



May 23, 2006

**RECEIVED**

*By lopprojectop at 3:56 pm, Jun 01, 2006*

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

SUBJECT: RESPONSE TO DECEMBER 16, 2005 LETTER  
Oakland Truck Stop  
8255 San Leandro Street  
Oakland, California

Dear Mr. Wickham:

This letter addresses your comments and concerns outlined in your letter dated December 16, 2005.

**1 Source of Diesel Fuel**

Although ASE has speculated that there may have been a leak in the diesel fuel lines at the dispenser for some time, tests on the lines have always showed the lines as being tight. The most recent test of the underground storage tanks (USTs) was conducted by Dialysis Testing on April 29, 2006 and the USTs tested tight. The diesel piping was tested on May 18, 2006, and the results have not yet been made available to ASE. ASE will provide these results to the Alameda County Health Care Services Agency when available. Upgrades to the diesel system since 1999 reported by the Oakland Truck Stop in the letter attached as Appendix A are as follows:

- In 1999, all pumps were replaced.
- Containment buckets were installed under all fuel pumps in 2004.
- Replaced all fuel pump piping through containment trays and extended them out 20-feet to the main line with fiberglass lines in 2004.
- Pulled out all old aisles and replaced with new 10-inch thick concrete with rebar support and a solid slab in 2004.
- Upgraded all delivery buckets in 2005.
- Replaced all icon line leak detectors in 2005.



A sample of the diesel fuel will be collected during the next sampling event in June and will be sent to a laboratory to determine whether it appears to be from a recent release.

## **2 Proposed Treatment Area**

The proposed ozone sparging system will not be effective in treating diesel fuel, so it will only be used in the southern portion of the site. Diesel fuel has been bailed on a periodic basis from monitoring well MW-1 since 1999. ASE will conduct an assessment at the site to determine the extent of free-floating hydrocarbons in groundwater in areas surrounding monitoring well MW-1. Temporary well points will be drilled with a Geoprobe direct push drill rig in borings surrounding the dispensers. Well screen and blank casing will be placed in the borings and will be left open for 24-hours. After the 24-hour period, the temporary wells will be checked for the presence of free-floating hydrocarbons. A map showing the extent of free-floating hydrocarbons will be included in the report. If no free-floating hydrocarbons are measured, then a groundwater sample will be collected from the well using a disposable bailer. The samples will be decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid, and sealed without headspace. The samples will be labeled and placed in coolers with wet ice for transport to a certified analytical laboratory under appropriate chain-of-custody documentation. The groundwater samples will be analyzed for total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 3550/8015M, and total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX), and fuel oxygenates by EPA Method 8260B. Please see the revised workplan attached to this letter as Appendix B.

## **3 Pipeline Along Southern Property Boundary**

ASE has no information on this pipeline other than its existence. This line was identified during a previous utility clearance for a drilling project. No depth, size, or material was provided to us. ASE does believe, however, based on the pumping test that backfill material in this line could provide a conduit for the movement of groundwater. ASE will research this line further and will, if necessary, conduct another subsurface survey to obtain further information on this line. Details for this portion of the project are presented in the workplan attached as Appendix B.

## **4 Preferential Pathway Survey**

ASE will research the location and depth of subsurface utilities in the site vicinity and determine whether any of these utility lines may be a potential conduit for the migration of groundwater contamination. Details of this proposed survey are described in the workplan attached as Appendix B.

## **5 Groundwater Flow Direction**

Your letter requests a rose diagram showing historic gradients at the site. However, since there is rarely a gradient in only one or two directions at the site during any sampling event, it is not possible to construct a rose diagram that will provide useful information. During most quarters, the gradient will have components in several directions with significant interpretations as to flow



direction and gradient required, which would also make interpretation from a rose diagram misleading.

ASE will conduct measurements of water levels at the site on a single day two hours before low tide and one and two hours after high tide during the next quarter. This data will be included in the next assessment or quarterly monitoring report for the site. Details for this portion of the project are included in the workplan attached as Appendix B.

## **6 & 7      Extent of Soil and Groundwater Contamination**

ASE will conduct a soil and groundwater assessment at the site to further define the extent of hydrocarbons in soil and groundwater. Please see the attached workplan in Appendix B for details of this assessment.

## **8            Monitoring Performance of Ozone Sparging System**

ASE will install one additional groundwater monitoring well at the site to monitor the performance of the proposed ozone-sparging system east of the USTs. Please see the workplan attached in Appendix B for details.

## **9            Free Product Removal**

Free-product has been removed periodically at the site by ASE personnel between August 1999 and November 2002. The schedule for removal of product ranged from weekly to monthly. Oakland Truck Stop employees continued free-product removal every other Friday since November 2002. Records during ASE's period for product removal are tabulated in Appendix C. ASE did not estimate volume of product removed since it was usually a very small amount. ASE did not request Oakland Truck Stop personnel measure product thickness or amount removed after 2002 since they did not have access to an interface probe. ASE only asked that they bail the product off and skim the product into one drum and put the remaining water in a second drum to separate drums that would have to be disposed of as free-product from those that could be disposed of as non-hazardous waste. To date, approximately 135 gallons of free-product have been removed from MW-1, as well as large additional volumes of non-hazardous water beneath the free-floating product. A manifest for the disposal of the most recent product removed from the site is attached as Appendix D. Since there have been periods in the last few months where there have been large thicknesses of free-product followed by days with only a sheen, ASE requested that Oakland Truck Stop personnel measure the thickness of free-product daily starting in April 2006. The product thicknesses were measured from a bailer with a measuring tape and not with an interface probe, so the thicknesses should be considered approximate. These records are also included in Appendix C.

## **10          Unknown USTs at the Site**

Subtronics of Concord, California conducted a magnetometer survey at the site in February 2004 to determine whether there may be any unknown USTs present beneath the site. No USTs were located, although two areas of magnetic anomalies were located beneath areas of reinforced



concrete where USTs could not be ruled out. Subtronics report dated February 7, 2004 is attached as Appendix E.

## 11 Free Product Analysis

A sample of the free product will be collected during the next sampling event at the site and will be analyzed to determine whether the product appears to be aged or from a more recent release. The results will be provided in the June quarterly groundwater monitoring report.

## 12 Quarterly Monitoring

Quarterly groundwater monitoring has been conducted at the site and the report of the most recent sampling event was mailed on May 11, 2006. The next sampling event is scheduled for June 2006, and sampling will continue on a quarterly basis until an approval of a change in the sampling schedule is made from your office. ASE has made no such request, and no request for a modification to this schedule is anticipated for at least a year.

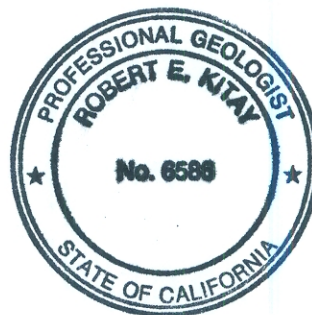
Should you have any questions or comments, please feel free to call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



Robert E. Kitay, R.G., R.E.A.  
Senior Geologist



cc: Mr. Nissan Saidian, 5733 Medallion Court, Castro Valley, CA 94522



## **APPENDIX A**

Diesel System Upgrade Letter



# **SF-Oakland Auto Truck Plaza**

Serving your  
transportation  
needs!

Phone: 510-569-1624  
FAX: 510-562-9686

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May 11, 2006

Attn.: ROBERT

AQUA SCIENCE ENGINEERS

Please note the following changes were made at S.F. Oakland Auto Truck Plaza as follow.

- 1) In 1999 all pumps were replaced.
- 2) Installed containment buckets under all Fuel Pumps in 2004.
- 3) Replaced all fuel pump piping through containment trays and extended them out 20 ft to our main line with fiber glass lines 2004.
- 4) Pull out all old aisles and replaced with new concrete 10" thick w/rebar support and a solid slab 2004.
- 5) Upgraded all delivery buckets in 2005.
- 6) Replaced all Incon line leak detectors 2005.

Thanks

  
Joseph Zadik

**8255 San Leandro Street, Oakland, Ca 94621**



## **APPENDIX B**

### Workplan



May 22, 2006

REVISED WORKPLAN  
for  
ADDITIONAL SOIL AND GROUNDWATER ASSESSMENT  
at  
Oakland Truck Stop  
8255 San Leandro Street  
Oakland, California

Submitted by:  
AQUA SCIENCE ENGINEERS, INC.  
208 West El Pintado, Suite C  
Danville, CA 94526  
(925) 820-9391



## 1.0 INTRODUCTION

This submittal presents a revision to Aqua Science Engineers, Inc. (ASE)'s December 4, 2003 workplan for additional soil and groundwater assessment activities at the Oakland Truck Stop located at 8255 San Leandro Street in Oakland, California (Figure 1). The proposed site assessment activities were initiated by Mr. Nissan Saidian, owner of the property, as requested by the Alameda County Health Care Services Agency (ACHCSA) based on the requirements outlined in a letter dated December 16, 2005.

## 2.0 OUTLINE OF PROPOSED SCOPE OF WORK (SOW)

The purpose of this assessment is to further define the extent of soil and groundwater contamination at the site and to assess the risk associated with the presence of soil and groundwater contamination beneath the site. The scope of work presented in ASE's December 4, 2003 workplan will be revised to include the following scope of work:

- 1) Research the location and depth of subsurface utilities in the site vicinity and determine whether any of these utility lines may be a potential conduit for the migration of groundwater contamination. ASE will pay particular attention to the conduit on the southern property line that appears to be influencing groundwater conditions at the site. If needed based on this study, additional borings will be proposed to investigate potential impacts from these conduits. If no additional information can be obtained regarding the conduit on the southern property line that appears to be influencing groundwater conditions at the site, then a subsurface line locating service will be utilized to obtain a video of this line and trace its location and depth.
- 2) Obtain a drilling permit from the Alameda County Public Works Agency.
- 3) Obtain access agreements from the property owners to the east and south of the site to allow for drilling on these properties.
- 4) Install and develop one additional groundwater monitoring well east of the underground storage tanks (USTs) to monitor the performance of the proposed ozone-sparging system.
- 5) Install temporary wells in areas surrounding monitoring well MW-1 to define the extent of free-floating hydrocarbons.
- 6) Drill shallow soil borings in on and off-site locations using a Geoprobe. Soil samples will be collected continuously and groundwater samples will be collected from the first water-bearing zone encountered.
- 7) Drill deeper soil borings in four locations at the site using a Sonic drill rig to a depth of 50-feet bgs. Soil samples will be collected continuously and groundwater samples will be collected from adjacent borings using a Hydropunch sampler in each water-bearing zone.

- 8) Following collection of the soil and groundwater samples, backfill the borings described in Tasks 6 and 7 with neat cement placed by tremie pipe.
- 9) Analyze soil and groundwater samples collected from each boring described in tasks 5, 6 and 7 at a CAL-EPA certified analytical laboratory for TPH-D and TPH-MO by EPA Method 8015 and TPH-G, BTEX, fuel oxygenates, ethanol and methanol by EPA Method 8260B.
- 10) Measure water levels in site wells at several times during the day with timing related to tide tables.
- 11) Prepare a report presenting results from this assessment. This report will present tabulated analytical results, geologic cross-sections, potentiometric surface maps, an updated site conceptual model, conclusions, and recommendations.

### 3.0 DETAILS OF PROPOSED SOW

Details of the assessment are presented below.

#### TASK 1 - *CONDUCT A SUBSURFACE CONDUIT SURVEY FOR THE SITE VICINITY*

Research the location and depth of subsurface utilities in the site vicinity and determine whether any of these utility lines may be a potential conduit for the migration of groundwater contamination. ASE will pay particular attention the line on the southern property boundary that appears to be influencing groundwater conditions at the site. If needed based on this study, additional borings will be proposed to investigate potential impacts from these conduits. If no additional information can be obtained regarding the line on the southern property boundary that appears to be influencing groundwater conditions at the site, then a subsurface line locating service will be utilized to obtain a video of this line and trace its location and depth.

#### TASK 2 - *OBTAIN A DRILLING PERMIT FROM THE ALAMEDA COUNTY PUBLIC WORKS AGENCY*

Prior to drilling, ASE will obtain a drilling permit from the Alameda County Public Works Agency. ASE will also notify Underground Service Alert (USA) to have underground utility lines marked in the site vicinity at least 48-hours prior to drilling.

#### TASK 3 - *OBTAIN ACCESS AGREEMENTS FROM NEIGHBORING PROPERTY OWNERS TO ALLOW FOR DRILLING ON THEIR PROPERTY*

ASE will obtain access agreements from the property owners to the east and south of the site. Please note that in April 2004 ASE tried unsuccessfully to obtain an access agreement from BART to drill under their tracks. ASE paid fees and provided plans to BART to obtain access and BART would not grant us access for this project. The request was appealed and ASE never heard the results of the appeal. This has been the main reason for the delay in implementing the December 4, 2003 workplan. In addition, ASE has tried to obtain access to drill on Southern



Pacific Railroad property at a number of other sites, and fees and insurance for this access would cost over \$75,000.00. For this reason, unless BART will allow this access, then the next property beyond the railroad tracks is the Mothers Cookies facility. ASE has knowledge that this property is currently for sale and it is unlikely that they would allow access to this property during the process. However, it is likely that groundwater sampling will take place during the property transaction due diligence and ASE hopes that the results will become part of the public record and available to ASE for review. If all attempts to gain access on the properties to the east are not successful, then ASE will make another attempt to drill in San Leandro Street. Since it was not possible to drill on the eastern parking lane during previous attempts due to a deeper non-penetratable slab or footing, then ASE will attempt to drill in center lanes on San Leandro Street. If this is needed, then an excavation permit will be obtained from the City of Oakland to allow for this drilling.

Regardless of the situation with access agreements to the east, ASE will obtain an access agreement to drill on the property south of the site and will not delay the implementation of the remaining portions of this assessment if a delay is encountered in obtaining access agreements.

*TASK 4 - INSTALL AND DEVELOP ONE ADDITIONAL GROUNDWATER MONITORING WELL EAST OF THE UNDERGROUND STORAGE TANKS TO MONITOR THE PERFORMANCE OF THE PROPOSED OZONE-SPARGING SYSTEM*

ASE will drill one soil boring at the site in the location shown on Figure 2. A groundwater monitoring well will be installed in this boring to monitor the performance of the proposed ozone-sparging system. The boring will be drilled using a drill rig equipped with 8-inch diameter hollow-stem augers. A qualified ASE geologist will direct the drilling. Undisturbed soil samples will be collected at least every 5-feet, at lithographic changes, and from just above the water table for subsurface hydrogeologic description and possible chemical analysis. The samples will be described by the ASE geologist according to the Unified Soil Classification System (USCS). The samples will be collected in brass tubes using a split-barrel drive sampler advanced ahead of the auger tip by successive blows from a 140-lb. hammer dropped 30-inches. Each sample will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-EPA certified analytical laboratory.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with a photoionization detector (PID). The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the PID will measure the vapor through a small hole punched in the bag. These PID readings will be used as a screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.



All sampling equipment will be cleaned in buckets with brushes and an Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in labeled 55-gallon steel drums until off-site disposal can be arranged.

ASE will complete the boring as a 2-inch diameter groundwater monitoring well. The well will be constructed with 2-inch diameter, flush-threaded, schedule 40, 0.020-inch slotted PVC well screen and blank casing. The well casing will be lowered through the augers and #3 Monterey sand will be placed in the annular space between the well casing and the borehole to approximately 1-foot above the screened interval. Approximately 0.5-foot of bentonite pellets will be placed on top of the sand pack and hydrated with deionized water. This bentonite layer will prevent the cement sanitary seal from infiltrating into the sand pack. Cement mixed with 3 to 5 percent bentonite powder by volume will be used to fill the annular space between the bentonite layer and the surface to prevent surface water from infiltrating into the well. The well head will be protected by a locking well plug and an at-grade, traffic-rated well box (See Figure 3 - Typical Monitoring Well).

The well will be screened to monitor the first water-bearing zone encountered. ASE anticipates that the well will be screened between 4-feet below ground surface and 14-feet bgs.

After waiting at least 72 hours after well construction, the new well will be developed using at least two episodes of surge block agitation and bailer and/or pump evacuation. At least ten well casing volumes of water will be removed during the development, and development will continue until the water appears to be reasonably clear. The well development purge water will be stored temporarily on-site in sealed and labeled 55-gallon steel drums until off-site disposal can be arranged.

**TASK 5 - *INSTALL TEMPORARY WELLS IN THE VICINITY OF MONITORING WELL MW-1 TO FURTHER DEFINE THE EXTENT OF FREE-FLOATING HYDROCARBONS***

ASE will drill six borings in areas surrounding monitoring well MW-1 using a Geoprobe or similar type drill rig (Figure 2). Temporary PVC casing will be placed in the boring and will be left overnight to determine whether free-floating hydrocarbons will accumulate in the temporary wells. The casing will be slotted to a depth above the water table and blank casing will be placed above the screened interval. The surface will be sealed overnight to prevent infiltration of contaminants from the surface.

The following day, the casings will be checked for the presence of free-floating hydrocarbons using an interface probe and a bailer. The thickness of any accumulated free-floating hydrocarbons will be measured. If no free-floating hydrocarbons are present, a water sample will be collected and analyzed for TPH-D and TPH-MO by modified EPA Method 3510/8015M, and TPH-G, BTEX, oxygenates, ethanol and methanol by EPA Method 8260B.

All sampling equipment will be cleaned in buckets with brushes and an Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon steel drums and stored on-site until off-site disposal can be arranged.

Following the collection of any samples, the borings will be backfilled with neat cement placed by tremie pipe.

**TASK 6 - *DRILL SHALLOW SOIL BORINGS ON AND OFF-SITE AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS FOR ANALYSIS***

ASE will drill three borings on the north and northwestern portions of the property and will collect soil and groundwater samples to define the extent of groundwater contamination both horizontally and vertically at the site (Figure 2). These borings will be drilled using a Geoprobe or similar type direct-push drilling rig. In addition, three borings will be drilled to define the extent of contamination to the east, where previous attempts at drilling in San Leandro Street met with refusal. These borings will be placed under the BART tracks or in other accessible areas in this direction depending on what property an access agreement can be secured. Two borings will also be drilled on the property to the south of the site.

Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and possible chemical analysis. The geologist will describe the soil according to the USCS. The samples will be collected in acetate tubes using a drive sampler advanced as the boring progresses. Samples to be retained for analysis will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-EPA certified analytical laboratory.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with a PID. The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the PID will measure the vapor through a small hole, punched in the bag. These PID readings will be used as a screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.

A groundwater sample will be collected from each boring. Drilling will be halted at the water table and a Hydropunch or similar type device will be utilized to collect groundwater samples from the boring. The groundwater samples will be contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid and sealed without headspace. The samples will then be labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples will then be sealed in plastic bags and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

All sampling equipment will be cleaned in buckets with brushes and an Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon steel drums and stored on-site until off-site disposal can be arranged.



**TASK 7 - DRILL DEEPER SOIL BORINGS NEAR THE USTS AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS FOR ANALYSIS**

In addition to the borings described in Task 6 above, the definition of the vertical extent of contamination will require deeper borings in the vicinity of the USTs and near the southern property line (Figure 2). ASE will drill four deeper borings in the following locations. Borings will be located adjacent to monitoring wells MW-3 and MW-9, between monitoring wells MW-1 and MW-3, and between borings BH-F and BH-G. These borings will be drilled using a sonic drill rig with conductor casing. Groundwater samples will be collected in each significant water-bearing zone. If any water-bearing zone is over 5-feet thick, samples will be collected every 5-feet within a zone using a Hydropunch or other discrete depth sampler. ASE anticipates that these borings will extend to 50-feet depending on the lithology encountered.

Soil borings will be drilled using a sonic drill rig to a depth of 50-feet bgs collecting soil samples continuously. This method allows the boring to advance with an external conductor casing to minimize potential cross-contamination into deeper water-bearing zones. Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and possible chemical analysis. The internal drive sampler is lined with acetate tubes and the internal sampler will be removed and then replaced after each sampling run.

The geologist will describe the soil according to the USCS. Samples to be retained for analysis will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-EPA certified analytical laboratory. Samples will be retained for analysis at least every 5-feet, in areas of obvious soil contamination and at each lithologic contact.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with a PID. The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the PID will measure the vapor through a small hole, punched in the bag. These PID readings will be used as a screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.

Once the lithology is known, ASE will collect groundwater samples from a second boring drilled immediately adjacent to the first boring. Groundwater samples will be collected from targeted zones using a Hydropunch sampler. Target sampling locations will include at least one location from each identified water-bearing zone. If water-bearing zones are greater than 5-feet in thickness, then multiple samples will be collected from the zones at vertical intervals of 5-feet.

In each boring, the Hydropunch will be driven into the targeted sampling zone. The Hydropunch sampler will be checked to verify that there has been no leakage of groundwater into the rods prior to opening. Once the rods are shown to be dry, the Hydropunch screen will be opened and groundwater will be allowed to enter the rods. Groundwater samples will then be collected from



within the rods using a bailer. Groundwater samples will then be decanted from the bailer into 40-ml VOA vials, preserved with hydrochloric acid and sealed without headspace. The samples will then be labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples will then be sealed in plastic bags and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

All sampling equipment will be cleaned in buckets with brushes and an Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon steel drums and stored on-site until off-site disposal can be arranged.

If the extent of groundwater contamination is not defined (either laterally or vertically) based on these samples, then additional borings will be drilled to complete these definitions. If deeper drilling is required to complete the vertical definition, then ASE will likely utilize CPT for the deeper boring.

#### *TASK 8 - BACKFILL THE BORINGS WITH NEAT CEMENT*

Following collection of the soil and groundwater samples, the boreholes described in Tasks 6 and 7 will be backfilled with neat cement placed by tremie pipe.

#### *TASK 9 - ANALYZE SOIL AND GROUNDWATER SAMPLES COLLECTED FROM THE BORINGS*

Each soil and groundwater sample will be analyzed at a CAL-EPA certified environmental laboratory for TPH-D and TPH-MO by modified EPA Method 3510/8015M, and TPH-G, BTEX, oxygenates, ethanol and methanol by EPA Method 8260B.

#### *TASK 10 - COLLECT WATER LEVEL MEASUREMENT SEVERAL TIMES DURING A SINGLE DAY RELATED TO HIGH AND LOW TIDES*

ASE will measure water levels in all site wells on a single day two hours before low tide and one and two hours after high tide during the next quarter. This data will be included in the next assessment or quarterly monitoring report for the site. The tide timing will be based on published tide tables for the Oakland Inner Harbor.

#### *TASK 11 - PREPARE A SUBSURFACE ASSESSMENT REPORT*

ASE will prepare a subsurface assessment report outlining the methods and findings of this assessment. This report will include a summary of the results, the site background and history, description of the work completed, tabulated soil and groundwater analytical results, geologic cross-sections, potentiometric surface maps, an updated site conceptual model, conclusions and recommendations. Formal boring logs, analytical reports, and chain of custody documents will be included as appendices. This report will be submitted under the seal of a California registered civil engineer or geologist.

#### 4.0 SCHEDULE

ASE will proceed with this project immediately upon approval of this workplan by the ACHCSA.

Should you have any questions or comments, please call us at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.



Robert E. Kitay, P.G., R.E.A.  
Senior Geologist



cc: Mr. Nissan Saidian, 5733 Medallion Court, Castro Valley, CA 94522

Mr. Jerry Wickham, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502

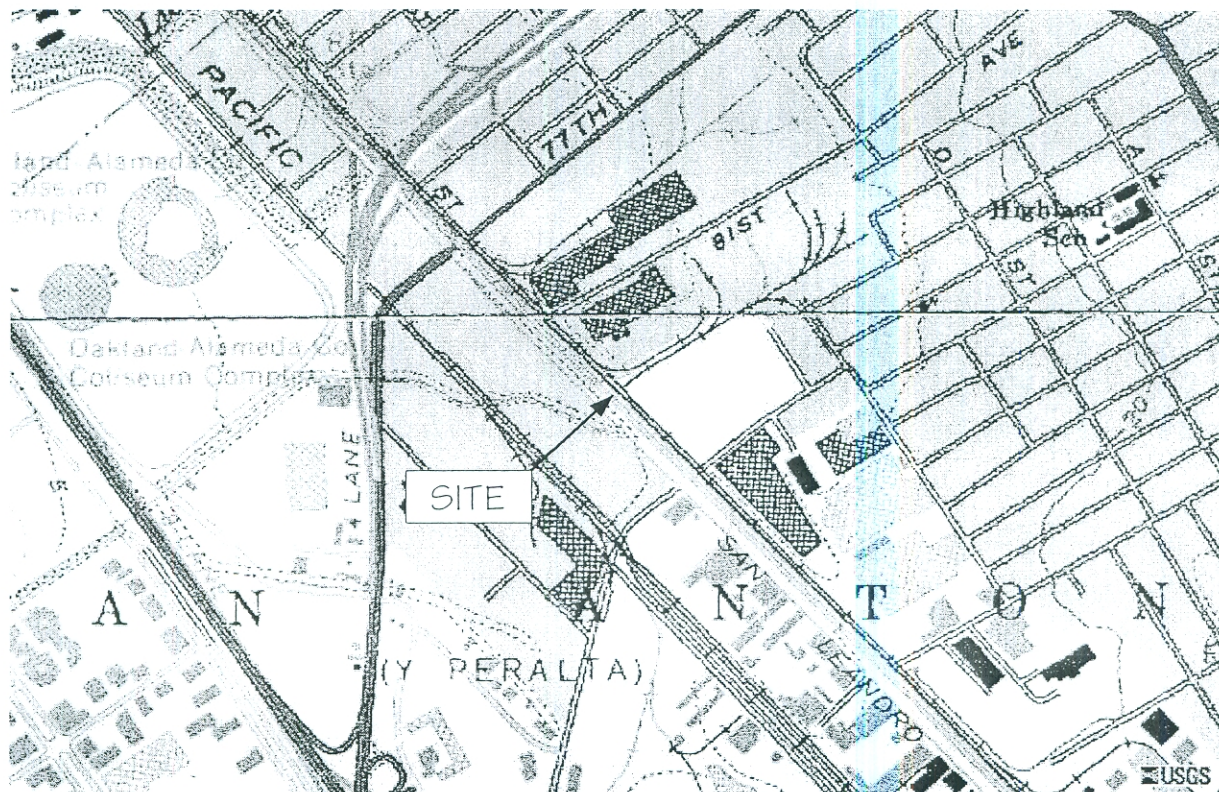
Ms. Betty Graham, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, CA 94612

## **FIGURES**





NORTH

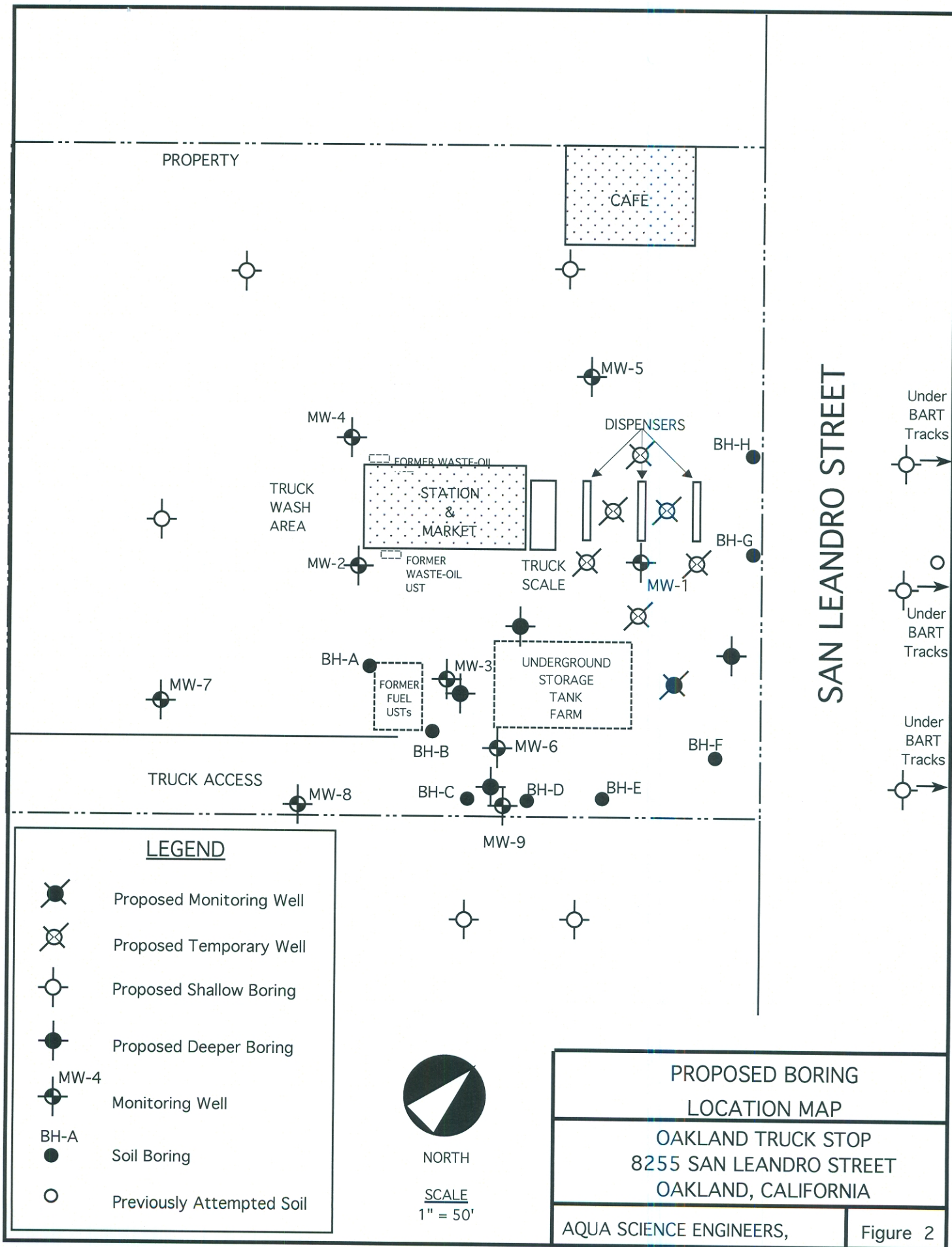


# LOCATION MAP

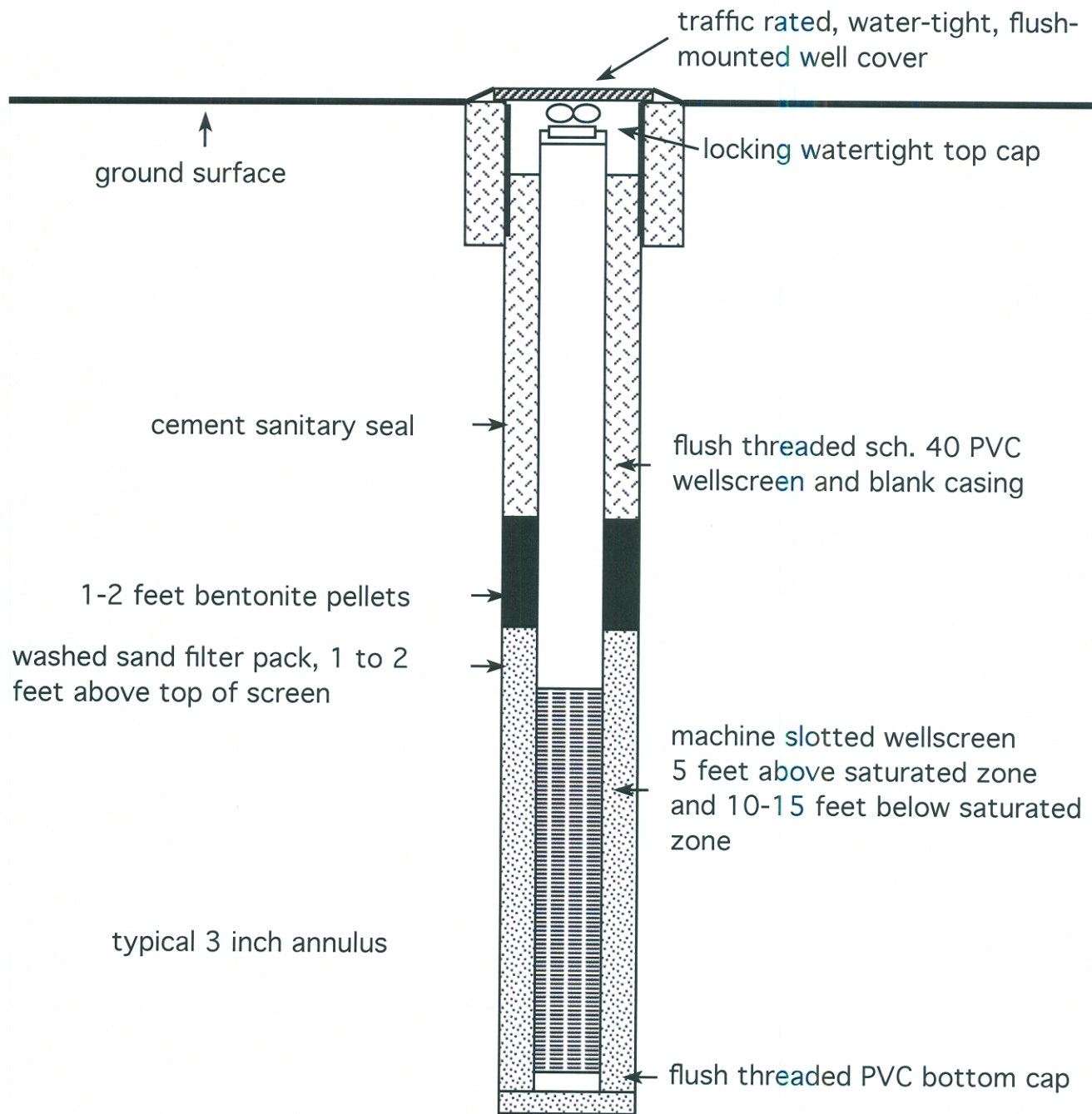
OAKLAND TRUCK STOP  
8255 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1







TYPICAL  
MONITORING WELL CONSTRUCTION  
IN CROSS SECTION



## **APPENDIX C**

### Free-Product Thickness Records

# Product Thickness Measurements

Oakland Truck Stop

8255 San Leandro Street, Oakland, CA

Well ID	Date	Product Depth (feet)	Water Depth (feet)	Product Thickness
MW-1	8/27/99	6.54	6.90	0.36
	9/10/99	6.60	6.78	0.18
	9/24/99	6.57	6.65	0.08
	10/8/99	6.59	6.87	0.28
	10/22/99	6.58	6.81	0.23
	11/2/99	6.63	6.94	0.31
	11/19/99	6.79	6.91	0.12
	12/6/99	6.81	6.93	0.12
	12/29/99	6.78	6.96	0.18
	1/14/00			0.14
	1/28/00			0.18
	3/8/00			0.20
	3/30/00			0.21
	4/21/00			0.18
	5/11/00	6.21	6.47	0.26
	6/14/00	5.85	6.57	0.72
	6/30/00			0.68
	7/7/00			0.54
	7/31/00			0.62
	8/10/00			0.74
	8/23/00			0.71
	12/11/00	6.10	6.70	0.60
	7/20/01	6.56	6.83	0.27
	7/27/01	6.59	6.83	0.24
	8/3/01	6.59	6.82	0.23
	8/10/01	6.63	6.87	0.24
	8/24/01	6.53	6.73	0.20

## Product Thickness Measurements

Oakland Truck Stop  
8255 San Leandro Street, Oakland, CA

Well ID	Date	Product Depth (feet)	Water Depth (feet)	Product Thickness
	8/31/01	6.59	6.78	0.19
	9/4/01	6.60	6.80	0.20
	9/18/01	6.54	6.72	0.18
	9/28/01	6.51	6.67	0.16
	10/5/01	6.55	6.70	0.15
	3/11/02	4.47	7.47	3.00
	3/29/02	4.93	7.35	2.42
	4/5/02	5.39	6.47	1.08
	4/22/02	4.67	6.80	2.13
	5/9/02	5.93	6.78	0.85
	5/16/02	5.95	6.79	0.84
	5/24/02	5.57	6.30	0.73
	5/31/02	5.69	6.46	0.77
	6/6/02	5.82	6.49	0.67
	6/13/02	5.95	6.84	0.89
	6/20/02	5.93	6.62	0.69
	7/11/02	5.97	6.76	0.79
	8/6/02	6.17	7.01	0.84
	8/19/02	6.20	6.92	0.72
	9/4/02	6.35	6.89	0.54
	9/13/02	6.31	6.86	0.55
	9/20/02	6.33	6.78	0.45
	10/1/02	6.42	6.84	0.42
	10/25/02	6.41	6.68	0.27
	11/12/02	5.60	5.86	0.26



AL

Company SFO

## Tracking Fuel Sheet

Month April

Date	<del>Batch</del>	Miles	Fuel D/G	Gallons	Price Per	Total
1	X					
2	X					
3	30					
4	32					
5	30					
6	30					
7	28					
8	X					
9	X					
10	28					
11	32					
12	30					
13	30					
14	30					
15	X					
16	X					
17	30					
18	34					
19	32					
20	36					
21	36					
22	X					
23	X					
24	32					
25	32					
26	30					
27	30					
28	32					
29	X					
30	X					
31	—					

BAILING DURING HIGH TIDE

## Tracking Fuel Sheet

Company SFOMonth May

Date	Unit#	Miles	Fuel D/G	Gallons	Price Per	Total
5/1	Instr					
2	36					
3	30					
4	30					
5	32					
6	30					
7	X					
8	X					
9	32					
10	30					
11	30					
12	32					
13	36					
14	X					
15	X					
16	30					
17	30					
18	30					
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Attn Robert at Ague

1-925-837-4853

## **APPENDIX D**

### Free-Product Disposal Manifest



IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-832-7550

GENERATOR

FACILITY

<b>UNIFORM HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No. C A L 0 0 0 2 6 8 8 1 1 5 9 1 7 3		Manifest Document No. 1 7 3		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address OAKLAND TRUCK STOP 8255 SAN LEANDRO ST. OAKLAND, CA 94621						A. State Manifest Document Number 25059173							
4. Generator's Phone (510) 268-0211						B. State Generator's ID							
5. Transporter 1 Company Name ASBURY ENVIRONMENTAL SERVICES						C. State Transporter's ID [Reserved.]							
6. US EPA ID Number C A D 0 2 8 2 7 7 0 3 6						D. Transporter's Phone (800) 974-4495							
7. Transporter 2 Company Name						E. State Transporter's ID [Reserved.]							
8. US EPA ID Number						F. Transporter's Phone							
9. Designated Facility Name and Site Address D/K ENVIRONMENTAL 3650 E. 26TH STREET LOS ANGELES, CA 90023						G. State Facility's ID CA1080033681							
10. US EPA ID Number C A T 0 8 0 0 3 3 6 8 1						H. Facility's Phone (323) 268-5056							
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste Number State EPA/Other	
a. COMBUSTIBLE LIQUID, NOS, (DIESEL), NA1993, PGIII						001 DM 0101050		G				State 223 EPA/Other NONE	
b.												State EPA/Other	
c.												State EPA/Other	
d.												State EPA/Other	
J. Additional Descriptions for Materials Listed Above 11A. 1 X SC G 360216-36						K. Handling Codes for Wastes Listed Above a. 01 b. c. d.							
15. Special Handling Instructions and Additional Information USE PPE EMERGENCY CONTACT: CHEMTREC 800-424-9300 NAERG: 128 ORDER# N250351													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.  If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name Al VIERRE						Signature Al Vierra				Month Day Year 01/21/06			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Carlos Borjas						Signature Carlos Borjas				Month Day Year 01/21/06			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name						Signature				Month Day Year			
19. Discrepancy Indication Space													
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name RODNEY ANANDA													
Signature A 22						Month Day Year 02/27/06							

DO NOT WRITE BELOW THIS LINE.

## **APPENDIX E**

Subtronics Report Dated February 7, 2004

**subtronic corp**National Utility Location  
Contractors Association Member2430 Sprig Court, Suite C  
Concord, California 94520  
Telephone (925) 686-3747  
Fax No. (925) 686-5281  
[www.subtronic.com](http://www.subtronic.com)**GEOPHYSICAL SUBSURFACE INVESTIGATION****8255 San Leandro Street****Oakland, CA****For****Aquasciences****February 7<sup>th</sup> 2004****Project Location:**

Oakland Truck Stop, 8255 San Leandro Street, Oakland, California

**Objective:**

The objective of the investigation is to determine the possible presence and location of external underground storage tanks.

**Site History:**

Two fuel tanks and one waste oil tank were removed approximately five years ago.

**Site Description:**

8255 San Leandro Street. is located on the east side of the street and covers approximately one acre. It is currently used as a truck maintenance and refueling facility.

There is a service station and market centrally located on the lot, with gas and diesel dispensers on the north-east side and five underground storage tanks on the south-east side.

In order to grid the survey sites the lot was divided into four rectangles, Area 1 being on the north-west side of the building, Area 2 is north-east, Area 3 is south-east and Area 4 is south-west.

**Survey Methodology:**

First, a visual inspection was conducted at each site. Underground utilities, vaults, boxes, exposed piping, topographic mounds and depressions were noted. Exposed piping or risers found on the site were energized, traced out and the surface location was spray painted on the ground.

The split box locator was used to scan the site in both directions, and utilities detected by the locator were marked on the ground.



Prior to collecting magnetometer data, grids were laid out on 5' centers. The data collected from the cesium vapor magnetometer was stored in the instrument and later downloaded for analysis.

### **Geophysical Equipment**

The specialized equipment used at the site includes a TW-6 M-Scope and an 858 Magnetometer.

#### *TW-6 M-Scope*

The Fisher TW-6 M-Scope is a split box inductive locator and metal detector mounted on a four-foot rod. The split box locator can detect metal lines "inductively". The M-Scope is also used to detect buried metallic objects such as manhole covers, underground storage tanks, etc...

Data from the TW6 is not stored, however a visual and audio signal indicates the presence of metal objects when the instrument is passed over them.

#### *858 Magnetometer*

The 858 Magmapper by Geometrics is a magnetometer that detects the earth's magnetic field. This magnetometer uses new technology to get precise readings at rates up to 10 times per second. This enables Subtronic to collect high resolution data over large areas. The data is stored on the console connected to the magnetometer. Following the data collection, the data is then downloaded to a computer for processing by a software, contouring package. The results are analyzed and anomalies identified.

### **Survey Results:**

Some areas were not surveyed, the facility operates 24/7 and some vehicles under repair were not movable. The area immediately to the south east of the building was not included because of this. Other vehicles, mostly large trucks, were moved to the perimeter of the property where the likelihood of U.S.T.'s is reduced. Metal drums, pipes and vehicle parts were removed from the search area.

Some structures such as truck ramps and a thirty foot length of pipe could not be removed from the survey area. These appear as significant magnetic fields on the contour maps and are labeled accordingly. Some utilities, including fuel pipes and electrical conduits are also identified and tend to follow the typical repeating bi-polar pattern of a linear form.

#### **Conclusion:**

The contour maps clearly illustrate the areas of high magnetism and areas where there are no ferrous metal objects.

Most of the magnetic anomalies are identified as utilities or above ground structures and are labeled accordingly.

One area, (shown on Area 1 contour map) to the north east of the station and market, contains anomalies that are not identified. These objects are under reinforced concrete and are therefore, not easy to identify. The possibility of them being U.S.T.'s cannot be

ruled out, they could also be foundations of previous steel structures on the site, or possibly the site of a previous service island.

A second area shown on Area 2 contour map shows several anomalies that are also under a reinforced concrete slab. The close proximity of the service islands and pumps in this area have made the distinguishing of buried objects virtually impossible in this area.

**Recommendations:**

We recommend further investigation of those areas under reinforced concrete that appear to harbor buried ferrous objects of some weight, unless further light can be shed from historical data or memory as to what these buried objects may be.

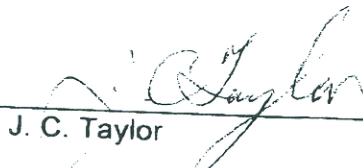
We would use ground penetrating radar as one possible method of further identification.

**Limitations:**

The subsurface geology, object size and composition, burial depth, affect the size and shape of geophysical anomalies, which may impede their detection. Geophysical anomalies may not represent unique solutions. Apparently similar anomalies may be created by different subsurface phenomena.

The limits of discernment of this magnetic survey are the detection of objects within five feet of metal fences, buildings, vehicles and other identified metal objects.

Report Prepared By:

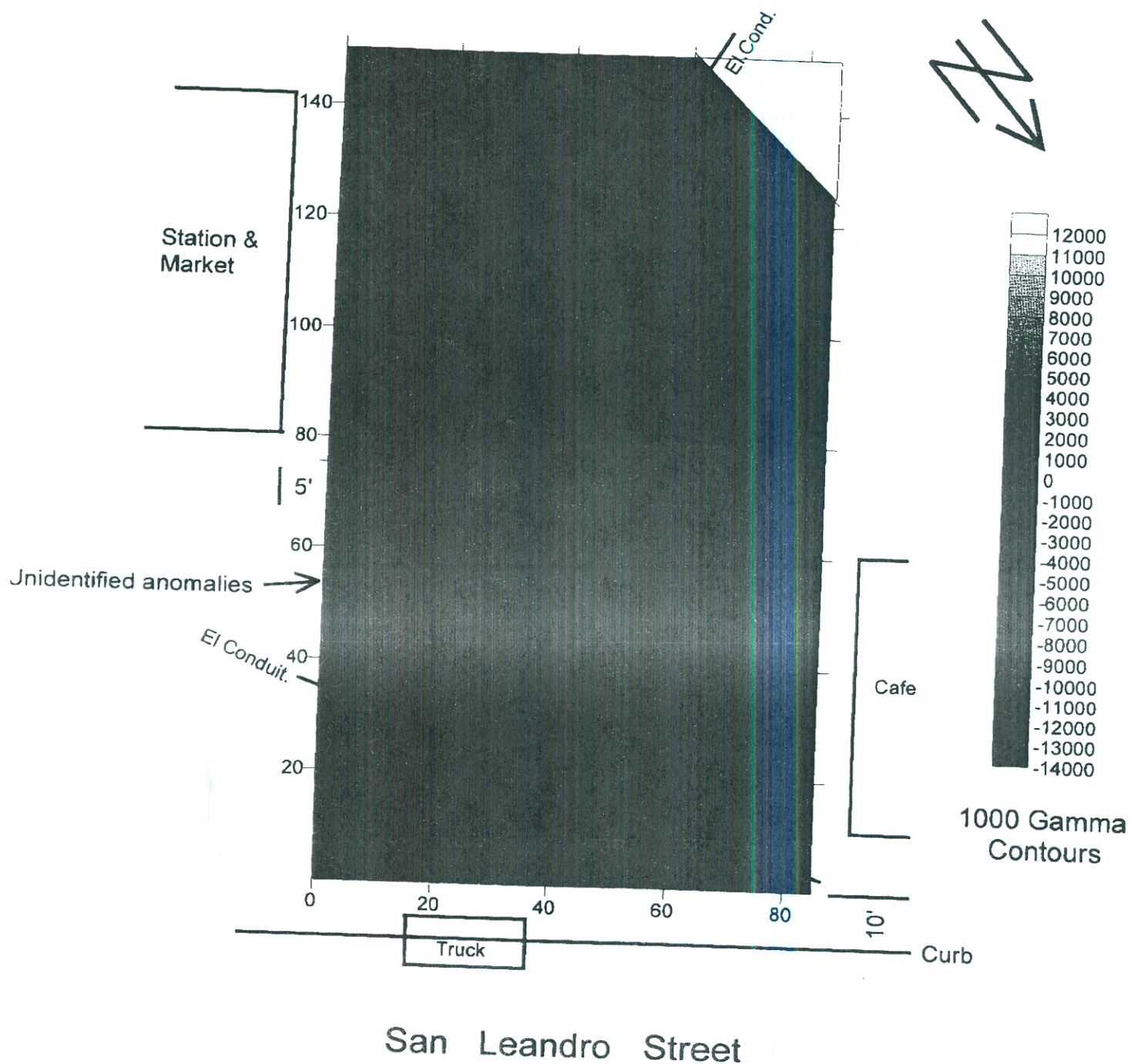
  
J. C. Taylor



Gradient Survey by Subtronic Corp.  
Oakland Truck Stop  
8255 San Leandro Street, Oakland

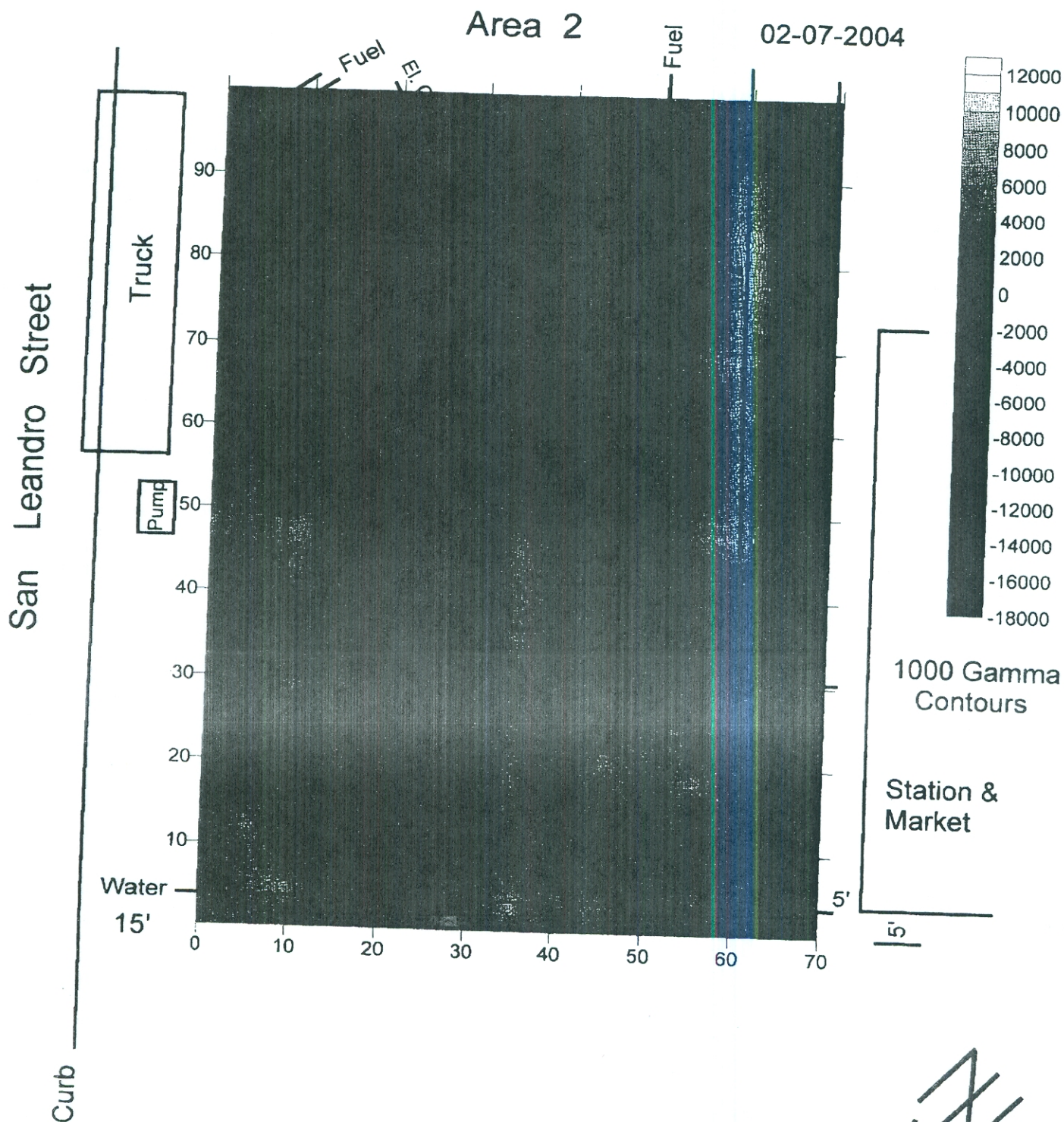
Area 1

02-07-2004





Gradient Survey by Subtronic Corp.  
Oakland Truck Stop  
8255 San Leandro Street, Oakland

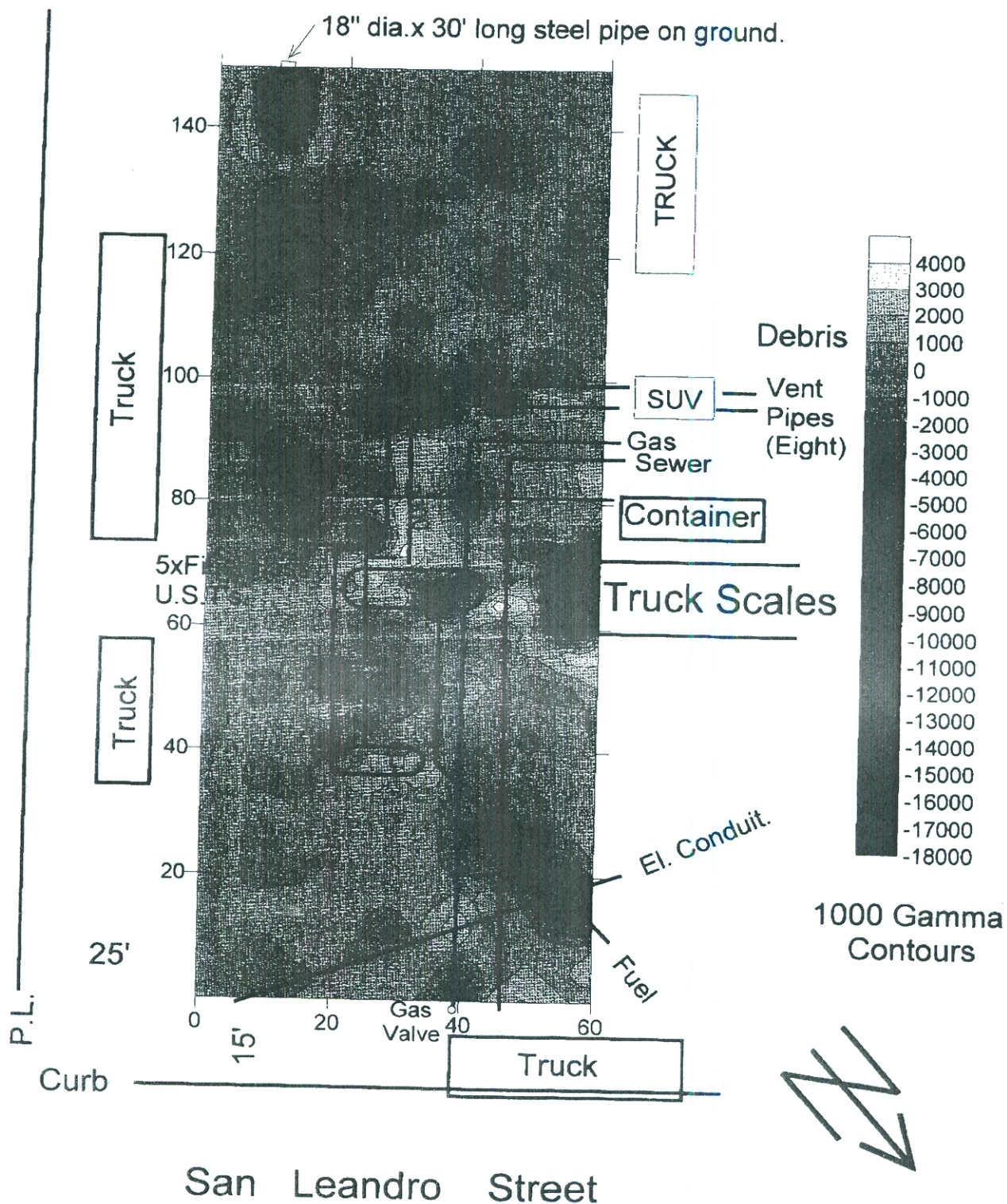




# Gradient Survey by Subtronic Corp. Oakland Truck Stop 8255 San Leandro Street, Oakland

Area 3

02-07-2004



Gradient Survey by Subtronic Corp.  
Oakland Truck Stop  
8255 San Leandro Street, Oakland

Area 4

02-07-2004

18" dia. x 30' long steel pipe on ground.

