PLATINUM ENERGY

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May 30, 2012

Mr. Keith Nowell
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Subject: **Case Closure Request**

Site: **76 Service Station No. 6277**
15803 East 14th Street
San Leandro, California
Fuel Leak Case No. RO0002969

Dear Mr. Nowell;

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

If you have any questions or need additional information, please call:

Brian Whalen
Platinum Energy
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Agoura Hills, Ca 91301
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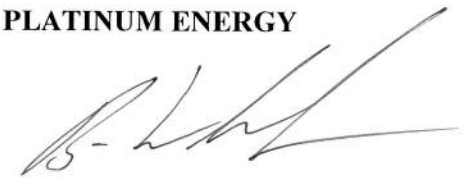
Sincerely,

PLATINUM ENERGY



BRIAN WHALEN

Attachment

Case Closure Request

76 Service Station No. 6277
15803 East 14th Street
San Leandro, California

Alameda County Health Care Services
Agency Fuel Leak Case No. RO00029696

GeoTracker Global ID No. T0619718179

Antea Group Project No. I40256277
May 30, 2012

Prepared for:
Mr. Keith Nowell
Hazardous Materials Specialist
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Prepared by:
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Table of Contents

Figures

Tables

Appendices

1.0 INTRODUCTION

Antea Group has prepared this Case Closure Request for the Alameda County Health Care Services Agency (ACHCSA). The purpose of this report is to summarize historical data collected during previous investigations, monitoring and sampling events, and evaluate the site data for low-risk case closure.

1.1 Site Description

The site is currently an operating 76 service station located at 15803 East 14th Street in San Leandro, California (**Figure 1**). Station facilities include two 12,000 gallon fuel underground storage tanks (USTs), a 520 gallon waste-oil UST, two dispenser islands and a service station building, containing three service bays (**Figure 2**).

1.2 Geologic Setting

1.2.1 Regional Geologic Setting

The site is located in the East Bay Plain Subbasin. The subbasin is an alluvial plain consisting of unconsolidated sediments of Quaternary age.

1.2.2 Site Geologic Setting

Based on soils observed during soil boring and monitoring well installation activities at the site, the site is underlain by silty sand, gravelly sand, sandy gravel, gravelly clay, clay, silt, sandy silt, silt with sand, poorly graded sand, and sandy clay. Fine grain material such as clay and silt extend from just below ground surface to a depth of 25 feet bgs. Discontinuous layers of sand and gravel appear at depths of approximately 15, 20, and 30 feet bgs. These layers range in thickness from inches to three feet. First encountered groundwater ranges in depth from 16 feet bgs to 28 feet bgs depending on lithology. Cross sections are presented on **Figure 3** and **Figure 4**. Boring logs are presented as **Appendix A**.

1.3 Hydrogeologic Setting

1.3.1 Regional Hydrogeologic setting

The site is located in the East Bay Plain Subbasin. The subbasin is an alluvial plain bounded by San Pablo bay to the north, the Franciscan Basement rock to the east, and the Niles Cone Groundwater Basin to the south. To the west the subbasin extends beneath the San Francisco Bay. Surface water collected in San Pablo Creek, Wildcat Creek, San Leandro Creek, and San Lorenzo Creek flow westward into the San Francisco and San Pablo bays. The San Francisco Bay is located approximately 4 miles west of the site.

1.3.2 Site Hydrogeologic Setting

The site currently has a network of four on-site monitoring wells (MW-7 through MW-10). Depth to groundwater in the monitoring wells has historically ranged from 9.35 feet below top of casing (btc) [MW-8, October 2011] to 10.78 feet btc [MW-10, February 2012]. The groundwater flow direction and gradient observed during the first quarter 2012 sampling event are shown on **Figure 5**. The historical groundwater flow direction is predominantly northwest with an average hydraulic gradient of 0.004 foot per foot (ft/ft). Historical groundwater flow directions and gradient data are presented as **Appendix B**.

2.0 SUMMARY OF PREVIOUS WORK

1969 - Reported site history indicates the site was first developed as a gas station from an empty lot.

March 1989 - Two 10,000-gallon gasoline USTs, one 550-gallon waste-oil UST, and the product piping were removed from the site during UST replacement activities. Kaprealian Engineering Inc. (KEI) advanced two exploratory borings designated as EB-1 and EB-2 at the site. The borings were advanced at the request of Alameda County to assess the possible presence of hydrocarbon impact to the soil in the vicinity of the proposed UST excavation.

The borings were advanced to depths of 10.5 feet below ground surface (bgs) and 13.5 feet bgs. Ground water was encountered in the borings at depths of 11 to 12 feet bgs. The analytical results of the soil samples were as follows:

- At a depth of 5 feet bgs soil samples analyzed for total petroleum hydrocarbons as gasoline (TPHg) ranged from below the laboratory's indicated reporting limit in boring EB-2 to 2.1 parts per million (ppm) in boring EB-1.

- At a depth of 10 feet bgs TPHg concentrations ranged from 200 ppm in boring EB-1 to 620 ppm in boring EB-2.

Based on results of this preliminary investigation, KEI recommended that the contractor excavate the existing UST excavation to a depth of approximately 13 feet bgs. Water was encountered in the fuel UST excavation at a depth of approximately 11 feet bgs, thus prohibiting the collection of any soil samples from immediately beneath the USTs.

Six soil samples, labeled SW1 through SW6, were collected from the sidewalls of the fuel UST excavation at depths of approximately 1 foot above the water table; and one soil sample, labeled W0-1, was collected from beneath the waste-oil UST at a depth of about 10 feet bgs. Based on observations in the field, it was decided to excavate additional soil from three of the four excavation sidewalls.

March 14, 1989: Four trenches were installed to assess the limits of additional soil excavation needed. Four soil samples were then collected at depths of approximately 10 feet bgs. The soil analytical results were as follows:

- In the fuel UST excavation, TPHg concentrations ranged from 24 ppm to 150 ppm.
- A sample collected adjacent to the existing station building indicated that TPHg was present at a concentration of 3,500 ppm.
- The soil sample collected after excavating 2 feet of sidewall toward the station building indicated that TPHg was present at a concentration of 100 ppm.
- Soil sample (SW-2) contained TPHg at a concentration of 390 ppm.
- The soil sample collected from the waste-oil UST excavation (WO-1) contained total oil and grease (TOG) at a concentration of 280 ppm. A side wall sample, SW-7 collected after excavating 14 feet of sidewall contained TOG at a concentration of 41 ppm.

The analytical results of the water sample (W1) collected from the waste-oil/fuel UST excavation contained TPHg at a concentration of 19,000 parts per billion (ppb) and benzene at a concentration of 230 ppb.

March 23, 1989: KEI returned to the site for pipe trench soil sampling. Six soil samples, labeled P1 through P6, were collected from beneath the product lines at depths of approximately 3 to 3.5 feet below grade. The analytical results of the soil samples P1 through P6 collected from the pipe trenches indicated concentrations of TPHg ranging from 1.1 ppm to 6.8 ppm.

The fuel UST excavation and the waste-oil UST excavation were over-excavated in order to remove hydrocarbon-impacted soil. The majority of the hydrocarbon-impacted soil appeared to have been

removed from the site, except for the capillary fringe in the vicinity of the former UST excavation and the building.

May 24, 1989: Four two-inch diameter monitoring wells, MW-1 through MW-4 were installed at the site. The four monitoring wells were installed to depths ranging from 24.5 to 25 feet bgs. Ground water was encountered at depths ranging from 11 to 12 feet bgs during drilling.

July 1989: The monitoring and sampling program was initiated.

February 1990: Monitoring well MW-2 was destroyed on February 1 in preparation for additional soil excavation in the vicinity of this well. Soil was excavated to a depth of approximately 6 to 12 inches below the level of the groundwater, which was encountered at a depth of about 11.5 feet below grade. After additional excavation, four soil samples were collected from the sidewalls of the excavation, each approximately 6 to 12 inches above groundwater. Soil excavation activities were terminated due to the close proximity of the former and new UST excavations and the site's property line.

The analytical results from the three soil samples indicated that TPHg was present at concentrations ranging from 140 ppm to 1,100 ppm, while concentrations of total petroleum hydrocarbons as diesel (TPHd) ranged from below the laboratory's indicated reporting limits to 280 ppm. The analytical results also indicated Environmental Protection Agency (EPA) Method 8010 constituents and TOG from each of the four samples were below the laboratory's indicated reporting limits, except in sample SW11A which contained TOG at a concentration of 210 ppm.

Over-excavation in the vicinity of monitoring well MW-2 was completed in April of 1990. Monitoring well MW-2 was then replaced with a new monitoring well (MW-2A) in March 1991.

1991: Due to the regular occurrence of tetrachloroethene (PCE), trichloroethene (TCE) and 1,2-dichlorethane (1,2-DCA) in sampled groundwater, a review of records documenting historic site activities was performed in 1991 to assess whether there were any up-gradient sources contributing to the impacted groundwater at the site. The file review was conducted by KEI at the Regional Water Quality Control Board (RWQCB).

The review focused on three sites with monitoring wells located within a half mile of the station. The Okada property, located at 16109 Ashland Avenue, a former USA Petroleum station located at 15120 Hesperian Boulevard, and Kaufman and Broad, located at 1620 162nd Avenue, approximately 1,800 feet

east-southeast of the site. The file review is outlined in Delta's *Addendum to Additional Site Assessment Work Plan*, dated April 3, 2009.

December 1992: A file review was conducted at the ACHCSA. Four sites with existing or former USTs were located in the vicinity of the site during the file review. These sites are as follows: 1.) Nayou Properties, 1500 Thrush Avenue; 2.) ABC Auto Repair, 15960 East 14th Street; 3. Petsas Property, 16035 East 14th Street, and; 4.) SpeeDee Oil Change, 15900 East 14th Street.

1991-1993: The California EPA, Department of Toxic Substances Control (DTSC), identified regional chlorinated solvent contamination of the upper aquifer in the San Leandro area.

1993: Based on the results of the site history research, site reconnaissance, and file review, and based upon the fact that no evidence of an on-site solvent source area in the vicinity of monitoring wells MW-3 and MW-4 was found, it was concluded that there was no likely on-site source of the halogenated volatile organic compound (HVOC) impact.

The potential of an off-site HVOC source is further supported by the fact that the highest HVOC concentrations have been reported in samples collected from monitoring wells MW-3 and MW-4, located on the up-gradient side of the site. HVOC concentrations reported in the groundwater samples collected from these monitoring wells are likely coming from a source (E.G. reaching sanitary sewer lines, etc.) up-gradient of the site.

March 1993: Monitoring wells MW-5 and MW-6 were installed on March 9, 1993. These wells were monitored monthly and sampled on a quarterly basis until 1996. Groundwater flow predominantly ranged from southwest to north during the course of the investigation. Chlorinated solvents have consistently been reported in up-gradient wells MW-3 and MW-4, and it appears that the chlorinated solvent impact at the site may be due to an unidentified source (or sources) located up-gradient of the site, or is part of a regional chlorinated solvent plume. The perimeter monitoring wells, MW-5 and MW-6, have historically shown a maximum concentration of 72 micrograms per liter (µg/L) of TPHg and below the laboratory's indicated reporting limits for benzene, toluene, ethylbenzene, and total xylenes (BTEX).

March 1997: An off-site investigation was conducted in March 1997 to assess any impacts in the down-gradient direction from monitoring well MW-1. Monitoring well MW-1 is the most down-gradient of the

wells at the site and has historically contained the highest concentrations of petroleum hydrocarbons in groundwater throughout the duration of the site investigation.

Three direct push borings (EB-3, EB-4, and EB-5) were advanced through East 14th Street in a northerly transect from the site. The three borings were each advanced to total depths ranging from 11 to 15 feet below grade. Groundwater was encountered at depths ranging from 10.5 to 15 feet bgs during drilling. No reportable target compounds were identified in either soil or groundwater samples.

1998 – A *Case Closure Summary* was prepared by the Alameda County Environmental Protection Department. This document concluded that drinking water wells are not affected. It also documented the maximum contaminant concentrations – before and after cleanup as follows:

Contaminant	Soil (ppm)			Water (ppb)	
	Before	After		Before	After
TPHg	3,500	1,100		19,000	510
TPHd	ND	6.2		NA	NA
Benzene	40	8		230	72
Toluene	280	43		79	ND
Xylenes	600	230		1,300	17
Ethyl-benzene	100	37		ND	ND
Methyl tert-butyl ether (MTBE)	NA	NA		NA	390
TOG	7,700	1,300		NA	NA
Heavy Metals	NA	NA		NA	NA
Other HVOC TCE	0.063	ND	TCE	4.4	ND
			PCE	110	950
			1,2-DCA	2.8	ND

The *Case Closure Summary* concluded that "there are no known municipal or residential water wells or surface water bodies within 750 feet down-gradient of the subject site that would be impacted by shallow groundwater from this site".

December 2000: The ACHCSA issued a *Case Closure* letter dated December 26, 2000.

2003: Six groundwater monitoring wells (MW-1, MW-2A, and MW-3 through MW-6) destroyed. Groundwater was at 6 to11 feet bgs.

September 2007: Six soil borings (ATC-1 through ATC-6) were advanced in the vicinity of the existing fuel and waste-oil USTs and dispensers on September 25 and 26, 2007. The borings were advanced to total depths of approximately 20 feet bgs (ATC-2, ATC-3, ATC-4, and ATC-5) and 25 feet bgs (ATC-1 and ATC-6). Groundwater was initially encountered at depths ranging from 14 feet bgs to 24 feet bgs during drilling activities.

Groundwater samples were collected from each of the six borings. A duplicate groundwater sample designated as "Duplicate B-1" was collected from boring ATC-1. Photo ionization detector (PID) readings from the screened soil samples ranged from 1.4 ppm to 2,272 ppm. The analytical results from the ATC Investigation are outlined in Delta's *Addendum to Additional Site Assessment Work Plan* dated April 3, 2009.

December 2009: Delta advanced six soil borings (B-1 through B-5, and B-7) to assess the extent of petroleum hydrocarbon impact to the soil and groundwater. The borings were advanced to total depths ranging from 24 to 32 feet bgs. First groundwater was encountered at depths ranging from 21 to 28.5 feet bgs during drilling activities.

Soil and groundwater samples were collected from each of the six borings. PID readings from the screened soil samples ranged from 0.2 ppm to 197 ppm. The analytical results indicated that TPHg was present in the soil at a maximum concentration of 603 mg/kg (B-1 at 12 feet) and in the groundwater at a maximum concentration of 2,110 µg/L (B-1). The analytical results from the December 2009 Investigation are outlined in Delta's *Subsurface Soil and Groundwater Investigation Report* dated March 23, 2010.

April 5, 2011: Antea Group completed a site investigation consisting of the installation of four on-site monitoring wells (MW-7 through MW-10). The results of the investigation are presented in the *Site Investigation Report*, dated July 5, 2011.

3.0 PETROLEUM HYDROCARBON DISTRIBUTION AND TRENDS

3.1 Lateral and Vertical Extent of Non-Aqueous Phase Liquid

Non-aqueous phase liquid (NAPL) has not been observed in soil and groundwater samples collected at the site.

3.2 Distribution of Petroleum Hydrocarbons in Soil

Historical soil sampling analytical results are summarized in **Table 1**.

3.2.1 TPHg Distribution in Soil

TPHg was reported in several soil samples collected on-site with a maximum concentration of 1,000 mg/kg at 5 feet bgs in soil sample ATC-4d5.0 in 2007. This soil sample was collected from soil boring ATC-4 which was advanced just east of the northern dispenser island (**Figure 2**). TPHg impacted soil at the site has been laterally delineated to the south, east, and west and vertically delineated and further investigation is not warranted at this time, based on the soil sample analytical results from samples collected from monitoring wells MW-7 through MW-10 and borings B-1 through B-7.

3.2.2 Benzene Distribution in Soil

Benzene has been reported in several soil samples collected on-site with a maximum concentration of 0.71 mg/kg at 12 feet bgs in soil sample B-1@12. This soil sample was collected from soil boring B-1 which was advanced just north of the product dispenser islands. Benzene impacted soil has been laterally delineated to the south, east, and west and vertically delineated and further investigation is not warranted at this time, based on the soil sample analytical results from samples collected from monitoring wells MW-7 through MW-10 and borings B-1 through B-7.

3.2.3 MTBE Distribution in Soil

MTBE has been reported in several soil samples collected on-site with a maximum concentration of 0.21 mg/kg at 10 feet bgs in soil boring B-7. MTBE impacted soil has been laterally delineated to the south, east, and west and vertically delineated and further investigation is not warranted at this time, based on the soil sample analytical results from samples collected from monitoring wells MW-7 through MW-10 and borings B-1 through B-7.

3.3 Distribution of Petroleum Hydrocarbons in Groundwater

Historical groundwater sampling locations are shown on **Figure 2**. Historical groundwater concentrations observed during periodic monitoring and sampling events since 2011 are presented in **Table 3**. Historical grab groundwater concentrations are presented in **Table 4**.

Constituents of concern (COC) in groundwater at the site have historically been TPHg, benzene, and MTBE. There are currently four groundwater monitoring wells on-site (MW-7 through MW-10) which monitor COC concentrations. Well construction details are included in **Table 5**.

3.3.1 TPHg Distribution in Groundwater

TPHg has historically been observed above the laboratory reporting limit in monitoring wells MW-7 through MW-10. TPHg was reported above the laboratory's reporting limit in monitoring wells MW-7 through MW-10 during the first quarter 2012 monitoring and sampling event with a maximum concentration of 655 micrograms per liter (µg/L) in the sample collected from monitoring well MW-7 (**Figure 6**).

3.3.2 Benzene Distribution in Groundwater

Benzene has historically been observed above the laboratory reporting limit in monitoring wells MW-7 and MW-8. Benzene was reported above the laboratory's reporting limit in monitoring well MW-7 during the first quarter 2012 monitoring and sampling event at a concentration of 14.9 µg/L (**Figure 7**).

3.3.3 MTBE Distribution in Groundwater

MTBE has historically been observed above the laboratory reporting limit in monitoring wells MW-7 through MW-10. MTBE was reported in monitoring wells MW-7 through MW-10 during the first quarter 2012 monitoring and sampling event with a maximum concentration of 112µg/L in the sample collected from monitoring well MW-7 (**Figure 8**).

4.0 CONTAMINANT SOURCES, TRANSPORT, AND EXPOSURE PATHWAYS

4.1 Contaminant Source

Based on the distribution of contaminants of concern in the soil and groundwater, it appears the on-site release occurred from the former USTs in the northwest portion of the site (**Figure 2**) and/or the former product piping and fuel dispenser in the northeast portion of the site. The highest concentrations of TPHg were found in soils immediately southeast of the product dispensers. Both the USTs and product lines have been replaced. It appears that contaminants of concern currently observed in soil and groundwater are residual in nature and will naturally attenuate within a reasonable amount of time.

4.2 Contaminant Transport and Preferential Pathways

A detailed underground utility survey has not been performed at the site. Based on the difference between the depth of groundwater (average 9 feet bgs) and the typical depth of utilities (usually no more than 5 feet bgs), it is unlikely that groundwater would intersect the utility trenches and use them as preferential pathways. In addition, based on the observed first encountered groundwater beneath the site, average 21.85 feet bgs, during soil boring advancement and monitoring well installation and the average depth to groundwater in the monitoring wells, 9.79 feet below top of casing, it appears that the groundwater is under confined conditions and not likely to be influenced by utility trenches.

4.3 Potential Sensitive Receptors

March 26, 2012: Antea Group completed a sensitive receptor survey for the site. According to California Department of Water Resources (DWR) and the Alameda County Public Works Agency (ACPWA) records, sixteen water wells are located within a one-half mile of the site. All sixteen of the wells are described as irrigation supply wells. The closest of the wells is located <100 feet north-northwest of the site in the apartment complex adjacent to the site. According to the apartment complex, they receive their irrigation water from the city; therefore, Antea Group concludes that this well has been either destroyed or abandoned. Five additional wells were identified by the DWR and ACPWA, but their locations were not reported and Antea Group was unable to locate these wells during a site visit.

A web based search identified twelve facilities within 0.5 miles of the site that could be potential receptors. These include schools, churches, medical facilities and elderly care facilities. The closest facility is Bayfaur Lodge Residential Care, an elderly care facility, is located 650 feet northeast of the site. The closest body of water is a drainage canal running north to south located 260 feet west of the site.

4.4 Exposure Pathways

4.4.1 Direct Contact (Ingestion and Dermal Contact)

Direct exposure to chemicals in the soil is primarily a concern when the impacts are located within 10 feet of the ground surface. Because the majority of the site is covered in concrete and asphalt, construction workers are the most likely on-site receptor to be directly exposed to the impacted soil and groundwater either during utility work or excavation activities. Commercial workers such as landscapers can potentially be exposed to chemicals in the soil to two feet bgs during typical irrigation system maintenance on-site. Due to the limited amount of landscaping on-site, the potential for exposure to this receptor is low. Commercial employees of the station typically do not perform subsurface work, and thus are less likely to be exposed.

4.4.2 Inhalation

Because the site is currently occupied by an active service station, commercial workers are most susceptible to exposure via the inhalation pathway, as they spend the greatest amount of time on-site. The risk to customers is far less, based on their limited potential exposure time. Construction workers conducting an indoor remodel or outside work could be exposed to vapors within buildings or ambient air, although their time on-site would be limited. Because groundwater impact is limited in extent, off-site, it appears the inhalation risk to off-site residents does not exist.

5.0 LOW RISK CLOSURE READINESS EVALUATION

- **The release has been stopped and ongoing contaminant sources have been removed or remediated.**

Based on the distribution of contaminants of concern in the soil and groundwater, it appears the on-site release(s) occurred from the former USTs in the northwest portion of the site (**Figure 2**) and/or the former product lines in the northeast portion of the site. The highest concentrations of TPHg was reported in soils immediately south of the product dispensers. Both the USTs and product lines have been replaced. It appears concentrations observed in soil and groundwater are residual in nature and will naturally attenuate within a reasonable amount of time.

- **The site has been adequately characterized.**

Soil impact at the site is minimal, and has been vertically delineated and laterally delineated to the south, east, and west (**Section 3.2**). Groundwater impact at the site is now limited to COCs TPHg, benzene, and MTBE (**Section 3.3**). Benzene and MTBE concentrations are below the concentrations reported when the case was closed in 1998. TPHg concentrations in the monitoring well MW-7 are decreasing, and the concentrations reported in the other three monitoring wells are below the levels observed when the case was closed in 1998. It appears historical soil and groundwater sampling activities at the site have adequately delineated groundwater impact and further investigation is not warranted. All COCs are currently below COC concentrations reported in 1998. This appears to indicate that there was no new release and the site should be closed.

- **The contamination is not migrating.**

The contamination plume appears to be shrinking. Concentrations of TPHg, benzene, and MTBE are decreasing in monitoring well MW-7, which historically contained the highest concentrations of TPHg, benzene, and MTBE. Concentrations observed in monitoring wells MW-8 through MW-9 are stable and remain below the groundwater concentrations reported when the case was closed in 1998.

- **No water wells, deep water drinking aquifers, surface water, or sensitive receptors are likely to be impacted.**

Antea Group performed a sensitive receptor survey in 2012. Sixteen irrigation water supply wells were identified in the search. Based on the distance from the site and the predominant groundwater flow direction, it does not appear that the petroleum hydrocarbon and MTBE impact is migrating in the direction of these water supply wells and impact to the wells is unlikely.

There are two surface water bodies identified within a one-half mile of the site. A drainage ditch located 260 feet west of the site and a drainage ditch located 420 feet south of the site. Based on the predominant groundwater flow direction being to the northwest, it appear that impact to these water bodies due to petroleum hydrocarbon and MTBE impact in the shallow groundwater originating beneath the site is unlikely.

- **The site presents no significant risk to human health and/or environment.**

There are no water supply wells in the immediate vicinity of the site and the shallow impacted groundwater plume does not appear to be migrating. Therefore, it appears the risk to off-site residents direct exposure to the shallow groundwater does not exist.

- **Destruction of Monitoring Wells.**

Antea Group will remove the four on-site monitoring wells by either over-drilling or pressure grouting when instructed to do so by the ACHCSA in preparation for regulatory closure. The well construction details are presented in **Table 5**.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Antea Group has made the following conclusions in this Case Closure Request:

- All contaminants of concern in soil have been laterally and vertically delineated, and do not pose a significant risk to human health. Further investigation of the soil impact due to the on-site release(s) is not warranted.
- Groundwater impacted has been adequately delineated cross- and down-gradient of the site. The impacted groundwater plume does not appear to be migrating and concentrations reported in the four on-site monitoring wells show a stable and/or decreasing trend.
- Currently, all constituents of concern are at or below those reported at the time of site closure in 1998. This indicates that there has not been a new release at this site and this site should be closed.

7.0 REMARKS

The recommendations contained in this report represent Antea USA, Inc.'s professional opinions based upon the currently available information and are arrived at in accordance with currently accepted professional standards. This report is based upon a specific scope of work requested by the client. The contract between Antea USA, Inc. and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Antea USA, Inc.'s client and anyone else specifically identified in writing by Antea USA, Inc. as a user of this report. Antea USA, Inc. will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Antea USA, Inc. makes no express or implied warranty as to the contents of this report.

Prepared by:

Date: 5/30/12

Edward T. Weyrens, G.I.T.
Project Professional

Information, conclusions, and recommendations provided by Antea Group in this document regarding the site have been prepared under the supervision of and reviewed by the licensed professional whose signature appears below.

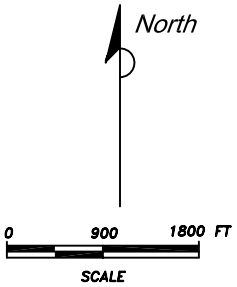
Licensed Approver:

PROFESSIONAL GEOLOGIST
DENNIS SHANNON DETTLOFF
No. 7480
STATE OF CALIFORNIA

Date: 5/30/12

Dennis S. Dettloff, P.G.
Project Manager
California Registered Professional Geologist No. 7480

Figures



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, SAN LEANDRO QUADRANGLE (1973)

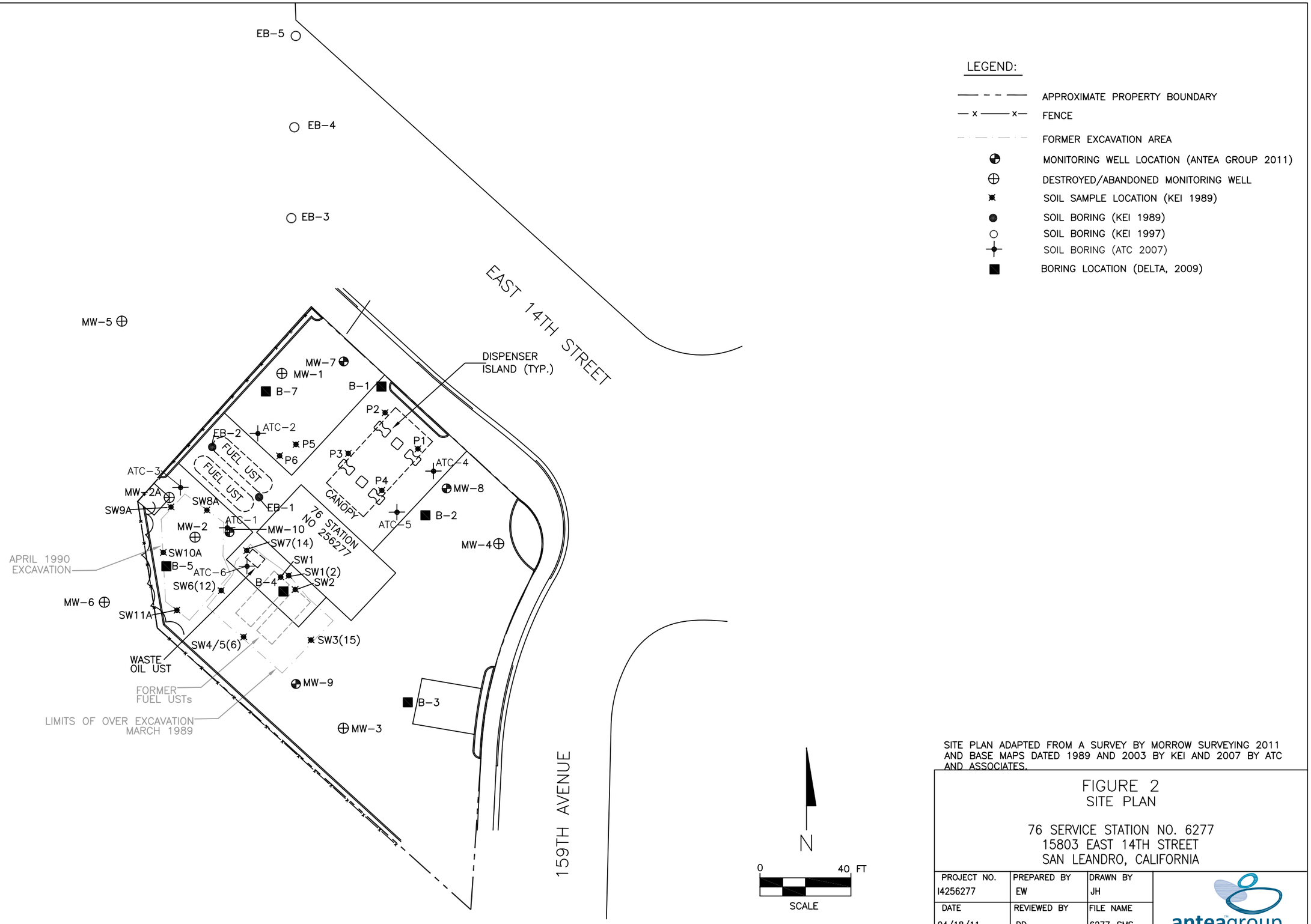
FIGURE 1

SITE LOCATION MAP

76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO. I4256277	DRAWN BY JH 05/13/11
FILE NO. 6277-SiteLocator	PREPARED BY EW
REVISION NO.	REVIEWED BY

anteagroup



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- DESTROYED/ABANDONED MONITORING WELL
- SOIL SAMPLE LOCATION (KEI 1989)
- SOIL BORING (KEI 1989)
- SOIL BORING (KEI 1997)
- SOIL BORING (ATC 2007)
- BORING LOCATION (DELTA, 2009)

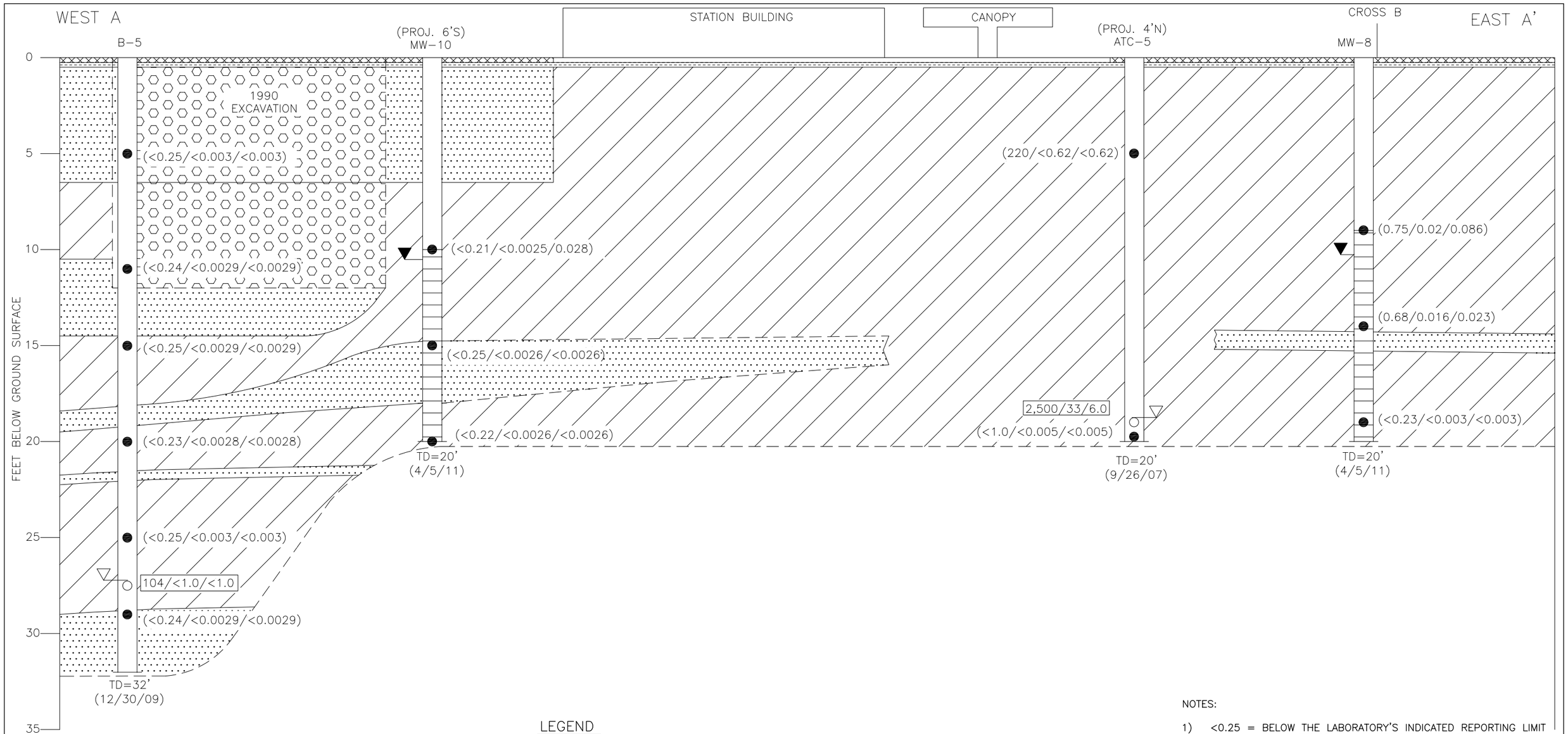
SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

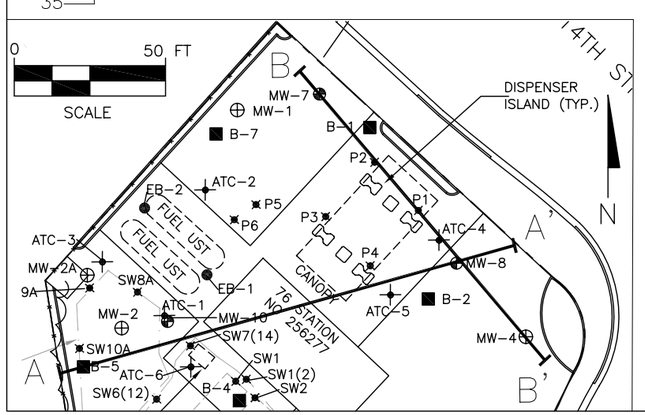
FIGURE 2
SITE PLAN

76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
04/18/11	DD	6277-SMS

antea group





LEGEND

- MW-10 — MONITORING WELL/BORING LOCATION
- EXPLORATORY BORING/WELL CASING
- (<0.25/<0.0026 <0.0026) — SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, BENZENE, MTBE (mg/kg)
- 104/<1.0/<1.0 — DEPTH TO STATIC WATER LEVEL
- GRAB GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, BENZENE, MTBE (µg/L)
- WELL SCREEN
- DEPTH TO FIRST ENCOUNTERED GROUNDWATER
- TD=20' (4/5/11) — TOTAL DEPTH DATE INSTALLED

- CONCRETE
- CLASS II AB
- SAND
- ASPHALT
- FILL
- FINE GRAINED MATERIAL (CLAY, SILT, ETC)
- APPROXIMATE STRATIGRAPHIC BOUNDARY

0 10
SCALE IN FEET
5

NOTES:

1) <0.25 = BELOW THE LABORATORY'S INDICATED REPORTING LIMIT
   TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
   MTBE = METHYL-TERT-BUTYL ETHER
   mg/kg = MILLIGRAMS PER KILOGRAM
   µg/L = MICROGRAMS PER LITER

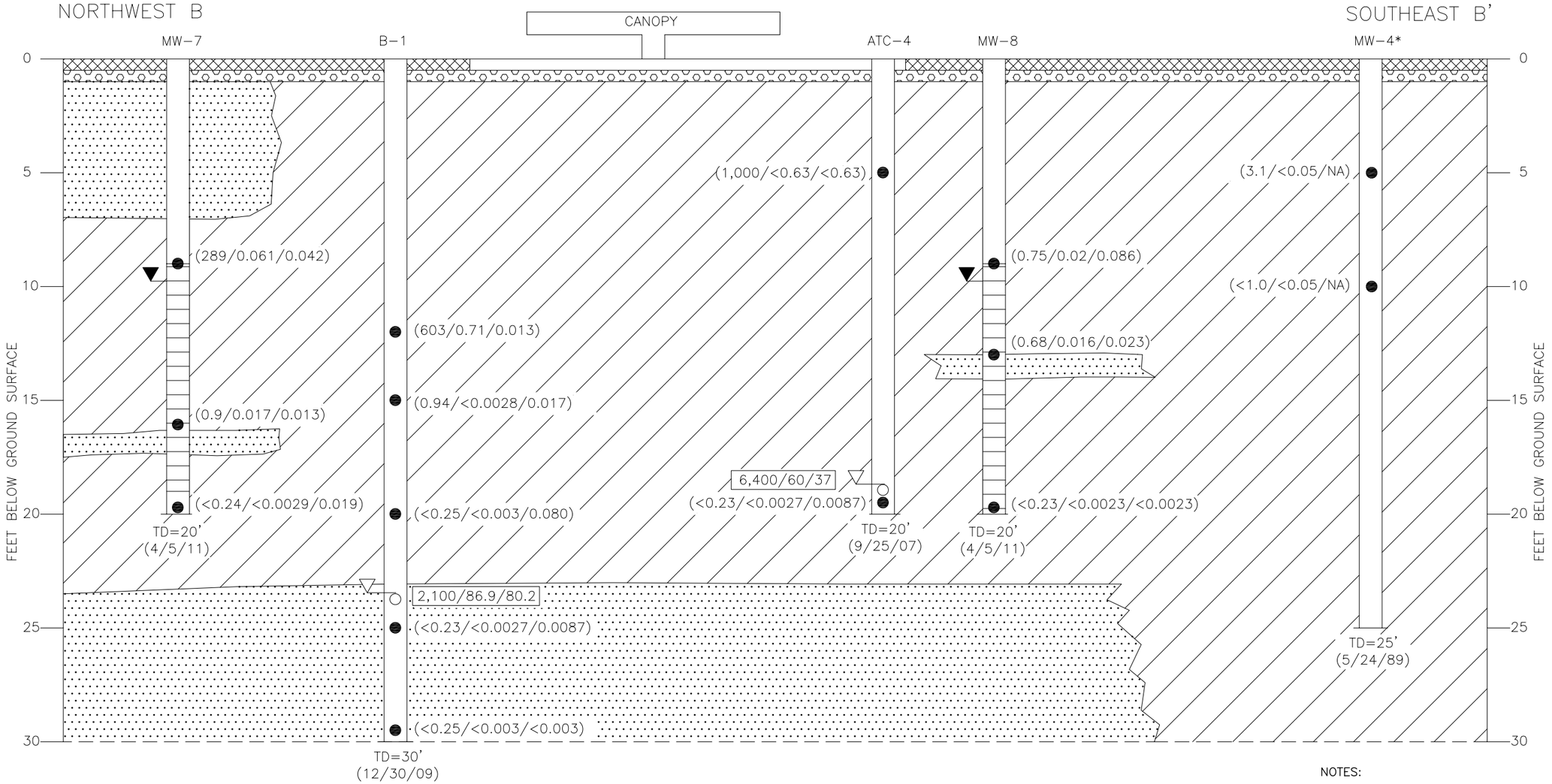
2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.

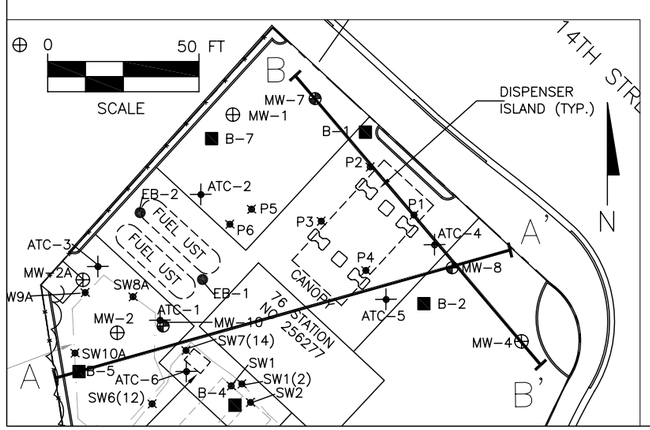
FIGURE 3
GEOLOGIC CROSS SECTION A – A'

76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
05/13/11	DD	6277-SMS

antea group





LEGEND

- MW-10 — MONITORING WELL/BORING LOCATION
- EXPLORATORY BORING/WELL CASING
- (<0.25/<0.0026 <0.0026) — SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, BENZENE, MTBE (mg/kg)
- DEPTH TO STATIC WATER LEVEL
- 104/<1.0/<1.0 — GRAB GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPHg, BENZENE, MTBE (µg/L)
- WELL SCREEN
- DEPTH TO FIRST ENCOUNTERED GROUNDWATER
- TD=20' (4/5/11) — TOTAL DEPTH DATE INSTALLED

- CONCRETE
- CLASS II AB
- SAND
- ASPHALT
- FINE GRAINED MATERIAL (CLAY, SILT, ETC)
- APPROXIMATE STRATIGRAPHIC BOUNDARY

0 10 SCALE IN FEET 5

NOTES:

1) <0.25 = BELOW THE LABORATORY'S INDICATED REPORTING LIMIT
   TPHg = TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
   MTBE = METHYL-TERT-BUTYL ETHER
   NA = NOT ANALYZED
   mg/kg = MILLIGRAMS PER KILOGRAM
   µg/L = MICROGRAMS PER LITER
   * = DESTROYED

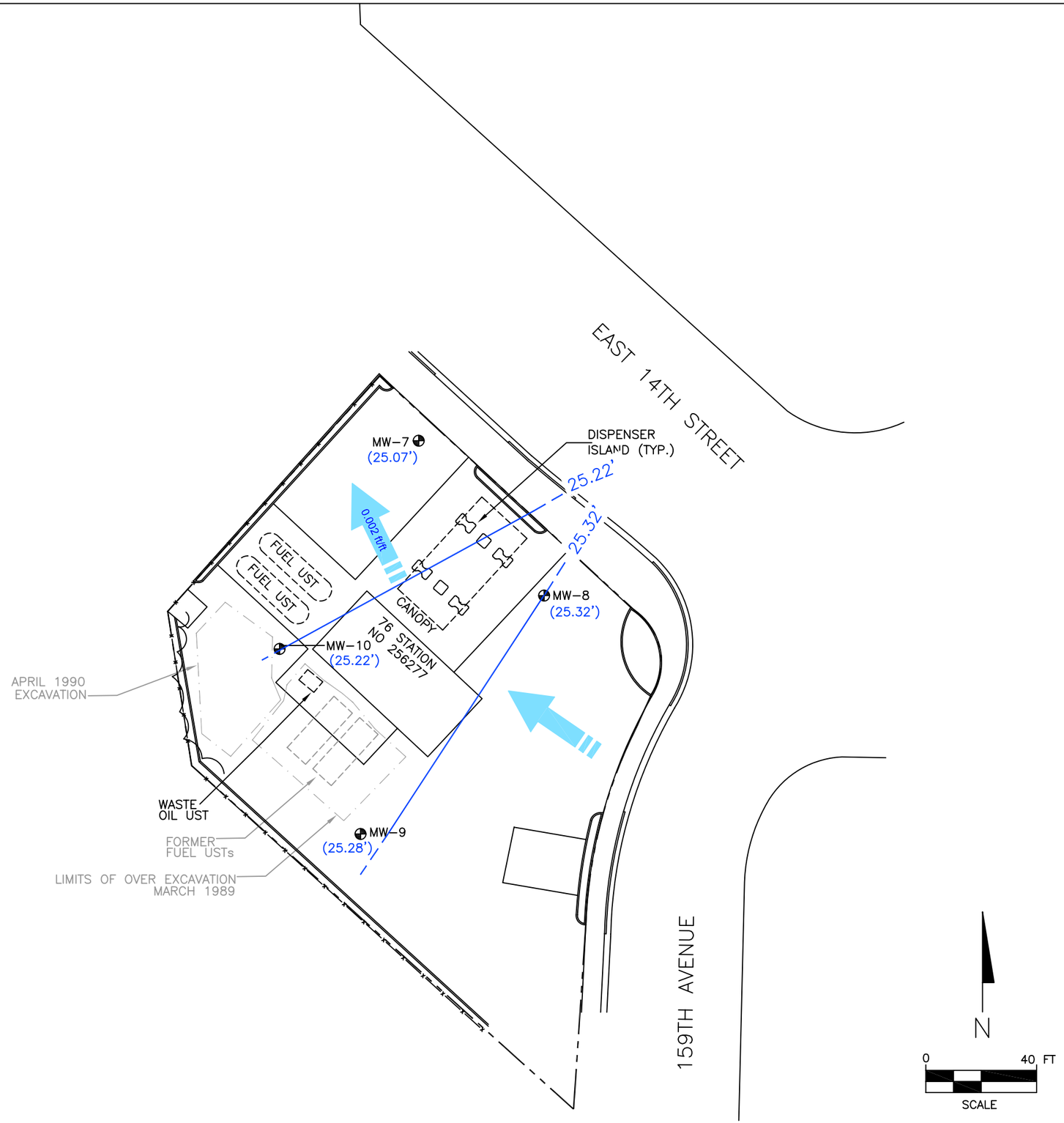
2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.

FIGURE 4
GEOLOGIC CROSS SECTION B – B'

76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	EW	JH
DATE	REVIEWED BY	FILE NAME
05/13/11	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (25.32') GROUNDWATER ELEVATON IN FEET ABOVE MEAN SEA LEVEL (ft/msl)
- 25.32' GROUNDWATER ELEVATION CONTOUR LINE (ft/msl) –DASHED WHERE INFERRED (CONTOUR INTERVAL: 0.10 ft)
- 0.002 ft/ft GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT (ft/ft)

N

0 40 FT

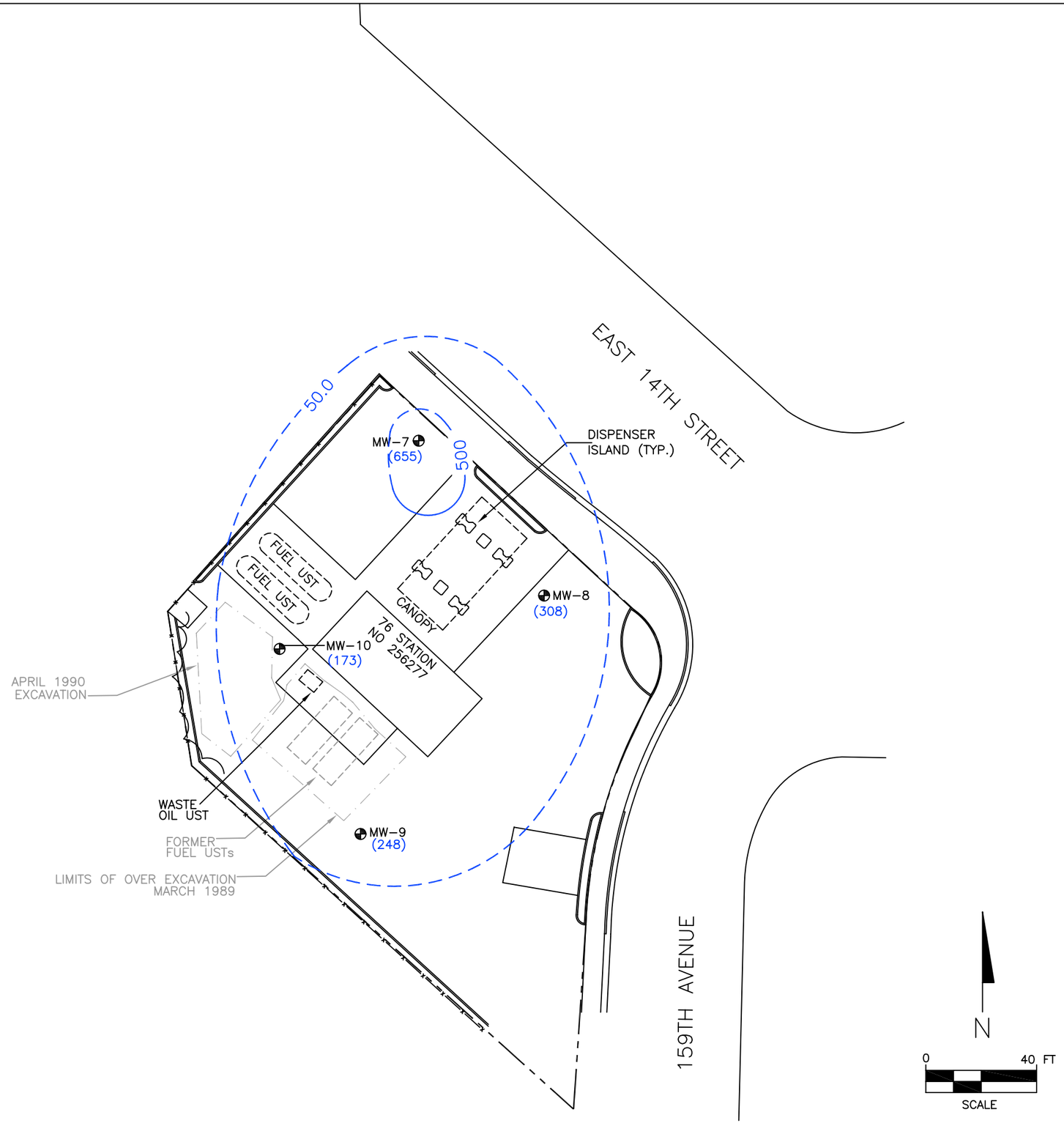
SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 5
GROUNDWATER ELEVATION CONTOUR MAP
FEBRUARY 22, 2012
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	DD	JH
DATE	REVIEWED BY	FILE NAME
3/13/12	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (655) DISSOLVED PHASE TPHg ISOCONCENTRATION (µg/L)
- 500 DISSOLVED PHASE TPHg ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:
TPHg = TOTAL PETROLEUM HYDROCABONS AS GASOLINE
µg/L = MICROGRAMS PER LITER

N

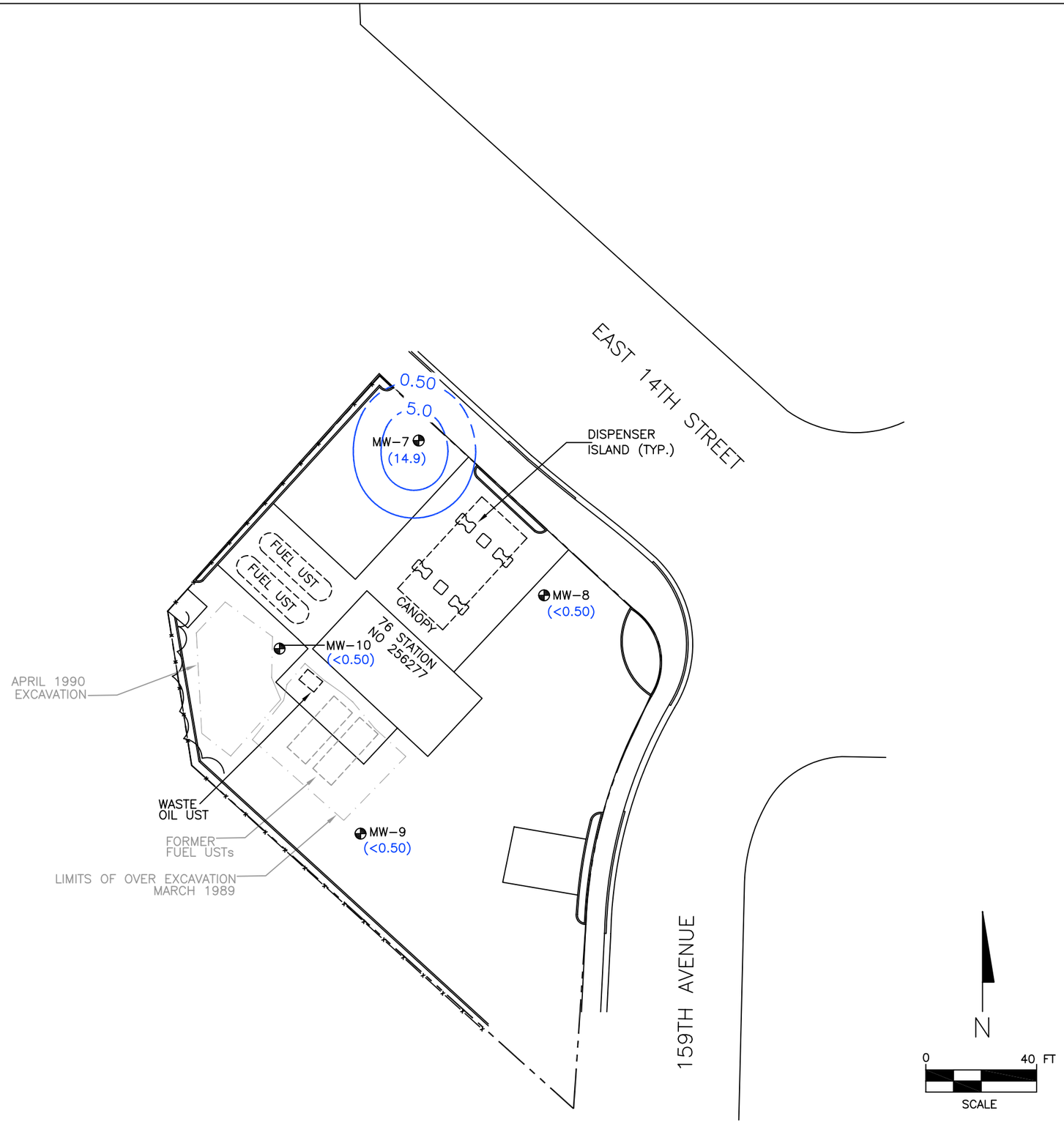
0 40 FT
SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 6
DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
FEBRUARY 22, 2012
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	DD	JH
DATE	REVIEWED BY	FILE NAME
3/13/12	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (14.9) DISSOLVED PHASE BENZENE ISOCONCENTRATION (µg/L)
- 5.0 DISSOLVED PHASE BENZENE ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:
µg/L = MICROGRAMS PER LITER
<0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMITS

N

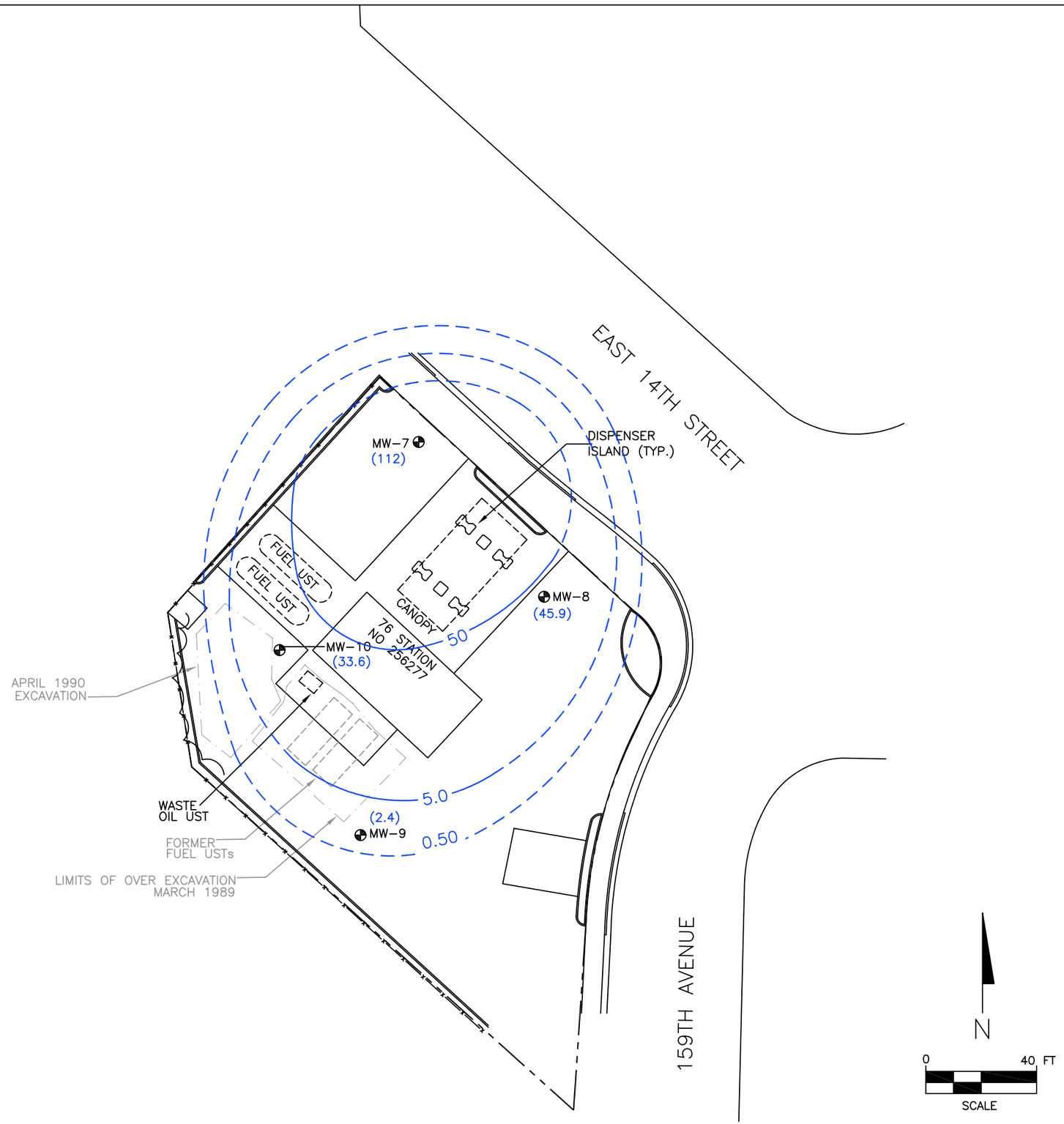
0 40 FT
SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 7
DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
FEBRUARY 22, 2012
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	DD	JH
DATE	REVIEWED BY	FILE NAME
3/13/12	DD	6277-SMS

antea group



LEGEND:

- APPROXIMATE PROPERTY BOUNDARY
- FENCE
- FORMER EXCAVATION AREA
- MONITORING WELL LOCATION (ANTEA GROUP 2011)
- (112) DISSOLVED PHASE MTBE ISOCONCENTRATION (µg/L)
- 5.0 DISSOLVED PHASE MTBE ISOCONTOUR (µg/L) –DASHED WHERE INFERRED

NOTES:

MTBE = METHYL TERTIARY BUTYL ETHER
µg/L = MICROGRAMS PER LITER
<0.50 = LESS THAN LABORATORY INDICATED REPORTING LIMITS

N

0 40 FT

SCALE

SITE PLAN ADAPTED FROM A SURVEY BY MORROW SURVEYING 2011 AND BASE MAPS DATED 1989 AND 2003 BY KEI AND 2007 BY ATC AND ASSOCIATES.

FIGURE 8
DISSOLVED PHASE MTBE ISOCONCENTRATION MAP
FEBRUARY 22, 2012
76 SERVICE STATION NO. 6277
15803 EAST 14TH STREET
SAN LEANDRO, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
14256277	DD	JH
DATE	REVIEWED BY	FILE NAME
3/13/12	DD	6277-SMS

antea group

Tables

Table 1

HISTORICAL SOIL ANALYTICAL RESULTS
76 Service Station No. 6277
15803 East 14th Street, San Leandro, CA

Sample ID	Date	Sample Depth (feet)	TPHg (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	TAME (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	Ethanol (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	DRO (mg/kg)	RRO (mg/kg)	Lead (mg/kg)
ATC 2007																		
ATC-1d12.0	9/25/2007	12	**100**	<0.005	<0.005	**0.016**	**0.029**	**0.024**	**0.19**	<0.001	<0.001	<0.001	<0.10	--	--	**57**	--	**8.15**
ATC-1d20.0	9/25/2007	20	<1.0	<0.005	<0.005	<0.005	<0.005	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<12	--	**4.57**
ATC-2d12.0	9/25/2007	12	**560**	<0.62	<0.62	**8.8**	**48**	**0.83**	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	**51**	--	**7.62**
ATC-2d20.0	9/25/2007	20	<1.0	<0.005	<0.005	<0.005	<0.005	**0.011**	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<12	--	**3.57**
ATC-3d12.0	9/25/2007	12	**27**	<0.63	<0.63	**0.82**	**2.93**	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	**310**	--	**7.71**
ATC-3d18.0	9/25/2007	18	<1.0	<0.005	<0.005	<0.005	<0.005	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	**18**	--	**8.21**
ATC-4d5.0	9/26/2007	5	**1,000**	<0.63	<0.63	**11**	**43**	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	**170**	--	**6.48**
ATC-4d20.0	9/26/2007	20	<1.0	<0.005	<0.005	<0.005	<0.005	**0.015**	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<12	--	**2.85**
ATC-5d5.0	9/26/2007	5	**220**	<0.62	**1.2**	**6.2**	**25.2**	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<12	--	**6.27**
ATC-5d20.0	9/26/2007	20	<1.0	<0.005	<0.005	<0.005	<0.005	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<14	--	**2.59**
ATC-6d12.0	9/25/2007	12	**59**	<0.005	<0.005	<0.005	<0.005	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<12	--	**9.37**
ATC-6d15.0	9/25/2007	15	<1.0	<0.005	<0.005	<0.005	<0.005	<0.0005	<0.10	<0.001	<0.001	<0.001	<0.10	--	--	<12	--	**5.27**
Delta 2009																		
B-1@12	12/29/2009	12	**603**	**0.71**	**12.3**	**19**	**103**	**0.013**	**0.021**	<0.0029	<0.0029	<0.0029	--	<0.0029	--	**16.3**	**55.2**	**7**
B-1@15	12/29/2009	15	**0.94**	<0.0028	**0.023**	**0.027**	**0.16**	**0.017**	<0.014	<0.0028	<0.0028	<0.0028	--	<0.0028	--	<2.0	<9.9	**6.2**
B-1@20	12/29/2009	20	<0.25	<0.0030	<0.0030	<0.0030	<0.0059	**0.021**	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**2.2**	<10	<4.7
B-1@24	12/29/2009	24	<0.23	<0.0027	<0.0027	<0.0027	<0.0054	**0.0087**	<0.014	<0.0027	<0.0027	<0.0027	--	<0.0027	--	<2.0	<10	<4.8
B-1@30	12/29/2009	30	<0.25	<0.0030	<0.0030	<0.0030	<0.0060	<0.0030	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	<2.0	<9.8	<4.3
B-2@5	12/29/2009	5	**2.8**	**0.1**	<0.0027	**0.488**	**0.22**	**0.058**	**0.034**	<0.0027	<0.0027	<0.0027	--	<0.0027	--	**9.2**	<10	**10.1**
B-2@10	12/29/2009	10	**1.5**	**0.073**	<0.0030	**0.014**	<0.0060	**0.13**	**0.04**	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**4**	<9.9	**6.3**
B-2@20	12/29/2009	20	<0.24	<0.0028	<0.0028	<0.0028	<0.0057	<0.0028	<0.014	<0.0028	<0.0028	<0.0028	--	<0.0028	--	<2.0	<10	**5.5**
B-2@24	12/29/2009	24	**42.2**	**0.027**	<0.0028	**0.94**	**2.3**	**0.031**	**0.017**	<0.0028	<0.0028	<0.0028	--	<0.0028	--	**27.2**	**79.8**	**7**
B-2@28	12/29/2009	28	<0.23	<0.0028	<0.0028	<0.0028	<0.0056	<0.0028	<0.014	<0.0028	<0.0028	<0.0028	--	<0.0028	--	<2.0	<9.8	**4.1**
B-3@5	12/29/2009	5	<0.24	<0.0029	<0.0029	<0.0029	<0.0057	**0.043**	**0.042**	<0.0029	<0.0029	<0.0029	--	<0.0029	--	**2.2**	<9.9	**19.7**
B-3@10	12/29/2009	10	<0.24	<0.0028	<0.0028	<0.0028	<0.0057	**0.044**	**0.023**	<0.0028	<0.0028	<0.0028	--	<0.0028	--	**2**	<10	**7.6**
B-3@15	12/29/2009	15	<0.22	<0.0026	<0.0026	<0.0026	<0.0052	<0.0026	<0.013	<0.0026	<0.0026	<0.0026	--	<0.0026	--	<2.0	<9.9	**5.7**
B-3@20.5	12/29/2009	20.5	<0.25	<0.0030	<0.0030	<0.0030	<0.0060	**0.0081**	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**2.2**	**18.7**	**5.8**
B-3@24.5	12/29/2009	24.5	<0.25	<0.0030	<0.0030	<0.0030	<0.0059	**0.0071**	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**11.1**	**174**	**8.2**
B-3@28	12/29/2009	28	<0.23	<0.0027	<0.0027	<0.0027	<0.0055	<0.0027	<0.014	<0.0027	<0.0027	<0.0027	--	<0.0027	--	<2.0	<9.8	**4.9**
B-4@5	12/30/2009	5	<0.25	<0.0030	<0.0030	<0.0030	<0.0060	<0.0030	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**22.5**	**379**	**37.9**
B-4@10	12/30/2009	10	<0.25	<0.0030	<0.0030	<0.0030	<0.0059	<0.0030	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**4**	**51.2**	**14.3**
B-4@20	12/30/2009	20	<0.25	<0.0029	<0.0029	<0.0029	<0.0059	<0.0029	<0.015	<0.0029	<0.0029	<0.0029	--	<0.0029	--	<2.0	<9.9	**4.9**
B-4@28	12/30/2009	28	<0.24	<0.0029	<0.0029	<0.0029	<0.0058	<0.0029	<0.015	<0.0029	<0.0029	<0.0029	--	<0.0029	--	<2.0	<9.9	**5.5**
B-5@5	12/30/2009	5	<0.25	<0.0030	<0.0030	<0.0030	<0.0059	<0.0030	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**3.6**	**40.1**	**15.4**
B-5@12	12/30/2009	12	<0.24	<0.0029	**0.0037**	<0.0029	<0.0058	<0.0029	<0.014	<0.0029	<0.0029	<0.0029	--	<0.0029	--	**11.6**	**247**	**8.4**
B-5@15	12/30/2009	15	<0.25	<0.0029	<0.0029	<0.0029	<0.0059	<0.0029	<0.015	<0.0029	<0.0029	<0.0029	--	<0.0029	--	<2.0	<9.9	**6.1**
B-5@20	12/30/2009	20	<0.23	<0.0028	<0.0028	<0.0028	<0.0056	<0.0028	<0.014	<0.0028	<0.0028	<0.0028	--	<0.0028	--	<2.0	<10	**6.5**
B-5@25	12/30/2009	25	<0.25	<0.0030	<0.0030	<0.0030	<0.0059	<0.0030	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	<2.0	<10	**5.2**
B-5@28	12/30/2009	28	<0.24	<0.0029	<0.0029	<0.0029	<0.0058	<0.0029	<0.015	<0.0029	<0.0029	<0.0029	--	<0.0029	--	**2.5**	**23.5**	**6.3**
B-7@5	12/30/2009	5	<0.25	<0.0029	<0.0029	<0.0029	<0.0059	<0.0029	<0.015	<0.0029	<0.0029	<0.0029	--	<0.0029	--	**63.7**	**582**	**22.1**
B-7@10	12/30/2009	10	**1.3**	**0.018**	<0.0030	**0.0035**	<0.0060	**0.21**	**0.093**	<0.0030	<0.0030	<0.0030	--	<0.0030	--	**5.7**	<9.8	**7.3**
B-7@20	12/30/2009	20	<0.25	<0.0030	<0.0030	<0.0030	<0.0059	**0.014**	<0.015	<0.0030	<0.0030	<0.0030	--	<0.0030	--	<2.0	<9.9	**5.8**
B-7@24	12/30/2009	24	<0.22	<0.0027	<0.0027	<0.0027	<0.0053	<0.0027	<0.013	<0.0027	<0.0027	<0.0027	--	<0.0027	--	<2.0	<10	<4.5
Antea Group 2011																		
MW-7d9	4/5/2011	9	**289**	**0.061**	**0.034**	**4.3**	**8.4**	**0.042**	**0.018**	<0.0024	<0.0024	<0.0024	<0.32	<0.0024	<0.0024	--	**20.7**	**8.9**
MW-7d16	4/5/2011	16	**0.9 M1**	**0.017**	**0.037**	**0.054**	**0.24**	**0.013**	<0.012	<0.0024	<0.0024	<0.0024	<0.32	<0.0024	<0.0024	--	**788**	**13.9**
MW-7d20	4/5/2011	20	<0.24	<0.0029	<0.0029	<0.0029	<0.0087	**0.019**	<0.015	<0.0029	<0.0029	<0.0029	<0.39	<0.0029	<0.0029	--	<9.9	**6.3**
MW-8d9	4/5/2011	9	**0.75**	**0.02**	<0.003	<0.003	<0.0089	**0.086**	**0.023**	<0.003	<0.003	<0.003	<0.39	<0.003	<0.003	--	<10	**9.9**
MW-8d13	4/5/2011	13	**0.68**	**0.016**	<0.0028	**0.024**	**0.06**	**0.023**	<0.014	<0.0028	<0.0028	<0.0028	<0.37	<0.0028	<0.0028	--	**852**	**15.7**
MW-8d20	4/5/2011	20	<0.23	<0.0023	<0.0023	<0.0023	<0.007	<0.0023	<0.012	<0.0023	<0.0023	<0.0023	<0.31	<0.0023	<0.0023	--	<10	<4.1
MW-9d8	4/5/2011	8	<0.22	<0.0026	<0.0026	<0.0026	<0.0078	<0.0026	<0.013	<0.0026	<0.0026	<0.0026	<0.35	<0.0026	<0.0026	--	<9.7	**8.9**
MW-9d20	4/5/2011	20	<0.24	<0.0028	<0.0028	<0.0028	<0.0085	<0.0028	<0.014	<0.0028	<0.0028	<0.0028	<0.38	<0.0028	<0.0028	--	<9.8	**5.3**
MW-9d24	4/5/2011	24	<0.21	<0.0027	<0.0027	<0.0027	<0.0082	<0.0027	<0.014	<0.0027	<0.0027	<0.0027	<0.36	<0.0027	<0.0027	--	<9.9	**6.4**
MW-10d10	4/5/2011	10	<0.21	<0.0025	<0.0025	<0.0025	<0.0075	**0.028**	<0.012	<0.0025	<0.0025	<0.0025	<0.33	<0.0025	<0.0025	<2.0	<10	**8.5**
MW-10d15	4/5/2011	15	<0.25	<0.0026	<0.0026	**0.0039**	**0.012**	<0.0026	<0.013	<0.0026	<0.0026	<0.0026	<0.34	<0.0026	<0.0026	<1.9	<9.7	**6.1**
MW-10d20	4/5/2011	20	<0.22	<0.0026	<0.0026	<0.0026	<0.0077	<0.0026	<0.013	<0.0026	<0.0026	<0.0026	<0.34	<0.0026	<0.0026	<2.0	<9.9	**5.8**

Notes:

TPHg=	total petroleum hydrocarbons as gasoline by CA LUFT
BTEX =	benzene, toluene, ethyl-benzene, total xylenes by EPA Method 8260
MTBE =	methyl tertiary butyl ether by EPA Method 8260
TBA =	tert butyl alcohol by EPA Method 8260
TAME =	tert amyl methyl ether by EPA Method 8260
DIPE =	Diisopropyl ether by EPA Method 8260
ETBE =	Ethyl-tert-butyl-ether by EPA Method 8260
1,2-DCA =	1,2-Dichloroethane by EPA Method 8260
EDB =	1,2-Dibromoethane by EPA Method 8260
DRO =	Diesel range organics by EPA Method 8015
RRO =	Residual range organics by EPA Method 8015
M1 =	Matrix Spike recovery exceeded QC limits. Batch accepted based on laboratory control sample recovery
mg/kg =	milligrams per kilogram
< =	Below the laboratory's indicated reporting limit
Bold =	Above the laboratory's indicated reporting limit
-- =	Not analyzed
EPA =	US Environmental Protection Agency

TABLE 2
CURRENT GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Service Station No. 6277
15803 EAST 14TH ST
SAN LEANDRO, CALIFORNIA

Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA												
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-7	2/22/2012	34.60	9.53	NP	25.07	**655**	**14.9**	**1.7**	**16.3**	**38.8**	**112**	<0.50	<0.50	<0.50	**10.9**	<250	<1.0	<1.0
MW-8	2/22/2012	34.85	9.53	NP	25.32	**308**	<0.50	<0.50	<0.50	<1.5	**45.9**	<0.50	<0.50	<0.50	**7.4**	<250	<1.0	<1.0
MW-9	2/22/2012	35.09	9.81	NP	25.28	**248**	<0.50	<0.50	<0.50	<1.5	**2.4**	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-10	2/22/2012	36.00	10.78	NP	25.22	**173**	<0.50	<0.50	<0.50	<1.5	**33.6**	<0.50	<0.50	<0.50	**5.3**	<250	<1.0	<1.0

Gauging Notes:
TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
-- - No information available

Analytical Notes:
< - Not detected at or above indicated laboratory reporting limit
ug/L - micrograms/liter
TPHg- Total Petroleum Hydrocarbons as gasoline
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether

TABLE 3
HISTORICAL GROUNDWATER GAUGING AND ANALYTICAL DATA
76 Service Station No. 6277
15803 EAST 14TH ST
SAN LEANDRO, CALIFORNIA

Well I.D.	Date	GROUNDWATER GAUGING DATA				GROUNDWATER ANALYTICAL DATA												
		TOC Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Water Elevation* (ft)	TPHg (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Total Xylenes (ug/L)	MTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	1,2-Dibromoethane (EDB) (ug/L)	1,2-Dichloroethane (ug/L)
MW-7	4/18/2011	34.60	9.40	NP	25.20	2,420	22.4	12.4	11.3	449	152	<0.50	<0.50	<0.50	5.7	<250	<1.0	<1.0
	7/26/2011	34.60	9.43	NP	25.17	1,770	27.3	18.9	66.4	341	102	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	34.60	9.37	NP	25.23	1,480	45.0	6.6	58.2	184	110	<0.50	<0.50	<0.50	23.0	<250	<1.0	<1.0
	2/22/2012	34.60	9.53	NP	25.07	655	14.9	1.7	16.3	38.8	112	<0.50	<0.50	<0.50	10.9	<250	<1.0	<1.0
MW-8	4/18/2011	34.85	9.40	NP	25.45	439	1.4	0.75	2.8	14.2	28.3	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	7/26/2011	34.85	9.42	NP	25.43	336	4.0	<0.50	<0.50	<1.5	42.7	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	34.85	9.35	NP	25.50	221	2.2	<0.50	<0.50	<1.5	30.7	<0.50	<0.50	<0.50	5.5	<250	<1.0	<1.0
	2/22/2012	34.85	9.53	NP	25.32	308	<0.50	<0.50	<0.50	<1.5	45.9	<0.50	<0.50	<0.50	7.4	<250	<1.0	<1.0
MW-9	4/18/2011	35.09	9.55	NP	25.54	208	<0.50	<0.50	<0.50	<1.5	1.6	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	7/26/2011	35.09	9.58	NP	25.51	176	<0.50	<0.50	<0.50	<1.5	1.7	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	35.09	9.54	NP	25.55	154	<0.50	<0.50	<0.50	<1.5	2.2	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	2/22/2012	35.09	9.81	NP	25.28	248	<0.50	<0.50	<0.50	<1.5	2.4	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
MW-10	4/18/2011	36.00	10.55	NP	25.45	513	<0.50	<0.50	6.9	40.0	14.9	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	7/26/2011	36.00	10.74	NP	25.26	169	<0.50	<0.50	1.4	<1.5	22.9	<0.50	<0.50	<0.50	<5.0	<250	<1.0	<1.0
	10/14/2011	36.00	10.75	NP	25.25	141	<0.50	<0.50	0.59	<1.5	29.7	<0.50	<0.50	<0.50	6.1	<250	<1.0	<1.0
	2/22/2012	36.00	10.78	NP	25.22	173	<0.50	<0.50	<0.50	<1.5	33.6	<0.50	<0.50	<0.50	5.3	<250	<1.0	<1.0

Gauging Notes:
TOC - Top of Casing
ft - Feet
NP - LNAPL not present
LNAPL - Light non-aqueous phase liquid
* - Corrected for LNAPL if present (assumes LNAPL specific gravity = 0.75)
-- - No information available

Analytical Notes:
< - Not detected at or above indicated laboratory reporting limit
ug/L - micrograms/liter
TPHg- Total Petroleum Hydrocarbons as gasoline
MTBE- Methyl tertiary-butyl ether
TBA- Tertiary-butyl alcohol
DIPE- Di-isopropyl ether
ETBE- Ethyl tertiary-butyl ether
TAME- Tertiary-amyl methyl ether

Table 4

HISTORICAL GRAB-GROUNDWATER ANALYTICAL DATA
76 Service Station No. 6277
15803 East 14th Street, San Leandro, California

Sample ID	Date	TPHg (µg/L)	DRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	DIPE (µg/L)	ETBE (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
ATC 2007															
ATC-1	9/25/2007	**140**	**15,000**	<5.0	<5.0	<5.0	**7**	**7**	<10	<0.8	<0.8	<0.8	<50	<1.0	--
ATC-2	9/25/2007	**860**	**5,200**	**39**	<5.0	**27**	**117**	**210**	<10	<0.8	<0.8	<0.8	<50	<1.0	--
ATC-3	9/25/2007	**3,700**	**8,100**	<5.0	<5.0	**160**	**630**	<0.5	<10	<0.8	<0.8	<0.8	<50	<1.0	--
ATC-4	9/26/2007	**6,400**	**1,900**	**60**	**120**	**300**	**1,040**	**37**	<10	<0.8	<0.8	<0.8	<50	<1.0	--
ATC-5	9/26/2007	**2,500**	**810**	**33**	**64**	**110**	**400**	**6**	<10	<0.8	<0.8	<0.8	<50	<1.0	--
ATC-6	9/26/2007	**93**	**910**	<5.0	<5.0	<5.0	<5.0	<0.5	<10	<0.8	<0.8	<0.8	<50	<1.0	--
Delta 2009															
B-1	12/29/2009	**2,110**	**494**	**86.9**	**56**	**114**	**357**	**80.2**	<5.0	<1.0	<1.0	<1.0	--	--	--
B-2	12/29/2009	**858**	**372**	**25**	<1.0	**26.9**	**47.7**	**7.3**	<5.0	<1.0	<1.0	<1.0	--	--	--
B-3	12/29/2009	**254**	**311**	<1.0	<1.0	**1.2**	**3.2**	**5.8**	<5.0	<1.0	<1.0	<1.0	--	--	--
B-4	12/30/2009	**158**	**411**	<1.0	<1.0	<1.0	<3.0	**2**	<5.0	<1.0	<1.0	<1.0	--	--	--
B-5	12/30/2009	**104**	**188**	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	<1.0	<1.0	--	--	--
B-7	12/30/2009	**1,340**	**479**	**4.7**	**6.9**	**61.1**	**284**	**59.5**	<5.0	<1.0	<1.0	<1.0	--	--	--
Antea Group 2011															
MW-7	4/18/2011	**2,420**	--	**22.4**	**12.4**	**11.3**	**449**	**152**	**5.7**	<0.50	<0.50	<0.50	<250	<1.0	<1.0
MW-8	4/18/2011	**439**	--	**1.4**	**0.75**	**2.8**	**14.2**	**28.3**	<5.0	<0.50	<0.50	<0.50	<250	<1..0	<1.0
MW-9	4/18/2011	**208**	--	<0.50	<0.50	<0.50	<1.5	**1.6**	<5.0	<0.50	<0.50	<0.50	<250	<1.0	<1.0
MW-10	4/18/2011	**513**	--	<0.50	<0.50	**6.9**	**40**	**14.9**	<5.0	<0.50	<0.50	<0.50	<250	<1.0	<1.0

Notes:

TPHg =	total petroleum hydrocarbons as gasoline by CA LUFT
DRO =	Diesel range organics by EPA Method 8015B
BTEX =	benzene, toluene, ethyl-benzene, total xylenes by EPA Method 8260
MTBE =	Methyl t-butyl Ether by EPA Method 8260
TBA =	tert butyl alcohol by EPA Method 8260
TAME =	Tert-amylmethyl ether by EPA Method 8260
DIPE =	Diisopropyl ether by EPA Method 8260
ETBE =	Ethyl-tert-butyl-ether by EPA Method 8260
1,2-DCA =	1,2-Dichloroethane by EPA Method 8260
EDB =	1,2-Dibromoethane by EPA Method 8260
µg/L =	micrograms per liter
< =	Below the laboratory's indicated reporting limit
Bold =	Above the laboratory's indicated reporting limit
EPA =	US Environmental Protection Agency
-- =	Not analyzed

TABLE 5
Well Construction Details
76 Service Station No. 6277
15803 East 14th Street
San Leandro, Ca

Well I.D.	Construction Date	Elevation (TOC feet above MSL)	Boring Depth (feet bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Casing Material	Slot Size (inches)	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Bentonite Seal Interval (feet bgs)	Cement Seal Interval (feet bgs)	Comments
Groundwater Monitoring Wells												
MW-7	04/05/11	34.60	20	8	2	PVC	0.02	9-19	8-20	7-8	1-7	
MW-8	04/05/11	34.85	20	8	2	PVC	0.02	9-20	8-20	7-8	1-7	
MW-9	04/05/11	35.09	24	8	2	PVC	0.02	9-24	8-24	7-8	1-7	
MW-10	04/05/11	36.00	20	8	2	PVC	0.02	9-20	8-20	7-8	1-7	

Notes:

bgs = below ground surface

TOC = top of casing

MSL = mean sea level

-- = Not available

Elevations are in US survey feet, Vertical Datum is NGVD29

Appendix A

Historical Boring Logs

LOG OF BORING ATC-1

SHEET 1 OF 1

Client ConocoPhillips Company
Project Name ConocoPhillips Site No. 256277
Number 34.75118.3151
Location 15803 East 14th Street, San Leandro, CA

Drill Contractor Vironex
Drill Method Geoprobe
Drilling Started 9/25/07 Ended 9/25/07
Logged By Jonathan Flomerfelt

Elevation (ft amsl) --
Total Depth 25.0
Depth To Water ▽ ATD 24.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5' bgs.	
5						CLAY. Very dark gray. High plasticity. Dry.	5
10	CT ATC-1-10		6.1	CH			10
	CT ATC-1-12		1366				
15	CT ATC-1-15		4.0	CL ML		SILTY CLAY. 80% clay. 20% silt. Reddish gray. High plasticity. Dry.	15
20	CT ATC-1-20		1.6	CH		CLAY. Black. High plasticity. Slightly damp.	20
				CL		SANDY CLAY. 70% clay. 30% fine grained sand. Pink. Damp. ▽	
25	CT ATC-1-25		0.0			Bottom of hole at 25 feet	25

REGISTERED GEOLOGIST
GIRARD E. MORGAN
No. 5289
6/30/10
Date Expires
STATE OF CALIFORNIA

ATC ASSOCIATES INC.
9185 S. Farmer Ave., Ste 107
Tempe, Arizona 85284
Phone: 480.894.2056
Fax: 480.894.2497

Remarks : Groundwater encountered at approximately 24' bgs.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 256277 BORING LOGS.GPJ LOG A EWNN05.GDT 10/17/07

LOG OF BORING ATC-2

SHEET 1 OF 1

Client ConocoPhillips Company
Project Name ConocoPhillips Site No. 256277
Number 34.75118.3151
Location 15803 East 14th Street, San Leandro, CA

Drill Contractor Vironex
Drill Method Geoprobe
Drilling Started 9/25/07 Ended 9/25/07
Logged By Jonathan Flomerfelt

Elevation (ft amsl) --
Total Depth 20.0
Depth To Water ▽ ATD 20.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5'.	
5						SILTY CLAY. 80% clay. 20% silt. Black. Dry.	5
10	CT ATC-2-10		81.9	CL ML			10
	CT ATC-2-12		1032				
15	CT ATC-2-15		1.8	CH		CLAY. Pale red. High plasticity. Damp.	15
20	CT ATC-2-20		0.0	CL ML		SILTY CLAY. 65% clay. 35% silt. White. Medium to high plasticity. Damp. ▽ Bottom of hole at 20 feet	20
25							25

REGISTERED GEOLOGIST
GIRARD E. MORGAN
No. 5289
6/30/10
Date Expires
STATE OF CALIFORNIA

ATC ASSOCIATES INC.
9185 S. Farmer Ave., Ste 107
Tempe, Arizona 85284
Phone: 480.894.2056
Fax: 480.894.2497

Remarks : Groundwater encountered at approximately 20' bgs.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 256277 BORING LOGS.GPJ LOG A EWNN05.GDT 10/17/07

LOG OF BORING ATC-3

SHEET 1 OF 1

Client ConocoPhillips Company
Project Name ConocoPhillips Site No. 256277
Number 34.75118.3151
Location 15803 East 14th Street, San Leandro, CA

Drill Contractor Vironex
Drill Method Geoprobe
Drilling Started 9/25/07 Ended 9/25/07
Logged By Jonathan Flomerfelt

Elevation (ft amsl) --
Total Depth 20.0
Depth To Water ▽ ATD 18.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5'.	
5				CH		CLAY.	5
						CLAYEY SILT. Gray with some oxidation staining. Low plasticity. Dry.	
10	CT ATC-3-10		0.0	MH			10
	CT ATC-3-12		794	CH		CLAY. Very dark gray.	
				CL ML		SILTY CLAY. Light yellowish brown. Medium plasticity. Dry.	
15	CT ATC-3-15		1.4	CH		CLAY. Grayish brown. High plasticity. Damp.	15
	CT ATC-3-18		1.6			Black. ▽	
20						Bottom of hole at 20 feet	20
25							25

REGISTERED GEOLOGIST
GIRARD E. MORGAN
No. 5289
6/30/10
Date Expires
STATE OF CALIFORNIA

ATC ASSOCIATES INC.
9185 S. Farmer Ave., Ste 107
Tempe, Arizona 85284
Phone: 480.894.2056
Fax: 480.894.2497

Remarks : Groundwater encountered at approximately 18' bgs.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 256277 BORING LOGS.GPJ LOG A EWNN05.GDT 10/17/07

LOG OF BORING ATC-4

SHEET 1 OF 1

Client ConocoPhillips Company
Project Name ConocoPhillips Site No. 256277
Number 34.75118.3151
Location 15803 East 14th Street, San Leandro, CA

Drill Contractor Vironex
Drill Method Geoprobe
Drilling Started 9/25/07 Ended 9/25/07
Logged By Jonathan Flomerfelt

Elevation (ft amsl) --
Total Depth 20.0
Depth To Water ▽ ATD 20.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5'.	
5	CT ATC-4-5		2272	MH		CLAYEY SILT. 80% silt. 20% clay. Dark bluish gray. Damp.	5
10	CT ATC-4-10		885	CH		CLAY. Dark greenish gray.	10
15	CT ATC-4-15		19.4	CL ML		SILTY CLAY. 75% clay. 25% silt. Light yellowish brown. Medium to high plasticity. Damp.	15
20	CT ATC-4-20		10.4	CH		CLAY. Very pale brown. High plasticity. Damp to moist. ▽	20
						Bottom of hole at 20 feet	
25							25

REGISTERED GEOLOGIST
GIRARD E. MORGAN
No. 5289
6/30/10
Date Expires
STATE OF CALIFORNIA

ATC ASSOCIATES INC.
9185 S. Farmer Ave., Ste 107
Tempe, Arizona 85284
Phone: 480.894.2056
Fax: 480.894.2497

Remarks : Groundwater encountered at approximately 20' bgs.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 256277 BORING LOGS.GPJ LOG A EWNN05.GDT 10/17/07

LOG OF BORING ATC-5

SHEET 1 OF 1

Client ConocoPhillips Company
Project Name ConocoPhillips Site No. 256277
Number 34.75118.3151
Location 15803 East 14th Street, San Leandro, CA

Drill Contractor Vironex
Drill Method Geoprobe
Drilling Started 9/26/07 Ended 9/26/07
Logged By Jonathan Flomerfelt

Elevation (ft amsl) --
Total Depth 20.0
Depth To Water ▽ ATD 20.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5'.	
5	CT ATC-5-5		846	CH		CLAY. Black. Medium plasticity.	5
				MH		CLAYEY SILT. 75% silt. 25% clay. Dark gray. Dry.	
10	CT ATC-5-10		118				10
				CL ML		SILTY CLAY. 80% clay. 20% silt. Pale brown. High plasticity. Damp.	
15	CT ATC-5-15		14.3				15
				CH		CLAY. White. High plasticity. Damp.	
20	CT ATC-5-20		0.0			▽ Bottom of hole at 20 feet	20
25							25

REGISTERED GEOLOGIST
GIRARD E. MORGAN
No. 5289
6/30/10
Date Expires
STATE OF CALIFORNIA

ATC ASSOCIATES INC.
9185 S. Farmer Ave., Ste 107
Tempe, Arizona 85284
Phone: 480.894.2056
Fax: 480.894.2497

Remarks : Groundwater encountered at approximately 20' bgs.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 256277 BORING LOGS.GPJ LOG A EWNN05.GDT 10/17/07

LOG OF BORING ATC-6

SHEET 1 OF 1

Client ConocoPhillips Company
Project Name ConocoPhillips Site No. 256277
Number 34.75118.3151
Location 15803 East 14th Street, San Leandro, CA

Drill Contractor Vironex
Drill Method Geoprobe
Drilling Started 9/25/07 Ended 9/25/07
Logged By Jonathan Flomerfelt

Elevation (ft amsl) --
Total Depth 25.0
Depth To Water ▽ ATD 18.0

DEPTH (feet)	SAMPLE NO.	BLOWS/6"	PID (ppm)	USCS	LITHOLOGY	DESCRIPTION	DEPTH FEET
						Airknifed to 5' bgs.	
5						No recovery.	5
10	CT ATC-6-12		1096	CH		CLAY. Dark gray.	10
15				CL ML		SILTY CLAY. 75% clay. 25% silt. Pale brown. High plasticity. Damp.	15
20							20
25						Bottom of hole at 25 feet	25

▽

REGISTERED GEOLOGIST
GIRARD E. MORGAN
No. 5289
6/30/10
Date Expires
STATE OF CALIFORNIA

ATC ASSOCIATES INC.
9185 S. Farmer Ave., Ste 107
Tempe, Arizona 85284
Phone: 480.894.2056
Fax: 480.894.2497

Remarks : Groundwater encountered at approximately 18' bgs.

See key sheet for symbols and abbreviations used above.

LOG A EWNN05 256277 BORING LOGS.GPJ LOG A EWNN05.GDT 10/17/07

Delta
Consultants, Inc.

Project No:	140256277	Client:	ELT	Boring No: B-1	
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA	Page 1 of 2	
Driller:	Gregg Drilling	Date Drilled:	12/30/2009		
Drilling Method:	Direct Push	Hole Diameter:	2"		
Sampling Method:	Sample Tube	Hole Depth:	30'		
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
												4" of asphalt
					Moist		Air Knife	1			CL	**Lean Clay with Gravel**: 80% clay, 5% fine grained sand, 15% fine gravel (angular to subangular), brown, moist, soft
								2				
								3				
					Moist			4			CL	**Lean Clay**: 95% clay, 5% fine grained sand, black, moist, medium stiff
								5				NO RECOVERY
								6				
								7				
								8				
								9				
								10				
								11				
					Moist	197		12			CL	**Lean Clay**: 95% clay, 5% fine grained sand, olive green, moist, medium stiff
								13				
								14				as above: turning brown in color
					Moist	14.5		15				
								16				
								17				
								18				
								19				as above: turning dark brown in color
					Moist	11.2		20				

Delta
Consultants, Inc.

Project No:	I40256277	Client:	ELT		Boring No: B-1
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA		Page 2 of 2
Driller:	Gregg Drilling	Date Drilled:	12/30/2009	Location Map - See Site Map for Location	
Drilling Method:	Direct Push	Hole Diameter:	2"	▽ = First Water	
Sampling Method:	Sample Tube	Hole Depth:	30'	▼ = Static Groundwater	
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
								21			CL	**Lean Clay:** 95% clay, 5% fine grained sand dark brown, moist, medium stiff
								22				
								23				
					Moist	2.1		24			SM	**Silty Sand:** 75% fine grained sand, 25% silt, light brown, moist, loose
				▽				25				NO RECOVERY
								26				
								27				
								28			SM	**Silty Sand with Gravel:** 65% sand (fine to medium grained), 20% silt, 15% fine gravel, light brown, wet, loose
					Wet	1.8		29				
								30				Boring terminated at 30 feet below ground surface
								31				
								32				
								33				
								34				
								35				
								36				
								37				
								38				
								39				
								40				

Delta
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Project No:	140256277	Client:	ELT	Boring No: B-2	
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA	Page 1 of 2	
Driller:	Gregg Drilling	Date Drilled:	12/29/2009	Location Map - See Site Map for Location	
Drilling Method:	Direct Push	Hole Diameter:	2"	▽ = First Water	
Sampling Method:	Sample Tube	Hole Depth:	28'	▼ = Static Groundwater	
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
												4" of asphalt
								1			CL	**Gravelly Clay with Sand**: 65% clay, 20% fine gravel (angular), 15% sand (fine to medium grained), olive green, moist, soft
							Air Knife	2				
								3				
								4				
					Moist	9.9		5				
								6				
								7			ML	**Silt with Sand**: 80% silt, 20% fine grained sand, light olive green, moist, loose
								8				
								9				
								10			CL	**Lean Clay**: 95% clay, 5% fine grained sand, dark brown, moist, medium stiff
					Moist	5.6		11				
								12				
								13				
								14				
								15				
								16			CL	**Lean Clay**: 90% clay, 10% fine grained sand
											SP	light brown to borwn, moist, medium stiff
								17			CL	two small lenses of poorly graded sand with gravel
											SP	
								18			CL	**Lean Clay**: 90% clay, 10% fine grained sand, light brown to brown, moist, medium stiff
								19				
					Moist	0.4		20				

Delta
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Project No:	140256277	Client:	ELT		Boring No: B-2
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA		Page 2 of 2
Driller:	Gregg Drilling	Date Drilled:	12/29/2009		
Drilling Method:	Direct Push	Hole Diameter:	2"		
Sampling Method:	Sample Tube	Hole Depth:	28'		
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
								20			CL	**Lean Clay**: 90% clay, 10% fine grained sand, light brown to brown, moist, medium stiff
								21				
								22				
								23				
					Moist	11.9		24				
				▽				25				
								26			SP	**Poorly Graded Sand:** 85% fine grained sand, 10% fine gravel, 5% silt, light brown, wet, loose
								27				
					Wet	0.7		28				Boring terminated at 28 feet below ground surface.
								29				
								30				
								31				
								32				
								33				
								34				
								35				
								36				
								37				
								38				
								39				
								40				

Delta
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Project No:	f40256277	Client:	ELT
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA
Driller:	Gregg Drilling	Date Drilled:	12/29/2009
Drilling Method:	Direct Push	Hole Diameter:	2"
Sampling Method:	Sample Tube	Hole Depth:	28'
Casing Type:	-	Well Diameter:	-
Slot Size:	-	Well Depth:	-
Gravel Pack:	-	Casing Stickup:	-
Elevation		Northing	Easting

Boring No: B-3
Page 1 of 2

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
												4" of asphalt
							Air Knife	1			CL	**Gravelly Lean Clay with Sand:** 65% clay, 20% fine gravel (angular to subangular), 15% sand (fine to medium grained), olive green, moist, soft
								2				
								3				
								4				
					Moist	2.6		5			CL	**Sandy Lean Clay:** 60% clay, 40% fine grained sand, black, moist, medium stiff
								6				
								7				as above: turning olive green in color
								8				
								9				as above: with 90% clay, 10% fine grained sand, turning dark brown in color
					Moist	1.0		10				
								11				
								12				
								13				
								14			SW	**Well Graded Sand with Gravel:** 85% sand (fine to medium grained), 15% fine gravel, dark brown, moist, loose
					Moist	0.9		15			CL	**Lean Clay:** 95% clay, 5% fine grained sand, light brown, moist, medium stiff
								16				
								17				
								18				
								19				
								20			SM	**Silty Sand with Gravel:** (see next page)

Delta
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Project No:	140256277	Client:	ELT
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA
Driller:	Gregg Drilling	Date Drilled:	12/29/2009
Drilling Method:	Direct Push	Hole Diameter:	2"
Sampling Method:	Sample Tube	Hole Depth:	28'
Casing Type:	-	Well Diameter:	-
Slot Size:	-	Well Depth:	-
Gravel Pack:	-	Casing Stickup:	-
Elevation		Northing	Easting

Boring No: B-3
Page 2 of 2

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
					Moist	8.4		21			SM	**Silty Sand with Gravel:** 50% sand (fine to medium grained), 30% silt, 20% fine gravel (rounded), light brown, moist, loose
								22				
								23			ML	**Silt with Sand:** 80% silt, 20% fine grained sand, light brown, moist, loose
				▽	Wet	1.7		24				
								25			SW-SM	**Well Graded Sand with Silt and Gravel:** 75% sand (fine to coarse grained), 15% fine gravel, 10% silt, light brown, wet, loose
								26				
								27			ML	**Silt with Sand:** 80% silt, 20% fine grained sand, light brown, moist, medium dense
					Moist	1.5		28				Boring terminated at 28 feet below ground surface.
								29				
								30				
								31				
								32				
								33				
								34				
								35				
								36				
								37				
								38				
								39				
								40				

Delta
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Project No:	I40256277	Client:	ELT		Boring No: B-4
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA		Page 1 of 2
Driller:	Gregg Drilling	Date Drilled:	12/30/2009	Location Map - See Site Map for Location	
Drilling Method:	Direct Push	Hole Diameter:	2"	▽ = First Water	
Sampling Method:	Sample Tube	Hole Depth:	28'	▼ = Static Groundwater	
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
												4" of asphalt
							Air Knife	1			SW	**Well Graded Sand with Gravel:** 70% sand (50% fine, 50% medium grained), 30% fine gravel, brown, moist, dense
								2				
								3				
								4				
					Moist	0.3		5				
								6				
								7				
								8				
								9				
					Moist	0.3		10				
								11			GP	**Poorly Graded Gravel with Sand:** 80% fine gravel (angular to rounded), 20% sand (fine to coarse grained), brown, wet
								12				NO RECOVERY
								13				
								14				
								15				
								16			CL	**Lean Clay:** 95% clay, 5% fine grained sand, grey, moist, medium stiff
								17				
								18				
								19				
					Moist	0.5		20				NO RECOVERY

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Project No:	I40256277	Client:	ELT
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA
Driller:	Gregg Drilling	Date Drilled:	12/30/2009
Drilling Method:	Direct Push	Hole Diameter:	2"
Sampling Method:	Sample Tube	Hole Depth:	28'
Casing Type:	-	Well Diameter:	-
Slot Size:	-	Well Depth:	-
Gravel Pack:	-	Casing Stickup:	-
Elevation		Northing	Easting

Boring No: B-4
Page 2 of 2

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
												NO RECOVERY
								21				
								22				
					▽			23			GP	**Poorly Graded Gravel:** 90% fine gravel,
								24				10% sand (fine to coarse grained), brown, wet, loose
								25				
								26			SP	**Poorly Graded Sand:** 90% fine grained sand,
								27				5% silt, 5% fine gravel, brown, wet, loose
					Wet	0.3		28				Boring terminated at 28 feet below ground surface.
								29				
								30				
								31				
								32				
								33				
								34				
								35				
								36				
								37				
								38				
								39				
								40				

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Project No:	I40256277	Client:	ELT		Boring No: B-5
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA		Page 1 of 2
Driller:	Gregg Drilling	Date Drilled:	12/30/2009	Location Map - See Site Map for Location	
Drilling Method:	Direct Push	Hole Diameter:	2"	▽ = First Water	
Sampling Method:	Sample Tube	Hole Depth:	32'	▼ = Static Groundwater	
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
												4" of asphalt
								1			SW-SC	**Well Graded Sand with Clay and Gravel:** 60% sand (fine to medium grained), 30% fine gravel, 10% clay, brown, moist, medium dense
								2				
								3				
								4				
					Moist	0.2	Air Knife	5				
								6				
								7			CL	**Lean Clay:** 95% clay, 5% fine grained sand, dark brown, moist, stiff
								8				
								9				
								10				
								11			SW-SC	**Well Graded Sand with Clay and Gravel:** 60% sand (fine to coarse grained), 30% fine gravel, 10% clay, brown, moist, medium dense
					Moist	0.3		12				
								13				
								14			CL	**Lean Clay:** 95% clay, 5% fine grained sand, light grey, moist, stiff
					Moist	0.5		15				
								16				
								17				
								18			SW	**Well Graded Sand:** 85% sand (fine to coarse grained), 10% fine gravel, 5% silt, brown, moist, loose
								19			CL	**Lean Clay:** 95% clay, 5% fine grained sand, dark grey, moist, medium stiff
					Moist	0.4		20				

Delta
Consultants, Inc.

Project No:	140256277	Client:	ELT	Boring No: B-5
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA	Page 2 of 2
Driller:	Gregg Drilling	Date Drilled:	12/30/2009	
Drilling Method:	Direct Push	Hole Diameter:	2"	
Sampling Method:	Sample Tube	Hole Depth:	32'	
Casing Type:	-	Well Diameter:	-	
Slot Size:	-	Well Depth:	-	
Gravel Pack:	-	Casing Stickup:	-	
Elevation		Northing		Easting

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					Moist						CL	**Lean Clay:** 95% clay, 5% fine grained sand, dark grey, moist, medium stiff
								21				
								22				
					Dry						SP	**Poorly Graded Sand:** 95% fine grained sand, 5% silt, brown, dry, loose
								23			CL	**Lean Clay with Sand:** 75% clay, 25% coarse grained sand, light grey, moist, medium stiff
								24			ML	**Silt with Sand:** 85% silt, 15% fine grained sand, moist, loose
					Moist	0.4		25				
								26				
								27				
					▽	0.7		28				
								29			SW	**Well Graded Sand:** 95% fine grained sand, 5% silt, brown, wet, loose
								30				Not enough recovery for sample
								31				
								32				Boring terminated at 32 feet below ground surface.
								33				
								34				
								35				
								36				
								37				
								38				
								39				
								40				

Delta
Consultants, Inc.

Project No:	140256277	Client:	ELT	Boring No:	B-7
Logged By:	Ed Weyrens	Location:	15803 East 14th Street, San Leandro, CA	Page	1 of 1
Driller:	Gregg Drilling	Date Drilled:	12/30/2009		
Drilling Method:	Direct Push	Hole Diameter:	2"		
Sampling Method:	Sample Tube	Hole Depth:	24'		
Casing Type:	-	Well Diameter:	-		
Slot Size:	-	Well Depth:	-		
Gravel Pack:	-	Casing Stickup:	-		
Elevation		Northing		Easting	

Location Map - See Site Map for Location

▽ = First Water

▼ = Static Groundwater

Well Completion: Backfill	Well Completion: Casing	Well Completion: Backfill	Well Details	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
							Air Knife	0				4" asphalt
								1			SW-SM	**Well Graded Sand with Silt and Gravel:** 70% sand (40% fine, 30% medium, 30% coarse grained), 20% fine gravel, 10% silt, brown, moist, dense
								2				
								3				
								4				
								5				
					Moist	0.6		6			CL	**Lean Clay:** 95% clay, 5% fine grained sand, black, moist, medium stiff
								7				
								8			ML	**Silt with Sand:** 80% silt, 20% fine grained sand, olive green, dry, medium dense
								9			SW	**Well Graded Sand:** 85% fine to coarse grained sand, 10% fine gravel, 5% silt, brown, dry, loose
											CL	
					Moist	6.0		10				**Lean Clay:** 95% clay, 5% fine grained sand, black, moist, medium stiff
								11				
								12				NO RECOVERY
								13				
								14				
								15				
								16				as above: with more moisture
								17				as above: turning grayish-brown in color
								18				
								19				
					Moist	0.2		20				
				▽				21			CL	**Sandy Lean Clay with Gravel:** 55% clay, 35% fine to coarse grained sand, 10% fine gravel, dark brown, wet, soft
								22			CL	**Lean Clay:** 95% clay, 5% fine grained sand interbedded, very light brown (almost white), wet, medium stiff
								23				
					Wet	0.3		24				as above: dry @ 24'
								25				Boring terminated at 24 feet below ground surface.

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Project No:	140256277	Client:	COP-ELT
Logged By:	ETW	Location:	15803 East 14th Street
Driller:	Gregg	Date Drilled:	4/5/2011
Drilling Method:	HSA	Hole Diameter:	8"
Sampling Method:	Direct Push	Hole Depth:	20'
Casing Type:	PVC	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	19'
Gravel Pack:	#3	▼ First Water Depth:	16'
		▽ Static Water Depth:	10'

Boring/Well No: MW-7
Page 1 of 1

Location Map

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									Asphalt (4 inches thick)
									Class II AB
		dry			1			SM	**Silty Sand**; 65% sand, 30% silt, 5% gravel (large), light brown to dark brown, dry, sand is fine to coarse grain
					2				
					3				
					4				
					5	X			
					6	X			
						X			
		dry	1.4		7	X		ML	**Silt**; 95% silt, 5% fine sand, olive green, dry
					8	X			
						X			
	▽	dry	7.4	MW-7d9	9	X	O	CL	**Clay**, 95% clay, 5% fine sand, olive green, dry
					10	X			
					11	X			
					12	X			
					13	X			
					14	X			
					15	X			
						X			
	▼	wet	5.1	MW-7d16	16	X	O	SW	**Well graded sand w/ gravel**; 80% sand, 15% gravel, 5% silt, dark brown, wet, sand is fine to coarse grain, gravel is small
					17	X		CL	**Clay**; 95% clay, 5% sand, dark brown, wet
		wet			18	X			
						X			
					19	X		ML	**Sandy silt**; 65% silt, 35% fine sand, pale grey, wet
		wet	0.6	MW-7d20	20	X	O		TD = 20 feet bgs
					21				
					22				

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Project No:	I40256277	Client:	COP-ELT
Logged By:	ETW	Location:	15803 East 14th Street
Driller:	Gregg	Date Drilled:	4/5/2011
Drilling Method:	HSA	Hole Diameter:	8"
Sampling Method:	Direct Push	Hole Depth:	20'
Casing Type:	PVC	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	20'
Gravel Pack:	#3	▼ First Water Depth:	
		▽ Static Water Depth:	10.20'

Boring/Well No: MW-8
Page 1 of 1

Location Map

Elevation: | Northing: | Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									Asphalt (4 inches thick)
									Class II AB
		dry			1			ML	**Sandy silt**; 65% silt, 30% fine sand, 5% gravel (large), olive green to black, dry
					2				
					3				
					4				
					5	X			
					6	X			
					7	X			
		dry				X			
					8	X			
			8.1			X			
					9	X	O	CL	
		moist	5.6	MW-8d9		X			**Clay**, 95% clay, 5% fine sand, olive green, moist
	▽				10	X			
						X			
					11	X			
						X			
					12	X			
						X			
		moist	2.2	MW-8d13	13	X	O	SW	**Well graded sand w/ gravel**; 80% sand, 15% gravel, 5% clay, brown, moist, sand is medium to coarse, gravel is small
						X			
		moist	1.2		14	X		CL	**Clay**; 95% clay, 5% fine sand, light brown, moist
						X			
					15	X			
						X			
					16	X			
						X			
					17	X			
						X			
					18	X			
						X			
					19	X		ML	**Silt w/ sand**; 85% silt, 15% fine sand, pale brown, moist
		moist	0.3	MW-8d20		X	O		
					20				TD = 20 feet bgs
					21				
					22				

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Project No:	I40256277	Client:	COP-ELT
Logged By:	ETW	Location:	15803 East 14th Street
Driller:	Gregg	Date Drilled:	4/5/2011
Drilling Method:	HSA	Hole Diameter:	8"
Sampling Method:	Direct Push	Hole Depth:	24
Casing Type:	PVC	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	24'
Gravel Pack:	#3	▼ First Water Depth:	22'
		▽ Static Water Depth:	10.40'

Boring/Well No: MW-9
Page 1 of 2

Location Map

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									Asphalt (4 inches thick)
									Class II AB
		dry			1			SW	**Well graded sand w/ gravel**; 75% sand, 25% gravel, brown, dry, sand is fine to coarse grain, gravel is small to large
					2				
					3				
					4				
					5	X			
						X			
		dry	0.3		6	X		ML	**Silt w/ sand**; 80% silt, 20% fine sand, grey, dry
					7	X			
						X			
		moist	0.8	MW-9d8	8	X	O	CL	**Clay**; 95% clay, 5% fine sand, dark brown, moist
					9	X			
	▽				10	X			
						X			
					11	X			
						X			
					12	X			
						X			
					13	X			Change color to brown
						X			
					14	X			
						X			
					15	X			
						X			
					16	X			
						X			
					17	X			
						X			
					18	X			
						X			
					19	X		CL	**Sandy lean clay**; 70% clay, 30% fine sand, pale brown, moist
		moist	0.7	MW-9d20	20	X	O		
						X			
					21	X			
						X			
	▼				22	X			
		wet				X		SC	**Clayey sand**; 60% fine sand, 40% clay, brown, wet

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Project No:	I40256277	Client:	COP-ELT
Logged By:	ETW	Location:	15803 East 14th Street
Driller:	Gregg	Date Drilled:	4/5/2011
Drilling Method:	HSA	Hole Diameter:	8"
Sampling Method:	Direct Push	Hole Depth:	24'
Casing Type:	PVC	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	24'
Gravel Pack:	#3	First Water Depth:	22'
		Static Water Depth:	10.40'

Boring/Well No: MW-9
Page 2 of 2

Location Map

Elevation: | Northing: | Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
		wet	0.7	MW-9d24	23	X			**Clayey sand**; 60% fine sand, 40% clay, brown, wet
						X			
					24	X	O		TD = 24 feet bgs
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

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Project No:	140256277	Client:	COP-ELT
Logged By:	ETW	Location:	15803 East 14th Street
Driller:	Gregg	Date Drilled:	4/5/2011
Drilling Method:	HSA	Hole Diameter:	8"
Sampling Method:	Direct Push	Hole Depth:	20'
Casing Type:	PVC	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	20'
Gravel Pack:	#3	▼ First Water Depth:	
		▽ Static Water Depth:	11.20'
Elevation:		Northing:	Easting:

Boring/Well No: MW-10
Page 1 of 1

Location Map

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
									Asphalt (4 inches thick)
									Class II AB
		dry			1			Fill	**Well graded gravel w/ sand**; 55% gravel, 45% sand, brown, dry, sand is fine to coarse grain, gravel is large, material is fill
					2				
					3				
					4				
					5	X			
						X			
		dry	5.7		6	X		CL	**Clay w/ sand**; 85% clay, 15% fine sand, black, dry
					7	X			
					8	X			
						X			
			0.7		9	X			Olive green
						X			
		moist	1	MW-10d10	10	X	O	CL	**Clay**; 95% clay, 5% fine sand, black, moist, strong odor
	▽				11	X			
						X			
					12	X			Dark brown
						X			
					13	X			
					14	X			
						X			
		moist	1.1	MW-10d15	15	X	O	SC	**Clayey sand**; 75% fine sand, 25% clay, light brown, moist
					16	X			
						X			
					17	X			
						X			
		moist			18	X		CL	**Clay**; 90% clay, 10% fine sand, brown, moist
					19	X			
						X			Dark brown
			0.9	MW-10d20	20	X	O		
						X			TD = 20 feet bgs
					21	X			
						X			
					22	X			

Appendix B

Historical Groundwater Flow Direction and Gradient Data and Rose Diagram

Historical Groundwater Gradient and Flow Direction Data

76 Service Station No. 6277
15803 East 14th Street
San Leandro, California

Site	Monitoring Date	Groundwater Gradient (feet per foot)	Groundwater Flow Direction														
			N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
6277	04/18/11	0.003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**
	07/26/11	0.004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
	10/14/11	0.005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
	02/22/12	0.002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0
		0.004 Average	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**

Explanation

NA = Not available

Number of Events = 4

Historical Groundwater Flow Directions
76 Service Station No. 6277
15803 East 14th Street
San leandro, California