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Alameda County
Environmental Health

Mr. Jerry Wickham
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Alameda, CA 94502

RE: Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP StID# 2118
Fuel Leak Case No. R00000096
USTCF Claim No. 014551
Clearwater Group Project # ZP046D

Dear Mr. Wickham,

As the legally authorized representative of the above-referenced project location, I have reviewed the 2007 Soil and Groundwater Investigation Report prepared by my consultant of record, Clearwater Group, Inc. I declare, under penalty of perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Sincerely,



Mr. Muhammad Jamil

DATE:



2007
**SOIL AND GROUNDWATER
INVESTIGATION REPORT**

Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601

LOP StID# 2118
ACEH Case No. RO0000096
Clearwater Group Project # ZP046D

Prepared for:

**Ms. Farah Naz and
Mr. Muhammed Jamil**
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December 5, 2007



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1 INTRODUCTION

Clearwater Group (Clearwater) has been retained by Ms. Farah Naz and Mr. Muhammed Jamil, Underground Storage Tank Cleanup Fund claimants for the property at 4301 San Leandro Street, Oakland, California (the site aka Eagle Gas), to perform an additional subsurface investigation to better define the impacted soil and groundwater detected in previous site investigations. The investigation was performed per Clearwater's December 19, 2006, *Revised Work Plan, Eagle Gas Station* (Work Plan) and amended by Regulatory (Alameda County Environmental Health) directive (see **Appendix A**) and is the first investigation to examine off-site conditions.

The results of the additional investigation are summarized in this *2007 Soil and Groundwater Investigation Report*. The contents of this report include background information, investigation objectives and results, discussions and findings, an updated site conceptual model based on new maps and geologic cross sections, and recommendations for further on-site and off-site investigation.

2 BACKGROUND

2.1 Site Description

The site is located in the southern portion of the City of Oakland, Alameda County, California, approximately 1,100 feet northeast of Interstate Highway 880, at the southern corner of the intersection of San Leandro Street and High Street (Site Vicinity Map, **Figure 1**). The site is an active gasoline service station and is bounded by commercial properties to the southeast and southwest, by High Street to the northwest, and San Leandro Street to the northeast (**Figure 2**). The Site Plan with on-site groundwater monitoring well locations is presented in **Figure 3**.

2.2 Site Investigation History

On April 21 and 22, 1999, Artesian Environmental (now Clearwater) oversaw the removal of five underground storage tanks (USTs) consisting of two 6,000-gallon gasoline tanks, two 4,000-gallon diesel tanks, and one 300-gallon used-oil tank from the site. Strong petroleum odors were detected from soils near the former UST locations during the UST removals. Five soil samples were collected from the UST excavation for confirmation sampling. The results suggest that an unauthorized release of petroleum had occurred. The former UST excavation area is shown on **Figure 3**.

In a letter dated May 10, 1999, Alameda County Environmental Health Services (ACEH) recommended that soil be remediated by over-excavation and "as much groundwater as possible" be pumped from the



excavation. Approximately 800 tons of petroleum-impacted soils were excavated and disposed of as Class II non-hazardous waste, and approximately 1,000 gallons of petroleum-impacted groundwater was pumped from the excavation and removed from the site. Groundwater did not recharge quickly after the initial pumping. Interlocking steel shoring was used to support the UST excavation. Over-excavation beyond this area was not economically feasible due to the nearby and adjacent (brick wall) buildings, which limited the amount of soil that could be safely excavated. Soil samples collected from the excavation walls and product-piping trenches indicated that residual concentrations of petroleum hydrocarbons and methyl tert-butyl ether (MTBE) remained.

On August 4 and 5, 1999, approximately 100 linear feet of subsurface product piping was removed. Vent piping from between the former USTs and the south corner of the on-site building was also removed. All the piping was cut up and disposed of as scrap metal. On August 5, 1999, six confirmation soil samples were collected along the piping trench from approximately 3 feet below ground surface (bgs). Laboratory analytical results indicated that hydrocarbon-related contamination existed along the piping trenches.

On September 26, 2000, West Hazmat of Rancho Cordova, California, used a CME 75 drill rig to advance three borings to approximately 25 feet bgs and collect soil samples. The three borings were converted into groundwater monitoring wells MW-1 through MW-3. Initial groundwater samples collected from these wells contained 83,000 to 250,000 micrograms per liter ($\mu\text{g/L}$) Total Petroleum Hydrocarbons as gasoline (TPH-g) and 33,000 to 400,000 $\mu\text{g/L}$ MTBE.

On August 3, 2001, Clearwater submitted its *Groundwater Monitoring Report—Second Quarter 2001 and Sensitive Receptor Survey and Work Plan for Continuing Investigation*. It was determined that there were no major ecological receptors, permanent surface waters, or domestic-use wells within a 2,000-foot radius of the site. The proposed scope of the work included the installation of eight groundwater monitoring wells around the site to delineate the MTBE groundwater plume. In response to Clearwater's work plan, the ACEH, in a letter dated October 18, 2001, recommended that the additional off-site wells not be installed for the time being. Instead, the ACEH requested that further characterization of subsurface soils and groundwater on the site be completed prior to the installation of any off-site wells.



Quarterly monitoring was suspended after the Third Quarter 2001 event of August 3, 2001. Quarterly monitoring resumed in July 2003 (Third Quarter 2003) and has continued quarterly since then. After completing its review of the Third Quarter 2003 groundwater monitoring report, the ACEH requested a work plan to include additional on-site and off-site subsurface investigations and address the extent of on-site groundwater impact. Clearwater submitted an Interim Remedial Action Plan (IRAP) on January 14, 2004. ACEH provided its review comments for the IRAP and the *First Quarter 2005 Groundwater Monitoring Report* in a letter dated May 26, 2005. Clearwater submitted its *Soil and Groundwater Investigation Work Plan* on August 10, 2005. In review letters dated September 21, 2005, and November 1, 2005, ACEH approved the implementation of a modified IRAP proposed in Clearwater's June 13, 2005, letter entitled *Recommendations for Interim Remedial Actions* and the August 10, 2005, *Soil and Groundwater Investigation Work Plan*. An evolution of designs culminated in a remediation compound design, which was proposed with combined granulated activated carbon (GAC) filtering of discharge groundwater and an in-situ enhanced bioremediation treatment system. A limited groundwater pump test in well MW-2 (November 2005) determined an extremely low recharge rate in the shallow groundwater zone.

Between December 15 and 21, 2005, groundwater monitoring wells MW-4 through MW-8, MW-4D, MW-5D; interim remediation wells IS-1 through IS-6; and extraction wells EW-1 and EW-2 were installed. Groundwater monitoring wells MW-4, MW-6, MW-7, and MW-8 were screened in the "shallow zone" between 10 to 25 feet bgs. Monitoring wells MW-4D and MW-5D were screened in the "deep zone" between 35 to 45 feet bgs. "Shallow zone" and "deep zone" refer to apparent aquifer layers but do not imply separate, discontinuous, or confined aquifers.

Wells IS-1 through IS-6 were installed as remediation wells. Wells EW-1 and EW-2 were installed as groundwater extraction wells. All these wells were screened between 10 and 25 feet bgs, pending installation of the remediation compound. The in situ enhanced remediation system and groundwater extraction systems have not yet been installed in any of these wells. Because of recent revisions in the site conceptual model, presented in this report, the remedial alternatives are being reevaluated.

Deep zone soil borings SB-4D through SB-8D were drilled to approximately 50 feet bgs to investigate the lithology and degree of contamination within the deep zone.



A total of 115 soil samples were collected during the installation of the borings and wells and analyzed for TPH-diesel (TPH-d), TPH-g, BTEX (benzene, toluene, ethylbenzene, xylenes), oxygenated compounds including MTBE and tert-butyl alcohol (TBA), and lead scavengers 1,2-Dichloroethane (1,2-DCA) and 1,2-Dibromoethane (1,2-EDB). The groundwater samples were analyzed for TPH-d, TPH-g, BTEX, oxygenated compounds including MTBE and TBA, and the lead scavengers 1,2-DCA and 1,2-EDB (see **Table 1**).

2.3 2006 Investigation Findings

On May 30, 2006, Clearwater presented the results of its *Soil and Groundwater Investigation* to the ACEH staff. The results of the 2006 site investigative effort are summarized below:

- The site lithology is heterogeneous and is characterized by low permeability clays with occasional lenses of soil with relatively higher permeability.
- A clayey gravel layer, having a thickness of approximately 5 to 15 feet, exists in the shallow zone under the site. This relatively more permeable layer is located between low permeability clays. Clayey sand is found in a limited area within clayey layers.
- Underneath the relatively more permeable clayey gravel layer is another clayey layer of approximately 20 to 30 feet thick. Multiple sandy/silty lenses of limited thickness exist within this thick clayey layer and impose heterogeneities. Underneath this thick clayey layer is another sandy/silty layer. The thickness of this sandy/silty layer or lens is undetermined. Both the low-permeability, thick clayey layer and the relatively more permeable sandy/silty layer/lens constitute the deep groundwater zone.
- Comparison of the groundwater elevations in shallow/deep well pairs MW-4/MW-4D and MW-5/MW-5D indicates that the groundwater elevations are higher in the shallow wells relative to the deep wells, by an average of approximately 7.5 feet, and that a downward vertical gradient between the upper and lower zones exists.
- Groundwater with a principal flow in both the southwestern and northwestern directions was first identified during the First Quarter 2006 groundwater monitoring event following installation of additional groundwater monitoring wells.

- Groundwater in the shallow zone is heavily impacted by petroleum hydrocarbons. The major axes of the hydrocarbon plume and the MTBE plume trend along the same north-south line. The center of the plumes is located near wells MW-4/EW-1 and IS-3/IS-5. The TBA plume in the shallow zone is dissimilar to the hydrocarbon and MTBE plumes. The center of the TBA plume is near well IS-6 (further west than the axis). The TBA is a likely breakdown product of MTBE.
- The distribution of TPH-g and MTBE in the soil of the shallow groundwater zone is very similar to that of the shallow groundwater plume described above. An elevated soil TPH-d concentration in the shallow zone was found near soil borings SB-6D and SB-8. However, an elevated soil TBA concentration was found near the current UST area and southwest of the on-site building.
- In the deep groundwater zone, only two of the borings were found to be impacted by petroleum hydrocarbons. Samples from soil boring SB-6D contained TPH-g and TPH-d, and samples from soil boring SB-5D contained MTBE and TBA above the method detection limits.
- Based on the first quarter 2006 groundwater monitoring event, the ranges of MTBE and TBA concentrations in the shallow groundwater zone were 21,000 to 770,000 µg/L and 24,000 to 210,000 µg/L, respectively. The reason for the high MTBE and TBA concentrations is uncertain. Concentrations of the above-mentioned compounds in the deep groundwater zone ranged from 8.1 to 440 µg/L for MTBE and less than the method reporting limit (MRL) of 5.0 µg/L to 5.5 µg/L for TBA, respectively. Concentrations of TPH-g, TPH-d, and benzene in the deep groundwater zone were less than their associated MRLs of 90, 50, and 0.9 µg/L, respectively.
- As a result of the interference of high concentrations of MTBE and TBA, TPH-g and TPH-d analyses of the First Quarter 2006 groundwater monitoring samples from the shallow groundwater zone had relatively high MRLs, at 150,000 µg/L and 8,000 µg/L, respectively.
- MTBE, TBA, and TPH-g have been identified as the constituents of concern (COCs) for the subject site. Although elevated hydrocarbon concentrations have been detected, the concentration of the petroleum hydrocarbons is generally lower than the concentration of the oxygenates.
- The subsurface impact primarily exists in the shallow groundwater zone (depth interval of 25 feet bgs or less). Although a downward hydraulic gradient has been identified, the observed impact in the deep groundwater zone is relatively low.
- Since a clayey gravel layer (relatively more permeable than the surrounding clays) exists in the shallow zone, and the shallow groundwater has been greatly impacted, the potential of off-site



migration of contaminated groundwater is high. Although a sandy/silty layer exists in the deep groundwater zone, the deep groundwater zone did not appear to have been significantly impacted.

3 2007 SOIL AND GROUNDWATER INVESTIGATION

3.1 Objectives

Per the ACEH letter dated January 4, 2007 (**Appendix A**), ACEH staff requested the 2007 Soil and Groundwater Investigation

- To obtain information to further define the on-site lithology and hydrology and perform an initial characterization of the off-site lithology and hydrology.
- To determine if off-site soil and groundwater contamination originated from the site.
- To delineate the vertical and horizontal extent of the soil contamination and the plume of contaminated groundwater.

In that letter, ACEH staff also provided the following specific directives:

- To double check the data conversion of boring logs to Figure 4 (a two-dimensional depiction of the contact between a clayey gravel and a less permeable underlying soil) and to include SB-6D, SB-7D, and SB-8D on that figure.
- To review boring log SB-7 and present an interpretation of the well-sorted gravel noted from 13 to 25 feet bgs on that log.
- To find suspected water leaks from on-site water lines and sewer laterals.
- Dual Phase Extraction testing is to be conducted on wells within each of the contamination source areas.
- A Persulfate Bench-scale Test is acceptable and is to be presented in the Interim Remediation Report.

Between the January 4, 2007, staff letter and complete implementation of the site investigation, several modifications to the workplan were implemented and are presented in **Appendix A**:

- The Site Investigation Report and the Interim Remediation Reports were to be presented as two separate reports (May 8, 2007, e-mail train).
- The use of Electrical Conductivity Logging or CPT (Cone Penetrometer Testing) was accepted as an approved method to log the deep wells and off-site borings (May 22, 2007, e-mail train) for the purpose of identifying accurate locations of permeable lithologies to set the well screen.

- CPT work with a 25-ton CPT rig was ineffectual past 40–46 feet bgs; ACEH staff reiterated that the objective was to delineate the extent of groundwater contamination in both the upper (0–25) as well as the lower (25–50) zones. Therefore, collection of grab groundwater samples in the upper and lower zones was the primary objective. Defining the lithology in the upper and lower zones with lithologic logging or CPT work is secondary (see June 12, 2007, e-mail train).
- The relocation of SB-13 from inside a warehouse to an alleyway large enough for a drill rig to drive through and the relocation of deep monitoring well MW-1D closer to its shallow counterpart well MW-1 were both approved (e-mail of August 24, 2007) [Figures 2 and 3].
- Several schedule changes occurred over this time period for the drilling on and off site (various e-mails).
- An extension request for the production of an HVDPE pilot test report due to changes in the site conceptual model based on data acquired during the investigation (see November 5, 2007, letter and November 6, 2007, response).

3.2 Scope

The scope of the 2007 Soil and Groundwater Investigation included the following tasks:

- Inspect the sewer lateral to identify any pipe leaks; test the water lines for any leaks.
- Installation of two on-site groundwater monitoring wells (MW-1D and MW-7D, **Figure 3**) with their screened intervals set within the “deep zone,” 35–45 feet bgs, dictated by CPT information acquired in borings.
- Driving ten off-site soil borings in the adjacent streets (three on High Street and seven on San Leandro Street) and driving five off-site soil borings in adjacent properties (one of which was in an interior patio) to at least 50 feet bgs to collect grab groundwater samples in order to determine the vertical and lateral extent of contamination in the deep zone, and to determine whether contamination sourcing from on site reached these locations.
- Perform CPT borings at two locations to corroborate soil boring logs (SB-9 and SB-16).
- Surveying the soil boring locations using a GPS (Global Positioning System).
- Measure the locations of the new wells relative to nearby wells and survey their top-of-casing elevations to establish the groundwater elevation contour pattern within the deep groundwater zone.
- Collect samples for a Persulfate Bench Test; this test will be undertaken to determine whether the application of persulfate to remediate the soil and groundwater contamination is a viable remediation option.



- Construct and sample 6 shallow vapor wells with three discrete sample depths (3', 6', and 9') in each of the six well locations.
- Dispose of investigation-derived drums of soil and waste water.

3.3 Permits

Prior to drilling, Water Resources Well Permits were obtained from the Alameda County Public Works Agency (ACPWA), on June 6, 2007. See **Appendix B** for the well permits.

3.4 Subsurface Investigation

3.4.1 Cone Penetrometer Test (CPT) Borings

CPT borings are performed by driving an instrumented probe vertically downward through the soil. The CPT probe is composed of a hydrostatic pressure-sensing element containing an inclinometer, a friction-sensing sleeve containing strain-gauge load cells, a pore pressure transducer, a pore pressure element, and a cone tip. Electrical cabling within the CPT rods transfers the data to a computer within the CPT truck. The CPT values are computed using the techniques described in Robertson and Campanella, 1986. The CPT computer program selects the soil type most closely matching its database of representative soil values. However, a CPT log should not be solely relied on for soil characterization, or identification. Instead, the lithologic record, as determined by the CPT, was compared to the lithologic logs from nearby soil borings.

Off-site CPT borings SB-9 and SB-16 were driven by Precision Sampling, Inc. (PSI), of Richmond, California, using a 25-ton, truck-mounted CPT rig. Adjacent soil borings were conventionally logged by a Clearwater California Professional Geologist. The lithologic logs for these borings (**Appendix C**) also include simplified CPT logs drawn at the same scale as the boring logs, in addition to the full CPT logs.

Prior to installing on-site wells MW-1D and MW-7D, CPT borings were driven by Gregg Drilling and Testing (Gregg), of Martinez, California, using a 25-ton, truck-mounted CPT rig to help determine the proper depth interval for the screens of these wells. The CPT log for wells MW-1D (CPT-1D) and MW-7D (CPT-7D) are presented in **Appendix C**, along with the corresponding lithologic and well construction logs.

The CPT logs from the two soil borings and two wells indicate a similar lithology. For soil from near the ground surface to a depth of approximately 30 feet bgs, the CPT logs indicate primarily silty clay/silt

mix/clay. Below approximately 30 feet bgs, the CPT logs indicate sands and silty sand. Both off-site borings (SB-9 and SB-16) met refusal at approximately 48 feet, as indicated by the high tip stress (Tip Stress COR column on CPT logs).

3.4.2 Soil Borings

During June and September 2007, Clearwater supervised the driving of 15 soil boring (SB-9, SB-10A and SB-10B, and SB-11 through SB-22, **Figure 2**). Both PSI and RSI Drilling (RSI), of Woodland, California, used Geoprobe® direct-push drill rigs with continuous core systems. The borings were driven by either PSI (using direct-push macrocore) or RSI (using dual-tube continuous core). The boring logs indicate which company drove each boring. The boring depths ranged from 30 to 58 feet bgs. **Appendix D** presents Clearwater's Direct-Push Drilling Investigation procedures. Because of problems with driving through a hard layer below approximately 30 feet with the Geoprobe® drills, and time constraints in working in busy city streets, continuous soil cores were not collected from all the soil borings. **Table 2** presents the soil sample analytical results. All the borings were logged by a California Professional Geologist. Soil samples were collected according to Clearwater Group's Protocols (**Appendix D**). A Photo-Ionization Detector (PID) was used to screen the soil cores to locate contaminated zones. Where possible, soil samples were selected for analysis from the following depths:

- 5 ft bgs
- Capillary fringe
- First lithologic change below first encountered groundwater
- Any other locations where staining / odor or elevated PID readings were observed.

In their letter dated January 4, 2007, the ACEH requested that three soil borings be drilled in the shaded area shown on **Figure 4**. Because of conflicts with obtaining access for a drilling rig into this area (currently developed as work-live artist studios accessible only through doorways), only boring SB-12 was drilled within the shaded area (in a patio). Borings SB-13 and SB-14 were located further southwest of the shaded area, in a concrete driveway.

3.4.3 Grab Groundwater Sample Collection

Grab groundwater samples were collected at the following zones

- First encountered groundwater
- Permeable water-bearing zones below first encountered groundwater.



The grab groundwater samples were collected from the top of the groundwater after groundwater was encountered in each boring. In order to collect lower-zone groundwater samples, a temporary well consisting of a 5-foot-long section of 1-inch diameter slotted PVC well screen set below PVC blank casing was lowered through the Geoprobe® drill rods to the desired depth, and then a disposable bailer was slowly lowered to the screened interval. **Appendix D** presents Clearwater's Grab Groundwater Sample Collection Protocol. Results from the analysis of the grab groundwater samples are presented in **Table 3**.

3.4.4 Deep Zone Well Installations

"Deep Zone" wells MW-1D and MW-7D were installed on October 4, 2007, by Gregg Drilling using a Marl M5T track-mounted hollow-stem auger drill. Both wells were constructed with 2-inch diameter PVC well casings set in 8-inch diameter boreholes. The screened intervals extended from 35 feet to 45 feet bgs, and the filter pack intervals extended from 33 feet bgs to 45 feet bgs. The filter packs consist of #2/12 sand. The wells were developed by Clearwater on November 13, 2007; **Appendix D** presents Clearwater's Field Procedures for Soil Borehole Drilling and Groundwater Monitoring Well Installation and Development. Well Construction Data are presented in **Table 4**.

3.5 Soil and Grab Groundwater Sample Analyses

All the soil and grab groundwater samples were stored on ice in an ice chest, and then transported in an ice chest, under Chain-of-Custody documentation, to Kiff Analytical LLC (Kiff), in Davis, California, for analysis. Kiff is a California Department of Health (DHS)-certified laboratory. Kiff analyzed the samples for the following compounds; however, not all the soil and grab groundwater samples were analyzed for all the analyses.

The following analyses was performed by EPA Method 8015m:

- Total Petroleum Hydrocarbons as Diesel (TPH-d)

The following analyses were performed by EPA Method 8260B:

- Total Petroleum Hydrocarbons as Gasoline (TPH-g)
- Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX)
- Methyl Tertiary Butyl Ether (MTBE)
- Diisopropyl Ether (DIPE)
- Ethyl-T-Butyl Ether (ETBE)

- Tert-Amyl Methyl Ether (TAME)
- Tert-Butanol
- Methanol
- Ethanol
- 1,2-Dichloroethane
- 1,2-Dibromoethane.

The analytical results from the soil samples are presented in **Figure 4**. The analytical results from the groundwater samples are presented in **Figure 5**.

Appendix E presents Kiff analytical reports #56957, #57046, #57047, #58696, and #58805 (Soil and Grab Groundwater Samples). Kiff analytical report #58952 presents the results of soil samples collected for the disposal of investigation-derived wastes. See each individual Kiff analytical report for a Case Narrative, which describes any sample irregularities.

3.6 Well Location Survey

At the conclusion of the well installation event, each of the soil boring locations was surveyed using a Trimble GPS receiver. The GPS coordinates are presented in **Appendix F**. The location of wells MW-1D and MW-7D were measured with a cloth tape relative to wells MW-1 and MW-7, respectively. The top-of-casing elevations of wells MW-1D and MW-7D were surveyed on November 26, 2007, by a California Professional Geologist, using a survey level and rod and re-checked on November 27, 2007. The top-of-casing elevations were referenced to the top-of-casing elevation of previously installed well MW-1.

3.7 Cross Sections

The locations to the eight cross sections are presented in **Figure 6**. Cross sections A-A' through H-H' are presented in **Figures 7** through **14**.

3.8 Soil Vapor Sample Collection

3.8.1 Soil Vapor Well Installation

Six multi-depth soil vapor monitoring wells (VP-1 through VP-6, construction detail is presented in **Figure 15**) were installed by Fast-Tek Engineering Support Services (Fast-Tek) of Point Richmond, California on October 4, 2007. At each soil vapor well location, separate well points were installed at depths of 3 feet, 6 feet, and 9 feet bgs. Fast-Tek installed the wells using a Geoprobe® 5400 truck-

mounted drill. **Figure 3** presents the soil vapor well locations. **Appendix D** presents Clearwater's Soil Vapor Monitoring Well Installation and Sampling Procedures.

3.8.2 Soil Vapor Sample Collection Procedure

Prior to collecting a sample, each vapor point was purged for a minimum of five minutes using a vacuum pump. The soil vapor samples were collected using a SUMMA canister for each of the three soil vapor sample depths (3 feet, 6 feet and 9 feet). Each sampling system was assembled with a 6-liter SUMMA canister connected to an air flow controller using Teflon tubing. Since the sub-atmospheric pressure canister is an evacuated canister (final canister pressure is below atmospheric pressure), the soil vapor samples were collected without the use of a sample pump. An air flow controller regulated the vapor sample flow to 200 milliliters per minute for the recommended sample collection duration of approximately 30 minutes. The canisters were labeled according to the soil vapor well name, sample depth, and initial and final canister pressures, and then were documented on a chain-of-custody form, packed in a shipping carton, and transported to Air Toxics Ltd. (Air Toxics), in Folsom, California, for analyses.

3.8.3 Soil Vapor Sample Analyses

The soil vapor samples were analyzed by Air Toxics by EPA Method TO-15 using a gas chromatograph/mass spectrometer in the full scan mode. Each sample was analyzed for the BTEX compounds, TPH-g, TBA, 2-Propanol, and MTBE. The soil vapor sample analytical results are presented in **Table 5** and **Appendix E**.

3.8.4 Plotting of Soil Vapor Sample Analytical Data

The soil vapor sample analytical data for TPH-g, benzene, MTBE, and TBA were plotted and contoured separately for depths of 3, 6, and 9 feet bgs (**Figures 16** through **27**). The contouring of each figure was based upon five or six data points and represents the simplest pattern based on these data points. Samples were not collected from vapor well VP-1 at 9 feet bgs, because the bottom of this vapor well at the time of sample collection was below the site groundwater table.

For all contaminants considered from the 17 soil vapor samples, the concentration of the contaminant increased with depth. The general contour pattern for all the contaminants and all depths shows that the concentration of contamination increases toward the center of the site (**Figures 16** through **27**).



3.8.5 Investigation-Derived Waste Disposal

Soil and groundwater waste derived from the investigation were disposed of by IWM (see **Appendix G**).

4 INVESTIGATION FINDINGS

4.1 Regional and Site Geology

The site is located on the East Bay Plain in the San Francisco Bay region. This highly urbanized area is a gently sloping alluvial plain formed by sediment eroded out of the East Bay Hills. Creeks that drained the hills carried sediment toward the bay and built up the plain. **Figure 28** presents a generalized cross sectional view of East Bay Plain-derived sediments interbedded with marine sediments within San Francisco Bay (Norfleet Consultants, 1998).

Soil boring logs and cross sections of the site and nearby off-site areas indicate that the site lithology consists primarily of interbedded clayey sediments (lean clays to fat clays, and sandy clays) of low permeability, with thin interbeds of relatively more permeable clayey sands and clayey gravels, typical of alluvial deposits along the bay margin.

For convenience of discussion, Clearwater has divided the site and vicinity lithology into two zones, which are drawn on the cross sections and identified as Zone A and Zone B. Zone A is the zone extending from the ground surface to a depth of approximately 25 to 30 feet bgs. Zone A consists primarily of clays with discontinuous, or possibly meandering layers, of clayey gravel. Zone B extends from approximately 25 to 30 feet bgs to at least 58 feet bgs, the deepest depth explored. The lithology of Zone B is primarily sands (poorly graded sand, well graded sand, silty sand) with thin interbeds of lean clay. The top of Zone B appears to be the hard layer where several of the Geoprobe® borings (SB-9, SB-10, and SB-12) met refusal.

4.2 Revisions Requested in ACEH Letter of January 4, 2007

4.2.1 Revised Depth of Contact between Clayey Gravels and Underlying Soils

The estimate of the depth to the contact between the clayey gravel and the underlying soil in the upper (A) zone was revised, as requested in the ACEH letter of January 4, 2007. **Figure 29** presents the Revised Depth to Contact Between Clayey Gravel and Underlying Soil. This is a revision of Figure 4 in the Workplan dated December 19, 2006.

4.2.2 Review of Log for Soil Boring SB-7D

Boring SB-7D was drilled on March 16, 2006. The log indicates that clayey gravel occurs from 5 feet bgs to 12 feet bgs, and then clayey sand occurs from 12 feet bgs to 14 feet bgs, followed by a layer of clayey gravel from 14 feet bgs to 16 feet bgs. **Figure 29** is drawn using the contact between the clayey gravel and clayey sand at 12 feet bgs. Another alternative would be to draw **Figure 29** with the clayey gravel/clayey sand contact at 16 feet bgs, as the layer of clayey sand may be an interbed within the clayey gravel. **Figure 29** would not be substantially changed by drawing the contact at 16 feet bgs.

4.3 Site Hydrology

4.3.1 Groundwater Flow Direction in Zone A

Historic determinations of the groundwater flow in Zone A, since April 2006 when fifteen on-site wells were installed, have consistently indicated an apparent mounding of the groundwater surface, with steep gradients to the northwest, southwest, northeast, and southeast (**Table 6**). **Figures 30, 31, and 32** present groundwater contour elevation maps for February 13, 2007 (First Quarter 2007), May 15, 2007 (Second Quarter 2007) and August 15, 2007 (Third Quarter 2007), respectively. Late 2006 investigations determined that on-site leakage (see **Appendix H**) of the domestic water supply and sewer are contributing to the site groundwater and may provide enough water to maintain the groundwater mounding. Calculation of the site groundwater elevation contour pattern from the most recent measurement of the site's depth to groundwater on November 13, 2007, indicates that the pattern of mounded groundwater is still occurring. **Figure 33** presents the shallow Zone (A) groundwater elevation contour pattern. See **Appendix I** for field notes from that event. The Fourth Quarter 2007 Groundwater Monitoring event occurred on November 13, 2007; however, the results of this monitoring event will be reported in a separate report.

4.3.2 Groundwater Flow Direction in Zone B

Clearwater considers the groundwater flow direction in the lower Zone B to be separate from the groundwater flow in Zone A, because of the differences in groundwater levels between pairs of nearby wells (**Figure 3**; MW1/MW1-D, MW-4/MW-4D, MW5/MW-5D, and MW7/MW-7D). A downward gradient exists between the upper Zone A and the lower Zone B. The deep wells (with a D suffix) have their filter pack intervals located at depths of 33 to 45 feet bgs. The groundwater elevation contour pattern within Zone B was determined from data collected from the deep wells during the Fourth Quarter 2007 Groundwater Monitoring Event, which occurred on November 13, 2007. Depth to groundwater data for wells MW-1D, MW-4D, MW-5D, and MW-7D were combined with the top-of-casing elevation data for these wells to determine the groundwater elevation pattern presented in **Figure 34**. The



groundwater elevation contours indicate a partial elongated groundwater depression, which appears to discharge due north, at a gradient of 0.075.

In order to check the groundwater flow direction and gradient determined for November 13, 2007 (since the results were considered anomalous), Clearwater staff returned to the site on November 27, 2007, and resurveyed the top-of-casing elevations of the deep wells (MW-1D, MW-4D, MW-5D, and MW-7D) relative to the top-of-casing elevation of well MW-1. Depth-to-water measurements within the four deep wells were also re-measured at the same time. The groundwater elevation contour pattern for November 27, 2007 is shown on **Figure 35**. The groundwater elevation contours for November 27 indicate a partial groundwater depression, which appears to discharge due north at a gradient of 0.067.

Appendix I preserves the field notes for November 13 and 27, 2007. The groundwater elevation data is also presented in **Table 6**.

These determinations were based on data from four wells; the addition of additional data points (wells) may substantially alter future determinations of the deep groundwater flow (in Zone B).

5 SITE CONCEPTUAL MODEL

5.1 Zone A

The soil and grab groundwater analytical results (**Tables 1, 2, and 3**) indicate that the upper zone (Zone A) is highly contaminated on site and also off site to the south, southwest, and in the general direction of High Street.

Some of the on-site wells were installed at a depth where the tops of their screened sections are normally below the top of the site groundwater. The high concentrations of MTBE (observed over seven years of monitoring) in the groundwater may be the result of free product MTBE floating on the top of the groundwater. During the most recent groundwater sampling event on November 13, 2007, free product was described in the groundwater purged from wells IS-5 and MW-8 (**Appendix I**). The results of the November 13, 2007, groundwater monitoring event (Fourth Quarter 2007) have not been presented yet.

5.2 Zone B

The groundwater flow direction within Zone B is due north, on the basis of two determinations of groundwater elevations using wells MW-1D, MW-4D, MW-5D, and MW-7D on November 13 and 27,

2007. There appears to be a downward gradient between the upper Zone A and the lower Zone B, as determined by the difference in groundwater elevations in between the two zones. Downward transport of groundwater may have been restricted by the clayey soil, which acts as an aquitard.

The groundwater within Zone B is relatively less contaminated than that within Zone A, but the groundwater is still contaminated with as much as 14,000 µg/L MTBE and 33,000 µg/L TBA (boring SB-18 at 40 feet bgs). An off-site concentration as high as 23,000 µg/L of TPH-g occurs at a depth of 52 feet bgs in off-site soil boring SB-13, which, according to the gradient calculated for Zone B, is upgradient of the site.

5.3 Extent of Contamination

The off-site plume of contamination has not yet been defined to threshold MTBE Environmental Screening Limits in the horizontal direction. In addition, the extent of soil and groundwater contamination has not been defined in the vertical direction.

The grab groundwater sample results for borings SB-13 through SB-15 (**Figure 5** and **Table 3**) indicate that groundwater contaminated with high concentrations of TPH-g, TPH-d, MTBE, and BTEX components occurs to the south and west of the search area requested by ACEH staff (shaded area).

5.4 Persulfate Bench Test

Representative soil samples were collected during the field investigation and provided to the lab to perform a persulfate bench test to determine the feasibility of using persulfate to remediate clayey soils contaminated with petroleum hydrocarbons. The bench testing and analytical have been completed. The results of the persulfate bench test will be presented at a later date as a separate report.

5.5 Proposed HVDPE Test

Warren Chamberlain, P.E., evaluated the current configuration of the on-site wells (**Appendix J**). Clearwater Group engaged an HVDPE subcontractor, RSI; RSI staff concurred that the well screen locations were inefficient and recommended that the well screens be placed at depths of from 3.5 feet bgs to the base of the clayey gravel layer (see **Figure 36**). To establish radius of influence (ROI), one extraction well and three ROI wells are recommended, on the basis of the opinions of the PE and the

HVDPE operator. **Figure 37** shows a proposed HVDPE test well location, along with three HVDPE ROI test wells. The HVDPE well is located over the inferred clayey gravel layer shown on **Figure 29**.

The ROI wells are located at different distances (7'-15') from the HVDPE test well. In addition, vapor monitoring well VP-6 and extraction well EW-2 may serve to monitor the ROI at greater distances.

6 RECOMMENDATIONS FOR ADDITIONAL SOIL AND GROUNDWATER INVESTIGATION

The on-site and off-site extent of soil and groundwater contamination have not been fully determined. Clearwater recommends that the following actions be taken, toward the ultimate goal of remediating the source and the contaminant plume and obtaining site closure:

- Further define the extent of on-site and off-site contamination. Clearwater proposes soil borings and a Gore Sorber Survey to extend through the High Street block to the southwest (**Figure 38**) to help define the lateral extent of contamination and plan the location of off-site soil borings and groundwater monitoring wells (see **Figure 38**). Preliminary proposed locations for on-site and off-site wells are shown on **Figure 38**.
- Consider the risks associated with soil vapor intrusion into the on-site and off-site buildings; consider additional soil vapor wells.
- Establish a network of off-site groundwater monitoring wells, following a Gore-Sorber[®] survey, and incorporate the off-site groundwater monitoring wells into the Groundwater Monitoring Program. The groundwater monitoring program should be maintained for at least one hydrologic cycle (one calendar year). After one year, the groundwater monitoring data will be reviewed to determine whether the groundwater flow direction and gradient and analytical data in Zone B are consistent with a northerly groundwater flow direction.
- In order to conserve costs the groundwater monitoring program should be evaluated and unnecessary monitoring of some of the groundwater monitoring wells should cease. In addition, the option of performing semiannual groundwater monitoring events should be evaluated in order to optimize efforts at remediating this site.
- Initiate discussions with ACEH about Remedial Goals for obtaining site closure.
- Install wells and perform an HVDPE pilot test (**Figure 37**).
- Develop remedial options based on the Persulfate Bench Test and HVDPE pilot test results.
- Implement the remedial options.



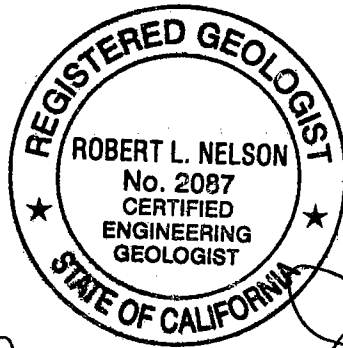
7 LICENSED PROFESSIONALS

In-house licensed professionals direct all projects. These professionals, including geologists or engineers and environmental managers, shall be guided by the highest standards of ethics, honesty, integrity, fairness, personal honor, and professional conduct. To the fullest extent possible, the licensed professional shall protect the public health and welfare and property in carrying out professional duties. In the course of normal business, recommendations by the in-house professional may include the use of equipment, services, or products in which the Company has an interest. Therefore, the Company is making full disclosure of potential or perceived conflicts of interest to all parties.

8 CERTIFICATION

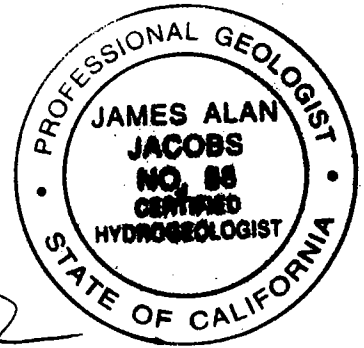
This report was prepared under the supervision of a State of California licensed Professional Geologist at Clearwater Group. All statements, conclusions, and recommendations are based solely upon published results from previous consultants, field observations by Clearwater Group, and laboratory analysis performed by California DHS-certified laboratories related to the work performed by Clearwater Group. Information and interpretation presented herein are for the sole use of the client and regulating agency. A third party should not rely upon the information and interpretation contained in this document. The service performed by Clearwater Group has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

Sincerely,
Clearwater Group



Robert L. Nelson

Robert L. Nelson, PG #6270, CEG #2087
Senior Geologist



James A. Jacobs

James A. Jacobs, PG # 4815, CHG # 88
Chief Hydrogeologist

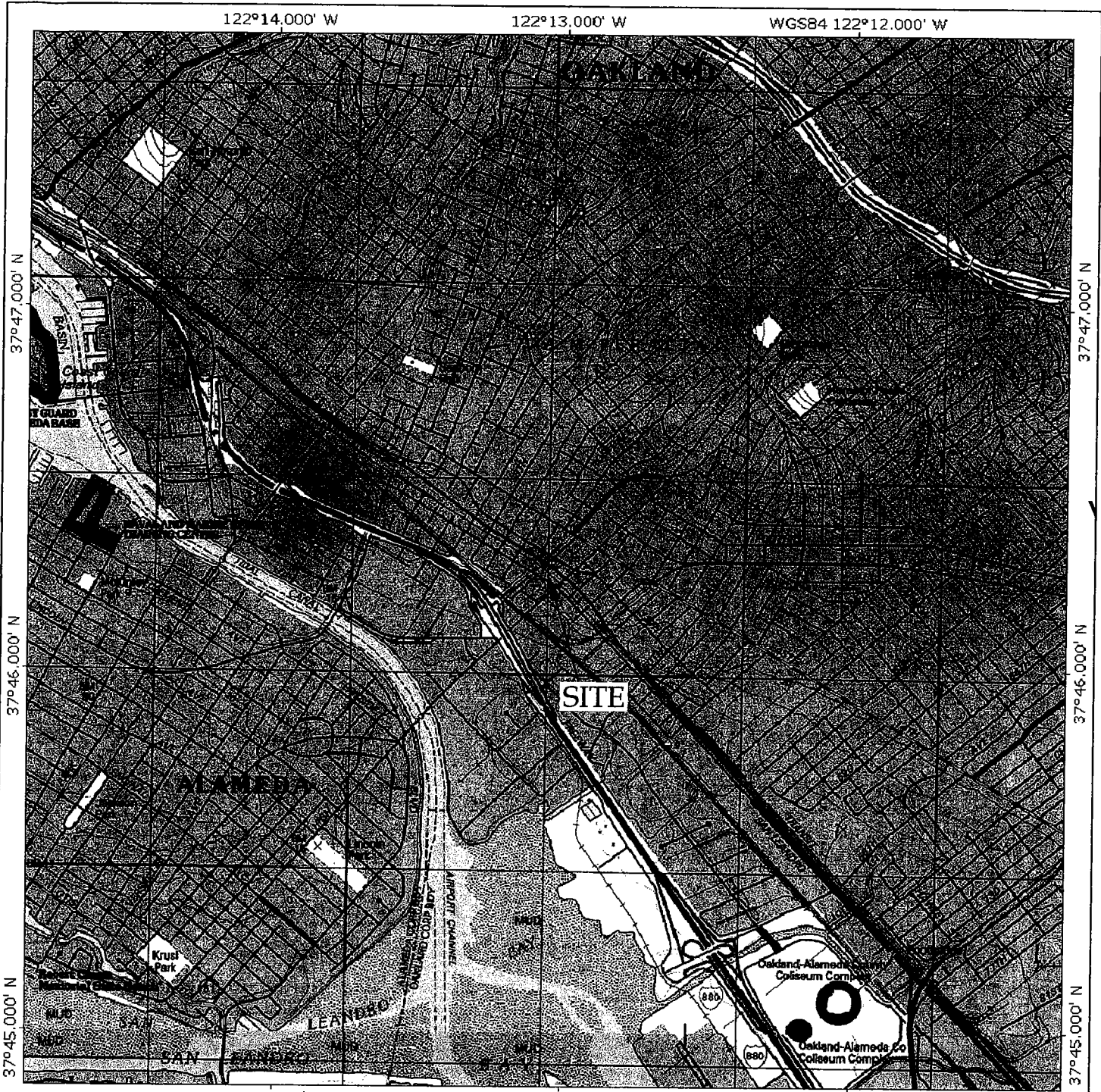


9 REFERENCES

Norfleet Consultants, Generalized Cross Section of East Bay Plain, 1998.

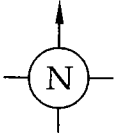
Robertson, P. K. and R. G. Campanella, 1986, *Guidelines for User Interpretation and Application of the CPT and CPTU*, University of British Columbia Soil Mechanics, Series 99, Civil Engineering Department, Vancouver.

FIGURES



TN / MN
15°

Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)

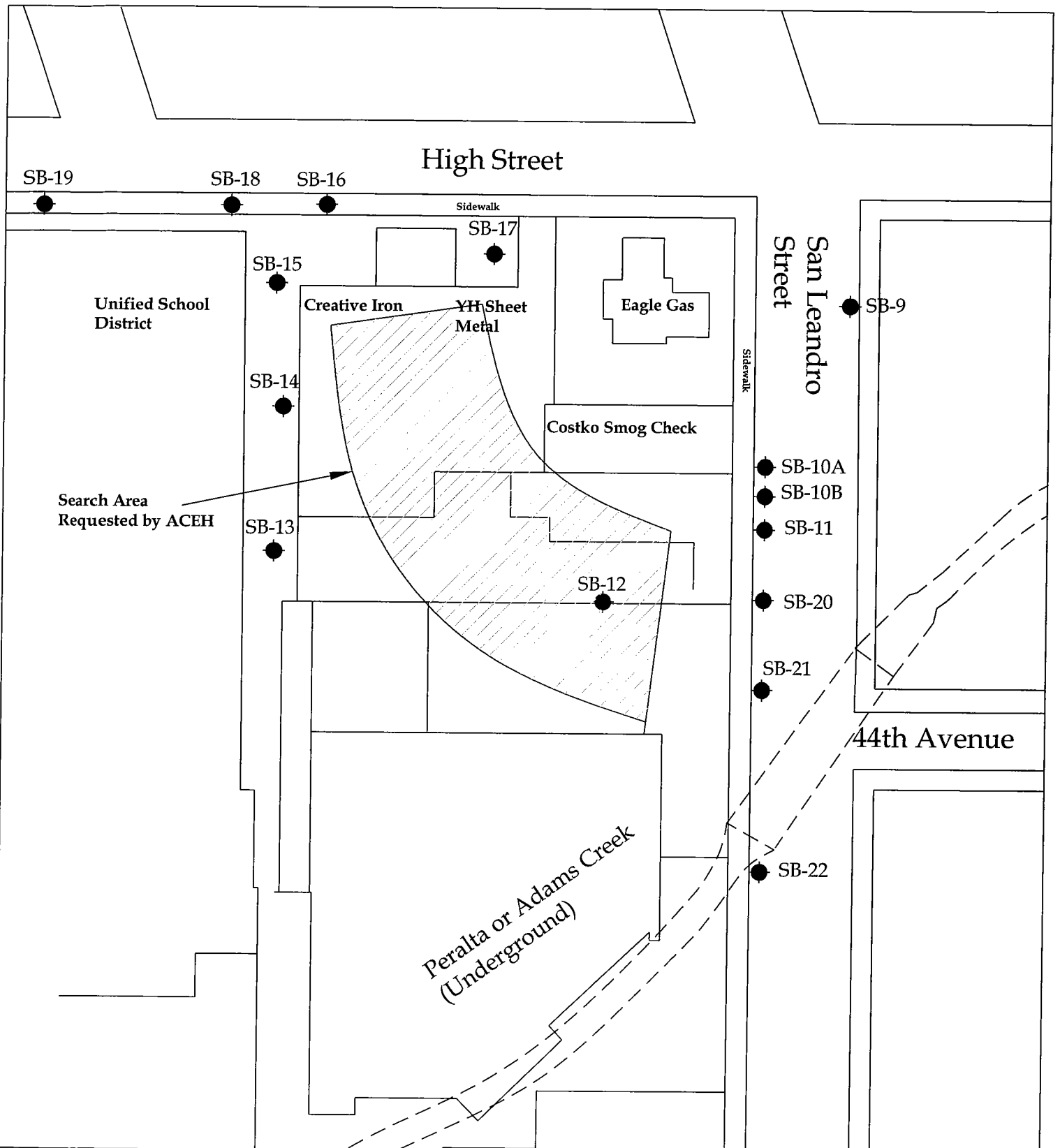


SITE VICINITY MAP

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046E	Figure Date 12/05	Figure 1
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LEGEND

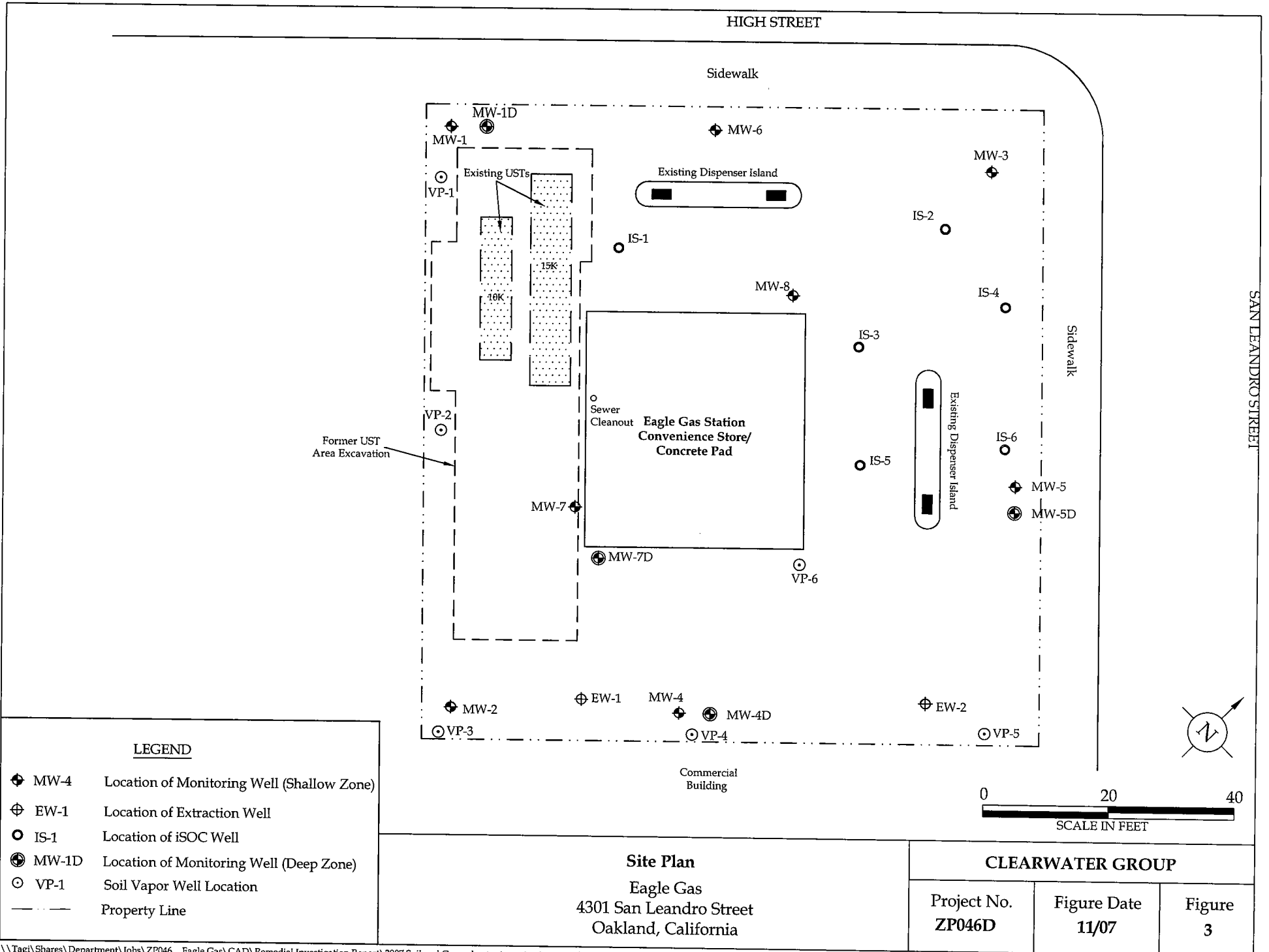
● Soil Boring Location

0 100 200

APPROXIMATE SCALE IN FEET

Site and Offsite Soil Boring Locations
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP		
Project No. ZP046	Figure Date 11/07	Figure 2



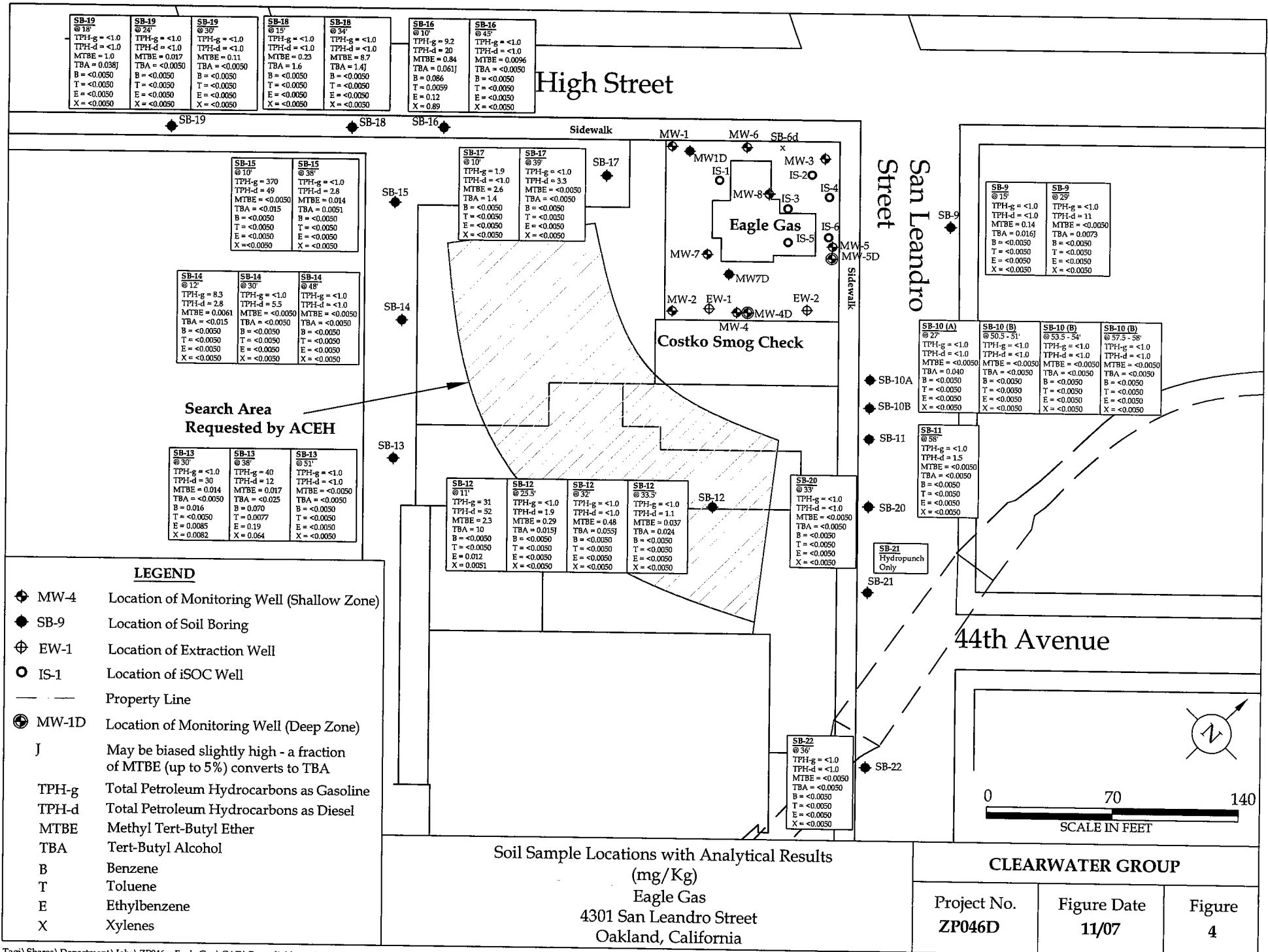
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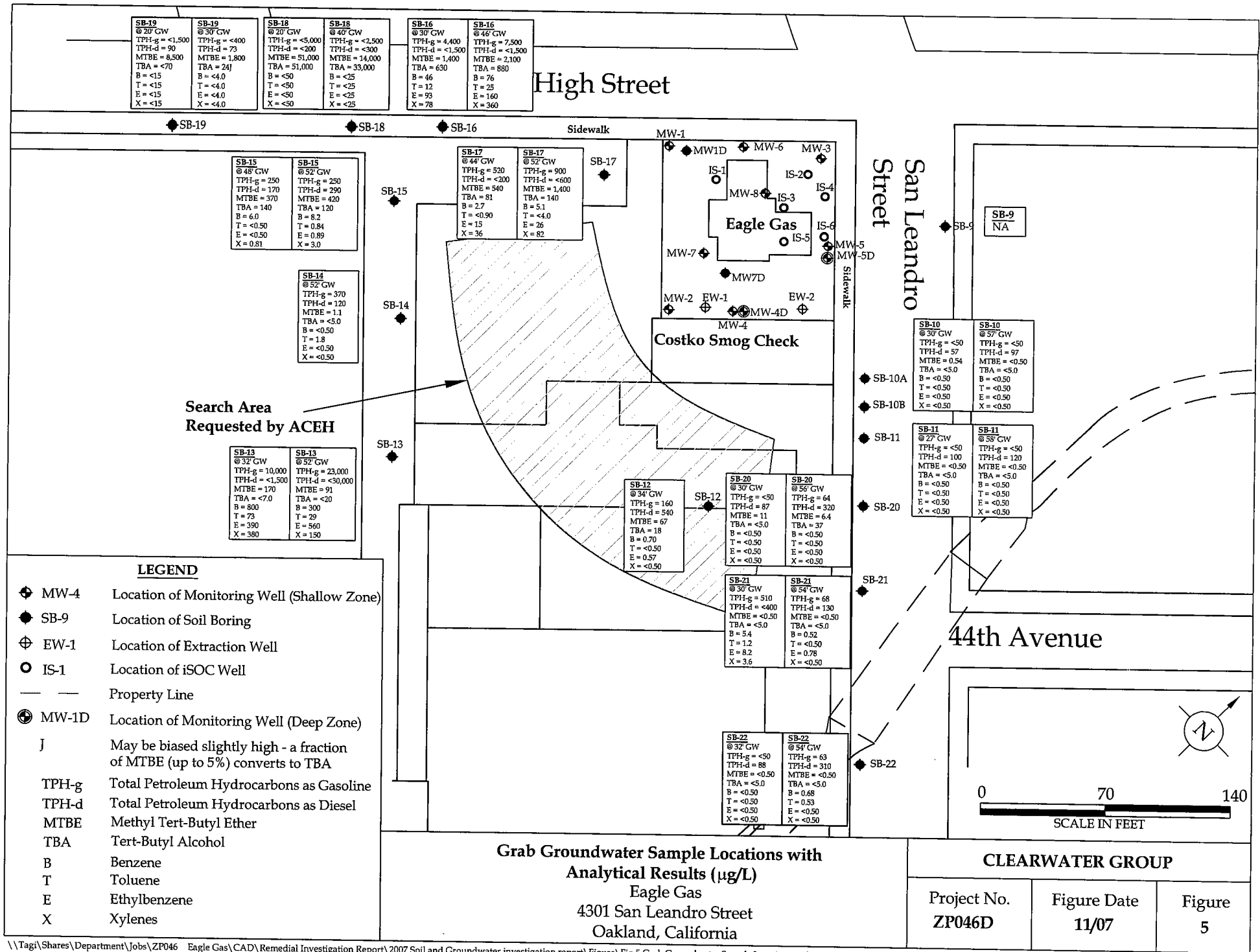
- ⊕ MW-4 Location of Monitoring Well (Shallow Zone)
- ⊕ EW-1 Location of Extraction Well
- IS-1 Location of iSOC Well
- ⊕ MW-1D Location of Monitoring Well (Deep Zone)
- VP-1 Soil Vapor Well Location
- — — Property Line

Site Plan
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 11/07	Figure 3
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Search Area Requested by ACEH

LEGEND

- ⊕ MW-4 Location of Monitoring Well (Shallow Zone)
- ◆ SB-9 Location of Soil Boring
- ⊕ EW-1 Location of Extraction Well
- IS-1 Location of iSOC Well
- — Property Line
- ⊕ MW-1D Location of Monitoring Well (Deep Zone)
- J May be biased slightly high - a fraction of MTBE (up to 5%) converts to TBA
- TPH-g Total Petroleum Hydrocarbons as Gasoline
- TPH-d Total Petroleum Hydrocarbons as Diesel
- MTBE Methyl Tert-Butyl Ether
- TBA Tert-Butyl Alcohol
- B Benzene
- T Toluene
- E Ethylbenzene
- X Xylenes

Grab Groundwater Sample Locations with Analytical Results (µg/L)
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 11/07	Figure 5
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High Street

San Leandro Street

44th Avenue

Unified School District

Creative Iron

YH Sheet Metal

Eagle Gas

Costco Smog Check

Search Area Requested by ACEH

LEGEND

- ◆ MW-4 Location of Monitoring Well (Shallow Zone)
- SB-9 Location of Soil Boring
- ⊕ EW-1 Location of Extraction Well
- IS-1 Location of iSOC Well
- — — Property Line
- ⊙ MW-1D Location of Monitoring Well (Deep Zone)
- J May be biased slightly high - a fraction of MTBE (up to 5%) converts to TBA

Cross Section Locations

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.
ZP046D

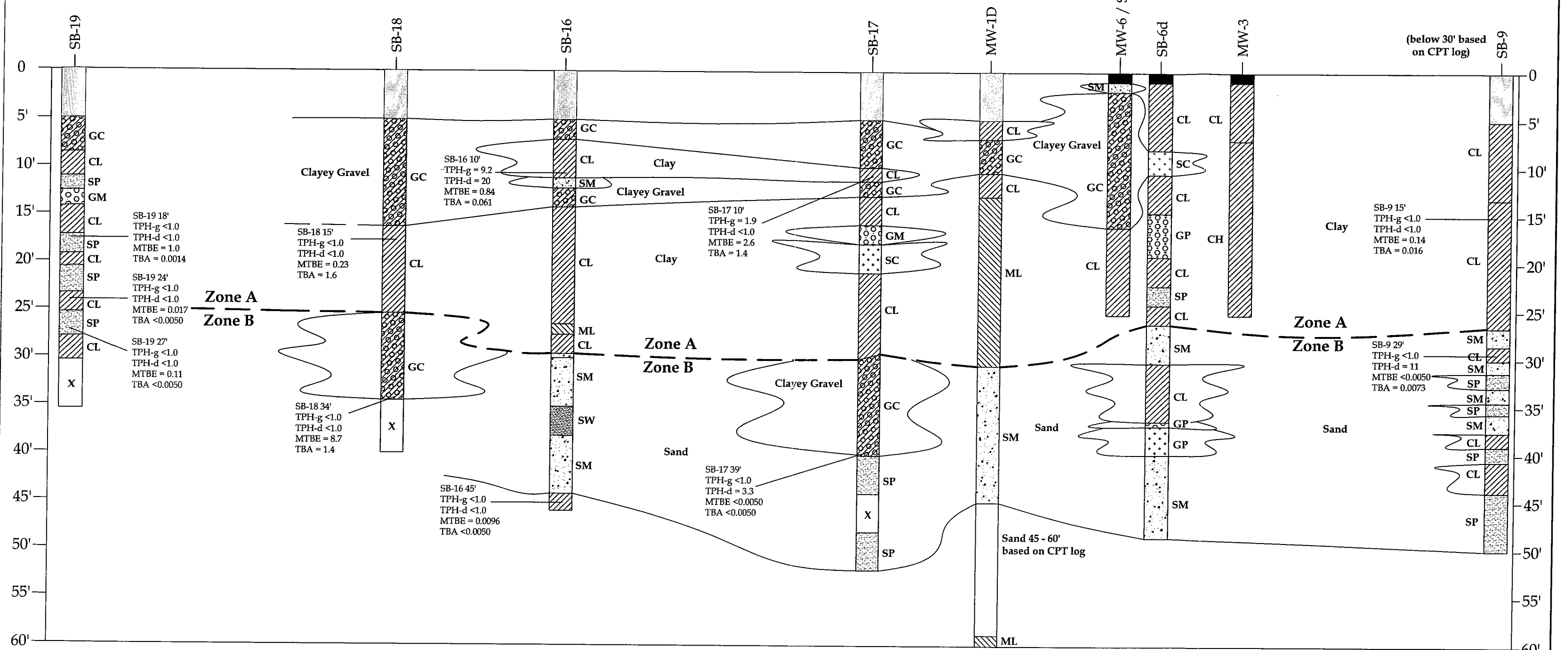
Figure Date
11/07

Figure
6

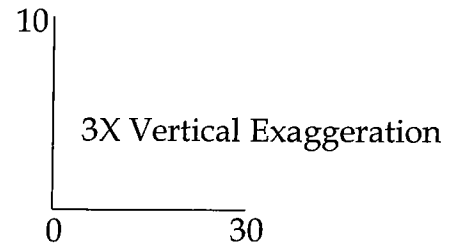


A Southwest

Northeast A'



View Toward Northwest



Soil Sample Results in mg/Kg

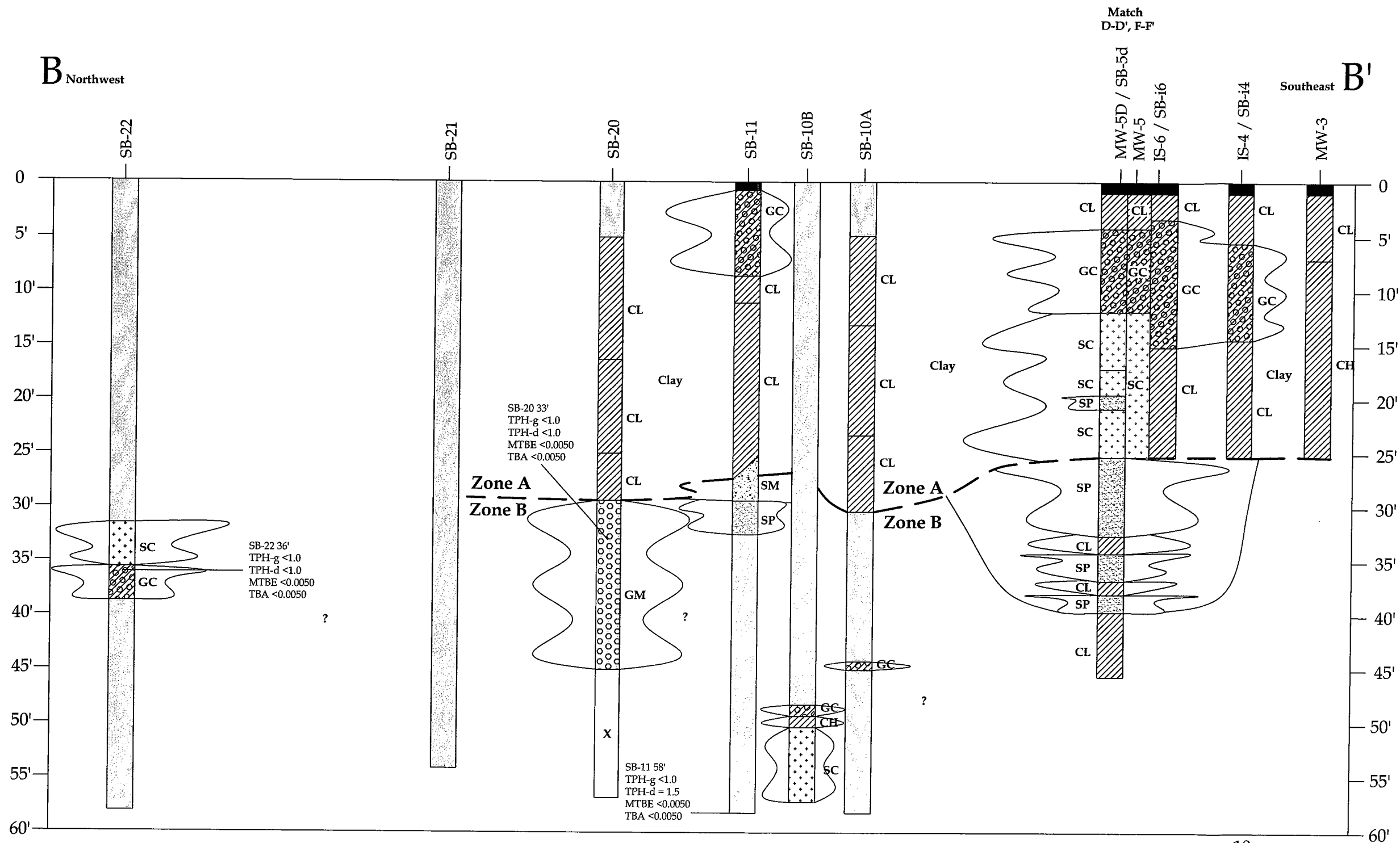
Legend

- Gravelly Sand (SW)
- Clayey Gravel (GC)
- Sandy Silt (ML)
- Silty Gravel (GM)
- Not Logged
- No Recovery
- Silty Sand (SM)
- Silty Clay (CL)
- Clayey Sand (SC)
- Sand (SP)
- Sandy Fat Clay (CH)
- Concrete

Cross Section A-A'
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 10/07	Figure 7
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View Toward Southwest

10'
 3X Vertical Exaggeration

Legend

- Gravelly Sand (SW)
- Clayey Gravel (GC)
- Sandy Silt (ML)
- Silty Gravel (GM)
- Silty Sand (SM)
- Silty Clay (CL)
- Sandy Fat Clay (CH)
- Clayey Sand (SC)
- Not Logged
- No Recovery
- Sand (SP)
- Concrete

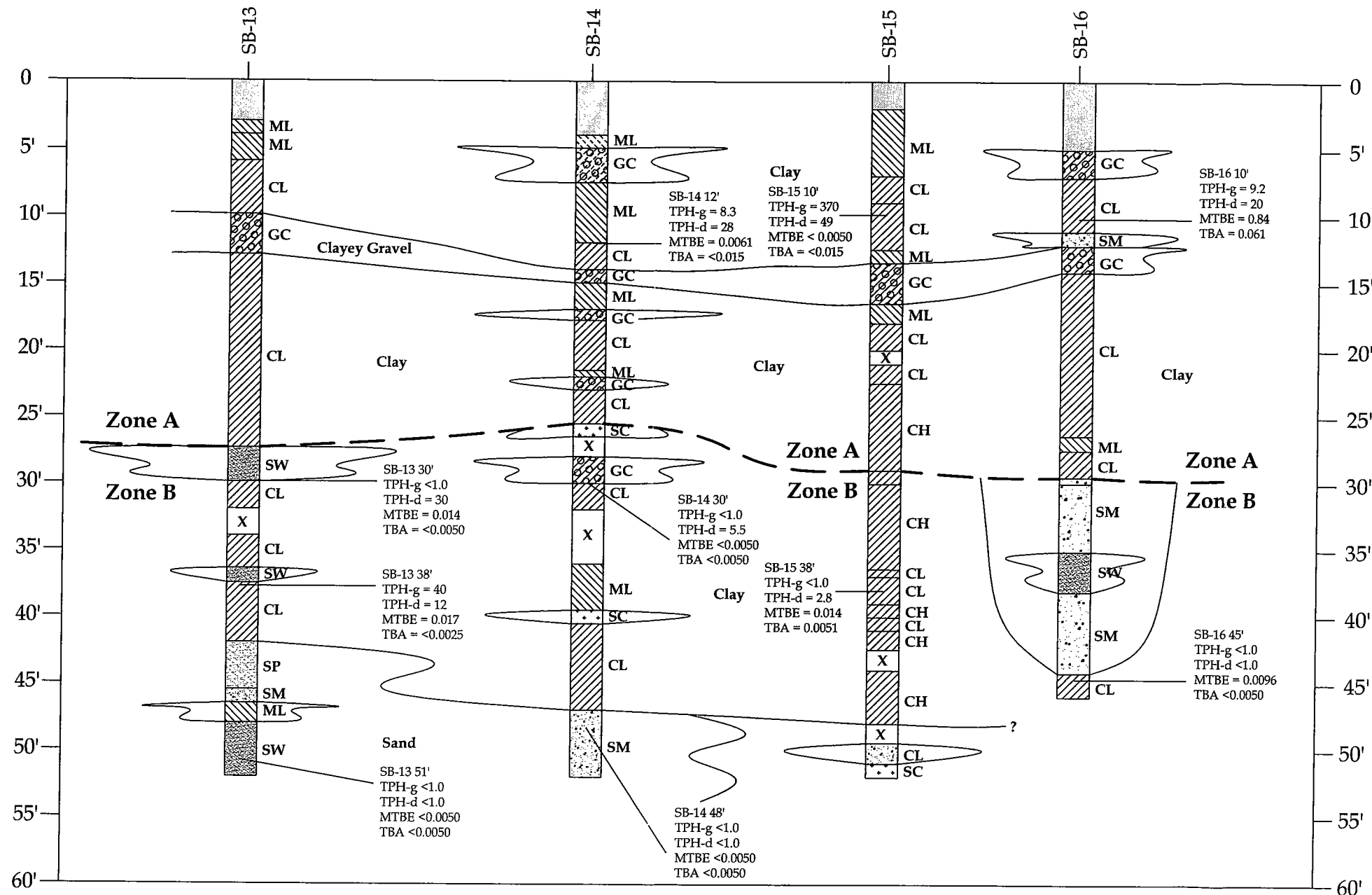
Cross Section B-B'
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

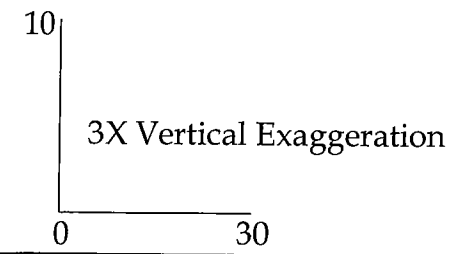
Project No. ZP046D	Figure Date 10/07	Figure 8
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C Southeast

Northwest C'



View Toward Southwest



Soil Sample Results in mg/Kg

Legend

- Gravelly Sand (SW) Clayey Gravel (GC) Sandy Silt (ML) Not Logged X No Recovery
- Silty Sand (SM) Silty Clay (CL) Clayey Sand (SC) Sand (SP) Sandy Fat Clay (CH)

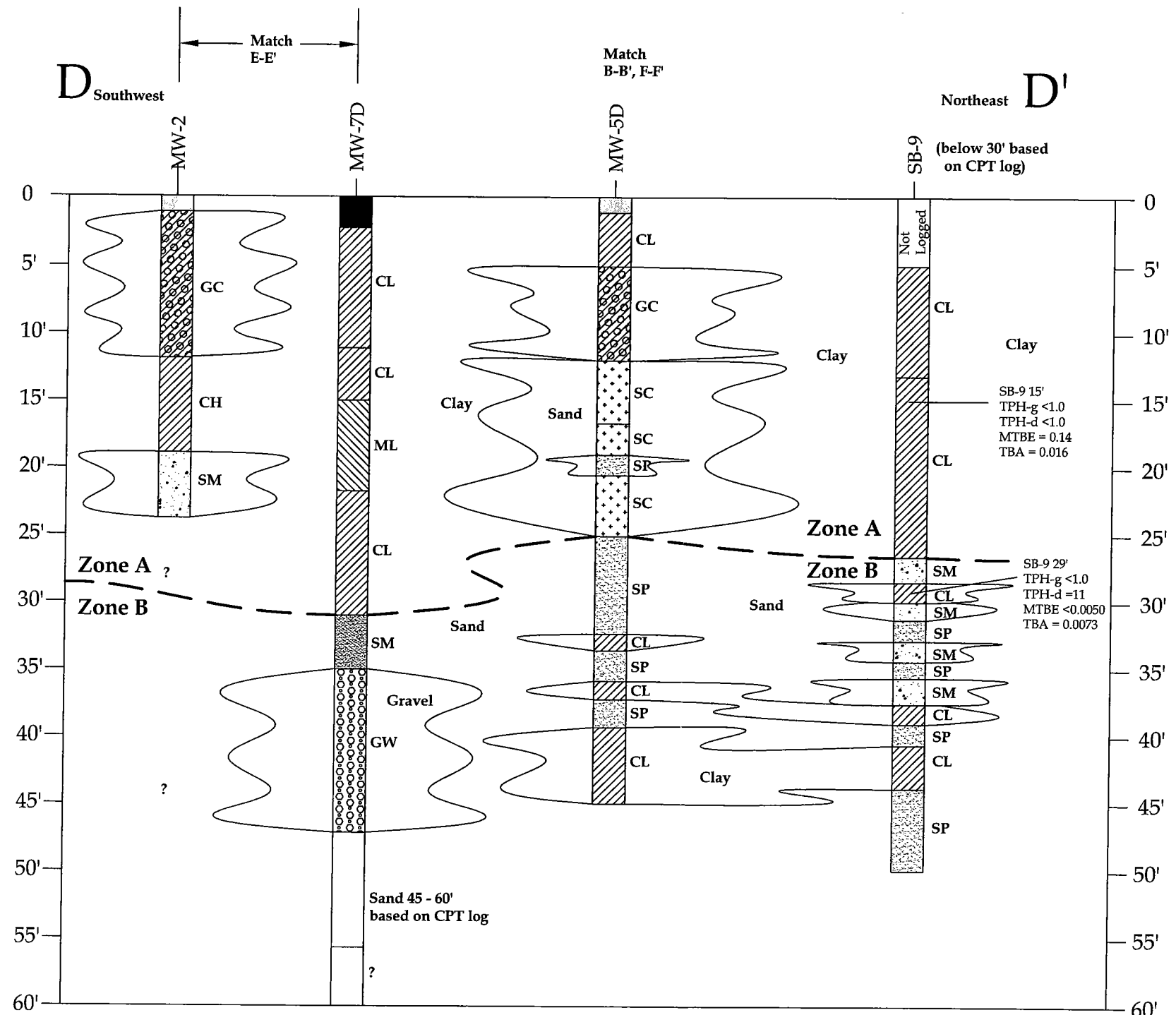
Cross Section C-C'
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

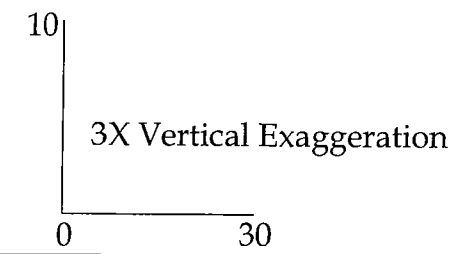
Project No.
ZP046D

Figure Date
10/07

Figure
9



View Toward Northwest

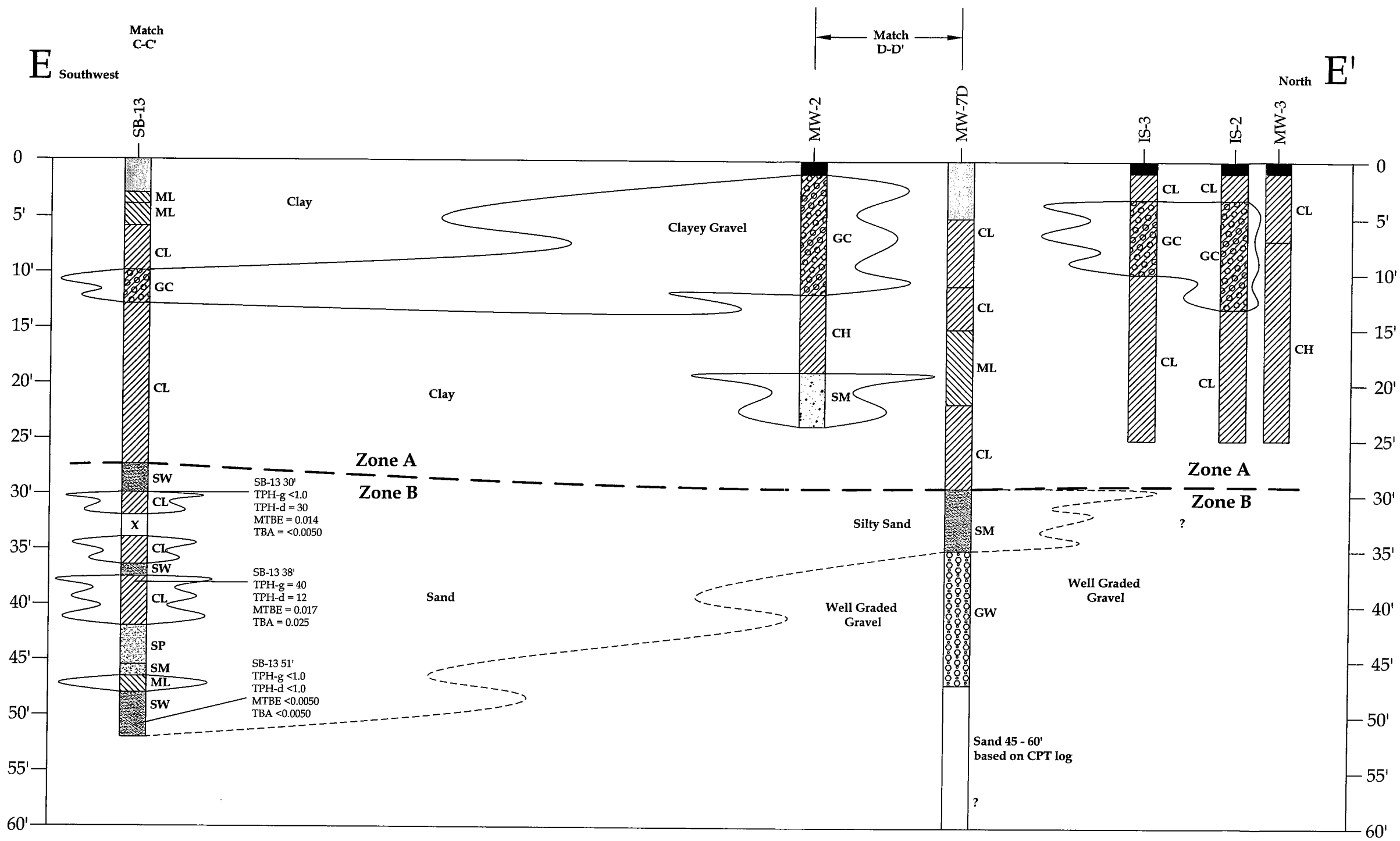


Legend			
Gravelly Sand (SW)	Clayey Gravel (GC)	Sandy Silt (ML)	Gravel Well Graded (GW)
Silty Sand (SM)	Silty Clay (CL)	Sandy Fat Clay (CH)	Not Logged
	Clayey Sand (SC)	Sand (SP)	No Recovery

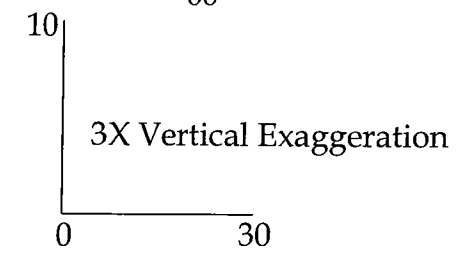
Soil Sample Results in mg/Kg

Cross Section D-D'
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 10/07	Figure 10



View Toward West

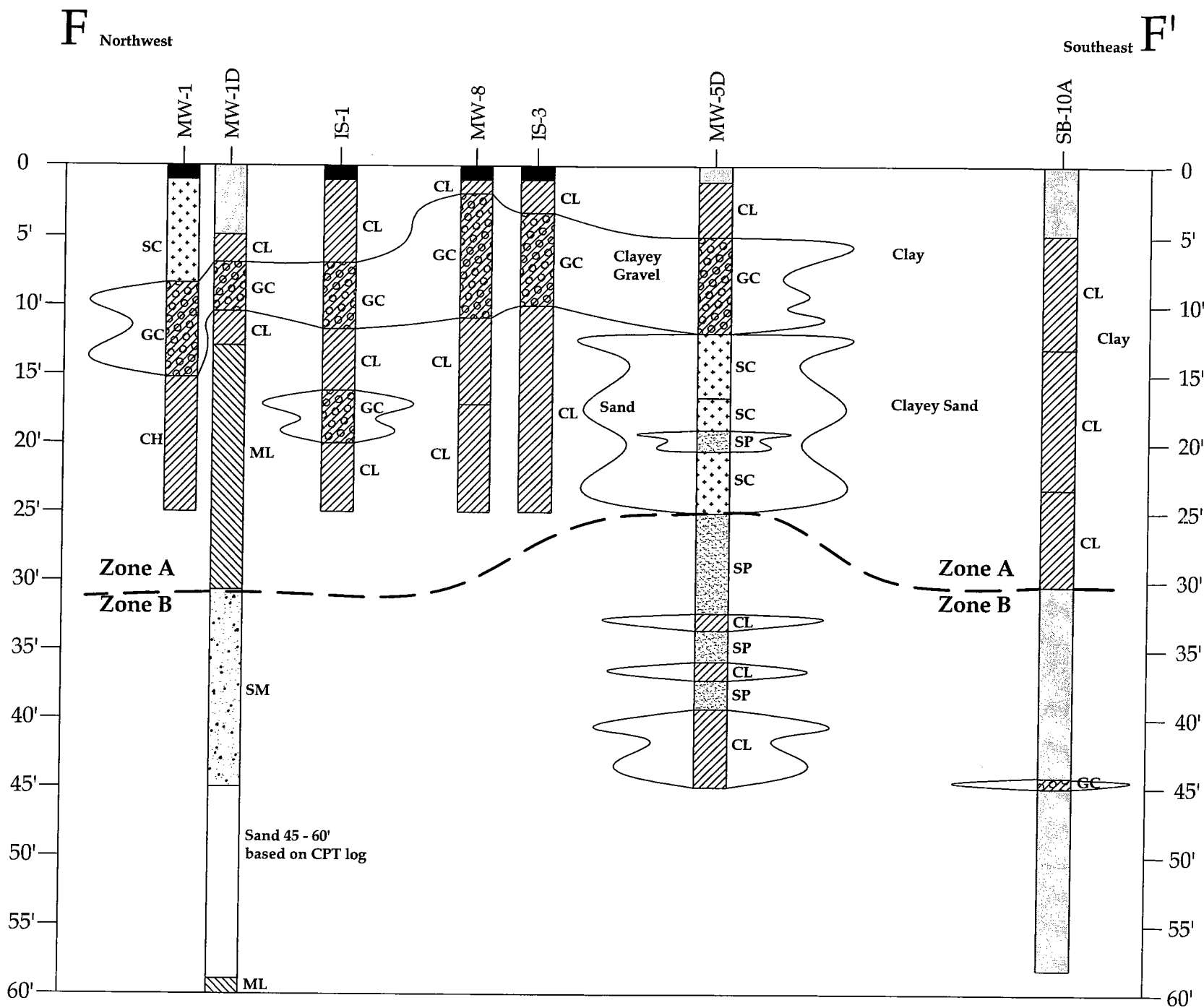


Legend

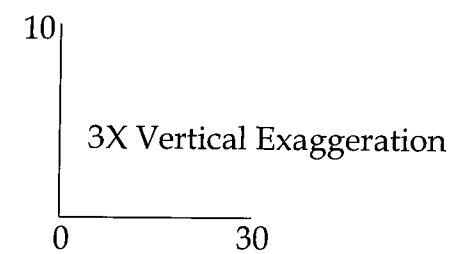
- Gravelly Sand (SW)
- Clayey Gravel (GC)
- Sandy Silt (ML)
- Gravel Well Graded (GW)
- Silty Sand (SM)
- Silty Clay (CL)
- Sandy Fat Clay (CH)
- Clayey Sand (SC)
- Not Logged
- No Recovery (X)
- Concrete
- Sand (SP)

Cross Section E-E'
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 10/07	Figure 11



View Toward Northeast



Soil Sample Results in mg/Kg

Legend

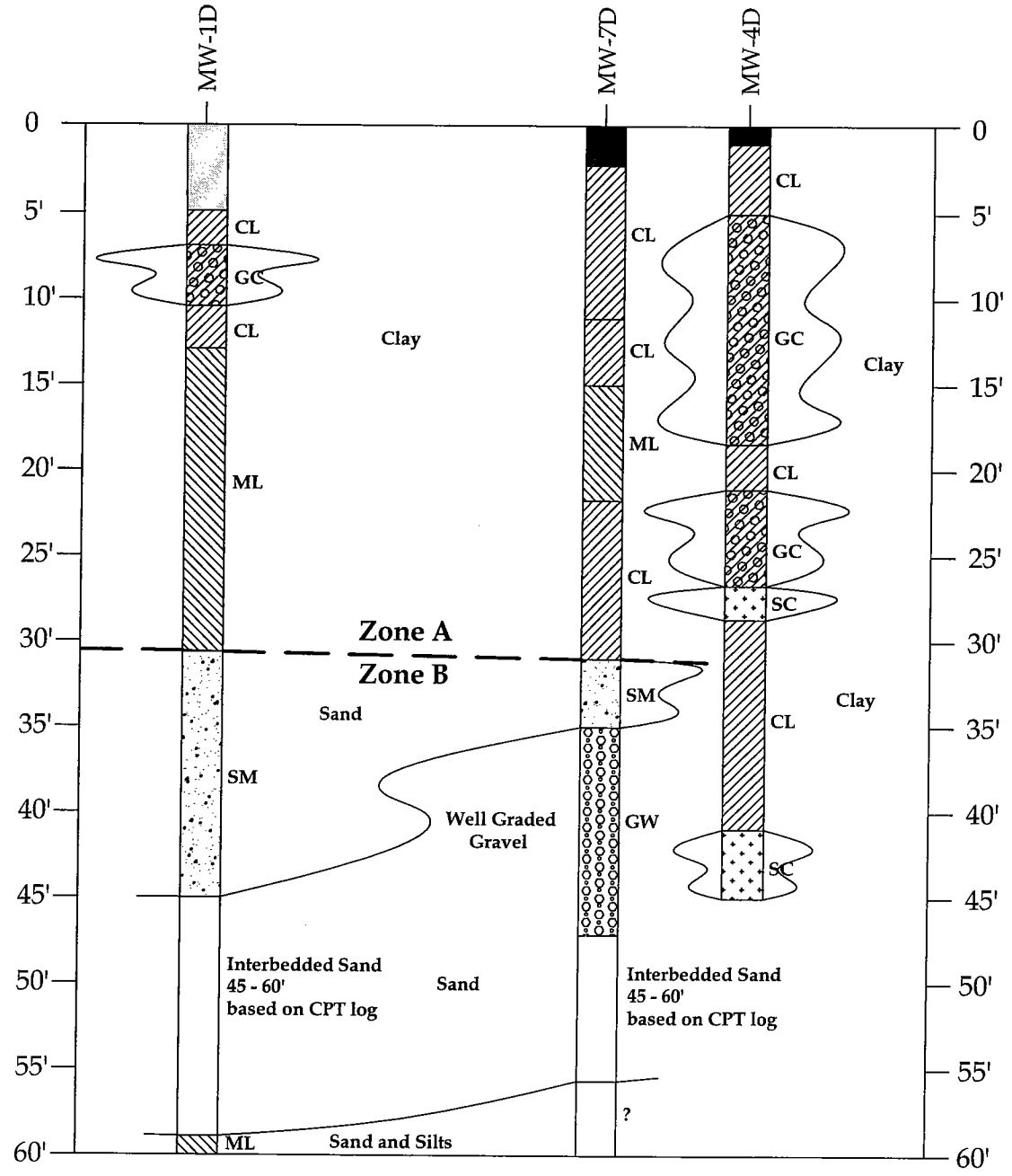
- Clayey Gravel (GC) Sandy Silt (ML) Not Logged No Recovery
- Silty Clay (CL) Clayey Sand (SC) Sand (SP) Concrete
- Sandy Fat Clay (CH)

Cross Section F-F'
4301 San Leandro Street
Oakland, California

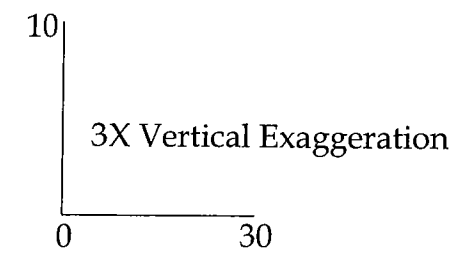
CLEARWATER GROUP

Project No. ZP046D	Figure Date 10/07	Figure 12
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G Northwest Southeast G'



View Toward Northeast



Soil Sample Results in mg/Kg

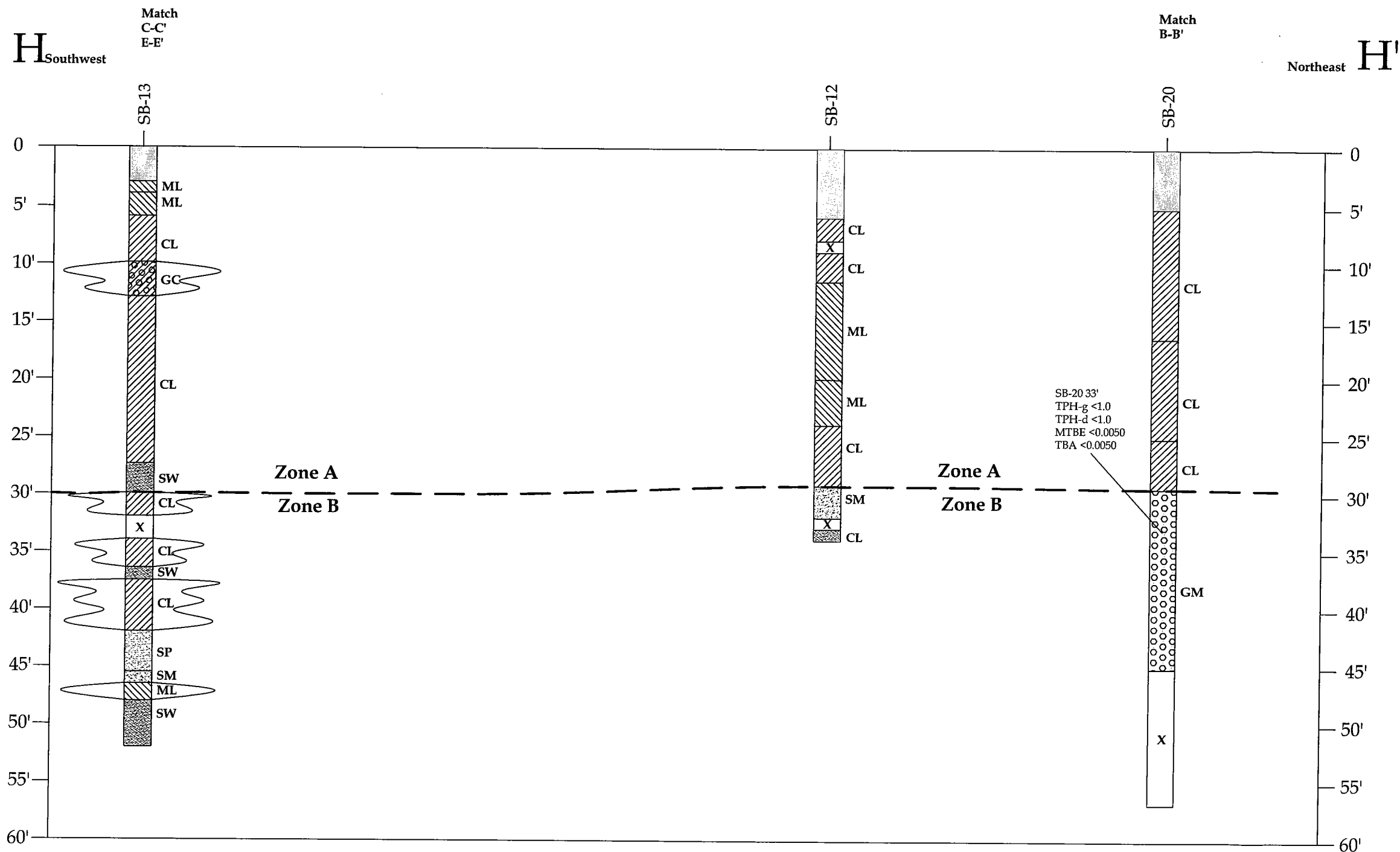
Legend

- Clayey Gravel (GC)
- Sandy Silt (ML)
- Not Logged
- Gravel Well Graded (GW)
- Silty Sand (SM)
- Silty Clay (CL)
- Clayey Sand (SC)
- Sand (SP)
- Concrete
- Sandy Fat Clay (CH)

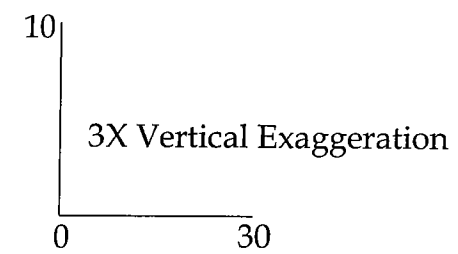
Cross Section G-G'
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 10/07	Figure 13
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View Toward Northwest



Soil Sample Results in mg/Kg

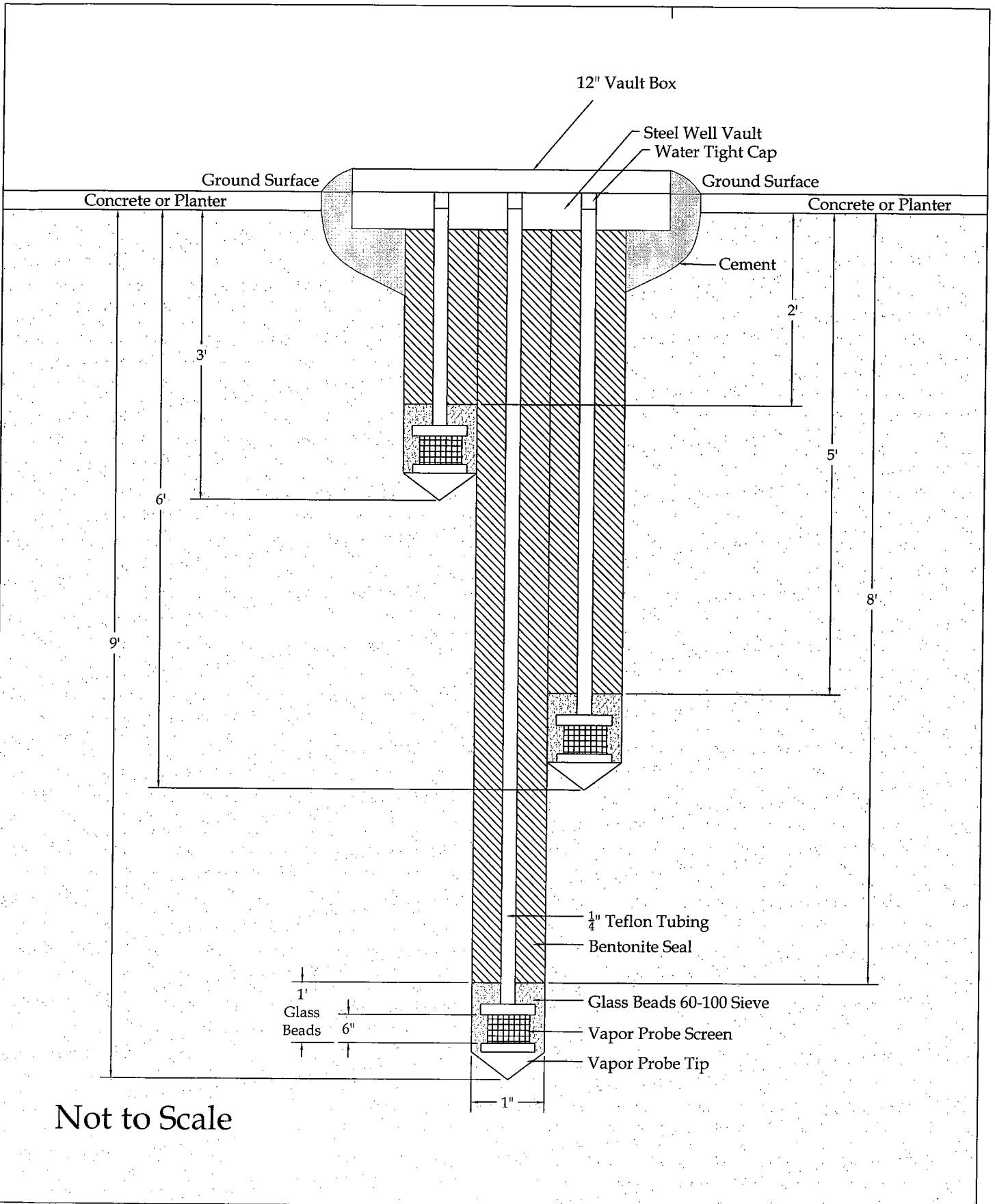
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- Gravelly Sand (SW)
- Clayey Gravel (GC)
- Sandy Silt (ML)
- Not Logged
- No Recovery
- Silty Sand (SM)
- Silty Clay (CL)
- Sandy Fat Clay (CH)
- Clayey Sand (SC)
- Sand (SP)

Cross Section H-H'
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 10/07	Figure 14
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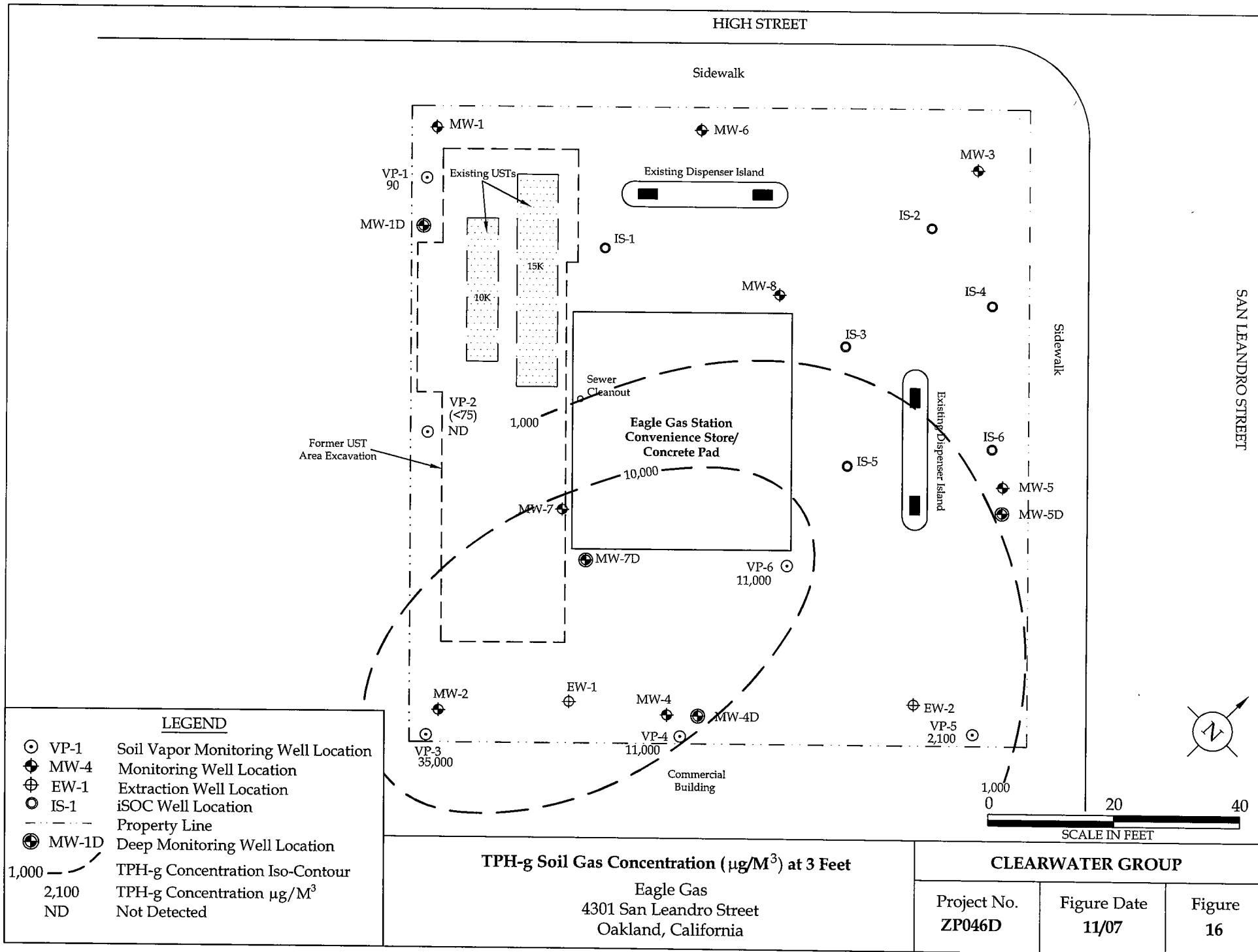
Vapor Well Completion Diagram
Vapor Wells VP-1 Through VP-6
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

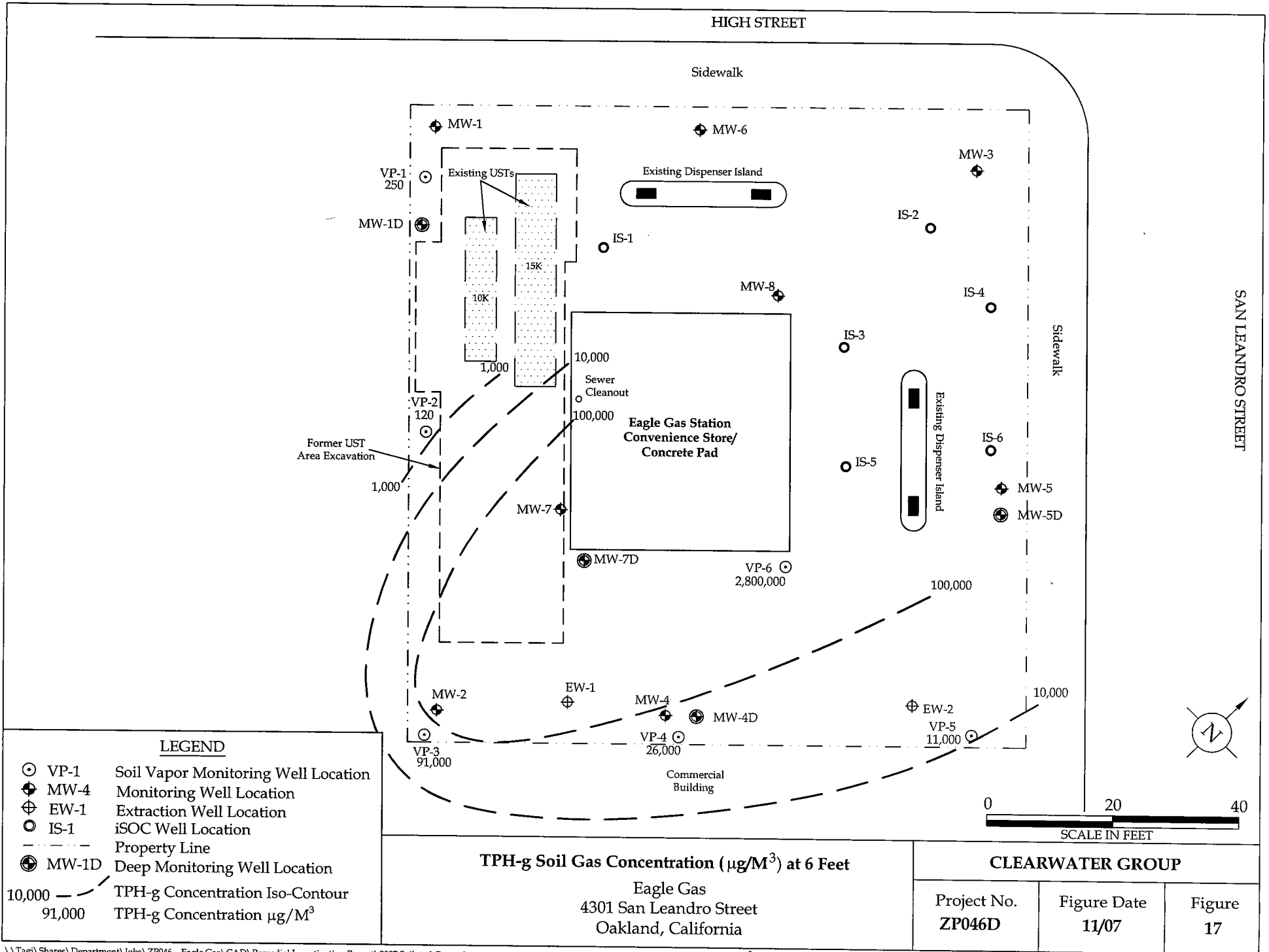
CLEARWATER GROUP

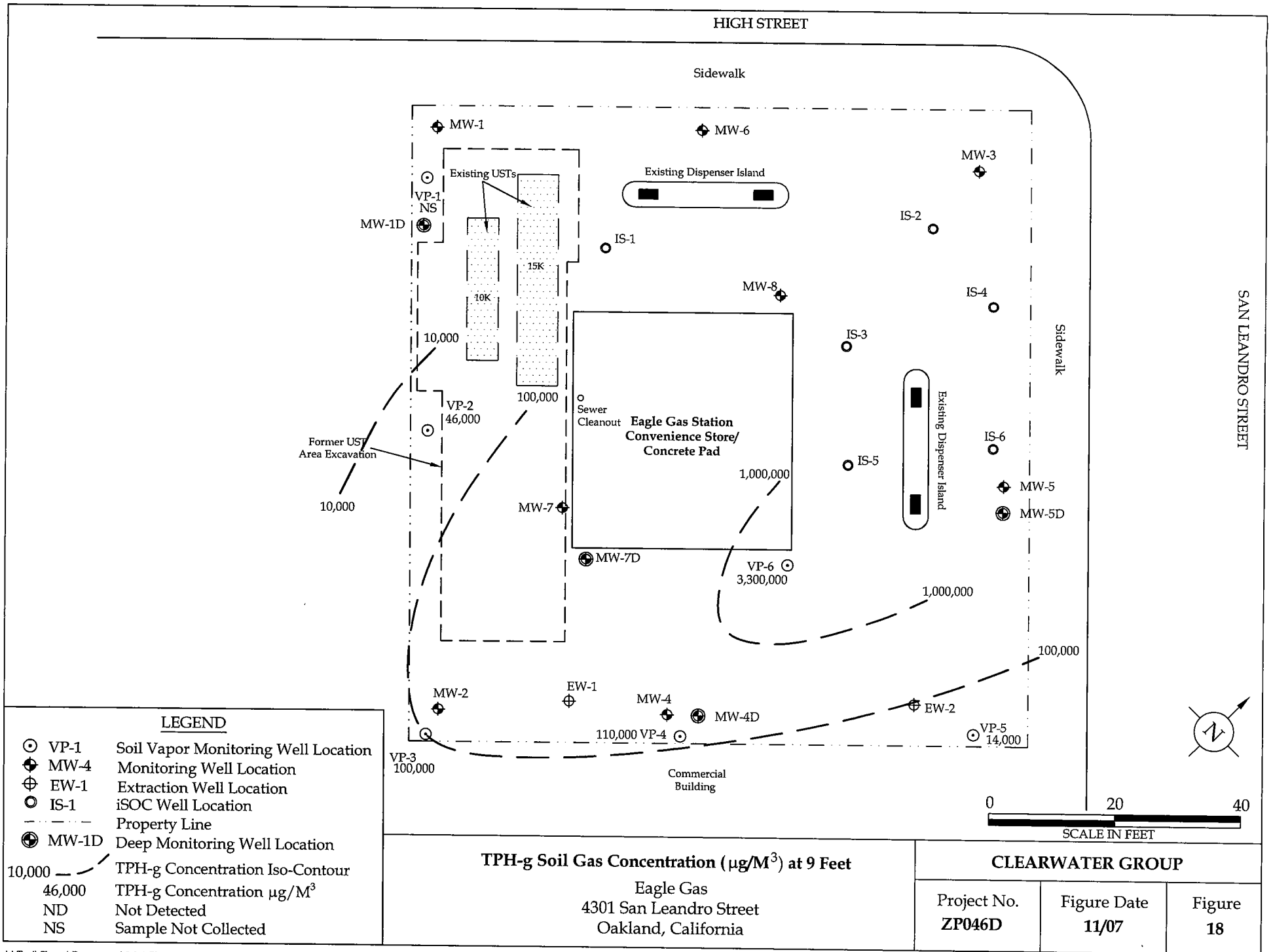
Project No.
ZP046D

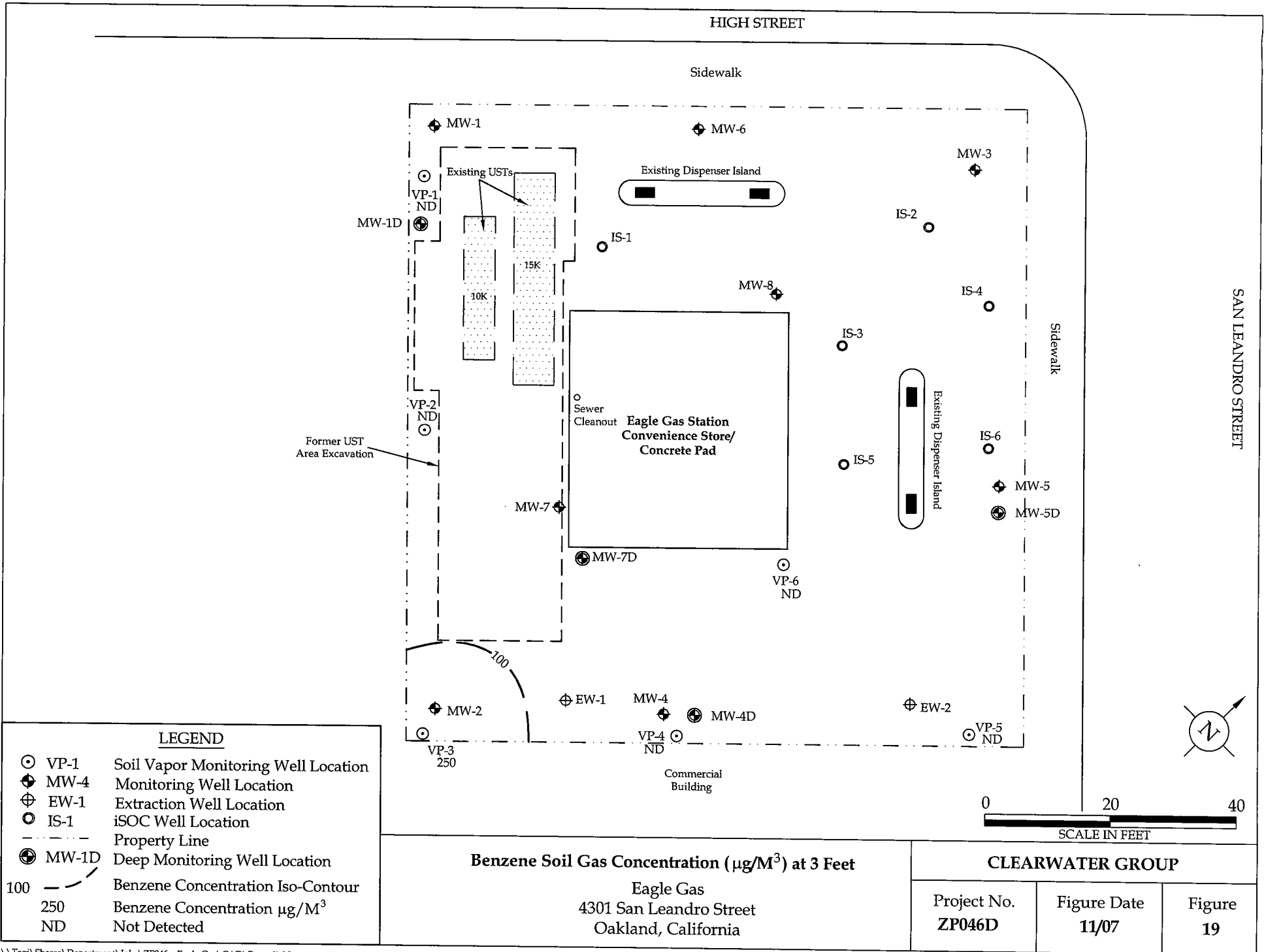
Figure Date
11/07

Figure
15









LEGEND

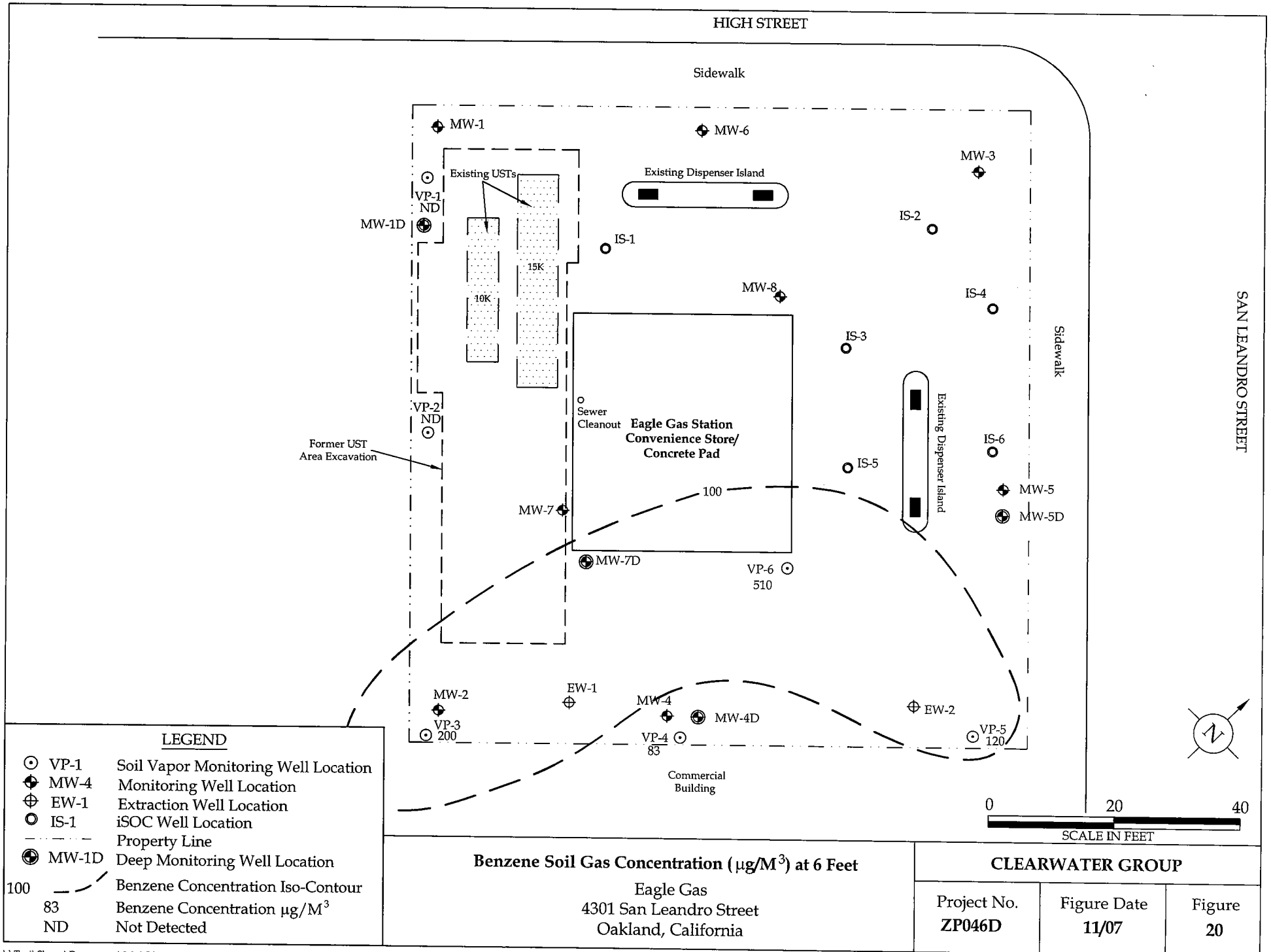
- VP-1 Soil Vapor Monitoring Well Location
- ⊕ MW-4 Monitoring Well Location
- ⊕ EW-1 Extraction Well Location
- IS-1 iSOC Well Location
- - - Property Line
- ⊕ MW-1D Deep Monitoring Well Location
- 100 Benzene Concentration Iso-Contour
- 250 Benzene Concentration $\mu\text{g}/\text{M}^3$
- ND Not Detected

Benzene Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 3 Feet

Eagle Gas
4301 San Leandro Street
Oakland, California

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LEGEND

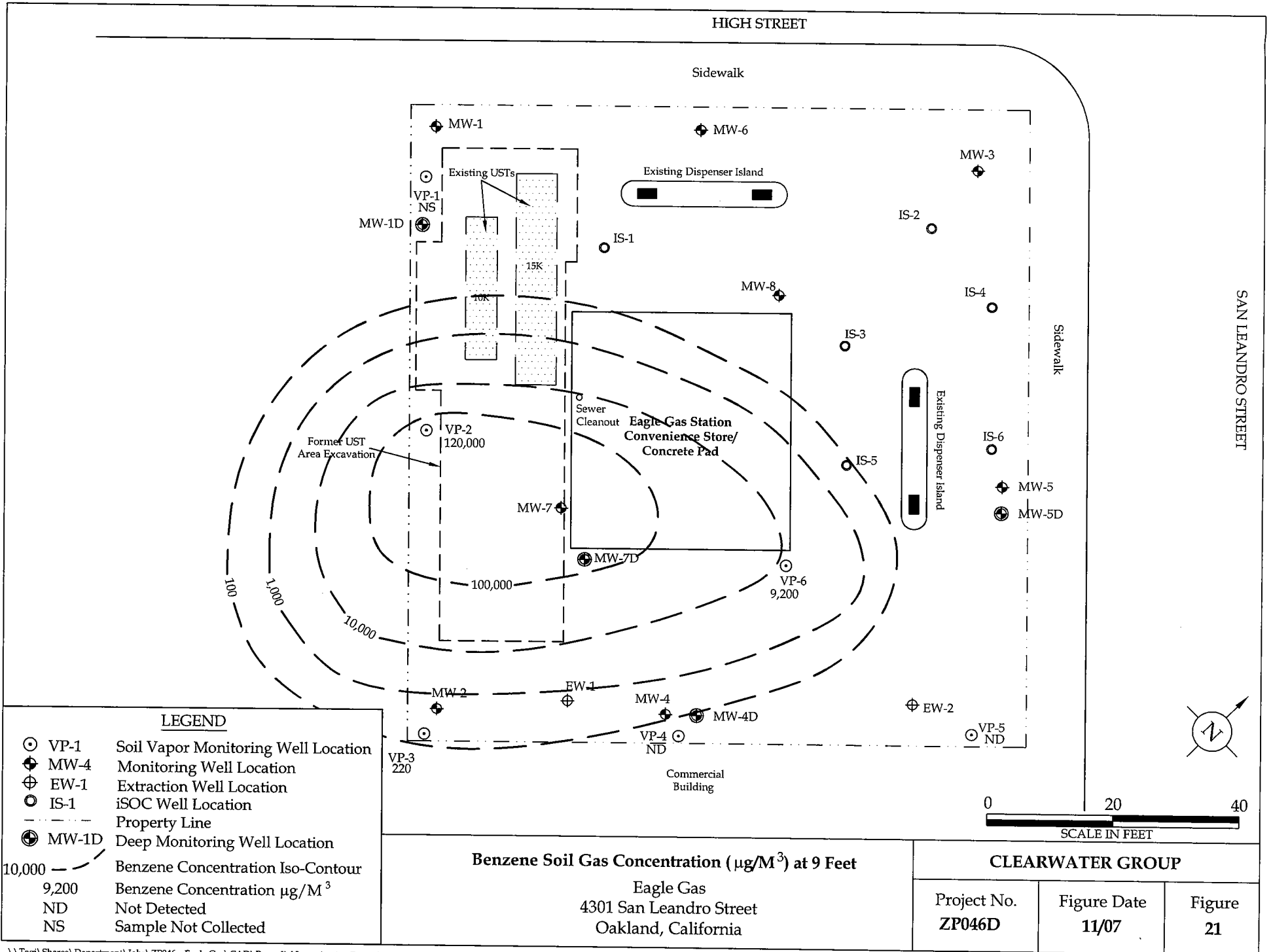
- VP-1 Soil Vapor Monitoring Well Location
- ⊕ MW-4 Monitoring Well Location
- ⊕ EW-1 Extraction Well Location
- IS-1 iSOC Well Location
- - - Property Line
- ⊕ MW-1D Deep Monitoring Well Location
- 100 — Benzene Concentration Iso-Contour
- 83 Benzene Concentration $\mu\text{g}/\text{M}^3$
- ND Not Detected

Benzene Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 6 Feet

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

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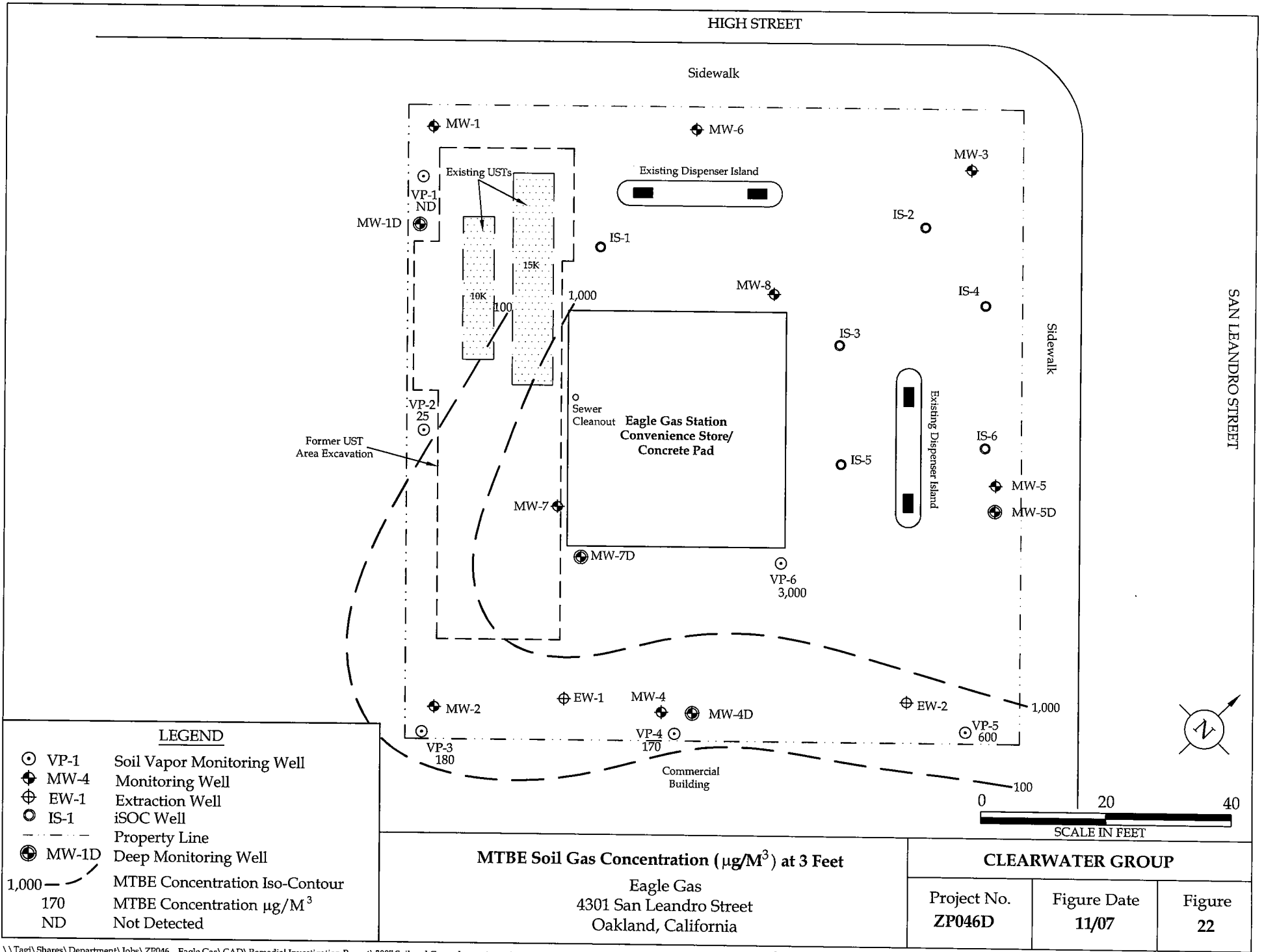


LEGEND	
⊙	VP-1 Soil Vapor Monitoring Well Location
⊕	MW-4 Monitoring Well Location
⊕	EW-1 Extraction Well Location
⊙	IS-1 iSOC Well Location
- - -	Property Line
⊕	MW-1D Deep Monitoring Well Location
10,000	Benzene Concentration Iso-Contour
9,200	Benzene Concentration $\mu\text{g}/\text{M}^3$
ND	Not Detected
NS	Sample Not Collected

Benzene Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 9 Feet

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 11/07	Figure 21



LEGEND

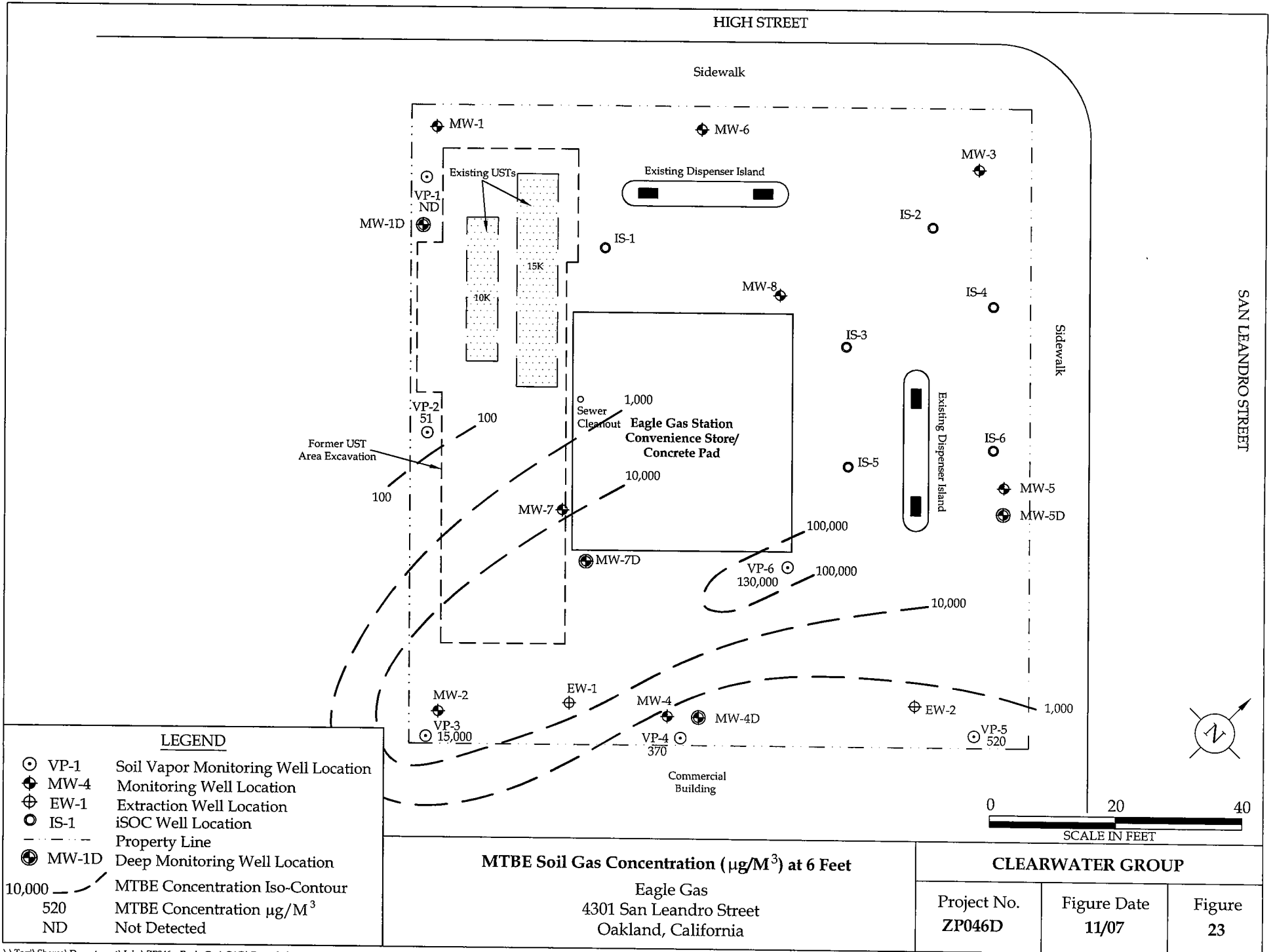
- ⊙ VP-1 Soil Vapor Monitoring Well
- ⊕ MW-4 Monitoring Well
- ⊕ EW-1 Extraction Well
- IS-1 iSOC Well
- - - Property Line
- ⊕ MW-1D Deep Monitoring Well
- 1,000 ——— MTBE Concentration Iso-Contour
- 170 ——— MTBE Concentration $\mu\text{g}/\text{M}^3$
- ND ——— Not Detected

MTBE Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 3 Feet

Eagle Gas
4301 San Leandro Street
Oakland, California

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LEGEND

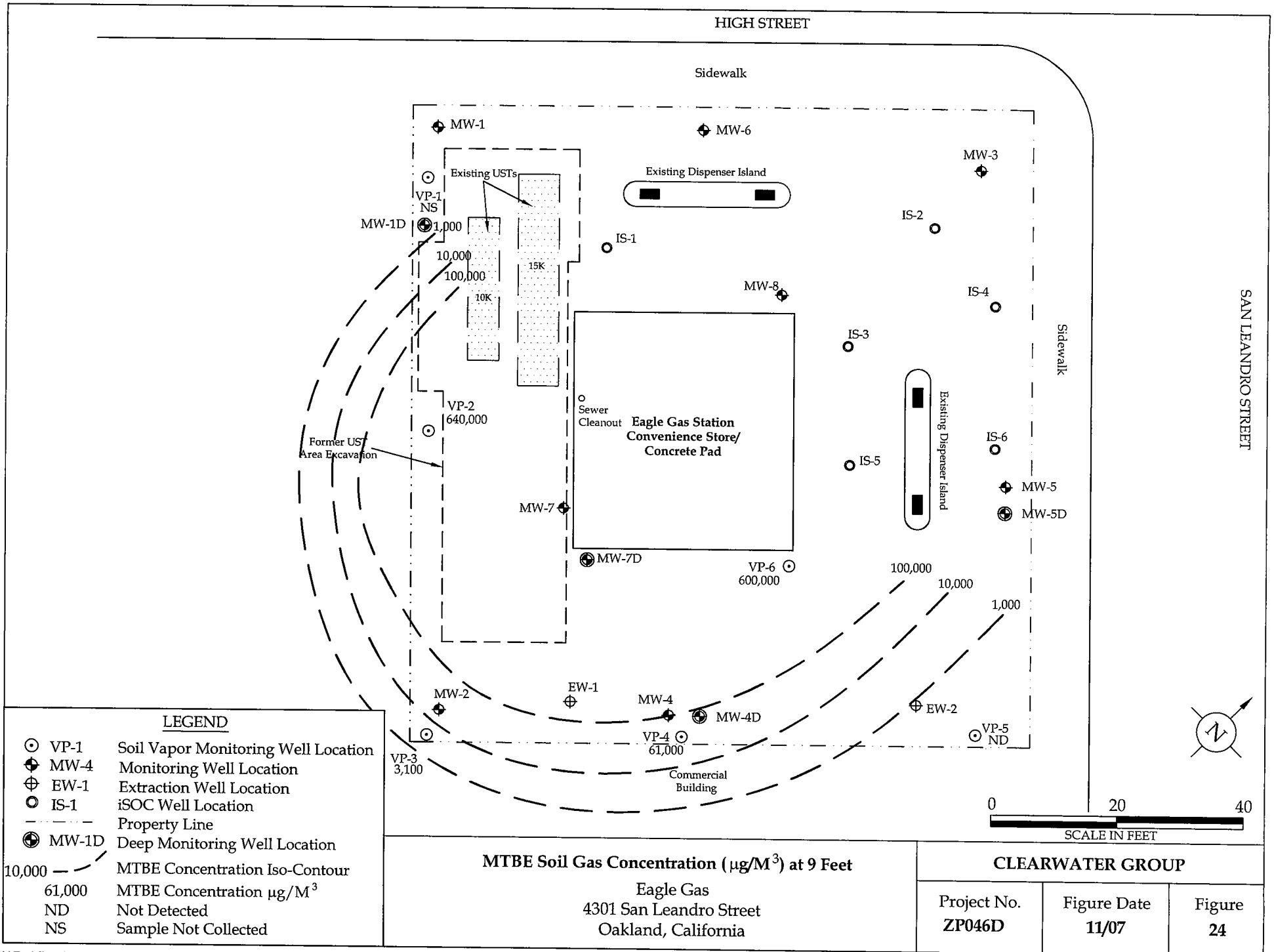
- ⊙ VP-1 Soil Vapor Monitoring Well Location
- ⊕ MW-4 Monitoring Well Location
- ⊕ EW-1 Extraction Well Location
- IS-1 iSOC Well Location
- ⊕ MW-1D Deep Monitoring Well Location
- 10,000 ——— MTBE Concentration Iso-Contour
- 520 MTBE Concentration $\mu\text{g}/\text{M}^3$
- ND Not Detected

MTBE Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 6 Feet

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

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LEGEND

- ⊙ VP-1 Soil Vapor Monitoring Well Location
- ⊕ MW-4 Monitoring Well Location
- ⊕ EW-1 Extraction Well Location
- IS-1 iSOC Well Location
- - - Property Line
- ⊕ MW-1D Deep Monitoring Well Location
- 10,000 ——— MTBE Concentration Iso-Contour
- 61,000 MTBE Concentration $\mu\text{g}/\text{M}^3$
- ND Not Detected
- NS Sample Not Collected

MTBE Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 9 Feet

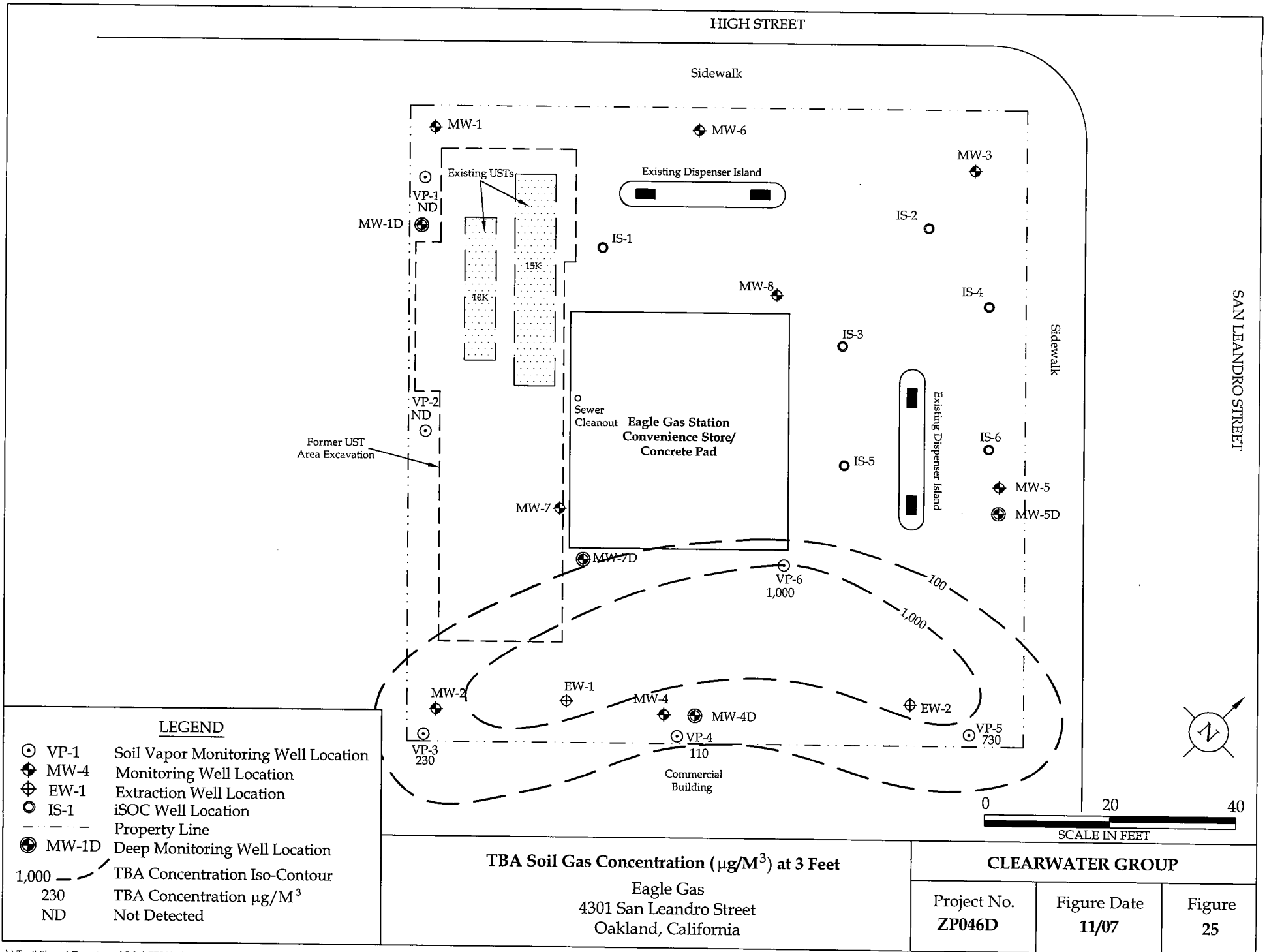
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.
ZP046D

Figure Date
11/07

Figure
24



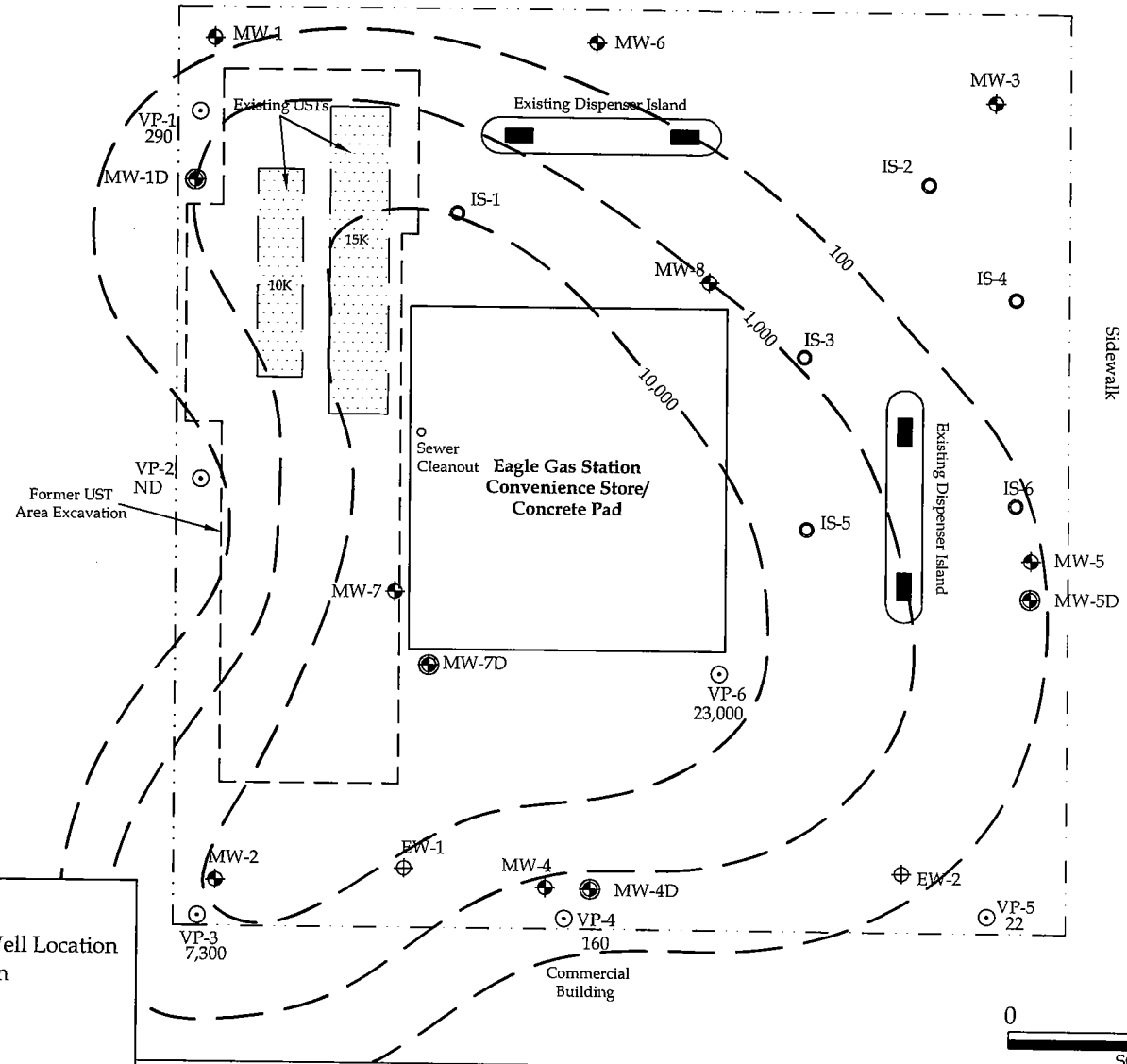
LEGEND

- VP-1 Soil Vapor Monitoring Well Location
- ⊕ MW-4 Monitoring Well Location
- ⊕ EW-1 Extraction Well Location
- IS-1 iSOC Well Location
- - - Property Line
- ⊕ MW-1D Deep Monitoring Well Location
- 1,000 — TBA Concentration Iso-Contour
- 230 — TBA Concentration $\mu\text{g}/\text{M}^3$
- ND Not Detected

HIGH STREET

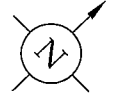
Sidewalk

SAN LEANDRO STREET



LEGEND

- ⊙ VP-1 Soil Vapor Monitoring Well Location
- ⊕ MW-4 Monitoring Well Location
- ⊕ EW-1 Extraction Well Location
- IS-1 iSOC Well Location
- - - - Property Line
- ⊕ MW-1D Deep Monitoring Well Location
- 10,000 --- TBA Concentration Iso-Contour
- 7,300 TBA Concentration $\mu\text{g}/\text{M}^3$
- ND Not Detected

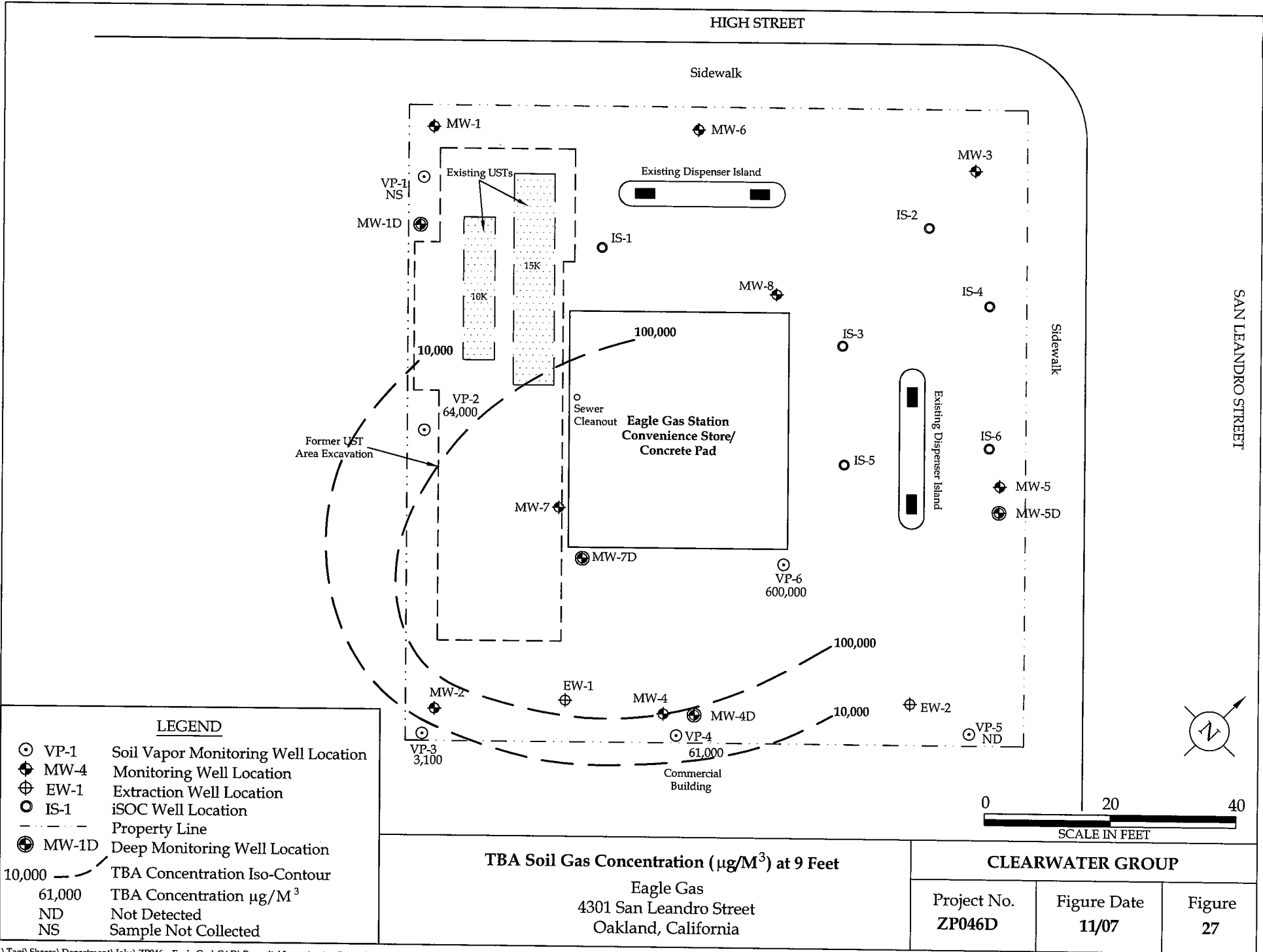


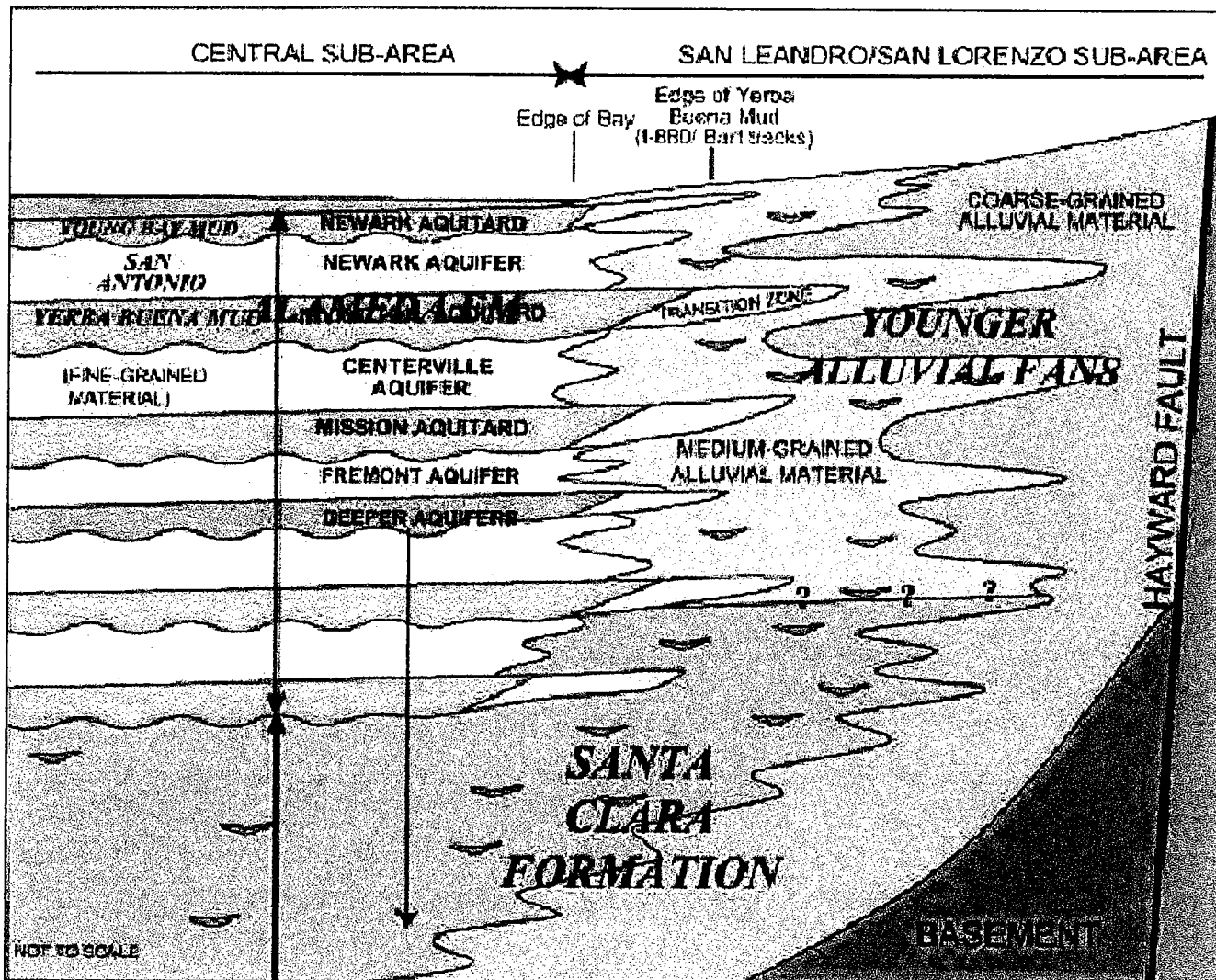
TBA Soil Gas Concentration ($\mu\text{g}/\text{M}^3$) at 6 Feet

Eagle Gas
4301 San Leandro Street
Oakland, California

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**SCHEMATIC STRATIGRAPHIC RELATIONSHIPS
IN THE SAN LEANDRO-SAN LORENZO AREA**

This is a schematic cross-section of the eastern part of the San Francisco basin in the vicinity of San Leandro-Hayward. This part of the basin contains the classical stratigraphic section: a well developed Alameda formation (marine units) adjacent to a thick, alluvial fan section. The bay muds appear to have a laterally extensive transition zone (tidal flats, lakes, etc) that effectively extends the aquitards to the east. Except for regional climatic influences, the two depositional environments (marine and alluvial) are independent of each other. The existence of an aquitard in the Alameda does not imply a lateral extension of that unit in the alluvial material.

The coarse-grained alluvial deposits adjacent to the Hayward fault form a relatively homogeneous hydrogeologic unit. The finer-grained materials are more heterogeneous, containing stream channels and other preferential flow paths, ponds, soil horizons, over bank deposits, etc. The Yerba Buena Mud extends east of I-880 and sometimes east of the Bart tracks. Basement extends to the ground surface in various locations. Vertical exaggeration is a minimum of 30:1.

Modified from Northfleet Consultants, 1998

Generalized Cross Section of East Bay Plain
Eagle Gas
4301 San Leandro Street
Oakland, California

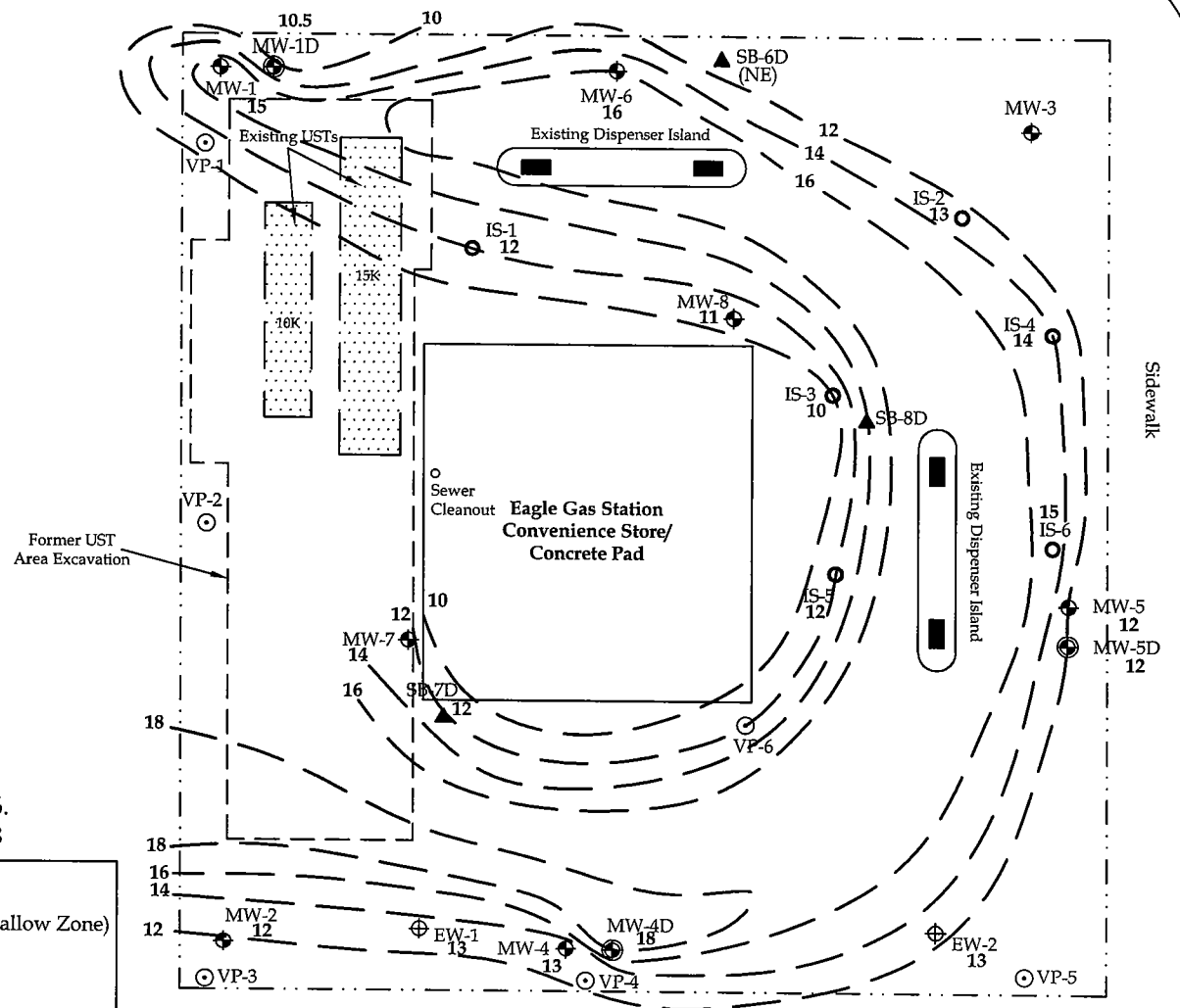
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HIGH STREET

Sidewalk

SAN LEANDRO STREET



Note:
 Boring SB-6D is same location as MW-6.
 Boring SB-8D is same location as MW-8

LEGEND

- ◆ MW-4 Location of Monitoring Well (Shallow Zone)
- ⊕ EW-1 Location of Extraction Well
- IS-1 Location of iSOC Well
- ⊗ MW-1D Location of Monitoring Well (Deep Zone)
- ▲ SB-6D Location of Soil Boring
- VP-1 Soil Vapor Well Location
- Location of Soil Boring
- Property Line
- 12 - Depth of Contact between Clayey Gravel and Underlying Soil in Boring
- 14 Depth Below Ground Surface in Feet
- NE Clayey Gravel not encountered

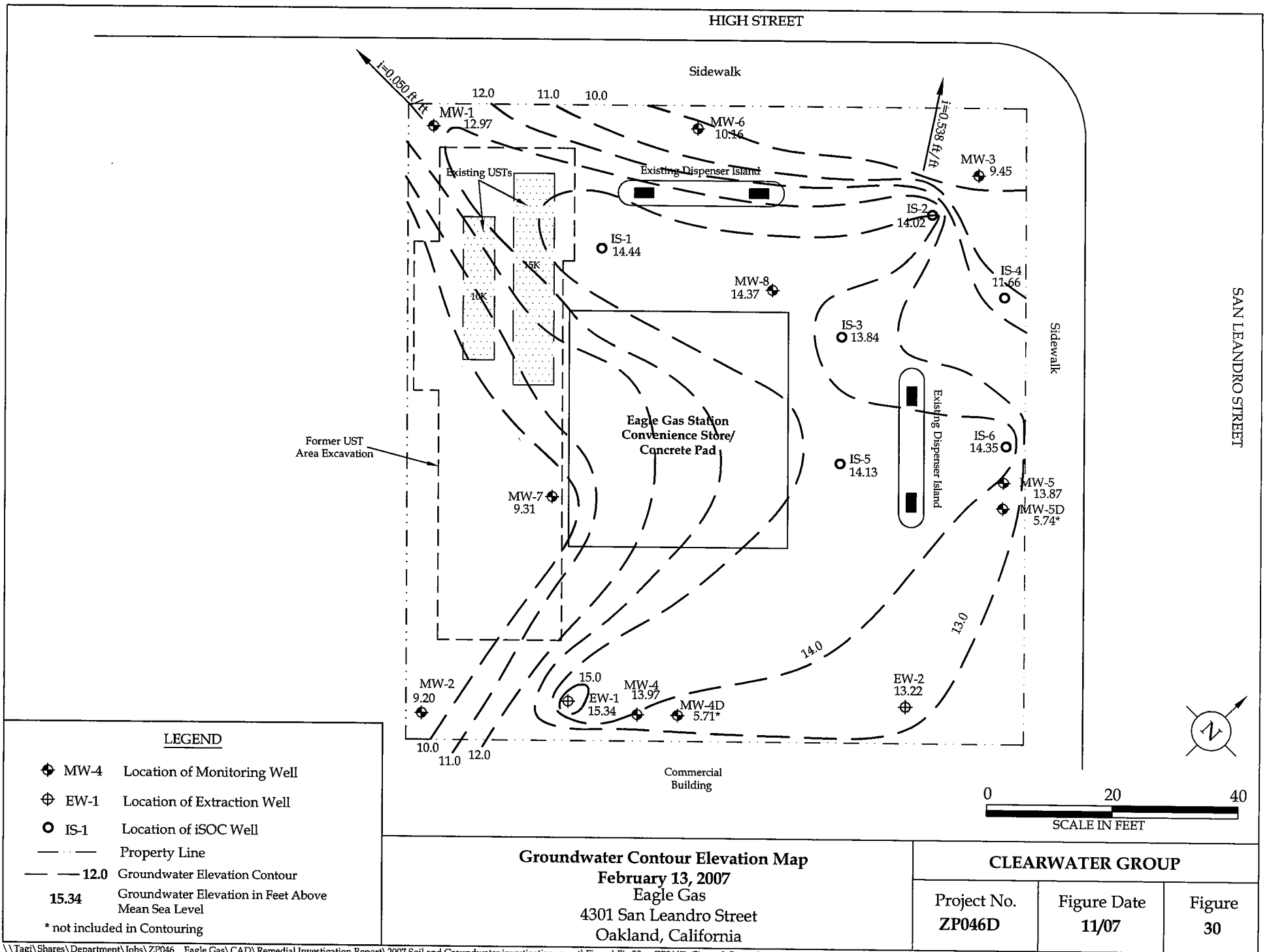
Revised Depth of Contact Between Clayey Gravel and Underlying Soil
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

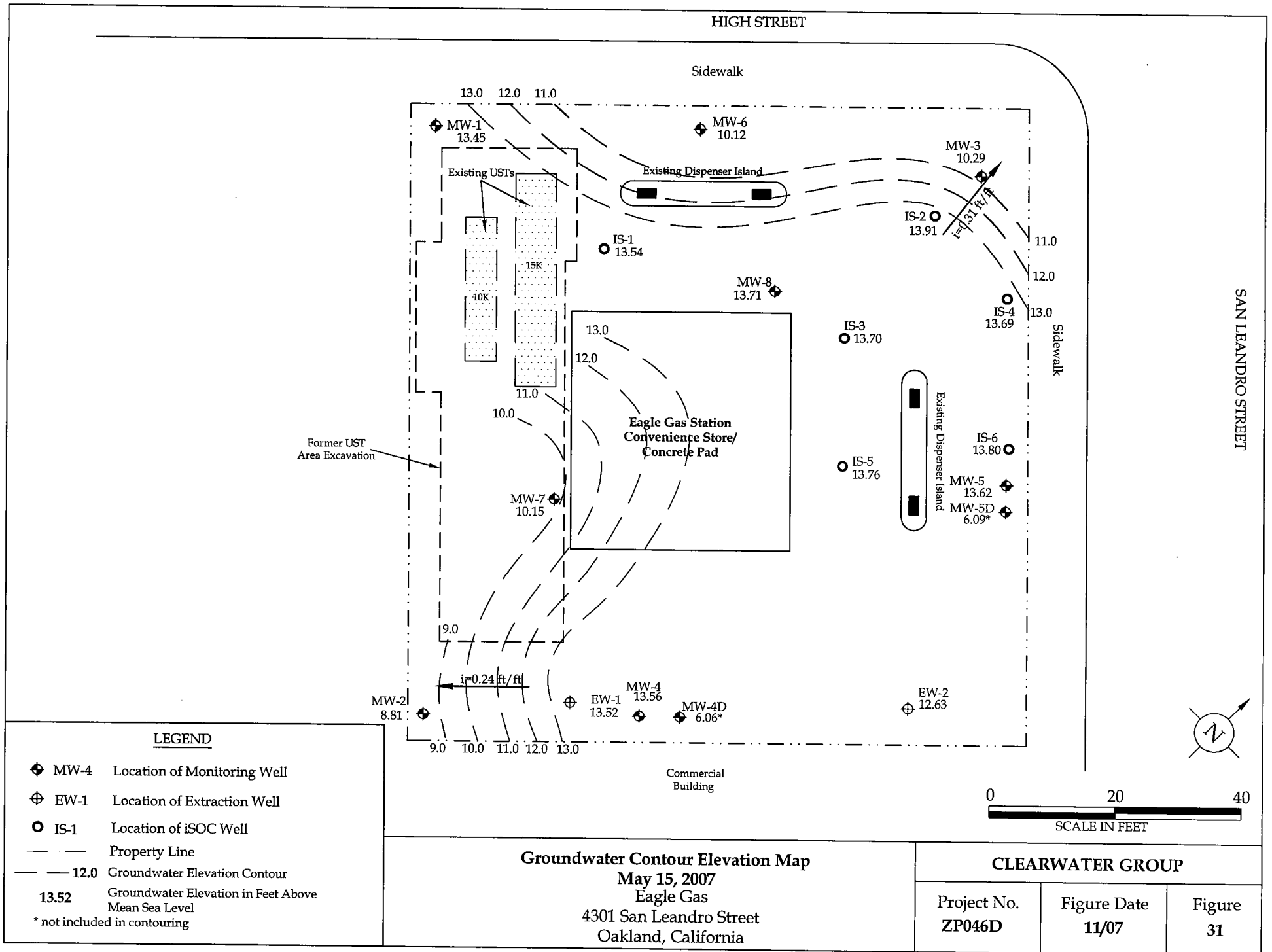
CLEARWATER GROUP

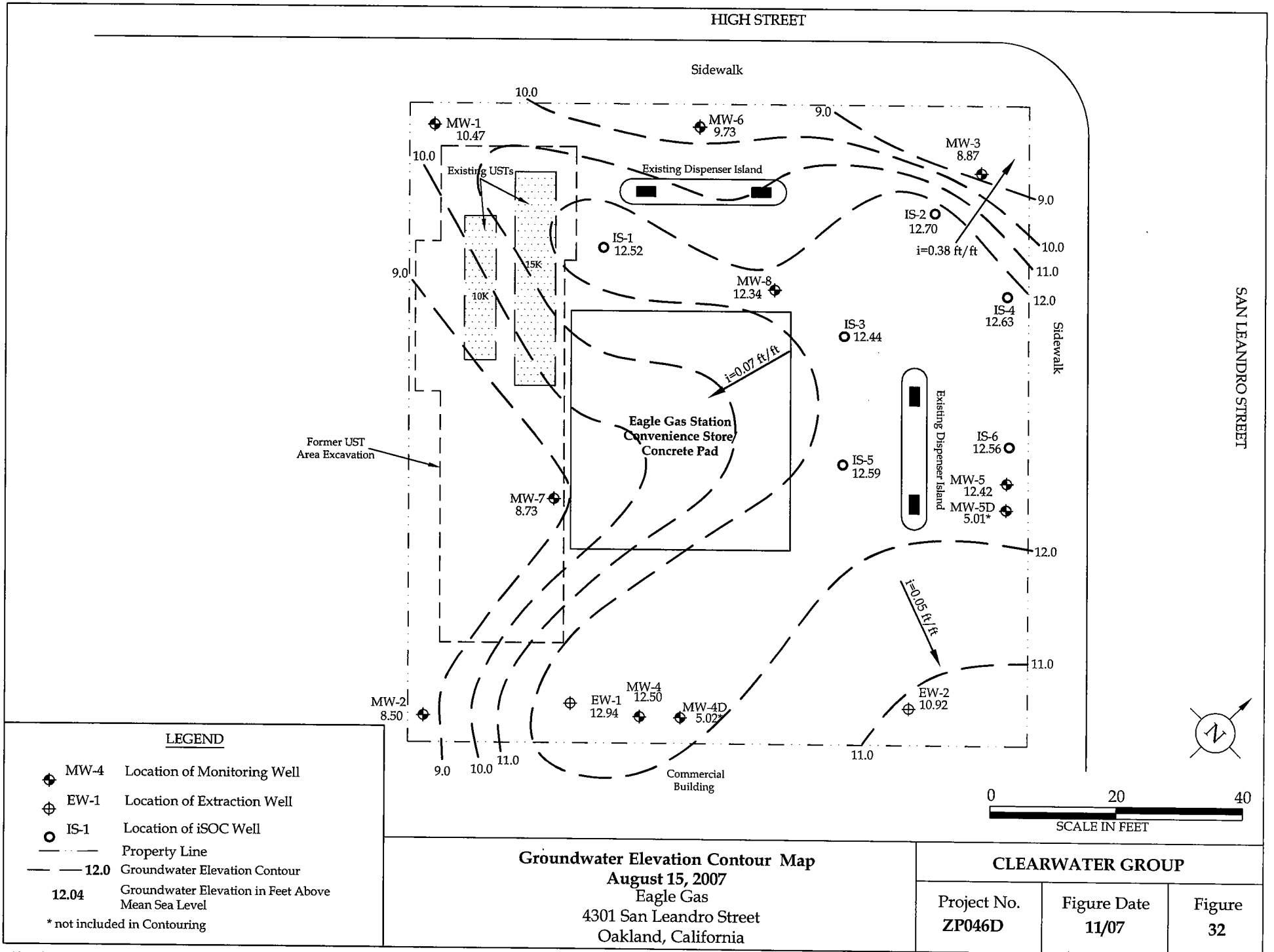
Project No.
ZP046D

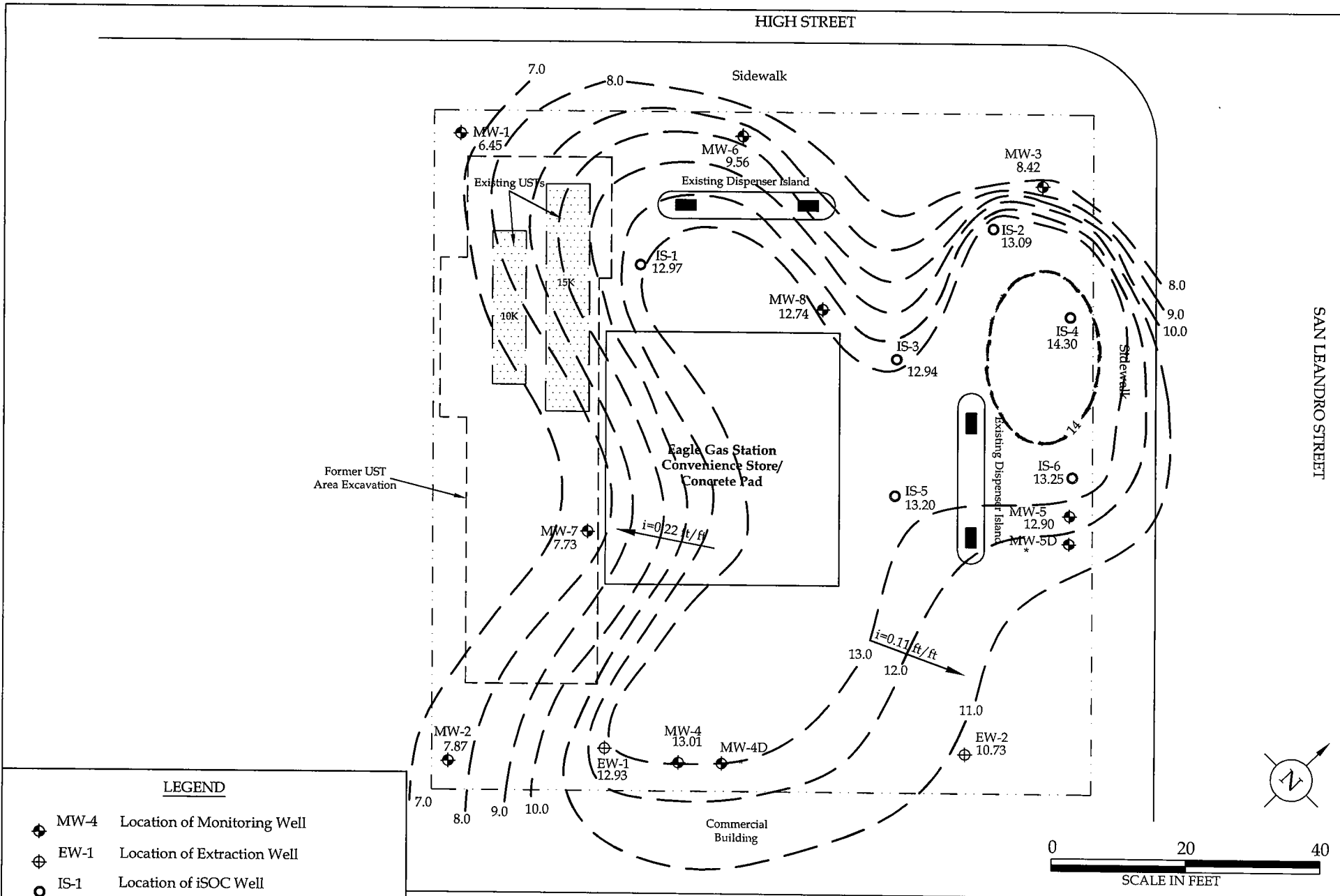
Figure Date
11/07

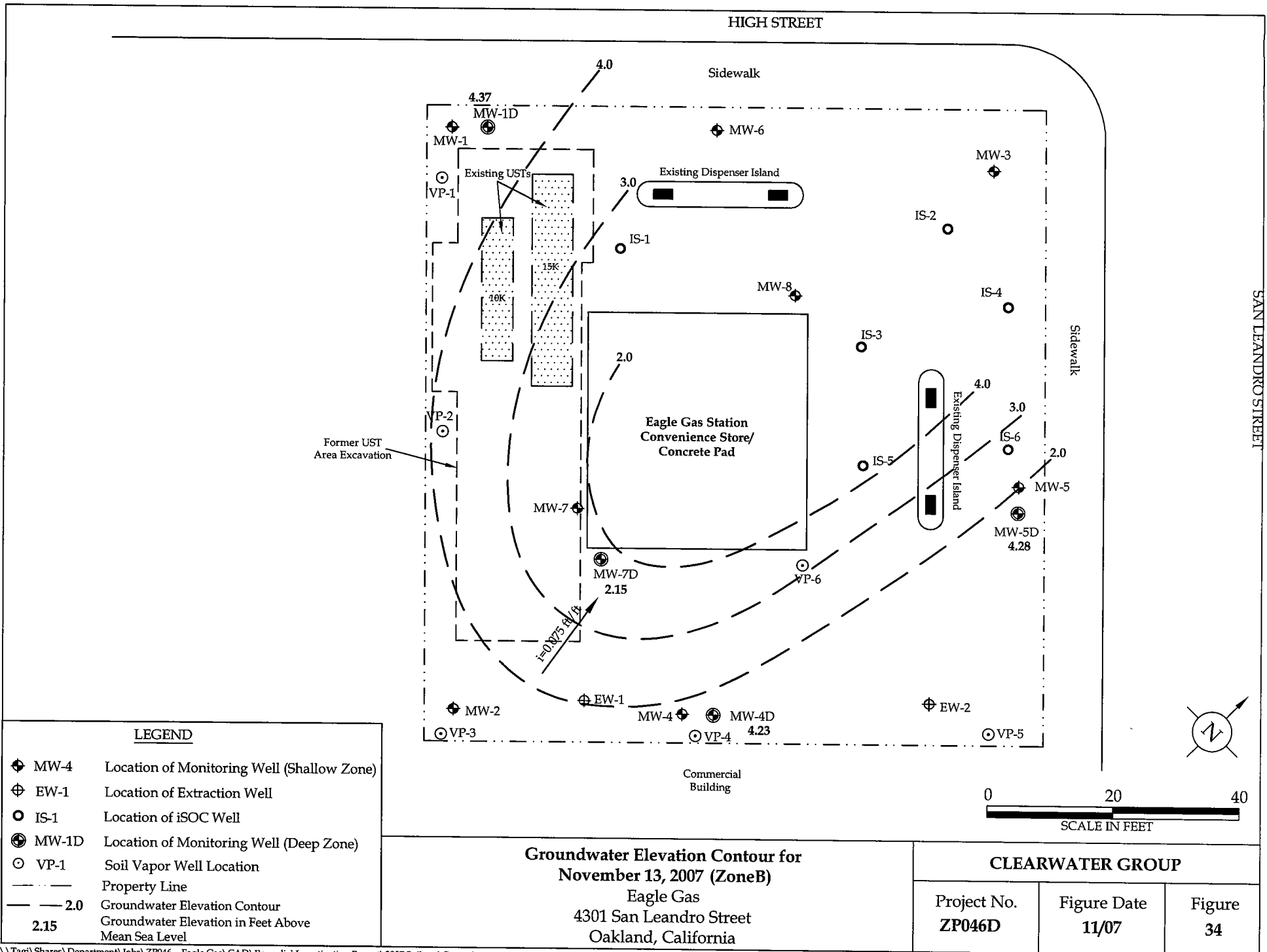
Figure
29











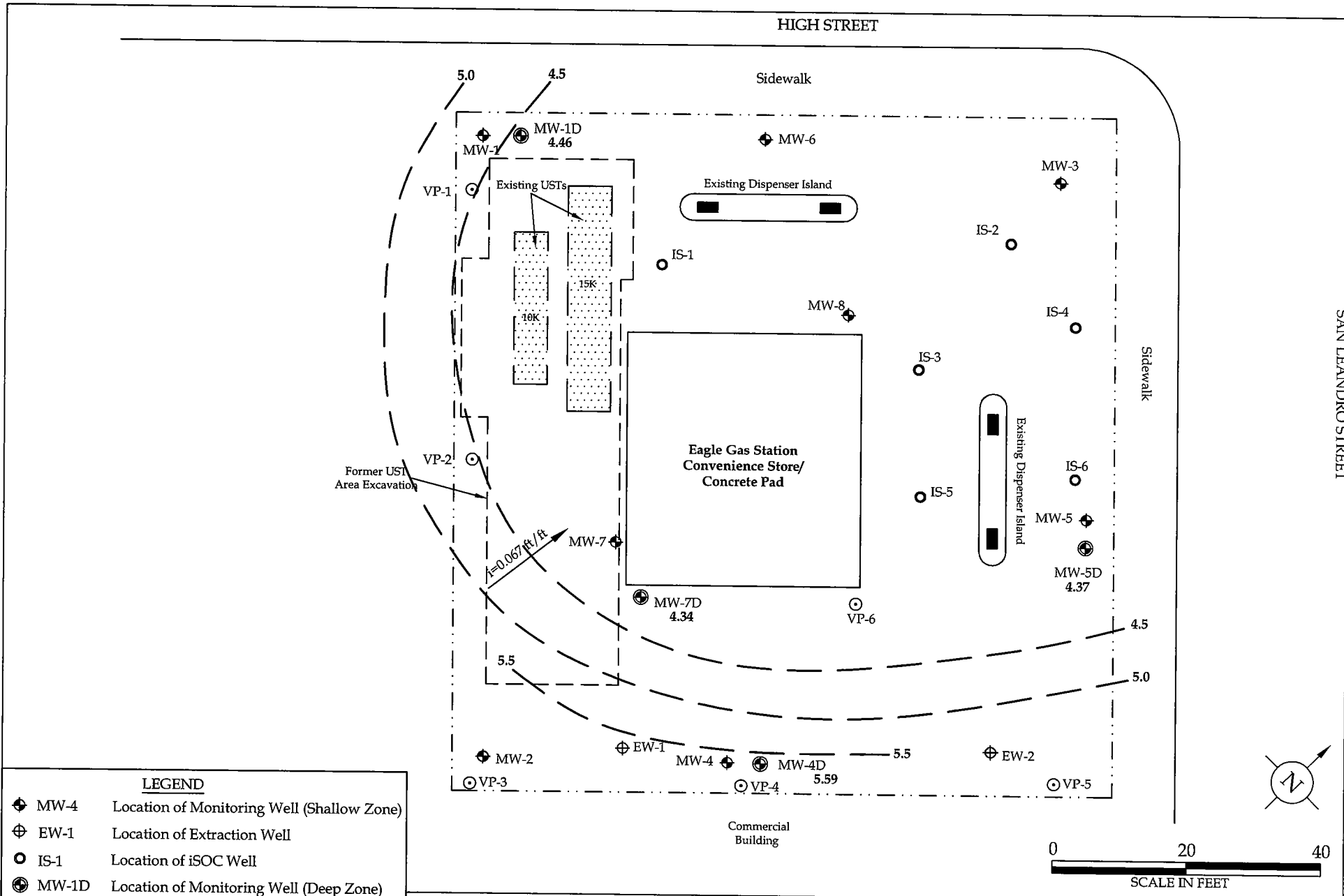
LEGEND

- ◆ MW-4 Location of Monitoring Well (Shallow Zone)
- ⊕ EW-1 Location of Extraction Well
- IS-1 Location of iSOC Well
- ⊙ MW-1D Location of Monitoring Well (Deep Zone)
- VP-1 Soil Vapor Well Location
- — — Property Line
- 2.0 Groundwater Elevation Contour
- 2.15 Groundwater Elevation in Feet Above Mean Sea Level

**Groundwater Elevation Contour for
 November 13, 2007 (Zone B)**
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

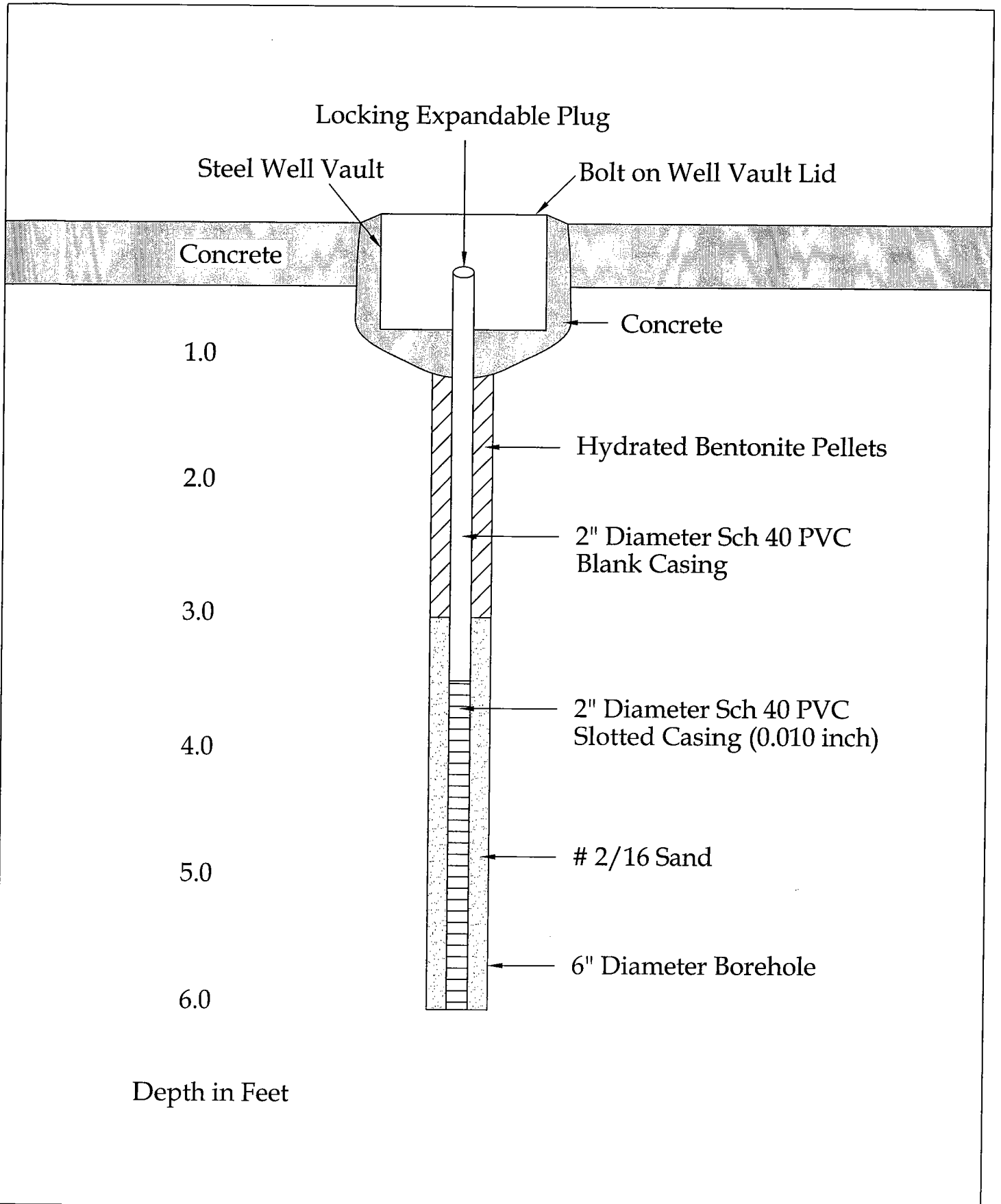
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LEGEND	
⊕ MW-4	Location of Monitoring Well (Shallow Zone)
⊕ EW-1	Location of Extraction Well
○ IS-1	Location of iSOC Well
⊕ MW-1D	Location of Monitoring Well (Deep Zone)
○ VP-1	Soil Vapor Well Location
---	Property Line
— 4.5	Groundwater Elevation Contour
— 4.34	Groundwater Elevation in Feet Above Mean Sea Level

**Groundwater Elevation Contour for
 November 27, 2007 (ZoneB)**
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 11/07	Figure 35



Proposed Soil Vapor Well Design for HVDPE Test

Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

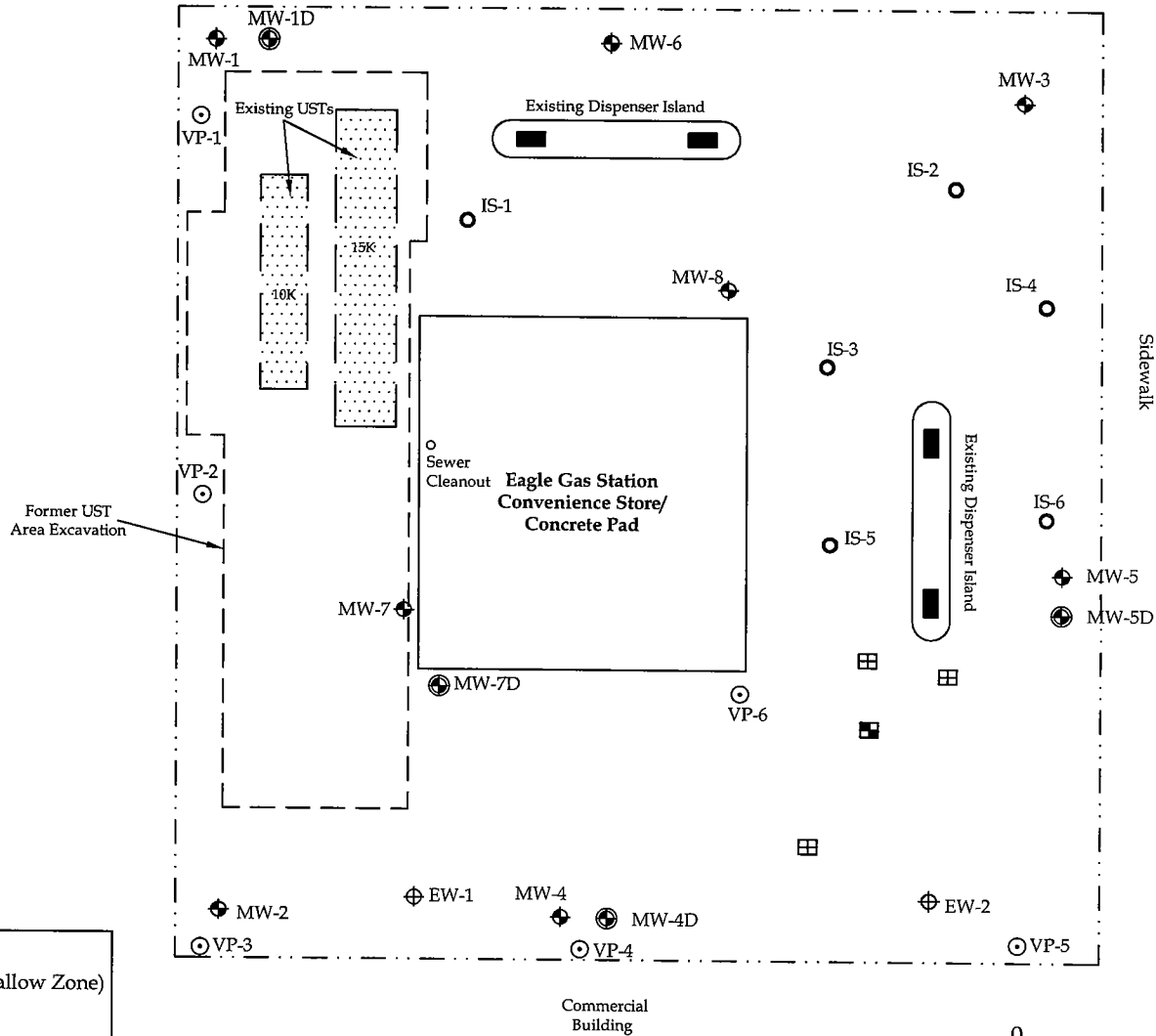
Project No.
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Figure
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HIGH STREET

Sidewalk



SAN LEANDRO STREET

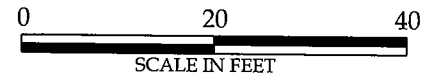
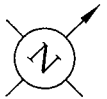
Sidewalk

Eagle Gas Station
Convenience Store/
Concrete Pad

Existing Dispenser Island

Former UST
Area Excavation

Commercial
Building



LEGEND

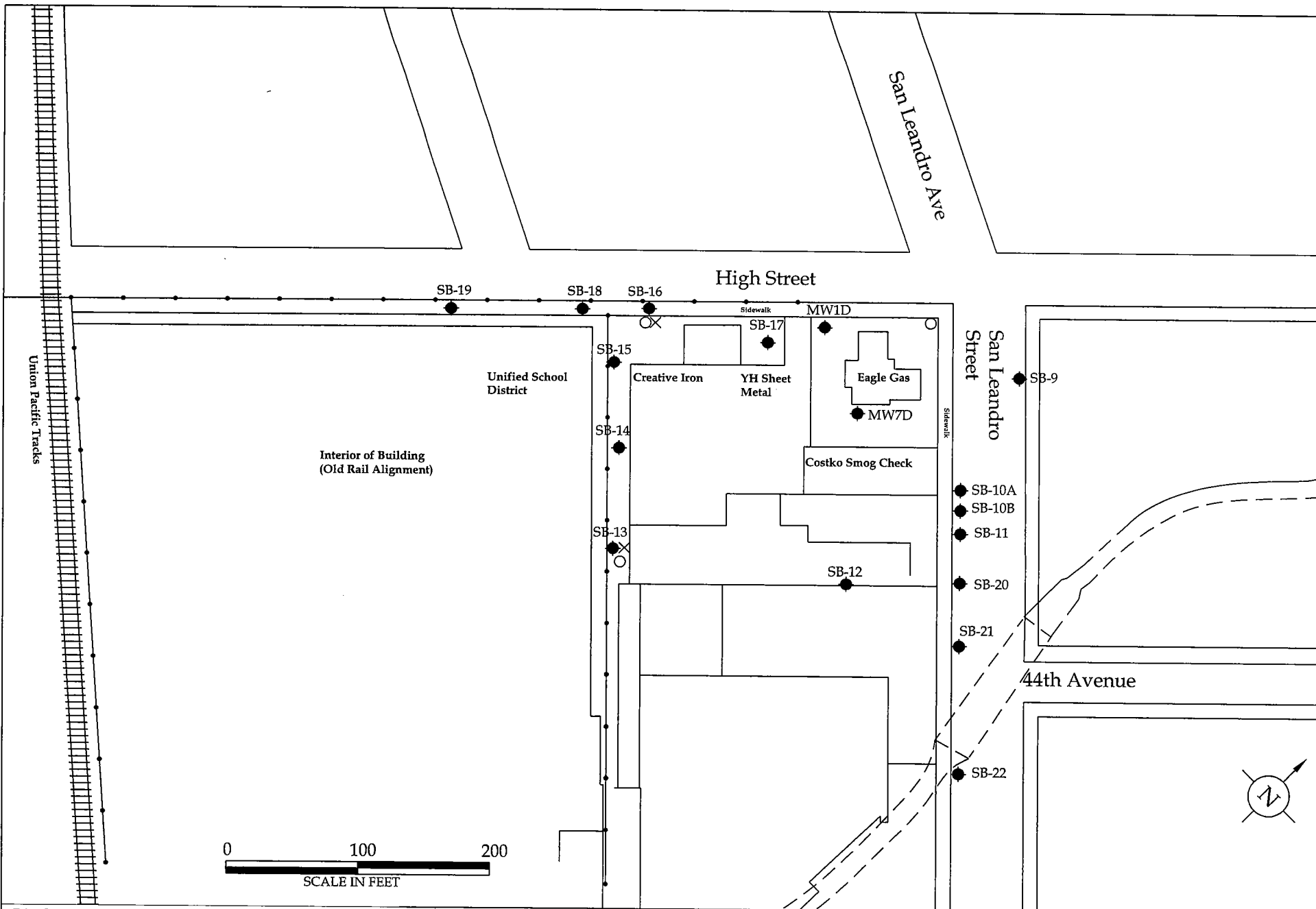
- ⊕ MW-4 Location of Monitoring Well (Shallow Zone)
- ⊕ EW-1 Location of Extraction Well
- IS-1 Location of iSOC Well
- ⊕ MW-1D Location of Monitoring Well (Deep Zone)
- VP-1 Soil Vapor Well Location
- Property Line
- 4" Diameter HVDPE Test Well
- ⊠ 2" Diameter HVDPE Radius of Influence (ROI) Measurement Well

Proposed HVDPE Test Well Locations

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

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LEGEND	
⊗	Proposed Shallow (Zone A) Groundwater Monitoring Well Location
○	Proposed Deep (Zone B) Groundwater Monitoring Well
●	Soil Boring Location
—●—	Proposed Gore-Sorber Survey line with Sorbers at approximate 40' spacing

**Proposed Additional Groundwater Monitoring Well
 and Off-Site Gore-Sorber Locations**
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 11/07	Figure 38

TABLES

**TABLE 1. HISTORIC SOIL SAMPLE ANALYTICAL RESULTS
EAGLE GAS**

4301 San Leandro Street, Oakland, California
Clearwater Group Project No. ZP046D

Sample/Borehole ID	Soil Sampling Interval (ft bgs)	TPH-d (mg/Kg)	TPH-g (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)
SB-4 (MW-4)	1.0 - 1.5	50	<1.0	<0.0050	0.0062	<0.0050	<0.0050	<0.0050	<0.0050
	8.5 - 9.0	31	<1.0	0.21	5.4	<0.0050	<0.0050	<0.0050	<0.0050
	10.5 - 11.0	840	250	35	2.2 J	0.58	0.091	4.1	1.9
	13.5 - 14.0	10	33	64	10	0.17	0.6	0.53	2.2
	17.5 - 18.0	82	71	51	5.8 J	0.29	1.7	1.2	5.2
SB-4D (MW-4D)	8.0 - 8.5	180	820	27	4.2 J	0.53	0.61	21	100
	12.5 - 13.0	<1.0	15	56	11	<0.0050	<0.0050	<0.0050	<0.050
	14.5 - 15.0	5.0	810	58	3.7 J	0.76	0.15	18	44
	17.0 - 17.5	160	87	8.4	2.4 J	0.023	<0.0050	1.1	4.8
	21.5 - 22.0	45	52	9.7	1.4 J	0.028	<0.0050	0.59	2.5
	25.5 - 26.0	8.9	44	27	4.1 J	0.013	<0.0050	0.11	1.4
	29.5 - 30.0	66	<1.0	2.4	0.11J	<0.0050	<0.0050	<0.0050	0.0078
	33.5 - 34.0	6.8	2.0	5.4	1.2 J	0.013	<0.0050	0.067	0.20
	37.5 - 38.0	5.1	<5.0	7.0	1.1 J	<0.0050	<0.0050	0.010	0.014
	43.5 - 44.0	1.3	<1.0	11	1.3 J	0.0068	<0.0050	0.014	0.032
SB-5D (MW-5D)	3.5 - 4.0	10	<1.0	0.24	0.14	<0.0050	<0.0050	<0.0050	<0.0050
	8.5 - 9.0	130	26	1.1	1.7	0.0055	<0.0050	0.040	<0.0050
	12.5 - 13.0	2.6	1.8	43	3.8 J	<0.0050	<0.0050	<0.0050	<0.0050
	15.5 - 16.0	1.6	3.7	92	5.6 J	<0.0050	<0.0050	<0.0050	<0.0050
	19.5 - 20.0	3.3	2.1	72	9.7	<0.0050	<0.0050	<0.0050	<0.0050
	22.0 - 22.5	4.1	<5.0	42	4.6 J	<0.0050	<0.0050	<0.050	<0.050
	27.0 - 27.5	3.2	2.3	80	6.0 J	<0.0050	<0.0050	<0.0050	<0.050
	32.5 - 33.0	15	2.1	84	9.7	<0.0050	<0.0050	<0.0050	<0.0050
	36.5 - 37.0	10	<1.0	34	2.8 J	<0.0050	<0.0050	<0.0050	<0.0050
	41.5 - 42.0	6.6	2.8	63	6.2 J	<0.025	<0.025	<0.025	<0.025
	SB-6 (MW-6)	4.5 - 5.0	400	9.9	0.020	0.98	<0.0050	<0.0050	<0.0050
11.5 - 12.0		2200	1600	6.9	3.6	6.0	0.50	1.0	2.4
14.5 - 15.0		6.6	180	3.6	0.91 J	0.59	0.034	0.060	0.15
17.5 - 18.0		920	210	4.8	4.2	0.76	0.076	0.16	0.23
24.5 - 25.0		11	25	0.22	0.14	0.015	<0.0050	0.012	0.022
SB-6D	5.0 - 5.5	1800	630	5.1	0.99J	0.20	<0.050	0.16	0.097
	10.0 - 10.5	2300	280	3.8	3.2	0.072	<0.050	0.086	<0.050
	15.0 - 15.5	820	150	3.9	2.2	0.068	<0.050	<0.050	<0.050
	20.0 - 20.5	79	<1.0	0.060	0.022	<0.0050	<0.0050	<0.0050	<0.0050

TABLE 1. HISTORIC SOIL SAMPLE ANALYTICAL RESULTS

EAGLE GAS

4301 San Leandro Street, Oakland, California

Clearwater Group Project No. ZP046D

Sample/Borehole ID	Soil Sampling Interval (ft bgs)	TPH-d (mg/Kg)	TPH-g (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)
	25.0 - 25.5	1600	210	1.3	1.4	0.097	<0.050	<0.050	<0.050
SB-6D	30.0 - 30.5	1600	220	2.8	1.9	0.17	<0.050	<0.050	<0.050
	35.0 - 35.5	97	3.1	0.027	0.027	<0.0050	<0.0050	<0.0050	<0.0050
	40.0 - 40.5	74	<1.0	<0.0050	0.0087	<0.0050	<0.0050	<0.0050	<0.0050
	44.0 - 44.5	14	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	47.5 - 48.0	37	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
SB-7 (MW-7)	1.5 - 2.0	210	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	7.5 - 8.0	72	<1.0	2.1	0.43 J	<0.0050	<0.0050	<0.0050	<0.0050
	11.5 - 12.0	66	<1.0	3.5	6.1	<0.0050	<0.0050	<0.0050	0.0057
	18.5 - 19.0	44	<1.0	7.8	13	<0.0050	<0.0050	<0.0050	0.0059
	23.5 - 24.0	24	<1.0	9.1	20	<0.0050	<0.0050	<0.0050	<0.0050
SB-7D	3.5 - 4.0	3.3	2.1	13	1.4J	<0.0050	<0.0050	<0.0050	<0.0050
	9.5 - 10.0	580	850	21	9.6	0.20	<0.15	18	66
	10.5 - 11.0	920	480	25	6.0J	0.42	<0.070	8.8	21
	14.5 - 15.0	130	120	24	56	0.21	<0.025	1.0	0.46
	19.5 - 20.0	27	140	33	8.1	0.046	<0.0050	0.36	0.63
	23.5 - 24.0	31	3.5	1.8	0.42	<0.0050	<0.0050	0.011	0.0077
	27.5 - 28.0	39	1.3	1.8	1.5	0.0065	<0.0050	0.011	0.0087
	31.5 - 32.0	31	2.2	0.32	0.11	<0.0050	<0.0050	0.011	0.0059
	33.5 - 34.0	9.3	<1.0	0.16	0.041J	<0.0050	<0.0050	0.011	0.0059
	43.5 - 44.0	150	32	12	5.1	0.018	<0.0050	0.16	0.31
	47.5 - 48.0	5.4	<1.0	0.075	0.074	<0.0050	<0.0050	0.16	0.31
SB-8 (MW-8)	4.5 - 5.0	990	230	15	3.1 J	0.016	<0.0050	4.90	9.70
	9.5 - 10.0	2100	390	71	2.2 J	1.5	0.19	1.70	14.00
	11.5 - 12.0	2400	150	10	0.31 J	0.12	<0.025	<0.025	0.10
	17.5 - 18.0	1500	140	19	0.68 J	0.22	0.034	0.49	1.10
	22.5 - 23.0	640	67	7.6	0.44 J	0.032	<0.025	0.076	0.16
SB-8D	5.0 - 5.5	9.2	<1.0	<0.0050	<0.0050	na	na	na	na
	10.0 - 10.5	250	1200	75	11J	na	na	na	na
	13.0 - 13.5	110	680	14	4.4	na	na	na	na
	15.0 - 15.5	<1.0	<1.0	12	1.4	na	na	na	na
	20.0 - 20.5	31	650	84	9.1J	na	na	na	na
	24.0 - 24.5	5.6	<1.0	0.12	0.0083J	na	na	na	na
	30.0 - 30.5	3.2	<1.0	0.44	0.0069J	na	na	na	na
	35.0 - 35.5	4.2	<1.0	0.79	0.21J	na	na	na	na

TABLE 1. HISTORIC SOIL SAMPLE ANALYTICAL RESULTS

EAGLE GAS

4301 San Leandro Street, Oakland, California

Clearwater Group Project No. ZP046D

Sample/Borehole ID	Soil Sampling Interval (ft bgs)	TPH-d (mg/Kg)	TPH-g (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)
	42.0 - 42.5	2.1	<1.0	1.5	0.54J	na	na	na	na
	46.0 - 46.5	3.7	<1.0	6.8	0.92J	na	na	na	na
SB-i1 (IS-1)	4.5 - 5.0	620	<1.0	0.074	0.96	<0.0050	<0.0050	<0.0050	<0.0050
	7.5 - 8.0	5	140	0.10	57.00	0.14	<0.025	<0.025	0.038
	10.5 - 11.0	680	160	13	3.9 J	0.20	0.027	<0.025	0.041
	16.5 - 17.0	820	3.6	2.6	13	0.0079	<0.0050	<0.0050	<0.0050
	22.5 - 23.0	74	4.5	1.4	3.7	0.014	<0.0050	<0.0050	<0.0050
SB-i2 (IS-2)	4.5 - 5.0	1.0	<1.0	0.073	0.27	<0.0050	<0.0050	<0.0050	<0.0050
	7.5 - 8.0	18	4.7	0.023	10	<0.0050	<0.0050	<0.0050	<0.0050
	11.5 - 12.0	<1.0	8.2	28	6.1 J	<0.025	<0.025	<0.025	<0.025
	18.5 - 19.0	5.4	1.8	2.2	0.23 J	0.0083	<0.0050	0.028	0.010
	21.5 - 22.0	1.4	<1.0	5.3	0.43 J	<0.0050	<0.0050	0.0089	<0.0050
SB-i3 (IS-3)	3.5 - 4.0	3.5	<1.0	2.4	0.77	<0.0050	<0.0050	0.027	0.068
	7.5 - 8.0	23	63	10	2.8 J	0.0057	<0.0050	0.35	0.55
	10.5 - 11.0	1800	920	97	4.2 J	1.20	0.099	7.20	4.70
	13.5 - 14.0	820	67	68	3.2 J	0.039	<0.0050	0.22	0.24
	18.5 - 19.0	27	30	34	1.2 J	0.0078	<0.0050	0.013	0.019
	23.5 - 24.0	24	<1.0	2	0.083 J	<0.0050	<0.0050	<0.0050	<0.0050
SB-i4 (IS-4)	4.5 - 5.0	2.7	<1.0	3.3	0.40 J	<0.0050	<0.0050	<0.0050	<0.0050
	8.5 - 9.0	9.4	230	11	2.3 J	0.092	<0.040	5.20	1.90
	11.5 - 12.0	25	190	24	3.9 J	0.10	<0.0050	0.95	0.072
	13.5 - 14.0	78	130	13	4.0	0.010	<0.0050	1.20	2.4
	17.5 - 18.0	<1.0	<1.0	0.58	0.046 J	<0.0050	<0.0050	<0.0050	<0.0050
	24.5 - 25.0	5.4	2.5	3.4	0.20 J	0.014	<0.0050	0.076	0.11
SB-i5 (IS-5)	4.5 - 5.0	46	21	25	1.9 J	0.074	0.091	0.57	1.20
	8.5 - 9.0	140	1200	23	2.2 J	1.1	1.0	29	90
	13.5 - 14.0	25	21	7.1	0.40 J	0.18	0.051	1.4	0.14
	18.0 - 18.5	34	880	34	3.5 J	1.6	0.55	15	63
	20.5 - 21.0	3.8	7.7	1.3	0.28 J	<0.0050	<0.0050	0.064	0.25
SB-i6 (IS-6)	4.5 - 5.0	2.0	<1.0	0.12	0.13	<0.0050	<0.0050	<0.0050	<0.0050
	8.5 - 9.0	8.1	150	2.4	1.1	0.048	<0.025	2.0	0.24
	10.5 - 11.0	200	120	11	1.7 J	0.036	<0.0050	0.85	0.015
	14.5 - 15.0	140	460	14	6	0.44	0.027	8.1	0.072
	17.5 - 18.0	1.1	20	33	10	<0.0050	<0.0050	0.19	<0.0050

TABLE 1. HISTORIC SOIL SAMPLE ANALYTICAL RESULTS

EAGLE GAS

4301 San Leandro Street, Oakland, California

Clearwater Group Project No. ZP046D

Sample/Borehole ID	Soil Sampling Interval (ft bgs)	TPH-d (mg/Kg)	TPH-g (mg/Kg)	MTBE (mg/Kg)	TBA (mg/Kg)	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Total Xylenes (mg/Kg)
	22.5 - 23.0	51	4	29	8.9	0.012	<0.0050	0.077	<0.0050

SB-e1 (EW-1)	4.5 - 5.0	1.8	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	8.5 - 9.0	3.5	<1.0	0.39	4.00	<0.0050	<0.0050	<0.0050	<0.0050
	10.5 - 11.0	480	1400	29	2.0 J	2.3	0.64	30.00	160
	13.5 - 14.0	170	280	42	5.5 J	0.36	0.074	4.90	16
	17.5 - 18.0	2.6	46	38	5.80	0.11	0.011	0.52	1.4
	21.5 - 22.0	2.7	5.7	20	0.78	0.045	<0.0050	0.076	0.23
SB-e2 (EW-2)	4.5 - 5.0	1.6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	9.5 - 10.0	5.9	17	10	4.2	<0.0050	<0.0050	<0.0050	<0.0050
	14.5 - 15.0	<1.0	<1.0	0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	20.5 - 21.0	47	2.5	0.75	0.11 J	0.0056	<0.0050	0.063	0.021
	24.5 - 25.0	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

na = Not Analyzed

<0.0050 Not Detected at Indicated Detection Limit

TABLE 2. SOIL SAMPLE ANALYTICAL RESULTS

Eagle Gas

4301 San Leandro Street, Oakland, California

Clearwater Group Project No. ZP046D

Sample/ Borehole ID	Street Name	COC #	Soil Sampling Interval (ft/bgs)	Sample Date (mmddyy)	Benzene mg/Kg	Toluene mg/Kg	Eth. Ben. mg/Kg	Xylenes mg/Kg	TPH-g mg/Kg	TPH-d mg/Kg	MTBE mg/Kg	DIPE mg/Kg	ETBE mg/Kg	TAME mg/Kg	TBA mg/Kg	Methanol mg/Kg	Ethanol mg/Kg	1,2-DCA mg/Kg	EDB mg/Kg
SB-9 15 ft	San Leandro	56957	15	06/11/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	0.14	< 0.0050	< 0.0050	< 0.0050	0.016 J	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-9 29 ft	San Leandro	56957	29	06/11/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	11	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0073	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-10 27ft	San Leandro	57047	27	06/13/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.040	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-10 50.5-51	San Leandro	57046	50.5-51	06/14/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-10 53.5-54	San Leandro	57046	53.5-54	06/14/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-10 57.5-58	San Leandro	57046	57.5-58	06/14/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-11 58ft	San Leandro	57047	58	06/15/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	1.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-12 11ft	Vulcan Courtyard	58805	11	09/26/07	< 0.0050	< 0.0050	0.012	0.0051	31	52	2.3	< 0.0050	< 0.0050	0.0058	10	NA	NA	NA	NA
SB-12 32ft	Vulcan Courtyard	58805	32	09/26/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	0.48	< 0.0050	< 0.0050	< 0.0050	0.055 J	NA	NA	NA	NA
SB-12 33.5ft	Vulcan Courtyard	58805	33.5	09/26/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	1.1	0.037	< 0.0050	< 0.0050	< 0.0050	0.024	NA	NA	NA	NA
SB-12 25.5ft	Vulcan Courtyard	58805	25.5	09/26/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	1.9	0.29	< 0.0050	< 0.0050	< 0.0050	0.015 J	NA	NA	NA	NA
SB-13 24ft	Vulcan Alley	58696	24.0	09/21/07	0.016	< 0.0050	0.0098	0.0082	4.8	21	0.0052	< 0.0050	< 0.0050	< 0.0050	0.015 J	NA	NA	NA	NA
SB-13 30ft	Vulcan Alley	58696	30	09/21/07	0.016	< 0.0050	0.0085	0.0082	< 1.0	30	0.014	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA
SB-13 38ft	Vulcan Alley	58696	38	09/21/07	0.070	0.0077	0.19	0.064	40	12	0.017	< 0.0050	< 0.0050	< 0.0050	< 0.025	NA	NA	NA	NA
SB-13 51ft	Vulcan Alley	58696	51	09/21/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA
SB-14 12ft	Creative Iron Alley	58696	12	09/20/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	8.3	28	0.0061	< 0.0050	< 0.0050	< 0.0050	< 0.015	NA	NA	NA	NA
SB-14 30ft	Creative Iron Alley	58696	30	09/20/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	5.5	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA
SB-14 48ft	Creative Iron Alley	58696	48	09/20/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA
SB-15 10ft	Creative Iron Alley	58805	10	09/25/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	370	49	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.015	NA	NA	NA	NA
SB-15 38ft	Creative Iron Alley	58805	38	09/25/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	2.8	0.014	< 0.0050	< 0.0050	< 0.0050	0.0051	NA	NA	NA	NA
SB-16 10 ft	High	56957	10	06/11/07	0.086	0.0059	0.12	0.89	9.2	20	0.84	< 0.0050	< 0.0050	0.025	0.061 J	< 5.0	< 0.025	< 0.0050	< 0.0050
SB-16 45 ft	High	56957	45	06/12/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	0.0096	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-17 10ft	YH Sheet Metal	58696	10	09/20/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	1.9	< 1.0	2.6	< 0.0050	< 0.0050	0.013	1.4	NA	NA	NA	NA
SB-17 39ft	YH Sheet Metal	58696	39	09/20/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	3.3	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	NA	NA	NA	NA
SB-18 15 ft	High	56957	15	06/12/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	0.23	< 0.0050	< 0.0050	< 0.0050	1.6	< 1.0	< 0.010	< 0.0050	< 0.0050
SB-18 34 ft	High	56957	34	06/12/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	8.7	< 0.0050	< 0.0050	0.11	1.4 J	< 5.0	< 0.010	< 0.0050	< 0.0050

TABLE 2. SOIL SAMPLE ANALYTICAL RESULTS
Eagle Gas
4301 San Leandro Street, Oakland, California
Clearwater Group Project No. ZP046D

Sample/ Borehole ID	Street Name	COC #	Soil Sampling Interval (ft/bgs)	Sample Date (mmddyy)	Benzene mg/Kg	Toluene mg/Kg	Eth. Ben. mg/Kg	Xylenes mg/Kg	TPH-g mg/Kg	TPH-d mg/Kg	MTBE mg/Kg	DIPE mg/Kg	ETBE mg/Kg	TAME mg/Kg	TBA mg/Kg	Methanol mg/Kg	Ethanol mg/Kg	1,2-DCA mg/Kg	EDB mg/Kg
SB-19 18 ft	High	56957	18	06/12/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	1.0	< 0.0050	< 0.0050	0.014	0.038 J	< 0.30	< 0.010	< 0.0050	< 0.0050
SB-19 24 ft	High	56957	24	06/12/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	0.017	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB-19 27 ft	High	56957	27	06/12/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	0.11	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.50	< 0.010	< 0.0050	< 0.0050
SB-20 33ft	San Leandro	57047	33	06/14/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050
SB21	San Leandro	Hydropunch only																	
SB-22 36ft	San Leandro	57047	36	06/15/07	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.20	< 0.010	< 0.0050	< 0.0050

NOTES:

- TPH-d Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified)
- TPH-g Total petroleum hydrocarbons as gasoline by EPA Method 8260B
- BTEX Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
- MTBE Methyl tertiary butyl ether by EPA Method 8260B
- DIPE Di-isopropyl ether by EPA Method 8260B
- ETBE Ethyl tertiary butyl ether by EPA Method 8260B
- TAME Tertiary amyl methyl ether by EPA Method 8260B
- 1,2-DCA 1,2-Dichloroethane by EPA Method 8260B
- EDB Ethylene dibromide by EPA Method 8260B
- TBA Tertiary butyl alcohol by EPA Method 8260B
- mg/Kg milligrams per kilogram
- J May be biased slightly high - a fraction of MTBE (up to 5%) converts to TBA during analysis of soil samples.

**TABLE 3. GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
EAGLE GAS**

4301 San Leandro Street, Oakland, California
Clearwater Group Project No. ZP046

Sample ID	Street Name	COC #	GW Sampling Interval (ft/bgs)	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Eth. Ben. (µg/L)	Xylenes (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	
SB-9		No Groundwater Samples available																		
SB10 30ft GW	San Leandro	57047	30	06/13/07	< 0.50	< 0.50	< 0.50	< 0.50	< 50	57	0.54	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50	
SB10 57ft GW	San Leandro	57047	57	06/15/07	< 0.50	< 0.50	< 0.50	< 0.50	< 50	97	< 0.50	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50	
SB11 27ft GW	San Leandro	57047	27	06/15/07	< 0.50	< 0.50	< 0.50	< 0.50	< 50	100	< 0.50	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50	
SB11 58ft GW	San Leandro	57047	58	06/15/07	< 0.50	< 0.50	< 0.50	< 0.50	< 50	120	< 0.50	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50	
SB-12 34ft GW	Vulcan Courtyard	58805	34	09/26/07	0.70	< 0.50	0.57	< 0.50	160	540	67	2.4	<0.50	< 0.50	18	NA	NA	NA	NA	
SB-13 32ftGW	Vulcan Alley	58696	32	09/21/07	800	73	390	380	10000	< 1500	170	6.6	<1.5	<1.5	<7.0	NA	NA	NA	NA	
SB-13 52ftGW	Vulcan Alley	58696	52	09/21/07	300	29	560	150	23000	< 30000	91	<4.0	<4.0	<4.0	<20	NA	NA	NA	NA	
SB-14 52ftGW	Creative Iron Alley	58696	52	09/20/07	< 0.50	1.8	< 0.50	< 0.50	370	120	1.1	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA	
SB-15 48ft GW	Creative Iron Alley	58805	48	09/25/07	6.0	< 0.50	< 0.50	0.81	250	170	370	0.64	<0.50	2.3	140	NA	NA	NA	NA	
SB-15 52ft GW	Creative Iron Alley	58805	52	09/25/07	8.2	0.84	0.89	3.0	250	290	420	<0.50	<0.50	3.3	120	NA	NA	NA	NA	
SB-16 30 ft GW	High	56957	30	06/12/07	46	12	93	78	4400	< 1500	1400	<4.0	<4.0	33	630	< 1000	< 40	< 4.0	< 4.0	
SB-16 46 ft GW	High	56957	46	06/12/07	76	25	160	360	7500	< 1500	2100	<4.0	<4.0	51	880	< 500	< 40	< 4.0	< 4.0	
SB-17 44ftGW	YH Sheet Metal	58696	44	09/20/07	2.7	< 0.90	15	36	520	< 200	540	<0.90	<0.90	2.8	81	NA	NA	NA	NA	
SB-17 52ftGW	YH Sheet Metal	58696	52	09/20/07	5.1	< 4.0	26	82	900	< 600	1400	<4.0	<4.0	6.8	140	NA	NA	NA	NA	
SB-18 20 ft GW	High	56957	20	06/12/07	< 50	< 50	< 50	< 50	< 5000	< 200	51000	<50	<50	430	51000	< 40000	< 500	< 50	< 50	
SB-18 40 ft GW	High	56957	40	06/12/07	< 25	< 25	< 25	< 25	< 2500	< 300	14000	<25	<25	82	33000	< 5000	< 250	< 25	< 25	
SB-19 20 ft GW	High	56957	20	06/12/07	< 15	< 15	< 15	< 15	< 1500	90	8500	<15	<15	64	< 70	< 3000	< 150	< 15	< 15	
SB-19 30 ft GW	High	56957	30	06/12/07	< 4.0	< 4.0	< 4.0	< 4.0	< 400	73	1800	<4.0	<4.0	17	24 J	< 1000	< 40	7.5	< 4.0	
SB20 30ft GW	San Leandro	57047	30	06/14/07	< 0.50	< 0.50	< 0.50	< 0.50	< 50	87	11	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50	
SB20 56ft GW	San Leandro	57047	56	06/15/07	< 0.50	< 0.50	< 0.50	< 0.50	64	320	6.4	<0.50	<0.50	< 0.50	37	< 50	< 5.0	< 0.50	< 0.50	

**TABLE 3. GRAB GROUNDWATER SAMPLE ANALYTICAL RESULTS
EAGLE GAS**

4301 San Leandro Street, Oakland, California
Clearwater Group Project No. ZP046

Sample ID	Street Name	COC #	GW Sampling Interval (ft/bgs)	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Eth. Ben. (µg/L)	Xylenes (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
SB21 30ft GW	San Leandro	57047	30	06/15/07	5.4	1.2	8.2	3.6	510	< 400	< 0.50	0.97	<0.50	< 0.50	< 5.0	< 50	< 8.0	2.0	< 0.50
SB21 54ft GW	San Leandro	57047	54	06/15/07	0.52	< 0.50	0.78	< 0.50	68	130	< 0.50	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50
SB22 32ft GW	San Leandro	57047	32	06/15/07	< 0.50	< 0.50	< 0.50	< 0.50	< 50	88	< 0.50	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50
SB22 54ft GW	San Leandro	57047	54	06/15/07	0.68	0.53	< 0.50	< 0.50	63	310	< 0.50	<0.50	<0.50	< 0.50	< 5.0	< 50	< 5.0	< 0.50	< 0.50

NOTES:

- TOC Top of well casing referenced to arbitrary datum prior to 3Q2005
- DTW Depth to water
- GWE Groundwater elevation
- TPH-d Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified)
- TPH-g Total petroleum hydrocarbons as gasoline by EPA Method 8260B
- BTEX Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
- MTBE Methyl tertiary butyl ether by EPA Method 8260B
- DIPE Di-isopropyl ether by EPA Method 8260B
- ETBE Ethyl tertiary butyl ether by EPA Method 8260B
- TAME Tertiary amyl methyl ether by EPA Method 8260B
- TBA Tertiary butyl alcohol by EPA Method 8260B
- DCA 1,2-Dichloroethane
- EDB 1,2-Dibromoethane
- (µg/L) Micrograms per liter
- J May be biased slightly high - a fraction of MTBE (up to 5%) converts to TBA during analysis of soil samples.

TABLE 4
WELL CONSTRUCTION DATA
Eagle Gas
4301 San Leandro Street
Oakland, California
Clearwater Group Project No. ZP046

Well I.D.	Date Installed	Installed by	Borehole Diameter (inches)	Casing Diameter (inches)	Depth of Borehole (feet)	Cement (feet)	Bentonite Seal (feet)	Filter Pack (feet)	Filter Pack Material	Screened Interval (feet)	Slot Size (inches)
MW-1	9/26/2000	Western Hazmat	8	2	25	0-5	5-7	7-25	#2/12 sand	10-25	0.01
MW-1D	10/4/2007	Gregg Drilling	8	2	45	0-31	31-33	33-45	#2/12 sand	35-45	0.01
MW-2	9/26/2000	Western Hazmat	8	2	25	0-5	5-7	7-25	#2/12 sand	10-25	0.01
MW-3	9/26/2000	Western Hazmat	8	2	25	0-5	5-7	7-25	#2/12 sand	10-25	0.01
MW-4	12/19/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-4D	12/19/2005	HEW Drilling	8	2	45	0-30	30-33	33-45	#3 sand	35-45	0.02
MW-5	12/15/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-5D	12/15/2005	HEW Drilling	8	2	45	0-30	30-33	33-45	#3 sand	35-45	0.02
MW-6	12/20/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-7	12/19/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-7D	10/4/2007	Gregg Drilling	8	2	45	0-32	31-33	33-45	#2/12 sand	35-45	0.01
MW-8	12/21/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
IS-1	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-2	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-3	12/21/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-4	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-5	12/21/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-6	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
EW-1	12/16/2005	HEW Drilling	8	4	25	0-3	3-6	6-25	#3 sand	10-25	0.02
EW-2	12/16/2005	HEW Drilling	8	4	25	0-3	3-6	6-25	#3 sand	10-25	0.02

Note: All depths and Intervals are below ground surface

Table 5. SOIL VAPOR SAMPLE ANALYTICAL RESULTS
EAGLE GAS
 4301 San Leandro Street, Oakland, California 94601
 Clearwater Group Project No. ZP046D

Clearwater Project No. ZP046D

Sample (ID)	Sampling Date	Analytical Method	B (µg/m ³)	E (µg/m ³)	T (µg/m ³)	X (µg/m ³)	o-xylene (µg/m ³)	TPH-g (µg/m ³)	TBA (µg/m ³)	2-Prop (µg/m ³)	MTBE (µg/m ³)	1,2-DCA-d4 (µg/m ³)	T-d8 (µg/m ³)	4-BFB (µg/m ³)
<i>CTLS^^ Chronic Inhalation REL in µg/m³</i>			60	2,000	300	700	700	NA	NA	NA	8,000	NA	NA	NA
VP1-3	10/4/2007	TO-15	ND	ND	ND	4.4	ND	90	ND	170	ND	112	91	108
VP1-6	10/4/2007	TO-15	ND	ND	ND	5.7	ND	250	290	ND	ND	115	92	107
VP2-3	10/4/2007	TO-15	ND	ND	ND	ND	ND	ND	ND	ND	25	114	91	107
VP2-6	10/4/2007	TO-15	ND	ND	ND	7.8	ND	120	ND	ND	51	118	91	109
VP2-9	10/4/2007	TO-15	120,000	43,000	ND	24000	ND	46,000,000	66,000	ND	640000	115	100	92
VP3-3	10/4/2007	TO-15	250	3,300	ND	3800	ND	35,000	230	ND	180	125	99	105
VP3-6	10/4/2007	TO-15	280	390	ND	320	ND	91,000	7,300	ND	15000	102	99	94
VP3-9	10/4/2007	TO-15	220	ND	ND	ND	ND	100,000	2,600	ND	3100	130	99	109
VP3-9 Lab Duplicate	10/4/2007	TO-15	210	ND	ND	ND	ND	100,000	2,700	ND	3000	130	98	106
VP4-3	10/4/2007	TO-15	ND	ND	ND	ND	ND	11,000	110	9800	170	87	100	91
VP4-6	10/4/2007	TO-15	83	880	3.9	1000	ND	26,000	160	180	370	103	102	94
VP4-9	10/4/2007	TO-15	ND	ND	ND	ND	ND	110,000	20,000	ND	61000	95	98	91
VP5-3	10/4/2007	TO-15	ND	ND	ND	4.4	ND	2,100	730	ND	600	94	97	91
VP5-6	10/4/2007	TO-15	120	32	20	100	38	11,000	22	17	520	100	98	94
VP5-9	10/4/2007	TO-15	ND	ND	ND	ND	ND	14,000	66	ND	360	99	97	92
VP6-3	10/4/2007	TO-15	ND	24	ND	22	ND	11,000	1,000	12000	3000	110	95	108
VP6-6	10/4/2007	TO-15	510	ND	ND	ND	ND	2,800,000	23,000	ND	130000	95	100	92
VP6-9	10/4/2007	TO-15	9,200	ND	ND	ND	ND	3,300,000	60,000	ND	600000	90	98	92

Notes:

No sample collected for sample point VP1-9, this sample point was beneath site groundwater level at time of sampling.

CTLS^^ Bay Area Air Quality Management District (June 15, 2005) Table 2-5-1 Toxic Air Contaminant Trigger Levels for chronic inhalation risk exposure level (REL)

TO-15 Samples analyzed using modified EPA method TO-15 for air collected in specially prepared canisters and analyzed by gas chromatography/mass spectrometry (GC/MS).

(µg/m³) Micrograms per cubic meter

- B Benzene
- E Ethyl Benzene
- T Toluene
- X m,p-Xylene
- o-Xylene o-Xylene
- TPH-g TPH ref. to Gasoline (MW=100)
- TBA tert-Butyl alcohol
- 2-Prop 2-Propanol
- MTBE Methyl tert-butyl ether
- 1,2-DCA 1,2-Dichloroethane-d4
- T-d8 Toluene-d8
- 4-BFB 4-Bromofluorobenzene

TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-1	10/3/2000	18.37	8.96	9.41	460	93,000	<500	<500	<500	<500	130,000	<10,000	<10,000	<10,000	<2,000	---	---	---	---
	10/27/2000	18.37	7.27	11.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/26/2001	18.37	7.60	10.77	1,600*	51,000	270	<100	<100	<100	77,000	<5,000	<5,000	<5,000	<20,000	---	---	---	---
	5/8/2001	18.37	7.50	10.87	470*	36,000*	<100	<100	<100	<100	15,000	<5,000	<5,000	<5,000	<20,000	---	---	---	---
	8/3/2001	18.37	7.09	11.28	2,200*	19,000*	<50	59	<50	<50	96,000	<5,000	<5,000	<5,000	<20,000	---	---	---	---
	7/1/2003	18.37	7.59	10.78	3,000	<25,000	<250	<250	<250	<250	170,000	<250	<250	980	8,700	---	---	---	---
	10/1/2003	18.37	8.36	10.01	2,600	<20,000	<200	<200	<200	<200	69,000	<200	<200	270	15,000	---	---	---	---
	2/13/2004	18.37	8.80	9.57	1,800	<10,000	<100	<100	<100	<100	85,000	<100	<100	390	79,000	---	---	---	---
	5/17/2004	18.37	10.92	7.45	5,400	<15,000	<150	<150	<150	<150	60,000	<150	<150	260	160,000	---	---	---	---
	8/6/2004	18.37	7.76	10.61	510	<10,000	<100	<100	<100	<100	26,000	<100	<100	100	250,000	---	---	---	---
	11/12/2004	18.37	9.25	9.12	3,500	<5,000	<50	<50	<50	<50	25,000	<50	<50	150	160,000	---	---	---	---
	2/15/2005	18.37	10.12	8.25	2,900	<5,000	<50	<50	<50	<50	12,000	<50	<50	70	160,000	---	---	---	---
	5/9/2005	18.37	9.58	8.79	1,700	<5,000	<50	<50	<50	<50	11,000	<50	<50	53	200,000	---	---	---	---
	8/8/2005**	20.08	10.09	9.99	2,000	<5,000	<50	<50	<50	<50	8,500	<50	<50	<50	250,000	---	---	---	---
	11/16/2005	20.08	9.81	10.27	3,600	<5,000	<50	<50	<50	<50	3,800	<50	<50	<50	140,000	<5,000	<500	<50	<50
	2/22/2006	20.08	9.58	10.50	2,600	<5,000	<50	<50	<50	<50	5,800	<50	<50	<50	120,000	<5,000	<500	<50	<50
	5/16/2006	20.08	6.89	13.19	4,700	<5,000	<50	<50	<50	<50	3,700	<50	<50	<50	150,000	<5,000	<500	<50	<50
	8/23/2006	20.08	9.21	10.87	2,000	<5,000	<50	<50	<50	<50	3,700	<50	<50	<50	110,000	<5,000	<500	<50	<50
	11/13/2006	20.08	8.55	11.53	NA	<4,000	<40	<40	<40	<40	2,000	<40	<40	<40	79,000	NA	NA	NA	NA
	2/13/2007	20.08	7.11	12.97	900	<2,500	<25	<25	<25	<25	3,700	<25	<25	25	63,000	NA	NA	NA	NA
	5/15/2007	20.08	6.63	13.45	3,000	<2,500	<25	<25	<25	<25	1,100	<25	<25	<25	52,000	NA	NA	NA	NA
	8/15/2007	20.08	9.61	10.47	1,000	<1,000	<10	<10	<10	<10	230	<10	<10	<10	34,000	NA	NA	NA	NA
	11/13/2007	20.08	13.63	6.45															
MW-1D	11/13/2007	19.98	15.61	4.37															
	11/27/2007	19.98	15.52	4.46															
No groundwater samples collected																			
MW-2	10/3/2000	20.28	20.26	0.02	210	250,000	<1,250	<1,250	<1,250	<1,250	400,000	<25,000	<25,000	<25,000	<100,000	---	---	---	---
	10/27/2000	20.28	13.88	6.40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/26/2001	20.28	12.10	8.18	6,000*	740,000	3,800	<500	940	1,600	1,000,000	<50,000	<50,000	<50,000	<200,000	---	---	---	---
	5/8/2001	20.28	12.05	8.23	2,100*	140,000	2,800	<250	780	640	840,000	<50,000	<50,000	<50,000	<200,000	---	---	---	---
	8/3/2001	20.28	13.30	6.98	2,600*	42,000*	1,100	63	230	130	880,000	<25,000	<25,000	<25,000	<100,000	---	---	---	---
	7/1/2003	20.28	14.98	5.30	2,200	<200,000	<2,000	<2,000	<2,000	<2,000	790,000	<2,000	<2,000	3,400	<20,000	---	---	---	---
	10/1/2003	20.28	15.99	4.29	870	<100,000	<1,000	<1,000	<1,000	<1,000	620,000	<1,000	<1,000	2,700	<20,000	---	---	---	---

TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
 4301 San Leandro Street
 Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-2	2/13/2004	20.28	13.88	6.40	1,200	<20,000	860	<200	260	<200	710,000	<200	<200	2,000	<25,000	---	---	---	---
cont'd	5/17/2004	20.38	14.68	5.70	2,500	<50000	860	<500	<500	<500	760,000	<500	<500	2,500	13,000J	---	---	---	---
	8/6/2004	20.38	15.36	5.02	2,500	<50000	590	<500	<500	<500	810,000	<500	<500	3,600	17,000J	---	---	---	---
	11/12/2004	20.38	15.49	4.89	500	<150,000	<1500	<1500	<1500	<1500	700,000	<1500	<1500	2,800	25,000J	---	---	---	---
	2/15/2005	20.38	14.16	6.22	990	<150,000	<1,500	<1,500	<1,500	<1,500	630,000	<1,500	<1,500	2,600	32,000	---	---	---	---
	5/9/2005	20.38	13.62	6.76	1,100	<150,000	<1,500	<1,500	<1,500	<1,500	570,000	<1,500	<1,500	2,300	32,000	---	---	---	---
	8/8/2005**	22.05	13.36	8.69	770	<150,000	<1,500	<1,500	<1,500	<1,500	770,000	<1,500	<1,500	2,200	85,000	---	---	---	---
	11/16/2005	22.05	14.51	7.54	890	<70,000	<700	<700	<700	<700	430,000	<700	<700	2,100	130,000	<100,000	<7,000	<700	<700
	2/22/2006	22.05	12.69	9.36	<1,500	<70,000	800	<700	<700	<700	400,000	<700	<700	1,700	130,000	<70,000	<7,000	<700	<700
	5/16/2006	22.05	12.01	10.04	1,100	<70,000	<700	<700	<700	<700	250,000	<700	<700	940	140,000	<70,000	<7,000	<700	<700
	8/23/2006	21.98	11.33	10.65	660	<40,000	<400	<400	<400	<400	200,000	<400	<400	830	170,000	<40,000	<4,000	<400	<400
	11/13/2006	21.98	13.64	8.34	NA	<40,000	<400	<400	<400	<400	140,000	<400	<400	490	170,000	NA	NA	NA	NA
	2/13/2007	21.98	12.78	9.20	780	<20,000	250	<200	<200	<200	100,000	<200	<200	240	130,000	NA	NA	NA	NA
	5/16/2007	21.98	13.17	8.81	800	<7,000	150	<70	<70	<70	44,000	<70	<70	120	130,000	NA	NA	NA	NA
	8/16/2007	21.98	13.48	8.50	610	<5,000	100	<50	<50	<50	21,000	<50	<50	<80 ⁺⁺	100,000	NA	NA	NA	NA
	11/13/2007	21.98	14.11	7.87															
MW-3	10/3/2000	18.98	---	---	120	83,000	<500	<500	<500	<500	33,000	<2,500	<2,500	<2,500	<10,000	---	---	---	---
	10/27/2000	18.98	18.75	0.23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/26/2001	18.98	13.38	5.60	900*	230,000	930	<500	<500	<500	330,000	<25,000	<25,000	<25,000	<100,000	---	---	---	---
	5/8/2001	18.98	11.82	7.16	1,100*	95,000	840	<250	<250	<250	390,000	<12,500	<12,500	<12,500	<50,000	---	---	---	---
	8/3/2001	18.98	13.44	5.54	290*	30,000*	<50	51	<50	<50	270,000	<12,500	<12,500	<12,500	<50,000	---	---	---	---
	7/1/2003	18.98	12.67	6.31	620	<50,000	<500	<500	<500	<500	230,000	<500	<500	1,800	<5,000	---	---	---	---
	10/1/2003	18.98	14.04	4.94	370	<20,000	<200	<200	<200	<200	120,000	<200	<200	1,200	<5,000	---	---	---	---
	2/13/2004	18.98	12.20	6.78	430	<20,000	280	<200	<200	<200	210,000	<200	<200	1,200	<5,000	---	---	---	---
	5/17/2004	18.98	11.87	7.11	920	<25,000	<250	<250	<250	<250	150,000	<250	<250	1,100	5,600J	---	---	---	---
	8/6/2004	18.98	13.07	5.91	78	<20,000	<200	<200	<200	<200	110,000	<200	<200	760	<2,500	---	---	---	---
	11/12/2004	18.98	12.83	6.15	120	<20,000	<200	<200	<200	<200	100,000	<200	<200	660	6,000	---	---	---	---
	2/15/2005	18.98	11.95	7.03	130	<25,000	<250	<250	<250	<250	110,000	<250	<250	760	12,000	---	---	---	---
	5/9/2005	18.98	10.51	8.47	320	<15,000	<150	<150	<150	<150	97,000	<150	<150	780	30,000	---	---	---	---
	8/8/2005**	20.73	10.98	9.75	180	<15,000	<150	<150	<150	<150	75,000	<150	<150	500	44,000	---	---	---	---

TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
 4301 San Leandro Street
 Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-3	11/16/2005	20.73	12.89	7.84	<200	<5,000	<50	<50	<50	<50	37,000	<50	<50	190	38,000	<5,000	<500	<50	<50
cont'd	2/22/2006	20.73	10.31	10.42	<600	<5,000	88	<50	<50	<50	57,000	<50	<50	420	65,000	<9,000	<500	<50	<50
	5/16/2006	20.73	9.03	11.70	<600^	<9,000	110	<90	<90	<90	42,000	<90	<90	340	68,000	<9,000	<900	<90	<90
	8/23/2006	20.68	10.81	9.87	<200^	<4,000	<40	<40	<40	<40	18,000	<40	<40	120	60,000	<4,000	<400	<40	<40
	11/13/2006	20.68	12.29	8.39	NA	<2,000	<20	<20	<20	<20	6,100	<20	<20	30	54,000	NA	NA	NA	NA
	2/13/2007	20.68	11.23	9.45	<200^	<4,000	52	<40	<40	<40	13,000	<40	<40	82	65,000	NA	NA	NA	NA
	5/15/2007	20.68	10.39	10.29	<300^	<4,000	67	<40	<40	<40	12,000	<40	<40	77	71,000	NA	NA	NA	NA
	8/15/2007	20.68	11.81	8.87	<200^	<4,000	42	<40	<40	<40	4,500	<40	<40	<40	64,000	NA	NA	NA	NA
	11/13/2007	20.68	12.26	8.42															
MW-4	2/22/2006	21.63	7.87	13.76	<8,000	<150,000	3,200	2,000	1,600	3,800	770,000	<1,500	<1,500	3,300	59,000	<150,000	<15,000	<1,500	<1,500
	5/16/2006	21.63	8.04	13.59	3,800	<70,000	2,100	<700	930	1,500	410,000	<700	<700	2,500	110,000	<70,000	<7,000	<700	<700
	8/23/2006	21.53	9.77	11.76	8,400	89,000	4,500	<700	2,100	2,800	870,000	<700	<700	4,000	89,000	<70,000	<7,000	<700	<700
	11/13/2006	21.53	8.78	12.75	NA	<150,000	3,700	<1,500	<1,500	2,400	950,000	<1,500	<1,500	4,000	110,000	NA	NA	NA	NA
	2/13/2007	21.53	7.56	13.97	2,000	<150,000	2,000	<1,500	<1,500	<1,500	640,000	<1,500	<1,500	2,900	130,000	NA	NA	NA	NA
	5/16/2007	21.53	7.97	13.56	1,900 ^^	<70,000	3,200	<700	1,000	940	430,000	<700	<700	2,300	160,000	NA	NA	NA	NA
	8/16/2007	21.53	9.03	12.50	4,400	<150,000	2,400	<1,500	<1,500	<1,500	630,000	<1,500	<1,500	4,300	130,000	NA	NA	NA	NA
	11/13/2007	21.53	8.52	13.01															
MW-4D	2/21/2006	21.54	15.58	5.96	<50	<90	<0.90	<0.90	<0.90	<0.90	440	<0.90	<0.90	2	<5.0	<90	<9.0	<0.90	<0.90
	5/16/2006	21.54	13.23	8.31	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<50	<5.0	<0.50	<0.50
	8/23/2006	21.44	15.33	6.11	<50	<50	<0.50	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	<5.0	93	8	<0.50	<0.50
	11/13/2006	21.44	16.23	5.21	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	2/13/2007	21.44	15.73	5.71	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	5/15/2007	21.44	15.38	6.06	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	8/15/2007	21.44	16.42	5.02	130 ^^	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	11/13/2007	21.44	17.21	4.23															
	11/27/2007	21.44	15.85	5.59															
No groundwater samples collected																			
MW-5	2/21/2006	20.48	6.63	13.85	<3,000	<10,000	460	<100	170	<100	480,000	<100	<100	3,000	95,000	<90,000	<1,000	<100	<100
	5/16/2006	20.48	6.62	13.86	1,600	<90,000	<900	<900	<900	<900	480,000	<900	<900	2,300	130,000	<90,000	<9,000	<900	<900
	8/23/2006	20.41	7.62	12.79	1,400	<90,000	<900	<900	<900	<900	510,000	<900	<900	2,400	270,000	<90,000	<9,000	<900	<900
	11/13/2006	20.41	7.31	13.10	NA	<90,000	<900	<900	<900	<900	430,000	<900	<900	2,200	350,000	NA	NA	NA	NA
	2/13/2007	20.41	6.54	13.87	1,000	<50,000	<500	<500	<500	<500	260,000	<500	<500	740	350,000	NA	NA	NA	NA
	5/16/2007	20.41	6.79	13.62	2,200 ^^	<15,000	650	<150	<150	<150	73,000	<150	<150	610	240,000	NA	NA	NA	NA
	8/16/2007	20.41	7.99	12.42	950	<25,000	<250	<250	<250	<250	130,000	<250	<250	550	620,000	NA	NA	NA	NA
	11/13/2007	20.41	7.51	12.90															

**TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS**

4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-5D	2/21/2006	20.32	13.68	6.64	<50	<50	<0.50	<0.50	<0.50	<0.50	8	<0.50	<0.50	<0.50	6	<50	<5.0	<0.50	<0.50
	5/16/2006	20.32	12.72	7.60	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<50	<5.0	<0.50	<0.50
	8/23/2006'	20.22	14.48	5.74	<50	<50	<0.50	<0.50	<0.50	<0.50	56	<0.50	<0.50	<0.50	<5.0	120	6	<0.50	<0.50
	11/13/2006	20.22	14.98	5.24	NA	<50	<0.50	<0.50	<0.50	<0.50	81	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	2/13/2007	20.22	14.48	5.74	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	5/15/2007	20.22	14.13	6.09	<50	<50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	8/15/2007	20.22	15.21	5.01	330 ^^	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	11/13/2007	20.22	15.94	4.28											<5.0	NA	NA	NA	NA
	11/27/2007	20.22	15.85	4.37	No groundwater samples collected														
MW-6	2/22/2006	20.45	9.88	10.57	2,900	<10,000	620	<100	<100	<100	50,000	<100	<100	210	24,000	<10,000	<1,000	<100	<100
	5/16/2006	20.45	9.35	11.10	3,200	<9,000	1,500	<90	<90	<90	50,000	<90	<90	280	27,000	<10,000	<900	<90	<90
	8/23/2006'	20.47	10.48	9.99	3,400	<9,000	1,600	<90	<90	<90	39,000	<90	<90	190	55,000	<9,000 ⁺⁺	<900	<90	<90
	11/13/2006	20.47	10.86	9.61	NA	<5,000	1,200	<50	<50	<50	17,000	<50	<50	66	71,000	NA	NA	NA	NA
	2/13/2007	20.47	10.31	10.16	2,400	4,900	1,800	<25	<25	<25	14,000	<25	<25	65	55,000	NA	NA	NA	NA
	5/15/2007	20.47	10.35	10.12	2,600	4,900	1,900	21	<20	<20	12,000	<20	<20	55	60,000	NA	NA	NA	NA
	8/15/2007	20.47	10.74	9.73	2,900	4,000	1,300	<20	<20	<20	7,000	<20	<20	32	69,000	NA	NA	NA	NA
	11/13/2007	20.47	10.91	9.56															
MW-7	2/22/2006	21.13	11.72	9.41	400	<10,000	<100	<100	<100	<100	88,000	<100	<100	430	90,000	<10,000	<1,000	<100	<100
	5/16/2006	21.13	8.72	12.41	340	<5,000	<50	<50	<50	<50	28,000	<50	<50	120	47,000	<5,000	<500	<50	<50
	8/23/2006'	21.14	11.34	9.80	280	<9,000	<90	<90	<90	<90	62,000	<90	<90	280	160,000	<18,000 ⁺⁺	<900	<90	<90
	11/13/2006	21.14	12.53	8.61	NA	<9,000	<90	<90	<90	<90	49,000	<90	<90	280	130,000	NA	NA	NA	NA
	2/13/2007	21.14	11.83	9.31	210	<7,000	<70	<70	<70	<70	33,000	<70	<70	170	130,000	NA	NA	NA	NA
	5/15/2007	21.14	10.99	10.15	250	<5,000	<50	<50	<50	<50	36,000	<50	<50	190	140,000	NA	NA	NA	NA
	8/15/2007	21.14	12.41	8.73	390	<9,000	<90	<90	<90	<90	37,000	<90	<90	170	160,000	NA	NA	NA	NA
	11/13/2007	21.14	13.41	7.73															
MW-7D	11/13/2007	21.36	19.21	2.15															
	11/27/2007	21.36	17.02	4.34	No groundwater samples collected														
MW-8	2/22/2006	21.03	7.28	13.75	6,800	<10,000	1,200	<100	270	220	400,000	<100	<100	2,100	63,000	<300,000	<1,000	<100	<100
	5/16/2006	21.03	7.48	13.55	3,800	<90,000	1,600	<900	<900	<900	620,000	<900	<900	3,000	46,000	<90,000	<9,000	<900	<900
	8/23/2006'	20.95	8.19	12.76	17,000	<90,000	940	<900	<900	<900	340,000	<900	<900	1,200	74,000	<90,000	<9,000	<900	<900
	11/13/2006	20.95	8.15	12.80	NA	<25,000	490	<250	<250	<250	120,000	<250	<250	360	130,000	NA	NA	NA	NA
	2/13/2007	20.95	6.58	14.37	4,100	<90,000	1,700	<900	<900	<900	410,000	<900	<900	1,700	160,000	NA	NA	NA	NA

TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
 4301 San Leandro Street
 Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-8	5/16/2007	20.95	7.24	13.71	3,300	<50,000	650	<500	<500	<500	190,000	<500	<500	750	170,000	NA	NA	NA	NA
cont'd	8/16/2007	20.95	8.61	12.34	4,400	<25,000	420	<250	<250	<250	150,000	<250	<250	460	210,000	NA	NA	NA	NA
	11/13/2007	20.95	8.21	12.74															
IS-1	2/22/2006	20.57	6.91	13.66	4,400	<5,000	160	<50	<50	<50	21,000	<50	<50	64	130,000	<5,000	<500	<50	<50
	5/16/2006	20.57	7.01	13.56	3,800	<5,000	150	<50	<50	<50	24,000	<50	<50	58	130,000	<5,000	<500	<50	<50
	8/23/2006	20.58	7.82	12.76	3,800	<5,000	65	<50	<50	<50	5,800	<50	<50	<50	110,000	<5,000	<500	<50	<50
	11/13/2006	20.58	8.21	12.37	NA	<5,000	<50	<50	<50	<50	1,000	<50	<50	<50	100,000	NA	NA	NA	NA
	2/13/2007	20.58	6.14	14.44	1,800	<4,000	<40	<40	<40	<40	3,600	<40	<40	<40	110,000	NA	NA	NA	NA
	5/15/2007	20.58	7.04	13.54	2,000	<4,000	49	<40	<40	<40	2,800	<40	<40	<40	98,000	NA	NA	NA	NA
	8/15/2007	20.58	8.06	12.52	2,700	<4,000	<40	<40	<40	<40	4,200	<40	<40	<40	90,000	NA	NA	NA	NA
	11/13/2007	20.58	7.61	12.97															
IS-2	2/22/2006	20.87	6.92	13.95	<4,000	8,600	1,200	<9.0	240	17	190,000	<9.0	9	1,700	29,000	<150,000	<90	<9.0	<9.0
	5/16/2006	20.87	6.99	13.88	<3,000^	<15,000	500	<150	<150	<150	130,000	<150	<150	880	24,000	<15,000	<1,500	<150	<150
	8/23/2006	20.78	7.91	12.87	2,700	<40,000	490	<400	<400	<400	150,000	<400	<400	1,200	39,000	<40,000 ⁺⁺	<4,000	<400	<400
	11/13/2006	20.78	8.23	12.55	NA	<40,000	<400	<400	<400	<400	160,000	<400	<400	990	120,000	NA	NA	NA	NA
	2/13/2007	20.78	6.76	14.02	<1,500^	<5,000	230	<50	<50	<50	28,000	<50	<50	250	72,000	NA	NA	NA	NA
	5/15/2007	20.78	6.87	13.91	<3,000^	<7,000	690	<70	120	<70	35,000	<70	<70	370	32,000	NA	NA	NA	NA
	8/15/2007	20.78	8.08	12.70	<3,000^	<7,000	500	<70	<70	<70	20,000	<70	<70	160	160,000	NA	NA	NA	NA
	11/13/2007	20.78	7.69	13.09															
IS-3	2/22/2006	20.99	7.32	13.67	<4,000	29,000	2,700	820	1,100	2,900	750,000	<100	<100	3,400	40,000	<80,000	<1,000	<100	<100
	5/16/2006	20.99	7.86	13.13	8,000	<20,000	1,110	<200	450	<200	300,000	<200	<200	1,600	65,000	<20,000	<2,000	<200	<200
	8/23/2006	20.87	8.19	12.68	4,800	<50,000	2,900	<500	1,100	660	970,000	<500	<500	3,900	54,000	<50,000	<5,000	<500	<500
	11/13/2006	20.87	8.03	12.84	NA	<200,000	2,800	<2,000	<2,000	<2,000	1,100,000	<2,000	<2,000	4,500	65,000	NA	NA	NA	NA
	2/13/2007	20.87	7.03	13.84	<3,000	<150,000	3,200	<1,500	<1,500	<1,500	600,000	<1,500	<1,500	3,300	49,000	NA	NA	NA	NA
	5/16/2007	20.87	7.17	13.70	<4,000^	<150,000	2,900	<1,500	<1,500	<1,500	630,000	<1,500	<1,500	3,400	88,000	NA	NA	NA	NA
	8/15/2007	20.87	8.43	12.44	<3,000^	<150,000	2,800	<1,500	<1,500	<1,500	960,000	<1,500	<1,500	4,300	98,000	NA	NA	NA	NA
	11/13/2007	20.87	7.93	12.94															

**TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS**

4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
IS-4	2/22/2006	20.79	6.95	13.84	3,100	11,000	790	<100	120	<100	280,000	<100	<100	2,400	51,000	<10,000	<1,000	<100	<100
	5/16/2006	20.79	7.17	13.62	5,600	<15,000	610	<150	<150	<150	220,000	<150	<150	1,700	53,000	<15,000	<1,500	<150	<150
	8/23/2006	20.68	7.83	12.85	4,300	6,100	280	<40	<40	<40	270,000	<40	<40	1,600	100,000	<80,000 ⁺⁺	<400	<40	<40
	11/13/2006	20.68	8.46	12.22	NA	<50,000	<500	<500	<500	<500	230,000	<500	<500	1,100	220,000	NA	NA	NA	NA
	2/13/2007	20.68	9.02	11.66	1,500	<25,000	380	<250	<250	<250	160,000	<250	<250	570	250,000	NA	NA	NA	NA
	5/15/2007	20.68	6.99	13.69	1,700	<25,000	<250	<250	<250	<250	150,000	<250	<250	820	260,000	NA	NA	NA	NA
	8/15/2007	20.68	8.05	12.63	1,000	<15,000	<150	<150	<150	<150	85,000	<150	<150	360	280,000	NA	NA	NA	NA
	11/13/2007	20.68	6.38	14.30															
IS-5	2/22/2006	21.02	7.17	13.85	35,000	66,000	4,100	<250	3,100	7,700	420,000	<250	<250	4,600	40,000	<25,000	<2,500	<250	<250
	5/16/2006	21.02	6.81	14.21	11000+	33,000	2,800	<200	1,700	1,900	350,000	<200	<200	3,400	29,000	<20,000	<2,000	<200	<200
	8/23/2006	20.91	8.12	12.79	11,000	71,000	5,200	<500	6,200	4,500	350,000	<500	<500	3,900	32,000	<50,000	<5,000	<500	<500
	11/13/2006	20.91	8.41	12.50	NA	<50,000	930	<500	<500	<500	440,000	<500	<500	2,800	89,000	NA	NA	NA	NA
	2/13/2007	20.91	6.78	14.13	<5,000	<50,000	3,600	<500	2,200	3,800	240,000	<500	<500	3,600	28,000	NA	NA	NA	NA
	5/16/2007	20.91	7.15	13.76	<5,000 [^]	<50,000	4,500	<500	<500	<500	200,000	<500	<500	2,700	24,000	NA	NA	NA	NA
	8/15/2007	20.91	8.32	12.59	<10,000 [^]	<50,000	4,300	<500	2,100	990	310,000	<500	<500	3,400	48,000	NA	NA	NA	NA
	11/13/2007	20.91	7.71	13.20															
IS-6	2/22/2006	20.56	6.89	13.67	3,000	11,000	1,000	<100	560	180	130,000	<100	<100	1,400	210,000	<15,000	<1,000	<100	<100
	5/16/2006	20.56	6.44	14.12	3,300	<20,000	1,300	<200	730	<200	96,000	<200	<200	1,300	260,000	<25,000	<2,500	<200	<200
	8/23/2006	20.47	7.69	12.78	2,900	<20,000	580	<200	<200	<200	54,000	<200	<200	500	370,000	<20,000	<2,000	<200	<200
	11/13/2006	20.47	7.72	12.75	NA	<9,000	220	<90	<90	<90	20,000	<90	<90	170	260,000	NA	NA	NA	NA
	2/13/2007	20.47	6.12	14.35	1,600	<9,000	360	<90	<90	<90	28,000	<90	<90	210	310,000	NA	NA	NA	NA
	5/16/2007	20.47	6.67	13.80	1,700	9,100	1,400	<70	300	<70	21,000	<70	<70	240	240,000	NA	NA	NA	NA
	8/15/2007	20.47	7.91	12.56	1,700	<9,000	560	<90	<90	<90	8,000	<90	<90	100	220,000	NA	NA	NA	NA
	11/13/2007	20.47	7.22	13.25															
EW-1	2/22/2006	21.74	8.06	13.68	3,200	<150,000	3,100	<1,500	<1,500	<1,500	700,000	<1,500	<1,500	5,100	59,000	<150,000	<15,000	<1,500	<1,500
	5/16/2006	21.74	7.97	13.77	1,600	<100,000	2,000	<1,000	<1,000	<1,000	630,000	<1,000	<1,000	4,700	57,000	<100,000	<10,000	<1,000	<1,000
	8/23/2006	21.65	9.61	12.04	2,600	<150,000	2,200	<1,500	<1,500	<1,500	1,000,000	<1,500	<1,500	5,200	79,000	<150,000	<15,000	<1,500	<1,500
	11/13/2006	21.65	8.78	12.87	NA	<100,000	<1,000	<1,000	<1,000	<1,000	610,000	<1,000	<1,000	4,000	110,000	NA	NA	NA	NA
	2/13/2007	21.65	6.31	15.34	840	<70,000	1,200	<700	<700	<700	530,000	<700	<700	2,500	100,000	NA	NA	NA	NA
	5/16/2007	21.65	8.13	13.52	1,500	<70,000	1,700	<700	<700	<700	990,000	<700	<700	3,900	150,000	NA	NA	NA	NA
	8/16/2007	21.65	8.71	12.94	1,400	<80,000	1,900	<800	<800	<800	680,000	<800	<800	3,400	210,000	NA	NA	NA	NA
	11/13/2007	21.65	8.70	12.95															

**TABLE 6
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS**

4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
EW-2	2/22/2006	20.46	7.31	13.15	<3,000	10,000	1,800	<100	700	670	120,000	<100	<100	1,200	36,000	<80,000	<1,000	<100	<100
	5/16/2006	20.46	7.25	13.21	<3,000 [^]	<25,000	2,400	<250	1,110	880	180,000	<250	<250	1,400	45,000	<25,000	<2,500	<250	<250
	8/23/2006 [']	20.37	8.31	12.06	<2,000	<25,000	1,600	<250	520	<250	120,000	<250	<250	930	35,000	<25,000	<2,500	<250	<250
	11/13/2006	20.37	8.18	12.19	NA	<10,000	610	<100	170	<100	60,000	<100	<100	380	25,000	NA	NA	NA	NA
	2/13/2007	20.37	7.15	13.22	<2,000	<15,000	1,100	<150	230	<150	81,000	<150	<150	700	49,000	NA	NA	NA	NA
	5/16/2007	20.37	7.74	12.63	<3,000 [^]	9,900	1,700	<50	460	170	96,000	<50	<50	870	65,000	NA	NA	NA	NA
	8/16/2007	20.37	9.45	10.92	<2,000 [^]	<15,000	1,300	<150	250	<150	100,000	<150	<150	700	75,000	NA	NA	NA	NA
	11/13/2007	20.37	9.64	10.73															

Notes:

Groundwater samples collected on 11/13/2007 have not been processed

- TOC Top of well casing referenced to arbitrary datum prior to 3Q2005
- DTW Depth to water
- MSL Mean sea level
- GWE Groundwater elevation measured in feet above mean sea level
- TPH-d Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified)
- TPH-g Total petroleum hydrocarbons as gasoline by EPA Method 8260B
- BTEX Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
- MTBE Methyl tertiary butyl ether by EPA Method 8260B
- DIPE Di-isopropyl ether by EPA Method 8260B
- ETBE Ethyl tertiary butyl ether by EPA Method 8260B
- TAME Tertiary amyl methyl ether by EPA Method 8260B
- TBA Tertiary butyl alcohol by EPA Method 8260B
- DCA 1,2-Dichloroethane
- EDB 1,2-Dibromoethane
- ESL Environmental Screening Levels for deep soils and groundwater is not a current or potential source of drinking water; San Francisco Bay Regional Water Quality Control Board February 2005.
- (µg/L) Micrograms per liter
- Date['] TOC was re-surveyed on September 12, 2006.
- NA Not analyzed.
- <# Not detected in concentrations above laboratory reporting limit.
- J Estimated quantity because the MTBE to TBA ratio is greater than 20 to 1.
- No samples collected, no data available
- Not provided
- * Laboratory note: "Results within quantitation range; chromatographic pattern not typical of fuel."
- ** Wells re-surveyed on 3/28/2005.
- ^ The method reporting limit for TPH-d is increased due to interference from gasoline-range hydrocarbons.
- ^^ Petroleum hydrocarbons reported as TPH-d do not exhibit a typical Diesel chromatogram pattern; they have a lower boiling point than typical Diesel fuel Surrogate recovery for test method Mod. EPA 8015 was outside of control limits. This may indicate a bias in the analysis
- + due to the sample's matrix or an interference from compounds present in the sample.
- ++ The method reporting limit has been increased due to the presence of an interfering compound.

APPENDICES

APPENDIX A
REGULATORY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY
DAVID J. KEARS, Agency Director



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

January 4, 2007

Ms. Farah Naz c/o
Mr. Muhammad Jamil
40092 Davis Street
Fremont, CA 94538

Subject: Fuel Leak Case No. RO0000096, Eagle Gas, 4301 San Leandro Street, Oakland, CA

Dear Ms. Naz:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Revised Work Plan," dated December 19, 2006. The Revised Work Plan proposes plans for on-site and off-site investigation tasks and interim remediation. The Work Plan has been revised in response to technical comments in ACEH correspondence dated October 19, 2006. The proposed scope of work may be implemented without submittal of a revised Work Plan provided that the technical comments below and modifications to the site investigation are addressed and incorporated during the field investigation. Submittal of a revised work plan is not required.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to jerry.wickham@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

- Figure 4 – Depth of Contact Between Clayey Gravel and Underlying Soil.** The clayey gravel unit, the base of which is depicted on Figure 4, may affect groundwater flow across the site. However, the basis for depicting the base of the contact at a depth of 18 feet bgs in the area of the dispenser that is northeast of the service station building is not apparent since none of the data points in the eastern portion of the site show the contact more than 15 feet bgs. We note that several borings such as SB-6d, SB-7d, and SB-8d, are not included on the figure. We also note that there are several discrepancies between Figure 4 and the boring logs such as the depth of the contact in borings MW-1 and MW-7. Please include the additional data points and corrected depths in future revisions of Figure 4. Please also note that the log for boring SB-7/MW-7 indicates a well-sorted gravel from 13 to 25 feet bgs. Identification of a well-sorted, loose gravel in the subsurface is unusual and no other boring log for the site contains a similar description. Please review this boring log and present an interpretation of this described gravel in the Site Investigation and Interim Remediation Report requested below.
- Water Line or Sewer System Leaks.** We concur with the recommendation to find and repair the suspected leaks from on-site water lines and the sewer system. Please report on progress in finding and repairing the leaks in future quarterly groundwater monitoring reports.

3. **Deep Monitoring Wells.** The proposed locations of the two deeper monitoring wells are acceptable. Please present the results from the well installation in the Site Investigation and Interim Remediation Report requested below.
4. **Proposed Discrete Interval Sampling.** We do not concur with the proposal to conduct depth-discrete sampling within wells IS-5, MW-1, and MW-7. Recent research indicates that significant vertical mixing occurs within well bores even during low flow sampling (Martin-Hayden 2006 and Varjen and Kaminski 2006). Therefore, depth-discrete sampling within an open borehole will not provide accurate data to estimate mass within specific vertical intervals. Depth-discrete sampling would require grab groundwater sampling from additional borings or the use of baffles or packers within open well bores. Proposal of either of these two methods would require a Work Plan Addendum along with a detailed justification for this type of sampling.
5. **Off-site Soil Boring Locations.** The proposed locations for the nine off-site soil borings shown on Figure 6 are acceptable. Although nine off-site boring locations are shown on Figure 6, the text in section 3.3 of the Revised Work Plan indicates that seven off-site borings will be advanced. Nine off-site borings, as shown on Figure 6, are required.
6. **Depth of Off-site Soil Borings.** The Revised Work Plan currently proposes to collect depth-discrete grab groundwater samples below 25 feet bgs only if highly contaminated soil or groundwater is observed. The on-site borings have confirmed that groundwater contamination extends below 25 feet bgs. The purpose of the off-site investigation is to delineate the extent of groundwater contamination in both the upper and lower zones. Field observation of gross contamination does not provide sufficient information to assess whether groundwater contamination may extend off-site in the coarse-grained layers present below 25 feet bgs. Therefore, in addition to sampling first encountered groundwater from each off-site boring, grab groundwater sampling is required from each significant water-bearing zone encountered within the upper 50 feet bgs. Please present the results in the Site Investigation and Interim Remediation Report requested below.
7. **Soil Vapor Sampling.** The proposed soil vapor sampling at six soil vapor monitoring wells as discussed in the text is acceptable. However, we note that only five soil vapor sampling locations are shown on Figure 7; one previously proposed location adjacent to MW-4D was deleted from Figure 7. Please conduct soil vapor sampling at the proposed location adjacent to well MW-4D in addition to the five locations shown on Figure 7. Please present the results in the Site Investigation and Interim Remediation Report requested below.
8. **Dual Phase Extraction Pilot Test.** Implementation of a Dual Phase Extraction (DPE) Test is acceptable. DPE testing is to be conducted on wells within each of the contamination source areas. Please present the results in the Site Investigation and Interim Remediation Report requested below.
9. **Persulfate Bench Test.** The proposed bench-scale test for persulfate is acceptable. Please present the results in the Site Investigation and Interim Remediation Report requested below.

REFERENCES

Martin-Hayden, James M. 2006. "Physical Well-Bore Processes and Influences on Concentrations Heterogeneity," High-Resolution Site Characterization and Monitoring, 2nd Symposium in GRA's Tools and Technologies Series, November 14-15, 2006.

Varljen, Mark D. and Kaminski, David B., 2006. "Numerical Simulations of the Vertical Flux Distribution into Monitoring Wells Screens during Low-flow Purging and Sampling High-Resolution Site Characterization and Monitoring, 2nd Symposium in GRA's Tools and Technologies Series, November 14-15, 2006.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **May 25, 2007** – Site Investigation and Interim Remediation Report
- **45 days after the end of each quarter** – Quarterly Groundwater Monitoring Report

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

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. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

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. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for 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 monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

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

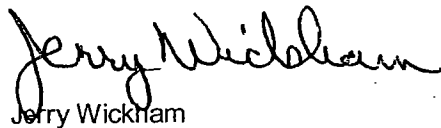
Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

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.

If you have any questions, please call me at (510) 567-6791.

Sincerely,



Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

Farah Naz
January 4, 2007
Page 5

cc: Robert Nelson
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801

Sunil Ramdass
SWRCB Cleanup Fund
1001 I Street, 17th floor
Sacramento, CA 95814-2828

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Tuesday, May 08, 2007 2:24 PM
To: Karel Detterman
Cc: Olivia Jacobs; Sandy Young; Hermy Tam
Subject: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Interim Remediation Report Separation and Extension Request, Clearwater Project # ZP046D

Karel,

I have no objection to separating the Site Investigation and Interim Remediation into separate reports. Based on your request, the schedule for both reports is extended to August 27, 2007. You may submit an alternate schedule for the Site Investigation Report upon completion of access agreements.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

From: Karel Detterman [mailto:KDetterman@clearwatergroup.com]
Sent: Monday, May 07, 2007 1:45 PM
To: Wickham, Jerry, Env. Health
Cc: Olivia Jacobs; Sandy Young; Hermy Tam
Subject: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Interim Remediation Report Separation and Extension Request, Clearwater Project # ZP046D

Dear Mr. Wickham:

I'd like to introduce myself as the new Clearwater Group project manager for the Eagle Gas Station project.

In a letter dated January 4, 2007, Alameda County Environmental Health (ACEH) requested that the *Site Investigation and Interim Remediation Report* be submitted by May 25, 2007. Clearwater Group requests that the *Site Investigation and Interim Remediation Report* be separated and submitted in two reports, *Site Investigation Report* and *Interim Remediation Report*, and also requests an extension for the submittal of both reports. These changes are being requested because of the necessity to place soil borings SB-12, SB-13, SB-14, SB-15, and SB-17 in neighboring properties; we do not know how long it will take to obtain access agreements from the property owners. Clearwater has initiated the process of acquiring the access agreements and will proceed with acquiring necessary permits for the on-site well installation and off-site soil borings in High and San Leandro Streets.

5/8/2007

Attached is a revised schedule for each report; however, a separate schedule for off-site borings SB-12, SB-13, SB-14, SB-15, and SB-17 will be submitted to ACEH upon acquisition of the access agreements. Should you have any questions or comments regarding this request, please call or e-mail me at the numbers below or contact Olivia Jacobs at 510-307-9943 x 223.

Thank you,

Karel Detterman, P.G.
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228

**Eagle Gas Station, 4301 San Leandro Street, Oakland, California 94601
LOP Site ID# 2118, USTCF Claim No. 014551**

REVISED SCHEDULE as of May 4, 2007

Site Investigation Report Tasks for on-site wells, off-site borings, and street soil boring locations

Description	Approximate start date or projected time period	Approximate Duration	Notes/Agency
Submit Work Plan	December 19, 2006		
Approve Work Plan	January 4, 2007	2 – 4 weeks	ACEH
Obtain drill bids	April 6, 2007	5 days	
Schedule driller	May 2007	1 day	
Initiate process to obtain off-site access agreements for SB-14, SB-15, and SB-17 boring locations	March 8, 2007	Unknown	One owner
Initiate process to obtain off-site access agreements for SB-12 and SB-13 boring locations	March 27, 2007	Unknown	Four owners: two Trusts and two Limited Liability Partnerships
Submit Traffic Plan	April 25, 2007	4 – 6 weeks	In review at the City of Oakland Public Works Agency
Submit Boring and Well Permit Applications	May 2007	2 weeks	Alameda County Public Works Agency, Water Resources Section
Drill 9 off-site borings in High Street & San Leandro Street	Depends on acquiring the Traffic Plan	3 days	
Drill off-site borings SB-12 through SB-15 & SB-17	Depends on acquiring access agreements	2 days	
Install 2 deep on-site monitoring wells	May 2007	2 days	
Install 6 permanent soil vapor monitoring wells	May 2007	2 days	
Develop 2 deep monitoring wells	Depends on driller's schedule	1 day	
Survey wells and borings	Depends on driller's schedule & acquisition of access agreements	1 day	
Dispose of soil cuttings	Depends on driller's schedule	20 days	
Submit report to ACEH	Depends on acquisition of site access agreements		Schedule pending

Eagle Gas Station, 4301 San Leandro Street, Oakland, California 94601
LOP Site ID# 2118, USTCF Claim No. 014551

REVISED SCHEDULE as of May 4, 2007

Interim Remediation Report Tasks

Description	Approximate start date or time period	Duration	Notes/Agency
Analyze samples for Bioremediation Feasibility Study	April 9, 2007	2 weeks	
Produce Bioremediation Feasibility Study Report	April 23, 2007	1 month	Included with the First Quarter 2007 Groundwater Monitoring & Sampling Report
Persulfate Bench Test	June 2007	2 months	
Sample & analyze soil vapor samples	June 2007	2 weeks	
HVDPE Pilot Test	June-July 2007	5 days	
Analyze samples from HVDPE Pilot Test	June-July 2007	2 weeks	
Submit Interim Remediation report to ACEH	September 2007		

Olivia Jacobs

From: Wickham, Jerry, Env. Health [jerry.wickham@acgov.org]
Sent: Tuesday, May 22, 2007 2:12 PM
To: Karel Detterman
Cc: Olivia Jacobs; Sandy Young; Hermy Tam
Subject: RE: 4301 San Leandro St., Oakland, Eagle Gas - Request for clarification

Karel,

The use of EC or CPT for logging the deep wells and off-site borings is acceptable.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

From: Karel Detterman [mailto:KDetterman@clearwatergroup.com]
Sent: Friday, May 18, 2007 4:15 PM
To: Wickham, Jerry, Env. Health
Cc: Olivia Jacobs; Sandy Young; Hermy Tam
Subject: 4301 San Leandro St., Oakland, Eagle Gas - Request for clarification

Hi Jerry:

I am about to award the drill bids for the upcoming drilling at Eagle Gas and wanted to check on your approval of two items:

1. In your Jan. 4, 2007 letter, the locations of the proposed on-site "deep" wells were approved under item number 3, "Deep Monitoring Wells", but there was no response to Clearwater's statement in the December 19, 2006 Work Plan, Section 3.2, "Installation of Two On-Site Deep Groundwater Monitoring Wells" to log the pilot boring using a continuous soil electrical conductivity (EC) recording or a cone penetrometer test (CPT), for the purpose of providing accurate location of permeable lithologies to set the well screen interval.
2. Regarding the nine off-site boring locations in High and San Leandro Streets, Clearwater recommends using continuous soil EC recordings or CPT on all or at least 1 or 2 borings on each street to gain accurate locations of permeable lithologies defining significant water-bearing zones off-site.

Thank you,

Karel Detterman, P.G.

Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228
Fax (510) 232-2823

5/22/2007

Olivia Jacobs

From: Olivia Jacobs
Sent: Tuesday, June 12, 2007 6:02 PM
To: 'Wickham, Jerry, Env. Health'
Cc: 'jimjacobs@ebsinfo.com'; Karel Detterman; Sandy Young; Rob Nelson
Subject: RE: Eagle Gas, 4301 San Leandro Street, Oakland LOP Site ID #2118

I'm just off the phone with Karel. She reports completing four holes in the past two days, as follows:

SB-9 to 30 feet with no groundwater samples (no recharge) and refusal with the DPT rig.
SB-16 to 46 feet with groundwater at 15-20 feet and also from 27-30 feet bgs.
SB-18 to 40 feet, ditto on the groundwater.
SB-19 to 35 feet, ditto on the groundwater.

The big picture is that there is a clayey/gravelly (gravel/cobble) layer ("very hard layer with large cobbles") around 40 feet bgs.

Karel has requested that, tomorrow, Precision use DPT as far as it will go on the borings, and going forward, having them have complete set up of 4" auger system to use when refusal is reached, logging off the cuttings at that point and acquiring groundwater samples by using a plug, and sampling through the augers. This, of course, would mean no continuous logging, but would achieve the objective of determining the depth of the gravel/cobble layer.

Pending field results, tomorrow, if the 4" auger is ineffectual, the plan would be to bring in a large truck mounted drill rig. The goal would be to reach the lower sandy gravel unit.

Please advise if you would prefer a different strategy.

Thanks.

Olivia Jacobs

From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Tuesday, June 12, 2007 5:17 PM
To: Rob Nelson; Olivia Jacobs; Sandy Young; Karel Detterman
Subject: RE: Eagle Gas, 4301 San Leandro Street, Oakland LOP Site ID #2118

As requested in the technical comments, the purpose of extending the borings to 50 feet bgs was to delineate the extent of groundwater contamination in both the upper and lower zones. Therefore, in addition to sampling first encountered groundwater from each off-site boring, grab groundwater sampling is required from each significant water-bearing zone encountered within the upper 50 feet bgs. The objective of defining the extent of contamination in the upper 50 feet bgs can be met provided that the borings extend to depths approaching 50 feet bgs and grab groundwater samples are collected from the lower sandy gravel unit.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

6/13/2007

From: Rob Nelson [mailto:RNelson@clearwatergroup.com]
Sent: Tuesday, June 12, 2007 2:00 PM
To: Wickham, Jerry, Env. Health; Olivia Jacobs; Sandy Young; Karel Detterman
Subject: Eagle Gas, 4301 San Leandro Street, Oakland LOP Site ID #2118

LOP Site ID #2118
USTCF Claim No. 014551

Clearwater Group drove two CPT borings yesterday at the Eagle Gas site. One CPT was along High Street, the second CPT was on the east side of San Leandro Street. Both of these CPTs met refusal at 49 feet bgs and neither CPT penetrated below the bottom of the lower sandy/gravelly layer. You have requested that the borings be driven to 50 feet or deeper, to find the bottom of the sandy/gravelly unit. The soil boring drilled next to the CPT on High Street met refusal at 46 feet. The soil boring next to the CPT on San Leandro Street was stopped at 30 feet bgs, due to time restrictions (we had to be out of the traffic lane by 4:30 PM).

The CPT subcontractor (Precision Sampling) was using a 25 ton CPT rig. They have a 30 ton CPT rig, but it is probably not available on Friday, also Precision thinks that the refusal is more a function of the material than the rig weight.

Clearwater seeks your input. We are scheduled to drive additional CPT borings along San Leandro Street on Friday (June 15) and are concerned that we may not be able to penetrate through the sandy/gravelly layer. If we reschedule the CPT with a larger, heavier rig this will require re-obtaining the encroachment, drilling and traffic permits.

Sincerely,
Rob Nelson
Clearwater Group

6/13/2007

From: Karel Detterman

Sent: Friday, August 24, 2007 2:53 PM

To: Gavin Fisco; Sandy Young; Hermy Tam; Olivia Jacobs; Jim Jacobs

Subject: FW: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Status Update, Clearwater Project # ZP046D

From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]

Sent: Fri 8/24/2007 2:01 PM

To: Karel Detterman

Subject: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Status Update, Clearwater Project # ZP046D

Karel,

With regard to the items in your email message below:

- 1) The proposed schedule for submittal of a Soil and Groundwater Investigation Report by November 30, 2007 is acceptable.
- 2) The proposed alternate location for SB-13 is acceptable. The alternate location for SB-12 largely duplicates boring SB-22. Therefore, please keep the original location for SB-12 although the boring may not extend to the planned depth due to the layer encountered at 40 to 45 feet bgs.
- 3) The proposed schedule for submittal of an Interim Remediation Report by November 30, 2007 is acceptable.
- 4) Re-location of well MW-1D is acceptable.

Regards,
Jerry Wickham

8/28/2007

Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

From: Karel Detterman [mailto:KDetterman@clearwatergroup.com]
Sent: Thursday, August 23, 2007 5:05 PM
To: Wickham, Jerry, Env. Health
Cc: Hermy Tam; Sandy Young; Sharon Hardin; Olivia Jacobs
Subject: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Status Update, Clearwater Project # ZP046D

Hi Jerry:

Status of off-site adjacent property soil borings:

1. Clearwater is pleased to inform you that we received both signed access agreements on August 14 and 15, 2007, respectively for soil borings SB-12, SB-13, SB-14, SB-15, and SB-17 to be located on the adjacent properties to Eagle Gas. These access agreements will allow us to complete the off-site soil-boring program which we started in June with the completion of the off-site soil borings on High Street and San Leandro Street, SB-9, SB-10A, SB-10B, SB-11, SB 16, SB-18, SB-19, SB-20, SB-21, and SB-22. As per your May 8, 2007 e-mail, attached is a revised schedule for the Site Investigation Report.
2. The City of Oakland Traffic Plan's requirement to provide a minimum five-foot wide pedestrian walkway on the sidewalk required Clearwater to use a limited access track-mounted direct push rig for SB-16, SB-18, and SB-19. Unfortunately, the track-mounted rig lacked the weight to penetrate a hard silty/clayey gravel layer encountered approximately 40 to 45 feet below grade. The weight provided by a truck-mounted direct-push rig was crucial in enabling direct push soil borings SB-10B, SB-11, SB-20, and SB-22 to reach depths of greater than 50 feet. SB-13 is located in an interior room of Creative Iron, at 926 High Street and not at the rear of Costco Smog Check, as previously thought (please see attached revised Figure 6). We are concerned that we may not be able to achieve drill depths of greater than 50 feet using limited access direct-push equipment for SB-12, in an interior courtyard of the Vulcan Lofts and SB-13. Clearwater proposes the alternate soil boring locations, shown on Figure 6, which would be accessible to a truck-mounted direct push rig. Please let us know how to proceed on this matter.

Request for Interim Remediation Report extension:

Clearwater requests an extension for the submittal of the Interim Remediation Report to November 30, 2007. The lowest groundwater levels of the year typically experienced during the fall months will be the most beneficial time to conduct the HVDPE test, exposing the maximum area of screen to the vacuum. The test has been scheduled for the first half of October; attached is a revised schedule for the Interim Remediation Report.

Proposed re-location of new monitoring well MW-1D:

Clearwater proposes to place on-site deep monitoring well MW-1D within three feet of and to the northeast of MW-1, to situate the well closer to MW-1. Attached is revised Figure 3.

Should you have any questions or comments regarding this request, please e-mail or call me

8/28/2007

at the numbers below.

Thank you,

Karel Detterman, P.G.
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228
Fax (510) 232-2823

8/28/2007

REVISED SCHEDULE as of August 23, 2007
Eagle Gas Station, 4301 San Leandro Street, Oakland, California 94601
LOP Site ID# 2118, USTCF Claim No. 014551

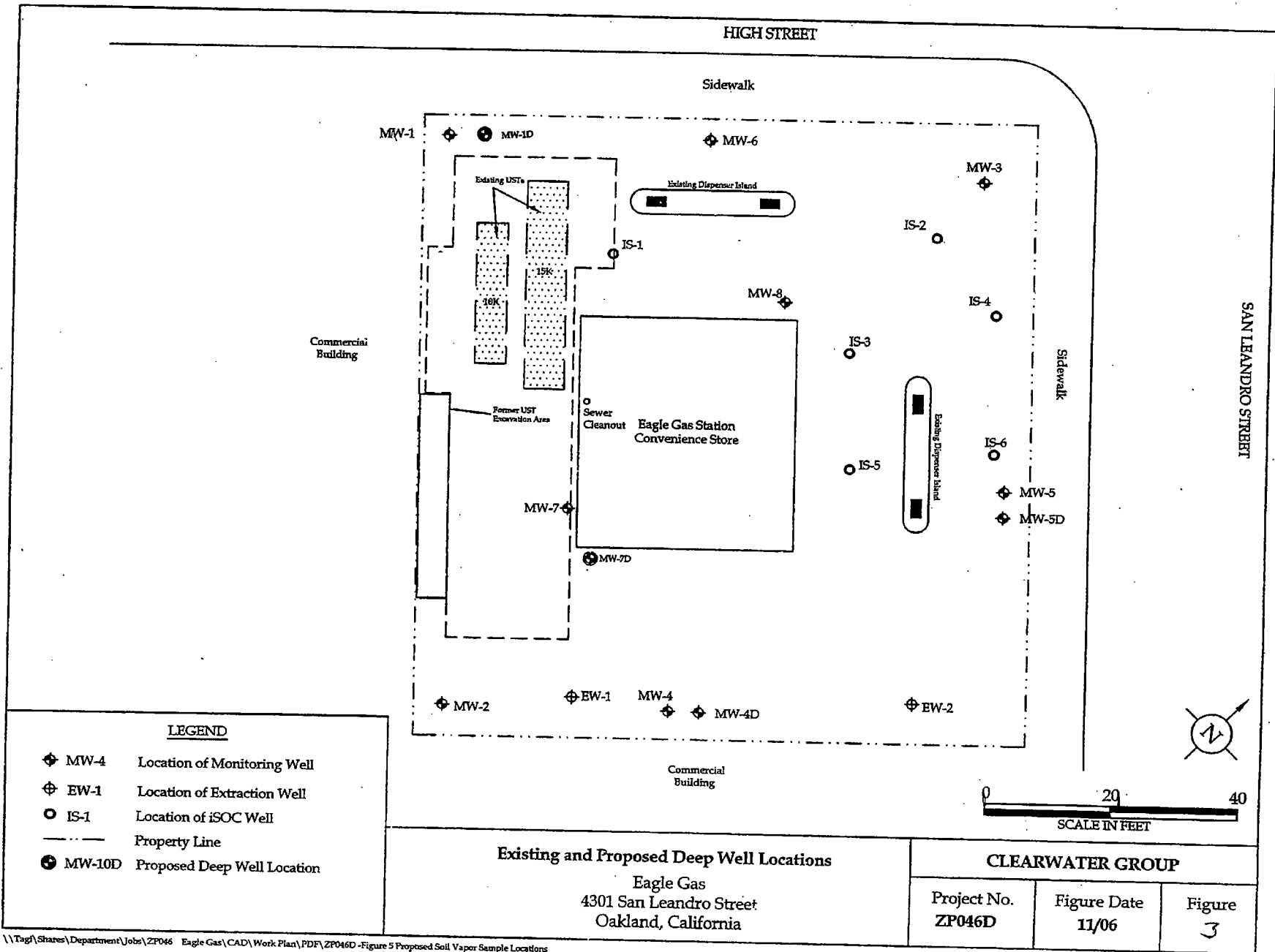
Site Investigation Report Tasks For On-Site Wells And Off-Site And Street Soil Boring Locations

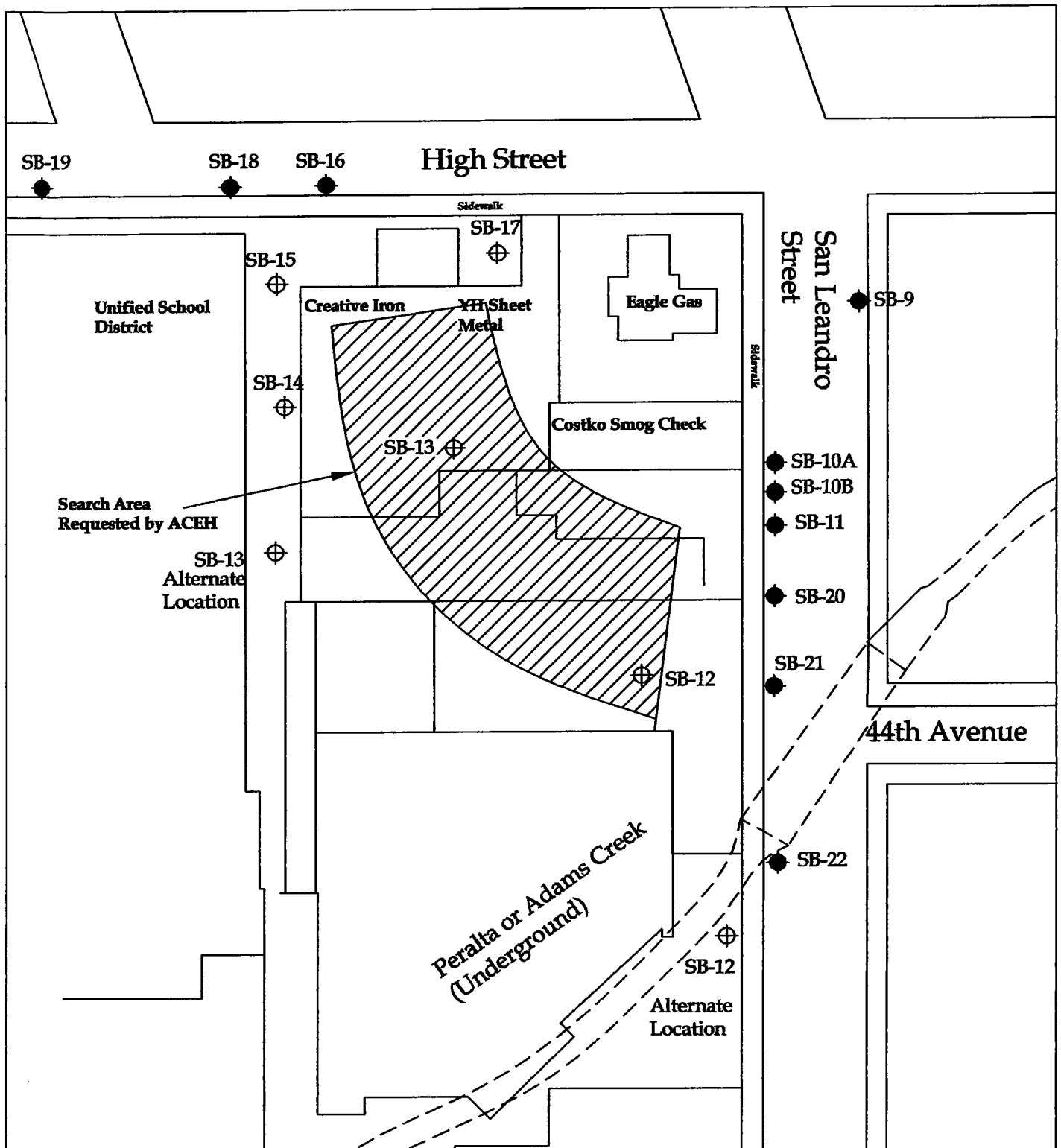
Description	Approximate start date or projected time period	Approximate Duration	Completion Date	Notes/Agency
Submit Work Plan	December 19, 2006			ACEH
Approve Work Plan	January 4, 2007			
Obtain drill bids	April 6, 2007			
Schedule driller	May 2007			
Initiate process to obtain off-site access agreements for SB-14, SB-15, and SB-17 boring locations	March 8, 2007		August 15, 2007	One owner: Naresh Sawhney
Initiate process to obtain off-site access agreements for SB-12 and SB-13 boring locations	March 27, 2007		August 14, 2007	Four owners: Theresa and Christopher Young Trust; Anna & Angelos Sakkis Trust; Vulcan LLC; and Wathen Pano II LLC
Submit Traffic Plan	April 25, 2007		June 2007	City of Oakland
Submit Boring and Well Permit Applications	May 2007		June 2007	Alameda County Public Works Agency, Water Resources Section
Drill 9 off-site borings in High Street & San Leandro Street			June 11-15, 2007	
Drill off-site boring SB-12 & SB-13 with limited access equipment	September-October 2007	2-4 days		
Drill off-site borings SB-14, SB-15 & SB-17	September-October 2007	5 days		
Install 2 deep on-site monitoring wells	September 2007	2 days		Soil & groundwater samples for the persulfate bench test will be collected during on-site monitoring well installation
Install 6 permanent soil vapor monitoring wells	September 2007	1-2 days		
Develop 2 deep monitoring wells	September-October 2007	1 day		Existing wells chosen for extraction for the HVDPE pilot test will be re-developed along with new on-site deep monitoring wells, to improve well efficiency
Survey wells and borings	October 2007	1-2 days		
Dispose of soil cuttings	October 2007	30 days		
Submit report to ACEH			November 30, 2007	

REVISED SCHEDULE as of August 23, 2007
Eagle Gas Station, 4301 San Leandro Street, Oakland, California 94601
LOP Site ID# 2118, USTCF Claim No. 014551

Interim Remediation Report Tasks

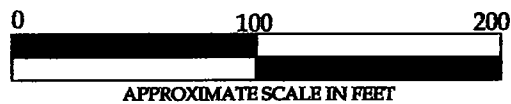
Description	Approximate start date or time period	Approximate Duration	Completion Date	Notes/Agency
Analyze samples for Bioremediation Feasibility Study	April 9, 2007		April 2007	
Produce Bioremediation Feasibility Study Report	April 23, 2007		July 16, 2007	
Persulfate Bench Test	September 2007	2 months		Soil & groundwater samples for the persulfate bench test will be collected during on-site monitoring well installation scheduled for September 2007
Sample & analyze soil vapor samples	September-October 2007	2 weeks		
HVDPE Pilot Test	October 2007	5-6 days		Existing wells chosen for extraction for the HVDPE pilot test will be re-developed along with new on-site deep monitoring wells, to improve well efficiency
Analyze samples from HVDPE Pilot Test	October 2007	2 weeks		
Submit Interim Remediation report to ACEH			November 30, 2007	





LEGEND

- Soil Boring Location
- ⊕ Proposed Soil Boring Location



New and Proposed Off-site Soil Boring Locations

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.
ZP046D

Figure Date
8/07

Figure
6

Olivia Jacobs

From: Karel Detterman
Sent: Tuesday, September 18, 2007 2:56 PM
To: Wickham, Jerry, Env. Health
Cc: Hamlin, Vicky; Sandy Young; Hermy Tam; Gavin Fisco; Olivia Jacobs
Subject: RE: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Clearwater Project # ZP046D - 72-hour advance notification of the start of field activities

Hi Jerry:

Here is the revised drilling schedule:

Wednesday, September 19, 2007: installation of six vapor wells at the Eagle Gas Station site;

Thursday and Friday, September 20 and 21, 2007: Direct-push soil borings SB-14 and SB-15 (Creative Iron alley), SB-17 YH Sheet Metal driveway (starting at 5 PM when business closes), and SB-13 (Vulcan Lofts alley;

Wednesday and Thursday September 26-27, 2007: Direct-push soil boring SB-12 (Vulcan Lofts interior courtyard).

The schedule for the on-site CPT holes and the installation of the 2 on-site monitoring wells is pending at this moment, but as soon as Gregg Drilling has an opening for both activities on a Tuesday, Wednesday, or Thursday, as per Mr. Muhammad Jamil's request, I'll get those dates to you.

Thank you,

Karel Detterman, P.G.
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228
Fax (510) 232-2823

From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Tuesday, September 18, 2007 8:26 AM
To: Karel Detterman
Subject: RE: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Clearwater Project # ZP046D - 72-hour advance notification of the start of field activities

Hi Karel,

Thank you for the update.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

9/18/2007

From: Karel Detterman [mailto:KDetterman@clearwatergroup.com]
Sent: Monday, September 17, 2007 2:55 PM
To: Wickham, Jerry, Env. Health
Cc: Sandy Young; Hermy Tam; Gavin Fisco; Olivia Jacobs; Hamlin, Vicky
Subject: FW: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Clearwater Project # ZP046D - 72-hour advance notification of the start of field activities

Hi Jerry:

Please see the attached letter sent by Muhammad Jamil, the property owner of Eagle Gas station. I called his tenant, Shan Sunder, last Thursday informing him of the 9/19 & 9/24 drilling work and Shan was extremely upset by the perceived disruption to his business. I then called Mr. Jamil to request his intervention, and the attached letter documents the result. I am in the process of re-arranging the drilling schedule I sent you last Thursday because of this development and will send you a revised schedule as soon as I have it set again.

Thank you,

Karel Detterman, P.G.
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228
Fax (510) 232-2823

From: Karel Detterman
Sent: Thursday, September 13, 2007 4:33 PM
To: 'Wickham, Jerry, Env. Health'
Cc: Sandy Young; Hermy Tam; Gavin Fisco; Olivia Jacobs
Subject: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Clearwater Project # ZP046D - 72-hour advance notification of the start of field activities

Hi Jerry:

Here is our drilling schedule for next week:

Wednesday, September 19, 2007: installation of six vapor wells and two CPT borings at the Eagle Gas Station site;

Thursday and Friday, September 20 and 21, 2007: Direct-push soil borings SB-14 and SB-15 (Creative Iron alley), SB-17 YH Sheet Metal driveway (starting at 5 PM when business closes), and SB-13 (Vulcan Lofts alley);

Monday, September 24, 2007: Installation of MW-1D and MW-7D at the Eagle Gas Station site;

Wednesday and Thursday September 26-27, 2007: Direct-push soil boring SB-12 (Vulcan Lofts interior courtyard).

Thank you,

Karel Detterman, P.G.
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228

9/18/2007

Muhammad Jamil
40092 Davis St.
Fremont, CA 94538
(510) 656-3487

September 17, 2007

Dear Olivia

Please do not perform any job on Mondays and Fridays at Eagle Gas (4301 San Leandro St. Oakland) because these are busy days for business and Shan Sunder (Tenant) is upset to loose the business, Tuesday to Thursday early morning is better time to do the job. The workers should not block the driveways; I hope you understand my problem I do not want to have argument with Shan Sunder.

Thanks

MUHAMMAD JAMIL

Thank you I've received your note.

Olivia Jacobs

Karel Detterman

From: Karel Detterman
Sent: Friday, October 12, 2007 12:45 PM
To: Wickham, Jerry, Env. Health
Cc: Sandy Young; Hermy Tam; Gavin Fisco; Olivia Jacobs; Rob Nelson; Karel Detterman
Subject: RE: Fuel Leak Case # RO 0096, Eagle Gas, 4301 San Leandro Street, Oakland, CA, Clearwater Project # ZP046D
Attachments: Fig 2b Off-site Soil Boring locations.pdf; Drilling schedule Sept_Oct 2007.xls

Hi Jerry:

I wanted to give you a brief update of the drilling events at and off-site from Eagle Gas and also let you that I am leaving the Clearwater Group and joining a firm that does work for the EPA.

Rob Nelson (Ext 237) will be taking over the project as of Monday, Oct. 15th.

Attached is the actual drilling schedule and a revised "Off-site Soil Boring Location" figure. As of today, all of the off-site soil borings are complete as are the installation of the six vapor monitoring wells, and the two deep groundwater monitoring wells, MW-1D & MW-7D. We ran CPT to a total depth of 60 feet bgs in CPT-1D and CPT-7D, located adjacent to new wells MW-1D & MW-7D. With the limited access direct push drilling equipment, we were able to reach a total depth of 34 feet bgs and obtain a groundwater sample at 34 feet in the Vulcan Lofts Courtyard soil boring, SB-12. We were able to reach a depth of 52 feet bgs in SB-13, SB-14, SB-15, and SB-17 and obtain water samples from the deeper water-bearing zone in all four soil borings.

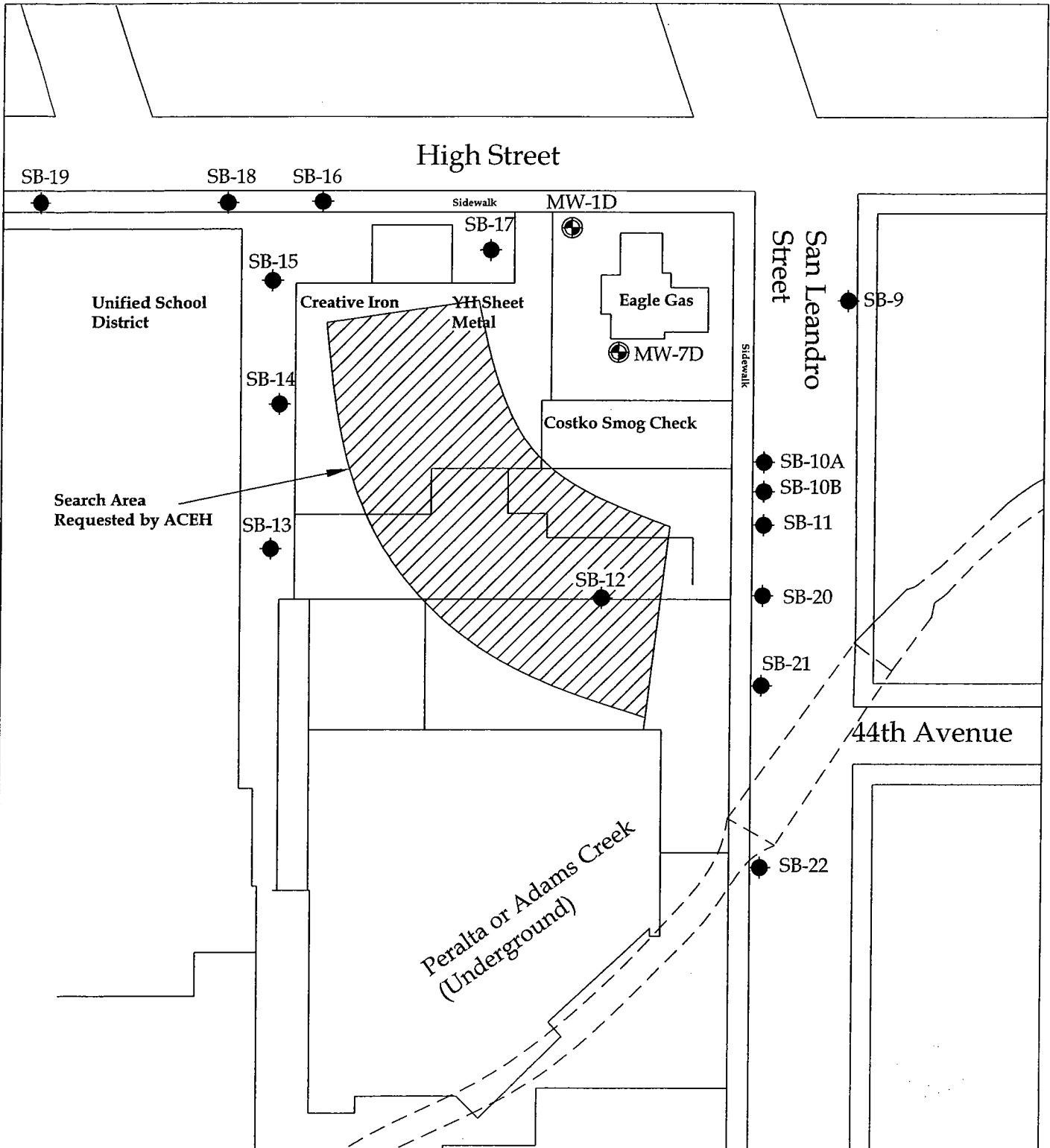
Remediation Services, Inc. (RSI) is scheduled to perform the HVDPE pilot test Wednesday through Sunday, November 14 - 18, 2007.

Thank you for being responsive to Clearwater's questions and suggestions.

Sincerely,

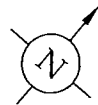
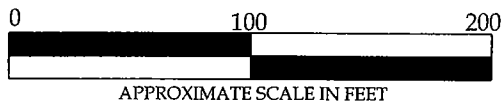
Karel Detterman, P.G.
Clearwater Group
229 Tewksbury Avenue
Point Richmond, CA 94801
(510) 307-9943 Ext. 228
Fax (510) 232-2823

10/12/2007



LEGEND

- Soil Boring Location
- ⊕ Deep Well Location



Off-site Soil Boring Locations
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

Project No. ZP046	Figure Date 10/07	Figure 2b
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Drilling Schedule
Sept - Oct, 2007
Eagle Gas Station, 4301 San Leandro St., Oakland

Day	Soil boring or drilling event
Wed 9/19	install VP-1 through VP-6 Eagle Gas Station
Thurs 9/20	SB-14 Creative Iron alley SB-17 YH Sheet Metal driveway start at 5 PM
Fri 9/21	SB-13 Vulcan Lofts alley
Tues 9/25	SB-15 Creative Iron alley
Wed 9/26	SB-12 Vulcan Lofts courtyard
Thurs 9/27	CPT -1D & CPT 7D on site
Thurs 10/4	MW-1D & MW-7D install on site

Note: SB-17, in YH Sheet Metal driveway will be started at 5 PM, when business closes for the day.



November 5, 2007

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RE: Request for Extension of HVDPE Pilot Test

Fuel Leak Case # RO 0096
Eagle Gas Station
4301 San Leandro Street
Oakland, California
Clearwater Project # ZP046D

Dear Mr. Wickham:

Clearwater Group (Clearwater) requests an extension for implementing the high vacuum dual phase extraction (HVDPE) test, which is part of the continuing site investigation presented in Clearwater's December 19, 2006, *Revised Work Plan* (Work Plan). Clearwater recently completed the onsite and offsite soil borings presented in the Work Plan. The results from the soil borings will be presented in the upcoming *Clearwater 2007 Site Investigation Report*. The lithologic data from the new borings has been incorporated with lithologic data from the previous onsite soil borings to generate new cross sections. The preliminary cross sections indicate that the site conceptual model will need to be revised, and that these revisions will affect the design of the proposed HVDPE test.



In addition, Clearwater has been in discussion with RSI, the HVDPE contractor, and a licensed geotechnical and environmental engineer regarding the proposed HVDPE test. Both RSI and the engineer have expressed concern that none of the existing well locations, or their screened intervals, are suitable for conducting a HVDPE test. The cross sections corroborate their opinions.

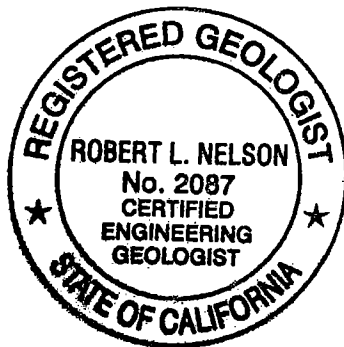
Therefore, Clearwater requests an extension for conducting the HVDPE test in order to 1) complete the *2007 Site Investigation Report* first and subsequently propose the location and design of HVDPE test well(s) based on the revised concept of the site lithology and 2) install the HVDPE well(s) and make other preparations for the HVDPE test. Based on the preliminary cross sections and the most likely placement of well(s) constructed for the HVDPE pilot test, the HVDPE pilot test well(s) may be used later for remediation. If you have any questions, please contact me at (510) 307-9943 extension 237 or at rnelson@clearwatergroup.com.

Sincerely,

CLEARWATER GROUP

A handwritten signature in cursive script that reads "Robert L. Nelson".

Robert L. Nelson, PG, CEG
Senior Geologist



Olivia Jacobs

From: Rob Nelson
Sent: Thursday, November 29, 2007 3:22 PM
To: Olivia Jacobs
Subject: FW: Schedule for DPE test at Eagle Gas case RO0096

From: Wickham, Jerry, Env. Health [mailto:jerry.wickham@acgov.org]
Sent: Tuesday, November 06, 2007 4:40 PM
To: Rob Nelson
Subject: Schedule for DPE test at Eagle Gas case RO0096

Rob,

Based on your request in correspondence dated November 5, 2007, the schedule for implementing a DPE pilot test is extended until after completion of the Site Investigation Report, which is due on 11/30/2007. Please propose a schedule for the DPE pilot test in the Site Investigation Report.

Regards,
Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502-6577
510-567-6791 phone
510-337-9335 fax
jerry.wickham@acgov.org

11/29/2007

APPENDIX B
PERMITS

Alameda County Public Works Agency - Water Resources Well Permit



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

Application Approved on: 06/06/2007 By jamesy

**Permit Numbers: W2007-0663 to W2007-0666
Permits Valid from 10/04/2007 to 10/04/2007**

Application Id: 1181063426382
Site Location: 4301 San Leandro St, CA
Project Start Date: 06/11/2007
Extension Start Date: 10/04/2007
Extension Count: 3

City of Project Site: Oakland
Completion Date: 09/28/2007
Extension End Date: 10/04/2007
Extended By: vickyh1

Applicant: Clearwater Group - Karel Detterman
229 Tewksbury Avenue, Point Richmond, CA 94801
Property Owner: Muhammed Jamil & Farah Naz
40092 Davis St., Fremont, CA 94538
Client: ** same as Property Owner **

Phone: 510-307-9943

Phone: 510-656-3487

Receipt Number: WR2007-0251 **Total Due:** \$1000.00
Payer Name : Clearwater G **Total Amount Paid:** \$1000.00
Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Construction-Monitoring-Monitoring - 2 Wells

Driller: Precision Drilling (636387) & Gregg Drilling (below) - Lic #: 485165 - Method:
other

Work Total: \$600.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2007-0663	06/06/2007	09/09/2007	MW-1D	8.00 in.	2.00 in.	30.00 ft	100.00 ft
W2007-0664	06/06/2007	09/09/2007	MW-7D	8.00 in.	2.00 in.	30.00 ft	100.00 ft

Specific Work Permit Conditions

1. 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.

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

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

4. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with

Alameda County Public Works Agency - Water Resources Well Permit

appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org 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.

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

7. Minimum surface seal thickness is two inches of cement grout placed by tremie

8. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of \$500.00.

Borehole(s) for Investigation-Contamination Study - 23 Boreholes

Driller: Precision Drilling (636387) & Gregg Drilling (below), RSI-802334, Fast-Tek,
624461 - Lic #: 485165 - Method: other

Work Total: \$200.00

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2007-0665	06/06/2007	09/09/2007	23	2.00 in.	100.00 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. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities

Alameda County Public Works Agency - Water Resources Well Permit

or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

5. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org 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.

6. 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.

7. 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.

Remediation Well Construction-Extraction - 6 Wells

Driller: Precision Drilling, Fast-Tek drilling (C-57 No. 624461) - Lic #: 636387 -

Work Total: \$200.00

Method: DP

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2007-0666	06/06/2007	09/09/2007	VP-1	1.00 in.	0.25 in.	2.00 ft	10.00 ft
W2007-0666	06/06/2007	09/09/2007	VP-2	1.00 in.	0.25 in.	2.00 ft	10.00 ft
W2007-0666	06/06/2007	09/09/2007	VP-3	1.00 in.	0.25 in.	2.00 ft	10.00 ft
W2007-0666	06/06/2007	09/09/2007	VP-4	1.00 in.	0.25 in.	2.00 ft	10.00 ft
W2007-0666	06/06/2007	09/09/2007	VP-5	1.00 in.	0.25 in.	2.00 ft	10.00 ft
W2007-0666	06/06/2007	09/09/2007	VP-6	1.00 in.	0.25 in.	2.00 ft	10.00 ft

Specific Work Permit Conditions

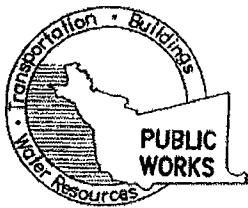
1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

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

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

Alameda County Public Works Agency - Water Resources Well Permit

4. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org 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. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).
 6. Minimum surface seal thickness is two inches of cement grout placed by tremie
 7. 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 Section, Attn: James Yoo
 399 Elmhurst Street, Hayward, CA 94544-1395
 Phone: (510) 670-6633 Fax: (510) 782-1939
 General Info: www.acgov.org/pwa/wells or email at wells@acpwa.org

DRILLING PERMIT APPLICATION

Applicants: Please attach a site map for all drilling permit applications.

Location of Project: 4301 San Leandro Street

City: Oakland, CA

Project start date: 06/11/07

Project completion date: 06/15/07

PROPERTY OWNER	
Name:	Muhammad Jamil & Farah Naz
Address:	40092 Davis Street
City, State, Zip:	Fremont, CA 94538
Phone:	510-656-3487
E-mail Address:	

APPLICANT	
Name:	Clearwater Group
Address:	229 Tewksbury Ave.
City, State, Zip:	Point Richmond CA 94801
Phone:	510-307-9943x228
E-mail Address:	kdetterman@clearwatergroup.org
cc E-mail Address:	

WORK CATEGORIES

Type of Project

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input checked="" type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input type="checkbox"/>

Proposed Water Supply Well Use

New Domestic	<input type="checkbox"/>	Industrial	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>	Other	<input type="checkbox"/>

Drilling Method

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other Direct Push	<input checked="" type="checkbox"/>		
		Precision Drilling			

Driller's Name: 1. Precision Drilling Driller's License No. 636387 AND 2. Gregg Drilling License No: 485165

WELL PROJECTS

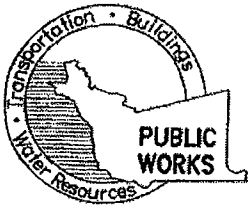
Owner-Well ID	Drill Hole Diameter (in.)	Casing Diameter (in.)	Surface Seal Depth (ft.)	Max. Depth (ft.)	Latitude	Longitude
1MW-1D&MW7D	8	2	~30	100		
2VP-1toVP-6	1	0.25	Variable	10		
3						
4						
5						
6						

GEOTECHNICAL/ENVIRONMENTAL/CONTAMINATION PROJECTS

	Number of Boreholes	Hole Diameter (in.)	Max. Depth (ft.)
1 Precision Drilling	14 soil borings	2	100
2 Precision Drilling	9 CPT	2	100

Applicant's Signature: Kael Detter

Approved by: _____



ALAMEDA COUNTY PUBLIC WORKS AGENCY
 Water Resources Section, Attn: James Yoo
 399 Elmhurst Street, Hayward, CA 94544-1395
 Phone: (510) 670-6633 Fax: (510) 782-1939
 General Info: www.acgov.org/pwa/wells or email at wells@acpwa.org

SITE HAZARD INFORMATION

Please provide the following information for the site:

Owner's Name: Mohammad Jamil

Site Address: 4301 San Leandro St., Oakland, CA

Consultant On Site: Clearwater Group Phone No.: 510/307-9943 X 228 Cell No.: 510-672-5300

Site Safety Officer: Karel Detterman Phone No.: 510/307-9943 X 228 Cell No.: 510-672-5300

Type of Facility: Active Gas Station *Use only during field work*

Anticipated Hazardous Substances – (Attach Additional Sheets if Necessary)
 (Please include concentrations below. Note if free product historically on site.)

Name	Expected Concentrations (ppm)		PEL (ppm)	Health Effects
<input type="checkbox"/> Gasoline <input type="checkbox"/> Diesel <input type="checkbox"/> Waste Oil	on-site	groundwater:	air-benzene-10	headache-nausea
	benzene	3.6		
	MTBE	640		
	T B A 3 5 0			
	o n - s i t e s o i l			
	b e n z e n e 1 1			
	M T B E 3 1 0			

District Use Only

Checked Against
Reported Contaminants

Permit No.:

Site Safety Meeting

Date:

Time:

Level of Personal Protection Equipment A B C D

Personal Protective Equipment:

R = Required A = As Needed (with description of action concentrations)

- | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------------------------------------|--------------------------|----------------|-------------------------------------|--------------------------|--------------|-------------------------------------|--------------------------|---------------------|-------------------------------------|--------------------------|--------------------|-------------------------------------|--------------------------|----------------|--|--------------------------|-------------------------------------|------------------|-------|--------------------------|-------------------------------------|--------------------|-------|--------------------------|-------------------------------------|-------------------|-------|-------------------------------------|--------------------------|----------------|----------------|--------------------------|-------------------------------------|--------|-------|
| <table style="width: 100%; border: none;"> <tr> <td style="width: 20px;"><input checked="" type="checkbox"/></td> <td style="width: 20px;"><input type="checkbox"/></td> <td>Hard Hat</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Safety Shoes</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Orange Traffic Vest</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Hearing Protection</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Safety Eyewear</td> </tr> </table> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hard Hat | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Safety Shoes | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Orange Traffic Vest | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hearing Protection | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Safety Eyewear | <table style="width: 100%; border: none;"> <tr> <td style="width: 20px;"><input type="checkbox"/></td> <td style="width: 20px;"><input checked="" type="checkbox"/></td> <td>Clothing (Type):</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Respirator (Type):</td> <td>_____</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Cartridge (Type):</td> <td>_____</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Gloves (Type):</td> <td><u>nitrile</u></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Other:</td> <td>_____</td> </tr> </table> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Clothing (Type): | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Respirator (Type): | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Cartridge (Type): | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Gloves (Type): | <u>nitrile</u> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other: | _____ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hard Hat | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Safety Shoes | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Orange Traffic Vest | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Hearing Protection | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Safety Eyewear | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Clothing (Type): | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Respirator (Type): | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Cartridge (Type): | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Gloves (Type): | <u>nitrile</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other: | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Site Hazard Information Provided By: Karel Detterman Phone: 510/307-9943 X 228

ClearwaterGroup/SeniorGeologist Karel Detterman Date: 6/4/07
 Company Name & Title Signature

EMCO WHEATON A722
MONITORING WELL BOX
OR EQUIVALENT

LOCKING EXPANSION PLUG

EXISTING SURFACE

2' x 2' x 1' REBAR REINFORCED
CONCRETE PAD (IF REQUIRED)

SAND-CEMENT SLURRY
OR NEAT CEMENT

30'
TBD

MINIMUM
48' TBD

WATER LEVEL

3' TBD

BENTONITE SEAL

1'

WELL CASING: 2" OR 4" DIA.
SCHEDULE 40 PVC

SAND FILTER PACK
#2/12 or #30 SAND

5'

WELL SCREEN: MACHINE SLOTTED PVC
0.01" SCREEN

PVC THREADED END-CAP,
OR SLIP CAP ATTACHED WITH
STAINLESS STEEL SCREWS

8-INCHES (2-INCH WELL)
10-INCHES (4-INCH WELL)

TBD - TO BE DETERMINED IN THE FIELD
NOT TO SCALE

Proposed Monitoring Well Constuction Detail

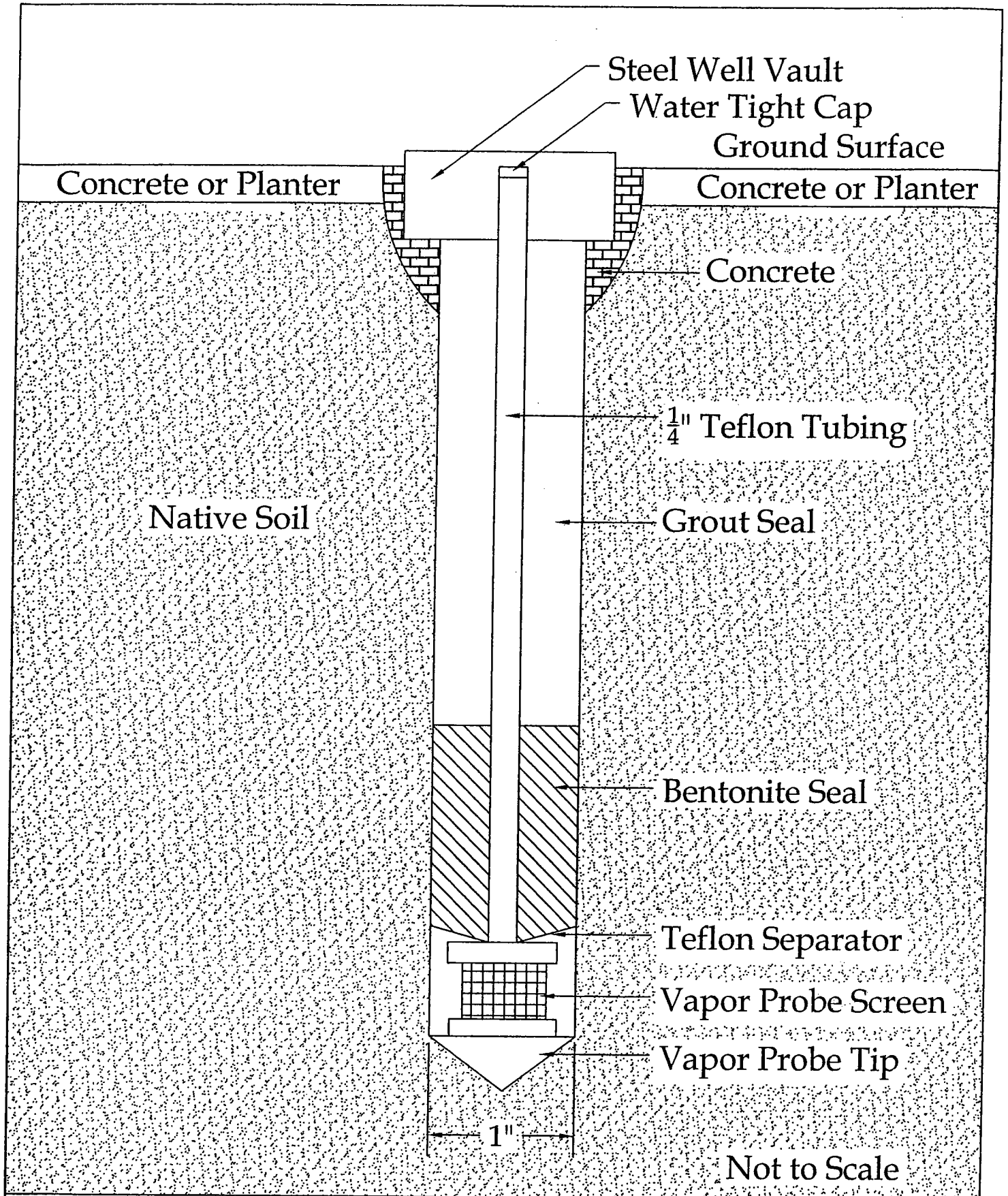
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.
ZP046D

Figure Date
6/07

Figure
1



Typical Soil Vapor Monitoring Well Installation

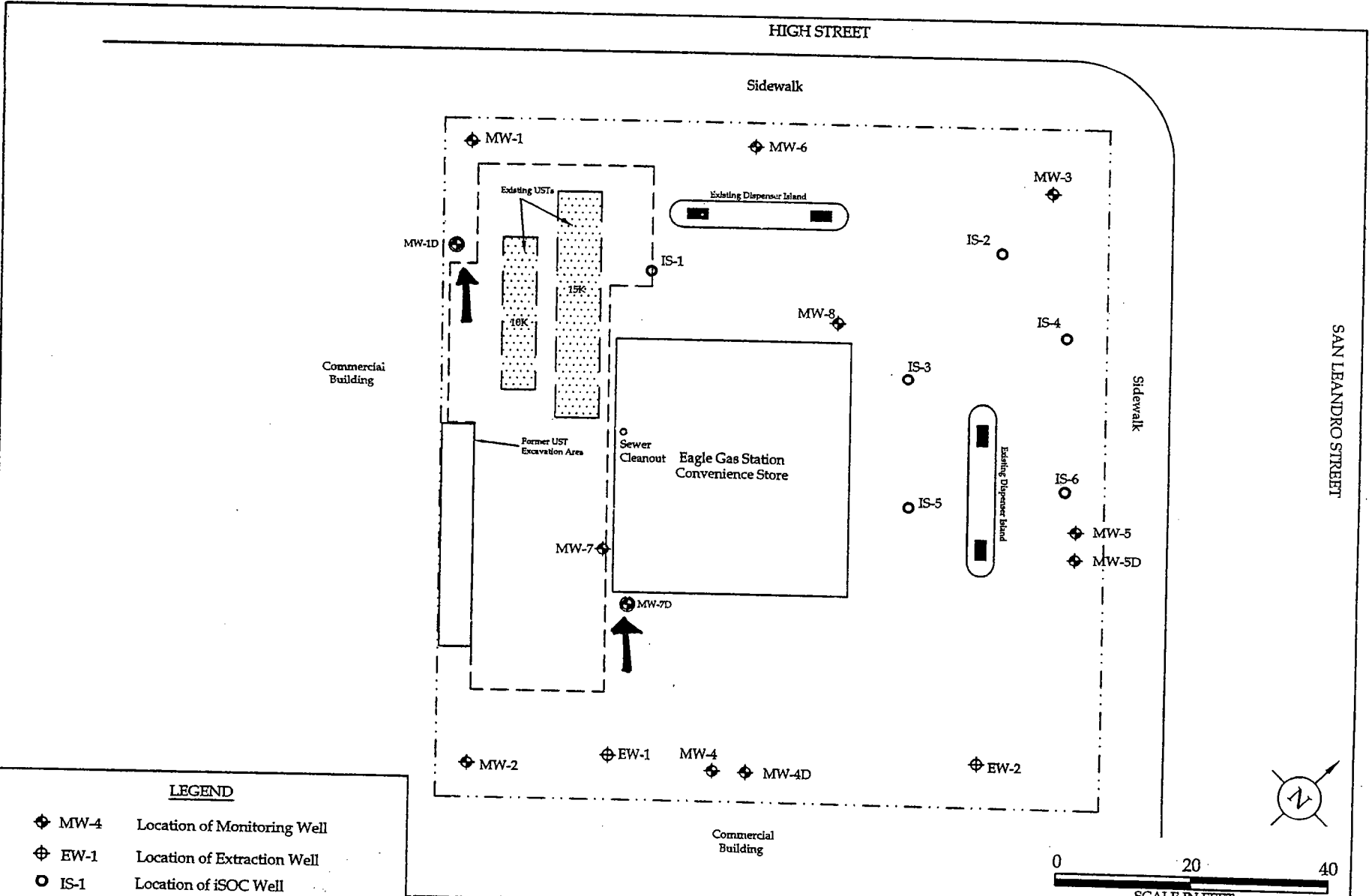
Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

Project No.
 ZP046D

Figure Date
 6/07

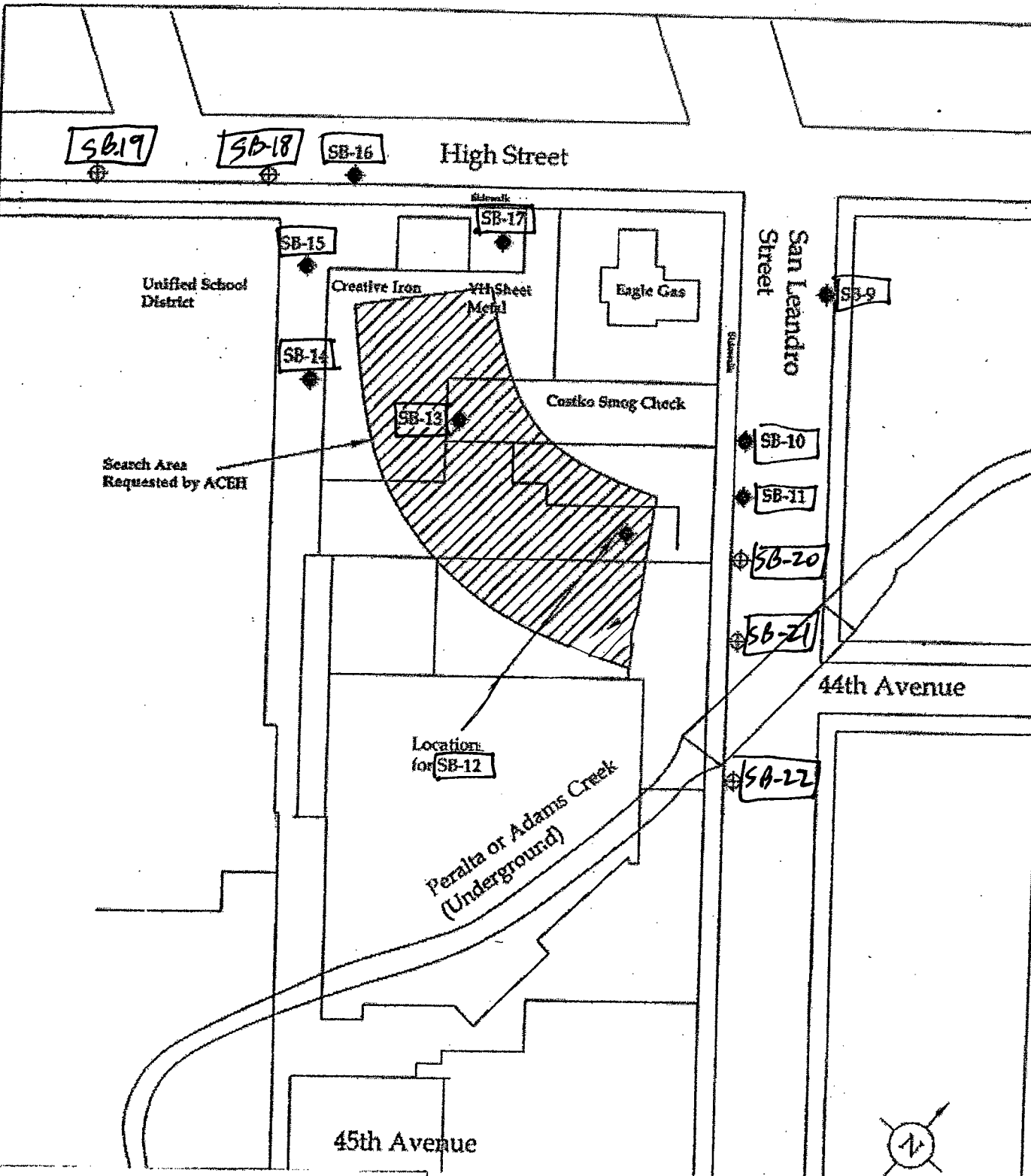
Figure
 2



LEGEND	
◆ MW-4	Location of Monitoring Well
⊕ EW-1	Location of Extraction Well
○ IS-1	Location of iSOC Well
---	Property Line
⊕ MW-10D	Proposed Deep Well Location

Existing and Proposed Deep Well Locations
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 11/06	Figure 3



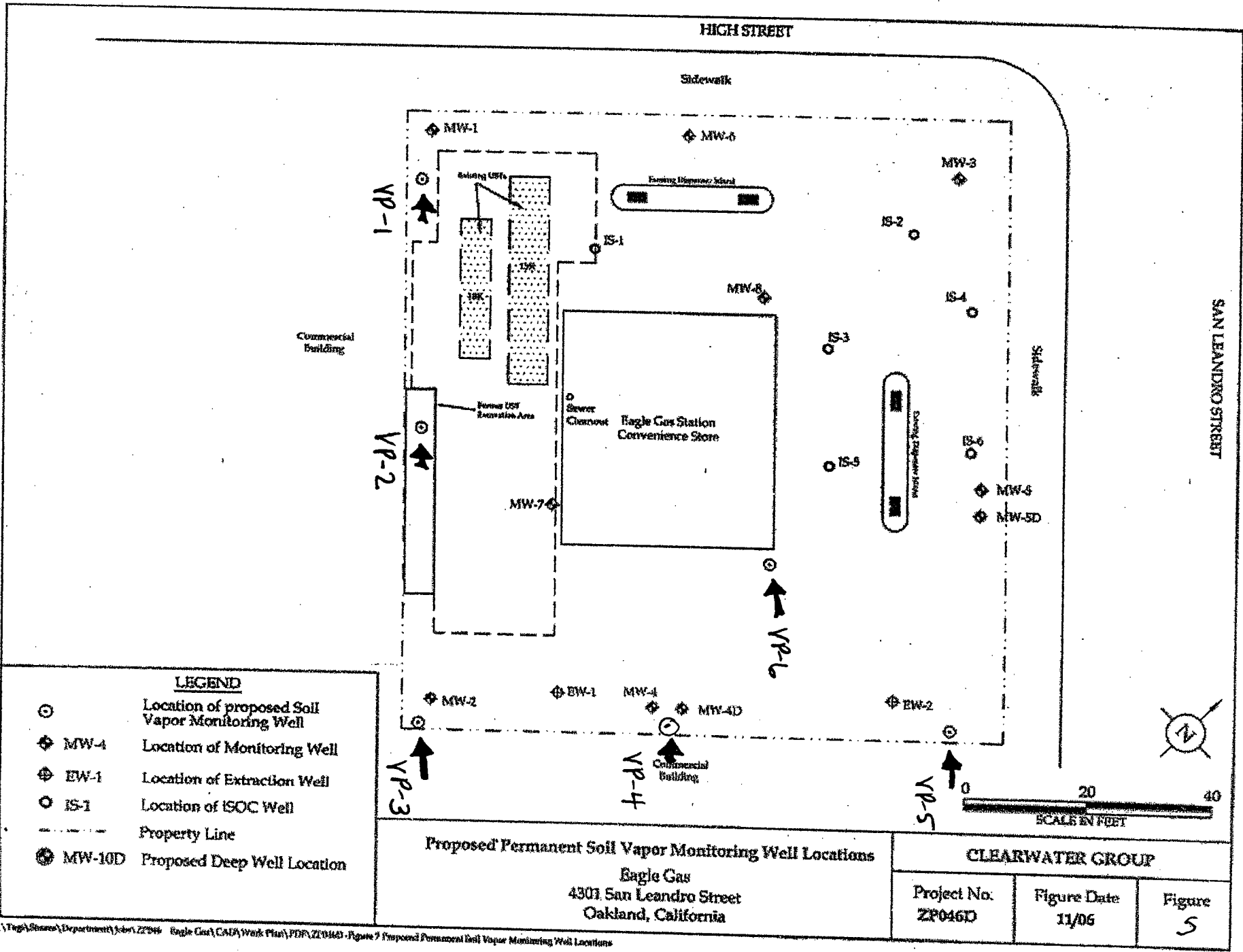
LEGEND

- Proposed Soil Boring Location
- ⊕ Optional Soil Boring Location

SB-15
Borings - Access



Proposed Off-site Soil Boring Locations Eagle Gas 4301 San Leandro Street Oakland, California	CLEARWATER GROUP		
	Project No. ZP046D	Figure Date 12/06	Figure 4



LEGEND	
⊙	Location of proposed Soil Vapor Monitoring Well
◆ MW-4	Location of Monitoring Well
⊕ EW-1	Location of Extraction Well
○ IS-1	Location of ISOC Well
- - -	Property Line
⊗ MW-10D	Proposed Deep Well Location

Proposed Permanent Soil Vapor Monitoring Well Locations
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP		
Project No. ZP046D	Figure Date 11/06	Figure 5

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation.

Job Site 4301 SAN LEANDRO ST Parcel# 034 -2265-001-00 Appl# X0700512

Descr soil boring loc 1 along San Leandro St Permit Issued 05/21/07

Work Type EXCAVATION-PRIVATE P

USA #

Util Co. Job #

Acctg#:

Util Fund #

Applicant

Phone#

City

License Classes--

Owner NAZ FARAH

Contractor THE AUGER GROUP INC

EX (510) 307-8823 799 441A C57 B

Arch/Engr

Agent

Applic Addr 229 TEWKSBURY DRIVE, POINT RICHMOND, CA 94801

JOB SITE

\$14.25 TOTAL FEE PAID AT ISSUANCE

\$61.00	Applic	\$300.00	Permit
\$0.00	Process	\$34.30	Rec Mgmt
\$0.00	Gen Plan	\$0.00	Invstg
\$0.00	Other	\$18.95	Tech Enh

DIST: ADDRESS:

CITY OF OAKLAND

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation.

Job Site 4301 SAN LEANDRO ST

Parcel# 034 -2265-001-00

Appl# X0700513

Descr soil boring loc 2 along High St

Permit Issued 05/21/07

Work Type EXCAVATION-PRIVATE P

USA #

Utility Co. Job #
Utility Fund #

Acctg#:

Owner NAZ FARAH

Contractor THE AUGER GROUP INC

Arch/Engr

Agent

Applic Addr 229 TEWKSBURY DRIVE, POINT RICHMOND, CA 94803

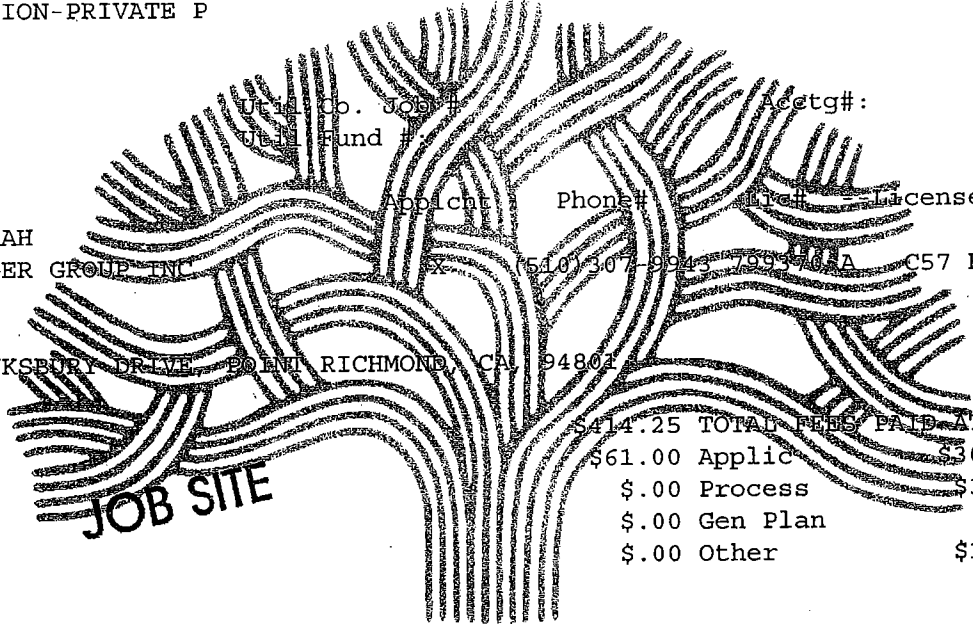
Applicant

Phone#

Trch

License Classes--

(510) 307-9943 709346A C57 B



\$414.25 TOTAL FEES PAID AT ISSUANCE
\$61.00 Applic \$300.00 Permit
\$.00 Process \$34.30 Rec Mgmt
\$.00 Gen Plan \$.00 Invstg
\$.00 Other \$18.95 Tech Enh

ADDRESS:

DIST:

CITY OF OAKLAND

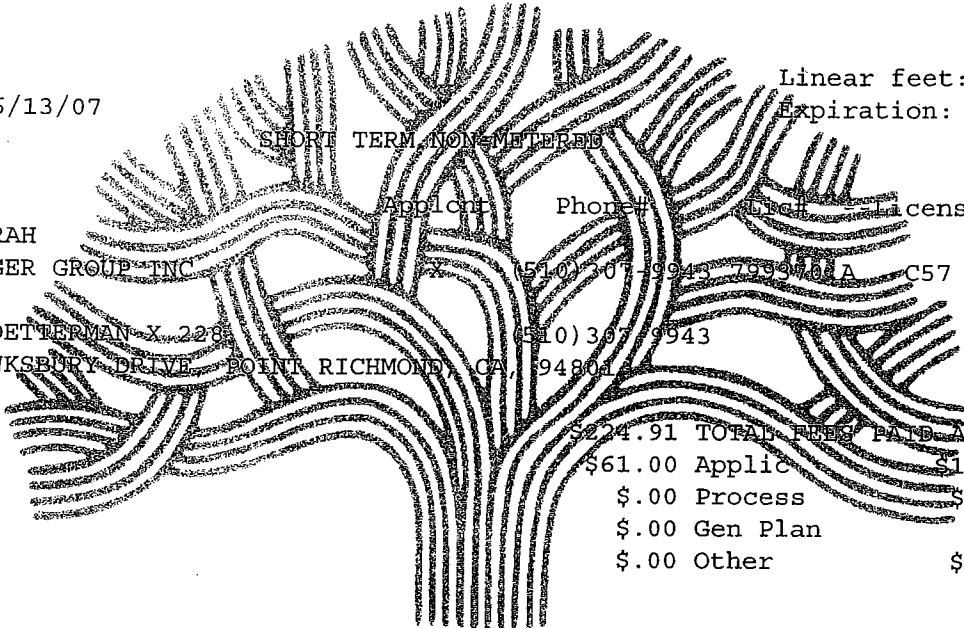
Applications for which no permit is issued within 180 days shall expire by limitation.

Job Site 4301 SAN LEANDRO ST Parcel# 034 -2265-001-00 Appl# OB070351

Reserve parking for construction & block traffic per Permit Issued 05/21/07
approved TCP soil boring loc 1 along San Leandro St
Seven parking spaces total

Nbr of days: 3
Effective: 06/13/07

Linear feet: 75
Expiration: 06/15/07



SHORT TERM NON-METERED

Owner NAZ FARAH
Contractor THE AUGER GROUP INC
Arch/Engr
Agent KAREL DETTERMAN X 228
Applic Addr 229 TEWKESBURY DRIVE POINT RICHMOND, CA, 94801

Applicant Phone# (510) 307-9943
License Classes-- C57 B

\$224.91 TOTAL FEE PAID AT ISSUANCE
\$61.00 Applic \$135.00 Permit
\$.00 Process \$18.62 Rec Mgmt
\$.00 Gen Plan \$.00 Invstg
\$.00 Other \$10.29 Tech Enh

DIST: ADDRESS:

JOB SITE
CITY OF OAKLAND

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: Karel Detter 5/21/07
Issued by: [Signature] w

29046

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

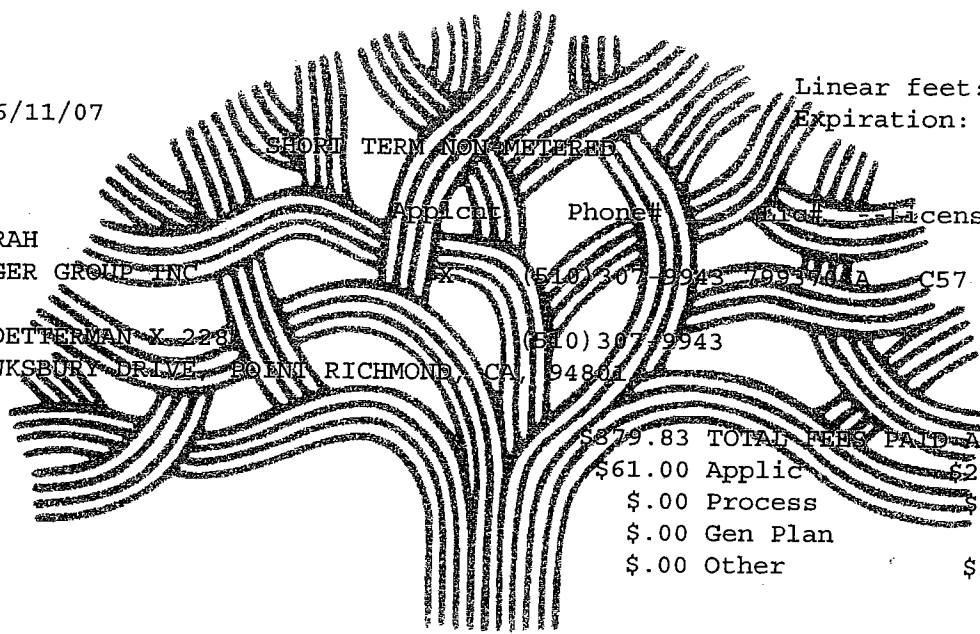
Applications for which no permit is issued within 180 days shall expire by limitation.

Job Site 4301 SAN LEANDRO ST Parcel# 034 -2265-001-00 Appl# OB070394

Block portion of s/w. Leave 5.5' clear for pedestrian access Permit Issued 06/07/07 per approved TCP on High St

Nbr of days: 2
Effective: 06/11/07

Linear feet: 225
Expiration: 06/12/07



SHORT TERM NON-METERED

Owner NAZ FARAH
Contractor THE AUGER GROUP INC
Arch/Engr
Agent KAREL DETTERMAN X-228
Applic Addr 229 TEWKSBURY DRIVE, SUITE RICHMOND, CA 94801

Applicant Phone# License Classes--
(510) 307-9943 7994AAA C57 B

\$879.83 TOTAL FEES PAID AT ISSUANCE
\$61.00 Applic \$270.00 Permit
\$.00 Process \$31.45 Rec Mgmt
\$.00 Gen Plan \$.00 Invstg
\$.00 Other \$17.38 Tech Enh

DIST: _____
RESS: _____

CITY OF OAKLAND

JOB SITE

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____
Issued by: _____ *[Signature]* _____

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation.

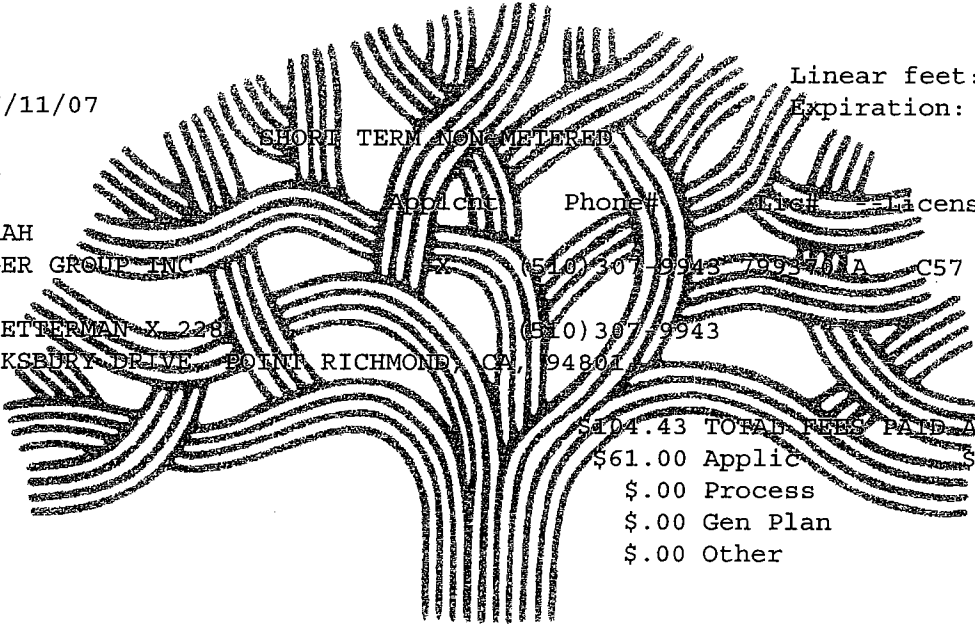
Job Site 4301 SAN LEANDRO ST Parcel# 034 -2265-001-00 Appl# OB070395

block traffic per approved TCP soil boring
along San Leandro St on Northbound side

Permit Issued 06/07/07

Nbr of days: 1
Effective: 06/11/07

Linear feet: 50
Expiration: 06/11/07



SHORT TERM NON-METERED

Owner NAZ FARAH
Contractor THE AUGER GROUP INC
Arch/Engr

Applicant Phone City License Classes--

Agent KAREL DETBERMAN X 228
Applic Addr 229 TEWKSBURY DRIVE POINT RICHMOND, CA, 94801

(510) 307-9943 799-1111 A C57 B

(510) 307-9943

\$104.43 TOTAL FEE PAID AT ISSUANCE
\$61.00 Applic \$30.00 Permit
\$.00 Process \$8.65 Rec Mgmt
\$.00 Gen Plan \$.00 Invstg
\$.00 Other \$4.78 Tech Enh

RESS:
DIST:

CITY OF OAKLAND

JOB SITE

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____
Issued by: _____ *[Signature]* _____

Applications for which no permit is issued within 180 days shall expire by limitation.

Job Site 4301 SAN LEANDRO ST

Parcel# 034 -2265-001-00

Appl# OB070397

reserve parking only soil boring
along San Leandro St on Southbound side

Permit Issued 06/07/07

Nbr of days: 2
Effective: 06/14/07

Linear feet: 100
Expiration: 06/15/07

SHORT TERM NON-METERED

Owner NAZ FARAH
Contractor THE AUGER GROUP INC
Arch/Engr
Agent KAREL DETTERMAN X-2281
Applic Addr 229 TEWKSBURY DRIVE, POINT RICHMOND, CA 94801

Applicant Phone# License Classes--

(510) 307-9943-799-1111A C57 B

(510) 307-9943

\$207.70 TOTAL FEES PAID AT ISSUANCE
\$61.00 Applic \$120.00 Permit
\$.00 Process \$17.20 Rec Mgmt
\$.00 Gen Plan \$.00 Invstg
\$.00 Other \$9.50 Tech Enh

RESS:

DIST:

CITY OF ^{JOB SITE} OAKLAND

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: _____

Issued by: _____



This obs. permit replaced OB permit # 08070397

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation.

Job Site 4301 SAN LEANDRO ST Parcel# 034 -2265-001-00 Appl# OB070405

Block traffic along San Leandro St on Southbound side Permit Issued 06/11/07
per approved TCP

Nbr of days: 3
Effective: 06/13/07

Linear feet: 150
Expiration: 06/15/07

SHORT TERM NON-METERED

Owner	Applicant	Phone#	Lic#	License Classes--
NAZ FARAH				
Contractor THE AUGER GROUP INC	X	(510) 307-9943	799370 A	C57 B
Arch/Engr				
Agent KAREL DETTERMAN X 228		(510) 307-9943		
Applic Addr 229 TEWKSBURY DRIVE, POINT RICHMOND, CA, 94801				

\$379.83 TOTAL FEES PAID AT ISSUANCE	
\$61.00 Applic	\$270.00 Permit
\$.00 Process	\$31.45 Rec Mgmt
\$.00 Gen Plan	\$.00 Invstg
\$.00 Other	\$17.38 Tech Enh

JOB SITE

CITY OF OAKLAND

DIST: ADDRESS:

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: Karel Dette 6/11/07
Issued by: [Signature] -

SPECIAL PROVISION 7-10.1 TRAFFIC REQUIREMENTS

Ref: X0700512/513

Project Name: _____
 Project Number: TSD-07-0090
 Reviewed By: JWatson
 Date: 5/17/2007
 Permit good for 6/11/2007
 and 6/15/2007

ADD NEW SUBSECTION TO READ:
SP 7-10.1.4 Vehicular Traffic

Attention is directed to Section 7-10. Public Convenience and Safety, of the City of Oakland Standard Specification for Public Works Construction, 2000 Edition (Include this paragraph for p-jobs, excavation permits or obstruction permits).

The Contractor shall conduct its work in such a manner as to provide public convenience and safety and according to the provisions in this subsection. The provisions shall not be modified or altered without written approval from the Engineer.

Standard traffic control devices shall be placed at the construction zone according to the latest edition of the Work Area Traffic Control Handbook or Caltrans Traffic Manual, Chapter 5 - "Traffic Controls for Construction and Maintenance Work Zone," or as directed by the Engineer.

All trenches and excavations in any public street or roadway shall be back filled and opened to traffic, or covered with suitable steel plates securely placed and opened to traffic at all times except during actual construction operations unless otherwise permitted by the Engineer.

Each section of work shall be completed or temporarily paved and open to traffic in not more than 5 days after commencing work unless otherwise permitted in writing by the Engineer.

Where construction encroaches into the sidewalk area, a minimum of 5 1/2 feet of unobstructed sidewalk shall be maintained at all times for pedestrian use. Pedestrian barricades, shelter, and detour signs per Caltrans standards may be required.

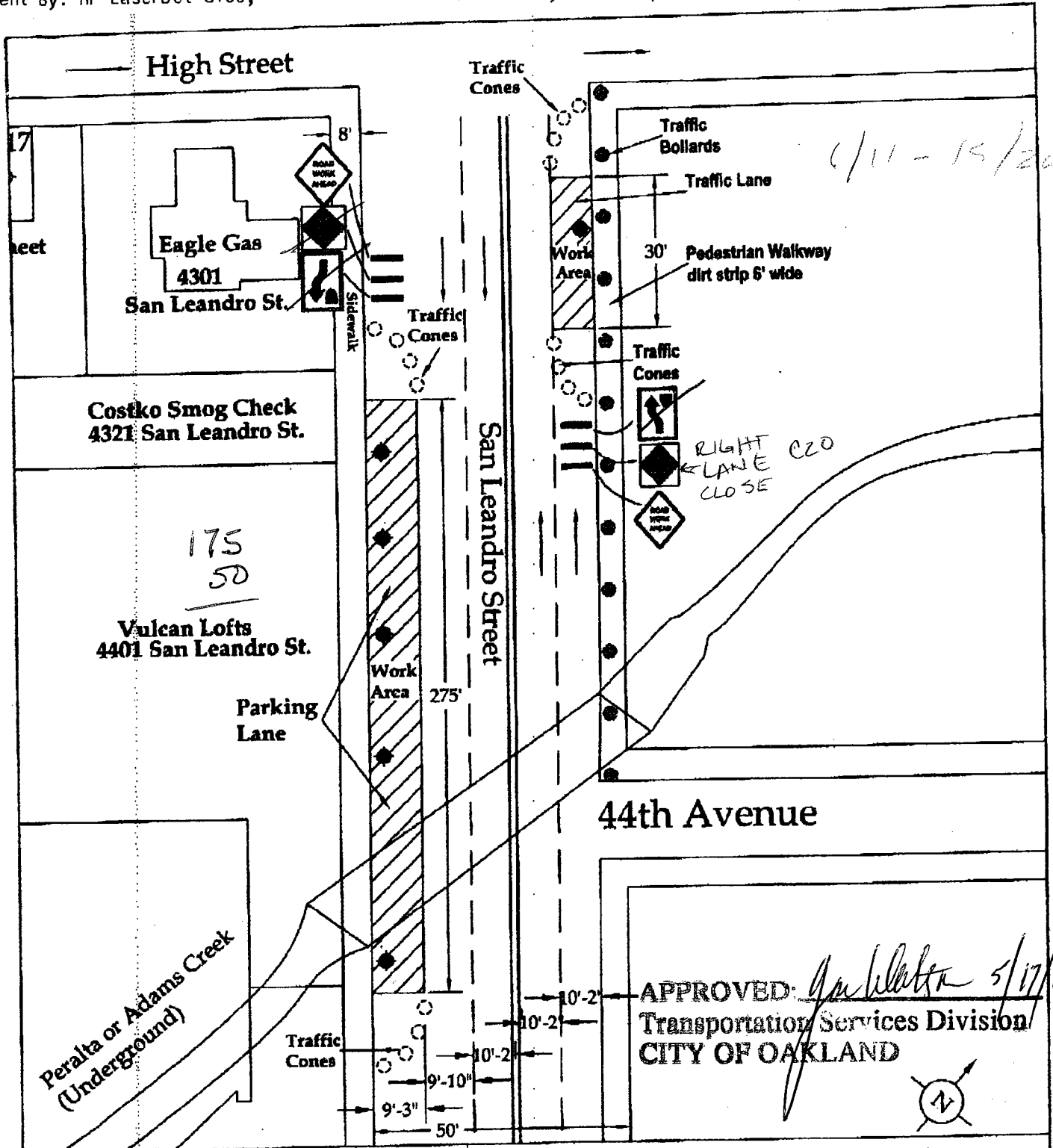
The contractor shall conduct its operation in such a manner as to leave the following traffic lanes unobstructed and in a condition satisfactory for vehicular travel during the Obstruction Period. At all times traffic lanes will be restricted and reopened to travel. Emergency access shall be provided at all times.

Street Name Limits	Obstruction Period	North Bound	South Bound	East Bound	West Bound
San Leandro between High Street and 44 th Street	Mon - Fri 9am - 4pm	N/A	N/A	N/A	1-12' lane open minimum

The Contractor Shall Also include all check item:

1. Design a construction traffic control plan and submit (2) copies to the Engineer for approval prior to starting any work.
2. Replace all signs, pavement markings, and traffic detector loops damaged or removed due to construction within 3 days of completion of work or the final pavement lift.
3. Provide advance notice to Oakland Police at (510) 815-5874 (24-hrs) and Oakland Fire at (510) 238-3331 (2-rhs) when a single lane of traffic or less is provided on any street. *777-3333*
4. Provide 72-hour advance notice to AC Transit at (510) 891-4909 when affecting a bus stop.
5. For Caltrans roadways, ramps, or maintained facilities, the Contractor shall obtain appropriate permits and notify the Traffic Management Center 24 hours in advance of any work.
6. Flagger control is required. Certified Flagger is required.
7. Pedestrian walkway by K-rail, Canopy or Plywood is required. (See detour plan)
8. Pedestrian traffic shall be maintained and guided through the project at all times.
9. Provide advance notice to Business and Residence within 72-hours. *By Fri 6/8*
10. Allow all traffic movement at intersection.

Nothing specified herein shall prohibit emergency work and/or repair necessary to ensure public health and safety.



6/11-15/2007

APPROVED: *[Signature]* 5/17/07
 Transportation Services Division
 CITY OF OAKLAND



Legend

- ◆ Proposed Soil Boring Location

Not to Scale

Traffic Control Plan - San Leandro Street

Eagle Gas
 4301 San Leandro Street
 Oakland, California

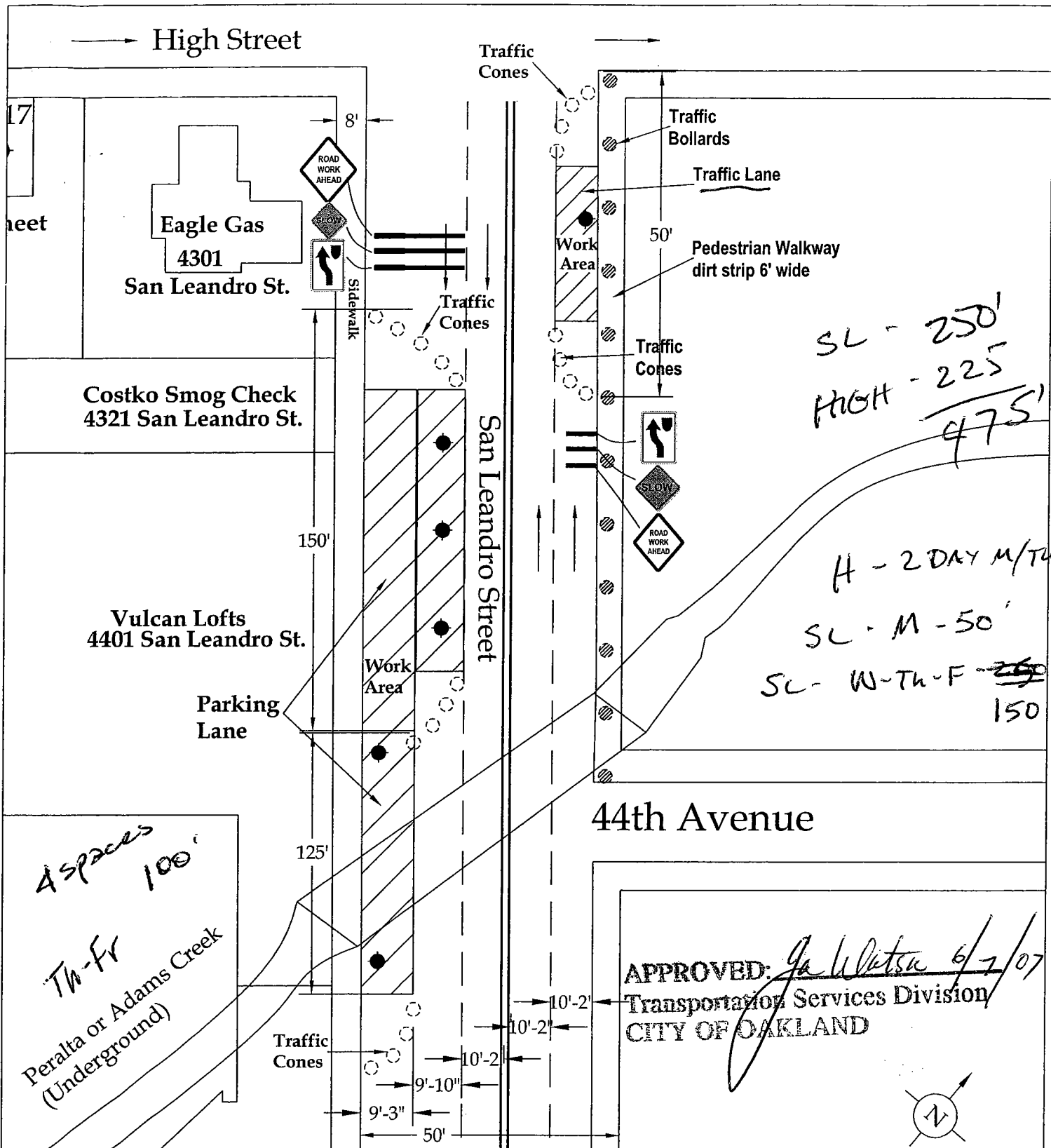
CLEARWATER GROUP

Project No.
 ZP046D

Figure Date
 4/07

Figure
 2

225/350



Legend

● Proposed Soil Boring Location

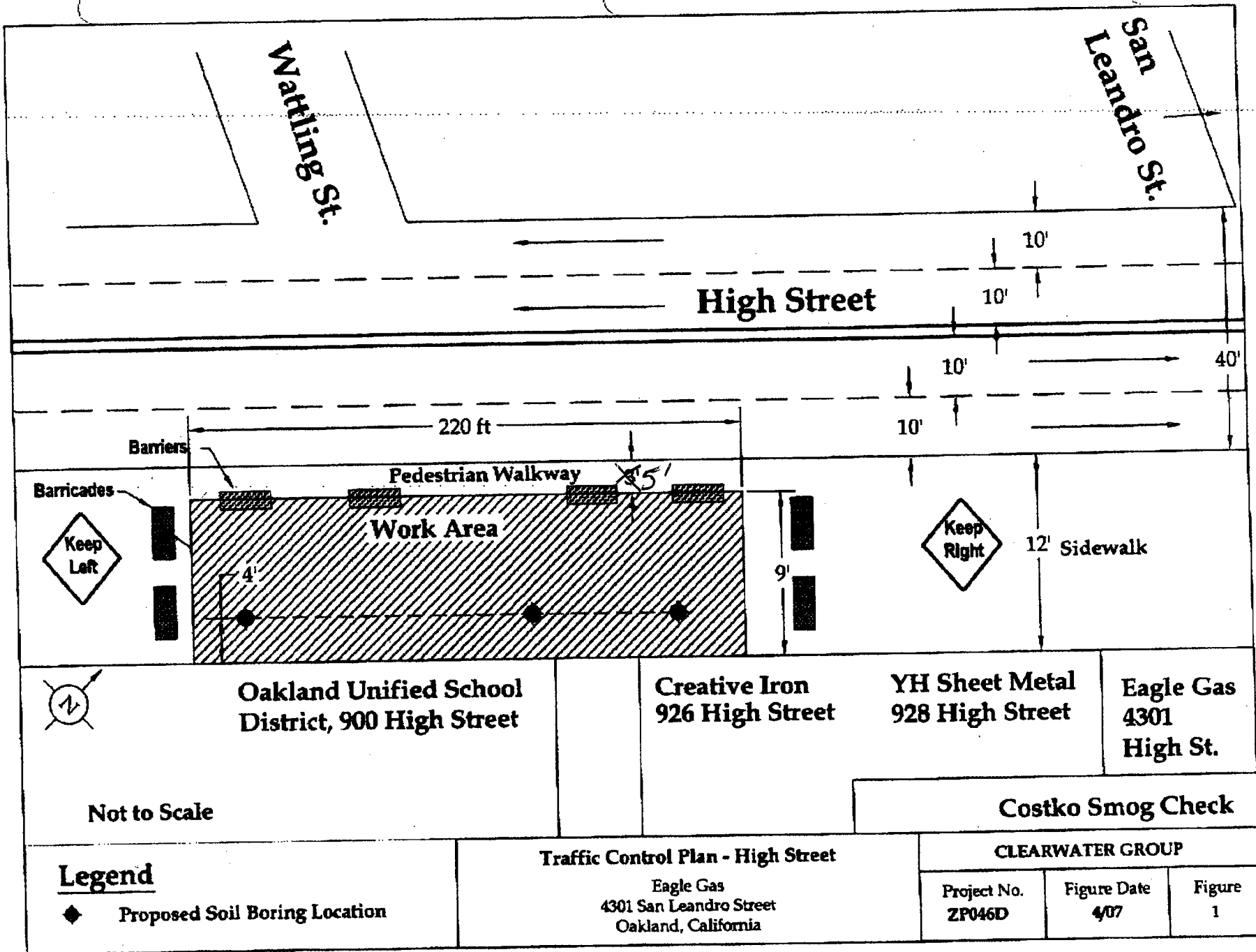
Not to Scale

Traffic Control Plan - San Leandro Street

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 4/07	Figure 2
-----------------------	---------------------	-------------



Oakland Unified School District, 900 High Street

Creative Iron
926 High Street

YH Sheet Metal
928 High Street

Eagle Gas
4301 High St.

Not to Scale

Costco Smog Check

Legend

◆ Proposed Soil Boring Location

Traffic Control Plan - High Street

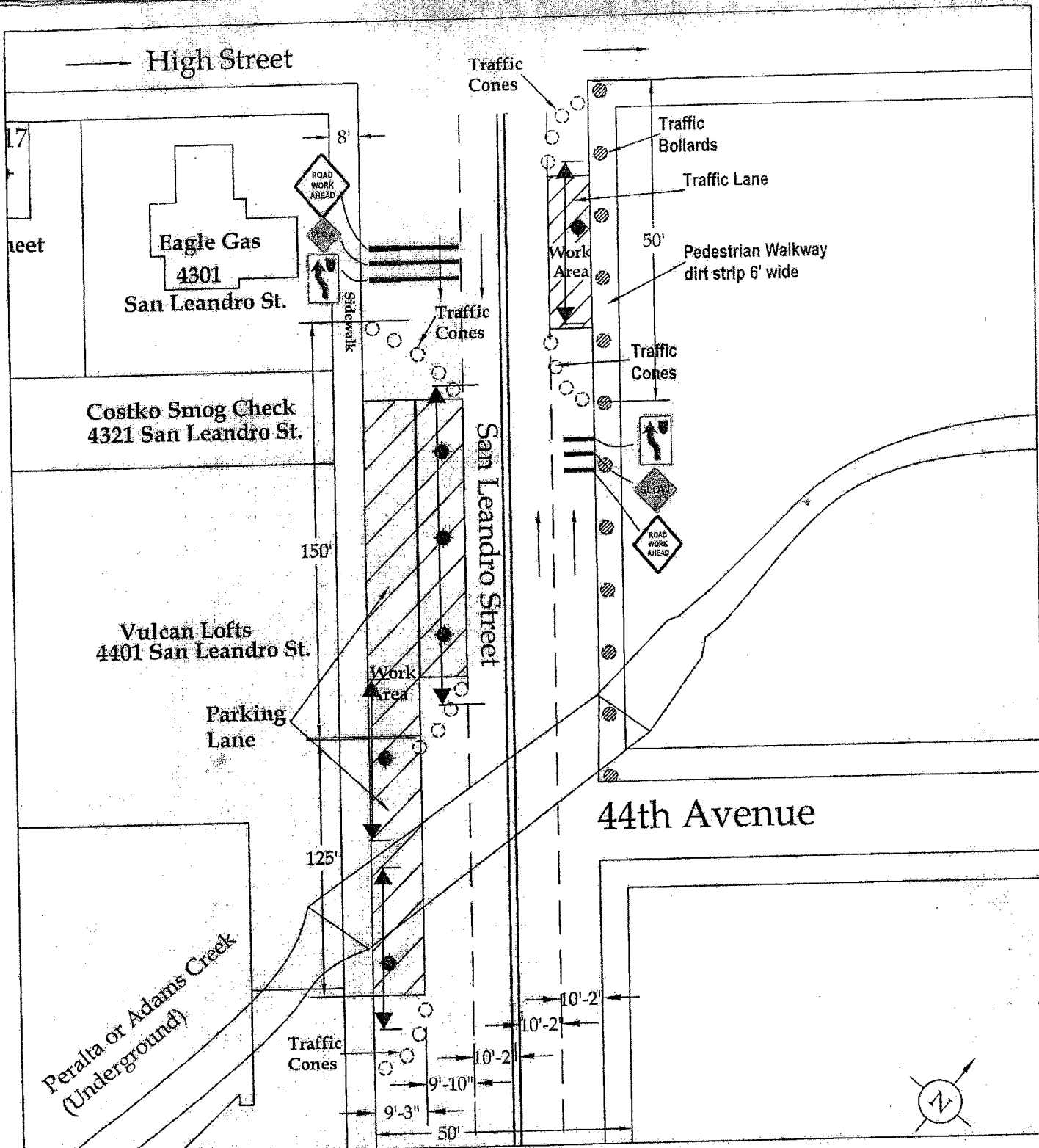
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.
ZP046D

Figure Date
4/07

Figure
1



Legend

- ◆ Proposed Soil Boring Location

Proposed Rig Positioning
40 L X 10W

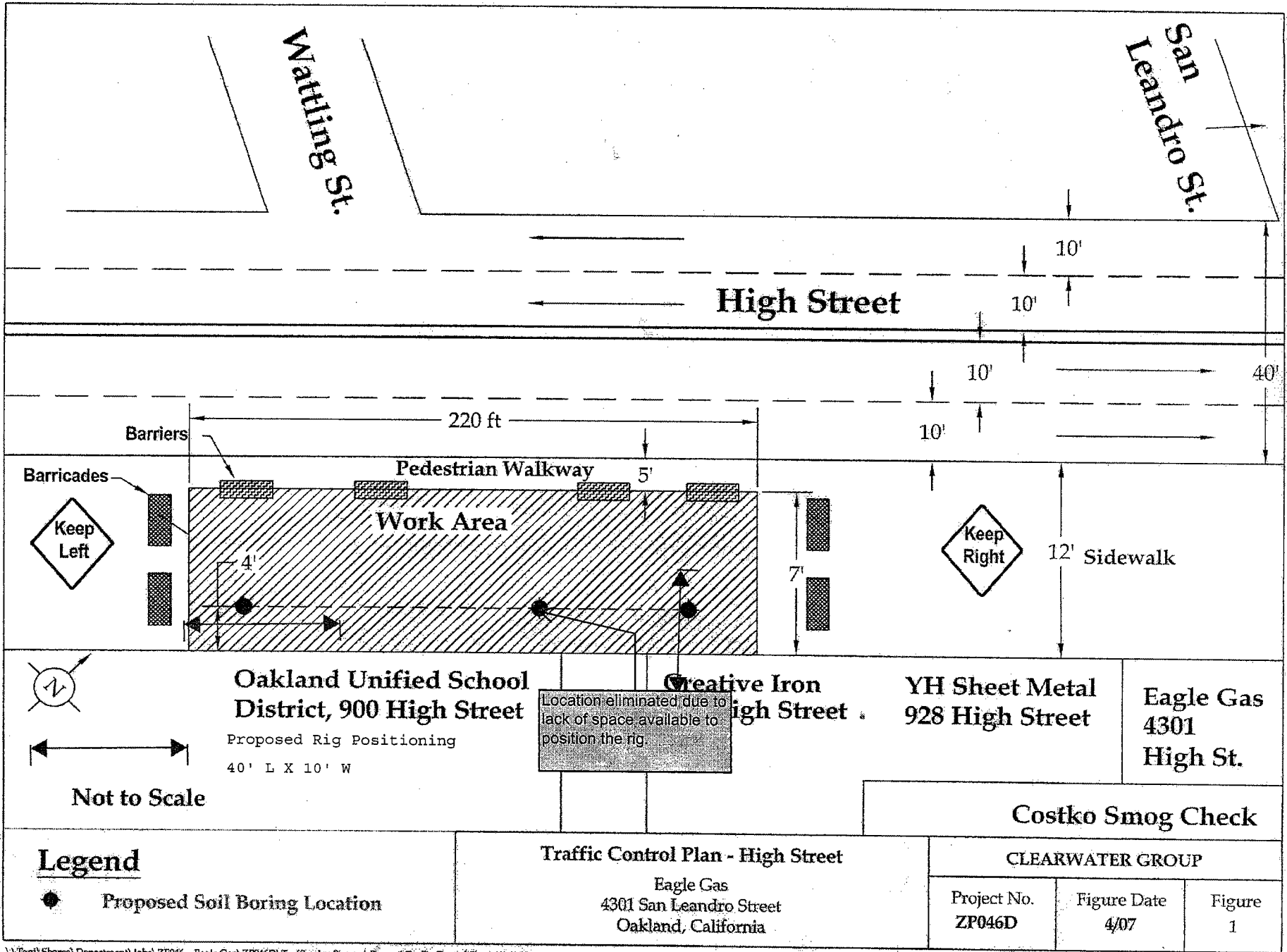
Not to Scale

Traffic Control Plan - San Leandro Street

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046D	Figure Date 4/07	Figure 2
-----------------------	---------------------	-------------



APPENDIX C
SOIL BORING LOGS WITH WELL
CONSTRUCTION AND CPT LOGS FOR
WELLS MW-1D & MW-7D

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 1 of 1

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO.: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-9
		DRILLING CONTRACTOR: Precision Sampling		DRILL RIG TYPE: Geoprobe 6610DT Track Rig	WELL DEPTH: N/A	BORING DIAMETER: 2"
		DRILL RIG OPERATOR: Ernesto Jasso		WELL MATERIAL: N/A	BORING DEPTH: 30'	FILTER PACK: N/A
Condition: North bound traffic lane of San Leandro St, directly across from Eagle Gas Station Bldg.					DRILLING DATE: 6/11/07	

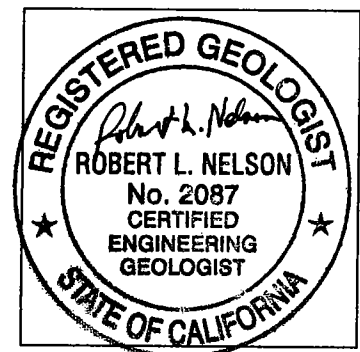
FINISH: 1630

DRILLING START: 1400

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

See Attached CPT Log	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core
						1	Approximate 10" thick concrete.	
Hand Auger						2	Hand augered to 5' bgs.	
						3		
						4		
						5		
Clay				NO		6	Gravelly lean clay (CL), moist, dark olive grey (5Y 3/2).	
						7		
						8		
Silt Mix				NO		9		
						10		
						11		
Silty Clay						12	Decreasing gravels.	
						13		
Silt Mix	Soil	SB-9 15' 6/11/07 1530		NO		14	Silty lean clay (CL), moist, stiff, slightly plastic. light olive brown (2.5Y 3/3).	
						15		
						16		
Silty Clay						17		
						18		
Silt Mix				NO		19		
					0ppm	20		
						21	Acetate liner stuck in sampler. No sample	
						22		
						23		
						24		
Silt Mix						25		
						26	Silty lean clay (CL), dark yellow brown (10YR 3/4).	
						27		
Silty Clay				NO		28	Silty sand (SM), fine sand, wet.	
	Soil	SB-9 29' 6/11/07 1600		NO	0ppm	29		
						30	Silty lean clay (CL). Placed 10' PVC screen in 30' hole @ 1600; no water in screen by 1620pm; grouted hole. Total depth 30' bgs.	





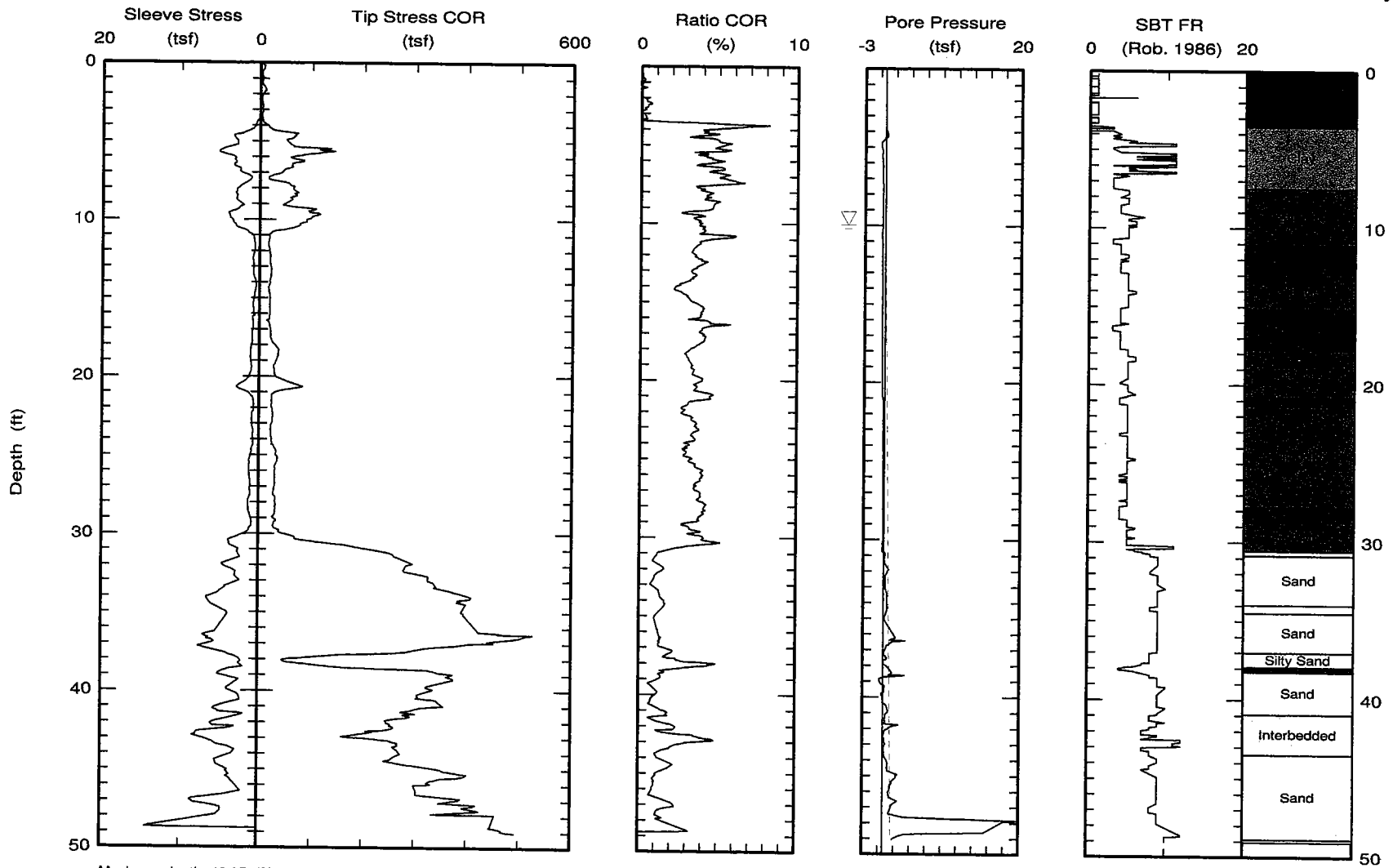
Precision Sampling, Inc.
 1081 Essex Ave. Richmond, CA 94801
 510-812-1619
 jacob@precisionsampling.com
 www.precisionsampling.com

Northing:
 Easting:
 Elevation:
 Client: Clearwater
 Job Site: Eagle Gas

Date: 11/Jun/2007
 Test ID: CPT2-SB-9
 Project: EAGLEGAS

*Mislabeled as
 SB-10,
 Corrected
 identification
 is SB-9*

*Robert H. Nelson,
 P.E., C.E.S.
 Nov. 30, 2007*



Maximum depth: 49.05 (ft)

▽ Estimated Phreatic Surface

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

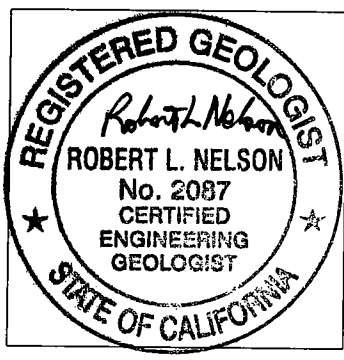
Project No. ZP046

Sheet 1 of 2

<p>FIELD LOCATION OF BORING:</p>		<p>CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.</p>		<p>JOB NO#: ZP046D</p>	<p>PROJ. MANAGER: Karel Detterman, P.G.</p>	<p>BORING/WELL NO.: SB-10A</p>
<p>DRILLING CONTRACTOR: Precision Sampling</p>		<p>DRILL RIG TYPE: Geoprobe 6610DT Track Rig</p>		<p>WELL DEPTH: N/A</p>		<p>BORING DIAMETER: 2"</p>
<p>DRILL RIG OPERATOR: Ernesto Jasso</p>		<p>WELL MATERIAL: N/A</p>		<p>BORING DEPTH: 45'</p>		<p>FILTER PACK: N/A</p>
<p>Condition: Southbound traffic lane of San Leandro St., South of driveway of 4321 San Leandro St., Costko Smog Center. SB-10A is located 15.5' north of SB-10B.</p>						<p>DRILLING DATE: 6/13/07</p>

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION	
						1	▽	Approximate 10" thick concrete.	
						2	▽	Hand augered to 5' bgs.	
						3	▽		
						4	▽		
				NO		5	▽	Gravelly lean clay (CL), heterogeneous material with sandy zones, gravels, numerous colors, moist.	
						6	▽		
						7	▽		
						8	▽		
						9	▽	Between 8' -10' dark olive grey (5Y 3/2)	
						10	▽		
						11	▽		
						12	▽		
						13	▽	Silty lean clay (CL), no gravel, moist, plastic, light olive brown (2.5Y 3/3)	
						14	▽		
				NO		15	▽		
						16	▽		
						17	▽		
						18	▽		
				NO		19	▽		
						20	▽		
						21	▽		
						22	▽		
				NO		23	▽		
						24	▽	Silty lean clay (CL) with 15% medium sand, sand content increases with depth, moist, dark yellow brown (10YR 3/4).	
						25	▽		
						26	▽		
						27	▽		
	Soil	SB-10 27"				28	▽		
		6/13/07 1300					▽		
	Used PVC 0.010" screen placed from interval 20' - 30' for groundwater sample collection.						29	▽	
	Water	SB-10 30' GW				30	▽		
		6/13/07 1215					▽		

FINISH: 1400
 DRILLING START: 0900
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

<p>FIELD LOCATION OF BORING:</p>		<p>CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.</p>		<p>JOB NO#: ZP046D</p>	<p>PROJ. MANAGER: Karel Detterman, P.G.</p>	<p>BORING/WELL NO.: SB-10A</p>
<p>DRILLING CONTRACTOR: Precision Sampling</p>		<p>DRILL RIG TYPE: Geoprobe 6610DT Track Rig</p>		<p>WELL DEPTH: N/A</p>	<p>BORING DIAMETER: 2"</p>	
<p>DRILL RIG OPERATOR: Ernesto Jasso</p>		<p>WELL MATERIAL: N/A</p>		<p>BORING DEPTH: 45'</p>	<p>FILTER PACK: N/A</p>	
<p>Condition: Southbound traffic lane of San Leandro St., South of driveway of 4321 San Leandro St., Costko Smog Center. SB-10A is located 15.5' north of SB-10B.</p>						<p>DRILLING DATE: 6/13/07</p>

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION
						31	Not Logged	<p>At 30' depth driller changed from direct push to 4" dia. augers to drill down to 45' bgs. Material became softer @ 45', but heaving sands came into the hole so hole was no longer useable; grouted hole.</p> <p>Heaving sands @ 45'.</p>
						32		
						33		
						34		
						35		
						36		
						37		
						38		
						39		
						40		
						41		
						42		
						43		
						44		
						45		
						46		
						47		
						48		
						49		
						50		
						51		
						55		
						53		
						54		
						55		
						56		
						57		
						58		
						59		
						60		

FINISH: 1400

DRILLING START: 0900

LOGGED BY: R. Nelson

APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No.
 Sheet 1 of 1

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-10B
		DRILLING CONTRACTOR: Resonant Sonic International (RSI)		DRILL RIG TYPE: Geo Probe 6600 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"
		DRILL RIG OPERATOR: Jose & Fernando Ambriz		WELL MATERIAL: N/A	BORING DEPTH: 58'	FILTER PACK: N/A
		Condition: Asphalt. SB-10B is located 15.5' south of SB-10A.				DRILLING DATE: 6/14/07

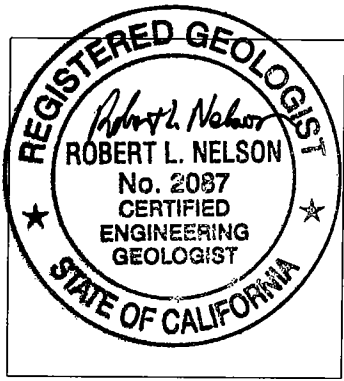
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube Continuous Core	
								MONITORING INSTRUMENT: N/A	
								FIRST ENCOUNTERED WET SOIL: 48'	
								STATIC WATER DEPTH - DATE: N/A	
						45	Not Logged	Not logged from 0-48'.	
						46			
						47			
						48		From 48' - 49' Clayey gravel (GC), yellowish brown (10YR 5/4), wet, very dense, 60% fine to coarse subrounded gravels (dark volcanic and light quartzite), 10% fine to coarse sand, 30% clay, iron oxide stained.	
						49			
	Soil	SB-10 51' 6/14/07 1415		NO		50		Sandy silt (ML), yellowish brown (10YR 5/4) soft, wet, 30% very fine sand, 70% silt.	
						51			
						55		Sandy clay (SC) light olive green (2.5Y 5/3), stiff, moist, 20% very fine sand, low to moderate plasticity, trace of dark staining (manganese oxide?), trace of thin fissures in clay with whiteish carbonate fill (caliche?), carbonate is approximately 10% of mass @ 53' - 55'.	
						53			
	Soil	SB-10 54' 6/14/07 1430				54			
						55			
	Water	SB-10 57' GW 6/15/07 0910				56		Drive casing pulled up to 50' and water sample collected from inside bottom of drive casing with bailer.	
						57			
	Soil	SB-10 58' 6/14/07 1445				58		Total depth 58' bgs	

FINISH: 1530

DRILLING START: 1200

LOGGED BY: R. Nelson

APPROVED BY: R. Nelson

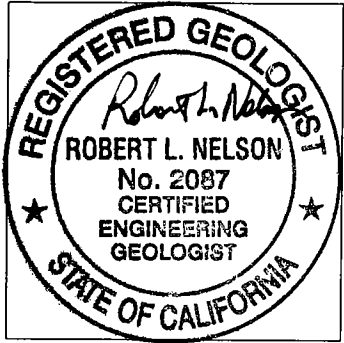


SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO.: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-11			
		DRILLING CONTRACTOR: Resonant Sonic International (RSI)		DRILL RIG TYPE: Geo Probe 6600 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"			
		DRILL RIG OPERATOR: Jose & Fernando Ambriz		WELL MATERIAL: N/A	BORING DEPTH: 58'	FILTER PACK: N/A			
		Condition: Southbound traffic lane of San Leandro St. in front of 4401 San Leandro St. Vulcan Lofts.				DRILLING DATE: 6/15/07			
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube Continuous Core	
								MONITORING INSTRUMENT: N/A	
FIRST ENCOUNTERED WET SOIL: 10'								STATIC WATER DEPTH - DATE: N/A	
						1		8" Concrete	
				NO		2		Hand augered to 5' bgs.	
						3		Clayey gravel with sand (GC), dark olive gray (5Y 3/2), 50% fine to coarse subrounded gravel, 20% fine to medium sand, 30% clay, very stiff, moist.	
						4			
						5			
						6			
						7			
						8			
				NO		9		Sandy fat clay (CH), brown (10YR 9/3), soft, moist to wet, 5% fine gravel, 40% very fine to fine sand, 55% clay.	
						10			
						11			
						12		Sandy lean clay (CL), yellowish brown (10YR 5/4), very stiff, moist, iron oxide stained, 40% fine to medium sand, 60% lean clay, sand content increases with depth.	
				NO		13			
						14			
						15			
						16			
						17			
						18			
						19			
						20			
						21			
						22			
						23			
						24			
						25		Gradational contact from 25' - 27'.	
				NO		26		Silty sand with gravel to clayey sand with gravel (SM-SC), dark yellowish brown (10YR 4/4), loose, 50% medium to coarse 25% fine gravel, 25% fines (silt and clay).	
Water		SB-11 27" GW				27		6/15/07 1025	
						28			
						29		Poorly graded sand (SP), dark yellowish brown (10YR 4/4), loose, wet, heaving sand.	
						30			



FINISH: 1120

DRILLING START: 0935

LOGGED BY: R. Nelson

APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

<p>FIELD LOCATION OF BORING:</p>		<p>CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.</p>		<p>JOB NO#: ZP046D</p>	<p>PROJ. MANAGER: Karel Detterman, P.G.</p>	<p>BORING/WELL NO.: SB-11</p>
<p>DRILLING CONTRACTOR: Resonant Sonic International (RSI)</p>		<p>DRILL RIG TYPE: Geo Probe 6600 Truck Mounted</p>		<p>WELL DEPTH: N/A</p>	<p>BORING DIAMETER: 2"</p>	
<p>DRILL RIG OPERATOR: Jose & Fernando Ambriz</p>		<p>WELL MATERIAL: N/A</p>		<p>BORING DEPTH: 58'</p>	<p>FILTER PACK: N/A</p>	
<p>Condition: Southbound traffic lane of San Leandro St. in front of 4401 San Leandro St. Vulcan lofts.</p>						<p>DRILLING DATE: 6/15/07</p>

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION	
						31		30'-32' Silty sand (SM), dark yellowish brown (10YR 4/4), loose, wet, 20% silt, 80% fine to coarse, subangular to subrounded sand, trace of fine subrounded gravel.	
						32		Drove 32' -44' without sampling to penetrate gravel layer.	
						33			
						34			
						35			
						36			
						37			
						38			
						39			
						40			
						41			
						42		Not logged	
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			
						51			
						52		Not logged; collected water sample only	
						53			
						54			
						55			
						56			
Soil		SB-11 58'				56	6/15/07 1115		
Water		SB-11 58' GW				57	6/15/07 1135		
						58			
						59			
						60			
							Total depth 58' bgs		

FINISH: 1120
 DRILLING START: 0955
 LOGGED BY: R. Nelson
 APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 1 of 2

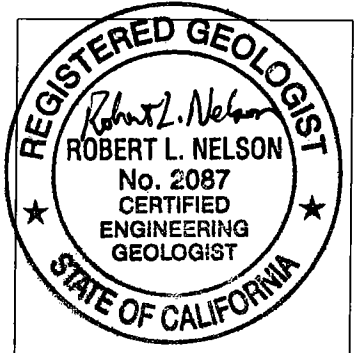
FIELD LOCATION OF BORING:		CLIENT/LOCATION:		JOB NO#:	PROJ. MANAGER:	BORING/WELL NO.:			
		Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	SB-12			
		DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:			
		Resonant Sonic International (RSI)		Geo Probe 5400 Limited Access	N/A	2"			
		DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:			
		Jorge Ornelas		N/A	34'	N/A			
		Condition: Vulcan Lofts Courtyard.				DRILLING DATE: 9/26/07			
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE ID.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube Continuous Core	
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
								FIRST ENCOUNTERED WET SOIL: 33'	
								STATIC WATER DEPTH - DATE: 14.9' bgs - 9/26/07	
						1			
						2			
						3		Hand augered to 6'.	
						4			
						5			
						6			
				NO	76.7 ppm	7		Silty lean clay (CL) with 15% fine gravel, moist, olive (5Y 5/4).	
						8		No Recovery	
				NO		9			
	Soil	SB-12 11' 9/24/07 1130		NO	91.2 ppm	10		Gravelly clay with silt (CL), 20 - 35% gravel, moist, olive (5Y 5/4).	
				NO		11			
						12		Gravel wet @ 11 - 12'. Graded to ML @ 12'.	
				NO		13		Clayey silt (ML), plastic, moist, <10% fine gravel. Light olive brown (2.5Y 5/4).	
						14			
						15			
				NO	30.8 ppm	17		Clayey silt (ML), plastic, moist, light yellowish brown (2.5Y 6/3).	
						18			
						19			
				NO		20			
						21		Zones of silty lean clay (CL) throughout. Clayey silt (ML).	
						22			
						23			
	Soil	SB-12 25.5' 9/24/07 1350		NO		24		Gradual change to silty lean clay (CL), moist, plastic.	
						25		Yellowish brown (10YR 5/4).	
				NO		26			
						27			
						28		No Recovery	
						29		Silty sand (SM).	
						30			

FINISH: 1500

DRILLING START: 1000

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson



**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING:		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-12
		DRILLING CONTRACTOR: Resonant Sonic International (RSI)		DRILL RIG TYPE: Geo Probe 5400 Limited Access	WELL DEPTH: N/A	BORING DIAMETER: 2"
		DRILL RIG OPERATOR: Jorge Ornelas		WELL MATERIAL: N/A	BORING DEPTH: 34'	FILTER PACK: N/A
		Condition: Vulcan Lofts Courtyard.				DRILLING DATE: 9/26/07

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION	
						31		Silty sand (SM).	
	Soil	SB-12 32' 9/26/07 1330			24.1 ppm	32			
	Soil	SB-12 33.5' 9/26/07 1355				33	No Recovery		
	Water	SB-12 34' GW 9/26/07 1400		NO		34		Well graded sand (SW), medium - coarse, saturated, yellowish brown (10YR 5/4). Total depth 34'.	
	Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer						35		
						36			
						37			
						38			
						39			
						40			
						41			
						42			
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			
						51			
						52			
						53			
						54			
						55			
						56			
						57			
						58			
						59			
						60			

FINISH: 1500

DRILLING START: 1000

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO.: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-13
DRILLING CONTRACTOR: Fast-Tek		DRILL RIG TYPE: Geo Probe 5400 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"	
DRILL RIG OPERATOR: Eric Austin		WELL MATERIAL: N/A	BORING DEPTH: 52'	FILTER PACK: N/A	
Condition: Alley between Creative Iron and OUSD.				DRILLING DATE: 9/21/07	

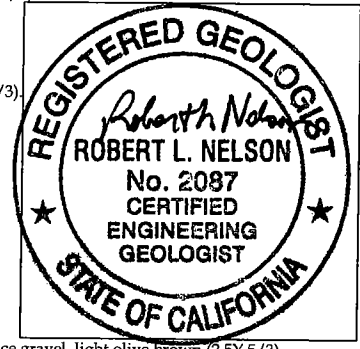
FINISH: 1500

DRILLING START: 0900

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION
						1		2" Asphalt
						2		Buried railroad ties approx. 4 - 6" deep.
						3		
					0ppm	4		Sandy silt (ML), fine sand, wet, black (5Y 2.5/1), color changes to light olive brown (2.5Y 5/3).
						5		Trace tree roots.
						6		Gradational change to silty lean clay (CL), moist, plastic.
						7		Increasing gravels @ 7'.
						8		Gravelly clay (GC), moist, stiff, fine to medium gravel, medium sand, light olive brown (2.5Y 5/4).
				YES	76.7 ppm	9		
						10		Increasing gravel @ 10'
				YES		11		Clayey gravel (GC), moist, olive gray (5Y 4/2).
					53.5 ppm	12		
				YES		13		Color change to light olive brown (2.5Y 5/3). Decreasing gravels @ 13'.
						14		Silty lean clay (CL), moist, plastic, stiff.
						15		
				YES	76.7 ppm	16		Increasing gravels @ 16'.
						17		Gravelly clay, moist.
						18		3" thick gravel layer @ 17.5'. Decreasing gravels below 18'.
				NO		19		Silty lean clay (CL), moist, plastic, stiff, trace gravel, light olive brown (2.5Y 5/3).
						20		
				YES		21		Silty lean clay (CL), moist, increasing gravels.
					31.8 ppm	22		
				NO		23		Silty lean clay (CL), decreasing gravels, moist, plastic, light yellowish brown (2.5Y 6/3)
	Soil	SB-13 24' 9/21/07 1100				24		
						25		Silty lean clay (CL), <10% gravels, moist, plastic.
						26		
						27		
						28		Well graded sand (SW), fine to medium sand, well graded fine gravel, saturated, olive brown (2.5Y 4/3).
	Soil	SB-13 30' 9/21/07 1135				29		
						30		



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING:				CLIENT/LOCATION:		JOB NO.:	PROJ. MANAGER:	BORING/WELL NO.:
				Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	SB-13
				DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:
				Fast-Tek		Geo Probe 5400 Truck Mounted	N/A	2"
				DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:
				Eric Austin		N/A	52'	N/A
Condition: Alley between Creative Iron and OUSD.							DRILLING DATE: 9/21/07	
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)
								FIRST ENCOUNTERED WET SOIL: 28'
								STATIC WATER DEPTH - DATE: 5.1' bgs - 9/21/07
	Water	SB-13 32' GW 9/21/07 1130		NO		31		Silty lean clay (CL), saturated, plastic. Depth to water - 13.3'.
	Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer							
						33	No Recovery	
				NO		34		
						35		Silty lean clay (CL), saturated, plastic, olive brown (2.5Y 4/3).
						36		
	Soil	SB-13 38' 9/21/07 1230		NO		37		Well graded sand (SW), fine to medium sand, fine gravel, saturated, olive brown (2.5Y 4/3).
						38		Silty clay (CL), saturated, plastic.
						39		
				YES		40		Increasing gravels, saturated.
						41		
						42		
						43		Poorly graded sand (SP), medium sand, saturated, olive brown (2.5Y 4/3).
					39 ppm	44		
				YES	49.7 ppm	45		
				YES		46		Silty sand (SM), fine sand, saturated, olive brown (2.5Y 4/3).
						47		
						48		Sandy silt with clay (ML), 20-35% fine sand, saturated, olive brown (2.5Y 4/3).
						49		
					47 ppm	50		Well graded sand (SW) with 35 - 50% fine to coarse gravel, saturated.
	Soil	SB-13 51' 9/21/07 1440				51		Gradational change to poorly graded fine sand.
	Water	SB-13 52' GW 9/21/07 1430				52		Total depth 52'. Depth to water 5.1'.
	Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer							
						53		
						54		
						55		
						56		
						57		
						58		
						59		
						60		

FINISH: 1500

DRILLING START: 0900

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

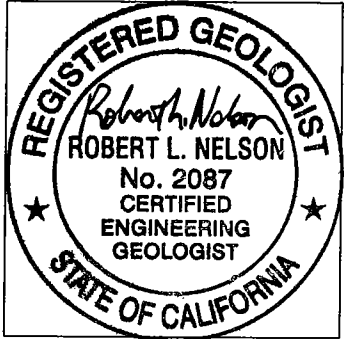
**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D
Sheet 1 of 2

FIELD LOCATION OF BORING: 	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-14
	DRILLING CONTRACTOR: Fast-Tek	DRILL RIG TYPE: Geo Probe 5400 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"
	DRILL RIG OPERATOR: Eric Austin	WELL MATERIAL: N/A	BORING DEPTH: 52'	FILTER PACK: N/A
	Condition: Alley between Creative Iron and OUSD.			DRILLING DATE: 9/20/07

FINISH: 1500
 DRILLING START: 1000
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core MONITORING INSTRUMENT: Photo-Ionization Detector (PID) FIRST ENCOUNTERED WET SOIL: 10' STATIC WATER DEPTH - DATE: 3.8 ft bgs - 9/20/07
						1		1 - 2" Concrete
						2		
						3		Wood approx. 3' depth.
				NO		4		Sandy silt (ML) @ 4', fine sand, wet.
				NO		5		
						6		Clayey gravel (GC), well graded gravel, fine to medium sand, wet, dark yellowish brown (10YR 3/4).
						7		
						8		At 7.5' grades to clayey silt, 0 - 10%, fine sand, wet, dark yellowish brown (10YR 3/4).
						9		Interbedded GC and ML layers, wet.
						10		
	Soil	SB-14 12' 9/20/07 1010		YES		11		
				NO		12		Increasing clay Interbedded GC and CL.
					2927 ppm	13		
						14		
				NO		15		Clayey gravel (GC), dark yellowish brown (10YR 4/4), wet.
					7123 ppm	16		Clayey silt (ML) with trace shells, wet
						17		
				NO		18		Clayey gravel (GC), very dark brown (10YR 2/2), moist, medium gravel.
						19		
						20		Silty lean clay (CL), moist, plastic.
						21		
				NO		22		Clayey silt (ML), plastic, moist.
						23		Clayey gravel (GC), moist, medium sand, similar to @ 17.5'.
				NO		24		Silty lean clay (CL), moist, plastic.
						25		
				NO		26		Clayey sand (SC), medium sand, slighty plastic.
						27		No Recovery
						28		
				NO		29		Clayey gravel (GC), fine gravel, medium sand, trace of wood 28'.
	Soil	SB-14 30' 9/20/07 1130				30		



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING:				CLIENT / LOCATION:		JOB NO.:	PROJ. MANAGER:	BORING / WELL NO.:	
				Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	SB-14	
				DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:	
				Fast-Tek		Geo Probe 5400 Truck Mounted	N/A	2"	
				DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:	
				Eric Austin		N/A	52'	N/A	
				Condition: Alley between Creative Iron and OUSD.				DRILLING DATE: 9/20/07	
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOUR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core	
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
								FIRST ENCOUNTERED WET SOIL: 10'	
								STATIC WATER DEPTH - DATE: 3.8 ft bgs - 9/20/07	
				NO		31		Silty lean clay (CL), wet, plastic, olive brown (2.5Y 5/4).	
						32	No Recovery		
						33			
						34			
						35			
						36			
				NO		37		Sandy clayey silt (ML), moist, sand, fine sand, plastic, yellowish brown (10YR 5/4).	
						38			
						39			
				NO		40		Clayey sand (SC), fine sand, wet.	
						41			
				NO		42		Silty lean clay (CL), <10% fine sand, plastic, moist, dark yellowish brown (10YR 4/4).	
						43			
						44			
						45			
						46			
	Soil	SB-14 48' 9/20/07 1350		NO	767 ppm	47			
						48		Silty sand (SM), fine sand, moist, light olive brown (2.5Y 5/3), saturated.	
						49			
						50			
	Water	SB-14 52' GW 9/20/07 1420				51			
	Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer						52		Total depth 52'.
						53			
						54			
						55			
						56			
						57			
						58			
						59			
						60			

FINISH: 1500

DRILLING START: 1000

LOGGED BY: K. Detterman

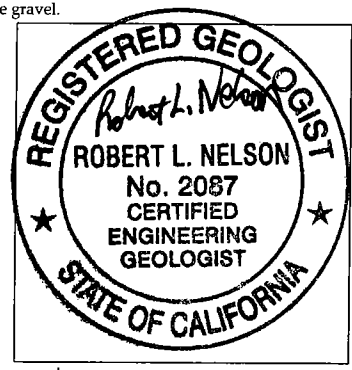
APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D
 Sheet 1 of 2

FIELD LOCATION OF BORING:				CLIENT/LOCATION:		JOB NO.:	PROJ. MANAGER:	BORING/WELL NO.:
				Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	SB-15
DRILLING CONTRACTOR:				DRILL RIG TYPE:		WELL DEPTH:	BORING DIAMETER:	
Fast-Tek				Geo Probe 5400 Truck Mounted		N/A	2"	
DRILL RIG OPERATOR:				WELL MATERIAL:		BORING DEPTH:	FILTER PACK:	
Eric Austin				N/A		52'	N/A	
Condition:				Condition:		DRILLING DATE:		
Alley between Creative Iron and OUSD.				Alley between Creative Iron and OUSD.		9/25/07		
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	
								SAMPLING METHOD: Direct Push Macro-Core
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)
								FIRST ENCOUNTERED WET SOIL: 10'
								STATIC WATER DEPTH - DATE: 10.8' bgs - 9/25/07
						1	Asphalt / Baserock.	
						2		
				NO		3	Clayey silt (ML), slightly plastic, moist to wet, dark olive brown (2.5Y 3/3).	
				NO		4	Increasing fine sand.	
						5	Sandy silt (ML) with gravel lenses, fine sand, dry to moist.	
						6		
				NO		7		
						8	Silty lean clay (CL).	
	Soil	SB-15 10' 9/25/07 1000		YES	1876 ppm	9		
						10	Silty lean clay (CL) with trace of gravel lenses, moist, dark olive gray (5Y 3/2).	
						11	Increasing clay, 11 - 12' very plastic.	
						12		
						13	Sandy silt (ML).	
				NO		14	Clayey gravel with sand (GC), medium sand, dark yellowish brown (10YR 4/4).	
						15		
				NO		16		
						17	Clayey silt (ML), slightly plastic, moist.	
						18	Lenses of fine gravel.	
				NO		19	Silty lean clay (CL), plastic, moist.	
						20		
						21	No Recovery	
				NO		22	Silty lean clay (CL), plastic, moist, 15% fine gravel.	
						23		
				NO		24	Silty fat clay (CH), moist, plastic, olive brown (2.5Y 4/3).	
						25		
						26		
						27		
						28		
						29	0 - 10% gravel 29 - 30'.	
				NO		30	Silty lean clay (CL), wet, plastic, 0 - 10% fine gravel.	

FINISH: 1500
 DRILLING START: 0935
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING: 	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-15
	DRILLING CONTRACTOR: Fast-Tek	DRILL RIG TYPE: Geo Probe 5400 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"
	DRILL RIG OPERATOR: Eric Austin	WELL MATERIAL: N/A	BORING DEPTH: 52'	FILTER PACK: N/A
	Condition: Alley between Creative Iron and OUSD.			DRILLING DATE: 9/25/07

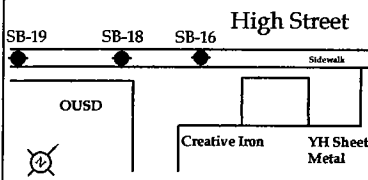
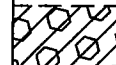



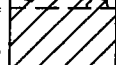
FINISH: 1500
 DRILLING START: 0935
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION
				NO		31		Silty fat clay (CH), moist, plastic, light olive brown (2.5Y 4/3).
						32		
				NO		33		10% fine gravel.
						34		Olive brown (2.5Y 4/3).
						35		
				NO		36		
	Soil	SB-15 38' 9/25/07 1130				37		Silty lean clay (CL), 15% fine sand, saturated.
				NO		38		Silty lean clay (CL), plastic, moist.
						39		
				NO		40		Silty fat clay (CH), plastic, moist. no water @ 40', light olive brown (2.5Y 5/4).
						41		Grades to CL, 0 - 10% fine gravel, wet.
						42		Silty fat clay (CH), moist, plastic, yellowish brown (10YR 5/4).
						43		
						44		No Recovery
				NO		45		Silty fat clay (CH), saturated, plastic, <10% fine sand.
						46		
	Water	SB-15 48' GW 9/25/07 1300				47		
						48		
						49		Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer
						50		No Recovery
				NO		51		Silty sand (SM), fine sand, saturated.
	Water	SB-15 52' GW 9/25/07 1355				52		Increasing clay. Clayey sand (SC), fine sand, olive brown (2.5Y 4/4).
						53		Total depth 52'. Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer
						54		
						55		
						56		
						57		
						58		
						59		
						60		

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 1 of 2

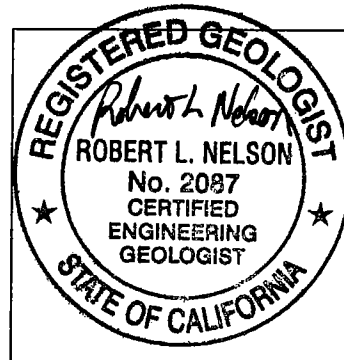
FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.:	SB-16	
		DRILLING CONTRACTOR: Precision Sampling		DRILL RIG TYPE: Geo Probe 6610DT Track Rig	WELL DEPTH: N/A	BORING DIAMETER: 2"		
		DRILL RIG OPERATOR: Ernesto Jasso		WELL MATERIAL: N/A	BORING DEPTH: 46'	FILTER PACK: N/A		
		Condition: Concrete driveway of Creative Iron, 926 High St.				DRILLING DATE: 6/11/07		
See Attached CPT Log	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOUR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core
								MONITORING INSTRUMENT: N/A
								FIRST ENCOUNTERED WET SOIL: 27'
								STATIC WATER DEPTH - DATE: N/A
Hand Auger						1	Not Logged	Hand auger to 5' bgs.
						2		
						3		
						4		
						5		
Silt Mix				NO		6		Clayey gravel (GC), well graded fine to coarse gravel, 20-35% medium sand, dark brown (10YR 3/3), moist.
						7		
						8		Silty lean clay (CL), slightly plastic, moist, stiff, dark brown (10YR 3/3).
Silty Sand	Soil	SB-16 10" 6/11/07 1330				9		Increasing fine sand.
						10		
						11		
				NO		12		Silty sand (SM), poorly graded fine, moist.
Silt Mix						13		Clayey gravel (GC), well graded fine gravel, dark brown (10YR 3/3).
						14		
						15		Silty lean clay (CL), moist.
Sandy Silt						16		
Silt Mix						17		
						18		
						19		
Sandy Silt						20		
						21		
						22		
						23		
Silt Mix						24		
						25		
						26		
Sandy Silt						27		
						28		Used PVC 0.010" screen placed from interval 20' - 30' for groundwater sample collection
						29		
						30		
Silty Sand	Water	SB-16 30" GW 6/11/07 0945						Silty lean clay (CL).
								Silty sand (SM), poorly graded fine sand, saturated, olive brown (2.5Y 4/3).

FINISH: 1700

DRILLING START: 1230

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson



**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 2 of 2


FIELD LOCATION OF BORING:		CLIENT/LOCATION:		JOB NO.:	PROJ. MANAGER:	BORING/WELL NO.:		
		Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	SB-16		
		DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:		
		Precision Sampling		Geo Probe 6610DT Track Rig	N/A	2"		
		DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:		
Ernesto Jasso		N/A	46'	N/A				
Condition:		Concrete driveway of Creative Iron, 926 High St.				DRILLING DATE:		
						6/11/07		
See Attached CPT Log	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core
								MONITORING INSTRUMENT: N/A
								FIRST ENCOUNTERED WET SOIL: 27'
								STATIC WATER DEPTH - DATE: N/A
Sand				NO		31		Silty sand, saturated.
				NO		32		
				NO		33		Increasing gravel.
Sand Mix				NO		34		
Silty Sand						35		Gravelly sand (SW), poorly graded medium, wet.
						36		
Sand						37		Decreasing gravels
						38		
						39		
Interbedded				NO		40		Silty sand (SM), medium sand, 0 to 10% fine gravels, saturated.
						41		
Sand				NO		42		
Gr Sand			Used PVC 0.010" screen placed from interval 36' - 46' for groundwater sample collection.			43		
	Soil	SB-16 45' 6/11/07 1215		NO		44		Gravelly lean clay (CL), well graded fine to coarse gravels, moist, dense At 46' refusal.
Sand	Water	SB-16 46' GW 6/12/07 1600				45		
						46		Total depth of boring 46' bgs.
						47		
Gr Sand						48		Total depth of CPT Boring 48'
						49		
						50		
						51		
						55		
						53		
						54		
						55		
						56		
						57		
						58		
						59		
						60		

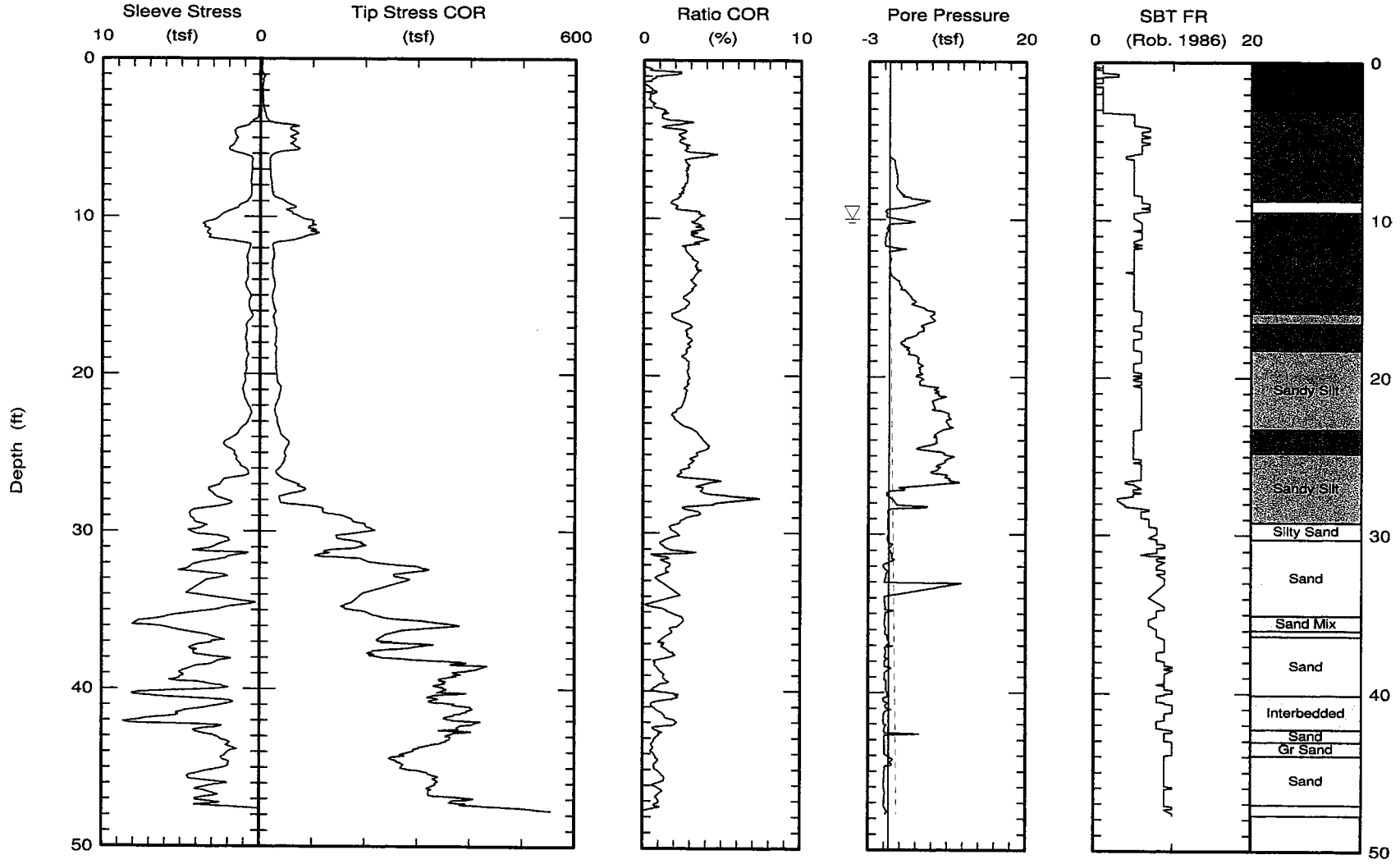
FINISH: 1700

DRILLING START: 1230

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

	Precision Sampling, Inc. 1081 Essex Ave. Richmond, CA 94801 510-812-1619 jacob@precisionsampling.com www.precisionsampling.com	Northing: Easting: Elevation:	Date: 11/Jun/2007 Test ID: CPT1-SB16 Project: EAGLEGAS
		Client: Clearwater Job Site: Eagle Gas	



Maximum depth: 47.74 (ft)

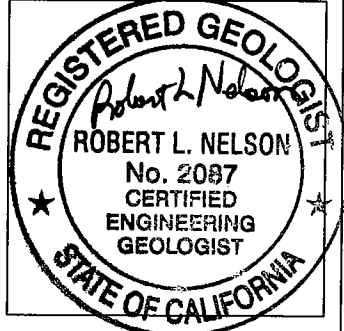
▽ Estimated Phreatic Surface

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING:				CLIENT/LOCATION:			JOB NO#:	PROJ. MANAGER:	BORING/WELL NO.:			
				Eagle Gas 4301 San Leandro Blvd. Oakland Ca.			ZP046D	Karel Detterman, P.G.	SB-17			
				DRILLING CONTRACTOR:			Fast-Tek		DRILL RIG TYPE:	Geo Probe 5400 Truck Mounted	WELL DEPTH:	N/A
				DRILL RIG OPERATOR:			Eric Austin		WELL MATERIAL:	N/A	BORING DEPTH:	52'
				Condition:			Driveway of YH Sheet Metal.		BORING DEPTH:	N/A	FILTER PACK:	N/A
								DRILLING DATE:	9/20/07			
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core				
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)				
								FIRST ENCOUNTERED WET SOIL: 40'				
								STATIC WATER DEPTH - DATE: 10.8' bgs - 9/20/07				
						1		Hand augered to 5'. Not logged.				
						2						
						3						
						4						
						5						
						6						
						7						
				YES		8		Clayey gravel (GC), moist, olive (5Y 5/3).				
				YES		9						
	Soil	SB-17 10' 9/10/07 1730			1689 ppm	10						
						11		Silty lean clay (CL), moist. Increasing gravels @ 11.5'.				
						12		Clayey gravel (GC), moist, fine to coarse gravel, yellowish brown (10YR 5/4).				
				YES	5800 ppm	13						
						14		Silty lean clay (CL), moist, plastic.				
						15						
						16						
						17		Silty gravel (GM), medium gravel, moist.				
						18						
				NO		19						
						20		Clayey sand (SC), fine to medium sand, moist, 35 - 50% clay, yellowish brown (10YR 5/4).				
						21						
				NO		22		Silty lean clay (CL), moist, plastic, light olive brown (2.5Y 5/3).				
						23						
						24						
						25						
						26						
						27						
						28						
	Soil	SB-17 30' 9/21/07 1135		NO		29		Increasing medium gravel, brown (10YR 5/4).				
						30						



FINISH: 2030

DRILLING START: 1700

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.:	SB-17
	DRILLING CONTRACTOR: Fast-Tek	DRILL RIG TYPE: Geo Probe 5400 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER:	2"
	DRILL RIG OPERATOR: Eric Austin	WELL MATERIAL: N/A	BORING DEPTH: 52'	FILTER PACK:	N/A
	Condition: Driveway of YH Sheet Metal.			DRILLING DATE:	9/20/07

FINISH: 2030

DRILLING START: 1700

LOGGED BY: K. Detterman

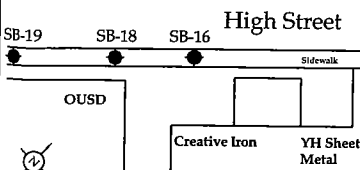
APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION	
				NO		31		Clayey gravel (GC), medium gravel, medium sand, moist, yellowish brown (10YR 5/4).	
						32			
						33			
						34			
				NO		35		Color change to light olive brown (2.5Y 5/4).	
						36			
						37			
						38			
	Soil	SB-17 39' 9/20/07 1900		NO		39			
						40			
						41		Poorly graded sand (SP), fine, saturated,	
						42			
						43			
	Water	SB-17 44' GW 9/20/07 1915				44			
	Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer						45		
						46			
						47			
						48			
						49		Poorly graded sand (SP), fine, saturated,	
						50			
						51			
	Water	SB-17 52' GW 9/20/07 2015				52			
	Drive casing pulled up and water sample collected from inside bottom of drive casing with bailer						53		Total depth 52'.
						54			
						55			
						56			
						57			
						58			
						59			
						60			


**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

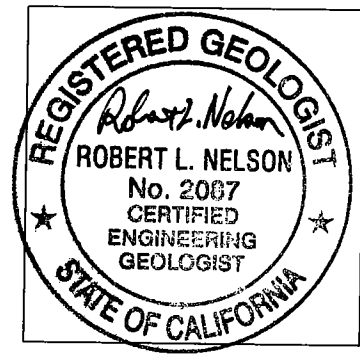
Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-18
DRILLING CONTRACTOR: Precision Sampling		DRILL RIG TYPE: Geo Probe 6610DT Track Rig	WELL DEPTH: N/A	BORING DIAMETER: 2"	
DRILL RIG OPERATOR: Ernesto Jasso		WELL MATERIAL: N/A	BORING DEPTH: 40'	FILTER PACK: N/A	
Condition: Concrete sidewalk @ east end of 900 High St., Oakland Unified School District.					DRILLING DATE: 6/12/07

FINISH: 1600
DRILLING START: 1300
LOGGED BY: K. Detterman
APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core		
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)		
*								FIRST ENCOUNTERED WET SOIL: 14'		
								STATIC WATER DEPTH - DATE: N/A		
						1	Not Logged		Hand augered to 5'.	
						2				
						3				
						4				
						5				
				NO		6			Clayey gravel (GC), fine to coarse gravel, dark brown (10YR 3/3), moist.	
						7				
				NO		8				
						9				
						10				
				NO		11				
						12				
						13				
						14				Approx. 14' - 15' saturated.
Soil	SB-18 15' GW 6/12/07 1400					15				
						16				
				NO		17			Silty lean clay (CL), moist, stiff, dark yellowish brown (10YR 3/6).	
						18				
						19			Used PVC 0.010" screen placed from interval 10' - 20' for groundwater sample collection	
Water	SB-18 20' GW 6/12/07 1345			NO		20				
						21				
						22				
						23		Silty lean clay (CL), moist, stiff.		
						24				
				NO		25				
						26		Silty clay with fine to coarse gravels, moist.		
						27		767 ppm in soil from approx. 27' bgs.		
						28				
						29				
						30				



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-18
DRILLING CONTRACTOR: Precision Sampling		DRILL RIG TYPE: Geo Probe 6610DT Track Rig		WELL DEPTH: N/A	BORING DIAMETER: 2"	
DRILL RIG OPERATOR: Ernesto Jasso		WELL MATERIAL: N/A		BORING DEPTH: 40'	FILTER PACK: N/A	
Condition: Concrete sidewalk @ east end of 900 High St., Oakland Unified School District.						DRILLING DATE: 6/12/07

FINISH: 1600

DRILLING START: 1300

LOGGED BY: K. Detterman

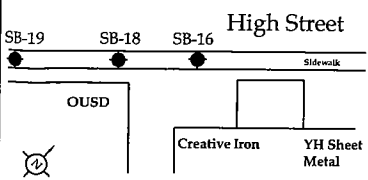
APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core	
								MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
								FIRST ENCOUNTERED WET SOIL: 14'	
								STATIC WATER DEPTH - DATE: N/A	
						31		Clayey gravel (GC), fine to coarse gravel, wet.	
						32			
	Soil	SB-18 34' 6/12/07 1500		NO		33			
						34			
						35	No Recovery	Refusal @ 40' bgs. Total depth 40'	
						36			
						37			
						38			
						39			
						40			
						41			
						42			
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			
						51			
						55			
						53			
						54			
						55			
						56			
						57			
						58			
						59			
						60			

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-19
DRILLING CONTRACTOR: Precision Sampling		DRILL RIG TYPE: Geo Probe 6610DT Track Rig	WELL DEPTH: N/A	BORING DIAMETER: 2"	
DRILL RIG OPERATOR: Ernesto Jasso		WELL MATERIAL: N/A	BORING DEPTH: 35'	FILTER PACK: N/A	
Condition: Concrete sidewalk @ west end of 900 High St., Oakland Unified School District.				DRILLING DATE: 6/12/07	

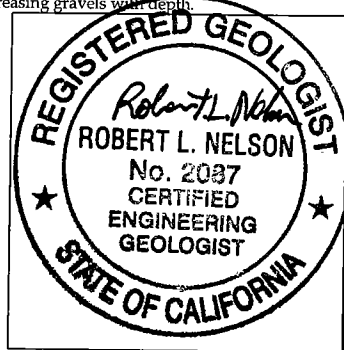
FINISH: 1800

DRILLING START: 1400

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

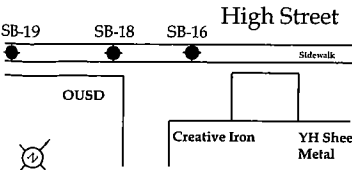
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION	
						1	Not Logged	Hand augered to 5'.	
						2			
						3			
						4			
						5			
				NO		6		Clayey gravel (GC), fine to coarse gravel, dark brown (10YR 3/3), moist.	
						7		Silty lean clay (CL) moist, stiff, plastic.	
				NO		8			
						9			
						10		Increasing gravel - well graded fine, moist, plastic.	
						11			
						12		Poorly graded sand (SP), medium, wet, increasing gravels with depth.	
						13			
				NO		14		Silty gravel (GM), fine to coarse gravel.	
						15		Silty lean clay (CL), stiff, plastic, wet.	
						16			
Soil	SB-19 18'	6/12/07 1540		NO		17		Poorly graded sand (SP), medium, wet.	
						18			
Water	SB-19 20' GW	6/12/07 1550		NO		19		Silty lean clay (CL), moist, stiff, plastic, dark yellowish brown (10YR 3/6).	
						20			
	Used PVC 0.010" screen placed from interval 10' - 20' for GW sample collection						21		Poorly graded sand (SP), medium, saturated.
						22			
Soil	SB-19 24'	6/12/07 1645				23		Silty lean clay (CL), stiff, wet, plastic.	
						24			
					NO	25		Poorly graded sand (SP), coarse, saturated.	
						26			
Soil	SB-19 27'	6/12/07 1715				27		Silty lean clay (CL), wet.	
						28			
						29			
						30			



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

<p>FIELD LOCATION OF BORING:</p> 		<p>CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.</p>		<p>JOB NO#: ZP046D</p>	<p>PROJ. MANAGER: Karel Detterman, P.G.</p>	<p>BORING/WELL NO.: SB-19</p>
<p>DRILLING CONTRACTOR: Precision Sampling</p>		<p>DRILL RIG TYPE: Geo Probe 6610DT Track Rig</p>		<p>WELL DEPTH: N/A</p>	<p>BORING DIAMETER: 2"</p>	
<p>DRILL RIG OPERATOR: Ernesto Jasso</p>		<p>WELL MATERIAL: N/A</p>		<p>BORING DEPTH: 35'</p>	<p>FILTER PACK: N/A</p>	
<p>Condition: Concrete sidewalk @ west end of 900 High St., Oakland Unified School District.</p>						<p>DRILLING DATE: 6/12/07</p>

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Direct Push Macro-Core
						31	No Recovery	MONITORING INSTRUMENT: N/A
						32		FIRST ENCOUNTERED WET SOIL: 14'
						33	No Recovery	STATIC WATER DEPTH - DATE: N/A
						34		Used PVC 0.010" screen placed from interval 25' - 35' for GW sample collection
	Water	SB-19 35' GW				35	No Recovery	Direct push refusal @ 35' bgs.
		6/12/07 1730				36		Total depth 35' bgs.
						37	No Recovery	
						38		
						39	No Recovery	
						40		
						41	No Recovery	
						42		
						43	No Recovery	
						44		
						45	No Recovery	
						46		
						47	No Recovery	
						48		
						49	No Recovery	
						50		
						51	No Recovery	
						52		
						53	No Recovery	
						54		
						55	No Recovery	
						56		
						57	No Recovery	
						58		
						59	No Recovery	
						60		

FINISH: 1800

DRILLING START: 1400

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

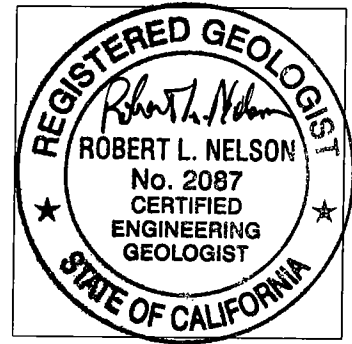
Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING: 	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-20
	DRILLING CONTRACTOR: Precision Sampling & RSI	DRILL RIG TYPE: Geo Probe 6610DT Track Rig (Precision) & Geo Probe 6600 Truck Mounted (RSI)	WELL DEPTH: N/A	BORING DIAMETER: 2"
	DRILL RIG OPERATOR: Ernesto Jasso (Precision) & Jose Ambriz (RSI)	WELL MATERIAL: N/A	BORING DEPTH: 56'	FILTER PACK: N/A
	Condition: South bound traffic lane of San Leandro St. in front of 4401 San Leandro St., Vulcan Lofts. Precision direct push 5' - 45'. RSI direct push 45' to 56' and collected water sample.			DRILLING DATE: 6/14/07

FINISH: 1500
 DRILLING START: 1100
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	DESCRIPTION
						1	Not Logged	Approximately 8" thick concrete.
						2	Not Logged	Hand auger to 5' bgs.
						3	Not Logged	
						4	Not Logged	
				NO		5	Not Logged	
						6	Not Logged	Gravelly lean clay (CL), moist, very heterogeneous material with sandy zones, gravels, numerous colors, moist.
						7	Not Logged	
						8	Not Logged	Color change to dark olive gray (5Y 3/2).
						9	Not Logged	
						10	Not Logged	
						11	Not Logged	Gravelly lean clay (CL) 10-20% medium sand and 20% gravel, light brown olive (2.5Y 5/3).
						12	Not Logged	
						13	Not Logged	
						14	Not Logged	
						15	Not Logged	
				NO		16	Not Logged	Decreasing gravels
						17	Not Logged	Silty lean clay (CL), moist, plastic between 16' and 20', occasional sandy and gravelly layers.
						18	Not Logged	
						19	Not Logged	
				NO		20	Not Logged	Silty lean clay (CL), moist, plastic.
						21	Not Logged	
				NO		22	Not Logged	
						23	Not Logged	
						24	Not Logged	
						25	Not Logged	Increasing sand @ 25'. Sandy clay, 20-35% medium sand, moist.
						26	Not Logged	
						27	Not Logged	Increasing gravel @ 28'.
						28	Not Logged	
						29	Not Logged	
						30	Not Logged	



Used PVC 0.010 inch screen placed from interval 20'-30' for groundwater sample collection

Water	SB-20 30' GW		
	6/14/07 1225		

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING:		CLIENT/LOCATION:		JOB NO#:	PROJ. MANAGER:	BORING/WELL NO.:			
		Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	SB-20			
		DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:			
		Precision Sampling & RSI		Geo Probe 6610DT Track Rig (Precision) & Geo Probe 6600 Truck Mounted (RSI)	N/A	2"			
		DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:			
		Ernesto Jasso (Precesion) & Jose Ambriz (RSI)		N/A	56'	N/A			
		Condition: South bound traffic lane of San Leandro St. in front of 4401 San Leandro St., Vulcan Lofts				DRILLING DATE:	6/14/07		
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube	
								MONITORING INSTRUMENT: N/A	
								FIRST ENCOUNTERED WET SOIL: 29'	
								STATIC WATER DEPTH - DATE: N/A	
	Soil	SB-20 33' 6/14/07 1415		NO		31		Same as previous material.	
						32			
						33			
						34			
						35			
						36			
						37			
						38			
						39			
						40			
						41		Same as previous material.	
						42			
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			
						51		Drive casing pulled up and water sample collected from inside of drive casing with bailer.	
						52			
						53			
						54			
						55			
						56			
						57			
						58			
						59			
						60			
	Water	SB-20 56' GW 6/15/07 1445				55		Total depth 56' bgs	
						56			

FINISH: 1500

DRILLING START: 1100

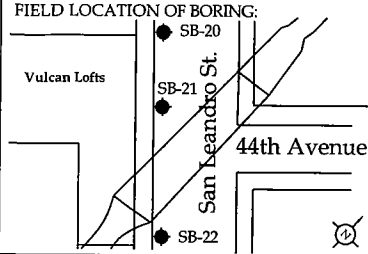
LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

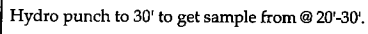
Project No. ZP046D

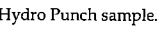
Sheet 1 of 2

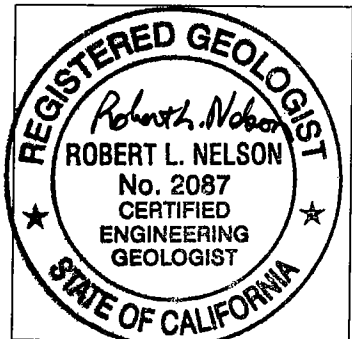
<p>FIELD LOCATION OF BORING:</p> 		<p>CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.</p>		<p>JOB NO#: ZP046D</p>		<p>PROJ. MANAGER: Karel Detterman, P.G.</p>		<p>BORING/WELL NO.: SB-21</p>	
		<p>DRILLING CONTRACTOR: Precision Sampling</p>		<p>DRILL RIG TYPE: Geo Probe 6610DT Track Rig</p>		<p>WELL DEPTH: N/A</p>		<p>BORING DIAMETER: 2"</p>	
		<p>DRILL RIG OPERATOR: Ernesto Jasso</p>		<p>WELL MATERIAL: N/A</p>		<p>BORING DEPTH: 54'</p>		<p>FILTER PACK: N/A</p>	
		<p>Condition: Parking lane of south bound traffic lane of San Leandro St. in front of 4401 San Leandro St., Vulcan Lofts</p>						<p>DRILLING DATE: 6/15/07</p>	

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube
						1		
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		
						13		
						14		
						15		
						16		
						17		
						18		
						19		
						20		
						21		
						22		
						23		
						24		
						25		
						26		
						27		
						28		
						29		
						30		

Not Logged







FINISH: 1200
 DRILLING START: 0900
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING: 	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-21
	DRILLING CONTRACTOR: Precision Sampling	DRILL RIG TYPE: Geo Probe 6610DT Track Rig	WELL DEPTH: N/A	BORING DIAMETER: 2"
	DRILL RIG OPERATOR: Ernesto Jasso	WELL MATERIAL: N/A	BORING DEPTH: 54'	FILTER PACK: N/A
	Condition: Parking lane of south bound traffic lane of San Leandro St. in front of 4401 San Leandro St, Vulcan Lofts			DRILLING DATE: 6/15/07

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube	
								MONITORING INSTRUMENT: N/A	
								FIRST ENCOUNTERED WET SOIL: N/A	
								STATIC WATER DEPTH - DATE: N/A	
						31	Not Logged		
						32			
						33			
						34			
						35			
						36			
						37			
						38			
						39			
						40			
						41			
						42			
						43			
						44			
						45			
						46			
						47			
						48			
						49			
						50			
						51			
						55			
						53			
	Water	SB-21 54' GW				6/15/07 1215			
						54			Total depth 54' bgs
						55			
						56			
						57			
						58			
						59			
						60			

FINISH: 1200
 DRILLING START: 0900
 LOGGED BY: K. Detterman
 APPROVED BY: R. Nelson

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D
Sheet 1 of 2

FIELD LOCATION OF BORING: 	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.	JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-22
	DRILLING CONTRACTOR: Resonant Sonic International (RSI)	DRILL RIG TYPE: Geo Probe 6600 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"
	DRILL RIG OPERATOR: Jose & Fernando Ambriz	WELL MATERIAL: N/A	BORING DEPTH: 58'	FILTER PACK: N/A
	Condition: Parking lane of south bound traffic lane of San Leandro St. in front of 4401 San Leandro St., Vulcan Lofts			DRILLING DATE: 6/15/07

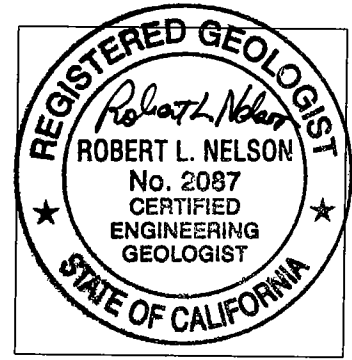
FINISH: 1700

DRILLING START: 1200

LOGGED BY: R. Nelson

APPROVED BY: R. Nelson

Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube Continuous Core	
								MONITORING INSTRUMENT: N/A	FIRST ENCOUNTERED WET SOIL: N/A
						1	Not Logged	STATIC WATER DEPTH - DATE: N/A	
						2		Collected grab groundwater sample SB-22 32'	
						3			
						4			
						5			
						6			
						7			
						8			
						9			
						10			
						11			
						12			
						13			
						14			
						15			
						16			
						17			
						18			
						19			
						20			
						21			
						22			
						23			
						24			
						25			
						26			
						27			
						28			
						29			
						30			



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING: 	CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: SB-22
	DRILLING CONTRACTOR: Resonant Sonic International (RSI)		DRILL RIG TYPE: Geo Probe 6600 Truck Mounted	WELL DEPTH: N/A	BORING DIAMETER: 2"
	DRILL RIG OPERATOR: Jose & Fernando Ambriz		WELL MATERIAL: N/A	BORING DEPTH: 58'	FILTER PACK: N/A
	Condition: Parking lane of south bound traffic lane of San Leandro St. in front of 4401 San Leandro St, Vulcan Lofts				DRILLING DATE: 6/15/07

FINISH: 1700

DRILLING START: 1200

LOGGED BY: R. Nelson

APPROVED BY: R. Nelson

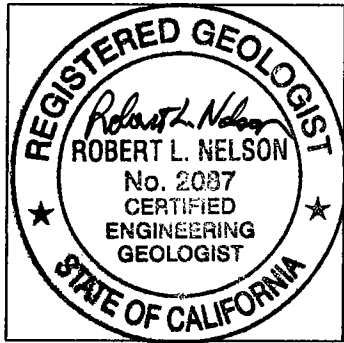
Conductivity (mS/M)	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: Dual Tube	
								MONITORING INSTRUMENT: N/A	
								FIRST ENCOUNTERED WET SOIL: N/A	
								STATIC WATER DEPTH - DATE: N/A	
	Water	SB-22 32' GW 6/15/07 1515				31	Not Logged		
				NO		32	+ +	Clayey sand (SC), dark yellowish brown (10YR 4/4), loose, wet, 60% fine to medium coarse subrounded to subangular sand, 10% fine gravel, 30% clay, thin (1") layers of Silty Sand.	
						33	+ +		
						34	+ +		
						35	+ +		
	Soil	SB-22 36' 6/15/07 1600				35	+ +	Sandy gravel with clay (GC), dark yellowish brown (10YR 3/4), wet, dense, 25% clay, 30% fine to coarse sand, 45% subangular to subrounded fine gravel.	
				NO		36	+ +		
						37	Graphic Log Pattern		
						38	Graphic Log Pattern		
						39	Graphic Log Pattern	Bottom of boring @ 58', collected grab groundwater sample @ 54' @ 1615. Total depth 58' bgs.	
						40	Graphic Log Pattern		
						41	Graphic Log Pattern		
						42	Graphic Log Pattern		
						43	Graphic Log Pattern		
						44	Graphic Log Pattern		
						45	Graphic Log Pattern		
						46	Graphic Log Pattern		
						47	Graphic Log Pattern		
						48	Graphic Log Pattern		
						49	Graphic Log Pattern		
						50	Graphic Log Pattern		
						51	Graphic Log Pattern		
						52	Graphic Log Pattern		
						53	Graphic Log Pattern		
	Water	SB-22 54' GW 6/15/07 1615				53	Graphic Log Pattern		
						54	Graphic Log Pattern		
						55	Graphic Log Pattern		
						56	Graphic Log Pattern		
						57	Graphic Log Pattern		
						58	Graphic Log Pattern		
						59	Graphic Log Pattern		
						60	Graphic Log Pattern		

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING:		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO#: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: MW-1D				
		DRILLING CONTRACTOR: Gregg Drilling		DRILL RIG TYPE: Track Mounted Hollow Stem Auger	WELL DEPTH: 45'	BORING DIAMETER: 2"				
		DRILL RIG OPERATOR: Jessie Pattison		WELL MATERIAL: 2" PVC Sch 40 0.010" Slot	BORING DEPTH: 45'	FILTER PACK: 2 / 12 Sand				
		Condition: On site.				DRILLING DATE: 10/04/07				
See Attached CPT Log	WELL CONSTRUCTION	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: California Split Spoon	
									MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
									FIRST ENCOUNTERED WET SOIL: 30'	
									STATIC WATER DEPTH - DATE: N/A	
Sandy Silt & Clayey Silt					YES		1			
Clay & Silty Clay					YES		2			
Clay & Silty Clay					NO		3	Hand augered to 5'.		
Sandy Silt & Clayey Silt					NO		4	Silty lean clay (CL) with poor graded sand, medium and fine gravel, light olive brown (2.5Y 5/4).		
Sandy Silt & Clayey Silt					NO		5	Clayey gravel (GC), moist, olive gray (5Y 4/2).		
Sandy Silt & Clayey Silt					NO		6	Silty lean clay (CL), plastic, moist, olive brown (2.5Y 4/3).		
Sandy Silt & Clayey Silt					NO		7	Clayey silt (ML), moist, plastic.		
Sandy Silt & Clayey Silt					NO		8	Clayey silt (ML), moist, plastic.		
Sandy Silt & Clayey Silt					NO		9	Moist, light olive brown (2.5Y 5/3).		
Sandy Silt & Clayey Silt					NO		10	Moist, light olive brown (2.5Y 5/3).		
Sandy Silt & Clayey Silt					NO		11			
Sandy Silt & Clayey Silt					NO		12			
Sandy Silt & Clayey Silt					NO		13			
Sandy Silt & Clayey Silt					NO		14			
Sandy Silt & Clayey Silt					NO		15			
Sandy Silt & Clayey Silt					NO		16			
Sandy Silt & Clayey Silt					NO		17			
Sandy Silt & Clayey Silt					NO		18			
Sandy Silt & Clayey Silt					NO		19			
Sandy Silt & Clayey Silt					NO		20			
Sandy Silt & Clayey Silt					NO		21			
Sandy Silt & Clayey Silt					NO		22			
Sandy Silt & Clayey Silt					NO		23			
Sandy Silt & Clayey Silt					NO		24			
Sandy Silt & Clayey Silt					NO		25			
Sandy Silt & Clayey Silt					NO		26			
Sandy Silt & Clayey Silt					NO		27			
Sandy Silt & Clayey Silt					NO		28			
Sandy Silt & Clayey Silt					NO		29			
Sandy Silt & Clayey Silt					NO		30			



FINISH: 1500

DRILLING START: 1315

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson

**SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP**

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING:		CLIENT/LOCATION:		JOB NO#:	PROJ. MANAGER:	BORING/WELL NO.:				
		Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	MW-1D				
		DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:				
		Gregg Drilling		Track Mounted Hollow Stem Auger	45'	2"				
		DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:				
		Jessie Pattison		2" PVC Sch 40 0.010" Slot	CPT 60'	2 / 12 Sand				
		Condition: On site.				DRILLING DATE: 10/04/07				
See Attached CPT Log	WELL CONSTRUCTION	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: California Split Spoon	
									MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
										FIRST ENCOUNTERED WET SOIL: 30'
										STATIC WATER DEPTH - DATE: N/A
					NO		31		Silty sand (SM), fine sand, moist, light olive brown (2.5Y 5/3).	
							32		Not sampled below 31.5' due to heaving sands.	
							33			
							34			
							35			
							36			
							37			
							38			
							39			
							40			
							41			
							42			
							43			
							44			
							45		Total depth of well 45' bgs.	
							46			
							47			
							48			
							49			
							50			
							51			
							52			
							53			
							54			
							55			
							56			
							57			
							58			
							59			
							60		Total depth of CPT Boring 60'.	

FINISH: 1500

DRILLING START: 1315

LOGGED BY: K. Detterman

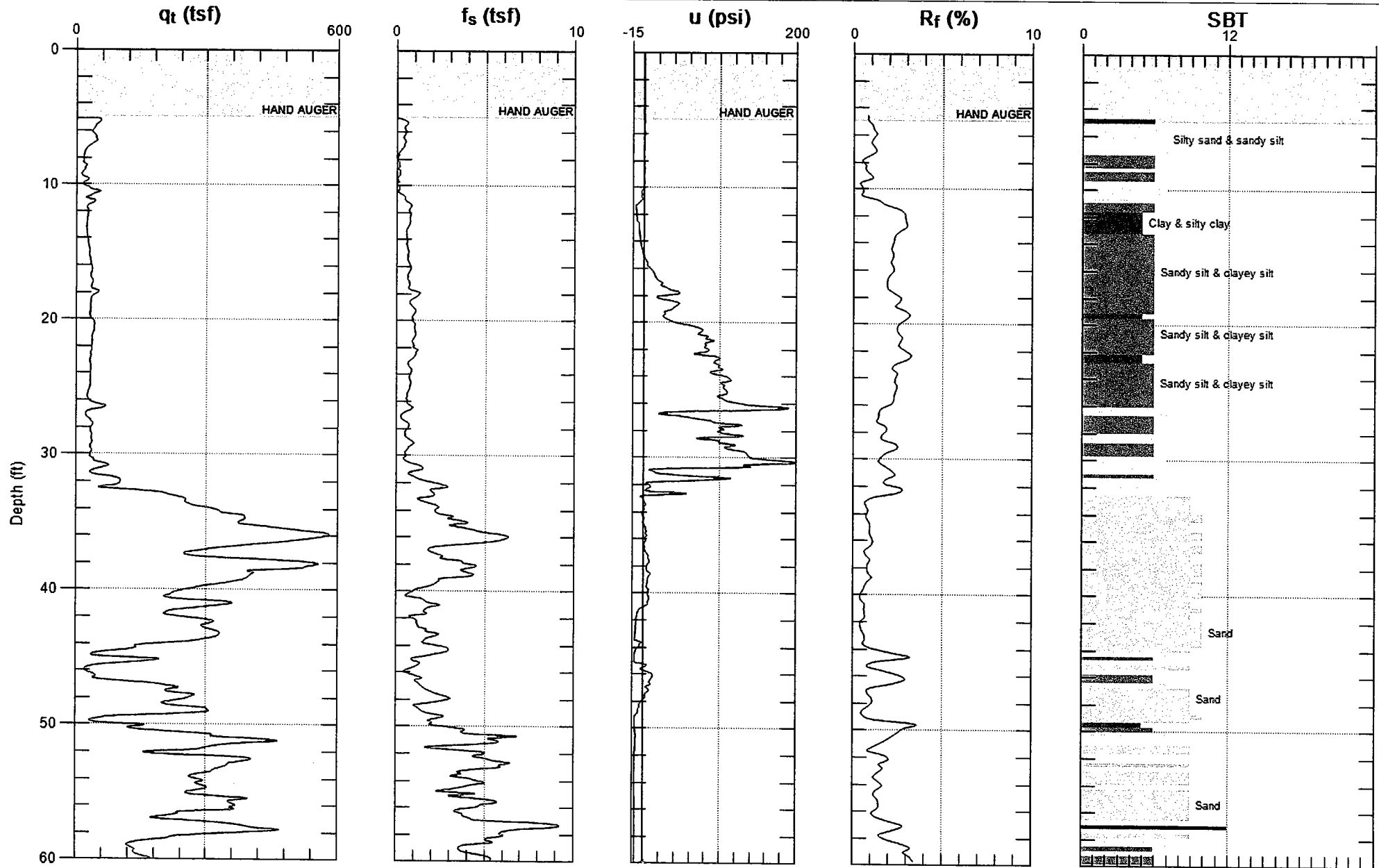
APPROVED BY: R. Nelson



CLEARWATER GROUP

Site: EAGLE GAS STATION
Sounding: CPT-1D

Engineer: K.DETTERMAN
Date: 9/27/2007 05:16



Max. Depth: 60.039 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 1 of 2

FIELD LOCATION OF BORING: 		CLIENT/LOCATION: Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		JOB NO.: ZP046D	PROJ. MANAGER: Karel Detterman, P.G.	BORING/WELL NO.: MW-7D
		DRILLING CONTRACTOR: Gregg Drilling		DRILL RIG TYPE: Track Mounted Hollow Stem Auger	WELL DEPTH: 45'	BORING DIAMETER: 2"
		DRILL RIG OPERATOR: Jessie Pattison		WELL MATERIAL: 2" PVC Sch 40 0.010" Slot	BORING DEPTH: 46.5'	FILTER PACK: 2 / 12 Sand
		Condition: On site.		DRILLING DATE: 10/04/07		

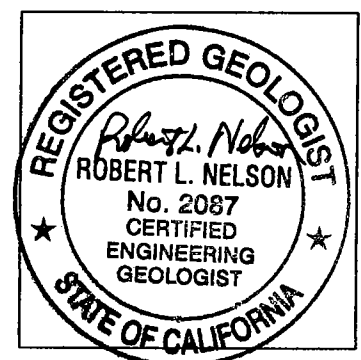
See Attached CPT Log	WELL CONSTRUCTION	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: California Split Spoon	
									MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
									FIRST ENCOUNTERED WET SOIL: 30'	
									STATIC WATER DEPTH - DATE: N/A	
SANDY SILT & CLAYEY SILT							1		Hand augered to 5'.	
							2			
							3			
							4			
							5		YES	Silty lean clay (CL), trace of fine gravel, plastic, moist, dark olive brown (2.5Y 3/3).
							6			
							7			
							8		YES	
							9			
							10		YES	
							11			
							12			
							13			
							14			
							15		NO	Clayey silt (ML), 20 - 35% medium sand, moist, light olive brown (2.5Y 5/4).
							16			
							17			
							18			
							19			
							20			Clayey silt (ML), <10% sand, light olive brown (2.5Y 5/4).
							21			
							22			Silty lean clay (CL), 10% fine sand, dark yellowish brown (10YR 4/4).
							23			
							24			
							25			
							26			
							27			
							28			
							29			
							30			

FINISH: 1115

DRILLING START: 0915

LOGGED BY: K. Detterman

APPROVED BY: R. Nelson



SOIL BORING AND WELL CONSTRUCTION LOG:
CLEARWATER GROUP

Project No. ZP046D

Sheet 2 of 2

FIELD LOCATION OF BORING:		CLIENT/LOCATION:		JOB NO.:	PROJ. MANAGER:	BORING/WELL NO.:				
		Eagle Gas 4301 San Leandro Blvd. Oakland Ca.		ZP046D	Karel Detterman, P.G.	MW-7D				
		DRILLING CONTRACTOR:		DRILL RIG TYPE:	WELL DEPTH:	BORING DIAMETER:				
		Gregg Drilling		Track Mounted Hollow Stem Auger	45'	2"				
		DRILL RIG OPERATOR:		WELL MATERIAL:	BORING DEPTH:	FILTER PACK:				
		Jessie Pattison		2" PVC Sch 40 0.010" Slot	46.5'	2 / 12 Sand				
		Condition: On site.				DRILLING DATE: 10/04/07				
See Attached CPT Log	WELL CONSTRUCTION	SAMPLE TYPE	SAMPLE I.D.	Product	PETROLEUM HYDROCARBON ODOR	PID	DEPTH (FEET)	GRAPHIC LOG	SAMPLING METHOD: California Split Spoon	
									MONITORING INSTRUMENT: Photo-Ionization Detector (PID)	
									FIRST ENCOUNTERED WET SOIL: 30'	
									STATIC WATER DEPTH - DATE: N/A	
Silty Sand & Sand	[Pattern]						31	[Graphic]	Silty sand (SM), medium sand, saturated, dark yellowish brown (10YR 4/4).	
							32			
							33			
							34			
							35			
							36			
							37			
							38			
							39			
							40			
							41			
							42			
					43					
Sand	[Pattern]						44	[Graphic]	Well graded gravel (GW), saturated, dark yellowish brown (10YR 3/4). Heaving sands.	
							45			
							46			
							47			
							48			
							49			
							50			
							51			
							52			
							53			
							54			
							55			
					56					
Sandy Silt & Clayey Silt	[Pattern]						57	[Graphic]	Well graded gravel (GW), saturated, dark yellowish brown (10YR 3/4).	
							58			
							59			
							60			
								Total depth 46.5' bgs.		
								Total depth of CPT Boring 60'.		

FINISH: 1115

DRILLING START: 0915

LOGGED BY: K. Detterman

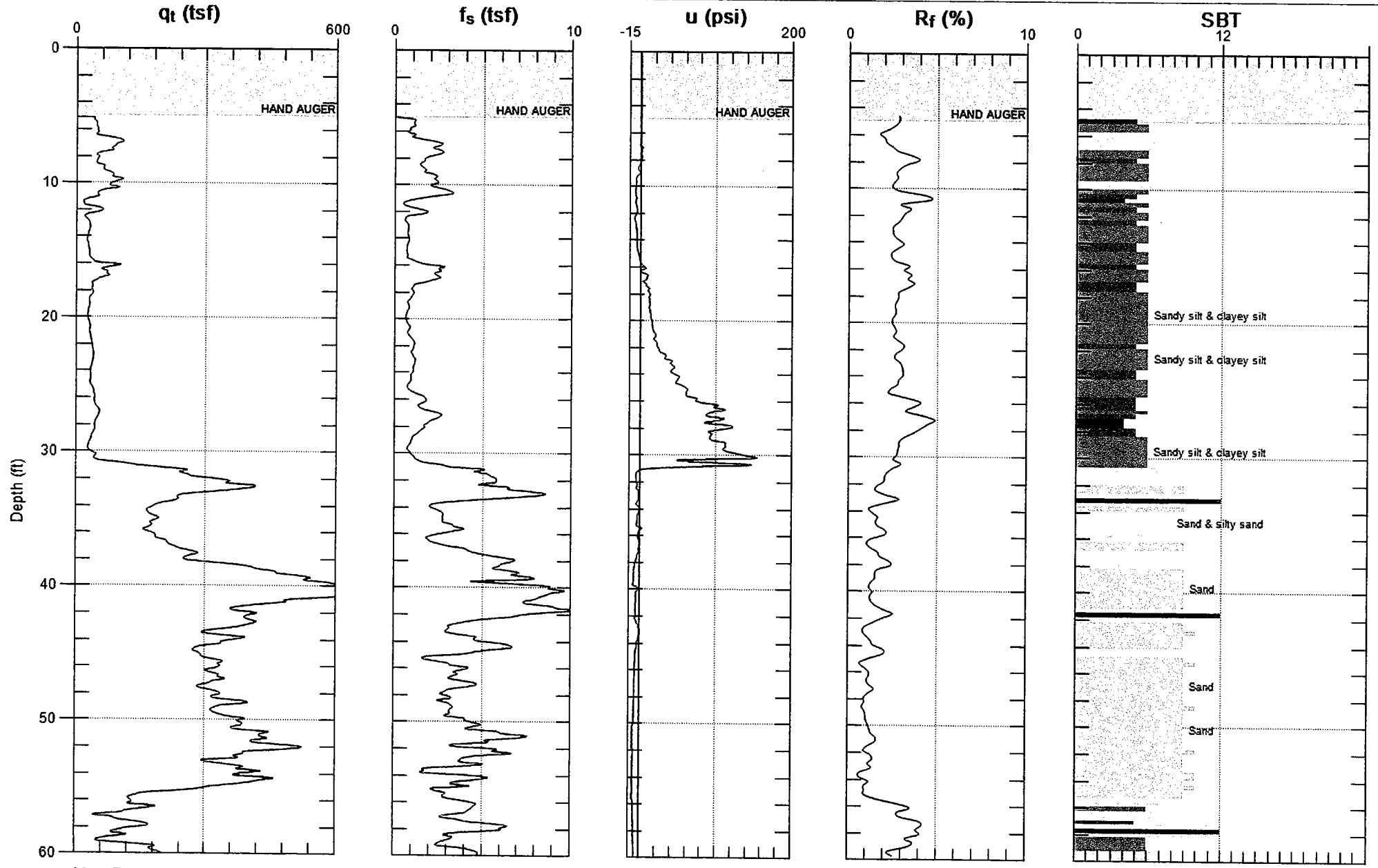
APPROVED BY: R. Nelson



CLEARWATER GROUP

Site: EAGLE GAS STATION
Sounding: CPT-7D

Engineer: K.DETTERMAN
Date: 9/27/2007 07:42



Max. Depth: 60.039 (ft)
Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

APPENDIX D
CLEARWATER GROUP PROTOCOLS

Direct Push Technologies

CLEARWATER GROUP

Direct-Push Drilling Investigation Procedures

The direct-push method of drilling soil borings has several advantages over hollow-stem auger drilling. The direct-push method produces no drill cuttings and is capable of 150 to 200 feet of soil boring or well installation work per day. Direct-push drilling can be used for soil gas surveys, soil sampling, groundwater sampling, and installation of small-diameter monitoring well and remediation system components such as air sparge points. The equipment required to perform direct-push work is varied, ranging from a roto-hammer and operator to a pickup truck-mounted rig capable of substantial static downward force combined with percussive force. This method allows subsurface investigation work to be performed in areas inaccessible to conventional drill rigs such as basements, beneath canopies, or below power lines. Direct-push equipment is ideal at sites with unconsolidated soil or overburden, and for sampling depths less than 30 feet. This method is not appropriate for boring through bedrock or gravelly soils.

Permitting and Site Preparation

Prior to direct-push drilling, Clearwater Group will obtain all necessary permits and locate all underground and above-ground utilities through Underground Service Alert and a thorough site inspection. All drilling equipment will be inspected daily and will be maintained in safe operating condition. All down-hole drilling equipment will be cleaned prior to arriving on-site. Working components of the rig near the borehole, as well as casing and sampling equipment, will be thoroughly decontaminated between each boring location by either steam cleaning or washing with an Alconox® solution. All drilling and sampling methods will be consistent with ASTM Method D-1452-80 and county, state, and federal regulations.

Boring Installation and Soil Sampling

Direct-push drilling uses a 1.5-inch outer barrel with an inner rod held in place during pushing. Soil samples are collected by penetrating to the desired depth, retracting the inner rod, and

attaching a soil sampler. The sampler is then thrust beyond the outer barrel into native soil. Soil samples are recovered in brass, stainless steel, or acetate sample tubes held inside the sampler.

Soil removed from the upper tube section is used for lithologic descriptions, according to the Unified Soil Classification System. If organic vapors will be analyzed in the field, a portion of each soil sample will be placed in a plastic zip-lock bag. The bag will be sealed and warmed for approximately 10 minutes to allow soil vapors to be released from the sample and diffused into the head space of the bag. The bag is then pierced with the probe of a calibrated organic vapor detector and the detector readings recorded with the lithologic descriptions on the soil boring log. Soil samples selected for laboratory analysis will be covered on both ends with Teflon™ tape and plastic end caps. The samples will then be labeled, recorded on a chain-of-custody document, stored on ice in a cooler, and transported to a state-certified analytical laboratory.

Temporary Well Installation and Groundwater Sampling

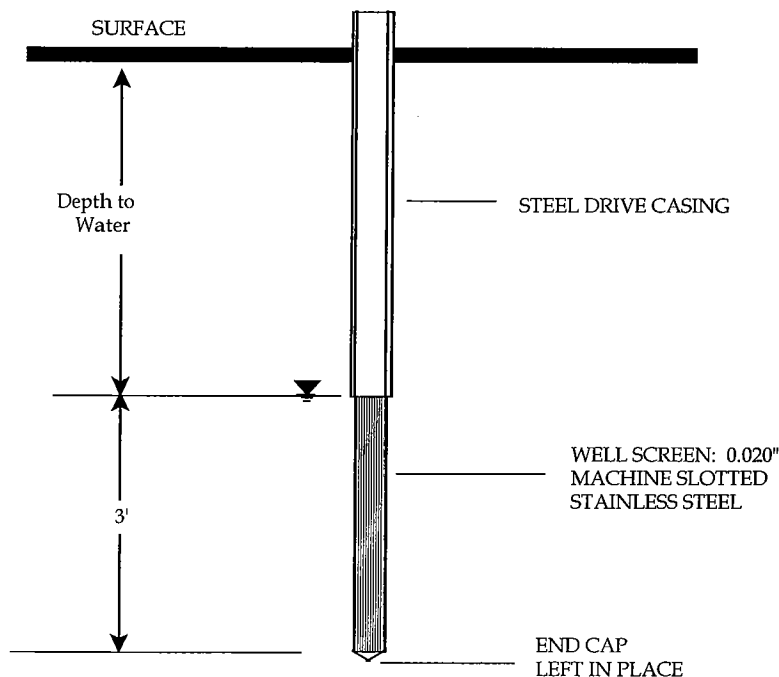


Figure 1

Grab Groundwater Sample Collection

Groundwater samples are collected by removing the inner rod and attaching a 4-foot stainless steel screen with a drive point at the end (**Figure 1**). The screen and rod are then inserted inside

the outer barrel and driven to the desired depth, where the outer rod is retracted to expose the screen. If enough water for sampling is not produced through the stainless well screen, a 1-inch PVC screen can be installed in the boring and the outer rod retracted to leave a temporary well point for collecting groundwater samples, water level, or other parameters.

Monitoring Well Installation and Development

Permanent small-diameter monitoring wells are installed by driving a 2-inch diameter outer barrel and inner rod as described above. Upon reaching the desired depth, the system is removed, and 1-inch outside diameter (OD) (1/2-inch inside diameter [ID]) pre-packed PVC piping is installed. The well plug is created using granular bentonite. The well seal is constructed of cement and sealed at the surface with a conventional “Christy® Box” or similar vault. Monitoring wells are developed by surging the well with a small-diameter bailer and removing approximately 10 casing volumes of water, until the water is clear.

Groundwater Sample Collection and Water Level Measurement from Monitoring Wells

Before groundwater is collected from the wells, the water levels are measured in all wells using an electronic water-level gauge. Monitoring wells are prepared for sampling by purging three or more well volumes of water. Water is removed using small-diameter bailers, a peristaltic pump, or by manually pumping using tubing with a check valve at the bottom. During removal of each well volume of water, the temperature, pH, and conductivity are measured and recorded on the field sampling form. Successive well volumes are removed until the parameters have stabilized or the well has gone dry. Prior to sampling, the well is allowed to recover to within 90% of the stabilized water levels. The groundwater samples¹ are collected using small-diameter bailers.

¹ Small-diameter wells often produce small sample quantities and are appropriate for analysis of volatile and aromatic compounds and dissolved metals analysis using VOA vials. Obtaining liter-size samples can be difficult and time consuming. Monitoring wells installed by the direct-push method are most effective at sites where the subsurface soils are more coarse than silt, gasoline components are the key contaminants of concern, and water levels are not more than 25 feet below ground surface.

The samples are decanted into laboratory-supplied containers, labeled, recorded on a chain-of-custody document, stored on ice in a cooler, and transported to a certified analytical laboratory for analysis.

Grab Groundwater Sampling

CLEARWATER GROUP

Grab Groundwater Sample Collection Protocol

Permits, Site Safety Plan, Utility Clearance

Clearwater Group will obtain all the required permits, unless contracted by a permitting party. Clearwater prepares a site-specific Site Safety Plan detailing site hazards, site safety and control, decontamination procedures, and emergency response procedures to be employed throughout the work. Usually seven, and at least two, working days prior to drilling, Underground Service Alert (USA) will be notified of the planned work. Clearwater attempts to locate all underground and above-ground utilities by site inspection and with hand-held magnetic line locating equipment, in conjunction with its subcontractors and knowledgeable site managers, and review the site as-built drawings. Clearwater may employ a private, professional utility locator or a subcontractor who performs ground penetrating radar surveys, to refine the site utility inspection. Clearwater provides notification to those agencies which require notification prior to drilling in order to schedule a grouting inspection.

Drilling Equipment

All soil borings are drilled using a truck-mounted, direct-push, Geoprobe® drill rig, unless site conditions warrant a different drilling method. Subsurface conditions permitting, the first five feet of each boring is advanced using a hand-auger or post-hole digger. All drilling equipment will be inspected daily and maintained in safe working condition by the operator. All down-hole drilling equipment will be steam cleaned prior to arriving on site. Working components of the drill rig near the borehole, as well as probe rods, will be thoroughly steam cleaned between each boring location. All drilling and sampling methods will be consistent with local, state, and federal regulations.

Grab Groundwater Sample Collection

- Drive the soil boring to the depth zone(s) of interest. For petroleum hydrocarbons and floating compounds, the primary zone of interest is the top of static groundwater. For

dense non-aqueous-phase liquid compounds, the zone of interest will be below the top of static groundwater and above an aquitard.

- Remove the Geoprobe® rods from the boring, and insert a short (5-foot-long or less), 1-inch diameter PVC temporary well screen. Attach enough blank well casing above the well screen to reach the target depth.
- If the boring was drilled with a hollow-stem auger, it may be possible to collect the sample from within the augers without setting temporary well casing.
- Lower a clean disposable bailer down the temporary well casing to collect the grab groundwater sample.
- Decant the sample into laboratory-provided containers.
- Seal and label the containers, and record the sample information on a Chain-of-Custody document.
- Place the labeled containers in watertight plastic bags (zip-lock opening).
- Store the sample in a cooler containing ice.
- Block the bags of samples with bubblewrap to prevent container breakage.
- Remove the temporary well casing.
- Grout the boring with bentonite chips or cement grout according to agency regulations.
- Hydrate the bentonite chips with clean water.
- Patch the ground surface with concrete, asphalt cold patch, or other material to match the ground surface.
- Measure the sample location from known landmarks using a tape measure and/or use a global positioning system (GPS) to locate the sample. If a GPS is used, located nearby landmarks with the GPS, and confirm the locations with a tape measure.
- Sketch the sample location in the field notes with dimensions.
- Photograph the sample location with nearby landmarks visible in the photograph's background.

Recordkeeping

Proper record keeping consists of recording the following information, at a minimum:

- Sample identification information (location, depth, sample identifiers, data, and time)

- Chain-of-custody document
- Field personnel
- Weather conditions (temperature, wind speed, precipitation, etc.)
- Sampling method, devices, and equipment used
- Shipment information, including a copy of the FedEx, or other transporter, shipping label and tracking number.

Quality Assurance Procedures

To prevent contamination of the samples, Clearwater personnel adhere to the following procedures in the field:

- Put on a new, clean pair of latex gloves prior to collecting each sample.
- Collect samples in the expected order of increasing degree of contamination based on historical analytical results.
- All sampling equipment will be thoroughly decontaminated between each boring.

Soil Waste Management

Soil cuttings will be stockpiled onsite and covered with plastic sheeting to control runoff, or contained in labeled 55-gallon D.O.T.-approved drums, pending disposal. Wastes will be sampled, to profile them for disposal, and, once profiled and accepted, hauled by a licensed waste hauler to an appropriate landfill. All waste stored on site will be properly labeled at the time of production.

Vapor Sampling

CLEARWATER GROUP

Soil Vapor Monitoring Well Installation and Sampling Procedures

Permits, Site Safety Plan, Utility Clearance

Clearwater Group obtains all the required permits, unless otherwise contractually directed. Clearwater prepares a site specific Site Safety Plan detailing site hazards, site safety and control, decontamination procedures, and emergency response procedures to be employed throughout the work. At least 48 hours prior to drilling, Underground Service Alert (USA) or an equivalent agency is notified of the planned work. Clearwater attempts to locate all underground and aboveground utilities by site inspection (in conjunction with its subcontractors and knowledgeable site managers, if available), and review of site as-built drawings. Clearwater may employ a private, professional utility locator and/or ground penetrating radar survey subcontractor to refine the site utility inspection.

Drilling Equipment

All soil borings are drilled using a truck-mounted Geoprobe® drill rig, unless site conditions warrant a different drilling method. Subsurface conditions permitting, the first five feet of each boring is advanced using a hand-auger or post-hole digger. All drilling equipment is inspected daily and maintained in safe working condition by the operator. All down-hole drilling equipment is steam cleaned prior to arriving on site. Working components of the drill rig near the borehole, as well as probe rods are thoroughly steam cleaned between each boring location. All Clearwater drilling and sampling methods will be consistent with local, state and federal regulations.

Soil Vapor Monitoring Well Installation

Soil vapor monitoring depths will be chosen to minimize the effects of change in barometric pressure, or breakthrough of ambient air from the surface, and to ensure that consistent and representative samples are collected. If groundwater is too shallow to allow soil gas sampling at the depths specified above, samples will be collected from immediately above the capillary fringe. Sampling points will be laterally spaced to adequately represent soil gas concentrations proximate to structures, taking into consideration the location of the contamination relative to the structures.

The borehole for the soil vapor well may be installed using direct push or hollow stem auger drilling equipment or hand driven using a rotary hammer or a hand auger. A soil vapor monitoring well example is shown on **Figure 1**. The sample probe consists of a probe tip through which the soil gas probe is collected, and probe tubing that extends from the probe tip to the ground surface. Sample probe tubing will be small diameter (1/8 to 1/4 inch). The sample probe and tubing will be constructed of material that will not react or interact with the target compounds. The tubing will be properly marked at the surface to identify the probe location and depth. The probe tip is placed midway between the top and bottom of the sampling interval, with a sand pack extending approximately 6 inches above and below the sampling interval. At least 1 foot of dry granular bentonite will be placed on top of the sand. The borehole will be grouted to the surface with hydrated bentonite. The surface seal will be a minimum of 2.5 feet thick. One foot of dry granular bentonite must be placed between the filter pack and the grout at each sampling location.

Surface Completion

The following components may be installed, as necessary:

- Gas-tight valve or fitting for capping the vapor point;
- Fitting for connection to above ground sampling equipment;
- Protective flush-mounted or above ground well vault and/or guard posts

Soil Gas Probe Equilibration

Soil gas sampling will not be conducted for at least 30 minutes following probe installation using the direct push method. For probes installed with hollow stem auger drilling methods, soil gas sampling will not be conducted for at least 48 hours following probe installation.

Soil Gas Probe Sampling

The volume of the sampling system will be calculated by summing the volume of the probe screened interval (including filter pack void space, accounting for the porosity of the sand pack), the volume of tubing from the probe tip to the ground surface, and the volume of the above ground tubing connecting the soil probe to the sample collection device. The monitoring point will be purged until at least three volumes of the full sampling system have been evacuated. Purging will be conducted at flow rates and vacuum conditions similar to those for sample collection.

An initial sampling rate of 200 milliliters per minute (mL/min) or less is recommended. The sampling flow rate will be adjusted using the flow regulator. Data for samples collected under a vacuum greater than 100 inches of water will be flagged.

The aboveground sampling equipment will be attached to the probe at the surface. All sampling system connections and fittings will be checked for tightness and obvious deterioration. Purge at least three volumes of air from the sampling system. After purging is complete, the valve to the purge line will be closed and/or disconnected from the purge apparatus. Connect the sample container to the sampling line, using quick-connect, airtight fittings. Open the valve and collect the sample into the container, measure and record the sample flow rate and vacuum every two to five minutes. Disconnect sample container and immediately label the container with the sample identification information. If Summa canisters are used, measure the final pressure of the canister using a pressure gauge and record the final canister pressure.

Recordkeeping

Proper record keeping consists of recording the following information, at a minimum:

- Sample identification information (location, depth, sample identifiers, data and time)
- Field personnel
- Weather conditions (temperature, wind speed, barometric pressure, precipitation, etc.)
- Sampling method, devices and equipment used
- Purge volumes prior to sample collection
- Volume of soil gas extracted per sample
- Vacuum of canisters before and after samples were collected
- If observable, the apparent moisture content of the sampling zone
- Shipment information, including chain of custody protocols and records.

Leak Testing

A leak test is recommended each time a soil gas sample is collected. A leak check, or tracer, compound such as isopropanol is recommended to determine if leaks are present. Other compounds such as pentane, isobutene, propane and butane may be used. A leak check compound is selected that is not known or suspected to be site related or otherwise associated with the site or nearby properties.

Immediately before sampling, place the leak check compound at each location where ambient air could enter the sampling system or where cross contamination may occur. For liquid compounds, wet a paper towel with the leak compound and place the towel over each location where air could enter the system. The leak check compound must be included in the list of analytes looked for during laboratory analysis of each sample.

Quality Assurance Procedures

To prevent contamination of the samples, Clearwater personnel adhere to the following procedures in the field:

- A new, clean pair of latex gloves are put on prior to sampling each well.
- Wells are purged and samples are collected in the expected order of increasing degree of contamination based on historical analytical results.
- All purging equipment will be thoroughly decontaminated between each well.

Soil Waste Management

Soil cuttings are stockpiled on and covered with plastic sheeting to control runoff, or contained in 55-gallon D.O.T.-approved drums on site. Waste soil is sampled to chemically profile it for disposability, and is hauled by a licensed waste hauler to an appropriate landfill. All waste stored on site is properly labeled at the time of production.

Well Construction

CLEARWATER GROUP

Field Procedure for Soil Borehole Drilling and Groundwater Monitoring Well Installation and Development

Drilling and Soil Sampling

Permits, Site Safety Plan, Utility Clearance

Clearwater Group (Clearwater) obtains all the required permits, unless otherwise contractually directed. Clearwater prepares a site-specific Site Safety Plan detailing site hazards, site safety and control, decontamination procedures, and emergency response procedures to be employed throughout the work or in the event of an accident. At least 48 hours prior to drilling, Underground Service Alert (USA) or an equivalent agency is notified of the planned work. Clearwater attempts to locate all underground and aboveground utilities by site inspection (in conjunction with its subcontractors and knowledgeable site managers, if available), and review of site as-built drawings. Clearwater may employ a private, professional utility locator to refine the site utility inspection.

Drilling Equipment

Soil borings are drilled using either a continuous core drill (Geoprobe®) or a hollow-stem auger drill rig, unless site conditions warrant a different drilling method. Subsurface conditions permitting, the first 5 feet of each boring is advanced using a hand-auger or post-hole digger. All drilling equipment is inspected daily and maintained in safe working condition by the operator. All down-hole drilling equipment is steam cleaned prior to arriving on site. Working components of the drill rig near the borehole, as well as augers and drill rods, are thoroughly steam cleaned between each boring location. All Clearwater drilling and sampling methods are consistent with American Society for Testing and Material Standards (ASTM) Method D 1452-80 and local, state, and federal regulations.

Soil Sampling and Lithologic Description

Whenever possible, the first boring to be drilled at a site is continuously cored to obtain a complete lithologic description using a Geoprobe®, or similar, continuous core soil probe drill rig.

Typically, groundwater monitoring wells are installed using a hollow-stem auger drill, and samples for lithologic characterization or environmental analysis are collected every 5 feet to the total depth explored. The samples are collected using brass tubes fitted inside a split spoon sampler. If copper or zinc contamination is the subject of the investigation, stainless steel liners are used instead of brass. Additional soil samples may be collected if there are significant changes in lithology or in areas of obvious soil contamination. The soil sampler and liners are cleaned with an Alconox® solution and rinsed with tap water prior to each sampling event. New liners are used whenever a soil sample may be retained for laboratory analysis.

During soil sample collection, the split spoon sampler is driven 18 to 24 inches past the lead auger by a 140-pound hammer falling 30 inches. The number of hammer blows necessary to drive the sampler every 6 inches ("Blow Count") and the amount of soil recovered are recorded on the Field Exploratory Soil Boring Log. It is necessary to record the type, diameter, and length of the split spoon sampler on the boring log, in order to be able to convert the blow counts to standard values.

The soil descriptions will be made according to ASTM Method D 2488-90, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). The soil colors will be described, by color name and numeric description, according to Munsell® Soil Color Charts.

Monitoring Well Installation

Construction of Well Casing, Screen, and Filter Pack

Groundwater monitoring wells are constructed with threaded, Schedule 40, polyvinyl chloride (PVC) casing unless site geochemistry or contamination necessitates an alternative material. The wells are constructed with factory-slotted screened casing and threaded end caps.

A graded sand filter pack is placed in the annular space across the screened interval and extended approximately 1 to 2 feet above the screened casing, as site conditions permit. The well screen slot size is the maximum size capable of retaining 90% of the filter pack. Typically, 0.010-inch diameter slotted screen is used where the formation is predominantly clay and/or silt or fine sand and 0.020-inch screen is used where the formation is predominantly medium to coarse sand and/or gravel.

The filter pack grade (mean grain size) is selected according to native sediment type as follows: a) for poorly graded fine sand or silt/clay - 4 times the 70% grain size of the formation (grain size where 30% of the grains are larger and 70% are smaller); b) for medium to coarse sand, gravel, or well graded sediments - 6 times the 70% grain size. Since grain size analysis is not always available, Clearwater often selects screen size and filter pack on the basis of the site stratigraphy, specifically the finest significantly thick layer of sediment to be screened. Commonly selected grades are Lone Star[®] 3, 2/12, or 2/16 (or equivalent) with 0.020-inch slotted screen and Lone Star[®] 1/20 with 0.010-inch slotted screen. To prevent sand bridging of the filter pack and help settle the filter pack sand, a surge block should be used to swab the inside of the screened casing, prior to placing the well seal.

Well Seal and Completion

A minimum 2-foot-thick seal of bentonite pellets is placed above the filter pack to prevent extension of the filter pack into an overlying water-bearing unit. The bentonite seal is hydrated by either formation water or potable water. Neat cement or a cement/bentonite grout mixture seals the remaining annular space to the surface. If bentonite is used in the grout mixture, it will not exceed 5% by weight. The grout is placed using a tremie pipe, if the top of the bentonite is more than 20 feet below grade, or if water is present in the boring above the bentonite seal. A watertight locking cap and protective traffic-rated vault box is installed to protect the top of each well. Well construction details are recorded on a Well Construction Log and the Field Exploratory Soil Boring Log Form. Following completion of a well, Clearwater completes and submits, or ensures that the driller has sufficient information to complete, sign, and submit, a California Department of Water Resources Well Completion Report (Form 188) for each well.

Well Development

Well development is performed 48 hours, or more, after well installation, in order to allow the grout seal to set. Well development removes most of the particles that are smaller than the slot openings from the filter pack, thereby increasing the porosity and hydraulic conductivity of the filter pack.

The total depth of the well (depth to bottom of well) is measured, then the well is pumped, or bailed, of several well volumes to remove turbid water and sediment from the bottom of the well and to draw sediment that is finer than the slot opening through the well screen. The well is surged with a surge block for approximately 10 minutes to further remove loose sediment and then pumped, or bailed, to remove the turbid water and sediment from the well. The surging and bailing procedure is performed at least twice, followed by additional purging until the purged water is observed to be clear. Typically, greater than ten well volumes of groundwater will be removed from a well during development. Finally, the total depth of the well and depth to water are remeasured.

Multiple, large diameter, and/or deep wells can be developed by a drilling or well-servicing contractor using a truck-mounted well development rig. The contractor may use alternative well development techniques, such as bailing, jetting, or air development procedures.

Soil Boring Abandonment

Soil borings which are not to be converted into monitoring wells are sealed to the ground surface using neat cement or sand-cement slurry, in accordance with federal, state, and local regulations. Native soil or road construction surfacing may be used to fill the top 2 to 3 feet to ensure a completed flush surface and for cosmetic purposes, as permitted.

APPENDIX E
ANALYTICAL REPORTS



Report Number : 56957

Date : 6/20/2007

Karel Detterman
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 9 Soil Samples and 6 Water Samples
Project Name : Eagle Gas
Project Number : ZP046D

Dear Ms. Detterman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Subject : 9 Soil Samples and 6 Water Samples
Project Name : Eagle Gas
Project Number : ZP046D

Case Narrative

The Method Reporting Limit for Methanol has been increased due to the presence of an interfering compound for samples SB-16 10 ft, SB-16 30 ft GW, SB-18 15 ft, SB-18 20 ft GW, SB-18 34 ft, SB-18 40 ft GW, SB-19 20 ft GW, SB-19 27 ft and SB-19 30 ft GW.

Tert-Butanol results for sample SB-19 30 ft GW may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.

Tert-Butanol results for samples SB-16 10 ft, SB-9 15 ft, SB-18 34 ft and SB-19 18 ft may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (up to 5%) converts to Tert-Butanol during the analysis of soil samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 3:1.

Sample SB-19 30 ft GW was analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for samples SB-16 30 ft GW, SB-18 20 ft GW, SB-18 40 ft GW and SB-16 46 ft GW.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample SB-16 10 ft. These hydrocarbons are lower boiling than typical diesel fuel.

Hydrocarbons reported as TPH as Diesel do not exhibit a typical Diesel chromatographic pattern for sample SB-9 29 ft. These hydrocarbons are higher boiling than typical diesel fuel.

Matrix Spike/Matrix Spike Duplicate Results associated with samples SB-16 10 ft, SB-18 15 ft, SB-19 18 ft, SB-18 34 ft, SB-16 45 ft, SB-19 24 ft, and SB-9 29 ft for the analyte TPH as Diesel were affected by the analyte concentrations already present in the un-spiked sample.

Approved By:


Jde Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB-16 10 ft**

Matrix : Soil

Lab Number : 56957-01

Sample Date :6/11/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.086	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene	0.0059	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethylbenzene	0.12	0.0050	mg/Kg	EPA 8260B	6/15/2007
Total Xylenes	0.89	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	0.84	0.0050	mg/Kg	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	0.025	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-Butanol	0.061 J	0.015	mg/Kg	EPA 8260B	6/15/2007
Methanol	< 5.0	5.0	mg/Kg	EPA 8260B	6/15/2007
Ethanol	< 0.025	0.025	mg/Kg	EPA 8260B	6/15/2007
TPH as Gasoline	9.2	1.0	mg/Kg	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	97.0		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	6/15/2007
1,2-Dichloroethane-d4 (Surr)	97.2		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	20	1.0	mg/Kg	M EPA 8015	6/16/2007
1-Chlorooctadecane (Diesel Surrogate)	95.4		% Recovery	M EPA 8015	6/16/2007

Approved By:  Joel Kiff



Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-9 15 ft**

Matrix : Soil

Lab Number : 56957-02

Sample Date :6/11/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	0.14	0.0050	mg/Kg	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-Butanol	0.016 J	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/15/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/15/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	6/15/2007
1,2-Dichloroethane-d4 (Surr)	104		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/18/2007
1-Chlorooctadecane (Diesel Surrogate)	99.7		% Recovery	M EPA 8015	6/18/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-9 29 ft**

Matrix : Soil

Lab Number : 56957-03

Sample Date :6/11/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-Butanol	0.0073	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/14/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/14/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	6/14/2007
1,2-Dichloroethane-d4 (Surr)	99.4		% Recovery	EPA 8260B	6/14/2007
TPH as Diesel	11	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	87.1		% Recovery	M EPA 8015	6/19/2007

Approved By:  Joel Kiff



Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-16 30 ft GW**

Matrix : Water

Lab Number : 56957-04

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	46	4.0	ug/L	EPA 8260B	6/15/2007
Toluene	12	4.0	ug/L	EPA 8260B	6/15/2007
Ethylbenzene	93	4.0	ug/L	EPA 8260B	6/15/2007
Total Xylenes	78	4.0	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	1400	3.0	ug/L	EPA 8260B	6/16/2007
Diisopropyl ether (DIPE)	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	33	4.0	ug/L	EPA 8260B	6/15/2007
Tert-Butanol	630	15	ug/L	EPA 8260B	6/16/2007
Methanol	< 1000	1000	ug/L	EPA 8260B	6/16/2007
Ethanol	< 40	40	ug/L	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
TPH as Gasoline	4400	400	ug/L	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 1500	1500	ug/L	M EPA 8015	6/15/2007
Octacosane (Diesel Surrogate)	112		% Recovery	M EPA 8015	6/15/2007

Approved By:  Joel Kiff



Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

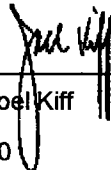
Sample : **SB-16 45 ft**

Matrix : Soil

Lab Number : 56957-05

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	0.0096	0.0050	mg/Kg	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/15/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/15/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	6/15/2007
1,2-Dichloroethane-d4 (Surr)	101		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	91.2		% Recovery	M EPA 8015	6/19/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-18 15 ft**

Matrix : Soil

Lab Number : 56957-06

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	0.23	0.0050	mg/Kg	EPA 8260B	6/14/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-Butanol	1.6	0.0050	mg/Kg	EPA 8260B	6/15/2007
Methanol	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/15/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	99.6		% Recovery	EPA 8260B	6/15/2007
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	90.3		% Recovery	M EPA 8015	6/19/2007

Approved By:

Joel Kiff





Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-18 20 ft GW**

Matrix : Water

Lab Number : 56957-07

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 50	50	ug/L	EPA 8260B	6/15/2007
Toluene	< 50	50	ug/L	EPA 8260B	6/15/2007
Ethylbenzene	< 50	50	ug/L	EPA 8260B	6/15/2007
Total Xylenes	< 50	50	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	51000	250	ug/L	EPA 8260B	6/16/2007
Diisopropyl ether (DIPE)	< 50	50	ug/L	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 50	50	ug/L	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	430	50	ug/L	EPA 8260B	6/15/2007
Tert-Butanol	51000	250	ug/L	EPA 8260B	6/15/2007
Methanol	< 40000	40000	ug/L	EPA 8260B	6/16/2007
Ethanol	< 500	500	ug/L	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 50	50	ug/L	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 50	50	ug/L	EPA 8260B	6/15/2007
TPH as Gasoline	< 5000	5000	ug/L	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 200	200	ug/L	M EPA 8015	6/15/2007
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	6/15/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-18 34 ft**

Matrix : Soil

Lab Number : 56957-08

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	8.7	0.025	mg/Kg	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	0.11	0.0050	mg/Kg	EPA 8260B	6/15/2007
Tert-Butanol	1.4 J	0.15	mg/Kg	EPA 8260B	6/15/2007
Methanol	< 5.0	5.0	mg/Kg	EPA 8260B	6/14/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/14/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/14/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	6/14/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	82.8		% Recovery	M EPA 8015	6/19/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB-18 40 ft GW**

Matrix : Water

Lab Number : 56957-09

Sample Date : 6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 25	25	ug/L	EPA 8260B	6/15/2007
Toluene	< 25	25	ug/L	EPA 8260B	6/15/2007
Ethylbenzene	< 25	25	ug/L	EPA 8260B	6/15/2007
Total Xylenes	< 25	25	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	14000	25	ug/L	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 25	25	ug/L	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 25	25	ug/L	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	82	25	ug/L	EPA 8260B	6/15/2007
Tert-Butanol	33000	150	ug/L	EPA 8260B	6/16/2007
Methanol	< 5000	5000	ug/L	EPA 8260B	6/16/2007
Ethanol	< 250	250	ug/L	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 25	25	ug/L	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 25	25	ug/L	EPA 8260B	6/15/2007
TPH as Gasoline	< 2500	2500	ug/L	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	98.7		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 300	300	ug/L	M EPA 8015	6/15/2007
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	6/15/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB-19 18 ft**

Matrix : Soil

Lab Number : 56957-10

Sample Date : 6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	1.0	0.0050	mg/Kg	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	0.014	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-Butanol	0.038 J	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methanol	< 0.30	0.30	mg/Kg	EPA 8260B	6/15/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/14/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	6/14/2007
1,2-Dichloroethane-d4 (Surr)	100		% Recovery	EPA 8260B	6/14/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	86.7		% Recovery	M EPA 8015	6/19/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

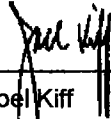
Sample : **SB-19 20 ft GW**

Matrix : Water

Lab Number : 56957-11

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 15	15	ug/L	EPA 8260B	6/15/2007
Toluene	< 15	15	ug/L	EPA 8260B	6/15/2007
Ethylbenzene	< 15	15	ug/L	EPA 8260B	6/15/2007
Total Xylenes	< 15	15	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	8500	15	ug/L	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 15	15	ug/L	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 15	15	ug/L	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	64	15	ug/L	EPA 8260B	6/15/2007
Tert-Butanol	< 70	70	ug/L	EPA 8260B	6/16/2007
Methanol	< 3000	3000	ug/L	EPA 8260B	6/16/2007
Ethanol	< 150	150	ug/L	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 15	15	ug/L	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 15	15	ug/L	EPA 8260B	6/15/2007
TPH as Gasoline	< 1500	1500	ug/L	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	90	50	ug/L	M EPA 8015	6/15/2007
Octacosane (Diesel Surrogate)	121		% Recovery	M EPA 8015	6/15/2007

Approved By:  Joel Kiff



Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB-16 46 ft GW**

Matrix : Water

Lab Number : 56957-12

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	76	4.0	ug/L	EPA 8260B	6/15/2007
Toluene	25	4.0	ug/L	EPA 8260B	6/15/2007
Ethylbenzene	160	4.0	ug/L	EPA 8260B	6/15/2007
Total Xylenes	360	4.0	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	2100	5.0	ug/L	EPA 8260B	6/15/2007
Diisopropyl ether (DIPE)	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	51	4.0	ug/L	EPA 8260B	6/15/2007
Tert-Butanol	880	20	ug/L	EPA 8260B	6/15/2007
Methanol	< 500	500	ug/L	EPA 8260B	6/15/2007
Ethanol	< 40	40	ug/L	EPA 8260B	6/15/2007
1,2-Dichloroethane	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
TPH as Gasoline	7500	400	ug/L	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	< 1500	1500	ug/L	M EPA 8015	6/14/2007
Octacosane (Diesel Surrogate)	114		% Recovery	M EPA 8015	6/14/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB-19 24 ft**

Matrix : Soil

Lab Number : 56957-13

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	0.017	0.0050	mg/Kg	EPA 8260B	6/14/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/14/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/14/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	98.1		% Recovery	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	99.7		% Recovery	EPA 8260B	6/14/2007
1,2-Dichloroethane-d4 (Surr)	107		% Recovery	EPA 8260B	6/14/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	88.4		% Recovery	M EPA 8015	6/19/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB-19 27 ft**

Matrix : Soil

Lab Number : 56957-14

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	0.11	0.0050	mg/Kg	EPA 8260B	6/14/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methanol	< 0.50	0.50	mg/Kg	EPA 8260B	6/14/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/14/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/14/2007
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	6/14/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	88.8		% Recovery	M EPA 8015	6/19/2007

Approved By:  Joel Kiff



Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

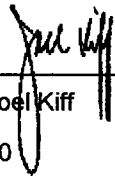
Sample : **SB-19 30 ft GW**

Matrix : Water

Lab Number : 56957-15

Sample Date :6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Toluene	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Ethylbenzene	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Total Xylenes	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	1800	4.0	ug/L	EPA 8260B	6/16/2007
Diisopropyl ether (DIPE)	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Ethyl-t-butyl ether (ETBE)	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
Tert-amyl methyl ether (TAME)	17	4.0	ug/L	EPA 8260B	6/15/2007
Tert-Butanol	24 J	20	ug/L	EPA 8260B	6/16/2007
Methanol	< 1000	1000	ug/L	EPA 8260B	6/16/2007
Ethanol	< 40	40	ug/L	EPA 8260B	6/15/2007
1,2-Dichloroethane	7.5	4.0	ug/L	EPA 8260B	6/15/2007
1,2-Dibromoethane	< 4.0	4.0	ug/L	EPA 8260B	6/15/2007
TPH as Gasoline	< 400	400	ug/L	EPA 8260B	6/15/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	6/15/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/15/2007
TPH as Diesel	73	50	ug/L	M EPA 8015	6/14/2007
Octacosane (Diesel Surrogate)	115		% Recovery	M EPA 8015	6/14/2007

Approved By:  Joel Kiff

QC Report : Method Blank Data

Project Name : Eagle Gas

Project Number : ZP046D

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/15/2007
1-Chlorooctadecane (Diesel Surrogate)	82.3		%	M EPA 8015	6/15/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	6/14/2007
Octacosane (Diesel Surrogate)	111		%	M EPA 8015	6/14/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	6/15/2007
Octacosane (Diesel Surrogate)	129		%	M EPA 8015	6/15/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/18/2007
1-Chlorooctadecane (Diesel Surrogate)	87.6		%	M EPA 8015	6/18/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	85.2		%	M EPA 8015	6/19/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/12/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/12/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/12/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/12/2007
Toluene - d8 (Surr)	101		%	EPA 8260B	6/12/2007
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	6/12/2007
1,2-Dichloroethane-d4 (Surr)	99.3		%	EPA 8260B	6/12/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/14/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/14/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	100		%	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	6/14/2007
1,2-Dichloroethane-d4 (Surr)	94.8		%	EPA 8260B	6/14/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/14/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	6/14/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	6/14/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/14/2007
Toluene - d8 (Surr)	99.3		%	EPA 8260B	6/14/2007
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	6/14/2007

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff



Report Number : 56957

Date : 6/20/2007

QC Report : Method Blank Data

Project Name : **Eagle Gas**

Project Number : **ZP046D**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/15/2007
Methanol	< 50	50	ug/L	EPA 8260B	6/15/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/16/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	6/16/2007
Methanol	< 50	50	ug/L	EPA 8260B	6/16/2007

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

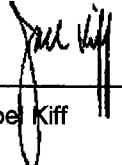
Approved By:  _____
Joel Kiff

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	56852-10	30	20.0	20.0	29.2	25.2	mg/Kg	M EPA 8015	6/15/07	59.0	50.8	14.8	60-140	25
TPH as Diesel	Blank	<50	1000	1000	812	838	ug/L	M EPA 8015	6/14/07	81.2	83.8	3.05	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1160	1180	ug/L	M EPA 8015	6/15/07	116	118	2.20	70-130	25
TPH as Diesel	56957-02	<1.0	20.0	20.0	14.5	15.6	mg/Kg	M EPA 8015	6/18/07	72.6	77.9	7.07	60-140	25
TPH as Diesel	57047-02	2.0	20.0	20.0	17.6	14.7	mg/Kg	M EPA 8015	6/19/07	79.9	67.1	17.4	60-140	25
Benzene	56792-03	<0.0050	0.0395	0.0399	0.0372	0.0374	mg/Kg	EPA 8260B	6/13/07	94.1	93.8	0.381	70-130	25
Toluene	56792-03	<0.0050	0.0395	0.0399	0.0363	0.0362	mg/Kg	EPA 8260B	6/13/07	91.8	90.8	1.12	70-130	25
Tert-Butanol	56792-03	<0.0050	0.198	0.200	0.179	0.176	mg/Kg	EPA 8260B	6/13/07	90.4	88.4	2.30	70-130	25
Methyl-t-Butyl Ether	56792-03	<0.0050	0.0395	0.0399	0.0394	0.0369	mg/Kg	EPA 8260B	6/13/07	99.6	92.6	7.37	70-130	25
Benzene	56958-06	<0.0050	0.0396	0.0397	0.0361	0.0358	mg/Kg	EPA 8260B	6/14/07	91.2	90.3	0.982	70-130	25
Toluene	56958-06	<0.0050	0.0396	0.0397	0.0349	0.0339	mg/Kg	EPA 8260B	6/14/07	88.2	85.4	3.16	70-130	25
Tert-Butanol	56958-06	<0.0050	0.198	0.198	0.178	0.178	mg/Kg	EPA 8260B	6/14/07	90.0	89.5	0.494	70-130	25
Methyl-t-Butyl Ether	56958-06	<0.0050	0.0396	0.0397	0.0397	0.0368	mg/Kg	EPA 8260B	6/14/07	100	92.7	7.82	70-130	25
Benzene	56959-03	9.3	39.8	39.9	48.6	49.1	ug/L	EPA 8260B	6/14/07	98.9	99.7	0.844	70-130	25
Toluene	56959-03	<0.50	39.8	39.9	40.7	40.4	ug/L	EPA 8260B	6/14/07	102	101	0.972	70-130	25

Approved By:  Joe Kiff

Report Number : 56957

Date : 6/20/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	56959-03	7.0	199	200	193	196	ug/L	EPA 8260B	6/14/07	93.8	94.5	0.791	70-130	25
Methyl-t-Butyl Ether	56959-03	150	39.8	39.9	181	185	ug/L	EPA 8260B	6/14/07	70.4	79.6	12.3	70-130	25
Benzene	57005-01	<0.50	39.8	39.9	39.6	39.6	ug/L	EPA 8260B	6/15/07	99.7	99.2	0.451	70-130	25
Toluene	57005-01	<0.50	39.8	39.9	39.6	39.6	ug/L	EPA 8260B	6/15/07	99.7	99.1	0.569	70-130	25
Tert-Butanol	57005-01	<5.0	199	200	192	189	ug/L	EPA 8260B	6/15/07	96.7	94.9	1.90	70-130	25
Methyl-t-Butyl Ether	57005-01	<0.50	39.8	39.9	34.6	36.0	ug/L	EPA 8260B	6/15/07	86.9	90.2	3.65	70-130	25
Benzene	56997-03	<0.50	40.0	40.0	41.8	40.8	ug/L	EPA 8260B	6/16/07	104	102	2.40	70-130	25
Toluene	56997-03	<0.50	40.0	40.0	42.4	41.4	ug/L	EPA 8260B	6/16/07	106	103	2.45	70-130	25
Tert-Butanol	56997-03	<5.0	200	200	209	207	ug/L	EPA 8260B	6/16/07	105	103	1.22	70-130	25
Methyl-t-Butyl Ether	56997-03	4.2	40.0	40.0	45.8	44.7	ug/L	EPA 8260B	6/16/07	104	101	2.68	70-130	25



Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number : 56957

Date : 6/20/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	6/15/07	77.6	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	6/18/07	94.5	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	6/19/07	94.0	70-130
Benzene	0.0398	mg/Kg	EPA 8260B	6/13/07	96.9	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	6/13/07	97.9	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	6/13/07	89.7	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	6/13/07	98.6	70-130
Benzene	0.0393	mg/Kg	EPA 8260B	6/14/07	101	70-130
Toluene	0.0393	mg/Kg	EPA 8260B	6/14/07	103	70-130
Tert-Butanol	0.196	mg/Kg	EPA 8260B	6/14/07	96.4	70-130
Methyl-t-Butyl Ether	0.0393	mg/Kg	EPA 8260B	6/14/07	95.4	70-130
Benzene	40.0	ug/L	EPA 8260B	6/14/07	104	70-130
Toluene	40.0	ug/L	EPA 8260B	6/14/07	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/14/07	96.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/14/07	93.7	70-130

KIFF ANALYTICAL, LLC

Approved By:



 Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 56957

Date : 6/20/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	6/15/07	98.4	70-130
Toluene	40.0	ug/L	EPA 8260B	6/15/07	99.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/15/07	93.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/15/07	97.9	70-130
Benzene	40.0	ug/L	EPA 8260B	6/16/07	101	70-130
Toluene	40.0	ug/L	EPA 8260B	6/16/07	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/16/07	102	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/16/07	102	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:

Joe Kiff





Report Number : 57046

Date : 6/21/2007

Karel Detterman
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 3 Soil Samples
Project Name : Eagle Gas
Project Number : ZP046

Dear Ms. Detterman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046**

Sample : **SB10-50.5-51**

Matrix : Soil

Lab Number : 57046-01

Sample Date :6/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/20/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/20/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/20/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	6/20/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	6/20/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	6/20/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/20/2007
1-Chlorooctadecane (Diesel Surrogate)	90.9		% Recovery	M EPA 8015	6/20/2007

Approved By:

Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046**

Sample : **SB10-53.5-54**

Matrix : Soil

Lab Number : 57046-02

Sample Date :6/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/20/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/20/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/20/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/20/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	6/20/2007
1,2-Dichloroethane-d4 (Surr)	105		% Recovery	EPA 8260B	6/20/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/20/2007
1-Chlorooctadecane (Diesel Surrogate)	86.4		% Recovery	M EPA 8015	6/20/2007

Approved By:

Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046**

Sample : **SB10-57.5-58**

Matrix : Soil

Lab Number : 57046-03

Sample Date :6/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/20/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/20/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/20/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/20/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/20/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	6/20/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	6/20/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/20/2007
1-Chlorooctadecane (Diesel Surrogate)	89.6		% Recovery	M EPA 8015	6/20/2007

Approved By:

Joel Kiff

Report Number : 57046

Date : 6/21/2007

QC Report : Method Blank Data

Project Name : **Eagle Gas**

Project Number : **ZP046**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	6/19/2007
1-Chlorooctadecane (Diesel Surrogate)	85.2		%	M EPA 8015	6/19/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	6/19/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	6/19/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	6/19/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	6/19/2007
Toluene - d8 (Surr)	99.9		%	EPA 8260B	6/19/2007
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	6/19/2007
1,2-Dichloroethane-d4 (Surr)	105		%	EPA 8260B	6/19/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 57046

Date : 6/21/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas**

Project Number : **ZP046**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	57047-02	2.0	20.0	20.0	17.6	14.7	mg/Kg	M EPA 8015	6/19/07	79.9	67.1	17.4	60-140	25
Benzene	57042-02	<0.0050	0.0403	0.0406	0.0416	0.0429	mg/Kg	EPA 8260B	6/19/07	103	106	2.44	70-130	25
Toluene	57042-02	<0.0050	0.0403	0.0406	0.0414	0.0430	mg/Kg	EPA 8260B	6/19/07	103	106	3.24	70-130	25
Tert-Butanol	57042-02	0.039	0.202	0.203	0.230	0.244	mg/Kg	EPA 8260B	6/19/07	94.5	101	6.61	70-130	25
Methyl-t-Butyl Ether	57042-02	0.0092	0.0403	0.0406	0.0439	0.0463	mg/Kg	EPA 8260B	6/19/07	86.2	91.5	5.92	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:  Joel Kiff

Report Number : 57046

Date : 6/21/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas**

Project Number : **ZP046**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	6/19/07	94.0	70-130
Benzene	0.0398	mg/Kg	EPA 8260B	6/19/07	96.6	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	6/19/07	96.5	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	6/19/07	85.8	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	6/19/07	89.8	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:

Joe Kiff





Report Number : 57047

Date : 06/25/2007

Karel Detterman
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 4 Soil Samples and 10 Water Samples
Project Name : Eagle Gas
Project Number : ZP046D

Dear Ms. Detterman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff

Subject : 4 Soil Samples and 10 Water Samples
Project Name : Eagle Gas
Project Number : ZP046D

Case Narrative

Samples SB20 56ft GW and SB22 54ft GW were analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.

The Method Reporting Limit for Ethanol has been increased due to the presence of an interfering compound for sample SB21 30ft GW.

Approved By: _____


Joe Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB10 30ft GW**

Matrix : Water

Lab Number : 57047-01

Sample Date :06/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Methyl-t-butyl ether (MTBE)	0.54	0.50	ug/L	EPA 8260B	06/19/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/19/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/2007
Toluene - d8 (Surr)	96.1		% Recovery	EPA 8260B	06/19/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	06/19/2007
TPH as Diesel	57	50	ug/L	M EPA 8015	06/19/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	06/19/2007

Approved By:  Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**


Sample : **SB10 27ft**

Matrix : Soil

Lab Number : 57047-02

Sample Date :06/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-Butanol	0.040	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	06/19/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	06/19/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	06/19/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	06/19/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	06/19/2007
1,2-Dichloroethane-d4 (Surr)	103		% Recovery	EPA 8260B	06/19/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	06/21/2007
1-Chlorooctadecane (Diesel Surrogate)	94.4		% Recovery	M EPA 8015	06/21/2007

Approved By:  Joel Kiff



Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB20 30ft GW**

Matrix : Water

Lab Number : 57047-03

Sample Date :06/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Methyl-t-butyl ether (MTBE)	11	0.50	ug/L	EPA 8260B	06/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/20/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	06/20/2007
4-Bromofluorobenzene (Surr)	99.7		% Recovery	EPA 8260B	06/20/2007
TPH as Diesel	87	50	ug/L	M EPA 8015	06/19/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	06/19/2007

Approved By:

Joel Kiff

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Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB20 33ft**

Matrix : Soil

Lab Number : 57047-04

Sample Date :06/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	06/19/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	06/19/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	06/19/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	06/19/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	06/19/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	06/19/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	06/21/2007
1-Chlorooctadecane (Diesel Surrogate)	84.8		% Recovery	M EPA 8015	06/21/2007

Approved By:

Joel Kiff

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Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB21 30ft GW** Matrix : Water Lab Number : 57047-05
 Sample Date : 06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5.4	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	1.2	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	8.2	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	3.6	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	0.97	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 8.0	8.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	2.0	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	510	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	06/21/2007
TPH as Diesel	< 400	400	ug/L	M EPA 8015	06/20/2007
(Note: MRL increased due to interference from Gasoline-Range hydrocarbons.)					
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	06/20/2007

Approved By:

Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB11 58ft GW**

Matrix : Water

Lab Number : 57047-06

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/20/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	06/20/2007
4-Bromofluorobenzene (Surr)	98.4		% Recovery	EPA 8260B	06/20/2007
TPH as Diesel	120	50	ug/L	M EPA 8015	06/20/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	06/20/2007

Approved By:

Joel Kiff



Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB21 54ft GW**

Matrix : Water

Lab Number : 57047-07

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.52	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	0.78	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	68	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	06/21/2007
TPH as Diesel	130	50	ug/L	M EPA 8015	06/20/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	112		% Recovery	M EPA 8015	06/20/2007

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Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

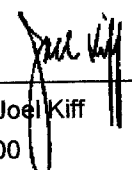
Sample : **SB20 56ft GW**

Matrix : Water

Lab Number : 57047-08

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	6.4	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	37	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/22/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	64	50	ug/L	EPA 8260B	06/21/2007
(Note: Primarily compounds not found in typical Gasoline)					
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	109		% Recovery	EPA 8260B	06/21/2007
TPH as Diesel	320	50	ug/L	M EPA 8015	06/20/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	113		% Recovery	M EPA 8015	06/20/2007

Approved By:  Joel Kiff

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Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB22 32ft GW** Matrix : Water Lab Number : 57047-09

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	99.8		% Recovery	EPA 8260B	06/21/2007
TPH as Diesel	88	50	ug/L	M EPA 8015	06/19/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	96.6		% Recovery	M EPA 8015	06/19/2007

Approved By:

Joel Kiff



Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB22 54ft GW**

Matrix : Water

Lab Number : 57047-10

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.68	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	0.53	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	63	50	ug/L	EPA 8260B	06/21/2007
(Note: Primarily compounds not found in typical Gasoline)					
Toluene - d8 (Surr)	94.8		% Recovery	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	06/21/2007
TPH as Diesel	310	50	ug/L	M EPA 8015	06/21/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	105		% Recovery	M EPA 8015	06/21/2007

Approved By:

Joel Kiff

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Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB11 58ft**

Matrix : Soil

Lab Number : 57047-11

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	06/19/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	06/19/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	06/19/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	06/19/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	06/19/2007
1,2-Dichloroethane-d4 (Surr)	102		% Recovery	EPA 8260B	06/19/2007
TPH as Diesel	1.5	1.0	mg/Kg	M EPA 8015	06/19/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	93.7		% Recovery	M EPA 8015	06/19/2007

Approved By:

Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB22 36ft**

Matrix : Soil

Lab Number : 57047-12

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	06/19/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	06/19/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	06/19/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/19/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	06/19/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	06/19/2007
1,2-Dichloroethane-d4 (Surr)	99.6		% Recovery	EPA 8260B	06/19/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	06/20/2007
1-Chlorooctadecane (Diesel Surrogate)	86.8		% Recovery	M EPA 8015	06/20/2007

Approved By:

Joel Kiff

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB10 57ft GW**

Matrix : Water

Lab Number : 57047-13

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/20/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/20/2007
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	06/20/2007
4-Bromofluorobenzene (Surr)	99.4		% Recovery	EPA 8260B	06/20/2007
TPH as Diesel	97	50	ug/L	M EPA 8015	06/19/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	97.2		% Recovery	M EPA 8015	06/19/2007

Approved By:

Joel Kiff



Report Number : 57047

Date : 06/25/2007

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Sample : **SB11 27ft GW**

Matrix : Water

Lab Number : 57047-14

Sample Date :06/15/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	06/21/2007
TPH as Diesel	100	50	ug/L	M EPA 8015	06/19/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel fuel.)					
Octacosane (Diesel Surrogate)	98.2		% Recovery	M EPA 8015	06/19/2007

Approved By:

Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 57047

Date : 06/25/2007

QC Report : Method Blank DataProject Name : **Eagle Gas**Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	06/19/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
1-Chlorooctadecane (Diesel Surrogate)	85.2		%	M EPA 8015	06/19/2007	Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	06/19/2007	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Octacosane (Diesel Surrogate)	108		%	M EPA 8015	06/19/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	06/19/2007	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Octacosane (Diesel Surrogate)	112		%	M EPA 8015	06/19/2007	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	06/20/2007	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
1-Chlorooctadecane (Diesel Surrogate)	81.7		%	M EPA 8015	06/20/2007	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	06/21/2007	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
Octacosane (Diesel Surrogate)	99.4		%	M EPA 8015	06/21/2007	Methanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	Toluene - d8 (Surr)	99.6		%	EPA 8260B	06/19/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	06/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methanol	< 0.20	0.20	mg/Kg	EPA 8260B	06/18/2007	Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 0.010	0.010	mg/Kg	EPA 8260B	06/18/2007	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	06/18/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.0050	0.0050	mg/Kg	EPA 8260B	06/18/2007	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	98.6		%	EPA 8260B	06/18/2007	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	93.4		%	EPA 8260B	06/18/2007	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane-d4 (Surr)	102		%	EPA 8260B	06/18/2007	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
						Methanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
						Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
						1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
						1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
						TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 57047

Date : 06/25/2007

QC Report : Method Blank Data

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	99.0		%	EPA 8260B	06/21/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
4-Bromofluorobenzene (Surr)	99.0		%	EPA 8260B	06/21/2007	Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/23/2007	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Methanol	< 50	50	ug/L	EPA 8260B	06/20/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Toluene - d8 (Surr)	104		%	EPA 8260B	06/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007	4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	06/20/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/20/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/20/2007	Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/20/2007	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
Toluene - d8 (Surr)	102		%	EPA 8260B	06/20/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	06/20/2007	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
						Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
						Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
						Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
						Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
						Methanol	< 50	50	ug/L	EPA 8260B	06/19/2007
						Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/19/2007
						1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
						1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/19/2007
						TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/19/2007
						Toluene - d8 (Surr)	100		%	EPA 8260B	06/19/2007
						4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	06/19/2007

Approved By:  Joel Kiff

Report Number : 57047

Date : 06/25/2007

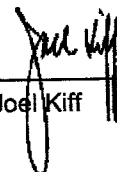
QC Report : Method Blank Data

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	101		%	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	98.7		%	EPA 8260B	06/21/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	06/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	06/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	06/21/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	06/21/2007
Toluene - d8 (Surr)	102		%	EPA 8260B	06/21/2007
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	06/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:  Joel Kiff

Report Number : 57047

Date : 06/25/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas**Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	57047-02	2.0	20.0	20.0	17.6	14.7	mg/Kg	M EPA 8015	6/19/07	79.9	67.1	17.4	60-140	25
TPH as Diesel	Blank	<50	1000	1000	780	807	ug/L	M EPA 8015	6/19/07	78.0	80.7	3.40	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1120	1100	ug/L	M EPA 8015	6/19/07	112	110	1.90	70-130	25
TPH as Diesel	57047-11	1.3	20.0	20.0	15.5	19.3	mg/Kg	M EPA 8015	6/21/07	73.0	90.9	21.9	60-140	25
TPH as Diesel	Blank	<50	1000	1000	1100	1090	ug/L	M EPA 8015	6/21/07	110	109	0.784	70-130	25
Benzene	57042-05	<0.0050	0.0400	0.0399	0.0452	0.0455	mg/Kg	EPA 8260B	6/18/07	113	114	0.958	70-130	25
Toluene	57042-05	<0.0050	0.0400	0.0399	0.0450	0.0446	mg/Kg	EPA 8260B	6/18/07	113	112	0.746	70-130	25
Tert-Butanol	57042-05	<0.0050	0.200	0.200	0.209	0.212	mg/Kg	EPA 8260B	6/18/07	105	106	1.54	70-130	25
Methyl-t-Butyl Ether	57042-05	<0.0050	0.0400	0.0399	0.0400	0.0395	mg/Kg	EPA 8260B	6/18/07	100	99.0	1.14	70-130	25
Benzene	57053-13	<0.50	40.2	40.2	45.2	44.7	ug/L	EPA 8260B	6/19/07	113	111	1.09	70-130	25
Toluene	57053-13	<0.50	40.2	40.2	45.2	46.1	ug/L	EPA 8260B	6/19/07	112	115	2.07	70-130	25
Tert-Butanol	57053-13	9.0	201	201	234	232	ug/L	EPA 8260B	6/19/07	112	111	1.28	70-130	25
Methyl-t-Butyl Ether	57053-13	94	40.2	40.2	137	133	ug/L	EPA 8260B	6/19/07	105	96.8	8.63	70-130	25
Benzene	57093-05	<0.50	40.0	40.0	42.4	41.7	ug/L	EPA 8260B	6/20/07	106	104	1.53	70-130	25
Toluene	57093-05	<0.50	40.0	40.0	42.5	42.0	ug/L	EPA 8260B	6/20/07	106	105	1.25	70-130	25

Approved By:  Joe Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 57047

Date : 06/25/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas**Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	57093-05	<5.0	200	200	215	216	ug/L	EPA 8260B	6/20/07	108	108	0.539	70-130	25
Methyl-t-Butyl Ether	57093-05	<0.50	40.0	40.0	39.6	39.9	ug/L	EPA 8260B	6/20/07	98.9	99.7	0.871	70-130	25
Benzene	57073-01	1.1	40.0	40.0	42.7	42.2	ug/L	EPA 8260B	6/21/07	104	103	1.35	70-130	25
Toluene	57073-01	7.0	40.0	40.0	48.6	48.1	ug/L	EPA 8260B	6/21/07	104	103	1.09	70-130	25
Tert-Butanol	57073-01	24	200	200	238	239	ug/L	EPA 8260B	6/21/07	107	107	0.316	70-130	25
Methyl-t-Butyl Ether	57073-01	1.6	40.0	40.0	39.8	39.5	ug/L	EPA 8260B	6/21/07	95.4	94.7	0.708	70-130	25
Benzene	57131-02	<0.50	40.0	40.0	41.5	40.6	ug/L	EPA 8260B	6/22/07	104	101	2.13	70-130	25
Toluene	57131-02	<0.50	40.0	40.0	41.5	40.5	ug/L	EPA 8260B	6/22/07	104	101	2.50	70-130	25
Tert-Butanol	57131-02	<5.0	200	200	209	209	ug/L	EPA 8260B	6/22/07	105	105	0.0314	70-130	25
Methyl-t-Butyl Ether	57131-02	<0.50	40.0	40.0	38.0	37.8	ug/L	EPA 8260B	6/22/07	94.9	94.5	0.460	70-130	25
Benzene	57066-05	<0.50	40.0	40.0	36.3	35.0	ug/L	EPA 8260B	6/20/07	90.8	87.4	3.78	70-130	25
Toluene	57066-05	<0.50	40.0	40.0	38.8	37.6	ug/L	EPA 8260B	6/20/07	97.0	94.1	3.04	70-130	25
Tert-Butanol	57066-05	<5.0	200	200	201	186	ug/L	EPA 8260B	6/20/07	100	92.8	7.95	70-130	25
Methyl-t-Butyl Ether	57066-05	<0.50	40.0	40.0	43.0	42.9	ug/L	EPA 8260B	6/20/07	107	107	0.215	70-130	25
Benzene	57093-04	<0.50	40.0	40.0	37.2	35.5	ug/L	EPA 8260B	6/20/07	93.1	88.9	4.65	70-130	25
Toluene	57093-04	<0.50	40.0	40.0	40.1	38.4	ug/L	EPA 8260B	6/20/07	100	95.9	4.41	70-130	25
Tert-Butanol	57093-04	<5.0	200	200	192	196	ug/L	EPA 8260B	6/20/07	96.2	98.1	2.00	70-130	25
Methyl-t-Butyl Ether	57093-04	0.68	40.0	40.0	44.9	43.6	ug/L	EPA 8260B	6/20/07	110	107	2.82	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 57047

Date : 06/25/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas**Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	57056-05	<0.50	40.0	40.0	41.5	40.2	ug/L	EPA 8260B	6/19/07	104	100	3.19	70-130	25
Toluene	57056-05	<0.50	40.0	40.0	41.8	40.3	ug/L	EPA 8260B	6/19/07	104	101	3.63	70-130	25
Tert-Butanol	57056-05	<5.0	200	200	206	203	ug/L	EPA 8260B	6/19/07	103	101	1.65	70-130	25
Methyl-t-Butyl Ether	57056-05	<0.50	40.0	40.0	39.6	39.2	ug/L	EPA 8260B	6/19/07	99.0	98.1	0.843	70-130	25
Benzene	57071-07	<0.50	40.0	40.0	42.3	42.1	ug/L	EPA 8260B	6/21/07	106	105	0.419	70-130	25
Toluene	57071-07	<0.50	40.0	40.0	42.6	42.9	ug/L	EPA 8260B	6/21/07	106	107	0.732	70-130	25
Tert-Butanol	57071-07	<5.0	200	200	216	210	ug/L	EPA 8260B	6/21/07	108	105	2.67	70-130	25
Methyl-t-Butyl Ether	57071-07	<0.50	40.0	40.0	40.4	39.9	ug/L	EPA 8260B	6/21/07	101	99.7	1.26	70-130	25
Benzene	57111-03	0.92	40.0	40.0	42.0	41.6	ug/L	EPA 8260B	6/21/07	103	102	0.897	70-130	25
Toluene	57111-03	<0.50	40.0	40.0	42.2	42.0	ug/L	EPA 8260B	6/21/07	106	105	0.594	70-130	25
Tert-Butanol	57111-03	<5.0	200	200	215	212	ug/L	EPA 8260B	6/21/07	108	106	1.76	70-130	25
Methyl-t-Butyl Ether	57111-03	28	40.0	40.0	66.1	66.8	ug/L	EPA 8260B	6/21/07	94.4	96.4	2.02	70-130	25
Benzene	57071-05	<0.50	40.0	40.0	39.1	39.2	ug/L	EPA 8260B	6/21/07	97.7	97.9	0.243	70-130	25
Toluene	57071-05	<0.50	40.0	40.0	38.2	37.8	ug/L	EPA 8260B	6/21/07	95.6	94.5	1.14	70-130	25
Tert-Butanol	57071-05	<5.0	200	200	188	185	ug/L	EPA 8260B	6/21/07	94.0	92.6	1.54	70-130	25
Methyl-t-Butyl Ether	57071-05	<0.50	40.0	40.0	39.8	39.7	ug/L	EPA 8260B	6/21/07	99.5	99.2	0.256	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 57047

Date : 06/25/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	6/19/07	94.0	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	6/20/07	91.5	70-130
Benzene	0.0397	mg/Kg	EPA 8260B	6/18/07	115	70-130
Toluene	0.0397	mg/Kg	EPA 8260B	6/18/07	115	70-130
Tert-Butanol	0.198	mg/Kg	EPA 8260B	6/18/07	103	70-130
Methyl-t-Butyl Ether	0.0397	mg/Kg	EPA 8260B	6/18/07	100	70-130
Benzene	40.0	ug/L	EPA 8260B	6/19/07	111	70-130
Toluene	40.0	ug/L	EPA 8260B	6/19/07	112	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/19/07	116	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/19/07	106	70-130
Benzene	40.0	ug/L	EPA 8260B	6/20/07	101	70-130
Toluene	40.0	ug/L	EPA 8260B	6/20/07	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/20/07	107	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/20/07	97.9	70-130
Benzene	40.0	ug/L	EPA 8260B	6/21/07	102	70-130
Toluene	40.0	ug/L	EPA 8260B	6/21/07	103	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:

Joel Kiff



Report Number : 57047

Date : 06/25/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Tert-Butanol	200	ug/L	EPA 8260B	6/21/07	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/21/07	94.3	70-130
Benzene	40.0	ug/L	EPA 8260B	6/22/07	102	70-130
Toluene	40.0	ug/L	EPA 8260B	6/22/07	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/22/07	104	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/22/07	93.5	70-130
Benzene	40.0	ug/L	EPA 8260B	6/20/07	85.9	70-130
Toluene	40.0	ug/L	EPA 8260B	6/20/07	95.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/20/07	98.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/20/07	104	70-130
Benzene	40.0	ug/L	EPA 8260B	6/20/07	91.3	70-130
Toluene	40.0	ug/L	EPA 8260B	6/20/07	98.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/20/07	96.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/20/07	109	70-130
Benzene	40.0	ug/L	EPA 8260B	6/19/07	105	70-130
Toluene	40.0	ug/L	EPA 8260B	6/19/07	107	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/19/07	104	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/19/07	103	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:

Joe Kiff



Report Number : 57047

Date : 06/25/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	6/21/07	106	70-130
Toluene	40.0	ug/L	EPA 8260B	6/21/07	109	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/21/07	110	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/21/07	102	70-130
Benzene	40.0	ug/L	EPA 8260B	6/21/07	104	70-130
Toluene	40.0	ug/L	EPA 8260B	6/21/07	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/21/07	102	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/21/07	99.2	70-130
Benzene	40.0	ug/L	EPA 8260B	6/21/07	96.7	70-130
Toluene	40.0	ug/L	EPA 8260B	6/21/07	96.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/21/07	89.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/21/07	98.2	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:

Joel Kiff





Report Number : 58696

Date : 10/1/2007

Karel Detterman
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 9 Soil Samples and 5 Water Samples
Project Name : Eagle Gas Station
Project Number : ZP046D

Dear Ms. Detterman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,



Joel Kiff



Report Number : 58696

Date : 10/1/2007

Subject : 9 Soil Samples and 5 Water Samples
Project Name : Eagle Gas Station
Project Number : ZP046D

Case Narrative

Matrix Spike/Matrix Spike Duplicate Results associated with sample SB-13 32ftGW for the analyte Benzene were affected by the analyte concentrations already present in the un-spiked sample.

Samples SB-14 52ftGW, SB-17 52ftGW and SB-13 52ftGW were analyzed by EPA Method 8260B using bottles that contained headspace bubbles greater than 1/4 inch in diameter.

Samples SB-14 52ftGW, SB-17 44ftGW, SB-17 52ftGW and SB-13 52ftGW analyzed for 'TPH as Diesel' were centrifuged and decanted prior to extraction due to high levels of sediment.

Matrix Spike/Matrix Spike Duplicate Results associated with samples SB-13 51ft, SB-14 12ft, SB-13 30ft for the analyte TPH as Diesel were outside of control limits. This may indicate a bias for the sample that was spiked. Since the LCS recoveries were within control limits, no data are flagged.

Approved By: _____

A handwritten signature in black ink, appearing to read "Joe Kiff", is written over a horizontal line. The signature is stylized and cursive.

Joe Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

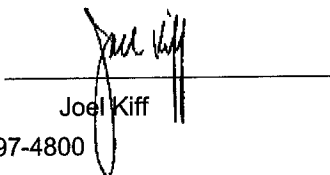
Sample : **SB-14 12ft**

Matrix : Soil

Lab Number : 58696-01

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	0.0061	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.015	0.015	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	8.3	2.5	mg/Kg	EPA 8260B	9/29/2007
Toluene - d8 (Surr)	108		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	96.3		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	28	1.0	mg/Kg	M EPA 8015	9/27/2007
(Note: Lower boiling hydrocarbons and higher-boiling hydrocarbons present.)					
1-Chlorooctadecane (Diesel Surrogate)	99.2		% Recovery	M EPA 8015	9/27/2007

Approved By:  Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-14 30ft**

Matrix : Soil

Lab Number : 58696-02

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	98.4		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	5.5	1.0	mg/Kg	M EPA 8015	9/26/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	110		% Recovery	M EPA 8015	9/26/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-14 48ft**

Matrix : Soil

Lab Number : 58696-03

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/25/2007
1-Chlorooctadecane (Diesel Surrogate)	90.7		% Recovery	M EPA 8015	9/25/2007

Approved By:  Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-14 52ftGW**

Matrix : Water

Lab Number : 58696-04

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Toluene	1.8	0.50	ug/L	EPA 8260B	9/26/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Methyl-t-butyl ether (MTBE)	1.1	0.50	ug/L	EPA 8260B	9/26/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/26/2007
TPH as Gasoline	370	50	ug/L	EPA 8260B	9/26/2007
(Note: Primarily compounds not found in typical Gasoline)					
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	9/26/2007
4-Bromofluorobenzene (Surr)	97.4		% Recovery	EPA 8260B	9/26/2007
TPH as Diesel	120	50	ug/L	M EPA 8015	9/28/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	99.9		% Recovery	M EPA 8015	9/28/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-17 10ft**

Matrix : Soil

Lab Number : 58696-05

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	2.6	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	0.013	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	1.4	0.025	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	1.9	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	98.2		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/26/2007
1-Chlorooctadecane (Diesel Surrogate)	77.0		% Recovery	M EPA 8015	9/26/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-17 39ft**

Matrix : Soil

Lab Number : 58696-06

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	97.4		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	3.3	1.0	mg/Kg	M EPA 8015	9/26/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	103		% Recovery	M EPA 8015	9/26/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-17 44ftGW**

Matrix : Water

Lab Number : 58696-07

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.7	0.90	ug/L	EPA 8260B	9/27/2007
Toluene	< 0.90	0.90	ug/L	EPA 8260B	9/27/2007
Ethylbenzene	15	0.90	ug/L	EPA 8260B	9/27/2007
Total Xylenes	36	0.90	ug/L	EPA 8260B	9/27/2007
Methyl-t-butyl ether (MTBE)	540	0.90	ug/L	EPA 8260B	9/27/2007
Diisopropyl ether (DIPE)	< 0.90	0.90	ug/L	EPA 8260B	9/27/2007
Ethyl-t-butyl ether (ETBE)	< 0.90	0.90	ug/L	EPA 8260B	9/27/2007
Tert-amyl methyl ether (TAME)	2.8	0.90	ug/L	EPA 8260B	9/27/2007
Tert-Butanol	81	5.0	ug/L	EPA 8260B	9/27/2007
TPH as Gasoline	520	90	ug/L	EPA 8260B	9/27/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	9/27/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	9/27/2007
TPH as Diesel	< 200	200	ug/L	M EPA 8015	9/28/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	9/28/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-17 52ftGW**

Matrix : Water

Lab Number : 58696-08

Sample Date :9/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5.1	4.0	ug/L	EPA 8260B	9/28/2007
Toluene	< 4.0	4.0	ug/L	EPA 8260B	9/28/2007
Ethylbenzene	26	4.0	ug/L	EPA 8260B	9/28/2007
Total Xylenes	82	4.0	ug/L	EPA 8260B	9/28/2007
Methyl-t-butyl ether (MTBE)	1400	4.0	ug/L	EPA 8260B	9/28/2007
Diisopropyl ether (DIPE)	< 4.0	4.0	ug/L	EPA 8260B	9/28/2007
Ethyl-t-butyl ether (ETBE)	< 4.0	4.0	ug/L	EPA 8260B	9/28/2007
Tert-amyl methyl ether (TAME)	6.8	4.0	ug/L	EPA 8260B	9/28/2007
Tert-Butanol	140	20	ug/L	EPA 8260B	9/28/2007
TPH as Gasoline	900	400	ug/L	EPA 8260B	9/28/2007
Toluene - d8 (Surr)	96.5		% Recovery	EPA 8260B	9/28/2007
4-Bromofluorobenzene (Surr)	90.2		% Recovery	EPA 8260B	9/28/2007
TPH as Diesel	< 600	600	ug/L	M EPA 8015	9/28/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	9/28/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

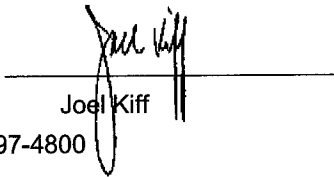
Sample : **SB-13 24ft**

Matrix : Soil

Lab Number : 58696-09

Sample Date :9/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	0.0098	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	0.0052	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
TPH as Gasoline	4.8	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	21	2.0	mg/Kg	M EPA 8015	9/26/2007
(Note: Lower boiling hydrocarbons and higher-boiling hydrocarbons present.)					
1-Chlorooctadecane (Diesel Surrogate)	88.8		% Recovery	M EPA 8015	9/26/2007

Approved By:  Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-13 32ftGW**

Matrix : Water

Lab Number : 58696-10

Sample Date :9/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	800	1.5	ug/L	EPA 8260B	9/28/2007
Toluene	73	1.5	ug/L	EPA 8260B	9/28/2007
Ethylbenzene	390	1.5	ug/L	EPA 8260B	9/28/2007
Total Xylenes	380	1.5	ug/L	EPA 8260B	9/28/2007
Methyl-t-butyl ether (MTBE)	170	1.5	ug/L	EPA 8260B	9/28/2007
Diisopropyl ether (DIPE)	6.6	1.5	ug/L	EPA 8260B	9/28/2007
Ethyl-t-butyl ether (ETBE)	< 1.5	1.5	ug/L	EPA 8260B	9/28/2007
Tert-amyl methyl ether (TAME)	< 1.5	1.5	ug/L	EPA 8260B	9/28/2007
Tert-Butanol	< 7.0	7.0	ug/L	EPA 8260B	9/29/2007
TPH as Gasoline	10000	150	ug/L	EPA 8260B	9/28/2007
Toluene - d8 (Surr)	96.3		% Recovery	EPA 8260B	9/28/2007
4-Bromofluorobenzene (Surr)	97.4		% Recovery	EPA 8260B	9/28/2007
TPH as Diesel	< 1500	1500	ug/L	M EPA 8015	9/28/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	9/28/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-13 30ft**

Matrix : Soil

Lab Number : 58696-11

Sample Date :9/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.016	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	0.0085	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	0.0082	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	0.014	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	30	2.0	mg/Kg	M EPA 8015	9/27/2007
(Note: Lower boiling hydrocarbons and higher-boiling hydrocarbons present.)					
1-Chlorooctadecane (Diesel Surrogate)	84.2		% Recovery	M EPA 8015	9/27/2007

Approved By:

Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

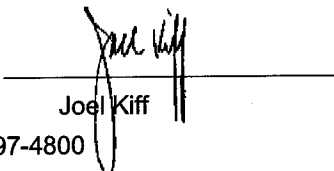
Sample : **SB-13 38ft**

Matrix : Soil

Lab Number : 58696-12

Sample Date :9/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.070	0.0050	mg/Kg	EPA 8260B	9/25/2007
Toluene	0.0077	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethylbenzene	0.19	0.0050	mg/Kg	EPA 8260B	9/25/2007
Total Xylenes	0.064	0.0050	mg/Kg	EPA 8260B	9/25/2007
Methyl-t-butyl ether (MTBE)	0.017	0.0050	mg/Kg	EPA 8260B	9/25/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/25/2007
Tert-Butanol	< 0.025	0.025	mg/Kg	EPA 8260B	9/25/2007
TPH as Gasoline	40	1.0	mg/Kg	EPA 8260B	9/25/2007
Toluene - d8 (Surr)	92.1		% Recovery	EPA 8260B	9/25/2007
4-Bromofluorobenzene (Surr)	98.1		% Recovery	EPA 8260B	9/25/2007
TPH as Diesel	12	1.0	mg/Kg	M EPA 8015	9/29/2007
(Note: Lower boiling hydrocarbons and higher-boiling hydrocarbons present.)					
1-Chlorooctadecane (Diesel Surrogate)	82.8		% Recovery	M EPA 8015	9/29/2007

Approved By:  Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-13 52ftGW**

Matrix : Water

Lab Number : 58696-13

Sample Date :9/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	300	4.0	ug/L	EPA 8260B	9/27/2007
Toluene	29	4.0	ug/L	EPA 8260B	9/27/2007
Ethylbenzene	560	4.0	ug/L	EPA 8260B	9/27/2007
Total Xylenes	150	4.0	ug/L	EPA 8260B	9/27/2007
Methyl-t-butyl ether (MTBE)	91	4.0	ug/L	EPA 8260B	9/27/2007
Diisopropyl ether (DIPE)	< 4.0	4.0	ug/L	EPA 8260B	9/27/2007
Ethyl-t-butyl ether (ETBE)	< 4.0	4.0	ug/L	EPA 8260B	9/27/2007
Tert-amyl methyl ether (TAME)	< 4.0	4.0	ug/L	EPA 8260B	9/27/2007
Tert-Butanol	< 20	20	ug/L	EPA 8260B	9/27/2007
TPH as Gasoline	23000	400	ug/L	EPA 8260B	9/27/2007
Toluene - d8 (Surr)	92.7		% Recovery	EPA 8260B	9/27/2007
4-Bromofluorobenzene (Surr)	99.6		% Recovery	EPA 8260B	9/27/2007
TPH as Diesel	< 30000	30000	ug/L	M EPA 8015	9/28/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	118		% Recovery	M EPA 8015	9/28/2007

Approved By:  Joel Kiff



Report Number : 58696

Date : 10/1/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **SB-13 51ft**

Matrix : Soil

Lab Number : 58696-14

Sample Date :9/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/26/2007
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	9/26/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	9/26/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/27/2007
1-Chlorooctadecane (Diesel Surrogate)	88.2		% Recovery	M EPA 8015	9/27/2007

Approved By:

Joel Kiff

QC Report : Method Blank DataProject Name : **Eagle Gas Station**Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/25/2007	Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
1-Chlorooctadecane (Diesel Surrogate)	78.8		%	M EPA 8015	9/25/2007	Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/26/2007	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
1-Chlorooctadecane (Diesel Surrogate)	77.1		%	M EPA 8015	9/26/2007	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	9/29/2007	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
1-Chlorooctadecane (Diesel Surrogate)	86.1		%	M EPA 8015	9/29/2007	Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	9/28/2007	Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Octacosane (Diesel Surrogate)	97.2		%	M EPA 8015	9/28/2007	Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/26/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/26/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/26/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Toluene - d8 (Surr)	98.4		%	EPA 8260B	9/26/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	4-Bromofluorobenzene (Surr)	86.9		%	EPA 8260B	9/26/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/24/2007	Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/24/2007	Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
Toluene - d8 (Surr)	98.3		%	EPA 8260B	9/24/2007	Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
4-Bromofluorobenzene (Surr)	86.2		%	EPA 8260B	9/24/2007	Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
						Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	9/26/2007
						TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/26/2007
						Toluene - d8 (Surr)	98.9		%	EPA 8260B	9/26/2007
						4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	9/26/2007

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 58696

Date : 10/1/2007


QC Report : Method Blank Data

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	9/26/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/27/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/27/2007
Toluene - d8 (Surr)	98.1		%	EPA 8260B	9/27/2007
4-Bromofluorobenzene (Surr)	87.7		%	EPA 8260B	9/27/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/28/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/28/2007
Toluene - d8 (Surr)	100		%	EPA 8260B	9/28/2007
4-Bromofluorobenzene (Surr)	94.2		%	EPA 8260B	9/28/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/28/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	9/27/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	9/27/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	9/27/2007
Toluene - d8 (Surr)	96.4		%	EPA 8260B	9/27/2007
4-Bromofluorobenzene (Surr)	90.9		%	EPA 8260B	9/27/2007

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

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QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas Station**Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	58696-03	<1.0	20.0	20.0	22.3	24.8	mg/Kg	M EPA 8015	9/25/07	112	124	10.6	60-140	25
Benzene	58640-01	<0.0050	0.0393	0.0396	0.0386	0.0388	mg/Kg	EPA 8260B	9/24/07	98.2	98.0	0.212	70-130	25
Toluene	58640-01	<0.0050	0.0393	0.0396	0.0364	0.0368	mg/Kg	EPA 8260B	9/24/07	92.6	92.9	0.316	70-130	25
Tert-Butanol	58640-01	<0.0050	0.196	0.198	0.189	0.192	mg/Kg	EPA 8260B	9/24/07	96.4	96.7	0.312	70-130	25
Methyl-t-Butyl Ether	58640-01	<0.0050	0.0393	0.0396	0.0365	0.0366	mg/Kg	EPA 8260B	9/24/07	92.9	92.3	0.682	70-130	25
Benzene	58678-01	<0.50	39.7	39.8	41.8	42.4	ug/L	EPA 8260B	9/26/07	105	107	1.26	70-130	25
Toluene	58678-01	<0.50	39.7	39.8	40.9	41.5	ug/L	EPA 8260B	9/26/07	103	104	1.36	70-130	25
Tert-Butanol	58678-01	<5.0	198	199	206	210	ug/L	EPA 8260B	9/26/07	104	106	1.79	70-130	25
Methyl-t-Butyl Ether	58678-01	<0.50	39.7	39.8	37.6	38.1	ug/L	EPA 8260B	9/26/07	94.9	95.8	0.937	70-130	25
Benzene	58696-14	<0.0050	0.0399	0.0399	0.0394	0.0401	mg/Kg	EPA 8260B	9/26/07	98.6	100	1.78	70-130	25
Toluene	58696-14	<0.0050	0.0399	0.0399	0.0382	0.0386	mg/Kg	EPA 8260B	9/26/07	95.6	96.7	1.13	70-130	25
Tert-Butanol	58696-14	<0.0050	0.200	0.200	0.190	0.186	mg/Kg	EPA 8260B	9/26/07	95.1	93.2	2.07	70-130	25
Methyl-t-Butyl Ether	58696-14	<0.0050	0.0399	0.0399	0.0368	0.0411	mg/Kg	EPA 8260B	9/26/07	92.2	103	11.0	70-130	25
Benzene	58728-01	<0.0050	0.0399	0.0400	0.0321	0.0387	mg/Kg	EPA 8260B	9/26/07	80.5	96.7	18.3	70-130	25
Toluene	58728-01	<0.0050	0.0399	0.0400	0.0333	0.0402	mg/Kg	EPA 8260B	9/26/07	83.5	100	18.5	70-130	25
Tert-Butanol	58728-01	<0.0050	0.200	0.200	0.165	0.199	mg/Kg	EPA 8260B	9/26/07	82.8	99.3	18.1	70-130	25
Methyl-t-Butyl Ether	58728-01	<0.0050	0.0399	0.0400	0.0300	0.0358	mg/Kg	EPA 8260B	9/26/07	75.3	89.6	17.4	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : Eagle Gas Station

Project Number : ZP046D

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	58693-01	<0.50	40.0	40.0	42.3	43.2	ug/L	EPA 8260B	9/27/07	106	108	1.98	70-130	25
Toluene	58693-01	<0.50	40.0	40.0	41.5	42.0	ug/L	EPA 8260B	9/27/07	104	105	1.36	70-130	25
Tert-Butanol	58693-01	<5.0	200	200	211	211	ug/L	EPA 8260B	9/27/07	106	106	0.0317	70-130	25
Methyl-t-Butyl Ether	58693-01	<0.50	40.0	40.0	39.0	38.4	ug/L	EPA 8260B	9/27/07	97.4	96.1	1.34	70-130	25
Benzene	58734-01	480	40.0	39.9	495	470	ug/L	EPA 8260B	9/28/07	30.0	0.00	200	70-130	25
Toluene	58734-01	25	40.0	39.9	65.8	64.7	ug/L	EPA 8260B	9/28/07	102	99.9	2.62	70-130	25
Tert-Butanol	58734-01	14	200	200	199	212	ug/L	EPA 8260B	9/28/07	92.4	99.1	7.00	70-130	25
Methyl-t-Butyl Ether	58734-01	<0.50	40.0	39.9	41.2	41.1	ug/L	EPA 8260B	9/28/07	103	103	0.0654	70-130	25
Benzene	58700-10	<0.50	40.0	40.0	39.2	38.7	ug/L	EPA 8260B	9/28/07	97.9	96.7	1.22	70-130	25
Toluene	58700-10	<0.50	40.0	40.0	39.1	38.9	ug/L	EPA 8260B	9/28/07	97.9	97.3	0.566	70-130	25
Tert-Butanol	58700-10	<5.0	200	200	196	194	ug/L	EPA 8260B	9/28/07	98.1	96.9	1.24	70-130	25
Methyl-t-Butyl Ether	58700-10	<0.50	40.0	40.0	38.6	39.9	ug/L	EPA 8260B	9/28/07	96.6	99.8	3.31	70-130	25
Benzene	58721-11	<0.50	40.0	40.0	40.1	39.5	ug/L	EPA 8260B	9/27/07	100	98.7	1.56	70-130	25
Toluene	58721-11	<0.50	40.0	40.0	37.8	37.4	ug/L	EPA 8260B	9/27/07	94.5	93.6	0.976	70-130	25
Tert-Butanol	58721-11	<5.0	200	200	193	187	ug/L	EPA 8260B	9/27/07	96.4	93.7	2.86	70-130	25
Methyl-t-Butyl Ether	58721-11	<0.50	40.0	40.0	41.9	41.3	ug/L	EPA 8260B	9/27/07	105	103	1.25	70-130	25
TPH as Diesel	58696-11	1.0	20.0	20.0	18.6	26.4	mg/Kg	M EPA 8015	9/26/07	88.5	126	34.6	60-140	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 58696

Date : 10/1/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	58630-03	6.1	20.0	20.0	24.4	23.0	mg/Kg	M EPA 8015	9/29/07	93.7	88.2	6.06	60-140	25
TPH as Diesel	Blank	<50	1000	1000	1020	1010	ug/L	M EPA 8015	9/28/07	102	101	1.66	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)Project Name : **Eagle Gas Station**Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/25/07	116	70-130
Benzene	0.0396	mg/Kg	EPA 8260B	9/24/07	102	70-130
Toluene	0.0396	mg/Kg	EPA 8260B	9/24/07	99.2	70-130
Tert-Butanol	0.198	mg/Kg	EPA 8260B	9/24/07	95.0	70-130
Methyl-t-Butyl Ether	0.0396	mg/Kg	EPA 8260B	9/24/07	94.1	70-130
Benzene	40.0	ug/L	EPA 8260B	9/26/07	108	70-130
Toluene	40.0	ug/L	EPA 8260B	9/26/07	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/26/07	104	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/26/07	92.5	70-130
Benzene	0.0398	mg/Kg	EPA 8260B	9/26/07	99.0	70-130
Toluene	0.0398	mg/Kg	EPA 8260B	9/26/07	95.4	70-130
Tert-Butanol	0.199	mg/Kg	EPA 8260B	9/26/07	93.9	70-130
Methyl-t-Butyl Ether	0.0398	mg/Kg	EPA 8260B	9/26/07	86.6	70-130
Benzene	0.0394	mg/Kg	EPA 8260B	9/26/07	97.8	70-130
Toluene	0.0394	mg/Kg	EPA 8260B	9/26/07	103	70-130
Tert-Butanol	0.197	mg/Kg	EPA 8260B	9/26/07	98.6	70-130
Methyl-t-Butyl Ether	0.0394	mg/Kg	EPA 8260B	9/26/07	99.8	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:



 Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas Station**Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	9/27/07	107	70-130
Toluene	40.0	ug/L	EPA 8260B	9/27/07	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/27/07	104	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/27/07	99.0	70-130
Benzene	40.0	ug/L	EPA 8260B	9/28/07	113	70-130
Toluene	40.0	ug/L	EPA 8260B	9/28/07	110	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/28/07	97.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/28/07	108	70-130
Benzene	40.0	ug/L	EPA 8260B	9/28/07	96.4	70-130
Toluene	40.0	ug/L	EPA 8260B	9/28/07	100	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/28/07	90.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/28/07	99.6	70-130
Benzene	40.0	ug/L	EPA 8260B	9/27/07	94.4	70-130
Toluene	40.0	ug/L	EPA 8260B	9/27/07	91.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	9/27/07	89.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	9/27/07	99.2	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:



 Joel Kiff

Report Number : 58696

Date : 10/1/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/26/07	91.9	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	9/29/07	80.4	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:


Joel Kiff



2795 2nd Street, Suite 300
 Davis, CA 95616
 Lab: 530.297.4800
 Fax: 530.297.4802

SRG # / Lab No. 58696

Page 1 of 2

Project Contact (Hardcopy or PDF To): Karel Dettemer California EDF Report? Yes No

Company / Address: Clearwater Group
229 Tewksbury, Pt Richmond CA 94804 Sampling Company Log Code: CWGO

Phone #: 510 307 9943 Fax #: 510 732-2823 Global ID: TO605300219

Project #: ZP046D P.O. #: EDF Deliverable To (Email Address): afischer@clearwater-group.com

Project Name: Eagle Gas Station Sampler Signature: Karel Dettemer

Project Address: 4301 San Leandro St
Oakland, CA

Chain-of-Custody Record and Analysis Request

Analysis Request

Sample Designation	Date	Time	Container				Preservative			Matrix			MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)	TAT	For Lab Use Only	
			40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil																	Air
• SB-14 12ft	9/20/07	1810	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	01
• SB-14 30ft		1130	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	02
• SB-14 48ft		1350	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	03
• SB-14 52ft GW		1420	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	04
• SB-17 10ft		1730	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	05
• SB-17 39ft		1850	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	06
• SB-17 44ft GW		1915	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	07
• SB-17 52ft GW	↓	2015	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	08
• SB-13 24ft	9/21/07	1100	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	09
• SB-13 32ft GW	↓	1130	/	/	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	10

Relinquished by: [Signature] Date: 9/24/07 Time: 1500 Received by: [Signature]
 Relinquished by: Date: Time: Received by:
 Relinquished by: Date: Time: Received by:

Remarks:
 Bill to:
 For Lab Use Only: Sample Receipt

Relinquished by:	Date	Time	Received by Laboratory:	Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
<u>[Signature]</u>	<u>692407</u>	<u>1500</u>	<u>[Signature]</u>	<u>20</u>	<u>RLM</u>	<u>092407</u>	<u>1727</u>	<u>1R-5</u>	<u>Yes</u>



2795 2nd Street, Suite 300
 Davis, CA 95616
 Lab: 530.297.4800
 Fax: 530.297.4802

SRG # / Lab No. 58696

Page 2 of 2

Project Contact (Hardcopy or PDF To): Karel Dettmerman California EDF Report? Yes No

Company / Address: 229 Newkirk, Pt Richmond 94801 Sampling Company Log Code: CH 60

Phone #: 5107079943 Fax #: 5102322823 Global ID: TO 605 300219

Project #: ZP046D P.O. #: _____ EDF Deliverable To (Email Address): g.fiso@clearwatergroup.com

Project Name: Eagle Gas Sampler Signature: Karel Dettmerman

Project Address: 430L San Leandro St Oakland, CA

Chain-of-Custody Record and Analysis Request

Sample Designation	Sampling		Container				Preservative			Matrix			Analysis Request											TAT	For Lab Use Only						
	Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil	Air	MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 524.2 Drinking Water)			TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)		
SB-13 30ft	9/21/07	1135	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	12 hr	<input type="checkbox"/>
SB-13 38ft		1230	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	24 hr	<input type="checkbox"/>	
SB-13 52FAGW		1430	/	/	/	/	6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	48 hr	<input type="checkbox"/>		
SB-13 51ft		1440	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	72 hr	<input type="checkbox"/>		
																												1 wk	<input checked="" type="checkbox"/>		

Relinquished by: [Signature] Date: 9/24/07 Time: 500

Relinquished by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: 092407 Time: 1500 Received by Laboratory: KIFF Analytical

Remarks: _____

Bill to: _____

For Lab Use Only: Sample Receipt					
Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No



Report Number : 58805

Date : 10/5/2007

Karel Detterman
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 6 Soil Samples and 3 Water Samples
Project Name : NAZ EAGLE GAS STATION
Project Number : ZP046D

Dear Ms. Detterman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 58805

Date : 10/5/2007

Subject : 6 Soil Samples and 3 Water Samples
Project Name : NAZ EAGLE GAS STATION
Project Number : ZP046D

Case Narrative

Tert-Butanol results for samples SB-12 32ft and SB-12 25.5ft may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (up to 5%) converts to Tert-Butanol during the analysis of soil samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 3:1.

Matrix Spike/Matrix Spike Duplicate Results associated with samples SB-12 11ft, SB-15 38ft, SB-12 32ft, SB-12 25.5ft and SB-12 33.5ft for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

Repeat analysis by Method 8260 yielded inconsistent results for sample SB-15 48ft GW. The concentrations appear to vary between the bottles. Two of the three bottles were similar to each other so results from one of those two similar bottles are reported.

Approved By: _____

A handwritten signature in black ink, appearing to read "Joe Kiff", is written over a horizontal line. The signature is stylized and cursive.

Joe Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Sample : **SB-15 10ft**

Matrix : Soil

Lab Number : 58805-01

Sample Date :9/25/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/2/2007
Tert-Butanol	< 0.015	0.015	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	370	5.0	mg/Kg	EPA 8260B	10/3/2007
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	10/2/2007
4-Bromofluorobenzene (Surr)	85.0		% Recovery	EPA 8260B	10/2/2007
TPH as Diesel	49	1.0	mg/Kg	M EPA 8015	10/3/2007
(Note: Hydrocarbons are lower-boiling than typical Diesel Fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	87.3		% Recovery	M EPA 8015	10/3/2007

Approved By:

Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : NAZ EAGLE GAS STATION

Project Number : ZP046D

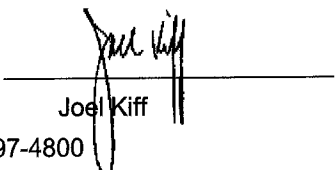
Sample : SB-15 38ft

Matrix : Soil

Lab Number : 58805-02

Sample Date :9/25/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	0.014	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-Butanol	0.0051	0.0050	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	99.3		% Recovery	EPA 8260B	10/1/2007
TPH as Diesel	2.8	1.0	mg/Kg	M EPA 8015	10/5/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	90.7		% Recovery	M EPA 8015	10/5/2007

Approved By:  Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Sample : **SB-15 48ft GW**

Matrix : Water

Lab Number : 58805-03

Sample Date :9/25/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	6.0	0.50	ug/L	EPA 8260B	10/5/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/5/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/5/2007
Total Xylenes	0.81	0.50	ug/L	EPA 8260B	10/5/2007
Methyl-t-butyl ether (MTBE)	370	0.50	ug/L	EPA 8260B	10/5/2007
Diisopropyl ether (DIPE)	0.64	0.50	ug/L	EPA 8260B	10/5/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/5/2007
Tert-amyl methyl ether (TAME)	2.3	0.50	ug/L	EPA 8260B	10/5/2007
Tert-Butanol	140	5.0	ug/L	EPA 8260B	10/5/2007
TPH as Gasoline	250	50	ug/L	EPA 8260B	10/5/2007
(Note: Primarily compounds not found in typical Gasoline)					
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	10/5/2007
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	10/5/2007
TPH as Diesel	170	50	ug/L	M EPA 8015	10/4/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	10/4/2007

Approved By:

Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Sample : **SB-15 52ft GW**

Matrix : Water

Lab Number : 58805-04

Sample Date :9/25/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	8.2	0.50	ug/L	EPA 8260B	10/4/2007
Toluene	0.84	0.50	ug/L	EPA 8260B	10/4/2007
Ethylbenzene	0.89	0.50	ug/L	EPA 8260B	10/4/2007
Total Xylenes	3.0	0.50	ug/L	EPA 8260B	10/4/2007
Methyl-t-butyl ether (MTBE)	420	1.5	ug/L	EPA 8260B	10/5/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Tert-amyl methyl ether (TAME)	3.3	0.50	ug/L	EPA 8260B	10/4/2007
Tert-Butanol	120	5.0	ug/L	EPA 8260B	10/3/2007
TPH as Gasoline	250	50	ug/L	EPA 8260B	10/4/2007
(Note: Primarily compounds not found in typical Gasoline)					
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	10/4/2007
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	10/4/2007
TPH as Diesel	290	50	ug/L	M EPA 8015	10/4/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
Octacosane (Diesel Surrogate)	92.3		% Recovery	M EPA 8015	10/4/2007

Approved By:

Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Sample : **SB-12 11ft**

Matrix : Soil

Lab Number : 58805-05

Sample Date :9/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	0.012	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	0.0051	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	2.3	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	0.0058	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-Butanol	10	0.025	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	31	1.0	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	10/1/2007
TPH as Diesel	52	1.0	mg/Kg	M EPA 8015	10/3/2007
1-Chlorooctadecane (Diesel Surrogate)	84.4		% Recovery	M EPA 8015	10/3/2007

Approved By:

Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

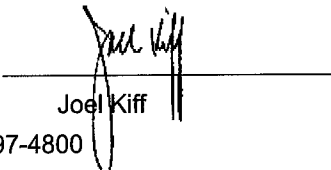
Sample : **SB-12 32ft**

Matrix : Soil

Lab Number : 58805-06

Sample Date :9/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	0.48	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-Butanol	0.055 J	0.0050	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	99.9		% Recovery	EPA 8260B	10/1/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/3/2007
1-Chlorooctadecane (Diesel Surrogate)	85.1		% Recovery	M EPA 8015	10/3/2007

Approved By:  Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**


Sample : **SB-12 33.5ft**

Matrix : Soil

Lab Number : 58805-07

Sample Date :9/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	0.037	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-Butanol	0.024	0.0050	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	98.3		% Recovery	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	84.2		% Recovery	EPA 8260B	10/1/2007
TPH as Diesel	1.1	1.0	mg/Kg	M EPA 8015	10/3/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	88.0		% Recovery	M EPA 8015	10/3/2007

Approved By:  Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Sample : **SB-12 25.5ft**

Matrix : Soil

Lab Number : 58805-08

Sample Date :9/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	0.29	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-Butanol	0.015 J	0.0050	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	108		% Recovery	EPA 8260B	10/1/2007
TPH as Diesel	1.9	1.0	mg/Kg	M EPA 8015	10/3/2007
(Note: Hydrocarbons are higher-boiling than typical Diesel Fuel.)					
1-Chlorooctadecane (Diesel Surrogate)	104		% Recovery	M EPA 8015	10/3/2007

Approved By:

Joel Kiff



Report Number : 58805

Date : 10/5/2007

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Sample : **SB-12 34ft GW**

Matrix : Water

Lab Number : 58805-09

Sample Date :9/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	0.70	0.50	ug/L	EPA 8260B	10/3/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Ethylbenzene	0.57	0.50	ug/L	EPA 8260B	10/3/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Methyl-t-butyl ether (MTBE)	67	0.50	ug/L	EPA 8260B	10/3/2007
Diisopropyl ether (DIPE)	2.4	0.50	ug/L	EPA 8260B	10/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Tert-Butanol	18	5.0	ug/L	EPA 8260B	10/3/2007
TPH as Gasoline	160	50	ug/L	EPA 8260B	10/3/2007
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	10/3/2007
4-Bromofluorobenzene (Surr)	115		% Recovery	EPA 8260B	10/3/2007
TPH as Diesel	540	50	ug/L	M EPA 8015	10/4/2007
Octacosane (Diesel Surrogate)	84.3		% Recovery	M EPA 8015	10/4/2007

Approved By:

Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 58805

Date : 10/5/2007

QC Report : Method Blank Data

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/2/2007
1-Chlorooctadecane (Diesel Surrogate)	81.8		%	M EPA 8015	10/2/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	10/3/2007
Octacosane (Diesel Surrogate)	97.5		%	M EPA 8015	10/3/2007
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/4/2007
1-Chlorooctadecane (Diesel Surrogate)	83.7		%	M EPA 8015	10/4/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-Butanol	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	98.0		%	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	86.3		%	EPA 8260B	10/1/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Diisopropyl ether (DIPE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Ethyl-t-butyl ether (ETBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Tert-amyl methyl ether (TAME)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/1/2007
Toluene - d8 (Surr)	101		%	EPA 8260B	10/1/2007
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	10/1/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/3/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/3/2007
Toluene - d8 (Surr)	99.8		%	EPA 8260B	10/3/2007
4-Bromofluorobenzene (Surr)	98.4		%	EPA 8260B	10/3/2007

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 58805

Date : 10/5/2007

QC Report : Method Blank Data

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046D**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/3/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/3/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/3/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/3/2007
Toluene - d8 (Surr)	102		%	EPA 8260B	10/3/2007
4-Bromofluorobenzene (Surr)	113		%	EPA 8260B	10/3/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	10/4/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	10/4/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	10/4/2007
Toluene - d8 (Surr)	99.2		%	EPA 8260B	10/4/2007
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	10/4/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
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Approved By:

Joel Kiff



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2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **NAZ EAGLE GAS**Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	58738-02	<1.0	20.0	20.0	17.6	18.0	mg/Kg	M EPA 8015	10/1/07	88.0	90.3	2.57	60-140	25
TPH as Diesel	Blank	<50	1000	1000	868	936	ug/L	M EPA 8015	10/3/07	86.8	93.6	7.58	70-130	25
TPH as Diesel	58834-07	2.0	20.0	20.0	17.8	17.4	mg/Kg	M EPA 8015	10/4/07	80.8	79.2	2.02	60-140	25
Benzene	58805-07	<0.0050	0.0396	0.0396	0.0410	0.0408	mg/Kg	EPA 8260B	10/1/07	104	103	0.388	70-130	25
Toluene	58805-07	<0.0050	0.0396	0.0396	0.0399	0.0398	mg/Kg	EPA 8260B	10/1/07	101	100	0.166	70-130	25
Tert-Butanol	58805-07	0.052	0.198	0.198	0.230	0.233	mg/Kg	EPA 8260B	10/1/07	89.8	91.1	1.40	70-130	25
Methyl-t-Butyl Ether	58805-07	0.085	0.0396	0.0396	0.0924	0.0992	mg/Kg	EPA 8260B	10/1/07	18.6	35.8	63.2	70-130	25
Benzene	58777-01	<0.0050	0.0398	0.0398	0.0407	0.0418	mg/Kg	EPA 8260B	10/1/07	102	105	2.59	70-130	25
Toluene	58777-01	<0.0050	0.0398	0.0398	0.0386	0.0395	mg/Kg	EPA 8260B	10/1/07	97.0	99.1	2.15	70-130	25
Tert-Butanol	58777-01	<0.0050	0.199	0.199	0.184	0.188	mg/Kg	EPA 8260B	10/1/07	92.3	94.6	2.38	70-130	25
Methyl-t-Butyl Ether	58777-01	<0.0050	0.0398	0.0398	0.0394	0.0406	mg/Kg	EPA 8260B	10/1/07	98.9	102	3.09	70-130	25
Benzene	58808-06	<0.0050	0.0393	0.0394	0.0408	0.0406	mg/Kg	EPA 8260B	10/3/07	104	103	0.888	70-130	25
Toluene	58808-06	<0.0050	0.0393	0.0394	0.0396	0.0393	mg/Kg	EPA 8260B	10/3/07	101	99.6	1.11	70-130	25
Tert-Butanol	58808-06	<0.0050	0.196	0.197	0.178	0.178	mg/Kg	EPA 8260B	10/3/07	90.8	90.5	0.284	70-130	25
Methyl-t-Butyl Ether	58808-06	<0.0050	0.0393	0.0394	0.0397	0.0398	mg/Kg	EPA 8260B	10/3/07	101	101	0.0582	70-130	25
Benzene	58812-02	<0.50	40.2	40.1	44.4	43.9	ug/L	EPA 8260B	10/3/07	110	110	0.770	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **NAZ EAGLE GAS**Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Recov. Limit	Relative Percent Diff. Limit
Toluene	58812-02	<0.50	40.2	40.1	42.7	42.0	ug/L	EPA 8260B	10/3/07	106	105	1.56	70-130	25
Tert-Butanol	58812-02	<5.0	201	200	191	190	ug/L	EPA 8260B	10/3/07	95.3	94.9	0.413	70-130	25
Methyl-t-Butyl Ether	58812-02	0.68	40.2	40.1	43.9	43.2	ug/L	EPA 8260B	10/3/07	108	106	1.51	70-130	25
Benzene	58878-03	<0.50	40.0	40.1	44.7	45.0	ug/L	EPA 8260B	10/4/07	112	112	0.320	70-130	25
Toluene	58878-03	<0.50	40.0	40.1	43.3	43.2	ug/L	EPA 8260B	10/4/07	108	108	0.463	70-130	25
Tert-Butanol	58878-03	<5.0	200	200	196	195	ug/L	EPA 8260B	10/4/07	97.9	97.4	0.549	70-130	25
Methyl-t-Butyl Ether	58878-03	<0.50	40.0	40.1	43.2	44.1	ug/L	EPA 8260B	10/4/07	108	110	1.90	70-130	25
Benzene	58842-03	<0.50	40.0	40.0	39.2	37.0	ug/L	EPA 8260B	10/3/07	98.1	92.5	5.91	70-130	25
Toluene	58842-03	<0.50	40.0	40.0	41.2	38.8	ug/L	EPA 8260B	10/3/07	103	96.9	6.21	70-130	25
Tert-Butanol	58842-03	<5.0	200	200	204	208	ug/L	EPA 8260B	10/3/07	102	104	1.49	70-130	25
Methyl-t-Butyl Ether	58842-03	<0.50	40.0	40.0	39.9	38.6	ug/L	EPA 8260B	10/3/07	99.8	96.4	3.36	70-130	25
Benzene	58854-03	<0.50	40.0	40.0	38.9	36.1	ug/L	EPA 8260B	10/3/07	97.2	90.2	7.46	70-130	25
Toluene	58854-03	<0.50	40.0	40.0	40.2	37.3	ug/L	EPA 8260B	10/3/07	100	93.2	7.53	70-130	25
Tert-Butanol	58854-03	<5.0	200	200	209	193	ug/L	EPA 8260B	10/3/07	105	96.4	8.26	70-130	25
Methyl-t-Butyl Ether	58854-03	<0.50	40.0	40.0	40.8	38.3	ug/L	EPA 8260B	10/3/07	102	95.9	6.18	70-130	25
Benzene	58887-20	<0.50	40.0	40.0	41.5	40.2	ug/L	EPA 8260B	10/4/07	104	100	3.26	70-130	25
Toluene	58887-20	<0.50	40.0	40.0	41.5	40.0	ug/L	EPA 8260B	10/4/07	104	100	3.65	70-130	25
Tert-Butanol	58887-20	<5.0	200	200	208	207	ug/L	EPA 8260B	10/4/07	104	103	0.561	70-130	25
Methyl-t-Butyl Ether	58887-20	<0.50	40.0	40.0	39.5	39.0	ug/L	EPA 8260B	10/4/07	98.7	97.4	1.35	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Project Name : **NAZ EAGLE GAS**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	10/2/07	70.8	70-130
TPH as Diesel	20.0	mg/Kg	M EPA 8015	10/4/07	90.9	70-130
Benzene	0.0400	mg/Kg	EPA 8260B	10/1/07	100	70-130
Toluene	0.0400	mg/Kg	EPA 8260B	10/1/07	97.4	70-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	10/1/07	97.3	70-130
Methyl-t-Butyl Ether	0.0400	mg/Kg	EPA 8260B	10/1/07	89.0	70-130
Benzene	0.0396	mg/Kg	EPA 8260B	10/1/07	105	70-130
Toluene	0.0396	mg/Kg	EPA 8260B	10/1/07	106	70-130
Tert-Butanol	0.198	mg/Kg	EPA 8260B	10/1/07	93.1	70-130
Methyl-t-Butyl Ether	0.0396	mg/Kg	EPA 8260B	10/1/07	96.1	70-130
Benzene	0.0397	mg/Kg	EPA 8260B	10/3/07	106	70-130
Toluene	0.0397	mg/Kg	EPA 8260B	10/3/07	104	70-130
Tert-Butanol	0.198	mg/Kg	EPA 8260B	10/3/07	88.4	70-130
Methyl-t-Butyl Ether	0.0397	mg/Kg	EPA 8260B	10/3/07	101	70-130
Benzene	40.0	ug/L	EPA 8260B	10/3/07	110	70-130
Toluene	40.0	ug/L	EPA 8260B	10/3/07	106	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:



 Joel Kiff

QC Report : Laboratory Control Sample (LCS)Project Name : **NAZ EAGLE GAS**Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Tert-Butanol	200	ug/L	EPA 8260B	10/3/07	94.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/3/07	106	70-130
Benzene	40.0	ug/L	EPA 8260B	10/4/07	110	70-130
Toluene	40.0	ug/L	EPA 8260B	10/4/07	106	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/4/07	95.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/4/07	106	70-130
Benzene	40.0	ug/L	EPA 8260B	10/3/07	90.8	70-130
Toluene	40.0	ug/L	EPA 8260B	10/3/07	97.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/3/07	92.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/3/07	94.7	70-130
Benzene	40.0	ug/L	EPA 8260B	10/3/07	94.4	70-130
Toluene	40.0	ug/L	EPA 8260B	10/3/07	98.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/3/07	99.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/3/07	101	70-130
Benzene	40.0	ug/L	EPA 8260B	10/4/07	100	70-130
Toluene	40.0	ug/L	EPA 8260B	10/4/07	101	70-130
Tert-Butanol	200	ug/L	EPA 8260B	10/4/07	99.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	10/4/07	98.8	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:



 Joel Kiff

Project Contact (Hardcopy or PDF To): KAREL DETTERMAN
 Company / Address: CLEARWATER GROUP
229 TOWNSEND BLVD RICHMOND CA 94804
 Phone #: (510) 387-9943 Fax #: (510) 232-2823
 Project #: ZP046D P.O. #:
 Project Name: LAZ SAGS GAS STATION
 Project Address: 4301 SAN LEONARD ST OAKLAND, CA

California EDF Report? Yes No
 Sampling Company Log Code: GW60
 Global ID: 10605300219
 EDF Deliverable To (Email Address): GWISCO@CLEARWATERGROUP
 Sampler Signature: KODNEN BERRY

Chain-of-Custody Record and Analysis Request

Sample Designation	Sampling		Container				Preservative			Matrix			MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	MTBE (EPA 8260B) @ 0.5 ppb	BTEX (EPA 8260B)	TPH Gas (EPA 8260B)	5 Oxygenates (EPA 8260B)	7 Oxygenates (EPA 8260B)	Lead Scav. (1,2 DCA & 1,2 EDB-EPA 8260B)	Volatile Halocarbons (EPA 8260B)	Volatile Organics Full List (EPA 8260B)	Volatile Organics (EPA 824.2 Drinking Water)	TPH as Diesel (EPA 8015M)	TPH as Motor Oil (EPA 8015M)	Total Lead (EPA 6010)	W.E.T. Lead (STLC)	TAT	For Lab Use Only			
	Date	Time	40 ml VOA	Sleeve	Poly	Glass	Tedlar	HCl	HNO ₃	None	Water	Soil																	Air		
SB-15 10FT	9/25/07	1200																												<input type="checkbox"/> 12 hr	
SB-15 38FT		1130																												<input type="checkbox"/> 24 hr	
SB-15 48FT GW		1300	X																											<input type="checkbox"/> 48 hr	
SB-15 52FT GW		1355	X																											<input type="checkbox"/> 72 hr	
SB-12 12FT	9/26/07	1130																												<input checked="" type="checkbox"/> 1 wk	
SB-12 32FT		1330																													
SB-12 33.5FT		1355																													
SB-12 25.5FT		1350																													
SB-12 34FT GW		1400	X																												

Relinquished by: Karel Dett Date: 9/26/07 Time: 1700
 Relinquished by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date: 092807 Time: 1456 Received by Laboratory: Rozmarie Kiff Analytical

Remarks:
 Bill to:
 For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
20	Rm	092807	1710	1R-5	<input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No



Report Number : 58952

Date : 10/10/2007

Karel Detterman
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 2 Soil Samples
Project Name : Eagle Gas Station
Project Number : ZP046D

Dear Ms. Detterman,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 58952

Date : 10/10/2007

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Sample : **Drum 1, 2, 3**

Matrix : Soil

Lab Number : 58952-01

Sample Date :10/4/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/9/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/9/2007
Ethylbenzene	0.022	0.0050	mg/Kg	EPA 8260B	10/9/2007
Total Xylenes	0.014	0.0050	mg/Kg	EPA 8260B	10/9/2007
Methyl-t-butyl ether (MTBE)	0.76	0.0050	mg/Kg	EPA 8260B	10/9/2007
TPH as Gasoline	5.6	1.0	mg/Kg	EPA 8260B	10/9/2007
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	10/9/2007
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	10/9/2007
TPH as Diesel	23	1.0	mg/Kg	M EPA 8015	10/10/2007
1-Chlorooctadecane (Diesel Surrogate)	77.3		% Recovery	M EPA 8015	10/10/2007

Sample : **Drum 4, 5, 6**

Matrix : Soil

Lab Number : 58952-02

Sample Date :10/4/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/9/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/9/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/9/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/9/2007
Methyl-t-butyl ether (MTBE)	0.78	0.0050	mg/Kg	EPA 8260B	10/9/2007
TPH as Gasoline	6.4	1.0	mg/Kg	EPA 8260B	10/9/2007
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	10/9/2007
4-Bromofluorobenzene (Surr)	108		% Recovery	EPA 8260B	10/9/2007
TPH as Diesel	16	1.0	mg/Kg	M EPA 8015	10/10/2007
1-Chlorooctadecane (Diesel Surrogate)	79.5		% Recovery	M EPA 8015	10/10/2007

Approved By:

Joel Kiff

Report Number : 58952

Date : 10/10/2007

QC Report : Method Blank Data

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
TPH as Diesel	< 1.0	1.0	mg/Kg	M EPA 8015	10/10/2007
1-Chlorooctadecane (Diesel Surrogate)	78.2		%	M EPA 8015	10/10/2007
Benzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/8/2007
Toluene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/8/2007
Ethylbenzene	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/8/2007
Total Xylenes	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/8/2007
Methyl-t-butyl ether (MTBE)	< 0.0050	0.0050	mg/Kg	EPA 8260B	10/8/2007
TPH as Gasoline	< 1.0	1.0	mg/Kg	EPA 8260B	10/8/2007
Toluene - d8 (Surr)	100		%	EPA 8260B	10/8/2007
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	10/8/2007

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
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Approved By:  _____
Joel Kiff

Report Number : 58952

Date : 10/10/2007

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	58836-01	1.5	20.0	20.0	16.9	16.7	mg/Kg	M EPA 8015	10/10/07	78.7	77.7	1.32	60-140	25
Benzene	58951-01	<0.0050	0.0400	0.0400	0.0448	0.0444	mg/Kg	EPA 8260B	10/9/07	112	111	0.890	70-130	25
Toluene	58951-01	<0.0050	0.0400	0.0400	0.0422	0.0414	mg/Kg	EPA 8260B	10/9/07	105	104	1.82	70-130	25
Tert-Butanol	58951-01	<0.0050	0.200	0.200	0.186	0.184	mg/Kg	EPA 8260B	10/9/07	93.0	91.9	1.20	70-130	25
Methyl-t-Butyl Ether	58951-01	<0.0050	0.0400	0.0400	0.0435	0.0437	mg/Kg	EPA 8260B	10/9/07	109	109	0.442	70-130	25

Approved By:  Joe Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Report Number : 58952

Date : 10/10/2007

QC Report : Laboratory Control Sample (LCS)

Project Name : **Eagle Gas Station**

Project Number : **ZP046D**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
TPH as Diesel	20.0	mg/Kg	M EPA 8015	10/10/07	83.5	70-130
Benzene	0.0400	mg/Kg	EPA 8260B	10/8/07	116	70-130
Toluene	0.0400	mg/Kg	EPA 8260B	10/8/07	112	70-130
Tert-Butanol	0.200	mg/Kg	EPA 8260B	10/8/07	95.3	70-130
Methyl-t-Butyl Ether	0.0400	mg/Kg	EPA 8260B	10/8/07	114	70-130

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By:

Joe Kiff



alscience
nvironmental
laboratories, Inc.

October 15, 2007

Joel Kiff
Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Subject: **Calscience Work Order No.: 07-10-0725**
Client Reference: Eagle Gas Station

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 10/10/2007 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

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

Sincerely,



Calscience Environmental
Laboratories, Inc.
Amanda Porter
Project Manager



alscience
environmental
laboratories, Inc.

Analytical Report

Kiff Analytical	Date Received:	10/10/07
2795 2nd Street, Suite 300	Work Order No:	07-10-0725
Davis, CA 95616-6593	Preparation:	EPA 3050B
	Method:	EPA 6010B

Page 1 of 1

Project: Eagle Gas Station

Client Sample Number	Lab Sample Number	Date Collected	Matrix	Instrument	Date Prepared	Date Analyzed	QC Batch ID
Drum 1, 2, 3	07-10-0725-1	10/04/07	Solid	ICP 5300	10/10/07	10/12/07	071010L01

Parameter	Result	RL	DF	Qual	Units
Lead	6.24	0.500	1		mg/kg

Drum 4, 5, 6	07-10-0725-2	10/04/07	Solid	ICP 5300	10/10/07	10/12/07	071010L01
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Parameter	Result	RL	DF	Qual	Units
Lead	5.46	0.500	1		mg/kg

Method Blank	097-01-002-9,929	N/A		Solid	ICP 5300	10/10/07	10/10/07	071010L01
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Parameter	Result	RL	DF	Qual	Units
Lead	ND	0.500	1		mg/kg

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

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alscience

nvironmental Quality Control - Spike/Spike Duplicate
aboratories, Inc.

Kiff Analytical	Date Received:	10/10/07
2795 2nd Street, Suite 300	Work Order No:	07-10-0725
Davis, CA 95616-6593	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project Eagle Gas Station

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
07-10-0729-1	Solid	ICP 5300	10/10/07	10/10/07	071010S01

<u>Parameter</u>	<u>MS %REC</u>	<u>MSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Lead	4X	4X	75-125	4X	0-20	Q

 RPD - Relative Percent Difference , CL - Control Limit

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aboratories, Inc.

Quality Control - PDS / PDSD

Kiff Analytical	Date Received	10/10/07
2795 2nd Street, Suite 300	Work Order No:	07-10-0725
Davis, CA 95616-6593	Preparation:	EPA 3050B
	Method:	EPA 6010B

Project: Eagle Gas Station

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
07-10-0729-1	Solid	ICP 5300	10/10/07	10/10/07	071010S01

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Lead	4X	4X	75-125	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit

alscience**nvironmental****Quality Control - LCS/LCS Duplicate****aboratories, Inc.**

Kiff Analytical
2795 2nd Street, Suite 300
Davis, CA 95616-6593

Date Received: N/A
Work Order No: 07-10-0725
Preparation: EPA 3050B
Method: EPA 6010B

Project: Eagle Gas Station

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-002-9,929	Solid	ICP 5300	10/10/07	10/10/07	071010L01

<u>Parameter</u>	<u>LCS %REC</u>	<u>LCSD %REC</u>	<u>%REC CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Lead	108	108	80-120	1	0-20	

RPD - Relative Percent Difference , CL - Control Limit

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alscience**nvironmental
aboratories, Inc.****Glossary of Terms and Qualifiers**

Work Order Number: 07-10-0725

<u>Qualifier</u>	<u>Definition</u>
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0710279

Work Order Summary

CLIENT: Mr. Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

BILL TO: Mr. Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

PHONE: 510-307-9943

P.O. # 0744

FAX:

PROJECT # ZP046 D Eagle Gas

DATE RECEIVED: 10/10/2007

CONTACT: Kyle Vagadori

DATE COMPLETED: 10/23/2007

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>
01A	VP1-3	Modified TO-15	6.5 "Hg
02A	VP1-6	Modified TO-15	6.5 "Hg
03A	VP2-3	Modified TO-15	8.0 "Hg
04A	VP2-6	Modified TO-15	8.0 "Hg
05A	VP2-9	Modified TO-15	11.5 "Hg
06A	VP3-3	Modified TO-15	5.5 "Hg
07A	VP3-6	Modified TO-15	5.0 "Hg
08A	VP3-9	Modified TO-15	22.0 "Hg
08AA	VP3-9 Lab Duplicate	Modified TO-15	22.0 "Hg
09A	VP6-3	Modified TO-15	10.0 "Hg
10A	VP6-6	Modified TO-15	28.0 "Hg
11A	VP6-9	Modified TO-15	25.0 "Hg
12A	VP4-3	Modified TO-15	6.5 "Hg
13A	VP4-6	Modified TO-15	6.0 "Hg
14A	VP4-9	Modified TO-15	6.5 "Hg
15A	VP5-3	Modified TO-15	5.5 "Hg
16A	VP5-6	Modified TO-15	6.5 "Hg

Continued on next page



AN ENVIRONMENTAL ANALYTICAL LABORATORY

WORK ORDER #: 0710279

Work Order Summary

CLIENT: Mr. Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

BILL TO: Mr. Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

PHONE: 510-307-9943

P.O. # 0744

FAX:

PROJECT # ZP046 D Eagle Gas

DATE RECEIVED: 10/10/2007

CONTACT: Kyle Vagadori

DATE COMPLETED: 10/23/2007

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>	<u>RECEIPT VAC./PRES.</u>
17A	VP5-9	Modified TO-15	22.5 "Hg
18A	Lab Blank	Modified TO-15	NA
18B	Lab Blank	Modified TO-15	NA
18C	Lab Blank	Modified TO-15	NA
19A	CCV	Modified TO-15	NA
19B	CCV	Modified TO-15	NA
19C	CCV	Modified TO-15	NA
20A	LCS	Modified TO-15	NA
20B	LCS	Modified TO-15	NA
20C	LCS	Modified TO-15	NA

CERTIFIED BY: *Sandra A. Trueman*

DATE: 10/23/07

Laboratory Director

Certification numbers: CA NELAP - 02110CA, LA NELAP/LELAP- AI 30763, NJ NELAP - CA004
NY NELAP - 11291, UT NELAP - 9166389892

Name of Accrediting Agency: NELAP/Florida Department of Health, Scope of Application: Clean Air Act,
Accreditation number: E87680, Effective date: 07/01/07, Expiration date: 06/30/08

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

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**LABORATORY NARRATIVE
Modified TO-15
Clearwater Group, Inc.
Workorder# 0710279**



Seventeen 6 Liter Summa Canister samples were received on October 10, 2007. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode. The method involves concentrating up to 0.2 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

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

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

<i>Requirement</i>	<i>TO-15</i>	<i>ATL Modifications</i>
Daily CCV	+/- 30% Difference	<= 30% Difference with two allowed out up to <=40%.; flag and narrate outliers
Sample collection media	Summa canister	ATL recommends use of summa canisters to insure data defensibility, but will report results from Tedlar bags at client request
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

Samples VP3-9, VP6-6, VP6-9 and VP5-9 were received with significant vacuum remaining in the canister. The residual canister vacuum resulted in elevated reporting limits.

Analytical Notes

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

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

Dilution was performed on sample VP3-9 due to the presence of high level non-target species.

Definition of Data Qualifying Flags

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

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

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

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

N - The identification is based on presumptive evidence.

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

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP1-3

Lab ID#: 0710279-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
m,p-Xylene	0.86	1.0	3.7	4.4
TPH ref. to Gasoline (MW=100)	17	22	70	90
2-Propanol	3.4	71	8.4	170

Client Sample ID: VP1-6

Lab ID#: 0710279-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
m,p-Xylene	0.86	1.3	3.7	5.7
TPH ref. to Gasoline (MW=100)	17	62	70	250
tert-Butyl alcohol	3.4	97	10	290

Client Sample ID: VP2-3

Lab ID#: 0710279-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Methyl tert-butyl ether	0.92	6.9	3.3	25

Client Sample ID: VP2-6

Lab ID#: 0710279-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
m,p-Xylene	0.92	1.8	4.0	7.8
TPH ref. to Gasoline (MW=100)	18	30	75	120
Methyl tert-butyl ether	0.92	14	3.3	51

Client Sample ID: VP2-9

Lab ID#: 0710279-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1100	39000	3500	120000
Ethyl Benzene	1100	9900	4700	43000
m,p-Xylene	1100	5600	4700	24000
TPH ref. to Gasoline (MW=100)	22000	11000000	89000	46000000



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP2-9

Lab ID#: 0710279-05A

tert-Butyl alcohol	4300	22000	13000	66000
Methyl tert-butyl ether	1100	180000	3900	640000

Client Sample ID: VP3-3

Lab ID#: 0710279-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	3.3	80	10	250
Ethyl Benzene	3.3	770	14	3300
m,p-Xylene	3.3	880	14	3800
TPH ref. to Gasoline (MW=100)	66	8500	270	35000
tert-Butyl alcohol	13	76	40	230
Methyl tert-butyl ether	3.3	51	12	180

Client Sample ID: VP3-6

Lab ID#: 0710279-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	11	88	34	280
Ethyl Benzene	11	90	47	390
m,p-Xylene	11	73	47	320
TPH ref. to Gasoline (MW=100)	220	22000	880	91000
tert-Butyl alcohol	43	2400	130	7300
Methyl tert-butyl ether	11	4200	39	15000

Client Sample ID: VP3-9

Lab ID#: 0710279-08A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	6.7	69	21	220
TPH ref. to Gasoline (MW=100)	130	24000	550	100000
tert-Butyl alcohol	27	880	81	2600
Methyl tert-butyl ether	6.7	860	24	3100

Client Sample ID: VP3-9 Lab Duplicate

Lab ID#: 0710279-08AA



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP3-9 Lab Duplicate

Lab ID#: 0710279-08AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	6.7	66	21	210
TPH ref. to Gasoline (MW=100)	130	25000	550	100000
tert-Butyl alcohol	27	890	81	2700
Methyl tert-butyl ether	6.7	840	24	3000

Client Sample ID: VP6-3

Lab ID#: 0710279-09A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Ethyl Benzene	4.0	5.6	17	24
m,p-Xylene	4.0	5.0	17	22
TPH ref. to Gasoline (MW=100)	80	2700	330	11000
tert-Butyl alcohol	16	340	49	1000
2-Propanol	16	4900 E	40	12000 E
Methyl tert-butyl ether	4.0	840	14	3000

Client Sample ID: VP6-6

Lab ID#: 0710279-10A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	130	160	430	510
TPH ref. to Gasoline (MW=100)	2700	680000	11000	2800000
tert-Butyl alcohol	540	7700	1600	23000
Methyl tert-butyl ether	130	36000	480	130000

Client Sample ID: VP6-9

Lab ID#: 0710279-11A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	800	2900	2600	9200
TPH ref. to Gasoline (MW=100)	16000	810000	66000	3300000
tert-Butyl alcohol	3200	20000	9800	60000
Methyl tert-butyl ether	800	160000	2900	600000



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP4-3

Lab ID#: 0710279-12A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH ref. to Gasoline (MW=100)	68	2600	280	11000
tert-Butyl alcohol	14	38	41	110
2-Propanol	14	4000 E	34	9800 E
Methyl tert-butyl ether	3.4	46	12	170

Client Sample ID: VP4-6

Lab ID#: 0710279-13A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.84	26	2.7	83
Ethyl Benzene	0.84	200	3.6	880
Toluene	0.84	1.0	3.2	3.9
m,p-Xylene	0.84	230	3.6	1000
TPH ref. to Gasoline (MW=100)	17	6300	69	26000
tert-Butyl alcohol	3.4	54	10	160
2-Propanol	3.4	74	8.2	180
Methyl tert-butyl ether	0.84	100	3.0	370

Client Sample ID: VP4-9

Lab ID#: 0710279-14A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH ref. to Gasoline (MW=100)	1700	28000	7000	110000
tert-Butyl alcohol	340	6600	1000	20000
Methyl tert-butyl ether	86	17000	310	61000

Client Sample ID: VP5-3

Lab ID#: 0710279-15A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
m,p-Xylene	0.82	1.0	3.6	4.4
TPH ref. to Gasoline (MW=100)	16	510	67	2100
tert-Butyl alcohol	3.3	240	9.9	730
Methyl tert-butyl ether	0.82	170	3.0	600



AN ENVIRONMENTAL ANALYTICAL LABORATORY

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

Client Sample ID: VP5-6

Lab ID#: 0710279-16A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.86	39	2.7	120
Ethyl Benzene	0.86	7.4	3.7	32
Toluene	0.86	5.3	3.2	20
m,p-Xylene	0.86	23	3.7	100
o-Xylene	0.86	8.7	3.7	38
TPH ref. to Gasoline (MW=100)	17	2700	70	11000
tert-Butyl alcohol	3.4	7.4	10	22
2-Propanol	3.4	7.0	8.4	17
Methyl tert-butyl ether	0.86	140	3.1	520

Client Sample ID: VP5-9

Lab ID#: 0710279-17A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
TPH ref. to Gasoline (MW=100)	54	3400	220	14000
tert-Butyl alcohol	11	22	32	66
Methyl tert-butyl ether	2.7	100	9.7	360



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP1-3

Lab ID#: 0710279-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101719	Date of Collection:	10/4/07
Dil. Factor:	1.71	Date of Analysis:	10/18/07 01:32 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.86	Not Detected	2.7	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
m,p-Xylene	0.86	1.0	3.7	4.4
o-Xylene	0.86	Not Detected	3.7	Not Detected
TPH ref. to Gasoline (MW=100)	17	22	70	90
tert-Butyl alcohol	3.4	Not Detected	10	Not Detected
2-Propanol	3.4	71	8.4	170
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	108	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP1-6

Lab ID#: 0710279-02A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101720	Date of Collection:	10/4/07
Dil. Factor:	1.71	Date of Analysis:	10/18/07 02:26 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.86	Not Detected	2.7	Not Detected
Ethyl Benzene	0.86	Not Detected	3.7	Not Detected
Toluene	0.86	Not Detected	3.2	Not Detected
m,p-Xylene	0.86	1.3	3.7	5.7
o-Xylene	0.86	Not Detected	3.7	Not Detected
TPH ref. to Gasoline (MW=100)	17	62	70	250
tert-Butyl alcohol	3.4	97	10	290
2-Propanol	3.4	Not Detected	8.4	Not Detected
Methyl tert-butyl ether	0.86	Not Detected	3.1	Not Detected

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	107	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP2-3

Lab ID#: 0710279-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101721	Date of Collection:	10/4/07
Dil. Factor:	1.83	Date of Analysis:	10/18/07 03:15 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.92	Not Detected	2.9	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
Toluene	0.92	Not Detected	3.4	Not Detected
m,p-Xylene	0.92	Not Detected	4.0	Not Detected
o-Xylene	0.92	Not Detected	4.0	Not Detected
TPH ref. to Gasoline (MW=100)	18	Not Detected	75	Not Detected
tert-Butyl alcohol	3.7	Not Detected	11	Not Detected
2-Propanol	3.7	Not Detected	9.0	Not Detected
Methyl tert-butyl ether	0.92	6.9	3.3	25

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	114	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	107	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP2-6

Lab ID#: 0710279-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101722	Date of Collection:	10/4/07
Dil. Factor:	1.83	Date of Analysis:	10/18/07 04:01 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.92	Not Detected	2.9	Not Detected
Ethyl Benzene	0.92	Not Detected	4.0	Not Detected
Toluene	0.92	Not Detected	3.4	Not Detected
m,p-Xylene	0.92	1.8	4.0	7.8
o-Xylene	0.92	Not Detected	4.0	Not Detected
TPH ref. to Gasoline (MW=100)	18	30	75	120
tert-Butyl alcohol	3.7	Not Detected	11	Not Detected
2-Propanol	3.7	Not Detected	9.0	Not Detected
Methyl tert-butyl ether	0.92	14	3.3	51

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	118	70-130
Toluene-d8	91	70-130
4-Bromofluorobenzene	109	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP2-9

Lab ID#: 0710279-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102213	Date of Collection:	10/4/07
Dil. Factor:	2170	Date of Analysis:	10/22/07 06:20 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	1100	39000	3500	120000
Ethyl Benzene	1100	9900	4700	43000
Toluene	1100	Not Detected	4100	Not Detected
m,p-Xylene	1100	5600	4700	24000
o-Xylene	1100	Not Detected	4700	Not Detected
TPH ref. to Gasoline (MW=100)	22000	11000000	89000	46000000
tert-Butyl alcohol	4300	22000	13000	66000
2-Propanol	4300	Not Detected	11000	Not Detected
Methyl tert-butyl ether	1100	180000	3900	640000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	115	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	92	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP3-3

Lab ID#: 0710279-06A

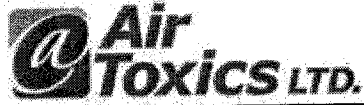
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101723	Date of Collection:	10/4/07
Dil. Factor:	6.56	Date of Analysis:	10/18/07 06:05 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	3.3	80	10	250
Ethyl Benzene	3.3	770	14	3300
Toluene	3.3	Not Detected	12	Not Detected
m,p-Xylene	3.3	880	14	3800
o-Xylene	3.3	Not Detected	14	Not Detected
TPH ref. to Gasoline (MW=100)	66	8500	270	35000
tert-Butyl alcohol	13	76	40	230
2-Propanol	13	Not Detected	32	Not Detected
Methyl tert-butyl ether	3.3	51	12	180

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	125	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	105	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP3-6

Lab ID#: 0710279-07A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102210	Date of Collection:	10/4/07
Dil. Factor:	21.5	Date of Analysis:	10/22/07 03:11 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	11	88	34	280
Ethyl Benzene	11	90	47	390
Toluene	11	Not Detected	40	Not Detected
m,p-Xylene	11	73	47	320
o-Xylene	11	Not Detected	47	Not Detected
TPH ref. to Gasoline (MW=100)	220	22000	880	91000
tert-Butyl alcohol	43	2400	130	7300
2-Propanol	43	Not Detected	100	Not Detected
Methyl tert-butyl ether	11	4200	39	15000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP3-9

Lab ID#: 0710279-08A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101726	Date of Collection:	10/4/07
Dil. Factor:	13.4	Date of Analysis:	10/18/07 08:35 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	6.7	69	21	220
Ethyl Benzene	6.7	Not Detected	29	Not Detected
Toluene	6.7	Not Detected	25	Not Detected
m,p-Xylene	6.7	Not Detected	29	Not Detected
o-Xylene	6.7	Not Detected	29	Not Detected
TPH ref. to Gasoline (MW=100)	130	24000	550	100000
tert-Butyl alcohol	27	880	81	2600
2-Propanol	27	Not Detected	66	Not Detected
Methyl tert-butyl ether	6.7	860	24	3100

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	130	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	109	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP3-9 Lab Duplicate

Lab ID#: 0710279-08AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101727	Date of Collection:	10/4/07
Dil. Factor:	13.4	Date of Analysis:	10/18/07 09:31 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	6.7	66	21	210
Ethyl Benzene	6.7	Not Detected	29	Not Detected
Toluene	6.7	Not Detected	25	Not Detected
m,p-Xylene	6.7	Not Detected	29	Not Detected
o-Xylene	6.7	Not Detected	29	Not Detected
TPH ref. to Gasoline (MW=100)	130	25000	550	100000
tert-Butyl alcohol	27	890	81	2700
2-Propanol	27	Not Detected	66	Not Detected
Methyl tert-butyl ether	6.7	840	24	3000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	130	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	106	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP6-3

Lab ID#: 0710279-09A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101728	Date of Collection:	10/4/07
Dil. Factor:	8.04	Date of Analysis:	10/18/07 10:09 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	4.0	Not Detected	13	Not Detected
Ethyl Benzene	4.0	5.6	17	24
Toluene	4.0	Not Detected	15	Not Detected
m,p-Xylene	4.0	5.0	17	22
o-Xylene	4.0	Not Detected	17	Not Detected
TPH ref. to Gasoline (MW=100)	80	2700	330	11000
tert-Butyl alcohol	16	340	49	1000
2-Propanol	16	4900 E	40	12000 E
Methyl tert-butyl ether	4.0	840	14	3000

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	110	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	108	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP6-6

Lab ID#: 0710279-10A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102121	Date of Collection:	10/4/07
Dil. Factor:	268	Date of Analysis:	10/22/07 06:09 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	130	160	430	510
Ethyl Benzene	130	Not Detected	580	Not Detected
Toluene	130	Not Detected	500	Not Detected
m,p-Xylene	130	Not Detected	580	Not Detected
o-Xylene	130	Not Detected	580	Not Detected
TPH ref. to Gasoline (MW=100)	2700	680000	11000	2800000
tert-Butyl alcohol	540	7700	1600	23000
2-Propanol	540	Not Detected	1300	Not Detected
Methyl tert-butyl ether	130	36000	480	130000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	92	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP6-9

Lab ID#: 0710279-11A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102119	Date of Collection:	10/4/07
Dil. Factor:	1610	Date of Analysis:	10/22/07 04:40 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	800	2900	2600	9200
Ethyl Benzene	800	Not Detected	3500	Not Detected
Toluene	800	Not Detected	3000	Not Detected
m,p-Xylene	800	Not Detected	3500	Not Detected
o-Xylene	800	Not Detected	3500	Not Detected
TPH ref. to Gasoline (MW=100)	16000	810000	66000	3300000
tert-Butyl alcohol	3200	20000	9800	60000
2-Propanol	3200	Not Detected	7900	Not Detected
Methyl tert-butyl ether	800	160000	2900	600000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP4-3

Lab ID#: 0710279-12A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102118	Date of Collection:	10/4/07
Dil. Factor:	6.84	Date of Analysis:	10/22/07 03:54 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	3.4	Not Detected	11	Not Detected
Ethyl Benzene	3.4	Not Detected	15	Not Detected
Toluene	3.4	Not Detected	13	Not Detected
m,p-Xylene	3.4	Not Detected	15	Not Detected
o-Xylene	3.4	Not Detected	15	Not Detected
TPH ref. to Gasoline (MW=100)	68	2600	280	11000
tert-Butyl alcohol	14	38	41	110
2-Propanol	14	4000 E	34	9800 E
Methyl tert-butyl ether	3.4	46	12	170

E = Exceeds instrument calibration range.

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	87	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	91	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP4-6

Lab ID#: 0710279-13A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102214	Date of Collection:	10/4/07
Dil. Factor:	1.68	Date of Analysis:	10/22/07 07:09 PM

Compound	Rot. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.84	26	2.7	83
Ethyl Benzene	0.84	200	3.6	880
Toluene	0.84	1.0	3.2	3.9
m,p-Xylene	0.84	230	3.6	1000
o-Xylene	0.84	Not Detected	3.6	Not Detected
TPH ref. to Gasoline (MW=100)	17	6300	69	26000
tert-Butyl alcohol	3.4	54	10	160
2-Propanol	3.4	74	8.2	180
Methyl tert-butyl ether	0.84	100	3.0	370

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP4-9

Lab ID#: 0710279-14A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102215	Date of Collection:	10/4/07
Dil. Factor:	171	Date of Analysis:	10/22/07 07:59 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	86	Not Detected	270	Not Detected
Ethyl Benzene	86	Not Detected	370	Not Detected
Toluene	86	Not Detected	320	Not Detected
m,p-Xylene	86	Not Detected	370	Not Detected
o-Xylene	86	Not Detected	370	Not Detected
TPH ref. to Gasoline (MW=100)	1700	28000	7000	110000
tert-Butyl alcohol	340	6600	1000	20000
2-Propanol	340	Not Detected	840	Not Detected
Methyl tert-butyl ether	86	17000	310	61000

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	95	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP5-3

Lab ID#: 0710279-15A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102216	Date of Collection:	10/4/07
Dil. Factor:	1.64	Date of Analysis:	10/22/07 08:47 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.82	Not Detected	2.6	Not Detected
Ethyl Benzene	0.82	Not Detected	3.6	Not Detected
Toluene	0.82	Not Detected	3.1	Not Detected
m,p-Xylene	0.82	1.0	3.6	4.4
o-Xylene	0.82	Not Detected	3.6	Not Detected
TPH ref. to Gasoline (MW=100)	16	510	67	2100
tert-Butyl alcohol	3.3	240	9.9	730
2-Propanol	3.3	Not Detected	8.1	Not Detected
Methyl tert-butyl ether	0.82	170	3.0	600

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	91	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP5-6

Lab ID#: 0710279-16A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102219	Date of Collection:	10/4/07
Dil. Factor:	1.71	Date of Analysis:	10/23/07 12:59 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.86	39	2.7	120
Ethyl Benzene	0.86	7.4	3.7	32
Toluene	0.86	5.3	3.2	20
m,p-Xylene	0.86	23	3.7	100
o-Xylene	0.86	8.7	3.7	38
TPH ref. to Gasoline (MW=100)	17	2700	70	11000
tert-Butyl alcohol	3.4	7.4	10	22
2-Propanol	3.4	7.0	8.4	17
Methyl tert-butyl ether	0.86	140	3.1	520

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: VP5-9

Lab ID#: 0710279-17A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102218	Date of Collection:	10/4/07
Dil. Factor:	5.36	Date of Analysis:	10/23/07 12:06 AM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	2.7	Not Detected	8.6	Not Detected
Ethyl Benzene	2.7	Not Detected	12	Not Detected
Toluene	2.7	Not Detected	10	Not Detected
m,p-Xylene	2.7	Not Detected	12	Not Detected
o-Xylene	2.7	Not Detected	12	Not Detected
TPH ref. to Gasoline (MW=100)	54	3400	220	14000
tert-Butyl alcohol	11	22	32	66
2-Propanol	11	Not Detected	26	Not Detected
Methyl tert-butyl ether	2.7	100	9.7	360

Container Type: 6 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	92	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710279-18A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101706	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/17/07 01:24 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	105	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710279-18B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102105	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/21/07 05:58 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	93	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: Lab Blank

Lab ID#: 0710279-18C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102209	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/22/07 02:22 PM

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (uG/m3)	Amount (uG/m3)
Benzene	0.50	Not Detected	1.6	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
TPH ref. to Gasoline (MW=100)	10	Not Detected	41	Not Detected
tert-Butyl alcohol	2.0	Not Detected	6.1	Not Detected
2-Propanol	2.0	Not Detected	4.9	Not Detected
Methyl tert-butyl ether	0.50	Not Detected	1.8	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710279-19A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101702	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/17/07 10:32 AM

Compound	%Recovery
Benzene	105
Ethyl Benzene	105
Toluene	108
m,p-Xylene	103
o-Xylene	104
TPH ref. to Gasoline (MW=100)	Not Spiked
tert-Butyl alcohol	106
2-Propanol	99
Methyl tert-butyl ether	93

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	106	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710279-19B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102102	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/21/07 03:33 PM

Compound	%Recovery
Benzene	107
Ethyl Benzene	105
Toluene	107
m,p-Xylene	105
o-Xylene	106
TPH ref. to Gasoline (MW=100)	Not Spiked
tert-Butyl alcohol	120
2-Propanol	110
Methyl tert-butyl ether	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	93	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: CCV

Lab ID#: 0710279-19C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102202	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/22/07 08:43 AM

Compound	%Recovery
Benzene	107
Ethyl Benzene	104
Toluene	106
m,p-Xylene	105
o-Xylene	105
TPH ref. to Gasoline (MW=100)	Not Spiked
tert-Butyl alcohol	116
2-Propanol	104
Methyl tert-butyl ether	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	104	70-130
4-Bromofluorobenzene	98	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710279-20A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7101704	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/17/07 11:59 AM

Compound	%Recovery
Benzene	106
Ethyl Benzene	102
Toluene	112
m,p-Xylene	100
o-Xylene	103
TPH ref. to Gasoline (MW=100)	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	98
Methyl tert-butyl ether	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	107	70-130
Toluene-d8	101	70-130
4-Bromofluorobenzene	108	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710279-20B

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102104	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/21/07 04:54 PM

Compound	%Recovery
Benzene	112
Ethyl Benzene	106
Toluene	116
m,p-Xylene	107
o-Xylene	108
TPH ref. to Gasoline (MW=100)	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	117
Methyl tert-butyl ether	117

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Client Sample ID: LCS

Lab ID#: 0710279-20C

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	7102203	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 10/22/07 09:25 AM

Compound	%Recovery
Benzene	109
Ethyl Benzene	105
Toluene	113
m,p-Xylene	106
o-Xylene	107
TPH ref. to Gasoline (MW=100)	Not Spiked
tert-Butyl alcohol	Not Spiked
2-Propanol	112
Methyl tert-butyl ether	108

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	103	70-130
4-Bromofluorobenzene	96	70-130

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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 2

Project Manager Karel Dettmer
 Collected by: (Print and Sign) Rhuth Nelson
 Company Chromatix Group Email rhuth@chromatixgroup.com
 Address 229 Taylorbury Ave City Richmond State CA Zip 94801
 Phone 510-307-9943 Fax 510-232-2823

Project Info:
 P.O. # 0744
 Project # 2P046 D
 Project Name Eagle Gras

Turn Around Time:
 Normal
 Rush
specify
 Lab Use Only
 Pressurized by: VP
 Date: 10/12/07
 Pressurization Gas: N₂ He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum			
						Initial	Final	Receipt	Final
01A	VP1-3	943	10-4	09:27	TO-15	30+	7.0	6.5	5.0 PSI
02A	VP1-6	915	2007	09:34		30+	8.0	6.5	
03A	VP2-3	34251		10:19		30+	7.5	8.0	
04A	VP2-6	33565		10:20		30+	2.5	8.0	
05A	VP2-9	35271		10:21		30+	12.5	11.5	
06A	VP3-3	33728		11:00		30+	7.5	5.5	
07A	VP3-6	3750		11:07		30+	6.5	5.0	
08A	VP3-9	33915		11:08		30+	23.0	22.0	

Relinquished by: (signature) <u>Rhuth Nelson</u> Date/Time <u>10-4-2007</u>	Received by: (signature) <u>Karel Dettmer</u> Date/Time <u>10/9/07 0900</u>
Relinquished by: (signature) <u>Karel Dettmer</u> Date/Time <u>10/9/07 0900</u>	Received by: (signature) <u>Armeda Whit</u> Date/Time <u>10/10/07 0850</u>
Relinquished by: (signature) _____ Date/Time _____	Received by: (signature) _____ Date/Time _____

Notes:

Lab Use Only	Shipper Name <u>FedEx</u>	Air-Bill # <u>858176075426</u>	Temp (°C) <u>NA</u>	Condition <u>Good</u>	Custody Seals Intact? <u>None</u>	Work Order # <u>0710279</u>
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CHAIN-OF-CUSTODY RECORD

Sample Transportation Notice

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Karel Dettmer
 Collected by: (Print and Sign) Robert L. Nelson
 Company Clearwater Group Email rlnelson@clearwatergroup.com
 Address 229 Tewksbury Ave City Richmond State CA Zip 94801
 Phone 510-307-9943 Fax 510-232-2823

Project Info:
 P.O. # 0744
 Project # 2P046 D
 Project Name Eagle Bay

Turn Around Time:
 Normal
 Rush
specify
 Lab Use Only
 Pressurized by: VFA
 Date: 10/12/07
 Pressurization Gas: (N₂) He.

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum			
						Initial	Final	Receipt	Final (PSI)
09A	VP6-3	12005	10-4-	11:50	TO-15	30.4	9.5	10.0	5.0 PSI
10A	VP6-6	13671	2007	11:51		30.4	28.0	28.0	
11A	VP6-9	94303		11:52		30.4	26.0	25.0	
12A	VP4-3	31476		11:45		30.4	7.0	10.5	
13A	VP4-6	12335		11:46		29.5	5.5	6.0	
14A	VP4-9	9584		11:47		29.5	5.5	6.5	
15A	VPS-3	12044		13:30		29.0	6.0	5.5	
16A	VPS-6	1056		13:31		28.0	6.5	6.5	
17A	VPS-9	04585		13:32		29.5	23.0	22.5	

Relinquished by: (signature) Date/Time <u>Robert L. Nelson</u> <u>10-7-2007</u>	Received by: (signature) Date/Time <u>Karel Dettmer</u> <u>10/9/07 0900</u>
Relinquished by: (signature) Date/Time <u>Karel Dettmer</u> <u>10/9/07 0900</u>	Received by: (signature) Date/Time <u>Angela</u> <u>ATL</u> <u>10/10/07 0850</u>
Relinquished by: (signature) Date/Time	Received by: (signature) Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx	8581 7407 5426	NA	Good	Yes No None	0710279

ZPO46D EAGLE GAS

LABSAMPID	LABCODE	MATRIX	METHOD	CLIENTSAMPID	SAMPDATE	ANALDATE	ANALTIME	LABCTLID	DILUTION	REPLMT
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	0.86
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	0.86
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	0.86
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	0.86
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	17
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	3.4
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	3.4
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	0.86
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	
0710279-01A	ATL	AIR	TO-15	VP1-3	10/04/07	10/18/07	0132	7101701	1.71	
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	0.86
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	0.86
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	0.86
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	0.86
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	17
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	3.4
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	3.4
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	0.86
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	
0710279-02A	ATL	AIR	TO-15	VP1-6	10/04/07	10/18/07	0226	7101701	1.71	
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	0.92
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	0.92
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	0.92
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	0.92
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	18
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	3.7

0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	3.7
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	0.92
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	
0710279-03A	ATL	AIR	TO-15	VP2-3	10/04/07	10/18/07	0315	7101701	1.83	
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	0.92
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	0.92
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	0.92
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	0.92
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	0.92
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	18
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	3.7
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	3.7
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	0.92
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	
0710279-04A	ATL	AIR	TO-15	VP2-6	10/04/07	10/18/07	0401	7101701	1.83	
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	1100
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	1100
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	1100
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	1100
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	1100
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	22000
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	4300
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	4300
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	1100
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	
0710279-05A	ATL	AIR	TO-15	VP2-9	10/04/07	10/22/07	1820	7102201	2170	
0710279-06A	ATL	AIR	TO-15	VP3-3	10/04/07	10/18/07	0605	7101701	6.56	3.3
0710279-06A	ATL	AIR	TO-15	VP3-3	10/04/07	10/18/07	0605	7101701	6.56	3.3

0710279-08A	ATL	AIR	TO-15	VP3-9	10/04/07	10/18/07	0835	7101701	13.4	
0710279-08A	ATL	AIR	TO-15	VP3-9	10/04/07	10/18/07	0835	7101701	13.4	
0710279-08A	ATL	AIR	TO-15	VP3-9	10/04/07	10/18/07	0835	7101701	13.4	
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	6.7
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	6.7
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	6.7
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	6.7
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	6.7
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	130
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	27
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	27
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	6.7
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	
0710279-08AA	ATL	AIR	TO-15	VP3-9 Lab Duplicate	10/04/07	10/18/07	0931	7101701	13.4	
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	4.0
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	4.0
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	4.0
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	4.0
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	4.0
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	80
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	16
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	16
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	4.0
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	
0710279-09A	ATL	AIR	TO-15	VP6-3	10/04/07	10/18/07	1009	7101701	8.04	
0710279-10A	ATL	AIR	TO-15	VP6-6	10/04/07	10/22/07	0609	7102101	268	130
0710279-10A	ATL	AIR	TO-15	VP6-6	10/04/07	10/22/07	0609	7102101	268	130
0710279-10A	ATL	AIR	TO-15	VP6-6	10/04/07	10/22/07	0609	7102101	268	130
0710279-10A	ATL	AIR	TO-15	VP6-6	10/04/07	10/22/07	0609	7102101	268	130

0710279-15A	ATL	AIR	TO-15	VP5-3	10/04/07	10/22/07	2047	7102201	1.64	3.3
0710279-15A	ATL	AIR	TO-15	VP5-3	10/04/07	10/22/07	2047	7102201	1.64	3.3
0710279-15A	ATL	AIR	TO-15	VP5-3	10/04/07	10/22/07	2047	7102201	1.64	0.82
0710279-15A	ATL	AIR	TO-15	VP5-3	10/04/07	10/22/07	2047	7102201	1.64	
0710279-15A	ATL	AIR	TO-15	VP5-3	10/04/07	10/22/07	2047	7102201	1.64	
0710279-15A	ATL	AIR	TO-15	VP5-3	10/04/07	10/22/07	2047	7102201	1.64	
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	0.86
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	0.86
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	0.86
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	0.86
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	0.86
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	17
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	3.4
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	3.4
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	0.86
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	
0710279-16A	ATL	AIR	TO-15	VP5-6	10/04/07	10/23/07	0059	7102201	1.71	
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	2.7
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	2.7
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	2.7
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	2.7
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	2.7
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	54
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	11
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	11
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	2.7
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	
0710279-17A	ATL	AIR	TO-15	VP5-9	10/04/07	10/23/07	0006	7102201	5.36	
0710279-18A	ATL	AIR	TO-15	Lab Blank		10/17/07	1324	7101701	1.00	0.50

0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	0.50
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	0.50
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	0.50
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	0.50
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	10
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	2.0
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	2.0
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	0.50
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	
0710279-18A	ATL	AIR	TO-15	Lab Blank	10/17/07	1324	7101701	1.00	
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	0.50
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	0.50
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	0.50
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	0.50
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	0.50
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	10
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	2.0
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	2.0
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	0.50
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	
0710279-18B	ATL	AIR	TO-15	Lab Blank	10/21/07	1758	7102101	1.00	
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	0.50
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	0.50
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	0.50
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	0.50
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	0.50
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	10
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	2.0
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	2.0

0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	0.50
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	
0710279-18C	ATL	AIR	TO-15	Lab Blank	10/22/07	1422	7102201	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19A	ATL	AIR	TO-15	CCV	10/17/07	1032	7101701	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19B	ATL	AIR	TO-15	CCV	10/21/07	1533	7102101	1.00	
0710279-19C	ATL	AIR	TO-15	CCV	10/22/07	0843	7102201	1.00	
0710279-19C	ATL	AIR	TO-15	CCV	10/22/07	0843	7102201	1.00	
0710279-19C	ATL	AIR	TO-15	CCV	10/22/07	0843	7102201	1.00	

UNITS	RESULTS	DATAFLAGS	REPLMT (uG/m3)	UNITS (uG/m3)	RESULTS (uG/m3)	DATAFLAGS (uG/m3)	COMPOUND NAME
PPBV		ND	2.7	UG/M3		ND	Benzene
PPBV		ND	3.7	UG/M3		ND	Ethyl Benzene
PPBV		ND	3.2	UG/M3		ND	Toluene
PPBV	1.0		3.7	UG/M3	4.4		m,p-Xylene
PPBV		ND	3.7	UG/M3		ND	o-Xylene
PPBV	22		70	UG/M3	90		TPH ref. to Gasoline (MW=100)
PPBV		ND	10	UG/M3		ND	tert-Butyl alcohol
PPBV	71		8.4	UG/M3	170		2-Propanol
PPBV		ND	3.1	UG/M3		ND	Methyl tert-butyl ether
%R	112			%R	112		1,2-Dichloroethane-d4
%R	91			%R	91		Toluene-d8
%R	108			%R	108		4-Bromofluorobenzene
PPBV		ND	2.7	UG/M3		ND	Benzene
PPBV		ND	3.7	UG/M3		ND	Ethyl Benzene
PPBV		ND	3.2	UG/M3		ND	Toluene
PPBV	1.3		3.7	UG/M3	5.7		m,p-Xylene
PPBV		ND	3.7	UG/M3		ND	o-Xylene
PPBV	62		70	UG/M3	250		TPH ref. to Gasoline (MW=100)
PPBV	97		10	UG/M3	290		tert-Butyl alcohol
PPBV		ND	8.4	UG/M3		ND	2-Propanol
PPBV		ND	3.1	UG/M3		ND	Methyl tert-butyl ether
%R	115			%R	115		1,2-Dichloroethane-d4
%R	92			%R	92		Toluene-d8
%R	107			%R	107		4-Bromofluorobenzene
PPBV		ND	2.9	UG/M3		ND	Benzene
PPBV		ND	4.0	UG/M3		ND	Ethyl Benzene
PPBV		ND	3.4	UG/M3		ND	Toluene
PPBV		ND	4.0	UG/M3		ND	m,p-Xylene
PPBV		ND	4.0	UG/M3		ND	o-Xylene
PPBV		ND	75	UG/M3		ND	TPH ref. to Gasoline (MW=100)
PPBV		ND	11	UG/M3		ND	tert-Butyl alcohol

PPBV		ND	9.0	UG/M3		ND	2-Propanol
PPBV	6.9		3.3	UG/M3	25		Methyl tert-butyl ether
%R	114			%R	114		1,2-Dichloroethane-d4
%R	91			%R	91		Toluene-d8
%R	107			%R	107		4-Bromofluorobenzene
PPBV		ND	2.9	UG/M3		ND	Benzene
PPBV		ND	4.0	UG/M3		ND	Ethyl Benzene
PPBV		ND	3.4	UG/M3		ND	Toluene
PPBV	1.8		4.0	UG/M3	7.8		m,p-Xylene
PPBV		ND	4.0	UG/M3		ND	o-Xylene
PPBV	30		75	UG/M3	120		TPH ref. to Gasoline (MW=100)
PPBV		ND	11	UG/M3		ND	tert-Butyl alcohol
PPBV		ND	9.0	UG/M3		ND	2-Propanol
PPBV	14		3.3	UG/M3	51		Methyl tert-butyl ether
%R	118			%R	118		1,2-Dichloroethane-d4
%R	91			%R	91		Toluene-d8
%R	109			%R	109		4-Bromofluorobenzene
PPBV	39000		3500	UG/M3	120000		Benzene
PPBV	9900		4700	UG/M3	43000		Ethyl Benzene
PPBV		ND	4100	UG/M3		ND	Toluene
PPBV	5600		4700	UG/M3	24000		m,p-Xylene
PPBV		ND	4700	UG/M3		ND	o-Xylene
PPBV	11000000		89000	UG/M3	46000000		TPH ref. to Gasoline (MW=100)
PPBV	22000		13000	UG/M3	66000		tert-Butyl alcohol
PPBV		ND	11000	UG/M3		ND	2-Propanol
PPBV	180000		3900	UG/M3	640000		Methyl tert-butyl ether
%R	115			%R	115		1,2-Dichloroethane-d4
%R	100			%R	100		Toluene-d8
%R	92			%R	92		4-Bromofluorobenzene
PPBV	80		10	UG/M3	250		Benzene
PPBV	770		14	UG/M3	3300		Ethyl Benzene

PPBV		ND	12	UG/M3		ND	Toluene
PPBV	880		14	UG/M3	3800		m,p-Xylene
PPBV		ND	14	UG/M3		ND	o-Xylene
PPBV	8500		270	UG/M3	35000		TPH ref. to Gasoline (MW=100)
PPBV	76		40	UG/M3	230		tert-Butyl alcohol
PPBV		ND	32	UG/M3		ND	2-Propanol
PPBV	51		12	UG/M3	180		Methyl tert-butyl ether
%R	125			%R	125		1,2-Dichloroethane-d4
%R	99			%R	99		Toluene-d8
%R	105			%R	105		4-Bromofluorobenzene
PPBV	88		34	UG/M3	280		Benzene
PPBV	90		47	UG/M3	390		Ethyl Benzene
PPBV		ND	40	UG/M3		ND	Toluene
PPBV	73		47	UG/M3	320		m,p-Xylene
PPBV		ND	47	UG/M3		ND	o-Xylene
PPBV	22000		880	UG/M3	91000		TPH ref. to Gasoline (MW=100)
PPBV	2400		130	UG/M3	7300		tert-Butyl alcohol
PPBV		ND	100	UG/M3		ND	2-Propanol
PPBV	4200		39	UG/M3	15000		Methyl tert-butyl ether
%R	102			%R	102		1,2-Dichloroethane-d4
%R	99			%R	99		Toluene-d8
%R	94			%R	94		4-Bromofluorobenzene
PPBV	69		21	UG/M3	220		Benzene
PPBV		ND	29	UG/M3		ND	Ethyl Benzene
PPBV		ND	25	UG/M3		ND	Toluene
PPBV		ND	29	UG/M3		ND	m,p-Xylene
PPBV		ND	29	UG/M3		ND	o-Xylene
PPBV	24000		550	UG/M3	100000		TPH ref. to Gasoline (MW=100)
PPBV	880		81	UG/M3	2600		tert-Butyl alcohol
PPBV		ND	66	UG/M3		ND	2-Propanol
PPBV	860		24	UG/M3	3100		Methyl tert-butyl ether

%R	130		%R	130		1,2-Dichloroethane-d4
%R	99		%R	99		Toluene-d8
%R	109		%R	109		4-Bromofluorobenzene
PPBV	66		21	UG/M3	210	Benzene
PPBV		ND	29	UG/M3		Ethyl Benzene
PPBV		ND	25	UG/M3		Toluene
PPBV		ND	29	UG/M3		m,p-Xylene
PPBV		ND	29	UG/M3		o-Xylene
PPBV	25000		550	UG/M3	100000	TPH ref. to Gasoline (MW=100)
PPBV	890		81	UG/M3	2700	tert-Butyl alcohol
PPBV		ND	66	UG/M3		2-Propanol
PPBV	840		24	UG/M3	3000	Methyl tert-butyl ether
%R	130		%R	130		1,2-Dichloroethane-d4
%R	98		%R	98		Toluene-d8
%R	106		%R	106		4-Bromofluorobenzene
PPBV		ND	13	UG/M3		Benzene
PPBV	5.6		17	UG/M3	24	Ethyl Benzene
PPBV		ND	15	UG/M3		Toluene
PPBV	5.0		17	UG/M3	22	m,p-Xylene
PPBV		ND	17	UG/M3		o-Xylene
PPBV	2700		330	UG/M3	11000	TPH ref. to Gasoline (MW=100)
PPBV	340		49	UG/M3	1000	tert-Butyl alcohol
PPBV	4900	E	40	UG/M3	12000	2-Propanol
PPBV	840		14	UG/M3	3000	Methyl tert-butyl ether
%R	110		%R	110		1,2-Dichloroethane-d4
%R	95		%R	95		Toluene-d8
%R	108		%R	108		4-Bromofluorobenzene
PPBV	160		430	UG/M3	510	Benzene
PPBV		ND	580	UG/M3		Ethyl Benzene
PPBV		ND	500	UG/M3		Toluene
PPBV		ND	580	UG/M3		m,p-Xylene

PPBV		ND	580	UG/M3		ND	o-Xylene
PPBV	680000		11000	UG/M3	2800000		TPH ref. to Gasoline (MW=100)
PPBV	7700		1600	UG/M3	23000		tert-Butyl alcohol
PPBV		ND	1300	UG/M3		ND	2-Propanol
PPBV	36000		480	UG/M3	130000		Methyl tert-butyl ether
%R	95			%R	95		1,2-Dichloroethane-d4
%R	100			%R	100		Toluene-d8
%R	92			%R	92		4-Bromofluorobenzene
PPBV	2900		2600	UG/M3	9200		Benzene
PPBV		ND	3500	UG/M3		ND	Ethyl Benzene
PPBV		ND	3000	UG/M3		ND	Toluene
PPBV		ND	3500	UG/M3		ND	m,p-Xylene
PPBV		ND	3500	UG/M3		ND	o-Xylene
PPBV	810000		66000	UG/M3	3300000		TPH ref. to Gasoline (MW=100)
PPBV	20000		9800	UG/M3	60000		tert-Butyl alcohol
PPBV		ND	7900	UG/M3		ND	2-Propanol
PPBV	160000		2900	UG/M3	600000		Methyl tert-butyl ether
%R	90			%R	90		1,2-Dichloroethane-d4
%R	98			%R	98		Toluene-d8
%R	92			%R	92		4-Bromofluorobenzene
PPBV		ND	11	UG/M3		ND	Benzene
PPBV		ND	15	UG/M3		ND	Ethyl Benzene
PPBV		ND	13	UG/M3		ND	Toluene
PPBV		ND	15	UG/M3		ND	m,p-Xylene
PPBV		ND	15	UG/M3		ND	o-Xylene
PPBV	2600		280	UG/M3	11000		TPH ref. to Gasoline (MW=100)
PPBV	38		41	UG/M3	110		tert-Butyl alcohol
PPBV	4000	E	34	UG/M3	9800	E	2-Propanol
PPBV	46		12	UG/M3	170		Methyl tert-butyl ether
%R	87			%R	87		1,2-Dichloroethane-d4
%R	100			%R	100		Toluene-d8

%R 91		%R 91		4-Bromofluorobenzene	
PPBV	26	2.7	UG/M3	83	Benzene
PPBV	200	3.6	UG/M3	880	Ethyl Benzene
PPBV	1.0	3.2	UG/M3	3.9	Toluene
PPBV	230	3.6	UG/M3	1000	m,p-Xylene
PPBV	ND	3.6	UG/M3	ND	o-Xylene
PPBV	6300	69	UG/M3	26000	TPH ref. to Gasoline (MW=100)
PPBV	54	10	UG/M3	160	tert-Butyl alcohol
PPBV	74	8.2	UG/M3	180	2-Propanol
PPBV	100	3.0	UG/M3	370	Methyl tert-butyl ether
%R	103		%R	103	1,2-Dichloroethane-d4
%R	102		%R	102	Toluene-d8
%R	94		%R	94	4-Bromofluorobenzene
PPBV	ND	270	UG/M3	ND	Benzene
PPBV	ND	370	UG/M3	ND	Ethyl Benzene
PPBV	ND	320	UG/M3	ND	Toluene
PPBV	ND	370	UG/M3	ND	m,p-Xylene
PPBV	ND	370	UG/M3	ND	o-Xylene
PPBV	28000	7000	UG/M3	110000	TPH ref. to Gasoline (MW=100)
PPBV	6600	1000	UG/M3	20000	tert-Butyl alcohol
PPBV	ND	840	UG/M3	ND	2-Propanol
PPBV	17000	310	UG/M3	61000	Methyl tert-butyl ether
%R	95		%R	95	1,2-Dichloroethane-d4
%R	98		%R	98	Toluene-d8
%R	91		%R	91	4-Bromofluorobenzene
PPBV	ND	2.6	UG/M3	ND	Benzene
PPBV	ND	3.6	UG/M3	ND	Ethyl Benzene
PPBV	ND	3.1	UG/M3	ND	Toluene
PPBV	1.0	3.6	UG/M3	4.4	m,p-Xylene
PPBV	ND	3.6	UG/M3	ND	o-Xylene
PPBV	510	67	UG/M3	2100	TPH ref. to Gasoline (MW=100)

PPBV	240		9.9	UG/M3	730		tert-Butyl alcohol
PPBV		ND	8.1	UG/M3		ND	2-Propanol
PPBV	170		3.0	UG/M3	600		Methyl tert-butyl ether
%R	94			%R	94		1,2-Dichloroethane-d4
%R	97			%R	97		Toluene-d8
%R	91			%R	91		4-Bromofluorobenzene
PPBV	39		2.7	UG/M3	120		Benzene
PPBV	7.4		3.7	UG/M3	32		Ethyl Benzene
PPBV	5.3		3.2	UG/M3	20		Toluene
PPBV	23		3.7	UG/M3	100		m,p-Xylene
PPBV	8.7		3.7	UG/M3	38		o-Xylene
PPBV	2700		70	UG/M3	11000		TPH ref. to Gasoline (MW=100)
PPBV	7.4		10	UG/M3	22		tert-Butyl alcohol
PPBV	7.0		8.4	UG/M3	17		2-Propanol
PPBV	140		3.1	UG/M3	520		Methyl tert-butyl ether
%R	100			%R	100		1,2-Dichloroethane-d4
%R	98			%R	98		Toluene-d8
%R	94			%R	94		4-Bromofluorobenzene
PPBV		ND	8.6	UG/M3		ND	Benzene
PPBV		ND	12	UG/M3		ND	Ethyl Benzene
PPBV		ND	10	UG/M3		ND	Toluene
PPBV		ND	12	UG/M3		ND	m,p-Xylene
PPBV		ND	12	UG/M3		ND	o-Xylene
PPBV	3400		220	UG/M3	14000		TPH ref. to Gasoline (MW=100)
PPBV	22		32	UG/M3	66		tert-Butyl alcohol
PPBV		ND	26	UG/M3		ND	2-Propanol
PPBV	100		9.7	UG/M3	360		Methyl tert-butyl ether
%R	99			%R	99		1,2-Dichloroethane-d4
%R	97			%R	97		Toluene-d8
%R	92			%R	92		4-Bromofluorobenzene
PPBV		ND	1.6	UG/M3		ND	Benzene

PPBV	ND	2.2	UG/M3	ND	Ethyl Benzene
PPBV	ND	1.9	UG/M3	ND	Toluene
PPBV	ND	2.2	UG/M3	ND	m,p-Xylene
PPBV	ND	2.2	UG/M3	ND	o-Xylene
PPBV	ND	41	UG/M3	ND	TPH ref. to Gasoline (MW=100)
PPBV	ND	6.1	UG/M3	ND	tert-Butyl alcohol
PPBV	ND	4.9	UG/M3	ND	2-Propanol
PPBV	ND	1.8	UG/M3	ND	Methyl tert-butyl ether
%R	109		%R	109	1,2-Dichloroethane-d4
%R	94		%R	94	Toluene-d8
%R	105		%R	105	4-Bromofluorobenzene
PPBV	ND	1.6	UG/M3	ND	Benzene
PPBV	ND	2.2	UG/M3	ND	Ethyl Benzene
PPBV	ND	1.9	UG/M3	ND	Toluene
PPBV	ND	2.2	UG/M3	ND	m,p-Xylene
PPBV	ND	2.2	UG/M3	ND	o-Xylene
PPBV	ND	41	UG/M3	ND	TPH ref. to Gasoline (MW=100)
PPBV	ND	6.1	UG/M3	ND	tert-Butyl alcohol
PPBV	ND	4.9	UG/M3	ND	2-Propanol
PPBV	ND	1.8	UG/M3	ND	Methyl tert-butyl ether
%R	90		%R	90	1,2-Dichloroethane-d4
%R	99		%R	99	Toluene-d8
%R	93		%R	93	4-Bromofluorobenzene
PPBV	ND	1.6	UG/M3	ND	Benzene
PPBV	ND	2.2	UG/M3	ND	Ethyl Benzene
PPBV	ND	1.9	UG/M3	ND	Toluene
PPBV	ND	2.2	UG/M3	ND	m,p-Xylene
PPBV	ND	2.2	UG/M3	ND	o-Xylene
PPBV	ND	41	UG/M3	ND	TPH ref. to Gasoline (MW=100)
PPBV	ND	6.1	UG/M3	ND	tert-Butyl alcohol
PPBV	ND	4.9	UG/M3	ND	2-Propanol

PPBV	ND	1.8	UG/M3	ND	
%R 96			%R 96		Methyl tert-butyl ether
%R 98			%R 98		1,2-Dichloroethane-d4
%R 94			%R 94		Toluene-d8
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%R 105			%R 105		4-Bromofluorobenzene
%R 105			%R 105		Benzene
%R 108			%R 108		Ethyl Benzene
%R 103			%R 103		Toluene
%R 104			%R 104		m,p-Xylene
%R	NS		%R	NS	o-Xylene
%R 106			%R 106		TPH ref. to Gasoline (MW=100)
%R 99			%R 99		tert-Butyl alcohol
%R 93			%R 93		2-Propanol
%R 106			%R 106		Methyl tert-butyl ether
%R 102			%R 102		1,2-Dichloroethane-d4
%R 106			%R 106		Toluene-d8
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%R 107			%R 107		4-Bromofluorobenzene
%R 105			%R 105		Benzene
%R 107			%R 107		Ethyl Benzene
%R 105			%R 105		Toluene
%R 106			%R 106		m,p-Xylene
%R	NS		%R	NS	o-Xylene
%R 120			%R 120		TPH ref. to Gasoline (MW=100)
%R 110			%R 110		tert-Butyl alcohol
%R 100			%R 100		2-Propanol
%R 91			%R 91		Methyl tert-butyl ether
%R 103			%R 103		1,2-Dichloroethane-d4
%R 93			%R 93		Toluene-d8
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%R 107			%R 107		4-Bromofluorobenzene
%R 104			%R 104		Benzene
%R 106			%R 106		Ethyl Benzene
					Toluene

%R	105		%R	105		m,p-Xylene
%R	105		%R	105		o-Xylene
%R		NS	%R		NS	TPH ref. to Gasoline (MW=100)
%R	116		%R	116		tert-Butyl alcohol
%R	104		%R	104		2-Propanol
%R	100		%R	100		Methyl tert-butyl ether
%R	96		%R	96		1,2-Dichloroethane-d4
%R	104		%R	104		Toluene-d8
%R	98		%R	98		4-Bromofluorobenzene
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%R	106		%R	106		Benzene
%R	102		%R	102		Ethyl Benzene
%R	112		%R	112		Toluene
%R	100		%R	100		m,p-Xylene
%R	103		%R	103		o-Xylene
%R		NS	%R		NS	TPH ref. to Gasoline (MW=100)
%R		NS	%R		NS	tert-Butyl alcohol
%R	98		%R	98		2-Propanol
%R	87		%R	87		Methyl tert-butyl ether
%R	107		%R	107		1,2-Dichloroethane-d4
%R	101		%R	101		Toluene-d8
%R	108		%R	108		4-Bromofluorobenzene
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%R	112		%R	112		Benzene
%R	106		%R	106		Ethyl Benzene
%R	116		%R	116		Toluene
%R	107		%R	107		m,p-Xylene
%R	108		%R	108		o-Xylene
%R		NS	%R		NS	TPH ref. to Gasoline (MW=100)
%R		NS	%R		NS	tert-Butyl alcohol
%R	117		%R	117		2-Propanol
%R	117		%R	117		Methyl tert-butyl ether
%R	93		%R	93		1,2-Dichloroethane-d4

%R	103		%R	103	Toluene-d8
%R	96		%R	96	4-Bromofluorobenzene
%R	109		%R	109	Benzene
%R	105		%R	105	Ethyl Benzene
%R	113		%R	113	Toluene
%R	106		%R	106	m,p-Xylene
%R	107		%R	107	o-Xylene
%R		NS	%R		TPH ref. to Gasoline (MW=100)
%R		NS	%R		tert-Butyl alcohol
%R	112		%R	112	2-Propanol
%R	108		%R	108	Methyl tert-butyl ether
%R	93		%R	93	1,2-Dichloroethane-d4
%R	103		%R	103	Toluene-d8
%R	96		%R	96	4-Bromofluorobenzene

CASNUM	COMMENTS
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71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3
108-38-3/106-42-3
95-47-6
NA
75-65-0
67-63-0
1634-04-4
17060-07-0
2037-26-5
460-00-4

71-43-2
100-41-4
108-88-3
108-38-3/106-42-3
95-47-6
NA
75-65-0
67-63-0
1634-04-4
17060-07-0
2037-26-5
460-00-4

71-43-2
100-41-4
108-88-3
108-38-3/106-42-3
95-47-6
NA
75-65-0
67-63-0
1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

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NA

75-65-0

67-63-0

1634-04-4

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460-00-4

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NA

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17060-07-0

2037-26-5

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108-38-3/106-42-3

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75-65-0

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1634-04-4

17060-07-0

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460-00-4

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1634-04-4

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460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4
108-88-3
108-38-3/106-42-3
95-47-6
NA
75-65-0
67-63-0
1634-04-4
17060-07-0
2037-26-5
460-00-4

71-43-2
100-41-4
108-88-3
108-38-3/106-42-3
95-47-6
NA
75-65-0
67-63-0
1634-04-4
17060-07-0
2037-26-5
460-00-4

71-43-2
100-41-4
108-88-3
108-38-3/106-42-3
95-47-6
NA
75-65-0
67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

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NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4

71-43-2

100-41-4

108-88-3

108-38-3/106-42-3

95-47-6

NA

75-65-0

67-63-0

1634-04-4

17060-07-0

2037-26-5

460-00-4



AN ENVIRONMENTAL ANALYTICAL LABORATORY

Air Toxics Ltd. Introduces the Electronic Report

Thank you for choosing Air Toxics Ltd. To better serve our customers, we are providing your report by e-mail. This document is provided in Portable Document Format which can be viewed with Acrobat Reader by Adobe.

This electronic report includes the following:

- Work order Summary;
- Laboratory Narrative;
- Results; and
- Chain of Custody (copy).

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

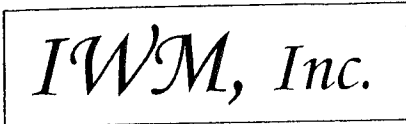
**(916) 985-1000 .FAX (916) 985-1020
Hours 8:00 A.M to 6:00 P.M. Pacific**

APPENDIX F
SURVEY DATA

Point_generic

Longitude	Latitude	Comment	Point_ID
-122.2169915	37.77038192	mw5d	1
-122.2171777	37.77014542	mw2	2
-122.217336	37.77033565	realmw1	3
-122.217712	37.77008649	sb16east	4
-122.2181563	37.76975644	sb19	6
-122.2177126	37.77008312	sb16west	7
-122.2168909	37.7705484	sb9off7ft	8
-122.2168365	37.77050479	sb9soff7ftne	9
-122.2167868	37.77024564	sb10noff12ft	10
-122.2167357	37.77022399	sb10soff12ft	11
-122.2166945	37.77017993	sb11off11ftsw	12
-122.2166049	37.77010375	sb20off13ftsw	13
-122.2164591	37.76999705	v	14
-122.2162588	37.76983657	sb22on	15
-122.2162674	37.76983784	sb22on2nd	16

APPENDIX G
DISPOSAL MANIFESTS



INTEGRATED WASTESTREAM MANAGEMENT, INC.
1945 CONCOURSE DRIVE, SAN JOSE, CA 95131
PHONE: 408.433.1990 FAX: 408.433.9521

CERTIFICATE OF DISPOSAL

Generator Name: Mohammad Jamil/Farah Naz
Address: 40092 Davis Street
Fremont, CA 94538
Contact: Mohammad Jamil
Phone: 510.656.3487

Facility Name: Naz Eagle Gas Staion
Address: 4301 San Leandro Street
Oakland, CA
Facility Contact: Karel Detterman, Clearwater Group
Phone: 510.307.9943 x228

IWM Job #:	<u>97115-DS</u>
Description of Waste:	<u>4 Drums of</u> <u>Non-Hazardous</u> <u>Soil</u>
Removal Date:	<u>7/19/07</u>
Ticket #:	<u>RSVRL190707</u>

Transporter Information

Name: IWM, Inc.
Address: 1945 Concourse Drive
San Jose, CA 95131
Phone: (408) 433-1990

Disposal Facility Information

Name: Republic Services Vasco Road Landfill
Address: 4001 N. Vasco Road
Livermore, CA 94550
Phone: (925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon *William T. DeLon*
Authorized Representative (Print Name and Signature)

7/19/07
Date

IWM, Inc.

INTEGRATED WASTESTREAM MANAGEMENT, INC.
1945 CONCOURSE DRIVE, SAN JOSE, CA 95131
PHONE: 408.433.1990 FAX: 408.433.9521

CERTIFICATE OF DISPOSAL

Generator Name: Mohammad Jamil/Farah Naz
Address: 40092 Davis Street
Fremont, CA 94538
Contact: Mohammad Jamil
Phone: 510.656.3487

Facility Name: Naz Eagle Gas Staion
Address: 4301 San Leandro Street
Oakland, CA
Facility Contact: Karel Detterman, Clearwater Group
Phone: 510.307.9943 x228

IWM Job #:	<u>97115-DS</u>
Description of Waste:	<u>2 Drums of</u> <u>Non-Hazardous</u> <u>Rinsate Water</u>
Removal Date:	<u>7/19/07</u>
Ticket #:	<u>SP190707-MISC</u>

Transporter Information

Name: IWM, Inc.
Address: 1945 Concourse Drive
San Jose, CA 95131
Phone: (408) 433-1990

Disposal Facility Information

Name: Seaport Refining & Environmental
Address: 700 Seaport Blvd
Redwood City, CA 94063
Phone: (650) 364-1024

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon

Authorized Representative (Print Name and Signature)

7/19/07

Date

APPENDIX H
SEWER LINE LEAK

1000 Detroit Avenue, Suite T
 Concord, CA 94518
 Fax (925) 969-9184
 License #821986
 1-800-517-PIPE (7473)

PIPE PROS
 INCORPORATED

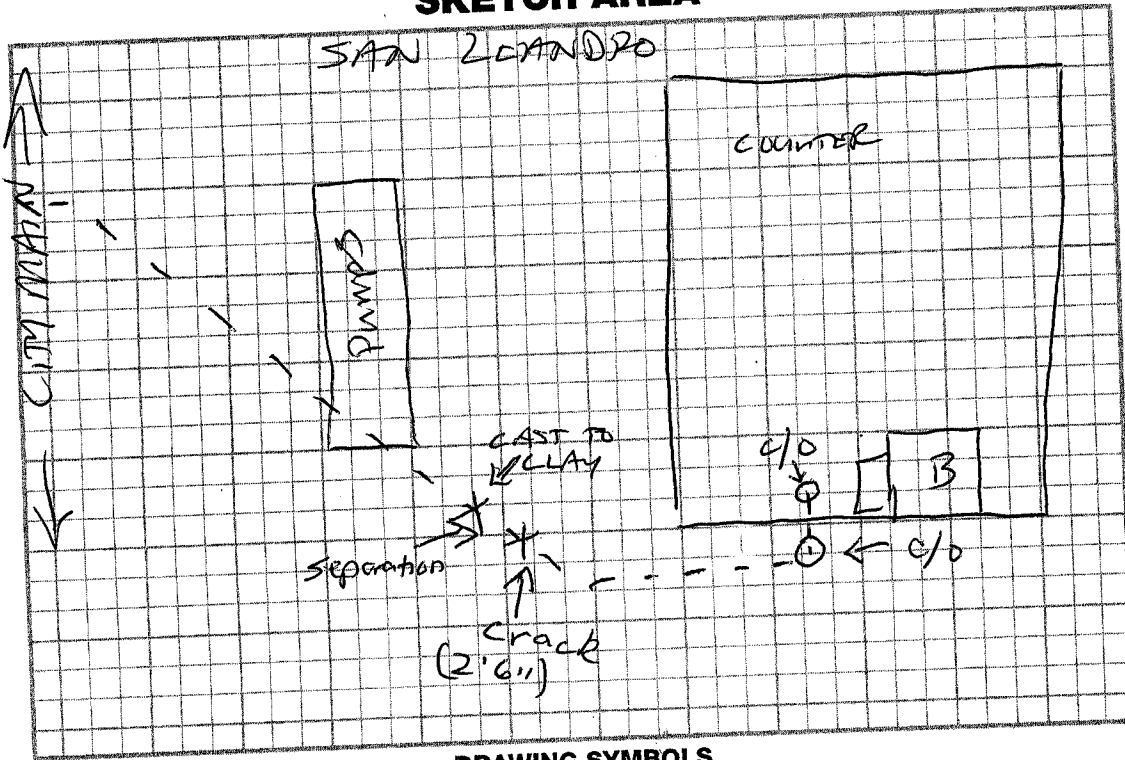
Name Auger Group / Clear H2O Grp Job Address EAGLE GAS
 Address Karel Dettmer 4301 San Leandro
 City _____ Zip _____ City Oakland Zip _____
 Telephone _____ Invoice # 82100

UNDERGROUND FACILITY LOCATION SKETCH

TIME ARRIVED 0500 TIME COMPLETED 0700
 HAND DIG AND EXPOSE ALL FACILITIES BEFORE USING MECHANICAL
 DEVICES NEAR UNDERGROUND FACILITIES

HOW MARKED: PAINT FLAGS NYLON WHISKERS PRINT # _____

SKETCH AREA



DRAWING SYMBOLS

DIG AREA		FENCE	
GAS		ELECTRIC	
PHONE		CATV	
WATER		SEWER	

COLOR CODE

PHONE = ORANGE GAS = YELLOW ELECTRIC = RED CABLE = ORANGE WATER = BLUE SEWER = GREEN

THIS SKETCH IS APPROXIMATE. 24 INCHES HORIZONTALLY FROM EXTERIOR MARK IS CONSIDERED A CORRECT LOCATION.

COMMENTS: line is old cast w/ a new clay repair
& 2" = large crack in cast & large separation
@ cast to clay transition

NOTE: All markings are good for 14 days and only for the utilities marked by Pipe Pros Inc. We assume no liability for utilities not specifically marked by Pipe Pros Inc. or damaged by mechanical means as well excavation shall be done by hand within 2 feet of all utilities.

SIGNATURE MS DATE 4-11-07

APPENDIX I
FIELD NOTES – NOVEMBER 13, 2007,
NOVEMBER 16, 2007 & NOVEMBER 27,
2007

CLEARWATER GROUP

229 Tewksbury Avenue,
Point Richmond, CA 94801
Tel: (510) 307-9943 Fax: (510) 232-2823

WELL GAUGING/PURGING CALCULATIONS DATA SHEET

Date: 11-13-07 Job No.: 2P046I Location: 4301 San Leandro St. Oakland, CA
 Drums on Site @ TOA/TOD
 Soil: 06 Water: 0 Total number of DRUMS used for this event
 Soil: 0 Water:

Tech(s):
Eric V. Austin

Well No.	Diameter (in)	DTB (ft)	DTW (ft)	ST (ft)	CV (gal)	PV (gal)	SPL (ft)	Notes
MW-5D	2 in	42.53	15.94	26.59	4.25	12.75		
MW-4D	2 in	42.12	17.21	24.91	3.99	11.97		
MW-1D	2 in	43.50	15.61	27.89	4.46	13.38		
MW-1	2 in	24.53	13.63	10.90	1.74	5.22		
IS-1	2 in	24.88	7.61	17.27	2.76	8.28		
MW-7D	2 in	38.30	19.21	19.09	3.05	7.15	60.95	
MW-7	2 in	25.90	13.41	12.49	2.00	6.00		
MW-3	2 in	23.03	12.26	10.77	1.72	5.16		

Explanation:

DTB = Depth to Bottom
 DTW = Depth to Water
 ST = Saturated Thickness (DTB-DTW) must be > 1 foot
 CV = Casing Volume (ST x cf)
 PV = Purge Volume (standard 3 x CV, well development 10 x CV)
 SPL = Thickness of Separate Phase Liquid

71.91 Conversion Factors (cf)
+135.45 2-inch diameter well cf = 0.16 gal/ft
 4-inch diameter well cf = 0.65 gal/ft
 6-inch diameter well cf = 1.44 gal/ft
207.36
20.00 - Deion H₂O
187.36 - H₂O FROM Gallons.

Well No.	Diameter (in)	DTB (ft)	DTW (ft)	ST (ft)	CV (gal)	PV (gal)	SPL (ft)	Notes
MW-6	2 in	25.30	10.91	14.39	2.30	6.90		
IS-2	2 in	25.31	7.69	17.62	2.82	8.46		
IS-4	2 in	24.90	6.38	18.52	2.96	8.88		
IS-6	2 in	25.35	7.22	18.13	2.90	8.70		
IS-3	2 in	24.24	7.93	16.31	2.61	7.83	40.77	
IS-5	2 in	14.30	7.71	6.59	1.05	3.15		
EW-2	4 in	25.20	9.64	15.56	10.11	30.33		
MW-2	2 in	24.59	14.11	10.48	1.68	5.04		
MW-4	2 in	24.50	8.52	15.98	2.56	7.68		
MW-5	2 in	25.51	7.51	18.00	2.88	8.64		
MW-8	2 in	24.60	8.21	16.39	2.62	7.86		
EW-1	4 in	25.10	8.70	16.40	10.66	31.98		

Explanation:

DTB = Depth to Bottom
 DTW = Depth to Water
 ST = Saturated Thickness (DTB-DTW) must be > 1 foot
 CV = Casing Volume (ST x cf)
 PV = Purge Volume (standard 3 x CV, well development 10 x CV)
 SPL = Thickness of Separate Phase Liquid

135.45

Conversion Factors (cf)

2-inch diameter well cf = 0.16 gal/ft
 4-inch diameter well cf = 0.65 gal/ft
 6-inch diameter well cf = 1.44 gal.ft

CLEARWATER GROUP

Environmental Services

DAILY FIELD REPORT

Page: ___ of ___

Date: 11/16/07
 Field Engineer/Technician: Eric V. Austin
 Project Name: Naz Eagle Gas
 Project Number: 28046E
 Time Left For Site: 8:00
 Time Arrived on site: 8:45
 Time Departed site: 4:15

Company/ Firm: TAG Inc. dba Clearwater Group
 Project Manager: Rob Nelson
 Site Contact (name/phone): _____
 Weather Conditions: 70° Cloudy
 (on-site)
 Comments on Traffic: Heavy

Time EVENTS/COMMENTS/REMARKS

7:45 - 8:00 > 2036 - load / Pre-trip inspection
 8:00 - 8:45 > 2040 - Mob to site
 8:45 - 4:15 > 2240 - Arrive, check-in, open wells, start purging & sampling, set up work area & down area, set up meters, clean up, close & secure wells, lids, etc.
 4:15 - 5:00 > 2040 - Demob to office
 5:00 - 5:30 > 2041 - Sampling, Handling, LOD & put in refrigerator, call Keith.
 5:30 - 5:45 > 1045 - Report findings to Rob N. (CPM).
 5:45 - 6:00 > 2036 - Unload Gear, etc.
 6:00 - 6:45 > 2014 - Drain Tank in to Drums, etc.
 6:45 - 7:15 > 1045 - Call OS, disc findings of Product to Her, email RN, OS, SS.
 7:15 - 8:00 > 2260 - write up field forms, time, exp, etc.

Please make sure to call to review field works and check box before leaving the site. Discussion with Project Manager:

Project Manager: RN Call-in Time: NT

Notes: - Noticed Free product in IS-5 & MW-8, trailer came up very slippery, *

Urgent:

Purge Water/Rinse: 227 gal/drum #1 Tank to Instrat; Tank to Drum; Drum Left On Site;
 gal/drum #2 Tank to Instrat; Tank to Drum; Drum Left On Site;
 gal/drum #3 Tank to Instrat; Tank to Drum; Drum Left On Site;

- Attachments:
- Well Gauging/Purging Calculation Data Sheet
 - Purge Data Sheet
 - Equipment & Materials Billing Sheet
 - ISOC System Field Monitoring Data Sheet

Maintenance Comments: _____

Signature: Eric V. Austin

Figures Included: _____

PURGE DATA SHEET

Sheet 10 of 11

Job No.: 290461 Location: Orlando, CA

Date: 11/16/07

Tech: Eric W. Austin

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe ²⁺	Fe _T	
MW-5	12:56	3.00	26.5	1115	69.01	2.12	5.69	NA	NA	Sample for: <u>5044/T01</u> <u>TPHg</u> <u>TPHd</u> 8260 <u>BTEX</u> <u>MTBE</u> Metals
Calc. purge	13:13	6.00	25.6	1118	68.79	1.64	5.67	↓	↓	
volume <u>8.69</u>	13:29	9.00	24.2	1117	68.89	1.54	5.62	↓	↓	

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor lt. Gray, low, poor - slight sheen slight odor

POST DEPTH TO WATER: 10.47 SAMPLE TIME: 13:45

Job No.: _____ Location: _____

Date: _____

Tech: _____

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe ²⁺	Fe _T	
MW-8	13:58	2.00	-45.3	1408	66.89	3.70	5.15	NA	NA	Sample for: <u>5044/T01</u> <u>TPHg</u> <u>TPHd</u> 8260 <u>BTEX</u> <u>MTBE</u> Metals
Calc. purge	14:15	5.00	-45.2	1409	66.90	2.80	5.14	↓	↓	
volume <u>7.86</u>	14:31	8.00	-45.2	1409	66.91	2.41	5.15	↓	↓	

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Gray, Moderate, poor - Has sheen, Strong Odor & Free product.

POST DEPTH TO WATER: 8.30 SAMPLE TIME: 14:45

PURGE DATA SHEET

Sheet 8 of 11

Job No.: 7P0462 Location: Oakland, CA.

Date: 11/16/07

Tech: Eric V. Anstett

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe ²⁺	Fe _T	
IS-5	9:08	1.00	-55.1	1293	66.55	4.51	5.53	NA	NA	Sample for: <u>5oxy/TBA</u> PPHg TPHd 8260 BTEX MTBE Metals
Calc. purge	9:21	2.00	-56.1	1280	66.60	3.09	5.50	↓	↓	
volume <u>3.15</u>	9:33	3.00	-56.3	1272	66.70	2.31	5.49	↓	↓	

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

ABSO - Notice slight Product

COMMENTS: color, turbidity, recharge, sheen, odor Gray, High, OK Has sheen, Has strong odor

POST DEPTH TO WATER: 7.72 SAMPLE TIME: 9:45

Job No.: _____ Location: _____

Date: _____ Tech: _____

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe ²⁺	Fe _T	
EW-2	9:51	10.00	-44.9	1050	66.14	1.49	5.57	NA	NA	Sample for: <u>5oxy/TBA</u> PPHg TPHd 8260 BTEX MTBE Metals
Calc. purge	10:14	20.00	-45.9	1049	66.19	1.41	5.56	↓	↓	
volume <u>30.33</u>	10:32	30.00	-47.5	1049	66.24	1.33	5.57	↓	↓	

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Tan, Moderate, Poor - Has sheen & slight odor

POST DEPTH TO WATER: 17.94 SAMPLE TIME: 11:00

11-26-2007 Monday

Eagle Gas ZPO46D

Well Survey: MW-1D
MW-7D

I = 5.72 MW-7D

I = 6.91 MW-1D

I = 6.75 MW-1

RLN of E. Austin

11-27-2007 2P046D
Sunny Day well TOC
elevations relative to
MW-1

MW1-D $\Sigma = 15.32$
I = 7.08

MW-1 I = 6.88

MW7-D $\Sigma = 17.2$
I = 5.60

MW4-D $\Sigma = 17.10$
I = 5.51

MW5-D $\Sigma = 15.85$
I = 6.74

RLN & MRS 12:45-13:45
on 11-27-2007

APPENDIX J
EVALUATION OF SITE FOR HVDPE
PILOT TEST

June 18, 2007

Ms. Karel Detterman
Clearwater Group
229 Tewksbury Avenue
Richmond, CA 94801

Subject: Site Data Review and Design of HVDPE Pilot Test Plan
Eagle Gas Station
4301 San Leandro Street
Oakland, California

Dear Ms. Detterman:

CCA has prepared this review of reports for the Eagle Gas Station located at 4301 San Leandro Street, Oakland, California (Site) in accordance with the scope of work outlined in Clearwater Group Purchase Order 719 and following discussions at a site meeting held on May 24, 2007. The Site data review was performed to evaluate potential remedial strategies with the specific objective to design a HVDPE pilot test plan. The following Artesian/Clearwater Group reports were reviewed to assess site conditions and determine the applicability of HVDPE to site conditions:

- Underground Storage Tank Removal Report, dated May 24, 1999
- Notice of Interim Remediation Groundwater Treatment Pilot Test, dated November 1, 2005
- Bench Test for Using Advanced Oxidation – A summary Report, dated March 27, 2006
- Activated Carbon and Organoclay (EC300) Bench Test Report, dated May 9, 2006
- Soil and Groundwater Investigation Report, dated May 30, 2006
- Revised Work Plan, dated December 19, 2006

Petroleum hydrocarbons have been released to Site soil and groundwater, with MTBE and TBA being the main drivers for remediation. TPH-g, TPH-d and BTEX compounds are also present within Site soil and groundwater. This letter report provides a review of the Site Geology, Hydrogeology and Current Groundwater Monitoring Network, Petroleum Hydrocarbon Distribution, Review of Proposed Remediation Options, Design Parameters for HVDPE Pilot Test Plan, and Conclusions and Recommendations.

Site Geology

The site is located in the San Francisco Bay Plain and situated upon Holocene alluvial deposits (the flatland deposits of Helley and Lajoie, USGS Professional Paper 943, 1979). The alluvium encountered in the 21 site boreholes consists mostly of clayey gravel (GC), clayey sand (SC) and clay (CL) with lesser intervals of well graded gravel (GW), poorly graded gravel (GP), silty sand (SM), poorly graded sand (SP) and organic clay (CH) to the maximum depth explored of 48 feet below ground surface (bgs).

The site geology is consistent with a floodplain setting where fluvial channels have traversed the depositional landscape and during times of flooding deposited widespread fine grained floodplain deposits of mostly silt and clay. (The topographic slope and profile of the valley floor does not support the sometimes held view that these deposits are related to alluvial fans). Within the "mud" rich floodplain, stream channels tend to flow within the cohesive mud-rich banks, and changes course during flood events by cutting new pathways by avulsion through the stream banks. As such, lateral continuity between coarse grained channel deposits is variable.

Flood-related deposition of the coarse alluvium (i.e., GC and SC) is supported by the fact that the coarse grained deposits appear to contain significant amounts of fine grained material. This suggests that deposition occurred due to a rapid loss of transport energy, i.e., in the waning stage of a flood. Further during the flood-stage, overtopping of stream banks results in lobate overbank deposits of coarse grained material across the floodplain. During non-flood stages, winnowing of fines occurs within the stream channels and the mud-fraction is removed resulting in cleaner coarser grained residual deposits (GW or SW or SP). These deposits likely represent the more permeable sediments for the migration of fluids within the subsurface.

Unfortunately, the site boring logs have been prepared consistent with the USCS (the industry standard) and little geological detail is provided that would assist in refining the interpretation of the depositional environment and therefore the spatial relationship between sediment types and potential fluid migration pathways. Further, relative percentages of grain sizes for each sediment (soil) type described are not in the recorded boring logs; this information would be useful to assess relative permeability of soil types. It is recommended in future investigations that sieve/hydrometer analysis be performed to verify the interpretations of soil types and grain size ranges.

Site Hydrogeology and Current Groundwater Monitoring Network

The approximately ¼-acre site (100-feet by 100-feet) is populated with 8 shallow monitoring wells (MW-1 to MW-8), 6 intended oxygen delivery wells (IS-1 to IS-6) and two intended extraction wells (EW-1 and EW-2) and 2 deep monitoring wells (MW-4D and MW-5D).

Based on the site geology and groundwater elevation measurements two water bearing zones (WBZs) have been identified; the Shallow WBZ defined by the extent of clayey gravel and clayey sand deposits and ranging in depth from approximately 5-15 feet bgs (noting that the top and bottom of the coarse units are variable) and the Deep WBZ ranging in depth from approximately 30-45 feet bgs (noting that the top and bottom of the coarse units are variable). Depth to water beneath the site appears to vary seasonally; varying within the Shallow WBZ from about 5 to 14 feet bgs across the site, and varying within the Deep WBZ from about 13 to 16 feet bgs across the site. Vertical head data from well pairs MW-4/MW-4D and MW-5/MW-5D suggest that the two WBZs are hydraulically isolated as a consistent approximately 7.5-foot head difference is measured between the WBZs. However, the boring log from MW-5D would indicate that the two WBZs are possibly connected. The logging of this borehole should be verified with a less invasive technique such as CPT, as the current interpretation may be the result of sloughing during drilling activities. If the boring log for MW-5D is correct then a vertical pathway between the two WBZs likely exists.

The groundwater gradient within the Shallow WBZ is relatively steep at about 0.03 ft/ft and flow is multidirectional due to mounding created by water leakage from Site utilities. Given the position of the Site relative to the uplands and the bay, and if large pumping centers are not located nearby, it would be reasonable to assume that groundwater in the vicinity of the Site would naturally flow to the west or southwest, that is, towards the bay. The groundwater gradient between MW-5D and MW-4D within the Deep WBZ appears much flatter than the Shallow WBZ and based on the latest measurements, a gradient between the wells of 0.0005 ft/ft exists, flow is likely to the west.

The groundwater monitoring network within the Shallow WBZ is relatively dense for such a small site and should provide an accurate picture of groundwater conditions across the Site. However, it is noted that a large portion of many of the well screen intervals are situated within fine-grained sediments. Based on depth to water measurements many of the Shallow WBZ well screens are not screened across the water table interface between vadose soil and permanently saturated soil. Therefore, comparing groundwater elevation data from say wells MW-3 or IS-3 (which are completely screened in clay) with other wells may lead to a distorted view of groundwater flow patterns.

With regard to using existing monitoring wells as observation wells during the HVDPE pilot test, it would appear that large portions of the Shallow WBZ wells will require dewatering to expose the well screens to potential vacuum pressures. For the same reason, the use of existing monitoring wells as soil vapor extraction wells are not optimum choices. It is recommended that purpose-built soil vapor extraction well(s) be constructed for the HVDPE pilot test. Ideally the well should screen only the GC interval of the Shallow WBZ.

Petroleum Hydrocarbon Distribution

Soil data presented in Table 2 of the Soil and Groundwater Investigation Report indicate that TPH-d and TPH-g (and associated compounds) are relatively wide spread across the soil, and not surprisingly, highest in the vicinity of the former UST pit. The highest concentrations (generally > 1000 mg/kg TPH-d or TPH-g) are within vadose soil and at depths that correspond to the seasonal fluctuation of the water table between about 10 to 14 feet bgs. High concentrations of TPH-d or TPH-g are noted in vadose soil from boreholes SB-8, SB-i3, and Sb-i5 suggesting that releases from the former dispenser island are contributing to soil and groundwater impacts. Also, high TPH concentrations are noted in saturated soil from boreholes SB-6D and SB-8. These data indicate that significant residual TPH impacts still exist at the Site.

TPH impacts to groundwater are observed in all Site groundwater monitoring wells, with MTBE and TBA being the highest. Data from wells MW-1, MW-2 and MW-3 (i.e., wells with a history of monitoring) show declines in TPH-g and BTEX concentrations over time suggesting natural attenuation processes are active at the Site. Similarly, while MTBE concentrations are declining, TBA concentrations are increasing, again suggesting natural attenuation processes are active at the Site. While high concentrations of hydrocarbon compounds are observed across the Site, some of the highest concentrations are noted in area of wells IS-3 and IS-6, again suggesting that releases from each former dispenser island likely occurred.

Review of Proposed Remediation Options

Clearwater has proposed three remedial options for the Site; Bioremediation, HVDPE and Insitu Chemical Oxidation (ISCO). The following provides a brief discussion to the potential applicability of each technology to Site conditions.

Bioremediation: Site conditions appear very favorable for aerobic bioremediation, as indicated by the (surprisingly) high dissolved oxygen (DO) levels measured in monitoring wells. Noted also, is relatively high level of ferrous iron, suggesting anaerobic conditions exist (i.e. within the hydrocarbon plume); ferrous iron tends to oxidize readily in the presence of available oxygen. The presence of both high levels of DO and ferrous iron would suggest that an active biogeochemical environment exists. The identification of leaking sewer lines at the Site likely supply a source of nitrogen compounds to groundwater and further enhances microbial activity.

HVDPE: Site data with respect to soil porosity and permeability is limited and therefore it is difficult to accurately assess the applicability for HVDPE. The one reported incident of groundwater extraction testing (from well MW-2) indicates that groundwater extraction was limited and recharge rates were extremely low, suggesting low permeability soil in the area of well MW-2. Given that biological activity at the Site appears high, biofouling has likely occurred within this well's screen and filter pack causing a reduction in well efficiency. It is recommended that any proposed wells for the HVDPE pilot test be redeveloped and possibly treated with a biocide to improve efficiency prior to initiating the test. The application of a vacuum generally improves the

ability of a well to recover groundwater due to the steepened pressure gradient created by the low pressure created within the well casing.

ISCO: Chemical oxidation is a viable remediation technology; however, experience in the Bay Area has indicated that the method requires injection under pressure or pre-fracturing to obtain an effective area of influence. Further, an assessment of the aquifer's native (soil) oxygen demand should also be performed to accurately estimate oxidant dosage requirement and efficiency. The application of ISCO may be counter-productive to the benefit offered by natural attenuation processes currently active at the Site.

Design Parameters for HVDPE Pilot Test Plan

A HVDPE test can serve two purposes; to evaluate potential for soil vapor extraction (SVE) and evaluate the potential groundwater extraction (GWE). The SVE portion of the HVDPE pilot test can provide the following benefits and design information: (1) remove free product, (2) evaluate the effectiveness of soil vapor extraction to remove contaminants from vadose soil, (3) develop preliminary design parameters for potential full-scale operation; and (4) provide site-specific data.

Site specific parameters to be evaluated during the HVDPE pilot test are as follows:

- Determine the effectiveness of SVE to remove hydrocarbon compounds from the vadose zone.
- Determine radius of influence as measured from surrounding groundwater monitoring wells. An effective radius of influence (ROI_{SVE}) is typically taken to be the radial distance at which an induced vacuum of 0.10 in. H₂O can be measured (*USEPA, 2004*).
- Determine air flow rates versus applied vacuum at the test well.
- Determine hydrocarbon concentrations in extracted soil vapor using a photo-ionization detector (PID) and laboratory analyses.
- Determine the likelihood of volatilization of free product.
- Estimate hydrocarbon mass removal rates.

A portable high vacuum SVE unit with an attached thermal oxidizer will be used to conduct the pilot test. The vacuum will be applied to each HVDPE pilot test extraction well to draw in soil vapor from the area surrounding the well screen. To avoid upconing groundwater during the HVDPE pilot test, the stinger method will be used. In the stinger method, the vacuum is applied via a 1 or 2-inch stinger tube inserted inside the main 2 or 4-inch diameter extraction well casing. The stinger tube is used to remove both soil vapor and (slurp) groundwater from the area surrounding the extraction well screen. Using this method, an evaluation of both soil vapor flow rates and groundwater extraction rates can be obtained. A portion of the applied vacuum will be utilized to lift groundwater (1-inch mercury (Hg) is required to 1.13 lift feet of water), while the remaining vacuum will draw in soil vapor to the well.

The portable SVE unit will consist of a trailer-mounted, thermal oxidizer and vacuum pump (blower) capable of generating a vacuum up to 29"Hg at 450 cubic feet per minute

(cfm) flow rate. The SVE/Treatment unit will be powered with on-site electricity or a portable generator. The HVDPE extraction well will be connected to the SVE/Treatment unit using flexible hosing. Each observation well head will be fitted with a magnehelic gauge to observe changes in subsurface pressure.

Magnehelic gauges fitted to each individual wellhead will measure the induced vacuum at the wellhead. Air-flow will be measured with a portable anemometer. PID readings and vapor samples for laboratory testing will be collected throughout the test period. Data collected during the HVDPE test will include wellhead flow rates, applied wellhead vacuums, petroleum hydrocarbon concentrations in extracted soil vapors, and induced vacuum in nearby observation wells. Each HVDPE pilot test will be performed for approximately 6-hours.

Soil vapor extracted from each HVDPE well will be collected for laboratory analysis. Soil vapor samples will be collected using 1-liter SUMMA[®] canisters and submitted for analyses to a State of California certified laboratory. The submitted vapor samples will be analyzed for the following using the indicated test method:

- EPA TO-3/15 for TPH-g/BTEX/MTBE/TBA

Site wells have not been constructed in a fashion that readily lends their use in a HVDPE pilot test. To perform an optimum HVDPE pilot test, construction of extraction wells and observation wells across the GC-soils of the Shallow WBZ would be ideal. Groundwater elevations depicted on geological cross-sections indicate that, in most instances, at least 3 to 4 feet of groundwater overlie the top of well screens; thus, for any existing well to be used as an effective observation point in a HVDPE pilot test, the well screen will need to be exposed. The planned 6-hour pilot test duration may not be sufficient to create an effective cone of depression around each extraction well point. The pilot test should be planned for a period of seasonal low water levels, thereby reducing the required amount of dewatering to expose the well screens.

While it can be expected that water levels will drop significantly in the extraction well; the shape of the propagating cone of depression will be dependent on the surrounding formation permeabilities. If sediment is permeable, then a flat-broad cone of depression will develop; with the disadvantage that it will take some time to dewater over the broad area. However, if sediment is tight, then a steep-narrow cone of depression will develop, with the disadvantage that it will take some-time to propagate away from the extraction well, and is the like scenario for this site.

However, based on the site well construction details and encountered geology, the following rationale for the HVDPE pilot test layouts are provided:

Extraction Well	Observation Wells	Comment
MW-5 Screen 10-25 ft bgs	IS-6 Screen 10-25 ft bgs	Well MW-5 is screened across coarse grained material and has the best chance to dewater, and allow the applied vacuum to radiate. Observation well IS-6 is located 8-feet from MW-5 and has 5-feet of screen in GC.
	IS-5 Screen 10-25 ft bgs	Located 25 ft from extraction well and an area of high TPH concentrations. Only has 2-feet of screen in GC.
	IS-4 Screen 10-25 ft bgs	Located 33 ft from extraction well and an area of high TPH concentrations. Only has 4-feet of screen in GC.
EW-1 Screen 10-25 ft bgs	MW-4 Screen 10-25 ft bgs	Well EW-1 is 4-inch well and will have better well efficiency than 2-inch wells to dewater, and allow the applied vacuum to radiate. Only has 3-feet of screen in GC. Observation well MW-4 is 16 ft from extraction well and location of high TPH concentrations. Only has 3-feet of screen in GC.
	Purpose built vapor monitoring well near MW-2 Screen not determined	Located 5 ft from extraction well. Monitoring ports to be install into GC
	MW-7 Screen 10-25 ft bgs	Located 30 ft from extraction well. Has 12-feet of screen in GW, may not dewater sufficiently allow for vacuum readings.
MW-1 Screen 10-25 ft bgs	IS-1 Screen 10-25 ft bgs	Well MW-1 is surrounded by coarse grained material including former the UST pit, and should dewater readily and allow vacuum to radiate; coarse material in the area of the well is located near ground surface, which may allow short-circuiting of vacuum pressures. Well IS-1 located 35 ft from extraction well. Only has 3-feet of screen in GC.
	Purpose built vapor monitoring well near MW-1 Screen not determined	Located 8 ft from extraction well. Monitoring ports to be install into GC
	MW-6 Screen 10-25 ft bgs	Located 45 ft from extraction well. Lower GW elevation requiring less dewatering to expose screen.

Conclusions and Recommendations

Soil and groundwater across the site are impacted with significant concentrations of TPH and related compounds. Two WBZs are recognized to exist, with the Shallow WBZ and overlying vadose soil containing the majority of hydrocarbon mass. Natural attenuation processes appear to be active at the Site, and are evidenced by reduced concentrations of hydrocarbons, including MTBE, over time. However, degradation of MTBE has lead to a significant build up of TBA which is more recalcitrant to aerobic biodegradation.

Due to the high clay content of WBZs many remedial technologies have been demonstrated to have restricted value at similar site conditions. HVDPE does offer a proven remedial technology for apparent low permeability Site conditions. Hydrocarbon compounds BTEX, MTBE and TBA are volatile compounds and readily amenable to HVDPE remediation. Current onsite monitoring wells are not ideally suited to perform a HVDPE pilot test as many of the wells are screened across fine-grained sediments and the tops of many well screens are below year-round water levels. However, HVDPE offers many benefits for the site remediation and purpose-built extraction wells should be constructed if full scale implementation is to be initiated.

The proposed design using current site wells, while not optimum, should provide relevant and valuable data to contrast against the proposed ISCO bench scale test. Mass removal will be more readily quantified using HVDPE than other methods. It is recommended that proposed wells for the HVDPE pilot test be redeveloped to remove any buildup of bio-matter from within the well screens and filter packs to improve the efficiency of the wells. Further the pilot test should be conducted during a period of low water levels (likely late summer) to limit the amount of dewatering required to expose observation well screens to improve the potential value of the HVDPE pilot test.

If you have any questions or comments, please call me at 650-270-8741 or email at warrentas@aol.com.

Sincerely,



Warren B. Chamberlain, P.G., C.H.G., P.E.





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Jim, Olivia,
 An extraction well nearer a hot spot would be preferred, however an extraction well in between EW-2 and MW-5 would tape into the GC observed in both wells, if it needs to be closer to EW-2 for logistical reasons, then we would just need to install enough vapor/vacuum monitoring wells to observe the response of an applied vacuum. Noting that VP-4, VP-5 and VP-6 are in place, and therefore, possibly install three observation points; one near MW-5, one 5-10 and one 10-20 feet away from the extraction well. As we know that HCs are essentially everywhere across the site and will be captured by applying a vacuum, the main objective of the pilot test should be to determine how large a ROI can be created by the range of applied vacuums during the pilot test.

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To get a better idea of what a remediation system's performance might be, I would install a minimum of a 4-inch diameter extraction well and screen it 1-foot below top of GC to base of GC, i.e. from about 5 to 13 feet bgs.

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It is good confirmation that everybody seems to be of the same opinion that the existing MW network is not ideal for a SVE pilot test, but unfortunate in that to complete a meaningful SVE pilot test additional effort is required. Regardless any additional wells will be of value and reduce effort in any final remediation/monitoring effort.

Hope this doesn't complicate plans.
 Cheers
 Warren

In a message dated 11/1/2007 5:16:48 P.M. Pacific Daylight Time, augerpro@sbcglobal.net writes:

Greetings-

Now that we have decent cross sections, I suggest putting in 1 central vapor well, with 4-5 observation wells (or other wells we can try vapor extraction. These would be shallow and new wells that we would need to install.

-Jim J.