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ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION REPORT

FORMER CALTRANS HEGENBERGER
MAINTENANCE STATION
555 HEGENBERGER ROAD
OAKLAND, ALAMEDA COUNTY, CALIFORNIA



GEOCON
CONSULTANTS, INC.

GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

PREPARED FOR

CALIFORNIA DEPARTMENT OF TRANSPORTATION,
DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING
111 GRAND AVENUE, 14TH FLOOR
OAKLAND, CALIFORNIA

GEOCON PROJECT NO. E8722-02-01B

JUNE 2015



Geocon Project No. E8722-02-01B
June 10, 2015

Mr. Bahram Sazegar
Caltrans – District 4
Office of Environmental Engineering, MS 8C
111 Grand Avenue, 14th Floor
Oakland, California 94623

Subject: ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION REPORT
 FORMER CALTRANS HEGENBERGER MAINTENANCE STATION
 555 HEGENBERGER ROAD
 OAKLAND, ALAMEDA COUNTY, CALIFORNIA

Dear Mr. Sazegar:

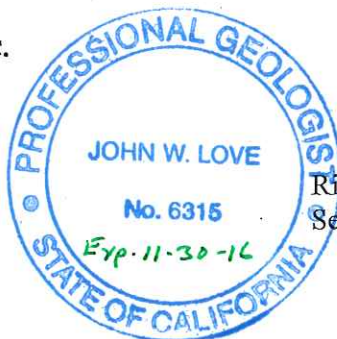
Geocon Consultants, Inc. has prepared this *Additional Soil and Groundwater Investigation Report* for the Former Caltrans Maintenance Station site located at 555 Hegenberger Road in Oakland, Alameda County, California. Our report contains details of field services and laboratory analytical results.

Caltrans' authorization to submit this report is provided in Appendix E. Please contact the undersigned if you have any questions or comments.

Sincerely,

GEOCON CONSULTANTS, INC.

John Love, PG
Senior Project Geologist



Richard Day, CEG, CHG
Senior Geologist

- (5) Addressee
- (1) Keith Nowell, Alameda County LOP

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ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION REPORT

1.0 INTRODUCTION

On behalf of Caltrans Department of Transportation – District 4 (Caltrans), Geocon Consultants, Inc. conducted additional soil and groundwater investigation at the Former Caltrans Maintenance Station site located at 555 Hegenberger Road in Oakland, California (Figure 1). The investigation was performed in response to the Alameda County Health Care Services Agency (ACHCSA) letter dated February 11, 2015. A copy of the letter is provided in Appendix A.

1.1 Background

Since 1948, the site is known to have been used as City of Oakland and Caltrans maintenance yards. The latter occupied the site from at least 1978 until the early 1990's.

In September 1994, GHH Engineering, Inc. removed two 2,000-gallon diesel underground storage tanks (USTs) and two 6,500-gallon gasoline USTs were removed in 1994. The USTs were reportedly last used in 1986. During the UST removals approximately 8,100 gallons of water and product were removed from the tanks. After removal from the ground, holes were observed in each UST indicating that a release had occurred. Approximately 280 cubic yards of soil were over-excavated from the common UST pit and disposed offsite during the UST removal.

After the USTs were removed in 1994, several subsurface investigations were conducted at the site to delineate the petroleum impacts to soil and groundwater resulting from the unauthorized release(s) of gasoline and diesel fuel from the four USTs.

Geocon conducted soil and groundwater investigations in 1995 and 2001 which included the advancement of nine soil borings (BH-1 to BH-9) and the construction of five groundwater monitoring wells (MW-1 to MW-5). Stantec advanced 14 soil borings (SB-1 to SB-12, SB-12A and SB-13) in April 2012 to further delineate impacts to soil and groundwater surrounding the former UST excavation area (see Figure 2). The groundwater monitoring wells have been sampled sporadically during the last 19 years. Soil and groundwater sample results from the borings and monitoring wells are summarized in Tables 1 to 3.

On November 14, 2014, a meeting was held at the ACHCSA office to discuss issues that needed to be addressed to facilitate eventual case closure under the 2012 Low-Threat Underground Storage Tank Case Closure Policy (2012 LTCP) guidelines. The issues to be addressed are as follows:

- 1) Assess whether more than one groundwater-bearing zone exists beneath the investigation area. This information is critical to understanding how petroleum-impacts to shallow-depth soils throughout the site may have occurred.

During the construction of MW-1 to MW-5 in 2005, groundwater was initially encountered between 13 and 18 feet below ground surface (bgs); however, depths to groundwater measured in these wells over the last 19 years indicate that confined conditions likely exist since depths to groundwater in these wells have been measured at depths of less than 4 feet.

Soil sample data collected from outlying borings such as SB3 indicate that total petroleum hydrocarbons as gasoline (TPHg), as diesel (TPHd), and benzene are present in soil between 0 and 5 feet at concentrations of 16 milligrams per kilogram (mg/kg), 120 mg/kg, and 0.530 mg/kg, respectively. Given their location and shallow depth (<5 feet) it is unclear if these contaminants originated from the former leaking USTs or from other unknown source(s) given the site's known land use as both City of Oakland and Caltrans vehicle maintenance facilities. Presumably, if they originated from the former USTs they would have been deposited in soils near SB3 by means of migration through groundwater; however, if it turns out that groundwater is confined, as past circumstances seem to indicate, then TPH-impacts to shallow-depth soils will need to be addressed as a separate issue from the unauthorized release from the former USTs.

- 2) Further delineate (to the extent feasible given the close proximity of Hegenberger Road to the site) the lateral extent of petroleum-impacts to shallow-depth soil and groundwater northwest, northeast, and east of the former UST excavation area.
- 3) Assess potential vapor intrusion for existing buildings.
- 4) Assess potential impacts to sensitive receptors such as the tidal channel located approximately 300 feet south of the site.

Once these issues have been addressed, it was thought that active remediation of soil and groundwater within the immediate vicinity of the former UST excavation may be necessary to close this case using the guidelines established in the 2012 LTCP.

1.2 Scope of Services

The scope of services conducted during this investigation included the following:

- Obtained soil boring permits from the Alameda County Public Works Agency (ACPWA). Copies of the permits are provided in Appendix B.
- Conducted utility clearance.
- Coordinated the field sampling with the ACHCSA, ACPWA, TEC Trucking, the site owner of the adjacent property located at 8099 Coliseum Way, and Caltrans.
- Advanced 21 temporary borings using a Geoprobe direct-push sample rig.
- Collected and submitted 29 soil and 16 groundwater samples for laboratory analysis.
- Prepared report of findings.

2.0 SITE INVESTIGATION

On April 20 and 24, 2015, Geocon oversaw the advancement of 21 temporary borings (BC-1 to BC-3 and SB-15 to SB-25) as shown on Figures 2 and 3. The total number of boreholes includes several boring clusters where more than one boring was advanced for the purpose of collecting depth-discrete groundwater samples.

2.1 Soil and Groundwater Sample Methodology and Laboratory Analysis

All borings were advanced using a Geoprobe™ direct-push sample rig provided by Geocon. Each borehole was continuously cored by driving a four-foot-long by two-inch-diameter Macrocore sampler lined with an acetate sample tube into undisturbed soil at three- to four-foot sample intervals until the target sample depth was encountered.

Soil samples were collected by cutting the acetate sample sleeve from the targeted sample depth, capping the ends with Teflon tape and plastic end caps, and then placing in a chest cooled with ice for storage and transport to the analytical laboratory.

Grab-groundwater samples were collected from most boring locations by installing a temporary ¾-inch-diameter PVC well casing into the open borehole and then allowing groundwater to enter the well casing. A Hydropunch sampler was used to facilitate the collection of groundwater samples at SB-23 and SB-24, since soil sample collection was not necessary at these locations and depth to groundwater was known to be somewhere between 14 and 16 feet after nearby SB-25 was advanced by means of continuous coring.

Groundwater samples were collected at each boring using a peristaltic pump with disposable polyethylene tubing. Groundwater samples were retrieved and containerized in 40-milliliter (ml) glass vials preserved with hydrochloric acid and unpreserved one liter jars for transport to the analytical laboratory.

All soil and groundwater samples were submitted for laboratory analysis under chain-of-custody protocol to McCampbell Analytical, Inc., a State of California-certified laboratory located in Pittsburg, California.

All soil and groundwater samples were analyzed for TPHd and TPHd using silica gel cleanup following EPA Test Method 8015B, and TPHg and volatile organic compounds (VOCs) following EPA Test Method 8260B.

2.2 Depth to Groundwater Assessment – Boring Clusters BC-1 to BC-3

Three boring clusters (BC-1 to BC-3) were originally planned to be advanced to assess whether confined groundwater conditions exist beneath the investigation area. Each cluster was to consist of five borings advanced to depths of 3, 6, 9, 12, and 15 feet. The borings were to be allowed to remain open for 4 days for the purpose of assessing whether groundwater encountered within 5 feet of ground surface during previous site investigations existed at shallow depth under confined or unconfined conditions. This information was to then be used to determine whether petroleum impacts to shallow-depth soils at several locations throughout the investigation area may have arrived at these locations by means of migration through groundwater or whether they likely originated from a source other than the former Caltrans USTs; however, during the advancement of the first borings at cluster locations BC-1 and BC-2 field observations indicated that obvious petroleum impacts to groundwater were present at BC-1 at 3.5 feet and at BC-2 at 7.5 feet; therefore, advancing four additional borings to greater depths in these locations was not necessary as groundwater was obviously present at shallow depths under unconfined conditions.

Boring cluster BC-3 was completed as planned. Five borings were advanced to the previously stated depths and allowed to remain open for 4 days. The borings were advanced at least 4 feet apart from one another to prevent groundwater from one boring leaching through potentially unconsolidated sediments into an adjacent borehole. The 12- and 15-foot boreholes were the only borings which had groundwater in them after all the borings were advanced on April 20, 2015.

After four days, we returned to the site on April 24, 2015, to measure depth to groundwater in each of the BC-3 borings. Depth to groundwater was measured in all borings at a depth of approximately 5 feet, except the 3-foot-deep borehole, confirming that shallow-depth groundwater does exist at the site under unconfined conditions.

2.2.1 Soil and Groundwater Conditions

Boring BC-1 was advanced to a depth of 8 feet. Saturated gravel was encountered at this location from somewhere between 1 foot and 3.5 to 4 feet (there was poor sample recovery between 1 and 3.5 feet). A strong petroleum odor and residual product was also observed in this saturated interval. Between 4.5 and 8 feet was stiff silty clay. The clay had a slight petroleum odor that decreased with depth. Groundwater in the BC-1 borehole stabilized at 3.5 feet.

Soil encountered in the BC-2 borehole consisted of firm sandy clay from near ground surface to a depth of approximately 7.5 feet. A slight petroleum odor was noticed starting at 1 foot below grade and intensified to a strong odor at approximately 4 feet. Between 7.5 and 8 feet was saturated clayey gravel. A strong petroleum odor and residual product was observed in the groundwater present at this

depth interval. The BC-2 borehole was terminated at 8 feet after a groundwater sample was collected for laboratory analysis.

We returned to the BC-2 boring location to collect a deeper groundwater sample after completing boring SB-15 (discussed in following sections). SB-15 was the next sample location after we finished BC-2, and it was discovered during the advancement of SB-15 that groundwater existed at approximately 7 feet (as in BC-2) and that another water-bearing zone was present between 15 and 17 feet. Since obvious petroleum impacts were present in groundwater between 7.5 and 8 feet at BC-2, we returned to BC-2 (or within 1 foot of the original BC-2 location) to collect a deeper depth-discrete groundwater sample in order to assess the vertical impacts to groundwater at this sample location. A Hydropunch sampler was extended between depths of 14 and 18 feet in an attempt to collect a deeper groundwater sample; however, groundwater did not enter the sampler and the groundwater sample collection process was terminated at BC-2.

Boring cluster BC-3 consisted of 5 separate boreholes that were advanced to depths of 3, 6, 9, 12, and 15 feet. Sandy gravelly fill soils were encountered from near ground surface to approximately 4 feet. From 4 to 7 feet was silty and clayey sand and underlying the two-foot-thick sand interval was silty clay to a depth of 15 feet. Petroleum odors were not noticed in the soil cuttings generated during the advancement of the 5 borings constituting boring cluster BC-3.

It was unclear at what depth(s) groundwater was present in any of borings; however, groundwater did start accumulating in the 12- and 15-foot deep boreholes soon after they were completed, and after 4 days, groundwater had stabilized in 4 of the 5 borings at approximately 5 feet, also confirming that groundwater does exist in most locations throughout the investigation area at shallow depth under unconfined conditions.

Copies of boring logs BC-1 to BC-3 are provided in Appendix C.

2.2.2 Soil and Ground Water Sample Results (BC-1 to BC-3)

One groundwater sample was collected from the BC-1 borehole. TPHg was reported at a concentration of 6,100 micrograms per liter (ug/l), and TPHd with and without (w/wo) silica gel cleanup at concentrations of 36,000 ug/l and 50,000 ug/l, respectively. Benzene was also reported in the groundwater sample at 890 ug/l along with toluene (27 ug/l), isopropylbenzene (56 ug/l), and n-propyl benzene (160 ug/l).

Soil samples were collected from the BC-2 borehole at depths of 1.5, 3.5, and 7 feet. TPHg and TPHd were reported at concentrations ranging from 0.75 mg/kg to 2.7 mg/kg in the 1.5- and 3.5-foot samples; however, the highest concentrations were reported in the soil sample collected just

above first groundwater at a depth of 7 feet. TPHg was reported at a concentration of 540 mg/kg and TPHd w/wo silica gel cleanup at concentrations of 2,800 mg/kg and 3,400 mg/kg, respectively.

Several VOCs including n-butyl benzene, sec-butyl benzene, isopropylbenzene, and n-propyl benzene were reported at concentrations ranging from 0.011 mg/kg to 22 mg/kg in the 7-foot soil sample collected from BC-2; however, none were reported at concentrations exceeding applicable San Francisco Bay Regional Water Quality Control Board (RWQCB) environmental screening levels (ESLs).

The groundwater sample collected from BC-3 was reported to contain TPHd with silica gel cleanup at a concentration of 53 ug/l and without silica gel cleanup at 99 ug/l. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were reported as non-detect. T-butyl alcohol (TBA) was detected at a concentration of 2.2 ug/l and chlorinated solvents cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride were reported at concentrations of 0.85 ug/l and 0.64 ug/l.

Analytical laboratory results of soil and groundwater samples collected from BC-1 to BC-3 are tabulated in Tables 1 and 2, and graphically shown on Figures 4 and 5. A copy of the analytical laboratory report is provided in Appendix D.

2.3 UST-Related Soil Boring Placement and Sample Rationale

Soil borings SB-15 to SB-17 were advanced to assess the lateral extent of impacts to soil and groundwater northeast and east of the former UST excavation area. The advancement of SB-14 northwest of the excavation area was cancelled after the obvious impacts to shallow groundwater were discovered during the advancement of the initial borehole at boring cluster BC-1 (see Figure 2). Given the close proximity of these two borings to each other it was decided that time constraints and additional expense to advance, collect, and submit samples for laboratory analysis from this boring were not warranted.

Soil borings SB-18 to SB-22 were advanced within and around the margins the former UST excavation to assess the volume of impacted soils that may require removal in order to close the site under the 2012 LTCP guidelines.

Soil borings SB-23 to SB-25 were advanced near the tidal channel to the south of the UST excavation area (see Figure 3) to assess the potential threat to aquatic habitat resulting from the Caltrans unauthorized release.

2.3.1 Soil and Groundwater Conditions

Soils encountered at SB-18 to SB-22 consisted primarily of silty and sandy clay, and clayey sand and gravel from near ground surface to at least 12 feet. Two borings (SB-15 and SB-20) were advanced

deeper than 12 feet using the Macrocore sampler; however, the only differing soil type encountered in either of these borings below 12 feet was a well-graded, silt-free sand interval located between 15 and 17 feet at SB-15.

Groundwater was first encountered in SB-15 to SB-19, SB-21, and SB-22 between 5 and 7 feet. Groundwater samples collected from these borings was from groundwater originating between these depths. Groundwater was not encountered in SB-20 until 16 feet, at which point a groundwater sample was collected from this boring.

Groundwater samples were also collected between depths of 14 and 18 feet at SB-15 and SB-17. The shallow depth groundwater samples were labeled as SB-15A and SB-17A, and the deeper samples were labeled as SB-15B and SB-17B. We also attempted to collect a deeper groundwater sample from SB-16 using a Hydropunch sampler; however, groundwater was either not present between these depths at this location, or it would not enter the borehole for sample collection.

Petroleum odors were observed in shallow groundwater at borings SB-16, SB-17, SB-18, SB-21, and SB-22; however, it was not noticed at borings SB-15, SB-19, or SB-20. Groundwater samples collected below 14 feet (and this might include the sample collected from SB-20 since first groundwater was not encountered until 16 feet) did not contain noticeable petroleum odors.

Copies of boring logs SB-15 to SB-22 are provided in Appendix C.

2.3.2 Soil and Groundwater Sample Results (SB-15 to SB-22)

Soil samples were collected from SB-15, SB-16, and SB-17 immediately above first encountered groundwater at 6 to 6.5 feet. One additional soil sample was collected from SB-16 at 3.5 feet as a slight petroleum odor was noticed at this depth in this boring.

TPHg and TPHd were detected in the 6- and 6.5-foot soil samples collected from SB-16 and SB-17; however, the highest concentrations were reported in the soil sample collected from SB-16 where strong petroleum odors were observed. TPHg was detected at a concentration of 61 mg/kg in the 6-foot soil sample collected from SB-16, TPHd at 250 mg/kg, and TPHd using silica gel cleanup at 110 mg/kg. N-butyl benzene and sec-butyl benzene were also reported in the 6-foot soil sample collected from SB-16 at concentrations of 0.75 mg/kg and 0.19 mg/kg, respectively.

Groundwater sample results from SB-15, SB-16, and SB-17 were similar to the soil sample results, with the groundwater sample from SB-16 containing the highest contaminant concentrations. TPHg was detected in the SB-16 groundwater sample at a concentration of 3,800 ug/l, TPHd without silica gel cleanup at 82,000 ug/l, and TPHd using silica gel cleanup at 74,000 ug/l. Benzene was also detected at a concentration of 17 ug/l, toluene at 7.9 ug/l, and xylenes at 14 ug/l. VOCs including

n-butyl benzene, sec-butyl benzene, 2-hexanone, isopropylbenzene, and n-propyl benzene were also detected at concentrations ranging from 10 ug/l (2-hexanone) to 82 ug/l (n-butyl benzene) in the SB-16 groundwater sample.

The shallow-depth groundwater sample collected from SB-15 (labeled as SB-15A) was reported to contain 190 ug/l TPHd using silica gel cleanup and the shallow-depth sample from SB-17 (labeled as SB-17A) was reported to contain TPHd without silica gel cleanup at a concentration of 1,800 ug/l. BTEX in SB-15A and SB-17A were reported as non-detect; however, acetone, 2-butanone, and t-butyl alcohol were detected in SB-15A at concentrations ranging from 3.5 ug/l (t-butyl alcohol) to 25 ug/l (acetone), and carbon disulfide was reported at a concentration of 0.80 ug/l in the SB-17A groundwater sample.

Soil samples were collected from SB-18 to SB-22 located around and within the former UST excavation at depths of 2 and 2.5 feet, 3.5 feet, and 6.5 to 7.5 feet to satisfy the *Direct Contact and Outdoor Air Exposure Criteria* of the 2012 LTCP, and additional deeper-depth samples were collected to characterize the vertical column of impacted soil for potential excavation purposes.

The highest TPHg concentration in soil was reported in the 10.5-foot sample collected from SB-22, which was advanced through the center of the former UST excavation (see Figure 2). TPHg was reported at a concentration of 12 mg/kg in this sample and TPHd w/wo silica gel cleanup were reported at concentrations of 74 mg/kg and 75 mg/kg, respectively.

TPHd was detected in most soil samples analyzed from SB-18 to SB-22; however, the highest concentration was reported in the 2-foot soil samples collected from SB-20. TPHd w/wo silica gel cleanup were both reported at concentrations of 220 mg/kg. BTEX and other VOCs were reported as non-detect in all soil samples analyzed from SB-18 to SB-22.

TPHg was reported at concentrations of 1,300 ug/l in the SB-18 groundwater sample, 66 ug/l in the SB-19 sample, and 370 ug/l in the SB-22 sample. TPHg was reported as non-detect in the groundwater samples analyzed from SB-20 and SB-21.

TPHd w/wo silica gel cleanup were detected in all the groundwater samples analyzed from SB-18 to SB-22. The TPHd concentrations using silica gel cleanup ranged from 560 ug/l (SB-20) to 11,000 ug/l (SB-18), and the TPHd concentrations in groundwater samples where silica gel cleanup was not used ranged from 850 ug/l (SB-21) to 15,000 ug/l (SB-18).

Benzene, toluene, and xylenes were reported in the SB-18 groundwater sample at concentrations of 2.4 ug/l, 1.5 ug/l, and 1.2 ug/l, respectively. BTEX compounds were reported as non-detect in the other groundwater samples collected from SB-19 to SB-22. VOCs were detected in the groundwater samples

analyzed from SB-18, SB-19, SB-20, and SB-22; however, none of the detected compounds are listed as chemicals of concern for ESL purposes.

Analytical laboratory results of soil and groundwater samples collected from SB-18 to SB-22 are tabulated in Tables 1 and 2, and graphically shown on Figures 4 and 5. A copy of the analytical laboratory report is provided in Appendix D.

2.4 Tidal Channel Investigation

Borings SB-23 to SB-25 were advanced approximately 300 feet south-southwest of the former UST excavation to assess whether petroleum-related impacts to groundwater originating from the former USTs pose a threat to aquatic habitat in the tidal channel (see Figure 3).

Boring SB-25 was advanced first using a Macrocore sampler to collect soil samples for lithologic description to assess at what depth first groundwater would be encountered along the tidal channel. Based on the field observations noted during the advancement of SB-25, groundwater could be expected somewhere between 14 and 16 feet, which seemed to coincide with the depth to surface water in the channel. Once encountered, groundwater quickly rose to within 7 feet of ground surface indicating confined groundwater conditions beneath this portion of the investigation area.

Groundwater samples were collected from SB-25 by installing a temporary ¾-inch-diameter PVC well casing in the open borehole and then extracting groundwater through the well casing using a peristaltic pump equipped with disposable polyethylene tubing. Since depth to groundwater near the tidal channel was now known, groundwater was sampled at SB-23 and SB-24 using a Hydropunch sampler screened from 16 to 20 feet below ground surface (bgs). Groundwater samples from these two locations were also collected using a peristaltic pump equipped with disposable polyethylene tubing.

2.4.1 Soil and Groundwater Conditions

Soil encountered at SB-25 consisted of sandy gravelly fill from ground surface to approximately 6 feet. Stiff silty clay was encountered from 6 feet to 16 feet, the total depth of the boring. Groundwater began entering the SB-25 borehole between 14 and 16 feet.

Petroleum odors were not observed in the soil cuttings or groundwater samples retrieved from SB-25, or the groundwater samples retrieved from borings SB-23 or SB-24.

A copy of boring log SB-25 is provided in Appendix C.

2.4.2 Groundwater Sample Results (SB-23 to SB-25)

TPHg was reported as non-detect in the groundwater samples collected from SB-23 to SB-25, and TPHd was also reported as non-detect in groundwater samples analyzed w/wo silica gel cleanup from SB-24.

TPHd was detected in the SB-23 groundwater sample that was analyzed using silica gel cleanup at a concentration of 84 ug/l; however, it was reported as non-detect (<50 ug/l) in the groundwater sample analyzed without silica gel cleanup. TPHd was reported at concentrations of 620 ug/l and 1,300 ug/l in the SB-25 groundwater sample w/wo silica gel cleanup, respectively.

BTEX compounds were reported as non-detect in the groundwater samples analyzed from SB-23 to SB-25; however, 1,1-DCE and 1,1-dichloroethane (1,1-DCA) were detected in the groundwater sample collected from SB-23 at concentrations of 1.5 ug/l and 0.61, and 1,1-DCE was detected in the SB-24 groundwater sample at a concentration of 1.1 ug/l..

Analytical laboratory results of groundwater samples collected from SB-23 to SB-25 are tabulated in Table 2, and a copy of the analytical laboratory report is provided in Appendix D.

2.5 Waste Disposal

Soil cuttings and rinsate fluids generated during this investigation were containerized in a 55-gallon drum and transported back to Geocon's warehouse in Livermore pending disposal arrangements.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this and previous investigations the following is concluded:

- Soil and groundwater samples collected from borings SB-18 to SB-22 indicate that some impacts still exist; however, the existing impacts do not exceed applicable ESLs given the current land use.
- It appears that most of the impacts to soil within close proximity to the former UST excavation were removed in 1994 when 280 cubic yards of soil were excavated and disposed offsite. Unfortunately, it also appears that a significant volume of petroleum hydrocarbons had leaked from the USTs and migrated through shallow gravelly soils (where they exist) beyond the boundary of the excavation area to their present distribution throughout the subsurface prior to the UST's being removed in 1994.
- Petroleum impacts to soil and groundwater likely extend east beneath Hegenberger Road in the vicinity of SB-16; however, the impacts appear to be limited to relatively narrow gravelly soil zones and the lateral extent probably terminates somewhere beneath the roadway.
- The benzene concentration in groundwater samples collected from SB2 (1,600 ug/l) and SB3 (2,000 ug/l) in 2012, MW-3 (660 ug/l) in March 2014, and BC-1 (890 ug/l) during the recent investigation exceed the ESL of 270 ug/l for potential vapor intrusion at commercial sites (see Tables 2 and 3); however, the locations of these borings (see Figure 5) are not within proximity to buildings and should not pose an indoor air threat to on- and offsite buildings as the site and surrounding area are currently developed.
- VOCs in soil and groundwater beneath the site and adjacent areas appear to have dissipated to levels below applicable ESLs given the current land use.
- Results of groundwater samples collected from SB-23 to SB-25 indicate that petroleum hydrocarbons released from the former Caltrans USTs do not pose a threat to aquatic habitat in the tidal channel located approximately 300 feet south-southeast of the former USTs.

TPHd was reported at a concentration of 84 ug/l in the SB-23 groundwater sample, and at a concentration of 620 ug/l in the SB-25 groundwater sample. Both of these concentrations are below the surface water ESL of 640 ug/l for estuary habitats.

Based on the results of past and present investigations, we recommend the physical removal of impacted soil and groundwater in the vicinity of SB1, SB2, SB3, SB-16, BC-1, BC-2, MW-3 and MW-4. Impacted soil and groundwater is largely confined within 8 feet of ground surface at varying depths, and could be easily accessed given the site is currently undeveloped and the adjacent property where impacts exist is an open parking lot. Once removed, we would expect contaminant concentrations in groundwater within proximity to the excavation area(s) to decrease accordingly.

Once the recommended soil and groundwater remediation is completed, the Former Caltrans Hegenberger Maintenance Station site could be closed under the 2012 LTCP with a deed restriction. If land use changes in the future, further evaluation can be made at that time to assess whether additional investigation or remediation is warranted. In the meantime, we would expect the continued subsurface dispersion of the contaminants to be halted by the proposed remediation effort and remaining

contaminant concentrations in soil and groundwater to attenuate since the bulk of the residual contaminant mass will have been removed.

4.0 LIMITATIONS

This report has been prepared exclusively for Caltrans, District 4. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

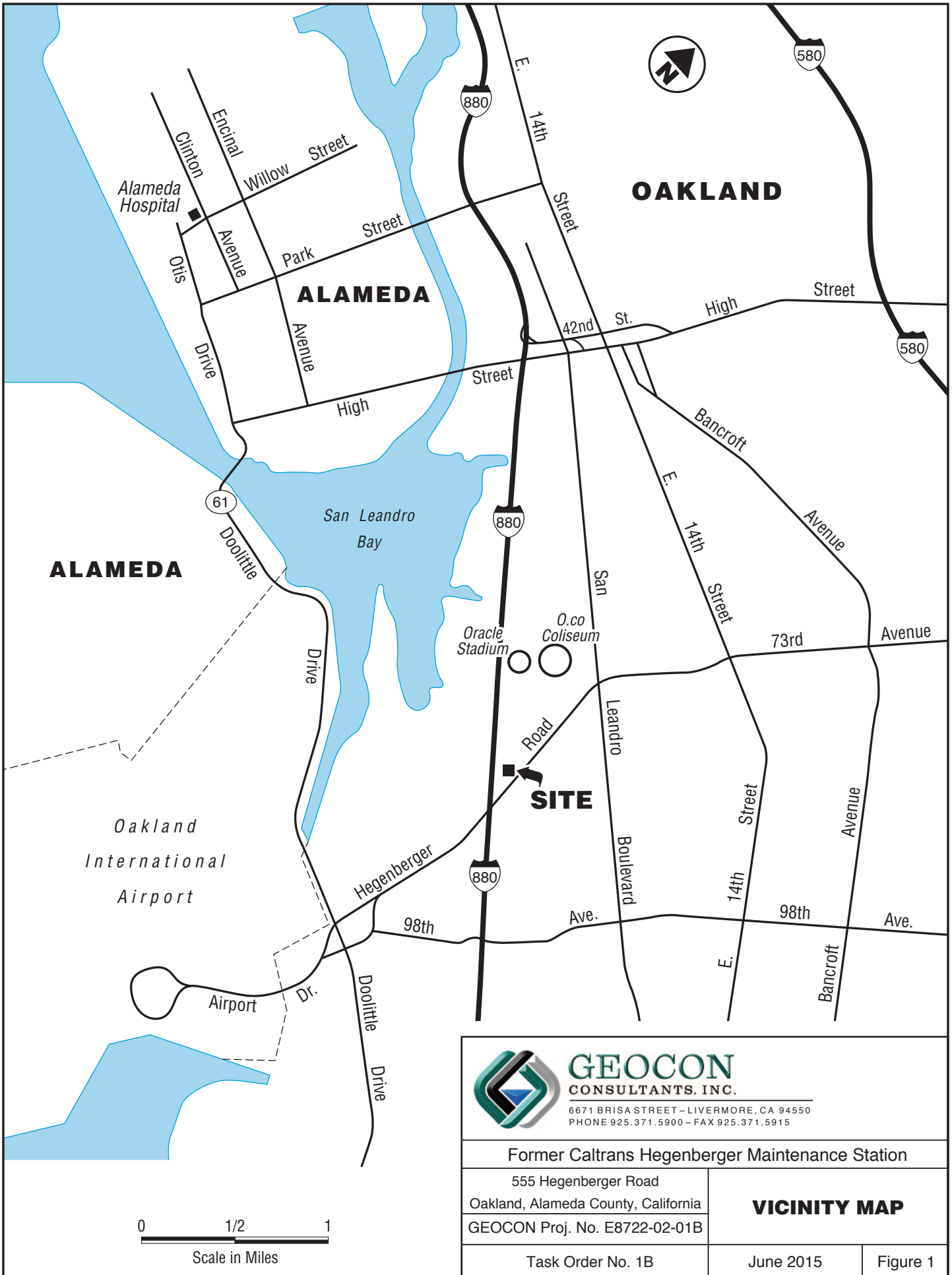
The Client should recognize that this report is not a comprehensive site characterization and the client should not construe it as such. This report presents findings of the results of the limited sampling and laboratory testing performed. In addition, it is not the intention of the information obtained to address potential impacts related to sources other than those specified herein.

Therefore, the report is only conclusive with respect to the information obtained. No guarantee of the results of the study is implied within the intent of this report. The services performed were conducted in accordance with the local standard of care in the geographic region at the time the services were rendered.

5.0 REFERENCES

Stantec Consulting Corporation, Site Conceptual Model and Current Subsurface Investigation Results, Former Caltrans Maintenance Station, 555 Hegenberger Road, Oakland, California, July 2012.

Geocon Consultants, Inc., First Quarter 2014 Groundwater Monitoring Report, Former Caltrans Maintenance Station, 555 Hegenberger Road, Oakland, Alameda County, California, July 2014.



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PHONE 925.371.5900 - FAX 925.371.5915

Former Caltrans Hegenberger Maintenance Station

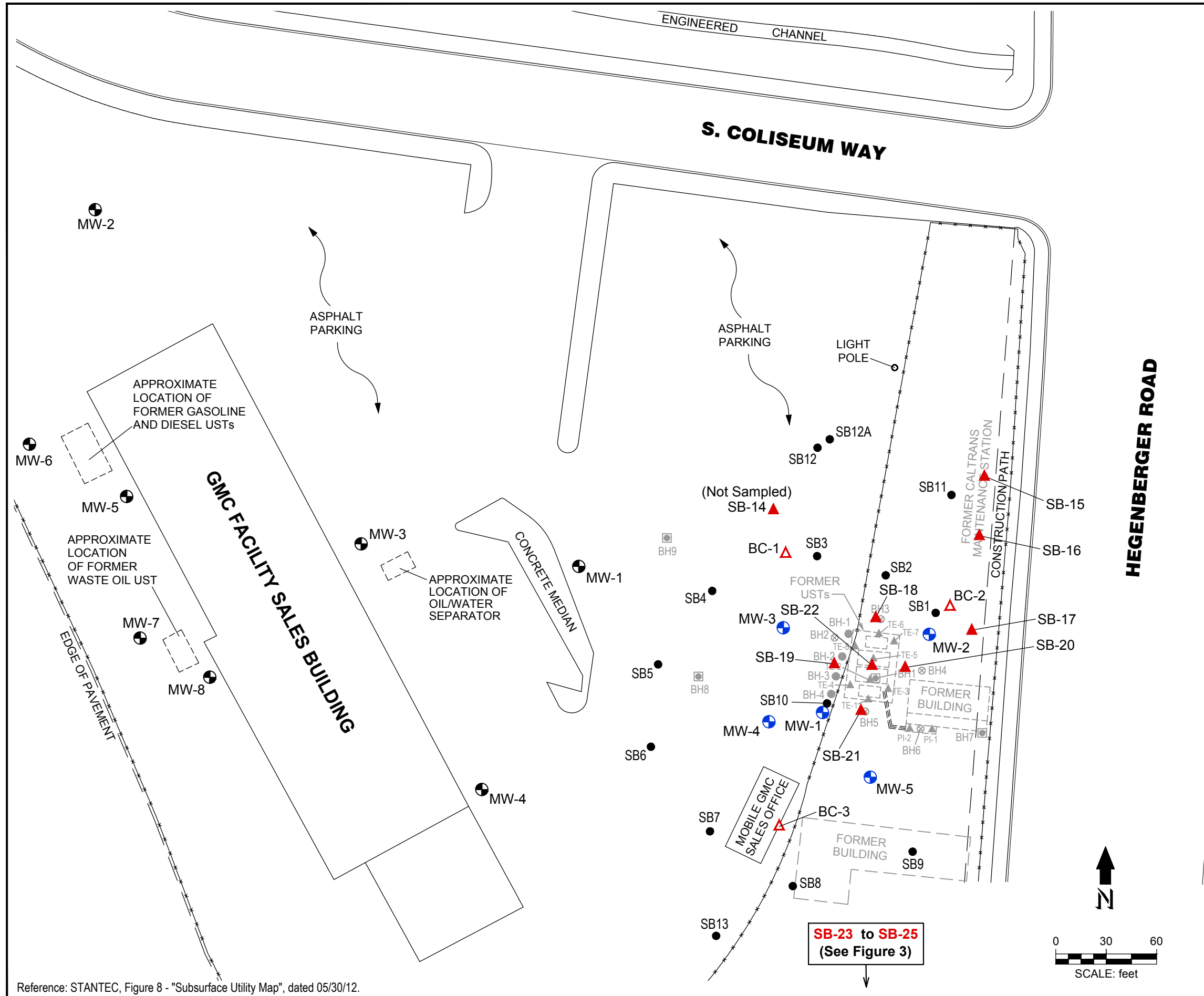
555 Hegenberger Road
Oakland, Alameda County, California
GEOCON Proj. No. E8722-02-01B

VICINITY MAP

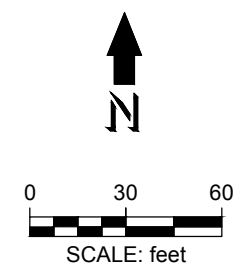
Task Order No. 1B

June 2015

Figure 1



- Legend**
- ⊕ Groundwater Monitoring Well (Associated with Former Caltrans)
 - ⊕ Groundwater Monitoring Well (Associated with GMC Facility)
 - Soil Boring (1993)
 - ⊗ Soil Boring (1995)
 - ▲ Soil Sample
 - Soil Boring (2001)
 - Soil Boring (2012)
 - ▲ Soil Boring (2015)
 - ▲ Boring Cluster (2015)



Reference: STANTEC, Figure 8 - "Subsurface Utility Map", dated 05/30/12.

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Hegenberger Maintenance Station	
555 Hegenberger Road, Oakland, California	SITE PLAN
GEOCON Proj. No. E8722-02-01B	June 2015
	Figure 2



Legend

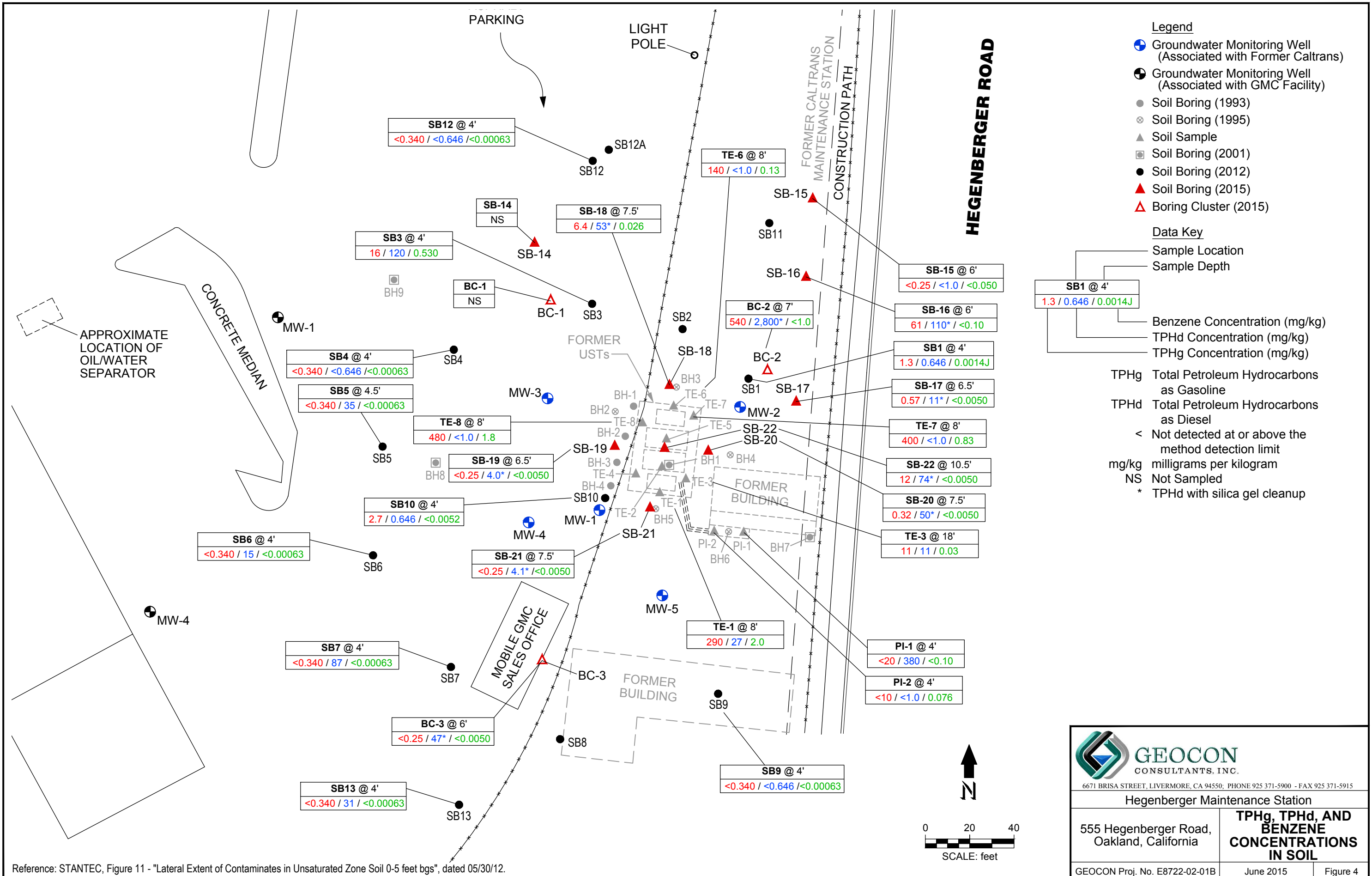
- Groundwater Monitoring Well (Associated with Former Caltrans)
- Soil Boring (2012)
- ▲ Soil Boring (2015)
- ▲ Boring Cluster (2015)

Approximate Location of Former UST Excavation

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Hegenberger Maintenance Station	
555 Hegenberger Road, Oakland, California	TIDAL CHANNEL BORING LOCATIONS

GEOCON Proj. No. E8722-02-01B June 2015 Figure 3



Reference: STANTEC, Figure 11 - "Lateral Extent of Contaminates in Unsaturated Zone Soil 0-5 feet bgs", dated 05/30/12.

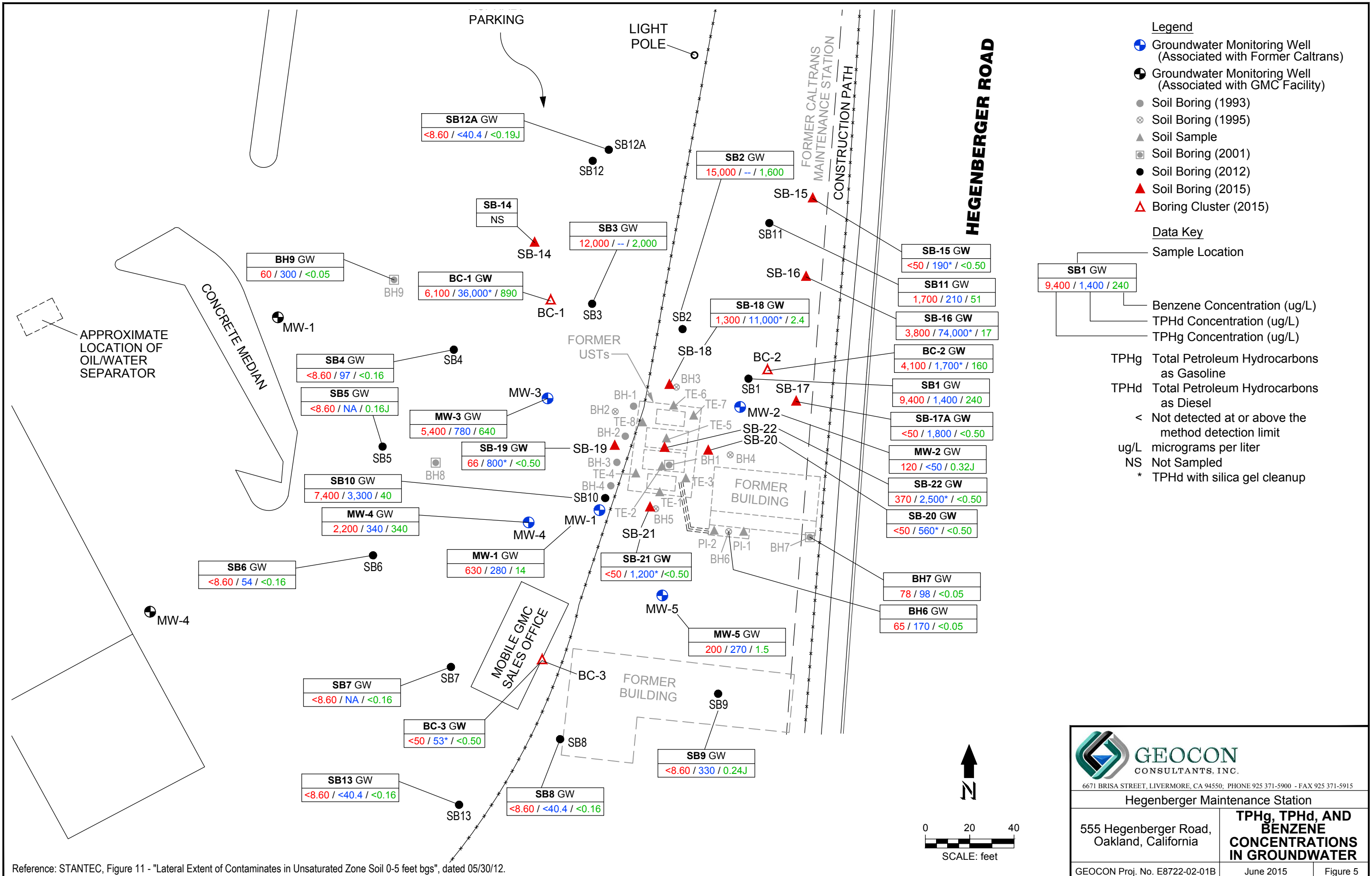
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Hegenberger Maintenance Station

555 Hegenberger Road,
Oakland, California

**TPHg, TPHd, AND
BENZENE
CONCENTRATIONS
IN SOIL**

GEOCON Proj. No. E8722-02-01B June 2015 Figure 4



- Legend**
- ⊕ Groundwater Monitoring Well (Associated with Former Caltrans)
 - ⊙ Groundwater Monitoring Well (Associated with GMC Facility)
 - Soil Boring (1993)
 - ⊗ Soil Boring (1995)
 - ▲ Soil Sample
 - Soil Boring (2001)
 - Soil Boring (2012)
 - ▲ Soil Boring (2015)
 - ▲ Boring Cluster (2015)

- Data Key**
- Sample Location
- | | |
|--------|------------------------------|
| SB1 GW | 9,400 / 1,400 / 240 |
| | Benzene Concentration (ug/L) |
| | TPHd Concentration (ug/L) |
| | TPHg Concentration (ug/L) |
- TPHg Total Petroleum Hydrocarbons as Gasoline
 TPHd Total Petroleum Hydrocarbons as Diesel
 < Not detected at or above the method detection limit
 ug/L micrograms per liter
 NS Not Sampled
 * TPHd with silica gel cleanup

Reference: STANTEC, Figure 11 - "Lateral Extent of Contaminates in Unsaturated Zone Soil 0-5 feet bgs", dated 05/30/12.

6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

Hegenberger Maintenance Station	
555 Hegenberger Road, Oakland, California	TPHg, TPHd, AND BENZENE CONCENTRATIONS IN GROUNDWATER
GEOCON Proj. No. E8722-02-01B	June 2015 Figure 5

Table 1
Historical Soil Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	Depth (feet)	TPHg (mg/kg)	TPHd (mg/kg)	TPHd* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Other VOCs (mg/kg)
PI-1	9/22/1994	4.0	<20	380	NA	<0.10	<0.10	0.18	<0.10	NA
PI-2	9/22/1994	4.0	<10	<1.0	NA	0.076	<0.05	<0.05	<0.05	NA
TE-1	9/22/1994	8.0	290	27	NA	2.0	<0.5	0.74	1.2	NA
TE-2	9/22/1994	18.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
TE-3	9/22/1994	18.0	11	11	NA	0.03	0.014	0.020	0.022	NA
TE-4	9/22/1994	18.0	<20	<1.0	NA	<0.10	<0.10	<0.10	<0.10	NA
TE-5	9/22/1994	13.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
TE-6	9/22/1994	13.0	140	<1.0	NA	0.13	<0.10	0.51	0.3	NA
TE-7	9/22/1994	8.0	400	<1.0	NA	0.83	<0.50	0.62	1.2	NA
TE-8	9/22/1994	8.0	480	<1.0	NA	1.8	0.51	7.6	8.7	NA
BH1	9/26/1995	16.0	<1.0	<1.0	NA	<0.005	<0.005	0.006	0.021	NA
BH1	9/26/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH2	9/26/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH2	9/26/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH3	9/26/1995	6.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH3	9/26/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH3	9/26/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH4	9/26/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH4	9/26/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH5	9/26/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH5	9/26/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH6	9/26/1995	6.0	<1.0	24	NA	<0.005	<0.005	<0.005	<0.005	NA
BH6	9/26/1995	11.0	<1.0	16	NA	<0.005	<0.005	<0.005	<0.005	NA
BH6	9/26/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW1	9/27/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW1	9/27/1995	19.5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW2	9/27/1995	6.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW2	9/27/1995	21.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW3	9/27/1995	7.5	<1.0	<1.0	NA	0.012	<0.005	<0.005	<0.005	NA
MW3	9/27/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW3	9/27/1995	21.0	<1.0	<1.0	NA	0.030	0.028	0.030	0.058	NA
MW4	9/27/1995	5.5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW4	9/27/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW4	9/27/1995	16.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW5	9/27/1995	6.0	1.6	<1.0	NA	<0.005	0.020	0.028	0.088	NA
MW5	9/27/1995	11.0	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
MW5	9/27/1995	19.5	<1.0	<1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH6	12/26/2001	11.0	<1.0	1.0	NA	<0.005	<0.005	<0.005	<0.005	NA
BH9	12/26/2001	6.5	<1.0	1.7	NA	<0.005	<0.005	<0.005	<0.005	NA

Table 1
Historical Soil Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	Depth (feet)	TPHg (mg/kg)	TPHd (mg/kg)	TPHd* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Other VOCs (mg/kg)
SB1	4/3/2012	4.0	1.3	<0.646	NA	0.0014^J	0.0017^J	<0.00064	0.0051	NA
SB3	4/2/2012	0-5	16	120	NA	0.530	0.039	0.023	0.083	NA
SB4	4/2/2012	4.0	<0.340	<0.646	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB5	4/2/2012	4.5	<0.340	35	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB6	4/2/2012	4.0	<0.340	15	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB7	4/5/2012	4.0	<0.340	87	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB7	4/5/2012	10.0	<0.340	<0.646	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB8	4/5/2012	8.0	<0.340	4.6	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB8	4/5/2012	10.0	<0.340	<0.646	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB9	4/3/2012	4.0	<0.340	<0.646	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB10	4/3/2012	4.0	2.7	<0.646	NA	0.0052	0.0013^J	0.00078^J	0.0012^J	NA
SB12	4/4/2012	4.0	<0.340	<0.646	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB12	4/4/2012	7.5	<0.340	110	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
SB13	4/5/2012	4.0	<0.340	31	NA	<0.00063	<0.00065	<0.00064	<0.00068	NA
BC-2	4/20/2015	1.5	0.75	2.5	1.6	<0.0050	<0.0050	<0.0050	<0.0050	ND
BC-2	4/20/2015	3.5	2.7	2.1	1.1	<0.0050	<0.0050	<0.0050	0.0052	n-Butyl benzene = 0.022 sec-Butyl benzene = 0.011
BC-2	4/20/2015	7.0	540	3,400	2,800	<1.0	<1.0	<1.0	<1.0	n-Butyl benzene = 13 sec-Butyl benzene = 3.6 Isopropylbenzene = 6.0 n-Propyl benzene = 22
BC-3	4/20/2015	6.0	<0.25	140	47	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-15	4/20/2015	6.0	<0.25	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-16	4/20/2015	3.5	<0.25	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-16	4/20/2015	6.0	61	250	110	<0.10	<0.10	<0.10	<0.10	n-Butyl benzene = 0.75 sec-Butyl benzene = 0.19
SB-17	4/20/2015	6.5	0.57	4.4	11	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-18	4/24/2015	2.0	0.42	38	54	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-18	4/24/2015	3.5	2.2	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-18	4/24/2015	7.5	6.4	91	53	0.026	<0.0050	<0.0050	0.011	n-Butyl benzene = 0.054 sec-Butyl benzene = 0.011 Isopropylbenzene = 0.013 4-Isopropyl toluene = 0.011 n-Propyl benzene = 0.021
SB-18	4/24/2015	11.5	0.63	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-19	4/24/2015	2.0	<0.25	110	53	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-19	4/24/2015	3.5	<0.25	13	4.8	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-19	4/24/2015	6.5	<0.25	4.2	4.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-19	4/24/2015	11.5	0.53	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-20	4/24/2015	2.0	<0.25	220	220	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-20	4/24/2015	3.5	<0.25	1.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-20	4/24/2015	7.5	0.32	72	50	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-20	4/24/2015	11.5	<0.25	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-20	4/24/2015	15.0	<0.25	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	ND

Table 1
Historical Soil Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	Depth (feet)	TPHg (mg/kg)	TPHd (mg/kg)	TPHd* (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Other VOCs (mg/kg)
SB-21	4/24/2015	2.0	<0.25	1.6	2.4	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-21	4/24/2015	3.5	<0.25	6.2	5.0	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-21	4/24/2015	7.5	<0.25	4.9	4.1	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-21	4/24/2015	11.5	1.6	3.2	4.3	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-22	4/24/2015	2.5	<0.25	6.3	6.6	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-22	4/24/2015	3.5	<0.25	25	16	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-22	4/24/2015	7.5	<0.25	13	8.5	<0.0050	<0.0050	<0.0050	<0.0050	ND
SB-22	4/24/2015	10.5	12	75	74	<0.0050	<0.0050	<0.0050	<0.0050	ND

RWQCB ESL

Direct Exposure Commercial / Industrial Worker Exposure Scenario	4,000	1,100	1,100	3.7	4,900	24	2,600
Direct Exposure Construction / Trench Worker Exposure Scenario	2,700	900	900	71	4,300	490	2,500

Notes:

Bold type indicates analyte detected above reporting limit

NA = Not analyzed

* TPHd with silica gel cleanup

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel

^J = Estimated value between method detection limit and practical quantitation limit.

ND = Not Detected

Table 2
Grab Groundwater Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	TPHg (µg/l)	TPHd (µg/l)	TPHd* (ug/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	Other VOCs (ug/l)
BH6	12/26/2001	65	170	NA	<0.05	<0.05	<0.05	<0.05	NA
BH7	12/26/2001	78	98	NA	<0.05	<0.05	<0.05	<0.05	NA
BH8	12/26/2001	89	NA	NA	<0.05	0.7	<0.05	1.5	NA
BH9	12/26/2001	60	300	NA	<0.05	<0.05	<0.05	0.8	NA
SB1	4/6/2012	9,400	1,400	NA	240	22	8.8	30	NA
SB2	4/4/2012	15,000	NA	NA	1,600	52	21	50	NA
SB3	4/4/2012	12,000	NA	NA	2,000	66	22	82	NA
SB4	4/6/2012	<8.60	97	NA	<0.16	<0.17	<0.23	<0.19	NA
SB5	4/6/2012	<8.60	NA	NA	0.16 ^J	<0.17	<0.23	<0.19	NA
SB6	4/5/2012	<8.60	54	NA	<0.16	<0.17	<0.23	<0.19	NA
SB7	4/6/2012	<8.60	NA	NA	<0.16	<0.17	<0.23	<0.19	NA
SB8	4/6/2012	<8.60	<40.40	NA	<0.16	<0.17	<0.23	<0.19	NA
SB9	4/6/2012	<8.60	330	NA	0.24 ^J	<0.17	<0.23	<0.19	NA
SB10	4/4/2012	7,400	3,300	NA	40	9.6	2.8	14	NA
SB11	4/4/2012	1,700	210	NA	51	3.5	4.1	11	NA
SB12A	4/4/2012	<8.60	<40.40	NA	0.19 ^J	<0.17	<0.23	<0.19	NA
SB13	4/6/2012	<8.60	<40.40	NA	<0.16	<0.17	<0.23	<0.19	NA
BC-1	4/20/2015	6,100	50,000	36,000	890	27	<25	<25	Isopropylbenzene = 56 n-Propyl benzene = 160
BC-2	4/20/2015	4,100	5,700	1,700	160	15	<5.0	19	n-Butyl benzene = 58 sec-Butyl benzene = 14 Isopropylbenzene = 64 n-Propyl benzene = 180
BC-3 6'	4/24/2015	<50	99	53	<0.50	<0.50	<0.50	<0.50	t-Butyl alcohol = 2.2 cis-1,2-Dichloroethene = 0.85 Vinyl Chloride = 0.64
SB-15A	4/20/2015	<50	NA	190	<0.50	<0.50	<0.50	<0.50	Acetone = 25 2-Butanone = 5.0 t-Butyl alcohol = 3.5
SB-15B	4/20/2015	<50	<150	<150	<0.50	<0.50	<0.50	<0.50	ND
SB-16	4/20/2015	3,800	82,000	74,000	17	7.9	<5.0	14	n-Butyl benzene = 82 sec-Butyl benzene = 20 2-hexanone = 10 Isopropylbenzene = 30 n-Propyl benzene = 22
SB-17A	4/20/2015	<50	1,800	<3,000	<0.50	<0.50	<0.50	<0.50	Carbon Disulfide = 0.80
SB-17B	4/20/2015	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	ND
SB-18	4/24/2015	1,300	15,000	11,000	2.4	1.5	<0.50	1.2	t-Butyl alcohol = 3.1 n-Butyl benzene = 7.4 sec-Butyl benzene = 4.9 Carbon Disulfide = 0.99 Chloroethane = 1.2 Isopropylbenzene = 10 n-Propyl benzene = 16
SB-19	4/24/2015	66	1,000	800	<0.50	<0.50	<0.50	<0.50	t-Butyl alcohol = 2.2 n-Propyl benzene = 0.93
SB-20	4/24/2015	<50	880	560	<0.50	<0.50	<0.50	<0.50	t-Butyl alcohol = 2.1 1,1-Dichloroethane = 0.61
SB-21	4/24/2015	<50	850	1,200	<0.50	<0.50	<0.50	<0.50	ND
SB-22	4/24/2015	370	5,300	2,500	<0.50	<0.50	<0.50	<0.50	t-Butyl alcohol = 2.0 n-Butyl benzene = 3.0 sec-Butyl benzene = 2.0

RWQCB ESLs

Groundwater Screening Levels for Evaluation
of Potential Vapor Intrusion (Commercial - Fine
Coarse Mix)

NS	NS	NS	270	NS	3,100	NS	Vinyl Chloride = 18
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Table 2
Grab Groundwater Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	TPHg (µg/l)	TPHd (µg/l)	TPHd* (ug/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	Other VOCs (ug/l)
SB-23	4/24/2015	<50	<50	84	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethane = 0.61 1,1-Dichloroethene = 1.5
SB-24	4/24/2015	<50	<50	<50	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethene = 1.1
SB-25	4/24/2015	<50	1,300	620	<0.50	<0.50	<0.50	<0.50	ND

RWQCB ESLs

Surface Water Screening Levels for Estuary Habitats	500	640	640	46	40	30	100	1,1-Dichloroethane = 47 1,1-Dichloroethene = 3.2
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RWQCB ESLs

Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion (Commercial - Fine Coarse Mix)	NS	NS	NS	270	NS	3,100	NS	Vinyl Chloride = 18
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Notes:

Bold type indicates analyte detected above reporting limit

ug/l = micrograms per liter

NA = Not analyzed

TPHg = Total petroleum hydrocarbons as gasoline range organics

TPHd = Total petroleum hydrocarbons as diesel range organics

* TPHd with silica gel cleanup

NS = No standard

< = value less than method detection limit

[‡] = Estimated value between method detection limit and practical quantitation limit.

ND = Not Detected

TABLE 3
Depth to Water and Groundwater Sample Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, California

Monitoring Well	Sample Date	TOC Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Elevation (ft)	TPHg (ug/l)	TPHd (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	1,2-DCA (ug/l)	EDB (ug/l)	DIPE (ug/l)	ETBE (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)	
MW-1	10/11/95	13.31	6.55	6.76	--	720	<50	660	13	4.7	2.8	--	--	--	--	--	--	--	
	1/17/96	13.31	5.64	7.67	0.91	4,400	<50	1,000	30	21	17	--	--	--	--	--	--	--	
	4/16/96	13.31	5.46	7.85	0.18	6,050	7,450	914	34.7	34.4	15.8	--	--	--	--	--	--	--	
	8/26/96	13.31	5.91	7.40	-0.45	3,800	430	780	23	21	20	--	--	--	--	--	--	--	
	11/14/96	13.31	6.16	7.15	-0.25	2,600	270	500	18	14	8.9	--	--	--	--	--	--	--	
	2/18/98	13.31	3.82	9.49	2.34	3,100	800	240	18	7.8	11	--	--	--	--	20	--	--	
	3/30/01	13.31	6.19	7.12	-2.37	3,600	480	150	13	0.7	10.8	--	--	--	--	<0.5	--	--	
	12/26/01	13.31	4.08	9.23	2.11	3,000	1,100	86	11	3.4	10.5	--	--	--	--	<5	--	--	
	9/30/02	13.31	5.79	7.52	-1.71	590	<50	12	2.7	<0.5	1.6	--	--	--	--	<0.5	--	--	
	2/20/03	13.31	4.49	8.82	1.3	2,660	--	36.9	10.6	7	18.1	--	--	--	--	<5	--	--	
	1/12/04	13.31	4.41	8.90	0.08	1,610	--	6.8	1.8	1.8	1.4	--	--	--	--	--	--	--	
	5/12/05	13.31	4.45	8.86	-0.04	1,200	--	20	<5	<5	<5	--	--	--	--	--	--	--	
	9/29/11	13.31	5.57	7.74	-1.12	950	530	14	6.5	0.36 ^J	6.9	<0.14	<0.20	<0.16	<0.19	<0.19	<0.14	<10.00	
	3/30/12	13.31	3.50	9.81	2.07	630	280	14	4.4	0.36 ^J	4.9	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	9/11/12	13.31	6.15	7.16	-2.65	600	470	5.5	4.7	0.30 ^J	6.0	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	3/20/13	13.31	5.48	7.83	0.67	1,200	130	7.2	4.0	0.35 ^J	4.8	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	8/28/13	13.31	6.13	7.18	-0.65	700	580	5.8	4.6	0.31 ^J	6.0	0.17 ^J	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	3/31/14	13.31	4.10	9.21	2.03	620	570	5.7	2.3	<0.50	2.91	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10

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Monitoring Well	Sample Date	TOC Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Elevation (ft)	TPHg (ug/l)	TPHd (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	1,2-DCA (ug/l)	EDB (ug/l)	DIPE (ug/l)	ETBE (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)	
MW-2	10/11/95	13.10	6.88	6.22	--	<50	<50	<0.3	<0.3	<0.3	<0.5	--	--	--	--	--	--	--	
	1/17/96	13.10	5.32	7.78	1.56	4,900	<50	2,100	<1.5	<15	<15	--	--	--	--	--	--	--	
	4/16/96	13.10	5.81	7.29	-0.49	<50	<50	1.0	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	8/26/96	13.10	5.98	7.12	-0.17	<50	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	11/14/96	13.10	6.72	6.38	-0.74	<50	56	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	
	2/18/98	13.10	5.01	8.09	1.71	<50	260	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<0.5	--	--	
	3/30/01	13.10	6.54	6.56	-1.53	<200	370	2.7	0.8	<0.5	0.8	--	--	--	--	<0.5	--	--	
	12/26/01	13.10	5.53	7.57	1.01	86	140	<0.5	<0.5	<0.5	<0.5	--	--	--	--	<0.5	--	--	
	9/30/02	13.10	6.48	6.62	-0.95	<50	<50	<0.5	<5	<0.5	<1.5	--	--	--	--	<0.5	--	--	
	2/20/03	13.10	5.98	7.12	0.5	110	--	6.6	<0.5	<0.5	<1	--	--	--	--	<0.5	--	--	
	1/12/04	13.10	5.69	7.41	0.29	67	--	<0.5	<0.5	<0.5	<1	--	--	--	--	--	--	--	
	5/12/05	13.10	5.55	7.55	0.14	330	--	<1	<1	<1	<1	--	--	--	--	--	--	--	
	9/29/11	13.10	6.21	6.89	-0.66	130	<40.40	<0.16	<0.17	<0.23	<0.19	<0.14	<0.20	<0.16	<0.19	<0.19	<0.14	<10.00	
	3/30/12	13.10	5.00	8.10	1.21	120	<40.40	0.32 ^J	0.24 ^J	<0.23	0.44 ^J	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	9/11/12	13.10	6.29	6.81	-1.29	13 ^J	<40.40	<0.16	<0.17	<0.23	<0.19	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	3/20/13	13.10	6.20	6.90	0.09	110	<40.40	1.2	0.59 ^J	<0.23	0.77	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	8/28/13	13.10	6.32	6.78	-0.12	14 ^J	<40.40	<0.16	<0.17	<0.23	<0.19	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	3/31/14	13.10	--	--	--	Not Sampled - Inaccessible													

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Monitoring Well	Sample Date	TOC Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Elevation (ft)	TPHg (ug/l)	TPHd (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	1,2-DCA (ug/l)	EDB (ug/l)	DIPE (ug/l)	ETBE (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)	
MW-3	10/11/95	12.34	6.42	5.92	--	1,300	<50	1.0	<0.3	<0.3	<0.3	--	--	--	--	--	--	--	
	1/17/96	12.34	5.82	6.52	0.6	171	<50	64	<0.3	1	<0.3	--	--	--	--	--	--	--	
	4/16/96	12.34	5.85	6.49	-0.03	6,740	565	2,770	31	13.9	21.9	--	--	--	--	--	--	--	
	8/26/96	12.34	5.72	6.62	0.13	700	700	180	4.2	1	4.6	--	--	--	--	--	--	--	
	11/14/96	12.34	6.28	6.06	-0.56	300	120	6.2	1.2	0.7	1.4	--	--	--	--	--	--	--	
	2/18/98	12.34	4.65	7.69	1.63	11,000	2,500	3,070	50	54	19	--	--	--	--	25	--	--	
	3/30/01	12.34	5.62	6.72	-0.97	9,900	490	2,000	48	39	39	--	--	--	--	<0.5	--	--	
	12/26/01	12.34	4.66	7.68	0.96	9,400	1,700	1,500	45	33	28	--	--	--	--	12	--	--	
	9/30/02	12.34	5.84	6.50	-1.18	2,020	570	775	17.2	1	8.4	--	--	--	--	<0.5	--	--	
	2/20/03	12.34	5.55	6.79	0.29	4,010	--	1,120	<50	<50	<100	--	--	--	--	<50	--	--	
	1/12/04	12.34	4.77	7.57	0.78	3,520	--	632	26.9	<25	<50	--	--	--	--	--	--	--	
	5/12/05	12.34	4.63	7.71	0.14	5,200	--	1,000	30	20	10	--	--	--	--	--	--	--	
	9/29/11	12.34	5.50	6.84	-0.87	3,800	900	390	16	1.1	14	<0.14	<0.20	<0.16	<0.19	<0.14	<0.14	<10.00	
	3/30/12	12.34	2.75	9.59	2.75	5,400	780	640	29	10	24	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	9/11/12	12.34	5.55	6.79	-2.8	2,000	210	22	7.4	<0.23	5.8	<0.14	<0.20	0.27 ^J	<0.19	<0.26	<0.14	<10.00	
	3/20/13	12.34	4.20	8.14	1.35	4,900	1,000	930	32	5.9	19	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	8/28/13	12.34	5.54	6.80	-1.34	920	660	39	9.5	0.53 ^J	8.9	<0.14	<0.20	<0.16	<0.19	<0.26	<0.14	<10.00	
	3/31/14	12.34	3.48	8.86	8.86	2.06	3,600	1,400	660	18	6.1	11.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<20

TABLE 3
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Oakland, Alameda County, California

Monitoring Well	Sample Date	TOC Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Elevation (ft)	TPHg (ug/l)	TPHd (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	1,2-DCA (ug/l)	EDB (ug/l)	DIPE (ug/l)	ETBE (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)	
MW-4	10/11/95	12.85	6.63	6.22	--	500	<50	17	1.1	<0.3	0.5		--	--	--	--	--	--	
	1/17/96	12.85	5.77	7.08	0.86	460	<50	72	4.1	<0.3	1.7		--	--	--	--	--	--	
	4/16/96	12.85	5.89	6.96	-0.12	2,200	<50	851	7.7	1.4	5.7		--	--	--	--	--	--	
	8/26/96	12.85	6.14	6.71	-0.25	300	110	55	4.9	1.2	<0.5		--	--	--	--	--	--	
	11/14/96	12.85	6.72	6.13	-0.58	200	200	3.4	<0.5	--	<0.5		--	--	--	--	--	--	
	2/18/98	12.85	5.02	7.83	1.7	1,500	260	320	9.1	1	0.6		--	--	--	1.7	--	--	--
	3/30/01	12.85	6.21	6.64	-1.19	2,700	350	320	16	5.3	13.6		--	--	--	<0.5	--	--	--
	12/26/01	12.85	5.37	7.48	0.84	600	200	33	3	<0.5	1.7		--	--	--	0.8	--	--	--
	9/30/02	12.85	6.40	6.45	-1.03	67	<50	<0.5	<0.5	<0.5	<1.5		--	--	--	<0.5	--	--	--
	2/20/03	12.85	5.83	7.02	0.57	570	--	107	<10	<10	<2.0		--	--	--	<10	--	--	--
	1/12/04	12.85	5.41	7.44	0.42	700	--	122	13.5	0.6	8.8		--	--	--	--	--	--	--
	5/12/05	12.85	5.59	7.26	-0.18	760	--	14	5.7	<5	<5		--	--	--	--	--	--	--
	9/29/11	12.85	6.23	6.62	-0.64	14 ^J	<40.40	<0.16	<0.17	<0.23	<0.19	<0.20	<0.14	<0.16	<0.19	<0.19	<0.14	<10.00	
	3/30/12	12.85	3.30	9.55	2.93	2,200	340	340	23	2.8	19	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00	
	9/11/12	12.85	5.86	6.99	-2.56	2,500	310	92	16	1.3	16	<0.40	<0.28	<0.32	<0.38	<0.52	<0.28	<20.00	
	3/20/13	12.85	5.23	7.62	0.63	4,800	680	200	21	3.7	21	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00	
	8/28/13	12.85	5.86	6.99	-0.63	2,300	500	60	17	1.7	18	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00	
	3/31/14	12.85	3.85	9.00	2.01	6,100	1,000	250	21	3.6	21.1	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<10

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Monitoring Well	Sample Date	TOC Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	Change in Elevation (ft)	TPHg (ug/l)	TPHd (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	1,2-DCA (ug/l)	EDB (ug/l)	DIPE (ug/l)	ETBE (ug/l)	MTBE (ug/l)	TAME (ug/l)	TBA (ug/l)
MW-5	10/11/95	13.33	6.68	6.65	--	1,000	<50	45	15	1.9	6.1	--	--	--	--	--	--	--
	1/17/96	13.33	5.74	7.59	0.94	<50	<50	2	<0.3	<0.3	<0.3	--	--	--	--	--	--	--
	4/16/96	13.33	5.85	7.48	-0.11	1,740	855	157	20.1	3.9	22.4	--	--	--	--	--	--	--
	8/26/96	13.33	5.99	7.34	-0.14	900	270	55	6.4	0.9	3.7	--	--	--	--	--	--	--
	11/14/96	13.33	6.70	6.63	-0.71	700	320	31	5.7	0.7	0.38	--	--	--	--	--	--	--
	2/18/98	13.33	5.74	7.59	0.96	1,200	580	14	5.2	0.8	5.5	--	--	--	--	9.5	--	--
	3/30/01	13.33	6.73	6.60	-0.99	1,500	480	7.2	6.5	<0.5	10.7	--	--	--	--	<0.5	--	--
	12/26/01	13.33	5.23	8.10	1.5	5,000	7,200	0.8	10.5	3.8	10.5	--	--	--	--	3.6	--	--
	9/30/02	13.33	6.18	7.15	-0.95	560	430	1.8	5.2	<0.5	6.5	--	--	--	--	<0.5	--	--
	2/20/03	13.33	5.80	7.53	0.38	1,040	--	<2.5	8.6	<2.5	11.3	--	--	--	--	<2.5	--	--
	1/12/04	13.33	5.60	7.73	0.2	1,820	--	4.2	8	0.6	12.8	--	--	--	--	--	--	--
	5/12/05	13.33	6.18	7.15	-0.58	1,300	--	<5	<5	<5	<5	--	--	--	--	--	--	--
	9/29/11	13.33	6.37	6.96	-0.19	960	440	0.34 ^J	0.52 ^J	<0.23	1.8	<0.20	<0.14	<0.16	<0.19	<0.19	<0.14	<10.00
	3/30/12	13.33	4.61	8.72	1.76	200	270	1.5	2.4	<0.23	5.2	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00
	9/11/12	13.33	6.40	6.93	-1.79	550	200	1.0	1.6	<0.23	3.2	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00
	3/20/13	13.33	5.73	7.60	0.67	900	230	0.86	1.3	<0.23	3.3	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00
	8/28/13	13.33	6.17	7.16	-0.44	760	250	0.27 ^J	0.26 ^J	<0.23	1.4	<0.20	<0.14	<0.16	<0.19	<0.26	<0.14	<10.00
3/31/14	13.33	--	--	--	Not Sampled - Inaccessible													

Notes:

TOC = top of casing

TPHg = total petroleum hydrocarbons as gasoline

TPHd = total petroleum hydrocarbons as diesel

^J = Concentration is above the detection limit and below the practical quantitation limit

EDB = ethylene dibromide or 1,2-dibromethane

1,2-DCA = 1,2-dichloroethane

DIPE = Di-isopropyl ether

ETBE = Ethyl tert-butyl ether

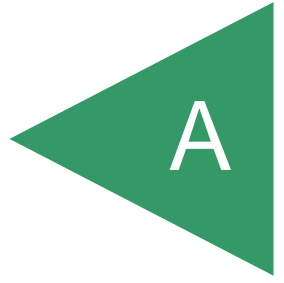
MTBE = methyl tertiary butyl ether

TAME = tert-Amyl methyl ether

TBA = tert-Butanol

APPENDIX

A





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

February 11, 2015

Caltrans
111 Grand Avenue
Oakland, CA 94612
Attn: Mr. Bahram Sazegar
(Sent via E-mail to: bahram.sazegar@dot.ca.gov)

Subject: ADDITIONAL INVESTIGATION WORK PLAN, Fuel Leak Case No. RO0000225 and GeoTracker Global ID T0600101696, Caltrans Oakland Maintenance Station, 555 Hegenberger Road, Oakland, CA 94621

Dear Mr. Sazegar:

Thank you for the recently submitted document entitled, *Additional Investigation Workplan (Work Plan)*, dated December 16, 2014, which was prepared by Geocon Consultants, Inc. (Geocon) for the subject site. Alameda County Environmental Health (ACEH) staff has reviewed the case file including the above-mentioned work plan for the subject site. The Work Plan proposes to address four data gaps identified for the site.

Data gaps the Work Plan proposes to address are:

1. A determination if shallow groundwater is in a confined condition by means of advancing three temporary cluster wells, with each cluster consisting of five wells having varying depths from 3 to 15 feet below the ground surface;
2. Further delineation of the lateral impacts to groundwater by means of advancing four borings for the recovery of grab groundwater samples;
3. Residual source evaluation in the vicinity of the former UST pit, consisting of the advancement of four borings outside of the former tank pit excavation boundary and an additional soil boring advanced through the former tank pit for the recovery of soil and grab groundwater samples; and
4. An evaluation potential groundwater impact to the adjoining downgradient wetland by means of advancing a three boring transect for the recovery of grab groundwater samples. The proposed location of the transect is between the wetland and the former underground storage tanks (USTs).

Based on ACEH staff review of the Work Plan, the proposed scope of work is conditionally approved for implementation provided that the technical comments below are incorporated during the proposed work. 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 these technical comments is proposed. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance

written notification to this office (e-mail preferred to: keith.nowell@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. The referenced work plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests several modifications to the scope of work as addressed below:

A. Grab Groundwater Sampling – The Work Plan states groundwater samples will be extracted by means of polyethylene tubing fitted with a check valve. ACEH is of the opinion this extraction method may cause undue agitation of the groundwater, potentially reducing volatilizing volatile organic compound (VOC) concentrations. ACEH requests the use of a peristaltic pump be used for groundwater sample recovery.

B. Silica Gel Cleanup – The Work Plan states grab groundwater samples collected during the investigation of Items 1, 2, and 4 presented above will be analyzed for TPH as diesel (TPHd) by EPA test method 8015B and that the TPHd analysis would be performed using silica gel clean up. Diesel degradation produces both polar and non-polar byproducts. To remain consistent with Regional Water Quality Control Board (RWQCB) recommendations, ACEH requests that the TPHd analysis be performed using EPA test method 8015B both with and without silica gel clean up.

Additionally, Item 3 above does not indicate if using silica gel clean up would be performed for the TPHd analysis. Please perform EPA test method 8015B both with and without silica gel clean up on the TPHd samples recovered from the UST excavation are investigation.

C. Borehole Security – The Work Plan states the boreholes advanced for Item 1 above will be left open for three days. The Work Plan does not indicate how these borings will be secured for the duration prior to the sampling of these wells. Please elaborate in an email (attention Keith Nowell) prior to implementation of this Work Plan what measures will be taken to secure the open borings from surface water intrusion and/or vandalism prior to sampling. Note that these borings are contingent on Alameda County Public Works Agency, the well permitting agency, for approval of open boreholes

D. Soil Sampling Protocols – The Work Plan states soil samples will be collected every 5 feet and at depths where obvious petroleum impacts are observed for Item 3 above. ACEH requests soil samples be collected and analyzed at maximum intervals of five feet, areas of obvious contamination, the soil/groundwater interface, and at significant changes in lithology. If staining, odor, or elevated PID readings are observed over an interval of several feet, a sufficient number of soil samples from this interval requested to be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval. Please ensure that the analytical results define the vertical extent of TPH impacts at these locations.

E. Soil Bore Numbering – The Work Plan states three borings (SB18 to SB20) will be advanced at the approximate location as shown of Figure 5. The borings depicted on Figure 5 are labeled SB-23 to SB25. Please contact ACEH by email (attention Keith Nowell) with a revised figure for our review should these three borings be incorrectly identified on Figure 5.

- F. Analytical Testing** – The State Water Resources Control Board’s (SWRCBs) Low Threat Underground Storage Tank Case Closure Policy (LTCP) requires collection of soil samples from within the 0- to 5-foot and 5- to 10-foot zones to satisfy the LTCP Media Specific Criteria for Direct Contact and Outdoor Air Exposure. ACEH requests that excavation perimeter soil samples be collected at two different depths from within the 0- to 5-foot interval measured from below the ground surface (bgs), and in addition to at least one from the one 5- to 10-foot zone, and be consistent with Item D above. ACEH requests naphthalene be added to the scope of analysis presented in the Work Plan,

Additionally, the Work Plan also indicates that analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) will be performed by EPA test method 8021B for Item 4 above. The presence of non-BTEX VOCs have been detected in groundwater at the site. Therefore, ACEH requests that the full suite of VOCs be analyzed by EPA test method 8260B for the groundwater samples recovered from this area. Total petroleum hydrocarbons (TPH) as gasoline (TPHg) may also be reported by this scan.

TECHNICAL REPORT REQUEST

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

- **March 6, 2015** – Email Correspondence addressing Item C and Item E in the Technical Comments section above.
- **June 12, 2015** – **Soil and Groundwater Investigation Report** (file name: RO0000225_SWI_R_yyyy-mm-dd)

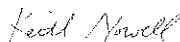
These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance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

Online case files are available for review at the following website:

<http://www.acgov.org/aceh/index.htm>.

Thank you for your cooperation. ACEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org.

Respectfully,



Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o=Alameda
County, ou=Department of
Environmental Health,
email=keith.nowell@acgov.org,
c=US
Date: 2015.02.11 14:55:09 -0800

Keith Nowell
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: John Love, Geocon Consultants, Inc., 6671 Brisa Street, Livermore, CA 94550-2505
(Sent via E-mail to: love@geoconinc.com)

Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA
94612-2032 (Sent via E-mail to: lgriffin@oaklandnet.com)

Dilan Roe, ACEH (Sent via E-mail to: dilan.roe@acgov.org)

Keith Nowell, ACEH (Sent via E-mail to: keith.nowelli@acgov.org)

GeoTracker

File

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

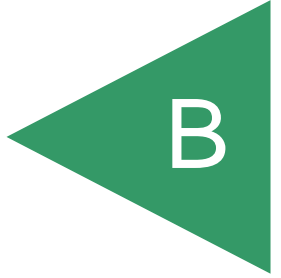
- Please **do not** submit reports as attachments to electronic mail.
- Entire report including cover letter must be submitted to the ftp site as a **single portable document format (PDF) with no password protection**.
- It is **preferable** that reports be converted to PDF format from their original 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



Alameda County Public Works Agency - Water Resources Well Permit



Public Works Agency
— Alameda County —

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

Application Approved on: 04/07/2015 By jamesy

Permit Numbers: W2015-0293
Permits Valid from 04/20/2015 to 04/24/2015

Application Id: 1427836992418
Site Location: 555 Hegenberger Road

City of Project Site:Oakland

Project Start Date: 04/20/2015
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Completion Date:04/24/2015

Applicant: Geocon Consultants, Inc - John Love
6671 Brisa Street, Livermore, CA 94550
Property Owner: Bahram Sazegar
111 Grand Avenue, MS 8C, Oakland, CA 94623
Client: ** same as Property Owner **
Contact: John Love

Phone: 925-371-5900 x407

Phone: 510-286-5643

Phone: 925-371-5900 x407
Cell: 925-525-4142

Receipt Number: WR2015-0162 Total Due: \$265.00
Payer Name : John William Love Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 13 Boreholes
Driller: Geocon Consultants, Inc. - Lic #: 716050 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-0293	04/07/2015	07/19/2015	13	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Alameda County Public Works Agency - Water Resources Well Permit

6. NOTE:

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

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

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

Alameda County Public Works Agency - Water Resources Well Permit



Public Works Agency
—Alameda County—

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

Application Approved on: 04/07/2015 By jamesy

Permit Numbers: W2015-0294
Permits Valid from 04/20/2015 to 04/24/2015

Application Id: 1427840114434
Site Location: 8099 Coliseum Way

City of Project Site:Oakland

Oakland, CA 94621

Project Start Date: 04/20/2015

Completion Date:04/24/2015

Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Applicant: Geocon Consultants, Inc. - John Love
6671 Brisa Street, Livermore, CA 94550

Phone: 925-371-5900 x407

Property Owner: David Thompson
750 NE Columbia Blvd., Portland, OR 97211

Phone: 503-289-4134

Client: Bahram Sazegar
111 Grand Avenue, MS 8C, Oakland, CA 94623

Phone: 510-286-5643

Contact: John Love

Phone: 925-371-5900 x407
Cell: 925-525-4142

Receipt Number: WR2015-0163 Total Due: \$265.00
Payer Name : John William Love Total Amount Paid: \$265.00
Paid By: VISA PAID IN FULL

Works Requesting Permits:

Borehole(s) for Investigation-Environmental/Monitorinig Study - 12 Boreholes
Driller: Geocon Consultants, Inc. - Lic #: 716050 - Method: DP

Work Total: \$265.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2015-0294	04/07/2015	07/19/2015	12	2.00 in.	20.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.
2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.
3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.
5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Alameda County Public Works Agency - Water Resources Well Permit

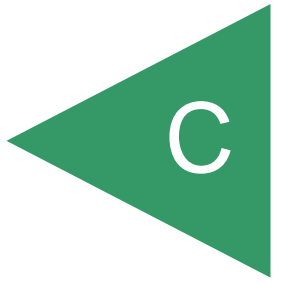
6. NOTE:

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

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

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

APPENDIX



DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING BC-1		PENETRATION RESISTANCE (BLOWS/FT)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/20/2015</u>			
					ENG./GEO. <u>JL</u>	DRILLER <u>GEOCON</u>			
					EQUIPMENT <u>GEOPROBE</u>	HAMMER TYPE _____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1									
2									
3									
4				GP	Dense, saturated, coarse gravel (GP), petroleum sheen				
5			▼	CL	Stiff, moist, dark gray to black, Silty CLAY (CL) with some gravel, medium plasticity, slight petro odor				
6									
7									
8					BORING TERMINATED AT 8 FEET				

Figure , Log of Boring BC-1, page 1 of 1



SAMPLE SYMBOLS		
<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>
<input checked="" type="checkbox"/>	... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE	

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING BC-2		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/20/2015</u>			
					ENG./GEO. <u>JL</u>	DRILLER <u>GEOCON</u>			
					EQUIPMENT <u>GEOPROBE</u>	HAMMER TYPE _____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1				CL	Firm, moist, brown to black, fine Sandy CLAY (CL), low to medium plasticity				
2	1.5-2								
3									
4	3.5-4				- petro odor at 4 feet				
5									
6									
7	7-7.5								
8				GC/GM	Loose, saturated, Clayey Coarse GRAVEL (GC), petroleum product				
BORING TERMINATED AT 8 FEET									

Figure , Log of Boring BC-2, page 1 of 1



SAMPLE SYMBOLS		
	... SAMPLING UNSUCCESSFUL	
	... DISTURBED OR BAG SAMPLE	
	... STANDARD PENETRATION TEST	
	... CHUNK SAMPLE	

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING BC-3			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/20/2015</u>				
MATERIAL DESCRIPTION										
0					ASPHALT & SANDY, GRAVELLY FILL					
1										
2										
3					SM/C Firm, very moist, brown, Silty fine to medium SAND/Clayey SAND (SM/SC), low plasticity, no odor					
4										
5					CL Stiff, moist, dark gray and brown, Silty CLAY (CL), medium plasticity, no odor					
6	6-6.5									
7										
8					BORING TERMINATED AT 15 FEET					
9										
10										
11										
12										
13										
14										
15										

Figure , Log of Boring BC-3, page 1 of 1



SAMPLE SYMBOLS		
<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>
<input checked="" type="checkbox"/>	... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE	

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-15			PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/20/2015</u>				
MATERIAL DESCRIPTION										
0					ASPHALT & BASE SOIL					
1				CL	Firm, moist, dark brown, Sandy CLAY (CL), low plasticity, no odor					
2										
3										
4										
5				SC	Soft to stiff, light green, Clayey fine SAND (SC), no odor					
6	6-6.5		▼		- saturated 6 to 8 feet					
7										
8										
9										
10				CL	Stiff, moist, dark brown to black, Silty CLAY (CL), some small gravel, medium plasticity, no odor					
11										
12				CL	Very stiff, moist, brown to light brown, Silty CLAY (CL), medium plasticity, no odor					
13										
14										
15				SW	Very dense, saturated, brown, SAND (SW), no odor					
16										
17					BORING TERMINATED AT 17 FEET					

Figure , Log of Boring SB-15, page 1 of 1



SAMPLE SYMBOLS		
<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>
<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>
<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input type="checkbox"/>
<input type="checkbox"/>	... CHUNK SAMPLE	<input type="checkbox"/>
<input type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)	<input type="checkbox"/>
<input type="checkbox"/>	... WATER TABLE OR SEEPAGE	<input type="checkbox"/>

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-16		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/20/2015</u>			
					ENG./GEO. <u>JL</u>	DRILLER <u>GEOCON</u>			
					EQUIPMENT <u>GEOPROBE</u>	HAMMER TYPE _____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1					Fill soil, brick fragments				
2									
3				CL	Firm, moist, dark brown to black, Silty CLAY (CL), some SAND, low plasticity				
4	3.5-4				- slight petro odor				
5					- saturated 6 to 8 feet				
6	6-6.5		▼		Strong petro odor, sheen on water table surface				
7									
8					BORING TERMINATED AT 8 FEET				

Figure , Log of Boring SB-16, page 1 of 1



SAMPLE SYMBOLS		
<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>
<input checked="" type="checkbox"/>	... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE	<input checked="" type="checkbox"/>

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-17		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/20/2015</u>			
					ENG./GEO.	DRILLER			
					<u>JL</u>	<u>GEOCON</u>			
					EQUIPMENT	HAMMER TYPE			
					<u>GEOPROBE</u>	_____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1				CL	Firm, moist, dark brown, Sandy CLAY (CL), low plasticity, no odor				
2									
3									
4									
5				SC	Soft to firm, light green, Clayey SAND (SC), slight petro odor				
6									
7	6.5-7'		▼		- saturated at 7 feet				
8					BORING TERMINATED AT 8 FEET				

Figure , Log of Boring SB-17, page 1 of 1



SAMPLE SYMBOLS		
<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>
<input type="checkbox"/>	... STANDARD PENETRATION TEST	<input type="checkbox"/>
<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input type="checkbox"/>
<input type="checkbox"/>	... CHUNK SAMPLE	<input type="checkbox"/>
<input type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)	<input type="checkbox"/>
<input type="checkbox"/>	... WATER TABLE OR SEEPAGE	<input type="checkbox"/>

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-18		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/24/2015</u>			
					MATERIAL DESCRIPTION				
0					ASPHALT & BASE SOIL				
1									
2	2-2.5			CL	Very stiff, moist, black, Silty CLAY (CL), medium plasticity				
3									
4	3.5-4								
5									
6									
7					Very moist, Interbedded gravel, petroleum odor				
8	7.5-8								
9									
10					Slight to no petroleum odor				
11									
12	11.5-12				BORING TERMINATED AT 12 FEET				

Figure , Log of Boring SB-18, page 1 of 1



SAMPLE SYMBOLS		
	... SAMPLING UNSUCCESSFUL	
	... DISTURBED OR BAG SAMPLE	
	... STANDARD PENETRATION TEST	
	... CHUNK SAMPLE	
		... DRIVE SAMPLE (UNDISTURBED)
		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-19		PENETRATION RESISTANCE (BLOWS/FT)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/24/2015</u>			
					ENG./GEO.	DRILLER			
					<u>JL</u>	<u>GEOCON</u>			
					EQUIPMENT	HAMMER TYPE			
					<u>GEOPROBE</u>	_____			
MATERIAL DESCRIPTION									
0						ASPHALT & BASE SOIL			
1									
2	2-2.5								
3									
3.5-4				CL	Firm, moist, brown to dark brown, well-graded Sandy CLAY (CL) with some gravel, low to medium plasticity, no odor				
4									
5				SC	Saturated, brown, Clayey Gravelly SAND (SC), low plasticity				
6			▼						
6.5-7									
7									
8				CL	Soft to firm, moist to saturated, dark gray to black, Silty CLAY (CL) with some gravel, intermittent petro odor				
9									
10									
11									
11.5-12									
12					BORING TERMINATED AT 12 FEET				

Figure , Log of Boring SB-19, page 1 of 1



SAMPLE SYMBOLS		
	... SAMPLING UNSUCCESSFUL	
	... DISTURBED OR BAG SAMPLE	
	... STANDARD PENETRATION TEST	
	... CHUNK SAMPLE	
		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-20		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/24/2015</u>			
					ENG./GEO.	DRILLER			
					<u>JL</u>	<u>GEOCON</u>			
					EQUIPMENT	HAMMER TYPE			
					<u>GEOPROBE</u>	_____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1				CL	Firm, moist, dark brown, Silty CLAY (CL), medium plasticity, no odor Some gravel Increased stiffness				
2	2-2.5								
3									
4	3.5-4								
5									
6									
7									
8	7.5-8								
9									
10									
11									
12	11.5-12								
13									
14									
15	15-15.5			CL	Very stiff, moist, yellowish-brown, Sandy CLAY (CL), medium plasticity, no odor Very dense, moist to very moist, yellowish-brown, Clayey Gravelly SAND (GC/SC)				
16				GC/SC					
17					BORING TERMINATED AT 18 FEET				
18									

Figure , Log of Boring SB-20, page 1 of 1



SAMPLE SYMBOLS			
	... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST
	... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE
			... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-21		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/24/2015</u>			
					ENG./GEO.	DRILLER			
					<u>JL</u>	<u>GEOCON</u>			
					EQUIPMENT	HAMMER TYPE			
					<u>GEOPROBE</u>	_____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1	2-2.5			GC/SC	Dense, moist, dark brown, Clayey Gravelly SAND (GC/SC), low plasticity, no odor				
2									
3									
4									
5									
6				GC/GM	Dense, reddish-brown, Clayey GRAVEL/GRAVEL (GC/GM), angular gravel, slight plasticity - saturated at 7 feet				
7									
8									
9				CL	Stiff, moist, dark gray, Silty CLAY (CL), medium plasticity, slight petroleum odor				
10									
11									
12					BORING TERMINATED AT 12 FEET				

Figure , Log of Boring SB-21, page 1 of 1



SAMPLE SYMBOLS			
	... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST
	... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE
			... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-22		PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/24/2015</u>			
					ENG./GEO. <u>JL</u>	DRILLER <u>GEOCON</u>			
					EQUIPMENT <u>GEOPROBE</u>	HAMMER TYPE _____			
MATERIAL DESCRIPTION									
0					ASPHALT & BASE SOIL				
1				CL	Firm, moist, brown, Gravelly CLAY (CL), no odor				
2									
3	2.5-3				- intermittent petro odor to 12 feet				
4	3.5-4								
5					- saturated at 6 feet				
6			▼						
7									
8	7.5-8								
9									
10									
11	10.5-11				BORING TERMINATED AT 12 FEET				
12									

Figure , Log of Boring SB-22, page 1 of 1



SAMPLE SYMBOLS		
<input type="checkbox"/>	... SAMPLING UNSUCCESSFUL	<input type="checkbox"/>
<input checked="" type="checkbox"/>	... STANDARD PENETRATION TEST	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DRIVE SAMPLE (UNDISTURBED)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... DISTURBED OR BAG SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... CHUNK SAMPLE	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	... WATER TABLE OR SEEPAGE	<input checked="" type="checkbox"/>

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

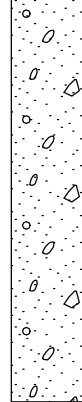







DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	BORING SB-25		PENETRATION RESISTANCE (BLOWS/FT)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)					
					ELEV. (MSL.) _____	DATE COMPLETED <u>4/24/2015</u>								
					ENG./GEO.	DRILLER								
					<u>JL</u>	<u>GEOCON</u>								
					EQUIPMENT	HAMMER TYPE								
					<u>GEOPROBE</u>	_____								
MATERIAL DESCRIPTION														
0					SANDY, GRAVELLY FILL									
1														
2														
3														
4														
5														
6				CL	Very stiff, moist, dark brown, Silty CLAY (CL), medium plasticity, no odor									
7														
8						- groundwater appears to be located between 14 and 16 feet								
9														
10				CL	Firm to very stiff, moist, light brown, fine Sandy CLAY (CL), no odor									
11														
12														
13														
14														
15														
16					BORING TERMINATED AT 16 FEET									

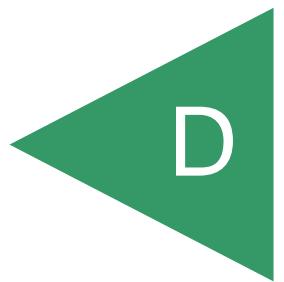
Figure , Log of Boring SB-25, page 1 of 1



SAMPLE SYMBOLS					
	... SAMPLING UNSUCCESSFUL		... STANDARD PENETRATION TEST		... DRIVE SAMPLE (UNDISTURBED)
	... DISTURBED OR BAG SAMPLE		... CHUNK SAMPLE		... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

APPENDIX





McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1504849

Report Created for: GEOCON Env. Consultants

6671 Brisa St
Livermore, CA 94550

Project Contact: John Love

Project P.O.:

Project Name: #E8722-02-01B; Caltrans Hegenberger

Project Received: 04/21/2015

Analytical Report reviewed & approved for release on 04/30/2015 by:

Angela Rydelius,
Laboratory Manager

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





Glossary of Terms & Qualifier Definitions

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
WorkOrder: 1504849

Glossary Abbreviation

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



Glossary of Terms & Qualifier Definitions

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
WorkOrder: 1504849

Analytical Qualifiers

a3 sample diluted due to high organic content.
b1 aqueous sample that contains greater than ~1 vol. % sediment
b6 lighter than water immiscible sheen/product is present
e2 diesel range compounds are significant; no recognizable pattern
e3 aged diesel is significant
e4 gasoline range compounds are significant.
e7 oil range compounds are significant
e11/e8 stoddard solvent/mineral spirit (?); and/or kerosene/kerosene range/jet fuel range
e11 stoddard solvent/mineral spirit (?)

Quality Control Qualifiers

F1 MS/MSD recovery and/or RPD was out of acceptance criteria; LCS validated the prep batch.



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 1.5'	1504849-001A	Soil	04/20/2015 08:10	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	04/24/2015 11:44
tert-Amyl methyl ether (TAME)	ND	0.0050	1	04/24/2015 11:44
Benzene	ND	0.0050	1	04/24/2015 11:44
Bromobenzene	ND	0.0050	1	04/24/2015 11:44
Bromochloromethane	ND	0.0050	1	04/24/2015 11:44
Bromodichloromethane	ND	0.0050	1	04/24/2015 11:44
Bromoform	ND	0.0050	1	04/24/2015 11:44
Bromomethane	ND	0.0050	1	04/24/2015 11:44
2-Butanone (MEK)	ND	0.020	1	04/24/2015 11:44
t-Butyl alcohol (TBA)	ND	0.050	1	04/24/2015 11:44
n-Butyl benzene	ND	0.0050	1	04/24/2015 11:44
sec-Butyl benzene	ND	0.0050	1	04/24/2015 11:44
tert-Butyl benzene	ND	0.0050	1	04/24/2015 11:44
Carbon Disulfide	ND	0.0050	1	04/24/2015 11:44
Carbon Tetrachloride	ND	0.0050	1	04/24/2015 11:44
Chlorobenzene	ND	0.0050	1	04/24/2015 11:44
Chloroethane	ND	0.0050	1	04/24/2015 11:44
Chloroform	ND	0.0050	1	04/24/2015 11:44
Chloromethane	ND	0.0050	1	04/24/2015 11:44
2-Chlorotoluene	ND	0.0050	1	04/24/2015 11:44
4-Chlorotoluene	ND	0.0050	1	04/24/2015 11:44
Dibromochloromethane	ND	0.0050	1	04/24/2015 11:44
1,2-Dibromo-3-chloropropane	ND	0.0040	1	04/24/2015 11:44
1,2-Dibromoethane (EDB)	ND	0.0040	1	04/24/2015 11:44
Dibromomethane	ND	0.0050	1	04/24/2015 11:44
1,2-Dichlorobenzene	ND	0.0050	1	04/24/2015 11:44
1,3-Dichlorobenzene	ND	0.0050	1	04/24/2015 11:44
1,4-Dichlorobenzene	ND	0.0050	1	04/24/2015 11:44
Dichlorodifluoromethane	ND	0.0050	1	04/24/2015 11:44
1,1-Dichloroethane	ND	0.0050	1	04/24/2015 11:44
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	04/24/2015 11:44
1,1-Dichloroethene	ND	0.0050	1	04/24/2015 11:44
cis-1,2-Dichloroethene	ND	0.0050	1	04/24/2015 11:44
trans-1,2-Dichloroethene	ND	0.0050	1	04/24/2015 11:44
1,2-Dichloropropane	ND	0.0050	1	04/24/2015 11:44
1,3-Dichloropropane	ND	0.0050	1	04/24/2015 11:44
2,2-Dichloropropane	ND	0.0050	1	04/24/2015 11:44
1,1-Dichloropropene	ND	0.0050	1	04/24/2015 11:44

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 1.5'	1504849-001A	Soil	04/20/2015 08:10	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	04/24/2015 11:44
trans-1,3-Dichloropropene	ND	0.0050	1	04/24/2015 11:44
Diisopropyl ether (DIPE)	ND	0.0050	1	04/24/2015 11:44
Ethylbenzene	ND	0.0050	1	04/24/2015 11:44
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	04/24/2015 11:44
Freon 113	ND	0.0050	1	04/24/2015 11:44
Hexachlorobutadiene	ND	0.0050	1	04/24/2015 11:44
Hexachloroethane	ND	0.0050	1	04/24/2015 11:44
2-Hexanone	ND	0.0050	1	04/24/2015 11:44
Isopropylbenzene	ND	0.0050	1	04/24/2015 11:44
4-Isopropyl toluene	ND	0.0050	1	04/24/2015 11:44
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	04/24/2015 11:44
Methylene chloride	ND	0.0050	1	04/24/2015 11:44
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	04/24/2015 11:44
Naphthalene	ND	0.0050	1	04/24/2015 11:44
n-Propyl benzene	ND	0.0050	1	04/24/2015 11:44
Styrene	ND	0.0050	1	04/24/2015 11:44
1,1,1,2-Tetrachloroethane	ND	0.0050	1	04/24/2015 11:44
1,1,2,2-Tetrachloroethane	ND	0.0050	1	04/24/2015 11:44
Tetrachloroethene	ND	0.0050	1	04/24/2015 11:44
Toluene	ND	0.0050	1	04/24/2015 11:44
1,2,3-Trichlorobenzene	ND	0.0050	1	04/24/2015 11:44
1,2,4-Trichlorobenzene	ND	0.0050	1	04/24/2015 11:44
1,1,1-Trichloroethane	ND	0.0050	1	04/24/2015 11:44
1,1,2-Trichloroethane	ND	0.0050	1	04/24/2015 11:44
Trichloroethene	ND	0.0050	1	04/24/2015 11:44
Trichlorofluoromethane	ND	0.0050	1	04/24/2015 11:44
1,2,3-Trichloropropane	ND	0.0050	1	04/24/2015 11:44
1,2,4-Trimethylbenzene	ND	0.0050	1	04/24/2015 11:44
1,3,5-Trimethylbenzene	ND	0.0050	1	04/24/2015 11:44
Vinyl Chloride	ND	0.0050	1	04/24/2015 11:44
Xylenes, Total	ND	0.0050	1	04/24/2015 11:44

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 1.5'	1504849-001A	Soil	04/20/2015 08:10	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		04/24/2015 11:44
Toluene-d8	101	70-130		04/24/2015 11:44
4-BFB	99	70-130		04/24/2015 11:44

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 3.5'	1504849-002A	Soil	04/20/2015 08:10	GC16	103881
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	04/24/2015 23:56
tert-Amyl methyl ether (TAME)	ND		0.0050	1	04/24/2015 23:56
Benzene	ND		0.0050	1	04/24/2015 23:56
Bromobenzene	ND		0.0050	1	04/24/2015 23:56
Bromochloromethane	ND		0.0050	1	04/24/2015 23:56
Bromodichloromethane	ND		0.0050	1	04/24/2015 23:56
Bromoform	ND		0.0050	1	04/24/2015 23:56
Bromomethane	ND		0.0050	1	04/24/2015 23:56
2-Butanone (MEK)	ND		0.020	1	04/24/2015 23:56
t-Butyl alcohol (TBA)	ND		0.050	1	04/24/2015 23:56
n-Butyl benzene	0.022		0.0050	1	04/24/2015 23:56
sec-Butyl benzene	0.011		0.0050	1	04/24/2015 23:56
tert-Butyl benzene	ND		0.0050	1	04/24/2015 23:56
Carbon Disulfide	ND		0.0050	1	04/24/2015 23:56
Carbon Tetrachloride	ND		0.0050	1	04/24/2015 23:56
Chlorobenzene	ND		0.0050	1	04/24/2015 23:56
Chloroethane	ND		0.0050	1	04/24/2015 23:56
Chloroform	ND		0.0050	1	04/24/2015 23:56
Chloromethane	ND		0.0050	1	04/24/2015 23:56
2-Chlorotoluene	ND		0.0050	1	04/24/2015 23:56
4-Chlorotoluene	ND		0.0050	1	04/24/2015 23:56
Dibromochloromethane	ND		0.0050	1	04/24/2015 23:56
1,2-Dibromo-3-chloropropane	ND		0.0040	1	04/24/2015 23:56
1,2-Dibromoethane (EDB)	ND		0.0040	1	04/24/2015 23:56
Dibromomethane	ND		0.0050	1	04/24/2015 23:56
1,2-Dichlorobenzene	ND		0.0050	1	04/24/2015 23:56
1,3-Dichlorobenzene	ND		0.0050	1	04/24/2015 23:56
1,4-Dichlorobenzene	ND		0.0050	1	04/24/2015 23:56
Dichlorodifluoromethane	ND		0.0050	1	04/24/2015 23:56
1,1-Dichloroethane	ND		0.0050	1	04/24/2015 23:56
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	04/24/2015 23:56
1,1-Dichloroethene	ND		0.0050	1	04/24/2015 23:56
cis-1,2-Dichloroethene	ND		0.0050	1	04/24/2015 23:56
trans-1,2-Dichloroethene	ND		0.0050	1	04/24/2015 23:56
1,2-Dichloropropane	ND		0.0050	1	04/24/2015 23:56
1,3-Dichloropropane	ND		0.0050	1	04/24/2015 23:56
2,2-Dichloropropane	ND		0.0050	1	04/24/2015 23:56
1,1-Dichloropropene	ND		0.0050	1	04/24/2015 23:56

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 3.5'	1504849-002A	Soil	04/20/2015 08:10	GC16	103881
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.0050	1	04/24/2015 23:56
trans-1,3-Dichloropropene	ND		0.0050	1	04/24/2015 23:56
Diisopropyl ether (DIPE)	ND		0.0050	1	04/24/2015 23:56
Ethylbenzene	ND		0.0050	1	04/24/2015 23:56
Ethyl tert-butyl ether (ETBE)	ND		0.0050	1	04/24/2015 23:56
Freon 113	ND		0.0050	1	04/24/2015 23:56
Hexachlorobutadiene	ND		0.0050	1	04/24/2015 23:56
Hexachloroethane	ND		0.0050	1	04/24/2015 23:56
2-Hexanone	ND		0.0050	1	04/24/2015 23:56
Isopropylbenzene	ND		0.0050	1	04/24/2015 23:56
4-Isopropyl toluene	ND		0.0050	1	04/24/2015 23:56
Methyl-t-butyl ether (MTBE)	ND		0.0050	1	04/24/2015 23:56
Methylene chloride	ND		0.0050	1	04/24/2015 23:56
4-Methyl-2-pentanone (MIBK)	ND		0.0050	1	04/24/2015 23:56
Naphthalene	ND		0.0050	1	04/24/2015 23:56
n-Propyl benzene	ND		0.0050	1	04/24/2015 23:56
Styrene	ND		0.0050	1	04/24/2015 23:56
1,1,1,2-Tetrachloroethane	ND		0.0050	1	04/24/2015 23:56
1,1,2,2-Tetrachloroethane	ND		0.0050	1	04/24/2015 23:56
Tetrachloroethene	ND		0.0050	1	04/24/2015 23:56
Toluene	ND		0.0050	1	04/24/2015 23:56
1,2,3-Trichlorobenzene	ND		0.0050	1	04/24/2015 23:56
1,2,4-Trichlorobenzene	ND		0.0050	1	04/24/2015 23:56
1,1,1-Trichloroethane	ND		0.0050	1	04/24/2015 23:56
1,1,2-Trichloroethane	ND		0.0050	1	04/24/2015 23:56
Trichloroethene	ND		0.0050	1	04/24/2015 23:56
Trichlorofluoromethane	ND		0.0050	1	04/24/2015 23:56
1,2,3-Trichloropropane	ND		0.0050	1	04/24/2015 23:56
1,2,4-Trimethylbenzene	ND		0.0050	1	04/24/2015 23:56
1,3,5-Trimethylbenzene	ND		0.0050	1	04/24/2015 23:56
Vinyl Chloride	ND		0.0050	1	04/24/2015 23:56
Xylenes, Total	0.0052		0.0050	1	04/24/2015 23:56

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 3.5'	1504849-002A	Soil	04/20/2015 08:10	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		04/24/2015 23:56
Toluene-d8	98	70-130		04/24/2015 23:56
4-BFB	94	70-130		04/24/2015 23:56

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 7'	1504849-003A	Soil	04/20/2015 08:15	GC10	103881

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	20	200	04/28/2015 23:37
tert-Amyl methyl ether (TAME)	ND	1.0	200	04/28/2015 23:37
Benzene	ND	1.0	200	04/28/2015 23:37
Bromobenzene	ND	1.0	200	04/28/2015 23:37
Bromochloromethane	ND	1.0	200	04/28/2015 23:37
Bromodichloromethane	ND	1.0	200	04/28/2015 23:37
Bromoform	ND	1.0	200	04/28/2015 23:37
Bromomethane	ND	1.0	200	04/28/2015 23:37
2-Butanone (MEK)	ND	4.0	200	04/28/2015 23:37
t-Butyl alcohol (TBA)	ND	10	200	04/28/2015 23:37
n-Butyl benzene	13	1.0	200	04/28/2015 23:37
sec-Butyl benzene	3.6	1.0	200	04/28/2015 23:37
tert-Butyl benzene	ND	1.0	200	04/28/2015 23:37
Carbon Disulfide	ND	1.0	200	04/28/2015 23:37
Carbon Tetrachloride	ND	1.0	200	04/28/2015 23:37
Chlorobenzene	ND	1.0	200	04/28/2015 23:37
Chloroethane	ND	1.0	200	04/28/2015 23:37
Chloroform	ND	1.0	200	04/28/2015 23:37
Chloromethane	ND	1.0	200	04/28/2015 23:37
2-Chlorotoluene	ND	1.0	200	04/28/2015 23:37
4-Chlorotoluene	ND	1.0	200	04/28/2015 23:37
Dibromochloromethane	ND	1.0	200	04/28/2015 23:37
1,2-Dibromo-3-chloropropane	ND	0.80	200	04/28/2015 23:37
1,2-Dibromoethane (EDB)	ND	0.80	200	04/28/2015 23:37
Dibromomethane	ND	1.0	200	04/28/2015 23:37
1,2-Dichlorobenzene	ND	1.0	200	04/28/2015 23:37
1,3-Dichlorobenzene	ND	1.0	200	04/28/2015 23:37
1,4-Dichlorobenzene	ND	1.0	200	04/28/2015 23:37
Dichlorodifluoromethane	ND	1.0	200	04/28/2015 23:37
1,1-Dichloroethane	ND	1.0	200	04/28/2015 23:37
1,2-Dichloroethane (1,2-DCA)	ND	0.80	200	04/28/2015 23:37
1,1-Dichloroethene	ND	1.0	200	04/28/2015 23:37
cis-1,2-Dichloroethene	ND	1.0	200	04/28/2015 23:37
trans-1,2-Dichloroethene	ND	1.0	200	04/28/2015 23:37
1,2-Dichloropropane	ND	1.0	200	04/28/2015 23:37
1,3-Dichloropropane	ND	1.0	200	04/28/2015 23:37
2,2-Dichloropropane	ND	1.0	200	04/28/2015 23:37
1,1-Dichloropropene	ND	1.0	200	04/28/2015 23:37

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 7'	1504849-003A	Soil	04/20/2015 08:15	GC10	103881

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	1.0	200	04/28/2015 23:37
trans-1,3-Dichloropropene	ND	1.0	200	04/28/2015 23:37
Diisopropyl ether (DIPE)	ND	1.0	200	04/28/2015 23:37
Ethylbenzene	ND	1.0	200	04/28/2015 23:37
Ethyl tert-butyl ether (ETBE)	ND	1.0	200	04/28/2015 23:37
Freon 113	ND	1.0	200	04/28/2015 23:37
Hexachlorobutadiene	ND	1.0	200	04/28/2015 23:37
Hexachloroethane	ND	1.0	200	04/28/2015 23:37
2-Hexanone	ND	1.0	200	04/28/2015 23:37
Isopropylbenzene	6.0	1.0	200	04/28/2015 23:37
4-Isopropyl toluene	ND	1.0	200	04/28/2015 23:37
Methyl-t-butyl ether (MTBE)	ND	1.0	200	04/28/2015 23:37
Methylene chloride	ND	1.0	200	04/28/2015 23:37
4-Methyl-2-pentanone (MIBK)	ND	1.0	200	04/28/2015 23:37
Naphthalene	ND	1.0	200	04/28/2015 23:37
n-Propyl benzene	22	1.0	200	04/28/2015 23:37
Styrene	ND	1.0	200	04/28/2015 23:37
1,1,1,2-Tetrachloroethane	ND	1.0	200	04/28/2015 23:37
1,1,2,2-Tetrachloroethane	ND	1.0	200	04/28/2015 23:37
Tetrachloroethene	ND	1.0	200	04/28/2015 23:37
Toluene	ND	1.0	200	04/28/2015 23:37
1,2,3-Trichlorobenzene	ND	1.0	200	04/28/2015 23:37
1,2,4-Trichlorobenzene	ND	1.0	200	04/28/2015 23:37
1,1,1-Trichloroethane	ND	1.0	200	04/28/2015 23:37
1,1,2-Trichloroethane	ND	1.0	200	04/28/2015 23:37
Trichloroethene	ND	1.0	200	04/28/2015 23:37
Trichlorofluoromethane	ND	1.0	200	04/28/2015 23:37
1,2,3-Trichloropropane	ND	1.0	200	04/28/2015 23:37
1,2,4-Trimethylbenzene	ND	1.0	200	04/28/2015 23:37
1,3,5-Trimethylbenzene	ND	1.0	200	04/28/2015 23:37
Vinyl Chloride	ND	1.0	200	04/28/2015 23:37
Xylenes, Total	ND	1.0	200	04/28/2015 23:37

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 7'	1504849-003A	Soil	04/20/2015 08:15	GC10	103881

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	98	70-130		04/28/2015 23:37
Toluene-d8	94	70-130		04/28/2015 23:37
4-BFB	94	70-130		04/28/2015 23:37

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15 6'	1504849-005A	Soil	04/20/2015 08:45	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	04/24/2015 12:27
tert-Amyl methyl ether (TAME)	ND	0.0050	1	04/24/2015 12:27
Benzene	ND	0.0050	1	04/24/2015 12:27
Bromobenzene	ND	0.0050	1	04/24/2015 12:27
Bromochloromethane	ND	0.0050	1	04/24/2015 12:27
Bromodichloromethane	ND	0.0050	1	04/24/2015 12:27
Bromoform	ND	0.0050	1	04/24/2015 12:27
Bromomethane	ND	0.0050	1	04/24/2015 12:27
2-Butanone (MEK)	ND	0.020	1	04/24/2015 12:27
t-Butyl alcohol (TBA)	ND	0.050	1	04/24/2015 12:27
n-Butyl benzene	ND	0.0050	1	04/24/2015 12:27
sec-Butyl benzene	ND	0.0050	1	04/24/2015 12:27
tert-Butyl benzene	ND	0.0050	1	04/24/2015 12:27
Carbon Disulfide	ND	0.0050	1	04/24/2015 12:27
Carbon Tetrachloride	ND	0.0050	1	04/24/2015 12:27
Chlorobenzene	ND	0.0050	1	04/24/2015 12:27
Chloroethane	ND	0.0050	1	04/24/2015 12:27
Chloroform	ND	0.0050	1	04/24/2015 12:27
Chloromethane	ND	0.0050	1	04/24/2015 12:27
2-Chlorotoluene	ND	0.0050	1	04/24/2015 12:27
4-Chlorotoluene	ND	0.0050	1	04/24/2015 12:27
Dibromochloromethane	ND	0.0050	1	04/24/2015 12:27
1,2-Dibromo-3-chloropropane	ND	0.0040	1	04/24/2015 12:27
1,2-Dibromoethane (EDB)	ND	0.0040	1	04/24/2015 12:27
Dibromomethane	ND	0.0050	1	04/24/2015 12:27
1,2-Dichlorobenzene	ND	0.0050	1	04/24/2015 12:27
1,3-Dichlorobenzene	ND	0.0050	1	04/24/2015 12:27
1,4-Dichlorobenzene	ND	0.0050	1	04/24/2015 12:27
Dichlorodifluoromethane	ND	0.0050	1	04/24/2015 12:27
1,1-Dichloroethane	ND	0.0050	1	04/24/2015 12:27
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	04/24/2015 12:27
1,1-Dichloroethene	ND	0.0050	1	04/24/2015 12:27
cis-1,2-Dichloroethene	ND	0.0050	1	04/24/2015 12:27
trans-1,2-Dichloroethene	ND	0.0050	1	04/24/2015 12:27
1,2-Dichloropropane	ND	0.0050	1	04/24/2015 12:27
1,3-Dichloropropane	ND	0.0050	1	04/24/2015 12:27
2,2-Dichloropropane	ND	0.0050	1	04/24/2015 12:27
1,1-Dichloropropene	ND	0.0050	1	04/24/2015 12:27

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15 6'	1504849-005A	Soil	04/20/2015 08:45	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	04/24/2015 12:27
trans-1,3-Dichloropropene	ND	0.0050	1	04/24/2015 12:27
Diisopropyl ether (DIPE)	ND	0.0050	1	04/24/2015 12:27
Ethylbenzene	ND	0.0050	1	04/24/2015 12:27
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	04/24/2015 12:27
Freon 113	ND	0.0050	1	04/24/2015 12:27
Hexachlorobutadiene	ND	0.0050	1	04/24/2015 12:27
Hexachloroethane	ND	0.0050	1	04/24/2015 12:27
2-Hexanone	ND	0.0050	1	04/24/2015 12:27
Isopropylbenzene	ND	0.0050	1	04/24/2015 12:27
4-Isopropyl toluene	ND	0.0050	1	04/24/2015 12:27
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	04/24/2015 12:27
Methylene chloride	ND	0.0050	1	04/24/2015 12:27
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	04/24/2015 12:27
Naphthalene	ND	0.0050	1	04/24/2015 12:27
n-Propyl benzene	ND	0.0050	1	04/24/2015 12:27
Styrene	ND	0.0050	1	04/24/2015 12:27
1,1,1,2-Tetrachloroethane	ND	0.0050	1	04/24/2015 12:27
1,1,2,2-Tetrachloroethane	ND	0.0050	1	04/24/2015 12:27
Tetrachloroethene	ND	0.0050	1	04/24/2015 12:27
Toluene	ND	0.0050	1	04/24/2015 12:27
1,2,3-Trichlorobenzene	ND	0.0050	1	04/24/2015 12:27
1,2,4-Trichlorobenzene	ND	0.0050	1	04/24/2015 12:27
1,1,1-Trichloroethane	ND	0.0050	1	04/24/2015 12:27
1,1,2-Trichloroethane	ND	0.0050	1	04/24/2015 12:27
Trichloroethene	ND	0.0050	1	04/24/2015 12:27
Trichlorofluoromethane	ND	0.0050	1	04/24/2015 12:27
1,2,3-Trichloropropane	ND	0.0050	1	04/24/2015 12:27
1,2,4-Trimethylbenzene	ND	0.0050	1	04/24/2015 12:27
1,3,5-Trimethylbenzene	ND	0.0050	1	04/24/2015 12:27
Vinyl Chloride	ND	0.0050	1	04/24/2015 12:27
Xylenes, Total	ND	0.0050	1	04/24/2015 12:27

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15 6'	1504849-005A	Soil	04/20/2015 08:45	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	94	70-130		04/24/2015 12:27
Toluene-d8	99	70-130		04/24/2015 12:27
4-BFB	95	70-130		04/24/2015 12:27

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17 6.5'	1504849-008A	Soil	04/20/2015 11:10	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	04/29/2015 00:18
tert-Amyl methyl ether (TAME)	ND	0.0050	1	04/29/2015 00:18
Benzene	ND	0.0050	1	04/29/2015 00:18
Bromobenzene	ND	0.0050	1	04/29/2015 00:18
Bromochloromethane	ND	0.0050	1	04/29/2015 00:18
Bromodichloromethane	ND	0.0050	1	04/29/2015 00:18
Bromoform	ND	0.0050	1	04/29/2015 00:18
Bromomethane	ND	0.0050	1	04/29/2015 00:18
2-Butanone (MEK)	ND	0.020	1	04/29/2015 00:18
t-Butyl alcohol (TBA)	ND	0.050	1	04/29/2015 00:18
n-Butyl benzene	ND	0.0050	1	04/29/2015 00:18
sec-Butyl benzene	ND	0.0050	1	04/29/2015 00:18
tert-Butyl benzene	ND	0.0050	1	04/29/2015 00:18
Carbon Disulfide	ND	0.0050	1	04/29/2015 00:18
Carbon Tetrachloride	ND	0.0050	1	04/29/2015 00:18
Chlorobenzene	ND	0.0050	1	04/29/2015 00:18
Chloroethane	ND	0.0050	1	04/29/2015 00:18
Chloroform	ND	0.0050	1	04/29/2015 00:18
Chloromethane	ND	0.0050	1	04/29/2015 00:18
2-Chlorotoluene	ND	0.0050	1	04/29/2015 00:18
4-Chlorotoluene	ND	0.0050	1	04/29/2015 00:18
Dibromochloromethane	ND	0.0050	1	04/29/2015 00:18
1,2-Dibromo-3-chloropropane	ND	0.0040	1	04/29/2015 00:18
1,2-Dibromoethane (EDB)	ND	0.0040	1	04/29/2015 00:18
Dibromomethane	ND	0.0050	1	04/29/2015 00:18
1,2-Dichlorobenzene	ND	0.0050	1	04/29/2015 00:18
1,3-Dichlorobenzene	ND	0.0050	1	04/29/2015 00:18
1,4-Dichlorobenzene	ND	0.0050	1	04/29/2015 00:18
Dichlorodifluoromethane	ND	0.0050	1	04/29/2015 00:18
1,1-Dichloroethane	ND	0.0050	1	04/29/2015 00:18
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	04/29/2015 00:18
1,1-Dichloroethene	ND	0.0050	1	04/29/2015 00:18
cis-1,2-Dichloroethene	ND	0.0050	1	04/29/2015 00:18
trans-1,2-Dichloroethene	ND	0.0050	1	04/29/2015 00:18
1,2-Dichloropropane	ND	0.0050	1	04/29/2015 00:18
1,3-Dichloropropane	ND	0.0050	1	04/29/2015 00:18
2,2-Dichloropropane	ND	0.0050	1	04/29/2015 00:18
1,1-Dichloropropene	ND	0.0050	1	04/29/2015 00:18

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17 6.5'	1504849-008A	Soil	04/20/2015 11:10	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	04/29/2015 00:18
trans-1,3-Dichloropropene	ND	0.0050	1	04/29/2015 00:18
Diisopropyl ether (DIPE)	ND	0.0050	1	04/29/2015 00:18
Ethylbenzene	ND	0.0050	1	04/29/2015 00:18
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	04/29/2015 00:18
Freon 113	ND	0.0050	1	04/29/2015 00:18
Hexachlorobutadiene	ND	0.0050	1	04/29/2015 00:18
Hexachloroethane	ND	0.0050	1	04/29/2015 00:18
2-Hexanone	ND	0.0050	1	04/29/2015 00:18
Isopropylbenzene	ND	0.0050	1	04/29/2015 00:18
4-Isopropyl toluene	ND	0.0050	1	04/29/2015 00:18
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	04/29/2015 00:18
Methylene chloride	ND	0.0050	1	04/29/2015 00:18
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	04/29/2015 00:18
Naphthalene	ND	0.0050	1	04/29/2015 00:18
n-Propyl benzene	ND	0.0050	1	04/29/2015 00:18
Styrene	ND	0.0050	1	04/29/2015 00:18
1,1,1,2-Tetrachloroethane	ND	0.0050	1	04/29/2015 00:18
1,1,2,2-Tetrachloroethane	ND	0.0050	1	04/29/2015 00:18
Tetrachloroethene	ND	0.0050	1	04/29/2015 00:18
Toluene	ND	0.0050	1	04/29/2015 00:18
1,2,3-Trichlorobenzene	ND	0.0050	1	04/29/2015 00:18
1,2,4-Trichlorobenzene	ND	0.0050	1	04/29/2015 00:18
1,1,1-Trichloroethane	ND	0.0050	1	04/29/2015 00:18
1,1,2-Trichloroethane	ND	0.0050	1	04/29/2015 00:18
Trichloroethene	ND	0.0050	1	04/29/2015 00:18
Trichlorofluoromethane	ND	0.0050	1	04/29/2015 00:18
1,2,3-Trichloropropane	ND	0.0050	1	04/29/2015 00:18
1,2,4-Trimethylbenzene	ND	0.0050	1	04/29/2015 00:18
1,3,5-Trimethylbenzene	ND	0.0050	1	04/29/2015 00:18
Vinyl Chloride	ND	0.0050	1	04/29/2015 00:18
Xylenes, Total	ND	0.0050	1	04/29/2015 00:18

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17 6.5'	1504849-008A	Soil	04/20/2015 11:10	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		04/29/2015 00:18
Toluene-d8	98	70-130		04/29/2015 00:18
4-BFB	97	70-130		04/29/2015 00:18

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 3.5'	1504849-011A	Soil	04/20/2015 13:05	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	04/29/2015 00:59
tert-Amyl methyl ether (TAME)	ND	0.0050	1	04/29/2015 00:59
Benzene	ND	0.0050	1	04/29/2015 00:59
Bromobenzene	ND	0.0050	1	04/29/2015 00:59
Bromochloromethane	ND	0.0050	1	04/29/2015 00:59
Bromodichloromethane	ND	0.0050	1	04/29/2015 00:59
Bromoform	ND	0.0050	1	04/29/2015 00:59
Bromomethane	ND	0.0050	1	04/29/2015 00:59
2-Butanone (MEK)	ND	0.020	1	04/29/2015 00:59
t-Butyl alcohol (TBA)	ND	0.050	1	04/29/2015 00:59
n-Butyl benzene	ND	0.0050	1	04/29/2015 00:59
sec-Butyl benzene	ND	0.0050	1	04/29/2015 00:59
tert-Butyl benzene	ND	0.0050	1	04/29/2015 00:59
Carbon Disulfide	ND	0.0050	1	04/29/2015 00:59
Carbon Tetrachloride	ND	0.0050	1	04/29/2015 00:59
Chlorobenzene	ND	0.0050	1	04/29/2015 00:59
Chloroethane	ND	0.0050	1	04/29/2015 00:59
Chloroform	ND	0.0050	1	04/29/2015 00:59
Chloromethane	ND	0.0050	1	04/29/2015 00:59
2-Chlorotoluene	ND	0.0050	1	04/29/2015 00:59
4-Chlorotoluene	ND	0.0050	1	04/29/2015 00:59
Dibromochloromethane	ND	0.0050	1	04/29/2015 00:59
1,2-Dibromo-3-chloropropane	ND	0.0040	1	04/29/2015 00:59
1,2-Dibromoethane (EDB)	ND	0.0040	1	04/29/2015 00:59
Dibromomethane	ND	0.0050	1	04/29/2015 00:59
1,2-Dichlorobenzene	ND	0.0050	1	04/29/2015 00:59
1,3-Dichlorobenzene	ND	0.0050	1	04/29/2015 00:59
1,4-Dichlorobenzene	ND	0.0050	1	04/29/2015 00:59
Dichlorodifluoromethane	ND	0.0050	1	04/29/2015 00:59
1,1-Dichloroethane	ND	0.0050	1	04/29/2015 00:59
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	04/29/2015 00:59
1,1-Dichloroethene	ND	0.0050	1	04/29/2015 00:59
cis-1,2-Dichloroethene	ND	0.0050	1	04/29/2015 00:59
trans-1,2-Dichloroethene	ND	0.0050	1	04/29/2015 00:59
1,2-Dichloropropane	ND	0.0050	1	04/29/2015 00:59
1,3-Dichloropropane	ND	0.0050	1	04/29/2015 00:59
2,2-Dichloropropane	ND	0.0050	1	04/29/2015 00:59
1,1-Dichloropropene	ND	0.0050	1	04/29/2015 00:59

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 3.5'	1504849-011A	Soil	04/20/2015 13:05	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	04/29/2015 00:59
trans-1,3-Dichloropropene	ND	0.0050	1	04/29/2015 00:59
Diisopropyl ether (DIPE)	ND	0.0050	1	04/29/2015 00:59
Ethylbenzene	ND	0.0050	1	04/29/2015 00:59
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	04/29/2015 00:59
Freon 113	ND	0.0050	1	04/29/2015 00:59
Hexachlorobutadiene	ND	0.0050	1	04/29/2015 00:59
Hexachloroethane	ND	0.0050	1	04/29/2015 00:59
2-Hexanone	ND	0.0050	1	04/29/2015 00:59
Isopropylbenzene	ND	0.0050	1	04/29/2015 00:59
4-Isopropyl toluene	ND	0.0050	1	04/29/2015 00:59
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	04/29/2015 00:59
Methylene chloride	ND	0.0050	1	04/29/2015 00:59
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	04/29/2015 00:59
Naphthalene	ND	0.0050	1	04/29/2015 00:59
n-Propyl benzene	ND	0.0050	1	04/29/2015 00:59
Styrene	ND	0.0050	1	04/29/2015 00:59
1,1,1,2-Tetrachloroethane	ND	0.0050	1	04/29/2015 00:59
1,1,2,2-Tetrachloroethane	ND	0.0050	1	04/29/2015 00:59
Tetrachloroethene	ND	0.0050	1	04/29/2015 00:59
Toluene	ND	0.0050	1	04/29/2015 00:59
1,2,3-Trichlorobenzene	ND	0.0050	1	04/29/2015 00:59
1,2,4-Trichlorobenzene	ND	0.0050	1	04/29/2015 00:59
1,1,1-Trichloroethane	ND	0.0050	1	04/29/2015 00:59
1,1,2-Trichloroethane	ND	0.0050	1	04/29/2015 00:59
Trichloroethene	ND	0.0050	1	04/29/2015 00:59
Trichlorofluoromethane	ND	0.0050	1	04/29/2015 00:59
1,2,3-Trichloropropane	ND	0.0050	1	04/29/2015 00:59
1,2,4-Trimethylbenzene	ND	0.0050	1	04/29/2015 00:59
1,3,5-Trimethylbenzene	ND	0.0050	1	04/29/2015 00:59
Vinyl Chloride	ND	0.0050	1	04/29/2015 00:59
Xylenes, Total	ND	0.0050	1	04/29/2015 00:59

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 3.5'	1504849-011A	Soil	04/20/2015 13:05	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		04/29/2015 00:59
Toluene-d8	100	70-130		04/29/2015 00:59
4-BFB	102	70-130		04/29/2015 00:59

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 6'	1504849-012A	Soil	04/20/2015 13:15	GC16	103881
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		2.0	20	04/25/2015 02:03
tert-Amyl methyl ether (TAME)	ND		0.10	20	04/25/2015 02:03
Benzene	ND		0.10	20	04/25/2015 02:03
Bromobenzene	ND		0.10	20	04/25/2015 02:03
Bromochloromethane	ND		0.10	20	04/25/2015 02:03
Bromodichloromethane	ND		0.10	20	04/25/2015 02:03
Bromoform	ND		0.10	20	04/25/2015 02:03
Bromomethane	ND		0.10	20	04/25/2015 02:03
2-Butanone (MEK)	ND		0.40	20	04/25/2015 02:03
t-Butyl alcohol (TBA)	ND		1.0	20	04/25/2015 02:03
n-Butyl benzene	0.75		0.10	20	04/25/2015 02:03
sec-Butyl benzene	0.19		0.10	20	04/25/2015 02:03
tert-Butyl benzene	ND		0.10	20	04/25/2015 02:03
Carbon Disulfide	ND		0.10	20	04/25/2015 02:03
Carbon Tetrachloride	ND		0.10	20	04/25/2015 02:03
Chlorobenzene	ND		0.10	20	04/25/2015 02:03
Chloroethane	ND		0.10	20	04/25/2015 02:03
Chloroform	ND		0.10	20	04/25/2015 02:03
Chloromethane	ND		0.10	20	04/25/2015 02:03
2-Chlorotoluene	ND		0.10	20	04/25/2015 02:03
4-Chlorotoluene	ND		0.10	20	04/25/2015 02:03
Dibromochloromethane	ND		0.10	20	04/25/2015 02:03
1,2-Dibromo-3-chloropropane	ND		0.080	20	04/25/2015 02:03
1,2-Dibromoethane (EDB)	ND		0.080	20	04/25/2015 02:03
Dibromomethane	ND		0.10	20	04/25/2015 02:03
1,2-Dichlorobenzene	ND		0.10	20	04/25/2015 02:03
1,3-Dichlorobenzene	ND		0.10	20	04/25/2015 02:03
1,4-Dichlorobenzene	ND		0.10	20	04/25/2015 02:03
Dichlorodifluoromethane	ND		0.10	20	04/25/2015 02:03
1,1-Dichloroethane	ND		0.10	20	04/25/2015 02:03
1,2-Dichloroethane (1,2-DCA)	ND		0.080	20	04/25/2015 02:03
1,1-Dichloroethene	ND		0.10	20	04/25/2015 02:03
cis-1,2-Dichloroethene	ND		0.10	20	04/25/2015 02:03
trans-1,2-Dichloroethene	ND		0.10	20	04/25/2015 02:03
1,2-Dichloropropane	ND		0.10	20	04/25/2015 02:03
1,3-Dichloropropane	ND		0.10	20	04/25/2015 02:03
2,2-Dichloropropane	ND		0.10	20	04/25/2015 02:03
1,1-Dichloropropene	ND		0.10	20	04/25/2015 02:03

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 6'	1504849-012A	Soil	04/20/2015 13:15	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.10	20	04/25/2015 02:03
trans-1,3-Dichloropropene	ND	0.10	20	04/25/2015 02:03
Diisopropyl ether (DIPE)	ND	0.10	20	04/25/2015 02:03
Ethylbenzene	ND	0.10	20	04/25/2015 02:03
Ethyl tert-butyl ether (ETBE)	ND	0.10	20	04/25/2015 02:03
Freon 113	ND	0.10	20	04/25/2015 02:03
Hexachlorobutadiene	ND	0.10	20	04/25/2015 02:03
Hexachloroethane	ND	0.10	20	04/25/2015 02:03
2-Hexanone	ND	0.10	20	04/25/2015 02:03
Isopropylbenzene	ND	0.10	20	04/25/2015 02:03
4-Isopropyl toluene	ND	0.10	20	04/25/2015 02:03
Methyl-t-butyl ether (MTBE)	ND	0.10	20	04/25/2015 02:03
Methylene chloride	ND	0.10	20	04/25/2015 02:03
4-Methyl-2-pentanone (MIBK)	ND	0.10	20	04/25/2015 02:03
Naphthalene	ND	0.10	20	04/25/2015 02:03
n-Propyl benzene	ND	0.10	20	04/25/2015 02:03
Styrene	ND	0.10	20	04/25/2015 02:03
1,1,1,2-Tetrachloroethane	ND	0.10	20	04/25/2015 02:03
1,1,2,2-Tetrachloroethane	ND	0.10	20	04/25/2015 02:03
Tetrachloroethene	ND	0.10	20	04/25/2015 02:03
Toluene	ND	0.10	20	04/25/2015 02:03
1,2,3-Trichlorobenzene	ND	0.10	20	04/25/2015 02:03
1,2,4-Trichlorobenzene	ND	0.10	20	04/25/2015 02:03
1,1,1-Trichloroethane	ND	0.10	20	04/25/2015 02:03
1,1,2-Trichloroethane	ND	0.10	20	04/25/2015 02:03
Trichloroethene	ND	0.10	20	04/25/2015 02:03
Trichlorofluoromethane	ND	0.10	20	04/25/2015 02:03
1,2,3-Trichloropropane	ND	0.10	20	04/25/2015 02:03
1,2,4-Trimethylbenzene	ND	0.10	20	04/25/2015 02:03
1,3,5-Trimethylbenzene	ND	0.10	20	04/25/2015 02:03
Vinyl Chloride	ND	0.10	20	04/25/2015 02:03
Xylenes, Total	ND	0.10	20	04/25/2015 02:03

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 6'	1504849-012A	Soil	04/20/2015 13:15	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	95	70-130		04/25/2015 02:03
Toluene-d8	91	70-130		04/25/2015 02:03
4-BFB	93	70-130		04/25/2015 02:03

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504849-014A	Soil	04/20/2015 15:55	GC16	103881
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	04/25/2015 02:45
tert-Amyl methyl ether (TAME)	ND		0.0050	1	04/25/2015 02:45
Benzene	ND		0.0050	1	04/25/2015 02:45
Bromobenzene	ND		0.0050	1	04/25/2015 02:45
Bromochloromethane	ND		0.0050	1	04/25/2015 02:45
Bromodichloromethane	ND		0.0050	1	04/25/2015 02:45
Bromoform	ND		0.0050	1	04/25/2015 02:45
Bromomethane	ND		0.0050	1	04/25/2015 02:45
2-Butanone (MEK)	ND		0.020	1	04/25/2015 02:45
t-Butyl alcohol (TBA)	ND		0.050	1	04/25/2015 02:45
n-Butyl benzene	ND		0.0050	1	04/25/2015 02:45
sec-Butyl benzene	ND		0.0050	1	04/25/2015 02:45
tert-Butyl benzene	ND		0.0050	1	04/25/2015 02:45
Carbon Disulfide	ND		0.0050	1	04/25/2015 02:45
Carbon Tetrachloride	ND		0.0050	1	04/25/2015 02:45
Chlorobenzene	ND		0.0050	1	04/25/2015 02:45
Chloroethane	ND		0.0050	1	04/25/2015 02:45
Chloroform	ND		0.0050	1	04/25/2015 02:45
Chloromethane	ND		0.0050	1	04/25/2015 02:45
2-Chlorotoluene	ND		0.0050	1	04/25/2015 02:45
4-Chlorotoluene	ND		0.0050	1	04/25/2015 02:45
Dibromochloromethane	ND		0.0050	1	04/25/2015 02:45
1,2-Dibromo-3-chloropropane	ND		0.0040	1	04/25/2015 02:45
1,2-Dibromoethane (EDB)	ND		0.0040	1	04/25/2015 02:45
Dibromomethane	ND		0.0050	1	04/25/2015 02:45
1,2-Dichlorobenzene	ND		0.0050	1	04/25/2015 02:45
1,3-Dichlorobenzene	ND		0.0050	1	04/25/2015 02:45
1,4-Dichlorobenzene	ND		0.0050	1	04/25/2015 02:45
Dichlorodifluoromethane	ND		0.0050	1	04/25/2015 02:45
1,1-Dichloroethane	ND		0.0050	1	04/25/2015 02:45
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	04/25/2015 02:45
1,1-Dichloroethene	ND		0.0050	1	04/25/2015 02:45
cis-1,2-Dichloroethene	ND		0.0050	1	04/25/2015 02:45
trans-1,2-Dichloroethene	ND		0.0050	1	04/25/2015 02:45
1,2-Dichloropropane	ND		0.0050	1	04/25/2015 02:45
1,3-Dichloropropane	ND		0.0050	1	04/25/2015 02:45
2,2-Dichloropropane	ND		0.0050	1	04/25/2015 02:45
1,1-Dichloropropene	ND		0.0050	1	04/25/2015 02:45

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504849-014A	Soil	04/20/2015 15:55	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	04/25/2015 02:45
trans-1,3-Dichloropropene	ND	0.0050	1	04/25/2015 02:45
Diisopropyl ether (DIPE)	ND	0.0050	1	04/25/2015 02:45
Ethylbenzene	ND	0.0050	1	04/25/2015 02:45
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	04/25/2015 02:45
Freon 113	ND	0.0050	1	04/25/2015 02:45
Hexachlorobutadiene	ND	0.0050	1	04/25/2015 02:45
Hexachloroethane	ND	0.0050	1	04/25/2015 02:45
2-Hexanone	ND	0.0050	1	04/25/2015 02:45
Isopropylbenzene	ND	0.0050	1	04/25/2015 02:45
4-Isopropyl toluene	ND	0.0050	1	04/25/2015 02:45
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	04/25/2015 02:45
Methylene chloride	ND	0.0050	1	04/25/2015 02:45
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	04/25/2015 02:45
Naphthalene	ND	0.0050	1	04/25/2015 02:45
n-Propyl benzene	ND	0.0050	1	04/25/2015 02:45
Styrene	ND	0.0050	1	04/25/2015 02:45
1,1,1,2-Tetrachloroethane	ND	0.0050	1	04/25/2015 02:45
1,1,2,2-Tetrachloroethane	ND	0.0050	1	04/25/2015 02:45
Tetrachloroethene	ND	0.0050	1	04/25/2015 02:45
Toluene	ND	0.0050	1	04/25/2015 02:45
1,2,3-Trichlorobenzene	ND	0.0050	1	04/25/2015 02:45
1,2,4-Trichlorobenzene	ND	0.0050	1	04/25/2015 02:45
1,1,1-Trichloroethane	ND	0.0050	1	04/25/2015 02:45
1,1,2-Trichloroethane	ND	0.0050	1	04/25/2015 02:45
Trichloroethene	ND	0.0050	1	04/25/2015 02:45
Trichlorofluoromethane	ND	0.0050	1	04/25/2015 02:45
1,2,3-Trichloropropane	ND	0.0050	1	04/25/2015 02:45
1,2,4-Trimethylbenzene	ND	0.0050	1	04/25/2015 02:45
1,3,5-Trimethylbenzene	ND	0.0050	1	04/25/2015 02:45
Vinyl Chloride	ND	0.0050	1	04/25/2015 02:45
Xylenes, Total	ND	0.0050	1	04/25/2015 02:45

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504849-014A	Soil	04/20/2015 15:55	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		04/25/2015 02:45
Toluene-d8	101	70-130		04/25/2015 02:45
4-BFB	96	70-130		04/25/2015 02:45

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2	1504849-004C	Water	04/20/2015 08:30	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	10	04/28/2015 16:44
tert-Amyl methyl ether (TAME)	ND	5.0	10	04/28/2015 16:44
Benzene	160	5.0	10	04/28/2015 16:44
Bromobenzene	ND	5.0	10	04/28/2015 16:44
Bromochloromethane	ND	5.0	10	04/28/2015 16:44
Bromodichloromethane	ND	5.0	10	04/28/2015 16:44
Bromoform	ND	5.0	10	04/28/2015 16:44
Bromomethane	ND	5.0	10	04/28/2015 16:44
2-Butanone (MEK)	ND	20	10	04/28/2015 16:44
t-Butyl alcohol (TBA)	ND	20	10	04/28/2015 16:44
n-Butyl benzene	58	5.0	10	04/28/2015 16:44
sec-Butyl benzene	14	5.0	10	04/28/2015 16:44
tert-Butyl benzene	ND	5.0	10	04/28/2015 16:44
Carbon Disulfide	ND	5.0	10	04/28/2015 16:44
Carbon Tetrachloride	ND	5.0	10	04/28/2015 16:44
Chlorobenzene	ND	5.0	10	04/28/2015 16:44
Chloroethane	ND	5.0	10	04/28/2015 16:44
Chloroform	ND	5.0	10	04/28/2015 16:44
Chloromethane	ND	5.0	10	04/28/2015 16:44
2-Chlorotoluene	ND	5.0	10	04/28/2015 16:44
4-Chlorotoluene	ND	5.0	10	04/28/2015 16:44
Dibromochloromethane	ND	5.0	10	04/28/2015 16:44
1,2-Dibromo-3-chloropropane	ND	2.0	10	04/28/2015 16:44
1,2-Dibromoethane (EDB)	ND	5.0	10	04/28/2015 16:44
Dibromomethane	ND	5.0	10	04/28/2015 16:44
1,2-Dichlorobenzene	ND	5.0	10	04/28/2015 16:44
1,3-Dichlorobenzene	ND	5.0	10	04/28/2015 16:44
1,4-Dichlorobenzene	ND	5.0	10	04/28/2015 16:44
Dichlorodifluoromethane	ND	5.0	10	04/28/2015 16:44
1,1-Dichloroethane	ND	5.0	10	04/28/2015 16:44
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	04/28/2015 16:44
1,1-Dichloroethene	ND	5.0	10	04/28/2015 16:44
cis-1,2-Dichloroethene	ND	5.0	10	04/28/2015 16:44
trans-1,2-Dichloroethene	ND	5.0	10	04/28/2015 16:44
1,2-Dichloropropane	ND	5.0	10	04/28/2015 16:44
1,3-Dichloropropane	ND	5.0	10	04/28/2015 16:44
2,2-Dichloropropane	ND	5.0	10	04/28/2015 16:44
1,1-Dichloropropene	ND	5.0	10	04/28/2015 16:44

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2	1504849-004C	Water	04/20/2015 08:30	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	5.0	10	04/28/2015 16:44
trans-1,3-Dichloropropene	ND	5.0	10	04/28/2015 16:44
Diisopropyl ether (DIPE)	ND	5.0	10	04/28/2015 16:44
Ethylbenzene	ND	5.0	10	04/28/2015 16:44
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	04/28/2015 16:44
Freon 113	ND	5.0	10	04/28/2015 16:44
Hexachlorobutadiene	ND	5.0	10	04/28/2015 16:44
Hexachloroethane	ND	5.0	10	04/28/2015 16:44
2-Hexanone	ND	5.0	10	04/28/2015 16:44
Isopropylbenzene	64	5.0	10	04/28/2015 16:44
4-Isopropyl toluene	ND	5.0	10	04/28/2015 16:44
Methyl-t-butyl ether (MTBE)	ND	5.0	10	04/28/2015 16:44
Methylene chloride	ND	5.0	10	04/28/2015 16:44
4-Methyl-2-pentanone (MIBK)	ND	5.0	10	04/28/2015 16:44
Naphthalene	ND	5.0	10	04/28/2015 16:44
n-Propyl benzene	180	5.0	10	04/28/2015 16:44
Styrene	ND	5.0	10	04/28/2015 16:44
1,1,1,2-Tetrachloroethane	ND	5.0	10	04/28/2015 16:44
1,1,2,2-Tetrachloroethane	ND	5.0	10	04/28/2015 16:44
Tetrachloroethene	ND	5.0	10	04/28/2015 16:44
Toluene	15	5.0	10	04/28/2015 16:44
1,2,3-Trichlorobenzene	ND	5.0	10	04/28/2015 16:44
1,2,4-Trichlorobenzene	ND	5.0	10	04/28/2015 16:44
1,1,1-Trichloroethane	ND	5.0	10	04/28/2015 16:44
1,1,2-Trichloroethane	ND	5.0	10	04/28/2015 16:44
Trichloroethene	ND	5.0	10	04/28/2015 16:44
Trichlorofluoromethane	ND	5.0	10	04/28/2015 16:44
1,2,3-Trichloropropane	ND	5.0	10	04/28/2015 16:44
1,2,4-Trimethylbenzene	ND	5.0	10	04/28/2015 16:44
1,3,5-Trimethylbenzene	ND	5.0	10	04/28/2015 16:44
Vinyl Chloride	ND	5.0	10	04/28/2015 16:44
Xylenes, Total	19	5.0	10	04/28/2015 16:44

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2	1504849-004C	Water	04/20/2015 08:30	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		04/28/2015 16:44
Toluene-d8	94	70-130		04/28/2015 16:44
4-BFB	86	70-130		04/28/2015 16:44

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15A	1504849-006B	Water	04/20/2015 10:00	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
Acetone	25	10	1	04/28/2015 17:25
tert-Amyl methyl ether (TAME)	ND	0.50	1	04/28/2015 17:25
Benzene	ND	0.50	1	04/28/2015 17:25
Bromobenzene	ND	0.50	1	04/28/2015 17:25
Bromochloromethane	ND	0.50	1	04/28/2015 17:25
Bromodichloromethane	ND	0.50	1	04/28/2015 17:25
Bromoform	ND	0.50	1	04/28/2015 17:25
Bromomethane	ND	0.50	1	04/28/2015 17:25
2-Butanone (MEK)	5.0	2.0	1	04/28/2015 17:25
t-Butyl alcohol (TBA)	3.5	2.0	1	04/28/2015 17:25
n-Butyl benzene	ND	0.50	1	04/28/2015 17:25
sec-Butyl benzene	ND	0.50	1	04/28/2015 17:25
tert-Butyl benzene	ND	0.50	1	04/28/2015 17:25
Carbon Disulfide	ND	0.50	1	04/28/2015 17:25
Carbon Tetrachloride	ND	0.50	1	04/28/2015 17:25
Chlorobenzene	ND	0.50	1	04/28/2015 17:25
Chloroethane	ND	0.50	1	04/28/2015 17:25
Chloroform	ND	0.50	1	04/28/2015 17:25
Chloromethane	ND	0.50	1	04/28/2015 17:25
2-Chlorotoluene	ND	0.50	1	04/28/2015 17:25
4-Chlorotoluene	ND	0.50	1	04/28/2015 17:25
Dibromochloromethane	ND	0.50	1	04/28/2015 17:25
1,2-Dibromo-3-chloropropane	ND	0.20	1	04/28/2015 17:25
1,2-Dibromoethane (EDB)	ND	0.50	1	04/28/2015 17:25
Dibromomethane	ND	0.50	1	04/28/2015 17:25
1,2-Dichlorobenzene	ND	0.50	1	04/28/2015 17:25
1,3-Dichlorobenzene	ND	0.50	1	04/28/2015 17:25
1,4-Dichlorobenzene	ND	0.50	1	04/28/2015 17:25
Dichlorodifluoromethane	ND	0.50	1	04/28/2015 17:25
1,1-Dichloroethane	ND	0.50	1	04/28/2015 17:25
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	04/28/2015 17:25
1,1-Dichloroethene	ND	0.50	1	04/28/2015 17:25
cis-1,2-Dichloroethene	ND	0.50	1	04/28/2015 17:25
trans-1,2-Dichloroethene	ND	0.50	1	04/28/2015 17:25
1,2-Dichloropropane	ND	0.50	1	04/28/2015 17:25
1,3-Dichloropropane	ND	0.50	1	04/28/2015 17:25
2,2-Dichloropropane	ND	0.50	1	04/28/2015 17:25
1,1-Dichloropropene	ND	0.50	1	04/28/2015 17:25

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15A	1504849-006B	Water	04/20/2015 10:00	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	04/28/2015 17:25
trans-1,3-Dichloropropene	ND	0.50	1	04/28/2015 17:25
Diisopropyl ether (DIPE)	ND	0.50	1	04/28/2015 17:25
Ethylbenzene	ND	0.50	1	04/28/2015 17:25
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	04/28/2015 17:25
Freon 113	ND	0.50	1	04/28/2015 17:25
Hexachlorobutadiene	ND	0.50	1	04/28/2015 17:25
Hexachloroethane	ND	0.50	1	04/28/2015 17:25
2-Hexanone	ND	0.50	1	04/28/2015 17:25
Isopropylbenzene	ND	0.50	1	04/28/2015 17:25
4-Isopropyl toluene	ND	0.50	1	04/28/2015 17:25
Methyl-t-butyl ether (MTBE)	ND	0.50	1	04/28/2015 17:25
Methylene chloride	ND	0.50	1	04/28/2015 17:25
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	04/28/2015 17:25
Naphthalene	ND	0.50	1	04/28/2015 17:25
n-Propyl benzene	ND	0.50	1	04/28/2015 17:25
Styrene	ND	0.50	1	04/28/2015 17:25
1,1,1,2-Tetrachloroethane	ND	0.50	1	04/28/2015 17:25
1,1,2,2-Tetrachloroethane	ND	0.50	1	04/28/2015 17:25
Tetrachloroethene	ND	0.50	1	04/28/2015 17:25
Toluene	ND	0.50	1	04/28/2015 17:25
1,2,3-Trichlorobenzene	ND	0.50	1	04/28/2015 17:25
1,2,4-Trichlorobenzene	ND	0.50	1	04/28/2015 17:25
1,1,1-Trichloroethane	ND	0.50	1	04/28/2015 17:25
1,1,2-Trichloroethane	ND	0.50	1	04/28/2015 17:25
Trichloroethene	ND	0.50	1	04/28/2015 17:25
Trichlorofluoromethane	ND	0.50	1	04/28/2015 17:25
1,2,3-Trichloropropane	ND	0.50	1	04/28/2015 17:25
1,2,4-Trimethylbenzene	ND	0.50	1	04/28/2015 17:25
1,3,5-Trimethylbenzene	ND	0.50	1	04/28/2015 17:25
Vinyl Chloride	ND	0.50	1	04/28/2015 17:25
Xylenes, Total	ND	0.50	1	04/28/2015 17:25

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15A	1504849-006B	Water	04/20/2015 10:00	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	99	70-130		04/28/2015 17:25
Toluene-d8	94	70-130		04/28/2015 17:25
4-BFB	99	70-130		04/28/2015 17:25

Analyst(s): GM

Analytical Comments: b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15B	1504849-007C	Water	04/20/2015 10:10	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	04/28/2015 18:06
tert-Amyl methyl ether (TAME)	ND	0.50	1	04/28/2015 18:06
Benzene	ND	0.50	1	04/28/2015 18:06
Bromobenzene	ND	0.50	1	04/28/2015 18:06
Bromochloromethane	ND	0.50	1	04/28/2015 18:06
Bromodichloromethane	ND	0.50	1	04/28/2015 18:06
Bromoform	ND	0.50	1	04/28/2015 18:06
Bromomethane	ND	0.50	1	04/28/2015 18:06
2-Butanone (MEK)	ND	2.0	1	04/28/2015 18:06
t-Butyl alcohol (TBA)	ND	2.0	1	04/28/2015 18:06
n-Butyl benzene	ND	0.50	1	04/28/2015 18:06
sec-Butyl benzene	ND	0.50	1	04/28/2015 18:06
tert-Butyl benzene	ND	0.50	1	04/28/2015 18:06
Carbon Disulfide	ND	0.50	1	04/28/2015 18:06
Carbon Tetrachloride	ND	0.50	1	04/28/2015 18:06
Chlorobenzene	ND	0.50	1	04/28/2015 18:06
Chloroethane	ND	0.50	1	04/28/2015 18:06
Chloroform	ND	0.50	1	04/28/2015 18:06
Chloromethane	ND	0.50	1	04/28/2015 18:06
2-Chlorotoluene	ND	0.50	1	04/28/2015 18:06
4-Chlorotoluene	ND	0.50	1	04/28/2015 18:06
Dibromochloromethane	ND	0.50	1	04/28/2015 18:06
1,2-Dibromo-3-chloropropane	ND	0.20	1	04/28/2015 18:06
1,2-Dibromoethane (EDB)	ND	0.50	1	04/28/2015 18:06
Dibromomethane	ND	0.50	1	04/28/2015 18:06
1,2-Dichlorobenzene	ND	0.50	1	04/28/2015 18:06
1,3-Dichlorobenzene	ND	0.50	1	04/28/2015 18:06
1,4-Dichlorobenzene	ND	0.50	1	04/28/2015 18:06
Dichlorodifluoromethane	ND	0.50	1	04/28/2015 18:06
1,1-Dichloroethane	ND	0.50	1	04/28/2015 18:06
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	04/28/2015 18:06
1,1-Dichloroethene	ND	0.50	1	04/28/2015 18:06
cis-1,2-Dichloroethene	ND	0.50	1	04/28/2015 18:06
trans-1,2-Dichloroethene	ND	0.50	1	04/28/2015 18:06
1,2-Dichloropropane	ND	0.50	1	04/28/2015 18:06
1,3-Dichloropropane	ND	0.50	1	04/28/2015 18:06
2,2-Dichloropropane	ND	0.50	1	04/28/2015 18:06
1,1-Dichloropropene	ND	0.50	1	04/28/2015 18:06

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15B	1504849-007C	Water	04/20/2015 10:10	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	04/28/2015 18:06
trans-1,3-Dichloropropene	ND	0.50	1	04/28/2015 18:06
Diisopropyl ether (DIPE)	ND	0.50	1	04/28/2015 18:06
Ethylbenzene	ND	0.50	1	04/28/2015 18:06
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	04/28/2015 18:06
Freon 113	ND	0.50	1	04/28/2015 18:06
Hexachlorobutadiene	ND	0.50	1	04/28/2015 18:06
Hexachloroethane	ND	0.50	1	04/28/2015 18:06
2-Hexanone	ND	0.50	1	04/28/2015 18:06
Isopropylbenzene	ND	0.50	1	04/28/2015 18:06
4-Isopropyl toluene	ND	0.50	1	04/28/2015 18:06
Methyl-t-butyl ether (MTBE)	ND	0.50	1	04/28/2015 18:06
Methylene chloride	ND	0.50	1	04/28/2015 18:06
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	04/28/2015 18:06
Naphthalene	ND	0.50	1	04/28/2015 18:06
n-Propyl benzene	ND	0.50	1	04/28/2015 18:06
Styrene	ND	0.50	1	04/28/2015 18:06
1,1,1,2-Tetrachloroethane	ND	0.50	1	04/28/2015 18:06
1,1,2,2-Tetrachloroethane	ND	0.50	1	04/28/2015 18:06
Tetrachloroethene	ND	0.50	1	04/28/2015 18:06
Toluene	ND	0.50	1	04/28/2015 18:06
1,2,3-Trichlorobenzene	ND	0.50	1	04/28/2015 18:06
1,2,4-Trichlorobenzene	ND	0.50	1	04/28/2015 18:06
1,1,1-Trichloroethane	ND	0.50	1	04/28/2015 18:06
1,1,2-Trichloroethane	ND	0.50	1	04/28/2015 18:06
Trichloroethene	ND	0.50	1	04/28/2015 18:06
Trichlorofluoromethane	ND	0.50	1	04/28/2015 18:06
1,2,3-Trichloropropane	ND	0.50	1	04/28/2015 18:06
1,2,4-Trimethylbenzene	ND	0.50	1	04/28/2015 18:06
1,3,5-Trimethylbenzene	ND	0.50	1	04/28/2015 18:06
Vinyl Chloride	ND	0.50	1	04/28/2015 18:06
Xylenes, Total	ND	0.50	1	04/28/2015 18:06

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15B	1504849-007C	Water	04/20/2015 10:10	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	98	70-130		04/28/2015 18:06
Toluene-d8	93	70-130		04/28/2015 18:06
4-BFB	106	70-130		04/28/2015 18:06

Analyst(s): GM

Analytical Comments: b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17A	1504849-009C	Water	04/20/2015 11:20	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	04/28/2015 18:47
tert-Amyl methyl ether (TAME)	ND	0.50	1	04/28/2015 18:47
Benzene	ND	0.50	1	04/28/2015 18:47
Bromobenzene	ND	0.50	1	04/28/2015 18:47
Bromochloromethane	ND	0.50	1	04/28/2015 18:47
Bromodichloromethane	ND	0.50	1	04/28/2015 18:47
Bromoform	ND	0.50	1	04/28/2015 18:47
Bromomethane	ND	0.50	1	04/28/2015 18:47
2-Butanone (MEK)	ND	2.0	1	04/28/2015 18:47
t-Butyl alcohol (TBA)	ND	2.0	1	04/28/2015 18:47
n-Butyl benzene	ND	0.50	1	04/28/2015 18:47
sec-Butyl benzene	ND	0.50	1	04/28/2015 18:47
tert-Butyl benzene	ND	0.50	1	04/28/2015 18:47
Carbon Disulfide	0.80	0.50	1	04/28/2015 18:47
Carbon Tetrachloride	ND	0.50	1	04/28/2015 18:47
Chlorobenzene	ND	0.50	1	04/28/2015 18:47
Chloroethane	ND	0.50	1	04/28/2015 18:47
Chloroform	ND	0.50	1	04/28/2015 18:47
Chloromethane	ND	0.50	1	04/28/2015 18:47
2-Chlorotoluene	ND	0.50	1	04/28/2015 18:47
4-Chlorotoluene	ND	0.50	1	04/28/2015 18:47
Dibromochloromethane	ND	0.50	1	04/28/2015 18:47
1,2-Dibromo-3-chloropropane	ND	0.20	1	04/28/2015 18:47
1,2-Dibromoethane (EDB)	ND	0.50	1	04/28/2015 18:47
Dibromomethane	ND	0.50	1	04/28/2015 18:47
1,2-Dichlorobenzene	ND	0.50	1	04/28/2015 18:47
1,3-Dichlorobenzene	ND	0.50	1	04/28/2015 18:47
1,4-Dichlorobenzene	ND	0.50	1	04/28/2015 18:47
Dichlorodifluoromethane	ND	0.50	1	04/28/2015 18:47
1,1-Dichloroethane	ND	0.50	1	04/28/2015 18:47
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	04/28/2015 18:47
1,1-Dichloroethene	ND	0.50	1	04/28/2015 18:47
cis-1,2-Dichloroethene	ND	0.50	1	04/28/2015 18:47
trans-1,2-Dichloroethene	ND	0.50	1	04/28/2015 18:47
1,2-Dichloropropane	ND	0.50	1	04/28/2015 18:47
1,3-Dichloropropane	ND	0.50	1	04/28/2015 18:47
2,2-Dichloropropane	ND	0.50	1	04/28/2015 18:47
1,1-Dichloropropene	ND	0.50	1	04/28/2015 18:47

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17A	1504849-009C	Water	04/20/2015 11:20	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	04/28/2015 18:47
trans-1,3-Dichloropropene	ND	0.50	1	04/28/2015 18:47
Diisopropyl ether (DIPE)	ND	0.50	1	04/28/2015 18:47
Ethylbenzene	ND	0.50	1	04/28/2015 18:47
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	04/28/2015 18:47
Freon 113	ND	0.50	1	04/28/2015 18:47
Hexachlorobutadiene	ND	0.50	1	04/28/2015 18:47
Hexachloroethane	ND	0.50	1	04/28/2015 18:47
2-Hexanone	ND	0.50	1	04/28/2015 18:47
Isopropylbenzene	ND	0.50	1	04/28/2015 18:47
4-Isopropyl toluene	ND	0.50	1	04/28/2015 18:47
Methyl-t-butyl ether (MTBE)	ND	0.50	1	04/28/2015 18:47
Methylene chloride	ND	0.50	1	04/28/2015 18:47
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	04/28/2015 18:47
Naphthalene	ND	0.50	1	04/28/2015 18:47
n-Propyl benzene	ND	0.50	1	04/28/2015 18:47
Styrene	ND	0.50	1	04/28/2015 18:47
1,1,1,2-Tetrachloroethane	ND	0.50	1	04/28/2015 18:47
1,1,2,2-Tetrachloroethane	ND	0.50	1	04/28/2015 18:47
Tetrachloroethene	ND	0.50	1	04/28/2015 18:47
Toluene	ND	0.50	1	04/28/2015 18:47
1,2,3-Trichlorobenzene	ND	0.50	1	04/28/2015 18:47
1,2,4-Trichlorobenzene	ND	0.50	1	04/28/2015 18:47
1,1,1-Trichloroethane	ND	0.50	1	04/28/2015 18:47
1,1,2-Trichloroethane	ND	0.50	1	04/28/2015 18:47
Trichloroethene	ND	0.50	1	04/28/2015 18:47
Trichlorofluoromethane	ND	0.50	1	04/28/2015 18:47
1,2,3-Trichloropropane	ND	0.50	1	04/28/2015 18:47
1,2,4-Trimethylbenzene	ND	0.50	1	04/28/2015 18:47
1,3,5-Trimethylbenzene	ND	0.50	1	04/28/2015 18:47
Vinyl Chloride	ND	0.50	1	04/28/2015 18:47
Xylenes, Total	ND	0.50	1	04/28/2015 18:47

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17A	1504849-009C	Water	04/20/2015 11:20	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	99	70-130		04/28/2015 18:47
Toluene-d8	93	70-130		04/28/2015 18:47
4-BFB	102	70-130		04/28/2015 18:47
<u>Analyst(s):</u> GM	<u>Analytical Comments:</u> b1			



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17B	1504849-010C	Water	04/20/2015 12:40	GC16	104242

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	04/29/2015 12:35
tert-Amyl methyl ether (TAME)	ND	0.50	1	04/29/2015 12:35
Benzene	ND	0.50	1	04/29/2015 12:35
Bromobenzene	ND	0.50	1	04/29/2015 12:35
Bromochloromethane	ND	0.50	1	04/29/2015 12:35
Bromodichloromethane	ND	0.50	1	04/29/2015 12:35
Bromoform	ND	0.50	1	04/29/2015 12:35
Bromomethane	ND	0.50	1	04/29/2015 12:35
2-Butanone (MEK)	ND	2.0	1	04/29/2015 12:35
t-Butyl alcohol (TBA)	ND	2.0	1	04/29/2015 12:35
n-Butyl benzene	ND	0.50	1	04/29/2015 12:35
sec-Butyl benzene	ND	0.50	1	04/29/2015 12:35
tert-Butyl benzene	ND	0.50	1	04/29/2015 12:35
Carbon Disulfide	ND	0.50	1	04/29/2015 12:35
Carbon Tetrachloride	ND	0.50	1	04/29/2015 12:35
Chlorobenzene	ND	0.50	1	04/29/2015 12:35
Chloroethane	ND	0.50	1	04/29/2015 12:35
Chloroform	ND	0.50	1	04/29/2015 12:35
Chloromethane	ND	0.50	1	04/29/2015 12:35
2-Chlorotoluene	ND	0.50	1	04/29/2015 12:35
4-Chlorotoluene	ND	0.50	1	04/29/2015 12:35
Dibromochloromethane	ND	0.50	1	04/29/2015 12:35
1,2-Dibromo-3-chloropropane	ND	0.20	1	04/29/2015 12:35
1,2-Dibromoethane (EDB)	ND	0.50	1	04/29/2015 12:35
Dibromomethane	ND	0.50	1	04/29/2015 12:35
1,2-Dichlorobenzene	ND	0.50	1	04/29/2015 12:35
1,3-Dichlorobenzene	ND	0.50	1	04/29/2015 12:35
1,4-Dichlorobenzene	ND	0.50	1	04/29/2015 12:35
Dichlorodifluoromethane	ND	0.50	1	04/29/2015 12:35
1,1-Dichloroethane	ND	0.50	1	04/29/2015 12:35
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	04/29/2015 12:35
1,1-Dichloroethene	ND	0.50	1	04/29/2015 12:35
cis-1,2-Dichloroethene	ND	0.50	1	04/29/2015 12:35
trans-1,2-Dichloroethene	ND	0.50	1	04/29/2015 12:35
1,2-Dichloropropane	ND	0.50	1	04/29/2015 12:35
1,3-Dichloropropane	ND	0.50	1	04/29/2015 12:35
2,2-Dichloropropane	ND	0.50	1	04/29/2015 12:35
1,1-Dichloropropene	ND	0.50	1	04/29/2015 12:35

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17B	1504849-010C	Water	04/20/2015 12:40	GC16	104242

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.50	1	04/29/2015 12:35
trans-1,3-Dichloropropene	ND	0.50	1	04/29/2015 12:35
Diisopropyl ether (DIPE)	ND	0.50	1	04/29/2015 12:35
Ethylbenzene	ND	0.50	1	04/29/2015 12:35
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	04/29/2015 12:35
Freon 113	ND	0.50	1	04/29/2015 12:35
Hexachlorobutadiene	ND	0.50	1	04/29/2015 12:35
Hexachloroethane	ND	0.50	1	04/29/2015 12:35
2-Hexanone	ND	0.50	1	04/29/2015 12:35
Isopropylbenzene	ND	0.50	1	04/29/2015 12:35
4-Isopropyl toluene	ND	0.50	1	04/29/2015 12:35
Methyl-t-butyl ether (MTBE)	ND	0.50	1	04/29/2015 12:35
Methylene chloride	ND	0.50	1	04/29/2015 12:35
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	04/29/2015 12:35
Naphthalene	ND	0.50	1	04/29/2015 12:35
n-Propyl benzene	ND	0.50	1	04/29/2015 12:35
Styrene	ND	0.50	1	04/29/2015 12:35
1,1,1,2-Tetrachloroethane	ND	0.50	1	04/29/2015 12:35
1,1,2,2-Tetrachloroethane	ND	0.50	1	04/29/2015 12:35
Tetrachloroethene	ND	0.50	1	04/29/2015 12:35
Toluene	ND	0.50	1	04/29/2015 12:35
1,2,3-Trichlorobenzene	ND	0.50	1	04/29/2015 12:35
1,2,4-Trichlorobenzene	ND	0.50	1	04/29/2015 12:35
1,1,1-Trichloroethane	ND	0.50	1	04/29/2015 12:35
1,1,2-Trichloroethane	ND	0.50	1	04/29/2015 12:35
Trichloroethene	ND	0.50	1	04/29/2015 12:35
Trichlorofluoromethane	ND	0.50	1	04/29/2015 12:35
1,2,3-Trichloropropane	ND	0.50	1	04/29/2015 12:35
1,2,4-Trimethylbenzene	ND	0.50	1	04/29/2015 12:35
1,3,5-Trimethylbenzene	ND	0.50	1	04/29/2015 12:35
Vinyl Chloride	ND	0.50	1	04/29/2015 12:35
Xylenes, Total	ND	0.50	1	04/29/2015 12:35

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17B	1504849-010C	Water	04/20/2015 12:40	GC16	104242

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		04/29/2015 12:35
Toluene-d8	87	70-130		04/29/2015 12:35
4-BFB	87	70-130		04/29/2015 12:35

Analyst(s): AK

Analytical Comments: ,b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16	1504849-013C	Water	04/20/2015 13:25	GC10	104220
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		100	10	04/29/2015 01:40
tert-Amyl methyl ether (TAME)	ND		5.0	10	04/29/2015 01:40
Benzene	17		5.0	10	04/29/2015 01:40
Bromobenzene	ND		5.0	10	04/29/2015 01:40
Bromochloromethane	ND		5.0	10	04/29/2015 01:40
Bromodichloromethane	ND		5.0	10	04/29/2015 01:40
Bromoform	ND		5.0	10	04/29/2015 01:40
Bromomethane	ND		5.0	10	04/29/2015 01:40
2-Butanone (MEK)	ND		20	10	04/29/2015 01:40
t-Butyl alcohol (TBA)	ND		20	10	04/29/2015 01:40
n-Butyl benzene	82		5.0	10	04/29/2015 01:40
sec-Butyl benzene	20		5.0	10	04/29/2015 01:40
tert-Butyl benzene	ND		5.0	10	04/29/2015 01:40
Carbon Disulfide	ND		5.0	10	04/29/2015 01:40
Carbon Tetrachloride	ND		5.0	10	04/29/2015 01:40
Chlorobenzene	ND		5.0	10	04/29/2015 01:40
Chloroethane	ND		5.0	10	04/29/2015 01:40
Chloroform	ND		5.0	10	04/29/2015 01:40
Chloromethane	ND		5.0	10	04/29/2015 01:40
2-Chlorotoluene	ND		5.0	10	04/29/2015 01:40
4-Chlorotoluene	ND		5.0	10	04/29/2015 01:40
Dibromochloromethane	ND		5.0	10	04/29/2015 01:40
1,2-Dibromo-3-chloropropane	ND		2.0	10	04/29/2015 01:40
1,2-Dibromoethane (EDB)	ND		5.0	10	04/29/2015 01:40
Dibromomethane	ND		5.0	10	04/29/2015 01:40
1,2-Dichlorobenzene	ND		5.0	10	04/29/2015 01:40
1,3-Dichlorobenzene	ND		5.0	10	04/29/2015 01:40
1,4-Dichlorobenzene	ND		5.0	10	04/29/2015 01:40
Dichlorodifluoromethane	ND		5.0	10	04/29/2015 01:40
1,1-Dichloroethane	ND		5.0	10	04/29/2015 01:40
1,2-Dichloroethane (1,2-DCA)	ND		5.0	10	04/29/2015 01:40
1,1-Dichloroethene	ND		5.0	10	04/29/2015 01:40
cis-1,2-Dichloroethene	ND		5.0	10	04/29/2015 01:40
trans-1,2-Dichloroethene	ND		5.0	10	04/29/2015 01:40
1,2-Dichloropropane	ND		5.0	10	04/29/2015 01:40
1,3-Dichloropropane	ND		5.0	10	04/29/2015 01:40
2,2-Dichloropropane	ND		5.0	10	04/29/2015 01:40
1,1-Dichloropropene	ND		5.0	10	04/29/2015 01:40

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16	1504849-013C	Water	04/20/2015 13:25	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	5.0	10	04/29/2015 01:40
trans-1,3-Dichloropropene	ND	5.0	10	04/29/2015 01:40
Diisopropyl ether (DIPE)	ND	5.0	10	04/29/2015 01:40
Ethylbenzene	ND	5.0	10	04/29/2015 01:40
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	04/29/2015 01:40
Freon 113	ND	5.0	10	04/29/2015 01:40
Hexachlorobutadiene	ND	5.0	10	04/29/2015 01:40
Hexachloroethane	ND	5.0	10	04/29/2015 01:40
2-Hexanone	10	5.0	10	04/29/2015 01:40
Isopropylbenzene	30	5.0	10	04/29/2015 01:40
4-Isopropyl toluene	ND	5.0	10	04/29/2015 01:40
Methyl-t-butyl ether (MTBE)	ND	5.0	10	04/29/2015 01:40
Methylene chloride	ND	5.0	10	04/29/2015 01:40
4-Methyl-2-pentanone (MIBK)	ND	5.0	10	04/29/2015 01:40
Naphthalene	ND	5.0	10	04/29/2015 01:40
n-Propyl benzene	22	5.0	10	04/29/2015 01:40
Styrene	ND	5.0	10	04/29/2015 01:40
1,1,1,2-Tetrachloroethane	ND	5.0	10	04/29/2015 01:40
1,1,2,2-Tetrachloroethane	ND	5.0	10	04/29/2015 01:40
Tetrachloroethene	ND	5.0	10	04/29/2015 01:40
Toluene	7.9	5.0	10	04/29/2015 01:40
1,2,3-Trichlorobenzene	ND	5.0	10	04/29/2015 01:40
1,2,4-Trichlorobenzene	ND	5.0	10	04/29/2015 01:40
1,1,1-Trichloroethane	ND	5.0	10	04/29/2015 01:40
1,1,2-Trichloroethane	ND	5.0	10	04/29/2015 01:40
Trichloroethene	ND	5.0	10	04/29/2015 01:40
Trichlorofluoromethane	ND	5.0	10	04/29/2015 01:40
1,2,3-Trichloropropane	ND	5.0	10	04/29/2015 01:40
1,2,4-Trimethylbenzene	ND	5.0	10	04/29/2015 01:40
1,3,5-Trimethylbenzene	ND	5.0	10	04/29/2015 01:40
Vinyl Chloride	ND	5.0	10	04/29/2015 01:40
Xylenes, Total	14	5.0	10	04/29/2015 01:40

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16	1504849-013C	Water	04/20/2015 13:25	GC10	104220

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	100	70-130		04/29/2015 01:40
Toluene-d8	95	70-130		04/29/2015 01:40
4-BFB	88	70-130		04/29/2015 01:40

Analyst(s): GM

Analytical Comments: b6,b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1504849-015C	Water	04/20/2015 17:35	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	500	50	04/29/2015 14:11
tert-Amyl methyl ether (TAME)	ND	25	50	04/29/2015 14:11
Benzene	890	25	50	04/29/2015 14:11
Bromobenzene	ND	25	50	04/29/2015 14:11
Bromochloromethane	ND	25	50	04/29/2015 14:11
Bromodichloromethane	ND	25	50	04/29/2015 14:11
Bromoform	ND	25	50	04/29/2015 14:11
Bromomethane	ND	25	50	04/29/2015 14:11
2-Butanone (MEK)	ND	100	50	04/29/2015 14:11
t-Butyl alcohol (TBA)	ND	100	50	04/29/2015 14:11
n-Butyl benzene	ND	25	50	04/29/2015 14:11
sec-Butyl benzene	ND	25	50	04/29/2015 14:11
tert-Butyl benzene	ND	25	50	04/29/2015 14:11
Carbon Disulfide	ND	25	50	04/29/2015 14:11
Carbon Tetrachloride	ND	25	50	04/29/2015 14:11
Chlorobenzene	ND	25	50	04/29/2015 14:11
Chloroethane	ND	25	50	04/29/2015 14:11
Chloroform	ND	25	50	04/29/2015 14:11
Chloromethane	ND	25	50	04/29/2015 14:11
2-Chlorotoluene	ND	25	50	04/29/2015 14:11
4-Chlorotoluene	ND	25	50	04/29/2015 14:11
Dibromochloromethane	ND	25	50	04/29/2015 14:11
1,2-Dibromo-3-chloropropane	ND	10	50	04/29/2015 14:11
1,2-Dibromoethane (EDB)	ND	25	50	04/29/2015 14:11
Dibromomethane	ND	25	50	04/29/2015 14:11
1,2-Dichlorobenzene	ND	25	50	04/29/2015 14:11
1,3-Dichlorobenzene	ND	25	50	04/29/2015 14:11
1,4-Dichlorobenzene	ND	25	50	04/29/2015 14:11
Dichlorodifluoromethane	ND	25	50	04/29/2015 14:11
1,1-Dichloroethane	ND	25	50	04/29/2015 14:11
1,2-Dichloroethane (1,2-DCA)	ND	25	50	04/29/2015 14:11
1,1-Dichloroethene	ND	25	50	04/29/2015 14:11
cis-1,2-Dichloroethene	ND	25	50	04/29/2015 14:11
trans-1,2-Dichloroethene	ND	25	50	04/29/2015 14:11
1,2-Dichloropropane	ND	25	50	04/29/2015 14:11
1,3-Dichloropropane	ND	25	50	04/29/2015 14:11
2,2-Dichloropropane	ND	25	50	04/29/2015 14:11
1,1-Dichloropropene	ND	25	50	04/29/2015 14:11

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1504849-015C	Water	04/20/2015 17:35	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	25	50	04/29/2015 14:11
trans-1,3-Dichloropropene	ND	25	50	04/29/2015 14:11
Diisopropyl ether (DIPE)	ND	25	50	04/29/2015 14:11
Ethylbenzene	ND	25	50	04/29/2015 14:11
Ethyl tert-butyl ether (ETBE)	ND	25	50	04/29/2015 14:11
Freon 113	ND	25	50	04/29/2015 14:11
Hexachlorobutadiene	ND	25	50	04/29/2015 14:11
Hexachloroethane	ND	25	50	04/29/2015 14:11
2-Hexanone	ND	25	50	04/29/2015 14:11
Isopropylbenzene	56	25	50	04/29/2015 14:11
4-Isopropyl toluene	ND	25	50	04/29/2015 14:11
Methyl-t-butyl ether (MTBE)	ND	25	50	04/29/2015 14:11
Methylene chloride	ND	25	50	04/29/2015 14:11
4-Methyl-2-pentanone (MIBK)	ND	25	50	04/29/2015 14:11
Naphthalene	ND	25	50	04/29/2015 14:11
n-Propyl benzene	160	25	50	04/29/2015 14:11
Styrene	ND	25	50	04/29/2015 14:11
1,1,1,2-Tetrachloroethane	ND	25	50	04/29/2015 14:11
1,1,2,2-Tetrachloroethane	ND	25	50	04/29/2015 14:11
Tetrachloroethene	ND	25	50	04/29/2015 14:11
Toluene	27	25	50	04/29/2015 14:11
1,2,3-Trichlorobenzene	ND	25	50	04/29/2015 14:11
1,2,4-Trichlorobenzene	ND	25	50	04/29/2015 14:11
1,1,1-Trichloroethane	ND	25	50	04/29/2015 14:11
1,1,2-Trichloroethane	ND	25	50	04/29/2015 14:11
Trichloroethene	ND	25	50	04/29/2015 14:11
Trichlorofluoromethane	ND	25	50	04/29/2015 14:11
1,2,3-Trichloropropane	ND	25	50	04/29/2015 14:11
1,2,4-Trimethylbenzene	ND	25	50	04/29/2015 14:11
1,3,5-Trimethylbenzene	ND	25	50	04/29/2015 14:11
Vinyl Chloride	ND	25	50	04/29/2015 14:11
Xylenes, Total	ND	25	50	04/29/2015 14:11

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/28/15-4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1504849-015C	Water	04/20/2015 17:35	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		04/29/2015 14:11
Toluene-d8	88	70-130		04/29/2015 14:11
4-BFB	88	70-130		04/29/2015 14:11

Analyst(s): AK

Analytical Comments: b6,b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 1.5'	1504849-001A	Soil	04/20/2015 08:10	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	0.75	0.25	1	04/24/2015 11:44

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	96	70-130	04/24/2015 11:44

Analyst(s): GM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 3.5'	1504849-002A	Soil	04/20/2015 08:10	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	2.7	0.25	1	04/24/2015 23:56

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	95	70-130	04/24/2015 23:56

Analyst(s): GM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 7'	1504849-003A	Soil	04/20/2015 08:15	GC10	103881

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	540	50	200	04/28/2015 23:37

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	105	70-130	04/28/2015 23:37

Analyst(s): GM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15 6'	1504849-005A	Soil	04/20/2015 08:45	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	04/24/2015 12:27

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	96	70-130	04/24/2015 12:27

Analyst(s): GM

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15-4/27/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17 6.5'	1504849-008A	Soil	04/20/2015 11:10	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	0.57	0.25	1	04/29/2015 00:18

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	98	70-130	04/29/2015 00:18

Analyst(s): GM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 3.5'	1504849-011A	Soil	04/20/2015 13:05	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	04/29/2015 00:59

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	98	70-130	04/29/2015 00:59

Analyst(s): GM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 6'	1504849-012A	Soil	04/20/2015 13:15	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	61	5.0	20	04/25/2015 02:03

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	98	70-130	04/25/2015 02:03

Analyst(s): GM

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504849-014A	Soil	04/20/2015 15:55	GC16	103881

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	04/25/2015 02:45

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	94	70-130	04/25/2015 02:45

Analyst(s): GM



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2	1504849-004C	Water	04/20/2015 08:30	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	4100	500	10	04/29/2015 14:54

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	107	70-130	04/29/2015 14:54

Analyst(s): AK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15A	1504849-006B	Water	04/20/2015 10:00	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	04/29/2015 15:37

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	104	70-130	04/29/2015 15:37

Analyst(s): AK

Analytical Comments: b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15B	1504849-007C	Water	04/20/2015 10:10	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	04/29/2015 16:20

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	105	70-130	04/29/2015 16:20

Analyst(s): AK

Analytical Comments: b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17A	1504849-009C	Water	04/20/2015 11:20	GC16	104220

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	04/29/2015 17:03

Surrogates	REC (%)	Limits	Date Analyzed
Dibromofluoromethane	106	70-130	04/29/2015 17:03

Analyst(s): AK

Analytical Comments: b1

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/29/15

WorkOrder: 1504849
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17B	1504849-010C	Water	04/20/2015 12:40	GC16	104242

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND	50	1	04/29/2015 12:35

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
Dibromofluoromethane	102	70-130

Analyst(s): AK Analytical Comments: b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16	1504849-013C	Water	04/20/2015 13:25	GC16	104220

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	3800	500	10	04/29/2015 17:45

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
Dibromofluoromethane	106	70-130

Analyst(s): AK Analytical Comments: b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1504849-015C	Water	04/20/2015 17:35	GC16	104220

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	6100	2500	50	04/29/2015 14:11

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
Dibromofluoromethane	105	70-130

Analyst(s): AK Analytical Comments: b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15

WorkOrder: 1504849
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 1.5'	1504849-001A	Soil	04/20/2015 08:10	GC2A	103934

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.6	1.0	1	04/23/2015 17:02
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		<u>Date Analyzed</u>
C9	103	70-130		04/23/2015 17:02
<u>Analyst(s):</u> TK		<u>Analytical Comments:</u> e7,e2		

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 3.5'	1504849-002A	Soil	04/20/2015 08:10	GC2A	103934

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.1	1.0	1	04/23/2015 20:47
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		<u>Date Analyzed</u>
C9	106	70-130		04/23/2015 20:47
<u>Analyst(s):</u> TK		<u>Analytical Comments:</u> e11		

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2 7'	1504849-003A	Soil	04/20/2015 08:15	GC2B	103934

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	2800	100	100	04/26/2015 07:36
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		<u>Date Analyzed</u>
C9	107	70-130		04/26/2015 07:36
<u>Analyst(s):</u> TK		<u>Analytical Comments:</u> e3,e4,e7		

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15 6'	1504849-005A	Soil	04/20/2015 08:45	GC6A	103934

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	04/24/2015 08:23
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		<u>Date Analyzed</u>
C9	71	70-130		04/24/2015 08:23
<u>Analyst(s):</u> TK				

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15

WorkOrder: 1504849
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17 6.5'	1504849-008A	Soil	04/20/2015 11:10	GC2B	103934

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	11	10	10	04/25/2015 12:57
Surrogates	REC (%)	Limits		Date Analyzed
C9	88	70-130		04/25/2015 12:57

Analyst(s): TK **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 3.5'	1504849-011A	Soil	04/20/2015 13:05	GC6A	103934

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	04/28/2015 08:21
Surrogates	REC (%)	Limits		Date Analyzed
C9	72	70-130		04/28/2015 08:21

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16 6'	1504849-012A	Soil	04/20/2015 13:15	GC2B	103934

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	110	5.0	5	04/26/2015 12:35
Surrogates	REC (%)	Limits		Date Analyzed
C9	87	70-130		04/26/2015 12:35

Analyst(s): TK **Analytical Comments:** e3,e4,e7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504849-014A	Soil	04/20/2015 15:55	GC2A	103934

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	47	20	20	04/28/2015 00:51
Surrogates	REC (%)	Limits		Date Analyzed
C9	108	70-130		04/28/2015 00:51

Analyst(s): TK **Analytical Comments:** e7,e2



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15

WorkOrder: 1504849
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2	1504849-004B	Water	04/20/2015 08:30	GC9b	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1700	50	1	04/22/2015 09:41
Surrogates	REC (%)	Limits		
C9	112	70-130		04/22/2015 09:41

Analyst(s): TK Analytical Comments: e4,e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15A	1504849-006A	Water	04/20/2015 10:00	GC11B	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	190	150	1	04/25/2015 11:47
Surrogates	REC (%)	Limits		
C9	112	70-130		04/25/2015 11:47

Analyst(s): TK Analytical Comments: e7,e2,b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15B	1504849-007B	Water	04/20/2015 10:10	GC11B	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	150	1	04/25/2015 04:55
Surrogates	REC (%)	Limits		
C9	116	70-130		04/25/2015 04:55

Analyst(s): TK Analytical Comments: a3,b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17A	1504849-009B	Water	04/20/2015 11:20	GC11B	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	3000	20	04/25/2015 09:29
Surrogates	REC (%)	Limits		
C9	116	70-130		04/25/2015 09:29

Analyst(s): TK Analytical Comments: a3,b1

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15

WorkOrder: 1504849
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17B	1504849-010B	Water	04/20/2015 12:40	GC11B	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	04/25/2015 07:12

Surrogates	REC (%)	Limits	Date Analyzed
C9	115	70-130	04/25/2015 07:12

Analyst(s): TK **Analytical Comments:** b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16	1504849-013B	Water	04/20/2015 13:25	GC11B	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	74,000	7500	50	04/25/2015 14:04

Surrogates	REC (%)	Limits	Date Analyzed
C9	112	70-130	04/25/2015 14:04

Analyst(s): TK **Analytical Comments:** e3,e4,e7,b6,b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1504849-015B	Water	04/20/2015 17:35	GC6A	103935

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	36,000	7500	50	04/24/2015 15:39

Surrogates	REC (%)	Limits	Date Analyzed
C9	79	70-130	04/24/2015 15:39

Analyst(s): TK **Analytical Comments:** e2,e7,e4,b6,b1



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15

WorkOrder: 1504849
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-2	1504849-004A	Water	04/20/2015 08:30	GC11B	103876

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	5700	150	1	04/26/2015 10:38
Surrogates	REC (%)	Limits		
C9	112	70-130		04/26/2015 10:38

Analyst(s): TK Analytical Comments: e4,e3,e7

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-15B	1504849-007A	Water	04/20/2015 10:10	GC11B	103876

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	150	1	04/24/2015 15:54
Surrogates	REC (%)	Limits		
C9	113	70-130		04/24/2015 15:54

Analyst(s): TK Analytical Comments: e7,a3,b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17A	1504849-009A	Water	04/20/2015 11:20	GC6A	103876

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	1800	1500	10	04/28/2015 10:46
Surrogates	REC (%)	Limits		
C9	72	70-130		04/28/2015 10:46

Analyst(s): TK Analytical Comments: e7,e2,b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-17B	1504849-010A	Water	04/20/2015 12:40	GC11B	103876

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	04/25/2015 18:38
Surrogates	REC (%)	Limits		
C9	109	70-130		04/25/2015 18:38

Analyst(s): TK Analytical Comments: b1

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/21/15 16:12
Date Prepared: 4/21/15

WorkOrder: 1504849
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-16	1504849-013A	Water	04/20/2015 13:25	GC6B	103876

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	82,000	3000	20	04/27/2015 18:02

Surrogates	REC (%)	Limits	Date Analyzed
C9	94	70-130	04/27/2015 18:02

Analyst(s): TK **Analytical Comments:** e3,e4,e7,b6,b1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-1	1504849-015A	Water	04/20/2015 17:35	GC11B	103876

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	50,000	7500	50	04/26/2015 01:30

Surrogates	REC (%)	Limits	Date Analyzed
C9	114	70-130	04/26/2015 01:30

Analyst(s): TK **Analytical Comments:** e4,e3,e7,b6,b1



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/20/15
Date Analyzed: 4/21/15
Instrument: GC10, GC16
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 103881
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-103881
 1504815-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0501	0.0050	0.050	-	100	53-116
Benzene	ND	0.0626	0.0050	0.050	-	125	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.258	0.050	0.20	-	129	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0535	0.0050	0.050	-	107	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0510	0.0040	0.050	-	102	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0570	0.0040	0.050	-	114	58-135
1,1-Dichloroethene	ND	0.0575	0.0050	0.050	-	115	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/20/15
Date Analyzed: 4/21/15
Instrument: GC10, GC16
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 103881
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-103881
 1504815-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0583	0.0050	0.050	-	117	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0538	0.0050	0.050	-	108	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0541	0.0050	0.050	-	108	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0575	0.0050	0.050	-	115	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0552	0.0050	0.050	-	110	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.114	0.120		0.12	91	96	72-126
Toluene-d8	0.129	0.122		0.12	103	98	81-115
4-BFB	0.0147	0.0114		0.012	117	91	55-127

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/20/15
Date Analyzed: 4/21/15
Instrument: GC10, GC16
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 103881
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-103881
 1504815-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0387	0.0397	0.050	ND	77	79	70-130	2.54	20
Benzene	0.0439	0.0440	0.050	ND	88	88	70-130	0	20
t-Butyl alcohol (TBA)	0.132	0.137	0.20	ND	66,F1	69,F1	70-130	3.67	20
Chlorobenzene	0.0409	0.0410	0.050	ND	82	82	70-130	0	20
1,2-Dibromoethane (EDB)	0.0394	0.0405	0.050	ND	79	81	70-130	2.75	20
1,2-Dichloroethane (1,2-DCA)	0.0410	0.0419	0.050	ND	82	84	70-130	2.35	20
1,1-Dichloroethene	0.0430	0.0433	0.050	ND	86	87	70-130	0.874	20
Diisopropyl ether (DIPE)	0.0407	0.0418	0.050	ND	81	84	70-130	2.69	20
Ethyl tert-butyl ether (ETBE)	0.0404	0.0418	0.050	ND	81	83	70-130	3.35	20
Methyl-t-butyl ether (MTBE)	0.0396	0.0407	0.050	ND	79	81	70-130	2.70	20
Toluene	0.0422	0.0420	0.050	ND	84	84	70-130	0	20
Trichloroethene	0.0440	0.0442	0.050	ND	88	88	70-130	0	20
Surrogate Recovery									
Dibromofluoromethane	0.119	0.124	0.12		95	99	70-130	4.31	20
Toluene-d8	0.120	0.120	0.12		96	96	70-130	0	20
4-BFB	0.0132	0.0133	0.012		106	106	70-130	0	20

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104127

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0402	0.0050	0.050	-	80	53-116
Benzene	ND	0.0461	0.0050	0.050	-	92	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.200	0.050	0.20	-	100	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0468	0.0050	0.050	-	94	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0416	0.0040	0.050	-	83	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0438	0.0040	0.050	-	88	58-135
1,1-Dichloroethene	ND	0.0402	0.0050	0.050	-	80	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104127

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0436	0.0050	0.050	-	87	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0426	0.0050	0.050	-	85	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0412	0.0050	0.050	-	83	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0500	0.0050	0.050	-	100	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0462	0.0050	0.050	-	92	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.113	0.116		0.12	91	93	72-126
Toluene-d8	0.126	0.125		0.12	101	100	81-115
4-BFB	0.0141	0.0125		0.012	113	100	55-127



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/29/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104220
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104220
 1504849-007CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	10.4	0.50	10	-	104	54-140
Benzene	ND	10.0	0.50	10	-	101	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	50.2	2.0	40	-	125	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.91	0.50	10	-	99	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	10.0	0.50	10	-	101	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	10.5	0.50	10	-	105	66-125
1,1-Dichloroethene	ND	9.84	0.50	10	-	98	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/29/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104220
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104220
 1504849-007CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	10.3	0.50	10	-	103	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.4	0.50	10	-	104	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.4	0.50	10	-	104	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.88	0.50	10	-	99	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.95	0.50	10	-	99	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	23.6	24.2		25	94	97	70-130
Toluene-d8	23.5	23.4		25	94	94	70-130
4-BFB	2.32	2.39		2.5	93	96	70-130

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/29/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104220
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104220
 1504849-007CMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.1	9.86	10	ND	101	99	69-139	2.54	20
Benzene	10.2	9.94	10	ND	100	98	69-141	2.19	20
t-Butyl alcohol (TBA)	44.9	46.0	40	ND	112	115	41-152	2.25	20
Chlorobenzene	9.80	9.63	10	ND	98	96	77-120	1.72	20
1,2-Dibromoethane (EDB)	9.98	9.67	10	ND	100	97	76-135	3.08	20
1,2-Dichloroethane (1,2-DCA)	10.4	10.1	10	ND	104	101	73-139	2.62	20
1,1-Dichloroethene	9.91	9.79	10	ND	99	98	59-140	1.20	20
Diisopropyl ether (DIPE)	10.4	10.2	10	ND	105	102	72-140	2.77	20
Ethyl tert-butyl ether (ETBE)	10.4	10.2	10	ND	104	102	71-140	2.31	20
Methyl-t-butyl ether (MTBE)	10.4	10.2	10	ND	104	102	73-139	2.09	20
Toluene	9.70	9.54	10	ND	96	94	71-128	1.65	20
Trichloroethene	9.89	9.58	10	ND	99	96	64-132	3.22	20
Surrogate Recovery									
Dibromofluoromethane	25.1	25.0	25		100	100	70-130	0	20
Toluene-d8	23.0	23.1	25		92	92	70-130	0	20
4-BFB	2.43	2.52	2.5		97	101	70-130	3.79	20

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/29/15
Date Analyzed: 4/29/15
Instrument: GC16
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104242
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104242

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.58	0.50	10	-	96	54-140
Benzene	ND	9.81	0.50	10	-	98	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	30.7	2.0	40	-	77	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	10.1	0.50	10	-	101	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.02	0.50	10	-	90	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	9.65	0.50	10	-	96	66-125
1,1-Dichloroethene	ND	9.98	0.50	10	-	100	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/29/15
Date Analyzed: 4/29/15
Instrument: GC16
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104242
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104242

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	9.86	0.50	10	-	99	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.74	0.50	10	-	97	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	9.12	0.50	10	-	91	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	10.2	0.50	10	-	102	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.1	0.50	10	-	101	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	22.9	22.7		25	92	91	70-130
Toluene-d8	22.2	22.0		25	89	88	70-130
4-BFB	2.26	2.14		2.5	90	86	70-130



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/20/15
Date Analyzed: 4/21/15
Instrument: GC16
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 103881
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-103881

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	2.95	0.25	3.2	-	92	74-142
Surrogate Recovery							
Dibromofluoromethane	0.121	0.123		0.12	97	99	72-126



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-104127

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	3.45	0.25	3.2	-	108	74-142
Surrogate Recovery							
Dibromofluoromethane	0.137	0.141		0.12	110	113	72-126



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504849
Date Prepared: 4/29/15	BatchID: 104220
Date Analyzed: 4/29/15	Extraction Method: SW5030B
Instrument: GC16	Analytical Method: SW8260B
Matrix: Water	Unit: µg/L
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104220

QC Summary Report for TPH(g)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	563	50	644	-	87	75-105
Surrogate Recovery							
Dibromofluoromethane	26.0	25.8		25	104	103	70-130



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/29/15
Date Analyzed: 4/29/15
Instrument: GC16
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 104242
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104242

QC Summary Report for TPH(g)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	563	50	644	-	87	75-105
Surrogate Recovery							
Dibromofluoromethane	26.0	25.8		25	104	103	70-130



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504849
Date Prepared: 4/21/15	BatchID: 103934
Date Analyzed: 4/22/15 - 4/23/15	Extraction Method: SW3550B/3630C
Instrument: GC11A, GC6A	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-103934 1504849-014AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	36.5	1.0	40	-	91	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	23.1	18.8		25	92	75	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		47	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/21/15
Date Analyzed: 4/22/15
Instrument: GC11A, GC9b
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504849
BatchID: 103935
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-103935

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1100	50	1000	-	110	59-151
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	574	669		625	92	107	77-130



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504849
Date Prepared: 4/21/15	BatchID: 103904
Date Analyzed: 4/21/15	Extraction Method: SW3550B
Instrument: GC11A	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-103904 1504830-001AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	37.5	1.0	40	-	94	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	23.9	24.0		25	96	96	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	37.9	37.1	40	ND	95	93	70-130	2.11	30
Surrogate Recovery									
C9	24.2	24.2	25		97	97	70-130	0	30

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504849
Date Prepared: 4/21/15	BatchID: 103933
Date Analyzed: 4/22/15 - 4/23/15	Extraction Method: SW3550B
Instrument: GC11A, GC6B	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-103933 1504849-014AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	46.2	1.0	40	-	115	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	23.5	22.9		25	94	91	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		140	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504849
Date Prepared: 4/20/15	BatchID: 103876
Date Analyzed: 4/21/15	Extraction Method: SW3510C
Instrument: GC6B	Analytical Method: SW8015B
Matrix: Water	Unit: µg/L
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-103876

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1140	50	1000	-	114	61-157
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	580	579		625	93	93	70-134

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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1504849

ClientCode: GECL

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Report to:
John Love
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550
925-371-5900 FAX: 925-371-5915

Email: love@geoconinc.com; merritt@geoconinc.
cc/3rd Party:
PO:
ProjectNo: #E8722-02-01B; Caltrans Hegenberger

Bill to:
Accounts Payable
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550

Requested TAT: 5 days

Date Received: 04/21/2015
Date Printed: 05/01/2015

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1504849-001	BC-2 1.5'	Soil	4/20/2015 8:10	<input type="checkbox"/>	A		A		A	A		A				
1504849-002	BC-2 3.5'	Soil	4/20/2015 8:10	<input type="checkbox"/>	A		A			A		A				
1504849-003	BC-2 7'	Soil	4/20/2015 8:15	<input type="checkbox"/>	A		A			A		A				
1504849-004	BC-2	Water	4/20/2015 8:30	<input type="checkbox"/>		C		C			A		B			
1504849-005	SB-15 6'	Soil	4/20/2015 8:45	<input type="checkbox"/>	A		A			A		A				
1504849-006	SB-15A	Water	4/20/2015 10:00	<input type="checkbox"/>		B		B					A			
1504849-007	SB-15B	Water	4/20/2015 10:10	<input type="checkbox"/>		C		C			A		B			
1504849-008	SB-17 6.5'	Soil	4/20/2015 11:10	<input type="checkbox"/>	A		A			A		A				
1504849-009	SB-17A	Water	4/20/2015 11:20	<input type="checkbox"/>		C		C			A		B			
1504849-010	SB-17B	Water	4/20/2015 12:40	<input type="checkbox"/>		C		C			A		B			
1504849-011	SB-16 3.5'	Soil	4/20/2015 13:05	<input type="checkbox"/>	A		A			A		A				
1504849-012	SB-16 6'	Soil	4/20/2015 13:15	<input type="checkbox"/>	A		A			A		A				
1504849-013	SB-16	Water	4/20/2015 13:25	<input type="checkbox"/>		C		C			A		B			
1504849-014	BC-3 6'	Soil	4/20/2015 15:55	<input type="checkbox"/>	A		A			A		A				
1504849-015	BC-1	Water	4/20/2015 17:35	<input type="checkbox"/>		C		C			A		B			

Test Legend:

1	8260B_S	2	8260B_W	3	8260GAS_S	4	8260GAS_W	5	PREFD REPORT
6	TPH(D)_S	7	TPH(D)_W	8	TPH(D)WSG_S	9	TPH(D)WSG_W	10	
11		12							

The following SamplIDs: 001A, 002A, 003A, 004C, 005A, 006B, 007C, 008A, 009C, 010C, 011A, 012A, 013C, 014A, 015C contain testgroup.

Prepared by: Maria Venegas

Comments:

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



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS
Project: #E8722-02-01B; Caltrans Hegenberger
Comments:

QC Level: LEVEL 2
Client Contact: John Love
Contact's Email: love@geoconinc.com; merritt@geoconinc.com

Work Order: 1504849
Date Received: 4/21/2015

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1504849-001A	BC-2 1.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 8:10	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504849-002A	BC-2 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 8:10	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504849-003A	BC-2 7'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 8:15	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504849-004A	BC-2	Water	SW8015B (Diesel)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 8:30	5 days	Present	<input type="checkbox"/>	
				1	ILA	<input type="checkbox"/>			Present	<input type="checkbox"/>	
1504849-004B	BC-2	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 8:30	5 days	Present	<input type="checkbox"/>	
				1	ILA	<input type="checkbox"/>			Present	<input type="checkbox"/>	
1504849-004C	BC-2	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 8:30	5 days	Present	<input type="checkbox"/>	
1504849-005A	SB-15 6'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 8:45	5 days		<input type="checkbox"/>	

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



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS
Project: #E8722-02-01B; Caltrans Hegenberger
Comments:

QC Level: LEVEL 2
Client Contact: John Love
Contact's Email: love@geoconinc.com; merritt@geoconinc.com

Work Order: 1504849
Date Received: 4/21/2015

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1504849-005A	SB-15 6'	Soil	SW8015B (Diesel)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 8:45	5 days		<input type="checkbox"/>	
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1504849-006A	SB-15A	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 10:00	5 days	1%+	<input type="checkbox"/>	
				1	ILA	<input type="checkbox"/>			1%+	<input type="checkbox"/>	
1504849-006B	SB-15A	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	2	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 10:00	5 days	1%+	<input type="checkbox"/>	
1504849-007A	SB-15B	Water	SW8015B (Diesel)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 10:10	5 days	5%+	<input type="checkbox"/>	
				1	ILA	<input type="checkbox"/>			5%+	<input type="checkbox"/>	
1504849-007B	SB-15B	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 10:10	5 days	5%+	<input type="checkbox"/>	
				1	ILA	<input type="checkbox"/>			5%+	<input type="checkbox"/>	
1504849-007C	SB-15B	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 10:10	5 days	5%+	<input type="checkbox"/>	
1504849-008A	SB-17 6.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 11:10	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1504849-009A	SB-17A	Water	SW8015B (Diesel)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 11:20	5 days	2%+	<input type="checkbox"/>	
				1	ILA	<input type="checkbox"/>			2%+	<input type="checkbox"/>	

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



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS
Project: #E8722-02-01B; Caltrans Hegenberger
Comments:

QC Level: LEVEL 2
Client Contact: John Love
Contact's Email: love@geoconinc.com; merritt@geoconinc.com

Work Order: 1504849
Date Received: 4/21/2015

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut	
1504849-009B	SB-17A	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 11:20	5 days	2%+	<input type="checkbox"/>		
				1	ILA	<input type="checkbox"/>				<input type="checkbox"/>		
1504849-009C	SB-17A	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 11:20	5 days	2%+	<input type="checkbox"/>		
1504849-010A	SB-17B	Water	SW8015B (Diesel)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 12:40	5 days	2%+	<input type="checkbox"/>		
				1	ILA	<input type="checkbox"/>				<input type="checkbox"/>		
1504849-010B	SB-17B	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 12:40	5 days	2%+	<input type="checkbox"/>		
				1	ILA	<input type="checkbox"/>				<input type="checkbox"/>		
1504849-010C	SB-17B	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 12:40	5 days	2%+	<input type="checkbox"/>		
1504849-011A	SB-16 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 13:05	5 days		<input type="checkbox"/>		
					SW8015B (Diesel)	<input type="checkbox"/>				5 days	<input type="checkbox"/>	
					TPH(g) & 8260 (Basic List) by P&T GCMS	<input type="checkbox"/>				5 days	<input type="checkbox"/>	
1504849-012A	SB-16 6'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 13:15	5 days		<input type="checkbox"/>		
					SW8015B (Diesel)	<input type="checkbox"/>				5 days	<input type="checkbox"/>	
					TPH(g) & 8260 (Basic List) by P&T GCMS	<input type="checkbox"/>				5 days	<input type="checkbox"/>	
1504849-013A	SB-16	Water	SW8015B (Diesel)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 13:25	5 days	1%+	<input type="checkbox"/>		

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



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS
Project: #E8722-02-01B; Caltrans Hegenberger
Comments:

QC Level: LEVEL 2
Client Contact: John Love
Contact's Email: love@geoconinc.com; merritt@geoconinc.com

Work Order: 1504849
Date Received: 4/21/2015

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1504849-013A	SB-16	Water		1	1LA	<input type="checkbox"/>	4/20/2015 13:25		1%+	<input type="checkbox"/>	
1504849-013B	SB-16	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 13:25	5 days	1%+	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>			1%+	<input type="checkbox"/>	
1504849-013C	SB-16	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 13:25	5 days	1%+	<input type="checkbox"/>	
1504849-014A	BC-3 6'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/20/2015 15:55	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
1504849-015A	BC-1	Water	SW8015B (Diesel)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 17:35	5 days	2%+	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>			2%+	<input type="checkbox"/>	
1504849-015B	BC-1	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 17:35	5 days	2%+	<input type="checkbox"/>	
				1	1LA	<input type="checkbox"/>			2%+	<input type="checkbox"/>	
1504849-015C	BC-1	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	1	aVOA w/ HCl	<input type="checkbox"/>	4/20/2015 17:35	5 days	2%+	<input type="checkbox"/>	

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



Sample Receipt Checklist

Client Name: **GEOCON Env. Consultants** Date and Time Received: **4/21/2015 4:12:18 PM**
 Project Name: **#E8722-02-01B; Caltrans Hegenberger** LogIn Reviewed by: **Maria Venegas**
 WorkOrder No: **1504849** Matrix: Soil/Water Carrier: Daniel (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes No
 Sample/Temp Blank temperature Temp: 2.2°C NA
 Water - VOA vials have zero headspace / no bubbles? Yes No NA
 Sample labels checked for correct preservation? Yes No
 pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? Yes No NA
 Samples Received on Ice? Yes No

(Ice Type: WET ICE)

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

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

 Comments:



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1504A02

Report Created for: GEOCON Env. Consultants

6671 Brisa St
Livermore, CA 94550

Project Contact: John Love

Project P.O.:

Project Name: #E8722-02-01B; Caltrans Hegenberger

Project Received: 04/24/2015

Analytical Report reviewed & approved for release on 05/05/2015 by:

Angela Rydelius,
Laboratory Manager

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





Glossary of Terms & Qualifier Definitions

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
WorkOrder: 1504A02

Glossary Abbreviation

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

Analytical Qualifiers

c2	surrogate recovery outside of the control limits due to matrix interference.
e1	unmodified or weakly modified diesel is significant
e2	diesel range compounds are significant; no recognizable pattern
e3	aged diesel is significant
e4	gasoline range compounds are significant.
e7	oil range compounds are significant
e8/e4	kerosene/kerosene range/jet fuel range; and/or gasoline range compounds are significant.
e8	kerosene/kerosene range/jet fuel range



Glossary of Terms & Qualifier Definitions

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
WorkOrder: 1504A02

Quality Control Qualifiers

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



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 2'	1504A02-001A	Soil	04/24/2015 06:45	GC10	104095
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	05/02/2015 00:46
tert-Amyl methyl ether (TAME)	ND		0.0050	1	05/02/2015 00:46
Benzene	ND		0.0050	1	05/02/2015 00:46
Bromobenzene	ND		0.0050	1	05/02/2015 00:46
Bromochloromethane	ND		0.0050	1	05/02/2015 00:46
Bromodichloromethane	ND		0.0050	1	05/02/2015 00:46
Bromoform	ND		0.0050	1	05/02/2015 00:46
Bromomethane	ND		0.0050	1	05/02/2015 00:46
2-Butanone (MEK)	ND		0.020	1	05/02/2015 00:46
t-Butyl alcohol (TBA)	ND		0.050	1	05/02/2015 00:46
n-Butyl benzene	ND		0.0050	1	05/02/2015 00:46
sec-Butyl benzene	ND		0.0050	1	05/02/2015 00:46
tert-Butyl benzene	ND		0.0050	1	05/02/2015 00:46
Carbon Disulfide	ND		0.0050	1	05/02/2015 00:46
Carbon Tetrachloride	ND		0.0050	1	05/02/2015 00:46
Chlorobenzene	ND		0.0050	1	05/02/2015 00:46
Chloroethane	ND		0.0050	1	05/02/2015 00:46
Chloroform	ND		0.0050	1	05/02/2015 00:46
Chloromethane	ND		0.0050	1	05/02/2015 00:46
2-Chlorotoluene	ND		0.0050	1	05/02/2015 00:46
4-Chlorotoluene	ND		0.0050	1	05/02/2015 00:46
Dibromochloromethane	ND		0.0050	1	05/02/2015 00:46
1,2-Dibromo-3-chloropropane	ND		0.0040	1	05/02/2015 00:46
1,2-Dibromoethane (EDB)	ND		0.0040	1	05/02/2015 00:46
Dibromomethane	ND		0.0050	1	05/02/2015 00:46
1,2-Dichlorobenzene	ND		0.0050	1	05/02/2015 00:46
1,3-Dichlorobenzene	ND		0.0050	1	05/02/2015 00:46
1,4-Dichlorobenzene	ND		0.0050	1	05/02/2015 00:46
Dichlorodifluoromethane	ND		0.0050	1	05/02/2015 00:46
1,1-Dichloroethane	ND		0.0050	1	05/02/2015 00:46
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	05/02/2015 00:46
1,1-Dichloroethene	ND		0.0050	1	05/02/2015 00:46
cis-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 00:46
trans-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 00:46
1,2-Dichloropropane	ND		0.0050	1	05/02/2015 00:46
1,3-Dichloropropane	ND		0.0050	1	05/02/2015 00:46
2,2-Dichloropropane	ND		0.0050	1	05/02/2015 00:46
1,1-Dichloropropene	ND		0.0050	1	05/02/2015 00:46

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 2'	1504A02-001A	Soil	04/24/2015 06:45	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 00:46
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 00:46
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 00:46
Ethylbenzene	ND	0.0050	1	05/02/2015 00:46
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 00:46
Freon 113	ND	0.0050	1	05/02/2015 00:46
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 00:46
Hexachloroethane	ND	0.0050	1	05/02/2015 00:46
2-Hexanone	ND	0.0050	1	05/02/2015 00:46
Isopropylbenzene	ND	0.0050	1	05/02/2015 00:46
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 00:46
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 00:46
Methylene chloride	ND	0.0050	1	05/02/2015 00:46
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 00:46
Naphthalene	ND	0.0050	1	05/02/2015 00:46
n-Propyl benzene	ND	0.0050	1	05/02/2015 00:46
Styrene	ND	0.0050	1	05/02/2015 00:46
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 00:46
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 00:46
Tetrachloroethene	ND	0.0050	1	05/02/2015 00:46
Toluene	ND	0.0050	1	05/02/2015 00:46
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 00:46
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 00:46
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 00:46
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 00:46
Trichloroethene	ND	0.0050	1	05/02/2015 00:46
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 00:46
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 00:46
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 00:46
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 00:46
Vinyl Chloride	ND	0.0050	1	05/02/2015 00:46
Xylenes, Total	ND	0.0050	1	05/02/2015 00:46

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 2'	1504A02-001A	Soil	04/24/2015 06:45	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		05/02/2015 00:46
Toluene-d8	100	70-130		05/02/2015 00:46
4-BFB	107	70-130		05/02/2015 00:46

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 3.5'	1504A02-002A	Soil	04/24/2015 06:45	GC10	104095
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	05/02/2015 01:27
tert-Amyl methyl ether (TAME)	ND		0.0050	1	05/02/2015 01:27
Benzene	ND		0.0050	1	05/02/2015 01:27
Bromobenzene	ND		0.0050	1	05/02/2015 01:27
Bromochloromethane	ND		0.0050	1	05/02/2015 01:27
Bromodichloromethane	ND		0.0050	1	05/02/2015 01:27
Bromoform	ND		0.0050	1	05/02/2015 01:27
Bromomethane	ND		0.0050	1	05/02/2015 01:27
2-Butanone (MEK)	ND		0.020	1	05/02/2015 01:27
t-Butyl alcohol (TBA)	ND		0.050	1	05/02/2015 01:27
n-Butyl benzene	ND		0.0050	1	05/02/2015 01:27
sec-Butyl benzene	ND		0.0050	1	05/02/2015 01:27
tert-Butyl benzene	ND		0.0050	1	05/02/2015 01:27
Carbon Disulfide	ND		0.0050	1	05/02/2015 01:27
Carbon Tetrachloride	ND		0.0050	1	05/02/2015 01:27
Chlorobenzene	ND		0.0050	1	05/02/2015 01:27
Chloroethane	ND		0.0050	1	05/02/2015 01:27
Chloroform	ND		0.0050	1	05/02/2015 01:27
Chloromethane	ND		0.0050	1	05/02/2015 01:27
2-Chlorotoluene	ND		0.0050	1	05/02/2015 01:27
4-Chlorotoluene	ND		0.0050	1	05/02/2015 01:27
Dibromochloromethane	ND		0.0050	1	05/02/2015 01:27
1,2-Dibromo-3-chloropropane	ND		0.0040	1	05/02/2015 01:27
1,2-Dibromoethane (EDB)	ND		0.0040	1	05/02/2015 01:27
Dibromomethane	ND		0.0050	1	05/02/2015 01:27
1,2-Dichlorobenzene	ND		0.0050	1	05/02/2015 01:27
1,3-Dichlorobenzene	ND		0.0050	1	05/02/2015 01:27
1,4-Dichlorobenzene	ND		0.0050	1	05/02/2015 01:27
Dichlorodifluoromethane	ND		0.0050	1	05/02/2015 01:27
1,1-Dichloroethane	ND		0.0050	1	05/02/2015 01:27
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	05/02/2015 01:27
1,1-Dichloroethene	ND		0.0050	1	05/02/2015 01:27
cis-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 01:27
trans-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 01:27
1,2-Dichloropropane	ND		0.0050	1	05/02/2015 01:27
1,3-Dichloropropane	ND		0.0050	1	05/02/2015 01:27
2,2-Dichloropropane	ND		0.0050	1	05/02/2015 01:27
1,1-Dichloropropene	ND		0.0050	1	05/02/2015 01:27

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 3.5'	1504A02-002A	Soil	04/24/2015 06:45	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 01:27
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 01:27
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 01:27
Ethylbenzene	ND	0.0050	1	05/02/2015 01:27
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 01:27
Freon 113	ND	0.0050	1	05/02/2015 01:27
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 01:27
Hexachloroethane	ND	0.0050	1	05/02/2015 01:27
2-Hexanone	ND	0.0050	1	05/02/2015 01:27
Isopropylbenzene	ND	0.0050	1	05/02/2015 01:27
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 01:27
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 01:27
Methylene chloride	ND	0.0050	1	05/02/2015 01:27
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 01:27
Naphthalene	ND	0.0050	1	05/02/2015 01:27
n-Propyl benzene	ND	0.0050	1	05/02/2015 01:27
Styrene	ND	0.0050	1	05/02/2015 01:27
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 01:27
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 01:27
Tetrachloroethene	ND	0.0050	1	05/02/2015 01:27
Toluene	ND	0.0050	1	05/02/2015 01:27
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 01:27
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 01:27
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 01:27
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 01:27
Trichloroethene	ND	0.0050	1	05/02/2015 01:27
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 01:27
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 01:27
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 01:27
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 01:27
Vinyl Chloride	ND	0.0050	1	05/02/2015 01:27
Xylenes, Total	ND	0.0050	1	05/02/2015 01:27

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 3.5'	1504A02-002A	Soil	04/24/2015 06:45	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	90	70-130		05/02/2015 01:27
Toluene-d8	100	70-130		05/02/2015 01:27
4-BFB	111	70-130		05/02/2015 01:27

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 6.5'	1504A02-003A	Soil	04/24/2015 06:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 02:08
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 02:08
Benzene	ND	0.0050	1	05/02/2015 02:08
Bromobenzene	ND	0.0050	1	05/02/2015 02:08
Bromochloromethane	ND	0.0050	1	05/02/2015 02:08
Bromodichloromethane	ND	0.0050	1	05/02/2015 02:08
Bromoform	ND	0.0050	1	05/02/2015 02:08
Bromomethane	ND	0.0050	1	05/02/2015 02:08
2-Butanone (MEK)	ND	0.020	1	05/02/2015 02:08
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 02:08
n-Butyl benzene	ND	0.0050	1	05/02/2015 02:08
sec-Butyl benzene	ND	0.0050	1	05/02/2015 02:08
tert-Butyl benzene	ND	0.0050	1	05/02/2015 02:08
Carbon Disulfide	ND	0.0050	1	05/02/2015 02:08
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 02:08
Chlorobenzene	ND	0.0050	1	05/02/2015 02:08
Chloroethane	ND	0.0050	1	05/02/2015 02:08
Chloroform	ND	0.0050	1	05/02/2015 02:08
Chloromethane	ND	0.0050	1	05/02/2015 02:08
2-Chlorotoluene	ND	0.0050	1	05/02/2015 02:08
4-Chlorotoluene	ND	0.0050	1	05/02/2015 02:08
Dibromochloromethane	ND	0.0050	1	05/02/2015 02:08
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 02:08
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 02:08
Dibromomethane	ND	0.0050	1	05/02/2015 02:08
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 02:08
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 02:08
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 02:08
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 02:08
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 02:08
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 02:08
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 02:08
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 02:08
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 02:08
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 02:08
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 02:08
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 02:08
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 02:08

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 6.5'	1504A02-003A	Soil	04/24/2015 06:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 02:08
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 02:08
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 02:08
Ethylbenzene	ND	0.0050	1	05/02/2015 02:08
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 02:08
Freon 113	ND	0.0050	1	05/02/2015 02:08
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 02:08
Hexachloroethane	ND	0.0050	1	05/02/2015 02:08
2-Hexanone	ND	0.0050	1	05/02/2015 02:08
Isopropylbenzene	ND	0.0050	1	05/02/2015 02:08
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 02:08
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 02:08
Methylene chloride	ND	0.0050	1	05/02/2015 02:08
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 02:08
Naphthalene	ND	0.0050	1	05/02/2015 02:08
n-Propyl benzene	ND	0.0050	1	05/02/2015 02:08
Styrene	ND	0.0050	1	05/02/2015 02:08
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 02:08
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 02:08
Tetrachloroethene	ND	0.0050	1	05/02/2015 02:08
Toluene	ND	0.0050	1	05/02/2015 02:08
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 02:08
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 02:08
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 02:08
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 02:08
Trichloroethene	ND	0.0050	1	05/02/2015 02:08
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 02:08
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 02:08
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 02:08
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 02:08
Vinyl Chloride	ND	0.0050	1	05/02/2015 02:08
Xylenes, Total	ND	0.0050	1	05/02/2015 02:08

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 6.5'	1504A02-003A	Soil	04/24/2015 06:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	91	70-130		05/02/2015 02:08
Toluene-d8	98	70-130		05/02/2015 02:08
4-BFB	102	70-130		05/02/2015 02:08

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 11.5'	1504A02-004A	Soil	04/24/2015 07:05	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 02:49
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 02:49
Benzene	ND	0.0050	1	05/02/2015 02:49
Bromobenzene	ND	0.0050	1	05/02/2015 02:49
Bromochloromethane	ND	0.0050	1	05/02/2015 02:49
Bromodichloromethane	ND	0.0050	1	05/02/2015 02:49
Bromoform	ND	0.0050	1	05/02/2015 02:49
Bromomethane	ND	0.0050	1	05/02/2015 02:49
2-Butanone (MEK)	ND	0.020	1	05/02/2015 02:49
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 02:49
n-Butyl benzene	ND	0.0050	1	05/02/2015 02:49
sec-Butyl benzene	ND	0.0050	1	05/02/2015 02:49
tert-Butyl benzene	ND	0.0050	1	05/02/2015 02:49
Carbon Disulfide	ND	0.0050	1	05/02/2015 02:49
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 02:49
Chlorobenzene	ND	0.0050	1	05/02/2015 02:49
Chloroethane	ND	0.0050	1	05/02/2015 02:49
Chloroform	ND	0.0050	1	05/02/2015 02:49
Chloromethane	ND	0.0050	1	05/02/2015 02:49
2-Chlorotoluene	ND	0.0050	1	05/02/2015 02:49
4-Chlorotoluene	ND	0.0050	1	05/02/2015 02:49
Dibromochloromethane	ND	0.0050	1	05/02/2015 02:49
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 02:49
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 02:49
Dibromomethane	ND	0.0050	1	05/02/2015 02:49
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 02:49
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 02:49
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 02:49
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 02:49
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 02:49
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 02:49
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 02:49
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 02:49
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 02:49
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 02:49
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 02:49
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 02:49
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 02:49

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 11.5'	1504A02-004A	Soil	04/24/2015 07:05	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 02:49
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 02:49
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 02:49
Ethylbenzene	ND	0.0050	1	05/02/2015 02:49
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 02:49
Freon 113	ND	0.0050	1	05/02/2015 02:49
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 02:49
Hexachloroethane	ND	0.0050	1	05/02/2015 02:49
2-Hexanone	ND	0.0050	1	05/02/2015 02:49
Isopropylbenzene	ND	0.0050	1	05/02/2015 02:49
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 02:49
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 02:49
Methylene chloride	ND	0.0050	1	05/02/2015 02:49
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 02:49
Naphthalene	ND	0.0050	1	05/02/2015 02:49
n-Propyl benzene	ND	0.0050	1	05/02/2015 02:49
Styrene	ND	0.0050	1	05/02/2015 02:49
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 02:49
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 02:49
Tetrachloroethene	ND	0.0050	1	05/02/2015 02:49
Toluene	ND	0.0050	1	05/02/2015 02:49
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 02:49
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 02:49
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 02:49
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 02:49
Trichloroethene	ND	0.0050	1	05/02/2015 02:49
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 02:49
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 02:49
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 02:49
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 02:49
Vinyl Chloride	ND	0.0050	1	05/02/2015 02:49
Xylenes, Total	ND	0.0050	1	05/02/2015 02:49

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 11.5'	1504A02-004A	Soil	04/24/2015 07:05	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	90	70-130		05/02/2015 02:49
Toluene-d8	101	70-130		05/02/2015 02:49
4-BFB	87	70-130		05/02/2015 02:49

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 2.5'	1504A02-006A	Soil	04/24/2015 07:20	GC10	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 03:30	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 03:30	
Benzene	ND	0.0050	1	05/02/2015 03:30	
Bromobenzene	ND	0.0050	1	05/02/2015 03:30	
Bromochloromethane	ND	0.0050	1	05/02/2015 03:30	
Bromodichloromethane	ND	0.0050	1	05/02/2015 03:30	
Bromoform	ND	0.0050	1	05/02/2015 03:30	
Bromomethane	ND	0.0050	1	05/02/2015 03:30	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 03:30	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 03:30	
n-Butyl benzene	ND	0.0050	1	05/02/2015 03:30	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 03:30	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 03:30	
Carbon Disulfide	ND	0.0050	1	05/02/2015 03:30	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 03:30	
Chlorobenzene	ND	0.0050	1	05/02/2015 03:30	
Chloroethane	ND	0.0050	1	05/02/2015 03:30	
Chloroform	ND	0.0050	1	05/02/2015 03:30	
Chloromethane	ND	0.0050	1	05/02/2015 03:30	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 03:30	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 03:30	
Dibromochloromethane	ND	0.0050	1	05/02/2015 03:30	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 03:30	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 03:30	
Dibromomethane	ND	0.0050	1	05/02/2015 03:30	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 03:30	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 03:30	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 03:30	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 03:30	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 03:30	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 03:30	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 03:30	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 03:30	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 03:30	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 03:30	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 03:30	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 03:30	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 03:30	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 2.5'	1504A02-006A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 03:30
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 03:30
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 03:30
Ethylbenzene	ND	0.0050	1	05/02/2015 03:30
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 03:30
Freon 113	ND	0.0050	1	05/02/2015 03:30
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 03:30
Hexachloroethane	ND	0.0050	1	05/02/2015 03:30
2-Hexanone	ND	0.0050	1	05/02/2015 03:30
Isopropylbenzene	ND	0.0050	1	05/02/2015 03:30
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 03:30
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 03:30
Methylene chloride	ND	0.0050	1	05/02/2015 03:30
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 03:30
Naphthalene	ND	0.0050	1	05/02/2015 03:30
n-Propyl benzene	ND	0.0050	1	05/02/2015 03:30
Styrene	ND	0.0050	1	05/02/2015 03:30
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 03:30
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 03:30
Tetrachloroethene	ND	0.0050	1	05/02/2015 03:30
Toluene	ND	0.0050	1	05/02/2015 03:30
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 03:30
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 03:30
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 03:30
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 03:30
Trichloroethene	ND	0.0050	1	05/02/2015 03:30
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 03:30
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 03:30
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 03:30
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 03:30
Vinyl Chloride	ND	0.0050	1	05/02/2015 03:30
Xylenes, Total	ND	0.0050	1	05/02/2015 03:30

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 2.5'	1504A02-006A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	90	70-130		05/02/2015 03:30
Toluene-d8	100	70-130		05/02/2015 03:30
4-BFB	91	70-130		05/02/2015 03:30

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 3.5'	1504A02-007A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 04:11
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 04:11
Benzene	ND	0.0050	1	05/02/2015 04:11
Bromobenzene	ND	0.0050	1	05/02/2015 04:11
Bromochloromethane	ND	0.0050	1	05/02/2015 04:11
Bromodichloromethane	ND	0.0050	1	05/02/2015 04:11
Bromoform	ND	0.0050	1	05/02/2015 04:11
Bromomethane	ND	0.0050	1	05/02/2015 04:11
2-Butanone (MEK)	ND	0.020	1	05/02/2015 04:11
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 04:11
n-Butyl benzene	ND	0.0050	1	05/02/2015 04:11
sec-Butyl benzene	ND	0.0050	1	05/02/2015 04:11
tert-Butyl benzene	ND	0.0050	1	05/02/2015 04:11
Carbon Disulfide	ND	0.0050	1	05/02/2015 04:11
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 04:11
Chlorobenzene	ND	0.0050	1	05/02/2015 04:11
Chloroethane	ND	0.0050	1	05/02/2015 04:11
Chloroform	ND	0.0050	1	05/02/2015 04:11
Chloromethane	ND	0.0050	1	05/02/2015 04:11
2-Chlorotoluene	ND	0.0050	1	05/02/2015 04:11
4-Chlorotoluene	ND	0.0050	1	05/02/2015 04:11
Dibromochloromethane	ND	0.0050	1	05/02/2015 04:11
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 04:11
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 04:11
Dibromomethane	ND	0.0050	1	05/02/2015 04:11
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:11
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:11
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:11
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 04:11
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 04:11
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 04:11
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 04:11
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 04:11
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 04:11
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 04:11
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 04:11
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 04:11
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 04:11

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 3.5'	1504A02-007A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 04:11
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 04:11
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 04:11
Ethylbenzene	ND	0.0050	1	05/02/2015 04:11
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 04:11
Freon 113	ND	0.0050	1	05/02/2015 04:11
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 04:11
Hexachloroethane	ND	0.0050	1	05/02/2015 04:11
2-Hexanone	ND	0.0050	1	05/02/2015 04:11
Isopropylbenzene	ND	0.0050	1	05/02/2015 04:11
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 04:11
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 04:11
Methylene chloride	ND	0.0050	1	05/02/2015 04:11
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 04:11
Naphthalene	ND	0.0050	1	05/02/2015 04:11
n-Propyl benzene	ND	0.0050	1	05/02/2015 04:11
Styrene	ND	0.0050	1	05/02/2015 04:11
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 04:11
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 04:11
Tetrachloroethene	ND	0.0050	1	05/02/2015 04:11
Toluene	ND	0.0050	1	05/02/2015 04:11
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 04:11
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 04:11
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 04:11
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 04:11
Trichloroethene	ND	0.0050	1	05/02/2015 04:11
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 04:11
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 04:11
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 04:11
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 04:11
Vinyl Chloride	ND	0.0050	1	05/02/2015 04:11
Xylenes, Total	ND	0.0050	1	05/02/2015 04:11

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 3.5'	1504A02-007A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		05/02/2015 04:11
Toluene-d8	99	70-130		05/02/2015 04:11
4-BFB	89	70-130		05/02/2015 04:11

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 7.5'	1504A02-008A	Soil	04/24/2015 07:30	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 04:52
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 04:52
Benzene	ND	0.0050	1	05/02/2015 04:52
Bromobenzene	ND	0.0050	1	05/02/2015 04:52
Bromochloromethane	ND	0.0050	1	05/02/2015 04:52
Bromodichloromethane	ND	0.0050	1	05/02/2015 04:52
Bromoform	ND	0.0050	1	05/02/2015 04:52
Bromomethane	ND	0.0050	1	05/02/2015 04:52
2-Butanone (MEK)	ND	0.020	1	05/02/2015 04:52
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 04:52
n-Butyl benzene	ND	0.0050	1	05/02/2015 04:52
sec-Butyl benzene	ND	0.0050	1	05/02/2015 04:52
tert-Butyl benzene	ND	0.0050	1	05/02/2015 04:52
Carbon Disulfide	ND	0.0050	1	05/02/2015 04:52
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 04:52
Chlorobenzene	ND	0.0050	1	05/02/2015 04:52
Chloroethane	ND	0.0050	1	05/02/2015 04:52
Chloroform	ND	0.0050	1	05/02/2015 04:52
Chloromethane	ND	0.0050	1	05/02/2015 04:52
2-Chlorotoluene	ND	0.0050	1	05/02/2015 04:52
4-Chlorotoluene	ND	0.0050	1	05/02/2015 04:52
Dibromochloromethane	ND	0.0050	1	05/02/2015 04:52
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 04:52
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 04:52
Dibromomethane	ND	0.0050	1	05/02/2015 04:52
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:52
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:52
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:52
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 04:52
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 04:52
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 04:52
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 04:52
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 04:52
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 04:52
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 04:52
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 04:52
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 04:52
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 04:52

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 7.5'	1504A02-008A	Soil	04/24/2015 07:30	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 04:52
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 04:52
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 04:52
Ethylbenzene	ND	0.0050	1	05/02/2015 04:52
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 04:52
Freon 113	ND	0.0050	1	05/02/2015 04:52
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 04:52
Hexachloroethane	ND	0.0050	1	05/02/2015 04:52
2-Hexanone	ND	0.0050	1	05/02/2015 04:52
Isopropylbenzene	ND	0.0050	1	05/02/2015 04:52
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 04:52
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 04:52
Methylene chloride	ND	0.0050	1	05/02/2015 04:52
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 04:52
Naphthalene	ND	0.0050	1	05/02/2015 04:52
n-Propyl benzene	ND	0.0050	1	05/02/2015 04:52
Styrene	ND	0.0050	1	05/02/2015 04:52
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 04:52
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 04:52
Tetrachloroethene	ND	0.0050	1	05/02/2015 04:52
Toluene	ND	0.0050	1	05/02/2015 04:52
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 04:52
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 04:52
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 04:52
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 04:52
Trichloroethene	ND	0.0050	1	05/02/2015 04:52
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 04:52
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 04:52
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 04:52
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 04:52
Vinyl Chloride	ND	0.0050	1	05/02/2015 04:52
Xylenes, Total	ND	0.0050	1	05/02/2015 04:52

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 7.5'	1504A02-008A	Soil	04/24/2015 07:30	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	89	70-130		05/02/2015 04:52
Toluene-d8	99	70-130		05/02/2015 04:52
4-BFB	85	70-130		05/02/2015 04:52

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 10.5	1504A02-009A	Soil	04/24/2015 07:40	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 05:33
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 05:33
Benzene	ND	0.0050	1	05/02/2015 05:33
Bromobenzene	ND	0.0050	1	05/02/2015 05:33
Bromochloromethane	ND	0.0050	1	05/02/2015 05:33
Bromodichloromethane	ND	0.0050	1	05/02/2015 05:33
Bromoform	ND	0.0050	1	05/02/2015 05:33
Bromomethane	ND	0.0050	1	05/02/2015 05:33
2-Butanone (MEK)	ND	0.020	1	05/02/2015 05:33
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 05:33
n-Butyl benzene	ND	0.0050	1	05/02/2015 05:33
sec-Butyl benzene	ND	0.0050	1	05/02/2015 05:33
tert-Butyl benzene	ND	0.0050	1	05/02/2015 05:33
Carbon Disulfide	ND	0.0050	1	05/02/2015 05:33
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 05:33
Chlorobenzene	ND	0.0050	1	05/02/2015 05:33
Chloroethane	ND	0.0050	1	05/02/2015 05:33
Chloroform	ND	0.0050	1	05/02/2015 05:33
Chloromethane	ND	0.0050	1	05/02/2015 05:33
2-Chlorotoluene	ND	0.0050	1	05/02/2015 05:33
4-Chlorotoluene	ND	0.0050	1	05/02/2015 05:33
Dibromochloromethane	ND	0.0050	1	05/02/2015 05:33
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 05:33
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 05:33
Dibromomethane	ND	0.0050	1	05/02/2015 05:33
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:33
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:33
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:33
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 05:33
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 05:33
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 05:33
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 05:33
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 05:33
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 05:33
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 05:33
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 05:33
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 05:33
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 05:33

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 10.5	1504A02-009A	Soil	04/24/2015 07:40	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 05:33
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 05:33
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 05:33
Ethylbenzene	ND	0.0050	1	05/02/2015 05:33
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 05:33
Freon 113	ND	0.0050	1	05/02/2015 05:33
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 05:33
Hexachloroethane	ND	0.0050	1	05/02/2015 05:33
2-Hexanone	ND	0.0050	1	05/02/2015 05:33
Isopropylbenzene	ND	0.0050	1	05/02/2015 05:33
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 05:33
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 05:33
Methylene chloride	ND	0.0050	1	05/02/2015 05:33
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 05:33
Naphthalene	ND	0.0050	1	05/02/2015 05:33
n-Propyl benzene	ND	0.0050	1	05/02/2015 05:33
Styrene	ND	0.0050	1	05/02/2015 05:33
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 05:33
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 05:33
Tetrachloroethene	ND	0.0050	1	05/02/2015 05:33
Toluene	ND	0.0050	1	05/02/2015 05:33
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 05:33
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 05:33
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 05:33
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 05:33
Trichloroethene	ND	0.0050	1	05/02/2015 05:33
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 05:33
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 05:33
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 05:33
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 05:33
Vinyl Chloride	ND	0.0050	1	05/02/2015 05:33
Xylenes, Total	ND	0.0050	1	05/02/2015 05:33

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 10.5	1504A02-009A	Soil	04/24/2015 07:40	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	94	70-130		05/02/2015 05:33
Toluene-d8	108	70-130		05/02/2015 05:33
4-BFB	81	70-130		05/02/2015 05:33

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 2'	1504A02-011A	Soil	04/24/2015 07:50	GC10	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 06:14	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 06:14	
Benzene	ND	0.0050	1	05/02/2015 06:14	
Bromobenzene	ND	0.0050	1	05/02/2015 06:14	
Bromochloromethane	ND	0.0050	1	05/02/2015 06:14	
Bromodichloromethane	ND	0.0050	1	05/02/2015 06:14	
Bromoform	ND	0.0050	1	05/02/2015 06:14	
Bromomethane	ND	0.0050	1	05/02/2015 06:14	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 06:14	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 06:14	
n-Butyl benzene	ND	0.0050	1	05/02/2015 06:14	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 06:14	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 06:14	
Carbon Disulfide	ND	0.0050	1	05/02/2015 06:14	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 06:14	
Chlorobenzene	ND	0.0050	1	05/02/2015 06:14	
Chloroethane	ND	0.0050	1	05/02/2015 06:14	
Chloroform	ND	0.0050	1	05/02/2015 06:14	
Chloromethane	ND	0.0050	1	05/02/2015 06:14	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 06:14	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 06:14	
Dibromochloromethane	ND	0.0050	1	05/02/2015 06:14	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 06:14	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 06:14	
Dibromomethane	ND	0.0050	1	05/02/2015 06:14	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:14	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:14	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:14	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 06:14	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 06:14	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 06:14	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 06:14	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 06:14	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 06:14	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 06:14	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 06:14	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 06:14	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 06:14	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 2'	1504A02-011A	Soil	04/24/2015 07:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 06:14
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 06:14
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 06:14
Ethylbenzene	ND	0.0050	1	05/02/2015 06:14
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 06:14
Freon 113	ND	0.0050	1	05/02/2015 06:14
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 06:14
Hexachloroethane	ND	0.0050	1	05/02/2015 06:14
2-Hexanone	ND	0.0050	1	05/02/2015 06:14
Isopropylbenzene	ND	0.0050	1	05/02/2015 06:14
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 06:14
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 06:14
Methylene chloride	ND	0.0050	1	05/02/2015 06:14
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 06:14
Naphthalene	ND	0.0050	1	05/02/2015 06:14
n-Propyl benzene	ND	0.0050	1	05/02/2015 06:14
Styrene	ND	0.0050	1	05/02/2015 06:14
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 06:14
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 06:14
Tetrachloroethene	ND	0.0050	1	05/02/2015 06:14
Toluene	ND	0.0050	1	05/02/2015 06:14
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 06:14
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 06:14
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 06:14
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 06:14
Trichloroethene	ND	0.0050	1	05/02/2015 06:14
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 06:14
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 06:14
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 06:14
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 06:14
Vinyl Chloride	ND	0.0050	1	05/02/2015 06:14
Xylenes, Total	ND	0.0050	1	05/02/2015 06:14

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 2'	1504A02-011A	Soil	04/24/2015 07:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		05/02/2015 06:14
Toluene-d8	100	70-130		05/02/2015 06:14
4-BFB	96	70-130		05/02/2015 06:14

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 3.5'	1504A02-012A	Soil	04/24/2015 07:50	GC10	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 06:55	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 06:55	
Benzene	ND	0.0050	1	05/02/2015 06:55	
Bromobenzene	ND	0.0050	1	05/02/2015 06:55	
Bromochloromethane	ND	0.0050	1	05/02/2015 06:55	
Bromodichloromethane	ND	0.0050	1	05/02/2015 06:55	
Bromoform	ND	0.0050	1	05/02/2015 06:55	
Bromomethane	ND	0.0050	1	05/02/2015 06:55	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 06:55	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 06:55	
n-Butyl benzene	ND	0.0050	1	05/02/2015 06:55	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 06:55	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 06:55	
Carbon Disulfide	ND	0.0050	1	05/02/2015 06:55	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 06:55	
Chlorobenzene	ND	0.0050	1	05/02/2015 06:55	
Chloroethane	ND	0.0050	1	05/02/2015 06:55	
Chloroform	ND	0.0050	1	05/02/2015 06:55	
Chloromethane	ND	0.0050	1	05/02/2015 06:55	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 06:55	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 06:55	
Dibromochloromethane	ND	0.0050	1	05/02/2015 06:55	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 06:55	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 06:55	
Dibromomethane	ND	0.0050	1	05/02/2015 06:55	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:55	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:55	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:55	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 06:55	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 06:55	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 06:55	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 06:55	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 06:55	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 06:55	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 06:55	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 06:55	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 06:55	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 06:55	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 3.5'	1504A02-012A	Soil	04/24/2015 07:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 06:55
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 06:55
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 06:55
Ethylbenzene	ND	0.0050	1	05/02/2015 06:55
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 06:55
Freon 113	ND	0.0050	1	05/02/2015 06:55
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 06:55
Hexachloroethane	ND	0.0050	1	05/02/2015 06:55
2-Hexanone	ND	0.0050	1	05/02/2015 06:55
Isopropylbenzene	ND	0.0050	1	05/02/2015 06:55
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 06:55
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 06:55
Methylene chloride	ND	0.0050	1	05/02/2015 06:55
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 06:55
Naphthalene	ND	0.0050	1	05/02/2015 06:55
n-Propyl benzene	ND	0.0050	1	05/02/2015 06:55
Styrene	ND	0.0050	1	05/02/2015 06:55
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 06:55
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 06:55
Tetrachloroethene	ND	0.0050	1	05/02/2015 06:55
Toluene	ND	0.0050	1	05/02/2015 06:55
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 06:55
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 06:55
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 06:55
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 06:55
Trichloroethene	ND	0.0050	1	05/02/2015 06:55
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 06:55
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 06:55
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 06:55
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 06:55
Vinyl Chloride	ND	0.0050	1	05/02/2015 06:55
Xylenes, Total	ND	0.0050	1	05/02/2015 06:55

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 3.5'	1504A02-012A	Soil	04/24/2015 07:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	92	70-130		05/02/2015 06:55
Toluene-d8	99	70-130		05/02/2015 06:55
4-BFB	97	70-130		05/02/2015 06:55

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 7.5'	1504A02-013A	Soil	04/24/2015 07:55	GC16	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 03:45	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 03:45	
Benzene	ND	0.0050	1	05/02/2015 03:45	
Bromobenzene	ND	0.0050	1	05/02/2015 03:45	
Bromochloromethane	ND	0.0050	1	05/02/2015 03:45	
Bromodichloromethane	ND	0.0050	1	05/02/2015 03:45	
Bromoform	ND	0.0050	1	05/02/2015 03:45	
Bromomethane	ND	0.0050	1	05/02/2015 03:45	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 03:45	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 03:45	
n-Butyl benzene	ND	0.0050	1	05/02/2015 03:45	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 03:45	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 03:45	
Carbon Disulfide	ND	0.0050	1	05/02/2015 03:45	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 03:45	
Chlorobenzene	ND	0.0050	1	05/02/2015 03:45	
Chloroethane	ND	0.0050	1	05/02/2015 03:45	
Chloroform	ND	0.0050	1	05/02/2015 03:45	
Chloromethane	ND	0.0050	1	05/02/2015 03:45	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 03:45	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 03:45	
Dibromochloromethane	ND	0.0050	1	05/02/2015 03:45	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 03:45	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 03:45	
Dibromomethane	ND	0.0050	1	05/02/2015 03:45	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 03:45	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 03:45	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 03:45	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 03:45	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 03:45	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 03:45	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 03:45	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 03:45	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 03:45	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 03:45	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 03:45	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 03:45	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 03:45	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 7.5'	1504A02-013A	Soil	04/24/2015 07:55	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 03:45
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 03:45
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 03:45
Ethylbenzene	ND	0.0050	1	05/02/2015 03:45
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 03:45
Freon 113	ND	0.0050	1	05/02/2015 03:45
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 03:45
Hexachloroethane	ND	0.0050	1	05/02/2015 03:45
2-Hexanone	ND	0.0050	1	05/02/2015 03:45
Isopropylbenzene	ND	0.0050	1	05/02/2015 03:45
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 03:45
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 03:45
Methylene chloride	ND	0.0050	1	05/02/2015 03:45
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 03:45
Naphthalene	ND	0.0050	1	05/02/2015 03:45
n-Propyl benzene	ND	0.0050	1	05/02/2015 03:45
Styrene	ND	0.0050	1	05/02/2015 03:45
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 03:45
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 03:45
Tetrachloroethene	ND	0.0050	1	05/02/2015 03:45
Toluene	ND	0.0050	1	05/02/2015 03:45
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 03:45
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 03:45
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 03:45
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 03:45
Trichloroethene	ND	0.0050	1	05/02/2015 03:45
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 03:45
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 03:45
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 03:45
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 03:45
Vinyl Chloride	ND	0.0050	1	05/02/2015 03:45
Xylenes, Total	ND	0.0050	1	05/02/2015 03:45

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 7.5'	1504A02-013A	Soil	04/24/2015 07:55	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	86	70-130		05/02/2015 03:45
Toluene-d8	95	70-130		05/02/2015 03:45
4-BFB	97	70-130		05/02/2015 03:45

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 11.5'	1504A02-014A	Soil	04/24/2015 08:05	GC16	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 04:27	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 04:27	
Benzene	ND	0.0050	1	05/02/2015 04:27	
Bromobenzene	ND	0.0050	1	05/02/2015 04:27	
Bromochloromethane	ND	0.0050	1	05/02/2015 04:27	
Bromodichloromethane	ND	0.0050	1	05/02/2015 04:27	
Bromoform	ND	0.0050	1	05/02/2015 04:27	
Bromomethane	ND	0.0050	1	05/02/2015 04:27	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 04:27	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 04:27	
n-Butyl benzene	ND	0.0050	1	05/02/2015 04:27	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 04:27	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 04:27	
Carbon Disulfide	ND	0.0050	1	05/02/2015 04:27	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 04:27	
Chlorobenzene	ND	0.0050	1	05/02/2015 04:27	
Chloroethane	ND	0.0050	1	05/02/2015 04:27	
Chloroform	ND	0.0050	1	05/02/2015 04:27	
Chloromethane	ND	0.0050	1	05/02/2015 04:27	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 04:27	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 04:27	
Dibromochloromethane	ND	0.0050	1	05/02/2015 04:27	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 04:27	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 04:27	
Dibromomethane	ND	0.0050	1	05/02/2015 04:27	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:27	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:27	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 04:27	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 04:27	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 04:27	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 04:27	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 04:27	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 04:27	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 04:27	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 04:27	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 04:27	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 04:27	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 04:27	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 11.5'	1504A02-014A	Soil	04/24/2015 08:05	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 04:27
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 04:27
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 04:27
Ethylbenzene	ND	0.0050	1	05/02/2015 04:27
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 04:27
Freon 113	ND	0.0050	1	05/02/2015 04:27
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 04:27
Hexachloroethane	ND	0.0050	1	05/02/2015 04:27
2-Hexanone	ND	0.0050	1	05/02/2015 04:27
Isopropylbenzene	ND	0.0050	1	05/02/2015 04:27
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 04:27
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 04:27
Methylene chloride	ND	0.0050	1	05/02/2015 04:27
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 04:27
Naphthalene	ND	0.0050	1	05/02/2015 04:27
n-Propyl benzene	ND	0.0050	1	05/02/2015 04:27
Styrene	ND	0.0050	1	05/02/2015 04:27
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 04:27
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 04:27
Tetrachloroethene	ND	0.0050	1	05/02/2015 04:27
Toluene	ND	0.0050	1	05/02/2015 04:27
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 04:27
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 04:27
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 04:27
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 04:27
Trichloroethene	ND	0.0050	1	05/02/2015 04:27
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 04:27
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 04:27
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 04:27
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 04:27
Vinyl Chloride	ND	0.0050	1	05/02/2015 04:27
Xylenes, Total	ND	0.0050	1	05/02/2015 04:27

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 11.5'	1504A02-014A	Soil	04/24/2015 08:05	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	86	70-130		05/02/2015 04:27
Toluene-d8	94	70-130		05/02/2015 04:27
4-BFB	99	70-130		05/02/2015 04:27

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 15'	1504A02-015A	Soil	04/24/2015 08:20	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 05:10
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 05:10
Benzene	ND	0.0050	1	05/02/2015 05:10
Bromobenzene	ND	0.0050	1	05/02/2015 05:10
Bromochloromethane	ND	0.0050	1	05/02/2015 05:10
Bromodichloromethane	ND	0.0050	1	05/02/2015 05:10
Bromoform	ND	0.0050	1	05/02/2015 05:10
Bromomethane	ND	0.0050	1	05/02/2015 05:10
2-Butanone (MEK)	ND	0.020	1	05/02/2015 05:10
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 05:10
n-Butyl benzene	ND	0.0050	1	05/02/2015 05:10
sec-Butyl benzene	ND	0.0050	1	05/02/2015 05:10
tert-Butyl benzene	ND	0.0050	1	05/02/2015 05:10
Carbon Disulfide	ND	0.0050	1	05/02/2015 05:10
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 05:10
Chlorobenzene	ND	0.0050	1	05/02/2015 05:10
Chloroethane	ND	0.0050	1	05/02/2015 05:10
Chloroform	ND	0.0050	1	05/02/2015 05:10
Chloromethane	ND	0.0050	1	05/02/2015 05:10
2-Chlorotoluene	ND	0.0050	1	05/02/2015 05:10
4-Chlorotoluene	ND	0.0050	1	05/02/2015 05:10
Dibromochloromethane	ND	0.0050	1	05/02/2015 05:10
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 05:10
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 05:10
Dibromomethane	ND	0.0050	1	05/02/2015 05:10
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:10
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:10
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:10
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 05:10
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 05:10
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 05:10
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 05:10
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 05:10
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 05:10
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 05:10
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 05:10
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 05:10
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 05:10

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 15'	1504A02-015A	Soil	04/24/2015 08:20	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 05:10
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 05:10
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 05:10
Ethylbenzene	ND	0.0050	1	05/02/2015 05:10
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 05:10
Freon 113	ND	0.0050	1	05/02/2015 05:10
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 05:10
Hexachloroethane	ND	0.0050	1	05/02/2015 05:10
2-Hexanone	ND	0.0050	1	05/02/2015 05:10
Isopropylbenzene	ND	0.0050	1	05/02/2015 05:10
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 05:10
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 05:10
Methylene chloride	ND	0.0050	1	05/02/2015 05:10
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 05:10
Naphthalene	ND	0.0050	1	05/02/2015 05:10
n-Propyl benzene	ND	0.0050	1	05/02/2015 05:10
Styrene	ND	0.0050	1	05/02/2015 05:10
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 05:10
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 05:10
Tetrachloroethene	ND	0.0050	1	05/02/2015 05:10
Toluene	ND	0.0050	1	05/02/2015 05:10
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 05:10
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 05:10
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 05:10
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 05:10
Trichloroethene	ND	0.0050	1	05/02/2015 05:10
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 05:10
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 05:10
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 05:10
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 05:10
Vinyl Chloride	ND	0.0050	1	05/02/2015 05:10
Xylenes, Total	ND	0.0050	1	05/02/2015 05:10

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 15'	1504A02-015A	Soil	04/24/2015 08:20	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	85	70-130		05/02/2015 05:10
Toluene-d8	96	70-130		05/02/2015 05:10
4-BFB	101	70-130		05/02/2015 05:10

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 2'	1504A02-017A	Soil	04/24/2015 09:00	GC16	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 05:52	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 05:52	
Benzene	ND	0.0050	1	05/02/2015 05:52	
Bromobenzene	ND	0.0050	1	05/02/2015 05:52	
Bromochloromethane	ND	0.0050	1	05/02/2015 05:52	
Bromodichloromethane	ND	0.0050	1	05/02/2015 05:52	
Bromoform	ND	0.0050	1	05/02/2015 05:52	
Bromomethane	ND	0.0050	1	05/02/2015 05:52	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 05:52	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 05:52	
n-Butyl benzene	ND	0.0050	1	05/02/2015 05:52	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 05:52	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 05:52	
Carbon Disulfide	ND	0.0050	1	05/02/2015 05:52	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 05:52	
Chlorobenzene	ND	0.0050	1	05/02/2015 05:52	
Chloroethane	ND	0.0050	1	05/02/2015 05:52	
Chloroform	ND	0.0050	1	05/02/2015 05:52	
Chloromethane	ND	0.0050	1	05/02/2015 05:52	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 05:52	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 05:52	
Dibromochloromethane	ND	0.0050	1	05/02/2015 05:52	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 05:52	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 05:52	
Dibromomethane	ND	0.0050	1	05/02/2015 05:52	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:52	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:52	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 05:52	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 05:52	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 05:52	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 05:52	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 05:52	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 05:52	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 05:52	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 05:52	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 05:52	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 05:52	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 05:52	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 2'	1504A02-017A	Soil	04/24/2015 09:00	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 05:52
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 05:52
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 05:52
Ethylbenzene	ND	0.0050	1	05/02/2015 05:52
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 05:52
Freon 113	ND	0.0050	1	05/02/2015 05:52
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 05:52
Hexachloroethane	ND	0.0050	1	05/02/2015 05:52
2-Hexanone	ND	0.0050	1	05/02/2015 05:52
Isopropylbenzene	ND	0.0050	1	05/02/2015 05:52
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 05:52
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 05:52
Methylene chloride	ND	0.0050	1	05/02/2015 05:52
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 05:52
Naphthalene	ND	0.0050	1	05/02/2015 05:52
n-Propyl benzene	ND	0.0050	1	05/02/2015 05:52
Styrene	ND	0.0050	1	05/02/2015 05:52
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 05:52
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 05:52
Tetrachloroethene	ND	0.0050	1	05/02/2015 05:52
Toluene	ND	0.0050	1	05/02/2015 05:52
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 05:52
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 05:52
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 05:52
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 05:52
Trichloroethene	ND	0.0050	1	05/02/2015 05:52
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 05:52
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 05:52
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 05:52
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 05:52
Vinyl Chloride	ND	0.0050	1	05/02/2015 05:52
Xylenes, Total	ND	0.0050	1	05/02/2015 05:52

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 2'	1504A02-017A	Soil	04/24/2015 09:00	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	86	70-130		05/02/2015 05:52
Toluene-d8	94	70-130		05/02/2015 05:52
4-BFB	95	70-130		05/02/2015 05:52

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 3.5'	1504A02-018A	Soil	04/24/2015 09:00	GC16	104095
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	0.10	1	05/02/2015 06:35	
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 06:35	
Benzene	ND	0.0050	1	05/02/2015 06:35	
Bromobenzene	ND	0.0050	1	05/02/2015 06:35	
Bromochloromethane	ND	0.0050	1	05/02/2015 06:35	
Bromodichloromethane	ND	0.0050	1	05/02/2015 06:35	
Bromoform	ND	0.0050	1	05/02/2015 06:35	
Bromomethane	ND	0.0050	1	05/02/2015 06:35	
2-Butanone (MEK)	ND	0.020	1	05/02/2015 06:35	
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 06:35	
n-Butyl benzene	ND	0.0050	1	05/02/2015 06:35	
sec-Butyl benzene	ND	0.0050	1	05/02/2015 06:35	
tert-Butyl benzene	ND	0.0050	1	05/02/2015 06:35	
Carbon Disulfide	ND	0.0050	1	05/02/2015 06:35	
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 06:35	
Chlorobenzene	ND	0.0050	1	05/02/2015 06:35	
Chloroethane	ND	0.0050	1	05/02/2015 06:35	
Chloroform	ND	0.0050	1	05/02/2015 06:35	
Chloromethane	ND	0.0050	1	05/02/2015 06:35	
2-Chlorotoluene	ND	0.0050	1	05/02/2015 06:35	
4-Chlorotoluene	ND	0.0050	1	05/02/2015 06:35	
Dibromochloromethane	ND	0.0050	1	05/02/2015 06:35	
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 06:35	
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 06:35	
Dibromomethane	ND	0.0050	1	05/02/2015 06:35	
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:35	
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:35	
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 06:35	
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 06:35	
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 06:35	
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 06:35	
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 06:35	
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 06:35	
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 06:35	
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 06:35	
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 06:35	
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 06:35	
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 06:35	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 3.5'	1504A02-018A	Soil	04/24/2015 09:00	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 06:35
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 06:35
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 06:35
Ethylbenzene	ND	0.0050	1	05/02/2015 06:35
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 06:35
Freon 113	ND	0.0050	1	05/02/2015 06:35
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 06:35
Hexachloroethane	ND	0.0050	1	05/02/2015 06:35
2-Hexanone	ND	0.0050	1	05/02/2015 06:35
Isopropylbenzene	ND	0.0050	1	05/02/2015 06:35
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 06:35
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 06:35
Methylene chloride	ND	0.0050	1	05/02/2015 06:35
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 06:35
Naphthalene	ND	0.0050	1	05/02/2015 06:35
n-Propyl benzene	ND	0.0050	1	05/02/2015 06:35
Styrene	ND	0.0050	1	05/02/2015 06:35
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 06:35
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 06:35
Tetrachloroethene	ND	0.0050	1	05/02/2015 06:35
Toluene	ND	0.0050	1	05/02/2015 06:35
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 06:35
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 06:35
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 06:35
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 06:35
Trichloroethene	ND	0.0050	1	05/02/2015 06:35
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 06:35
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 06:35
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 06:35
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 06:35
Vinyl Chloride	ND	0.0050	1	05/02/2015 06:35
Xylenes, Total	ND	0.0050	1	05/02/2015 06:35

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 3.5'	1504A02-018A	Soil	04/24/2015 09:00	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	86	70-130		05/02/2015 06:35
Toluene-d8	95	70-130		05/02/2015 06:35
4-BFB	102	70-130		05/02/2015 06:35

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 7.5'	1504A02-019A	Soil	04/24/2015 09:10	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 12:22
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 12:22
Benzene	ND	0.0050	1	05/02/2015 12:22
Bromobenzene	ND	0.0050	1	05/02/2015 12:22
Bromochloromethane	ND	0.0050	1	05/02/2015 12:22
Bromodichloromethane	ND	0.0050	1	05/02/2015 12:22
Bromoform	ND	0.0050	1	05/02/2015 12:22
Bromomethane	ND	0.0050	1	05/02/2015 12:22
2-Butanone (MEK)	ND	0.020	1	05/02/2015 12:22
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 12:22
n-Butyl benzene	ND	0.0050	1	05/02/2015 12:22
sec-Butyl benzene	ND	0.0050	1	05/02/2015 12:22
tert-Butyl benzene	ND	0.0050	1	05/02/2015 12:22
Carbon Disulfide	ND	0.0050	1	05/02/2015 12:22
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 12:22
Chlorobenzene	ND	0.0050	1	05/02/2015 12:22
Chloroethane	ND	0.0050	1	05/02/2015 12:22
Chloroform	ND	0.0050	1	05/02/2015 12:22
Chloromethane	ND	0.0050	1	05/02/2015 12:22
2-Chlorotoluene	ND	0.0050	1	05/02/2015 12:22
4-Chlorotoluene	ND	0.0050	1	05/02/2015 12:22
Dibromochloromethane	ND	0.0050	1	05/02/2015 12:22
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 12:22
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 12:22
Dibromomethane	ND	0.0050	1	05/02/2015 12:22
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 12:22
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 12:22
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 12:22
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 12:22
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 12:22
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 12:22
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 12:22
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 12:22
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 12:22
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 12:22
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 12:22
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 12:22
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 12:22

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 7.5'	1504A02-019A	Soil	04/24/2015 09:10	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 12:22
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 12:22
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 12:22
Ethylbenzene	ND	0.0050	1	05/02/2015 12:22
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 12:22
Freon 113	ND	0.0050	1	05/02/2015 12:22
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 12:22
Hexachloroethane	ND	0.0050	1	05/02/2015 12:22
2-Hexanone	ND	0.0050	1	05/02/2015 12:22
Isopropylbenzene	ND	0.0050	1	05/02/2015 12:22
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 12:22
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 12:22
Methylene chloride	ND	0.0050	1	05/02/2015 12:22
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 12:22
Naphthalene	ND	0.0050	1	05/02/2015 12:22
n-Propyl benzene	ND	0.0050	1	05/02/2015 12:22
Styrene	ND	0.0050	1	05/02/2015 12:22
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 12:22
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 12:22
Tetrachloroethene	ND	0.0050	1	05/02/2015 12:22
Toluene	ND	0.0050	1	05/02/2015 12:22
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 12:22
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 12:22
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 12:22
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 12:22
Trichloroethene	ND	0.0050	1	05/02/2015 12:22
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 12:22
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 12:22
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 12:22
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 12:22
Vinyl Chloride	ND	0.0050	1	05/02/2015 12:22
Xylenes, Total	ND	0.0050	1	05/02/2015 12:22

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 2'	1504A02-021A	Soil	04/24/2015 09:40	GC16	104107

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 13:04
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 13:04
Benzene	ND	0.0050	1	05/02/2015 13:04
Bromobenzene	ND	0.0050	1	05/02/2015 13:04
Bromochloromethane	ND	0.0050	1	05/02/2015 13:04
Bromodichloromethane	ND	0.0050	1	05/02/2015 13:04
Bromoform	ND	0.0050	1	05/02/2015 13:04
Bromomethane	ND	0.0050	1	05/02/2015 13:04
2-Butanone (MEK)	ND	0.020	1	05/02/2015 13:04
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 13:04
n-Butyl benzene	ND	0.0050	1	05/02/2015 13:04
sec-Butyl benzene	ND	0.0050	1	05/02/2015 13:04
tert-Butyl benzene	ND	0.0050	1	05/02/2015 13:04
Carbon Disulfide	ND	0.0050	1	05/02/2015 13:04
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 13:04
Chlorobenzene	ND	0.0050	1	05/02/2015 13:04
Chloroethane	ND	0.0050	1	05/02/2015 13:04
Chloroform	ND	0.0050	1	05/02/2015 13:04
Chloromethane	ND	0.0050	1	05/02/2015 13:04
2-Chlorotoluene	ND	0.0050	1	05/02/2015 13:04
4-Chlorotoluene	ND	0.0050	1	05/02/2015 13:04
Dibromochloromethane	ND	0.0050	1	05/02/2015 13:04
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 13:04
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 13:04
Dibromomethane	ND	0.0050	1	05/02/2015 13:04
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 13:04
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 13:04
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 13:04
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 13:04
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 13:04
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 13:04
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 13:04
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 13:04
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 13:04
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 13:04
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 13:04
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 13:04
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 13:04

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 2'	1504A02-021A	Soil	04/24/2015 09:40	GC16	104107

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 13:04
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 13:04
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 13:04
Ethylbenzene	ND	0.0050	1	05/02/2015 13:04
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 13:04
Freon 113	ND	0.0050	1	05/02/2015 13:04
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 13:04
Hexachloroethane	ND	0.0050	1	05/02/2015 13:04
2-Hexanone	ND	0.0050	1	05/02/2015 13:04
Isopropylbenzene	ND	0.0050	1	05/02/2015 13:04
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 13:04
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 13:04
Methylene chloride	ND	0.0050	1	05/02/2015 13:04
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 13:04
Naphthalene	ND	0.0050	1	05/02/2015 13:04
n-Propyl benzene	ND	0.0050	1	05/02/2015 13:04
Styrene	ND	0.0050	1	05/02/2015 13:04
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 13:04
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 13:04
Tetrachloroethene	ND	0.0050	1	05/02/2015 13:04
Toluene	ND	0.0050	1	05/02/2015 13:04
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 13:04
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 13:04
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 13:04
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 13:04
Trichloroethene	ND	0.0050	1	05/02/2015 13:04
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 13:04
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 13:04
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 13:04
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 13:04
Vinyl Chloride	ND	0.0050	1	05/02/2015 13:04
Xylenes, Total	ND	0.0050	1	05/02/2015 13:04

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 2'	1504A02-021A	Soil	04/24/2015 09:40	GC16	104107

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	85	70-130		05/02/2015 13:04
Toluene-d8	94	70-130		05/02/2015 13:04
4-BFB	94	70-130		05/02/2015 13:04

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 3.5'	1504A02-022A	Soil	04/24/2015 09:40	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 11:17
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 11:17
Benzene	ND	0.0050	1	05/02/2015 11:17
Bromobenzene	ND	0.0050	1	05/02/2015 11:17
Bromochloromethane	ND	0.0050	1	05/02/2015 11:17
Bromodichloromethane	ND	0.0050	1	05/02/2015 11:17
Bromoform	ND	0.0050	1	05/02/2015 11:17
Bromomethane	ND	0.0050	1	05/02/2015 11:17
2-Butanone (MEK)	ND	0.020	1	05/02/2015 11:17
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 11:17
n-Butyl benzene	ND	0.0050	1	05/02/2015 11:17
sec-Butyl benzene	ND	0.0050	1	05/02/2015 11:17
tert-Butyl benzene	ND	0.0050	1	05/02/2015 11:17
Carbon Disulfide	ND	0.0050	1	05/02/2015 11:17
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 11:17
Chlorobenzene	ND	0.0050	1	05/02/2015 11:17
Chloroethane	ND	0.0050	1	05/02/2015 11:17
Chloroform	ND	0.0050	1	05/02/2015 11:17
Chloromethane	ND	0.0050	1	05/02/2015 11:17
2-Chlorotoluene	ND	0.0050	1	05/02/2015 11:17
4-Chlorotoluene	ND	0.0050	1	05/02/2015 11:17
Dibromochloromethane	ND	0.0050	1	05/02/2015 11:17
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 11:17
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 11:17
Dibromomethane	ND	0.0050	1	05/02/2015 11:17
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 11:17
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 11:17
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 11:17
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 11:17
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 11:17
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 11:17
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 11:17
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 11:17
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 11:17
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 11:17
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 11:17
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 11:17
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 11:17

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 3.5'	1504A02-022A	Soil	04/24/2015 09:40	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 11:17
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 11:17
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 11:17
Ethylbenzene	ND	0.0050	1	05/02/2015 11:17
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 11:17
Freon 113	ND	0.0050	1	05/02/2015 11:17
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 11:17
Hexachloroethane	ND	0.0050	1	05/02/2015 11:17
2-Hexanone	ND	0.0050	1	05/02/2015 11:17
Isopropylbenzene	ND	0.0050	1	05/02/2015 11:17
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 11:17
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 11:17
Methylene chloride	ND	0.0050	1	05/02/2015 11:17
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 11:17
Naphthalene	ND	0.0050	1	05/02/2015 11:17
n-Propyl benzene	ND	0.0050	1	05/02/2015 11:17
Styrene	ND	0.0050	1	05/02/2015 11:17
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 11:17
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 11:17
Tetrachloroethene	ND	0.0050	1	05/02/2015 11:17
Toluene	ND	0.0050	1	05/02/2015 11:17
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 11:17
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 11:17
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 11:17
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 11:17
Trichloroethene	ND	0.0050	1	05/02/2015 11:17
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 11:17
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 11:17
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 11:17
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 11:17
Vinyl Chloride	ND	0.0050	1	05/02/2015 11:17
Xylenes, Total	ND	0.0050	1	05/02/2015 11:17

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 3.5'	1504A02-022A	Soil	04/24/2015 09:40	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	89	70-130		05/02/2015 11:17
Toluene-d8	100	70-130		05/02/2015 11:17
4-BFB	92	70-130		05/02/2015 11:17

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 7.5'	1504A02-023A	Soil	04/24/2015 09:42	GC10	104107
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	05/02/2015 11:58
tert-Amyl methyl ether (TAME)	ND		0.0050	1	05/02/2015 11:58
Benzene	0.026		0.0050	1	05/02/2015 11:58
Bromobenzene	ND		0.0050	1	05/02/2015 11:58
Bromochloromethane	ND		0.0050	1	05/02/2015 11:58
Bromodichloromethane	ND		0.0050	1	05/02/2015 11:58
Bromoform	ND		0.0050	1	05/02/2015 11:58
Bromomethane	ND		0.0050	1	05/02/2015 11:58
2-Butanone (MEK)	ND		0.020	1	05/02/2015 11:58
t-Butyl alcohol (TBA)	ND		0.050	1	05/02/2015 11:58
n-Butyl benzene	0.054		0.0050	1	05/02/2015 11:58
sec-Butyl benzene	0.011		0.0050	1	05/02/2015 11:58
tert-Butyl benzene	ND		0.0050	1	05/02/2015 11:58
Carbon Disulfide	ND		0.0050	1	05/02/2015 11:58
Carbon Tetrachloride	ND		0.0050	1	05/02/2015 11:58
Chlorobenzene	ND		0.0050	1	05/02/2015 11:58
Chloroethane	ND		0.0050	1	05/02/2015 11:58
Chloroform	ND		0.0050	1	05/02/2015 11:58
Chloromethane	ND		0.0050	1	05/02/2015 11:58
2-Chlorotoluene	ND		0.0050	1	05/02/2015 11:58
4-Chlorotoluene	ND		0.0050	1	05/02/2015 11:58
Dibromochloromethane	ND		0.0050	1	05/02/2015 11:58
1,2-Dibromo-3-chloropropane	ND		0.0040	1	05/02/2015 11:58
1,2-Dibromoethane (EDB)	ND		0.0040	1	05/02/2015 11:58
Dibromomethane	ND		0.0050	1	05/02/2015 11:58
1,2-Dichlorobenzene	ND		0.0050	1	05/02/2015 11:58
1,3-Dichlorobenzene	ND		0.0050	1	05/02/2015 11:58
1,4-Dichlorobenzene	ND		0.0050	1	05/02/2015 11:58
Dichlorodifluoromethane	ND		0.0050	1	05/02/2015 11:58
1,1-Dichloroethane	ND		0.0050	1	05/02/2015 11:58
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	05/02/2015 11:58
1,1-Dichloroethene	ND		0.0050	1	05/02/2015 11:58
cis-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 11:58
trans-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 11:58
1,2-Dichloropropane	ND		0.0050	1	05/02/2015 11:58
1,3-Dichloropropane	ND		0.0050	1	05/02/2015 11:58
2,2-Dichloropropane	ND		0.0050	1	05/02/2015 11:58
1,1-Dichloropropene	ND		0.0050	1	05/02/2015 11:58

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 7.5'	1504A02-023A	Soil	04/24/2015 09:42	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 11:58
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 11:58
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 11:58
Ethylbenzene	ND	0.0050	1	05/02/2015 11:58
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 11:58
Freon 113	ND	0.0050	1	05/02/2015 11:58
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 11:58
Hexachloroethane	ND	0.0050	1	05/02/2015 11:58
2-Hexanone	ND	0.0050	1	05/02/2015 11:58
Isopropylbenzene	0.013	0.0050	1	05/02/2015 11:58
4-Isopropyl toluene	0.011	0.0050	1	05/02/2015 11:58
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 11:58
Methylene chloride	ND	0.0050	1	05/02/2015 11:58
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 11:58
Naphthalene	ND	0.0050	1	05/02/2015 11:58
n-Propyl benzene	0.021	0.0050	1	05/02/2015 11:58
Styrene	ND	0.0050	1	05/02/2015 11:58
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 11:58
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 11:58
Tetrachloroethene	ND	0.0050	1	05/02/2015 11:58
Toluene	ND	0.0050	1	05/02/2015 11:58
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 11:58
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 11:58
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 11:58
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 11:58
Trichloroethene	ND	0.0050	1	05/02/2015 11:58
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 11:58
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 11:58
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 11:58
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 11:58
Vinyl Chloride	ND	0.0050	1	05/02/2015 11:58
Xylenes, Total	0.011	0.0050	1	05/02/2015 11:58

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Analytical Report

Client: GEOCON Env. Consultants **WorkOrder:** 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger **Extraction Method:** SW5030B
Date Received: 4/24/15 19:36 **Analytical Method:** SW8260B
Date Prepared: 4/24/15-4/27/15 **Unit:** mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 7.5'	1504A02-023A	Soil	04/24/2015 09:42	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	86	70-130		05/02/2015 11:58
Toluene-d8	100	70-130		05/02/2015 11:58
4-BFB	84	70-130		05/02/2015 11:58

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 11.5'	1504A02-024A	Soil	04/24/2015 09:50	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	0.10	1	05/02/2015 12:39
tert-Amyl methyl ether (TAME)	ND	0.0050	1	05/02/2015 12:39
Benzene	ND	0.0050	1	05/02/2015 12:39
Bromobenzene	ND	0.0050	1	05/02/2015 12:39
Bromochloromethane	ND	0.0050	1	05/02/2015 12:39
Bromodichloromethane	ND	0.0050	1	05/02/2015 12:39
Bromoform	ND	0.0050	1	05/02/2015 12:39
Bromomethane	ND	0.0050	1	05/02/2015 12:39
2-Butanone (MEK)	ND	0.020	1	05/02/2015 12:39
t-Butyl alcohol (TBA)	ND	0.050	1	05/02/2015 12:39
n-Butyl benzene	ND	0.0050	1	05/02/2015 12:39
sec-Butyl benzene	ND	0.0050	1	05/02/2015 12:39
tert-Butyl benzene	ND	0.0050	1	05/02/2015 12:39
Carbon Disulfide	ND	0.0050	1	05/02/2015 12:39
Carbon Tetrachloride	ND	0.0050	1	05/02/2015 12:39
Chlorobenzene	ND	0.0050	1	05/02/2015 12:39
Chloroethane	ND	0.0050	1	05/02/2015 12:39
Chloroform	ND	0.0050	1	05/02/2015 12:39
Chloromethane	ND	0.0050	1	05/02/2015 12:39
2-Chlorotoluene	ND	0.0050	1	05/02/2015 12:39
4-Chlorotoluene	ND	0.0050	1	05/02/2015 12:39
Dibromochloromethane	ND	0.0050	1	05/02/2015 12:39
1,2-Dibromo-3-chloropropane	ND	0.0040	1	05/02/2015 12:39
1,2-Dibromoethane (EDB)	ND	0.0040	1	05/02/2015 12:39
Dibromomethane	ND	0.0050	1	05/02/2015 12:39
1,2-Dichlorobenzene	ND	0.0050	1	05/02/2015 12:39
1,3-Dichlorobenzene	ND	0.0050	1	05/02/2015 12:39
1,4-Dichlorobenzene	ND	0.0050	1	05/02/2015 12:39
Dichlorodifluoromethane	ND	0.0050	1	05/02/2015 12:39
1,1-Dichloroethane	ND	0.0050	1	05/02/2015 12:39
1,2-Dichloroethane (1,2-DCA)	ND	0.0040	1	05/02/2015 12:39
1,1-Dichloroethene	ND	0.0050	1	05/02/2015 12:39
cis-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 12:39
trans-1,2-Dichloroethene	ND	0.0050	1	05/02/2015 12:39
1,2-Dichloropropane	ND	0.0050	1	05/02/2015 12:39
1,3-Dichloropropane	ND	0.0050	1	05/02/2015 12:39
2,2-Dichloropropane	ND	0.0050	1	05/02/2015 12:39
1,1-Dichloropropene	ND	0.0050	1	05/02/2015 12:39

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 11.5'	1504A02-024A	Soil	04/24/2015 09:50	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 12:39
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 12:39
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 12:39
Ethylbenzene	ND	0.0050	1	05/02/2015 12:39
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 12:39
Freon 113	ND	0.0050	1	05/02/2015 12:39
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 12:39
Hexachloroethane	ND	0.0050	1	05/02/2015 12:39
2-Hexanone	ND	0.0050	1	05/02/2015 12:39
Isopropylbenzene	ND	0.0050	1	05/02/2015 12:39
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 12:39
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 12:39
Methylene chloride	ND	0.0050	1	05/02/2015 12:39
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 12:39
Naphthalene	ND	0.0050	1	05/02/2015 12:39
n-Propyl benzene	ND	0.0050	1	05/02/2015 12:39
Styrene	ND	0.0050	1	05/02/2015 12:39
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 12:39
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 12:39
Tetrachloroethene	ND	0.0050	1	05/02/2015 12:39
Toluene	ND	0.0050	1	05/02/2015 12:39
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 12:39
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 12:39
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 12:39
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 12:39
Trichloroethene	ND	0.0050	1	05/02/2015 12:39
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 12:39
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 12:39
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 12:39
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 12:39
Vinyl Chloride	ND	0.0050	1	05/02/2015 12:39
Xylenes, Total	ND	0.0050	1	05/02/2015 12:39

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 11.5'	1504A02-024A	Soil	04/24/2015 09:50	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	89	70-130		05/02/2015 12:39
Toluene-d8	100	70-130		05/02/2015 12:39
4-BFB	94	70-130		05/02/2015 12:39

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 11.5	1504A02-030A	Soil	04/24/2015	GC10	104127
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		0.10	1	05/02/2015 13:20
tert-Amyl methyl ether (TAME)	ND		0.0050	1	05/02/2015 13:20
Benzene	ND		0.0050	1	05/02/2015 13:20
Bromobenzene	ND		0.0050	1	05/02/2015 13:20
Bromochloromethane	ND		0.0050	1	05/02/2015 13:20
Bromodichloromethane	ND		0.0050	1	05/02/2015 13:20
Bromoform	ND		0.0050	1	05/02/2015 13:20
Bromomethane	ND		0.0050	1	05/02/2015 13:20
2-Butanone (MEK)	ND		0.020	1	05/02/2015 13:20
t-Butyl alcohol (TBA)	ND		0.050	1	05/02/2015 13:20
n-Butyl benzene	ND		0.0050	1	05/02/2015 13:20
sec-Butyl benzene	ND		0.0050	1	05/02/2015 13:20
tert-Butyl benzene	ND		0.0050	1	05/02/2015 13:20
Carbon Disulfide	ND		0.0050	1	05/02/2015 13:20
Carbon Tetrachloride	ND		0.0050	1	05/02/2015 13:20
Chlorobenzene	ND		0.0050	1	05/02/2015 13:20
Chloroethane	ND		0.0050	1	05/02/2015 13:20
Chloroform	ND		0.0050	1	05/02/2015 13:20
Chloromethane	ND		0.0050	1	05/02/2015 13:20
2-Chlorotoluene	ND		0.0050	1	05/02/2015 13:20
4-Chlorotoluene	ND		0.0050	1	05/02/2015 13:20
Dibromochloromethane	ND		0.0050	1	05/02/2015 13:20
1,2-Dibromo-3-chloropropane	ND		0.0040	1	05/02/2015 13:20
1,2-Dibromoethane (EDB)	ND		0.0040	1	05/02/2015 13:20
Dibromomethane	ND		0.0050	1	05/02/2015 13:20
1,2-Dichlorobenzene	ND		0.0050	1	05/02/2015 13:20
1,3-Dichlorobenzene	ND		0.0050	1	05/02/2015 13:20
1,4-Dichlorobenzene	ND		0.0050	1	05/02/2015 13:20
Dichlorodifluoromethane	ND		0.0050	1	05/02/2015 13:20
1,1-Dichloroethane	ND		0.0050	1	05/02/2015 13:20
1,2-Dichloroethane (1,2-DCA)	ND		0.0040	1	05/02/2015 13:20
1,1-Dichloroethene	ND		0.0050	1	05/02/2015 13:20
cis-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 13:20
trans-1,2-Dichloroethene	ND		0.0050	1	05/02/2015 13:20
1,2-Dichloropropane	ND		0.0050	1	05/02/2015 13:20
1,3-Dichloropropane	ND		0.0050	1	05/02/2015 13:20
2,2-Dichloropropane	ND		0.0050	1	05/02/2015 13:20
1,1-Dichloropropene	ND		0.0050	1	05/02/2015 13:20

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 11.5	1504A02-030A	Soil	04/24/2015	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 13:20
trans-1,3-Dichloropropene	ND	0.0050	1	05/02/2015 13:20
Diisopropyl ether (DIPE)	ND	0.0050	1	05/02/2015 13:20
Ethylbenzene	ND	0.0050	1	05/02/2015 13:20
Ethyl tert-butyl ether (ETBE)	ND	0.0050	1	05/02/2015 13:20
Freon 113	ND	0.0050	1	05/02/2015 13:20
Hexachlorobutadiene	ND	0.0050	1	05/02/2015 13:20
Hexachloroethane	ND	0.0050	1	05/02/2015 13:20
2-Hexanone	ND	0.0050	1	05/02/2015 13:20
Isopropylbenzene	ND	0.0050	1	05/02/2015 13:20
4-Isopropyl toluene	ND	0.0050	1	05/02/2015 13:20
Methyl-t-butyl ether (MTBE)	ND	0.0050	1	05/02/2015 13:20
Methylene chloride	ND	0.0050	1	05/02/2015 13:20
4-Methyl-2-pentanone (MIBK)	ND	0.0050	1	05/02/2015 13:20
Naphthalene	ND	0.0050	1	05/02/2015 13:20
n-Propyl benzene	ND	0.0050	1	05/02/2015 13:20
Styrene	ND	0.0050	1	05/02/2015 13:20
1,1,1,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 13:20
1,1,2,2-Tetrachloroethane	ND	0.0050	1	05/02/2015 13:20
Tetrachloroethene	ND	0.0050	1	05/02/2015 13:20
Toluene	ND	0.0050	1	05/02/2015 13:20
1,2,3-Trichlorobenzene	ND	0.0050	1	05/02/2015 13:20
1,2,4-Trichlorobenzene	ND	0.0050	1	05/02/2015 13:20
1,1,1-Trichloroethane	ND	0.0050	1	05/02/2015 13:20
1,1,2-Trichloroethane	ND	0.0050	1	05/02/2015 13:20
Trichloroethene	ND	0.0050	1	05/02/2015 13:20
Trichlorofluoromethane	ND	0.0050	1	05/02/2015 13:20
1,2,3-Trichloropropane	ND	0.0050	1	05/02/2015 13:20
1,2,4-Trimethylbenzene	ND	0.0050	1	05/02/2015 13:20
1,3,5-Trimethylbenzene	ND	0.0050	1	05/02/2015 13:20
Vinyl Chloride	ND	0.0050	1	05/02/2015 13:20
Xylenes, Total	ND	0.0050	1	05/02/2015 13:20

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 4/24/15-4/27/15	Unit: mg/kg

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 11.5	1504A02-030A	Soil	04/24/2015	GC10	104127

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		05/02/2015 13:20
Toluene-d8	98	70-130		05/02/2015 13:20
4-BFB	89	70-130		05/02/2015 13:20

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19	1504A02-005C	Water	04/24/2015 07:10	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/02/2015 00:13
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/02/2015 00:13
Benzene	ND		0.50	1	05/02/2015 00:13
Bromobenzene	ND		0.50	1	05/02/2015 00:13
Bromochloromethane	ND		0.50	1	05/02/2015 00:13
Bromodichloromethane	ND		0.50	1	05/02/2015 00:13
Bromoform	ND		0.50	1	05/02/2015 00:13
Bromomethane	ND		0.50	1	05/02/2015 00:13
2-Butanone (MEK)	ND		2.0	1	05/02/2015 00:13
t-Butyl alcohol (TBA)	2.2		2.0	1	05/02/2015 00:13
n-Butyl benzene	ND		0.50	1	05/02/2015 00:13
sec-Butyl benzene	ND		0.50	1	05/02/2015 00:13
tert-Butyl benzene	ND		0.50	1	05/02/2015 00:13
Carbon Disulfide	ND		0.50	1	05/02/2015 00:13
Carbon Tetrachloride	ND		0.50	1	05/02/2015 00:13
Chlorobenzene	ND		0.50	1	05/02/2015 00:13
Chloroethane	ND		0.50	1	05/02/2015 00:13
Chloroform	ND		0.50	1	05/02/2015 00:13
Chloromethane	ND		0.50	1	05/02/2015 00:13
2-Chlorotoluene	ND		0.50	1	05/02/2015 00:13
4-Chlorotoluene	ND		0.50	1	05/02/2015 00:13
Dibromochloromethane	ND		0.50	1	05/02/2015 00:13
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/02/2015 00:13
1,2-Dibromoethane (EDB)	ND		0.50	1	05/02/2015 00:13
Dibromomethane	ND		0.50	1	05/02/2015 00:13
1,2-Dichlorobenzene	ND		0.50	1	05/02/2015 00:13
1,3-Dichlorobenzene	ND		0.50	1	05/02/2015 00:13
1,4-Dichlorobenzene	ND		0.50	1	05/02/2015 00:13
Dichlorodifluoromethane	ND		0.50	1	05/02/2015 00:13
1,1-Dichloroethane	ND		0.50	1	05/02/2015 00:13
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/02/2015 00:13
1,1-Dichloroethene	ND		0.50	1	05/02/2015 00:13
cis-1,2-Dichloroethene	ND		0.50	1	05/02/2015 00:13
trans-1,2-Dichloroethene	ND		0.50	1	05/02/2015 00:13
1,2-Dichloropropane	ND		0.50	1	05/02/2015 00:13
1,3-Dichloropropane	ND		0.50	1	05/02/2015 00:13
2,2-Dichloropropane	ND		0.50	1	05/02/2015 00:13
1,1-Dichloropropene	ND		0.50	1	05/02/2015 00:13

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19	1504A02-005C	Water	04/24/2015 07:10	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/02/2015 00:13
trans-1,3-Dichloropropene	ND		0.50	1	05/02/2015 00:13
Diisopropyl ether (DIPE)	ND		0.50	1	05/02/2015 00:13
Ethylbenzene	ND		0.50	1	05/02/2015 00:13
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/02/2015 00:13
Freon 113	ND		0.50	1	05/02/2015 00:13
Hexachlorobutadiene	ND		0.50	1	05/02/2015 00:13
Hexachloroethane	ND		0.50	1	05/02/2015 00:13
2-Hexanone	ND		0.50	1	05/02/2015 00:13
Isopropylbenzene	ND		0.50	1	05/02/2015 00:13
4-Isopropyl toluene	ND		0.50	1	05/02/2015 00:13
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/02/2015 00:13
Methylene chloride	ND		0.50	1	05/02/2015 00:13
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/02/2015 00:13
Naphthalene	ND		0.50	1	05/02/2015 00:13
n-Propyl benzene	0.93		0.50	1	05/02/2015 00:13
Styrene	ND		0.50	1	05/02/2015 00:13
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/02/2015 00:13
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/02/2015 00:13
Tetrachloroethene	ND		0.50	1	05/02/2015 00:13
Toluene	ND		0.50	1	05/02/2015 00:13
1,2,3-Trichlorobenzene	ND		0.50	1	05/02/2015 00:13
1,2,4-Trichlorobenzene	ND		0.50	1	05/02/2015 00:13
1,1,1-Trichloroethane	ND		0.50	1	05/02/2015 00:13
1,1,2-Trichloroethane	ND		0.50	1	05/02/2015 00:13
Trichloroethene	ND		0.50	1	05/02/2015 00:13
Trichlorofluoromethane	ND		0.50	1	05/02/2015 00:13
1,2,3-Trichloropropane	ND		0.50	1	05/02/2015 00:13
1,2,4-Trimethylbenzene	ND		0.50	1	05/02/2015 00:13
1,3,5-Trimethylbenzene	ND		0.50	1	05/02/2015 00:13
Vinyl Chloride	ND		0.50	1	05/02/2015 00:13
Xylenes, Total	ND		0.50	1	05/02/2015 00:13

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22	1504A02-010C	Water	04/24/2015 07:45	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/02/2015 00:55
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/02/2015 00:55
Benzene	ND		0.50	1	05/02/2015 00:55
Bromobenzene	ND		0.50	1	05/02/2015 00:55
Bromochloromethane	ND		0.50	1	05/02/2015 00:55
Bromodichloromethane	ND		0.50	1	05/02/2015 00:55
Bromoform	ND		0.50	1	05/02/2015 00:55
Bromomethane	ND		0.50	1	05/02/2015 00:55
2-Butanone (MEK)	ND		2.0	1	05/02/2015 00:55
t-Butyl alcohol (TBA)	2.0		2.0	1	05/02/2015 00:55
n-Butyl benzene	3.0		0.50	1	05/02/2015 00:55
sec-Butyl benzene	2.0		0.50	1	05/02/2015 00:55
tert-Butyl benzene	ND		0.50	1	05/02/2015 00:55
Carbon Disulfide	ND		0.50	1	05/02/2015 00:55
Carbon Tetrachloride	ND		0.50	1	05/02/2015 00:55
Chlorobenzene	ND		0.50	1	05/02/2015 00:55
Chloroethane	ND		0.50	1	05/02/2015 00:55
Chloroform	ND		0.50	1	05/02/2015 00:55
Chloromethane	ND		0.50	1	05/02/2015 00:55
2-Chlorotoluene	ND		0.50	1	05/02/2015 00:55
4-Chlorotoluene	ND		0.50	1	05/02/2015 00:55
Dibromochloromethane	ND		0.50	1	05/02/2015 00:55
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/02/2015 00:55
1,2-Dibromoethane (EDB)	ND		0.50	1	05/02/2015 00:55
Dibromomethane	ND		0.50	1	05/02/2015 00:55
1,2-Dichlorobenzene	ND		0.50	1	05/02/2015 00:55
1,3-Dichlorobenzene	ND		0.50	1	05/02/2015 00:55
1,4-Dichlorobenzene	ND		0.50	1	05/02/2015 00:55
Dichlorodifluoromethane	ND		0.50	1	05/02/2015 00:55
1,1-Dichloroethane	ND		0.50	1	05/02/2015 00:55
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/02/2015 00:55
1,1-Dichloroethene	ND		0.50	1	05/02/2015 00:55
cis-1,2-Dichloroethene	ND		0.50	1	05/02/2015 00:55
trans-1,2-Dichloroethene	ND		0.50	1	05/02/2015 00:55
1,2-Dichloropropane	ND		0.50	1	05/02/2015 00:55
1,3-Dichloropropane	ND		0.50	1	05/02/2015 00:55
2,2-Dichloropropane	ND		0.50	1	05/02/2015 00:55
1,1-Dichloropropene	ND		0.50	1	05/02/2015 00:55

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22	1504A02-010C	Water	04/24/2015 07:45	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/02/2015 00:55
trans-1,3-Dichloropropene	ND		0.50	1	05/02/2015 00:55
Diisopropyl ether (DIPE)	ND		0.50	1	05/02/2015 00:55
Ethylbenzene	ND		0.50	1	05/02/2015 00:55
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/02/2015 00:55
Freon 113	ND		0.50	1	05/02/2015 00:55
Hexachlorobutadiene	ND		0.50	1	05/02/2015 00:55
Hexachloroethane	ND		0.50	1	05/02/2015 00:55
2-Hexanone	ND		0.50	1	05/02/2015 00:55
Isopropylbenzene	ND		0.50	1	05/02/2015 00:55
4-Isopropyl toluene	ND		0.50	1	05/02/2015 00:55
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/02/2015 00:55
Methylene chloride	ND		0.50	1	05/02/2015 00:55
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/02/2015 00:55
Naphthalene	ND		0.50	1	05/02/2015 00:55
n-Propyl benzene	ND		0.50	1	05/02/2015 00:55
Styrene	ND		0.50	1	05/02/2015 00:55
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/02/2015 00:55
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/02/2015 00:55
Tetrachloroethene	ND		0.50	1	05/02/2015 00:55
Toluene	ND		0.50	1	05/02/2015 00:55
1,2,3-Trichlorobenzene	ND		0.50	1	05/02/2015 00:55
1,2,4-Trichlorobenzene	ND		0.50	1	05/02/2015 00:55
1,1,1-Trichloroethane	ND		0.50	1	05/02/2015 00:55
1,1,2-Trichloroethane	ND		0.50	1	05/02/2015 00:55
Trichloroethene	ND		0.50	1	05/02/2015 00:55
Trichlorofluoromethane	ND		0.50	1	05/02/2015 00:55
1,2,3-Trichloropropane	ND		0.50	1	05/02/2015 00:55
1,2,4-Trimethylbenzene	ND		0.50	1	05/02/2015 00:55
1,3,5-Trimethylbenzene	ND		0.50	1	05/02/2015 00:55
Vinyl Chloride	ND		0.50	1	05/02/2015 00:55
Xylenes, Total	ND		0.50	1	05/02/2015 00:55

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22	1504A02-010C	Water	04/24/2015 07:45	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	92	70-130		05/02/2015 00:55
Toluene-d8	86	70-130		05/02/2015 00:55
4-BFB	90	70-130		05/02/2015 00:55

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20	1504A02-016C	Water	04/24/2015 08:55	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/02/2015 01:38
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/02/2015 01:38
Benzene	ND		0.50	1	05/02/2015 01:38
Bromobenzene	ND		0.50	1	05/02/2015 01:38
Bromochloromethane	ND		0.50	1	05/02/2015 01:38
Bromodichloromethane	ND		0.50	1	05/02/2015 01:38
Bromoform	ND		0.50	1	05/02/2015 01:38
Bromomethane	ND		0.50	1	05/02/2015 01:38
2-Butanone (MEK)	ND		2.0	1	05/02/2015 01:38
t-Butyl alcohol (TBA)	2.1		2.0	1	05/02/2015 01:38
n-Butyl benzene	ND		0.50	1	05/02/2015 01:38
sec-Butyl benzene	ND		0.50	1	05/02/2015 01:38
tert-Butyl benzene	ND		0.50	1	05/02/2015 01:38
Carbon Disulfide	ND		0.50	1	05/02/2015 01:38
Carbon Tetrachloride	ND		0.50	1	05/02/2015 01:38
Chlorobenzene	ND		0.50	1	05/02/2015 01:38
Chloroethane	ND		0.50	1	05/02/2015 01:38
Chloroform	ND		0.50	1	05/02/2015 01:38
Chloromethane	ND		0.50	1	05/02/2015 01:38
2-Chlorotoluene	ND		0.50	1	05/02/2015 01:38
4-Chlorotoluene	ND		0.50	1	05/02/2015 01:38
Dibromochloromethane	ND		0.50	1	05/02/2015 01:38
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/02/2015 01:38
1,2-Dibromoethane (EDB)	ND		0.50	1	05/02/2015 01:38
Dibromomethane	ND		0.50	1	05/02/2015 01:38
1,2-Dichlorobenzene	ND		0.50	1	05/02/2015 01:38
1,3-Dichlorobenzene	ND		0.50	1	05/02/2015 01:38
1,4-Dichlorobenzene	ND		0.50	1	05/02/2015 01:38
Dichlorodifluoromethane	ND		0.50	1	05/02/2015 01:38
1,1-Dichloroethane	0.61		0.50	1	05/02/2015 01:38
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/02/2015 01:38
1,1-Dichloroethene	ND		0.50	1	05/02/2015 01:38
cis-1,2-Dichloroethene	ND		0.50	1	05/02/2015 01:38
trans-1,2-Dichloroethene	ND		0.50	1	05/02/2015 01:38
1,2-Dichloropropane	ND		0.50	1	05/02/2015 01:38
1,3-Dichloropropane	ND		0.50	1	05/02/2015 01:38
2,2-Dichloropropane	ND		0.50	1	05/02/2015 01:38
1,1-Dichloropropene	ND		0.50	1	05/02/2015 01:38

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20	1504A02-016C	Water	04/24/2015 08:55	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
cis-1,3-Dichloropropene	ND		0.50	1	05/02/2015 01:38
trans-1,3-Dichloropropene	ND		0.50	1	05/02/2015 01:38
Diisopropyl ether (DIPE)	ND		0.50	1	05/02/2015 01:38
Ethylbenzene	ND		0.50	1	05/02/2015 01:38
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/02/2015 01:38
Freon 113	ND		0.50	1	05/02/2015 01:38
Hexachlorobutadiene	ND		0.50	1	05/02/2015 01:38
Hexachloroethane	ND		0.50	1	05/02/2015 01:38
2-Hexanone	ND		0.50	1	05/02/2015 01:38
Isopropylbenzene	ND		0.50	1	05/02/2015 01:38
4-Isopropyl toluene	ND		0.50	1	05/02/2015 01:38
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/02/2015 01:38
Methylene chloride	ND		0.50	1	05/02/2015 01:38
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/02/2015 01:38
Naphthalene	ND		0.50	1	05/02/2015 01:38
n-Propyl benzene	ND		0.50	1	05/02/2015 01:38
Styrene	ND		0.50	1	05/02/2015 01:38
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/02/2015 01:38
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/02/2015 01:38
Tetrachloroethene	ND		0.50	1	05/02/2015 01:38
Toluene	ND		0.50	1	05/02/2015 01:38
1,2,3-Trichlorobenzene	ND		0.50	1	05/02/2015 01:38
1,2,4-Trichlorobenzene	ND		0.50	1	05/02/2015 01:38
1,1,1-Trichloroethane	ND		0.50	1	05/02/2015 01:38
1,1,2-Trichloroethane	ND		0.50	1	05/02/2015 01:38
Trichloroethene	ND		0.50	1	05/02/2015 01:38
Trichlorofluoromethane	ND		0.50	1	05/02/2015 01:38
1,2,3-Trichloropropane	ND		0.50	1	05/02/2015 01:38
1,2,4-Trimethylbenzene	ND		0.50	1	05/02/2015 01:38
1,3,5-Trimethylbenzene	ND		0.50	1	05/02/2015 01:38
Vinyl Chloride	ND		0.50	1	05/02/2015 01:38
Xylenes, Total	ND		0.50	1	05/02/2015 01:38

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Analytical Report

Client:	GEOCON Env. Consultants	WorkOrder:	1504A02
Project:	#E8722-02-01B; Caltrans Hegenberger	Extraction Method:	SW5030B
Date Received:	4/24/15 19:36	Analytical Method:	SW8260B
Date Prepared:	5/1/15-5/2/15	Unit:	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20	1504A02-016C	Water	04/24/2015 08:55	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		05/02/2015 01:38
Toluene-d8	87	70-130		05/02/2015 01:38
4-BFB	87	70-130		05/02/2015 01:38

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21	1504A02-020C	Water	04/24/2015 09:20	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/02/2015 02:20
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/02/2015 02:20
Benzene	ND		0.50	1	05/02/2015 02:20
Bromobenzene	ND		0.50	1	05/02/2015 02:20
Bromochloromethane	ND		0.50	1	05/02/2015 02:20
Bromodichloromethane	ND		0.50	1	05/02/2015 02:20
Bromoform	ND		0.50	1	05/02/2015 02:20
Bromomethane	ND		0.50	1	05/02/2015 02:20
2-Butanone (MEK)	ND		2.0	1	05/02/2015 02:20
t-Butyl alcohol (TBA)	ND		2.0	1	05/02/2015 02:20
n-Butyl benzene	ND		0.50	1	05/02/2015 02:20
sec-Butyl benzene	ND		0.50	1	05/02/2015 02:20
tert-Butyl benzene	ND		0.50	1	05/02/2015 02:20
Carbon Disulfide	ND		0.50	1	05/02/2015 02:20
Carbon Tetrachloride	ND		0.50	1	05/02/2015 02:20
Chlorobenzene	ND		0.50	1	05/02/2015 02:20
Chloroethane	ND		0.50	1	05/02/2015 02:20
Chloroform	ND		0.50	1	05/02/2015 02:20
Chloromethane	ND		0.50	1	05/02/2015 02:20
2-Chlorotoluene	ND		0.50	1	05/02/2015 02:20
4-Chlorotoluene	ND		0.50	1	05/02/2015 02:20
Dibromochloromethane	ND		0.50	1	05/02/2015 02:20
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/02/2015 02:20
1,2-Dibromoethane (EDB)	ND		0.50	1	05/02/2015 02:20
Dibromomethane	ND		0.50	1	05/02/2015 02:20
1,2-Dichlorobenzene	ND		0.50	1	05/02/2015 02:20
1,3-Dichlorobenzene	ND		0.50	1	05/02/2015 02:20
1,4-Dichlorobenzene	ND		0.50	1	05/02/2015 02:20
Dichlorodifluoromethane	ND		0.50	1	05/02/2015 02:20
1,1-Dichloroethane	ND		0.50	1	05/02/2015 02:20
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/02/2015 02:20
1,1-Dichloroethene	ND		0.50	1	05/02/2015 02:20
cis-1,2-Dichloroethene	ND		0.50	1	05/02/2015 02:20
trans-1,2-Dichloroethene	ND		0.50	1	05/02/2015 02:20
1,2-Dichloropropane	ND		0.50	1	05/02/2015 02:20
1,3-Dichloropropane	ND		0.50	1	05/02/2015 02:20
2,2-Dichloropropane	ND		0.50	1	05/02/2015 02:20
1,1-Dichloropropene	ND		0.50	1	05/02/2015 02:20

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21	1504A02-020C	Water	04/24/2015 09:20	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/02/2015 02:20
trans-1,3-Dichloropropene	ND		0.50	1	05/02/2015 02:20
Diisopropyl ether (DIPE)	ND		0.50	1	05/02/2015 02:20
Ethylbenzene	ND		0.50	1	05/02/2015 02:20
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/02/2015 02:20
Freon 113	ND		0.50	1	05/02/2015 02:20
Hexachlorobutadiene	ND		0.50	1	05/02/2015 02:20
Hexachloroethane	ND		0.50	1	05/02/2015 02:20
2-Hexanone	ND		0.50	1	05/02/2015 02:20
Isopropylbenzene	ND		0.50	1	05/02/2015 02:20
4-Isopropyl toluene	ND		0.50	1	05/02/2015 02:20
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/02/2015 02:20
Methylene chloride	ND		0.50	1	05/02/2015 02:20
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/02/2015 02:20
Naphthalene	ND		0.50	1	05/02/2015 02:20
n-Propyl benzene	ND		0.50	1	05/02/2015 02:20
Styrene	ND		0.50	1	05/02/2015 02:20
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/02/2015 02:20
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/02/2015 02:20
Tetrachloroethene	ND		0.50	1	05/02/2015 02:20
Toluene	ND		0.50	1	05/02/2015 02:20
1,2,3-Trichlorobenzene	ND		0.50	1	05/02/2015 02:20
1,2,4-Trichlorobenzene	ND		0.50	1	05/02/2015 02:20
1,1,1-Trichloroethane	ND		0.50	1	05/02/2015 02:20
1,1,2-Trichloroethane	ND		0.50	1	05/02/2015 02:20
Trichloroethene	ND		0.50	1	05/02/2015 02:20
Trichlorofluoromethane	ND		0.50	1	05/02/2015 02:20
1,2,3-Trichloropropane	ND		0.50	1	05/02/2015 02:20
1,2,4-Trimethylbenzene	ND		0.50	1	05/02/2015 02:20
1,3,5-Trimethylbenzene	ND		0.50	1	05/02/2015 02:20
Vinyl Chloride	ND		0.50	1	05/02/2015 02:20
Xylenes, Total	ND		0.50	1	05/02/2015 02:20

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21	1504A02-020C	Water	04/24/2015 09:20	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	91	70-130		05/02/2015 02:20
Toluene-d8	88	70-130		05/02/2015 02:20
4-BFB	93	70-130		05/02/2015 02:20

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18	1504A02-025C	Water	04/24/2015 09:55	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/02/2015 03:03
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/02/2015 03:03
Benzene	2.4		0.50	1	05/02/2015 03:03
Bromobenzene	ND		0.50	1	05/02/2015 03:03
Bromochloromethane	ND		0.50	1	05/02/2015 03:03
Bromodichloromethane	ND		0.50	1	05/02/2015 03:03
Bromoform	ND		0.50	1	05/02/2015 03:03
Bromomethane	ND		0.50	1	05/02/2015 03:03
2-Butanone (MEK)	ND		2.0	1	05/02/2015 03:03
t-Butyl alcohol (TBA)	3.1		2.0	1	05/02/2015 03:03
n-Butyl benzene	7.4		0.50	1	05/02/2015 03:03
sec-Butyl benzene	4.9		0.50	1	05/02/2015 03:03
tert-Butyl benzene	ND		0.50	1	05/02/2015 03:03
Carbon Disulfide	0.99		0.50	1	05/02/2015 03:03
Carbon Tetrachloride	ND		0.50	1	05/02/2015 03:03
Chlorobenzene	ND		0.50	1	05/02/2015 03:03
Chloroethane	1.2		0.50	1	05/02/2015 03:03
Chloroform	ND		0.50	1	05/02/2015 03:03
Chloromethane	ND		0.50	1	05/02/2015 03:03
2-Chlorotoluene	ND		0.50	1	05/02/2015 03:03
4-Chlorotoluene	ND		0.50	1	05/02/2015 03:03
Dibromochloromethane	ND		0.50	1	05/02/2015 03:03
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/02/2015 03:03
1,2-Dibromoethane (EDB)	ND		0.50	1	05/02/2015 03:03
Dibromomethane	ND		0.50	1	05/02/2015 03:03
1,2-Dichlorobenzene	ND		0.50	1	05/02/2015 03:03
1,3-Dichlorobenzene	ND		0.50	1	05/02/2015 03:03
1,4-Dichlorobenzene	ND		0.50	1	05/02/2015 03:03
Dichlorodifluoromethane	ND		0.50	1	05/02/2015 03:03
1,1-Dichloroethane	ND		0.50	1	05/02/2015 03:03
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/02/2015 03:03
1,1-Dichloroethene	ND		0.50	1	05/02/2015 03:03
cis-1,2-Dichloroethene	ND		0.50	1	05/02/2015 03:03
trans-1,2-Dichloroethene	ND		0.50	1	05/02/2015 03:03
1,2-Dichloropropane	ND		0.50	1	05/02/2015 03:03
1,3-Dichloropropane	ND		0.50	1	05/02/2015 03:03
2,2-Dichloropropane	ND		0.50	1	05/02/2015 03:03
1,1-Dichloropropene	ND		0.50	1	05/02/2015 03:03

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18	1504A02-025C	Water	04/24/2015 09:55	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/02/2015 03:03
trans-1,3-Dichloropropene	ND		0.50	1	05/02/2015 03:03
Diisopropyl ether (DIPE)	ND		0.50	1	05/02/2015 03:03
Ethylbenzene	ND		0.50	1	05/02/2015 03:03
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/02/2015 03:03
Freon 113	ND		0.50	1	05/02/2015 03:03
Hexachlorobutadiene	ND		0.50	1	05/02/2015 03:03
Hexachloroethane	ND		0.50	1	05/02/2015 03:03
2-Hexanone	ND		0.50	1	05/02/2015 03:03
Isopropylbenzene	10		0.50	1	05/02/2015 03:03
4-Isopropyl toluene	ND		0.50	1	05/02/2015 03:03
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/02/2015 03:03
Methylene chloride	ND		0.50	1	05/02/2015 03:03
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/02/2015 03:03
Naphthalene	ND		0.50	1	05/02/2015 03:03
n-Propyl benzene	16		0.50	1	05/02/2015 03:03
Styrene	ND		0.50	1	05/02/2015 03:03
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/02/2015 03:03
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/02/2015 03:03
Tetrachloroethene	ND		0.50	1	05/02/2015 03:03
Toluene	1.5		0.50	1	05/02/2015 03:03
1,2,3-Trichlorobenzene	ND		0.50	1	05/02/2015 03:03
1,2,4-Trichlorobenzene	ND		0.50	1	05/02/2015 03:03
1,1,1-Trichloroethane	ND		0.50	1	05/02/2015 03:03
1,1,2-Trichloroethane	ND		0.50	1	05/02/2015 03:03
Trichloroethene	ND		0.50	1	05/02/2015 03:03
Trichlorofluoromethane	ND		0.50	1	05/02/2015 03:03
1,2,3-Trichloropropane	ND		0.50	1	05/02/2015 03:03
1,2,4-Trimethylbenzene	ND		0.50	1	05/02/2015 03:03
1,3,5-Trimethylbenzene	ND		0.50	1	05/02/2015 03:03
Vinyl Chloride	ND		0.50	1	05/02/2015 03:03
Xylenes, Total	1.2		0.50	1	05/02/2015 03:03

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 5/1/15-5/2/15	Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18	1504A02-025C	Water	04/24/2015 09:55	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	93	70-130		05/02/2015 03:03
Toluene-d8	86	70-130		05/02/2015 03:03
4-BFB	90	70-130		05/02/2015 03:03

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-25	1504A02-026C	Water	04/24/2015 11:20	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/01/2015 16:13
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/01/2015 16:13
Benzene	ND		0.50	1	05/01/2015 16:13
Bromobenzene	ND		0.50	1	05/01/2015 16:13
Bromochloromethane	ND		0.50	1	05/01/2015 16:13
Bromodichloromethane	ND		0.50	1	05/01/2015 16:13
Bromoform	ND		0.50	1	05/01/2015 16:13
Bromomethane	ND		0.50	1	05/01/2015 16:13
2-Butanone (MEK)	ND		2.0	1	05/01/2015 16:13
t-Butyl alcohol (TBA)	ND		2.0	1	05/01/2015 16:13
n-Butyl benzene	ND		0.50	1	05/01/2015 16:13
sec-Butyl benzene	ND		0.50	1	05/01/2015 16:13
tert-Butyl benzene	ND		0.50	1	05/01/2015 16:13
Carbon Disulfide	ND		0.50	1	05/01/2015 16:13
Carbon Tetrachloride	ND		0.50	1	05/01/2015 16:13
Chlorobenzene	ND		0.50	1	05/01/2015 16:13
Chloroethane	ND		0.50	1	05/01/2015 16:13
Chloroform	ND		0.50	1	05/01/2015 16:13
Chloromethane	ND		0.50	1	05/01/2015 16:13
2-Chlorotoluene	ND		0.50	1	05/01/2015 16:13
4-Chlorotoluene	ND		0.50	1	05/01/2015 16:13
Dibromochloromethane	ND		0.50	1	05/01/2015 16:13
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/01/2015 16:13
1,2-Dibromoethane (EDB)	ND		0.50	1	05/01/2015 16:13
Dibromomethane	ND		0.50	1	05/01/2015 16:13
1,2-Dichlorobenzene	ND		0.50	1	05/01/2015 16:13
1,3-Dichlorobenzene	ND		0.50	1	05/01/2015 16:13
1,4-Dichlorobenzene	ND		0.50	1	05/01/2015 16:13
Dichlorodifluoromethane	ND		0.50	1	05/01/2015 16:13
1,1-Dichloroethane	ND		0.50	1	05/01/2015 16:13
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/01/2015 16:13
1,1-Dichloroethene	ND		0.50	1	05/01/2015 16:13
cis-1,2-Dichloroethene	ND		0.50	1	05/01/2015 16:13
trans-1,2-Dichloroethene	ND		0.50	1	05/01/2015 16:13
1,2-Dichloropropane	ND		0.50	1	05/01/2015 16:13
1,3-Dichloropropane	ND		0.50	1	05/01/2015 16:13
2,2-Dichloropropane	ND		0.50	1	05/01/2015 16:13
1,1-Dichloropropene	ND		0.50	1	05/01/2015 16:13

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-25	1504A02-026C	Water	04/24/2015 11:20	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/01/2015 16:13
trans-1,3-Dichloropropene	ND		0.50	1	05/01/2015 16:13
Diisopropyl ether (DIPE)	ND		0.50	1	05/01/2015 16:13
Ethylbenzene	ND		0.50	1	05/01/2015 16:13
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/01/2015 16:13
Freon 113	ND		0.50	1	05/01/2015 16:13
Hexachlorobutadiene	ND		0.50	1	05/01/2015 16:13
Hexachloroethane	ND		0.50	1	05/01/2015 16:13
2-Hexanone	ND		0.50	1	05/01/2015 16:13
Isopropylbenzene	ND		0.50	1	05/01/2015 16:13
4-Isopropyl toluene	ND		0.50	1	05/01/2015 16:13
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/01/2015 16:13
Methylene chloride	ND		0.50	1	05/01/2015 16:13
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/01/2015 16:13
Naphthalene	ND		0.50	1	05/01/2015 16:13
n-Propyl benzene	ND		0.50	1	05/01/2015 16:13
Styrene	ND		0.50	1	05/01/2015 16:13
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/01/2015 16:13
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/01/2015 16:13
Tetrachloroethene	ND		0.50	1	05/01/2015 16:13
Toluene	ND		0.50	1	05/01/2015 16:13
1,2,3-Trichlorobenzene	ND		0.50	1	05/01/2015 16:13
1,2,4-Trichlorobenzene	ND		0.50	1	05/01/2015 16:13
1,1,1-Trichloroethane	ND		0.50	1	05/01/2015 16:13
1,1,2-Trichloroethane	ND		0.50	1	05/01/2015 16:13
Trichloroethene	ND		0.50	1	05/01/2015 16:13
Trichlorofluoromethane	ND		0.50	1	05/01/2015 16:13
1,2,3-Trichloropropane	ND		0.50	1	05/01/2015 16:13
1,2,4-Trimethylbenzene	ND		0.50	1	05/01/2015 16:13
1,3,5-Trimethylbenzene	ND		0.50	1	05/01/2015 16:13
Vinyl Chloride	ND		0.50	1	05/01/2015 16:13
Xylenes, Total	ND		0.50	1	05/01/2015 16:13

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-25	1504A02-026C	Water	04/24/2015 11:20	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	91	70-130		05/01/2015 16:13
Toluene-d8	85	70-130		05/01/2015 16:13
4-BFB	88	70-130		05/01/2015 16:13

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-24	1504A02-027C	Water	04/24/2015 12:05	GC16	104371
Analytes	Result	RL	DF	Date Analyzed	
Acetone	ND	10	1	05/01/2015 16:56	
tert-Amyl methyl ether (TAME)	ND	0.50	1	05/01/2015 16:56	
Benzene	ND	0.50	1	05/01/2015 16:56	
Bromobenzene	ND	0.50	1	05/01/2015 16:56	
Bromochloromethane	ND	0.50	1	05/01/2015 16:56	
Bromodichloromethane	ND	0.50	1	05/01/2015 16:56	
Bromoform	ND	0.50	1	05/01/2015 16:56	
Bromomethane	ND	0.50	1	05/01/2015 16:56	
2-Butanone (MEK)	ND	2.0	1	05/01/2015 16:56	
t-Butyl alcohol (TBA)	ND	2.0	1	05/01/2015 16:56	
n-Butyl benzene	ND	0.50	1	05/01/2015 16:56	
sec-Butyl benzene	ND	0.50	1	05/01/2015 16:56	
tert-Butyl benzene	ND	0.50	1	05/01/2015 16:56	
Carbon Disulfide	ND	0.50	1	05/01/2015 16:56	
Carbon Tetrachloride	ND	0.50	1	05/01/2015 16:56	
Chlorobenzene	ND	0.50	1	05/01/2015 16:56	
Chloroethane	ND	0.50	1	05/01/2015 16:56	
Chloroform	ND	0.50	1	05/01/2015 16:56	
Chloromethane	ND	0.50	1	05/01/2015 16:56	
2-Chlorotoluene	ND	0.50	1	05/01/2015 16:56	
4-Chlorotoluene	ND	0.50	1	05/01/2015 16:56	
Dibromochloromethane	ND	0.50	1	05/01/2015 16:56	
1,2-Dibromo-3-chloropropane	ND	0.20	1	05/01/2015 16:56	
1,2-Dibromoethane (EDB)	ND	0.50	1	05/01/2015 16:56	
Dibromomethane	ND	0.50	1	05/01/2015 16:56	
1,2-Dichlorobenzene	ND	0.50	1	05/01/2015 16:56	
1,3-Dichlorobenzene	ND	0.50	1	05/01/2015 16:56	
1,4-Dichlorobenzene	ND	0.50	1	05/01/2015 16:56	
Dichlorodifluoromethane	ND	0.50	1	05/01/2015 16:56	
1,1-Dichloroethane	ND	0.50	1	05/01/2015 16:56	
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	05/01/2015 16:56	
1,1-Dichloroethene	1.1	0.50	1	05/01/2015 16:56	
cis-1,2-Dichloroethene	ND	0.50	1	05/01/2015 16:56	
trans-1,2-Dichloroethene	ND	0.50	1	05/01/2015 16:56	
1,2-Dichloropropane	ND	0.50	1	05/01/2015 16:56	
1,3-Dichloropropane	ND	0.50	1	05/01/2015 16:56	
2,2-Dichloropropane	ND	0.50	1	05/01/2015 16:56	
1,1-Dichloropropene	ND	0.50	1	05/01/2015 16:56	

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-24	1504A02-027C	Water	04/24/2015 12:05	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/01/2015 16:56
trans-1,3-Dichloropropene	ND		0.50	1	05/01/2015 16:56
Diisopropyl ether (DIPE)	ND		0.50	1	05/01/2015 16:56
Ethylbenzene	ND		0.50	1	05/01/2015 16:56
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/01/2015 16:56
Freon 113	ND		0.50	1	05/01/2015 16:56
Hexachlorobutadiene	ND		0.50	1	05/01/2015 16:56
Hexachloroethane	ND		0.50	1	05/01/2015 16:56
2-Hexanone	ND		0.50	1	05/01/2015 16:56
Isopropylbenzene	ND		0.50	1	05/01/2015 16:56
4-Isopropyl toluene	ND		0.50	1	05/01/2015 16:56
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/01/2015 16:56
Methylene chloride	ND		0.50	1	05/01/2015 16:56
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/01/2015 16:56
Naphthalene	ND		0.50	1	05/01/2015 16:56
n-Propyl benzene	ND		0.50	1	05/01/2015 16:56
Styrene	ND		0.50	1	05/01/2015 16:56
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/01/2015 16:56
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/01/2015 16:56
Tetrachloroethene	ND		0.50	1	05/01/2015 16:56
Toluene	ND		0.50	1	05/01/2015 16:56
1,2,3-Trichlorobenzene	ND		0.50	1	05/01/2015 16:56
1,2,4-Trichlorobenzene	ND		0.50	1	05/01/2015 16:56
1,1,1-Trichloroethane	ND		0.50	1	05/01/2015 16:56
1,1,2-Trichloroethane	ND		0.50	1	05/01/2015 16:56
Trichloroethene	ND		0.50	1	05/01/2015 16:56
Trichlorofluoromethane	ND		0.50	1	05/01/2015 16:56
1,2,3-Trichloropropane	ND		0.50	1	05/01/2015 16:56
1,2,4-Trimethylbenzene	ND		0.50	1	05/01/2015 16:56
1,3,5-Trimethylbenzene	ND		0.50	1	05/01/2015 16:56
Vinyl Chloride	ND		0.50	1	05/01/2015 16:56
Xylenes, Total	ND		0.50	1	05/01/2015 16:56

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Analytical Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Project: #E8722-02-01B; Caltrans Hegenberger	Extraction Method: SW5030B
Date Received: 4/24/15 19:36	Analytical Method: SW8260B
Date Prepared: 5/1/15-5/2/15	Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-24	1504A02-027C	Water	04/24/2015 12:05	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	91	70-130		05/01/2015 16:56
Toluene-d8	86	70-130		05/01/2015 16:56
4-BFB	83	70-130		05/01/2015 16:56

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-23	1504A02-028C	Water	04/24/2015 12:50	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/01/2015 17:39
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/01/2015 17:39
Benzene	ND		0.50	1	05/01/2015 17:39
Bromobenzene	ND		0.50	1	05/01/2015 17:39
Bromochloromethane	ND		0.50	1	05/01/2015 17:39
Bromodichloromethane	ND		0.50	1	05/01/2015 17:39
Bromoform	ND		0.50	1	05/01/2015 17:39
Bromomethane	ND		0.50	1	05/01/2015 17:39
2-Butanone (MEK)	ND		2.0	1	05/01/2015 17:39
t-Butyl alcohol (TBA)	ND		2.0	1	05/01/2015 17:39
n-Butyl benzene	ND		0.50	1	05/01/2015 17:39
sec-Butyl benzene	ND		0.50	1	05/01/2015 17:39
tert-Butyl benzene	ND		0.50	1	05/01/2015 17:39
Carbon Disulfide	ND		0.50	1	05/01/2015 17:39
Carbon Tetrachloride	ND		0.50	1	05/01/2015 17:39
Chlorobenzene	ND		0.50	1	05/01/2015 17:39
Chloroethane	ND		0.50	1	05/01/2015 17:39
Chloroform	ND		0.50	1	05/01/2015 17:39
Chloromethane	ND		0.50	1	05/01/2015 17:39
2-Chlorotoluene	ND		0.50	1	05/01/2015 17:39
4-Chlorotoluene	ND		0.50	1	05/01/2015 17:39
Dibromochloromethane	ND		0.50	1	05/01/2015 17:39
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/01/2015 17:39
1,2-Dibromoethane (EDB)	ND		0.50	1	05/01/2015 17:39
Dibromomethane	ND		0.50	1	05/01/2015 17:39
1,2-Dichlorobenzene	ND		0.50	1	05/01/2015 17:39
1,3-Dichlorobenzene	ND		0.50	1	05/01/2015 17:39
1,4-Dichlorobenzene	ND		0.50	1	05/01/2015 17:39
Dichlorodifluoromethane	ND		0.50	1	05/01/2015 17:39
1,1-Dichloroethane	0.61		0.50	1	05/01/2015 17:39
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/01/2015 17:39
1,1-Dichloroethene	1.5		0.50	1	05/01/2015 17:39
cis-1,2-Dichloroethene	ND		0.50	1	05/01/2015 17:39
trans-1,2-Dichloroethene	ND		0.50	1	05/01/2015 17:39
1,2-Dichloropropane	ND		0.50	1	05/01/2015 17:39
1,3-Dichloropropane	ND		0.50	1	05/01/2015 17:39
2,2-Dichloropropane	ND		0.50	1	05/01/2015 17:39
1,1-Dichloropropene	ND		0.50	1	05/01/2015 17:39

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-23	1504A02-028C	Water	04/24/2015 12:50	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/01/2015 17:39
trans-1,3-Dichloropropene	ND		0.50	1	05/01/2015 17:39
Diisopropyl ether (DIPE)	ND		0.50	1	05/01/2015 17:39
Ethylbenzene	ND		0.50	1	05/01/2015 17:39
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/01/2015 17:39
Freon 113	ND		0.50	1	05/01/2015 17:39
Hexachlorobutadiene	ND		0.50	1	05/01/2015 17:39
Hexachloroethane	ND		0.50	1	05/01/2015 17:39
2-Hexanone	ND		0.50	1	05/01/2015 17:39
Isopropylbenzene	ND		0.50	1	05/01/2015 17:39
4-Isopropyl toluene	ND		0.50	1	05/01/2015 17:39
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/01/2015 17:39
Methylene chloride	ND		0.50	1	05/01/2015 17:39
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/01/2015 17:39
Naphthalene	ND		0.50	1	05/01/2015 17:39
n-Propyl benzene	ND		0.50	1	05/01/2015 17:39
Styrene	ND		0.50	1	05/01/2015 17:39
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/01/2015 17:39
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/01/2015 17:39
Tetrachloroethene	ND		0.50	1	05/01/2015 17:39
Toluene	ND		0.50	1	05/01/2015 17:39
1,2,3-Trichlorobenzene	ND		0.50	1	05/01/2015 17:39
1,2,4-Trichlorobenzene	ND		0.50	1	05/01/2015 17:39
1,1,1-Trichloroethane	ND		0.50	1	05/01/2015 17:39
1,1,2-Trichloroethane	ND		0.50	1	05/01/2015 17:39
Trichloroethene	ND		0.50	1	05/01/2015 17:39
Trichlorofluoromethane	ND		0.50	1	05/01/2015 17:39
1,2,3-Trichloropropane	ND		0.50	1	05/01/2015 17:39
1,2,4-Trimethylbenzene	ND		0.50	1	05/01/2015 17:39
1,3,5-Trimethylbenzene	ND		0.50	1	05/01/2015 17:39
Vinyl Chloride	ND		0.50	1	05/01/2015 17:39
Xylenes, Total	ND		0.50	1	05/01/2015 17:39

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Analytical Report

Client:	GEOCON Env. Consultants	WorkOrder:	1504A02
Project:	#E8722-02-01B; Caltrans Hegenberger	Extraction Method:	SW5030B
Date Received:	4/24/15 19:36	Analytical Method:	SW8260B
Date Prepared:	5/1/15-5/2/15	Unit:	µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-23	1504A02-028C	Water	04/24/2015 12:50	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>	
Dibromofluoromethane	92	70-130		05/01/2015 17:39
Toluene-d8	85	70-130		05/01/2015 17:39
4-BFB	87	70-130		05/01/2015 17:39

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504A02-029C	Water	04/24/2015 13:45	GC16	104371
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	05/01/2015 18:21
tert-Amyl methyl ether (TAME)	ND		0.50	1	05/01/2015 18:21
Benzene	ND		0.50	1	05/01/2015 18:21
Bromobenzene	ND		0.50	1	05/01/2015 18:21
Bromochloromethane	ND		0.50	1	05/01/2015 18:21
Bromodichloromethane	ND		0.50	1	05/01/2015 18:21
Bromoform	ND		0.50	1	05/01/2015 18:21
Bromomethane	ND		0.50	1	05/01/2015 18:21
2-Butanone (MEK)	ND		2.0	1	05/01/2015 18:21
t-Butyl alcohol (TBA)	2.2		2.0	1	05/01/2015 18:21
n-Butyl benzene	ND		0.50	1	05/01/2015 18:21
sec-Butyl benzene	ND		0.50	1	05/01/2015 18:21
tert-Butyl benzene	ND		0.50	1	05/01/2015 18:21
Carbon Disulfide	ND		0.50	1	05/01/2015 18:21
Carbon Tetrachloride	ND		0.50	1	05/01/2015 18:21
Chlorobenzene	ND		0.50	1	05/01/2015 18:21
Chloroethane	ND		0.50	1	05/01/2015 18:21
Chloroform	ND		0.50	1	05/01/2015 18:21
Chloromethane	ND		0.50	1	05/01/2015 18:21
2-Chlorotoluene	ND		0.50	1	05/01/2015 18:21
4-Chlorotoluene	ND		0.50	1	05/01/2015 18:21
Dibromochloromethane	ND		0.50	1	05/01/2015 18:21
1,2-Dibromo-3-chloropropane	ND		0.20	1	05/01/2015 18:21
1,2-Dibromoethane (EDB)	ND		0.50	1	05/01/2015 18:21
Dibromomethane	ND		0.50	1	05/01/2015 18:21
1,2-Dichlorobenzene	ND		0.50	1	05/01/2015 18:21
1,3-Dichlorobenzene	ND		0.50	1	05/01/2015 18:21
1,4-Dichlorobenzene	ND		0.50	1	05/01/2015 18:21
Dichlorodifluoromethane	ND		0.50	1	05/01/2015 18:21
1,1-Dichloroethane	ND		0.50	1	05/01/2015 18:21
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	05/01/2015 18:21
1,1-Dichloroethene	ND		0.50	1	05/01/2015 18:21
cis-1,2-Dichloroethene	0.85		0.50	1	05/01/2015 18:21
trans-1,2-Dichloroethene	ND		0.50	1	05/01/2015 18:21
1,2-Dichloropropane	ND		0.50	1	05/01/2015 18:21
1,3-Dichloropropane	ND		0.50	1	05/01/2015 18:21
2,2-Dichloropropane	ND		0.50	1	05/01/2015 18:21
1,1-Dichloropropene	ND		0.50	1	05/01/2015 18:21

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Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504A02-029C	Water	04/24/2015 13:45	GC16	104371
Analytes	Result		RL	DF	Date Analyzed
cis-1,3-Dichloropropene	ND		0.50	1	05/01/2015 18:21
trans-1,3-Dichloropropene	ND		0.50	1	05/01/2015 18:21
Diisopropyl ether (DIPE)	ND		0.50	1	05/01/2015 18:21
Ethylbenzene	ND		0.50	1	05/01/2015 18:21
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	05/01/2015 18:21
Freon 113	ND		0.50	1	05/01/2015 18:21
Hexachlorobutadiene	ND		0.50	1	05/01/2015 18:21
Hexachloroethane	ND		0.50	1	05/01/2015 18:21
2-Hexanone	ND		0.50	1	05/01/2015 18:21
Isopropylbenzene	ND		0.50	1	05/01/2015 18:21
4-Isopropyl toluene	ND		0.50	1	05/01/2015 18:21
Methyl-t-butyl ether (MTBE)	ND		0.50	1	05/01/2015 18:21
Methylene chloride	ND		0.50	1	05/01/2015 18:21
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	05/01/2015 18:21
Naphthalene	ND		0.50	1	05/01/2015 18:21
n-Propyl benzene	ND		0.50	1	05/01/2015 18:21
Styrene	ND		0.50	1	05/01/2015 18:21
1,1,1,2-Tetrachloroethane	ND		0.50	1	05/01/2015 18:21
1,1,2,2-Tetrachloroethane	ND		0.50	1	05/01/2015 18:21
Tetrachloroethene	ND		0.50	1	05/01/2015 18:21
Toluene	ND		0.50	1	05/01/2015 18:21
1,2,3-Trichlorobenzene	ND		0.50	1	05/01/2015 18:21
1,2,4-Trichlorobenzene	ND		0.50	1	05/01/2015 18:21
1,1,1-Trichloroethane	ND		0.50	1	05/01/2015 18:21
1,1,2-Trichloroethane	ND		0.50	1	05/01/2015 18:21
Trichloroethene	ND		0.50	1	05/01/2015 18:21
Trichlorofluoromethane	ND		0.50	1	05/01/2015 18:21
1,2,3-Trichloropropane	ND		0.50	1	05/01/2015 18:21
1,2,4-Trimethylbenzene	ND		0.50	1	05/01/2015 18:21
1,3,5-Trimethylbenzene	ND		0.50	1	05/01/2015 18:21
Vinyl Chloride	0.64		0.50	1	05/01/2015 18:21
Xylenes, Total	ND		0.50	1	05/01/2015 18:21

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

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

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504A02-029C	Water	04/24/2015 13:45	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
Dibromofluoromethane	91	70-130		05/01/2015 18:21
Toluene-d8	86	70-130		05/01/2015 18:21
4-BFB	89	70-130		05/01/2015 18:21

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 2'	1504A02-001A	Soil	04/24/2015 06:45	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 00:46

Surrogates	REC (%)	Limits
Dibromofluoromethane	111	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 3.5'	1504A02-002A	Soil	04/24/2015 06:45	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 01:27

Surrogates	REC (%)	Limits
Dibromofluoromethane	109	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 6.5'	1504A02-003A	Soil	04/24/2015 06:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 02:08

Surrogates	REC (%)	Limits
Dibromofluoromethane	110	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 11.5'	1504A02-004A	Soil	04/24/2015 07:05	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	0.53	0.25	1	05/02/2015 02:49

Surrogates	REC (%)	Limits
Dibromofluoromethane	109	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 2.5'	1504A02-006A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 03:30

Surrogates	REC (%)	Limits
Dibromofluoromethane	110	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 3.5'	1504A02-007A	Soil	04/24/2015 07:20	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 04:11

Surrogates	REC (%)	Limits
Dibromofluoromethane	110	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 7.5'	1504A02-008A	Soil	04/24/2015 07:30	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 04:52

Surrogates	REC (%)	Limits
Dibromofluoromethane	108	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 10.5	1504A02-009A	Soil	04/24/2015 07:40	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	12	2.5	10	05/04/2015 14:27

Surrogates	REC (%)	Limits
Dibromofluoromethane	110	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 2'	1504A02-011A	Soil	04/24/2015 07:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 06:14

Surrogates	REC (%)	Limits
Dibromofluoromethane	112	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 3.5'	1504A02-012A	Soil	04/24/2015 07:50	GC10	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 06:55

Surrogates	REC (%)	Limits
Dibromofluoromethane	111	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 7.5'	1504A02-013A	Soil	04/24/2015 07:55	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	0.32	0.25	1	05/02/2015 03:45

Surrogates	REC (%)	Limits
Dibromofluoromethane	98	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 11.5'	1504A02-014A	Soil	04/24/2015 08:05	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 04:27

Surrogates	REC (%)	Limits
Dibromofluoromethane	97	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 15'	1504A02-015A	Soil	04/24/2015 08:20	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 05:10

Surrogates	REC (%)	Limits
Dibromofluoromethane	97	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 2'	1504A02-017A	Soil	04/24/2015 09:00	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 05:52

Surrogates	REC (%)	Limits
Dibromofluoromethane	98	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 3.5'	1504A02-018A	Soil	04/24/2015 09:00	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 06:35

Surrogates	REC (%)	Limits
Dibromofluoromethane	97	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 7.5'	1504A02-019A	Soil	04/24/2015 09:10	GC16	104095

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	0.25	1	05/02/2015 07:17

Surrogates	REC (%)	Limits
Dibromofluoromethane	96	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 2'	1504A02-021A	Soil	04/24/2015 09:40	GC16	104107

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	0.42	0.25	1	05/02/2015 13:04

Surrogates	REC (%)	Limits
Dibromofluoromethane	97	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 3.5'	1504A02-022A	Soil	04/24/2015 09:40	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	2.2	0.25	1	05/02/2015 11:17

Surrogates	REC (%)	Limits
Dibromofluoromethane	108	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 7.5'	1504A02-023A	Soil	04/24/2015 09:42	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	6.4	0.25	1	05/02/2015 11:58

Surrogates	REC (%)	Limits
Dibromofluoromethane	104	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 11.5'	1504A02-024A	Soil	04/24/2015 09:50	GC10	104107

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	0.63	0.25	1	05/02/2015 12:39

Surrogates	REC (%)	Limits
Dibromofluoromethane	108	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 11.5	1504A02-030A	Soil	04/24/2015	GC10	104127
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	1.6		0.25	1	05/02/2015 13:20
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
Dibromofluoromethane	111		70-130		05/02/2015 13:20
<u>Analyst(s):</u>	KF				



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19	1504A02-005C	Water	04/24/2015 07:10	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	66	50	1	05/02/2015 00:13

Surrogates	REC (%)	Limits
Dibromofluoromethane	102	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22	1504A02-010C	Water	04/24/2015 07:45	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	370	50	1	05/02/2015 00:55

Surrogates	REC (%)	Limits
Dibromofluoromethane	104	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20	1504A02-016C	Water	04/24/2015 08:55	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/02/2015 01:38

Surrogates	REC (%)	Limits
Dibromofluoromethane	103	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21	1504A02-020C	Water	04/24/2015 09:20	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/02/2015 02:20

Surrogates	REC (%)	Limits
Dibromofluoromethane	103	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18	1504A02-025C	Water	04/24/2015 09:55	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	1300	50	1	05/02/2015 03:03

Surrogates	REC (%)	Limits
Dibromofluoromethane	106	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-25	1504A02-026C	Water	04/24/2015 11:20	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/01/2015 16:13

Surrogates	REC (%)	Limits
Dibromofluoromethane	104	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-24	1504A02-027C	Water	04/24/2015 12:05	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/01/2015 16:56

Surrogates	REC (%)	Limits
Dibromofluoromethane	103	70-130

Analyst(s): KF

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-23	1504A02-028C	Water	04/24/2015 12:50	GC16	104371

Analytes	Result	RL	DF	Date Analyzed
TPH(g)	ND	50	1	05/01/2015 17:39

Surrogates	REC (%)	Limits
Dibromofluoromethane	105	70-130

Analyst(s): KF

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 5/1/15-5/2/15

WorkOrder: 1504A02
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

TPH(g) by Purge & Trap and GC/MS

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504A02-029C	Water	04/24/2015 13:45	GC16	104371

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g)	ND	50	1	05/01/2015 18:21

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
Dibromofluoromethane	103	70-130

Analyst(s): KF



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 2'	1504A02-001A	Soil	04/24/2015 06:45	GC31B	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	53	10	1	04/30/2015 21:43

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	93	70-130

Analyst(s): HD Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 3.5'	1504A02-002A	Soil	04/24/2015 06:45	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	4.8	1.0	1	04/30/2015 21:53

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	113	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 6.5'	1504A02-003A	Soil	04/24/2015 06:50	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	4.0	1.0	1	05/03/2015 22:00

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	114	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 11.5'	1504A02-004A	Soil	04/24/2015 07:05	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/01/2015 06:16

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	114	70-130

Analyst(s): TK

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 2.5'	1504A02-006A	Soil	04/24/2015 07:20	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	6.6	1.0	1	05/01/2015 11:05

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	114	70-130	05/01/2015 11:05

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 3.5'	1504A02-007A	Soil	04/24/2015 07:20	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	16	1.0	1	05/02/2015 02:00

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	112	70-130	05/02/2015 02:00

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 7.5'	1504A02-008A	Soil	04/24/2015 07:30	GC2B	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	8.5	2.0	2	05/04/2015 09:59

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	113	70-130	05/04/2015 09:59

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 10.5	1504A02-009A	Soil	04/24/2015 07:40	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	74	1.0	1	05/02/2015 17:30

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	113	70-130	05/02/2015 17:30

Analyst(s): TK Analytical Comments: e7,e2,e8/e4

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 2'	1504A02-011A	Soil	04/24/2015 07:50	GC31B	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	220	50	5	05/02/2015 10:29

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	102	70-130	05/02/2015 10:29

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 3.5'	1504A02-012A	Soil	04/24/2015 07:50	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	04/30/2015 20:41

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	111	70-130	04/30/2015 20:41

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 7.5'	1504A02-013A	Soil	04/24/2015 07:55	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	50	1.0	1	05/01/2015 07:27

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	113	70-130	05/01/2015 07:27

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 11.5'	1504A02-014A	Soil	04/24/2015 08:05	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/01/2015 22:26

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	109	70-130	05/01/2015 22:26

Analyst(s): TK

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 15'	1504A02-015A	Soil	04/24/2015 08:20	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/02/2015 11:30

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	113	70-130

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 2'	1504A02-017A	Soil	04/24/2015 09:00	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	2.4	1.0	1	05/02/2015 00:49

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	107	70-130

Analyst(s): TK

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 3.5'	1504A02-018A	Soil	04/24/2015 09:00	GC6A	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	5.0	1.0	1	05/04/2015 11:55

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	97	70-130

Analyst(s): TK

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 7.5'	1504A02-019A	Soil	04/24/2015 09:10	GC9a	104096

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	4.1	1.0	1	05/02/2015 12:42

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): TK

Analytical Comments: e7,e2

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B/3630C
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 2'	1504A02-021A	Soil	04/24/2015 09:40	GC9b	104096

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	54	50	50	04/30/2015 17:00

Surrogates	REC (%)	Limits	Date Analyzed
C9	94	70-130	04/30/2015 17:00

Analyst(s): TK **Analytical Comments:** e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 3.5'	1504A02-022A	Soil	04/24/2015 09:40	GC2A	104105

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	04/28/2015 17:47

Surrogates	REC (%)	Limits	Date Analyzed
C9	103	70-130	04/28/2015 17:47

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 7.5'	1504A02-023A	Soil	04/24/2015 09:42	GC9a	104105

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	53	1.0	1	05/02/2015 22:17

Surrogates	REC (%)	Limits	Date Analyzed
C9	115	70-130	05/02/2015 22:17

Analyst(s): TK **Analytical Comments:** e7,e2,e8/e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 11.5'	1504A02-024A	Soil	04/24/2015 09:50	GC9a	104105

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	05/01/2015 23:37

Surrogates	REC (%)	Limits	Date Analyzed
C9	106	70-130	05/01/2015 23:37

Analyst(s): TK

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15

WorkOrder: 1504A02
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19	1504A02-005B	Water	04/24/2015 07:10	GC11A	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	800	250	5	05/04/2015 17:30

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	95	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22	1504A02-010B	Water	04/24/2015 07:45	GC11A	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	2500	1000	20	04/30/2015 08:14

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	92	70-130

Analyst(s): TK Analytical Comments: e7,e8,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20	1504A02-016B	Water	04/24/2015 08:55	GC11A	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	560	50	1	04/30/2015 05:57

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	98	70-130

Analyst(s): TK Analytical Comments: e7,e1

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21	1504A02-020B	Water	04/24/2015 09:20	GC11A	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1200	1000	20	04/30/2015 04:49

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	89	70-130

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15

WorkOrder: 1504A02
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18	1504A02-025B	Water	04/24/2015 09:55	GC11B	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	11,000	5000	100	04/30/2015 09:23

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	122	70-130	04/30/2015 09:23

Analyst(s): TK Analytical Comments: e7,e2,e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-25	1504A02-026B	Water	04/24/2015 11:20	GC31B	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	620	500	1	04/30/2015 18:07

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	88	70-130	04/30/2015 18:07

Analyst(s): HD Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-24	1504A02-027B	Water	04/24/2015 12:05	GC11A	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	50	1	04/30/2015 07:06

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	96	70-130	04/30/2015 07:06

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-23	1504A02-028B	Water	04/24/2015 12:50	GC11B	104106

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	84	50	1	04/30/2015 04:49

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	111	70-130	04/30/2015 04:49

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15

WorkOrder: 1504A02
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
BC-3 6'	1504A02-029B	Water	04/24/2015 13:45	GC11B	104106

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	53	50	1	04/30/2015 05:57

Surrogates	REC (%)	Limits	Date Analyzed
C9	98	70-130	04/30/2015 05:57

Analyst(s): TK

Analytical Comments: e7,e2



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 2'	1504A02-001A	Soil	04/24/2015 06:45	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	110	50	5	05/01/2015 23:17

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	93	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 3.5'	1504A02-002A	Soil	04/24/2015 06:45	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	13	10	1	05/02/2015 14:31

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	92	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 6.5'	1504A02-003A	Soil	04/24/2015 06:50	GC9a	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	4.2	1.0	1	05/04/2015 02:45

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	111	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19 11.5'	1504A02-004A	Soil	04/24/2015 07:05	GC9b	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	04/30/2015 23:05

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): TK Analytical Comments: e7

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 2.5'	1504A02-006A	Soil	04/24/2015 07:20	GC9a	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	6.3	1.0	1	05/03/2015 14:52

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	111	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 3.5'	1504A02-007A	Soil	04/24/2015 07:20	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	25	10	1	04/30/2015 19:57

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	85	70-130

Analyst(s): HD Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 7.5'	1504A02-008A	Soil	04/24/2015 07:30	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	13	10	1	05/01/2015 05:10

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	107	70-130

Analyst(s): HD Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22 10.5	1504A02-009A	Soil	04/24/2015 07:40	GC9a	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	75	10	10	05/04/2015 09:55

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	120	70-130

Analyst(s): TK Analytical Comments: e7,e8,e4

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 2'	1504A02-011A	Soil	04/24/2015 07:50	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	220	50	5	05/02/2015 16:17

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	81	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 3.5'	1504A02-012A	Soil	04/24/2015 07:50	GC9	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.5	1.0	1	05/04/2015 15:54

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	108	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 7.5'	1504A02-013A	Soil	04/24/2015 07:55	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	72	10	1	05/02/2015 12:46

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	95	70-130

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 11.5'	1504A02-014A	Soil	04/24/2015 08:05	GC9b	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	04/30/2015 20:41

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): TK Analytical Comments: e7

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20 15'	1504A02-015A	Soil	04/24/2015 08:20	GC9a	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	05/01/2015 21:15

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	107	70-130

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 2'	1504A02-017A	Soil	04/24/2015 09:00	GC9b	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1.6	1.0	1	05/01/2015 09:51

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): TK

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 3.5'	1504A02-018A	Soil	04/24/2015 09:00	GC9b	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	6.2	1.0	1	05/01/2015 03:52

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): TK

Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21 7.5'	1504A02-019A	Soil	04/24/2015 09:10	GC9b	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	4.9	1.0	1	05/01/2015 01:29

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>
C9	112	70-130

Analyst(s): TK

Analytical Comments: e3,e7

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15-4/27/15

WorkOrder: 1504A02
Extraction Method: SW3550B
Analytical Method: SW8015B
Unit: mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 2'	1504A02-021A	Soil	04/24/2015 09:40	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	38	20	2	05/01/2015 19:52

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	74	70-130	05/01/2015 19:52

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 3.5'	1504A02-022A	Soil	04/24/2015 09:40	GC2A	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	04/28/2015 21:33

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	104	70-130	04/28/2015 21:33

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 7.5'	1504A02-023A	Soil	04/24/2015 09:42	GC31B	104099

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	91	10	1	05/02/2015 05:27

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	128	70-130	05/02/2015 05:27

Analyst(s): TK Analytical Comments: e7,e2,c2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18 11.5'	1504A02-024A	Soil	04/24/2015 09:50	GC2B	104104

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	1.0	1	04/28/2015 17:47

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	81	70-130	04/28/2015 17:47

Analyst(s): TK

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15

WorkOrder: 1504A02
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-19	1504A02-005A	Water	04/24/2015 07:10	GC31B	104045

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1000	500	1	05/01/2015 08:36
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
C9	104	70-130		05/01/2015 08:36

Analyst(s): HD Analytical Comments: e7,e4,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-22	1504A02-010A	Water	04/24/2015 07:45	GC31B	104045

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	5300	500	1	05/02/2015 03:46
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
C9	126	70-130		05/02/2015 03:46

Analyst(s): TK Analytical Comments: e7,e2,e4

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-20	1504A02-016A	Water	04/24/2015 08:55	GC6A	104045

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	880	500	10	05/04/2015 17:01
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
C9	100	70-130		05/04/2015 17:01

Analyst(s): TK Analytical Comments: e7,e3

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-21	1504A02-020A	Water	04/24/2015 09:20	GC11A	104045

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	850	250	5	05/04/2015 23:12
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>		
C9	92	70-130		05/04/2015 23:12

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)



Analytical Report

Client: GEOCON Env. Consultants
Project: #E8722-02-01B; Caltrans Hegenberger
Date Received: 4/24/15 19:36
Date Prepared: 4/24/15

WorkOrder: 1504A02
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-18	1504A02-025A	Water	04/24/2015 09:55	GC9	104045

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	15,000	5000	100	05/04/2015 17:05

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	109	70-130	05/04/2015 17:05

Analyst(s): TK Analytical Comments: e4,e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-25	1504A02-026A	Water	04/24/2015 11:20	GC11A	104045

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1300	1000	20	04/27/2015 22:01

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	83	70-130	04/27/2015 22:01

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-24	1504A02-027A	Water	04/24/2015 12:05	GC6B	104108

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	50	1	05/04/2015 17:01

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	111	70-130	05/04/2015 17:01

Analyst(s): TK

Client ID	Lab ID	Matrix/ExtType	Date Collected	Instrument	Batch ID
SB-23	1504A02-028A	Water	04/24/2015 12:50	GC6B	104108

<u>Analytes</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND	50	1	05/04/2015 18:12

<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>	<u>Date Analyzed</u>
C9	108	70-130	05/04/2015 18:12

Analyst(s): TK

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/24/15
Date Analyzed: 4/27/15 - 4/28/15
Instrument: GC10, GC28
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104095
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104095
 1504993-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0399	0.0050	0.050	-	80	53-116
Benzene	ND	0.0411	0.0050	0.050	-	82	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.200	0.050	0.20	-	100	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0414	0.0050	0.050	-	83	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0419	0.0040	0.050	-	84	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0411	0.0040	0.050	-	82	58-135
1,1-Dichloroethene	ND	0.0375	0.0050	0.050	-	75	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/24/15
Date Analyzed: 4/27/15 - 4/28/15
Instrument: GC10, GC28
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104095
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104095
 1504993-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0399	0.0050	0.050	-	80	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0390	0.0050	0.050	-	78	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0410	0.0050	0.050	-	82	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0444	0.0050	0.050	-	89	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0415	0.0050	0.050	-	83	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.112	0.138		0.12	90	110	72-126
Toluene-d8	0.126	0.150		0.12	101	120, F3	81-115
4-BFB	0.0125	0.0141		0.012	100	113	55-127

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Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104095
Date Analyzed: 4/27/15 - 4/28/15	Extraction Method: SW5030B
Instrument: GC10, GC28	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104095 1504993-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0503	0.0412	0.050	ND	101	82	70-130	19.9	20
Benzene	0.0489	0.0404	0.050	ND	98	81	70-130	19.1	20
t-Butyl alcohol (TBA)	0.180	0.155	0.20	ND	90	77	70-130	15.3	20
Chlorobenzene	0.0485	0.0422	0.050	ND	97	84	70-130	13.9	20
1,2-Dibromoethane (EDB)	0.0500	0.0424	0.050	ND	100	85	70-130	16.5	20
1,2-Dichloroethane (1,2-DCA)	0.0463	0.0353	0.050	ND	93	71	70-130	27.1,F1	20
1,1-Dichloroethene	0.0420	0.0353	0.050	ND	84	71	70-130	17.3	20
Diisopropyl ether (DIPE)	0.0498	0.0399	0.050	ND	100	80	70-130	22.2,F1	20
Ethyl tert-butyl ether (ETBE)	0.0516	0.0413	0.050	ND	103	83	70-130	22.2,F1	20
Methyl-t-butyl ether (MTBE)	0.0498	0.0417	0.050	ND	100	83	70-130	17.7	20
Toluene	0.0501	0.0416	0.050	ND	100	83	70-130	18.5	20
Trichloroethene	0.0664	0.0552	0.050	ND	127	104	70-130	18.3	20
Surrogate Recovery									
Dibromofluoromethane	0.140	0.131	0.12		112	105	70-130	6.44	20
Toluene-d8	0.131	0.128	0.12		105	103	70-130	1.95	20
4-BFB	0.0130	0.0120	0.012		104	96	70-130	7.84	20

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/24/15
Date Analyzed: 4/29/15
Instrument: GC38
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104107
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104107
 1504A02-021AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0399	0.0050	0.050	-	80	53-116
Benzene	ND	0.0467	0.0050	0.050	-	93	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.151	0.050	0.20	-	76	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0455	0.0050	0.050	-	91	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0445	0.0040	0.050	-	86	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0453	0.0040	0.050	-	87	58-135
1,1-Dichloroethene	ND	0.0421	0.0050	0.050	-	84	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/24/15
Date Analyzed: 4/29/15
Instrument: GC38
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104107
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104107
 1504A02-021AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0443	0.0050	0.050	-	89	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0452	0.0050	0.050	-	90	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0446	0.0050	0.050	-	89	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0502	0.0050	0.050	-	100	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0480	0.0050	0.050	-	96	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.121	0.137		0.12	97	109	72-126
Toluene-d8	0.127	0.132		0.12	101	105	81-115
4-BFB	0.0142	0.0130		0.012	114	104	55-127

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Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104107
Date Analyzed: 4/29/15	Extraction Method: SW5030B
Instrument: GC38	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104107 1504A02-021AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	0.0336	0.0338	0.050	ND	67,F1	68,F1	70-130	0.397	20
Benzene	0.0376	0.0375	0.050	ND	75	75	70-130	0	20
t-Butyl alcohol (TBA)	0.130	0.132	0.20	ND	65,F1	66,F1	70-130	1.63	20
Chlorobenzene	0.0376	0.0380	0.050	ND	75	76	70-130	1.06	20
1,2-Dibromoethane (EDB)	0.0356	0.0354	0.050	ND	71	71	70-130	0	20
1,2-Dichloroethane (1,2-DCA)	0.0358	0.0358	0.050	ND	72	72	70-130	0	20
1,1-Dichloroethene	0.0332	0.0308	0.050	ND	66,F1	62,F1	70-130	7.43	20
Diisopropyl ether (DIPE)	0.0368	0.0365	0.050	ND	74	73	70-130	0.952	20
Ethyl tert-butyl ether (ETBE)	0.0360	0.0360	0.050	ND	72	72	70-130	0	20
Methyl-t-butyl ether (MTBE)	0.0337	0.0335	0.050	ND	67,F1	67,F1	70-130	0	20
Toluene	0.0408	0.0407	0.050	ND	82	81	70-130	0.0881	20
Trichloroethene	0.0372	0.0385	0.050	ND	74	77	70-130	3.41	20
Surrogate Recovery									
Dibromofluoromethane	0.108	0.109	0.12		86	87	70-130	0.881	20
Toluene-d8	0.116	0.116	0.12		92	93	70-130	0.195	20
4-BFB	0.0116	0.0121	0.012		93	97	70-130	3.69	20



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104127
 1504A70-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	0.10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.0402	0.0050	0.050	-	80	53-116
Benzene	ND	0.0461	0.0050	0.050	-	92	63-137
Bromobenzene	ND	-	0.0050	-	-	-	-
Bromochloromethane	ND	-	0.0050	-	-	-	-
Bromodichloromethane	ND	-	0.0050	-	-	-	-
Bromoform	ND	-	0.0050	-	-	-	-
Bromomethane	ND	-	0.0050	-	-	-	-
2-Butanone (MEK)	ND	-	0.020	-	-	-	-
t-Butyl alcohol (TBA)	ND	0.200	0.050	0.20	-	100	41-135
n-Butyl benzene	ND	-	0.0050	-	-	-	-
sec-Butyl benzene	ND	-	0.0050	-	-	-	-
tert-Butyl benzene	ND	-	0.0050	-	-	-	-
Carbon Disulfide	ND	-	0.0050	-	-	-	-
Carbon Tetrachloride	ND	-	0.0050	-	-	-	-
Chlorobenzene	ND	0.0468	0.0050	0.050	-	94	77-121
Chloroethane	ND	-	0.0050	-	-	-	-
Chloroform	ND	-	0.0050	-	-	-	-
Chloromethane	ND	-	0.0050	-	-	-	-
2-Chlorotoluene	ND	-	0.0050	-	-	-	-
4-Chlorotoluene	ND	-	0.0050	-	-	-	-
Dibromochloromethane	ND	-	0.0050	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.0040	-	-	-	-
1,2-Dibromoethane (EDB)	ND	0.0416	0.0040	0.050	-	83	67-119
Dibromomethane	ND	-	0.0050	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.0050	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.0050	-	-	-	-
Dichlorodifluoromethane	ND	-	0.0050	-	-	-	-
1,1-Dichloroethane	ND	-	0.0050	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.0438	0.0040	0.050	-	88	58-135
1,1-Dichloroethene	ND	0.0402	0.0050	0.050	-	80	42-145
cis-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.0050	-	-	-	-
1,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,3-Dichloropropane	ND	-	0.0050	-	-	-	-
2,2-Dichloropropane	ND	-	0.0050	-	-	-	-
1,1-Dichloropropene	ND	-	0.0050	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.0050	-	-	-	-

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104127
 1504A70-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	0.0436	0.0050	0.050	-	87	52-129
Ethylbenzene	ND	-	0.0050	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.0426	0.0050	0.050	-	85	53-125
Freon 113	ND	-	0.0050	-	-	-	-
Hexachlorobutadiene	ND	-	0.0050	-	-	-	-
Hexachloroethane	ND	-	0.0050	-	-	-	-
2-Hexanone	ND	-	0.0050	-	-	-	-
Isopropylbenzene	ND	-	0.0050	-	-	-	-
4-Isopropyl toluene	ND	-	0.0050	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.0412	0.0050	0.050	-	83	58-122
Methylene chloride	ND	-	0.0050	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.0050	-	-	-	-
Naphthalene	ND	-	0.0050	-	-	-	-
n-Propyl benzene	ND	-	0.0050	-	-	-	-
Styrene	ND	-	0.0050	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.0050	-	-	-	-
Tetrachloroethene	ND	-	0.0050	-	-	-	-
Toluene	ND	0.0500	0.0050	0.050	-	100	76-130
1,2,3-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.0050	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.0050	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.0050	-	-	-	-
Trichloroethene	ND	0.0462	0.0050	0.050	-	92	72-132
Trichlorofluoromethane	ND	-	0.0050	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.0050	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.0050	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.0050	-	-	-	-
Vinyl Chloride	ND	-	0.0050	-	-	-	-
Xylenes, Total	ND	-	0.0050	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	0.113	0.116		0.12	91	93	72-126
Toluene-d8	0.126	0.125		0.12	101	100	81-115
4-BFB	0.0141	0.0125		0.012	113	100	55-127

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/Kg
Sample ID: MB/LCS-104127
 1504A70-003AMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	NR	NR		ND	NR	NR	-	NR	
Benzene	NR	NR		ND	NR	NR	-	NR	
t-Butyl alcohol (TBA)	NR	NR		ND	NR	NR	-	NR	
Chlorobenzene	NR	NR		ND	NR	NR	-	NR	
1,2-Dibromoethane (EDB)	NR	NR		ND	NR	NR	-	NR	
1,2-Dichloroethane (1,2-DCA)	NR	NR		ND	NR	NR	-	NR	
1,1-Dichloroethene	NR	NR		ND	NR	NR	-	NR	
Diisopropyl ether (DIPE)	NR	NR		ND	NR	NR	-	NR	
Ethyl tert-butyl ether (ETBE)	NR	NR		ND	NR	NR	-	NR	
Methyl-t-butyl ether (MTBE)	NR	NR		ND	NR	NR	-	NR	
Toluene	NR	NR		ND	NR	NR	-	NR	
Trichloroethene	NR	NR		ND	NR	NR	-	NR	
Surrogate Recovery									
Dibromofluoromethane	NR	NR			NR	NR	-	NR	
Toluene-d8	NR	NR			NR	NR	-	NR	
4-BFB	NR	NR			NR	NR	-	NR	



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 5/4/15
Date Analyzed: 5/1/15
Instrument: GC16
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104371
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104371
 1504A02-026CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	9.15	0.50	10	-	92	54-140
Benzene	ND	9.11	0.50	10	-	91	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	29.9	2.0	40	-	75	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.90	0.50	10	-	99	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	8.97	0.50	10	-	90	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	8.95	0.50	10	-	90	66-125
1,1-Dichloroethene	ND	8.53	0.50	10	-	85	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-

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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 5/4/15
Date Analyzed: 5/1/15
Instrument: GC16
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104371
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104371
 1504A02-026CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Diisopropyl ether (DIPE)	ND	9.22	0.50	10	-	92	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.27	0.50	10	-	93	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	8.54	0.50	10	-	85	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.79	0.50	10	-	98	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	9.43	0.50	10	-	94	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

Surrogate Recovery

Dibromofluoromethane	22.4	22.5		25	89	90	70-130
Toluene-d8	22.4	22.1		25	90	88	70-130
4-BFB	2.27	2.24		2.5	91	89	70-130

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 5/4/15
Date Analyzed: 5/1/15
Instrument: GC16
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104371
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-104371
 1504A02-026CMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	10.2	10.5	10	ND	102	105	69-139	3.30	20
Benzene	9.23	9.60	10	ND	92	95	69-141	4.00	20
t-Butyl alcohol (TBA)	37.2	37.9	40	ND	89	91	41-152	1.76	20
Chlorobenzene	9.63	10.1	10	ND	96	101	77-120	5.05	20
1,2-Dibromoethane (EDB)	10.0	10.4	10	ND	100	104	76-135	3.60	20
1,2-Dichloroethane (1,2-DCA)	9.68	9.95	10	ND	97	99	73-139	2.80	20
1,1-Dichloroethene	9.06	9.53	10	ND	91	95	59-140	5.05	20
Diisopropyl ether (DIPE)	9.75	10.1	10	ND	97	101	72-140	3.94	20
Ethyl tert-butyl ether (ETBE)	10.1	10.6	10	ND	101	106	71-140	4.51	20
Methyl-t-butyl ether (MTBE)	9.86	10.2	10	ND	99	102	73-139	2.90	20
Toluene	9.45	10.1	10	ND	94	101	71-128	6.33	20
Trichloroethene	9.29	9.68	10	ND	93	97	64-132	4.10	20
Surrogate Recovery									
Dibromofluoromethane	22.7	22.7	25		91	91	70-130	0	20
Toluene-d8	22.1	22.2	25		88	89	70-130	0.565	20
4-BFB	2.17	2.20	2.5		87	88	70-130	1.13	20



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104095
Date Analyzed: 4/28/15 - 4/29/15	Extraction Method: SW5030B
Instrument: GC16	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104095

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	2.75	0.25	3.2	-	86	74-142
Surrogate Recovery							
Dibromofluoromethane	0.123	0.126		0.12	98	101	72-126



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104107
Date Analyzed: 4/28/15 - 4/29/15	Extraction Method: SW5030B
Instrument: GC16	Analytical Method: SW8260B
Matrix: Soil	Unit: mg/kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104107

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	2.75	0.25	3.2	-	86	74-142
Surrogate Recovery							
Dibromofluoromethane	0.123	0.126		0.12	98	101	72-126



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/27/15
Date Analyzed: 4/28/15
Instrument: GC10
Matrix: Soil
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104127
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: mg/kg
Sample ID: MB/LCS-104127

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	3.45	0.25	3.2	-	108	74-142
Surrogate Recovery							
Dibromofluoromethane	0.137	0.141		0.12	110	113	72-126



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 5/4/15	BatchID: 104371
Date Analyzed: 5/1/15	Extraction Method: SW5030B
Instrument: GC16	Analytical Method: SW8260B
Matrix: Water	Unit: µg/L
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104371

QC Summary Report for TPH(g)

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
VOC (C6-C12)	ND	526	50	644	-	82	75-105
Surrogate Recovery							
Dibromofluoromethane	25.5	25.6		25	102	102	70-130



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104096
Date Analyzed: 4/25/15	Extraction Method: SW3550B/3630C
Instrument: GC6A	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104096 1504993-002AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	34.3	1.0	40	-	86	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	18.4	18.5		25	73	74	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	93.7	93.0	40	52.74	102	101	70-130	0.745	30

Surrogate Recovery

C9	18.3	17.7	25		73	71	70-130	3.13	30
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Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104105
Date Analyzed: 4/28/15	Extraction Method: SW3550B/3630C
Instrument: GC6A, GC6B	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104105 1504A02-022AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.4	1.0	40	-	109	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	17.7	20.7		25	71	83	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	40.8	42.2	40	ND	102	106	70-130	3.57	30
Surrogate Recovery									
C9	25.7	25.9	25		103	104	70-130	0.865	30

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/27/15	BatchID: 104155
Date Analyzed: 4/29/15 - 4/30/15	Extraction Method: SW3550B/3630C
Instrument: GC11A, GC6B	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104155 1504A02-030AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	33.2	1.0	40	-	83	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	17.6	23.7		25	70	95	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	44.3	47.4	40	4.334	100	108	70-130	6.84	30

Surrogate Recovery

C9	27.6	28.0	25		110	112	70-130	1.45	30
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Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/23/15
Date Analyzed: 4/24/15
Instrument: GC2B, GC6B
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104045
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-104045

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	971	50	1000	-	97	61-157
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	588	553		625	94	88	70-134



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104099
Date Analyzed: 4/27/15	Extraction Method: SW3550B
Instrument: GC2B, GC6A	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104099 1504995-001AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	47.8	1.0	40	-	120	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	18.8	21.5		25	75	86	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		11	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/24/15	BatchID: 104104
Date Analyzed: 4/28/15 - 4/30/15	Extraction Method: SW3550B
Instrument: GC11A, GC2A	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104104 1504A02-024AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	36.2	1.0	40	-	90	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-

Surrogate Recovery

C9	24.9	23.1		25	100	93	70-130
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	45.7	46.6	40	ND	114	116	70-130	1.97	30
Surrogate Recovery									
C9	20.3	20.6	25		81	82	70-130	1.06	30

(Cont.)



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/24/15
Date Analyzed: 4/27/15 - 4/28/15
Instrument: GC6A, GC6B
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104106
Extraction Method: SW3510C/3630C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-104106

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1050	50	1000	-	105	59-151
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	447	491		625	71	79	77-130



Quality Control Report

Client: GEOCON Env. Consultants
Date Prepared: 4/24/15
Date Analyzed: 4/27/15
Instrument: GC6A, GC6B
Matrix: Water
Project: #E8722-02-01B; Caltrans Hegenberger

WorkOrder: 1504A02
BatchID: 104108
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L
Sample ID: MB/LCS-104108

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	1180	50	1000	-	118	61-157
TPH-Motor Oil (C18-C36)	ND	-	250	-	-	-	-
Surrogate Recovery							
C9	456	551		625	73	88	70-134



Quality Control Report

Client: GEOCON Env. Consultants	WorkOrder: 1504A02
Date Prepared: 4/27/15	BatchID: 104135
Date Analyzed: 4/28/15	Extraction Method: SW3550B
Instrument: GC11A, GC6A	Analytical Method: SW8015B
Matrix: Soil	Unit: mg/Kg
Project: #E8722-02-01B; Caltrans Hegenberger	Sample ID: MB/LCS-104135 1504A70-001AMS/MSD

QC Summary Report for SW8015B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	37.5	1.0	40	-	94	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	17.8	23.7		25	71	95	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	NR	NR		880	NR	NR	-	NR	
Surrogate Recovery									
C9	NR	NR			NR	NR	-	NR	



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1504A02

ClientCode: GECL

WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag

Report to:

John Love
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550
925-371-5900 FAX: 925-371-5915

Email: love@geoconinc.com; merritt@geoconinc.
cc/3rd Party:
PO:
ProjectNo: #E8722-02-01B; Caltrans Hegenberger

Bill to:

Accounts Payable
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550

Requested TAT:

5 days

Date Received: 04/24/2015

Date Printed: 05/05/2015

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1504A02-001	SB-19 2'	Soil	4/24/2015 6:45	<input type="checkbox"/>	A		A		A	A		A				
1504A02-002	SB-19 3.5'	Soil	4/24/2015 6:45	<input type="checkbox"/>	A		A			A		A				
1504A02-003	SB-19 6.5'	Soil	4/24/2015 6:50	<input type="checkbox"/>	A		A			A		A				
1504A02-004	SB-19 11.5'	Soil	4/24/2015 7:05	<input type="checkbox"/>	A		A			A		A				
1504A02-005	SB-19	Water	4/24/2015 7:10	<input type="checkbox"/>		C		C			A		B			
1504A02-006	SB-22 2.5'	Soil	4/24/2015 7:20	<input type="checkbox"/>	A		A			A		A				
1504A02-007	SB-22 3.5'	Soil	4/24/2015 7:20	<input type="checkbox"/>	A		A			A		A				
1504A02-008	SB-22 7.5'	Soil	4/24/2015 7:30	<input type="checkbox"/>	A		A			A		A				
1504A02-009	SB-22 10.5	Soil	4/24/2015 7:40	<input type="checkbox"/>	A		A			A		A				
1504A02-010	SB-22	Water	4/24/2015 7:45	<input type="checkbox"/>		C		C			A		B			
1504A02-011	SB-20 2'	Soil	4/24/2015 7:50	<input type="checkbox"/>	A		A			A		A				
1504A02-012	SB-20 3.5'	Soil	4/24/2015 7:50	<input type="checkbox"/>	A		A			A		A				
1504A02-013	SB-20 7.5'	Soil	4/24/2015 7:55	<input type="checkbox"/>	A		A			A		A				
1504A02-014	SB-20 11.5'	Soil	4/24/2015 8:05	<input type="checkbox"/>	A		A			A		A				
1504A02-015	SB-20 15'	Soil	4/24/2015 8:20	<input type="checkbox"/>	A		A			A		A				

Test Legend:

1	8260B_S	2	8260B_W	3	8260GAS_S	4	8260GAS_W	5	PREFD REPORT
6	TPH(D)_S	7	TPH(D)_W	8	TPH(D)WSG_S	9	TPH(D)WSG_W	10	
11		12							

The following SamplIDs: 001A, 002A, 003A, 004A, 005C, 006A, 007A, 008A, 009A, 010C, 011A, 012A, 013A, 014A, 015A, 016C, 017A, 018A, 019A, 020C, 021A, 022A, 023A, 024A, 025C, 026C, 027C, 028C, 029C, 030A contain testgroup.

Prepared by: Jena Alfaro

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

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



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

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1504A02

ClientCode: GECL

WaterTrax WriteOn EDF Excel EQulS Email HardCopy ThirdParty J-flag

Report to:

John Love
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550
925-371-5900 FAX: 925-371-5915

Email: love@geoconinc.com; merritt@geoconinc.
cc/3rd Party:
PO:
ProjectNo: #E8722-02-01B; Caltrans Hegenberger

Bill to:

Accounts Payable
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550

Requested TAT:

5 days

Date Received: 04/24/2015

Date Printed: 05/05/2015

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1504A02-016	SB-20	Water	4/24/2015 8:55	<input type="checkbox"/>		C		C			A		B			
1504A02-017	SB-21 2'	Soil	4/24/2015 9:00	<input type="checkbox"/>	A		A			A		A				
1504A02-018	SB-21 3.5'	Soil	4/24/2015 9:00	<input type="checkbox"/>	A		A			A		A				
1504A02-019	SB-21 7.5'	Soil	4/24/2015 9:10	<input type="checkbox"/>	A		A			A		A				
1504A02-020	SB-21	Water	4/24/2015 9:20	<input type="checkbox"/>		C		C			A		B			
1504A02-021	SB-18 2'	Soil	4/24/2015 9:40	<input type="checkbox"/>	A		A			A		A				
1504A02-022	SB-18 3.5'	Soil	4/24/2015 9:40	<input type="checkbox"/>	A		A			A		A				
1504A02-023	SB-18 7.5'	Soil	4/24/2015 9:42	<input type="checkbox"/>	A		A			A		A				
1504A02-024	SB-18 11.5'	Soil	4/24/2015 9:50	<input type="checkbox"/>	A		A			A		A				
1504A02-025	SB-18	Water	4/24/2015 9:55	<input type="checkbox"/>		C		C			A		B			
1504A02-026	SB-25	Water	4/24/2015 11:20	<input type="checkbox"/>		C		C			A		B			
1504A02-027	SB-24	Water	4/24/2015 12:05	<input type="checkbox"/>		C		C			A		B			
1504A02-028	SB-23	Water	4/24/2015 12:50	<input type="checkbox"/>		C		C			A		B			
1504A02-029	BC-3 6'	Water	4/24/2015 13:45	<input type="checkbox"/>		C		C			A		B			
1504A02-030	SB-21 11.5	Soil	4/24/2015	<input type="checkbox"/>	A		A			A	A		A			

Test Legend:

1	8260B_S	2	8260B_W	3	8260GAS_S	4	8260GAS_W	5	PREFD REPORT
6	TPH(D)_S	7	TPH(D)_W	8	TPH(D)WSG_S	9	TPH(D)WSG_W	10	
11		12							

The following SamplIDs: 001A, 002A, 003A, 004A, 005C, 006A, 007A, 008A, 009A, 010C, 011A, 012A, 013A, 014A, 015A, 016C, 017A, 018A, 019A, 020C, 021A, 022A, 023A, 024A, 025C, 026C, 027C, 028C, 029C, 030A contain testgroup.

Prepared by: Jena Alfaro

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

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



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS

QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1504A02-001A	SB-19 2'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 6:45	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-002A	SB-19 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 6:45	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-003A	SB-19 6.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 6:50	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-004A	SB-19 11.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:05	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-005A	SB-19	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 7:10	5 days	Present	<input type="checkbox"/>			
1504A02-005B	SB-19	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 7:10	5 days	Present	<input type="checkbox"/>			
1504A02-005C	SB-19	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 7:10	5 days	Present	<input type="checkbox"/>			

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS

QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1504A02-006A	SB-22 2.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:20	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-007A	SB-22 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:20	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-008A	SB-22 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:30	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-009A	SB-22 10.5	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:40	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-010A	SB-22	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 7:45	5 days	Present	<input type="checkbox"/>			
1504A02-010B	SB-22	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 7:45	5 days	Present	<input type="checkbox"/>			
1504A02-010C	SB-22	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 7:45	5 days	Present	<input type="checkbox"/>			

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.



WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS

QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1504A02-011A	SB-20 2'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:50	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days			
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days			
1504A02-012A	SB-20 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:50	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days			
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days			
1504A02-013A	SB-20 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 7:55	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days			
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days			
1504A02-014A	SB-20 11.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 8:05	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days			
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days			
1504A02-015A	SB-20 15'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 8:20	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days			
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days			

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WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS

QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut		
1504A02-016A	SB-20	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 8:55	5 days	Present	<input type="checkbox"/>			
1504A02-016B	SB-20	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 8:55	5 days	Present	<input type="checkbox"/>			
1504A02-016C	SB-20	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 8:55	5 days	Present	<input type="checkbox"/>			
1504A02-017A	SB-21 2'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:00	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-018A	SB-21 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:00	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-019A	SB-21 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:10	5 days		<input type="checkbox"/>			
			SW8015B (Diesel)			<input type="checkbox"/>						5 days	<input type="checkbox"/>
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>						5 days	<input type="checkbox"/>
1504A02-020A	SB-21	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 9:20	5 days	Present	<input type="checkbox"/>			
1504A02-020B	SB-21	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 9:20	5 days	Present	<input type="checkbox"/>			
1504A02-020C	SB-21	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 9:20	5 days	Present	<input type="checkbox"/>			

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WORK ORDER SUMMARY

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QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

WaterTrax
 WriteOn
 EDF
 Excel
 Fax
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De- chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1504A02-021A	SB-18 2'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:40	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504A02-022A	SB-18 3.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:40	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504A02-023A	SB-18 7.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:42	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504A02-024A	SB-18 11.5'	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015 9:50	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>	5 days		<input type="checkbox"/>		
1504A02-025A	SB-18	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 9:55	5 days	Present	<input type="checkbox"/>	
1504A02-025B	SB-18	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 9:55	5 days	Present	<input type="checkbox"/>	
1504A02-025C	SB-18	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 9:55	5 days	Present	<input type="checkbox"/>	

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WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS

QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

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 Excel
 Fax
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 HardCopy
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 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1504A02-026A	SB-25	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 11:20	5 days	Present	<input type="checkbox"/>	
1504A02-026B	SB-25	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 11:20	5 days	Present	<input type="checkbox"/>	
1504A02-026C	SB-25	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 11:20	5 days	Present	<input type="checkbox"/>	
1504A02-027A	SB-24	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 12:05	5 days	Present	<input type="checkbox"/>	
1504A02-027B	SB-24	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 12:05	5 days	Present	<input type="checkbox"/>	
1504A02-027C	SB-24	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 12:05	5 days	Present	<input type="checkbox"/>	
1504A02-028A	SB-23	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 12:50	5 days	Present	<input type="checkbox"/>	
1504A02-028B	SB-23	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 12:50	5 days	Present	<input type="checkbox"/>	
1504A02-028C	SB-23	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 12:50	5 days	Present	<input type="checkbox"/>	
1504A02-029A	BC-3 6'	Water	SW8015B (Diesel)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 13:45	5 days	Present	<input type="checkbox"/>	
1504A02-029B	BC-3 6'	Water	SW8015B (Diesel w/ S.G. Clean-Up)	1	1LA w/ HCl	<input type="checkbox"/>	4/24/2015 13:45	5 days	Present	<input type="checkbox"/>	
1504A02-029C	BC-3 6'	Water	TPH(g) & 8260 (Basic List) by P&T GCMS	3	aVOA w/ HCl	<input type="checkbox"/>	4/24/2015 13:45	5 days	Present	<input type="checkbox"/>	
1504A02-030A	SB-21 11.5	Soil	SW8015B (Diesel w/ S.G. Clean-Up)	1	Acetate Liner	<input type="checkbox"/>	4/24/2015	5 days		<input type="checkbox"/>	
			SW8015B (Diesel)			<input type="checkbox"/>		5 days		<input type="checkbox"/>	
			TPH(g) & 8260 (Basic List) by P&T GCMS			<input type="checkbox"/>		5 days		<input type="checkbox"/>	

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WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS

QC Level: LEVEL 2

Work Order: 1504A02

Project: #E8722-02-01B; Caltrans Hegenberger

Client Contact: John Love

Date Received: 4/24/2015

Comments: Sample SB-21-11.5 taken off hold and set up on original work order 4/27/15.

Contact's Email: love@geoconinc.com; merritt@geoconinc.com

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
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Sample Receipt Checklist

Client Name: **GEOCON Env. Consultants** Date and Time Received: **4/24/2015 7:36:36 PM**
 Project Name: **#E8722-02-01B; Caltrans Hegenberger** LogIn Reviewed by: **Jena Alfaro**
 WorkOrder No: **1504A02** Matrix: Soil/Water Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present? Yes No
 Chain of custody signed when relinquished and received? Yes No
 Chain of custody agrees with sample labels? Yes No
 Sample IDs noted by Client on COC? Yes No
 Date and Time of collection noted by Client on COC? Yes No
 Sampler's name noted on COC? Yes No

Sample Receipt Information

Custody seals intact on shipping container/cooler? Yes No NA
 Shipping container/cooler in good condition? Yes No
 Samples in proper containers/bottles? Yes No
 Sample containers intact? Yes No
 Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

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

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes No NA
 Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? Yes No NA

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

 Comments:

APPENDIX

A solid green triangle pointing to the left, containing the letter 'E' in white.

E

June 10, 2015

Mr. Keith Nowell
Alameda County Health Care Services
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Reference: Additional Soil and Groundwater Investigation Report
Former Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, California

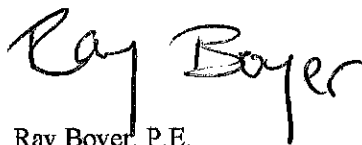
Dear Mr. Nowell:

Attached for your review is the *Additional Soil and Groundwater Investigation Report* for the Former Hegenberger Maintenance Station located at 555 Hegenberger Road in Oakland, California. This report was prepared for the Alameda County Health Care Services Environmental Protection Division by Geocon Consultants, Inc.

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

If you have any questions, please don't hesitate to contact me or Geocon project manager John Love at (925) 371-5900 extension 407.

Sincerely,



Ray Boyer, P.E.
Office of Environmental Engineering
Division of Planning & Engineering
Caltrans District 4