations of the soil borings and sub-slab vapor probes are shown on **Figure 2**. Stantec also completed a review of well records provided by the Alameda County Water District (ACWD) and California Department of Water Resources (DWR) to evaluate potential supply wells within 1,000 feet of the Site and updated the sensitive receptor survey.

2.0 SITE BACKGROUND

2.1 SITE DESCRIPTION AND LAND USE

The Site is a former Chevron service station located on the eastern corner at the intersection of Piedmont Avenue and Montell Street in Oakland, California. The Site is currently occupied by a one story commercial building, currently being used as an urgent care clinic, with associated parking.

A Chevron service station operated at the Site from at least 1940 until 1978. Based on a Site plan from 1940, first-generation Site features consisted of three gasoline USTs (928-gallon, 440-gallon, and 550-gallon) located in the southwestern portion of the Site, a lubrication building with a waste oil sump in the eastern corner of the Site, two fuel dispenser islands located in the western portion of the Site, and a small station building located adjacent to the fuel dispenser islands. Based on a Site plan from 1955, the first-generation gasoline USTs were removed and three second-generation gasoline USTs (3,000-gallon, 5,000-gallon, and 7,500-gallon) were installed to the northwest of the first-generation USTs. A 1,000-gallon waste oil UST is shown to the northwest of the lubrication building and two hydraulic hoists are shown within the building. In addition, the first-generation fuel dispenser islands were removed and second-generation fuel dispenser islands were installed to the east of the first-generation fuel dispenser islands. Based on a Site plan from 1971, the mid-size gasoline UST is identified as 5,700-gallon instead of 5,000-gallon. In 1978, the service station was closed and all remaining Site features, including underground fuel structures, were removed. Station operation ceased before the fuel additive methyl *tertiary*-butyl ether (MtBE) came to be used commercially. The existing commercial building was then constructed (Conestoga-Rover & Associates [CRA], 2010). A Site Plan is shown on **Figure 2**.

Land use near the Site consists of a mixture of commercial and residential properties. The Site is bounded on the northwest by Piedmont Avenue, to the northeast by a commercial building, to the southeast by residences, and on the southwest by Montell Street.

2.2 PREVIOUS INVESTIGATIONS AND REMEDIATION

Based on a historical Site Plan from 1955, the three first-generation gasoline USTs (928-gallon, 440-gallon, and 550-gallon) were removed and the three second-generation gasoline USTs (3,000-gallon, 5,000-gallon or 5,700-gallon, and 7,500-gallon) were installed to the northwest of the first-generation gasoline USTs prior to or in 1955. In addition, the two first-generation fuel dispenser islands were removed and two second-generation fuel dispenser islands were installed to the east of the first-generation fuel dispenser islands (CRA, 2010). It is unknown if product piping associated with the first-generation fueling structures was replaced at the time of these activities. Further documentation on these activities could not be found and conditions of the tanks, dispenser islands, and soil during removal are unknown.

In 1978, the service station was closed and all remaining Site features associated with the service station were removed (CRA, 2010). This includes at least the three second-generation gasoline USTs (3,000-gallon, 5,000-gallon or 5,700-gallon, and 7,500-gallon), two second-generation fuel dispenser islands, associated product piping, and the station building. Further documentation on these activities could not be found and conditions of these Site features and soil during removal are unknown. It is unknown when the lubrication building, hydraulic hoists, waste oil sump, and 1,000-gallon waste oil UST were removed. They may have been removed when the service station was closed in 1978 or anytime between 1971 (date of most-recent Site Plan showing these features as existing) and 1978.

In October 1993, Environmental Science & Engineering, Inc. (ESE) oversaw advancement of eight on-site soil borings (FNBO-1 through FNBO-8) to total depths ranging from 7.5 to 16.5 feet below ground surface (bgs). A total of 11 soil samples were collected from the borings at depths ranging from 6 to 11 feet bgs. Soil samples were analyzed for total petroleum hydrocarbons as gasoline range organics (TPH-GRO), total petroleum hydrocarbons as diesel range organics (TPH-DRO), and benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds). TPH-GRO was detected in eight of the soil samples at concentrations ranging from 1.4 milligrams per kilogram (mg/kg; boring FNBO-4 at 6 feet bgs) to 3,400 mg/kg (boring FNBO-5 at 6 feet bgs). The maximum TPH-GRO concentration in soil was detected in the sample collected at 6 feet bgs from boring FNBO-5, located immediately down-gradient of the former USTs. Benzene was detected in the samples collected from boring FNBO-5 at 10 feet bgs (0.03 mg/kg) and boring FNBO-7 at 11 feet bgs (1.0 mg/kg). Five of the soil samples that surrounded the former USTs and dispenser islands were additionally analyzed for total recoverable petroleum hydrocarbons (TRPH) and volatile organic compounds (VOCs). TRPH was detected in all five of the samples, at concentrations ranging from 10.0 mg/kg (boring FNBO-6 at 10 feet bgs) to 350 mg/kg (boring FNBO-1 at 10.5 feet bgs) and VOCs were not detected above laboratory reporting limits (LRLs) in any of the samples. A groundwater sample was collected from boring FNBO-6, located in the southwest corner of the Site, and was analyzed for TPH-GRO, BTEX compounds, TRPH, and VOCs. TPH-GRO, TRPH, and BTEX compounds were detected in the groundwater sample at concentrations of 7,800 micrograms per liter [µg/L], 2,800 µg/L, 7.7 µg/L, 21 µg/L, 260 µg/L, and 260 µg/L, respectively. VOCs were generally not detected above LRLs in the groundwater sample, with the exception of acetone (30 µg/L) and carbon disulfide (33 µg/L) (ESE, 1993).

In July 1998, Gettler-Ryan Inc. (G-R) oversaw installation of two on-site monitoring wells (MW-1 and MW-2) and two off-site monitoring wells (MW-3 and MW-4) to further evaluate soil and groundwater quality associated with the Site. Boreholes MW-1, MW-2, and MW-4 were advanced to total depths of 16.5 feet bgs and borehole MW-3 was advanced to a total depth of 20 feet bgs. Groundwater was encountered in the boreholes at depths ranging from approximately 11 to 13 feet bgs. Soil samples were collected at depths of approximately 6, 11, and 16 feet bgs and analyzed for TPH-GRO, BTEX compounds, and MtBE. TPH-GRO and BTEX compounds were generally not detected above LRLs in the soil samples collected, with the exception of BTEX compounds (up to 0.010 mg/kg) in the sample collected from borehole MW-2 at 6 feet bgs, and TPH-GRO (80 mg/kg) and BTEX compounds (up to 5.8 mg/kg) in the sample

collected from borehole MW-4 at 11 feet bgs. MtBE was not detected above LRLs in any of the soil samples (G-R, 1998).

In July 2008, CRA oversaw advancement of off-site exploratory soil boring SB-2 to further evaluate down-gradient soil and groundwater quality. In addition, three attempts were made to advance a soil boring in Montell Street; however, drilling refusal was reportedly encountered. Boring SB-2 was advanced to a total depth of 24 feet bgs and groundwater was encountered at approximately 18 feet bgs. Soil samples were collected at depths of 5, 10, 15, and 20 feet bgs and analyzed for TPH-GRO, BTEX compounds, MtBE, di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (EtBE), tertiary-amyl methyl ether (TAME), tertiary-butyl alcohol (TBA), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromoethane (1,2-DBA). None of the analytes were detected above LRLs in any of the soil samples. A groundwater sample was also collected from boring SB-2 and analyzed for the same constituents as the soil samples. Only TPH-GRO and MtBE were detected in this sample, at concentrations of 540 µg/L and 1 µg/L, respectively (CRA, 2008).

In addition to the Site assessment activities, routine groundwater monitoring and sampling has occurred since 1998. Historical soil and groundwater data tables are included in **Appendix B**.

3.0 SITE ASSESSMENT

On April 11, April 12, and April 17, 2017, Stantec oversaw the advancement of five soil borings (B-1 through B-5) and the installation and sampling of four sub-slab vapor probes (SS-1 through SS-4). Stantec contracted Cascade Drilling, a C-57 California State-licensed drilling company from Richmond, California, to advance the soil borings and sub-slab vapor probes. Drilling was performed under the direction of a State of California Professional Engineer. Following installation of the sub-slab probes, soil vapor, indoor air, outdoor ambient air, and crawl space (off-site) samples were collected. A Site plan showing the soil borings and vapor sample locations is included as **Figure 2**.

3.1 PRELIMINARY FIELD ACTIVITIES

3.1.1 Permitting and Notifications

The ACDEH required an exploratory boring permit for the soil borings, which was approved and obtained before work began. An encroachment permit was also obtained to reserve metered parking due to the small footprint of the on-site parking lot.

As required by law, Underground Service Alert (USA) - North was notified at least 48 hours prior to any intrusive activities. In addition to notifying USA - North, Stantec retained the service of a private utility locating contractor to determine if underground utilities were located near the proposed soil boring locations.

3.1.2 Health and Safety

Stantec generated a Site-specific health and safety plan (HASP) as required by the State of California General Industry Safety Order 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120. The HASP outlines potential hazards Stantec personnel and subcontractors expect to be encountered during the field activities. Job safety analyses (JSAs) for tasks to be performed by Stantec personnel (e.g., driving, oversight of boring advancement, sample collection, etc.) were included. The HASP also included details regarding required personal protective equipment to be worn by all Stantec field personnel for each task. In addition, Stantec produced a Journey Management Plan (JMP) to prevent motor vehicle incidents driving to and from the Site. A copy of Stantec's HASP and JMP were available on-site during all field activities.

Subcontractors also developed a site-specific HASP and JSAs for tasks applicable to their scope of work (e.g., driving, advancing soil borings, etc.). Appropriate subcontractor HASPs were also available on-site.

3.2 SOIL INVESTIGATION

3.2.1 Soil Sample Collection and Analysis

On April 11 and April 12, 2017, Stantec oversaw the advancement of soil borings B-1 through B-5. Stantec field personnel recorded details of field activities, such as site conditions, sampling processes, names of field personnel, and pertinent dates and times.

Each borehole was attempted to be advanced using a hand augur to 4 feet bgs to clear for potentially undetected subsurface utilities. No soil samples were collected from soil borings B-1 or B-3 due to refusal from a concrete slab encountered at approximately 2 feet bgs. One soil sample was collected from boring B-2 at 2.5 feet bgs, but the borehole met refusal at 4 feet bgs due to very dense and rocky soil conditions which the hand auger could not penetrate. The soil boring locations could not be moved into the sidewalk due to City of Oakland limitations on advancing boreholes in the sidewalk. Boreholes B-4 and B-5 were advanced to 10 feet bgs using a direct-push drill rig after 4 feet bgs. Soil samples from ground surface to 4 feet bgs were collected using a slide hammer fitted with a stainless steel or brass sample sleeve. Beyond 4 feet bgs, soil cores were collected in acetate sleeves, and soil samples were cut at approximately 6 inches from within the sampling depth of the core, then covered with Teflon® sheets and plastic end caps. Soil samples were then labeled, placed in an ice-filled cooler, and logged on a chain-of-custody (COC) form for transport to the certified analytical laboratory.

Portions of each soil core were also logged by Stantec field personnel for lithological content using the Unified Soil Classification System (USCS) as a guide and for relative moisture content, composition, photoionization detector (PID) readings, and other notable field observations. Portions of the soil cuttings were placed in Ziploc® bags and field-screened using a PID to evaluate the presence of VOCs that may have collected in the headspace of the bag. Soil boring logs are included in **Appendix C**.

All soil samples were analyzed for the presence of TPH-GRO and TPH-DRO with and without silica gel cleanup by United States Environmental Protection Agency (US EPA) Method 8015B; and BTEX compounds, MtBE, DIPE, EtBE, TAME, TBA, 1,2-DCA, 1,2-DBA, and naphthalene by US EPA Method 8260B (SW-846). In addition, soil samples collected from boring B-5, near the former waste oil UST, were analyzed for polynuclear aromatic hydrocarbons (PAHs) by US EPA 8270C-SIM, wear metals by US EPA 6010, and TPH-Motor Oil by US EPA 8015. Soil samples were submitted to Eurofins Lancaster Laboratories, Inc. (Lancaster), a State of California certified analytical laboratory for analysis. Complete certified laboratory analysis reports and COC documents are included in **Appendix D**.

3.2.2 Soil Sample Analytical Results

Soil samples from borings B-2 and B-5 did not have detected concentrations of the primary constituents of concern over their respective California Regional Water Quality Control Board (RWQCB) Tier 1 Environmental Screening Levels (ESL). Soil sample analytical results are included

in **Table 1**. In soil boring B-4, 1,500 mg/kg of TPH-GRO and 790 mg/kg and 490 mg/kg of TPH-DRO (including TPH-DRO with silica gel cleanup) were the two constituents that were detected above their respective RWQCB Tier 1 ESLs.

Soil boring B-5 was analyzed for additional constituents associated with assessment of a former waste oil UST, including PAHs and wear metals (see **Table 2** and **Table 3**). No PAHs were detected above their respective ESLs, and total PAHs from 0 to 5 feet bgs were below the LTCP criteria of 0.063 mg/kg. All soil samples from boring B-5 detected cadmium above the RWQCB Direct Exposure Human Health Risk Level (Table S-1), Commercial/Industrial: Shallow Soil Exposure ESL. No other metal concentrations in boring B-5 exceeded these respective ESLs.

3.3 VAPOR INTRUSION EVALUATION

3.3.1 Sub-Slab Vapor Sampling

3.3.1.1 Sub-Slab Vapor Probe Installation

On April 12, 2017, sub-slab vapor probes SS-1 through SS-4 were installed inside the on-site building using the Vapor Pin® product. For each sub-slab probe location, a 1.5-inch diameter outer hole was advanced to a depth of approximately 1 inch into the concrete building slab. A 5/8-inch diameter inner hole was then advanced to a depth of approximately 1 to 2 inches below the concrete slab. Each Vapor Pin® was installed in the slab, and a steel cover was placed inside the outer 1.5-inch hole to protect the vapor pin as well as complete flush to the ground surface.

3.3.1.2 Sub-Slab Vapor Sample Collection and Analysis

On April 17, 2017, sub-slab vapor samples were collected from sub-slab probes SS-1 through SS-4. The sub-slab vapor samples were collected in 1-liter Summa canisters, which were received from the laboratory with the proper vacuum of approximately -30 inches of mercury (inHg). Teflon® tubing was used to connect the Summa canisters to the sub-slab probes, and ½-hour flow regulators (restricting flow to approximately 26.6 millimeters per minute) and particulate filters were installed in line on the downhole side of Summa canisters. Additionally, a ball valve was installed on the sub-slab probe side of the flow regulator/particulate filter assembly to allow for the performance of a 1-minute leak check.

Prior to assembly of the vapor sample collection apparatus, the Summa canister valves were checked to make sure that they were closed. Once the apparatus was assembled, the ball valve on the downhole side of the flow regulator/particulate filter assembly was checked to make sure that it was in the closed position. The leak check was performed by first using a syringe to create a vacuum by withdrawing air within the tubing setup, then closing the valve to the syringe. The vacuum observed for the assembled apparatus remained steady for one minute, indicating that the apparatus on the sample collection side of the ball valve did not contain a leak. Helium gas was then introduced within a shroud surrounding these connections. A shroud was created by affixing a plastic liner to the rim of a plastic tub and inverting over the

sub-slab probe location. A helium gas detector was used to monitor the shroud atmosphere to document concentrations during vapor sample collection. Vapor sample collection data logs are included in **Appendix E**.

Sub-slab vapor samples were also collected using sorbent tubes to analyze for naphthalene by US EPA Method TO-17. Prior to vapor sample collection, each sorbent tube was checked for leaks in accordance with the laboratory instructions. The samples were collected by drawing in approximately 60 milliliters (mL) of air using a syringe and 3-way valve. The samples were then sealed, labeled, and recorded on the COC. All vapor samples collected during this assessment were sent under COC documentation to Eurofins Air Toxics (Air Toxics), a California-state National Environmental Laboratory Accreditation Program (NELAP-certified laboratory. The samples were analyzed for TPH-GRO, BTEX compounds, and naphthalene by TO-15 SIM. TPH-DRO and naphthalene were analyzed by TO-17. Fixed gases (carbon dioxide, oxygen, methane, and helium) were analyzed by American Society for Testing and Materials (ASTM) Method D-1946.

3.3.1.3 Sub-Slab Vapor Sample Analytical Results

A total of five sub-slab vapor samples (four samples and one duplicate sample from SS-2) were collected from sub-slab vapor probes SS-1 through SS-4 on April 17, 2017. Laboratory analysis indicated detections of petroleum hydrocarbons above their respective laboratory reporting limits (LRLs) for each sample.

Samples collected from sub-slab probes SS-1 through SS-4 had detections of TPH-GRO ranging from 130 micrograms per milligrams per cubic meter (µg/m^3) in SS-4 to 4,500 µg/m^3 in SS-2. Sub-slab probe SS-2 also had detections of benzene (5.8 µg/m^3), toluene (2.3 µg/mg), ethylbenzene (3.2 µg/m^3), and total xylenes (18.3 µg/m^3). Naphthalene was detected just above the LRL but only in the duplicate sample analyzed by TO-17. All detected concentrations were below their respective RWQCB Tier 1 ESLs. No other detections were reported in any of the other samples. Sub-slab vapor analytical results are included in **Table 4.** Certified laboratory analysis reports and chain-of-custody documentation is included in **Appendix D**.

The presence of the atmospheric gases oxygen, carbon dioxide, and methane were reported in the sub-slab vapor samples as a percentage of the sample volume (%). These atmospheric gases were reported within the following ranges: 18% to 21% oxygen, 0.44% and 1.2% carbon dioxide, and less than 0.00027% methane. The natural occurrence of these gases in the atmosphere are approximately 21% for oxygen, 0.04% for carbon dioxide, and 0.002% for methane. The concentration of oxygen and methane in the sub-slab soil vapor samples were equal to or less than the average atmospheric concentration, and the concentrations of carbon dioxide was greater than the average atmospheric percentages.

Helium (the leak detection compound) was detected in the primary and duplicate sub-slab vapor samples collected at SS-2 at concentrations of 0.13% and 0.14%, respectively. Over the sampling duration, the average concentration of helium within the shroud was approximately

37%, indicating a leakage of approximately 0.3% (0.14% divided by 37%), which is well below the Department of Toxic Substances Control (DTSC) limit of 5% for quantitative leak testing using gaseous tracer compounds; therefore, the data collected from SS-2 are considered reliable. Soil vapor sample collection data logs are included in **Appendix E**.

3.3.2 Indoor Air and Outdoor Ambient Air Sampling

3.3.2.1 Indoor Air and Outdoor Ambient Air Sample Collection and Analysis

A total of four indoor air samples and one outdoor ambient air sample were collected on April 17 and 18, 2017. A building survey was completed by Stantec, which included observing the building contents for potential additional VOC sources. No use or storage of chemicals was identified that could potentially affect the sample results; however, the building was renovated within the past year, so fresh paint, glue for the floor laminate, new furniture, and other new building materials may affect the indoor air samples due to off-gassing. Normal building use occurred during indoor air and outdoor ambient air samples (ex. work hours; employee and customer activities; heating, ventilation, and air conditioning [HVAC] use; etc.). A copy of the building survey is included in **Appendix E**.

The indoor air samples (IA-1 through IA-4) were collected from within the building in 6-Liter individually 100% certified Summa canisters that were prepared in the laboratory with approximately -30 inHg vacuum. The canister was connected to a flow regulator calibrated to reduce air flow to approximately 3.5 milliliters per minute (mL/min) and a particulate filter. The sampling canister was placed so that the air intake was within the normal breathing zone," at a height between 3 and 5 feet above the ground surface. The indoor air samples were collected during off and normal business hours, for an approximately 24-hour period. Stantec ensured that residual vacuum was left in the canister at the cessation of sampling. The approximate locations of the indoor air samples are shown on **Figure 2**.

The outdoor ambient air sample (OA-1) was collected at the same time as the indoor air samples. The outdoor ambient air sample was collected in a 6-Liter Summa canister. The canister was connected to a flow regulator calibrated to reduce air flow to approximately 3.5 mL/min and a particulate filter. The Summa canister was placed approximately 3 feet above grade at an up-wind location protected from the elements. The approximate location of the outdoor ambient air sample is shown on **Figure 2**. Vapor sample collection data logs are included in **Appendix E**.

The indoor air and outdoor ambient air samples were submitted to Air Toxics to be analyzed for the presence of TPH-GRO, BTEX compounds, and naphthalene by US EPA Method TO-15 SIM.

3.3.2.2 Indoor Air and Outdoor Ambient Air Sample Analytical Results

Laboratory results indicated the presence of TPH-GRO and/or BTEX compounds in all indoor air and outdoor ambient air samples; however, only benzene exceeded its respective RWQCB commercial/industrial indoor air ESL. Benzene in indoor air samples range from 0.52 µg/m^3 in IA-4

to 0.58 µg/m^3 in IA-1. Benzene was detected above its ESL at a similar concentration in the outdoor ambient air sample at 0.42 µg/m^3.

Indoor air and outdoor ambient air analytical results are included in **Table 5.** Certified laboratory analysis reports and chain-of-custody documentation is included in **Appendix D**.

3.3.3 Off-Site Crawl Space Air Sampling

3.3.3.1 Off-Site Crawl Space Air Sample Collection and Analysis

An access agreement was established with the owner of the off-Site, down-gradient property located at 3891 Piedmont Avenue, Oakland, California prior to accessing the property. Notification was sent to the owner and tenant prior to sampling. Access approval was limited to the air sampling only from outside the building through a hatch. The tenant confirmed that there is no basement. The crawl space consisted of an earthen floor with posts and beams supporting the first floor and approximately 3-foot high brick sidewalls.

Since access to the crawl space was limited, approximately 10 feet of Teflon® tubing was used to reach the approximate mid-point of the crawl space. The tubing was placed within a length of polyvinyl chloride (PVC) pipe to prevent curling or kinking of the tubing. The crawl space air was first sampled for analysis by Method TO-17 in laboratory-supplied, batch-certified sorbent tubes. Prior to sampling, 120 mL of air was removed using a syringe. After purging, the sorbent tube was connected to the Teflon® tubing, and approximately 3,360 mL of crawl space air was drawn through the sorbent tube using a gas-tight syringe.

For analysis by Method TO-15, the crawl space air sample was collected in a laboratory-supplied individually-certified 1-Liter Summa canister. The canister was connected to a flow regulator calibrated to deliver air flow of approximately 11.5 mL/min and a particulate filter. The 1-Liter Summa canister with a flow controller was connected to the Teflon® tubing, and the Summa canister valve was opened. Stantec ensured that residual vacuum was left in the canister at the cessation of sampling. Vapor sample collection data logs are included in **Appendix E**.

The crawl space air sample was submitted to Air Toxics to be analyzed for TPH-DRO and naphthalene by US EPA Method TO-17; and for TPH-GRO and BTEX compounds by US EPA Method TO-15 SIM.

3.3.3.2 Off-Site Crawl Space Sample Analytical Results

Crawl space air sample analytical results are summarized in **Table 6** along with prior crawlspace results for samples collected in July 2016**.** Certified laboratory analytical reports and chain-of-custody documentation are included in **Appendix D**. The US EPA assumes zero attenuation from the crawl space to indoor air, and as such the results are compared to RWQCB commercial/industrial indoor air ESLs.

TPH-DRO and naphthalene analyzed by US EPA Method TO-17 and TPH-GRO analyzed by US EPA Method TO-15 were not detected above their respective LRLs. BTEX compounds were detected above their respective LRLs in the crawl space air sample; however, only benzene was detected above its RWQCB ESL at a concentration of 1.0 µg/m^3. All other detections were below the respective RWQCB commercial/industrial indoor air ESLs. In general, compounds detected in the crawl space sample were somewhat higher than in the outdoor ambient air sample, which is likely the result of diminished air flow in the crawl space even with crawl space perimeter vents which were noted to be present.

Although BTEX compounds were detected in the crawl space air sample, they are unlikely related to the former service station. The on-site sub-slab samples collected directly over former UST system features indicated BTEX concentrations were below laboratory LRLs or RWQCB ESLs. The history of the off-site property use is not known, and off-site access was limited to crawl space air sample collection, so current or historical sources of VOCs are unknown.

3.4 WASTE MANAGEMENT

Investigation-derived waste (soil cuttings) were stored on Site in Department of Transportation-approved 55-gallon drums. Chevron managed the waste profile and arranged for a certified waste contractor, Waste Management, to pick up the waste on July 10, 2017, for transportation and disposal. The final waste manifest is included in **Appendix F**.

4.0 UPDATED SENSITIVE RECEPTOR SURVEY

An evaluation was conducted to identify complete and potentially complete exposure pathways relevant to human health risks at the Site based on analyses of the following components:

- Current and future land uses;
- Water well, surface water, and conduit surveys;
- Potentially exposed populations; and
- Complete and potentially complete exposure pathways.

4.1 CURRENT AND FUTURE LAND USES

Land use near the Site consists of a mixture of commercial and residential properties. The Site is bounded on the northwest by Piedmont Avenue followed by a commercial building housing various businesses, to the northeast by a commercial building that appears to be vacant, to the southeast by residences, and on the southwest by Montell Street followed by another commercial building that appears to be vacant. The Site and the properties to the northwest, northeast, and southwest are zoned for commercial purposes, while the properties to the southeast are zoned as residential.

4.2 WATER SURVEY

The Site is located in the East Bay Plain groundwater basin, which has been designated as having existing beneficial uses for municipal, domestic, industrial process, industrial service, and agricultural water supply.

4.2.1 Water Supply Wells

A well survey was conducted in 2002 to identify water supply wells within a 2,000-foot radius of the Site. The historical records indicated four water supply wells within that radius, which include one irrigation well and three abandoned wells with an unknown purpose. The irrigation well is located approximately 750 feet northeast (up-gradient) of the Site and was advanced to a depth of approximately 198 feet bgs. One of the abandoned wells is located approximately 1,200 feet west (down-gradient) of the Site and two of the abandoned wells are located approximately 1,825 feet southwest (cross-gradient) of the Site. Total depth information was not available for these wells (Delta, 2002).

Stantec performed an updated review of potential water supply wells. Stantec's review of ACWD records also identified the previously reported irrigation well. The reported irrigation well is

located adjacent to a former leaking UST case (ACDEH RO0000527), which received case closure in October 1994. Stantec reviewed the SWRCB GeoTracker™ Groundwater Ambient Monitoring and Assessment (GAMA) Database (SWRCB, 2017) and did not identify any additional water supply wells within a 2,000-foot radius of the Site. Stantec also reviewed well completion reports provided by the DWR and did not identify any additional domestic or municipal water supply wells within 0.5-miles of the Site.

Only the reported irrigation well was identified within 1,000 feet of this Site. Based on the direction, distance, and depth of the reported irrigation well, it is unlikely to be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site.

4.2.2 Surface Water Bodies

The United States Geological Survey (USGS) 7.5-minute topographic map for the Oakland West Quadrangle, the adjoining Oakland East Quadrangle, and aerial photos from Google Earth® were reviewed to identify any surface water within a 0.5-mile radius of the Site. The nearest surface water body is Glen Echo Creek, located approximately 400 feet southeast (up-gradient) of the Site. Based on the distance to Glen Echo Creek, and its location and orientation up-gradient of the Site, it is unlikely that Glen Echo Creek will be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site.

4.3 CONDUIT SURVEY

A Site Plan showing the location of utilities in the vicinity and down-gradient of the Site is shown on **Figure 2**. In 2002, Delta conducted an underground utility survey. Results from the survey indicated that sewer lines located adjacent to the Site are buried at approximately 12 to 13 feet bgs. Specific burial depths of water, gas, and electrical lines were not available; however, it was stated in phone correspondence with a representative of the East Bay Municipal Utility District that these lines are usually buried no deeper than 5 feet bgs. Additionally, according to the East Bay Municipal Utility District, water lines are usually buried between 3 and 5 feet bgs (Delta, 2002). Based on the conduit burial depths and historical range of depth-to-water (DTW) (approximately 5 to 13 feet bgs), the nearby water, gas, and electrical trenches are not likely acting as preferential pathways for groundwater migration; however, there is the potential for the sewer lines to act as a preferential pathway, since they are installed below the current groundwater table (DTW range during First Quarter 2017 was approximately 5 to 8 feet bgs).

4.4 POTENTIALLY EXPOSED POPULATIONS

4.4.1 On-Site and Off-Site Current or Potential Populations

The current Site use is an urgent care center. Based on the current and likely future use of the Site and down-gradient properties as commercial, the current or future potentially exposed populations on and off Site include commercial workers, customers, and construction workers.

Although a residential area is located southeast (cross-gradient) of the Site, groundwater data from well MW-2 suggests that the plume is defined on Site to the south and southeast.

4.4.2 Potential Sensitive Populations

Seventeen potentially sensitive populations (schools, child care facilities, senior living, and hospitals) were identified within a 0.5-mile radius of the Site. Distances ranged between 0.12 and 0.47 miles in north, northwest, north-northwest, northeast, north-northeast, east-southeast, southwest, south-southwest, and west directions. Only one of the identified sensitive populations within a 0.5-mile radius of the Site is located down-gradient of the Site. Kaiser Permanente Medical Center is located approximately 0.12 miles (634 feet) west (down-gradient) of the Site. Given its distance from the Site and the limited lateral extent of the dissolved-phase petroleum hydrocarbon plume associated with the Site as supported by groundwater data collected from boring SB-2, Kaiser Permanente Medical Center is unlikely to be at risk from exposure to Site-related contaminants. Additionally, the potential sensitive populations located within a 0.5-mile radius of the Site are listed in the following table:

Potential Sensitive Receptor	Address	Distance from Site (miles)	Direction from Site
Kaiser Permanente Medical Center	3801 Howe St.	0.12	W
Satellite Senior Homes	4030 Panama Ct.	0.13	E-SE
Snow White Pre-School	214 W. MacArthur Blvd.	0.15	SW
Baywood Apartments	225 41st St.	0.17	N
Piedmont Gardens	110 41st St.	0.20	NE
My Giving Hands	4139 Howe St.	0.20	N-NE
Archway School	250 41st St.	0.21	N-NW
Linda Glen	32 Linda Ave.	0.24	NE
Saint Leo The Great Catholic School	4238 Howe St.	0.29	NE
Pacific Boychoir Academy	215 Ridgeway Ave.	0.29	N-NE
Opal Home Care	3917 Opal St.	0.32	NW
Piedmont Avenue Elementary School	4314 Piedmont Ave.	0.37	NE
Beach Elementary School	100 Lake Ave.	0.39	E-SE
It Takes a Village Family Daycare	4167 Opal St.	0.43	NW
Oakland Technical High School	4351 Broadway	0.44	N
Edison School	3239 Kempton Ave. #1	0.44	S-SW
Park Day School	360 42nd St.	0.47	N-NW

4.5 EXPOSURE PATHWAY ANALYSIS

An exposure pathway is considered complete or potentially complete if it meets four basic requirements: 1) presence of chemical sources; 2) release and transport within an environmental medium; 3) an exposure route; and 4) a potential receptor. A graphical representation of the exposure pathway analysis is shown on **Figure 3**.

Potentially complete pathways are summarized as follows:

- The incidental ingestion and dermal contact with groundwater exposure pathways are considered potentially complete for off-site construction workers only, as sewer lines located adjacent to the Site are buried at approximately 12 to 13 feet bgs and current DTW is approximately 5 to 8 feet bgs. Excavation work to access the sewer line will likely encounter groundwater.

- The ingestion and dermal contact with soil exposure pathways are considered potentially complete for on-site construction workers only, due to shallow (less than 10 feet bgs) soil detections of petroleum hydrocarbons above ESLs near the second-generation gasoline USTs at borings FNBO-5 and B-4. The Site is paved, so customers and commercial workers are not likely to contact shallow soil. The current building sits above the majority of former fueling features and access to impacted soil beneath or near the former fueling features is unlikely to occur while the building is present.

- The ingestion, dermal contact, and inhalation of outdoor particulates from excavated soil exposure pathways are considered potentially complete for on-site construction workers only, due to historical shallow (less than 10 feet bgs) soil detections of petroleum hydrocarbons above ESLs on Site; however, the current building is placed above the majority of former fueling features and access to the impacted soil beneath or near the former fueling features is unlikely while the building is present.

Incomplete pathways are summarized as follows:

- Based upon recent vapor data, the potential for petroleum hydrocarbons in shallow soil to volatilize and be inhaled in the indoor or outdoor air are considered incomplete for on-site and off-site receptors. Soil vapor data indicate the SWRCB LTCP petroleum vapor intrusion to indoor air criteria and outdoor air exposure criteria are satisfied.

- Based upon recent vapor data, the inhalation of contaminants partitioning from groundwater to indoor and outdoor air is considered incomplete for on-site and off-site receptors. Soil vapor data indicate the SWRCB LTCP petroleum vapor intrusion to indoor air criteria and outdoor air exposure criteria are satisfied.

- Under current conditions, the ingestion, dermal contact, and inhalation pathways for shallow soil is considered incomplete for on-site commercial workers, since the Site is paved and the current building is placed above the majority of former fueling features.

The ingestion, dermal contact, and inhalation pathways for shallow soil and excavated soil are considered potentially complete for on-site construction workers, and the ingestion and dermal contact pathways for groundwater are considered potentially complete for off-site construction workers; however, the Site and surrounding areas are paved and the current building is placed

above the majority of former fueling features, so risk to construction workers is not likely at this time. In the event of planned construction or excavation, care should be taken to safely manage exposed and excavated soil and groundwater.

The soil gas and groundwater emission pathways (inhalation of indoor and outdoor air) are considered potentially complete; however, recent on-site soil and vapor data indicate that LTCP petroleum vapor intrusion to indoor air criteria and the direct contact and outdoor air exposure criteria are satisfied.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

Soil and vapor samples collected during this assessment provide new data to update the conceptual Site model and reevaluate current Site conditions compared to the SWRCB LTCP.

5.1.1 LTCP General Criteria

As noted in Stantec's March 21, 2014, *Conceptual Site Model and Data Gap Work Plan*, all LTCP general criteria are satisfied.

5.1.2 LTCP Groundwater-Specific Criteria Evaluation

Based on recent groundwater data reported in Stantec's March 24, 2017, *First Quarter 2017 Annual Groundwater Monitoring Report*, and based on the July 2008 groundwater sample collected from boring SB-2, the extent of the dissolved plume has been defined and is limited in extent. Benzene concentrations were non-detect at boring SB-2, which is approximately 150 to 200 feet down-gradient from the Site. This indicates that the dissolved plume associated with this Site aligns with an average plume length as described within the SWRCB LTCP technical justification for groundwater-specific criteria. Because an average TPH-GRO plume is less than 250 feet in length, Stantec estimates the dissolved plume associated with this Site is less than 250 feet. This Site would satisfy LTCP groundwater-specific criteria, scenario 2; however, the proximity of the reported irrigation well and Glen Echo Creek preclude use of this scenario.

Based on a Site-specific analysis of current conditions and reasonably anticipated near-term future scenarios, the contaminant plume poses a low threat to human health and the environment, and water quality objectives will be achieved within a reasonable time frame, which satisfies LTCP groundwater-specific criteria, scenario 5.

5.1.3 LTCP Direct Contact and Outdoor Air Exposure Evaluation

Based on current and historical data, Site conditions satisfy the LTCP direct contact and outdoor air exposure criteria. As shown in the following table, concentrations of benzene, ethylbenzene, naphthalene, and PAHs during this recent assessment were below the commercial/industrial direct contact and outdoor air exposure specified in Table 1 of the LTCP.

	Low-Threat Closure Policy Criteria for Direct Contact/Outdoor Air					Site Data	
	Residential		Commercial/Industrial		Utility Worker	Maximum Conc. (April 2017)	
Constituent	0 – 5 feet bgs mg/kg	Volatilization to outdoor air (5 – 10 feet bgs) mg/kg	0 – 5 feet bgs mg/kg	Volatilization to outdoor air (5 – 10 feet bgs) mg/kg	0 – 10 feet bgs mg/kg	0 – 5 feet bgs mg/kg	Volatilization to outdoor air (>5 – 10 feet bgs) mg/kg
Benzene	1.9	2.8	8.2	12	14	<0.0005	<0.026
Ethylbenzene	21	32	89	134	314	0.002	0.15
Naphthalene	9.7	9.7	45	45	219	0.006	<0.052
PAH*	0.063	NA	0.68	NA	4.5	0.00922	NA
*Notes: Based on the seven carcinogenic polynuclear aromatic hydrocarbons (PAHs) as benzo(a)pyrene toxicity equivalent [BaPe]. The PAH screening level is only applicable where soil is affected by either waste oil and/or Bunker C fuel.							

5.1.4 LTCP Petroleum Vapor Intrusion to Indoor Air Evaluation

Sub-slab vapor samples contained no concentrations of chemicals above their respective RWQCB commercial/industrial ESLs. For chemicals reported as not detected, the LRLs were also below RWQCB commercial/industrial ESLs. Concentrations detected in the indoor air and outdoor ambient air samples were below RWQCB commercial/industrial ESLs, except for benzene in the indoor air and outdoor ambient air samples.

Criteria indicative of vapor intrusion include:

- Indoor air concentrations significantly higher than outdoor ambient air;
- Indoor air concentrations significantly higher than the range of normal background concentrations (rather than the ESLs, which are within the lower range of normal background); and
- Sub-slab vapor concentrations significantly higher than indoor air concentrations.

Any other combination of concentrations, and concentration ratios, likely indicate either an indoor or outdoor background source rather than vapor intrusion to the building.

All sub-slab concentrations are below the RWQCB soil gas ESLs, indicating the absence of an unacceptable vapor intrusion risk. Only benzene concentrations in indoor air and outdoor ambient air exceeded the indoor air ESL, but the indoor air and outdoor ambient air benzene concentrations are very similar, suggesting an ambient source. Furthermore, the indoor air benzene concentrations are at the lower end of indoor air background concentrations (EPA, 2011) and may be attributed to the newer construction materials.

For the off-site crawl space air sample, TPH-DRO and naphthalene analyzed by US EPA Method TO-17 and TPH-GRO analyzed by US EPA Method TO-15 were not detected above their respective LRLs, which were all below their respective ESLs. BTEX compounds were detected

above their respective LRLs in the crawl space air sample; however, only benzene was detected above its RWQCB ESL at a concentration of 1.0 µg/m^3. All other detections were below their respective RWQCB commercial/industrial indoor air ESLs. In general, compounds detected in the crawl space air sample were somewhat higher than in the outdoor ambient air sample, which is likely the result of diminished air flow in the crawl space even with the noted presence of crawl space perimeter vents.

Although BTEX compounds were detected in the crawl space air sample, they are consistent with measured outdoor air concentrations, and as such, they are unlikely related to the former service station. The history of the off-site property use is not known, and off-site access was limited to crawl space air sample collection, so current or historical sources of VOCs at the off-site property are unknown.

Based on a review of the data collected during this investigation, the vapor intrusion pathway is not complete. LTCP petroleum vapor intrusion to indoor air criteria, scenario b, is satisfied.

5.1.5 Sensitive Receptor Survey

Stantec reviewed well data provided by the ACWD, SWRCB, and DWR. There are no domestic or municipal water supply wells within 1,000 feet of the Site. There is an irrigation well in the ACWD records reportedly located approximately 750 feet northeast (up-gradient) from the Site. Based on the direction, distance, and depth of the reported irrigation well, it is unlikely to be impacted by the dissolved-phase petroleum hydrocarbon plume associated with the Site.

The ingestion, dermal contact, and inhalation pathways for shallow soil and excavated soil are considered potentially complete for on-site construction workers, and the ingestion and dermal contact pathways for groundwater are considered potentially complete for off-site construction workers; however, the Site and surrounding areas are paved and the current building is placed above the majority of former fueling features, so exposure to construction workers is not likely at this time.

The soil gas and groundwater emission pathways (inhalation of indoor and outdoor air) are considered potentially complete; however, recent on-site soil and vapor data indicate that LTCP petroleum vapor intrusion to indoor air criteria and the direct contact and outdoor air exposure criteria are satisfied.

5.2 RECOMMENDATIONS

Based on the updated LTCP evaluation outlined above, Stantec recommends that the ACDEH evaluate this Site for low-threat case closure. Groundwater monitoring and sampling will cease pending the ACDEH low-threat closure review. A LTCP checklist is included as **Appendix G**.

6.0 REFERENCES

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ESE, 1993. *Phase II Environmental Site Assessment*. November 15.

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Stantec, 2014. *Site Conceptual Model and Data Gap Work Plan*. March 21.

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TABLES

Table 1
Soil Sample Analytical Results
3900 Piedmont Avenue
Oakland, California

			US EPA Method 8015B				US EPA Method 8260B											
Borehole/ Sample ID	Sample Depth (feet bgs)	Date Collected	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-DRO with Silica Gel (mg/kg)	TPH-MRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MtBE (mg/kg)	DIPE (mg/kg)	EtBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	1,2-DCA (mg/kg)	1,2-DBA (mg/kg)	Naphthalene (mg/kg)
B-2	2.5	4/11/2017	**1**	**61**	**30**	--	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.0009	<0.0009	<0.019	<0.0009	<0.0009	<0.0009
B-4	2.5	4/11/2017	<0.5	**32**	**22**	--	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.019	<0.001	<0.001	<0.001
	5	4/11/2017	**7.7**	**790**	**700**	--	<0.0005	<0.001	**0.002**	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.021	<0.001	<0.001	**0.006**
	7.5	4/12/2017	**1,500**	**490**	**420**	--	<0.024	<0.048	**0.15**	**0.12**	<0.024	<0.048	<0.048	<0.048	<0.95	<0.048	<0.048	<0.048
	10	4/12/2017	**94**	**12**	**4.7**	--	<0.026	<0.052	<0.052	<0.052	<0.026	<0.052	<0.052	<0.052	<1.0	<0.052	<0.052	<0.052
B-5	2.5	4/12/2017	<0.5	**10**	<4.0	**25**	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001
	5	4/12/2017	<0.5	<4.0	<4.0	<9.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.019	<0.001	<0.001	<0.001
	7.5	4/12/2017	**0.9**	<4.0	<4.0	<9.9	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.019	<0.001	<0.001	<0.001
	10	4/12/2017	**0.5**	<4.0	<4.0	<10	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	<0.001
RWQCB Tier 1 ESLs[1]			**100**	**240**	**240**	**100**	**0.044**	**2.9**	**1.4**	**2.3**	**0.023**	**NS**	**NS**	**NS**	**0.075**	**0.0045**	**0.00033**	**0.023**

Notes:

(1) California Regional Water Quality Control Board, San Francisco Bay Region, Tier 1 ESLs. *February 2016.*

Bold text denotes detected concentrations. **Bold/blue** text denotes detected concentrations above Environmental Screening Levels for Commercial Land Use.

Abbreviations:

1,2-DCA = 1,2-dichloroethane

1,2-DBA = 1,2-dibromoethane

DIPE = di-isopropyl ether

ESL = environmental screening level

EtBE = ethyl *tertiary* -butyl ether

feet bgs = feet below ground surface

mg/kg = milligrams per kilogram

MtBE = methyl *tertiary* -butyl ether

NS = no standard

RWQCB = Regional Water Quality Control Board

TAME = *tertiary* -amyl methyl ether

TBA = *tertiary* -butyl alcohol

TPH-GRO = total petroleum hydrocarbons as gasoline range organics

TPH-DRO = total petroleum hydrocarbons as diesel range organics

TPH-MRO = total petroleum hydrocarbons as motor oil range organics

US EPA = United States Environmental Protection Agency

-- = not analyzed

< = compound was not detected at or above the detection limit shown

Table 2
Soil Sample Analytical Results
Polynuclear Aromatic Hydrocarbons (PAHs)
3900 Piedmont Avenue
Oakland, California

			US EPA Method 8270C-SIM															
Sample ID	**Depth** *(feet bgs)*	**Date Collected**	**Acenaphthene** *(mg/kg)*	**Acenaphthylene** *(mg/kg)*	**Anthracene** *(mg/kg)*	**Benzo[a] anthracene** *(mg/kg)*	**Benzo[b] flouranthene** *(mg/kg)*	**Benzo[k] flouranthene** *(mg/kg)*	**Benzo[a] pyrene** *(mg/kg)*	**Benzo[g,h,i] perylene** *(mg/kg)*	**Chrysene** *(mg/kg)*	**Dibenzo[a,h] anthracene** *(mg/kg)*	**Flouranthene** *(mg/kg)*	**Flourene** *(mg/kg)*	**Indeno[1,2,3-cd] pyrene** *(mg/kg)*	**Naphthalene** *(mg/kg)*	**Phenanthrene** *(mg/kg)*	**Pyrene** *(mg/kg)*
B-5	2.5	4/12/2017	<0.00066	<0.00033	<0.00033	<0.00066	**0.0011**	<0.00066	<0.00066	<0.00066	**0.0012**	<0.00066	<0.00066	<0.00066	<0.00066	<0.00066	**0.0021**	**0.00095**
	5	4/12/2017	<0.00066	<0.00033	<0.00033	<0.00066	<0.00066	<0.00066	<0.00066	<0.00066	<0.00033	<0.00066	**0.00067**	<0.00066	<0.00066	**0.0014**	**0.0018**	<0.00066
	7.5	4/12/2017	<0.00066	<0.00033	<0.00033	<0.00066	**0.0020**	**0.00083**	**0.00083**	**0.00086**	**0.0015**	<0.00066	**0.00098**	<0.00066	<0.00066	<0.00066	**0.00078**	**0.0011**
	10	4/12/2017	<0.00066	<0.00033	<0.00033	<0.00066	<0.00066	<0.00066	<0.00066	<0.00066	**0.00038**	<0.00066	<0.00066	<0.00066	<0.00066	**0.00087**	<0.00066	**0.00069**
RWQCB Tier 1 ESLs[(1)]			***16***	***13***	***2.8***	***0.7***	***0.7***	***2.6***	***0.07***	***2.5***	***3.8***	***0.07***	***60***	***8.9***	***0.7***	***0.023***	***11***	***85***

Notes:

Highlighted columns represent the seven carcinogenic PAHs as identified by the US EPA and used for evaluation of Direct Contact and Outdoor Air Exposure Criteria in the LTCP for a Commercial/Industrial property.

(1) California Regional Water Quality Control Board, San Francisco Bay Region, Tier 1 ESLs. *February 2016.*

Bold font denotes detected value. **Bold/blue** font denotes detected value equal to or above RWQCB ESLs (commercial and/or residential).

Abbreviations:

bgs = below ground surface

ESLs = Environmental Screening Levels

mg/kg = milligrams per kilogram

RWQCB = Regional Water Quality Control Board

US EPA = United States Environmental Protection Agency

< = compound was not detected at or above the detection limit shown

Table 3
Soil Sample Analytical Results - Metals
3900 Piedmont Avenue
Oakland, California

			US EPA Method 6010B				
Sample ID	**Depth Interval *(feet bgs)***	**Date Collected**	**Cadmium *(mg/kg)***	**Chromium *(mg/kg)***	**Lead *(mg/kg)***	**Nickel *(mg/kg)***	**Zinc *(mg/kg)***
B-5	2.5	4/12/2017	**0.156**	**44.1**	**9.22**	**32.6**	**31.7**
	5	4/12/2017	**0.157**	**55.2**	**12.2**	**83.0**	**84.6**
	7.5	4/12/2017	**0.228**	**40.2**	**20.9**	**119**	**32.5**
	10	4/12/2017	**0.204**	**32.6**	**7.08**	**38.1**	**27.4**
RWQCB ESLs[(1)]			***0.058***	***NS***	***320***	***11,000***	***350,000***

Notes:

(1) California Regional Water Quality Control Board, San Francisco Bay Region, Direct Exposure Human Health Risk Levels (Table S-1), Commercial/Industrial: Shallow Soil Exposure. *February 2016.*

Bold font denotes detected value. **Bold/blue** font denotes detected value equal to or above RWQCB ESLs

Abbreviations:

bgs = below ground surface

ESLs = Environmental Screening Levels

mg/kg = milligrams per kilogram

RWQCB = Regional Water Quality Control Board

US EPA = United States Environmental Protection Agency

Table 4
Sub-Slab Sample Analytical Results
3900 Piedmont Avenue
Oakland, California

		US EPA Method TO-17		US EPA Method TO-15					ASTM Method D-1946			
Sample ID	**Date Collected**	**TPH-DRO (1L sample)** ($\mu g/m^3$)	**Naphthalene (1L sample)** ($\mu g/m^3$)	**TPH-GRO** ($\mu g/m^3$)	**Benzene** ($\mu g/m^3$)	**Toluene** ($\mu g/m^3$)	**Ethylbenzene** ($\mu g/m^3$)	**Total Xylenes[1]** ($\mu g/m^3$)	**Oxygen** %	**Carbon Dioxide** %	**Methane** %	**Helium** %
SS-1	4/17/2017	<17,000	<17	**310**	<0.85	<1.0	<1.2	<2.4	**20**	**0.84**	<0.00027	<0.13
SS-2	4/17/2017	<17,000	<17	**4,100**	**2.4**	**2.3**	**2.5**	**16.5**	**20**	**0.99**	<0.00024	**0.13**
SS-3	4/17/2017	<17,000	<17	**320**	<0.85	<1.0	<1.2	<2.4	**18**	**1.2**	<0.00026	<0.13
SS-4	4/17/2017	<17,000	<17	**130**	<0.79	<0.93	<1.1	<2.2	**21**	**0.44**	<0.00025	<0.12
Dup	4/17/2017	**24,000**	**18**	**4,500**	**5.8**	**2.2**	**3.2**	**18.3**	**20**	**1.0**	<0.00025	**0.14**
RWQCB Tier 1 ESLs[2]		***68,000***	***41***	***50,000***	***48***	***160,000***	***560***	***52,000***	***NS***	***NS***	***NS***	***NS***

Notes:

(1) Total xylenes is the sum of ortho-, meta-, and para-xylenes.

(2) California Regional Water Quality Control Board, San Francisco Bay Region, Tier 1 ESLs. February 2016.

Duplicate sample collected from SS-2.

Bold font denotes a detected concentration. **Bold/Blue** denotes a concentration that exceeds its respective ESL.

Abbreviations:

ASTM = American Society for Testing and Materials

ESLs = Environmental Screening Levels

L = liter

NS = no standard

(µg/m3) = micrograms per cubic meter

RWQCB = Regional Water Quality Control Board

TPH-DRO = total petroleum hydrocarbons as diesel range organics

TPH-GRO = total petroleum hydrocarbons as gasoline range organics

US EPA = United States Environmental Protection Agency

< = compound was not detected at or above the detection limit shown

Table 5
Indoor Air and Outdoor Ambient Air Sample Analytical Results
3900 Piedmont Avenue
Oakland, California

		US EPA Method TO-15					
Sample ID	**Date Collected**	**TPH-GRO ($\mu g/m^3$)**	**Benzene ($\mu g/m^3$)**	**Toluene ($\mu g/m^3$)**	**Ethylbenzene ($\mu g/m^3$)**	**Total Xylenes[1] ($\mu g/m^3$)**	**Naphthalene ($\mu g/m^3$)**
IA-1	4/17/2017	**570**	**0.58 J**	**1.6**	<0.48	<1.43	<1.4
IA-2	4/17/2017	<210	**0.53 J**	**1.2**	<0.45	<1.35	<1.4
IA-3	4/17/2017	**610**	**0.56 J**	**1.4**	<0.36	<1.07	<1.1
IA-4	4/17/2017	<140	**0.52 J**	**1.3**	<0.30	<0.90	<0.91
OA-1	4/17/2017	**340**	**0.42**	**0.70**	<0.13	**0.54**	<0.40
RWQCB ESLs[2]		***2,500***	***0.42***	***1,300***	***4.9***	***440***	***0.36***

Notes:

(1) Total xylenes is the sum of ortho-, meta-, and para-xylenes.

(2) California Regional Water Quality Control Board, San Francisco Bay Region, Direct Exposure Human Heath Risk Levels (Table IA-1) Commercial/Industrial Indoor Air ESLs. February 2016.

J = estimated value

Bold font denotes a detected concentration. **Bold/Blue** denotes a concentration that exceeds its respective ESL.

Abbreviations:

ESLs = Environmental Screening Levels

(µg/m3) = micrograms per cubic meter

RWQCB = Regional Water Quality Control Board

TPH-GRO = total petroleum hydrocarbons as gasoline range organics

US EPA = United States Environmental Protection Agency

< = compound was not detected at or above the detection limit shown.

Table 6
Off-Site Crawl Space Air Sample Analytical Results
3900 Piedmont Avenue
Oakland, California

		US EPA Method TO-17		US EPA Method TO-15				
Sample ID	**Date Collected**	**TPH-DRO (1L sample) ($\mu g/m^3$)**	**Naphthalene (1L sample) ($\mu g/m^3$)**	**TPH-GRO ($\mu g/m^3$)**	**Benzene ($\mu g/m^3$)**	**Toluene ($\mu g/m^3$)**	**Ethylbenzene ($\mu g/m^3$)**	**Total Xylenes[1] ($\mu g/m^3$)**
CS-1	7/21/2016	<1000	<1.0	<62	**0.32**	**1.6**	**0.40**	**2.32**
	4/17/2017	<300	<0.30	<100	**1.0**	**2.0**	<1.1	**2.0**
OA-1	7/21/2016	<1000	<1.0	<63	**0.25**	**0.88**	**0.20**	**0.98**
RWQCB Indoor Air ESLs [2]		***570***	***0.36***	***2,500***	***0.42***	***1,300***	***4.9***	***440***

Notes:

(1) Total xylenes is the sum of ortho-, meta-, and para-xylenes.

(2) California Regional Water Quality Control Board, San Francisco Bay Region, Direct Exposure Human Heath Risk Levels (Table IA-1) Commercial/Industrial Indoor Air ESLs. February 2016.

Bold font denotes a detected concentration. **Bold/Blue** denotes a concentration that exceeds its respective ESL.

Abbreviations:

ESLs = Environmental Screening Levels

L = liter

(µg/m3) = micrograms per cubic meter

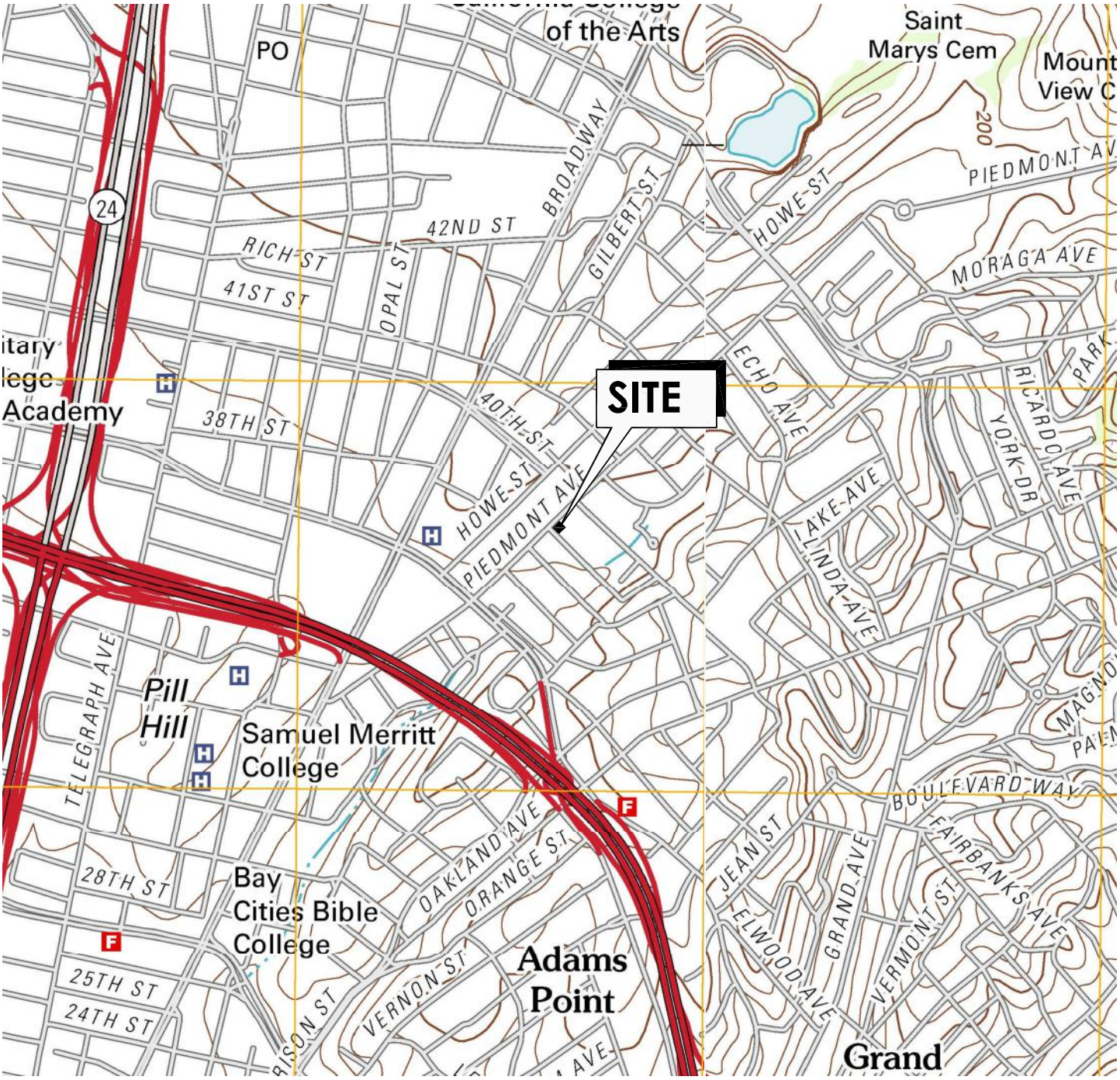
RWQCB = Regional Water Quality Control Board

TPH-GRO = total petroleum hydrocarbons as gasoline range organics

US EPA = United States Environmental Protection Agency

< = compound was not detected at or above the detection limit shown.

FIGURES

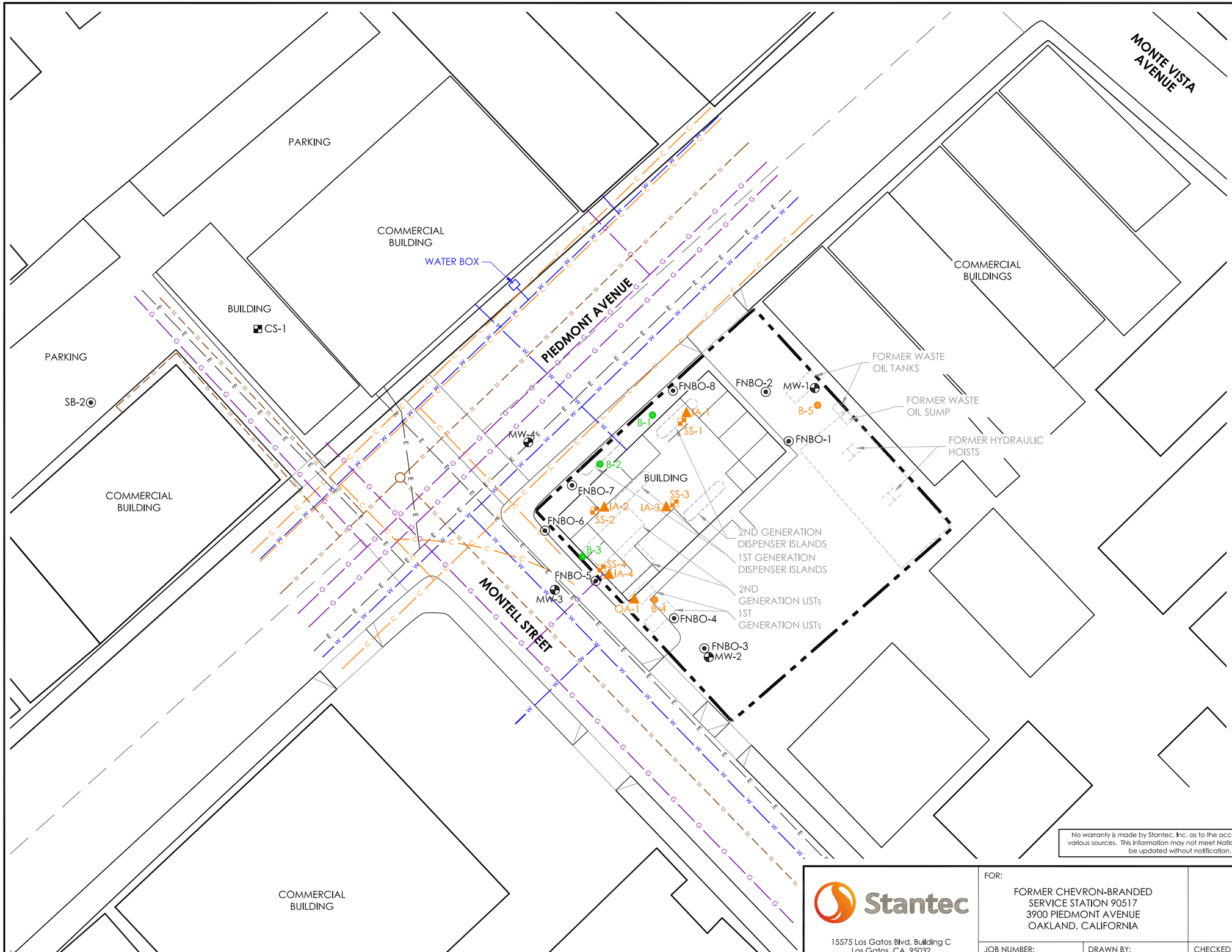


REFERENCE: USGS 7.5 MINUTE QUADRANGLE;
OAKLAND WEST, CALIFORNIA; 2012 AND OAKLAND EAST, CALIFORNIA; 2012

Stantec
15575 Los Gatos Blvd, Building C
Los Gatos, CA 95032
PHONE: (408) 356-6124 FAX: (408) 356-6138

FOR:				FIGURE:
FORMER CHEVRON-BRANDED SERVICE STATION 90517 3900 PIEDMONT AVENUE OAKLAND, CALIFORNIA		SITE LOCATION MAP		1
JOB NUMBER: 211602403	DRAWN BY: JRO	CHECKED BY: MRK	APPROVED BY: TLF	DATE: 02/21/14

FILEPATH:P:\Chevron\N. CA Marketing Sites\Carryl MacLeod Portfolio\90517\GWM\2013\1Q13\Figures\CAD\OLD\90517_2014.dwg | nbizjak | Feb 24, 2014 at 14:03 | Layout: Fig 1_SLM



LEGEND

- PROPERTY BOUNDARY (APPROXIMATE)
- UST — UNDERGROUND STORAGE TANK
- E — ELECTRICAL LINE
- G — GAS LINE
- SS — SANITARY SEWER LINE
- W — WATER LINE
- C — SBC COMMUNICATION LINE
- CRAWL SPACE SAMPLE
- MONITORING WELL
- SOIL BORING
- SOIL BOREHOLE (APPROXIMATE LOCATION)
- INCOMPLETE BOREHOLE (REFUSAL)
- BOREHOLE (STANTEC, 2017)
- SUB-SLAB PROBE (STANTEC, 2017)
- INDOOR/OUTDOOR AMBIENT AIR SAMPLE (STANTEC, 2017)

Stantec
15575 Los Gatos Blvd, Building C
Los Gatos, CA 95032
PHONE: (408) 356-6124 FAX: (408) 356-6138

FOR:
FORMER CHEVRON-BRANDED SERVICE STATION 90517
3900 PIEDMONT AVENUE
OAKLAND, CALIFORNIA

SITE PLAN

FIGURE: 2

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
211602403	JRO	SS	TLF	05/16/17

FILEPATH:U:\211602403\05_report_deliv\dwgs_design\cad_figures\dwg_211602403_90517_slm_sp_2017.dwg | jopalekopsahl | May 18, 2017 at 13:21 | Layout: fig2_sp_prop

PRIMARY SOURCE	PRIMARY TRANSPORT MECHANISM	SECONDARY SOURCE	SECONDARY TRANSPORT MECHANISM	TERTIARY SOURCE	TERTIARY TRANSPORT MECHANISM	QUATERNARY SOURCE	EXPOSURE ROUTE	POTENTIALLY EXPOSED HUMAN RECEPTORS				
								Future On-Site Commercial / Industrial Worker	Future On-Site Construction Worker	Current or Future Off-Site Commercial / Industrial Worker	Current or Future Off-Site Construction Worker	Current or Future Off-site Resident
Contaminants in Soil	Direct Soil Contact	Surface Soils (0-3 ft bgs)					Ingestion					
							Dermal Contact					
		Excavated Soils (Subsurface to Surface Soils)					Ingestion					
							Dermal Contact					
	Wind or Excavation Activities	Outdoor Air (Particulates)					Inhalation					
	Soil Gas Emission	Indoor Air (Volatiles)					Inhalation					
		Outdoor Air (Volatiles)					Inhalation					
	Infiltration and Percolation by Surface Water (e.g., rain, snow), Leading to Leaching, Solubilization, and Suspension	Groundwater					Ingestion					
							Dermal Contact					
			Volatilization	Air (Volatiles)			Inhalation					
			Surface Discharge	Surface Water			Ingestion					
							Dermal Contact					
					Volatilization	Air (Volatiles)	Inhalation					
					Fish Uptake	Fish	Ingestion					
				Sediments			Ingestion					
							Dermal Contact					
	Stormwater Runoff	Surface Water					Ingestion					
							Dermal Contact					
			Volatilization	Air (Volatiles)			Inhalation					
			Fish Uptake	Fish			Ingestion					
		Sediments					Ingestion					
							Dermal Contact					
Contaminants in Groundwater	Direct Groundwater Contact						Ingestion					
							Dermal Contact					
	Volatilization	Indoor Air (Volatiles)					Inhalation					
		Outdoor Air (Volatiles)					Inhalation					
	Surface Discharge	Surface Water					Ingestion					
							Dermal Contact					
			Volatilization	Air (Volatiles)			Inhalation					
			Fish Uptake	Fish			Ingestion					
		Sediments					Ingestion					

LEGEND

- Exposure pathway is complete or potentially complete.
- Exposure pathway is incomplete.

DATE: 07/17/17
DRAWN BY: EEO
APPROVED BY: TLF

Former Chevron-Branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

FIGURE 3
EXPOSURE PATHWAY FLOW CHART

APPENDIX A
COUNTY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

May 6, 2014

Ms. Carryl MacLeod
Chevron Environmental Management Co.
6101 Bollinger Canyon Road
San Ramon, CA 94583
(sent via electronic mail to CMacleod@chevron.com)

Ms. Leslie Riasanovsky
Unknown Address

Neil & Diane Goodhue
300 Hillside Avenue
Piedmont, CA 94611

Subject: Modified Work Plan Approval; Fuel Leak Case No. RO0000138; Global ID # T0600102248; Chevron #9-0517 / Homestead Federal Savings, 3900 Piedmont Avenue, Oakland CA 94610

Dear Mesdames MacLeod, Riasanovsky, and Mr. & Mrs. Goodhue:

Alameda County Environmental Health Department (ACEH) staff has reviewed the case file, including the *First Quarter 2014 Groundwater Monitoring Report,* and the *Site Conceptual Model and Data Gap Work Plan,* both dated March 21, 2014. The reports were prepared and submitted on your behalf by Stantec Consulting Services Inc. (Stantec). Thank you for submitting the documents.

ACEH has previously evaluated the data and recommendations in case files, and reviewed the site with respect to the State Water Resources Control Board's (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP). Based on ACEH staff review, we determined that the site fails to meet the LTCP General Criteria e (Site Conceptual Model), the Media-Specific Criteria for Groundwater, the Media-Specific Criteria for Vapor Intrusion to Indoor Air, and potentially the Direct Contact and Outdoor Air Exposure Criteria (see Geotracker for a copy of the LTCP checklist). ACEH's determination is based on insufficient data and analysis to support groundwater plume delineation coupled with a lack of knowledge of vicinity water supply well locations and potential other sensitive receptors, lack of understanding of the potential for vapor intrusion into existing onsite buildings, and the lack of sufficient shallow soil samples proximal to a number of the former UST-related structures. The referenced work plan was generated as a result of this LTCP review. For more details please see the directive letter dated December 18, 2013.

Based on ACEH staff review of the work plan addendum the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed field investigation. Submittal of a revised work plan or a work plan addendum is not required unless an alternate scope of work outside that described in the work plan or technical comments below is proposed. We request that you address the following technical comments, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Soil Vapor Data Collection Clarifications –** The referenced vapor work plan proposes a series of actions with which ACEH is in general agreement with; however, ACEH requests several modifications to the approach. Please submit a report by the date specified below.

    a. **Chevron Vapor Sampling Technical Protocols –** Because the Chevron Technical Protocols are proprietary and were not disclosed with the referenced work plan, ACEH requests that a copy be forwarded for review by the date identified below.

b. **Installation Depth of Soil Vapor Wells –** The work plan proposes to install the vapor wells to a depth of 5.5 feet below grade surface (bgs); however, the LTCP states that soil vapor is to be collected at existing buildings five feet below the depth of the foundation. Consequently, ACEH requests that the depth of the vapor wells be modified to ensure this detail is observed. Provided the depth of the foundations (onsite and offsite) can be documented which will justify the depth of well installation in the requested report, further communication of the well depth is not required.

c. **Use of Dry Bentonite in Vapor Wells –** ACEH requests the use of hydrated bentonite in vapor well construction procedures. Recent ACEH experience indicates that the sole use of dry bentonite, and subsequent (insufficient) in-place hydration, can significantly skew vapor data due to generator exhaust gases that can be in the vicinity. ACEH is not opposed to a thin layer of dry bentonite immediately above the well sand interval; however, seeks to clarify that hydrated bentonite above the dry bentonite is the preferred, and requested, well construction method.

d. **Naphthalene Analytical Testing Methods –** Vapor samples are proposed to be analyzed by TO-15 for naphthalene. Please note that Department of Toxic Substance Control (DTSC) documents recommend that TO-17 should be used to confirm TO-15 sampling results (Appendix E, *Active Soil Gas Investigations Advisory,* dated April 30, 2012). In part this appears to be related to lower naphthalene concentrations when Nylaflow tubing is used to sample soil vapor. Therefore ACEH requests that TO-17 be used to confirm naphthalene results by TO-15.

e. **Helium Tracer Shroud Concentrations –** A tracer gas is proposed to be used during vapor sampling, and while analysis for helium in the vapor sample is proposed, proposed analysis for shroud helium concentrations was not found. The referenced DTSC document recommends that shroud concentrations are to be determined in order to determine the magnitude of a leak into the vapor sample concentrations, if any. The document also provides an acceptable leak magnitude (Appendix C).

f. **Not Approved - Contingency Indoor Air Sampling –** A contingency sampling plan for sub-slab, indoor and outdoor air was provided in the referenced work plan. While ACEH is in general agreement with the generalized plan, because indoor sampling locations and a copy of the indoor air pre-sampling survey were not provided, ACEH does not include approval of this scope of work with this letter.

   The work plan proposed conducting a pre-sampling survey 24 hours prior to indoor air and under normal HVAC operations. Because of the potential for consumer products to complicate the interpretation of indoor air vapor samples, ACEH will request a longer advanced warning and interview period. DTSC also recommends (*Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air*, dated October 2011) that the sample duration for indoor air events should be a 24-hour period. In accordance with U.S. EPA Region 9 document (*EPA Region 9 Guidelines and Supplemental Information Needed for Vapor Intrusion Evaluations at the South Bay National Priorities List (NPL) Sites*, December 3, 2013), because HVAC operations can significantly affect sample results, ACEH will request collection of the indoor air vapor samples under worst-case conditions, such as a non-operational HVAC system and with doors and windows closed. Additional 8-hour sampling events can be conducted at that time.

   Should this contingency be required, please submit proposed indoor and outdoor air sampling locations, and a copy of the indoor air pre-sampling survey form to ACEH by the date identified below, as a work plan addendum.

2. **Well Survey –** Principally to clarify, ACEH requests that the proposed well survey utilize both Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA) well databases as they are sufficiently different to warrant review of both.

3. **Sensitive Receptor Survey –** Principally to clarify, and because of the difficulty in defining the length of the groundwater plume downgradient of the site, ACEH has requested that a sensitive receptor

survey be conducted. ACEH requests that the technical justification papers of the LTCP be used to estimate the likely maximum length of the groundwater plume, and determine if sensitive receptors lie within that area. As previously requested this is to include basements or other underground structures and sensitive populations.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **June 6, 2014 –** Chevron Vapor Sampling Technical Protocols (via electronic mail)

- **June 27, 2014 –** Work Plan Addendum (Indoor and Outdoor Sampling Locations and Indoor Air Pre-Sampling Survey Form, if required)
  File to be named: RO138_WP_ADEND_R_yyyy-mm-dd
- **July 25, 2014 –** Subsurface Investigation
  File to be named: RO138_SWI_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website: http://www.acgov.org/aceh/index.htm. If your email address does not appear on the cover page of this notification, ACEH is requesting you provide your email address so that we can correspond with you quickly and efficiently regarding your case.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, o, ou, email, c=US
Date: 2014.05.06 15:19:13 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Travis Flora, Stantec Consulting Services, Inc, 15575 Los Gatos Blvd, Bldg C, Los Gatos, CA 95032 (sent via electronic mail to: Travis.Flora@Stantec.com)

Dilan Roe (sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements/Obligations

REPORT/DATA REQUESTS

These reports/data are being requested pursuant to Division 7 of the California Water Code (Water Quality), Chapter 6.7 of Division 20 of the California Health and Safety Code (Underground Storage of Hazardous Substances), and Chapter 16 of Division 3 of Title 23 of the California Code of Regulations (Underground Storage Tank Regulations).

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (Local Oversight Program [LOP] for unauthorized releases from petroleum Underground Storage Tanks [USTs], and Site Cleanup Program [SCP] for unauthorized releases of non-petroleum hazardous substances) require submission of reports in electronic format pursuant to Chapter 3 of Division 7, Sections 13195 and 13197.5 of the California Water Code, and Chapter 30, Articles 1 and 2, Sections 3890 to 3895 of Division 3 of Title 23 of the California Code of Regulations (23 CCR). Instructions for submission of electronic documents to the ACEH FTP site are provided on the attached "Electronic Report Upload Instructions."

Submission of reports to the ACEH FTP site is in addition to requirements for electronic submittal of information (ESI) to the State Water Resources Control Board's (SWRCB) Geotracker website. In April 2001, the SWRCB adopted 23 CCR, Division 3, Chapter 16, Article 12, Sections 2729 and 2729.1 (Electronic Submission of Laboratory Data for UST Reports). Article 12 required electronic submittal of analytical laboratory data submitted in a report to a regulatory agency (effective September 1, 2001), and surveyed locations (latitude, longitude and elevation) of groundwater monitoring wells (effective January 1, 2002) in Electronic Deliverable Format (EDF) to Geotracker. Article 12 was subsequently repealed in 2004 and replaced with Article 30 (Electronic Submittal of Information) which expanded the ESI requirements to include electronic submittal of any report or data required by a regulatory agency from a cleanup site. The expanded ESI submittal requirements for petroleum UST sites subject to the requirements of 23 CCR, Division, 3, Chapter 16, Article 11, became effective December 16, 2004. All other electronic submittals required pursuant to Chapter 30 became effective January 1, 2005. Please visit the SWRCB website for more information on these requirements: (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 7835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SCP)	**REVISION DATE:** July 25, 2012
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (petroleum UST and SCP) require submission of all reports in electronic form to the county's FTP site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single Portable Document Format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Friday, May 09, 2014 9:45 AM
To: MacLeod, Carryl G; 'Fischer, Alexis N'
Cc: Flora, Travis; Roe, Dilan, Env. Health
Subject: RO138; Chevron 9-0517 / Homestead Federal Savings; Meeting Followup and Report Submittal Extension

Follow Up Flag: Follow up
Flag Status: Flagged

Carryl and Alexis,
Based on the discussions in the meeting held at ACEH on May 8, 2014, ACEH is in agreement that an extension of the submittal of the final report to September 5, 2014 is appropriate. This is expected to allow inclusion of indoor and outdoor air sampling, if required. Should indoor and outdoor air sampling be required, a work plan addendum to refine this scope of work, as discussed in the May 6, 2014 directive letter, would require an extension to August 1, 2014. These dates will be updated in Geotracker shortly.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

Espino, Belinda

From: Flora, Travis
Sent: Wednesday, August 27, 2014 9:21 AM
To: Espino, Belinda
Subject: FW: Chevron 90517, 3900 Piedmont Avenue, Oakland, CA (Case #: RO0000138)

FYI

From: Detterman, Mark, Env. Health [mailto:Mark.Detterman@acgov.org]
Sent: Tuesday, August 26, 2014 16:51
To: Flora, Travis
Cc: MacLeod, Carryl G
Subject: RE: Chevron 90517, 3900 Piedmont Avenue, Oakland, CA (Case #: RO0000138)

Travis,
The two proposed bore locations (B-7 and B-8) are not well located as replacements to VP-6, which was located downgradient (per the rose diagram) of well MW-4. The location of bore B-7 appears appropriate to characterize the downgradient of extent of groundwater from other onsite proposed bores should data generated by them be elevated; however, well MW-4 contains the highest known concentrations at the site. Is it not possible to place a bore outboard of VP-6 in the street by the manhole? If not, another suitable location for a replacement for VP-6 is necessary. Does the building have a crawl space?

Otherwise, ACEH is in agreement with the request for an extension to November 26th due to permitting factors at the city of Oakland. I've updated Geotracker with this revised date until we resolve this issue.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Thursday, August 21, 2014 3:22 PM
To: Detterman, Mark, Env. Health
Cc: MacLeod, Carryl G
Subject: Chevron 90517, 3900 Piedmont Avenue, Oakland, CA (Case #: RO0000138)

Hi Mark,
As requested, a copy of the extension request for RO0138 is attached. This extension request is due to the delays associated with Oakland encroachment permitting. We also discuss the proposed change in scope of work, adding two soil borings in the street in lieu of an off-site vapor probe, because the City will not allow work in the sidewalk.

Regards,

Travis L. Flora
Associate Project Manager
Stantec
15575 Los Gatos Boulevard Building C Los Gatos CA 95032-2569
Phone: (408) 827-3876
Cell: (408) 458-6320
Travis.Flora@stantec.com

Celebrating 60 years of community, creativity, and client relationships.

Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Tuesday, January 20, 2015 16:36
To: Flora, Travis
Cc: 'Coulter, Alexis N'; 'MacLeod, Carryl G'
Subject: RE: Extension Approval; Chevron 90517 (RO138)

Follow Up Flag: Follow up
Flag Status: Flagged

Travis,
I've updated Geotracker with an April 3, 2015 submittal date.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Thursday, January 15, 2015 2:28 PM
To: Detterman, Mark, Env. Health
Cc: 'Coulter, Alexis N'; 'MacLeod, Carryl G'; dehloptoxic, Env. Health
Subject: RE: Extension Approval; Chevron 90517 (RO138)

Hi Mark,
Due to continued Oakland permitting delays, I just submitted the attached extension request to GeoTracker and the ACEH FTP for site RO138.

Regards,

Travis L. Flora
Associate Project Manager
Stantec
15575 Los Gatos Boulevard Building C Los Gatos CA 95032-2569
Phone: (408) 827-3876
Cell: (408) 458-6320
Travis.Flora@stantec.com

From: Detterman, Mark, Env. Health [mailto:Mark.Detterman@acgov.org]
Sent: Friday, November 14, 2014 09:35
To: 'MacLeod, Carryl G'
Cc: Flora, Travis; 'Coulter, Alexis N'
Subject: Extension Approval; Chevron 90517 (RO138)

Please use this email as approval of the requested extension.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Tuesday, March 17, 2015 13:35
To: Flora, Travis
Cc: MacLeod, Carryl G
Subject: RE: RO138 - Chevron 90517 Oakland - Request for Extension

Travis,
Hopefully we'll see some progress shortly! In the mean time, please use this email to document ACEH concurrence with the extension request.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Monday, March 16, 2015 9:20 AM
To: Detterman, Mark, Env. Health; dehloptoxic, Env. Health
Subject: RO138 - Chevron 90517 Oakland - Request for Extension

Hi Mark,
The attached extension request for RO138 was uploaded to GeoTracker.

Regards,

Travis L. Flora
Associate Project Manager
Stantec
15575 Los Gatos Boulevard Building C Los Gatos CA 95032-2569
Phone: (408) 827-3876
Cell: (408) 458-6320
Travis.Flora@stantec.com

Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Monday, July 06, 2015 13:51
To: Flora, Travis; MacLeod, Carryl G
Subject: RE: Chevron 90517; RO138; Extension Request

Follow Up Flag: Follow up
Flag Status: Flagged

Travis,
Please use this email to document ACEH agreement with an extension to October 31, 2015 due to the difficulty in obtaining offsite access prior to field work.
Good luck,

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Friday, June 26, 2015 1:31 PM
To: Detterman, Mark, Env. Health
Cc: dehloptoxic, Env. Health
Subject: RE: Chevron 90517; RO138; Extension Request

Hi Mark,
The attached extension request for Chevron 90517 – RO138 was uploaded to GeoTracker and the ACEH FTP site.

Thanks,

Travis L. Flora
Associate Project Manager
Stantec
15575 Los Gatos Boulevard Building C Los Gatos CA 95032-2569
Phone: (408) 827-3876
Cell: (408) 458-6320
Travis.Flora@stantec.com

Please consider the environment before printing this email.

Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Monday, October 26, 2015 17:22
To: Flora, Travis; 'MacLeod, Carryl G'
Subject: FW: RO0000138 (Chevron 90517) Oakland, Extension Approval
Attachments: RO0000138_CORRES_2015-10-16.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Carryl and Travis,
Please use this email to document ACEH acceptance of the requested extension for the subject site. Please be aware that you will encounter the city of Oakland holiday prohibition on public right of way encroachments between November 1 and January 2, 2016. Good luck with the permitting.

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Espino, Belinda [mailto:Belinda.Espino@stantec.com]
Sent: Friday, October 16, 2015 3:54 PM
To: Detterman, Mark, Env. Health
Cc: Flora, Travis; MacLeod, Carryl G; dehloptoxic, Env. Health
Subject: RO0000138 (Chevron 90517) Oakland,

Hi Mr. Detterman,

The attached extension request for RO0000138 (Chevron 90517) Oakland, CA was uploaded to GeoTracker and the ACEH FTP site.

Thank you,

Belinda Espino
Project Scientist/Wildlife Biologist
Stantec
15575 Los Gatos Boulevard Building C Los Gatos CA 95032-2569
Phone: (408) 827-3529
Cell: (408) 596-0640
belinda.espino@stantec.com

Stantec

Flora, Travis

From: Detterman, Mark, Env. Health <Mark.Detterman@acgov.org>
Sent: Monday, February 01, 2016 10:02
To: Flora, Travis
Cc: 'MacLeod, Carryl G'
Subject: RE: RO0000138_CORRES_2016-01-29
Attachments: RO0000138_CORRES_2016-01-29.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Travis, Carryl,
Per your request, ACEH has extended the due date until April 29th. It will be great to resolve these impediments and determine how the site should move forward.
Regards,

Mark Detterman
Senior Hazardous Materials Specialist, PG, CEG
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
Direct: 510.567.6876
Fax: 510.337.9335
Email: mark.detterman@acgov.org

PDF copies of case files can be downloaded at:

http://www.acgov.org/aceh/lop/ust.htm

From: Flora, Travis [mailto:Travis.Flora@stantec.com]
Sent: Friday, January 29, 2016 5:42 PM
To: Detterman, Mark, Env. Health
Cc: dehloptoxic, Env. Health
Subject: RO0000138_CORRES_2016-01-29

Hi Mark,
Please see attached extension request that was uploaded to GeoTracker and the ACEH FTP site.

Regards,

Travis L. Flora
Associate Project Manager
Stantec
15575 Los Gatos Boulevard Building C Los Gatos CA 95032-2569
Phone: (408) 827-3876
Cell: (408) 458-6320
Travis.Flora@stantec.com

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

April 29, 2016

Neil & Diane Goodhue
300 Hillside Avenue
Piedmont, CA 94611
(Sent via electronic mail to: goodhueproperty@aol.com)
(Sent via electronic mail to: dcgoodhue@aol.com)

Neil & Diane Goodhue
and Edward Plant 3rd,
300 Hillside Avenue
Piedmont, CA 94611

Neil & Diane Goodhue
and Edward Plant 3rd,
Trust and Trustees
19 Mallorca Way
San Francisco, CA 94123
(Sent via electronic mail to: tplant@edwardplantcompany.com)

Subject: **Site Access Request**; Fuel Leak Case No. RO0000138; Global ID # T0600102248; Chevron #9-0517 / Homestead Federal Savings, 3900 Piedmont Avenue, Oakland CA 94610

Dear Mr. and Mrs. Goodhue, and Mr. Plant:

Alameda County Department of Environmental Health (ACDEH) understands that Ms. Carryl MacLeod of the Chevron Environmental Management Company, (CEMC; a Responsible Party for the subject fuel release case) and her consultant, Mr. Travis Flora with Stantec, have requested access to your property at 3900 Piedmont Avenue in Oakland to investigate the extent of residual contamination that has the potential to be of concern to site occupants. This work has been required by ACDEH. It is the understanding of ACDEH that an access agreement has been signed; however, Ms. MacLeod and Mr. Flora have informed ACDEH that the terms of access continue to be elusive. The purpose of this letter is to advise you in your decision to allow access.

In the past when your property was a gasoline service station, a petroleum hydrocarbon release occurred at the property and is known to have contaminated the soil, groundwater, and likely soil vapor beneath the site and vicinity. As a lead responsible party, CEMC is required to investigate the extent of the release(s) and to clean up the contamination to levels that are considered safe. For this reason ACDEH has required the CEMC and their consultant Stantec to investigate the presence of any residual contamination, and they have consequently requested access to undertake the investigation beneath your property.

ACDEH encourages you to work with Ms. MacLeod and Mr. Flora, and agree upon the terms necessary to allow them access to your property. If you or your tenant continue to deny access or do not respond by the date specified below, then this Agency will hold you legally responsible for the investigation required by ACDEH. You will then be required to undertake the investigation at your own expense. Since the costs for such investigations are often high, allowing access is clearly more reasonable.

Please also be aware that it appears our records have not been updated lately, and that the State of California considers all property owners who simply own a contaminated site to be Responsible Parties. Normally these changes are captured near the closure of a case, which this investigation is attempting to move the site towards. However to reflect changes in property ownership, and the apparent reluctance to allow access, ACDEH will shortly update our records and will be issuing you a *Notice of Responsibility* that notifies you of your responsibility to investigate and clean up your properly as a Responsible Party. The CEMC has provided the lead in this effort until now. Please understand that this is a standard procedure required of ACDEH by the state. It is also intended to clarify your legal responsibility.

Please reconsider the request for access and the terms of access to your property and respond to ACDEH within 10 working days from the date of this letter (**April 29, 2016**) with your decision.

Please contact me with any questions you may have at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark Detterman
DN: cn=Mark Detterman, o=ACEH, ou=ACEH, email=mark.detterman@acgov.org, c=US
Date: 2016.04.29 12:11:03 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Ms. Carryl MacLeod, Chevron Environmental Management Co., 6101 Bollinger Canyon Road, San Ramon, CA 94583, (Sent via electronic mail to CMacleod@chevron.com)

Travis Flora, Stantec Consulting Services, Inc, 15575 Los Gatos Blvd, Bldg C, Los Gatos, CA 95032 (Sent via electronic mail to: Travis.Flora@Stantec.com)

Dilan Roe, ACDEH, (Sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman, ACDEH, (Sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**REVISION DATE:** May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

Carryl MacLeod
Project Manager
Marketing Business Unit

Chevron Environmental Management Company
6101 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 790-6506
cmacleod@chevron.com

June 10, 2016

Mr. Mark Detterman
Alameda Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Re: Fuel Leak Case No. RO0000138
Chevron 90517, 3900 Piedmont Ave, Oakland, CA (the "Property")

Dear Mr. Detterman:

This letter is intended to serve as a chronology of events of Chevron Environmental Management Company's ("CEMC") effort to access the Property to conduct environmental work directed by Alameda County Department of Environmental Health ("ACDEH"). As you know, CEMC entered into a Site Access Agreement ("Agreement") with the owners of the Property, Neil & Diane Goodhue Trs & E M Plant 3rd Tr, on December 11, 2006 which granted CEMC access to the Property to perform environmental assessment and monitoring activities.

On January 13, 2016, Stantec, on behalf of CEMC, sent a Notification of Proposed Field Work Activities of ACDEH-directed work to Owner (specifically, Neil and Diane Goodhue, as listed in the "Notices" section of the Agreement) and Owner's tenant, SOL Performance Training (owned by Tammara Moore) ("Tenant") (Attachment A). Both notifications were sent via overnight mail and delivered on January 14, 2016.

After the notifications were sent out and no objections were received from either the Owner or Tenant, Stantec conducted the utility locate activities at all locations on and offsite without incident on January 26, 2016. On February 1, 2016, Stantec began field activities on offsite locations on Piedmont Avenue in front of the Property. On February 2, 2016, Stantec accessed the Property to begin concrete coring at several locations at the back of the onsite building. During this process, Tenant (specifically, Ms. Moore) requested Stantec and its subcontractor to stop work immediately and remove all equipment and personnel from the Property, threatening to call authorities even after it was explained that CEMC had a valid access agreement with the Owner and had provided appropriate notifications to both Owner and Tenant weeks prior.

After being ordered by Ms. Moore to vacate the Property, Stantec and its subcontractor left quickly and notified CEMC. Due to the Ms. Moore's insistence that those performing the work on behalf of CEMC vacate the Property immediately, the subcontractor did not have time to appropriately drum the debris/soil from the concrete coring activities and subsequently left the debris in a bucket on site.

Per the Agreement, Alexis Coulter of CEMC notified Owner's attorney Eric Starr to inform him of the Tenant's refusal of access. Ms. Coulter explained to Mr. Starr that waste was left at the

Property and requested that he inform his client that Stantec needed to return to the Property to complete the agency-directed work and to properly contain the waste left on the Property. Mr. Starr advised Ms. Coulter to call the Owner directly and provided her with Ted Plant's contact information (Mr. Plant owns the Property along with the Goodhues). Ms. Coulter contacted Mr. Plant to inform him of the Tenant's actions and again requested access to return to the Property to complete the work. Mr. Plant directed Ms. Coulter to contact the Tenant directly, which she did. Ms. Coulter spoke with an employee of the Tenant's business who communicated CEMC's desire to return to the Property to properly store the waste to Ms. Moore. Ms. Moore then provided her consent (via her employee) for CEMC to return to the Property to properly store the waste.

The work was then rescheduled for February 22, 2016. On February 3, 2016, CEMC again provided notice of its intent to access the Property via email to Mr. Plant. Additional notification and work schedule was provided to Owner and Tenant on February 15, 2016. In this notification, CEMC also requested that Mr. Plant inform the Tenant of the rescheduled work and to provide confirmation to CEMC prior to February 17th from the Tenant of her acceptance of the new date of access (February 22nd). Beginning on February 3rd, CEMC worked with Mr. Plant and the Tenant to address their numerous concerns about the work, including potential noise, onsite parking, and timing of field activities.

On February 17, 2016, the Tenant identified storage of waste onsite as another concern that she requested be addressed prior to the commencement of any work on the Property. On February 19, 2016, CEMC canceled the February 22, 2016 scheduled work while determining available options to address the Tenant's concern regarding the storage of waste. CEMC notified ACDEH by phone that the work was canceled and that we were working to resolve the issues.

Due to the fact that we would likely generate waste that may potentially be hazardous, we therefore needed to abide by Title 22 California Code of Regulations Section 66262.11 and by Title 40 Code of Federal Regulations Section 262.11 in handling any waste that was generated. As we did not know whether the soil and/or water encountered during the proposed work would be hazardous until it is properly profiled, more time was needed to determine a safe and appropriate handling of the waste prior to being profiled and accepted at a waste disposal facility.

The work was then rescheduled for May 10, 2016. On April 13, 2016, CEMC again provided notice to Mr. Plant of its intended access and assured him that the accommodations requested by his Tenant regarding noise, onsite parking, and timing of the work were properly addressed by CEMC. CEMC again requested confirmation from Mr. Plant that the proposed schedule and accommodations were acceptable to both he and the Tenant.

After hearing nothing from Mr. Plant, CEMC followed up with him on April 22, 2016. Mr. Plant responded, telling CEMC that he gave notice to his Tenant of the proposed schedule but had not heard anything.

On April 22, 2016, Stantec submitted via Geotracker a Request for Extension of Subsurface Investigation Report which provided an update on the delay of completing the work, along with a brief statement that the Tenant had requested that the work conducted on February 2nd be discontinued. Stantec also provided notification to ACDEH of the rescheduled May 10, 2016 start date.

On April 25, 2016, CEMC requested written confirmation from Mr. Plant that the Tenant had accepted the new schedule and accommodations.

On April 28, 2016, due to a lack of response from Mr. Plant, CEMC canceled the work scheduled for May 10th and provided notification to ACDEH that the work was canceled as we did not receive confirmation from either Mr. Plant or the Tenant that the Tenant had agreed to CEMC's planned access to the Property to conduct the work.

On April 29, 2016, ACDEH submitted a Site Access Request to the Owner (Attachment B). ACDEH's letter stated "If you or your tenant continue to deny access or do not respond by the date specified below, then this Agency will hold you legally responsible for the investigation required by ACDEH. You will then be required to undertake the investigation at your own expense".

On May 2, 2016, CEMC received an email from Mr. Plant which included an email he received from the Tenant's employee, Kris Bailey, in which Ms. Bailey asks if CEMC had completed their work. CEMC then rescheduled the work yet again for May 10, 2016 and requested confirmation from Mr. Plant by end of the day that the Tenant understood the work had not occurred but would occur on May10th and that the Tenant would not deny CEMC access to the Property at that time.

On May 3, 2016, CEMC notified ACDEH that the work would need to be rescheduled yet again as no further communication or confirmation was received from either Mr. Plant or the Tenant.

On May 4, 2016, ACDEH regulator Mark Detterman inquired with Mr. Plant by email as to whether there was an update or if ACDEH could "authorize Chevron and their consultants to proceed". Mr. Plant responded, indicating that he, as landlord, had provided notice to the Tenant, but did not receive any authorization from the Tenant allowing the work to proceed.

On May 5, 2016, CEMC canceled the work scheduled for May 10th as no confirmation had been received by the end of May 4th from either the Tenant or Owner as was requested by CEMC. Soon after, CEMC was copied on an email dated May 5, 2016from ACDEH Program Manager Dilan Roe in which she proposed a meeting or conference call between all of the parties to discuss the project. At that time, CEMC noticed that within that email thread was an email from the Tenant's employee Ms. Bailey to Mr. Plant dated May 4, 2016 that confirmed the May 10th 2016 work and schedule, along with several complaints from the Tenant to ACDEH about the scheduled work. Within hours of receiving this new information (the Tenant's confirmation that the work scheduled for May 10th could go forward), CEMC rescheduled the driller, field crew, permit inspector and waste hauler to begin the work on May 10th and notified Mr. Plant, the Tenant, and ACDEH by email that we were set to begin work on May 10th. Soon after, the Tenant responded by email stating that they now had patients scheduled during the time the work was scheduled to occur but that they were open to having a conference call between all of the parties. After receiving this information, I called ACDEH for assistance in proceeding with the work.

On May 6, 2016, I spoke with Mr. Detterman of ACDEH and informed him that the work would be done with hand augers to collect soil samples and install soil vapor probes. The only time the drill rig would be operating on the Property would be on Thursday, May 12, 2016 in the afternoon beginning at 4pm to conduct concrete coring as previously worked out with the Tenant due to their concerns.

On May 6, 2016, Mr. Detterman notified me that he had left a voice message for Tenant's representative, Ms. Bailey.

On May 9, 2016, Stantec picked up the street parking permit and posted No Parking signs along Piedmont Avenue and Montell Street in order to park all work vehicles off-site as requested by the Tenant. CEMC provided notification to Owner, Tenant and ACDEH of the planned work to begin the following morning, May 10th. I then received an update from Mr. Detterman that the Tenant would only permit the work to be performed on a Friday after 1pm. After hearing this news, CEMC notified all parties that the work was canceled and that the drums that were still on site would be removed on May 10th.

On May 10, 2016, Stantec coordinated the removal of the drums that were onsite.

It is CEMC's opinion that every effort was made to coordinate with both Owner and Tenant to conduct the agency-directed work at the Property in accordance with the Agreement. CEMC addressed every concern raised by the Tenant and spent significant time and effort to reschedule the work several times and had to do so with very little assistance from the Owner, despite the owner's obligation to communicate with the Tenant.

Per the ACDEH letter addressed to the Owner dated April 29, 2016, ACDEH stated "this Agency will hold you legally responsible for the investigation required by ACDEH. You will then be required to undertake the investigation at your own expense." Since CEMC was not able to conduct the work due to the Tenant's refusal to grant access (despite the fact that the Agreement between the CEMC and Owner is still in effect), CEMC requests that the property owners be required to complete the agency-directed work

If you have any further questions, please do not hesitate to contact me at (925) 842-3201, or cmacleod@chevron.com.

Sincerely,

Carryl MacLeod

Carryl MacLeod
Project Manager

Attachments

cc
Geotracker
Neil and Diane Goodhue Trust
EM Plant 3rd Trust
Alexis Coulter, CEMC (via email)
Susan Snyder, CEMC (via email)

Attachment

Stantec

January 13, 2016

Attention: **Neil and Diane Goodhue**
300 Hillside Avenue
Piedmont, California 94611-4014

Manager of SOL Performance Training
3900 Piedmont Avenue
Oakland, California 94611

Reference: **Notification of Proposed Fieldwork Activities**
3900 Piedmont Avenue, Oakland, California

Dear Mr. and Ms. Goodhue:

On behalf of Chevron Environmental Management Company (EMC), Stantec Consulting Services Inc. (Stantec) will be accessing your property located at the above-referenced address (the "Property") to perform Agency-directed environmental work. Environmental work will include the installation of soil vapor probes as well as the collection of soil and soil vapor samples.

Stantec and its subcontractors will be on the Property the following dates to complete this work: **January 26, 2016** to perform utility locating activities, and **February 1 - 5, 2016** to perform drilling and sampling activities. The scheduled fieldwork will occur during normal business hours. The equipment used for the work will include utility locating equipment, limited access drill rig, and support vehicles. Traffic control equipment will also be used to establish an exclusion zone to protect workers and the public while the activities are occurring on the Property. Waste generated during the site assessment activities will be stored on site pending pickup and disposal.

Please contact me if you have any questions about this work.

Regards,

Stantec Consulting Services Inc.

Belinda Espino
Project Scientist
408-827-3529
belinda.espino@stantec.com

cc: Carryl MacLeod, EMC – Electronic Copy (cmacleod@chevron.com)
Eric Starr, Esq., 1 California Street, #300, San Francisco, California 94111

Flora, Travis

From: trackingupdates@fedex.com
Sent: Thursday, January 14, 2016 10:58
To: Flora, Travis
Subject: FedEx Shipment 775412570848 Delivered

Your package has been delivered

Tracking # 775412570848

Ship date:
Wed, 1/13/2016

Belinda Espino
Stantec Consulting Services Inc.
Los Gatos, CA 95032
US

Delivered

Delivery date:
Thu, 1/14/2016 10:54 am

Neil and Diane Goodhue
300 Hillside Ave
PIEDMONT, CA 94611
US

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	775412570848
Status:	Delivered: 01/14/2016 10:54 AM Signed for By: Signature not required
Reference:	211602403.711.0201
Signed for by:	Signature not required
Delivery location:	PIEDMONT, CA
Delivered to:	Residence
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
	Residential Delivery

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 12:57 PM CST on 01/14/2016.

To learn more about FedEx Express, please go to fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or go to fedex.com.

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Thank you for your business.

Flora, Travis

From: trackingupdates@fedex.com
Sent: Thursday, January 14, 2016 11:19
To: Flora, Travis
Subject: FedEx Shipment 775412629876 Delivered

Your package has been delivered

Tracking # 775412629876

Ship date:
Wed, 1/13/2016

Belinda Espino
Stantec Consulting Services Inc.
Los Gatos, CA 95032
US

Delivered

Delivery date:
Thu, 1/14/2016 11:14 am

Manager of SOL Performance Training
SOL Performance Training
3900 Piedmont Ave
OAKLAND, CA 94611
US

Shipment Facts

Our records indicate that the following package has been delivered.

Tracking number:	775412629876
Status:	Delivered: 01/14/2016 11:14 AM Signed for By: Signature not required
Reference:	211602403.711.0201
Signed for by:	Signature not required
Delivery location:	OAKLAND, CA
Delivered to:	Residence
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.
Special handling/Services:	Deliver Weekday
	Residential Delivery

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 1:18 PM CST on 01/14/2016.

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Thank you for your business.

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Acting Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

April 29, 2016

Neil & Diane Goodhue
300 Hillside Avenue
Piedmont, CA 94611
(Sent via electronic mail to: goodhueproperty@aol.com)
(Sent via electronic mail to: dcgoodhue@aol.com)

Neil & Diane Goodhue
and Edward Plant 3rd,
300 Hillside Avenue
Piedmont, CA 94611

Neil & Diane Goodhue
and Edward Plant 3rd,
Trust and Trustees
19 Mallorca Way
San Francisco, CA 94123
(Sent via electronic mail to: tplant@edwardplantcompany.com)

Subject: **Site Access Request**; Fuel Leak Case No. RO0000138; Global ID # T0600102248; Chevron #9-0517 / Homestead Federal Savings, 3900 Piedmont Avenue, Oakland CA 94610

Dear Mr. and Mrs. Goodhue, and Mr. Plant:

Alameda County Department of Environmental Health (ACDEH) understands that Ms. Carryl MacLeod of the Chevron Environmental Management Company, (CEMC; a Responsible Party for the subject fuel release case) and her consultant, Mr. Travis Flora with Stantec, have requested access to your property at 3900 Piedmont Avenue in Oakland to investigate the extent of residual contamination that has the potential to be of concern to site occupants. This work has been required by ACDEH. It is the understanding of ACDEH that an access agreement has been signed; however, Ms. MacLeod and Mr. Flora have informed ACDEH that the terms of access continue to be elusive. The purpose of this letter is to advise you in your decision to allow access.

In the past when your property was a gasoline service station, a petroleum hydrocarbon release occurred at the property and is known to have contaminated the soil, groundwater, and likely soil vapor beneath the site and vicinity. As a lead responsible party, CEMC is required to investigate the extent of the release(s) and to clean up the contamination to levels that are considered safe. For this reason ACDEH has required the CEMC and their consultant Stantec to investigate the presence of any residual contamination, and they have consequently requested access to undertake the investigation beneath your property.

ACDEH encourages you to work with Ms. MacLeod and Mr. Flora, and agree upon the terms necessary to allow them access to your property. If you or your tenant continue to deny access or do not respond by the date specified below, then this Agency will hold you legally responsible for the investigation required by ACDEH. You will then be required to undertake the investigation at your own expense. Since the costs for such investigations are often high, allowing access is clearly more reasonable.

Please also be aware that it appears our records have not been updated lately, and that the State of California considers all property owners who simply own a contaminated site to be Responsible Parties. Normally these changes are captured near the closure of a case, which this investigation is attempting to move the site towards. However to reflect changes in property ownership, and the apparent reluctance to allow access, ACDEH will shortly update our records and will be issuing you a *Notice of Responsibility* that notifies you of your responsibility to investigate and clean up your properly as a Responsible Party. The CEMC has provided the lead in this effort until now. Please understand that this is a standard procedure required of ACDEH by the state. It is also intended to clarify your legal responsibility.

Please reconsider the request for access and the terms of access to your property and respond to ACDEH within 10 working days from the date of this letter (**April 29, 2016**) with your decision.

Please contact me with any questions you may have at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark Detterman
DN: cn=Mark Detterman, o=ACEH, ou=ACEH, email=mark.detterman@acgov.org, c=US
Date: 2016.04.29 12:11:03 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations
Electronic Report Upload (ftp) Instructions

cc: Ms. Carryl MacLeod, Chevron Environmental Management Co., 6101 Bollinger Canyon Road, San Ramon, CA 94583, (Sent via electronic mail to CMacleod@chevron.com)

Travis Flora, Stantec Consulting Services, Inc, 15575 Los Gatos Blvd, Bldg C, Los Gatos, CA 95032 (Sent via electronic mail to: Travis.Flora@Stantec.com)

Dilan Roe, ACDEH, (Sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman, ACDEH, (Sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker

Attachment 1

Responsible Party(ies) Legal Requirements / Obligations

REPORT REQUESTS

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) GeoTracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the GeoTracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in GeoTracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.waterboards.ca.gov/water_issues/programs/ust/electronic_submittal/).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**REVISION DATE:** May 15, 2014
	ISSUE DATE: July 5, 2005
	PREVIOUS REVISIONS: October 31, 2005; December 16, 2005; March 27, 2009; July 8, 2010, July 25, 2010
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- **Please do not submit reports as attachments to electronic mail.**
- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- **Signature pages and perjury statements must be included and have either original or electronic signature.**
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:

  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Submission Instructions

1) Obtain User Name and Password
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to deh.loptoxic@acgov.org
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape, Safari, and Firefox browsers will not open the FTP site as they are NOT being supported at this time.
   b) Click on Page located on the Command bar on upper right side of window, and then scroll down to Open FTP Site in Windows Explorer.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to deh.loptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO#, use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

APPENDIX B
HISTORICAL SOIL AND GROUNDWATER DATA TABLES

Table 1
Well Details / Screen Interval Assessment
First Quarter 2017
Former Chevron-Branded Service Station 90517
3900 Piedmont Avenue, Oakland, California

Well ID	Date Installed	Well Type	Casing Diameter (inches)	Top of Casing (feet above msl)	Construction Well Depth (feet bgs)	Current Well Depth[1] (feet below TOC)	Current Depth to Groundwater[1] (feet below TOC)	Screen Interval (feet bgs)	Screen Interval Assessment
MW-1	07/21/98	Monitoring	2	87.89	16.50	16.61	5.44	3.5-16.5	Depth-to-groundwater within screen interval.
MW-2	07/21/98	Monitoring	2	86.09	16.50	16.55	5.08	3.5-16.5	Depth-to-groundwater within screen interval.
MW-3	07/21/98	Monitoring	2	86.28	17.50	17.70	6.18	4.5-17.5	Depth-to-groundwater within screen interval.
MW-4	07/21/98	Monitoring	2	87.22	16.50	16.25	7.48	3.5-16.5	Depth-to-groundwater within screen interval.

Notes:
bgs = below ground surface
msl = mean sea level
TOC = top of casing
[1] = As measured on February 27, 2017.

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)
MW-1													
08/03/98	87.89	12.43	75.46	--	--		--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	87.89	9.05	78.84	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	87.89	6.50	81.39	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	87.89	7.13	80.76	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	87.89	9.15	78.74	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	87.89	9.54	78.35	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	87.89	5.90	81.99	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00[3]	87.89	7.05	80.84	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/31/00	87.89	8.40	79.49	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	87.89	8.65	79.24	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.50	<2.50
02/27/01	87.89	5.83	82.06	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
05/15/01	87.89	7.71	80.18	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
08/23/01	87.89	DRY	--	--	--	--	--	--	--	--	--	--	--
02/25/02	87.89	6.71	81.18	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	87.89	8.89	79.00	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	87.89	7.36	80.53	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03[5]	87.89	9.47	78.42	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04[5]	87.89	6.30	81.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	87.89	10.12	77.77	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05[5]	87.89	6.79	81.10	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05[5]	87.89	8.89	79.00	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06[5]	87.89	6.65	81.24	--	--	--	--	<50	1	<0.5	<0.5	<0.5	<0.5
08/02/06[5]	87.89	7.73	80.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07[5]	87.89	7.77	80.12	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07[5]	87.89	9.59	78.30	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08[5]	87.89	7.41	80.48	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08[5]	87.89	9.78	78.11	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09[5]	87.89	5.61	82.28	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09	87.89	10.22	77.67	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/29/10	87.89	6.04	81.85	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
08/11/10	87.89	8.35	79.54	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/02/11	87.89	6.54	81.35	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/31/12	INACCESSIBLE		--	--	--	--	--	--	--	--	--	--	--
05/10/12[5]	87.89	7.28	80.61	2,800[6]/ 1,300[6,7,8]	2,800[6]/ 1,300[6,7,8]	--	1,400/ 720[7,8]	<50	<0.5	<0.5	<0.5	<1	<0.5
02/09/13[5]	87.89	7.47	80.42	1,400[6]/ 700[6,7,8]	1,400[6]/ 700[6,7,8]	1,600/ 2,400[7]	650/ 220[7,8]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14[5]	87.89	8.68	79.21	2,400[6]	2,400[6]	<1,400/ <1,400[7]	1,100/ 570[7,8]	<50	<0.5	<0.5	<0.5	<0.5	<2

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)
MW-1 (cont)													
02/04/15[5]	87.89	7.98	79.91	71[6,7,8]	71[6,7,8]	--	360[7,8]	<50	<0.5	<0.5	<0.5	0.6	<0.5
01/14/16[5]	87.89	8.35	79.54	520[6]	520[6]	--	400[7,8]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/27/17[5]	**87.89**	**5.44**	**82.45**	**600[6]**	**600[6]**	**--**	**<50[7,8]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-2													
08/03/98	86.09	11.34	74.75	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	3.4
11/23/98	86.09	6.90	79.19	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	86.09	5.23	80.86	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.09	6.12	79.97	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	86.09	6.41	79.68	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	86.09	7.29	78.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	86.09	4.49	81.60	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	86.09	5.90	80.19	--	--	--	--	4,000[3]	240	26	100	76	<100
07/31/00	86.09	6.58	79.51	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	86.09	6.23	79.86	--	--	--	--	<51	<0.50	2.92	<0.50	1.88	4.89
02/27/01	86.09	4.60	81.49	--	--	--	--	<52	<0.50	<0.50	<0.50	<0.50	<2.50
05/15/01	86.09	6.3	79.79	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
08/23/01	86.09	7.28	78.81	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
02/25/02	86.09	5.61	80.48	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	86.09	7.10	78.99	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	86.09	7.45	78.64	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03[5]	86.09	7.65	78.44	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04[5]	86.09	4.85	81.24	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	86.09	8.23	77.86	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05[5]	86.09	5.93	80.16	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05[5]	86.09	7.59	78.50	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06[5]	86.09	5.73	80.36	--	--	--	--	<50	0.6	<0.5	<0.5	<0.5	<0.5
08/02/06[5]	86.09	6.95	79.14	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07[5]	86.09	6.29	79.80	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07[5]	86.09	7.40	78.69	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08[5]	86.09	6.47	79.62	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/12/08[5]	86.09	7.08	79.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09[5]	86.09	6.50	79.59	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09	86.09	8.51	77.58	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/29/10	86.09	6.29	79.80	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
08/11/10	86.09	7.20	78.89	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/02/11	86.09	6.87	79.22	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/31/12	86.09	6.81	79.28	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--

Table 2
Groundwater Monitoring Data and Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TOTAL TPH (µg/L)	TPH-MO (µg/L)	O&G (µg/L)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MtBE (µg/L)
MW-2 (cont)													
02/09/13	86.09	5.80	80.29	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/24/14	86.09	6.95	79.14	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/04/15	86.09	5.59	80.50	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
01/14/16	86.09	5.40	80.69	NOT PART OF GROUNDWATER SAMPLING PROGRAM					--	--	--	--	--
02/27/17	**86.09**	**5.08**	**81.01**	**NOT PART OF GROUNDWATER SAMPLING PROGRAM**					**--**	**--**	**--**	**--**	**--**
MW-3													
08/03/98	86.28	12.08	74.20	--	--	--	--	4,000	160	<5.0	<5.0	73	180
11/23/98	86.28	7.69	78.59	--	--	--	--	4,000	67.7	7.56	17.1	24.5	41.2
02/08/99	86.28	6.27	80.01	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	86.28	6.96	79.32	--	--	--	--	1,800	53.6	8.96	33	18.6	21.4
08/23/99	86.28	7.92	78.36	--	--	--	--	3,970	155	24	88.8	39.8	185
11/03/99	86.28	7.92	78.36	--	--	--	--	3,320	108	19.9	98.4	44.8	<25
02/15/00	86.28	5.74	80.54	--	--	--	--	779	26.7	3.82	15.4	4.24	<12.5
05/12/00	86.28	6.76	79.52	--	--	--	--	12,000[3]	3,100	120	980	1,400	820
07/31/00	86.28	7.30	78.98	--	--	--	--	1,200[3]	32	<5.0	11	7.3	39
10/30/00	86.28	7.02	79.26	--	--	--	--	3,300[4]	119	<5.00	40	<15.0	<25.0
02/27/01	86.28	5.89	80.39	--	--	--	--	432[3]	15.5	1.53	14.9	1.06	15.7
05/15/01	86.28	7.07	79.21	--	--	--	--	3,220[3]	96.4	12.6	11.5	11.6	128
08/23/01	86.28	8.05	78.23	--	--	--	--	2,300	48	<10	<10	<10	100
02/25/02	86.28	6.73	79.55	--	--	--	--	3,100	27	2.1	4.8	6.6	<2.5
08/05/02	86.28	7.95	78.33	--	--	--	--	4,100	87	21	90	47	21
02/11/03	86.28	7.05	79.23	--	--	--	--	3,700	21	2.3	4.4	9	<20
08/09/03[5]	86.28	8.23	78.05	--	--	--	--	1,600	12	1	2	4	0.7
02/25/04[5]	86.28	5.85	80.43	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	86.28	9.05	77.23	--	--	--	--	3,000	21	3	3	9	<0.5
02/11/05[5]	86.28	7.02	79.26	--	--	--	--	540	15	1	<0.5	0.8	<0.5
08/15/05[5]	86.28	8.41	77.87	--	--	--	--	2,600	11	1	1	2	<0.5
02/10/06[5]	86.28	6.93	79.35	--	--	--	--	970	20	2	<0.5	3	<0.5
08/02/06[5]	86.28	8.00	78.28	--	--	--	--	1,000	16	1	<0.5	3	<0.5
02/09/07[5]	86.28	7.33	78.95	--	--	--	--	590	3	<0.5	<0.5	0.5	<0.5
08/23/07[5]	86.28	8.83	77.45	--	--	--	--	2,700	18	4	2	8	<0.5
02/18/08[5]	86.28	7.27	79.01	--	--	--	--	1,300	8	1	0.6	1	<0.5
08/12/08[5]	86.28	9.58	76.70	--	--	--	--	2,000	21	3	1	4	<0.5
02/19/09[5]	86.28	6.76	79.52	--	--	--	--	810	<0.5	<0.5	<0.5	1	<0.5
08/07/09[5]	86.28	9.17	77.11	--	--	--	--	900	4	0.9	3	3	<0.5
01/29/10[5]	86.28	6.57	79.71	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/11/10[5]	86.28	8.61	77.67	--	--	--	--	1,800	9	2	6	5	<0.5

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MW-3 (cont)													
2/2/2011[5]	86.28	7.16	79.12	--	--	--	--	97	<0.5	<0.5	<0.5	<0.5	<0.5
01/31/12[5]	86.28	7.67	78.61	--	--	--	--	720	0.9	<0.5	<0.5	0.9	<0.5
02/09/13[5]	86.28	6.87	79.41	86[6]/ <41[6,7,8]	86[6]/ <41[6,7,8]	<1,400/ 2,400[7]	120/ <50[7,8]	75	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14[5]	86.28	7.11	79.17	<40[6]	<40[6]	1,500/ <1,400[7]	<50/ <50[7,8]	<50	<0.5	<0.5	<0.5	<0.5	<2
02/04/15[5]	86.28	6.78	79.50	<38[6,7,8]	<38[6,7,8]	--	<50[7,8]	84	0.8	<0.5	<0.5	0.7	<0.5
01/14/16[5]	86.28	7.06	79.22	81[6]	81[6]	--	55[7,8]	400	0.7	<0.5	<0.5	0.6	<0.5
02/27/17[5]	**86.28**	**6.18**	**80.10**	**<40[6]**	**<40[6]**	**--**	**<50[7,8]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-4													
08/03/98	87.22	12.92	74.30	--	--	--	--	1,900	110	12	<0.5	55	130
11/23/98	87.22	9.40	77.82	--	--	--	--	4,080	136	17.8	37.2	30.1	51.8
02/08/99[1]	87.22	7.82	79.40	--	--	--	--	2,900	150	16	<5.0	15	230/30.7[2]
05/07/99	87.22	7.42	79.80	--	--	--	--	6,050	161	<25	39.8	36.9	<250/30.2[2]
08/23/99	87.22	9.39	77.83	--	--	--	--	3,930	203	37.6	58.6	42.2	255
11/03/99	87.22	9.81	77.41	--	--	--	--	5,350	324	44.7	91.5	56.1	<50
02/15/00	87.22	7.72	79.50	--	--	--	--	4,080	161	27.7	31.1	39.1	73.9
05/12/00	87.22	7.91	79.31	--	--	--	--	3,600[3]	170	27	49	64	170
07/31/00	87.22	8.65	78.57	--	--	--	--	2,900[3]	160	20	15	56	170
10/30/00	87.22	9.08	78.14	--	--	--	--	5,630[4]	301	17.8	11.8	51.5	<25.0
02/27/01	87.22	7.30	79.92	--	--	--	--	2,140[3]	95.1	12.8	53.4	43.0	235
05/15/01	87.22	8.15	79.07	--	--	--	--	4,580[3]	200	44.1	46.3	51.7	172
08/23/01	87.22	9.33	77.89	--	--	--	--	2,700	250	44	21	72	130
02/25/02	87.22	7.80	79.42	--	--	--	--	4,100	100	18	27	39	<10
08/05/02	87.22	7.10	80.12	--	--	--	--	4,100	130	18	50	20	<10
02/11/03	87.22	8.12	79.10	--	--	--	--	4,100	100	23	20	51	<50
08/09/03[5]	87.22	9.55	77.67	--	--	--	--	3,700	110	24	10	45	8
02/25/04[5]	87.22	8.06	79.16	--	--	--	--	5,400	94	28	34	49	5
08/23/04[5]	87.22	10.19	77.03	--	--	--	--	5,100	100	26	7	43	5
02/11/05[5]	87.22	7.97	79.25	--	--	--	--	3,900	58	16	25	16	2
08/15/05[5]	87.22	8.82	78.40	--	--	--	--	2,400	76	16	11	26	3
02/10/06[5]	87.22	7.81	79.41	--	--	--	--	1,600	68	16	8	27	4
08/10/06[5]	87.22	8.58	78.64	--	--	--	--	2,500	100	19	5	30	3
02/09/07[5]	87.22	8.71	78.51	--	--	--	--	6,200	200	39	16	52	3
08/23/07[5]	87.22	10.38	76.84	--	--	--	--	5,800	190	48	20	61	3
02/18/08[5]	87.22	8.11	79.11	--	--	--	--	4,900	110	24	11	32	2
08/12/08[5]	87.22	10.58	76.64	--	--	--	--	6,100	180	31	9	52	3
02/19/09[5]	87.22	7.72	79.50	--	--	--	--	2,900	84	20	5	24	2
08/07/09[5]	87.22	10.42	76.80	--	--	--	--	4,900	120	34	11	36	2

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Oakland, California

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MW-4 (cont)													
01/29/10[5]	87.22	8.02	79.20	--	--	--	--	3,800	49	15	4	17	1
08/11/10[5]	87.22	10.19	77.03	--	--	--	--	5,400	110	36	11	36	1
2/2/2011[5]	87.22	8.65	78.57	--	--	--	--	3,800	76	29	16	31	1
01/31/12[5]	87.22	9.24	77.98	--	--	--	--	6,700	110	32	7	34	1
02/09/13[5]	87.22	8.14	79.08	300[6,9]/ <40[6,7]	300[6,9]/ <40[6,7]	<1,400/ 1,900[7]	2,300/ 1,500[7,8]	1,800	77	17	4	10	0.8
02/24/14[5]	87.22	9.50	77.72	92[6]	92[6]	<1,400/ <1,400[7]	1,200/ 720[7,8]	6,000	80	29	9	30	<2
02/04/15[5]	87.22	8.60	78.62	<38[6,7,8]	<38[6,7,8]	--	290[7,8]	2,300	43	15	5	11	<0.5
01/14/16[5]	87.22	9.30	77.92	150[6]	150[6]	--	540[7,8]	4,300	27	12	3	10	<3
02/27/17[5]	**87.22**	**7.48**	**79.74**	**66[6]**	**66[6]**	**--**	**190[7,8]**	**2,400**	**33**	**14**	**4**	**11**	**<0.5**
TRIP BLANK													
08/03/98	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/23/98	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.0
02/08/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
05/07/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
08/23/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
11/03/99	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2.5
02/15/00	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0
05/12/00	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/31/00	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/30/00	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.50	<2.50
02/27/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
05/15/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.50
08/23/01	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA													
02/25/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/05/02	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
02/11/03	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
08/09/03[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/25/04[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/04[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/11/05[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/15/05[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/10/06[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/02/06[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/07[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/23/07[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/18/08[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5

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QA (cont)													
08/12/08[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/19/09[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
08/07/09[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/13[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<2
02/04/15[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/14/16[5]	--	--	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
02/27/17[5]	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

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EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to May 12, 2000 were compiled from reports prepared by Blaine Tech Services, Inc.
Groundwater monitoring data and laboratory analytical results from May 12, 2000 to May 12, 2012 were provided by Gettler-Ryan Inc.
Current groundwater monitoring data was provided by Gettler-Ryan Inc. Current laboratory analytical results were provided by Eurofins Lancaster Laboratories.

TOC = Top of Casing
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Mean sea level
DTW = Depth to Water
TPH = Total Petroleum Hydrocarbons
DRO = Diesel Range Organics
MO = Motor Oil
GRO = Gasoline Range Organics
O&G = Oil and Grease (n-Hexane Extractable Material)
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes (sum of m+p and o)
MtBE = Methyl tertiary-butyl ether
(µg/L) = Micrograms per liter
-- = Not Measured/Not Analyzed
QA = Quality Assurance/Trip Blank

* TOC elevations are referenced to msl.

[1] Chromatogram pattern indicates gas and an unidentified hydrocarbon.

[2] Confirmation run.

[3] Laboratory report indicates gasoline C_6-C_{12}.

[4] Laboratory report indicates hydrocarbon pattern present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

[5] BTEX and MtBE by EPA Method 8260.

[6] TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C_8 (n-octane) through C_{40} (n-tetracontane) normal hydrocarbons.

[7] Analyzed with silica gel cleanup.

[8] Laboratory report indicates the reverse surrogate, capric acid, is present at <1%.

[9] Laboratory report indicates the surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.

Table 3
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	ETHANOL (µg/L)	TBA (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	1,2-DBA (µg/L)
MW-1							
05/10/12	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
02/09/13	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14	<500	<100	<2	<2	<2	<2	<2
02/04/15	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-3							
02/09/13	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14	<500	<100	<2	<2	<2	<2	<2
02/04/15	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5
MW-4							
02/09/13	<50	5	<0.5	<0.5	<0.5	<0.5	<0.5
02/24/14	<500	<100	<2	<2	<2	<2	<2
02/04/15	<50	<5	<0.5	<0.5	<0.5	<0.5	<0.5

Table 3
Groundwater Analytical Results - Oxygenate Compounds
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results on May 12, 2012 were provided by Gettler-Ryan Inc.
Current groundwater monitoring data was provided by Gettler-Ryan Inc. Current laboratory analytical results were provided by Eurofins Lancaster Laboratories.

TBA = Tertiary-Butyl Alcohol
DIPE = Di-Isopropyl Ether
EtBE = Ethyl Tertiary-Butyl Ether
TAME = Tertiary-Amyl Methyl Ether
1,2-DCA = 1,2-Dichloroethane
1,2-DBA = 1,2-Dibromoethane
(µg/L) = Micrograms per liter

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 4
Groundwater Analytical Results - PPL Volatiles
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	Acetone (µg/L)	2-Butanone (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)	2-Chlorotoluene (µg/L)	Isopropyl-benzene (µg/L)	p-Isopropyl-toluene (µg/L)	Naphth-alene (µg/L)	n-Propyl-benzene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	Diethylphthalate (µg/L)
MW-1											
05/10/12	<6	<3	<1	<1	<1	<1	<1	7	<1	<1	2
02/09/13	<6	<3	<1	<1	<1	<1	<1	<1	<1	<1	--
02/24/14	<6	<3	<1	<1	<1	<2	<1	<2	<1	<1	--
02/04/15	<6	<3	<1	<1	<1	<1	<1	<1	<1	<1	--
01/14/16	--	--	--	--	--	--	--	<1	--	--	--
02/27/17	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**<1**	**--**	**--**	**--**
MW-3											
02/09/13	<6	<3	<1	<1	<1	<1	<1	<1	<1	<1	--
02/24/14	<6	<3	<1	<1	<1	<2	<1	<2	<1	<1	--
02/04/15	<6	<3	<1	<1	<1	1	<1	<1	2	<1	--
01/14/16	--	--	--	--	--	--	--	<1	--	--	--
02/27/17	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**<1**	**--**	**--**	**--**
MW-4											
02/09/13	13	5	<1	1	<1	14	1	<1	7	<1	--
02/24/14	20	<3	5	7	2	44	7	<2	35	2	--
02/04/15[1]	12	<3	2	4	<1	24	2	1	18	<1	--
01/14/16	--	--	--	--	--	--	--	<5	--	--	--
02/27/17	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**1**	**--**	**--**	**--**

Table 4
Groundwater Analytical Results - PPL Volatiles
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results on May 12, 2012 were provided by Gettler-Ryan Inc.
Current groundwater monitoring data was provided by Gettler-Ryan Inc. and current laboratory analytical results were provided by Eurofins Lancaster Laboratories.

Only constituents with currently or historically detected concentrations are shown. Complete analytical results for the current monitoring period can be found in Attachment B.

(µg/L) **=** Micrograms per liter
PPL = priority pollutant list
-- = Not Measured/Not Analyzed

[1] Laboratory report indicates the LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC standards. The following analytes are accepted based on this allowance: Acetone.

Table 5
Groundwater Analytical Results - Metals
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	Cadmium (µg/L)	Chromium (µg/L)	Lead (µg/L)	Nickel (µg/L)	Zinc (µg/L)
MW-1					
05/10/12	<0.27	153	92.3	195	154
02/09/13	<0.36	37.7	5.4	42.0	36.1
02/24/14	<0.76	38.7	<4.7	49.8	39.3
02/04/15	<0.33	9.8	<4.7	10.7	18.7
01/14/16	<0.64	5.5	<5.1	15.8	13.9
02/27/17	**<0.49**	**<1.8**	**<6.2**	**<2.8**	**<5.4**
MW-3					
02/09/13	<0.36	34.6	8.4	40.6	52.1
02/24/14	<0.76	30.3	6.0	38.3	41.6
02/04/15	<0.33	5.7	<4.7	12.9	12.7
01/14/16	<0.64	5.2	5.1	10.3	30.4
02/27/17	**<0.49**	**<1.8**	**<6.2**	**3.6**	**7.3**
MW-4					
02/09/13	0.49	54.7	17.5	145	664
02/24/14	<0.76	22.5	<4.7	57.6	69.9
02/04/15	<0.33	8.8	<4.7	55.1	47.2
01/14/16	<0.64	13.6	<5.1	129	55.4
02/27/17	**<0.49**	**<1.8**	**<6.2**	**<2.8**	**<5.4**

EXPLANATIONS:

(µg/L) = Micrograms per liter

ANALYTICAL METHOD:

Metals by EPA Method 6010B

Table 6
Groundwater Analytical Results - PCBs
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

WELL ID/ DATE	PCB- 1016 (µg/L)	PCB- 1221 (µg/L)	PCB- 1232 (µg/L)	PCB- 1242 (µg/L)	PCB- 1248 (µg/L)	PCB- 1254 (µg/L)	PCB- 1260 (µg/L)
MW-1							
05/10/12	<0.095	<0.05	<0.19	<0.095	<0.095	<0.095	<0.14

EXPLANATIONS:

(µg/L) = Micrograms per liter
PCB = Polychlorinated Biphenyl

ANALYTICAL METHOD:

PCBs by EPA Method 8082

Table 7
Grab Groundwater Sample Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

Borehole/ Sample ID	Sample Depth (feet bgs)	Date Collected	TPH-GRO (µg/L)	TRPH (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MtBE (µg/L)	DIPE (µg/L)	EtBE (µg/L)	TAME (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	1,2-DBA (µg/L)	VOCs (µg/L)
FNBO-6	16	10/21/1993	**7,800**	**2,800**	**7.7**	**21**	**260**	**260**	--	--	--	--	--	<0.5	--	ND[1]
SB-2	18	7/28/2008	**540**	--	<0.5	<0.5	<0.5	<0.5	**1**	<0.5	<0.5	<0.5	<2	<0.5	<0.5	--
Environmental Screening Levels [2]			**100**	**100**	**1.0**	**40**	**30**	**20**	**5**	**NS**	**NS**	**NS**	**12**	**0.5**	**0.05**	**NS**

Notes:

(1) VOCs were not detected above laboratory reporting limits except for acetone (30 µg/L) and carbon disulfide (33 µg/L). The acetone concentration is below the groundwater environmental screening level of 1,500 µg/L and there is no environmental screening level for carbon disulfide.

(2) California Regional Water Quality Control Board, San Francisco Bay Region, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater* , Interim Final - December 2013.

Bold text denotes detected concentrations. **Bold/blue** text denotes detected concentrations above Environmental Screening Levels for Commercial Land Use.

Abbreviations:

feet bgs = feet below ground surface
µg/L = micrograms per liter
TPH-GRO = total petroleum hydrocarbons as gasoline range organics
TRPH = total recoverable petroleum hydrocarbons
MtBE = methyl *tertiary* -butyl ether
DIPE = di-isopropyl ether
EtBE = ethyl *tertiary* -butyl ether
TAME = *tertiary* -amyl methyl ether
TBA = *tertiary* -butyl alcohol
1,2-DCA = 1,2-dichloroethane
1,2-DBA = 1,2-dibromoethane
VOCs = volatile organic compounds
-- = not analyzed
ND = not detected above laboratory reporting limit
NS = no standard

Table 8
Soil Sample Analytical Results
Former Chevron-branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

Borehole/ Sample ID	Sample Depth (feet bgs)	Date Collected	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TRPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MtBE (mg/kg)	DIPE (mg/kg)	EtBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	1,2-DCA (mg/kg)	1,2-DBA (mg/kg)	VOCs (mg/kg)
FNBO-1	10.5	10/20/1993	**1.9**	<5.0	**350**	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	<0.005	--	ND
FNBO-2	10	10/20/1993	<1.0	<5.0	**86**	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	<0.005	--	ND
FNBO-3	10.5	10/20/1993	<1.0	<5.0	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	<0.005	<0.005	--
FNBO-4	6	10/20/1993	**1.4**	<5.0	**320**	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	<0.005	--	ND
FNBO-5	6	10/21/1993	**3,400**	<500	--	<0.5	<0.5	**19.0**	**7.5**	--	--	--	--	--	<0.5	<0.5	--
FNBO-5	10	10/21/1993	**15.0**	<5.0	**160**	**0.03**	<0.005	**0.31**	**0.12**	--	--	--	--	--	<0.005	--	ND
FNBO-6	5.5	10/21/1993	**5.0**	<10	--	<0.02	<0.02	<0.02	<0.02	--	--	--	--	--	<0.02	<0.02	--
FNBO-6	10	10/21/1993	**3.6**	<5.0	**10.0**	<0.005	<0.005	**0.034**	**0.041**	--	--	--	--	--	<0.005	--	ND
FNBO-7	6	10/21/1993	**350**	<400	--	<0.40	<0.40	<0.40	<0.40	--	--	--	--	--	<0.4	<0.4	--
FNBO-7	11	10/21/1993	**400**	<500	--	**1.0**	**1.5**	**5.0**	**13.0**	--	--	--	--	--	<0.5	<0.5	--
FNBO-8	11	10/21/1993	<1.0	<5.0	--	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	<0.005	<0.005	--
MW-1	6	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-1	11	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-1	16	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-2	6	7/21/1998	<1.0	--	--	**0.0070**	<0.0050	**0.010**	**0.0090**	<0.025	--	--	--	--	--	--	--
MW-2	11	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-2	16	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-3	6	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-3	10.5	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-3	16	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-4	6	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
MW-4	11	7/21/1998	**80**	--	--	**2.0**	**1.7**	**4.7**	**5.8**	<0.25	--	--	--	--	--	--	--
MW-4	16	7/21/1998	<1.0	--	--	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	--	--	--	--	--	--	--
SB-2	5	7/28/2008	<1.0	--	--	<0.0005	<0.0009	<0.0009	<0.0009	<0.0005	<0.0009	<0.0009	<0.0009	<0.019	<0.0009	<0.0009	--
SB-2	10	7/28/2008	<1.0	--	--	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.019	<0.001	<0.001	--
SB-2	15	7/28/2008	<1.0	--	--	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.019	<0.001	<0.001	--
SB-2	20	7/28/2008	<1.0	--	--	<0.0005	<0.001	<0.001	<0.001	<0.0005	<0.001	<0.001	<0.001	<0.020	<0.001	<0.001	--
ESLs - Shallow Soil [1],[2]			**500**	**110**	**500**	**0.44**	**2.9**	**3.3**	**2.3**	**0.023**	**NS**	**NS**	**NS**	**0.075**	**0.00033**	**1.1**	**NS**
ESLs - Deep Soil [1],[2]			**500**	**110**	**500**	**0.44**	**2.9**	**3.3**	**2.3**	**0.023**	**NS**	**NS**	**NS**	**0.075**	**0.00033**	**1.1**	**NS**

Notes:

(1) California Regional Water Quality Control Board, San Francisco Bay Region, *Screening For Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Interim Final - December 2013

(2) Shallow soil refers to soil above 9.84 feet bgs and deep soil refers to soil below 9.84 feet bgs.

Bold text denotes detected concentrations. **Bold/blue** text denotes detected concentrations above Environmental Screening Levels for Commercial Land Use.

Abbreviations:

feet bgs = feet below ground surface
mg/kg = milligrams per kilogram
TPH-GRO = total petroleum hydrocarbons as gasoline range organics
TPH-DRO = total petroleum hydrocarbons as diesel range organics
TRPH = total recoverable petroleum hydrocarbons
MtBE = methyl *tertiary* -butyl ether
DIPE = di-isopropyl ether
EtBE = ethyl *tertiary* -butyl ether
TAME = *tertiary* -amyl methyl ether
TBA = *tertiary* -butyl alcohol
1,2-DCA = 1,2-dichloroethane
1,2-DBA = 1,2-dibromoethane
VOCs = volatile organic compounds
-- = not analyzed
ND = not detected above laboratory reporting limit
NS = no standard

TABLE 9
HISTORICAL GROUNDWATER GRADIENT DATA

Former Chevron-Branded Service Station 90517
3900 Piedmont Avenue
Oakland, California

Monitoring Date	Groundwater Gradient (feet/foot)
08/03/98	0.0075
11/23/98	0.02
02/08/99	0.02
05/07/99	0.02
08/23/99	0.02
11/03/99	0.01
02/15/00	0.02
05/12/00	0.02
07/31/00	0.01
10/30/00	0.02
02/27/01	0.02
05/15/01	0.01
08/23/01	0.01
02/25/02	0.02
08/05/02	0.04
02/11/03	0.02
08/09/03	0.009
02/25/04	0.025
08/23/04	0.01
02/11/05	0.02
08/15/05	0.01
02/10/06	0.02
08/02/06	0.02
02/09/07	0.02
08/23/07	0.02
02/18/08	0.02
08/12/08	0.035
02/19/09	0.03
08/07/09	0.01
01/29/10	0.03
08/11/10	0.025
02/02/11	0.03
01/31/12	0.02
05/10/12	0.02
02/09/13	0.0145
Average =	0.019

APPENDIX C
SOIL BORING LOGS

PROJECT: **Chevron 90517** PAGE 1 OF 1
LOCATION: **3900 Piedmont Ave Oakland**
PROJECT NUMBER: **211602403**

WELL / PROBEHOLE / BOREHOLE NO: **B-2**

Stantec

DRILLING / INSTALLATION:
STARTED **4/11/17** COMPLETED: **4/11/17**
DRILLING COMPANY: **Cascade**
DRILLING EQUIPMENT: **Hand Auger**
DRILLING METHOD: **Hand Auger**
SAMPLING EQUIPMENT: **6" Sleeve**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **2**
STATIC DTW (ft): **--**
WELL CASING DIA. (in): **---**
LOGGED BY: **D.Owens**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **---**
BOREHOLE DEPTH (ft): **4.0**
BOREHOLE DIA. (in): **3.25**
CHECKED BY: **DR**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppmv)	Depth (feet)
			CONCRETE						
		CL	**CLAY WITH SAND** ; CL; 10YR 3/3 dark brown; low plasticity; firm; moist; trace gravel						
			Same as above; Wet		1450 B-2-2.5				▽
			Refusal at 4 feet. Borehole terminated at 4 feet.						
5									5
10									10

GEO FORM 304 CHEVRON 90517 GINT.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 7/19/17

PROJECT: **Chevron 90517** PAGE 1 OF 1
LOCATION: **3900 Piedmont Ave Oakland**
PROJECT NUMBER: **211602403**

WELL / PROBEHOLE / BOREHOLE NO: **B-4**

Stantec

DRILLING / INSTALLATION:
STARTED **4/11/17** COMPLETED: **4/12/17**
DRILLING COMPANY: **Cascade**
DRILLING EQUIPMENT: **Hand Auger/ GeoProbe**
DRILLING METHOD: **Hand Auger/ Direct Push**
SAMPLING EQUIPMENT: **6" Sleeve**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **5.7**
STATIC DTW (ft): **--**
WELL CASING DIA. (in): **---**
LOGGED BY: **D.Owens**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **---**
BOREHOLE DEPTH (ft): **10.0**
BOREHOLE DIA. (in): **3.25**
CHECKED BY: **DR**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppmv)	Depth (feet)
			ASPHALT						
		CL	**CLAY WITH SAND** ; CL; 10YR 3/3 dark brown; low plasticity; firm; dry; well graded sand; trace gravel		920 B-4-2.5			0.0	
5		SM	**SILTY SAND** ; SM; 10YR 3/2 very dark grayish brown; firm; dry; well graded sand; trace gravel		1000 B-4-5			1.0	5
		SP	**POORLY GRADED SAND** ; SP; 10YR 2/1 black; loose; wet; fine sand		1125 B-4-7.5			1220	
		ML	**SANDY SILT** ; ML; 5Y 4/1 dark gray; dense; moist; fine sand		1130 B-4-10			12	
10			Borehole terminated at 10 feet.						10

GEO FORM 304 CHEVRON 90517 GINT.GPJ STANTEC ENVIRO TEMPLATE 010509.GDT 7/19/17

PROJECT: **Chevron 90517**
LOCATION: **3900 Piedmont Ave Oakland**
PROJECT NUMBER: **211602403**

WELL / PROBEHOLE / BOREHOLE NO: **B-5**

Stantec

DRILLING / INSTALLATION:
STARTED **4/12/17** COMPLETED: **4/12/17**
DRILLING COMPANY: **Cascade**
DRILLING EQUIPMENT: **Hand Auger/ GeoProbe**
DRILLING METHOD: **Hand Auger/ Direct Push**
SAMPLING EQUIPMENT: **6" Sleeve**

NORTHING (ft):
LAT:
GROUND ELEV (ft):
INITIAL DTW (ft): **--**
STATIC DTW (ft): **--**
WELL CASING DIA. (in): **---**
LOGGED BY: **D.Owens**

EASTING (ft):
LONG:
TOC ELEV (ft):
WELL DEPTH (ft): **---**
BOREHOLE DEPTH (ft): **10.0**
BOREHOLE DIA. (in): **3.25**
CHECKED BY: **DR**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recov. (feet)	Blow Count	Headspace PID (ppmv)	Depth (feet)
			ASPHALT						
			Gravel and Sand Construction Fill						
		CL	**SILTY CLAY** ; CL; 10YR 4/6 dark yellowish brown; low plasticity; hard; dry; trace gravel		1325 B-5-2.5			0.0	
5		GW	**WELL-GRADED GRAVEL WITH SAND** ; GW; 10YR 4/6 dark yellowish brown; dense; dry; angular		1430 B-5-5			0.0	5
		CL	**CLAY WITH SAND** ; CL; 10YR 4/3 brown; fine-grained; low plasticity; dense; moist		1440 B-5-7.5			0.0	
10		SP	**POORLY GRADED SAND** ; SP; 10YR 4/3 brown; fine-grained; dense; moist		1450 B-5-10			0.0	10
			Borehole terminated at 10 feet.						

APPENDIX D
CERTIFIED LABORATORY ANALYSIS REPORTS AND CHAIN-OF-CUSTODY DOCUMENTS

eurofins | Lancaster Laboratories Environmental

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Analysis Report

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

Report Date: May 02, 2017

Project: 90517

Submittal Date: 04/14/2017
Group Number: 1790951
PO Number: 0015235605
Release Number: CMACLEOD
State of Sample Origin: CA

Client Sample Description	Lancaster Labs (LL) #
B-5-S-2.5-170412 Grab Soil	8947389
B-5-S-5-170412 Grab Soil	8947390
B-5-S-7.5-170412 Grab Soil	8947391
B-5-S-10-170412 Grab Soil	8947392
B-4-S-2.5-170411 Grab Soil	8947393
B-4-S-5-170411 Grab Soil	8947394
B-4-S-7.5-170412 Grab Soil	8947395
B-4-S-10-170412 Grab Soil	8947396
B-2-S-2.5-170411 Grab Soil	8947397

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ . To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To	Stantec	Attn: Marisa Kaffenberger
Electronic Copy To	Stantec	Attn: Erin O'Malley
Electronic Copy To	Stantec	Attn: Travis Flora
Electronic Copy To	Stantec	Attn: Laura Viesselman

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Respectfully Submitted,

Megan A. Moeller
Senior Specialist

(717) 556-7261

Sample Description: B-5-S-2.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947389
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 13:25 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90501

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.99
10237	Benzene	71-43-2	N.D.	0.0005	0.99
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.99
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.99
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.99
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.99
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.99
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Acenaphthene	83-32-9	N.D.	0.00066	1
10725	Acenaphthylene	208-96-8	N.D.	0.00033	1
10725	Anthracene	120-12-7	N.D.	0.00033	1
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00066	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00066	1
10725	Benzo(b)fluoranthene	205-99-2	0.0011	0.00066	1
10725	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00066	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00066	1
10725	Chrysene	218-01-9	0.0012	0.00033	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00066	1
10725	Fluoranthene	206-44-0	N.D.	0.00066	1
10725	Fluorene	86-73-7	N.D.	0.00066	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00066	1
10725	Naphthalene	91-20-3	N.D.	0.00066	1
10725	Phenanthrene	85-01-8	0.0021	0.00066	1
10725	Pyrene	129-00-0	0.00095	0.00066	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	24.8
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	10	4.0	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	25	9.9	1
02516	TPH Motor Oil C16-C36	n.a.	25	9.9	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
The reverse surrogate, capric acid, is present at <1%.

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Analysis Report

Sample Description: B-5-S-2.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947389
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 13:25 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90501

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.156	0.0374	1
06951	Chromium	7440-47-3	44.1	0.107	1
06955	Lead	7439-92-1	9.22	0.420	1
06961	Nickel	7440-02-0	32.6	0.229	1
06972	Zinc	7440-66-6	31.7	0.519	1

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171131AA	04/23/2017 23:31	Stephen C Nolte	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:17	Anastasia Jaynes	n.a.
10725	PAH SIM 8270 Soil Microwave	SW-846 8270C SIM	1	17109SLH026	04/21/2017 11:28	Joseph M Gambler	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	17109SLH026	04/20/2017 08:15	Joshua Ruth	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/20/2017 23:04	Jeremy C Giffin	24.8
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:18	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/20/2017 20:03	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	171100002A	04/24/2017 13:14	Timothy M Emrick	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 12:47	Thomas C Wildermuth	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-5-S-2.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947389
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 13:25 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90501

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	171100002A	04/20/2017 21:25	Karen L Beyer	1
06949	Cadmium	SW-846 6010B	1	171105708001	04/24/2017 10:24	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	171105708001	04/24/2017 10:24	Eric L Eby	1
06955	Lead	SW-846 6010B	1	171105708001	04/24/2017 10:24	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	171105708001	04/24/2017 10:24	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	171105708001	04/24/2017 10:24	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	171105708001	04/23/2017 23:15	Denise L Trimby	1

Sample Description: B-5-S-5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947390
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:30 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90502

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.97
10237	Benzene	71-43-2	N.D.	0.0005	0.97
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.97
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.97
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.97
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.97
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.97
10237	Naphthalene	91-20-3	N.D.	0.001	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.97
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Acenaphthene	83-32-9	N.D.	0.00066	1
10725	Acenaphthylene	208-96-8	N.D.	0.00033	1
10725	Anthracene	120-12-7	N.D.	0.00033	1
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00066	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00066	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00066	1
10725	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00066	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00066	1
10725	Chrysene	218-01-9	N.D.	0.00033	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00066	1
10725	Fluoranthene	206-44-0	0.00067	0.00066	1
10725	Fluorene	86-73-7	N.D.	0.00066	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00066	1
10725	Naphthalene	91-20-3	0.0014	0.00066	1
10725	Phenanthrene	85-01-8	0.0018	0.00066	1
10725	Pyrene	129-00-0	N.D.	0.00066	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	25.1
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
The reverse surrogate, capric acid, is present at <1%.

Sample Description: B-5-S-5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947390
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:30 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90502

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.157	0.0355	1
06951	Chromium	7440-47-3	55.2	0.101	1
06955	Lead	7439-92-1	12.2	0.399	1
06961	Nickel	7440-02-0	83.0	0.217	1
06972	Zinc	7440-66-6	84.6	0.493	1

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171131AA	04/23/2017 23:54	Stephen C Nolte	0.97
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:22	Anastasia Jaynes	n.a.
10725	PAH SIM 8270 Soil Microwave	SW-846 8270C SIM	1	17109SLH026	04/21/2017 12:00	Joseph M Gambler	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	17109SLH026	04/20/2017 08:15	Joshua Ruth	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/20/2017 23:40	Jeremy C Giffin	25.1
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:23	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/20/2017 18:44	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	171100002A	04/24/2017 13:36	Timothy M Emrick	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 11:26	Thomas C Wildermuth	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-5-S-5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947390
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:30 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90502

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	171100002A	04/20/2017 21:25	Karen L Beyer	1
06949	Cadmium	SW-846 6010B	1	171105708001	04/24/2017 10:27	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	171105708001	04/24/2017 10:27	Eric L Eby	1
06955	Lead	SW-846 6010B	1	171105708001	04/24/2017 10:27	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	171105708001	04/24/2017 10:27	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	171105708001	04/24/2017 10:27	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	171105708001	04/23/2017 23:15	Denise L Trimby	1

Sample Description: B-5-S-7.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947391
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:40 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90503

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.97
10237	Benzene	71-43-2	N.D.	0.0005	0.97
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.97
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.97
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.97
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.97
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.97
10237	Naphthalene	91-20-3	N.D.	0.001	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.97
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Acenaphthene	83-32-9	N.D.	0.00066	1
10725	Acenaphthylene	208-96-8	N.D.	0.00033	1
10725	Anthracene	120-12-7	N.D.	0.00033	1
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00066	1
10725	Benzo(a)pyrene	50-32-8	0.00083	0.00066	1
10725	Benzo(b)fluoranthene	205-99-2	0.0020	0.00066	1
10725	Benzo(g,h,i)perylene	191-24-2	0.00086	0.00066	1
10725	Benzo(k)fluoranthene	207-08-9	0.00083	0.00066	1
10725	Chrysene	218-01-9	0.0015	0.00033	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00066	1
10725	Fluoranthene	206-44-0	0.00098	0.00066	1
10725	Fluorene	86-73-7	N.D.	0.00066	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00066	1
10725	Naphthalene	91-20-3	N.D.	0.00066	1
10725	Phenanthrene	85-01-8	0.00078	0.00066	1
10725	Pyrene	129-00-0	0.0011	0.00066	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	0.9	0.5	24.61
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	9.9	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	9.9	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
The reverse surrogate, capric acid, is present at <1%.

Sample Description: B-5-S-7.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947391
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:40 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90503

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.228	0.0368	1
06951	Chromium	7440-47-3	40.2	0.105	1
06955	Lead	7439-92-1	20.9	0.414	1
06961	Nickel	7440-02-0	119	0.226	1
06972	Zinc	7440-66-6	32.5	0.511	1

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171141AA	04/24/2017 18:21	Linda C Pape	0.97
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:27	Anastasia Jaynes	n.a.
10725	PAH SIM 8270 Soil Microwave	SW-846 8270C SIM	1	17109SLH026	04/21/2017 12:33	Joseph M Gambler	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	17109SLH026	04/20/2017 08:15	Joshua Ruth	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 00:16	Jeremy C Giffin	24.61
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:28	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/20/2017 19:43	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	171100002A	04/24/2017 13:57	Timothy M Emrick	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 11:46	Thomas C Wildermuth	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-5-S-7.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947391
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:40 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90503

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	171100002A	04/20/2017 21:25	Karen L Beyer	1
06949	Cadmium	SW-846 6010B	1	171105708001	04/24/2017 10:36	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	171105708001	04/24/2017 10:36	Eric L Eby	1
06955	Lead	SW-846 6010B	1	171105708001	04/24/2017 10:36	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	171105708001	04/24/2017 10:36	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	171105708001	04/24/2017 10:36	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	171105708001	04/23/2017 23:15	Denise L Trimby	1

Sample Description: B-5-S-10-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947392
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:50 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90504

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.99
10237	Benzene	71-43-2	N.D.	0.0005	0.99
10237	t-Butyl alcohol	75-65-0	N.D.	0.020	0.99
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.99
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.99
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.99
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.99
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.99
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.99
10237	Naphthalene	91-20-3	N.D.	0.001	0.99
10237	Toluene	108-88-3	N.D.	0.001	0.99
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.99
GC/MS Semivolatiles	**SW-846 8270C SIM**		**mg/kg**	**mg/kg**	
10725	Acenaphthene	83-32-9	N.D.	0.00066	1
10725	Acenaphthylene	208-96-8	N.D.	0.00033	1
10725	Anthracene	120-12-7	N.D.	0.00033	1
10725	Benzo(a)anthracene	56-55-3	N.D.	0.00066	1
10725	Benzo(a)pyrene	50-32-8	N.D.	0.00066	1
10725	Benzo(b)fluoranthene	205-99-2	N.D.	0.00066	1
10725	Benzo(g,h,i)perylene	191-24-2	N.D.	0.00066	1
10725	Benzo(k)fluoranthene	207-08-9	N.D.	0.00066	1
10725	Chrysene	218-01-9	0.00038	0.00033	1
10725	Dibenz(a,h)anthracene	53-70-3	N.D.	0.00066	1
10725	Fluoranthene	206-44-0	N.D.	0.00066	1
10725	Fluorene	86-73-7	N.D.	0.00066	1
10725	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.00066	1
10725	Naphthalene	91-20-3	0.00087	0.00066	1
10725	Phenanthrene	85-01-8	N.D.	0.00066	1
10725	Pyrene	129-00-0	0.00069	0.00066	1
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	0.5	0.5	24.61
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	N.D.	4.0	1
GC Petroleum Hydrocarbons	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
02516	Total TPH	n.a.	N.D.	10	1
02516	TPH Motor Oil C16-C36	n.a.	N.D.	10	1

TPH quantitation is based on peak area comparison of the sample pattern to that of a hydrocarbon component mix calibration in a range that includes C8 (n-octane) through C40 (n-tetracontane) normal hydrocarbons.
The reverse surrogate, capric acid, is present at <1%.

Sample Description: B-5-S-10-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947392
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:50 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90504

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	N.D.	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				
Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	
06949	Cadmium	7440-43-9	0.204	0.0490	1
06951	Chromium	7440-47-3	32.6	0.140	1
06955	Lead	7439-92-1	7.08	0.550	1
06961	Nickel	7440-02-0	38.1	0.300	1
06972	Zinc	7440-66-6	27.4	0.680	1

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171131AA	04/24/2017 01:02	Stephen C Nolte	0.99
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:33	Anastasia Jaynes	n.a.
10725	PAH SIM 8270 Soil Microwave	SW-846 8270C SIM	1	17109SLH026	04/21/2017 13:06	Joseph M Gambler	1
10811	BNA Soil Microwave SIM	SW-846 3546	1	17109SLH026	04/20/2017 08:15	Joshua Ruth	1
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 00:52	Jeremy C Giffin	24.61
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:36	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/20/2017 19:04	Thomas C Wildermuth	1
02516	TPH Fuels by GC (Soils)	SW-846 8015B modified	1	171100002A	04/24/2017 12:31	Timothy M Emrick	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 12:06	Thomas C Wildermuth	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-5-S-10-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947392
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 14:50 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90504

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11218	TPH Fuels Soils Extraction	SW-846 3550B	1	171100002A	04/20/2017 21:25	Karen L Beyer	1
06949	Cadmium	SW-846 6010B	1	171105708001	04/24/2017 10:40	Eric L Eby	1
06951	Chromium	SW-846 6010B	1	171105708001	04/24/2017 10:40	Eric L Eby	1
06955	Lead	SW-846 6010B	1	171105708001	04/24/2017 10:40	Eric L Eby	1
06961	Nickel	SW-846 6010B	1	171105708001	04/24/2017 10:40	Eric L Eby	1
06972	Zinc	SW-846 6010B	1	171105708001	04/24/2017 10:40	Eric L Eby	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	171105708001	04/23/2017 23:15	Denise L Trimby	1

Sample Description: B-4-S-2.5-170411 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947393
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/11/2017 09:20 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90505

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	0.97
10237	Benzene	71-43-2	N.D.	0.0005	0.97
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.97
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	0.97
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	0.97
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	0.97
10237	Ethylbenzene	100-41-4	N.D.	0.001	0.97
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	0.97
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.97
10237	Naphthalene	91-20-3	N.D.	0.001	0.97
10237	Toluene	108-88-3	N.D.	0.001	0.97
10237	Xylene (Total)	1330-20-7	N.D.	0.001	0.97
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	N.D.	0.5	24.88
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	32	4.0	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	22	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171131AA	04/24/2017 01:24	Stephen C Nolte	0.97
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:39	Anastasia Jaynes	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 01:28	Jeremy C Giffin	24.88

Sample Description: B-4-S-2.5-170411 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947393
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/11/2017 09:20 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90505

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:40	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/21/2017 10:27	Thomas C Wildermuth	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 13:07	Thomas C Wildermuth	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-4-S-5-170411 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947394
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/11/2017 10:00 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90506

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.001	1.04
10237	Benzene	71-43-2	N.D.	0.0005	1.04
10237	t-Butyl alcohol	75-65-0	N.D.	0.021	1.04
10237	1,2-Dibromoethane	106-93-4	N.D.	0.001	1.04
10237	1,2-Dichloroethane	107-06-2	N.D.	0.001	1.04
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.001	1.04
10237	Ethylbenzene	100-41-4	0.002	0.001	1.04
10237	di-Isopropyl ether	108-20-3	N.D.	0.001	1.04
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	1.04
10237	Naphthalene	91-20-3	0.006	0.001	1.04
10237	Toluene	108-88-3	N.D.	0.001	1.04
10237	Xylene (Total)	1330-20-7	N.D.	0.001	1.04
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	7.7	0.5	24.32
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	790	20	5
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	700	20	5
	The reverse surrogate, capric acid, is present at <1%.				

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171131AA	04/24/2017 00:16	Stephen C Nolte	1.04
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:40	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:45	Anastasia Jaynes	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 02:11	Jeremy C Giffin	24.32

Sample Description: B-4-S-5-170411 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947394
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/11/2017 10:00 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90506

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:46	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/21/2017 12:36	Thomas C Wildermuth	5
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 20:20	Amy Lehr	5
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-4-S-7.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947395
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 11:25 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90507

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.048	47.62
10237	Benzene	71-43-2	N.D.	0.024	47.62
10237	t-Butyl alcohol	75-65-0	N.D.	0.95	47.62
10237	1,2-Dibromoethane	106-93-4	N.D.	0.048	47.62
10237	1,2-Dichloroethane	107-06-2	N.D.	0.048	47.62
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.048	47.62
10237	Ethylbenzene	100-41-4	0.15	0.048	47.62
10237	di-Isopropyl ether	108-20-3	N.D.	0.048	47.62
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.024	47.62
10237	Naphthalene	91-20-3	N.D.	0.048	47.62
10237	Toluene	108-88-3	N.D.	0.048	47.62
10237	Xylene (Total)	1330-20-7	0.12	0.048	47.62
	Reporting limits were raised due to interference from the sample matrix.				
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1,500	40	1986.1
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	490	3.9	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	420	3.9	1
	The reverse surrogate, capric acid, is present at <1%.				

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	R171131AA	04/23/2017 23:38	Angela D Sneeringer	47.62
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:41	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:41	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:48	Anastasia Jaynes	n.a.

Sample Description: B-4-S-7.5-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947395
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 11:25 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90507

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 04:35	Jeremy C Giffin	1986.1
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:49	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/21/2017 10:47	Thomas C Wildermuth	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 19:00	Amy Lehr	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-4-S-10-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947396
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 11:30 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90508

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.052	51.55
10237	Benzene	71-43-2	N.D.	0.026	51.55
10237	t-Butyl alcohol	75-65-0	N.D.	1.0	51.55
10237	1,2-Dibromoethane	106-93-4	N.D.	0.052	51.55
10237	1,2-Dichloroethane	107-06-2	N.D.	0.052	51.55
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.052	51.55
10237	Ethylbenzene	100-41-4	N.D.	0.052	51.55
10237	di-Isopropyl ether	108-20-3	N.D.	0.052	51.55
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.026	51.55
10237	Naphthalene	91-20-3	N.D.	0.052	51.55
10237	Toluene	108-88-3	N.D.	0.052	51.55
10237	Xylene (Total)	1330-20-7	N.D.	0.052	51.55
	Reporting limits were raised due to interference from the sample matrix.				
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	94	9.8	487.8
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	12	4.0	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	4.7	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	R171131AA	04/24/2017 00:26	Angela D Sneeringer	51.55
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 20:41	Anastasia Jaynes	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945029	04/19/2017 20:41	Anastasia Jaynes	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:54	Anastasia Jaynes	n.a.

Sample Description: B-4-S-10-170412 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947396
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/12/2017 11:30 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90508

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 03:59	Jeremy C Giffin	487.8
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945029	04/19/2017 19:55	Anastasia Jaynes	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/20/2017 19:23	Thomas C Wildermuth	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 12:26	Thomas C Wildermuth	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Sample Description: B-2-S-2.5-170411 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947397
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/11/2017 14:50 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90509

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**mg/kg**	**mg/kg**	
10237	t-Amyl methyl ether	994-05-8	N.D.	0.0009	0.95
10237	Benzene	71-43-2	N.D.	0.0005	0.95
10237	t-Butyl alcohol	75-65-0	N.D.	0.019	0.95
10237	1,2-Dibromoethane	106-93-4	N.D.	0.0009	0.95
10237	1,2-Dichloroethane	107-06-2	N.D.	0.0009	0.95
10237	Ethyl t-butyl ether	637-92-3	N.D.	0.0009	0.95
10237	Ethylbenzene	100-41-4	N.D.	0.0009	0.95
10237	di-Isopropyl ether	108-20-3	N.D.	0.0009	0.95
10237	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.0005	0.95
10237	Naphthalene	91-20-3	N.D.	0.0009	0.95
10237	Toluene	108-88-3	N.D.	0.0009	0.95
10237	Xylene (Total)	1330-20-7	N.D.	0.0009	0.95
GC Volatiles	**SW-846 8015B modified**		**mg/kg**	**mg/kg**	
01725	TPH-GRO N. CA soil C6-C12	n.a.	1	0.5	24.37
GC Miscellaneous	**SW-846 8015B**		**mg/kg**	**mg/kg**	
10941	TPH-DRO soil C10-C28 microwave	n.a.	61	4.0	1
GC Petroleum Hydrocarbons w/Si	**SW-846 8015B**		**mg/kg**	**mg/kg**	
02222	TPH-DRO soil C10-C28 w/Si Gel	n.a.	30	4.0	1
	The reverse surrogate, capric acid, is present at <1%.				

Sample Comments

CA ELAP Lab Certification No. 2792

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	BTEX + 7 Oxys/Naph 8260	SW-846 8260B	1	A171131AA	04/24/2017 01:47	Stephen C Nolte	0.95
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	1	201710945030	04/19/2017 22:10	Lois E Hiltz	n.a.
00374	GC/MS - Bulk Soil Prep	SW-846 5035A Modified	2	201710945030	04/19/2017 22:10	Lois E Hiltz	n.a.
06646	GC/MS HL Bulk Sample Prep	SW-846 5035A Modified	1	201710945030	04/19/2017 21:47	Lois E Hiltz	n.a.
01725	TPH-GRO N. CA soil C6-C12	SW-846 8015B modified	1	17110A31A	04/21/2017 02:47	Jeremy C Giffin	24.37

Sample Description: B-2-S-2.5-170411 Grab Soil
Facility# 90517
3900 Piedmont Ave-Oakland T0600102248

LL Sample # SW 8947397
LL Group # 1790951
Account # 10869

Project Name: 90517

Collected: 04/11/2017 14:50 by DO

Submitted: 04/14/2017 09:30
Reported: 05/02/2017 16:31

ChevronTexaco
L4310
6001 Bollinger Canyon Rd.
San Ramon CA 94583

90509

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01150	GC - Bulk Soil Prep	SW-846 5035A Modified	1	201710945030	04/19/2017 21:48	Lois E Hiltz	n.a.
10941	TPH-DRO soil C10-C28 microwave	SW-846 8015B	1	171090032A	04/21/2017 11:16	Thomas C Wildermuth	1
02222	TPH-DRO soil C10-C28 w/Si Gel	SW-846 8015B	1	171090033A	04/24/2017 19:20	Amy Lehr	1
11210	DRO by 8015 Microwave w/ SG	SW-846 3546	1	171090033A	04/20/2017 09:00	Michelle A Newswanger	1
10942	Microwave Extraction-DRO soils	SW-846 3546	1	171090032A	04/20/2017 09:00	Michelle A Newswanger	1

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	mg/kg	mg/kg
Batch number: A171131AA	Sample number(s): 8947389-8947390,8947392-8947394,8947397	
t-Amyl methyl ether	N.D.	0.001
Benzene	N.D.	0.0005
t-Butyl alcohol	N.D.	0.020
1,2-Dibromoethane	N.D.	0.001
1,2-Dichloroethane	N.D.	0.001
Ethyl t-butyl ether	N.D.	0.001
Ethylbenzene	N.D.	0.001
di-Isopropyl ether	N.D.	0.001
Methyl Tertiary Butyl Ether	N.D.	0.0005
Naphthalene	N.D.	0.001
Toluene	N.D.	0.001
Xylene (Total)	N.D.	0.001
Batch number: A171141AA	Sample number(s): 8947391	
t-Amyl methyl ether	N.D.	0.001
Benzene	N.D.	0.0005
t-Butyl alcohol	N.D.	0.020
1,2-Dibromoethane	N.D.	0.001
1,2-Dichloroethane	N.D.	0.001
Ethyl t-butyl ether	N.D.	0.001
Ethylbenzene	N.D.	0.001
di-Isopropyl ether	N.D.	0.001
Methyl Tertiary Butyl Ether	N.D.	0.0005
Naphthalene	N.D.	0.001
Toluene	N.D.	0.001
Xylene (Total)	N.D.	0.001
Batch number: R171131AA	Sample number(s): 8947395-8947396	
t-Amyl methyl ether	N.D.	0.050
Benzene	N.D.	0.025
t-Butyl alcohol	N.D.	1.0
1,2-Dibromoethane	N.D.	0.050
1,2-Dichloroethane	N.D.	0.050
Ethyl t-butyl ether	N.D.	0.050
Ethylbenzene	N.D.	0.050
di-Isopropyl ether	N.D.	0.050
Methyl Tertiary Butyl Ether	N.D.	0.025
Naphthalene	N.D.	0.050
Toluene	N.D.	0.050
Xylene (Total)	N.D.	0.050
Batch number: 17109SLH026	Sample number(s): 8947389-8947392	

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

Method Blank (continued)

Analysis Name	Result	MDL
	mg/kg	mg/kg
Acenaphthene	N.D.	0.00067
Acenaphthylene	N.D.	0.00033
Anthracene	N.D.	0.00033
Benzo(a)anthracene	N.D.	0.00067
Benzo(a)pyrene	N.D.	0.00067
Benzo(b)fluoranthene	N.D.	0.00067
Benzo(g,h,i)perylene	N.D.	0.00067
Benzo(k)fluoranthene	N.D.	0.00067
Chrysene	N.D.	0.00033
Dibenz(a,h)anthracene	N.D.	0.00067
Fluoranthene	N.D.	0.00067
Fluorene	N.D.	0.00067
Indeno(1,2,3-cd)pyrene	N.D.	0.00067
Naphthalene	N.D.	0.00067
Phenanthrene	N.D.	0.00067
Pyrene	N.D.	0.00067
Batch number: 17110A31A	Sample number(s): 8947389-8947397	
TPH-GRO N. CA soil C6-C12	N.D.	0.5
Batch number: 171090032A	Sample number(s): 8947389-8947397	
TPH-DRO soil C10-C28 microwave	N.D.	4.0
Batch number: 171100002A	Sample number(s): 8947389-8947392	
Total TPH	N.D.	10
TPH Motor Oil C16-C36	N.D.	10
Batch number: 171090033A	Sample number(s): 8947389-8947397	
TPH-DRO soil C10-C28 w/Si Gel	N.D.	4.0
Batch number: 171105708001	Sample number(s): 8947389-8947392	
Cadmium	N.D.	0.0490
Chromium	N.D.	0.140
Lead	N.D.	0.550
Nickel	N.D.	0.300
Zinc	0.776	0.680

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: A171131AA	Sample number(s): 8947389-8947390,8947392-8947394,8947397								
t-Amyl methyl ether	0.0200	0.0195	0.0200	0.0193	98	97	70-120	1	30
Benzene	0.0200	0.0215	0.0200	0.0214	108	107	80-120	1	30
t-Butyl alcohol	0.200	0.171	0.200	0.172	85	86	61-136	1	30

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dibromoethane	0.0200	0.0197	0.0200	0.0192	98	96	80-120	2	30
1,2-Dichloroethane	0.0200	0.0205	0.0200	0.0201	102	101	78-127	2	30
Ethyl t-butyl ether	0.0200	0.0200	0.0200	0.0196	100	98	69-120	2	30
Ethylbenzene	0.0200	0.0214	0.0200	0.0213	107	106	80-120	1	30
di-Isopropyl ether	0.0200	0.0210	0.0200	0.0203	105	101	69-125	4	30
Methyl Tertiary Butyl Ether	0.0200	0.0201	0.0200	0.0196	100	98	72-120	2	30
Naphthalene	0.0200	0.0167	0.0200	0.0155	83	78	61-125	7	30
Toluene	0.0200	0.0217	0.0200	0.0217	109	108	80-120	0	30
Xylene (Total)	0.0600	0.0640	0.0600	0.0643	107	107	80-120	0	30
Batch number: A171141AA	Sample number(s): 8947391								
t-Amyl methyl ether	0.0200	0.0185	0.0200	0.0187	93	94	70-120	1	30
Benzene	0.0200	0.0209	0.0200	0.0207	104	104	80-120	1	30
t-Butyl alcohol	0.200	0.166	0.200	0.170	83	85	61-136	2	30
1,2-Dibromoethane	0.0200	0.0190	0.0200	0.0184	95	92	80-120	3	30
1,2-Dichloroethane	0.0200	0.0201	0.0200	0.0203	100	101	78-127	1	30
Ethyl t-butyl ether	0.0200	0.0191	0.0200	0.0192	95	96	69-120	1	30
Ethylbenzene	0.0200	0.0209	0.0200	0.0205	105	102	80-120	2	30
di-Isopropyl ether	0.0200	0.0197	0.0200	0.0194	99	97	69-125	1	30
Methyl Tertiary Butyl Ether	0.0200	0.0194	0.0200	0.0192	97	96	72-120	1	30
Naphthalene	0.0200	0.0153	0.0200	0.0148	77	74	61-125	4	30
Toluene	0.0200	0.0211	0.0200	0.0206	105	103	80-120	2	30
Xylene (Total)	0.0600	0.0619	0.0600	0.0619	103	103	80-120	0	30
Batch number: R171131AA	Sample number(s): 8947395-8947396								
t-Amyl methyl ether	1.00	0.839	1.00	0.841	84	84	70-120	0	30
Benzene	1.00	0.991	1.00	0.980	99	98	80-120	1	30
t-Butyl alcohol	10	10.12	10	10.17	101	102	61-136	1	30
1,2-Dibromoethane	1.00	0.901	1.00	0.907	90	91	80-120	1	30
1,2-Dichloroethane	1.00	0.923	1.00	0.894	92	89	78-127	3	30
Ethyl t-butyl ether	1.00	0.878	1.00	0.897	88	90	69-120	2	30
Ethylbenzene	1.00	0.935	1.00	0.920	94	92	80-120	2	30
di-Isopropyl ether	1.00	1.03	1.00	1.04	103	104	69-125	1	30
Methyl Tertiary Butyl Ether	1.00	0.815	1.00	0.840	82	84	72-120	3	30
Naphthalene	1.00	0.838	1.00	0.721	84	72	61-125	15	30
Toluene	1.00	0.932	1.00	0.921	93	92	80-120	1	30
Xylene (Total)	3.00	2.74	3.00	2.73	91	91	80-120	0	30
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17109SLH026	Sample number(s): 8947389-8947392								
Acenaphthene	0.0333	0.0345			104		80-120		
Acenaphthylene	0.0333	0.0299			90		76-98		
Anthracene	0.0333	0.0290			87		75-111		
Benzo(a)anthracene	0.0333	0.0345			104		80-120		
Benzo(a)pyrene	0.0333	0.0310			93		80-120		
Benzo(b)fluoranthene	0.0333	0.0338			101		80-120		
Benzo(g,h,i)perylene	0.0333	0.0286			86		77-108		
Benzo(k)fluoranthene	0.0333	0.0304			91		80-120		

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Chrysene	0.0333	0.0329			99		79-111		
Dibenz(a,h)anthracene	0.0333	0.0275			82		79-115		
Fluoranthene	0.0333	0.0313			94		76-118		
Fluorene	0.0333	0.0331			99		80-120		
Indeno(1,2,3-cd)pyrene	0.0333	0.0271			81		75-107		
Naphthalene	0.0333	0.0301			90		70-103		
Phenanthrene	0.0333	0.0289			87		72-112		
Pyrene	0.0333	0.0321			96		79-115		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17110A31A	Sample number(s): 8947389-8947397								
TPH-GRO N. CA soil C6-C12	11	10.79	11	11.08	98	101	58-120	3	30
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171090032A	Sample number(s): 8947389-8947397								
TPH-DRO soil C10-C28 microwave	134	127			95		74-117		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171100002A	Sample number(s): 8947389-8947392								
Total TPH	134	93.04			69		64-122		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171090033A	Sample number(s): 8947389-8947397								
TPH-DRO soil C10-C28 w/Si Gel	134	112.01			84		59-120		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171105708001	Sample number(s): 8947389-8947392								
Cadmium	5.00	5.23			105		80-120		
Chromium	20	20.8			104		80-120		
Lead	15	16.04			107		80-120		
Nickel	50	53.2			106		80-120		
Zinc	50	52.88			106		80-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: R171131AA	Sample number(s): 8947395-8947396 UNSPK: P949943									
t-Amyl methyl ether	N.D.	0.810	0.707	0.816	0.771	87	94	70-120	9	30

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc	MS Spike Added	MS Conc	MSD Spike Added	MSD Conc	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Benzene	N.D.	0.810	0.894	0.816	1.05	110	129*	80-120	16	30
t-Butyl alcohol	N.D.	8.10	9.19	8.16	9.49	113	116	61-136	3	30
1,2-Dibromoethane	N.D.	0.810	0.925	0.816	0.994	114	122*	80-120	7	30
1,2-Dichloroethane	N.D.	0.810	0.875	0.816	0.974	108	119	78-127	11	30
Ethyl t-butyl ether	N.D.	0.810	0.774	0.816	0.878	96	108	69-120	13	30
Ethylbenzene	N.D.	0.810	0.940	0.816	0.984	116	121*	80-120	5	30
di-Isopropyl ether	N.D.	0.810	0.879	0.816	1.05	109	128*	69-125	17	30
Methyl Tertiary Butyl Ether	N.D.	0.810	0.702	0.816	0.815	87	100	72-120	15	30
Naphthalene	N.D.	0.810	0.686	0.816	0.740	85	91	61-125	8	30
Toluene	N.D.	0.810	0.925	0.816	1.04	114	128*	80-120	12	30
Xylene (Total)	N.D.	2.43	2.73	2.45	2.87	112	117	80-120	5	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17109SLH026	Sample number(s): 8947389-8947392 UNSPK: P947719									
Acenaphthene	0.0246	0.0330	0.0681	0.0331	0.0619	132*	113	80-120	10	30
Acenaphthylene	0.00736	0.0330	0.0311	0.0331	0.0276	72*	61*	76-98	12	30
Anthracene	N.D.	0.0330	0.0617	0.0331	0.0613	187*	185*	75-111	1	30
Benzo(a)anthracene	0.00195	0.0330	0.0350	0.0331	0.0353	100	101	80-120	1	30
Benzo(a)pyrene	0.00147	0.0330	0.0315	0.0331	0.0315	91	91	80-120	0	30
Benzo(b)fluoranthene	0.00181	0.0330	0.0325	0.0331	0.0329	93	94	80-120	1	30
Benzo(g,h,i)perylene	0.000931	0.0330	0.0230	0.0331	0.0213	67*	61*	77-108	8	30
Benzo(k)fluoranthene	0.000707	0.0330	0.0313	0.0331	0.0316	93	93	80-120	1	30
Chrysene	0.00316	0.0330	0.0349	0.0331	0.0354	96	97	79-111	1	30
Dibenz(a,h)anthracene	N.D.	0.0330	0.0244	0.0331	0.0230	74*	69*	79-115	6	30
Fluoranthene	0.00717	0.0330	0.0370	0.0331	0.0384	90	94	76-118	4	30
Fluorene	0.0698	0.0330	0.0813	0.0331	0.0733	35*	11*	80-120	10	30
Indeno(1,2,3-cd)pyrene	0.000699	0.0330	0.0239	0.0331	0.0224	70*	65*	75-107	7	30
Naphthalene	0.00619	0.0330	0.0367	0.0331	0.0365	92	92	70-103	0	30
Phenanthrene	0.172	0.0330	0.190	0.0331	0.169	56 (2)	-7 (2)	72-112	12	30
Pyrene	0.0126	0.0330	0.0415	0.0331	0.0424	88	90	79-115	2	30
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171090032A	Sample number(s): 8947389-8947397 UNSPK: 8947397									
TPH-DRO soil C10-C28 microwave	61.22	132	181.17			91		74-117		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171100002A	Sample number(s): 8947389-8947392 UNSPK: P947398									
Total TPH	341.25	133	851.89			384*		64-122		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 171090033A	Sample number(s): 8947389-8947397 UNSPK: 8947397									
TPH-DRO soil C10-C28 w/Si Gel	30.07	132	140.28			83		59-120		
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 171105708001	Sample number(s): 8947389-8947392 UNSPK: P938700									
Cadmium	0.518	4.50	5.26	4.50	5.14	105	103	75-125	2	20
Chromium	36.31	18.02	54.02	18.02	51.2	98	83	75-125	5	20
Lead	24.75	13.51	36.05	13.51	33.6	84	65*	75-125	7	20
Nickel	33.32	45.05	75	45.05	74.36	93	91	75-125	1	20
Zinc	99.69	45.05	142.82	45.05	139.09	96	87	75-125	3	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 171090032A	Sample number(s): 8947389-8947397 BKG: 8947397			
TPH-DRO soil C10-C28 microwave	61.22	65.67	7	20
	mg/kg	**mg/kg**		
Batch number: 171100002A	Sample number(s): 8947389-8947392 BKG: P947398			
Total TPH	341.25	1250.2	114*	20
TPH Motor Oil C16-C36	341.25	1250.2	114*	20
	mg/kg	**mg/kg**		
Batch number: 171090033A	Sample number(s): 8947389-8947397 BKG: 8947397			
TPH-DRO soil C10-C28 w/Si Gel	30.07	28.91	4 (1)	20
	mg/kg	**mg/kg**		
Batch number: 171105708001	Sample number(s): 8947389-8947392 BKG: P938700			
Cadmium	0.518	0.554	7 (1)	20
Chromium	36.31	38.06	5	20
Lead	24.75	21.59	14	20
Nickel	33.32	33.37	0	20
Zinc	99.69	98.33	1	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX + 7 Oxys/Naph 8260
Batch number: A171131AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8947389	101	103	100	89
8947390	99	98	101	90
8947392	100	99	99	93
8947393	102	103	99	92
8947394	98	96	105	92
8947397	101	96	106	86
Blank	99	102	98	92
LCS	101	99	102	98
LCSD	99	97	102	97
Limits:	50-141	54-135	52-141	50-131

Analysis Name: BTEX + 7 Oxys/Naph 8260
Batch number: A171141AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8947391	102	97	99	87
Blank	108	105	97	89
LCS	100	98	99	97
LCSD	101	96	98	96
Limits:	50-141	54-135	52-141	50-131

Analysis Name: BTEX + 7 Oxys/Naph 8260
Batch number: R171131AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8947395	88	92	112	88
8947396	71	78	82	82
Blank	99	103	93	84
LCS	95	103	94	93
LCSD	97	102	94	95
MS	80	82	83	79
MSD	94	89	90	85
Limits:	50-141	54-135	52-141	50-131

Analysis Name: PAH SIM 8270 Soil Microwave
Batch number: 17109SLH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
8947389	91	80	95
8947390	86	77	90
8947391	90	81	95
8947392	86	79	90
Blank	93	85	100
LCS	90	84	97
MS	102	83	105

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: PAH SIM 8270 Soil Microwave
Batch number: 17109SLH026

	Fluoranthene-d10	Benzo(a)pyrene-d12	1-Methylnaphthalene-d10
MSD	106	81	98
Limits:	56-142	53-137	52-110

Analysis Name: TPH-GRO N. CA soil C6-C12
Batch number: 17110A31A

	Trifluorotoluene-F
8947389	78
8947390	87
8947391	74
8947392	75
8947393	79
8947394	74
8947395	490*
8947396	131
8947397	74
Blank	92
LCS	92
LCSD	96
Limits:	50-142

Analysis Name: TPH-DRO soil C10-C28 microwave
Batch number: 171090032A

	Orthoterphenyl
8947389	97
8947390	91
8947391	95
8947392	91
8947393	95
8947394	105
8947395	105
8947396	93
8947397	94
Blank	99
DUP	96
LCS	100
MS	98
Limits:	34-147

Analysis Name: TPH-DRO soil C10-C28 w/Si Gel
Batch number: 171090033A

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: ChevronTexaco
Reported: 05/02/2017 16:31

Group Number: 1790951

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-DRO soil C10-C28 w/Si Gel
Batch number: 171090033A

	Orthoterphenyl
8947389	81
8947390	88
8947391	89
8947392	87
8947393	89
8947394	104
8947395	96
8947396	87
8947397	84
Blank	94
DUP	89
LCS	93
MS	83
Limits:	37-127

Analysis Name: TPH Fuels by GC (Soils)
Batch number: 171100002A

	Chlorobenzene	Orthoterphenyl
8947389	75	90
8947390	69	82
8947391	88	98
8947392	82	91
Blank	86	96
DUP	78	101
LCS	78	83
MS	93	93
Limits:	58-129	50-126

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody

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Acct. # 10869 Group # 1790951 Sample # 8947389-97

Client: Stantec Consulting				Matrix					Analyses Requested											For Lab Use Only
Project Name/#: Chevron 90517	Site ID #:								Preservation Codes											SF #:
Project Manager: Travis Flora	P.O. #:																			SCR #:
Sampler: Devon Owens	PWSID #:																			Preservation Codes: H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; P = H_3PO_4; O = Other
Phone #: 408-827-3876	Quote #:																			
State where samples were collected: ____	For Compliance: Yes ☐ No ☐																			
Sample Identification	Collection Date	Collection Time	Grab	Composite	Soil ☑ Sediment ☐ Tissue	Water ☐ Potable ☐ Ground ☐ NPDES ☐ Surface	Other:	Total # of Containers	TPH-G (8015B)	TPH-D with and without Silica gel (8015B)	BTEX, MTBE, DIPE, ETBE, TAME, TBA, 8260B SW-	1,2-DCA, 1,2-DBA, Naphthalene 8260B SW-	PAHs 8270C-SIM	TPH-MRO 8015	Wet Metals 6010					Remarks
B-5-2.5	4/12/2017	1325	X		X			1	X	X	X	X	X	X	X					
B-5-5	4/12/2017	1430	X		X			1	X	X	X	X	X	X	X					
B-5-7.5	4/12/2017	1440	X		X			1	X	X	X	X	X	X	X					
B-5-10	4/12/2017	1450	X		X			1	X	X	X	X	X	X	X					
B-4-2.5	4/11/2017	920	X		X			1	X	X	X	X								
B-4-5	4/11/2017	1000	X		X			1	X	X	X	X								
B-4-7.5	4/12/2017	1125	X		X			1	X	X	X	X								
B-4-10	4/12/2017	1130	X		X			1	X	X	X	X								
B-2-2.5	4/11/2017	1450	X		X			1	X	X	X	X								

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address: Travis.Flora@stantec.com

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐

Type III (Reduced non-CLP) ☐ CT RCP ☐

Type VI (Raw Data Only) ☐ TX TRRP-13 ☐

NJ DKQP ☐ NYSDEC Category ☐ A or ☐ B

EDD Required? Yes ☐ No ☐ If yes, format: _____

Relinquished by:	Date	Time	Received by:	Date	Time
Devon Owens	4-13-17	1330	FedEx		
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Relinquished by Commercial Carrier:

UPS _____ FedEx X Other _____

Temperature upon receipt _____ °C

Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 10869 Group # 1790951 Sample # 8947389-97

Client:	Stantec Consulting		
Project Name/#:	Chevron 90517	Site ID #:	
Project Manager:	Travis Flora	P.O. #:	
Sampler:	Devon Owens	PWSID #:	
Phone #:	408-827-3876	Quote #:	
State where samples were collected: ____		For Compliance: Yes ☐ No ☐	

Sample Identification	Collection Date	Collection Time	Grab	Composite	Matrix: Soil ☑ Sediment ☐ Tissue	Water: Potable ☐ Ground ☐ Surface ☐ NPDES ☐	Other:	Total # of Containers	Analyses Requested / Preservation Codes: TPH-G (8015B)	TPH-D with and without Silica gel (8015B)	BTEX, MTBE, DIPE, ETBE, TAME, TBA, 8260B SW-	1,2-DCA, 1,2-DBA, Naphthalene 8260B SW-	PAHs 8270C-SIM	Remarks
B-5-2.5	4/12/2017	1325	X		X			1	X	X	X	X	X	
B-5-5	4/12/2017	1430	X		X			1	X	X	X	X	X	
B-5-7.5	4/12/2017	1440	X		X			1	X	X	X	X	X	
B-5-10	4/12/2017	1450	X		X			1	X	X	X	X	X	
B-4-2.5	4/11/2017	920	X		X			1	X	X	X	X		
B-4-5	4/11/2017	1000	X		X			1	X	X	X	X		
B-4-7.5	4/12/2017	1125	X		X			1	X	X	X	X		
B-4-10	4/12/2017	1130	X		X			1	X	X	X	X		
B-2-2.5	4/11/2017	1450	X		X			1	X	X	X	X		

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 P = H_3PO_4
O = Other

Turnaround Time Requested (TAT) (please check): Standard ☑ Rush ☐
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed:

Rush results requested by (please check): E-Mail ☐ Phone ☐

E-mail Address: Travis.Flora@stantec.com

Phone:

Data Package Options (please check if required)

Type I (Validation/non-CLP)	☐	MA MCP	☐
Type III (Reduced non-CLP)	☐	CT RCP	☐
Type VI (Raw Data Only)	☐	TX TRRP-13	☐
NJ DKQP	☐	NYSDEC Category	☐ A or ☐ B

EDD Required? Yes ☐ No ☐ If yes, format: _____

Relinquished by:	Date	Time	Received by:	Date	Time
Devon Owens	4-13-17	1300	FedEx		
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	4/14/17	0830

Relinquished by Commercial Carrier:
UPS _____ FedEx X Other _____

Temperature upon receipt 2.4 °C

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Sample Administration Receipt Documentation Log

Doc Log ID: 180888

Group Number(s): 1790951

Client: STANTEC CONSULTING

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Timestamp:	04/14/2017 9:30
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	No
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Evelyn Shank (12390) at 13:10 on 04/14/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT121	2.4	DT	Wet	Y	Bagged	N

Sample Date/Time Discrepancy Details

Sample ID on COC	Date/Time on Label	Comments
B-2-2.5	4/11/2017 14:55	

2425 New Holland Pike
Lancaster, PA 17605-2425
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	none detected
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

< less than

> greater than

ppm parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Laboratory Data Qualifiers:

C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference…
W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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4/28/2017
Mr. Devon Owens
Stantec Consulting Corporation
15575 Los Gatos Boulevard
Building C
Los Gatos CA 95032

Project Name: Chevron 90517
Project #:
Workorder #: 1704299A

Dear Mr. Devon Owens

The following report includes the data for the above referenced project for sample(s) received on 4/19/2017 at Air Toxics Ltd.

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

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

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1704299A

Work Order Summary

CLIENT:	Mr. Devon Owens Stantec Consulting Corporation 15575 Los Gatos Boulevard Building C Los Gatos, CA 95032	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	408-356-6124	**P.O. #**	SO 0015188937
FAX:	408-356-6138	**PROJECT #**	Chevron 90517
DATE RECEIVED:	04/19/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	04/28/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SS-1	Modified TO-15	7.1 "Hg	15.1 psi
02A	SS-2	Modified TO-15	4.5 "Hg	15.2 psi
03A	SS-3	Modified TO-15	6.9 "Hg	15.3 psi
04A	SS-4	Modified TO-15	5.1 "Hg	15.5 psi
05A	Dup	Modified TO-15	6.1 "Hg	14.8 psi
06A	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA
08AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 04/28/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified TO-15
Stantec Consulting Corporation
Workorder# 1704299A

Five 1 Liter Summa Canister (100% Certified) samples were received on April 19, 2017. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Initial Calibration	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

A revised Chain of Custody (COC) was provided by the client on 04/20/2017.

Analytical Notes

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

The hydrocarbon profile present in samples SS-2 and Dup did not resemble that of commercial gasoline. Results were calculated using the response factor derived from the gasoline calibration.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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

Client Sample ID: SS-1

Lab ID#: 1704299A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	27	77	110	310

Client Sample ID: SS-2

Lab ID#: 1704299A-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.24	0.74	0.76	2.4
Toluene	0.24	0.62	0.90	2.3
Ethyl Benzene	0.24	0.57	1.0	2.5
m,p-Xylene	0.24	2.7	1.0	12
o-Xylene	0.24	1.0	1.0	4.5
TPH ref. to Gasoline (MW=100)	24	1000	98	4100

Client Sample ID: SS-3

Lab ID#: 1704299A-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	26	79	110	320

Client Sample ID: SS-4

Lab ID#: 1704299A-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	25	31	100	130

Client Sample ID: Dup

Lab ID#: 1704299A-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.25	1.8	0.80	5.8
Toluene	0.25	0.58	0.95	2.2
Ethyl Benzene	0.25	0.73	1.1	3.2

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

Client Sample ID: Dup

Lab ID#: 1704299A-05A

m,p-Xylene	0.25	2.9	1.1	13
o-Xylene	0.25	1.2	1.1	5.3
TPH ref. to Gasoline (MW=100)	25	1100	100	4500

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Client Sample ID: SS-1

Lab ID#: 1704299A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042509**	**Date of Collection: 4/17/17 11:00:00 AM**	
Dil. Factor:	**2.66**	**Date of Analysis: 4/25/17 01:26 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.27	Not Detected	0.85	Not Detected
Toluene	0.27	Not Detected	1.0	Not Detected
Ethyl Benzene	0.27	Not Detected	1.2	Not Detected
m,p-Xylene	0.27	Not Detected	1.2	Not Detected
o-Xylene	0.27	Not Detected	1.2	Not Detected
TPH ref. to Gasoline (MW=100)	27	77	110	310

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SS-2

Lab ID#: 1704299A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042510**	**Date of Collection: 4/17/17 12:48:00 PM**	
Dil. Factor:	**2.39**	**Date of Analysis: 4/25/17 02:08 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.24	0.74	0.76	2.4
Toluene	0.24	0.62	0.90	2.3
Ethyl Benzene	0.24	0.57	1.0	2.5
m,p-Xylene	0.24	2.7	1.0	12
o-Xylene	0.24	1.0	1.0	4.5
TPH ref. to Gasoline (MW=100)	24	1000	98	4100

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: SS-3

Lab ID#: 1704299A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042511**	**Date of Collection: 4/17/17 1:48:00 PM**	
Dil. Factor:	**2.65**	**Date of Analysis: 4/25/17 02:44 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.26	Not Detected	0.85	Not Detected
Toluene	0.26	Not Detected	1.0	Not Detected
Ethyl Benzene	0.26	Not Detected	1.2	Not Detected
m,p-Xylene	0.26	Not Detected	1.2	Not Detected
o-Xylene	0.26	Not Detected	1.2	Not Detected
TPH ref. to Gasoline (MW=100)	26	79	110	320

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: SS-4

Lab ID#: 1704299A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042512**	**Date of Collection: 4/17/17 2:35:00 PM**	
Dil. Factor:	**2.48**	**Date of Analysis: 4/25/17 03:40 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.25	Not Detected	0.79	Not Detected
Toluene	0.25	Not Detected	0.93	Not Detected
Ethyl Benzene	0.25	Not Detected	1.1	Not Detected
m,p-Xylene	0.25	Not Detected	1.1	Not Detected
o-Xylene	0.25	Not Detected	1.1	Not Detected
TPH ref. to Gasoline (MW=100)	25	31	100	130

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: Dup

Lab ID#: 1704299A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042513**	**Date of Collection: 4/17/17 12:48:00 PM**	
Dil. Factor:	**2.52**	**Date of Analysis: 4/25/17 04:16 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.25	1.8	0.80	5.8
Toluene	0.25	0.58	0.95	2.2
Ethyl Benzene	0.25	0.73	1.1	3.2
m,p-Xylene	0.25	2.9	1.1	13
o-Xylene	0.25	1.2	1.1	5.3
TPH ref. to Gasoline (MW=100)	25	1100	100	4500

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	89	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1704299A-06A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042507**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 11:47 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.10	Not Detected	0.32	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1704299A-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 07:43 AM**	

Compound	**%Recovery**
Benzene	95
Toluene	96
Ethyl Benzene	89
m,p-Xylene	89
o-Xylene	92
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCS

Lab ID#: 1704299A-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 09:04 AM**	

Compound	%Recovery	Method Limits
Benzene	104	70-130
Toluene	106	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	104	70-130
o-Xylene	106	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCSD

Lab ID#: 1704299A-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042505**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 09:50 AM**	

Compound	%Recovery	Method Limits
Benzene	107	70-130
Toluene	108	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	106	70-130
o-Xylene	108	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	99	70-130

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4/25/2017
Mr. Devon Owens
Stantec Consulting Corporation
15575 Los Gatos Boulevard
Building C
Los Gatos CA 95032

Project Name: Chevron 90517
Project #:
Workorder #: 1704316

Dear Mr. Devon Owens

The following report includes the data for the above referenced project for sample(s) received on 4/20/2017 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1704316

Work Order Summary

CLIENT:	Mr. Devon Owens Stantec Consulting Corporation 15575 Los Gatos Boulevard Building C Los Gatos, CA 95032	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	408-356-6124	**P.O. #**	SO 0015188937
FAX:	408-356-6138	**PROJECT #**	Chevron 90517
DATE RECEIVED:	04/20/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	04/21/2017		

FRACTION #	NAME	TEST
01A	SS-1	Modified TO-17 VI
02A	SS-2	Modified TO-17 VI
03A	SS-3	Modified TO-17 VI
04A	SS-4	Modified TO-17 VI
05A	Dup	Modified TO-17 VI
06A	Lab Blank	Modified TO-17 VI
07A	CCV	Modified TO-17 VI
08A	LCS	Modified TO-17 VI
08AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes DATE: 04/25/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Stantec Consulting Corporation
Workorder# 1704316

Five TO-17 VI Tube samples were received on April 20, 2017. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 0.06 L was used to convert ng to ug/m3 for the associated Lab Blank.

The reported CCV and LCS for each daily batch may be derived from more than one analytical file.

Definition of Data Qualifying Flags

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

B - Compound present in blank (subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

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

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: SS-1

Lab ID#: 1704316-01A

No Detections Were Found.

Client Sample ID: SS-2

Lab ID#: 1704316-02A

No Detections Were Found.

Client Sample ID: SS-3

Lab ID#: 1704316-03A

No Detections Were Found.

Client Sample ID: SS-4

Lab ID#: 1704316-04A

No Detections Were Found.

Client Sample ID: Dup

Lab ID#: 1704316-05A

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	1.1	18
TPH (Diesel Range C10-C22)	1000	17000	1500	24000

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Client Sample ID: SS-1
Lab ID#: 1704316-01A
EPA METHOD TO-17

File Name:	**18042125**	**Date of Extraction: NA**	**Date of Collection: 4/17/17 11:40:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 4/22/17 02:16 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	17000	Not Detected	Not Detected

Air Sample Volume(L): 0.0600
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	101	50-150

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Client Sample ID: SS-2
Lab ID#: 1704316-02A
EPA METHOD TO-17

File Name:	**18042126**	**Date of Extraction: NA**	**Date of Collection: 4/17/17 1:25:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 4/22/17 02:58 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	17000	Not Detected	Not Detected

Air Sample Volume(L): 0.0600
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	106	50-150

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Client Sample ID: SS-3
Lab ID#: 1704316-03A
EPA METHOD TO-17

File Name:	**18042127**	**Date of Extraction: NA**	**Date of Collection: 4/17/17 2:24:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 4/22/17 03:39 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	17000	Not Detected	Not Detected

Air Sample Volume(L): 0.0600
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	108	50-150

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Client Sample ID: SS-4
Lab ID#: 1704316-04A
EPA METHOD TO-17

File Name:	**18042128**	**Date of Extraction: NA**	**Date of Collection: 4/17/17 3:12:00 PM**
Dil. Factor:	**1.00**		**Date of Analysis: 4/22/17 04:21 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	17000	Not Detected	Not Detected

Air Sample Volume(L): 0.0600
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	109	50-150

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Client Sample ID: Dup
Lab ID#: 1704316-05A
EPA METHOD TO-17

File Name:	**18042129**	**Date of Extraction: NA**	**Date of Collection: 4/17/17**
Dil. Factor:	**1.00**		**Date of Analysis: 4/22/17 05:01 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	1.1	18
TPH (Diesel Range C10-C22)	1000	17000	1500	24000

Air Sample Volume(L): 0.0600
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	84	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1704316-06A

EPA METHOD TO-17

File Name:	**18042108**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 01:36 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	17	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	17000	Not Detected	Not Detected

Air Sample Volume(L): 0.0600

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	103	50-150

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Client Sample ID: CCV
Lab ID#: 1704316-07A
EPA METHOD TO-17

File Name:	**18042102**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 09:12 AM**

Compound	%Recovery
Naphthalene	101
TPH (Diesel Range C10-C22)	134

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	118	50-150

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Client Sample ID: LCS
Lab ID#: 1704316-08A
EPA METHOD TO-17

File Name:	**18042103**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 09:54 AM**

Compound	%Recovery	Method Limits
Naphthalene	105	70-130
TPH (Diesel Range C10-C22)	Not Spiked	60-140

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	116	50-150

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Client Sample ID: LCSD
Lab ID#: 1704316-08AA
EPA METHOD TO-17

File Name:	**18042104**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 10:35 AM**

Compound	%Recovery	Method Limits
Naphthalene	97	70-130
TPH (Diesel Range C10-C22)	Not Spiked	60-140

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	107	50-150

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5/2/2017

Mr. Devon Owens
Stantec Consulting Corporation
15575 Los Gatos Boulevard
Building C
Los Gatos CA 95032

Project Name: Chevron 90517
Project #:
Workorder #: 1704299B

Dear Mr. Devon Owens

The following report includes the data for the above referenced project for sample(s) received on 4/19/2017 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1704299B

Work Order Summary

CLIENT:	Mr. Devon Owens Stantec Consulting Corporation 15575 Los Gatos Boulevard Building C Los Gatos, CA 95032	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	408-356-6124	**P.O. #**	SO 0015188937
FAX:	408-356-6138	**PROJECT #**	Chevron 90517
DATE RECEIVED:	04/19/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	05/02/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SS-1	Modified ASTM D-1946	7.1 "Hg	15.1 psi
02A	SS-2	Modified ASTM D-1946	4.5 "Hg	15.2 psi
03A	SS-3	Modified ASTM D-1946	6.9 "Hg	15.3 psi
04A	SS-4	Modified ASTM D-1946	5.1 "Hg	15.5 psi
05A	Dup	Modified ASTM D-1946	6.1 "Hg	14.8 psi
06A	Lab Blank	Modified ASTM D-1946	NA	NA
06B	Lab Blank	Modified ASTM D-1946	NA	NA
07A	LCS	Modified ASTM D-1946	NA	NA
07AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 05/02/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified ASTM D-1946
Stantec Consulting Corporation
Workorder# 1704299B

Five 1 Liter Summa Canister (100% Certified) samples were received on April 19, 2017. The laboratory performed analysis via Modified ASTM Method D-1946 for Methane and fixed gases in air using GC/FID or GC/TCD. The method involves direct injection of 1.0 mL of sample.

On the analytical column employed for this analysis, Oxygen coelutes with Argon. The corresponding peak is quantitated as Oxygen.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A minimum of 5-point calibration curve is performed. Quantitation is based on average Response Factor.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: SS-1

Lab ID#: 1704299B-01A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.27	20
Carbon Dioxide	0.027	0.84

Client Sample ID: SS-2

Lab ID#: 1704299B-02A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	20
Carbon Dioxide	0.024	0.99
Helium	0.12	0.13

Client Sample ID: SS-3

Lab ID#: 1704299B-03A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	18
Carbon Dioxide	0.026	1.2

Client Sample ID: SS-4

Lab ID#: 1704299B-04A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	21
Carbon Dioxide	0.025	0.44

Client Sample ID: Dup

Lab ID#: 1704299B-05A

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	20
Carbon Dioxide	0.025	1.0
Helium	0.13	0.14

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Client Sample ID: SS-1

Lab ID#: 1704299B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042005**	**Date of Collection: 4/17/17 11:00:00 AM**	
Dil. Factor:	**2.66**	**Date of Analysis: 4/20/17 10:24 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Oxygen	0.27	20
Methane	0.00027	Not Detected
Carbon Dioxide	0.027	0.84
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

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Client Sample ID: SS-2

Lab ID#: 1704299B-02A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042006**	**Date of Collection: 4/17/17 12:48:00 PM**	
Dil. Factor:	**2.39**	**Date of Analysis: 4/20/17 10:55 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.24	20
Methane	0.00024	Not Detected
Carbon Dioxide	0.024	0.99
Helium	0.12	0.13

Container Type: 1 Liter Summa Canister (100% Certified)

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Client Sample ID: SS-3

Lab ID#: 1704299B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042007**	**Date of Collection: 4/17/17 1:48:00 PM**	
Dil. Factor:	**2.65**	**Date of Analysis: 4/20/17 11:34 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.26	18
Methane	0.00026	Not Detected
Carbon Dioxide	0.026	1.2
Helium	0.13	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

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Client Sample ID: SS-4

Lab ID#: 1704299B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042008**	**Date of Collection: 4/17/17 2:35:00 PM**	
Dil. Factor:	**2.48**	**Date of Analysis: 4/20/17 12:02 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	21
Methane	0.00025	Not Detected
Carbon Dioxide	0.025	0.44
Helium	0.12	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

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Client Sample ID: Dup

Lab ID#: 1704299B-05A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042009**	**Date of Collection: 4/17/17 12:48:00 PM**	
Dil. Factor:	**2.52**	**Date of Analysis: 4/20/17 12:31 PM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.25	20
Methane	0.00025	Not Detected
Carbon Dioxide	0.025	1.0
Helium	0.13	0.14

Container Type: 1 Liter Summa Canister (100% Certified)

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Client Sample ID: Lab Blank

Lab ID#: 1704299B-06A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042003**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/20/17 09:09 AM**	

Compound	Rpt. Limit (%)	Amount (%)
Oxygen	0.10	Not Detected
Methane	0.00010	Not Detected
Carbon Dioxide	0.010	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: Lab Blank

Lab ID#: 1704299B-06B

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042004c**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/20/17 09:35 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 1704299B-07A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/20/17 08:42 AM**	

Compound	%Recovery	Method Limits
Oxygen	100	85-115
Methane	102	85-115
Carbon Dioxide	98	85-115
Helium	101	85-115

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 1704299B-07AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**10042010**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/20/17 03:00 PM**	

Compound	%Recovery	Method Limits
Oxygen	99	85-115
Methane	103	85-115
Carbon Dioxide	98	85-115
Helium	101	85-115

Container Type: NA - Not Applicable

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Travis Flora
Collected by: (Print and Sign) Devon Owens
Company Stantec Email Travis.Flora@stantec.com
Address 15575 Los Gatos Blvd City Los Gatos State CA Zip 95032
Phone 408-356-6124 Fax

Project Info:
P.O. #
Project #
Project Name Chevron 90517

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psig)
01A	SS-1	1L2615	4-17-17	1100	TO-15 Full	-30			
02A	SS-2	1L2524		1248	ASTM D-1946	-30			
03A	SS-3	3017		1348	Helium	-30			
04A	SS-4	1L1952		1435	Naphthalene	-30			
05A	Dup	40880	↓	1248	↓	-30			

Relinquished by: (signature) Date/Time: 4-18-17 1400
Received by: (signature) Date/Time: FedEx 4-18-17 1400
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time: 4/19/17 EAH 0945
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx		NA	Good	Yes No (None)	1704299

Form 1293 rev.11

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Travis Flora
Collected by: (Print and Sign) Devon Owens
Company Stanter Email Travis.Flora@Stanter.com
Address 15575 Los Gatos Blvd City Los Gatos State CA Zip 95032
Phone 408-356-6124 Fax

Project Info:
P.O. #
Project #
Project Name Chevron 90517

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	SS-1	1L2615	4-17-17	1100	~~TO 15 full~~	-30	-8		
	SS-2	1L2524	↓	1248	ASTM D-1946	-30	-7		
	SS-3	3017	↓	1348	Helium	-30	-8		
	SS-4	1L1952	↓	1435	~~Naphthalene~~	-30	-6		
	Dup	40880	↓	1248	BTEX, GRO	-30	-7		

Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
4-18-17 1400	FedEx 4-18-17 1400
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact? Yes No None	Work Order #

Revised COC per Client 04/20/17

Form 1293 rev.11

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5/2/2017

Mr. Devon Owens
Stantec Consulting Corporation
15575 Los Gatos Boulevard
Building C
Los Gatos CA 95032

Project Name: Chevron 90517
Project #:
Workorder #: 1704301

Dear Mr. Devon Owens

The following report includes the data for the above referenced project for sample(s) received on 4/19/2017 at Air Toxics Ltd.

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

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

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1704301

Work Order Summary

CLIENT:	Mr. Devon Owens Stantec Consulting Corporation 15575 Los Gatos Boulevard Building C Los Gatos, CA 95032	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	408-356-6124	**P.O. #**	SO 0015188937
FAX:	408-356-6138	**PROJECT #**	Chevron 90517
DATE RECEIVED:	04/19/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	05/02/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	OA-1	Modified TO-15	4.1 "Hg	4.9 psi
01B	OA-1	Modified TO-15	4.1 "Hg	4.9 psi
02A	IA-1	Modified TO-15	5.5 "Hg	5 psi
02B	IA-1	Modified TO-15	5.5 "Hg	5 psi
03A	IA-2	Modified TO-15	4.3 "Hg	5 psi
03B	IA-2	Modified TO-15	4.3 "Hg	5 psi
04A	IA-3	Modified TO-15	5.3 "Hg	5.1 psi
04B	IA-3	Modified TO-15	5.3 "Hg	5.1 psi
05A	IA-4	Modified TO-15	6.9 "Hg	4.9 psi
05B	IA-4	Modified TO-15	6.9 "Hg	4.9 psi
06A	Lab Blank	Modified TO-15	NA	NA
06B	Lab Blank	Modified TO-15	NA	NA
07A	CCV	Modified TO-15	NA	NA
07B	CCV	Modified TO-15	NA	NA
08A	LCS	Modified TO-15	NA	NA
08AA	LCSD	Modified TO-15	NA	NA
08B	LCS	Modified TO-15	NA	NA
08BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 05/02/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Stantec Consulting Corporation
Workorder# 1704301

Five 6 Liter Summa Canister (SIM Certified) samples were received on April 19, 2017. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

As per project specific client request the laboratory has reported estimated values for Benzene that are below the Reporting Limit but greater than the Method Detection Limit. Results are reported as qualified with high probability for false positive.

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical

batch. Recovery is reported as 100% in the associated results for each CCV.

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

Dilution was performed on samples IA-1, IA-2, IA-3 and IA-4 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

CN - See case narrative explanation

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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

Client Sample ID: OA-1

Lab ID#: 1704301-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	15	82	63	340

Client Sample ID: OA-1

Lab ID#: 1704301-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.077	0.13	0.24	0.42
Toluene	0.031	0.19	0.12	0.70
m,p-Xylene	0.062	0.088	0.27	0.38
o-Xylene	0.031	0.038	0.13	0.16

Client Sample ID: IA-1

Lab ID#: 1704301-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	55	140	220	570

Client Sample ID: IA-1

Lab ID#: 1704301-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.27	0.18 J	0.87	0.58 J
Toluene	0.11	0.44	0.41	1.6

Client Sample ID: IA-2

Lab ID#: 1704301-03A

No Detections Were Found.

Client Sample ID: IA-2

Lab ID#: 1704301-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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

Client Sample ID: IA-2

Lab ID#: 1704301-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.26	0.16 J	0.83	0.53 J
Toluene	0.10	0.32	0.39	1.2

Client Sample ID: IA-3

Lab ID#: 1704301-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	41	150	170	610

Client Sample ID: IA-3

Lab ID#: 1704301-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.20	0.18 J	0.65	0.56 J
Toluene	0.082	0.37	0.31	1.4

Client Sample ID: IA-4

Lab ID#: 1704301-05A

No Detections Were Found.

Client Sample ID: IA-4

Lab ID#: 1704301-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.17	0.16 J	0.55	0.52 J
Toluene	0.069	0.34	0.26	1.3

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Client Sample ID: OA-1

Lab ID#: 1704301-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042810**	**Date of Collection: 4/17/17 10:20:00 AM**	
Dil. Factor:	**1.54**	**Date of Analysis: 4/28/17 02:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	15	82	63	340

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: OA-1

Lab ID#: 1704301-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042810sim**	**Date of Collection: 4/17/17 10:20:00 AM**	
Dil. Factor:	**1.54**	**Date of Analysis: 4/28/17 02:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.077	0.13	0.24	0.42
Toluene	0.031	0.19	0.12	0.70
Ethyl Benzene	0.031	Not Detected	0.13	Not Detected
m,p-Xylene	0.062	0.088	0.27	0.38
o-Xylene	0.031	0.038	0.13	0.16
Naphthalene	0.077	Not Detected	0.40	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: IA-1

Lab ID#: 1704301-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042811**	**Date of Collection: 4/17/17 10:25:00 AM**	
Dil. Factor:	**5.47**	**Date of Analysis: 4/28/17 02:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	55	140	220	570

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: IA-1

Lab ID#: 1704301-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042811sim**	**Date of Collection: 4/17/17 10:25:00 AM**	
Dil. Factor:	**5.47**	**Date of Analysis: 4/28/17 02:53 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.27	0.18 J	0.87	0.58 J
Toluene	0.11	0.44	0.41	1.6
Ethyl Benzene	0.11	Not Detected	0.48	Not Detected
m,p-Xylene	0.22	Not Detected	0.95	Not Detected
o-Xylene	0.11	Not Detected	0.48	Not Detected
Naphthalene	0.27	Not Detected	1.4	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	109	70-130

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Client Sample ID: IA-2

Lab ID#: 1704301-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042812**	**Date of Collection: 4/17/17 10:27:00 AM**	
Dil. Factor:	**5.19**	**Date of Analysis: 4/28/17 03:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	52	Not Detected	210	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: IA-2

Lab ID#: 1704301-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042812sim**	**Date of Collection: 4/17/17 10:27:00 AM**	
Dil. Factor:	**5.19**	**Date of Analysis: 4/28/17 03:33 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.26	0.16 J	0.83	0.53 J
Toluene	0.10	0.32	0.39	1.2
Ethyl Benzene	0.10	Not Detected	0.45	Not Detected
m,p-Xylene	0.21	Not Detected	0.90	Not Detected
o-Xylene	0.10	Not Detected	0.45	Not Detected
Naphthalene	0.26	Not Detected	1.4	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: IA-3

Lab ID#: 1704301-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042813**	**Date of Collection: 4/17/17 10:33:00 AM**	
Dil. Factor:	**4.10**	**Date of Analysis: 4/28/17 04:21 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	41	150	170	610

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: IA-3

Lab ID#: 1704301-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042813sim**	**Date of Collection: 4/17/17 10:33:00 AM**	
Dil. Factor:	**4.10**	**Date of Analysis: 4/28/17 04:21 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.20	0.18 J	0.65	0.56 J
Toluene	0.082	0.37	0.31	1.4
Ethyl Benzene	0.082	Not Detected	0.36	Not Detected
m,p-Xylene	0.16	Not Detected	0.71	Not Detected
o-Xylene	0.082	Not Detected	0.36	Not Detected
Naphthalene	0.20	Not Detected	1.1	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	107	70-130

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Client Sample ID: IA-4

Lab ID#: 1704301-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042814**	**Date of Collection: 4/17/17 10:30:00 AM**	
Dil. Factor:	**3.46**	**Date of Analysis: 4/28/17 05:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	35	Not Detected	140	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	86	70-130

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Client Sample ID: IA-4

Lab ID#: 1704301-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042814sim**	**Date of Collection: 4/17/17 10:30:00 AM**	
Dil. Factor:	**3.46**	**Date of Analysis: 4/28/17 05:09 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.17	0.16 J	0.55	0.52 J
Toluene	0.069	0.34	0.26	1.3
Ethyl Benzene	0.069	Not Detected	0.30	Not Detected
m,p-Xylene	0.14	Not Detected	0.60	Not Detected
o-Xylene	0.069	Not Detected	0.30	Not Detected
Naphthalene	0.17	Not Detected	0.91	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1704301-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042807**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 11:32 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1704301-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042807simc**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 11:32 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.050	0.0031 J	0.16	0.0099 J
Toluene	0.020	Not Detected	0.075	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected
Naphthalene	0.050	Not Detected	0.26	Not Detected

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: CCV

Lab ID#: 1704301-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042802**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 07:48 AM**	

Compound	**%Recovery**
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: CCV

Lab ID#: 1704301-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042802sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 07:48 AM**	

Compound	%Recovery
Benzene	109
Toluene	107
Ethyl Benzene	117
m,p-Xylene	119
o-Xylene	120
Naphthalene	110

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: LCS

Lab ID#: 1704301-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042803**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 08:36 AM**	

Compound	%Recovery	Method Limits
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCSD

Lab ID#: 1704301-08AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042805**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 10:06 AM**	

Compound	%Recovery	Method Limits
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCS

Lab ID#: 1704301-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042803sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 08:36 AM**	

Compound	%Recovery	Method Limits
Benzene	104	70-130
Toluene	103	70-130
Ethyl Benzene	115	70-130
m,p-Xylene	116	70-130
o-Xylene	116	70-130
Naphthalene	121	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	106	70-130
4-Bromofluorobenzene	106	70-130

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Client Sample ID: LCSD

Lab ID#: 1704301-08BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**20042805sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/28/17 10:06 AM**	

Compound	%Recovery	Method Limits
Benzene	102	70-130
Toluene	101	70-130
Ethyl Benzene	114	70-130
m,p-Xylene	114	70-130
o-Xylene	115	70-130
Naphthalene	120	60-140

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	105	70-130
4-Bromofluorobenzene	108	70-130

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Travis Flora

Collected by: (Print and Sign) Devon Owens

Company Stantec Email

Address 15575 Los Gatos Blvd City Los Gatos State CA Zip 95032

Phone 408-356-6124 Fax

Project Info:

P.O. #

Project # 40517

Project Name Chevron

Turn Around Time:

☑ Normal

☐ Rush

specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	OA-1	6L1686	4-17-17	1020	TO-15 SIM	-30	-6		
	IA-1	6L1733		1025	Naphthalene	-30	-6		
	IA-2	1195		1027	BTEX	-30	-6		
	IA-3	6L1601		1033	GRO	-30	-7		
	IA-4	6L1290		1030		-30	-8		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
	4-18-17 1400	FedEx	4-18-17 1400
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact? Yes No None	Work Order #

Form 1293 rev.11

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4/25/2017
Mr. Devon Owens
Stantec Consulting Corporation
15575 Los Gatos Boulevard
Building C
Los Gatos CA 95032

Project Name: Chevron 90517
Project #:
Workorder #: 1704319B

Dear Mr. Devon Owens

The following report includes the data for the above referenced project for sample(s) received on 4/20/2017 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-17 VI are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

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

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1704319B

Work Order Summary

CLIENT:	Mr. Devon Owens Stantec Consulting Corporation 15575 Los Gatos Boulevard Building C Los Gatos, CA 95032	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	408-356-6124	**P.O. #**	SO 0015188937
FAX:	408-356-6138	**PROJECT #**	Chevron 90517
DATE RECEIVED:	04/20/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	04/25/2017		

FRACTION #	NAME	TEST
02A	CS-1	Modified TO-17 VI
03A	Lab Blank	Modified TO-17 VI
04A	CCV	Modified TO-17 VI
05A	LCS	Modified TO-17 VI
05AA	LCSD	Modified TO-17 VI

CERTIFIED BY: Heidi Hayes DATE: 04/25/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified EPA Method TO-17 (VI Tubes)
Stantec Consulting Corporation
Workorder# 1704319B

One TO-17 VI Tube sample was received on April 20, 2017. The laboratory performed the analysis via modified EPA Method TO-17 using GC/MS in the full scan mode. TO-17 'VI' sorbent tubes are thermally desorbed onto a secondary trap. The trap is thermally desorbed to elute the components into the GC/MS system for compound separation and detection.

A modification that may be applied to EPA Method TO-17 at the client's discretion is the requirement to transport sorbent tubes at 4 deg C. Laboratory studies demonstrate a high level of stability for VOCs on the TO-17 'VI' tube at room temperature for periods of up to 14 days. Tubes can be shipped to and from the field site at ambient conditions as long as the 14-day sample hold time is upheld. Trip blanks and field surrogate spikes are used as additional control measures to monitor recovery and background contribution during tube transport.

Since the TO-17 VI application significantly extends the scope of target compounds addressed in EPA Method TO-15 and TO-17, the laboratory has implemented several method modifications outlined in the table below. Specific project requirements may over-ride the laboratory modifications.

Requirement	***TO-17***	***ATL Modifications***
Distributed Volume Pairs	Collection of distributed volume pairs required for monitoring ambient air to insure high quality.	If site is well-characterized or performance previously verified, single tube sampling may be appropriate. Distributed pairs may be impractical for soil gas collection due to configuration and volume constraints.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

A sampling volume of 3.36 L was used to convert ng to ug/m3 for the associated Lab Blank.

The reported CCV and LCS for each daily batch may be derived from more than one analytical file.

Definition of Data Qualifying Flags

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

B - Compound present in blank (subtraction not performed).
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.

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

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-17

Client Sample ID: CS-1

Lab ID#: 1704319B-02A

No Detections Were Found.

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Client Sample ID: CS-1
Lab ID#: 1704319B-02A
EPA METHOD TO-17

File Name:	**18042123**	**Date of Extraction: NA**	**Date of Collection: 4/17/17 9:45:00 AM**
Dil. Factor:	**1.00**		**Date of Analysis: 4/22/17 12:55 AM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.30	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	300	Not Detected	Not Detected

Air Sample Volume(L): 3.36
Container Type: TO-17 VI Tube

Surrogates	%Recovery	Method Limits
Naphthalene-d8	104	50-150

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Client Sample ID: Lab Blank

Lab ID#: 1704319B-03A

EPA METHOD TO-17

File Name:	**18042108**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 01:36 PM**

Compound	Rpt. Limit (ng)	Rpt. Limit (ug/m3)	Amount (ng)	Amount (ug/m3)
Naphthalene	1.0	0.30	Not Detected	Not Detected
TPH (Diesel Range C10-C22)	1000	300	Not Detected	Not Detected

Air Sample Volume(L): 3.36

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	103	50-150

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Client Sample ID: CCV
Lab ID#: 1704319B-04A
EPA METHOD TO-17

File Name:	**18042102**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 09:12 AM**

Compound	%Recovery
Naphthalene	101
TPH (Diesel Range C10-C22)	134

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	118	50-150

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Client Sample ID: LCS
Lab ID#: 1704319B-05A
EPA METHOD TO-17

File Name:	**18042103**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 09:54 AM**

Compound	%Recovery	Method Limits
Naphthalene	105	70-130
TPH (Diesel Range C10-C22)	Not Spiked	60-140

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	116	50-150

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Client Sample ID: LCSD
Lab ID#: 1704319B-05AA
EPA METHOD TO-17

File Name:	**18042104**	**Date of Extraction: NA**	**Date of Collection: NA**
Dil. Factor:	**1.00**		**Date of Analysis: 4/21/17 10:35 AM**

Compound	%Recovery	Method Limits
Naphthalene	97	70-130
TPH (Diesel Range C10-C22)	Not Spiked	60-140

Air Sample Volume(L): 1.00
Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Naphthalene-d8	107	50-150

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4/28/2017
Mr. Devon Owens
Stantec Consulting Corporation
15575 Los Gatos Boulevard
Building C
Los Gatos CA 95032

Project Name: Chevron 90517
Project #:
Workorder #: 1704319A

Dear Mr. Devon Owens

The following report includes the data for the above referenced project for sample(s) received on 4/20/2017 at Air Toxics Ltd.

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

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

Regards,

Rachel Selenis

Project Manager

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WORK ORDER #: 1704319A

Work Order Summary

CLIENT:	Mr. Devon Owens Stantec Consulting Corporation 15575 Los Gatos Boulevard Building C Los Gatos, CA 95032	**BILL TO:**	Accounts Payable Chevron U.S.A. Inc. 6001 Bollinger Canyon Road L4310 San Ramon, CA 94583
PHONE:	408-356-6124	**P.O. #**	SO 0015188937
FAX:	408-356-6138	**PROJECT #**	Chevron 90517
DATE RECEIVED:	04/20/2017	**CONTACT:**	Rachel Selenis
DATE COMPLETED:	04/28/2017		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	CS-1	Modified TO-15	6.7 "Hg	14.8 psi
02A	Lab Blank	Modified TO-15	NA	NA
03A	CCV	Modified TO-15	NA	NA
04A	LCS	Modified TO-15	NA	NA
04AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 04/28/17

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

LABORATORY NARRATIVE
Modified TO-15
Stantec Consulting Corporation
Workorder# 1704319A

One 1 Liter Summa Canister (100% Certified) sample was received on April 20, 2017. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

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

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Initial Calibration	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

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

As per project specific client request the laboratory has reported estimated values for Benzene that are below the Reporting Limit but greater than the Method Detection Limit. Results are reported as qualified with high probability for false positive.

Definition of Data Qualifying Flags

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

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

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

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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

Client Sample ID: CS-1

Lab ID#: 1704319A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.26	0.31	0.83	1.0
Toluene	0.26	0.53	0.98	2.0
m,p-Xylene	0.26	0.45	1.1	2.0

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Client Sample ID: CS-1

Lab ID#: 1704319A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042508**	**Date of Collection: 4/17/17 9:40:00 AM**	
Dil. Factor:	**2.59**	**Date of Analysis: 4/25/17 12:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.26	0.31	0.83	1.0
Toluene	0.26	0.53	0.98	2.0
Ethyl Benzene	0.26	Not Detected	1.1	Not Detected
m,p-Xylene	0.26	0.45	1.1	2.0
o-Xylene	0.26	Not Detected	1.1	Not Detected
TPH ref. to Gasoline (MW=100)	26	Not Detected	100	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1704319A-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042507**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 11:47 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	0.10	Not Detected	0.32	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: CCV

Lab ID#: 1704319A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 07:43 AM**	

Compound	**%Recovery**
Benzene	95
Toluene	96
Ethyl Benzene	89
m,p-Xylene	89
o-Xylene	92
TPH ref. to Gasoline (MW=100)	100

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	109	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCS

Lab ID#: 1704319A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 09:04 AM**	

Compound	%Recovery	Method Limits
Benzene	104	70-130
Toluene	106	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	104	70-130
o-Xylene	106	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	107	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: LCSD

Lab ID#: 1704319A-04AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**v042505**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 4/25/17 09:50 AM**	

Compound	%Recovery	Method Limits
Benzene	107	70-130
Toluene	108	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	106	70-130
o-Xylene	108	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	108	70-130
4-Bromofluorobenzene	99	70-130

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Travis Flora

Collected by: (Print and Sign) Devon Owens

Company Stantec Email Travis.Flora@Stantec.com

Address 15575 Los Gatos Blvd City Los Gatos State CA Zip 95032

Phone 408-356-6124 Fax ____

Project Info:
P.O. # ____
Project # ____
Project Name Chevron 90517

Turn Around Time:
☒ Normal
☐ Rush
____ specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	CS-1	3793	4-17-17	902	TO-15 SIM*	-30	-8		
	CS-1	Tube	4-17-17	945	TO-17 + DRO	—	—		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	4-18-17 1400	FedEx	4-18-17 1400
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:
3,360 mL pulled Through CS-1 Tube

* GRO, BTEX, Naphthalene

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact? Yes No None	Work Order #

Form 1293 rev.11

APPENDIX E
VAPOR SAMPLE COLLECTION DATA LOGS AND BUILDING SURVEY

Soil Vapor Sample Collection Data Log

Stantec

Project: Chevron 90517	
Address: 3900 Piedmont Ave., Oakland, CA	
Date:	4-17-17
Field Personnel:	SUCHAW SUNZ / DEVON OWENS
Weather:	OVERCAST / RAIN
Surface Soil Conditions:	WET
Outdoor Environment Conditions:	WET

Section		CS-1 ~~SS-1~~	CS-1 SORBENT TUBE ~~SS-2~~	~~SS-3~~	~~SS-4~~	~~DUP~~
Preliminary Data	Sample ID:	CS-1	CS-1 (Man)			
	Canister Serial No.:	3793	ABS. TUBE			
	Flow Controller Serial No.:	~~[illegible]~~	—			
	Sample Depth (ft):	10 Ft	10 Ft			
	Probe Tubing Length (ft):	—	—			
	Manifold Tubing Length (ft):	—	—			
	* Calculated Purge Volume (mL):	120 mL	120 mL			
	Calculated Purge Duration (min):	—	—			
Vacuum Leak Testing	Start Time:	X	X			
	Initial Vacuum (in Hg):					
	End Time:					
	Final Vacuum (in Hg):					
	Duration of Leak Test (min):					
	Pass/Fail:					
Purging	Start Time:	X	0945			
	End Time:		0950			
	Purge Duration (min):		5			
	Start Vacuum:		—			
	End Vacuum:		—			
	Total Vacuum Drop:		—			
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (in Hg):	-28	X			
	Start Time:	0902				
	Helium @ Start (%):	X				
	Helium @ 5 min (%):					
	Helium @ 10 min (%):					
	Helium @ 15 min (%):					
	Helium @ 20 min (%):					
	Helium @ 25 min (%):					
	Helium @ 30 min (%):					
	Helium @ 35 min (%):					
	Helium @ 40 min (%):					
	Helium @ 45 min (%):					
	Helium @ 50 min (%):					
	Helium @ 55 min (%):					
	Helium @ 60 min (%):					
	End Time:	0942				
	Final Canister Vacuum (in Hg):	-8				

Comments

*PURGE w/ SYRINGE.

CS-1 TUBE sample Time -0945.

Soil Vapor Sample Collection Data Log

Stantec

Project: Chevron 90517

Address: 3900 Piedmont Ave., Oakland, CA

Date: 4-17-17

Field Personnel: SHEHEEN SUNG / DEVON OWENS

Weather: OVERCAST

Surface Soil Conditions: —

Outdoor Environment Conditions: OVERCAST

		OA-1 ~~SG-1~~	IA-1 ~~SG-2~~	IA-2 ~~SG-3~~	IA-3 ~~SG-4~~	IA-4 ~~DUP~~
Preliminary Data	Sample ID:	OA-1	IA-1	IA-2	IA-3	IA-4
	Canister Serial No.:	6L1684	6L1733	1195	6L1601	6L1290
	Flow Controller Serial No.:	22845	22877	22884	20778	22857
	Sample Depth (ft):					
	Probe Tubing Length (ft):					
	Manifold Tubing Length (ft):					
	Calculated Purge Volume (mL):					
	Calculated Purge Duration (min):					
Vacuum Leak Testing	Start Time:					
	Initial Vacuum (in Hg):					
	End Time:					
	Final Vacuum (in Hg):					
	Duration of Leak Test (min):					
	Pass/Fail:					
Purging	Start Time:					
	End Time:					
	Purge Duration (min):					
	Start Vacuum:					
	End Vacuum:					
	Total Vacuum Drop:					
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (in Hg):	-30	-30	-30	-30	-30
	Start Time:	1020	1025	1027	1033	1030
	Helium @ Start (%):					
	Helium @ 5 min (%):					
	Helium @ 10 min (%):					
	Helium @ 15 min (%):					
	Helium @ 20 min (%):					
	Helium @ 25 min (%):					
	Helium @ 30 min (%):					
	Helium @ 35 min (%):					
	Helium @ 40 min (%):					
	Helium @ 45 min (%):					
	Helium @ 50 min (%):					
	Helium @ 55 min (%):					
	Helium @ 60 min (%):					
	End Time:					
	Final Canister Vacuum (in Hg):					

Comments

Soil Vapor Sample Collection Data Log

Stantec

Project: Chevron 90517
Address: 3900 Piedmont Ave., Oakland, CA
Date: 4-17-17
Field Personnel: SHELDON SUNG / DEVON OWENS
Weather: RAIN
Surface Soil Conditions: DRY INDOORS
Outdoor Environment Conditions: RAIN

		SS-1	SS-2	SS-3	SS-4	DUP
Preliminary Data	Sample ID:	SS-1	SS-2	SS-3	SS-4	DUP
	Canister Serial No.:	12615	12524	3017	11952	40880
	Flow Controller Serial No.:					
	Sample Depth (ft):	0.5'	0.5'	0.5'	0.5'	0.5
	Probe Tubing Length (ft):	0.5'	0.5	0.5'	0.5'	0.5
	Manifold Tubing Length (ft):	1.5'	1.5'	1.5'	1.5'	1.5
	Calculated Purge Volume (mL):					
	Calculated Purge Duration (min):					
Vacuum Leak Testing	Start Time:	1054	1243	1345	1432	1243
	Initial Vacuum (in Hg):	-10	-7	-11	-11	-7
	End Time:	1055	1244	1346	1433	1244
	Final Vacuum (in Hg):	-10	-7	-11	-11	-7
	Duration of Leak Test (min):	1	1	1	1	1
	Pass/Fail:	PASS	PASS	PASS	PASS	PASS
Purging	Start Time:					
	End Time:	purged ~~for~~ at leak test	purged ~~for~~ at leak test.	purged ~~for~~ at leak test	purged ~~for~~ at leak test.	purged ~~for~~ at leak test
	Purge Duration (min):					
	Start Vacuum:					
	End Vacuum:					
	Total Vacuum Drop:					
Sample Collection and Tracer Gas Monitoring	Initial Canister Vacuum (in Hg):	-30	-30	-30	-30	-30
	Start Time:	1100	1248	1348	1435	1248
	Helium @ Start (%):	45.5	46.3	61.6	62.3	46.3
	Helium @ 5 min (%):	31.7	36.0	44.6	32.7	36.0
	Helium @ 10 min (%):	40.4	33.4	32.2	34.0	33.4
	Helium @ 15 min (%):	36.8	30	44.6	38.0	30
	Helium @ 20 min (%):	34.2	27.4	28.5	38.7	27.4
	Helium @ 25 min (%):	34.0	29.5	30.2	41.3	29.5
	Helium @ 30 min (%):	36.6	29.8	29.1	30.1	29.8
	Helium @ 35 min (%):					
	Helium @ 40 min (%):					
	Helium @ 45 min (%):					
	Helium @ 50 min (%):					
	Helium @ 55 min (%):					
	Helium @ 60 min (%):					
	End Time:	1132	1320	1420	1506	1320
	Final Canister Vacuum (in Hg):	-8	-7	-6	-6	-7

Comments

~~CA # 1 - CAN # 12615~~
~~FC # 22645~~

VP = vapor pin

SS-1 - ~~PURGE~~ VP - 1140 - purge 60 mL w/ syringe
SS-2 - ~~PURGE~~ VP - 1325 - purge 60 mL w/ syringe
DUP - ~~PURGE~~ VP - ____ - purge 60 mL w/ syringe
SS-3 - VP - 1424 - purge 60 mL w/ syringe
SS-4 - VP - 1512 - purge 60 mL w/ syringe

INDOOR AIR QUALITY BUILDING SURVEY

This form must be completed for each building involved in an indoor air investigation.

Preparer's Name: SUCHEON SUNG Date Prepared: 3-27-17

Preparer's Affiliation: STANTEC

Telephone Number: 408-356-6124

OCCUPANT INFORMATION	
Name	GOLDEN GATE URGENT CARE
Address	3900 PIEDMONT AVE.
City, State ZIP	OAKLAND, CA.
Home Telephone	—
Office Telephone	415-432-7899

OWNER or LANDLORD INFORMATION	
Name (if different from Occupant)	Mr. and Mrs. Neil and Diane Goodhue
Address	300 Hillside Ave.
City, State ZIP	Piedmont, CA 94611
Telephone	NA

A. Building Construction

1. Type (check appropriate responses):

- ☒Single Level
- ☐Split Level
- ☐Mobile Home
- ☐Duplex
- ☐Apartment Building: # of Units: _____
- ☐Other: _____
- ☐Triplex
- ☐Office
- ☐Warehouse
- ☐Strip Mall

2. Building Age: 39 years old Number of Floors: 1
3. Area of the Building (square feet): ~2500
4. Is the building insulated? ☒YES ☐NO
5. How sealed is the building? was sealed.
6. Roll-up Doors Present? (Y / (N)) Normally Open? (Y / N)
7. Number of elevators in the building: NONE

8. Condition of the elevator pits (sealed, open earth, etc.) NA

9. General description of building construction materials:
wood / concrete.

B. Foundation Characteristics (check all that apply)

1. ☐Full basement ☐Crawlspace ☒Slab on Grade-

Post Tension Slab?_____
☐Other:_____

Were foundation design specifications and as-built drawings for the facility obtained? (Y / N)

Was soil beneath the floor slab treated with lime before placing the slab? (Y / N)

Were fibers or additional rebar added to the concrete floor to minimize cracking? (Y / N)

Was a vapor barrier installed under the floor slab? (Y / N)

Describe: UNK.

Were any other liners installed under the floor slab? (Y / N)

Describe: UNK

2. Basement Floor Description: ☒Concrete ☐Dirt ☐Wood
☐Other:_____
a) Basement is: ☐Wet ☐Dry ☐Damp
b) Sump present? ☐YES ☐NO Water in sump? ☐YES ☐NO
c) Basement is: ☐Finished ☐Unfinished ☐Other:_____
d) Is basement sealed? ☐YES ☐NO
Provide a description:_____

3. Concrete floor description: ☐Unsealed ☐Painted ☒Covered with: TILING

4. Foundation walls: ☒Poured Concrete ☐Block ☐Stone ☒Wood
☐Other:_____

C. Identify all potential soil gas entry points and their size (e.g., cracks, voids, pipes, utility ports, sumps, drain holes, etc.). Include these points on the building diagram.

D. Heating, Ventilation, and Air Conditioning (check all that apply)

1. Type of heating system(s):

☒Hot Air Circulation
☐Hot Water Radiation
☐Steam Radiation
☐Electric Baseboard
☐Heat Pump
☐Un-Vented Kerosene Heater
☐Wood Stove
☒Other (specify): HVAC

2. Type of fuel used:
☒Natural Gas ☒Electric ☐Coal
☐Fuel Oil ☐Wood ☐Solar
☐Other:_____

3. Location of heating system: Central

4. Is there air conditioning? ☒YES ☐NO
If YES: ☒Central Air ☐Window Units
Specify location:_____

5. Are there air distribution ducts present? ☐YES ☒NO

6. Describe the supply and cold air return duct work including whether there is a cold air return and comment on the tightness of duct joints: UNK.

7. Is there a whole house fan? ☐YES ☒NO
What is the size of the fan?_____

8. Temperature settings inside during sampling (note day and night temperatures).
   a. Daytime Temperature(s) 72° F
   b. Nighttime Temperature(s) UNK
   (Note times if system cycles during non-occupied hours during the day.)

9. Estimate the average time doors and windows are open to allow fresh outside air into the building. Note rooms that frequently have open windows or doors:
doors/windows closed at all times/except for when person enter/exit bldg. Through front door.

E. Potential Indoor Sources of Pollution

1. Is the laundry room located inside the building? ☒YES ☒NO
2. Has the building ever had a fire? ☐YES ☒NO
3. Is there an attached garage? ☐YES ☒NO
4. Is a vehicle normally parked in the garage? ☐YES ☒NO
5. Is there a kerosene heater present? ☐YES ☒NO
6. Is there a workshop, hobby or craft area in the building? ☐YES ☒NO

7. An inventory of all products used or stored in the building should be performed. Any products that contain volatile organic compounds or chemicals similar to the target compounds should be listed. The attached **Products Inventory Form** (see page 7) should be used for this purpose.
8. Is there a kitchen exhaust fan? ☐YES ☒NO
Where is it vented?_____
9. Is the stove: ☐Gas ☐Electric Is the oven: ☐Gas ☐Electric NONE
10. Is there an automatic dishwasher? ☐YES ☒NO
11. Is smoking allowed in the building? ☐YES ☒NO
12. Has the building ever been fumigated or sprayed for pests? ☐YES ☐NO UNK.
If YES, give date, type and location of treatment:_____
13. Date of last painting of surfaces at the facility: UNK / within BLDG was renovated
Location where painting occurred: INTERIOR

14. Date of last carpet replacement: None

Location(s): _____

_____

_____

Was glue used to attach carpeting to floor slab? NA

15. Describe Process/Manufacturing/Storage Areas:

16. Existing Soil Vapor Control Devices (pipes, vents, blowers, HVAC Add-ons)

Describe Observations, Locations: AC/Heat vents in ceiling throughout BLDG.

17. Wall Surfaces (painted, textured) painted

18. Noted Interior Sinks for VOCs yes.

F. Water and Sewage

1. Source of Water (check appropriate response)

- ☒ Public Water
- ☐ Drilled Well
- ☐ Driven Well
- ☐ Dug Well
- ☐ Other (specify): _____

2. Water Well Specifications

Well Diameter _____
Well Depth _____
Depth to Bedrock _____
Feet of Casing _____
Grouted or Un-grouted _____
Type of Storage Tank _____
Size of Storage Tank _____

Describe type(s) of Treatment: NA

3. Water Quality

Taste and/or odor problems with water? ☐ YES ☒ NO
If YES, describe: _____
Is the water chlorinated, brominated, or ozonated? ☐ YES ☒ NO
How long has the taste and/or odor problem been present? _____

4. Sewage Disposal

- ☒ Public Sewer
- ☐ Septic Tank
- ☐ Leach Field
- ☐ Other (specify): _____

Distance from well to septic system: UNK
Type of septic tank additives: UNK.

G. Plan View

Sketch each floor and if applicable, indicate air sampling locations, possible indoor air pollution sources, preferential pathways and field instrument readings.

H. Potential Outdoor Sources of Pollution

Draw a diagram of the area surrounding the building being sampled. If applicable, provide information on the spill locations (if known), potential air contamination sources (industries, service stations, repair shops, retail shops, landfills, etc.), outdoor air sampling locations, and field instrument readings.

Also, on the diagram, indicate barometric pressure, weather conditions, ambient and indoor temperatures, compass direction, wind direction and speed during sampling, the locations of the water wells, septic systems, and utility corridors if applicable, and a statement to help locate the site on a topographical map.

PRODUCTS INVENTORY FORM

Occupant of Building: Golden Gate Urgent Care

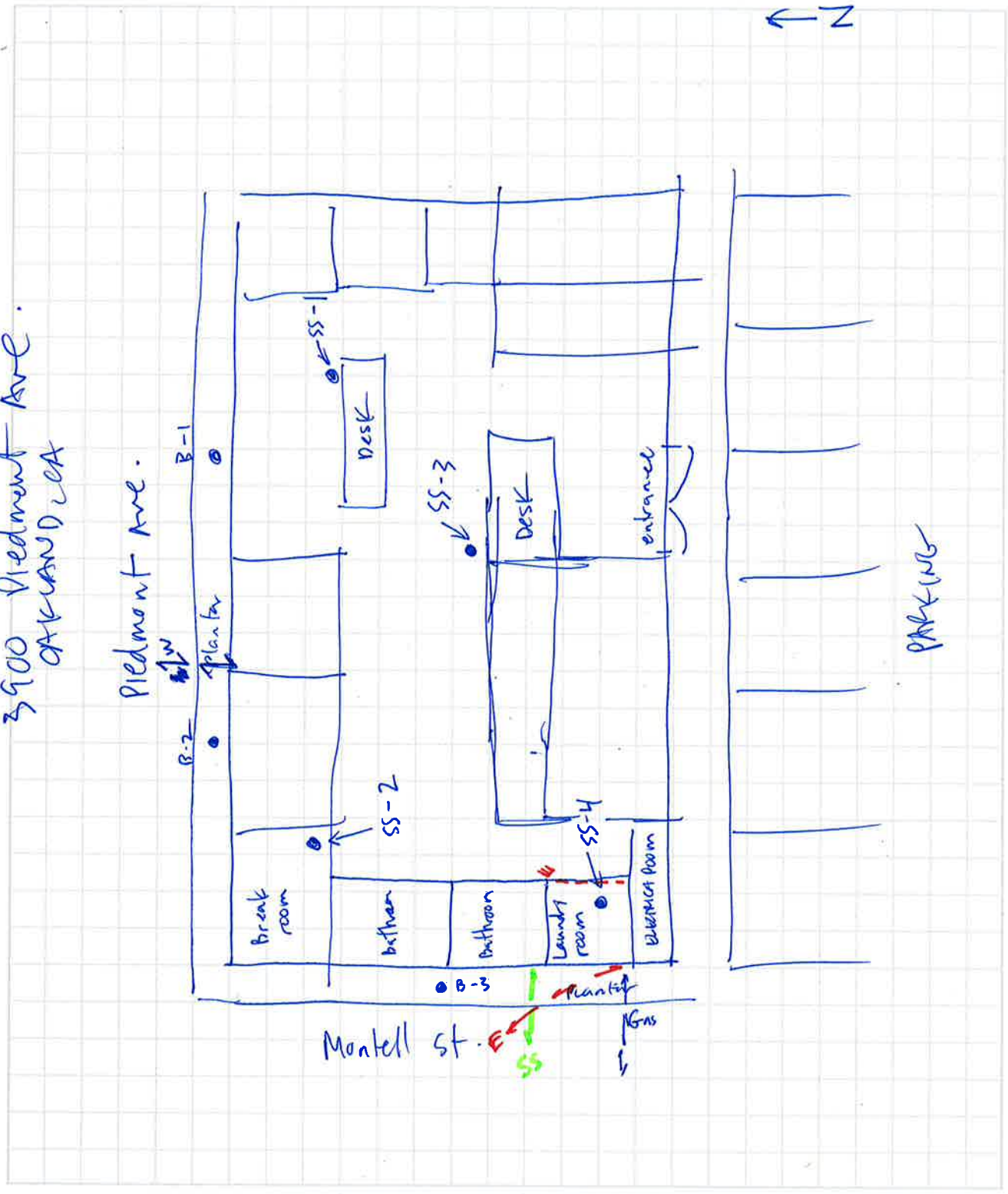
Address: 3900 PIEDMONT AVE. OAKLAND, CA

Field Investigator: [illegible] Date: 3-27-17

Product Description (Commercial name, dispenser type, container size, manufacturer)	VOCs Contained in Product	Field Instrument Reading
19oz can Lysol Disinfectant in bathrooms		
Windex cleaning supplies		
Clorox Bleach		

Comments:

Stantec



Designed by:

Checked by:

APPENDIX F
WASTE MANIFEST

WASTE MANAGEMENT

WEIGHMASTER-Altamont Landfill & RRF
10840 Altamont Pass Road
Livermore, CA. 94551
Phs (925)455-7300

Original
Ticket# 1107853

Customer Name CHEVRON EMC 0015242195 WMSS
Ticket Date 07/10/2017
Payment Type Credit Account
Manual Ticket#
Billing # 0389047

Carrier GEN Altamont Generic
Vehicle# 49065h1
Container
License#

Manifest ch0002922
PO 0015242195
Profile 631146CA (NON HAZARDOUS SOIL)
Generator 164-90517CHEVRON 90517 CHEVRON(3900 PIEDMONT AVE)

Time	Scale Ind	Deputy Weighmaster	Inbound	Gross	10120 lb
In 07/10/2017 13:56:19	Scale1 In	R Rojas		Tare	9680 lb
Out07/10/2017 14:16:17	Scale1 Inb	J Schaeuffler		Net	440 lb
				Tons	0.22

Comments

	Product	LD%	Qty	UOM	Rate	Tax	Amount	Origin
1	C2 Disp SPW-Each-W 100		1	Each				Oakland
2	FUEL-Fuel Surcharg 100			%				Oakland

DRIVER: _____

Total Tax
Total Ticket

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

404WMCA

49065H1
10/20

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of 1

3. Emergency Response Phone: 1-800-424-9300

4. Waste Tracking Number: CH 0002922

5. Generator's Name and Mailing Address
Chevron 90517
PO Box 6004 - Chevron EMC Waste Desk
San Ramon, CA 94583
Generator's Phone: 877 386-6044

Generator's Site Address (if different than mailing address)
3900 Piedmont Ave.
OAKLAND, CA 94611

6. Transporter 1 Company Name
Waste Management
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Waste Management, Inc. - Altamont Landfill & Resource Recovery
10840 Altamont Pass Rd
Livermore, CA 94550
Facility's Phone: 925-455-7350
U.S. EPA ID Number: CAD981382733

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non DOT Regulated Material (Soil)	01	DM	400	P	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information
Wear Gloves and Safety Shoes when moving drum.
Service Order# 0015242195
Waste Management Profile #631146CA
49065H1

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

Generator's/Offeror's Printed/Typed Name: Kwame Awuku
Signature
Month 7 Day 10 Year 17

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: IRENE PEREZ
Signature
Month 07 Day 10 Year 17

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

17c. Signature of Alternate Facility (or Generator)
Month Day Year

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

Printed/Typed Name
Signature
Month 7 Day 10 Year 17

169-BLC-O 5 11977 (Rev. 9/09)

DESIGNATED FACILITY TO GENERATOR

APPENDIX G
LTCP CHECKLIST

Site Name: Former Chevron-branded Service Station 90517
Site Address: 3900 Piedmont Ave., Oakland, California

Site meets the criteria of the Low-Threat Underground Storage Tank (UST) Case Closure Policy as described below.[1]

General Criteria General criteria that must be satisfied by all candidate sites:	
Is the unauthorized release located within the service area of a public water system?	☒ Yes ☐ No
Does the unauthorized release consist only of petroleum?	☒ Yes ☐ No
Has the unauthorized ("primary") release from the UST system been stopped?	☒ Yes ☐ No
Has free product been removed to the maximum extent practicable?	☐ Yes ☐ No ☒ NA
Has a conceptual site model that assesses the nature, extent, and mobility of the release been developed?	☒ Yes ☐ No
Has secondary source been removed to the extent practicable?	☒ Yes ☐ No
Has soil or groundwater been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15?	☒ Yes ☐ No
Does nuisance as defined by Water Code section 13050 exist at the site?	☐ Yes ☒ No
Are there unique site attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents?	☐ Yes ☒ No
Media-Specific Criteria Candidate sites must satisfy all three of these media-specific criteria: **1. Groundwater:** To satisfy the media-specific criteria for groundwater, the contaminant plume that exceeds water quality objectives must be stable or decreasing in areal extent, and meet all of the additional characteristics of one of the five classes of sites:	
Is the contaminant plume that exceeds water quality objectives stable or decreasing in areal extent?	☒ Yes ☐ No ☐ NA
Does the contaminant plume that exceeds water quality objectives meet all of the additional characteristics of one of the five classes of sites? If YES, check applicable class: ☐ **1** ☐ **2** ☐ **3** ☐ **4** ☒ **5**	☒ Yes ☐ No ☐ NA

[1] Refer to the Low-Threat Underground Storage Tank Case Closure Policy for closure criteria for low-threat petroleum UST sites.

For sites with releases that have not affected groundwater, do mobile constituents (leachate, vapors, or light non-aqueous phase liquids) contain sufficient mobile constituents to cause groundwater to exceed the groundwater criteria?	☐ Yes ☐ No ☒ NA
2. Petroleum Vapor Intrusion to Indoor Air: The site is considered low-threat for vapor intrusion to indoor air if site-specific conditions satisfy all of the characteristics of one of the three classes of sites (a through c) or if the exception for active commercial fueling facilities applies. **Is the site an active commercial petroleum fueling facility?** Exception: Satisfaction of the media-specific criteria for petroleum vapor intrusion to indoor air is not required at active commercial petroleum fueling facilities, except in cases where release characteristics can be reasonably believed to pose an unacceptable health risk. **a. Do site-specific conditions at the release site satisfy all of the applicable characteristics and criteria of scenarios 1 through 3 or all of the applicable characteristics and criteria of scenario 4?** If YES, check applicable scenarios: ☐ **1** ☐ **2** ☐ **3** ☐ **4** **b. Has a site-specific risk assessment for the vapor intrusion pathway been conducted and demonstrates that human health is protected to the satisfaction of the regulatory agency?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that petroleum vapors migrating from soil or groundwater will have no significant risk of adversely affecting human health?**	☐ Yes ☒ No ☐Yes ☐ No ☒ NA ☒ Yes ☐ No ☐ NA ☐ Yes ☐ No ☒ NA
3. Direct Contact and Outdoor Air Exposure: The site is considered low-threat for direct contact and outdoor air exposure if site-specific conditions satisfy one of the three classes of sites (a through c). **a. Are maximum concentrations of petroleum constituents in soil less than or equal to those listed in Table 1 for the specified depth below ground surface (bgs)?** **b. Are maximum concentrations of petroleum constituents in soil less than levels that a site specific risk assessment demonstrates will have no significant risk of adversely affecting human health?** **c. As a result of controlling exposure through the use of mitigation measures or through the use of institutional or engineering controls, has the regulatory agency determined that the concentrations of petroleum constituents in soil will have no significant risk of adversely affecting human health?**	☒ Yes ☐ No ☐ NA ☐ Yes ☐ No ☒ NA ☐ Yes ☐ No ☒ NA