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Aqua Science Engineers, Inc. 208 West El Pintado, Suite C, Danville, CA 94526 (925) 820-9391 - Fax (925) 837-4853 - www.aquascienceengineers.com

October 23, 2006

WORKPLAN
for
ADDITIONAL SOIL AND GROUNDWATER ASSESSMENT
at
Lim Property
250 8th Street
Oakland, California

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



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1.0 INTRODUCTION

This report presents Aqua Science Engineers, Inc.'s (ASEs) workplan for additional soil and groundwater assessment at the Lim Property located at 250 8th Street in Oakland, California (Figures 1 and 2). This workplan also completes the requirements requested by the Alameda County Health Care Services Agency (ACHCSA) in their letters dated November 7, 2005 and May 12, 2006. The Remedial action plan (RAP) was previously submitted on August 4, 2006, which contained the other items requested in the letters.

2.0 SITE HISTORY AND BACKGROUND INFORMATION

2.1 May 1992 Underground Storage Tank Removal

A gasoline service station previously occupied the site. In May 1992, ASE removed ten underground fuel storage tanks (USTs) from the site. The USTs consisted of one (1) 10,000-gallon gasoline tank, one (1) 5,000-gallon diesel tank, three (3) 2,000-gallon gasoline tanks, one (1) 2,000-gallon diesel tank, three (3) 500-gallon gasoline tanks and one (1) 250-gallon waste oil tank. Up to 10,000 parts per million (ppm) total petroleum hydrocarbons as gasoline (TPH-G) and 5,900 ppm total petroleum hydrocarbons as diesel (TPH-D) were detected in soil samples collected during the tank removal.

2.2 December 1992 through March 1993 Soil Overexcavation

Between December 1992 and March 1993, All Environmental of San Ramon, California overexcavated 1,762 cubic yards of soil from the site and off-hauled the soil to the BFI Landfill in Livermore, California for disposal (Figure 2). Analytical results show that all on-site soil with hydrocarbon concentrations greater than 10 ppm was removed from the site with the exception of soil along the 8th Street shoring. Up to 1,800 ppm TPH-G and 120 ppm TPH-D were detected in soil samples collected along the shoring indicating that contamination likely extends below 8th Street. This contamination left in place may still be a source for groundwater contamination.

2.3 January 1995 Monitoring Well Installation

In January 1995, ASE installed monitoring wells MW-1 and MW-2 at the site (Figure 2). High hydrocarbon concentrations were detected in monitoring well MW-2, downgradient of the site. Moderate hydrocarbon concentrations were detected in on-site monitoring well MW-1.

2.4 January 1996 Borings and Groundwater Sampling

In July 1996, ASE collected groundwater samples from each monitoring well and drilled borings BH-C and BH-D to further define the width of the hydrocarbon plume downgradient of the site. Relatively high hydrocarbon concentrations were detected in groundwater samples collected from monitoring well MW-2, downgradient of the site. Slightly lower but still very high hydrocarbon concentrations were detected in groundwater samples collected from boring BH-D,



west of monitoring well MW-2. Very low hydrocarbon concentrations were detected in groundwater samples collected from monitoring well MW-1, located on the site, and boring BH-C, east of monitoring well MW-2. Based on these findings, the plume appears to be moving to the south of Excavation I.

2.5 Quarterly Groundwater Monitoring

In April 1995, ASE began a quarterly groundwater monitoring program for the site. Since that time, the site has been on either a quarterly or semi-annual sampling schedule. Depth to groundwater data and analytical results for all groundwater sampling periods are tabulated in Tables One through Three in the Tables section of this report.

2.6 June 1997 Remedial Action Plan

On June 5, 1997, ASE prepared a remedial action plan (RAP) addressing the need for groundwater remediation at the site, describing the appropriateness of several remedial options and choosing an option. Low flow hydrogen peroxide injection was chosen as the groundwater remediation option of choice for the site in order to raise dissolved oxygen (DO) concentrations in the groundwater to stimulate in-situ bioremediation.

2.7 February 1999 Hydrogen Peroxide Remediation System Installation

On February 2 and 3, 1999, five (5) injection wells were installed at the site (Figure 2). On February 18, 1999, the injection system began operation. It delivered a water and hydrogen peroxide solution to each injection well on a constant basis. DO concentrations within the injection wells rose to above 20 ppm. Groundwater in downgradient monitoring well MW-2 never showed a measurable increase in DO.

2.8 June 1999 Discovery of Free-Floating Hydrocarbons

On June 22, 1999, while measuring the DO content within the injection wells, ASE discovered that the DO probe had a very strong gasoline odor when removed from injection well IW-5. A clear bailer was inserted into IW-5 to check for the presence of free-floating hydrocarbons. The bailer contained approximately 18-inches of what appeared to be aged gasoline. On June 24, 1999, ASE returned to the site with an interface probe to accurately measure the thickness of the free-floating hydrocarbons. On that day, 1.75-feet of free-floating hydrocarbons was measured on the water surface in IW-5. Injection well IW-4 (15-feet east of IW-5) was measured with the interface probe and did not contain a measurable thickness of floating hydrocarbons. On June 24, 1999, ASE bailed the free-floating hydrocarbons from IW-5 until only a sheen was present on the water surface. Approximately 3 gallons of product was removed from IW-5. ASE continued to measure and bail the floating product within well IW-5 on a bi-weekly basis.



2.9 January 2000 Monitoring Well Installation

In January 2000, ASE installed groundwater monitoring wells MW-3 and MW-4, east of injection well IW-5 and monitoring well MW-2 (Figure 2). High hydrocarbon concentrations were detected in groundwater samples collected from both of these wells, including up to 140,000 parts per billion (ppb) TPH-G, 13,000 ppb TPH-D and 22,000 ppb benzene.

2.10 April 2000 Groundwater Sampling

In April 2000, ASE collected groundwater samples from all four monitoring wells. Elevated hydrocarbon concentrations were detected in groundwater samples collected from monitoring wells MW-2, MW-3 and MW-4, including up to 240,000 ppb TPH-G, 700,000 ppb TPH-D and 35,000 ppb benzene. Monitoring well MW-3 contained free-floating hydrocarbons.

2.11 Hydrogen Peroxide System Discontinuation

On November 27, 2000, with the approval of the Alameda County Health Care Services Agency, ASE turned off the hydrogen peroxide injection system since there was no noticeable DO increase in downgradient monitoring wells MW-2 and MW-4 on the west side of 8th Street.

2.12 May 2002 Monitoring Well Installation

In May 2002, ASE installed groundwater monitoring wells MW-5 and MW-7 south of the site, across 8th Street, and MW-6 northwest of the site approximately 70 feet west of existing monitoring well MW-3 (Figure 2). Low concentrations of MTBE were identified in groundwater samples collected from wells MW-5 and MW-6. High concentrations of petroleum hydrocarbons were identified in well MW-7, including up to 38,000 ppb TPH-G and 890 ppb benzene.

2.13 October 2004 Duel-Phase Extraction Event

In October 2004, CalClean mobilized to the site with a truck-mounted Dual-Phase Extraction (DPE) system to perform both a DPE pilot test and a 14-day DPE interim remediation event at the site. At the completion of the DPE interim remediation event, a total of 94,470 gallons of free-product and groundwater were removed from three extraction wells. The average TPH-G concentration in the extracted groundwater was 13,900 ppb; the average benzene concentration of that extracted groundwater was 780 ppb. The extracted groundwater was treated on-site with activated carbon vessels, and then discharged, under permit, to the East Bay Municipal Utilities District (EBMUD) sanitary sewer system on-site.

A total of 2.3 million cubic feet of hydrocarbon-laden vapors were extracted from three extraction wells during the 15 day event. Based on field measurements and laboratory analytical data, over 7,000 pounds of petroleum hydrocarbons were extracted from three extraction wells during the 15-day event. This equates to approximately 1,150 gallons of petroleum



hydrocarbons. The extracted vapors were treated on-site by CalClean's thermal oxidizer. Based on the success of this DPE event, ASE recommended a second DPE event for the site prior to designing and installing a long-term remediation system.

2.14 Current Quarterly Groundwater Monitoring Program

The site is currently on a quarterly groundwater monitoring program. Depth to groundwater and analytical results for all historical groundwater sampling events are tabulated in the Tables section of this report as Tables One through Three.

3.0 SUBSURFACE GEOLOGY AND LITHOLOGY

Sediments beneath the site generally consist of silty sand and sandy silt. Beneath portions of the site where overexcavation previous took place, gravelly sand is encountered as backfill. Two geologic cross-sections have been prepared for the site. The cross-section locations are shown on Figure 3, and the two cross-sections are presented as Figures 4 and 5. Depth to groundwater and groundwater elevations are tabulated in Table One and show historical groundwater between 12.6-feet below ground surface (bgs) and 18.1-feet bgs. The typical depth to groundwater is 15 to 16-feet bgs. The groundwater flow beneath the site is typically to the south-southwest.

4.0 SENSITIVE RECEPTOR STUDY

ASE prepared a map (Figure 6) showing property usage within approximately one block of the site, specifically to search for sensitive receptors such as schools, daycare facilities, hospitals, or medical facilities. A summer school (Chinese Presbyterian Church School) is located across 8th Street to the southwest of the site at 265 8th Street. This school has monitoring wells MW-4 and MW-7 just in front of the school, and it is possible that the hydrocarbon plume extends beneath the church and school. No other schools, daycares, or medical facilities were located. None of the buildings across 8th Street downgradient of the site appeared to have basements.

The nearest surface water bodies are the Oakland Inner Harbor and Lake Merritt, both over 2,000-feet from the site. It is highly unlikely that the hydrocarbon plume has reached either of these surface water bodies.

5.0 CONDUIT AND POTENTIAL PREFERENTIAL PATHWAY STUDY

This study was conducted by reviewing Underground Service Alert (USA) markings in the site vicinity, reviewing as-built drawings supplied by the city, and contacting individuals that would have knowledge of the individual utility lines. Figure 7 presents the location of all known utility lines in the site vicinity. A discussion of each type of line is presented below along with an evaluation as to whether each line could present a potential preferred pathway for the movement of groundwater contamination.



5.1 Water Lines

Water lines in the site vicinity belong to the East Bay Municipal Utility District (EBMUD). ASE spoke with Surg Perentiff of EBMUD regarding the lines in the site vicinity. Mr. Perentiff stated that the bottoms of the water lines in the site vicinity are between 3 and 4-feet deep with little or no pitch. Since the shallowest groundwater measured at the site since the project began was 12.6-feet bgs, the water lines and their trench backfill will not present a preferential pathway for the movement of groundwater in the site vicinity.

5.2 Natural Gas Lines

Natural gas lines in the site vicinity belong to Pacific Gas and Electric (PG&E). ASE spoke with John Nunes of PG&E regarding the depth of natural gas lines in the site vicinity. Mr. Nunes did not have specific depths of the lines in 8th and Alice Streets, but he stated the lines are typically 4-feet deep in the downtown Oakland area.

Since the shallowest groundwater measured at the site since the project began was 12.6-feet bgs, the gas lines and their trench backfill will not present a preferential pathway for the movement of groundwater in the site vicinity.

5.3 Electric Lines

Electric lines in the site vicinity belong to PG&E. ASE spoke with John Nunes of PG&E regarding the depth of electric lines in the site vicinity. Mr. Nunes did not have specific depths of the lines in 8th and Alice Streets, but he stated the lines are typically 4-feet deep in the downtown Oakland area unless placed in a joint trench. If in a joint trench, the lines may be slightly deeper. No information is available on the backfill material used. Since the shallowest groundwater measured at the site since the project began was 12.6-feet bgs, the electric lines and their trench backfill will not present a preferential pathway for the movement of groundwater in the site vicinity.

5.4 Telephone Lines

The telephone lines in the site vicinity belong to AT&T (previously Pacific Bell, then SBC). No USA markings were placed by AT&T to show their line locations. However, a Pacific Bell utility vault was located and is shown on the map. AT&T will not provide depth information on their lines, although they have previously stated that they do not bury lines deeper than 3 to 6-feet below grade unless they have to trench under other buried lines. Based on this information, this line will not present a conduit for the preferential flow of groundwater since the shallowest groundwater has been measured at the site since the project began was 12.6-feet bgs.



5.5 Cable Television Lines

The cable television lines in the City of Oakland belong to Comcast. No cable television lines were marked by USA in the site vicinity. ASE made several attempts to contact Comcast regarding their lines in the site vicinity, but none of our phone calls were returned. ASE's past experience with cable television lines is that they are buried very shallow (no deeper than 3-feet bgs). Based on the depth to groundwater in the site vicinity, it is ASE's opinion that it is highly unlikely that cable television lines and their trench backfill will present at potential conduit for the preferential flow of groundwater in the site vicinity.

5.6 Sanitary Sewer Lines

The City of Oakland sewer maps show a sanitary sewer line just west of the center of 8th Street, and both sanitary and storm sewers running down the center of Alice Street. Available drawings for these lines are presented in Appendix A.

An 8-inch diameter sanitary sewer runs beneath 8th Street and is 8 feet deep in front of the site and pitches to the east toward Alice Street with a depth of 10-feet below bgs at the intersection with Alice Street. The sewer line beneath Alice Street is also 8-inches in diameter and pitches to the south. At the intersection of Alice Street and 7th Street the sanitary sewer line is approximately 14-feet deep. The pitches of the lines are shown on Figure 7. The backfill material is unknown.

Since the shallowest groundwater measured at the site since the project began was 12.6-feet bgs, the sanitary sewer line lies above the water table in both streets adjacent to the site. However, at 7th Street, one block downgradient of the site, the sanitary sewer line lies at a depth where, during periods of extremely high water levels, the sanitary sewer could be potentially at depths below the water table.

5.7 Storm Water Sewer Lines

The City of Oakland sewer maps show a storm sewer running beneath the center of Alice Street. Available drawings for these lines are presented in Appendix A. No storm sewer is located beneath 8th Street.

The 18-inch diameter storm sewer is approximately 14-feet deep at the corner of 8^{th} Street and Alice Street. The pitch of the line is shown on Figure 7. The backfill material is unknown.

Since the shallowest groundwater measured at the site since the project began was 12.6-feet bgs, the storm sewer line lies below the water table during periods of extremely high water levels. At typical water levels (15 to 16-feet bgs), this line is above the water table.



6.0 AREA WELL SURVEY

ASE conducted an area well survey to locate water wells within a 2,000-foot radius of the site. Records were reviewed from the California Department of Water Resources (DWR) and Alameda County Public Works Agency (ACPWA). ASE also had knowledge of several wells not located in the DWR and ACPWA records. The locations of all of the wells located are shown on Figure 7. Information regarding the wells is tabulated in Table Four.

A total of 149 wells are located within the study area. Of these wells, 129 are listed as monitoring or test wells, 10 are listed as piezometers, one is listed as a cathodic protection well, two are listed as extraction wells (for remediation), one is an air sparging well, one is listed as a domestic well, one is listed as an abandoned well, two are listed as destroyed wells, and two are of unknown usage. Although listed as a domestic well, the well labeled as domestic is owned by Western Union and has a listed depth of 33-feet. Based on this information, it is highly unlikely that this well is used for groundwater consumption.

All but five of the wells are listed as shallower than 60-feet. The deeper wells include monitoring/test wells owned by the City of Oakland (wells 50 and 55 at 66 and 64-feet bgs, respectively), an abandoned well from the Moose Club (well 71 at 150-feet bgs), a test well from the Division of Highways (well 75 at 130-feet bgs), and a cathodic protection well owned by PG&E (well 81 at 120-feet bgs)

Based on all of the information known from these wells, (a) no water supply wells are located in the site vicinity, and (b) none of the other wells downgradient of the site appear to present a potential conduit for the downward movement of contamination.

7.0 BRIEF CONCEPTUAL SITE MODEL

The site has had a release of both gasoline and diesel fuel either from the former USTs, piping or dispensers. Due to the age of the release, little MTBE has been detected in soil and groundwater at the site. Significant overexcavation has taken place at the site, although the excavation apparently did not extend into groundwater and a significant mass of hydrocarbons remain in groundwater and in the capillary zone soils, including free-floating hydrocarbons.

The groundwater flow direction is consistently to the south-southwest, which is consistent with the groundwater flow direction at nearby sites. The extent of hydrocarbons is defined crossgradient to the east and west, but not downgradient to the south. This is due to large buildings that fill the entire large block in the downgradient direction. To complete the definition in the downgradient direction, without demolishing the buildings, one would have to drill a full block away on 7th Street. The problem with drilling on 7th Street is that there are several other sites with known contamination within 200 feet of this site, and if any contamination was found in borings on 7th Street it would not be known which site was responsible. Since there is little MTBE at the site due to the age of the release, it is not likely that significant contamination has



moved the full block to 7th Street. The extent of contamination is not yet defined to the north in the upgradient direction.

Although no borings have been drilled to define the vertical extent of hydrocarbons at the site, in the absence of MTBE and other oxygenates, and in the absence of deeper pumping stress, it is unlikely that there is significant deeper contamination at the site.

Due to the depth of groundwater and the depth of the underground utility lines in 8th Street and Alice Street, it does not appear that there are any preferential pathways for the migration of groundwater contamination during normal water table conditions. During very rare periods of very high water levels, it may be possible that the sanitary and storm sewers beneath Alice Street could act as a conduit for the preferential movement of groundwater south of the site near 7th Street. However, Alice Street is generally crossgradient of the site's hydrocarbon plume and it does not seem likely that hydrocarbons related to the site have entered this conduit.

There are also no drinking water wells in the site vicinity. The only sensitive receptor is a small seasonal school southwest of the site across 8th Street. The primary risk related to groundwater contamination at the site appears to be vapor intrusion from soil and groundwater to indoor air in the building across 8th Street, and possibly in the school across 8th Street. Based on environmental screening levels (ESLs) prepared by the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), remediation will be necessary at the site.

8.0 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. The scope of work for this project is to:

- 1) Obtain a drilling permit from the Alameda County Public Works Agency.
- 2) Obtain an excavation permit from the City of Oakland to drill in 7th Street.
- 3) Contract with a subsurface utility locating service to clear drilling locations of underground utility lines.
- 4) Drill six soil borings in both on-site and off-site locations using a Geoprobe and collect soil and groundwater samples for analysis.
- 5) Drill one soil boring to a depth of 60-feet bgs using a Geoprobe with a dual-wall sampler collecting soil samples continuously and collecting multi-depth groundwater samples from adjacent borings using a Hydropunch sampler.
- 6) Following collection of the soil and groundwater samples, backfill the borings described in tasks 5 and 6 with neat cement placed by tremie pipe.



- 7) Analyze soil and groundwater samples collected from each boring described in tasks 4 and 5 at a CAL-DHS certified analytical laboratory for TPH-D by EPA Method 8015 and TPH-G, BTEX, fuel oxygenates and lead scavengers by EPA Method 8260B.
- 8) Prepare a report presenting results from this assessment. This report will present tabulated analytical results, an updated conceptual site model, conclusions, and recommendations for appropriate feasibility tests, as necessary.

9.0 DETAILS OF PROPOSED SOW

Details of the assessment are presented below.

TASK 1 - OBTAIN A DRILLING PERMIT FROM THE ALAMEDA COUNTY PUBLIC WORKS AGANCY

Prior to drilling, ASE will obtain a drilling permit from the Alameda County Public Works Agency.

TASK 2 - OBTAIN AN EXCAVATION PERMIT TO DRILL IN THE CITY STREETS

Prior to drilling, ASE will obtain an excavation permit from the City of Oakland to drill in 7th Street.

TASK 3 - CONTRACT WITH AN UNDERGROUND UTILITY LINE LOCATING SERVICE
TO ACCURATELY LOCATE UNDERGROUND UTILITY LINES IN STREET
AREAS

ASE will contact Underground Service Alert (USA) at least 48 hours prior to drilling. ASE will also contract with a private underground utility locating service to pinpoint the location of utility lines in the drilling locations.

TASK 4 - DRILL SIX SOIL BORINGS ON AND OFF-SITE AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORINGS FOR ANALYSIS

ASE will drill six soil borings in both on and off-site locations (Figure 9) and will collect soil and groundwater samples to define the extent of groundwater contamination both upgradient and downgradient of the site. The borings will be drilled using a Geoprobe or similar type direct-push drill rig. A qualified ASE geologist will direct the drilling.

Undisturbed soil samples will be collected continuously for subsurface hydrogeologic description and possible chemical analysis. The geologist will describe the soil according to the Unified Soil Classification System (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-DHS 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 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.

Once groundwater is encountered, a groundwater samples will be collected from the boring using a bailer. Groundwater samples will be decanted from the bailer into 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, and 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 5 - DRILL ONE SOIL TO 60-FEET BGS AND COLLECT SOIL AND GROUNDWATER SAMPLES FROM THE BORING FOR ANALYSIS

ASE will drill one soil boring on-site to a depth of 60-feet bgs to verify the vertical extent of hydrocarbons at the site (Figure 9). The borings will be drilled using a Geoprobe or similar type drill rig. A qualified ASE geologist will direct the drilling.

The soil boring will be drilled using a dual-wall sampler to a depth of 60-feet bgs collecting soil samples continuously. The dual-wall sampler 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-DHS



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 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.

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 10-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 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, and 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 Cone Penetrometer Testing (CPT) for the deeper boring.

TASK 6 - BACKFILL THE BORINGS WITH NEAT CEMENT

Following collection of the soil and groundwater samples, the boreholes described in Tasks 4 and 5 will be backfilled with neat cement placed by tremie pipe.



TASK 7 - ANALYZE SOIL AND GROUNDWATER SAMPLES COLLECTED FROM THE BORINGS

At least one soil and one groundwater sample from each of the shallow soil borings will be analyzed at a CAL-DHS certified environmental laboratory for TPH-D by modified EPA Method 3510/8015M, and TPH-G, BTEX, oxygenates and lead scavengers by EPA Method 8260B. The soil sample selected for analysis will be the sample that appears to be most contaminated based on odors, staining, and or PID readings. If there is no evidence of contamination, then the sample collected from the capillary zone will be selected for analysis. If there appears to be significant contamination in any of the borings, then all of the samples collected in the area that appears contaminated will be analyzed, as well as the samples above and below the contamination. In the deeper soil boring, all of the samples that appear to be contaminated based on odors, staining, and or PID readings will be selected for analysis, as well as both soil and groundwater samples collected at 10-foot intervals to the total depth of the boring.

TASK 8 - PREPARE A SUBSURFACE ASSESSMENT REPORT

ASE will prepare a subsurface assessment report presenting the methods and findings of this assessment. This report will include a summary of the results, the site background and history, tabulated soil and groundwater analytical results, an updated conceptual site 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.

10.0 SCHEDULE

ASE will proceed with this project immediately upon approval of this workplan by the ACHCSA. However, the City of Oakland has holiday restrictions on drilling in city streets in the Chinatown section of Oakland from late November until early January. If the ACHCSA approves this workplan prior to the November 1st, ASE will make every effort to complete this drilling prior to the holiday drilling restrictions. If this is not possible, the drilling will be scheduled for January 2007.



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: Alice and May Lee Lim, c/o Mr. Russell Lim, 1028 Annerly Road, Piedmont, CA 94610-1110

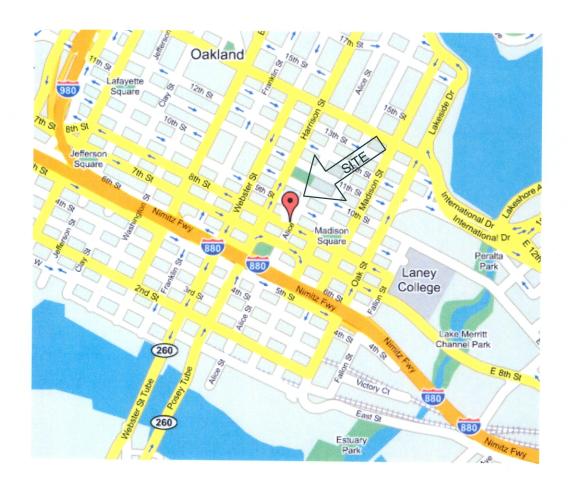
Mr. Jerry Wickham, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502

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



FIGURES



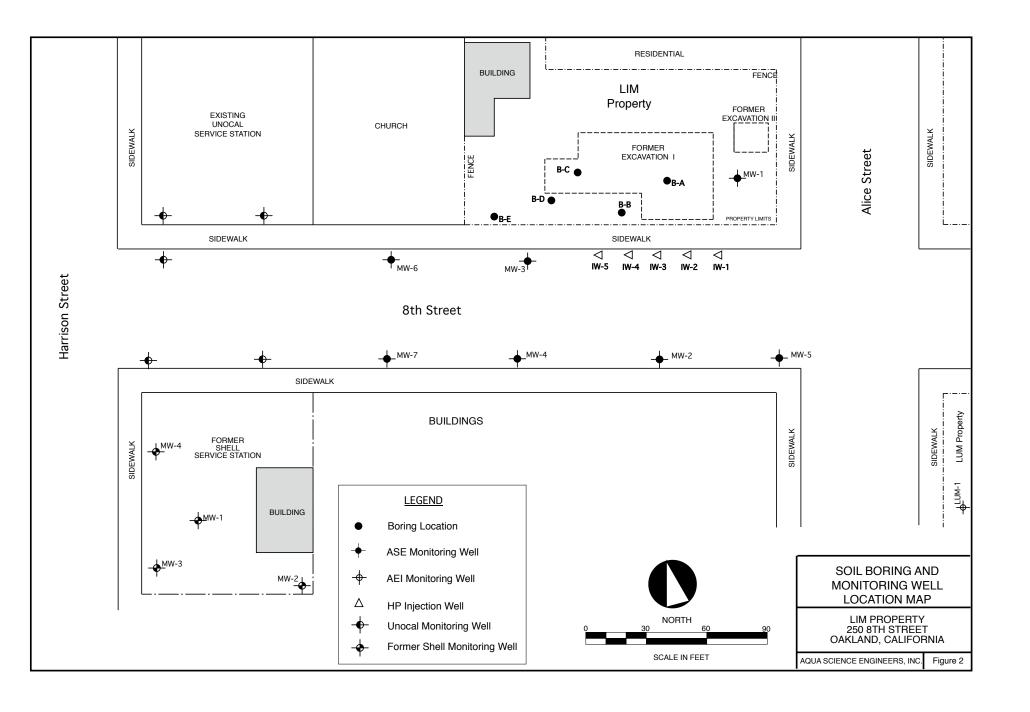


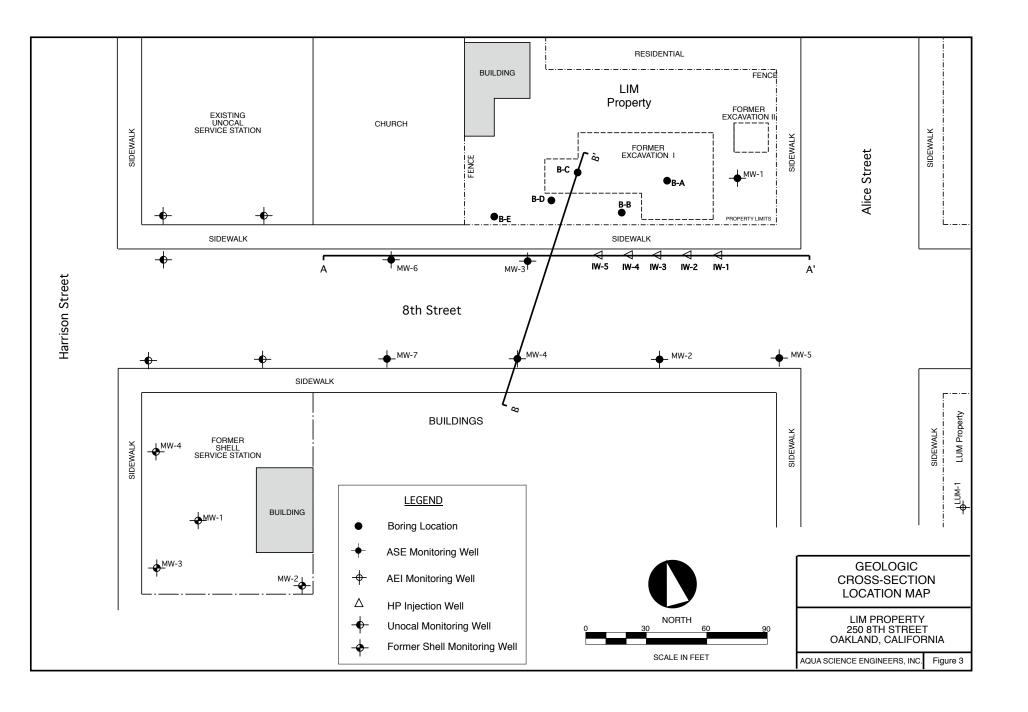
LOCATION MAP

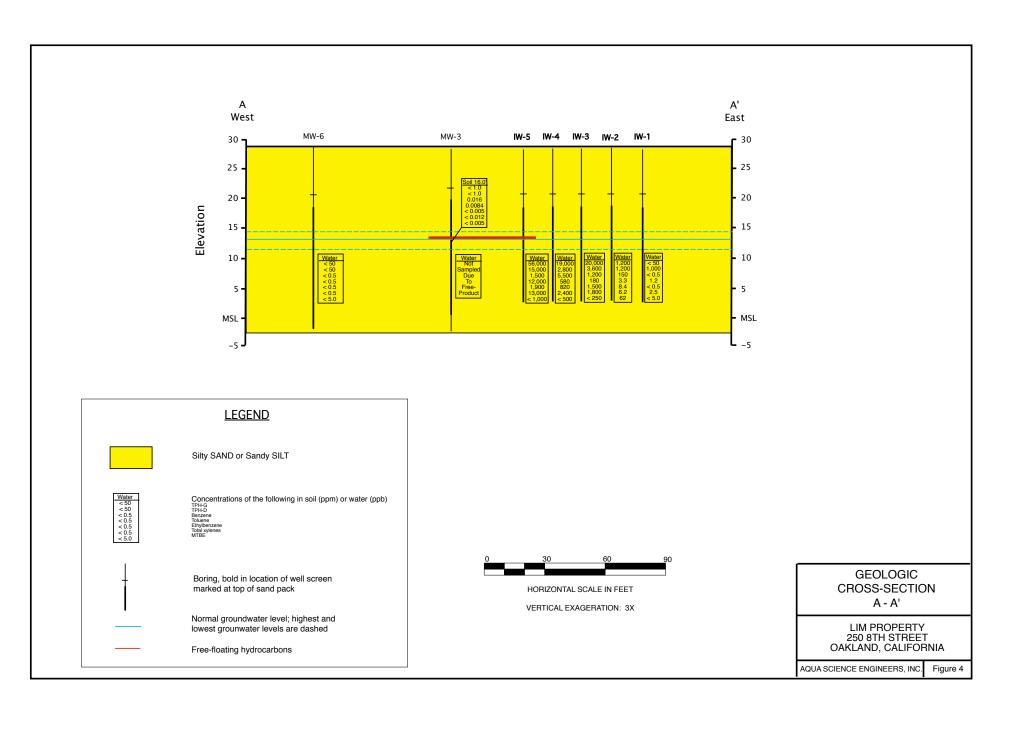
LIM PROPERTY 250 8TH STREET OAKLAND, CALIFORNIA

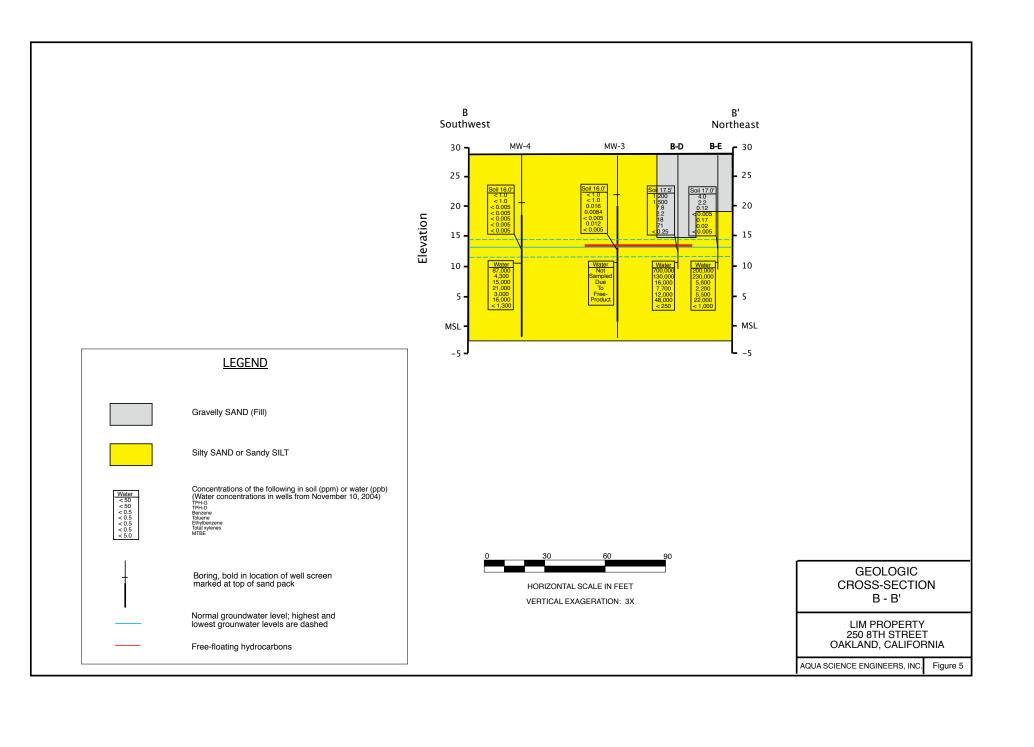
AQUA SCIENCE ENGINEERS

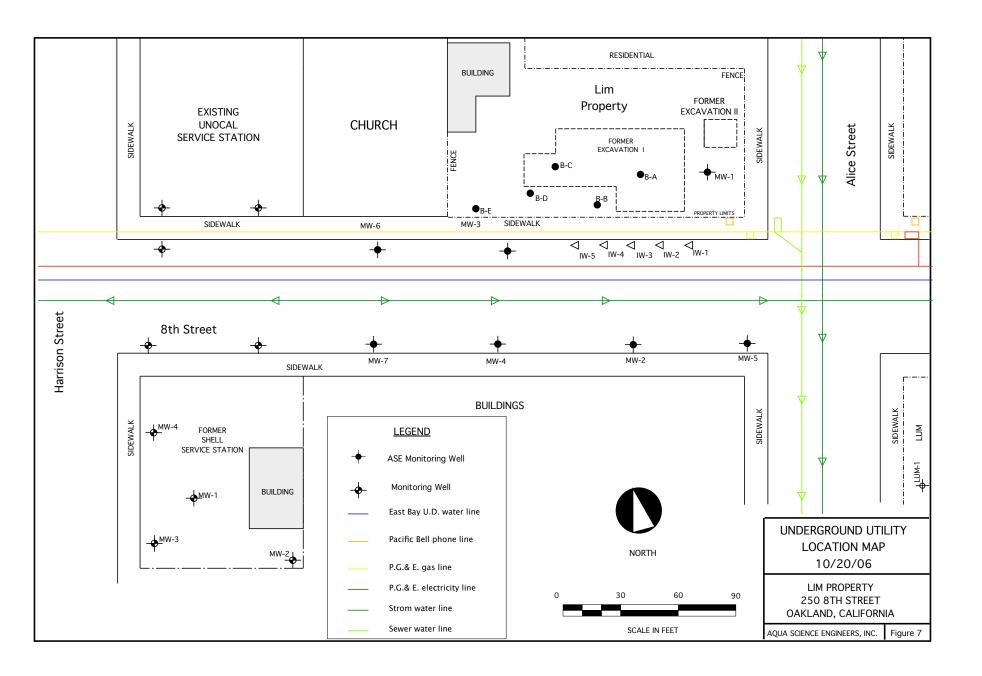
FIGURE 1

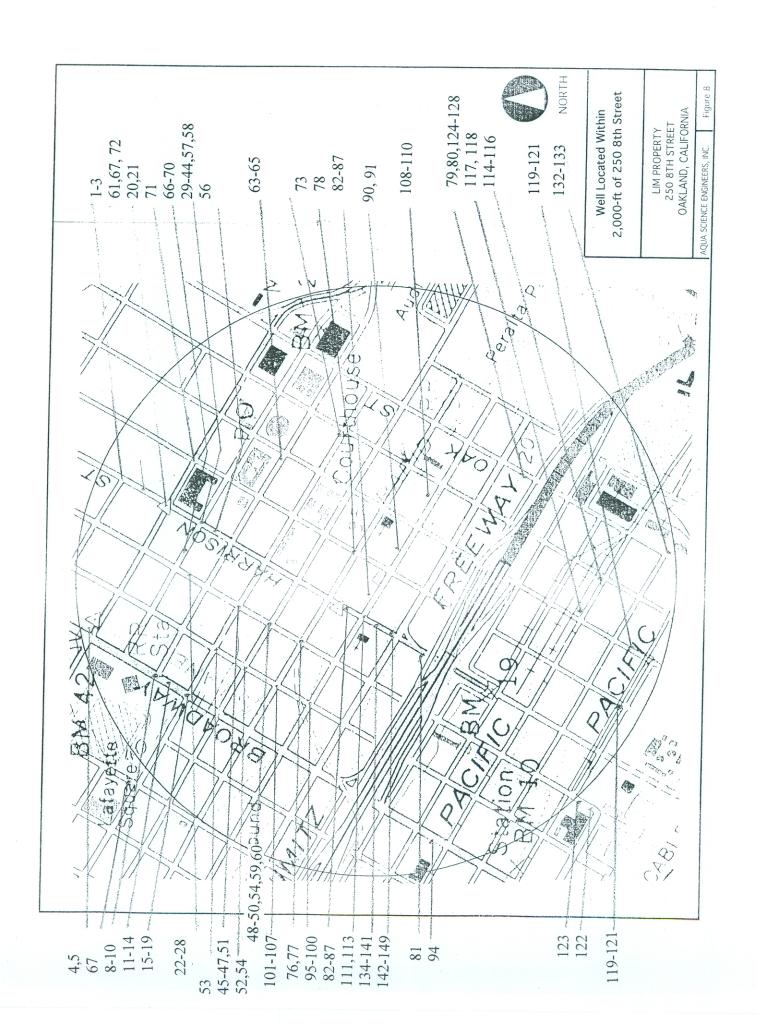


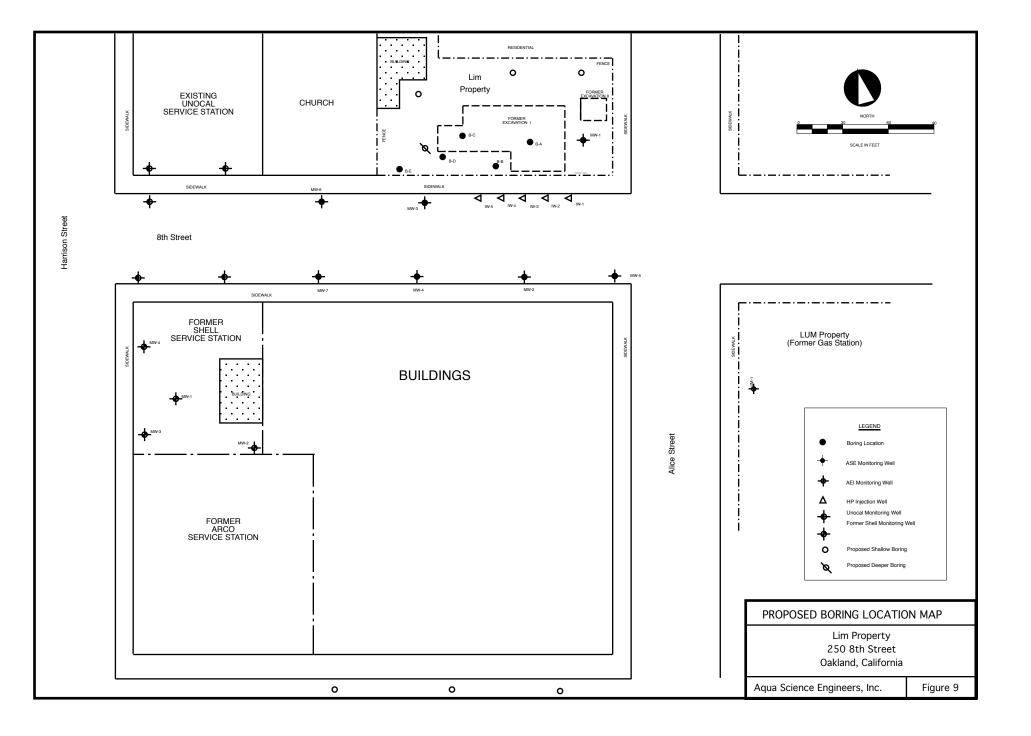














TABLES

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

Well I.D.	Date of	Top of Elevation	Depth to Water	Product Thickness	Groundwater Elevation
well i.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-1	01/30/95	25.51	16.21		9.30
	04/12/95		15.71		9.80
	07/14/95		16.71		8.80
	10/17/95		17.72		7.79
	01/12/96		18.03		7.48
	07/25/96		16.82		8.69
	01/06/97		15.60		9.91
	07/08/97		17.31		8.20
	01/26/98		15.21		10.30
	07/23/98		15.38		10.13
	01/05/99		16.82		8.69
	07/13/99		15.89		9.62
	01/12/00		17.44		8.07
	04/24/00		16.37		9.14
	07/20/00		16.30		9.21
	10/24/00		17.25		8.26
	01/18/01		17.29		8.22
	04/05/01		15.88		9.63
	07/17/01		16.54		8.97
	10/25/01		16.89		8.62
	01/21/02		14.92		10.59
	04/11/02		14.02		11.49
	06/11/02	29.72	15.33		14.39
	09/17/02		15.96		13.76
	12/18/02		16.14		13.58
	03/25/03		16.16		13.56
	06/23/03		16.01		13.71
	09/26/03		16.57		13.15
	12/18/03		16.41		13.31
	03/12/04		14.64		15.08
	06/17/04		15.71		14.01
	09/17/04		16.35		13.37
	12/17/04		16.10		13.62
	04/28/05		14.10		15.62
	07/19/05		15.94		13.78
	10/03/05		16.34		13.38
	12/06/05		16.21		13.51
	03/15/06		16.21		13.51
	06/28/06		14.92		14.80
	08/31/06		15.60		14.12

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-2	01/30/95	23.99	15.02		8.97
	04/12/95		14.75		9.24
	07/14/95		16.02		7.97
	10/17/95		16.94		7.05
	01/12/96		17.05		6.94
	07/25/96		16.02		7.97
	01/06/97		14.34		9.65
	07/08/97		16.52		7.47
	01/26/98		14.10		9.89
	07/23/98		14.70		9.29
	01/05/99		16.01		7.98
	07/13/99		15.40		8.59
	01/12/00		16.76		7.23
	04/24/00		15.67		8.32
	07/20/00		15.70		8.29
	10/24/00		16.56		7.43
	01/18/01		16.47		7.52
	04/05/01		15.88		8.11
	07/17/01		15.35		8.64
	10/25/01		15.63		8.36
	01/21/02		13.55		10.44
	04/11/02		13.74		10.25
	06/11/02	28.19	14.06		14.13
	09/17/02		14.67		13.52
	12/18/02		14.88		13.31
	03/25/03		15.11		13.08
	06/23/03		14.94		13.25
	09/26/03		15.49		12.70
	12/18/03		15.13		13.06
	03/12/04		13.50		14.69
	06/17/04		14.63		13.56
	09/17/04		15.19		13.00
	12/17/04		14.88		13.31
	04/28/05		13.39		14.80
	07/19/05		15.27		12.92
	10/03/05		15.57		12.62
	12/06/05		15.35		12.84
	03/15/06		12.65		15.54
	06/28/06		14.45		13.74
	08/31/06		15.37		12.82

TABLE ONE
Groundwater Elevation Data
Lim Family Property
250 8th Street
Oakland, CA

Well I.D.	Date of Measurement	Top of Elevation (msl)	Depth to Water (feet)	Product Thickness (feet)	Groundwater Elevation (msl)
L		,			, ,
MW-3	01/12/00 04/24/00 07/20/00 10/24/00 01/18/01 04/05/01 07/17/01	24.25	16.68 15.58 16.01 16.95 16.63 15.16 15.92	0.01 0.15 0.41 0.21 0.21 0.23 0.39	7.58* 8.79* 8.57* 7.47* 7.79* 9.27* 8.64*
	10/25/01 01/21/02		16.26 14.08	0.38 0.16	8.29* 10.30*
	04/11/02		14.59	0.54	10.09*
	06/11/02	28.58	15.16	0.90	14.14*
	09/17/02		16.04	1.24	13.53*
	10/01/02		16.14	1.23	13.42*
	10/25/02		15.80	0.60	13.26*
	11/12/02		15.87	0.47	13.09*
	12/18/02		15.42	0.47	13.54*
	03/25/03		16.11	1.14	13.38*
	06/23/03 09/26/03		16.58 16.11	1.86 0.66	13.49* 13.00*
	12/18/03		15.83	0.59	13.22*
	03/12/04		14.51	1.21	15.04*
	06/17/04		15.25	0.68	13.87*
	09/17/04		16.14	0.96	13.21*
	12/17/04		15.05	0.25	13.73*
	01/13/05		13.40	0.45	15.54*
	04/28/05		15.31	2.43	15.21*
	07/19/05		16.29	1.67	13.63*
	10/03/05		16.10	1.47	13.66*
	12/06/05		15.04	1.17	14.48*
	03/15/06		12.65	2.41	15.49*
	06/28/06 08/31/06		13.55 14.85	2.61 2.20	16.16* 15.49*

TABLE ONE Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-4	01/12/00	23.71	17.24		6.47
	04/24/00		16.18		7.53
	07/20/00		16.18		7.53
	10/24/00		17.03		6.68
	01/18/01		16.87		6.84
	04/05/01		15.28		8.43
	07/17/01		15.92		7.79
	10/25/01		16.23		7.48
	01/21/01		14.14		9.57
	04/11/02		14.43		9.28
	06/11/02	28.61	14.72		13.89
	09/17/02		15.29		13.32
	12/18/02		15.20		13.41
	03/25/03		15.53		13.08
	06/23/03		15.35		13.26
	09/26/03		15.91		12.70
	12/18/03		15.63		12.98
	03/12/04		13.88		14.73
	06/17/04		15.03		13.58
	09/17/04		15.61		13.00
	12/17/04		15.32		13.29
	04/28/05		13.82		14.79
	07/19/05		15.44		13.17
	10/03/05		15.91		12.70
	12/06/05		15.71		12.90
	03/15/06		13.05		15.56
	06/28/06		14.49		14.12
	08/31/06		15.75		12.86

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Data	T f	Donath to	Duadicat	Cuarradiricatan
	Date	Top of	Depth to	Product	Groundwater
\A/-!! D	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-5	06/11/02	28.40	14.23		14.17
	09/17/02		14.80		13.60
	12/18/02		15.08		13.32
	03/25/03		15.31		13.09
	06/23/03		15.16		13.24
	09/26/03		15.72		12.68
	12/18/03		15.47		12.93
	03/12/04		13.44		14.96
	06/17/04		14.90		13.50
	09/17/04		15.45		12.95
	12/17/04		15.12		13.28
	04/28/05		13.63		14.77
	07/19/05		15.67		12.73
	10/03/05		15.81		12.59
	12/06/05		15.60		12.80
	03/15/06		12.81		15.59
	06/28/06		15.21		13.19
	08/31/06		15.55		12.85
MW-6	06/11/02	29.20	14.95		14.25
	09/17/02		15.47		13.73
	12/18/02		15.43		13.77
	03/25/03		15.67		13.53
	06/23/03		15.48		13.72
	09/26/03	NOT ME		ounder Mai	
	12/18/03		15.79		13.41
	03/12/04		14.04		15.16
	06/17/04		15.13		14.07
	09/17/04		15.74		13.46
	12/17/04		15.54		13.66
	04/28/05		13.91		15.29
	07/19/05		15.30		13.90
	10/03/05		15.35		13.85
	12/06/05		15.69		13.51
	03/15/06		13.14		16.06
	06/28/06		14.44		14.76
	08/31/06		16.25		12.95

TABLE ONE

Groundwater Elevation Data Lim Family Property 250 8th Street Oakland, CA

	Date	Top of	Depth to	Product	Groundwater
	of	Elevation	Water	Thickness	Elevation
Well I.D.	Measurement	(msl)	(feet)	(feet)	(msl)
MW-7	06/11/02	28.95	15.19		13.76
	09/17/02		15.73		13.22
	12/18/02	NOT ME	ASURED - CA	ar Parked (OVER WELL
	03/25/03		15.96		12.99
	06/23/03		15.75		13.20
	09/26/03		16.29		12.66
	12/18/03		16.03		12.92
	03/12/04		14.28		14.67
	06/17/04		15.42		13.53
	09/17/04		16.02		12.93
	12/17/04		15.45		13.50
	04/28/05		14.15		14.80
	07/19/05		15.30		13.65
	10/03/05		16.25		12.70
	12/06/05		16.05		12.90
	03/15/06		13.36		15.59
	06/28/06		14.81		14.14
	08/31/06		16.13		12.82
	33, 31, 33		. 5110		

Top of casing elevations resurveyed by Mid Coast Engineers on 6/27/02 and 7/11/02.

Notes:

* = Adjusted for the presence of free-floating oil by the equation: Top of Casing Elevation -Depth to Water + (0.8 x Floating Hydrocarbon Thickness) = Groundwater Elevation (Adjusted).

TABLE TWO
Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
MW-1							
01/30/95	740	200	3	5	1	4	
04/12/95	400	500	< 0.5	< 0.5	3	< 2	
07/14/95	520	400	1	< 0.5	2	3	
10/17/95	400	200	0.5	1	3	< 2	
01/12/96	120	890	< 0.5	< 0.5	< 0.5	< 1.0	< 2.0
07/08/96	320	300	0.52	2.7	1.2	2.3	< 5.0
01/06/97	110	75	< 0.5	0.68	< 0.5	< 0.5	< 5.0
07/08/97	380	290	< 0.5	1.5	1.4	1.9	< 5.0
01/26/98	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
07/23/98	190	< 50	0.54	2.8	2	1.8	< 5.0
01/05/99	200	< 50	1.8	1.6	3.3	< 0.5	< 5.0
07/13/99	340	<50	<0.5	<0.5	2.6	<0.5	< 5.0
01/12/00	300	1,000	22	36	5.5	24	< 5.0
04/24/00	360	280*	< 0.5	< 0.5	< 0.5	2.1	< 5.0
07/20/00	290	150*	1.8	< 0.5	< 0.5	< 0.5	< 5.0
10/24/00	170**	280*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
01/18/01	170**	150*	< 0.5	<0.5	< 0.5	2.1	< 5.0
04/05/01	350**	190*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
07/17/01	310	570	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
10/25/01	250	260	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
01/22/02	200	250	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
04/11/02	260	300	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/11/02	270	330	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
09/17/02	320	1,700	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/18/02	170	320	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/25/03	320	< 500	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/23/03	240	310	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
09/26/03	110	300	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/18/03	150	340	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
03/12/04	220	510	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/17/04	250	490	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/17/04	110		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
11/10/04***	180	400	0.68	< 0.5	1.7	< 0.5	< 5.0
12/17/04	77	130	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
04/28/05	250	190	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	340	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/03/05	170	< 100	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/06/05	140	67	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	170	< 80	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	230	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
08/31/06	310	< 200	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
33/31/30	310	` L00	· 0.50	× 0.50	¥ 0.50	~ 0.50	~ 0.50

TABLE TWO
Summary of Chemical Analysis of Groundwater Samples
Petroleum Hydrocarbon Concentrations
All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
MW-2							
01/30/95	88,000	800	19,000	18,000	2,400	10,000	
04/12/95	110,000	990	21,000	28,000	2,800	14,000	
07/14/95	120,000	5,000	20,000	25,000	3,200	15,000	
10/17/95	190,000	4,000	15,000	26,000	4,900	23,000	
01/12/96	32,000	2,600	10,000	8,000	1,100	4,800	< 2
07/08/96	110,000	2,500	20,000	18,000	2,500	12,000	< 500
01/06/97	230,000	37,000	11,000	19,000	4,300	20,000	< 1,200
07/08/97	91,000	35,000	16,000	20,000	2,700	13,000	< 1,000
01/26/98	50,000	11,000	12,000	12,000	1,600	6,700	< 250
07/23/98	50,000	8,100#	11,000	8,300	1,800	7,000	1,100
01/05/99	50,000	7,600#	12,000	12,000	2,300	9,600	1,300
07/13/99	73,000	8,500	11,000	13,000	2,200	9,800	< 500
01/12/00	63,000	11,000	10,000	12,000	1,800	7,800	< 500
04/24/00	76,000	23,000*	7,100	14,000	2,000	9,400	< 500
07/20/00	68,000	5,300#	11,000	14,000	2,300	11,000	< 1,000
10/24/00	48,000	6,400*	11,000	9,400	1,500	7,300	< 500
01/18/01	37,000	4,600*	6,900	5,600	1,200	5,300	< 500
04/05/01	59,000	4,600*	7,100	9,800	1,600	7,600	< 500
07/17/01	90,000	< 10,000	9,200	14,000	2,700	11,000	< 50
10/25/01 01/22/02	79,000 76,000	< 3,800 < 2,300	9,200 7,000	14,000 13,000	2,400 2,200	11,000 9,600	< 50 < 50
04/11/02	76,000	< 1,500	7,800	11,000	2,200	12,000	< 50
06/11/02	72,000	< 2,500	7,300	9,600	2,500	12,000	< 50
09/17/02	52,000	< 3,000	5,000	5,400	2,100	9,100	< 20
12/18/02	46,000	< 6,000	2,900	3,000	1,800	7,600	22
03/25/03	87,000	< 8,000	7,900	9,300	2,900	12,000	< 50
06/23/03	46,000	< 3000	7,800	4,000	1,900	6,600	< 50
09/26/03	52,000	< 3000	9,100	3,500	1,300	5,000	< 50
12/18/03	61,000	< 4,000	13,000	3,500	1,600	5,600	< 20
03/12/04	53,000	< 4,000	9,100	3,500	1,700	5,700	< 25
06/17/04	59,000	< 3,000	7,100	4,000	1,700	7,300	< 25
09/17/04	33,000		9,800	1,200	1,300	4,000	< 20
11/10/04***	44,000	3,600	13,000	4,400	1,600	6,000	< 1000
12/17/04	54,000	< 3,000	7,900	2,200	1,700	3,900	< 15
04/28/05	81,000	< 3,000	7,000	6,000	2,100	8,700	< 15
07/19/05	59,000	na	7,900	4,400	1,900	7,000	< 15
10/03/05	34,000	< 800	7,800	810	1,000	2,800	< 15
12/06/05	26,000	< 800	6,100	940	770	2,000	< 15
03/15/06	33,000	< 1,500	7,700	2,600	1,400	4,200	< 15
06/28/06	96,000	< 4,000	10,000	14,000	2,900	12,000	< 15
8/31/06	47,000	< 3,000	5,800	5,100	2,200	8,700	< 15
	,	-,	. ,	-,	-,	-,	

TABLE TWO Summary of Chemical Analysis of Groundwater Samples Petroleum Hydrocarbon Concentrations All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
<u>MW-3</u>							
01/12/00	,	13,000*	,	,	,	,	
04/24/00	240,000	700,000*					< 5,000
			35,000	,	,	,	
07/20/00		SAMPLED					
10/24/00		SAMPLED					
01/18/01		SAMPLED					
04/05/01		SAMPLED					
07/17/01		SAMPLED					
10/25/01		SAMPLED					
01/22/02		SAMPLED					
04/11/02		SAMPLED					
06/11/02		SAMPLED					
09/17/02		SAMPLED					
12/18/02		SAMPLED					
03/25/03		SAMPLED					
06/23/03		SAMPLED					
09/26/03		SAMPLED					
12/18/03		SAMPLED					
03/12/04		SAMPLED					
06/17/04		SAMPLED					
09/17/04		SAMPLED					
11/10/04		SAMPLED					
12/17/04		SAMPLED					
04/28/05		SAMPLED					
07/19/05		SAMPLED					
10/03/05		SAMPLED					
12/06/05		SAMPLED					
03/15/06		SAMPLED					
06/28/06	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	NS
8/31/06	NOT	SAMPLED	DUE TO F	REE-FLOA	TING HYD	ROCARBO	NS

TABLE TWO

Summary of Chemical Analysis of Groundwater Samples Petroleum Hydrocarbon Concentrations All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
							LI CONTRACTOR OF THE PROPERTY
MW-4							
01/12/00	99,000	7,900*	16,000	20,000	2,100	,	< 2,500
04/24/00	54,000	44,000*	3,400/	13,000/	1,800/	8,800/	< 1,300
			4,500	20,000	2,800	14,000	
07/20/00	8,000	3,500	9,200/	20,000	2,500	,	< 1,000
			11,000	22,000	3,400	13,000	
10/24/00	98,000	8,000*	21,000	29,000	2,700		< 1,000
01/18/01	91,000	12,000	17,000/		2,500/	,	<1,000
04/05/01	00.000	7 500+	15,000	21,000	2,800	11,000	<5,000
04/05/01	88,000	7,500*	6,900/	18,000/	2,500/	,	< 1,000
07/17/01	05.000	2 000	3,200	9,000	1,300	6,400	< 500
07/17/01	95,000	< 3,000	8,000	16,000	2,900	11,000	49
10/25/01	89,000	< 2,200	9,300	18,000	2,400	12,000	66
01/22/02 04/11/02	80,000	< 2,300 < 900	4,600	15,000	2,500	11,000	< 50 55
	90,000		6,600	18,000 20,000	2,800	12,000	
06/25/02 09/17/02	110,000 110,000	< 3,000 < 3,000	10,000 9,600	21,000	2,900	13,000	< 100 < 100
12/18/02	97,000	< 4,000	8,000	20,000	2,800 2,600	13,000 12,000	< 50
03/25/03	97,000	< 7,500	7,600	22,000	2,500	12,000	< 100
06/23/03	100,000	< 3,000	9,600	22,000	3,300	15,000	< 100
09/26/03	110,000	< 4,000	9,300	17,000	2,100	10,000	< 50
12/18/03	110,000	< 2,000	8,900	19,000	2,500	12,000	< 25
03/12/04	96,000	< 4,000	6,500	18,000	2,700	12,000	< 40
06/17/04	110,000	< 4,000	10,000	20,000	2,900	13,000	< 50
09/17/04	78,000		9,300	15,000	2,400	11,000	<50
11/10/04***	87,000	4,300	15,000	21,000	3,000	16,000	< 1300
12/17/04	88,000	< 3,000	8,500	16,000	2,800	12,000	< 25
04/28/05	110,000	< 3,000	7,800	14,000	2,200	10,000	< 25
07/19/05	90,000	na	10,000	13,000	2,300	10,000	< 40
10/03/05	68,000	< 800	9,400	4,000	1,800	8,700	23
12/06/05	81,000	< 1,500	8,900	7,200	2,200	9,500	< 20
03/15/06	68,000	< 3,000	7,300	14,000	2,500	10,000	< 20
06/28/06	61,000	< 3,000	8,500	4,100	2,600	11,000	< 20
08/31/06	68,000	< 2,000	9,500	9,600	2,500	12,000	< 20
NAVA 5							
MW-5	. 50		. 0 5	. 0 -	. 0 [. 0 5	20
06/11/02 09/17/02	< 50 < 50	< 50 110	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	< 0.5 < 0.5	28 4.8
12/18/02	< 50	140	< 0.5	< 0.5	< 0.5	< 0.5	1.8
03/25/03	< 50	130	< 0.5	< 0.5	< 0.5	< 0.5	7.4
06/23/03	< 50	390	< 0.5	< 0.5	< 0.5	< 0.5	17
09/26/03	< 50	700	< 0.5	< 0.5	< 0.5	< 0.5	21
12/18/03	< 50	550	< 0.5	< 0.5	< 0.5	< 0.5	16
03/12/04	< 50	490	< 0.5	< 0.5	< 0.5	< 0.5	9.1
06/17/04	< 50	510	< 0.5	< 0.5	< 0.5	< 0.5	9.8
09/17/04	< 50		< 0.5	< 0.5	< 0.5	< 0.5	5.5
11/10/04***	< 50	370	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/04	< 50	120	< 0.5	< 0.5	< 0.5	< 0.5	9.2
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.2
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	6.1
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	2.4
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	3.3
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.8
08/31/06	< 50	< 50	< 0.50	< 0.50	< 0.50	< 0.50	3.4

TABLE TWO

Summary of Chemical Analysis of Groundwater Samples Petroleum Hydrocarbon Concentrations All results are in parts per billion

Well/							
Date	TPH	TPH			Ethyl-	Total	
Sampled	Gasoline	Diesel	Benzene	Toluene	benzene	Xylenes	MTBE
<u>MW-6</u>							
06/11/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.2
09/17/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	1.0
12/18/02	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.90
03/25/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
06/23/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/26/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/18/03	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
03/12/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
09/17/04	< 50		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
11/10/04***	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/04	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
04/28/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
07/19/05	< 50	na	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
10/03/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
12/06/05	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
03/15/06	< 50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
06/28/06	< 50	< 50	< 0.5	< 0.5	< 0.5	0.65	< 0.5
08/31/06	< 50	< 50	< 0.50	2.4	0.90	4.0	< 0.50
MW-7							
06/25/02	38,000	< 2,000	890	5,100	1,200	5,200	< 20
09/17/02	26,000	< 2,000	590	3,600	880	4,000	< 20
12/18/02		NOT SA	MPLED - (CAR PARK	ED OVER	WELL	
03/25/03	39,000	< 2,900	410	7,700	1,000	6,400	< 5.0
06/23/03	17,000	< 1,000	440	2,600	630	2,600	< 10
09/26/03	17,000	< 1,000	230	1,800	470	2,200	< 5.0
12/18/03	20,000	< 1,000	290	2,500	590	2,900	< 5.0
03/12/04	20,000	< 1,500	300	3,000	760	3,200	< 10
06/17/04	12,000	< 800	250	1,800	450	1,900	< 5.0
09/17/04	9,900		200	1,500	450	1,800	< 5.0
11/10/04***	20,000	1,900	550	4,200	920	4,000	< 500
12/17/04	14,000	< 800	220	1,700	530	2,000	< 3.0
04/28/05	13,000	< 300	84	1,000	660	2,200	< 2.5
07/19/05	16,000	na	170	1,800	540	2,200	< 2.5
10/03/05	7,400	< 200	140	710	350	1,100	< 0.50
12/06/05	22,000	< 600	240	2,300	800	3,400	< 5.0
03/15/06	3,800	< 200	4.6	160	120	620	< 0.50
06/28/06	6,400	< 500	19.0	340	490	940	< 0.90
08/31/06	20,000	< 600	160	2,200	1,300	3,500	< 2.5
	•			•	•	•	
ESL	500	640	46	130	290	13	1,800
Notes:							

Non-detectable concentrations noted by the less than sign (<) followed by the detection limit. Most recent data in bold.

 ${\sf ESL} = {\sf Environmental} \ {\sf screening} \ {\sf levels} \ {\sf presented} \ {\sf in} \ {\sf the} \ "{\sf Screening} \ {\sf For} \ {\sf Environmental} \ {\sf Concerns}$ at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

 $[\]frac{\text{Notes:}}{^*=\text{Hydrocarbons reported are in the early diesel range, and do not match the}}$ laboratory standard.

^{** =} Hydrocarbons reported do not match the laboratory gasoline standard.

^{***=} Grab sample - Not purged

^{# =} Estimated concentration reported due to overlapping fuel patterns.

^{/ =} Results separated by a slash represent results from two different laboratory methods (8020/8260).

na = not analyzed

TABLE THREE

Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Date Sampled &	_	_		_	_	_	_
Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
7/8/97							
7/8/97 Hydrocarbon Oil and Grease	_	< 1,000	_	-	_	_	_
Tetrachloroethane (PCE)	0.9	< 0.5	_	-	-	-	-
Other VOCs	< 0.5 - < 3	< 0.5 - < 3	-	-	-	-	-
	· · · ·						
1/26/98							
Hydrocarbon Oil and Grease	-	< 1,000	-	-	-	-	-
Trichloroethene	0.7	< 5.0	-	-	-	-	-
Tetrachloroethene	10	< 5.0	-	-	-	-	-
1,2-Dichloroethane	< 0.5	11 < 0.5 - < 50	-	-	-	-	-
Other VOCs	< 0.5 - < 50	< 0.5 - < 5U	-	-	-	-	-
7/23/98							
Hydrocarbon Oil and Grease	-	< 1,000	-	-	-	-	-
Tetrachloroethene	4	4.6	-	-	-	-	-
1,2-Dichloroethane	< 2	9.9	-	-	-	-	-
Other VOCs	< 2 - < 10	< 0.5 - < 5.0	-	-	-	-	-
1/5/00							
1/5/99 Hydrocarbon Oil and Grease	_	< 1,000	_	-	_	_	_
Tetrachloroethene	5.1	< 1,000 < 50	-	-	-	-	-
Trichloroethene	0.52	< 50	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.58	< 50	-	_	-	-	-
Chloroform	8.2	< 50	-	-	-	-	-
Other VOCs	< 0.5 - < 5	< 50 - < 500	-	-	-	-	-
7/13/00							
7/13/99 Hydrocarbon Oil and Grease	_	< 1,000	_	-	_	-	_
Tetrachloroethene	1.5	0.68	-	-	-	-	-
Chloroform	4.6	< 50	-	-	-	-	-
1,2-Dichloroethane	< 0.50	7.7	-	-	-	-	-
Other VOCs	< 0.5 - < 5	< 0.5 - < 500	-	-	-	-	-
1/12/00		4 00-		4 000			
Hydrocarbon Oil and Grease	-	< 1,000	< 1,000	< 1,000	-	-	-
Tetrachloroethene	0.8	< 1.0	< 100	< 50 < 50	-	-	-
Chloroform 1,2-Dichloroethane	3.2 <0.50	< 1.0 8.8	< 100 120	< 50 140	-	-	-
1,2-Dichloroethane Acetone	<u.3u -</u.3u 	8.8	120 25,000	6,400	-	-	-
Naphthalene	-	-	550	540	-	-	-
Isopropylbenzene	-	-	120	89	-	-	-
Other VOCs	< 0.5 - < 5.0	< 1.0 - < 4.0		000 < 50 - < 5,000	-	-	-
4/24/00							
Hydrocarbon Oil and Grease	_	<1,000	4,100	< 1,000	-	-	-
1,2-Dichloroethane	< 0.5	5.9	< 1,000	< 250	-	-	-
Naphthalene	-	-	3,800	590	-	-	-
Isopropylbenzene	-	-	1,200	< 250	-	-	-
Other VOCs	< 0.5 - < 5.0	< 5.0 - < 20		,0< 250 - < 25,000	-	-	-
7/20/00							
Hydrocarbon Oil and Grease	-	< 1,000		< 1,000	-		-
Tetrachloroethene	0.59	< 5.0	FREE	< 200	-	-	-
Chloroform	2.1	< 5.0	PRODUCT	< 200	-	-	-
1,2-Dichloroethane	< 0.5	6.7		< 200	-	-	-
Acetone	=	-	NOT	< 20,000	-	-	-
Naphthalene	-	-	SAMPLED	730	-	-	-
Other VOCs	< 0.5 - < 20	< 5.0 - < 20		< 250 - < 20,000	-	-	-
10/24/00			FREE				
Hydrocarbon Oil and Grease	_	< 1,000	PRODUCT	< 1,000	_	-	_
Tetrachloroethene	< 0.5	< 5.0		< 250	-	-	-
Chloroform	1.0	< 5.0	NOT	< 250	-	-	-
Other VOCs	< 0.5 - < 20	< 5.0 - < 20	SAMPLED	< 250 - < 25,000	-	-	-
1 /1 0 /01			FDFF				
1/18/01		2.100	FREE	1 202			
Hydrocarbon Oil and Grease	1.2	2,100	PRODUCT	1,300	-	-	-
Tetrachloroethene Chloroform	1.3 6.4	< 5.0	NOT	< 250 < 250	-	-	-
Other VOCs	6.4 < 0.5 - < 20	< 5.0 < 5.0 - < 20	NOT SAMPLED	< 250 < 250 - < 25,000	-	-	-
Other VOCS	< 0.3 - < 20	< 3.0 - < 20	SAMPLED	< 230 - < 23,000	-	-	-

TABLE THREE

Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Data Campled &							
Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
compound Analyzed	1-144 1	1111 2	1914 5	1-144 1	11111 3	1-144 0	1-144 /
4 /5 /04							
4/5/01 Hydrocarbon Oil and Grease	_	< 1.0	FREE	1,100.0	_	_	_
Tetrachloroethene	< 0.5	1.1	PRODUCT	< 50	-	-	_
1.2 dichloroethane	< 0.5	4.6		< 50	-	-	-
Trichloroethene	< 0.5	0.58	NOT	< 50	_	_	_
Naphthalene	-	-		320	-	-	-
Other VOCs	< 0.5 - < 2.0	< 5.0 - < 20	SAMPLED	< 50 - < 5,000	-	=	-
7/17/01							
Hydrocarbon Oil and Grease	_	< 500	FREE	< 500	_	_	_
Tetrachloroethene	_	-	PRODUCT	-	_	-	-
1.2 dichloroethane	< 0.5	< 50		69.0	-	-	-
Trichloroethene	-	-	NOT	-	-	-	-
Naphthalene	_	-		-	-	-	-
Other VOCs	-	-	SAMPLED	-	-	-	-
10/25/01							
Hydrocarbon Oil and Grease	_	< 5,000	FREE	< 5,000	-	_	-
1,2 dichloroethane	-	< 50	PRODUCT	72	-	_	_
1,2 dibromoethane	-	< 50	NOT	< 50	-	_	-
Other VOCs	-	-	SAMPLED		-	-	-
1/22/02							
Hydrocarbon Oil and Grease	_	< 5,000	FREE	< 5,000	-	-	-
1,2 dichloroethane	_	< 50	PRODUCT	< 50	_	_	_
1,2 dibromoethane	_	< 50	NOT	< 50	-	-	-
Other VOCs	-	-	SAMPLED		-	-	-
6/11/02							
Oil and Grease	_	1,100	FREE	_	< 1,000	< 1,000	_
1,2 dichloroethane	_	< 50	PRODUCT	_	< 0.5	< 0.5	_
1,2 dibromoethane	_	< 50	NOT	_	< 0.5	< 0.5	_
Other VOCs	-	-	SAMPLED	-	-	-	-
6/25/02							
Oil and Grease	_	_	FREE	1,400	_	_	< 1,000
1,2 dichloroethane	_	_	PRODUCT	< 100	_	_	< 20
1,2 dibromoethane	_	_	NOT	< 100	-	-	< 20
Other VOCs	-	-	SAMPLED	-	-	-	-
9/17/02							
Oil and Grease	_	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	-	< 20	PRODUCT	< 100	< 0.50	< 0.50	< 20
1,2 dibromoethane	-	< 20	NOT	< 100	< 0.50	< 0.50	< 20
Other VOCs	-	-	SAMPLED	-	-	-	-
12/19/02							
12/18/02 Oil and Grease	_	1,200	FREE	< 1,000	< 1,000	< 1,000	CAR PARKED
1,2 dichloroethane	-	< 10	PRODUCT	< 1,000 < 50	< 0.50	< 0.50	OVER WELL
1,2 dibromoethane	-	< 10	NOT	< 50 < 50	< 0.50	< 0.50	NOT
Other VOCs	-	-	SAMPLED	-	-	-	SAMPLED
			-				
3/25/03			5555			4.00-	
Oil and Grease	-	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	-	< 50	PRODUCT	< 100	< 0.50	< 0.50	< 2.5
1,2 dibromoethane	-	< 50	NOT	< 100	< 0.50	< 0.50	< 2.5
Other VOCs	-	-	SAMPLED	-	-	-	-
6/23/03							
Oil and Grease	-	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	< 0.5	< 50	PRODUCT	< 100	< 0.50	< 0.50	< 10
1,2 dibromoethane	< 0.5	< 50	NOT	< 100	< 0.50	< 0.50	< 10
Other VOCs	-	-	SAMPLED	-	-	-	-

TABLE THREE

Groundwater Analytical Results Oil & Grease and Volatile Organic Compounds All results are in parts per billion

Date Sampled & Compound Analyzed	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
9/26/03							
Oil and Grease	-	< 1,000	FREE	< 1,000	< 1,000	< 1,000	< 1,000
1,2 dichloroethane	< 0.5	< 50	PRODUCT	87	< 0.50	< 0.50	< 5.0
1,2 dibromoethane	< 0.5	< 50	NOT	< 50	< 0.50	< 0.50	< 5.0
Other VOCs	-	-	SAMPLED	-	-	-	-
12/18/03							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	< 0.5	< 20	PRODUCT	46	< 0.50	< 0.50	< 5.0
1,2 dibromoethane	< 0.5	< 20	NOT	< 25	< 0.50	< 0.50	< 5.0
Other VOCs	-	-	SAMPLED	-	-	-	-
3/12/04 Oil and Grease	_	_	FREE	_	-	_	-
1,2 dichloroethane	< 0.5	- < 25	PRODUCT	- < 40	< 0.50	< 0.50	- < 10
1,2 dibromoethane	< 0.5	< 25	NOT	< 40	< 0.50	< 0.50	< 10
Other VOCs	-	-	SAMPLED	-	-	-	-
6/17/04							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	< 0.5	< 25	PRODUCT	93	< 0.50	< 0.50	< 5.0
1,2 dibromoethane	< 0.5	< 25	NOT	< 50	< 0.50	< 0.50	< 5.0
Other VOCs	-	-	SAMPLED	-	-	-	-
9/17/04							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	-	-	PRODUCT	-	-	-	-
1,2 dibromoethane	-	-	NOT	-	-	-	-
Other VOCs	-	-	SAMPLED	-	-	-	-
12/17/04 Oil and Greece	_	-	FDFF		_	_	-
Oil and Grease 1,2 dichloroethane	< 0.5	- < 15	FREE PRODUCT	53	< 0.50	< 0.50	< 3.0
1,2 dibromoethane	< 0.5	< 15	NOT	< 25	< 0.50	< 0.50	< 3.0
Other VOCs	-	-	SAMPLED	-	-	-	-
4/28/05							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	PRODUCT	46	< 0.50	< 0.50	< 2.5
1,2 dibromoethane	< 0.5	< 15	NOT	< 25	< 0.50	< 0.50	< 2.5
Other VOCs	DIPE @ 0.67	TBA @ 90	SAMPLED	-	-	-	-
7/19/05							
Oil and Grease	-	-	FREE	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	PRODUCT	73	< 0.50	< 0.50	< 2.5
1,2 dibromoethane	< 0.5	< 15	NOT	< 40	< 0.50	< 0.50	< 2.5
Other VOCs	DIPE @ 0.76	TBA @ 77	SAMPLED	-	DIPE @ 2.1	-	-
10/3/05 Oil and Grease	_	_	_	_	_	_	_
1,2 dichloroethane	< 0.5	< 15	FREE	62	< 0.50	< 0.50	< 0.50
1,2 dibromoethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.50
Other VOCs	< 0.5	< 15	NOT	DIPE @ 23	DIPE @ 1.7	< 0.50	< 0.50
ТВА	< 5.0	< 70	SAMPLED	< 5.0	< 5.0	< 5.0	
3/15/06							
Oil and Grease	-	-	-	-	-	-	-
1,2 dichloroethane	< 0.5	< 15	FREE	< 20	< 0.50	< 0.50	< 0.50
1,2 dibromoethane	< 0.5	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.50
Other VOCs	-	-	NOT	-	-	-	-
TBA	-	-	SAMPLED	-	-	-	-
6/28/06 Oil and Crosse	_	_	_		_		_
Oil and Grease 1,2 dichloroethane	< 0.5	33	FREE	20	< 0.50	< 0.50	< 0.90
1,2 dibromoethane	< 0.5	>> < 15	PRODUCT	< 20	< 0.50	< 0.50	< 0.90
Other VOCs	< 0.5	< 15 -	NOT	< 20	< 0.50	< 0.50	< 0.90
TBA	-	-	SAMPLED	-	-	-	-
<u>8/31/06</u>							
Oil and Grease	-	-	-	-	-	-	-
	< 0.50	< 15	FREE	36	< 0.50	< 0.50	< 2.5
1,2 dichloroethane	~ 0.50	٠.٠					1
1,2 dibromoethane	< 0.50	< 15	PRODUCT	< 20	< 0.50	< 0.50	< 2.5

TABLE FOUR WELLS WITHIN 2,000-FOOT RADIUS OF 250 8th STREET, OAKLAND, CALIFORNIA

			Date	Total		
ASE ID	Address	Owner	Drilled	Depth	Diameter	Use
1	Harrison St && 15th St	Alvin H. Bacharach and Ba	Oct-96	25	2	MON
2	Harrison St && 15th St	Alvin H. Bacharach and Ba	Oct-96	29	2	MON
3	Harrison St && 15th St	Alvin H. Bacharach and Ba	Oct-96	29	2	MON
4	San Pablo Ave. & Broadway	Taldan Property B1-P	8/92	42	2	PIE
5	San Pablo Ave. & Broadway	Taldan Property B2-P	8/92	42	2	PIE
6	11th & Clay Streets	City Oakland, Econ. Devel	2/90	35	2	PIE
7	11th & Clay Streets	City Oakland, Econ. Devel	2/90	35	2	PIE
8	Corner of 12th & Broadway	APC Building	Sep-88	31	2	MON
9	Corner of 12th & Broadway	APC Building	Jul-88	30	2	MON
10 11	Corner of 12th & Broadway 1111 Broadway	APC Building	Jul-88 9/90	30 35	2	MON MON
12	1111 Broadway 1111 Broadway	Bramalea Pacific, Inc. Bramalea-APC	9/90 Dec-88	35 25	2 2	MON
13	1111 Broadway	Bramalea-APC	Dec-88	23	2	MON
14	1111 Broadway	Bramalea-APC	Dec-88	25	2	MON
15	Broadway & 11th Streets	City Center ESA	Apr-90	21	3	MON
16	11th Street & Broadway	City Oakland, Econ. Devel	2/90	35	2	PIE
17	11th Street & Broadway	City Oakland, Econ. Devel	2/90	35	2	PIE
18	11th Street & Broadway	City Oakland, Econ. Devel	2/90	35	2	PIE
19	11th & Clay Streets	City Oakland, Econ. Devel	2/90	35	2	PIE
20	1432 Harrison St	Alvin H Bacharach & Barba	Oct-96	25	2	MON
21	1432 Harrison St	Alvin H Bacharach & Barba	Oct-96	29	2	MON
22	1225 Webster St	Bank of the Orient	Dec-93	34	2	MON
23	1225 Webster St	Bank of the Orient	Dec-93	35 35	2	MON
24 25	1225 Webster St 1225 Webster St	Bank of the Orient Bank of the Orient	Dec-93 Dec-93	35 34	2 2	MON MON
26	1225 Webster St 1225 Webster St	Bank of the Orient	2/94	3 4 34	2	MON
27	1225 Webster St	Bank of the Orient	3/94	35	2	MON
28	1225 Webster St	Bank of the Orient	3/94	35	2	MON
29	301 14th Street	Chevron USA	Jun-90	60	4	MON
30	301 14th Street	Chevron USA	Jun-90	34	2	MON
31	301 14th Street	Chevron USA	Jun-90	33	2	MON
32	301 14th Street	Chevron USA	Jun-90	33	2	MON
33	301 14th Street	Chevron USA	Jun-90	33	2	MON
34	301 14th Street	Chevron USA	8/90	15	4	MON
35	301 14th Street	Chevron USA	Oct-90	32	2	MON
36 37	301 14th Street 301 14th Street	Chevron USA Chevron USA	4/91 2/91	14 20	2 2	MON MON
38	301 14th Street	Chevron USA	4/91	30	2	MON
39	301 14th Street	Chevron USA	4/91	35	2	MON
40	301 14th Street	Chevron USA MW10	6/92	35	2	MON
41	301 14th St.	Chevron USA VEW-1	6/92	20	2	MON
42	301 14th St.	Chevron USA VEW-2	6/92	20	2	MON
43	301 14th St	Chevron USA Products Co	4/94	30	4	MON
44	301 14th St.	Chevron VEW-3	3/93	31	4	MON
45	11th & Webster Sts.	City of Oakland	May-87	39	4	MON
46	11th & Webster Sts.	City of Oakland	Dec-87	45	4	MON
47	11th & Webster Sts.	City of Oakland	Dec-87	44	4	MON
48	10th & Webster Sts.	City of Oakland	Dec-87	40	4	MON
49 50	10th & Webster Sts. 10th & Webster Sts.	City of Oakland	Dec-87	42 66	4	MON
50 51	11th & Webster Sts.	City of Oakland City of Oakland	Mar-88 Mar-88	66 44	4 4	MON TES
52	10th & Franklin Sts.	City of Oakland	Mar-88	43	4	TES
53	11th & Franklin Sts.	City of Oakland	Mar-88	40	4	TES
54	10th & Webster Sts.	City of Oakland	Mar-88	40	4	TES
55	10th & Franklin Sts.	City of Oakland	Apr-88	64	4	TEST
56	1220 Harrison St	Frank G. Mar Assoc MW-1	4/92	36	2	MON
57	13th & Harrison Street	Frank Mar Comm. Housing	Unknown	Unknown	Unknown	Unknown
58	13th & Harrison Street	Frank Mar Comm. Housing	Unknown	Unknown	Unknown	Unknown
59	10th & Webster Sts.	Oakland Redevelopment Agency	Feb-89	40	4	MON
60	10th & Webster Sts.	Oakland Redevelopment Agency	Feb-89	40	4	MON
61	1432 Harrison St	Unknown	7/94	26	2	MON

TABLE FOUR WELLS WITHIN 2,000-FOOT RADIUS OF 250 8th STREET, OAKLAND, CALIFORNIA

			Date	Total		
ASE ID	Address	Owner	Drilled	Depth	Diameter	Use
	4400 Hamia a Ot	Links are se	410.1	07		MOV:
62 63	1432 Harrison St 387 12th St	Unknown	1/94 6/93	27 25	4	MON MON
63 64	387 12th St 387 12th St	Unknown Unknown	6/93 6/93	25 25	2 2	MON
65	387 12th St	Unknown	6/93	25	2	MON
66	165 13th Street	Alameda County Services	Oct-92	20	2	MON
67	165 13th Street	Alameda County Services	Mar-89	35	4	MON
68	165 13th Street	Alameda County Services	Mar-89	24	2	MON
69	165 13th Street	Alameda County Services	Mar-89	35	2	MON
70	165 13th Street	Alameda County Services	Mar-89	35	4	MON
71	Alice & 14th Street	Moose Club	/27	150	0	ABN
72	1439 Alice St	Unknown	7/94	25	2	MON
73	1106 Madison St	Alameda County GSA	5/97	35	2	MON
74 75	125 12th Street	Western Union	5/91 2/55	33 130	6 0	DOM TES
75 76	Clay Street Webster St. & 9th St.	Division of Highways City of Oakland	2/55 Nov-90	46	4	TES
70 77	Webster & 9th Streets	City of Oakland Redevelopment	7/90	37	4	MON
78	9th Street & Alice Street	Fire Station #12	Jun-89	37	2	MON
79	610 Oak St.	American Fund Plan MW1	4/93	25	2	DES
80	610 Oak St.	American Fund Plan MW1R	5/93	25	2	MON
81	6th Street & Harrison Street	Pacific Gas & Electric	6/73	120	0	CAT
82	800 Harrison St.	Unocal #0752 MW-7	4/93	33	2	MON
83	800 Harrison St.	Unocal #0752 MW-8	4/93	31	2	MON
84	800 Harrison Street	Unocal Corporation	6/91	33	2	MON
85	800 Harrison Street	Unocal Corporation MW4	9/92	33	2	MON
86 87	800 Harrison Street	Unocal Corporation MW5	Oct-92	32 32	2 2	MON MON
87 88	800 Harrison Street 245 8th St	Unocal Corporation MW6 Victor Lum	Oct-92 7/95	32 28	4	MON
89	245 8th St	Victor Lum	7/95 7/95	28	4	MON
90	280 6th St	Unknown	1/95	14	4	MON
91	280 6th St	Unknown	1/95	14	4	MON
92	280 6th St	Unknown	1/95	14	4	MON
93	280 6th St	Unknown	1/95	14	4	MON
94	333 Broadway	John Leonardini	9/93	26	2	MON
95	800 Franklin Street	Alex Shaw, Dynagroup	9/89	35	2	MON
96	800 Franklin Street	Alex Shaw, Dynagroup	9/89	35	2	MON
97	800 Franklin Street	Alex Shaw, Dynagroup	9/89	34	2	MON
98	800 Franklin St	Chiu	5/97	36	2	MON
99 100	800 Franklin St 800 Franklin St	Tom Chiu MW-4 Tom Chiu MW-5	Oct-91 Oct-91	35 35	2 2	MON MON
100	Webster St. & 9th St.	City of Oakland	Dec-89	38	4	MON
101	Webster & 9th St.	City of Oakland	1/91	40	4	MON
103	Webster & 9th St.	City of Oakland	Nov-90	37	2	PIE
104	Webster & 9th St.	City of Oakland	Nov-90	37	2	PIE
105	9th and Webster Streets	City of Oakland Redevelopment	1/90	45	6	DES
106	Webster & 9th Streets	City of Oakland Redevelopment	8/90	19	4	MON
107	Webster & 9th Streets	City of Oakland Redevelopment	8/90	19	4	MON
108	461 8th St	Shell Oil Company	Dec-94	30	4	MON
109	461 8th St	Shell Oil Company	Dec-94	30	4	MON
110	461 8th St	Shell Oil Company	Dec-94	37	4	MON
111	800 Harrison St	Unocal Corp MW1	5/91 5/01	35	2	MON
112 113	800 Harrison St	Unocal Corp MW2 Unocal Corp MW3	5/91 5/01	33	2	MON
113 114	800 Harrison St 499 5th St.	Alameda County Health MW-1	5/91 4/92	33 35	2 4	MON MON
115	499 5th St.	Alameda County Health MW-2	4/92	35	4	MON
116	499 5th St.	Alameda County Health MW-2	4/92	30	4	MON
117	400 Oak St	Post Tool MW-1	Dec-91	20	4	MON
118	400 Oak St	Post Tool MW-2	Dec-91	20	4	MON
119	2nd St Near Alice St	Port of Oakland/Amtrack	6/95	17	2	MON
120	2nd St Near Alice St	Port of Oakland/Amtrack	6/95	17	2	MON
121	2nd St Near Alice St	Port of Oakland/Amtrack	6/95	15	2	MON
122	125 Webster St	Bank of the Orient	8/94	35	2	MON

TABLE FOUR
WELLS WITHIN 2,000-FOOT RADIUS OF 250 8th STREET, OAKLAND, CALIFORNIA

			Date	Total		
ASE ID	Address	Owner	Drilled	Depth	Diameter	Use
					_	
123	125 Webster St	Bank of the Orient	3/94	35	2	MON
124	609 Oak Street	Chevron	Nov-90	17	2	MON
125	609 Oak Street	Chevron USA	8/90	26	2	MON
126	609 Oak Street	Chevron USA	9/90	15	2	MON
127	609 Oak Street	Chevron USA	9/90	30	2	MON
128	609 Oak Street	Chevron USA	9/90	30	2	MON
129	208 Jackson Street	East Bay Parking	May-90	10	2	MON
130	208 Jackson Street	East Bay Parking	May-90	10	2	MON
131	208 Jackson Street	East Bay Parking	May-90	10	2	MON
132	300 Oak Street	Nancy Cotteral	Dec-91	20	4	MON
133	300 Oak Street	Nancy Cotteral	Dec-91	20	4	MON
134	726 Harrison St	Kin Chan	7/97	28	2	MON
135	726 Harrison St	Kin Chan	12/98	30	2	MON
136	726 Harrison St	Kin Chan	12/98	30	2	MON
137	726 Harrison St	Kin Chan	12/98	30	2	MON
138	726 Harrison St	Kin Chan	12/98	30	2	MON
139	726 Harrison St	Kin Chan	8/01	29	2	MON
140	726 Harrison St	Kin Chan	8/01	29	6	EXT
141	726 Harrison St	Kin Chan	8/01	28	2	Sparge
142	706 Harrison St	Oakland Auto Parts	8/93	15	2	MON
143	706 Harrison St	Oakland Auto Parts	8/93	15	2	EXT
144	706 Harrison St	Bo Gin	Nov-94	30	2	MON
145	706 Harrison St	Bo Gin	Unknown	30	2	MON
146	706 Harrison St	Bo Gin	Unknown	30	2	MON
147	706 Harrison St	Bo Gin	Unknown	30	2	MON
148	706 Harrison St	Bo Gin	Unknown	30	2	MON
149	706 Harrison St	Bo Gin	Unknown	30	2	MON



APPENDIX A

City of Oakland Sewer Maps

