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TRANSMITTAL

DATE: July 2, 2010

REFERENCE NO.: 581000

PROJECT NAME: 800 Franklin Street, Oakland

TO: Mr. Jerry Wickham
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

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Copy to: Ms. Anny Chiu

Completed by: Bryan Fong [Please Print]

Signed: Bryan A. Fong

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SITE CONCEPTUAL MODEL

CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

FUEL LEAK CASE NO. RO0000196

Prepared by:
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JULY 2, 2010
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TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
2.0	PROJECT BACKGROUND	1
2.1	SITE LOCATION AND DESCRIPTION	1
2.2	SITE HISTORY	2
2.3	REGIONAL GEOLOGY AND HYDROGEOLOGY	2
2.4	LOCAL GEOLOGY AND HYDROGEOLOGY	3
2.5	PREVIOUS ACTIVITIES AND INVESTIGATIONS	3
3.0	SOURCE OF CONTAMINATION	7
4.0	SITE CHARACTERIZATION	7
4.1	SOIL DEFINITION STATUS	7
4.2	GROUNDWATER DEFINITION STATUS	8
4.3	PLUME STABILITY AND CONCENTRATION TRENDS	9
4.4	SOIL GAS DEFINITION STATUS	9
5.0	REMEDIATION STATUS	9
6.0	WELL AND SENSITIVE RECEPTOR SURVEY	9
6.1	DESIGNATED BENEFICIAL GROUNDWATER USE	9
6.2	SHALLOW GROUNDWATER USE	10
6.3	DEEP GROUNDWATER USE	10
6.4	WELL AND SURFACE WATER SURVEY	10
6.5	PREFERENTIAL FLOW PATHS	10
6.6	LIKELIHOOD OF IMPACT TO WELLS	11
6.7	LIKELIHOOD OF IMPACT TO SURFACE WATER	11
7.0	RISK ASSESSMENT	11
7.1	SITE CONCEPTUAL EXPOSURE MODEL	11
7.2	EXPOSURE PATHWAYS	11
7.3	HUMAN HEALTH RISK ASSESSMENT	12
7.4	IDENTIFIED HUMAN EXCEEDANCES	12
7.5	IDENTIFIED ECOLOGICAL EXEEDANCES	13
8.0	DATA GAPS	13
9.0	RECOMMENDATIONS	13
10.0	REFERENCES	14

LIST OF FIGURES
(Following Text)

FIGURE 1 VICINITY MAP

FIGURE 2 SITE MAP

FIGURE 3 SOIL ANALYTICAL SUMMARY MAP

FIGURE 4 TPHg IN SOIL, ISOCONCENTRATION MAP

FIGURE 5 BENZENE IN SOIL ISOCONCENTRATION MAP

FIGURE 6 GROUNDWATER ELEVATION AND CONCENTRATION MAP

FIGURE 7 DISSOLVED PHASE TPHg, ISOCONCENTRATION MAP

FIGURE 8 DISSOLVED PHASE BENZENE, ISOCONCENTRATION MAP

FIGURE 9 HYDROGEOLOGIC CROSS SECTION A-A'

FIGURE 10 HYDROGEOLOGIC CROSS SECTION B-B'

FIGURE 11 BENZENE IN SOIL GAS SUMMARY MAP

LIST OF TABLES
(Following Text)

TABLE 1 SOIL ANALYTICAL DATA

TABLE 2 GROUNDWATER ANALYTICAL AND ELEVATION DATA – PETROLEUM HYDROCARBONS

TABLE 3 SOIL VAPOR ANALYTICAL DATA

LIST OF APPENDICES

APPENDIX A REGULATORY AGENCY CORRESPONDENCE

APPENDIX B WELL CONSTRUCTION DETAILS AND SOIL BORING LOGS

APPENDIX C TPHg & BENZENE CONCENTRATION TREND ANALYSIS GRAPHS

1.0 INTRODUCTION

On behalf of our client, Mr. Tommy Chiu, Conestoga-Rovers & Associates, Inc. (CRA) has prepared the following *Site Conceptual Model* (SCM) for the site located at 800 Franklin Street, Oakland, California. Initially, a Feasibility Study and Corrective Action Plan (FS/CAP) was requested by the lead agency for the project, (Alameda County Environmental Health - ACEH), in a letter dated March 4, 2010. Following a preliminary review of the site history and data, CRA determined and recommended preparation of a SCM to identify and address the site data gaps before preparing a FS/CAP report. In an e-mail dated June 1, 2010, ACEH approved the preparation of a SCM report. The site is referenced by ACEH as Fuel Leak Case No. RO0000196. Mr. Jerry Wickham is the ACEH Case Manager. A copy of the regulatory agency correspondence is provided in Appendix A.

The SCM provides a description of the project background, source and distribution of contaminants, and the relationship between the source area, exposure pathways, and potential receptors, as well as identifies data gaps, and provides recommendations. This SCM should be considered an evergreen document that will be updated and refined as new data becomes available.

2.0 PROJECT BACKGROUND

2.1 SITE LOCATION AND DESCRIPTION

The site is located in a commercial area, at the eastern corner of the intersection of 8th and Franklin Streets in Oakland, California (Figure 1). It is set at an elevation of approximately 35 feet above mean sea level (msl). The site presently has a two-story commercial building that occupies the entire lot (Figure 2). Retail stores currently operate on the ground floor: Cathay Chinese Herb Company, Pacific Seafood Inc., Kim Van Jewelry, and Phoung Jewelry. Commercial offices currently operate on the second floor: Express Tax Service, Trident Financial, Mekong Reality & Mortgage Inc., and Evergreen Travel. The site is bound by commercial properties to the northeast and southeast, 8th Street to the southwest, and Franklin Street to the northwest.

2.2 SITE HISTORY

Prior to 1989 the site operated as a gasoline service station. Previous investigations indicate that five underground storage tanks (USTs) previously existed on site. Four of five former USTs consisted of two 6,000-gallon gasoline USTs, one 550-gallon waste oil, and one 1,000-gallon solvent UST. The four USTs were installed circa 1970 (MES, 1989a) and subsequently removed in 1989. The 6,000-gallon USTs were formerly located in the northwest portion of the site, and the 550-gallon and 1,000-gallon USTs were formerly located underneath the sidewalk along 8th Street on the south side of the site. The fifth former UST is presumed to have been located on the eastern portion of the site and removed prior to 1988; however, no documentation has been discovered regarding the size, former contents, and removal of the UST.

2.3 REGIONAL GEOLOGY AND HYDROGEOLOGY

The site is located within the Coast Range geomorphic province of California. In general, the Coast Range province consists of Jurassic eugeosynclinal basement rocks and Cretaceous and Cenozoic sedimentary and volcanic rocks that have been faulted and folded with a northwest-southeast trend. The site lies within the East Bay Plain Subbasin. Sediments beneath the site consist of coalescing alluvial deposits from the Oakland-Berkeley Hills. According to the United States Geologic Survey (USGS) Professional Paper 943, the site is located on quaternary age alluvial deposits consisting of medium-grained, unconsolidated, moderately sorted, and permeable, fine sand, silt, and clayey silt with thin beds of coarse sand.

The site is located in the East Bay Plain Subbasin, Groundwater Basin No. 2-9.04 (DWR 2003). The East Bay Plain Subbasin is a northwest trending alluvial basin, bounded on the north by San Pablo Bay, on the east by the contact with Franciscan basement rock, and on the south by the Nile Cone Groundwater Basin. The East Bay Plain Subbasin extends beneath the San Francisco Bay to the west. The East Bay Plain Subbasin aquifer system consists of unconsolidated sediments of Quaternary age. Throughout most of the East Bay Plain in the region of the site, groundwater flows from east to west, towards San Francisco Bay and typically correlates with the site topography.

From 1860 to 1930 groundwater from the East Bay Plain was the major water supply of the East Bay, before Sierra water was imported into the area. By the late 1920's the groundwater supply was too small to meet the growing population and the wells often

became contaminated by seepage or saltwater intrusion. By 1929, East Bay Municipal Utility District (EBMUD) provided imported water to East Bay communities via the Mokelumne Aqueduct. This high-quality, reliable supply soon eliminated the need for local groundwater wells. In 1996, the Regional Board reviewed General Plans for Oakland and other communities. They found that Oakland did not have any plans to develop local groundwater resources for drinking water, due to existing or potential saltwater intrusion, contamination, or poor or limited quality (Regional Board 1999).

2.4 LOCAL GEOLOGY AND HYDROGEOLOGY

Based on previous subsurface investigations, subsurface soil beneath the site consists of fine to medium-grained sand and silty sand to approximately 36 feet. Some sand-clay mixtures were encountered in boring B-4 (Frank Lee & Associates) on the western portion of the site from 2 to 6 feet below ground surface (feet bgs), and northwest of the site from 15 to 18 feet bgs in boring MW-6. Geotechnical soil boring logs obtained from nearby Bay Area Rapid Transit District (BART) identified fine to medium-grained sand to 40 feet bgs underlain by a low permeability, hard, silty clay from approximately 40 to 70 feet bgs.

An unconfined water-bearing zone is present beneath the site at 20 feet bgs and is approximately 20 feet thick. Since 1989, the groundwater table has fluctuated approximately 4 feet from approximately 20 to 24 feet bgs. Groundwater beneath the site flows predominantly towards the northwest. The observed flow direction may be influenced by BART tunnels, which run east-west and vary in depth from approximately 27 to 32 feet bgs beneath 8th Street and Franklin Street, and/or by potential groundwater pumping from the BART pump station no. 2 approximately 550 feet to the southwest of the site.

2.5 PREVIOUS ACTIVITIES AND INVESTIGATIONS

Several phases of soil and groundwater assessments have been conducted at the site since the USTs were removed in 1989. Boring and well locations are presented on Figure 2.

May 1988: Frank Lee & Associates performed a geotechnical investigation for the subject site. The purpose of this investigation was to determine the strength characteristics of the soil as a basis for making site grading and foundation design

recommendations for a proposed three-story commercial building. Soil beneath the site was observed to consist of generally moist, medium dense, fine-grained silty sand to the total explored depth of 28.5 feet bgs. Tank backfill soil was observed to approximately 15.5 feet bgs in B-3 and to a minimum depth of 6 feet bgs in B-4. Frank Lee & Associates recommended excavating the then existing surficial material "to a minimum depth of 2 feet and re-compact before placement of engineered fill or construction." Soil samples were collected from 1 to 4 feet bgs for analysis for volatile organic compounds (VOCs); low to medium boiling point hydrocarbons; benzene, toluene, ethylbenzene, xylenes (BTEX); and total oil and grease (TOG). None of these analytes were detected above laboratory detection limits (Frank Lee & Associates, 1988). Soil analytical data is summarized in Table 1. See Appendix B for copies of the boring logs.

August 1988: LW Environmental Services, Inc. performed a soil investigation. Gasoline hydrocarbon concentrations were detected in the vicinity of the then existing USTs (MEC, 1989b).

June 1989: The Robert J. Miller Company removed four USTs: two 6,000-gallon gasoline tanks, one 550-gallon waste-oil tank, and one 1,000-gallon solvent tank. The Traverse Group Inc. (TGI) collected soil samples from beneath each tank and visually inspected the condition of each tank upon removal. No obvious pitting or corrosion was reported. The two gasoline USTs were removed from one excavation area in the northwestern corner of the site. The waste-oil and solvent USTs were removed from one excavation area in the sidewalk south of the site, along 8th Street. Approximately 10 cubic yards of soil was deemed contaminated by TGI and stockpiled on site. Soil that TGI determined to be clean or only slightly impacted was stockpiled on site. Soil samples from the excavations and stockpiles were analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPHg), as diesel (TPHd), as waste oil (TPHwo), and BTEX. Additionally, samples from the waste oil and solvent UST's excavation were analyzed for purgeable organics and semi-volatile organic compounds (SVOCs). High levels of fuel hydrocarbon contamination were detected in the northeast corner of the northeastern excavation and in the waste oil/solvent UST's excavation (MEC, 1989c).

September – October 1989: Miller Environmental Company (MEC) performed a preliminary investigation to determine whether fuel detected in soil during UST excavation activities impacted groundwater. Two excavation pits were re-excavated to approximately 15 feet bgs and approximately 25 cubic yards of additional contaminated soil was removed. Confirmation soil samples were collected from the overexcavation sidewalls and bottoms. The highest levels detected in the northwestern overexcavated pit were 2.3 mg/kg TPHg, 80 mg/kg TPHwo, 0.05 mg/kg toluene, and 0.14 mg/kg

xylenes. TPHd, benzene, and ethylbenzene were not detected above laboratory detection limits in samples collected from the northwestern pit. The highest levels detected in the waste oil/solvent overexcavated pit were 10,000 mg/kg TPHg, 250 mg/kg TPHd, 400 mg/kg TPHwo, 50 mg/kg benzene, 210 mg/kg toluene, 54 mg/kg ethylbenzene, and 270 mg/kg xylenes. Further overexcavation in the waste oil/solvent pit was not possible due to the proximity of 8th Street and interfering utilities along the southern edge of this excavation. An estimated 32 cubic yards of contaminated soil was hauled to a Class I disposal facility. The northwestern pit was backfilled with a combination of clean fill and re-used "uncontaminated soil" from the initial excavation of the two gasoline USTs. This re-used fill was intended to be temporary and to be removed when construction took place on the property. The waste oil/solvent pit was backfilled with clean fill. In addition, three monitoring wells (MW-1, MW-2, and MW-3) were installed as part of this investigation. Analytical results from these borings and wells indicated soil and groundwater from boring MW-1 was not impacted by hydrocarbons. Impacted soil was detected in offsite borings MW-2 and MW-3, between 20 to 25 feet bgs. Groundwater was first encountered in all boreholes at approximately 25 feet bgs. The groundwater gradient and flow direction were calculated to be 0.006 feet per foot and to the west-northwest, respectively.

Early 1991: Construction of the existing building on site began in early 1991. It is reported that the ACEH concurred with MEC's conclusion that soil excavation in the 6,000-gallon UST pit was successful in removing all but minor residual hydrocarbon contamination. As a result no objections were raised to construction activities on site. Monitoring well MW-1 was preserved in the construction process and remains accessible inside the building (MEC, 1992).

September – October 1991: MEC conducted a subsurface investigation to further define the lateral extent of offsite hydrocarbon contamination. On September 11, 1991, one borehole (B-1) was advanced and soil samples were collected. On October 2 and 3, 1991, three boreholes (B-2, MW-4, and MW-5) were advanced, soil samples were collected, and two monitoring wells were constructed. Groundwater was first encountered in all boreholes at approximately 25 feet bgs. No hydrocarbons were detected in soil samples collected to a depth of 20 feet bgs. However, soil samples from 25 feet bgs in boreholes B-1 and B-2 detected TPHg, Total Recoverable Petroleum Hydrocarbons (TRPH), TPHd, and toluene (Table 1). On October 31, 1992, groundwater was sampled from wells MW-1 through MW-5. Approximately 1/8 inch of floating product was observed in well MW-2. Groundwater analytical results indicated very low to moderate concentrations of TPHg, TPHd, BTEX, and 1,2-dichloroethane (1,2-DCA) in monitoring wells MW-1, MW-2, and MW-3. No TOG were detected above laboratory detection

limits in any of the wells. Also detected in well MW-3 were 1,2-dichloropropane at 0.0007 parts per million (ppm) and 1,1,1-trichoroethane (1,1,1-TCE) at 0.0014 ppm. No hydrocarbons were detected in groundwater from off site wells MW-4 and MW-5. However, very low levels of chloroform were detected in off site wells MW-4 and MW-5. See Table 2 for historic groundwater analytical results.

May 1997: On May 15, 1997, Associated Terra Consultants, Inc. (ATC) installed monitoring well MW-6. Soil samples were collected and analyzed. Soil samples had detectable concentrations of TPHd, BTEX, and methyl tertiary butyl ether (MTBE). TPHd was detected in soil at 10 feet bgs. BTEX were detected in soil at 25 feet bgs. MTBE was detected in soil at 30 feet bgs. See Table 1 for soil analytical results. Groundwater was first encountered at approximately 22.5 feet bgs. Boring logs are included in Appendix B. On May 21, 1997 ATC performed groundwater monitoring and sampling activities for all six of the site's monitoring wells.

November-December 2006: On November 17, 2006, Cambria Environmental Technology, Inc. (Cambria) installed soil vapor probes VP-1 and VP-2 in the city sidewalk along Franklin and 8th Streets. Soil samples were collected from each soil vapor probe location at approximately 5 feet bgs. Soil samples were analyzed for TPHg, TPHd, and TPHmo by EPA Method 8015C; BTEX and MTBE by EPA Method 8021 B; and 1,2-DCA and chloroform by EPA Method 8260. Low levels of TPHd and TPHmo concentrations were detected in soil sample VP-1.5.5 at 4.0 and 6.9 mg/kg, respectively. Based on these results, Cambria concluded the upper 5.5 feet of soil at locations VP-1 and VP-2 has little to no hydrocarbon impact.

On December 28, 2006, Cambria returned to the site to collect vapor samples from VP-1 and VP-2. The samples were analyzed, in accordance with the approved July 24, 2006 Work Plan, for benzene and tracer compounds isobutene, butane, and propane by modified EPA method TO-15. No concentrations of benzene, and the tracer compounds were detected.

January-February 2007: Since 2004, monitoring well MW-3 has been filled with debris and inaccessible. ACEH requested that this well be decommissioned and rebuilt. On January 29, 2007, Cambria destroyed well MW-3 by pressure grouting. To replace MW-3, Cambria returned to the site on February 8, 2007 to install well MW-3A. This work was performed in accordance with the approved July 24, 2006 *Work Plan*. On July 25, 2007, CRA collected a second round of vapor samples from soil vapor wells VP-1 and VP-2. Each sample was analyzed by EPA Method TO-15 GC/MS for benzene and the full VOC target list. No concentrations of benzene or tracer compounds were

detected. The only chemicals detected were 2-butanone (Methyl Ethyl Ketone), 2,2,4-Trimethylpentane, Freon 12, Acetone, and Tetrachloroethane. Detections did not exceed Regional Water Quality Control Board – San Francisco Bay Region Environmental Screening Levels (ESLs) for any of the chemicals with an established ESL.

Groundwater Monitoring: Groundwater monitoring was conducted from October 1989 through at least 2000 and then again on a quarterly basis between September 2004 and October 2006. It is known that several documents were prepared but are missing from the client, CRA, and ACEH's files. Therefore, the entire historic monitoring and sampling frequency is currently unknown and some data is likely missing. Groundwater is currently monitored on a semi-annual basis.

3.0 SOURCE OF CONTAMINATION

The primary chemicals of concern at the site are TPHg, benzene, toluene, ethylbenzene, and xylenes in groundwater and soil. The contamination originated from the former gasoline USTs located in the northwest portion of the site and the former USTs located in the sidewalk along 8th Street. According to historical reports, the former USTs located in the sidewalk along 8th Street were used for storing waste oil and solvents. However, soil analytical data from this UST pit suggests that gasoline was likely stored and/or released from the former 1,000-gallon tank.

Low levels of TPHd concentrations were also detected in soil and groundwater. However, none of the USTs were recorded to store diesel. Therefore, TPHd concentrations are most likely related to gasoline constituents that elude within the TPHd laboratory method quantification range. Quarterly monitoring laboratory analytical notes consistently report that only gasoline-range compounds are significant, which supports this determination.

4.0 SITE CHARACTERIZATION

4.1 SOIL DEFINITION STATUS

Soil samples have been collected from a total of six soil borings; six groundwater monitoring well locations and two vapor probes located on and off the site. Of the six soil borings, four of them (B-1 through B-4; Frank Lee & Associates) were drilled mainly

for geotechnical reasons and therefore soil samples were only collected from 1 to 4 feet bgs for VOC analysis. No VOCs were detected in any of the samples.

Petroleum hydrocarbons have been detected at depths ranging from 21 to 26 feet bgs under the sidewalk and street west-northwest of the former 6,000-gallon gasoline USTs and also in the vicinity of the former 550-gallon and 1,000-gallon USTs located in the sidewalk along 8th Street. TPHg concentrations range from 120 to 2,200 milligrams per kilogram (mg/kg) in the vicinity of the two former 6,000-gallon USTs and range from 1,900 to 10,000 mg/kg in the vicinity of the former 550-gallon and 1,000-gallon USTs.

Hydrocarbon-impacted soil in the vicinity of the former 6,000-gallon USTs appears to extend offsite beneath the sidewalk and Franklin Street to the northwest. Hydrocarbon-impacted soil in the vicinity of the former 550-gallon and 1,000-gallon USTs appears to extend offsite beneath the sidewalk and 8th Street to the southwest and south. The extent of hydrocarbon-impacted soil is not fully defined laterally and also vertically below groundwater, beyond 26 ft bgs. Soil analytical data is presented on Table 1. Figures 3, 4, and 5 summarize soil analytical data and iso-concentrations for TPHg and benzene, respectively.

4.2 GROUNDWATER DEFINITION STATUS

Groundwater at the site has been characterized by periodic sampling of six monitoring wells. Depth to groundwater ranges from approximately 20 to 25 feet bgs in all six monitoring wells. During the March 19, 2010 sampling event, TPHg concentrations in monitoring wells MW-2, MW-3A, and MW-6 were 30,000, 16,000, and 8,900 micrograms per liter (µg/L), respectively. Elevated concentrations of TPHg and benzene in groundwater appear to form a comingled plume that extends from the two former UST source areas towards well MW-6. The elongated plume shape is consistent with the localized groundwater flow direction (Figure 6). The downgradient extent of hydrocarbon plume is undefined however concrete-lined BART tunnels in the immediate vicinity may be acting as a potential barrier to plume migration. Installation records indicate that the top of the BART tunnels ranges from approximately 27 to 32 feet bgs under 8th and Franklin Street. However, further downgradient of the site, the BART tunnels may rise to the same elevation as the groundwater table. The hydrocarbon plume appears to be adequately defined in all directions except to the northwest. Figures 7 and 8 present iso-concentrations for TPHg and benzene in groundwater, respectively.

4.3 PLUME STABILITY AND CONCENTRATION TRENDS

Trend analysis indicates that the dissolved-phase hydrocarbon concentration trends in MW-2 and MW-3/3A are flat. Dissolved-phase hydrocarbon concentrations in down-gradient well MW-6 are highly variable and no trend is readily observed. Benzene concentrations in MW-6 rose to a historical high during the March 2010 sampling event; however, there is insufficient data to confirm a rising trend at this time. The groundwater plume generally appears to be stable although further monitoring of the down-gradient edge of the plume is necessary. Trend analysis graphs of TPHg and benzene in MW-2, MW-3/3A and MW-6 are presented in Appendix C.

4.4 SOIL GAS DEFINITION STATUS

Two rounds of soil gas samples were collected at a depth of approximately 5 feet bgs from soil vapor probes VP-1 and VP-2 located adjacent to the former UST source areas. No concentrations were detected above regulatory screening levels. Soil gas results are presented on Table 3 and summarized on Figure 11.

5.0 REMEDIATION STATUS

All USTs and impacted tank backfill have been removed from the site. An additional 25 cubic yards of hydrocarbon-impacted soil was removed from the former 6,000-gallon UST pit.

6.0 WELL AND SENSITIVE RECEPTOR SURVEY

6.1 DESIGNATED BENEFICIAL GROUNDWATER USE

The site lies within the East Bay Plain Sub-basin 2-9.04. In general, groundwater in this basin has been designated beneficial for municipal and domestic water supply, industrial process and service water supply, and agricultural water supply, however due to existing or potential saltwater intrusion, contamination, or poor or limited quality, Oakland has no plans to use shallow groundwater for drinking water. All drinking water for the City of Oakland is imported from Sierra aqueducts. Therefore, the groundwater beneath the site should be considered as a non-drinking water resource.

6.2 SHALLOW GROUNDWATER USE

The shallow groundwater beneath the site is not currently being used.

6.3 DEEP GROUNDWATER USE

No current uses of deep groundwater have been identified.

6.4 WELL AND SURFACE WATER SURVEY

A well survey has not been completed for the site. However, a well survey has been completed for a neighboring site - 726 Harrison Street located approximately 750 feet to the southeast. An area well study was conducted for 726 Harrison Street by Aqua Science Engineers (ASE) to locate water wells within a 2000-foot radius of the site and is referenced in their December 6, 2007 *Subsurface Utility Study, Area Well Study, and Work Plan for Additional Soil and Groundwater Assessment*. ASE reported a total of 166 wells within the study area, of which only one was identified as a domestic well. The domestic well is located at 125 12th Street (upgradient of the site) and was reportedly not likely to be used for domestic drinking water. A copy of ASE's *Subsurface Utility Study, Area Well Study, and Work Plan for Additional Soil and Groundwater Assessment* report can be viewed at the State Geotracker website.

The nearest surface water bodies to the site are Oakland Inner Harbor located 2,500 feet to the southwest and Lake Merritt approximately 3,000 feet to the east.

6.5 PREFERENTIAL FLOW PATHS

During previous investigations, shallow subsurface utilities less than 7 feet bgs were identified in the vicinity of the site, beneath the sidewalk. Due to the depth to groundwater (20 feet bgs), subsurface utilities are not likely to be acting as preferential pathways for hydrocarbon plume migration. Due to the depth to residual impacted soil (20 feet bgs) and favorable soil gas sample results, subsurface utilities are not likely to be acting as preferential pathways for soil gas migration.

6.6 LIKELIHOOD OF IMPACT TO WELLS

Since Oakland does not use groundwater for drinking water purposes, there is no likelihood of impact to a municipal supply well. Only one domestic well was identified within approximately ½-mile east of the site. Based on the intervening distance to the domestic well and the northwest groundwater flow direction, the likelihood of impact to the up-gradient domestic well is very low.

6.7 LIKELIHOOD OF IMPACT TO SURFACE WATER

Based on the northwest groundwater flow direction; the likelihood of any impact to the up-gradient Lake Merritt surface water body is very low. Based on the long intervening distance from the site to Oakland Inner Harbor (2,500 feet); the likelihood of any impact to the Oakland Inner Harbor is very low.

7.0 RISK ASSESSMENT

7.1 SITE CONCEPTUAL EXPOSURE MODEL

The site consists of a two story commercial building that encompasses the entire property. The surrounding properties consist of commercial businesses.

Elevated TPHg and benzene concentrations in soil have been detected between 21 to 26 feet bgs on the northwest side of the site beneath the sidewalk and Franklin Street and also on the west of the site beneath the sidewalk and along 8th Street. A hydrocarbon groundwater plume lies beneath the northwest and south edges of the site and extends to the northwest parallel to the groundwater flow direction.

7.2 EXPOSURE PATHWAYS

The entire site consists of a slab-on-grade commercial building, bounded by concrete sidewalks and paved streets. Direct contact to impacted surficial soil is not considered a complete exposure pathway.

Drinking water for the City of Oakland is imported and no municipal or domestic drinking water wells have been identified in the site vicinity, therefore, contact with or ingestion of groundwater is not considered a complete exposure pathway.

Surface water bodies are unlikely to be impacted as noted above in Section 6.7; therefore, water used for recreation is not considered a complete exposure pathway.

Hydrocarbon impacted soil and groundwater is located approximately 21 to 26 feet bgs. Little to no hydrocarbons were detected in shallow soil gas samples. Based on the low soil gas results, inhalation of soil gas does not appear to be a significant exposure pathway.

7.3 HUMAN HEALTH RISK ASSESSMENT

The following Table A compares the maximum hydrocarbon concentration in soil gas relative to the Regional Water Quality Control Board – San Francisco Bay Region Environmental Screening Levels (ESLs). Soil gas analytical results are also presented in Table 3 and summarized on Figure 11.

TABLE A
COMPARISON OF HYDROCARBONS IN SOIL GAS
AND ENVIRONMENTAL SCREENING LEVELS

Analytes	*Maximum Concentration (ug/m^3)*	*Shallow Soil Gas ESL Residential Scenario[1] (ug/m^3)*	*Shallow Soil Gas ESL Commercial/Industrial Scenario[1] (ug/m^3)*
Benzene	ND<4.0	84	280
Toluene	ND<4.8	63,000	180,000
Ethylbenzene	ND<5.5	980	3,300
m,p-xylene[2]	6.0	21,000	58,000

notes: ESL = Environmental Screening Level
1 = Table E-2 (RWQCB 2007), ESL, Shallow Soil Gas Screening Levels
2 = Only detected in duplicate sample. See Table 3 for values.

7.4 IDENTIFIED HUMAN EXCEEDANCES

Gasoline-range constituents detected in soil gas did not exceeded any of the risk based ESLs. Based on the low soil gas concentrations, the hydrocarbon impacts beneath the site do not appear to pose a threat to human health

7.5 IDENTIFIED ECOLOGICAL EXEEDANCES

Based on the low likelihood of there being any impact to surface water, an ecological risk assessment has not been performed and therefore no ecological exceedances have been identified.

8.0 DATA GAPS

Based on a review of the site conditions, CRA has identified the following data gaps.

Hydrocarbon Concentration in Soil

The lateral and vertical extent of hydrocarbon-impacted soil is not fully defined.

Hydrocarbon Plume Delineation

The down-gradient edge of the hydrocarbon plume is undefined to the northwest.

9.0 RECOMMENDATIONS

Based on the above data gaps, CRA makes the following recommendations:

- Install an offsite groundwater monitoring well northwest of MW-6 to define the down-gradient edge of the hydrocarbon plume.

- Based on the lack of any identified exposure pathways, no further assessment of hydrocarbon-impacted soil is warranted at this time.

10.0 REFERENCES

California Department of Water Resources (DWR), 2003, *Bulletin 118 - California's Groundwater.*

Regional Water Quality Control Board, San Francisco Bay Region – Groundwater Committee, 1999. *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report. June.*

Frank Lee & Associates, 1988. *Soil and Foundation Investigation Proposed Commercial Building* at 800 Franklin Street, Oakland, California. June 13, 1988.

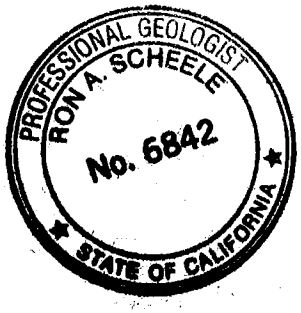
MEC, 1989b. *Update on 800 Franklin Street in Oakland*, 800 Franklin Street, Oakland, California. October 9, 1989.

MEC, 1989c. *Report on Subsurface Investigation and Remediation of Contaminated Soil*, 800 Franklin Street, Oakland, California. November 3, 1989 Draft Edition.

MEC, 1992. *Report on Subsurface Investigation, Related to Well Installation and Borings*, 800 Franklin Street, Oakland, California. January 20, 1992.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

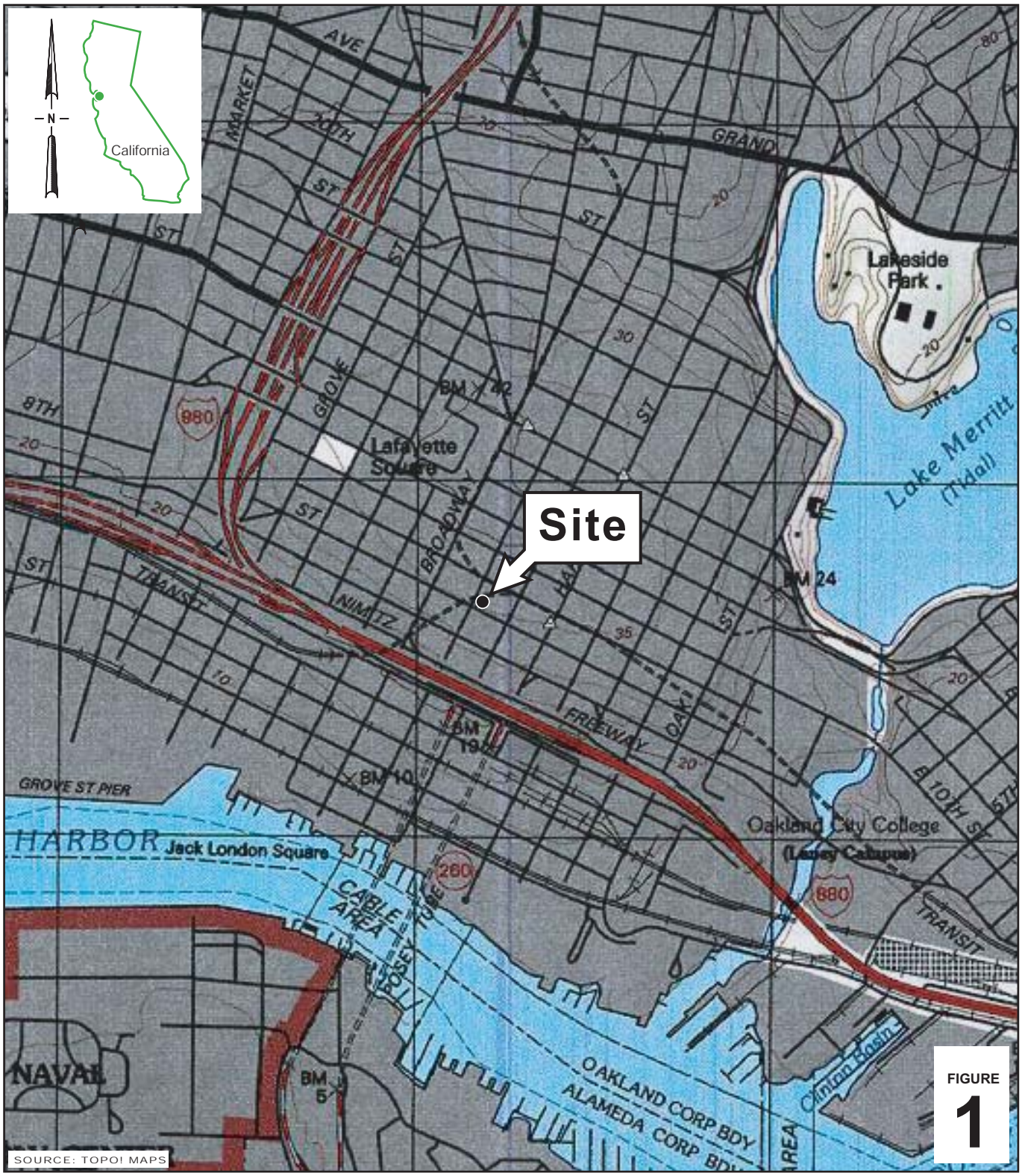
Bryan A. Fong



Ron Scheele, P.G.

FIGURES

04/17/07



I:\SFO-S1\SHARED\RICHIU PROPERTY\FIGURES\VICINITY-MAP.AI

FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Chiu Property
800 Franklin Street
Oakland, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

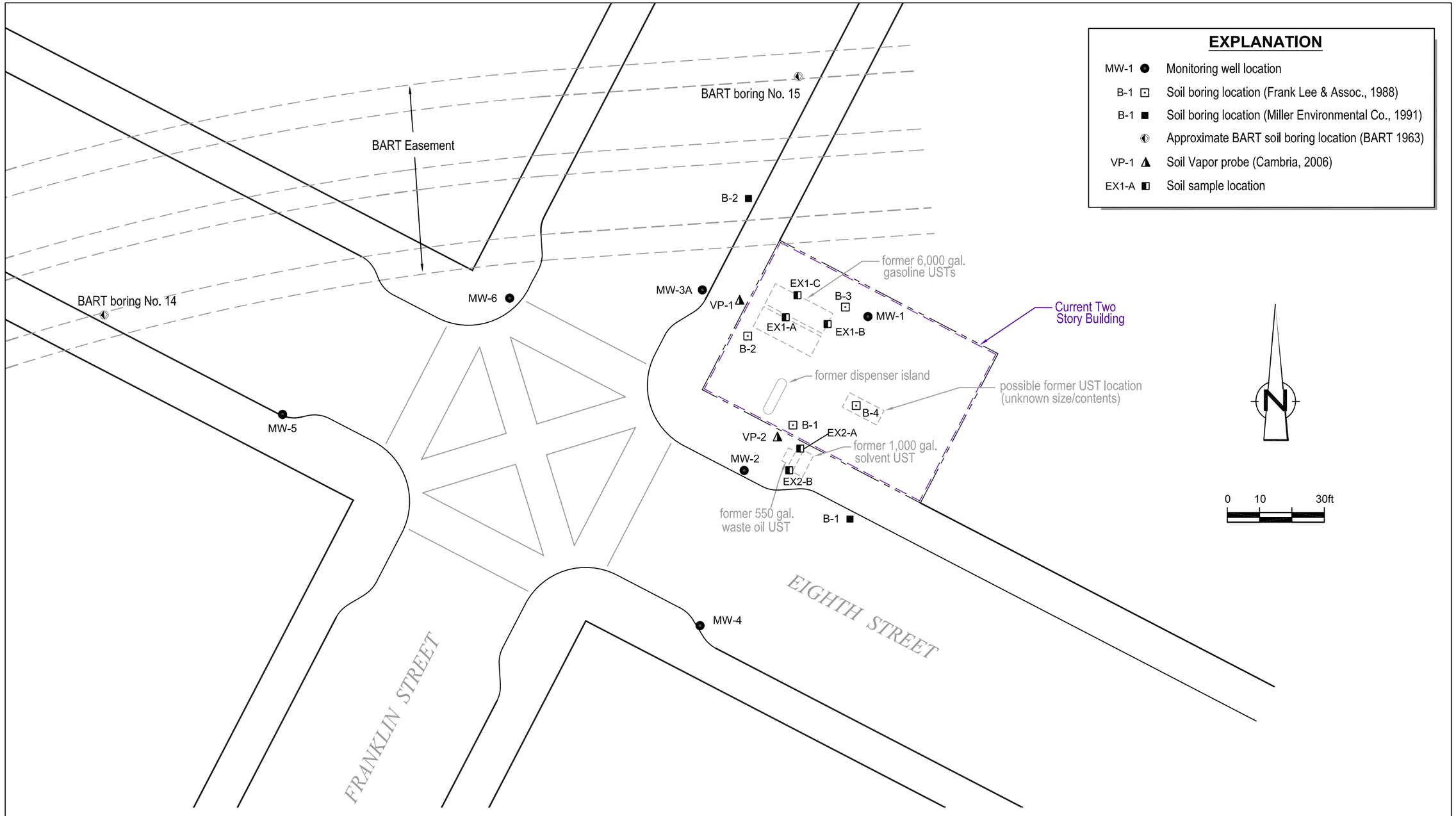


FIGURE 2

SITE PLAN
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-SITEPLAN.DWG

EXPLANATION

- MW-1 ● Monitoring well location
- B-1 ⊡ Soil boring location (Frank Lee & Assoc., 1988)
- B-1 ■ Soil boring location (Miller Environmental Co., 1991)
- ◐ Approximate BART soil boring location (BART 1963)
- EX1-A ◧ Soil sample location
- VP-1 ▲ Soil Vapor probe (Cambria, 2006)

NOTE: Soil concentrations are in milligrams per kilogram (mg/kg)

MW-3A			
Date	Depth	TPHg	Benzene
9/12-13/89	6'	ND	ND
9/12-13/89	11'	ND	ND
9/12-13/89	16'	ND	ND
9/12-13/89	21'	**2,200**	**7.5**
9/12-13/89	26'	**24**	**0.6**

MW-6			
Date	Depth	TPHg	Benzene
5/15/97	5'	<1.0	<0.0050
5/15/97	10'	<1.0	<0.0050
5/15/97	15'	<1.0	<0.0050
5/15/97	20'	<1.0	<0.0050
5/15/97	25'	<1.0	0.050
5/15/97	30'	<1.0	<0.0050
5/15/97	35'	<1.0	<0.0050

MW-5			
Date	Depth	TPHg	Benzene
10/3/91	5'	<1.0	<0.0025
10/3/91	10'	<1.0	<0.0025
10/3/91	15'	<1.0	<0.0025
10/3/91	20'	<1.0	<0.0025
10/3/91	25'	<1.0	<0.0025

B-2			
Date	Depth	TPHg	Benzene
10/2/91	5'	<1.0	<0.0025
10/2/91	10'	<1.0	<0.0025
10/2/91	15'	<1.0	<0.0025
10/2/91	20'	<1.0	<0.0025
10/2/91	25'	**120**	<0.0025

VP-1			
Date	Depth	TPHg	Benzene
11/17/06	5.5'	<1.0	<0.005

B-2			
Date	Depth	TPHg	Benzene
5/3/88	1'	<1.0	<0.05

B-1			
Date	Depth	TPHg	Benzene
5/3/88	3'	---	<0.1

VP-2			
Date	Depth	TPHg	Benzene
11/17/06	5.5'	<1.0	<0.005

MW-4			
Date	Depth	TPHg	Benzene
10/2/91	5'	<1.0	<0.0025
10/2/91	10'	<1.0	<0.0025
10/2/91	15'	<1.0	<0.0025
10/2/91	20'	<1.0	<0.0025
10/2/91	25'	<1.0	<0.0025

EX1-A			
Date	Depth	TPHg	Benzene
9/7/89	15'	ND	ND

EX1-C			
Date	Depth	TPHg	Benzene
9/7/89	15'	**2.3**	ND

B-3			
Date	Depth	TPHg	Benzene
5/3/88	4'	<1.0	<0.05

MW-1			
Date	Depth	TPHg	Benzene
9/12-13/89	6'	ND	ND
9/12-13/89	11'	ND	ND
9/12-13/89	16'	ND	ND
9/12-13/89	21'	**52**	**0.12**
9/12-13/89	26'	ND	ND

EX1-B			
Date	Depth	TPHg	Benzene
9/7/89	15'	ND	ND

EX2-A			
Date	Depth	TPHg	Benzene
9/7/89	15'	**10,000**	**50**

EX2-B			
Date	Depth	TPHg	Benzene
9/7/89	15'	**4.1**	ND

MW-2			
Date	Depth	TPHg	Benzene
9/12-13/89	6'	ND	ND
9/12-13/89	11'	ND	ND
9/12-13/89	16'	ND	ND
9/12-13/89	21'	**1,900**	**50**
9/12-13/89	26'	**7,800**	**30**

B-1			
Date	Depth	TPHg	Benzene
9/11/91	5'	<0.20	<0.0050
9/11/91	10'	<0.20	<0.0050
9/11/91	15'	<0.20	<0.0050
9/11/91	20'	<0.20	<0.0050
9/11/91	25'	**2,900**	<25

BART boring No. 14
BART boring No. 15
BART Easement
MW-3A
MW-6
MW-5
MW-4
MW-1
MW-2
VP-1
VP-2
B-1
B-2
B-3
B-4
EX1-A
EX1-B
EX1-C
EX2-A
EX2-B
former 6,000 gal. gasoline USTs
former dispenser island
former 1,000 gal. solvent UST
former 550 gal. waste oil UST
possible former UST location (unknown size/contents)
Current Two Story Building
FRANKLIN STREET
EIGHTH STREET
N
0 10 30ft

FIGURE 3

SOIL ANYALYTICAL SUMMARY MAP
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-EM003.DWG

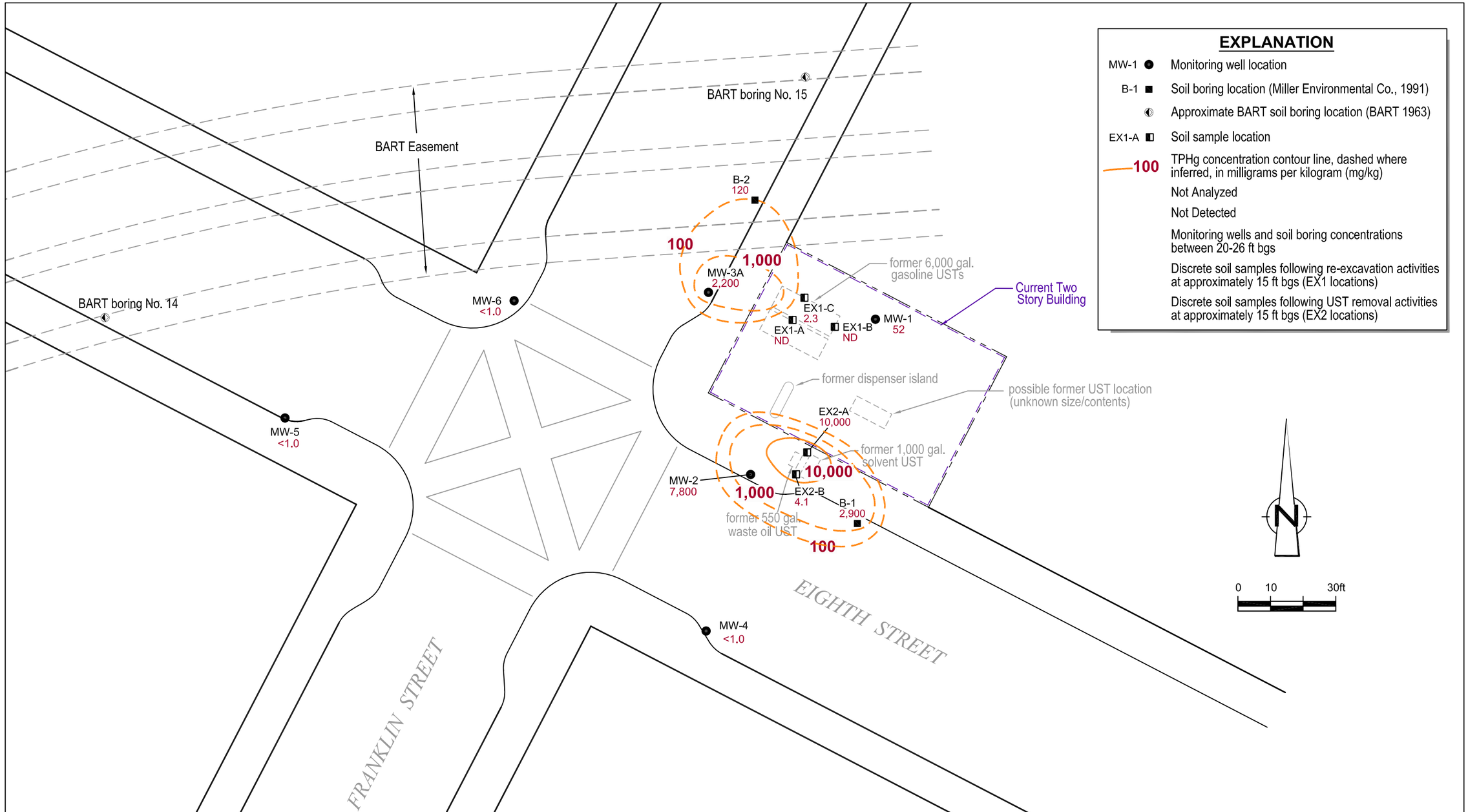


FIGURE 4

TPHG IN SOIL ISOCONCENTRATION MAP (15-26 ft bgs)
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-EM004.DWG

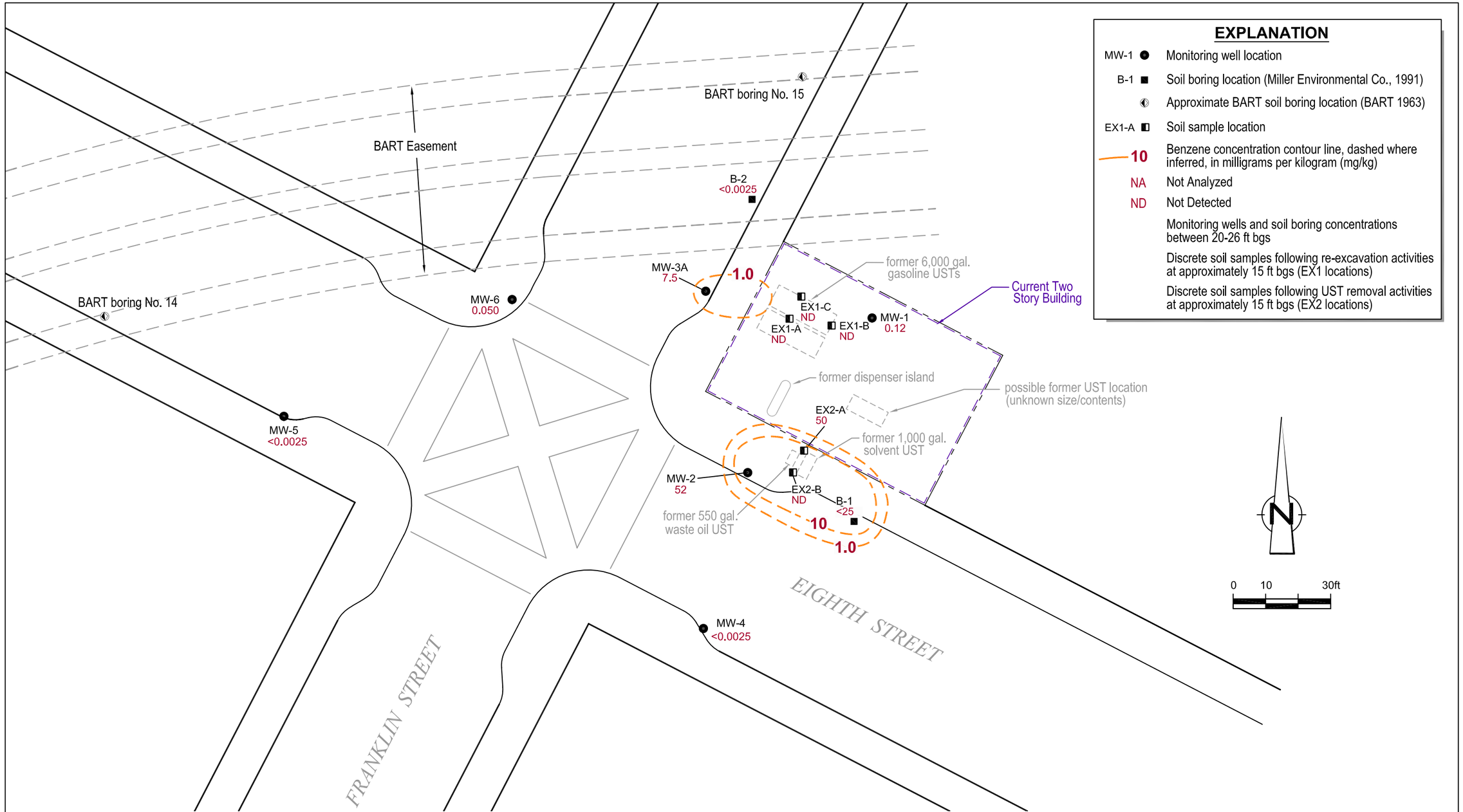


FIGURE 5

BENZENE IN SOIL ISOCONCENTRATION MAP (15-26 ft bgs)
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-EM005.DWG

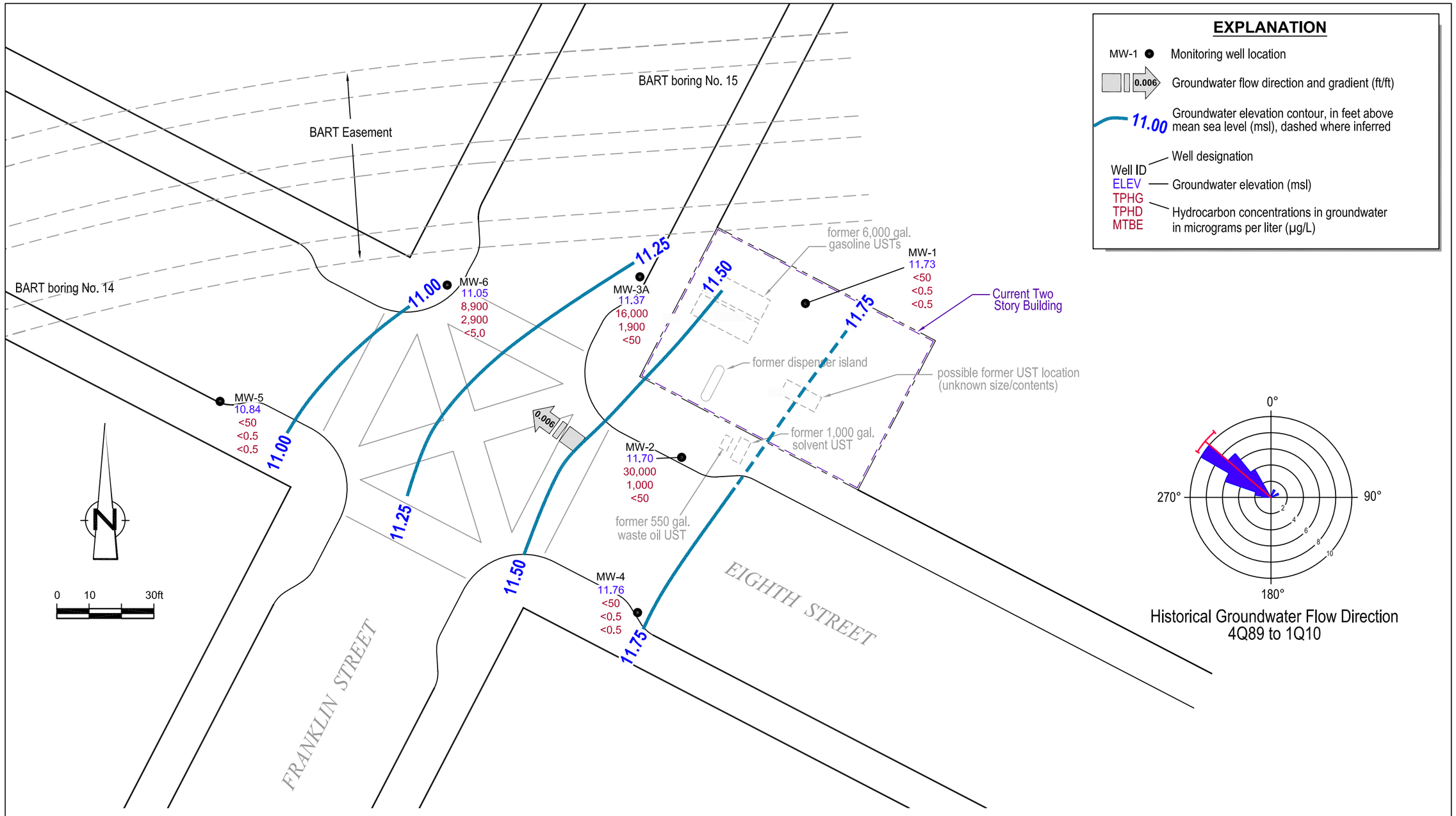


FIGURE 6

GROUNDWATER ELEVATION CONTOUR AND HYDROCARBON CONCENTRATION MAP
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California
March 19, 2010

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-1Q10-GWHC.DWG

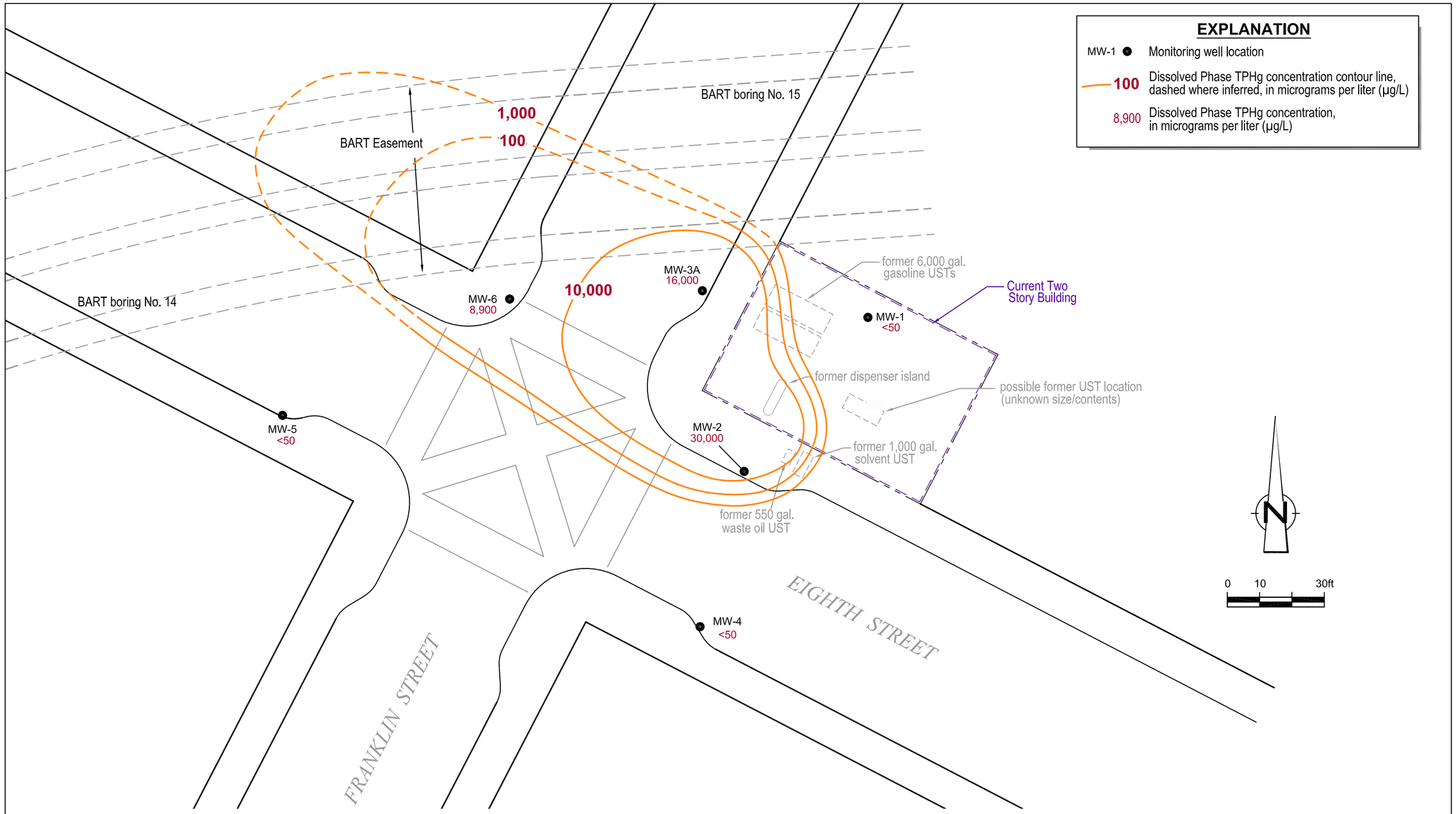


FIGURE 7

DISSOLVED PHASE TPHg ISOCONCENTRATION MAP
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California
March 19, 2010

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-EM007.DWG

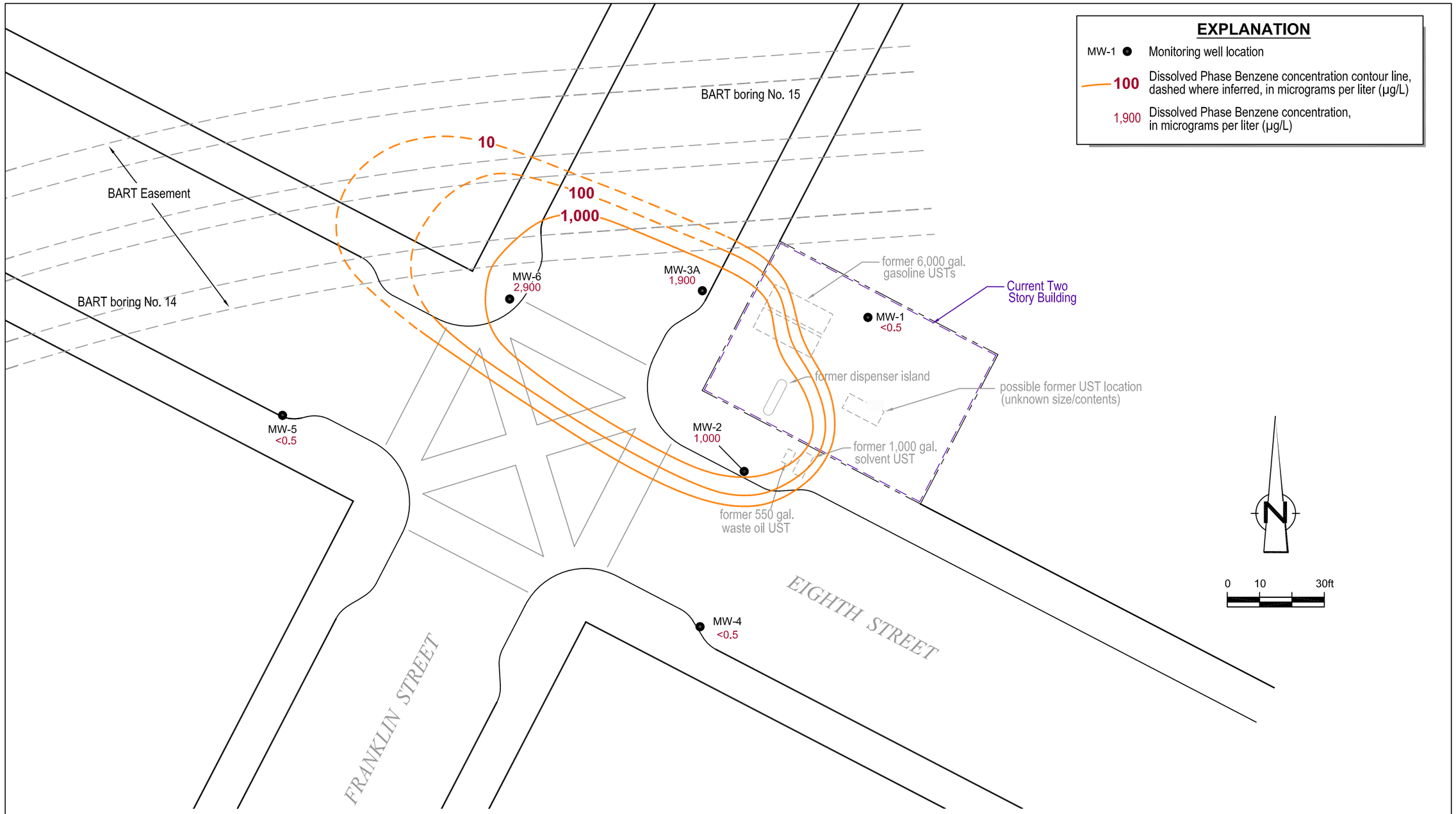
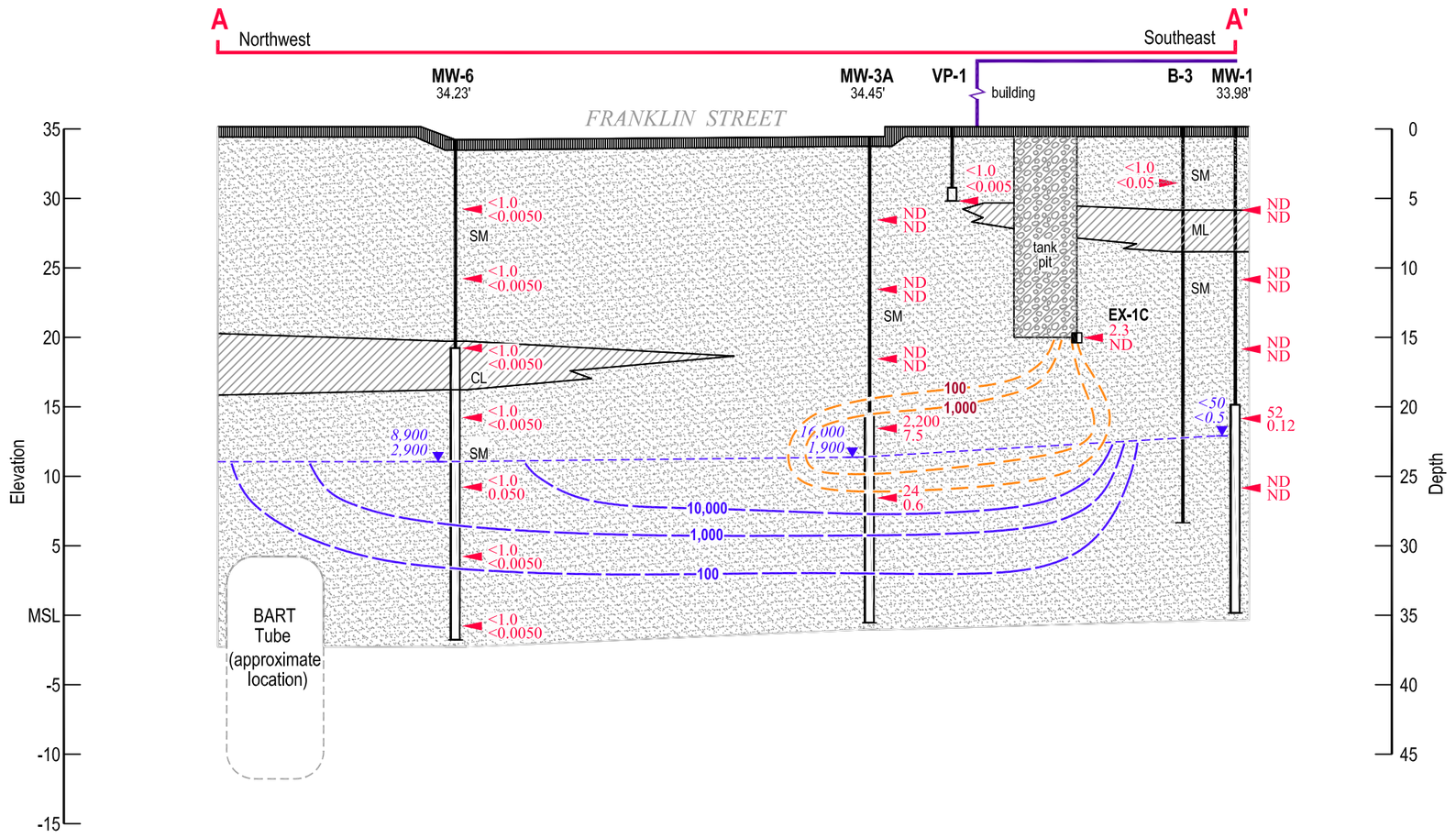
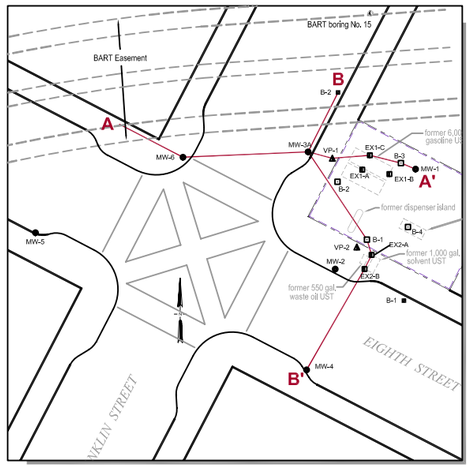


FIGURE 8

DISSOLVED PHASE BENZENE ISOCONCENTRATION MAP
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California
March 19, 2010

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-EM008.DWG





EXPLANATION

- = Asphalt / Concrete
- = Low Permeability Soils
  - CL - Clay
  - ML - Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts, with slight plasticity
- = Moderate Permeability Soils
  - SM - Silty Sand
  - SP - Poorly Graded Sand
- = Fill (Tank Pit)
- TPHg isoconcentration contour in soil, in milligrams per kilogram (mg/kg)
- TPHg isoconcentration contour in groundwater, in micrograms per liter (µg/L)
- TPHg / Benzene — Hydrocarbon concentrations in Soil, in milligrams per kilogram (mg/kg)

Well ID — Well Designation
Elev. (offset) — Top of Casing Elevation
Groundwater Monitoring Well
Well Screen Interval
Bottom of boring
ND — Not Detected
Approximate sample location
Depth of Groundwater - 03/19/10 (unless otherwise noted)
TPHg / Benzene — Hydrocarbon concentrations in Groundwater, in micrograms per liter (µg/L)

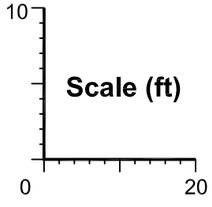
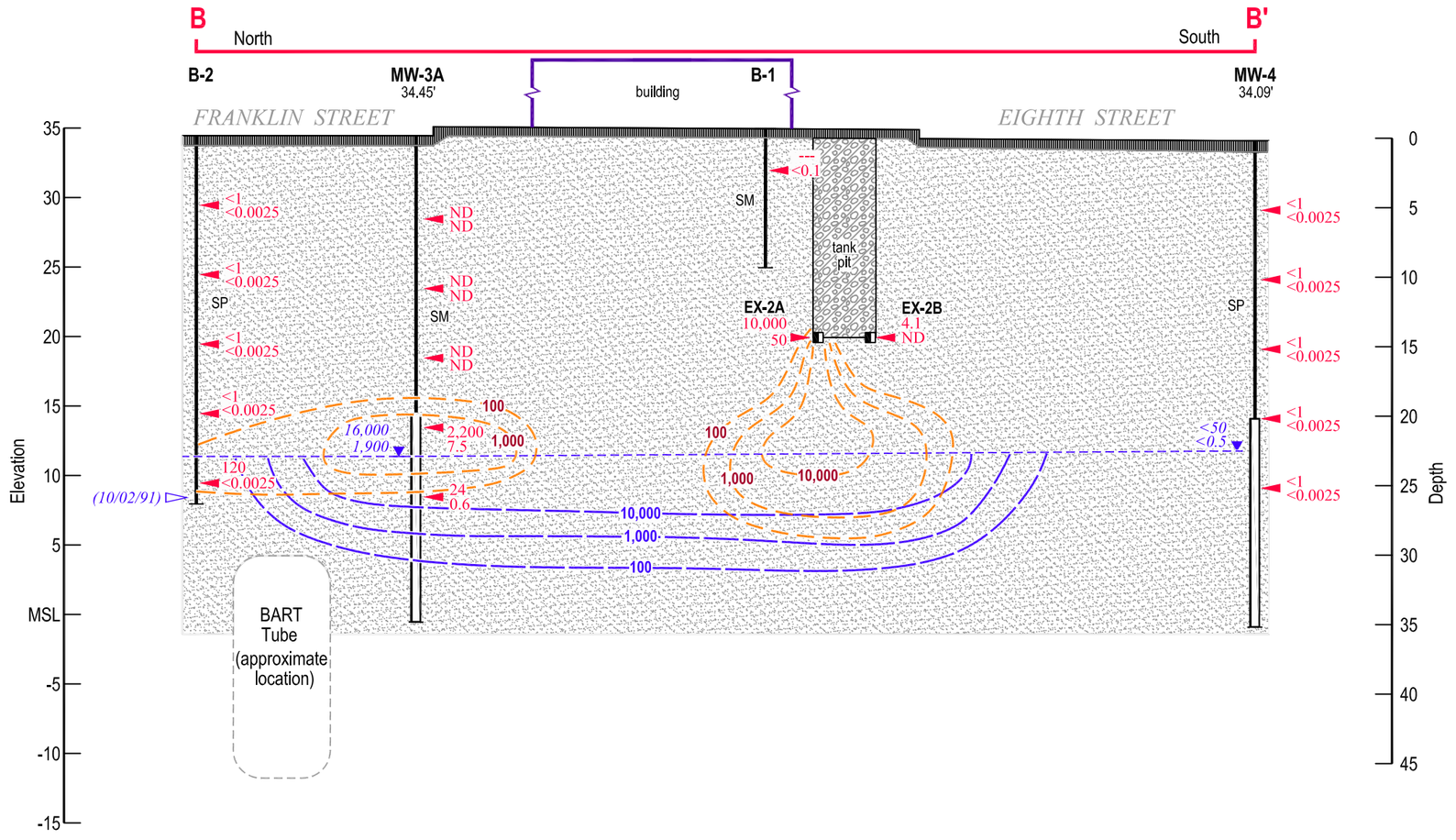
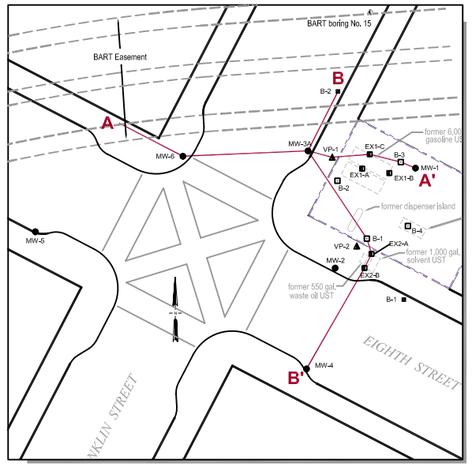


FIGURE 9

HYDROGEOLOGIC CROSS SECTION A-A'
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-SECTIONS.DWG





EXPLANATION

- = Asphalt / Concrete
- = Low Permeability Soils
  - CL - Clay
  - ML - Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts, with slight plasticity
- = Moderate Permeability Soils
  - SM - Silty Sand
  - SP - Poorly Graded Sand
- = Fill (Tank Pit)
- TPHg isoconcentration contour in soil, in milligrams per kilogram (mg/kg)
- TPHg isoconcentration contour in groundwater, in micrograms per liter (µg/L)
- TPHg / Benzene — Hydrocarbon concentrations in Soil, in milligrams per kilogram (mg/kg)

- Well ID / Elev. (offset) — Well Designation / Top of Casing Elevation
- Groundwater Monitoring Well
- Well Screen Interval
- Bottom of boring
- ND — Not Detected
- Approximate sample location
- Depth of Groundwater - 03/19/10 (unless otherwise noted)
- *TPHg / Benzene* — Hydrocarbon concentrations in Groundwater, in micrograms per liter (µg/L)

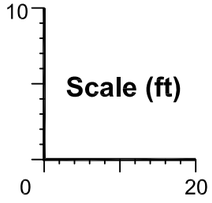


FIGURE 10

HYDROGEOLOGIC CROSS SECTION B-B'
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-SECTIONS.DWG

EXPLANATION

- MW-1 ● Monitoring well location
- B-1 ⊡ Soil boring location (Frank Lee & Assoc., 1988)
- B-1 ■ Soil boring location (Miller Environmental Co., 1991)
- ◐ Approximate BART soil boring location (BART 1963)
- VP-1 ◭ Soil Vapor probe (Cambria, 2006)
- EX1-A ◧ Soil sample location

NOTE: Benzene concentrations are in micrograms per cubic meter ($\mu g/m^3$)

VP-1		
Date	Depth	Benzene
11/17/06	5'	<4.0
7/25/07	5'	<3.6

VP-2		
Date	Depth	Benzene
11/17/06	5'	<3.9
7/25/07	5'	<3.9

BART boring No. 15
BART Easement
BART boring No. 14
B-2 ■
MW-3A ●
MW-6 ●
VP-1 ◭
EX1-C ◧
B-3 ⊡
MW-1 ●
EX1-A ◧
EX1-B ◧
B-2 ⊡
former 6,000 gal. gasoline USTs
Current Two Story Building
former dispenser island
possible former UST location (unknown size/contents)
B-4 ⊡
B-1 ⊡
VP-2 ◭
EX2-A ◧
former 1,000 gal. solvent UST
MW-2 ●
EX2-B ◧
MW-5 ●
former 550 gal. waste oil UST
B-1 ■
MW-4 ●
EIGHTH STREET
FRANKLIN STREET

N

0 10 30ft

FIGURE 11

BENZENE IN SOIL GAS
CHIU PROPERTY
800 FRANKLIN STREET
Oakland, California

I:\IR\6-chars\5810--\581000\581000-CHIU\581000-FIGURES\581000-EM006.DWG

TABLES

TABLE 1

SOIL ANALYTICAL DATA
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Sample ID	Date Sampled	Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHwo (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	SVOCs (mg/kg)	VOCs (mg/kg)	Total Oil & Grease (mg/kg)	TRPH	Total Lead (mg/kg)
Soil and Foundation Investigation by Frank Lee & Associates - Soil Borings																
B-1-3	5/3/1988	3	-	-	-	-	ND<0.1	ND<0.1	ND<0.1	ND<0.1	-	-	ND	ND<30	ND<30	-
B-2-1	5/3/1988	1	ND<1.0 *	-	-	-	ND<0.05	ND<0.1	-	ND<0.1	-	-	ND	-	-	-
B-3-4	5/3/1988	4	ND<1.0 *	-	-	-	ND<0.05	ND<0.1	-	ND<0.1	-	-	ND	-	-	-
UST Removal by Robert J. Miller Company																
UST Excavation Compliance Samples - Collected by The Traverse Group, Inc.																
T1 - Gasoline Tank	June-89	-	ND<1.0	ND<6.3	ND<30	--	0.011	0.0036	ND<0.0025	0.006	-	(1)	ND	-	-	-
T2 - Gasoline Tank	June-89	-	5.0	ND<6.7	30	--	0.050	0.044	0.0036	0.023	-	(2)	ND	-	-	-
T3 - Gasoline Tank	June-89	-	ND<1.0	ND<7.0	ND<30	--	0.0046	ND<0.0025	ND<0.0025	ND<0.0025	-	(3)	ND	-	-	-
T4 - Gasoline Tank	June-89	-	3,100	420	1,350	--	7.5	87	59	290	-	(4)	ND	-	-	-
W1 - Waste Oil Tank	June-89	-	270	430	4,000	--	ND<5.0	ND<5.0	ND<5.0	14	-	(5)	ND	-	-	-
W2A - Waste Oil Tank	June-89	-	2,300	170	50	--	ND<2.5	3	ND<2.5	12	-	(6)	ND	-	-	-
S1 - Solvent Tank	June-89	-	1.8	ND<6.0	ND<30	--	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	(7)	ND	-	-	-
S2 - Solvent Tank	June-89	-	62	106	ND<30	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	-	(8)	ND	-	-	-
SP1 - Spoils Pile "Contaminated"	June-89	-	184	240	900	--	ND<5.0	17	19	110	-	(9)	ND	-	-	-
SP2 - Spoils Pile "Clean"	June-89	-	ND<1.0	ND<6.7	ND<30	--	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	ND	ND	-	-	-
SP3 - Spoils Pile "Clean"	June-89	-	120	40	150	--	ND<1.0	ND<1.0	ND<1.0	2.1	-	(10)	ND	-	-	-
Subsurface Investigation by Miller Environmental Company																
Over-Excavation Confirmation Samples																
EX1-A (fuel tank)	9/7/1989	15	ND	ND	ND	--	ND	ND	ND	ND	-	-	-	-	-	-
EX1-B (fuel tank)	9/7/1989	15	ND	ND	40	--	ND	ND	ND	ND	-	-	-	-	-	-
EX1-C (fuel tank)	9/7/1989	15	2.3	ND	80	--	ND	0.05	0.14	ND	-	-	-	-	-	-
EX2-A (waste oil and solvent tanks)	9/7/1989	15	10,000	250	400	--	50	210	270	54	-	-	-	-	-	-
EX2-B (waste oil and solvent tanks)	9/7/1989	15	4.1	ND	ND	--	ND	ND	0.15	ND	-	-	-	-	-	-
Well Installation Soil Samples																
MW1-A	9/12-13/1989	6	ND	23	--	30	ND	ND	ND	ND	-	-	-	30	-	-
MW1-B	9/12-13/1989	11	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW1-C	9/12-13/1989	16	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW1-D	9/12-13/1989	21	52	ND	--	ND	0.12	0.7	0.53	4.5	-	-	-	ND	-	-
MW1-E	9/12-13/1989	26	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
					--											
MW2-A	9/12-13/1989	6	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	--	-	-
MW2-B	9/12-13/1989	11	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	--	-	-
MW2-C	9/12-13/1989	16	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	--	-	-
MW2-D	9/12-13/1989	21	1,900	110	--	50	7.4	51	24	180	-	-	-	50	-	-
MW2-E	9/12-13/1989	26	7,800	170	--	30	52	220	77	400	-	-	-	30	-	-
					--											
MW3-A	9/12-13/1989	6	ND	ND	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-

TABLE 1

SOIL ANALYTICAL DATA
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Sample ID	Date Sampled	Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHwo (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	SVOCs (mg/kg)	VOCs (mg/kg)	Total Oil & Grease (mg/kg)	TRPH	Total Lead (mg/kg)
MW3-B	9/12-13/1989	11	ND	25	--	ND	ND	ND	ND	ND	-	-	-	ND	-	-
MW3-C	9/12-13/1989	16	ND	ND	--	ND	ND	ND	ND	0.07	-	-	-	ND	-	-
MW3-D	9/12-13/1989	21	2,200	160	--	40	7.5	42.3	16	180	-	-	-	40	-	-
MW3-E	9/12-13/1989	26	24	ND	--	ND	0.6	1.1	0.17	1.4	-	-	-	ND	-	-
Additional Subsurface Investigation by Miller Environmental Company																
B1-5	9/11/1991	5	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-10	9/11/1991	10	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-15	9/11/1991	15	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-20	9/11/1991	20	ND<0.20	ND<5.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	-	ND	ND<20	-
B1-25	9/11/1991	25	2,900	160	-	-	ND<25	60	ND<25	ND<25	-	-	-	ND	190	-
B2-5	10/2/1991	5	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-10	10/2/1991	10	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-15	10/2/1991	15	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-20	10/2/1991	20	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
B2-25	10/2/1991	25	120	83	-	ND<10	ND<0.0025	0.310	0.210	0.600	-	-	-	ND<50	-	-
MW4-5	10/2/1991	5	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-10	10/2/1991	10	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-15	10/2/1991	15	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-20	10/2/1991	20	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW4-25	10/2/1991	25	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-5	10/3/1991	5	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-10	10/3/1991	10	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-15	10/3/1991	15	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-20	10/3/1991	20	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
MW5-25	10/3/1991	25	ND<1	ND<1	-	ND<10	ND<0.0025	ND<0.0025	ND<0.0025	ND<0.0025	-	-	-	ND<50	-	-
Additional Subsurface Investigation by Associated Terra Consultants, Inc.																
B6-1 (MW-6)	5/15/1997	5	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-2 (MW-6)	5/15/1997	10	ND<1.0	9.1	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-3B (MW-6)	5/15/1997	15	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-4B (MW-6)	5/15/1997	20	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
B6-5B (MW-6)	5/15/1997	25	ND<1.0	ND<1.0	-	-	0.050	0.011	0.023	0.099	ND<0.0050	-	-	ND<50	-	-
B6-6B (MW-6)	5/15/1997	30	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	0.0050	-	-	ND<50	-	-
B6-11 (MW-6)	5/15/1997	35	ND<1.0	ND<1.0	-	-	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	-	-	ND<50	-	-
Soil Vapor Borings by Cambria																

TABLE 1

SOIL ANALYTICAL DATA
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Sample ID	Date Sampled	Depth (ft)	TPHg (mg/kg)	TPHd (mg/kg)	TPHwo (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	MTBE (mg/kg)	SVOCs (mg/kg)	VOCs (mg/kg)	Total Oil & Grease (mg/kg)	TRPH	Total Lead (mg/kg)
VP-1.5.5	11/17/2006	5.5	ND<1.0	4.0	--	6.9	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	-	chloroform & 1,2-DCA: ND<0.005	--	-	35
VP-2-5.5	11/17/2006	5.5	ND<1.0	ND<1.0	--	ND<5.0	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	-	chloroform & 1,2-DCA: ND<0.005	--	-	-

Abbreviations and Analyses:

ND<0.5 = Not Detected (ND) above laboratory detection limit.
ft = Measured in feet
TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method 8015
TPHd = Total petroleum hydrocarbons as diesel by modified EPA Method 8015
TPHwo = Total petroleum hydrocarbons as waste oil by modified EPA Method 418.1/3550/SM503
TPHmo = Total petroleum hydrocarbons as motor boil by modified EPA Method 8015
Benzene, ethylbenzene, toluene and xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020 or 8021B
SVOCs = Semi-volatile organics by EPA Method 8270.
VOCs = Volatile organics by EPA Method 8240.
TRPH = Total Recoverable Petroleum Hydrocarbons by EPA Method 418.1
Total Lead by EPA Method 7420
mg/kg = Milligrams per kilogram
- = Not sampled, not analyzed, or not applicable
* = Analyzed for "low to medium boiling point hydrocarbons" by EPA Method 8015.

(1) = 0.20 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.
(2) = 0.24 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.
(3) = 0.42 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.
(4) = 28 mg/kg naphthalene; 23 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.
(5) = 0.37 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.
(6) = 6.4 mg/kg naphthalene; 4.1 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.
(7) = 0.50 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.
(7) = 0.50 mg/kg bis (2-ethylhexyl) phthalate. Other SVOCs were ND.
(8) = 2.4 mg/kg naphthalene; 1.9 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.
(9) = 27 mg/kg naphthalene; 13 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.
(10) = 1.6 mg/kg naphthalene; 2.0 mg/kg 2-methyl-naphthalene. Other SVOCs were ND.

WO1 sampled on 1/17/1991 was also analyzed for Total Petroleum Fuel Hydrocarbons by EPA Method 8015 (ND<1.0 mg/kg).
WO1 sampled on 1/17/1991 was also analyzed for Halogenated Volatile Organics by EPA Method 8010 (all analytes were ND).
WO1 sampled on 1/17/1991 was also analyzed for Semi-Volatile Organics by EPA Method 8270. The following analytes were detected: benzo(a)pyrene at 0.10 mg/kg, fluoranthene at 0.11 mg/kg, and pyrene at 0.15 mg/kg (all other analytes were ND).

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Well ID *TOC Elevation (ft msl)*	*Date Sampled*	*Depth to Water (ft below TOC)*	*Groundwater Elevation (feet msl)*	*TPHg*	*TPHd*	*TPHmo*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*Chloroform*	*1,2-DCA*
				←					*µg/L*				→
MW-1	10/12/1989	22.87	10.55	ND	--	--	ND	ND	ND	ND	--	0.8	8.6
33.42	10/31/1991	--	--	630	960	1,700	3.2	ND<0.5	ND<0.5	130	--	--	0.0098
34.89	10/21/1992	23.48	11.41	520	--	--	78	38	ND<0.5	120	--	--	ND
	2/25/1993	22.51	12.38	1,600	--	--	160	190	34	350	--	--	--
	4/27/1993	22.36	12.53	380	--	--	5.2	ND<0.5	ND<0.5	74	--	--	--
	10/7/1993	--	12.10	1,000	--	--	81	150	47	230	--	--	--
33.98	3/28/1994	--	11.91	460	--	--	14	25	14	39	--	--	--
	4/29/1994	--	--	--	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.66	--	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.62	--	--	--	--	--	--	--	--	--	--
	7/26/1994	--	11.48	--	--	--	--	--	--	--	--	--	--
	8/25/1994	--	11.47	--	--	--	--	--	--	--	--	--	--
	10/27/1994	22.51	11.47	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	1/6/1995	--	12.08	--	--	--	--	--	--	--	--	--	--
	2/1/1995	--	12.79	--	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.75	--	--	--	--	--	--	--	--	--	--
	10/31/1995	--	12.48	1,400	--	--	15	38	49	510	19	--	--
	5/21/1997	--	12.49	150	--	--	2.9	1.5	8.6	26	ND<5.0	--	--
	8/10/2004	23.35	10.63	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/28/2004É	--	--	--	--	--	--	--	--	--	--	--	--
	12/21/2004	22.93	11.05	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/11/2005É	--	--	--	--	--	--	--	--	--	--	--	--
	6/16/2005	20.68	13.30	ND<50	--	--	0.64	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/1/2005	20.74	13.24	ND<50	--	--	1.2	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	12/16/2005	20.95	13.03	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/10/2006	20.34	13.64	ND<50	--	--	0.60	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/15/2006	21.51	12.47	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	6.4	ND<0.5
	3/8/2007	21.81	12.17	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	0.72	ND<0.5	ND<5.0	6.9	ND<0.5
	9/17/2007	22.08	11.90	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	2.3	ND<0.5	ND<0.5	4.7	ND<0.5
	3/4/2008	21.72	12.26	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.3	ND<0.5
	9/3/2008	22.70	11.28	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.98	ND<0.5
	3/4/2009	22.49	11.49	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.65
	9/8/2009	22.80	11.18	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5	ND<0.5
	3/19/2010	**22.25**	**11.73**	**ND<50**	**ND<50**	**--**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**ND<0.5**	**0.58**
MW-2	10/12/1989	23.25	10.40	38,000	--	3,900	1,300	1,200	ND	4,700	--	--	--
33.66	10/31/1991	--	--	10,000	1,500	--	1,800	1,200	270	960	--	--	0.17
	11/6/1991	24.02	9.64	--	--	--	--	--	--	--	--	--	--
	10/21/1992	22.42	11.24	270,000	--	--	9,700	4,500	9,600	56,000	--	--	15.4

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Well ID *TOC Elevation (ft msl)*	*Date Sampled*	*Depth to Water (ft below TOC)*	*Groundwater Elevation (feet msl)*	*TPHg*	*TPHd*	*TPHmo*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*Chloroform*	*1,2-DCA*
				←					*µg/L*				→
	2/25/1993	21.50	12.16	49,000	--	--	4,300	11,000	1,300	9,100	--	--	--
MW-2 *(cont.)*	4/27/1993	21.26	12.40	39,000	--	--	1,400	4,000	220	5,200	--	--	--
	10/7/1993	--	12.04	50,000	--	--	2,700	8,100	940	7,800	--	--	--
	3/28/1994	--	11.88	20,000	--	--	360	1,300	220	1,800	--	--	--
	4/29/1994	--	11.87	--	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.44	--	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.42	--	--	--	--	--	--	--	--	--	--
	7/26/1994	--	11.22	--	--	--	--	--	--	--	--	--	--
	8/25/1994	--	11.01	--	--	--	--	--	--	--	--	--	--
	10/27/1994	22.66	11.00	21,000	--	--	1,200	3,700	600	4,300	--	--	--
	1/6/1995	--	11.66	--	--	--	--	--	--	--	--	--	--
	2/1/1995	--	12.21	--	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.66	--	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.51	45,000	--	--	3,100	8,800	1,200	8,400	810	--	--
	5/21/1997	--	12.65	18,000	--	--	1,400	4,200	680	3,600	370	--	--
	8/10/2004	21.03	12.63	47,000 (a)	--	--	4,200	4,900	1,400	6,000	ND<500	--	--
	9/28/2004	22.95	10.71	--	--	--	--	--	--	--	--	--	--
	12/21/2004	20.91	12.75	13,000 (a)	--	--	500	310	34	1600	ND<100	--	--
	3/11/2005	11.35	22.31	32,000 (a)	--	--	970	2,400	890	4,200	ND<1,000	--	--
	6/16/2005	20.50	13.16	43,000 (a,i)	--	--	1,500	3,400	1,200	5,400	ND<1,200	--	--
	9/1/2005	20.60	13.06	20,000 (a)	--	--	640	1,700	460	2,200	ND<200	--	--
	12/16/2005	20.83	12.83	32,000 (a,i)	--	--	1,000	3,100	760	3,800	ND<500	--	--
	3/10/2006	20.05	13.61	20,000 (a)	--	--	460	1,900	440	2,400	ND<400	--	--
	9/15/2006	21.31	12.35	43,000 (a)	3,100 (d)	ND<250	1,600	4,400	1,100	5,100	ND<500	16	ND<10
	3/8/2007	21.62	12.04	30,000 (a,h)	4,600 (d,h)	ND<1,200	1,200	3,400	890	4,500	ND<500	ND<50	ND<50 (j,h)
	9/17/2007	21.92	11.74	31,000 (a)	6,600 (d,b)	340	790	3,000	700	3,100	ND<100	ND<100	ND<100
	3/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	9/3/2008	22.50	11.16	46,000 (a)	5,100 (d)	370	1,700	8,600	1,400	7,500	ND<250	ND<250	ND<250
	3/4/2009	22.25	11.41	56,000 (a)	13,000 (d)	1,100	1,500	5,300	990	4,500	ND<10	ND<10	ND<10
	9/8/2009	22.60	11.06	42,000 (a)	11,000 (d)	1,200	1,400 (1,200)	5,200 (4,900)	970 (890)	5500 (4,900)	ND<100 (ND<100)	ND<0.5	ND<100
*33.75***	**3/19/2010**	**21.96**	**11.70**	**30,000 (a,h)**	**12,000 (d,h)**	**--**	**(1,000)**	**(3,500)**	**(980)**	**(4,500)**	**(ND<50)**	**ND<5.0**	**ND<5.0**
MW-3	10/12/1989	24.02	10.21	87,000	--	4,500	3,200	8,800	ND	6,500	--	--	70.0
34.23	10/31/1991	--	--	310,000	25,000	--	9,300	25,000	5,600	27,000	--	--	0.058
	11/6/1991	23.52	10.71	--	--	--	--	--	--	--	--	--	--
	10/21/1992	23.32	10.91	22,000	--	--	10,000	4,300	790	2,100	--	--	ND
	2/25/1993	22.51	11.72	29,000	--	--	8,400	5,400	1,300	3,300	--	--	--
	4/27/1993	22.37	11.86	50,000	--	--	8,200	8,700	1,000	5,400	--	--	--
	10/7/1993	--	14.19	1,700	--	--	3,100	3,700	400	1,700	--	--	--

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Well ID *TOC Elevation (ft msl)*	*Date Sampled*	*Depth to Water (ft below TOC)*	*Groundwater Elevation (feet msl)*	*TPHg*	*TPHd*	*TPHmo*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*Chloroform*	*1,2-DCA*
				←					*µg/L*				→
	3/28/1994	--	11.52	53,000	--	--	3,900	4,600	710	2,500	--	--	--
	4/29/1994	--	11.34	--	--	--	--	--	--	--	--	--	--
MW-3 *(cont.)*	6/10/1994	--	11.13	--	--	--	--	--	--	--	--	--	--
	7/8/1994	--	11.09	--	--	--	--	--	--	--	--	--	--
	7/26/1994	--	10.94	--	--	--	--	--	--	--	--	--	--
	8/25/1994	--	10.80	--	--	--	--	--	--	--	--	--	--
	10/27/1994	23.56	10.67	8,500	--	--	2,700	2,700	490	2,000	--	--	--
	1/6/1995	--	11.33	--	--	--	--	--	--	--	--	--	--
	2/1/1995	--	11.79	--	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.10	--	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.23	19,000	--	--	4,400	4,600	720	2,900	410	--	--
	5/21/1997	--	11.68	4,000	--	--	810	840	190	690	ND<100	--	--
	9/28/2004						*Well is damaged. Unable to measure depth to water or collect sample.*						
	12/21/2004						*Well is damaged. Unable to measure depth to water or collect sample.*						
	3/11/2005						*Well is damaged. Unable to measure depth to water or collect sample.*						
	6/16/2005						*Well is damaged. Unable to measure depth to water or collect sample.*						
	9/1/2005						*Well is damaged. Unable to measure depth to water or collect sample.*						
	12/16/2005						*Well is damaged. Unable to measure depth to water or collect sample.*						
	3/10/2006						*Well is damaged. Unable to measure depth to water or collect sample.*						
	9/15/2006						*Well is damaged. Unable to measure depth to water or collect sample.*						
	1/29/2007						*Well properly destroyed by Cambria.*						
MW-3A	1/29/2007						***MW-3A replaces MW-3***						
34.16	3/8/2007	22.42	11.74	30,000 (a,i)	1,700 (d,i)	ND<250	2,600	4,400	710	4,600	ND<1,000	ND<50	ND<50 (j)
	9/17/2007	22.65	11.51	9,800 (a)	980 (d)	ND<250	1,100	1,800	270	1,100	ND<25	ND<25	ND<25
	3/4/2008	22.31	11.85	21,000 (a,i)	1,700 (d,i)	ND<250	2,600	5,000	810	3,500	ND<50	ND<50	ND<50
	9/3/2008	23.11	11.05	13,000 (a)	880 (d)	ND<250	1,400	2,100	370	1,500	ND<50	ND<50	ND<50
	3/4/2009	22.98	11.18	12,000 (a)	810 (d)	ND<250	1,000	1,700	330	1,200	ND<5.0	7.9	7.2
	9/8/2009	23.25	10.91	8,900 (a)	780 (d)	ND<250	870 (830)	1300 (1,200)	260 (200)	1100 (880)	ND<25 (ND<25)	6.3	ND<25
	3/19/2010	**22.79**	**11.37**	**16,000 (a)**	**1,700 (d)**	**--**	**(1,900)**	**(3,200)**	**(620)**	**(2,800)**	**(ND<50)**	**ND<5.0**	**10**
MW-4	10/31/1991	--	--	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	2.6	ND
33.64	11/6/1991	23.32	10.32	--	--	--	--	--	--	--	--	--	--
	10/21/1992	22.10	11.54	410	--	--	3.1	29	6.8	47	--	--	ND
	2/25/1993	21.13	12.51	170	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	4/27/1993	20.74	12.90	100	--	--	ND<0.5	ND<0.5	ND<0.5	0.9	--	--	--
	10/7/1993	--	12.52	240	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	3/28/1994	--	12.34	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	4/29/1994	--	11.33	--	--	--	--	--	--	--	--	--	--
	6/10/1994	--	11.55	--	--	--	--	--	--	--	--	--	--

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Well ID *TOC Elevation (ft msl)*	*Date Sampled*	*Depth to Water (ft below TOC)*	*Groundwater Elevation (feet msl)*	*TPHg*	*TPHd*	*TPHmo*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*Chloroform*	*1,2-DCA*
				←					*µg/L*				→
	7/8/1994	--	11.54	--	--	--	--	--	--	--	--	--	--
	7/26/1994	--	11.30	--	--	--	--	--	--	--	--	--	--
MW-4 *(cont.)*	8/25/1994	--	11.09	--	--	--	--	--	--	--	--	--	--
	10/27/1994	22.69	10.95	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	1/6/1995	--	11.70	--	--	--	--	--	--	--	--	--	--
	2/1/1995	--	12.34	--	--	--	--	--	--	--	--	--	--
	3/29/1995	--	12.76	--	--	--	--	--	--	--	--	--	--
	10/31/1995	--	11.61	80	--	--	ND<0.5	0.6	ND<0.5	1.0	ND<0.5	--	--
	5/21/1997	--	12.08	ND<50	--	--	11	120	27	180	ND<5.0	--	--
	9/28/2004	22.72	10.92	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	12/21/2004	20.65	12.99	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/11/2005	20.20	13.44	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	6/16/2005	20.38	13.26	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/1/2005	20.48	13.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	12/16/2005	20.78	12.86	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/10/2006	19.81	13.83	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/15/2006	21.16	12.48	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	28	ND<0.5
	3/8/2007	21.52	12.12	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	23	ND<0.5
	9/17/2007	21.84	11.80	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	18	ND<0.5
	3/4/2008	21.41	12.23	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	13	ND<0.5
	9/3/2008	22.50	11.14	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	12	ND<0.5
	3/4/2009	22.15	11.49	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	14	ND<0.5
	9/8/2009	22.56	11.08	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	11	ND<0.5
*33.73**	**3/19/2010**	**21.88**	**11.76**	**ND<50**	**ND<50**	**--**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**10**	**ND<0.5**
MW-5	10/31/1991	--	--	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	1.1	--
33.51	11/6/1991	24.00	9.51	ND	--	--	ND	ND	ND	ND	--	--	--
	10/21/1992	23.24	10.27	840	--	--	17	120	39	180	--	--	--
33.56	2/25/1993	22.40	11.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	4/27/1993	22.15	11.41	260	--	--	53	19	1.2	2.4	--	--	--
	10/7/1993	--	11.06	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	3/28/1994	--	10.95	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	4/29/1994	--	10.91	--	--	--	--	--	--	--	--	--	--
	6/10/1994	--	10.68	--	--	--	--	--	--	--	--	--	--
	7/8/1994	--	10.60	--	--	--	--	--	--	--	--	--	--
	7/26/1994	--	10.45	--	--	--	--	--	--	--	--	--	--
	8/25/1994	--	10.28	--	--	--	--	--	--	--	--	--	--
	10/27/1994	23.50	10.06	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--	--
	1/6/1995	--	10.78	--	--	--	--	--	--	--	--	--	--

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Well ID *TOC Elevation (ft msl)*	*Date Sampled*	*Depth to Water (ft below TOC)*	*Groundwater Elevation (feet msl)*	*TPHg*	*TPHd*	*TPHmo*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*MTBE*	*Chloroform*	*1,2-DCA*
				←					*µg/L*				→
	2/1/1995	--	11.25	--	--	--	--	--	--	--	--	--	--
	3/29/1995	--	11.63	--	--	--	--	--	--	--	--	--	--
	10/31/1995	--	10.64	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
MW-5 *(cont.)*	5/21/1997	--	11.04	260	--	--	2.4	33	7.7	56	ND<5.0	--	--
	9/28/2004	23.70	9.86	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	1.5	ND<5.0	--	--
	12/21/2004	21.40	12.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/11/2005	21.40	12.16	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	6/16/2005	21.63	11.93	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/1/2005	21.65	11.91	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	12/16/2005	21.94	11.62	ND<50 (i)	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/10/2006	21.11	12.45	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	9/15/2006	22.20	11.36	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	10	ND<0.5
	3/8/2007	22.44	11.12	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	18	ND<0.5
	9/17/2007	22.73	10.83	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	14	ND<0.5
	3/4/2008	22.32	11.24	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	19	ND<0.5
	9/3/2008	23.13	10.43	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	17	ND<0.5
	3/4/2009	22.95	10.61	ND<50	ND<50	ND<250	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	14	ND<0.5
	9/8/2009	23.21	10.35	ND<50	ND<50	ND<250	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	ND<0.5 (ND<0.5)	11	ND<0.5
*33.67**	**3/19/2010**	**22.72**	**10.84**	**ND<50**	**ND<50**	**--**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**(ND<0.5)**	**14**	**ND<0.5**
MW-6	5/21/1997	--	11.26	760	--	--	2.5	1.7	ND<0.50	25	10	--	--
33.98	9/28/2004	24.00	9.98	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	12/21/2004	21.61	12.37	ND<50	--	--	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--
	3/11/2005	21.60	12.38	340 (a)	--	--	1.9	2.6	0.68	0.61	ND<5.0	--	--
	6/16/2005	21.81	12.17	1,300 (a)	--	--	58	8.3	6.1	4.0	ND<25	--	--
	9/1/2005	21.82	12.16	1,900 (a)	--	--	150	19	18	76	ND<12	--	--
	12/16/2005	22.03	11.95	3,600 (a,i)	--	--	560	63	33	230	ND<50	--	--
	3/10/2006	21.46	12.52	2,200 (a)	--	--	240	10	20	87	ND<50	--	--
	9/15/2006	22.46	11.52	1,800 (a)	480 (d)	ND<250	10	6.7	9.9	42	ND<17	3.2	ND<0.5
	3/8/2007	22.64	11.34	4,300 (a)	890 (d)	ND<250	260	36	29	140	ND<60	ND<10	ND<10 (j)
	9/17/2007	22.88	11.10	7,000 (a)	970 (d)	ND<250	760	28	46	270	ND<10	ND<10	ND<10
	3/4/2008	22.51	11.47	400 (a)	74 (d)	ND<250	46	ND<1.0	1.0	6.0	ND<1.0	ND<1.0	ND<1.0
	9/3/2008	23.24	10.74	280 (a)	69 (d, b)	ND<250	2.9	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	3/4/2009	23.14	10.84	670 (a)	150 (d)	ND<250	68	13	ND<2.5	12	ND<2.5	ND<2.5	ND<2.5
	9/8/2009	23.38	10.60	8,000 (a)	1,400 (d)	ND<250	870 (770)	16 (ND<12)	34 (17)	1500 (1,200)	ND<12 (ND<12)	ND<0.5	ND<12
*34.05**	**3/19/2010**	**22.93**	**11.05**	**8,900 (a)**	**1,200 (d)**	**--**	**(2,900)**	**(ND<100)**	**(ND<100)**	**(ND<100)**	**(ND<5.0)**	**ND<5.0**	**15**

TABLE 2

GROUNDWATER ANALYTICAL AND ELEVATION DATA: PETROLEUM HYDROCARBONS
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Well ID / TOC Elevation (ft msl)	Date Sampled	Depth to Water (ft below TOC)	Groundwater Elevation (feet msl)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	Chloroform	1,2-DCA
				←					µg/L				→

Abbreviations and Notes:

TOC Elevation = Top of well casing elevation measured in feet above mean sea level
msl = Above mean sea level
µg/L = Micrograms per liter
TPHg = Total petroleum hydrocarbons as gasoline by EPA Method SW8015C.
TPHd = Total petroleum hydrocarbons as diesel by EPA Method SW8015C with silica gel cleanup.
TPHmo = Total petroleum hydrocarbons as motor oil by EPA Method SW8015C with silica gel cleanup.
Benzene, toluene, ethylbenzene, and xylenes by EPA Method SW8021B (SW8260B).
MTBE = Methyl tertiary-butyl ether by EPA Method SW8021B by (8260B)
Chloroform by EPA Method SW8260B.
1,2-DCA = 1,2-Dichloroethane by EPA Method SW8260B.
Sheen = A sheen was observed on the water's surface.
Field = Observed in the field.
Lab = Observed in analytical laboratory.
(a) = unmodified or weakly modified gasoline is significant
(b) = diesel range compounds are significant; no recognizable pattern
(d) = gasoline range compounds are significant
(h) = lighter than water immiscible sheen/product is present
(i) = liquid sample that contains ~1 vol. % sediment
(j) = sample diluted due to high organic content/matrix interference
ND<5.0 = Not detected above detection limit.
-- = Not available, not analyzed, or not applicable
* = Surveyed September 7, 2006; updated to table May 24, 2010
** = Surveyed March 8, 2007; updated to table May 24, 2010
É = Unable to access well due to denial by current tenant

TABLE 3

SOIL VAPOR ANALYTICAL DATA
CHIU PROPERTY
800 FRANKLIN STREET
OAKLAND, CALIFORNIA

Sample ID	Date Sampled	Depth (ft)	Benzene	Toulene	Ethylbenzene	m,p-Xylene	o-Xylene	2-butanone (Methyl Ethyl Ketone)	2,2,4-Trimethylpentane	1,2,4-trimethylbenzene	Freon 12	Acetone	Tetrachloroethene	Isobutane (tracer)	Butane (tracer)	Propane (tracer)
			uG/m^3													
VP-1	12/28/2006	5	ND<3.9	--	--	--	--	--	--	--	--	--	--	ND	ND	ND
	7/25/2007	5	ND<3.9	ND<4.6	ND<5.2	ND<5.2	ND<5.2	9.6	12	ND<5.9	ND<6.0	ND<11	ND<8.2	ND	ND	ND
VP-2	12/28/2006	5	ND<4.0	--	--	--	--	--	--	--	--	--	--	ND	ND	ND
	7/25/2007	5	ND<3.6	ND<4.3	ND<5.0	ND<5.0	ND<5.0	ND<3.4	ND<5.3	ND<5.6	34	27	8.9	ND	ND	ND
Duplicate Samples																
VP-1-Dup	12/28/2006	5	ND<4.0	--	--	--	--	--	--	--	--	--	--	ND	ND	ND
VP-2-Duplicate	12/28/2006	5	ND<4.0	--	--	--	--	--	--	--	--	--	--	ND	ND	ND
VP-1-Duplicate	7/25/2007	5	ND<4.0	ND<4.8	ND<5.5	6.0	ND<5.5	ND<3.7	ND<5.9	7.7	ND<6.2	ND<12	ND<6.9	ND	ND	ND

Abbreviations and Analyses:

ND<n = Not dectected (ND) above laboratory detection limit, n.

ft = Measured in feet

uG/m^3 = Microgram per cubic meter.

Benzene, isobutane, butane and propane by modified EPA Method TO-15 (7/25/2007 event analyzed the TO-15 full scan)

FIGURES

TABLES

APPENDIX A

REGULATORY AGENCY CORRESPONENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

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

March 4, 2010

Mr. Tommy Chiu
P.O. Box 28194
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000196 and Geotracker Global ID T0600100050, Bill Louie's Auto Service, 800 Franklin Street, Oakland, CA 94607 – Request for Draft CAP

Dear Mr. Chiu:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the subject site. The site presently has a two story commercial building that occupies the entire lot. Prior to 1989, the site operated as a gasoline service station with up to five underground storage tanks on site. A plume of petroleum hydrocarbons extends off-site in a generally northwest direction. During the most recent groundwater sampling event on September 8, 2009, the concentrations of total petroleum hydrocarbons as gasoline (TPHg) and benzene reported in groundwater were as high as 42,000 and 1,200 micrograms per liter (µg/L), respectively. The concentrations of TPHg in the farthest downgradient well (MW-6) have not demonstrated a declining trend. On September 8, 2009, the concentration of TPHg in groundwater from MW-6 was 8,000 µg/L, which is the highest concentration reported to date for the well and is significantly higher than the concentration of TPHg detected in 1997 when the well was first sampled (760 µg/L).

We request that you prepare a Draft Corrective Action Plan (CAP) **by May 27, 2010** to assess and compare the feasibility of various remedial technologies for the site. The Draft CAP is to screen a broad range of remedial technologies based on feasibility for application at the site. Based on the screening of remedial technologies, develop a minimum of three active remedial alternatives are to be developed in addition to monitored natural attenuation. A discussion of the feasibility of the proposed remedial alternatives to achieve target cleanup goals and cost effectiveness must be included for the site-specific conditions.

TECHNICAL REPORT REQUEST

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

- **May 7, 2010** – Semi-Annual Groundwater Monitoring Report – First Quarter 2010
- **May 27, 2010** – Draft Corrective Action Plan
- **November 8, 2010** – Semi-Annual Groundwater Monitoring Report – Thrid Quarter 2010

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

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

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

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791 or send me an electronic mail message at jerry.wickham@acgov.org.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297
Senior Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

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

Bryan Fong, Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A
Emeryville, CA 94608 (*Sent via E-mail to: bfong@craworld.com*)

Donna Drogos, ACEH (*Sent via E-mail to: donna.drogos@acgov.org*)
Jerry Wickham, ACEH

Geotracker, File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** July 5, 2005
	REVISION DATE: March 27, 2009
	PREVIOUS REVISIONS: December 16, 2005, October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

The Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted**.
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         Or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of My Le Huynh.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name @acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload) If site is a new case without an RO# use the street address instead.
   d) If your document meets the above requirements and you follow the submission instructions, you will receive a notification by email indicating that your document was successfully uploaded to the ftp site.

From: Wickham, Jerry, Env. Health [jerry.wickham@acgov.org]
Sent: Tuesday, June 01, 2010 2:21 PM
To: Fong, Bryan
Subject: RE: 581000 - Fuel Leak Case No. RO0000196 - Response to FS/CAP Request

Bryan,

Moving ahead with a Site Conceptual Model (SCM) report is acceptable. Please submit the SCM Report no later than July 2. 2010.

Regards,

Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway
Alameda, CA 94502
510-567-6791
jerry.wickham@acgov.org

From: Fong, Bryan [mailto:bfong@craworld.com]
Sent: Wednesday, May 26, 2010 12:02 PM
To: Wickham, Jerry, Env. Health
Cc: Filing
Subject: 581000 - Fuel Leak Case No. RO0000196 - Response to FS/CAP Request

Hello Jerry,

After a closer review of the project site data we have identified some data gaps. Based on these data gaps, our remediation engineers have concluded the preparation of an FS/CAP is premature for the following reasons.

- Soil analytical data from borings within the vicinity of the former USTs (source area) is approximately 20 years old (1988 to 1991)
- Soil sample analytical data points are limited to B-1, B-2, MW-1, MW-2, and MW-3
- The groundwater plume is not fully accessed down-gradient of MW-6

We recommend preparing a Site Conceptual Model Report to identify and address the data gaps before preparing the FS/CAP. Please feel free to give me a call to discuss.

Bryan A. Fong
Conestoga-Rovers & Associates (CRA)
5900 Hollis St, Suite A
Emeryville, CA 94608

Phone: 510.420.3369 direct
Phone: 510.420.0700 main
Fax: 510.420.9170
Cell: 510.385.0509
Email: bfong@CRAworld.com
www.CRAworld.com
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APPENDIX B

WELL CONSTRUCTION DETAILS AND SOIL BORING LOGS

BORING LOG B-1

JOB NO: 8854-S1 DATE DRILLED: 5-3-88

JOB NAME: 800 Franklin St., Oakland SURFACE ELEV.: Approx. 25'

EQUIPMENT: DRILLING 6" cont. flight auger DATUM: MSL

SAMPLER TYPE	DRIVE WEIGHT - LB	HEIGHT OF FALL - IN
California Modified	140	30

Sample	Blows per ft	Moisture Content %	Dry Unit Weight pcf	Depth in feet	USCS Classification	Description
					SM	Silty fine sand, mottled yellowish-brown and brown, moist, loose.
B-1-1	7	10.4	98.8			Medium dense.
						Color changes to yellowish-brown.
				5		Dense.
B-1-2	45	12.8	106.4			
				10		Boring terminated at 10 feet deep. No free ground water encountered.

FILE

BORING LOG B-2

JOB NO: 8864-S1 DATE DRILLED: 5-3-88

JOB NAME: 800 Franklin Street, Oakland SURFACE ELEV.: Approx. 35'

EQUIPMENT: DRILLING 6" cont. flight auger DATUM: MSL

SAMPLER TYPE	DRIVE WEIGHT-LB	HEIGHT OF FALL-IN
California Modified	140	30

Sample	Blows per ft	Moisture Content %	Dry Unit Weight pcf	Depth in feet	USCS Classification	Description
					SM	Silty sand, brown, moist, medium dense.
				5		Color changes to yellowish-brown.
				10		
B-2-1	45			15		Less fines.
B-2-2	50/9"	13.7	96.3	20		Some silt.
						Boring terminated at 20 feet deep. No free ground water encountered

FILE

BORING LOG B-3

JOB NO: 8864-S1

DATE DRILLED: 5-3-88

JOB NAME: 800 Franklin Street, Oakland

SURFACE ELEV.: Approx. 35'

EQUIPMENT: DRILLING 6" cont. flight auger

DATUM MSL

SAMPLER TYPE	DRIVE WEIGHT-LB	HEIGHT OF FALL-IN
California Modified	140	30

Sample	Blows per ft	Moisture Content %	Dry Unit Weight pcf	Depth in feet	USCS Classification	Description
B-3-1	8	11.6	107.0		SM	Silty sand with some gravel, brown, moist, stiff: baserock.
						Some clay, gray, green and brown: tank backfill?
B-3-2	12	17.9	102.6	5		
					ML	Sandy silt, dark gray, moist, low plasticity, firm to stiff: tank backfill?
B-3-3	50	11.8	110.4	10	SM	Silty fine sand, grayish-green, moist, dense: tank backfill?
						Slight petroleum odor?
B-3-4	45	13.3	114.2	15		Slight petroleum odor?
						End of backfill 15½ feet?
						Color changes to yellowish-brown.
B-3-5	50 6"	15.1	108.9	20		

FILE

BORING LOG B-3 (cont.)

JOB NO.: 8864-S1

JOB NAME: 800 Franklin Street, Oakland

SHEET 2 OF 2

DEPTH 20 TO 28½ FT.

Sample	Blows per ft.	Moisture Content %	Dry Unit Weight p.c.f.	Depth in feet	USCS Classification	
				20		
B-3-6	50/6"			25		Petroleum odor? Partial recovery.
				30		Boring terminated at 28½ feet deep. Free ground water encountered at 28 feet deep. Boring backfilled with cement grout to 23½ feet.

FILE

FRANK LEE & ASSOCIATES

BORING LOG B-4

JOB NO: 8864-S1 DATE DRILLED: 5-3-88

JOB NAME: 800 Franklin Street, Oakland SURFACE ELEV.: Approx. 35'

EQUIPMENT: DRILLING 6" cont. flight auger DATUM: MSL

SAMPLER TYPE	DRIVE WEIGHT - LB	HEIGHT OF FALL - IN
California Modified	140	30

Sample	Blows per ft	Moisture Content %	Dry Unit Weight pcf	Depth in feet	USCS Classification	Description
					ML	Silt, brown, moist, low plasticity, soft: artificial fill? Some sand and gravel.
B-4-1	8	13.1	111.7			
					CL	Sandy clay, mottled light and dark brown, moist, low plasticity; metal objects: artificial fill, old tank removal backfill.
B-4-2	11			5		
				10		Boring terminated at 6 feet deep due to refusal (obstruction in fill). No free ground water encountered.

FILE

BORING LOG

PROJECT NO:90-1008	PROJECT NAME: CHIU	BORING NO:B1
LOCATION:800 FRANKLIN ST., OAKLAND, CA		DATE:09/11/91
GEOLOGIST: REINHARD RUHMKE		PAGE 1 OF 1
GROUND WATER DEPTH: 25 FEET		DRILLER:HEW
DRILLING METHODS: HOLLOW-STEM AUGER		

DEPTH	SAMPLE	RECOVERY	BLOWS	DESCRIPTION	USCS	GRAPHIC SYMBOL	WELL CONSTRUCTION
0				8 INCHES CONCRETE			
5	B1-5	18"	10 13 16	LIGHT BROWN FINE SAND; LOOSE; DRY.	SP		
10	B1-10	18"	9 11 11	GRAYISH-GREEN FINE SAND; LOOSE; DRY; ODOR.	SP		
15	B1-15	18"	6 10 14				
20	B1-20	18"	7 13 18	OLIVE-GRAY BROWN FINE SAND; MOTTLED; ODOR; DRY.	SP		
25	B1-25	18"	7 21 28	DARK GRAY FINE SAND; WET; ODOR; END OF BORING.			
30							

REMARKS

BOREHOLE WAS BACKFILLED WITH NEAT CEMENT

MILLER ENVIRONMENTAL COMPANY
RICHMOND, CA

BORING LOG

PROJECT NO: 90-1008	PROJECT NAME: CHIU	BORING NO: B2
LOCATION: 800 FRANKLIN ST., OAKLAND, CA		DATE: 10/02/91
GEOLOGIST: REINHARD RUHMKE		PAGE 1 OF 1
GROUND WATER DEPTH: 26 FEET		DRILLER: HEW
DRILLING METHODS: HOLLOW-STEM AUGER		

DEPTH	SAMPLE	RECOVERY	BLOWS	DESCRIPTION	USCS	GRAPHIC SYMBOL	WELL CONSTRUCTION
0				8 INCHES CONCRETE			
1–4				LIGHT BROWN FINE SAND; LOOSE; DRY.			
5	B2-5	18"	7 11 14	A LITTLE CLAY.	SP		
6–9				NO CLAY.			
10	B2-10	14"	10 12 15	BROWN FINE SAND; LOOSE; DRY.			
11–14					SP		
15	B2-15	4"	6 12 14	MOIST			
16–19							
20	B2-20	18"	14 18 19	OLIVE-GRAY FINE SAND; SLIGHT ODOR; DRY.	SP		
21–24							
25	B2-25	2"	7 7 10	DARK GRAY FINE SAND; WET; ODOR; END OF BORING			
26–30							

REMARKS

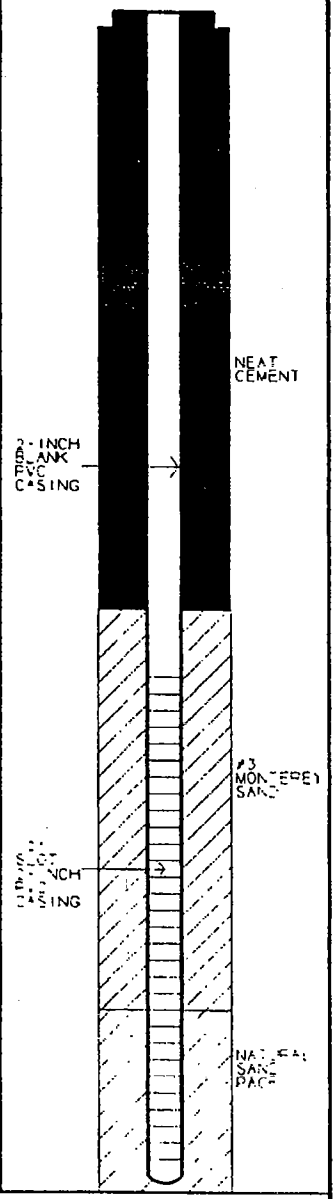
BOREHOLE WAS BACKFILLED WITH NEAT CEMENT

MILLER ENVIRONMENTAL COMPANY
RICHMOND, CA

BORING LOG

PROJECT NO:90-1008	PROJECT NAME: CHIU	BORING NO:MW4
LOCATION:800 FRANKLIN ST., OAKLAND, CA		DATE:10/02/91
GEOLOGIST:REINHARD RUHMKE		PAGE 1 OF 1
GROUND WATER DEPTH: 25 FEET		DRILLER:HEW
DRILLING METHODS:HOLLOW-STEM AUGER		

DEPTH	SAMPLE	RECOVERY	BLOWS	DESCRIPTION	USCS	GRAPHIC SYMBOL	WELL CONSTRUCTION
0				8 INCHES CONCRETE			
5	MW4-5	18"	4 4 5	BROWN FINE SAND: LOOSE; DRY.	SP		
10	MW4-10	14"	12 15 16				
15	MW4-15	14"	5 6 9				
20	MW4-20	12"	12 18 21	GRAY FINE SAND: LOOSE; DRY: ODOR	SP		
25	MW4-25		13 24 25	WET	SP		
35				END OF BORING			



REMARKS

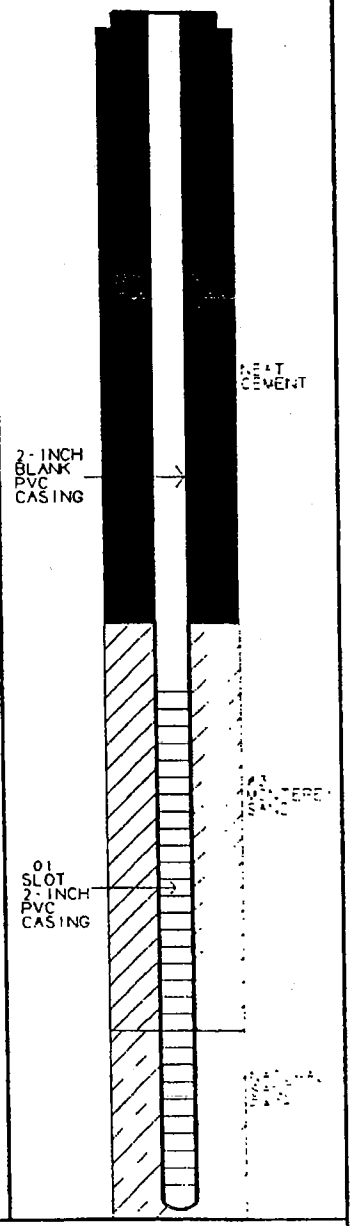
A NATURAL FILTER PACK WAS GENERATED DUE TO FLOWING SANDS

MILLER ENVIRONMENTAL COMPANY
RICHMOND, CA

BORING LOG

PROJECT NO:90-1008	PROJECT NAME: CHIU	BORING NO:MW5
LOCATION:800 FRANKLIN ST., OAKLAND, CA		DATE:10/03/91
GEOLOGIST:REINHARD RUHMKE		PAGE 1 OF 1
GROUND WATER DEPTH: 26 FEET		DRILLER:HEW
DRILLING METHODS:HOLLOW-STEM AUGER		

DEPTH	SAMPLE	RECOVERY	BLOWS	DESCRIPTION	USCS	GRAPHIC SYMBOL	WELL CONSTRUCTION
0				8 INCHES CONCRETE			
5	MW5-5	10"	12 12 13	RUSTY BROWN SILTY FINE SAND: LOOSE:DRY	SP		
10	MW5-10	18"	10 12 14	A LITTLE CLAY			
13				NO CLAY OR SILT			
15	MW5-15	8"	5 8 11				
18					SP		
20	MW5-20	8"	13 19 23	A LITTLE CLAY			
23				NO CLAY			
25	MW5-25	18"	12 19 34	WET			
29					SP		
35				END OF BORING			



REMARKS

A NATURAL FILTER PACK WAS GENERATED DUE TO FLOWING SANDS

MILLER ENVIRONMENTAL COMPANY
RICHMOND, CA

File No. 124575

KEY TO BORING LOGS

BORING LOG SYMBOL

—	Geologic contact line
═	Termination of boring
▽	Water level, preliminary measurement
▼	Water level, stabilized

SAMPLE RECOVERY

■	Undisturbed sample, retained for lab testing
▯	Sampler drive distance, sample examined in the field
☒	No sample recovered
SPT	Standard Penetration Test

SOIL SAMPLE TYPE

C	California
CM	California Modified
HS	Driven manual Hand Sampler
NQ	NQ Wireline
P	Piston
PB	Pitcher Barrel
SS	Split Spoon (Terzaghi)

File No: 124575

LOG OF MONITORING WELL - MW-6

Client: Chiu
Site: 800 Franklin St.
Drillers: Kvilhaug
Drill Rig: B-61
Auger Type/Size: 8" hollow stem
Top of Casing Elevation: 33 (Local Datum)

Logged By: RH
Approved By:
Date Completed: May 15, 1997
Casing Diameter: 2 in.
Screen Size: .010
Filter pack: #3 sand

Symbols used explained on "Key to Boring Logs"

Sample Number	Sampler	Blows per foot	F.I.D. Reading (ppm)	Dry Unit Weight p.c.f.	Well Data	Depth in feet	U.S. C.S.	Surface Conditions: Concrete Description
						0		**Concrete Slab.**
								Baserock, grayish-brown crushed rock.
								Sand, medium-grained, brown, slightly damp to damp, dense; no odor.
								Some clay
						5		
B6-1		48						
								Easy drilling.
						10		No odor.
B6-2		24						
								Increased sand, decreased clay, moisture change to wet.
						15		**Clayey sand,** medium-grained, grayish-green, damp, dense; some petroleum hydrocarbon odor.
B6-3A B6-3B		42						
								Sand, medium- to coarse-grained, greenish-gray, damp, dense.
						20		

ASSOCIATED TERRA CONSULTANTS, Inc.

File No: 124575

LOG OF MONITORING WELL MW- 6 (Continued)

Sample Number	Sampler	Blows per foot	F.I.D. Reading (ppm)	Dry Unit Weight p.c.f.	Well Data	Depth in feet	U.S. C.S.	Description
B6-4A B6-4B		42				20		
								Color change to gray.
						25		
B6-5A B6-5B		97						
						30		Change color to grayish-green.
B6-6A B6-6B		50						
						35		
B6-11		14						
								Bottom of hole at 36-1/4 ft. Free groundwater encountered at 22-1/2 ft.
						40		
						45		

Boring/Well Log Legend

KEY TO SYMBOLS/ABBREVIATIONS

- First encountered groundwater
- Static groundwater
- Soils logged by hand-auger or air-knife cuttings
- Soils logged by drill cuttings or disturbed sample
- Undisturbed soil sample interval
- Soil sample retained for submittal to analytical laboratory
- No recovery within interval
- Hydropunch screen interval

PID = Photo-ionization detector or organic vapor meter reading in parts per million (ppm)

fbg = Feet below grade

Blow Counts = Number of blows required to drive a California-modified split-spoon sampler using a 140-pound hammer falling freely 30 inches, recorded per 6-inch interval of a total 18-inch sample interval

(10YR 4/4) = Soil color according to Munsell Soil Color Charts

msl = Mean sea level

Soils logged according to the USCS.

UNIFIED SOILS CLASSIFICATION SYSTEM (USCS) SUMMARY

Major Divisions			Graphic	Group Symbol	Typical Description
Coarse-Grained Soils (>50% Sands and/or Gravels)	Gravel and Gravelly Soils	Clean Gravels (≤5% fines)		GW	Well-graded gravels, gravel-sand mixtures, little or no fines
				GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
		Gravels with Fines (≥15% fines)		GM	Silty gravels, gravel-sand-silt mixtures
				GC	Clayey gravels, gravel-sand-clay mixtures
	Sand and Sandy Soils	Clean Sands (≤5% fines)		SW	Well-graded sands, gravelly sands, little or no fines
				SP	Poorly-graded sands, gravelly sand, little or no fines
		Sands with Fines (≥15% fines)		SM	Silty sands, sand-silt mixtures
				SC	Clayey sands, sand-clay mixtures
Fine-Grained Soils (>50% Silts and/or Clays)	Silts and Clays			ML	Inorganic silts, very fine sands, silty or clayey fine sands, clayey silts with slight plasticity
				CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
				OL	Organic silts and organic silty clays of low plasticity
	Silts and Clays			MH	Inorganic silts, micaceous or diatomaceous fine sand or silty soils
				CH	Inorganic clays of high plasticity
				OH	Organic clays of medium to high plasticity, organic silts
Highly Organic Soils				PT	Peat, humus, swamp soils with high organic contents

I:\MISC\TEMPLATES\BORING LOG LEGEND.AI

CONESTOGA-ROVERS & ASSOCIATES

Conestoga-Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	MW-3
JOB/SITE NAME	Chiu	**DRILLING STARTED**	29-Jan-07
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	29-Jan-07
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Woodward Drilling Co., C57 #710079	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	--	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	10-inch	**SCREENED INTERVALS**	NA
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA
REMARKS	Well located on Franklin St. between two metered parking spaces in front of 800 Franklin St. building.		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							8-inches of concrete.	0.7	
							Silty SAND (fill): Light brown; moist; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		
				5			**Silty SAND:** Light brown; moist; 40% silt, 60% fine to medium sand; low plasticity; low estimated permeability.	5.0	
				10					
				15			@ 15' - Olive gray, 30% silt, 60% fine to medium sand.		
				20					Portland Type I/II

Continued Next Page

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BORING / WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	MW-3
JOB/SITE NAME	Chiu	**DRILLING STARTED**	29-Jan-07
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	29-Jan-07

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM				
				25			@ 25' - Light brown.		
				30			@ 30 - 15% silt, 85% fine to medium sand; non-plastic; and moderate estimated permeability. @ 32.5' - Olive gray and wet.		
				35				35.0	Bottom of Boring @ 35 fbg

Notes:

Soil lithology based on soil cuttings from MW-3A and other site boring logs.

2-inch, PVC, schedule 40 well MW-3 was destroyed by pressure grouting on January 29, 2007. MW-3 was screened from approximately 20 to 35 feet below grade.

WELL LOG (PID) I:\IR\6-CHARS\5810-1581000\581000~1\58FF5B~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 7/1/10

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5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	MW-3A
JOB/SITE NAME	Chiu	**DRILLING STARTED**	08-Feb-07
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	08-Feb-07
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Woodward Drilling Co., C57 #710079	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	10-inch	**SCREENED INTERVALS**	20 to 35 fbg
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA

REMARKS Well located on Franklin St. between two metered parking spaces in front of 800 Franklin St. building.

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)
							8-inches of concrete.	0.7
0							**Silty SAND (fill):** Light brown; moist; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.	
0				5			**Silty SAND:** Light brown; moist; 40% silt, 60% fine to medium sand; low plasticity; low estimated permeability.	5.0
1				15			@ 15' - Olive gray, 30% silt, 60% fine to medium sand.	

WELL DIAGRAM: Portland Type I/II; Bentonite Seal; Lonestar Sand #2/12

WELL LOG (PID) I:\IR\6-CHARS\5810--\581000\581000-158FF5B~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 7/1/10

Continued Next Page

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Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	MW-3A
JOB/SITE NAME	Chiu	**DRILLING STARTED**	08-Feb-07
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	08-Feb-07

Continued from Previous Page

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
					SM				
32				25			@ 25' - Light brown.		
1198				30			@ 30 - 15% silt, 85% fine to medium sand; non-plastic; and moderate estimated permeability.		4"-diam., 0.010" Slotted Schedule 40 PVC
128							@ 32.5' - Olive gray and wet.		
				35				35.0	Bottom of Boring @ 35 fbg

Notes:

Soil lithology based on soil cuttings from MW-3A.

4-inch well MW-3A is located adjacent to former well MW-3.

WELL LOG (PID) I:\IR\6-CHARS\5810--\581000\581000-1\58FF5B~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 7/1/10

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5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	VP-1
JOB/SITE NAME	Chiu	**DRILLING STARTED**	17-Nov-06
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	17-Nov-06
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-inch	**SCREENED INTERVALS**	5.5 to 6 fbg
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA ▽
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	On Franklin St. in front of 800 Franklin St. building		

PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Surface: 4-inches of concrete.	0.3	Portland Type I/II
0							**Silty SAND (fill):** Light brown; damp; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		Hydrated Granular Bentonite 1.5 - 4 fbg
									1/4-inch Nyflow tubing
									Dry Granular Bentonite 4 - 5 fbg
0		VP-1- 5.5		5					Monterey Sand #2/12
								6.0	6-inch Screened Vapor Probe
									Bottom of Boring @ 6 fbg

Note:
Installed soil vapor probe VP-1 to 6 fbg.
See Figure 3 for construction details of the soil vapor probe.
Soil vapor probe was sampled on 12/28/2006.

WELL LOG (PID) I:\IR\6-CHARS\5810-\581000\581000-1\58FF5B~1\BORING~1\CHIU~ SOIL VAPOR PROBES.GPJ DEFAULT.GDT 7/1/10

Conestoga-Rovers & Associates, Inc.
5900 Hollis Street, Suite A
Emeryville, CA 94608
Telephone: 510-420-0700
Fax: 510-420-9170

BORING / WELL LOG

CLIENT NAME	Chen Tso Chiu	**BORING/WELL NAME**	VP-2
JOB/SITE NAME	Chiu	**DRILLING STARTED**	17-Nov-06
LOCATION	800 Franklin Street, Oakland, CA	**DRILLING COMPLETED**	17-Nov-06
PROJECT NUMBER	589-1000	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Vironex	**GROUND SURFACE ELEVATION**	NA
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	NA
BORING DIAMETER	3-inch	**SCREENED INTERVALS**	5.5 to 6 fbg
LOGGED BY	C. Hernandez	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	M. Jonas	**DEPTH TO WATER (Static)**	NA
REMARKS	On 8th St. in sidewalk in front of 800 Franklin St. building		

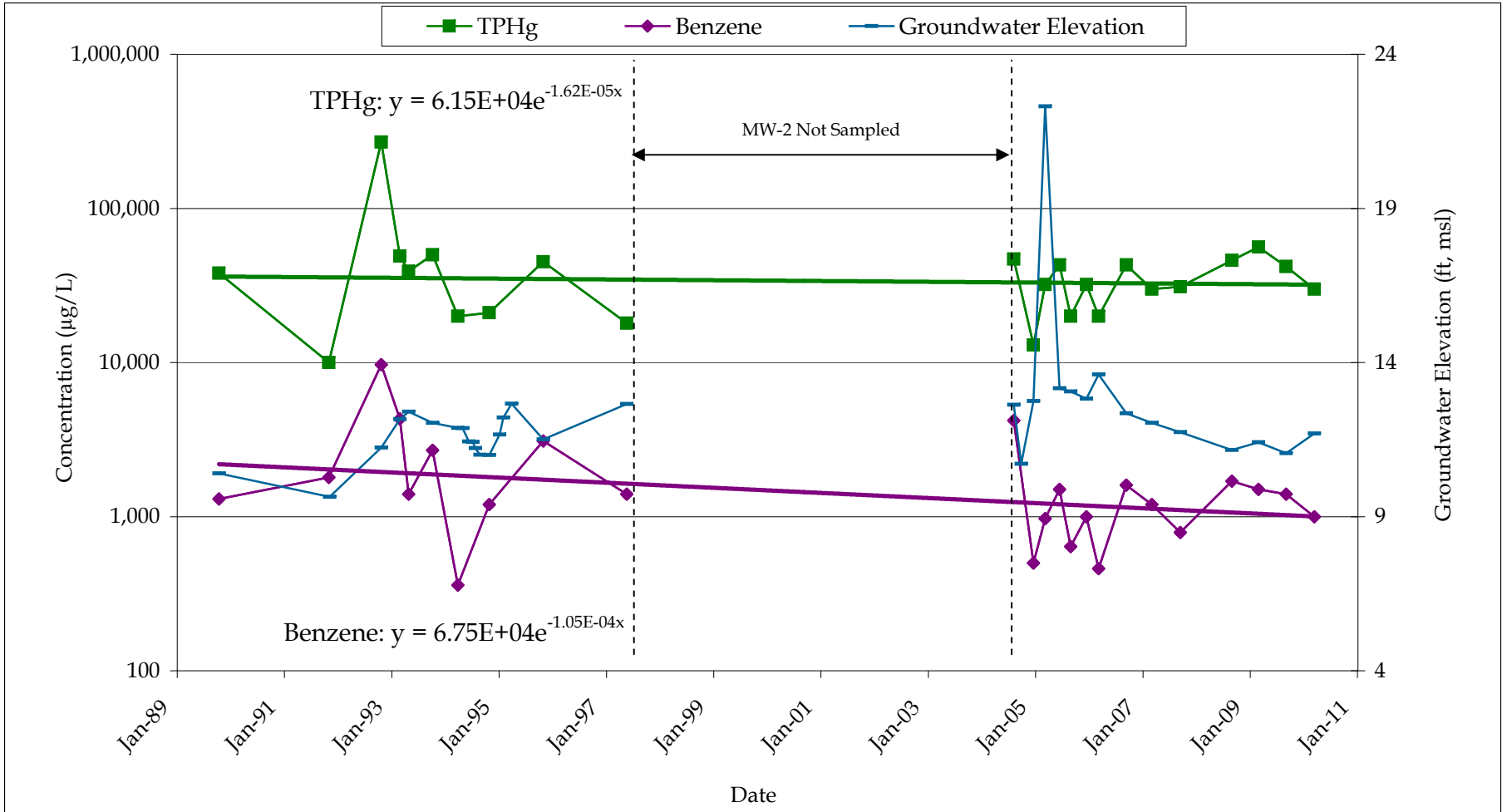
PID (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (fbg)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (fbg)	WELL DIAGRAM
							Surface: 4-inches of Concrete.	0.3	Portland Type I/II
0							**Silty SAND (fill):** Light brown; damp; 15% silt, 85% fine to medium sand; non-plastic; high estimated permeability.		Hydrated Granular Bentonite 1.5 - 4 fbg
							@3': Yellow-grey; 25% silt, 75% fine to medium sand.		1/4-inch Nyflow tubing
									Dry Granular Bentonite 4 - 5 fbg
0		VP-2- 5.5		5					Monterey Sand #2/12
								6.0	6-inch Screened Vapor Probe
									Bottom of Boring @ 6 fbg

Note:
Installed soil vapor probe VP-1 to 6 fbg.
See Figure 3 for construction details of the soil vapor probe.
Soil Vapor probe was sampled on 12/28/2006.

WELL LOG (PID) I:\IR\6-CHARS\5810-\581000\581000-1\58FF5B~1\BORING~1\CHIU- SOIL VAPOR PROBES.GPJ DEFAULT.GDT 7/1/10

APPENDIX C

TPHg & BENZENE CONCENTRATION TREND ANALYSIS GRAPHS



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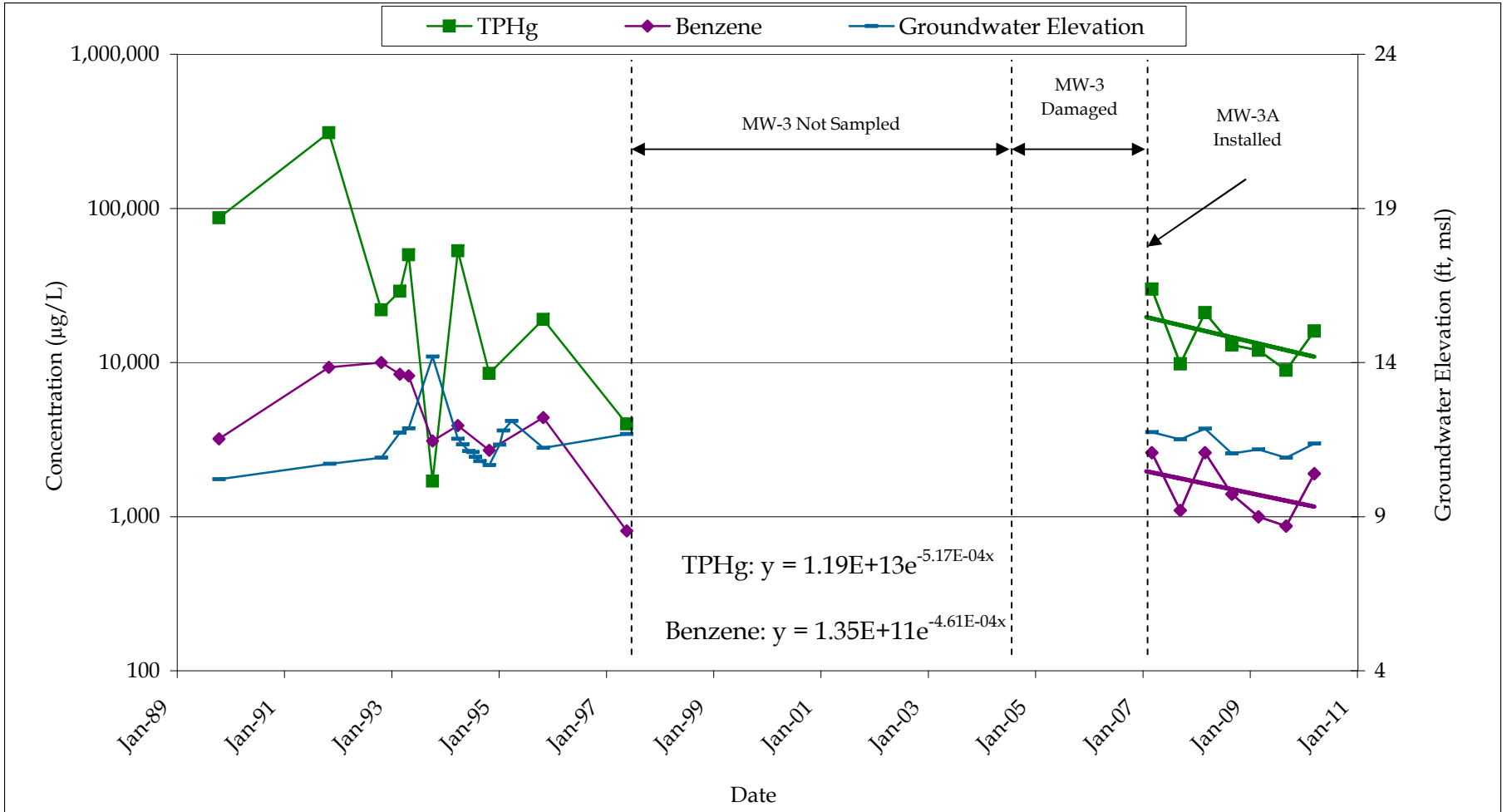
MW-2: TPHg AND BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION



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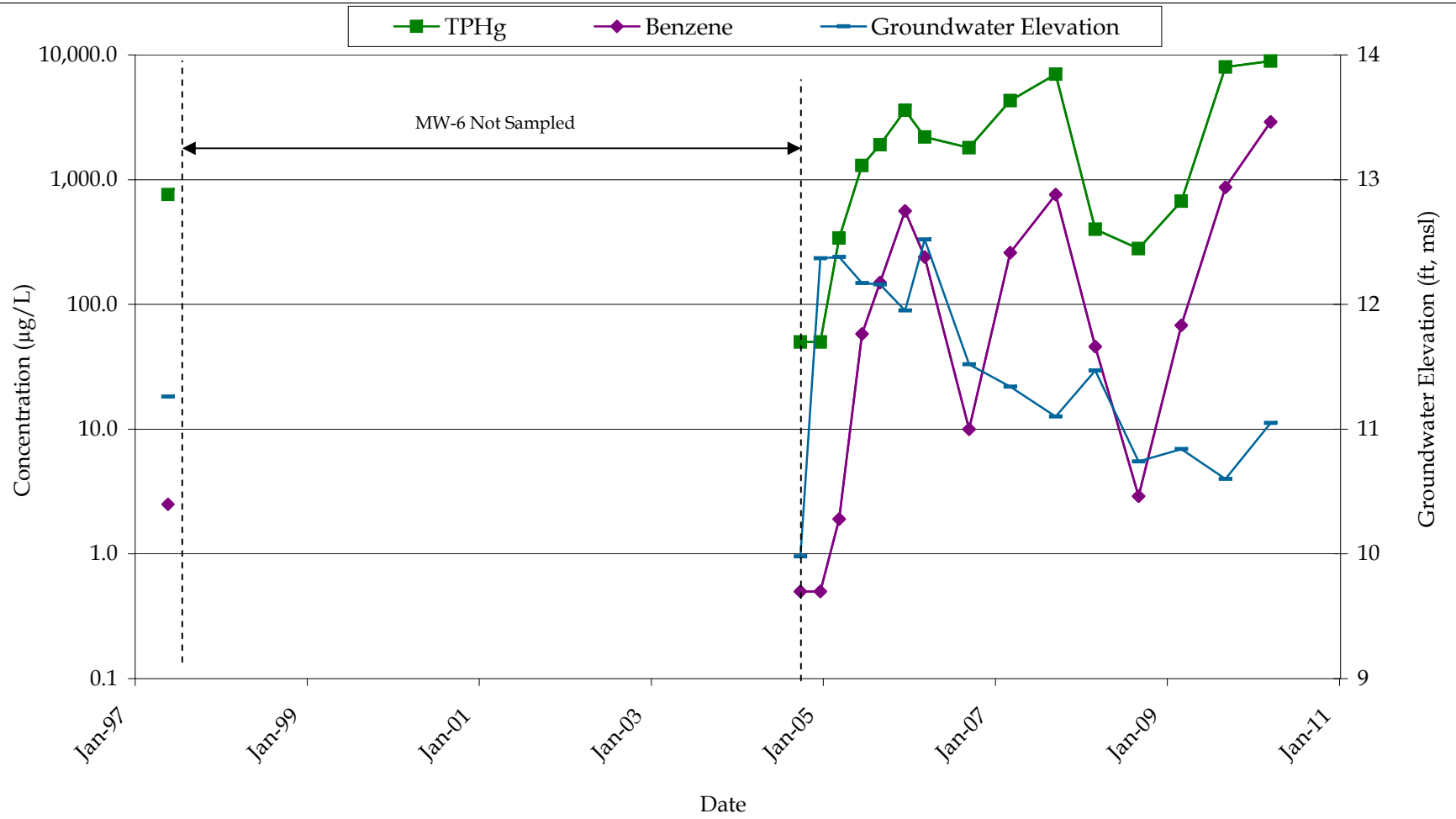
CONESTOGA-ROVERS & ASSOCIATES

MW-3/3A: TPHg AND BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION



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OAKLAND, CALIFORNIA

CONESTOGA-ROVERS & ASSOCIATES

MW-6: TPHg AND BENZENE CONCENTRATIONS AND GROUNDWATER ELEVATION