CAMBRIA

June 14, 2006

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

Re: **Feasibility Study and Corrective Action Plan**
Credit World Auto Sales
2345 International Boulevard (formerly E. 14th Street)
Oakland, California
ACHCS Case No. RO0000327
Cambria Project No. 513-1000

Dear Mr. Wickham:

On behalf of Mr. Stanley Wong, Cambria Environmental Technology, Inc. has prepared the enclosed *Feasibility Study and Corrective Action Plan* (FS/CAP) for the above-referenced site. The site background, hydrocarbon distribution, risk assessment, dual-phase extraction feasibility testing, evaluation of remedial alternatives, and proposed corrective action are presented in the attached FS/CAP.

If you have any questions or comments regarding this submittal, please call Matt Meyers at (510) 420-3314 or Mark Jonas at (510) 520-3307.

Sincerely,
Cambria Environmental Technology, Inc.

Matthew A. Meyers
Project Geologist

Attachment: *Feasibility Study and Corrective Action Plan*

cc: Mr. Stanley Wong, 2200 E. 12th Street, Oakland, California 94606

Cambria Environmental Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

CAMBRIA

FEASIBILITY STUDY AND CORRECTIVE ACTION PLAN

Credit World Auto Sales
2345 International Boulevard
(Formerly E. 14th Street)
Oakland, California 94601
ACHCS Case No. RO0000327
Cambria Project No. 513-1000

June 14, 2006

Prepared for:

Mr. Stanley Wong
2200 East 12th Street
Oakland, California 94606

Prepared by:

Cambria Environmental Technology, Inc.
5900 Hollis Street, Suite A
Emeryville, California 94608

Written by:

Subbarao Nagulapaty
Project Engineer

Cambria Environmental Technology, Inc. (Cambria) prepared this document for use by our client and appropriate regulatory agencies. It is based partially on information available to Cambria from outside sources and/or in the public domain, and partially on information supplied by Cambria and its subcontractors. Cambria makes no warranty or guarantee, expressed or implied, included or intended in this document, with respect to the accuracy of information obtained from these outside sources or the public domain, or any conclusions or recommendations based on information that was not independently verified by Cambria. This document represents the best professional judgment of Cambria. None of the work performed hereunder constitutes or shall be represented as a legal opinion of any kind or nature.

Mark Jonas, P.G.
Senior Project Geologist

CAMBRIA

FEASIBILITY STUDY AND CORRECTIVE ACTION PLAN

Credit World Auto Sales
2345 International Boulevard
Oakland, California 94601

FEASIBILITY STUDY AND CORRECTIVE ACTION PLAN

Credit World Auto Sales
2345 International Boulevard
Oakland, California 94601

FIGURES

TABLES

APPENDICES

CAMBRIA

FEASIBILITY STUDY AND CORRECTIVE ACTION PLAN

Credit World Auto Sales
2345 International Boulevard
(Formerly E. 14th Street)
Oakland, California 94601
ACHCS Case No. RO0000327
Cambria Project No. 513-1000

June 14, 2006

1.0 INTRODUCTION

On behalf of Mr. Stanley Wong, Cambria Environmental Technology, Inc. (Cambria) prepared this *Feasibility Study and Corrective Action Plan* (FS/CAP) for the above-referenced site. As per Cambria's *Feasibility Testing Work Plan* (Work Plan) dated August 24, 2004, a dual-phase extraction (DPE) pilot test was conducted to evaluate the effectiveness of the remedial technology to cleanup the site. The work plan was approved by the Alameda County Health Care Services Agency (ACHCSA) in a letter dated July 20, 2005 (Appendix A). The site background, hydrocarbon distribution, risk assessment, DPE pilot test activities, evaluation of remedial alternatives, and proposed corrective action are presented below.

2.0 SITE BACKGROUND

2.1 Site Description

The site is located at the west corner of the intersection of International Boulevard (formerly East 14th Street) and Miller Avenue in Oakland, California (Figure 1). Its elevation is approximately 27 feet (ft) above mean sea level. The property is currently operated by Credit World Auto Sales, a used car dealership. One building occupies the site and is used as an office and automotive service bay. The remainder of the site is a paved parking area (Figure 2). Previously the site operated as a taxi cab service center (Taxi Taxi) and previous to that operated as a gasoline service center for approximately 40 years.

The site is located in a mixed commercial and residential area and is bound by International Boulevard to the northeast, Miller Avenue to the southeast, a commercial building and automotive repair shop to the southwest, and a restaurant with second floor apartments to the northwest. Adjacent to the restaurant, to the northwest, is a hotel and residential dwelling.

2.2 Regional and Local Geology

Regionally, 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. Hydraulically, the site lies within the East Bay Plain Subbasin (Department of Water Resources, 2004). Sediments consist of coalescing alluvial deposits from

the Diablo Range to the east known as the San Leandro Cone. According to the United States Geological Survey 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.

Previous and recent investigations at the site encountered approximately one-foot of asphalt and aggregate base material (fill) overlying low permeability silts and clays. These silts and clays were observed from approximately one-foot below ground surface (bgs) to as deep as the total depth explored of 35 ft bgs. Occasionally higher permeable lenses of clayey sand and gravel are present from approximately 13 to 15.5 ft bgs. This predominantly low permeability silt and clay layer is interbedded with a relatively moderate permeable layer of silty to clayey sand from approximately 8 ft bgs to 27 ft bgs. A second relatively higher permeable sand and/or gravel layer is present in some places at depths ranging from 30.5 ft bgs to the total depth explored of 35 ft bgs. Hydrogeologic cross-sections are provided as Figures 3 and 4. Soil boring logs are provided in Appendix B.

2.3 Regional and Local Hydrogeology

The site is located above a "significant drinking water resource" (Regional Board Groundwater Committee, 1999). Major water-bearing zones beneath the East Bay Plain occur at depths ranging from 50 ft to more than 1,000 ft bgs. Regionally, groundwater flow is generally from the Diablo Range west toward San Francisco Bay. The nearest surface water body is Brooklyn Basin Tidal Canal, located ½ mile west of the site.

Previous investigations at the site encountered two water-bearing zones. The upper water-bearing zone is from approximately 8 to 18 ft bgs and extends to 15 to 28 ft bgs (14 to 27 ft bgs in well MW-1), and the lower water-bearing zone exists from approximately 30.5 to 35 ft bgs. The upper water-bearing zone appears to be unconfined to semi-confined and the two water-bearing zones are possibly hydraulically connected. Since 1991, the depth to groundwater beneath the site has ranged from approximately 6.2 to 17.8 ft bgs, but typically fluctuates between approximately 10 to 15 ft bgs. Historically, the groundwater flow direction has varied significantly, with groundwater appearing to flow to the northwest or possibly radially outward from the center of the site. During the March 2006 monitoring event, groundwater flow was divided, with apparent flow direction beneath the northern portion of the site toward the north-northeast with a gradient of 0.026 ft/ft and beneath the southern portion of the site flowing toward the southeast with a gradient of 0.048 ft/ft. A groundwater elevation contour map is presented as Figure 7 and the groundwater data is summarized in Table 2. Further information on recent groundwater monitoring results is provided in the *Groundwater Monitoring Report - First Quarter 2006* (Cambria, April 2006).

2.4 Surface Water Bodies

The Alameda Harbor, in San Francisco Bay, is located approximately 1½ miles west of the site. The closest body of surface water is the Brooklyn Basin Tidal Canal, located approximately ½ mile west of the site.

2.5 Summary of Previous Work

Several phases of soil and groundwater assessments have been conducted at the site since the underground storage tanks (USTs) were removed in 1988. Soil and groundwater analytical results from these investigations are summarized in Tables 1 and 2, respectively.

August 1988 UST Removal: On August 5, 1988, one 8,000-gallon gasoline UST, two 6,000-gallon gasoline USTs, one 1,000-gallon waste oil UST, two dispenser islands, and associated piping were removed from the site by West Coast Tank Company of Campbell, California (Figure 2) (Earth Systems Environmental Inc., 1991). The gasoline tanks were in poor condition with visible leaks. Soil samples from the fuel UST excavation cavity were impacted by total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) (Table 1). Soil samples from the waste oil excavation area were impacted by total petroleum hydrocarbons as diesel (TPHd), total oil and gas (TOG), and xylenes (SCS Engineers, 1988). The excavations were backfilled "with the stockpiled spoils and imported fill, compacted, graded to surface contours and capped with concrete" (Earth Systems Environmental Inc., 1991).

November 1988 Soil and Groundwater Investigation: California Environmental Consultants (CEC) advanced three soil borings (B-1 to B-3) to assess the extent of hydrocarbon impact in soil and groundwater in the vicinity of the former UST locations. Borings B-1 and B-2 were advanced adjacent to the former fuel USTs. TPHg and BTEX concentrations were detected in soil and groundwater samples from both borings (Tables 1 and 2). Soil and groundwater samples from boring B-3, located near the former waste oil UST location, were impacted by TOG and BTEX. Groundwater was first encountered at 19 to 21 ft bgs during this investigation. (CEC, 1988)

May to August 1991 Phase I Soil and Groundwater Assessment: Earth Systems Environmental advanced five onsite borings (TH-1 through TH-5) and additional onsite borings were advanced to install three groundwater monitoring wells (MW-1 through MW-3) to further delineate the onsite hydrocarbon impact. Borings TH-1 and TH-2 were advanced within the former fuel UST tank pit and adjacent to the former fuel USTs, respectively. TPHg and BTEX concentrations were detected in soil samples from boring TH-1. TPHg and xylenes were detected in soil samples from boring TH-2. Borings TH-3 and TH-4 were advanced adjacent to the former waste UST. Soil samples collected from boring TH-3 and TH-4 had detections of TPHg and TOG.

Boring TH-5 was advanced at the southern corner of the site. Soil samples collected from boring TH-5 had a detection of TPHg. Soil samples collected from borings MW-1 and MW-2 had detections of TPHg and BTEX. Soil samples collected from boring MW-3 only had detections of TPHg and TOG. Groundwater was first encountered at 9 ft bgs in the former fuel UST tank pit (TH-1) and 18 to 21.5 ft bgs in borings TH-2 through TH-5. Groundwater samples collected from monitoring well MW-1 had high concentrations of TPHg and BTEX, MW-2 had detectable levels of TPHg, and MW-3 was below laboratory detection limits (Earth Systems Environmental Inc., 1991).

July 1993 Preliminary Site Assessment: Tank Protect Engineering (Tank Protect) installed two monitoring wells (TMW-4 and TMW-5) at the site. TPHg was detected in boring TMW-4 at 16 ft bgs. No BTEX were detected in the soil samples collected from TMW-4. TPHg and BTEX were detected in soil samples collected from boring TMW-5 at 6.0, 11.0, and 16.0 ft bgs. Separate-phase hydrocarbons (SPH) were observed in wells MW-1, MW-2, and TMW-5. The groundwater flow direction beneath the site was inferred to be northwest with an average gradient of 0.029 ft/ft. Tank Protect concluded that unconfined and confined groundwater is present beneath the site, and that wells MW-2 and MW-3 monitor an upper, unconfined water-bearing zone while MW-1, TMW-4, and TMW-5 monitor both the upper unconfined water-bearing zone and a lower confined water-bearing zone. Tank Protect concluded that sands logged in well MW-2 are characteristic of a buried stream channel, trending north-south beneath and across the site (Tank Protect, 1993).

December 1994 Site Assessment: Tank Protect excavated about 600 cubic yards of contaminated vadose zone soil from the area of the former fuel USTs and associated piping. Confirmation soil samples were collected from the sidewalls and beneath the former piping. Soil samples collected from the sidewalls contained TPHg concentrations ranging from 1.3 mg/kg to 210 mg/kg. The soil sample collected from beneath the former piping contained a TPHg concentration of 2.7 mg/kg. BTEX concentrations were also detected in the soil samples. The excavation was backfilled with clean remediated soil (Tank Protect, January 1997).

April to May 1997 Site Assessment: Tank Protect advanced five borings (SB-1 through SB-5) to assess the offsite hydrocarbon impact. TPHg concentrations were detected in soil and grab groundwater samples from borings SB-2 and SB-5. Benzene concentrations were detected in soil from boring SB-2 and grab groundwater from borings SB-2 and SB-5 (Tables 1 and 2). A methyl tertiary butyl ether (MTBE) concentration was detected in grab groundwater from boring SB-5. No petroleum hydrocarbons or MTBE were detected in soil and groundwater samples from borings SB-1, SB-3, and SB-4. Tank Protect concluded that the northern, eastern, and western extent of the hydrocarbon plume was defined (Tank Protect, June 1997).

May 2001 Subsurface Investigation: Sequoia Environmental Corporation (Sequoia) advanced seven onsite borings (SB-1 through SB-7), converting boring SB-7 into monitoring well MW-6. No MTBE was detected in any soil samples. TPHg was detected in soil samples collected from borings SB-1, SB-3, SB-4, SB-5, and SB-7. Benzene was detected in soil samples collected from borings SB-3, SB-4, SB-5, and SB-7 (Table 1). MTBE was not detected in any groundwater samples. Hydrocarbons were not detected in grab groundwater samples from boring SB-6. TPHg was detected in grab groundwater from borings SB-1 through SB-6. Benzene was detected in grab groundwater samples from borings SB-1, SB-3, SB-4, and SB-5. Groundwater samples were collected from monitoring wells MW-3 and MW-6. TPHg and BTEX concentrations were detected in wells MW-3 and MW-6 (Table 2). SPH was detected in wells MW-1, MW-2, MW-3, and TMW-5, and 4.5 gallons of SPH was removed from the monitoring wells (Table 3). Sequoia reported groundwater flow to the west-southwest during this assessment (Sequoia, 2001).

March through July 2002 Bio-Remediation System: A bio-remediation system was installed and operated at the site by Sequoia between March 2002 and July 2002. According to Sequoia, this system pumped water from four wells (MW-1, MW-2, MW-3 and TMW-5) into four "bioreactor" tanks containing microbes, nutrients, and hydrogen peroxide. The treated, microbe-rich water was then injected into the subsurface through an infiltration well (MW-1). Monthly project updates submitted by Sequoia do not provide detailed information about system layout, startup, or operation. Between March 2002 and July 2002, four bio-treatment events were reported where treated, microbe-rich water was injected into well MW-1. The system was shut down and removed in July 2002. Groundwater samples collected by Sequoia on June 20, 2002 after the initiation of bio-remediation activities were generally consistent with historical groundwater hydrocarbon concentration trends. Insufficient data is available to assess the effectiveness of the bio-remediation system (Sequoia, 2002).

June 2002 Vacuum Truck Operations: Vacuum truck operations were conducted by Sequoia on June 20, 2002 as an interim remedial measure. Vacuum truck operations were performed to remove the SPH found in wells MW-2, MW-3, TMW-5, and MW-6. Details are not available describing the length of vacuum truck operations or amount of SPH and groundwater recovered (Sequoia, 2002.).

May 2003 Conduit Study: Cambria completed a conduit study to evaluate the potential for subsurface utility conduits to serve as preferential pathways for hydrocarbon migration. The depth to nearby utilities ranged from approximately 3 to 18 ft bgs. Site groundwater has historically fluctuated between approximately 6.5 and 17 ft bgs. Cambria determined that a 75 inch diameter storm drain up to 16 ft bgs beneath Miller Avenue potentially intersects groundwater year round. However, grab groundwater analytical results from boring SB-1 suggest that hydrocarbons have not migrated to this offsite storm drain (Cambria, 2003).

August and October 2005 Site Assessment: Cambria reconstructed improperly constructed groundwater monitoring wells (well MW-1 as MW-1B; MW-2 as MW-2A; MW-3 as MW-3A; and TMW-4 as TMW-4A), installed additional groundwater monitoring wells (MW-1A, MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12), and installed a remediation well (RW-1). The primary objective of this site assessment was to define the extent of SPH and the dissolved-phase hydrocarbon plume. Petroleum hydrocarbon impacted soil and groundwater were mainly present in onsite wells. Additional details of the site assessment activities are presented in Cambria's *Site Assessment Report* dated March 10, 2006 (Cambria, March 2006).

SPH Removal: SPH has been observed in wells MW-1, MW-2, MW-3, TMW-4, TMW-5, and MW-6. SPH removal from site wells was conducted from April 1993 through August 2005. SPH removal events have been performed twice per month from May 2003 through October 2005. Since August 2005 SPH has not been observed in site wells. Since October 2005 Cambria has reduced the SPH removal events to once per month due to the absence of SPH. SPH removal data is summarized in Table 3.

Groundwater Monitoring: Groundwater monitoring of site wells was conducted on a quarterly basis between August 1991 and December 1999, and only once in 2001 and 2002. Quarterly monitoring events were initiated again in March 2003. Groundwater elevation and analytical data is summarized in Table 2 and presented in Figure 7.

3.0 HYDROCARBON DISTRIBUTION

3.1 Hydrocarbon Distribution in Soil

Petroleum hydrocarbon impacted soil beneath the site is primarily located in the vicinity of the former USTs. Maximum TPHg and benzene concentrations up to 4,320 mg/kg and 7.275 mg/kg, respectively, were observed in soil samples collected from well MW-2 located north of the former USTs. The lateral extent of the petroleum hydrocarbon impacted soil appears to be adequately defined in all directions (Figures 5 and 6). Impact appears to be in deeper (greater than 3 meters bgs) soil at the site predominantly from 10 to 15 ft bgs and occasionally to approximately 20 ft bgs. Historical soil analytical data are presented in Table 1.

3.2 Hydrocarbon Distribution in Groundwater

The lateral extent of petroleum hydrocarbon impacted groundwater is limited to the vicinity of the former USTs. The dissolved-phase hydrocarbon concentrations in the impacted wells appears to be originating from hydrocarbon impacted soil in the vicinity of the former USTs. MTBE was detected in groundwater samples collected from off-site well MW-12 and is possibly from an off-site source. Groundwater monitoring data indicates that the dissolved phase petroleum hydrocarbon plume appears to be relatively stable. Historical groundwater analytical results are presented in Table 2.

3.3 SPH Distribution

Historically SPH was observed in all onsite monitoring wells (MW-1, MW-2, MW-3, TMW-4, TMW-5, and MW-6). However, no SPH was observed in any of the onsite monitoring wells since August 2005. SPH has never been observed in any off-site monitoring wells.

4.0 ASSESSMENT OF RISK

The overall goal for assessing risk and defining remedial objectives is to be protective of human health and the environment. The following approach presents receptors potentially impacted by known concentrations in soil and groundwater, defines chemicals of potential concern, and applies applicable screening criteria. This level of risk assessment is defined as Tier 1, based on the use of "lookup tables" for screening criteria, specifically Regional Water Quality Control Board – San Francisco Bay Region (Regional Board) *Environmental Screening Levels* (Regional Board, 2005). The Tier 1 risk assessment can be overly conservative and the actual impact to a potential receptor will tend to be less. After assessing potential risk, remediation goals are presented for groundwater at the site.

4.1 Potential Receptors

Following are potential receptors that possibly may be impacted by conditions at the site:

- Groundwater as a drinking water resource,
- Local vapor intrusion, and
- Direct exposure.

The site is located above a drinking water resource (Regional Board Groundwater Committee, 1999), currently used mainly for irrigation and industrial purposes. Even though local groundwater is not used currently as a drinking water source and impacted water appears to be shallow, groundwater as a drinking water resource environmental screening levels (ESLs) are considered. Drinking water is currently supplied to the City of Oakland by East Bay Municipal Utility District (EBMUD) via the Mokelumne Aqueduct. The site is located in a mixed commercial and residential area of Oakland. Therefore vapor intrusion ESLs are considered. Direct exposure may occur if industrial/commercial workers work in impacted soil or if the property eventually is redeveloped for residential use. Therefore direct exposure pathways ESLs are also considered. Surface water should not be impacted by the site.

The identification of potential receptors provides a basis for further consideration for assessing risk. For an initial evaluation, the potential receptors are evaluated with respect to chemicals of potential concern and ESLs to determine if a potential risk exists.

4.2 Chemicals of Potential Concern

Based on characterization of the site, following are chemicals of potential concern COPC for soil and groundwater.

- COPC in soil:
  - TPHg, benzene, toluene, ethylbenzene, and total xylenes.
- COPC in groundwater:
  - TPHg, benzene, toluene, ethylbenzene, total xylenes, and MTBE.

4.3 Tier 1 Risk Analysis and Remedial Objectives

A Tier 1 risk analysis was performed by comparing soil and groundwater concentrations to various Regional Board (2005) ESLs. From this, remedial objectives are defined and cleanup goals are recommended.

4.3.1. Summary of Analytical Results and Environmental Screening Levels

Summaries of soil and groundwater analytical results and potential ESLs are presented below.

Chemicals of Potential Concern in Soil and Environmental Screening Levels

The following Tables 4-1 and 4-2 present soil and groundwater results and ESLs for TPHg and BTEX:

Table 4-1
Chemicals of Potential Concern in Shallow Soil ≤3 m bgs and Environmental Screening Levels

COPC in Shallow Soil	Frequency of Detection	Highest "Remaining" Concentration (mg/kg)	Shallow Soil Residential ESL D.W. Resource[1] (mg/kg)	Shallow Soil Residential ESL Vapor Intrusion Into Building[2] (mg/kg)	Direct Exposure Residential ESL[3] (mg/kg)
TPHg	1/5 (20%)	2.4	100	NA	400
Benzene	1/5 (20%)	0.0026	0.044	0.18	0.38
Toluene	0/5 (0%)	ND	2.9	130	340
Ethylbenzene	0/5 (0%)	ND	3.3	390	400
Total Xylenes	1/5 (20%)	0.053	2.3	310	420

Notes: ESL = Environmental Screening Level; D.W. = Drinking Water; ND = None Detected; NA = Not Available; mg/kg = milligrams per kilogram
1 = Table A (Regional Board 2005), ESL, ≤3 m bgs, residential land use, current or potential drinking water source.
2 = Table A-1 (Regional Board 2005), ESL, ≤3 m bgs, residential land use, vapor intrusion into building.
3 = Table K-1 (Regional Board 2005), ESL, residential land use, direct exposure.

Based on a comparison of chemicals of potential concern in shallow soil and regulatory ESLs, TPHg and BTEX concentrations do not exceed ESLs for a drinking water resource, vapor intrusion, or direct exposure.

Table 4-2
Chemicals of Potential Concern in Deeper Soil >3 m bgs and Environmental Screening Levels

COPC in Deeper Soil	Frequency of Detection	Highest "Remaining" Concentration (mg/kg)	Deeper Soil Residential ESL D.W. Resource[1] (mg/kg)	Deeper Soil Res./Com. ESL Vapor Intrusion[2] (mg/kg)	Deeper Soil Direct Exposure Residential ESL[3] (mg/kg)
TPHg	41/59 (69%)	4,320	**100**	NA/NA	6,000
Benzene	23/60 (38%)	7.275	**0.044**	**0.18/0.51**	16
Toluene	16/60 (27%)	6.620	**2.9**	130/310	650
Ethylbenzene	25/60 (42%)	48	**3.3**	390/390	400
Total Xylenes	25/60 (42%)	53	**2.3**	310/420	420

Notes: ESL = Environmental Screening Level; D.W. = Drinking Water; ND = None Detected; NA = Not Available; mg/kg = milligrams per kilogram
1 = Table C (Regional Board 2005), ESL, >3 m bgs, residential land use, current or potential drinking water source.
2 = Table C-1 (Regional Board 2005), ESL, >3 m bgs, residential/commercial land use, vapor intrusion into building.
3 = Table C-1 (Regional Board 2005), ESL, residential land use, direct exposure.

Based on a comparison of COPC in soil deeper than approximately 10 ft bgs and regulatory ESLs, TPHg and BTEX concentrations exceed the ESLs for a residential drinking water resource; benzene concentrations exceed the ESLs for residential and commercial vapor intrusion; and TPHg and BTEX concentrations do not exceed ESLs for direct exposure.

Chemicals of Potential Concern in Groundwater and Environmental Screening Levels

The following Table 4-3 presents groundwater results and ESLs for TPHg, BTEX, and MTBE:

Table 4-3
Chemicals of Potential Concern in Groundwater and Environmental Screening Levels

COPC in GW	Frequency of Detection	Highest Concentration 2005-2006 (µg/L)	ESL D.W. Resource[1] (µg/L)	CAL DHS Primary MCL (µg/L)	Risk-Based Goal/Drinking Water Toxicity[2] (µg/L)	Res. / Com. Vapor Intrusion[3] (µg/L)
TPHg	116/156 (74%)	65,000	**100**[4]	NA	**210**	NA[6] / NA[7]
Benzene	113/157 (72%)	6,500	**1.0**[5]	**1.0**	**0.35**	**1,900 / 6,400**
Toluene	95/157 (61%)	2,600	**40**[4]	**150**	**1,400**	530,000$_{res./com.}$
Ethylbenzene	111/157 (71%)	2,600	**30**[4]	**700**	**700**	170,000$_{res./com.}$
Xylenes	106/157 (68%)	8,600	**20**[4]	**1,800**	**1,400**	160,000$_{res./com.}$
MTBE	18/127 (14%)	12,000	**5.0**[4]	**13**	**19**	45,000 / 150,000

Notes: ESL = Environmental Screening Level; D.W. = Drinking Water; ND = Not Detected; NA = Not Available; µg/L = micrograms per liter
CAL DHS MCL = California EPA Department of Health Services - Maximum Concentration Level
1 = Table F-1a (Regional Board 2005), ESL, groundwater screening level, current or potential drinking water source.
2 = Table F-3 (Regional Board 2005), ESL, drinking water toxicity screening levels.
3 = Table E-1a (Regional Board 2005), ESL, groundwater screening level, potential vapor intrusion, indoor air; low/moderate permeability soil, residential / commercial.
4 = Table I-1 (Regional Board 2005) Based on Taste and Odor Threshold.
5 = Table F-3 (Regional Board 2005) Based on Drinking Water Toxicity / CAL DHS MCL.
6 = Table E (Regional Board 2005) Recommends using soil gas. TPHg residential indoor screening level is 26 µg/m^3.
7 = Table E (Regional Board 2005) Recommends using soil gas. TPHg commercial indoor screening level is 36 µg/m^3.

Based on a comparison of COPC in groundwater and regulatory ESLs, the highest concentrations detected in 2005-2006 of TPHg, BTEX, and MTBE exceed ESLs for a drinking water resource. Except for benzene, drinking water resource ESLs are typically based on taste and odor goals. But elevated concentrations of BTEX and MTBE also exceed the California Environmental Protection Agency Department of Health Services (Cal DHS) primary maximum contaminant levels (MCLs) for drinking water. The COPC were also compared to risk based drinking water toxicity goals. TPHg, BTEX, and MTBE were also found to exceed drinking water toxicity goals. When compared to ESLs for potential vapor concerns in low to moderate permeability soil, only benzene exceeds the ESL for potential residential vapor intrusion. Only concentrations above 6,400 µg/L exceeded the benzene ESL for commercial vapor intrusion.

4.3.2. Remedial Objectives and Cleanup Goals

Following are remedial objectives for soil and groundwater:

Soil Remedial Objectives

As identified in Table 4-1, concentrations detected at the site in shallow soil do not exceed ESLs for a drinking water resource, a non-drinking water resource, vapor intrusion into buildings, or direct exposure. Concentrations in deeper soil do exceed some residential ESLs but only benzene exceeds ESLs for vapor intrusion. Therefore, our recommendation is to perform soil vapor extraction (SVE) with a DPE system followed by collecting soil vapor samples from the sites subsurface. Previous excavation around the former USTs appears to have adequately removed the most contaminated soil. Prior to August 2005, SPH was observed in all existing on-site monitoring wells. Since August 2005 SPH has not been observed in any site well. Remaining concentrations in soil are predominantly between 10 and 15 ft bgs and should be effectively remediated by DPE remediation.

Groundwater Remedial Objectives and Cleanup Goals

The overall remedial goal is to be protective of human health and the environment. The environment is not impacted by the plume because there is not a discharge to surface water. Protection of human health is based on evaluation of potential risk pathways to a potential human receptor. The shallow groundwater at and around the site is not currently used for drinking water. It is unlikely that the shallow groundwater will be used for drinking water, but removal of the drinking water resource beneficial use for local groundwater is problematic. We also consider that setting cleanup goals based on drinking water standards may be technically impractical to achieve. So, our recommendation is to have primary cleanup goals based on the drinking water toxicity level ESL for TPHg and the MCLs for BTEX and MTBE. If it is found that achieving drinking water standards are technically impractical within a reasonable period of time, the

agency should consider shifting to secondary cleanup goals based on vapor intrusion. The following Table 4-4 presents proposed primary and secondary cleanup goals for groundwater.

Table 4-4
Primary and Secondary Groundwater Cleanup Goals

Groundwater Analyte	Primary GW Cleanup Goal (µg/L)	Secondary GW Cleanup Goal (µg/L)
TPHg	210	collect soil gas
Benzene	1.0	1,900
Toluene	150	530,000
Ethylbenzene	700	170,000
Total Xylenes	1,800	160,000
MTBE	13	45,000

The primary groundwater cleanup goals in Table 4-4 are based on drinking water resource human toxicity ESLs for TPHg and MCLs for BTEX and MTBE. The secondary groundwater cleanup goals for BTEX and MTBE are based on ESL limits for vapor intrusion into residential buildings. If secondary groundwater cleanup goals are acceptable, soil vapor samples can be collected to compare TPHg, BTEX, and MTBE concentrations to risk based ESLs for soil gas (Regional Board 2005). Cleanup goals may be determined in the future based on site-specific 1) soil gas results, 2) modeling (RBCA, Johnson & Ettinger, etc.) and/or 3) further risk analysis. The groundwater cleanup goals will be used as objectives for the remedial effort.

5.0 DPE PILOT TEST ACTIVITIES

5.1 Rationale and Objectives

Rationale: Residual petroleum hydrocarbons are present in soil in the vicinity of the former USTs and are likely contributing to the elevated dissolved-phase hydrocarbon concentrations detected in on-site monitoring wells (see Figure 2 and Tables 1 and 2). Hydrocarbon impacted soil can be addressed by simultaneous soil vapor and groundwater extraction. Groundwater extraction would expose the submerged well screens for vapor extraction by lowering the groundwater in the wells.

Objectives: The objectives of the feasibility pilot test were to assess:

- aquifer hydraulic conductivity;
- hydrocarbon concentrations and vapor flow rates during SVE and DPE;
- vapor-phase hydrocarbon mass removal rate; and
- applicability and effectiveness of DPE for the site.

5.2 Field Activities

Cambria conducted a DPE pilot test between August 29 and September 2, 2005. A brief SVE step test was conducted prior to starting DPE as proposed in Cambria's *Feasibility Testing Work Plan* dated August 24, 2004. During the testing, well RW-1 was used for both, vapor and groundwater extraction. Groundwater from well RW-1 was extracted using a downwell stinger. Wells MW-1A, TMW-5, MW-6, and MW-7 were used as observation wells. A description of test equipment and field procedures for the DPE pilot test are presented below.

5.2.1. Test Equipment

A liquid-ring vacuum pump capable of generating up to 28 inches of mercury (in. Hg) vacuum and a flow rate of 400 actual cubic feet per minute (acfm) was used for vapor extraction. A propane-fired thermal oxidizer was used for soil vapor abatement. A trailer-mounted 100-kilowatt diesel generator was used to provide electricity for the extraction and treatment equipment. A temporary propane tank was used to provide supplemental fuel as necessary.

A Horiba Instruments, Inc.© gas analyzer, calibrated to iso-butylene, was used to measure hydrocarbon vapor concentrations from the extraction well. A TSI, Inc.© thermoanemometer was used to measure vapor extraction flow rates and temperature. Magnehelic gauges were used to measure the vacuum applied at the wellhead and induced in the observation wells. A Solinst© water level meter was used to measure the depth of groundwater in the wells before and after the DPE test. Drawdown and recharge were calculated from pressure head measurements collected from the well using a MiniTroll™ pressure transducer/data logger. A Thomas Industries Inc.© vacuum pump was used to collect soil vapor samples in one-liter Tedlar® bags for field measurements and laboratory analysis.

5.2.2. Test Procedures

The pilot test consisted of a SVE step test, a DPE step test, and a DPE constant vacuum test.

SVE Step Test: A SVE step test was conducted to compare the vapor flow rate data during SVE and DPE. Cambria conducted the SVE step test by applying increasing levels of wellhead vacuum on the extraction well. The step test consisted of three steps at wellhead vacuums of approximately 28 inches of water column (in. H_2O), 75 in. H_2O, and 136 in. H_2O. Wellhead vacuum, vapor flow rate, hydrocarbon concentrations, and vacuum influence in the observation wells were recorded every five minutes for each step until the vapor flow rate had stabilized.

DPE Step Test: Cambria conducted a DPE step test by applying increasing levels of wellhead vacuum on the extraction well at different stinger depths. The step test consisted of a total of five steps: three steps at a stinger depth of 11.25 ft below top of well casing (TOC) and wellhead vacuums of approximately 14 in. Hg, 16 in. Hg, and 20 in. Hg, and two steps at a stinger depth of

16 ft below TOC and wellhead vacuums of 17.5 in. Hg and 20 in. Hg. Wellhead vacuum, vapor flow rate, hydrocarbon concentrations, vacuum influence in the observation wells, and volume of extracted groundwater were recorded every five minutes for each step until the vapor flow rate had stabilized.

DPE Constant Vacuum Test: Cambria conducted a constant vacuum DPE test on remediation well RW-1 to assess if hydrocarbon concentrations at the site would be sustained. An optimum extraction vacuum rate for the constant vacuum DPE test was determined to be approximately 17.5 in. Hg and stinger depth of 16 ft below TOC based on the maximum possible TPHg mass removal rate. The DPE equipment was allowed to operate overnight. Wellhead vacuum, vapor flow rate, hydrocarbon concentrations, vacuum influence in the observation wells, and volume of extracted groundwater were recorded every 30 minutes during the day when the constant vacuum DPE test was in progress. Air samples were collected in Tedlar® bags in the middle of the day during the constant vacuum DPE test. The samples were submitted to McCampbell Analytical Inc., a state of California certified laboratory, and analyzed for TPHg, BTEX, and MTBE using EPA Methods 8015/8021. Depths to groundwater in observation wells were recorded every minute using MiniTroll™ pressure transducers/data loggers.

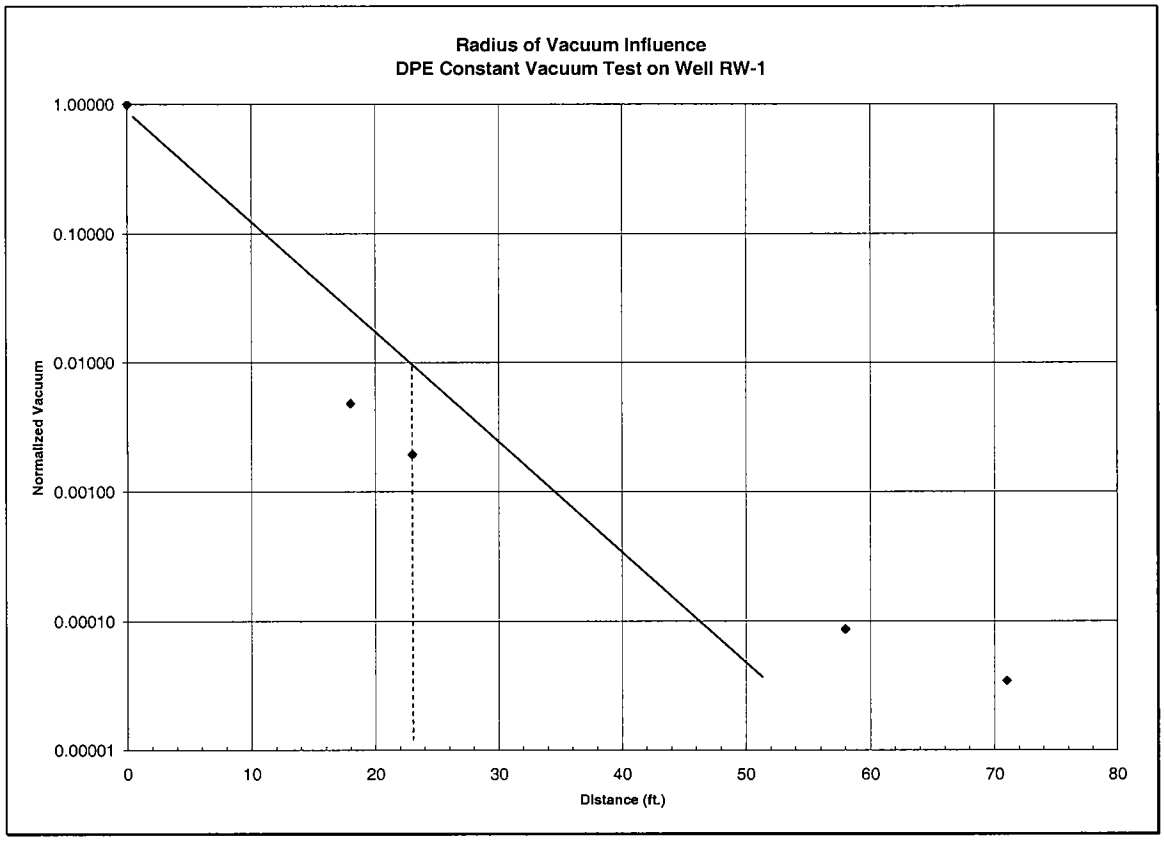
5.3 Test Results

A summary of field data are presented in Table 5. Field data forms are included in Appendix C. A discussion of the estimated radius of vacuum influence, vapor analytical data, estimated vapor-phase hydrocarbon mass removal rate, and estimated hydraulic conductivity of the aquifer are presented below.

5.3.1. Vacuum Radius of Influence

Vacuum radius of influence (ROI) was monitored in wells MW-1A, TMW-5, MW-6, and MW-7, with a maximum vacuum influence of 1.85 in. H_2O observed in MW-1A located approximately 18 feet away from the extraction well (Table 5).

Cambria estimated the effective ROI according to the methodology presented in "A Summary of Nationwide Vapor Extraction System Performance Study" (Buscheck, Peargin, November 1991). This approach first involves normalizing the vacuum data by dividing the vacuum observed at monitoring points by the vacuum observed at the extraction wellhead. The log of the normalized vacuum data is then plotted against the distance to the vacuum influence monitoring wells. The effective vacuum ROI is frequently considered to be the distance corresponding to 1% of the normalized vacuum. As shown below, the effective vacuum ROI was determined to be approximately 23 ft during the DPE test.



5.3.2. Hydrocarbon Vapor Measurements and Analytical Data

During the SVE step test, field measurements show that hydrocarbon concentrations increased with higher vacuums up to 10 in. of Hg, reaching a maximum of 17,900 parts per million by volume (ppmv). During the DPE step test, field measurements show that hydrocarbon concentrations increased with higher vacuums and stinger depth reaching a maximum of 9,630 parts per million by volume (ppmv) at 20 in Hg of extraction vacuum and a stinger depth of 16 ft below TOC. During the constant vacuum SVE test, field measured hydrocarbon concentrations appeared to have gradually decreased from 82,000 ppmv at the beginning of the constant vacuum test to 7,700 ppmv just before test conclusion. Laboratory analytical data are presented in Table 7 and the analytical reports are included as Appendix D.

5.3.3. Estimated Hydrocarbon Removal Rate

During the constant vacuum SVE test, vapor flow rates increased from 13.2 cfm at the beginning of the constant vacuum DPE test to 18.6 cfm at the end of the constant vacuum DPE test while hydrocarbon concentrations in extracted vapor decreased. Cambria calculated the hydrocarbon mass removal rate based on the vapor flow rate and the hydrocarbon vapor concentration. Hydrocarbon mass removal rates ranged from 8.38 to 62.95 pounds per day (lbs/day) during the

constant vacuum DPE test with the maximum hydrocarbon mass removal rate at the beginning of the constant vacuum DPE test. Laboratory analytical data shows a slight increasing hydrocarbon concentration trend at the end of the DPE test with a corresponding increase in hydrocarbon mass removal rate. Approximately 90.1 pounds of hydrocarbons were removed during the DPE test.

5.3.4. Groundwater Drawdown

During the DPE test on RW-1, a total of approximately 1,733 gallons of groundwater was extracted at an average flow rate of approximately 0.42 gallons per minute (gpm). Groundwater in the extraction well was lowered to 16 ft using an in-well stinger. Maximum groundwater drawdowns of approximately 6.58 ft, 6.18 ft, and 1.43 ft were observed in wells MW-1A, MW-6, and TMW-5 located 18 ft, 23 ft, and 58 ft, respectively, from the extraction well, RW-1.

5.3.5. Hydraulic Conductivity and Transmissivity

Cambria analyzed the water level test data from observation wells MW-1A, MW-6, and TMW-5 using AquiferTest for Windows® Version 3.01 software from Waterloo Hydrogeologic, Inc. Appendix C presents the aquifer test analysis data.

Cambria analyzed the drawdown observed in wells MW-1A, TMW-5, and MW-6 during the DPE test using the Theis method to estimate the hydraulic conductivity and transmissivity of the water-bearing zone. Post-DPE test recovery data from wells MW-1A, TMW-5, and MW-6 were analyzed by the Theis Recovery method. Table A presents the results of these analyses:

TABLE 5-1
Pump Test Analysis

Well ID	Analysis Method	Hydraulic Conductivity (cm/s)	Transmissivity (cm^2/s)
MW-1A	Theis	4.23×10^{-5}	3.22×10^{-2}
TMW-5	Theis	1.28×10^{-4}	9.74×10^{-2}
MW-6	Theis	7.35×10^{-5}	5.60×10^{-2}
MW-1A	Theis Recovery	4.42×10^{-5}	3.37×10^{-2}
TMW-5	Theis Recovery	5.97×10^{-4}	4.55×10^{-1}
MW-6	Theis Recovery	5.45×10^{-5}	4.16×10^{-2}

The Theis and the Theis Recovery methods assume the following:

1. The aquifer is confined and has an apparent infinite extent (a correction can be made for an unconfined aquifer within the analysis program).
2. The aquifer is homogenous, isotropic, and of uniform thickness over the area influenced by pumping.
3. The piezometric surface was horizontal prior to pumping.
4. The well is fully penetrating and pumped at a constant rate.
5. Water removed from storage is discharged instantaneously with decline in head.
6. The well diameter is small, so well storage is negligible.

Since the aquifer may not be of uniform thickness, and the wells may not fully penetrate the water-bearing zone, the assumptions are not completely satisfied, and the results should be considered approximate. The estimated hydraulic conductivity falls into the range for silt and silty sand which is consistent with the lithologic description of the water-bearing zone at the site.

5.4 Test Evaluation

Cambria evaluated the vapor flow rates, hydrocarbon concentrations, hydrocarbon mass removal rates, estimated vacuum ROI, and groundwater drawdown.

During the DPE test, moderate vapor flow rates (~15 cfm) and hydrocarbon mass removal rates (~20 lbs/day) were measured with a moderate vacuum ROI (~23 ft) was observed (Figure 8). Hydrocarbon concentrations and mass removal rates have decreased considerably during the DPE constant vacuum test with a slight increasing trend at the end of the DPE constant vacuum test. Groundwater drawdown extended to 58 ft from the extraction well. The estimated hydraulic conductivity ranged between 7.35×10^{-5} cm/s to 1.28×10^{-4} cm/s and falls into the range for silt and silty sand.

Lack of sustained hydrocarbon concentrations at the beginning of the DPE constant rate test suggests that the residual hydrocarbon impact is limited in nature in the immediate vicinity of the extraction well RW-1. The lateral extent of groundwater drawdown from the extraction well combined with the estimated hydraulic conductivity of the shallow water-bearing zone suggests that the water table can be effectively dewatered to the required level at lower groundwater extraction rates should DPE be used as the remedial technology for the site. Based on the favorable vapor flow rates, hydrocarbon mass removal rates, vacuum ROI, and groundwater drawdown at lower groundwater flow rates, DPE could be an effective remedial technique to remediate the hydrocarbon-impacted soil and groundwater beneath the site.

6.0 EVALUATION OF REMEDIAL ALTERNATIVES

6.1 Remedial Alternatives

Elevated petroleum hydrocarbon concentrations exist in shallow soil and groundwater predominantly in the vicinity of the former USTs at the site. The original source was substantially remediated with over-excavation at the former USTs. Therefore, remediation will focus on the hydrocarbon impacted soil and groundwater in the immediate vicinity of the former USTs where a majority of the residual hydrocarbon impact appears to be present. Remedial options considered for the site are as follows:

- Monitored Natural Attenuation (MNA)
- Soil Vapor Extraction (SVE)
- Groundwater Extraction and Treatment (GWE)
- Dual Phase Extraction (DPE)

6.2 Evaluation of Remedial Alternatives

A description of the remedial methods under consideration, estimated cost, a discussion of the alternatives, and a recommendation are provided. The goal is to implement a cost effective remedial strategy that can meet the cleanup goals in a reasonable period of time.

6.2.1. Monitored Natural Attenuation

Method Description and Discussion: Natural attenuation results from dispersion, sorption, dilution, volatilization, and biodegradation. BTEX will tend to naturally biodegrade with time. Studies suggest that TPH and BTEX will biodegrade in both, vadose and saturated zones, under favorable conditions. Other processes associated with natural attenuation (such as dispersion and dilution) can still occur, resulting in decreased concentrations in time.

Natural attenuation aided by biodegradation can be a viable option for the TPHg and BTEX found in groundwater at the site. But, given the current elevated concentrations of TPHg and BTEX present beneath the site, natural attenuation may need longer time frame compared to other active remedial alternatives to meet the cleanup goals for the site. Bioremediation parameters would need to be collected from the site to determine if bioremediation aiding natural attenuation is a viable remedial alternative.

Monitored natural attenuation (MNA) may also be an appropriate remedial alternative if another alternative proves to be technically impracticable, not cost effective, or cannot be performed in a reasonable period of time. Natural attenuation also occurs in conjunction with other selected alternatives.

Estimated Cost: Based on an estimated $30,000/year of monitoring and reporting for 10 to 20 years, the total estimated cost is $300,000 to $600,000 in current dollars, respectively.

6.2.2. Soil Vapor Extraction

Method Description and Comments: Soil vapor extraction (SVE) involves applying a vacuum to extract hydrocarbon-bearing vapors from the vadose zone. Extracted hydrocarbons are typically treated by activated carbon, oxidizers or internal combustion engines. In some situations, SVE can improve groundwater quality by encouraging hydrocarbon mass diffusion from groundwater, and by delivering oxygen to the subsurface to enhance naturally occurring biodegradation. This method is most effective for moderate to high permeability soils with hydrocarbons located in the vadose zone and no significant hydrocarbon mass below the water table or capillary fringe.

Static groundwater levels in the well casing were typically higher than the first encountered groundwater levels beneath the site suggesting a semi-confined or confined condition. Due to higher static groundwater levels in the wells, the vadose zone screen intervals could be submerged rendering SVE alone ineffective in addressing the hydrocarbon-impacted vadose zone. Hence, SVE alone is not considered an effective remedial alternative for the site as it is limited by the available screen for vapor extraction and also does not address the dissolved phase hydrocarbons present beneath the site.

Estimated Cost: System installation including additional wells, system design, installation, extraction and treatment equipment, etc. would likely cost between $200,000 and $260,000. The costs to operate and maintain the system are about $65,000 per year with an estimated 1-2 years of operation. Groundwater monitoring and reporting would likely cost about $150,000 assuming $30,000 per year for an estimated total of 5 years. Therefore, total estimated costs for SVE in current dollars are between $415,000 and $540,000.

6.2.3. Groundwater Extraction and Treatment

Method Description and Discussion: Groundwater extraction and treatment (GWE) has historically been the most common remediation technology applied for groundwater restoration. Groundwater is extracted by downhole pumps and routed to an abatement device such as activated carbon prior to discharge to a sanitary sewer or storm drain under a discharge permit. GWE can reduce dissolved-phase TPHg and BTEX, and provide hydraulic control. Studies and our experience show that GWE is relatively less effective in remediating dissolved-phase TPHg and BTEX.

As presented in section 6.2.2, a semi-confined or confined groundwater table could be present beneath the site. GWE alone will assist in lowering the groundwater table and addressing the hydrocarbon-impacted saturated zone, but will not address the hydrocarbon-impacted vadose zone. If the vadose zone is not addressed simultaneously, GWE would likely be needed for several years while hydrocarbons continue to leach into groundwater. Also, a low average groundwater extraction rate (approximately 0.25 gpm under vacuum) was observed during the

feasibility test conducted at the site in August 2005, which may render GWE ineffective and cost prohibitive over longer terms of operation. Hence, GWE alone is not considered an effective remedial alternative for the site.

Estimated Cost: System installation including additional wells, system design, installation, extraction and treatment equipment, etc. would likely cost between $220,000 and $280,000. The costs to operate and maintain the system are about $85,000 per year with an estimated 2-4 years of operation. Groundwater monitoring and reporting would likely cost about $240,000 assuming $30,000 per year for an estimated total of 8 years. Therefore, total estimated costs for GWE in current dollars are between $630,000 and $860,000.

6.2.4. Dual Phase Extraction

Method Description and Discussion: Dual phase extraction (DPE) consists of simultaneous SVE and GWE by applying high vacuum in the well casing using a down-well "stinger". GWE will lower the water table and SVE will extract soil vapor from vadose zone and previously saturated sediments. Extracting groundwater depresses the water table and allows extraction of exposed hydrocarbons adsorbed to soil in the capillary fringe and below the former water table using vapor extraction. DPE is highly effective when the chemicals of concern are volatile and when the subsurface has low to moderate permeability with low groundwater extraction rates (typically less than 2 gpm per well).

As discussed in sections 6.2.2 and 6.2.3, SVE and GWE would address the hydrocarbon-impacted vadose and saturated zones beneath site. DPE would be an effective remedial technology for the site since it consists of simultaneous SVE and GWE.

Estimated Cost: System installation including additional wells, system design, installation, extraction and treatment equipment, etc. would likely cost between $250,000 and $350,000. The costs to operate and maintain the system are about $95,000 per year with an estimated 1-2 years of operation. Groundwater monitoring and reporting would likely cost about $150,000 assuming $30,000 per year for an estimated total of 5 years. Therefore, total estimated costs for DPE in current dollars are between $495,000 and $690,000.

6.3 Recommended Remedial Alternative

The recommended remedial alternative is a combination of DPE and MNA. DPE can be used to address the hydrocarbon-impacted vadose and saturated zones in the vicinity of the former USTs. MNA would continue to remediate remaining hydrocarbon concentrations. Our recommendation is that after one year of remedial effort that primary cleanup goals be evaluated with respect to technical practicability and use of shallow groundwater in the area of the site.

7.0 PROPOSED CORRECTIVE ACTION

7.1 System Design

Cambria proposes to use existing wells RW-1, MW-1A, and MW-2A; and three proposed wells located in the vicinity of the former tank excavation (Figure 8) for DPE to address the residual hydrocarbons present beneath the site. Wells RW-1, MW-1A, and MW-2A are screened from 8 to 23 ft bgs, 10 to 20 ft bgs, and 8 to 18 ft bgs, respectively. The proposed wells will be screened from 8 to 22 ft bgs to target the hydrocarbon impacted zones beneath the site. The DPE test estimated a 23 ft radius of vacuum influence. Therefore, DPE from all the above-mentioned wells will address the residual hydrocarbons in the vadose and saturated zones beneath the site.

Trailer-mounted DPE equipment will be used to simultaneously extract soil vapor and groundwater from each well. The DPE equipment will consist of an oil-sealed liquid-ring vacuum pump (LRP) and a thermal/catalytic oxidizer. The LRP will be capable of generating a vacuum up to 28 in. Hg and a vapor flow rate of 400 cfm. An in-well extraction pipe (stinger) connected to a DPE manifold within the remediation enclosure will be used for simultaneous groundwater and vapor extraction. Extraction vacuum and vapor flow rate will be adjusted from the manifold to optimize system performance.

Extracted vapor and groundwater will be treated using a thermal/catalytic oxidizer and liquid-phase granular activated carbon beds prior to discharge. The DPE unit will be operated under a Bay Area Air Quality Management District (BAAQMD) permit. Treated groundwater from the DPE system will be discharged to an on-site sewer under a discharge permit issued by EBMUD. The remediation system will be shutdown as hydrocarbon mass removal rates approach asymptotic levels.

7.2 System Startup, Operation Schedule, Monitoring, and Reporting

Cambria will start the DPE system upon successfully installing the DPE unit and continue operation until the hydrocarbon-impacted vadose and saturated zones are addressed to a point where a decreasing hydrocarbon concentration trend is established and MNA would continue to decrease the residual hydrocarbons and/or it is no longer cost effective to operate the DPE system. A typical indicator that the hydrocarbon impact has been remediated is when hydrocarbon mass removal rates reach low and asymptotic levels. Decreasing dissolved phase hydrocarbon concentration trends in on-site wells MW-1A, MW-2A, TMW-4, TMW-5, and MW-6 is a second indicator that hydrocarbon-impacted vadose zone has been adequately remediated.

Hydrocarbon concentrations in soil vapor from each well will be monitored weekly or biweekly schedule using a Horiba Instruments Inc.© hydrocarbon gas analyzer. DPE system operations will be optimized periodically. The DPE system will be pulsed off and on when the hydrocarbon

mass removal rates reach low and asymptotic levels. Hydrocarbon concentrations in extracted vapor will be measured for rebound to confirm that DPE system can no longer effectively address any residual hydrocarbons beneath the site, if present.

Cambria will collect vapor samples from system influent and effluent, for laboratory analysis to comply with BAAQMD permit conditions, confirm gas analyzer readings, and to establish concentration reduction trends for individual hydrocarbon compounds such as TPHg and benzene. Cambria will also collect water samples from influent, intermediate, and effluent for laboratory analysis to comply with EBMUD permit conditions.

The hydrocarbon mass removed will be estimated based on the influent hydrocarbon concentrations in extracted vapor and groundwater from the DPE system. The remedial progress and DPE system status will be included in the routine quarterly groundwater monitoring reports for the site.

7.3 System Shutdown

The DPE remediation system is designed as a cost-effective approach to address hydrocarbon-impacted vadose and saturated zones beneath the site. It is not designed as a long-term plume remediation and/or containment approach and is not cost-effective at treating low dissolved-phase concentrations in groundwater. As indicated above, Cambria will shut off the DPE system if it is technically infeasible to operate the system or when hydrocarbon removal rates reach low asymptotic levels and there is no significant rebound in hydrocarbon vapor concentrations after system pulsing. Cambria will submit a request for "No Further Active Remediation" (NFAR) to the ACHCSA and upon approval of the NFAR request, the system will be removed. After cessation of DPE operation, if the cleanup goals have not been meet, natural attenuation will be the approach for continued remediation of the plume. Periodic groundwater monitoring will probably be performed until trend lines can be established to estimate time required to attain accepted cleanup goals. Three years of MNA is anticipated after use of the DPE system.

7.4 Site Closure

The ultimate goal of any remedial effort is to remediate the site or determine when remediation will be achieved, and then attain regulatory closure. After completing the DPE remedial effort and trend lines are established to determine time to achieve cleanup goals, and/or when the site conditions meet the Regional Board's low-risk groundwater case closure criteria, Cambria will request the lead agency for case closure. The closure request will include a summary of all work conducted at the site, a detailed site background, past and current site conditions, the remedial effort, and achieving closure criteria.

8.0 REFERENCES

Buscheck, Peargin, 1991. *A Summary of Nationwide Vapor Extraction System Performance Study*. November 1991.

CEC, 1988. *1. Soil and (Grab) Groundwater Sampling; & 2. Soil Sampling of Aerated Stockpiles*, 2345 East 14th Street, Oakland, California. November 21, 1988.

Cambria, 2003. *Site Summary Conduit Study and Groundwater Monitoring Report*, 2345 International Boulevard, Oakland, California. May 2, 2003.

Cambria, March 2006. *Site Assessment Report*, Credit World Auto Sales, 2345 International Boulevard, Oakland, California. March 10, 2006

Cambria, April 2006. *Groundwater Monitoring Report - First Quarter 2006*, Credit World Auto Sales, 2345 International Boulevard, Oakland, California. April 25, 2006.

Department of Water Resources, 2004. *California's Groundwater Bulletin 118 - San Francisco Bay Hydrologic Region, Santa Clara Valley Groundwater Basin*, California Department of Water Resources. February 27, 2004.

Earth Systems Environmental Inc., 1991. *Phase I Soil and Groundwater Assessment Report*, Wong's Taxi Taxi, 2345 East 14th Street, Oakland, California. December 23, 1991.

SCS Engineers, 1988. *Results of Soil Sampling*, Taxi Taxi, Oakland, California. September 19, 1988.

Regional Board Groundwater Committee, 1999. *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report, Alameda and Contra Costa Counties, California*, California Regional Water Quality Control Board, San Francisco Bay Region, Groundwater Committee. June 1999.

Regional Board, 2005. *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, Volume 1: Summary Tier 1 Lookup Tables. Interim Final February 2005.

Sequoia, 2001. *Subsurface Investigation Report*, 2345 International Boulevard, Oakland, California. July 19, 2001.

Sequoia, 2002. *Project Update June 2002*, Credit Auto, 2345 East 14th Street, Oakland, California. July 20, 2002.

Tank Protect, 1993. *Preliminary Site Assessment Report*, Credit World Auto Sales, 2345 East 14th Street, Oakland, California. November 4, 1993.

Tank Protect, 1997. *Site Assessment Report*, Credit World Auto Sales, 2345 East 14th Street, Oakland, California. January 10, 1997.

Tank Protect, June1997. *Site Assessment Report*, Credit World Auto Sales, 2345 East 14th Street, Oakland, California. June 3, 1997.

FIGURES

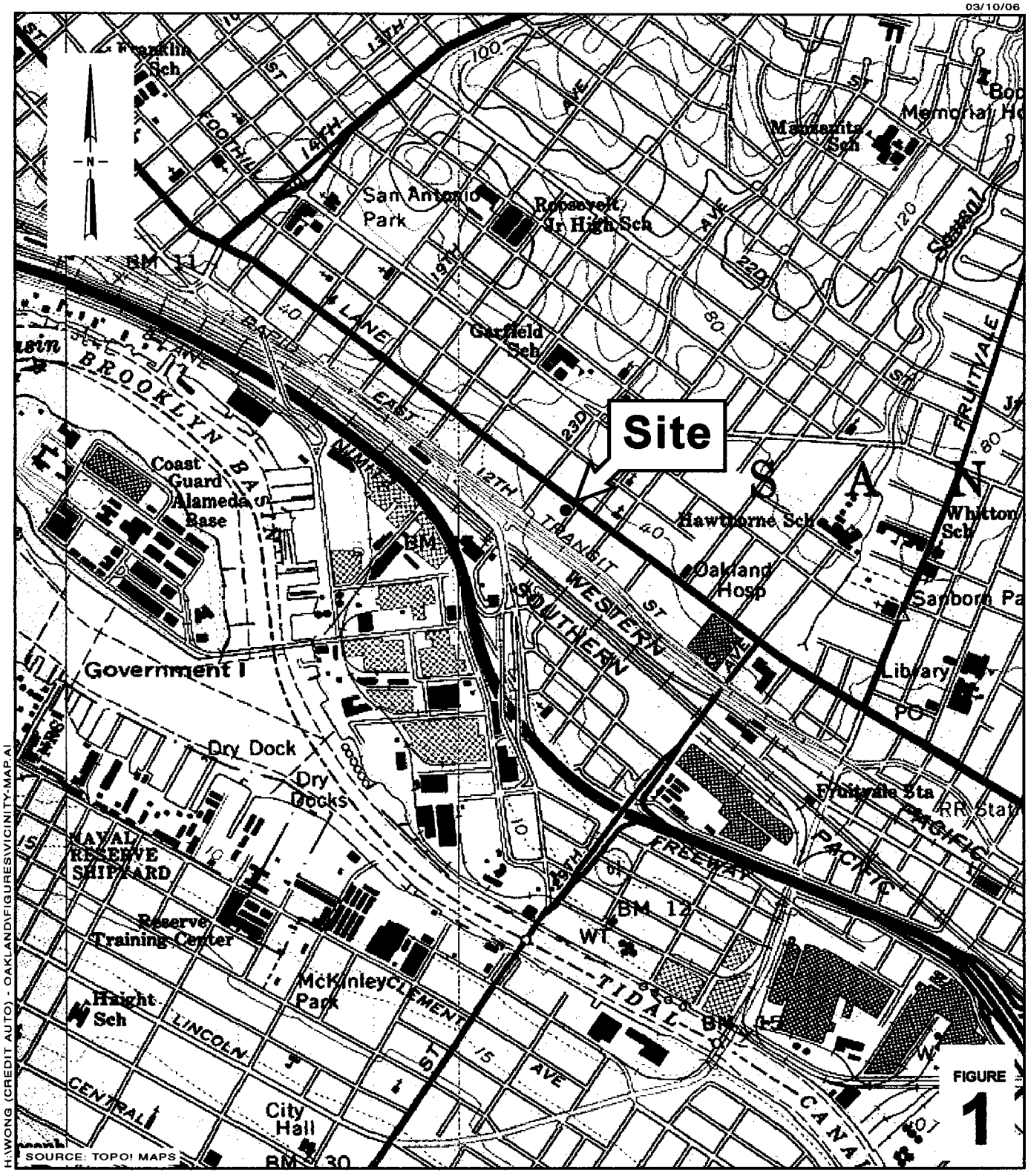


FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Credit World Auto Sales

2345 International Boulevard

Oakland, California

CAMBRIA

Vicinity Map

03/10/06

EXPLANATION

- MW-1 — Monitoring well location
- SB-1 (2001) — Soil boring location and year of installation in parenthesis
- Approximate limits of excavation

building
building
lot
Hotel
Restaurant with Second Floor Apartments
Residence
ALLEY
grass
INTERNATIONAL BOULEVARD
SB-4 (1997)
MW-10
SB-3 (1997)
SB-1 (2001)
SB-2 (2001)
gate
MW-9
SB-5 (1997)
MW-11
MW-2A
SB-3 (2001)
gate
TH-2
TMW-5
former USTs
B-2
SB-6 (2001)
TH-3
TH-4
former waste oil UST
TH-1
TMW-4A
SB-4 (2001)
garage
B-1
MW-12
B-3
office
MW-1A
MW-1B
MW-3A
asphalt
asphalt
MW-8
RW-1
gate
SB-5 (2001)
MILLER AVENUE
SB-2 (1997)
SB-7/MW-6
gate
building
fenceline
SB-1 (1997)
TH-5
MW-7
Auto Repair Shop

N

0 15 30 60
Scale (ft)

H:\WONG (CREDIT AUTO) - OAKLAND\FIGURES\WONG_SITEPLAN.DWG

Site Plan

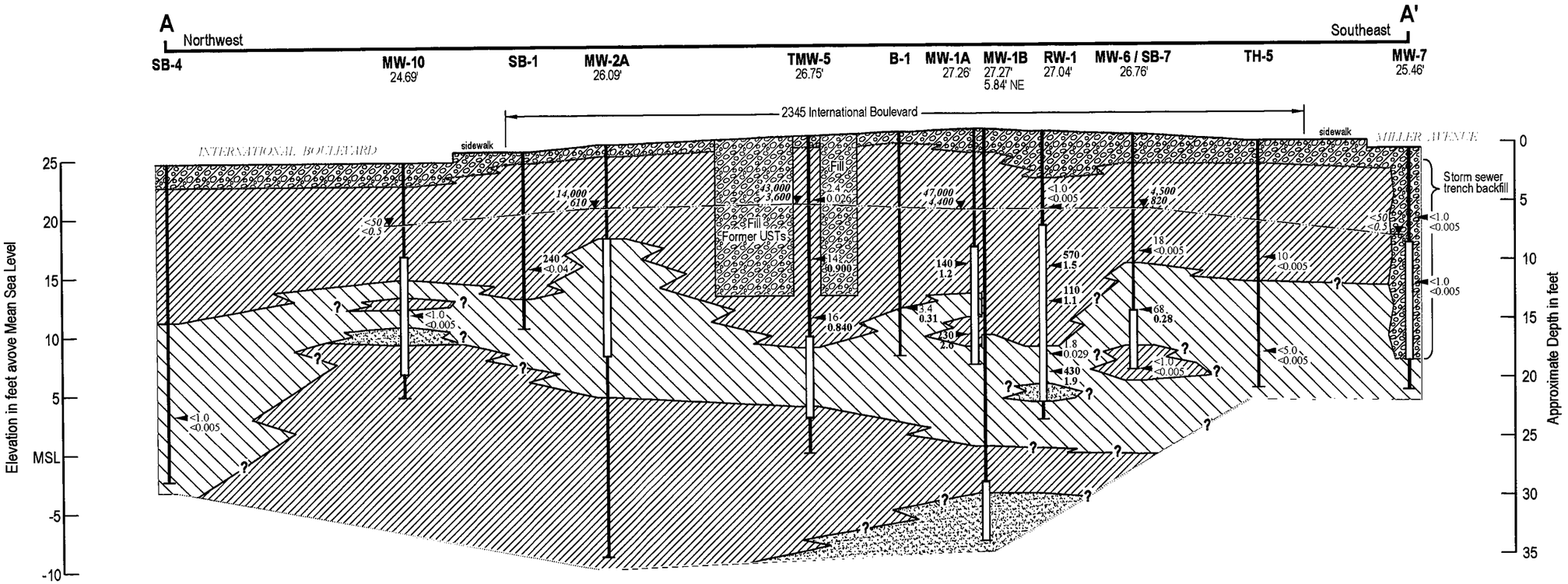
CAMBRIA

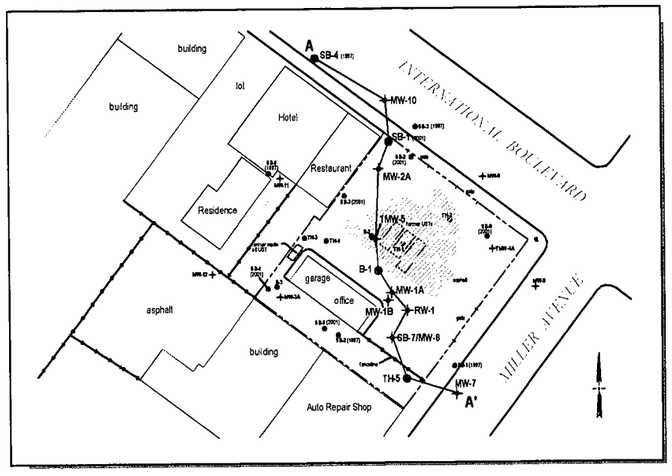
Credit World Auto Sales
2345 International Boulevard
Oakland, California

FIGURE
2

03/10/06

Hydrogeologic Cross Section A-A'





EXPLANATION

- = Low Permeability Soils
- = Moderate Permeability Soils
- = High Permeability Soils
- = Fill (Tank Pit, Subgrade, Trench)
- Approximate soil sample location
- TPHg / Benzene — Hydrocarbon concentrations in soil, in milligrams per kilogram
- Well ID — Well Designation
- Elev. (offset) — Top of Casing Elevation
- Groundwater Monitoring Well/ Soil Boring
- Well Screen Interval
- Bottom of boring
- Depth of Groundwater - 12/29/05
- *TPHg / Benzene* — Hydrocarbon concentrations in groundwater, in micrograms per liter

Scale (ft): 10, 0, 30

FIGURE **3**

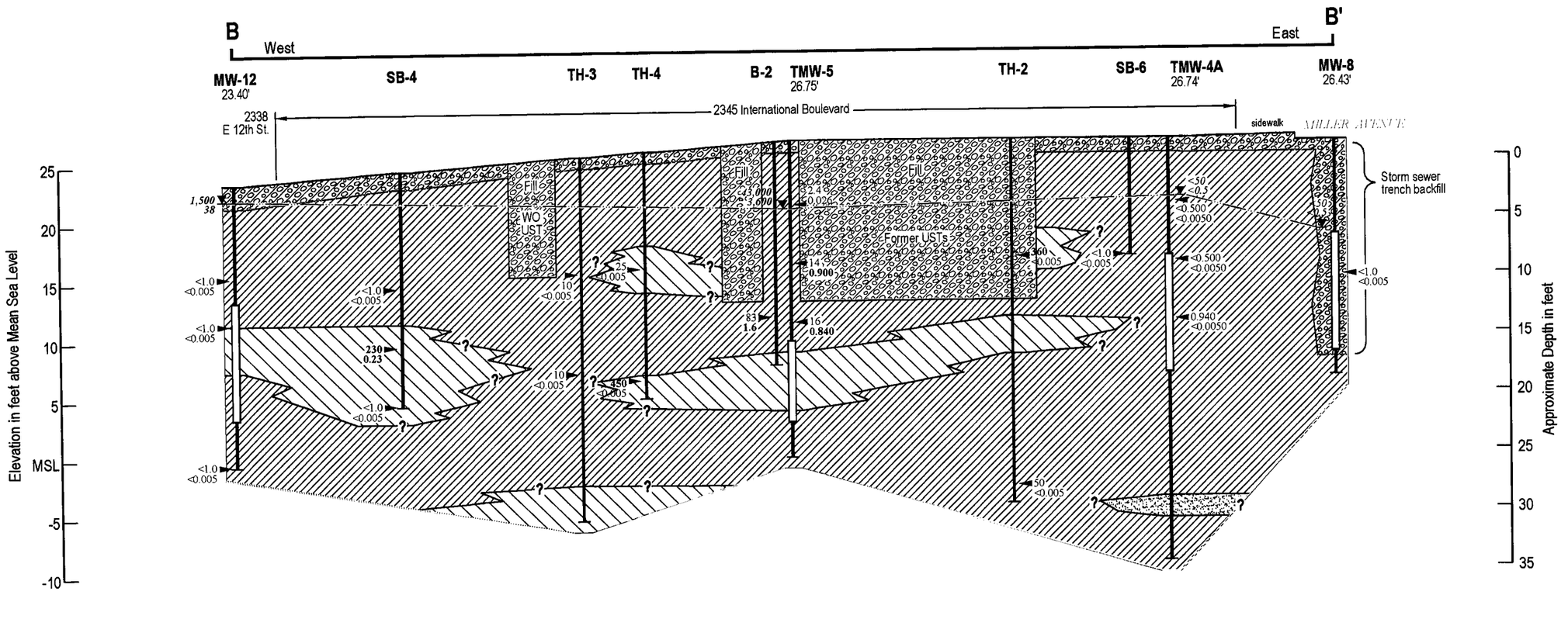
Credit World Auto Sales
2345 International Boulevard
Oakland, California

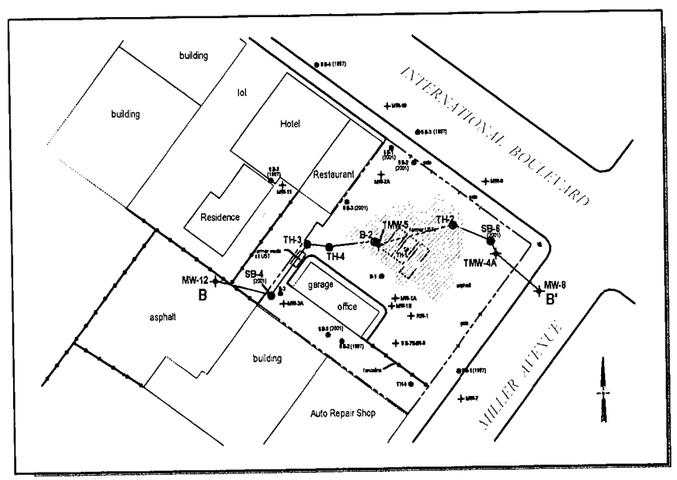
CAMBRIA

H:\WONG (CREDIT AUTO) - OAKLAND\FIGURES\WONG_X-SECTION-A2.DWG

03/10/06

Hydrogeologic Cross Section B-B'





EXPLANATION

- = Low Permeability Soils
- = Moderate Permeability Soils
- = High Permeability Soils
- = Fill (Tank Pit, Subgrade, Trench)
- Approximate soil sample location
- TPHg / Benzene — Hydrocarbon concentrations in soil, in miligrams per kilogram (mg/kg)

Well ID — Well Designation
Elev. — Top of Casing Elevation
Groundwater Monitoring Well/ Soil Boring
Well Screen Interval
Bottom of boring
Depth of Groundwater - 12/29/05
TPHg / Benzene — Hydrocarbon concentrations in groundwater, in micrograms per liter (µg/L)

Scale (ft)
10
0
30

FIGURE
4

Credit World Auto Sales
2345 International Boulevard
Oakland, California

CAMBRIA

H:\WONG (CREDIT AUTO) - OAKLAND\FIGURES\WONG_X-SECTION-B2.DWG

02/15/06

TPHg Concentrations in Soil

EXPLANATION

- **MW-1** (2001) — Monitoring well location (year sampled in parenthesis)
- **SB-1** (1997) — Soil boring location (year sampled in parenthesis)
- <1.0 (21.5') — TPHg in mg/kg (depth of sample in feet in parenthesis)
- **450** — Concentrations shown in **Bold** exceed RWQCB ESL of 100 mg/kg for residential site use (drinking water resource)
- Approximate limits of excavation

building
building
lot
Hotel
INTERNATIONAL BOULEVARD
Restaurant with Second Floor Apartments
Residence
ALLEY
grass
garage
office
asphalt
asphalt
former waste oil UST
former USTs
(excavated)
gate
gate
gate
fenceline
building
Auto Repair Shop
MILLER AVENUE

SB-4 (1997): <1.0 (21.5')
MW-10 (2005): <1.0 (13')
SB-1 (2001): **240** (10'); 3.0 (15')
SB-3 (1997): <1.0 (21.5')
SB-2 (2001): 89 (10'); <1.0 (15'); <1.0 (20')
MW-9 (2005): <1.0 (11'); <1.0 (16')
MW-11 (2005): 48 (11'); **350** (14'); 6.6 (18.5')
SB-5 (1997): 91 (11.5')
SB-3 (2001): **300** (10'); **1,800** (15'); 8.5 (20')
SB-2 (2001)
MW-2A
MW-2 (1991): **4,320** (10'); **160** (15')
TH-2 (1991): **360** (10'); 50 (29.5')
MW-11
B-2 (1988): 83 (15')
TMW-5 (1993): 2.4 (5.5'); 14 (10.5'); 16 (15.5')
TH-3 (1991): 10 (10'); 10 (18.5')
TH-4 (1991): 25 (10'); **450** (19.5')
SB-6 (2001): <1.0 (10')
TMW-4A
TMW-4 (1993): <0.500 (5.5'); <0.500 (10.5'); 0.940 (15.5')
B-3 (1988): NS
B-1 (1988): 3.4 (15')
MW-8 (2005): <1.0 (11.5')
MW-12 (2005): <1.0 (8'); <1.0 (12'); <1.0 (24')
MW-1A (2005): **140** (11.5'); **230** (17.5')
SB-4 (2001): <1.0 (10'); **230** (15'); <1.0 (20')
MW-3A
MW-1B (1991): **150** (10'); **255** (15')
TH-1 (1991): **2,775** (15') (excavated)
MW-3 (1991): 50 (10'); 25 (15')
RW-1 (2005): <1.0 (6.5'); **570** (11.5'); **110** (14.5'); 1.8 (19'); **430** (20.5')
SB-7 / MW-6 (2001): 18 (10'); 68 (15'); <1.0 (20')
SB-2 (1997): 3.7 (16.5')
SB-5 (2001): 25 (15'); 1.9 (20')
SB-1 (1997): <1.0 (26.5')
TH-5 (1991): 10 (10'); <5.0 (18')
MW-7 (2005): <1.0 (6'); <1.0 (11.5')

N

0 15 30 60
Scale (ft)

H:\SB-2004\WONG CREDIT AUTO\OAKLAND\FIGURES\WONG_HISTORICAL-TPHG.DWG

CAMBRIA

Credit World Auto Sales
2345 International Boulevard
Oakland, California

FIGURE
5

02/02/06

Benzene Concentrations in Soil

EXPLANATION

- **MW-1** (2001) — Monitoring well location (year sampled in parenthesis)
- **SB-1** (1997) — Soil boring location (year sampled in parenthesis)
- <0.005 (11.5') — Benzene in mg/kg (depth of sample in feet in parenthesis)
- **7.275** — Concentrations shown in **Bold** exceed RWQCB ESL of 0.044 mg/kg for residential site use (drinking water resource)
- Approximate limits of excavation

building
building
lot
Hotel
Restaurant with Second Floor Apartments
Residence
ALLEY
INTERNATIONAL BOULEVARD
grass
asphalt
garage
office
fenceline
building
Auto Repair Shop
MILLER AVENUE
gate
gate
gate
gate
former waste oil UST
former USTs
(excavated)

SB-4 (1997)
<0.005 (21.5')

MW-10 (2005)
<0.005 (13')

SB-1 (2001)
<0.04 (10')
<0.005 (15')

SB-3 (1997)
<0.005 (21.5')

SB-2 (2001)
<0.005 (10')
<0.005 (15')
<0.005 (20')

MW-9 (2005)
<0.005 (11')
<0.005 (16')

TH-2 (1991)
<0.005 (10')
<0.005 (29.5')

MW-11 (2005)
<0.005 (11')
<0.20 (14')
<0.005 (18.5')

SB-5 (1997)
<0.005 (11.5')

SB-3 (2001)
<0.01 (10')
3.3 (15')
0.009 (20')

SB-2 (2001)

MW-2A

MW-2 (1991)
7.275 (10')
<0.005 (15')

MW-11

B-2 (1988)
1.6 (15')

TH-3 (1991)
<0.005 (10')
<0.005 (18.5')

TH-4 (1991)
<0.005 (10')
<0.005 (19.5')

TMW-5

SB-6 (2001)
<0.005 (10')

TMW-4A

TMW-4 (1993)
<0.005 (5.5')
<0.005 (10.5')
<0.005 (15.5')

B-3 (1988)
0.36 (15')

B-1 (1988)
0.31 (15')

MW-12 (2005)
<0.005 (8')
<0.005 (12')
<0.005 (24')

SB-4 (2001)
<0.005 (10')
0.23 (15')
<0.005 (20')

MW-3A

MW-1A (2005)
1.2 (11.5')
2.6 (17.5')

MW-1B (1991)
0.460 (10')
1.505 (15')

TH-1 (1991)
1.235 (15')

MW-8 (2005)
<0.005 (11.5')

MW-3 (1991)
<0.005 (10')
<0.005 (15')

SB-2 (1997)
0.012 (16.5')

SB-7 / MW-6 (2001)
<0.005 (10')
0.28 (15')
<0.005 (20')

RW-1 (2005)
<0.005 (6.5')
1.5 (11.5')
1.1 (14.5')
0.029 (19')
1.9 (20.5')

SB-5 (2001)
0.035 (15')
0.62 (20')

SB-1 (1997)
<0.005 (26.5')

TH-5

MW-7 (2005)
<0.005 (6')
<0.005 (11.5')

N

0 15 30 60
Scale (ft)

H:\SB-2004\WONG CREDIT AUTO\OAKLAND\FIGURES\WONG_HISTORICAL-BENZ.DWG

FIGURE
6

Credit World Auto Sales
2345 International Boulevard
Oakland, California

CAMBRIA

04/25/06

Groundwater Elevation and Hydrocarbon Concentration Map

March 27-28, 2006

EXPLANATION

- MW-1 — Monitoring well location
- SB-1 — Soil boring location (drilling date)
- 0.026 — Groundwater flow direction and gradient
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), dashed where inferred
- Well ID / ELEV / TPHg / Benzene / MTBE — Well designation; Groundwater surface elevation (msl); TPHg, Benzene and MTBE concentrations in groundwater are in micrograms per liter (µg/L)
- * MW-1B is screened in a deeper water bearing zone (30-35 bgs.) and was not used for contouring
- Approximate limits of excavation

building
building
lot
Hotel
Restaurant with Second Floor Apartments
Residence
ALLEY
grass
former waste oil UST
garage
office
asphalt
asphalt
gate
building
Auto Repair Shop
fenceline
gate
gate
former USTs
INTERNATIONAL BOULEVARD
MILLER AVENUE

SB-4 (1997)
SB-3 (1997)
SB-1 (2001)
SB-2 (2001)
SB-3 (2001)
SB-5 (1997)
SB-4 (2001)
SB-5 (2001)
SB-2 (1997)
SB-1 (1997)
SB-6 (2001)
TH-1
TH-2
TH-3
TH-4
TH-5
B-1
B-2
B-3

MW-10: 19.09 / ND<50 / ND<0.5 / 13
MW-11: 20.94 / 880 / ND<0.5 / ND<0.5
MW-2A: 20.78 / 18,000 / 500 / ND<100
MW-9: 19.88 / ND<50 / ND<0.5 / ND<5.0
TMW-5: 21.41 / 63,000 / 3,800 / ND<500
TMW-4A: 21.79 / ND<50 / ND<0.5 / ND<5.0
MW-12: 20.60 / 1,200 / 34 / 8,000
MW-3A: 21.11 / 8,200 / 210 / ND<1.0
MW-1A: 20.25 / 65,000 / 6,500 / ND<800
MW-1B*: 16.31 / 950 / 2.0 / ND<5.0
RW-1: 20.11 / 19,000 / 1,800 / ND<160
MW-6: 20.27 / 6,000 / 650 / ND<120
MW-8: 18.50 / ND<50 / ND<0.5 / ND<5.0
MW-7: 17.56 / ND<50 / ND<0.5 / ND<5.0

20.00 · 21.00 · 21.00 · 20.00 · 19.00 · 21.00 · 21.00 · 20.00 · 18.00 · 19.00 · 18.00

0.026

0 15 30 60

Scale (ft)

Basemap from Tank Protect Engineering site plan.

H:\WONG CREDIT WORLD\FIGURES\CMS\1006-GW.DWG

FIGURE 7

Credit World Auto Sales
2345 International Boulevard
Oakland, California

CAMBRIA

04/11/06

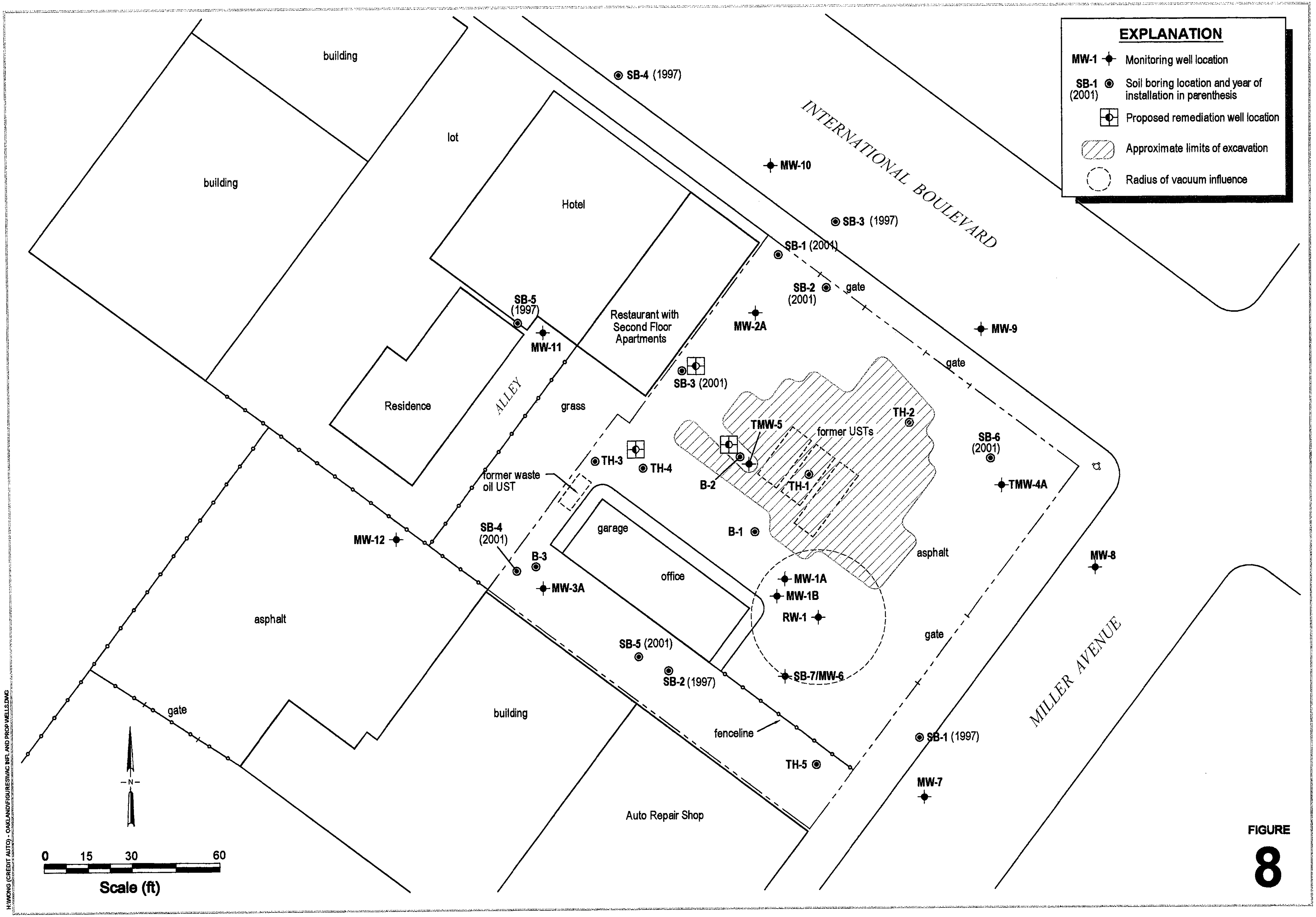


FIGURE
8

Radius of Vacuum Influence and Proposed DPE Well Locations

CAMBRIA

Credit World Auto Sales
2345 International Boulevard
Oakland, California

TABLES

Table 1. **Soil Analytical Data** - Credit World Auto Sales, 2345 International Boulevard, Oakland, California

Sample Location	Date Sampled	Depth (ft bgs)	TPHg	TPHd	TOG	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	VOCs	HVOCs
			← (mg/kg) →									
SCS Engineers (UST Removal Sampling)												
B-1	8/25/1988	--	**360**	--	--	**0.3**	2.2	**3.4**	**31**	--	--	--
B-2	8/25/1988	--	**1,500**	--	--	**3.0**	**6.4**	**25**	**160**	--	--	--
B-3	8/25/1988	--	**130**	--	--	**0.17**	0.4	1.3	**10**	--	--	--
B-4	8/25/1988	--	**150**	--	--	**0.8**	1.9	**8.7**	**86**	--	--	--
B-5	8/25/1988	--	**790**	--	--	**61**	1.3	**4.8**	**30**	--	--	--
B-6	8/25/1988	--	**1,300**	--	--	**1.5**	**4.7**	**9.6**	**75**	--	--	--
B-7	8/25/1988	--	--	**110**	570	(ND<0.005)	(ND<0.005)	(0.005)	**(0.048)**	--	ND*	--
B-8	8/25/1988	--	--	65	780	(ND<0.005)	(ND<0.005)	(ND<0.005)	**(0.012)**	--	ND*	--
California Environmental Consultants (Soil and Groundwater Investigation)											--	--
B-1	10/3/1988	15	3.4	--	--	**0.31**	ND<0.1	ND<0.1	0.14	--	--	--
B-2	10/3/1988	15	83	--	--	**1.6**	1.1	1.8	**9.6**	--	--	--
B-3	10/3/1988	15	--	--	88	(0.36)	(0.65)	(0.47)	(0.85)	--	ND*	ND
Earth Systems Environmental (Phase I Soil and Groundwater Assessment)												
TH-1	8/21/1991	15-15.5	**2,775**	--	--	**1.235**	1.060	1.625	**5.280**	--	--	--
TH-2	8/21/1991	10-10.5	**360**	--	--	ND<0.005	ND<0.005	ND<0.005	0.770	--	--	--
TH-2	8/21/1991	29.5-30	50	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
TH-3	8/22/1991	10-10.5	10	--	60	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
TH-3	8/22/1991	18.5-19	10	--	20	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
TH-4	8/22/1991	10-10.5	25	--	40	ND<0.005	ND<0.005	ND<0.005	0.175	--	--	--
TH-4	8/22/1991	19.5-20	**450**	--	1,600	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
TH-5	8/22/1991	10-10.5	10	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
TH-5	8/22/1991	18-18.5	ND<5.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
MW-1	5/22/1991	10-10.5	**150**	--	--	**0.460**	0.365	0.305	0.960	--	--	--
MW-1	5/22/1991	15-15.5	**255**	--	--	**1.505**	**4.255**	**4.015**	**4.270**	--	--	--

Table 1. **Soil Analytical Data** - Credit World Auto Sales, 2345 International Boulevard, Oakland, California

Sample Location	Date Sampled	Depth (ft bgs)	TPHg	TPHd	TOG	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	VOCs	HVOCs
			← (mg/kg) →									
MW-2	8/21/1991	10-10.5	**4,320**	--	--	**7.275**	**6.620**	**3.470**	**13.815**	--	--	--
MW-2	8/21/1991	15-15.5	**160**	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
MW-3	8/22/1991	10-10.5	50	--	90	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
MW-3	8/22/1991	15-15.5	25	--	40	ND<0.005	ND<0.005	ND<0.005	ND<0.005	--	--	--
Tank Protect Engineering (Preliminary Site Assessment)												
TMW-4	7/22/1993	5.5-6	ND<0.500	--	--	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.015	--	--	--
TMW-4	7/22/1993	10.5-11	ND<0.500	--	--	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.015	--	--	--
TMW-4	7/22/1993	15.5-16	0.940	--	--	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.015	--	--	--
TMW-5	7/23/1993	5.5-6	2.4	--	--	0.026	ND<0.0050	ND<0.0050	0.053	--	--	--
TMW-5	7/23/1993	10.5-11	14	--	--	**0.900**	ND<0.0050	1.6	ND<0.140	--	--	--
TMW-5	7/23/1993	15.5-16	16	--	--	**0.840**	ND<0.0050	0.690	1.3	--	--	--
Tank Protect Engineering (Site Assessment)												
SB-1	4/21/1997	26.5-27	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-2	4/21/1997	16.5-17	3.7	--	--	0.012	0.0071	0.042	ND<0.005	ND<0.05	--	--
SB-3	5/1/1997	21.5-22	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-4	5/1/1997	21.5-22	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-5	5/1/1997	11.5-12	91	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
Sequoia Environmental (Subsurface Investigation)												
SB-1	5/22/2001	10	**240**	--	--	ND<0.04	0.19	0.19	0.45	ND<0.20	--	--
SB-1	5/22/2001	15	3.0	--	--	ND<0.005	0.005	0.009	0.013	ND<0.05	--	--
SB-2	5/22/2001	10	89	--	--	ND<0.005	ND<0.005	0.033	0.25	ND<0.10	--	--
SB-2	5/22/2001	15	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-2	5/22/2001	20	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-3	5/22/2001	10	**300**	--	--	ND<0.01	ND<0.01	0.76	1.2	ND<0.20	--	--
SB-3	5/22/2001	15	**1,800**	--	--	**3.3**	**5.5**	**48**	**53**	ND<2.0	--	--
SB-3	5/22/2001	20	8.5	--	--	0.009	0.023	0.10	0.12	ND<0.05	--	--

Table 1. **Soil Analytical Data** - Credit World Auto Sales, 2345 International Boulevard, Oakland, California

Sample Location	Date Sampled	Depth (ft bgs)	TPHg	TPHd	TOG	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	VOCs	HVOCs
			← (mg/kg) →									
SB-4	5/22/2001	10	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-4	5/22/2001	15	**230**	--	--	**0.23**	ND<0.005	1.5	1.1	ND<0.10	--	--
SB-4	5/22/2001	20	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-5	5/22/2001	15	25	--	--	0.035	ND<0.005	0.10	0.11	ND<0.05	--	--
SB-5	5/22/2001	20	1.9	--	--	**0.62**	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-6	5/22/2001	10	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
SB-7 (MW-6)	5/22/2001	10	18	--	--	ND<0.005	ND<0.005	0.056	0.11	ND<0.05	--	--
SB-7 (MW-6)	5/22/2001	15	68	--	--	**0.28**	0.25	0.36	0.35	ND<0.10	--	--
SB-7 (MW-6)	5/22/2001	20	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
Cambria Environmental Technology												
RW-1	8/8/2005	6.5	ND<1.0	ND<1.0	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
RW-1	8/8/2005	11.5	**570** a	41 d	--	**1.5**	0.51	11	0.94	ND<2.0	--	--
RW-1	8/8/2005	14.5	**110** a	14 d	--	**1.1**	ND<0.10	2.0	0.14	ND<1.0	--	--
RW-1	8/8/2005	19.0	1.8 a	ND<1.0	--	0.029	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
RW-1	8/8/2005	20.5	**430** a	59 d	--	**1.9**	0.42	**5.0**	0.39	ND<1.0	--	--
MW-1A	8/8/2005	11.5	**140** a	18 d	--	**1.2**	0.20	**4.0**	0.23	ND<0.25	--	--
MW-1A	8/8/2005	17.5	**230** a	21 d	--	**2.6**	0.55	**4.3**	**6.7**	ND<1.0	--	--
MW-7	8/10/2005	6.0	ND<1.0	2.8 g,b	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-7	8/10/2005	11.5	ND<1.0	1.4 g,b	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-8	8/11/2005	11.5	ND<1.0	ND<1.0	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-9	8/9/2005	11.0	ND<1.0	ND<1.0	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-9	8/9/2005	16.0	ND<1.0	ND<1.0	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-10	8/11/2005	13.0	ND<1.0	ND<1.0	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-11	10/20/2005	11.0	48 c,m	--	--	ND<0.005	ND<0.005	0.021	ND<0.005	ND<0.05	--	--
MW-11	10/20/2005	14.0	**350** m	--	--	ND<0.20	ND<0.20	ND<0.20	ND<0.20	ND<2.0	--	--
MW-11	10/20/2005	18.5	6.6 m	--	--	ND<0.005	ND<0.005	ND<0.005	0.014	ND<0.05	--	--
MW-12	10/20/2005	8.0	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-12	10/20/2005	12.0	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--
MW-12	10/20/2005	24.0	ND<1.0	--	--	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05	--	--

Table 1. **Soil Analytical Data** - Credit World Auto Sales, 2345 International Boulevard, Oakland, California

Sample Location	Date Sampled	Depth (ft bgs)	TPHg	TPHd	TOG	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	VOCs	HVOCs
			← (mg/kg) →									

Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline by EPA Method SW8021B/8015Cm

TPHd = Total petroleum hydrocarbons as diesel by EPA Method SW8015C

TOG = Total oil and grease

Benzene, Toluene, Ethylbenzene, Xylenes by EPA Method SW8021B/8015Cm (by EPA Method 8020 if in parenthesis)

MTBE = methyl tertiary butyl ether by EPA Method SW8021B/8015Cm

VOCs = volatile organic compounds by EPA Method 8260

HVOCs = halogenated volatile organic compounds by EPA Method 8010

ft bgs = feet below ground surface

mg/kg = Milligrams per kilogram

Laboratory Notes:

a = unmodified or weakly modified gasoline is significant

b = diesel range compounds are significant; no recognizable pattern

c = strongly aged gasoline or diesel range compounds are significant

d = gasoline range compounds are significant

g = oil range compounds are significant

m = no recognizable pattern

ND<n = Below detection limit of n mg/kg

-- = Not analyzed

ESLs = Interim Final - February 2005 Environmental Screening Level as established by the Regional Water Quality Control Board - San Francisco Bay Region.

Shallow Soil Residential ESLs = Table A-1 - Shallow Soil Screening Levels (≤3m bgs) Residential Land Use (Potentially Impacted Groundwater is a Current or Potential Drinking Water Resource)

NE = ESL not established

N/A = Not applicable

1,500 = concentrations exceeding ESL shown in bold.

ND = not detected above laboratory detection limits

ND* = not detected with the exception of reported concentrations for benzene, toluene, ethylbenzene and xylenes

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
California Environmental Consultants (Soil and Groundwater Investigation)														
B-1-W	10/2/1984	--	--	--	**67,000**	**14,000**	**2,400**	**2,500**	**9,100**	--	--	--	--	--
B-2-W	10/2/1984	--	--	--	**110,000**	**17,000**	**2,600**	**3,000**	**12,000**	--	--	--	--	--
B-3-W	10/2/1984	--	--	--	--	**(490)**	**(160)**	**(770)**	**(1,300)**	--	--	--	--	--
Tank Protect Engineering (Site Assessment)														
SB-1W	4/21/1997	--	--	--	ND<50.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
SB-2W	4/21/1997	--	--	--	**6,100**	**870**	35	17	**28**	ND<5.0	--	--	--	--
SB-3W	5/1/1997	--	--	--	ND<50.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
SB-4W	5/1/1997	--	--	--	ND<50.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
SB-5W	5/1/1997	--	--	--	**890**	**5.4**	ND<0.5	1.4	ND<0.5	**12**	--	--	--	--
Sequoia Environmental (Subsurface Investigation)														
SB-1	5/22/2001	--	--	--	**11,000**	**8.1**	23	**81**	7.1	ND<20	--	--	--	--
SB-2	5/22/2001	--	--	--	**1,200**	ND<0.5	3.5	5.5	ND<0.5	ND<5.0	--	--	--	--
SB-3	5/22/2001	--	--	--	**53,000**	**790**	**110**	**2,000**	**2,000**	ND<200	--	--	--	--
SB-4	5/22/2001	--	--	--	**170,000**	**420**	ND<45	**1,500**	**800**	ND<200	--	--	--	--
SB-5	5/22/2001	--	--	--	**27,000**	**8,400**	**99**	**230**	**120**	ND<500	--	--	--	--
SB-6	5/22/2001	--	--	--	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
Monitoring Well Sampling Data														
MW-1	8/23/1991	15.42	0.00	11.91	**2,090,000**	**2,150**	**9,345**	**2,145**	**23,150**	--	--	--	--	--
27.37[a]	12/30/1997	10.96	0.17	16.51	**61,000**	**4,300**	**1,800**	**1,600**	**6,900**	**1,400**	--	--	--	--
	3/24/1998	9.33	0.00	18.04	**24,000**	**1,000**	**1,000**	**1,300**	**4,300**	**2,000**	--	--	--	--
	6/29/1998	12.20	0.00	15.17	**130,000**	**3,800**	**370**	**1,200**	**4,200**	**3,300**	--	--	--	--
	10/2/1998	13.46	0.00	13.91	**22,000**	**66**	21	26	**140**	ND<0.50	--	--	--	--
	12/10/1998	10.49	0.00	16.88	**32,000**	**4,600**	**970**	**1,700**	**4,900**	ND<250	--	--	--	--
	3/26/1999	9.44	0.00	17.93	**230,000**	**370**	**290**	**280**	**720**	ND<0.50	--	--	--	--
	6/11/1999	12.56	0.01	14.82	**180,000**	**210**	**170**	**220**	**400**	ND<0.50	--	--	--	--
	9/15/1999	14.85	1.00	13.32	**21,000**	**3,800**	**280**	**590**	**2,200**	ND<250	--	--	--	--
	12/28/1999	14.50	1.32	13.93	**27,000**	**48**	36	**46**	**83**	ND<0.5	--	--	--	--
	6/13/2001	15.83	4.36	12.03	--	--	--	--	--	--	--	--	--	--
	12/27/2002	8.31	0.16	16.19	--	--	--	--	--	--	--	--	--	--
	3/23/2003	10.65	0.05	16.72	--	--	--	--	--	--	--	--	--	--
	5/29/2003	12.11	0.28	15.44	--	--	--	--	--	--	--	--	--	--
	9/26/2003	12.84	0.29	14.72	--	--	--	--	--	--	--	--	--	--
	12/4/2003	12.50	0.10	14.91	--	--	--	--	--	--	--	--	--	--
	3/12/2004	10.45	0.52	17.30	--	--	--	--	--	--	--	--	--	--
	6/18/2004	12.01	0.46	15.69	--	--	--	--	--	--	--	--	--	--
	9/23/2004	13.56	0.50	14.21	--	--	--	--	--	--	--	--	--	--
	12/10/2004	12.94	0.10	14.51	--	--	--	--	--	--	--	--	--	--
	2/9/2005	10.53	0.52	17.26	--	--	--	--	--	--	--	--	--	--
	3/25/2005	7.76	0.06	19.66	--	--	--	--	--	--	--	--	--	--
	6/24/2005	11.00	0.06	16.42	--	--	--	--	--	--	--	--	--	--
	←						8/8/2005 - Well MW-1 reconstructed as well MW-1B							→

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
MW-1A	9/29/2005	11.92	0.00	15.03	--	--	--	--	--	--	--	--	--	--
26.95	12/29-30/2005	6.85	0.00	20.10	**47,000** b	**4,400**	**2,100**	**2,000**	**6,300**	ND<500	--	--	--	--
	3/27-28/2006	6.70	0.00	20.25	**65,000** b,c	**6,500**	**2,600**	**2,600**	**8,600**	ND<800	--	--	--	--
	4/28/2006	8.42	0.00	18.53	--	--	--	--	--	--	--	--	--	--
MW-1B	9/29/2005	13.62	0.00	13.23	--	--	--	--	--	--	--	--	--	--
26.85	12/29-30/2005	10.38	0.00	16.47	**1,200** b	**19**	2.5	0.91	2.7	ND<5.0	--	--	--	--
	3/27-28/2006	10.54	0.00	16.31	**950** b,d	**2.0**	1.3	0.54	ND<0.5	ND<5.0	--	--	--	--
	4/28/2006	11.15	0.00	15.70	--	--	--	--	--	--	--	--	--	--
MW-2	8/23/1991	13.77	0.00	12.15	**10,000**	ND<5	ND<5	ND<5	ND<5	--	--	--	--	--
26.16[a]	4/16/1992	15.38	2.81	12.79	--	--	--	--	--	--	--	--	--	--
	6/11/1993	13.19	0.00	12.98	--	--	--	--	--	--	--	--	--	--
	8/17/1993	14.04	0.01	12.13	**49,000**	**94**	**240**	**250**	**980**	--	--	--	--	--
	3/28/1994	13.61	0.54	12.98	**14,000**	**4,200**	ND<250	**910**	**1,400**	--	--	--	--	--
	6/27/1994	14.24	0.80	12.56	**24,000**	**4,400**	**72**	**1,100**	**1,700**	--	--	--	--	--
	9/16/1994	17.82	4.46	11.91	**40,000**	**2,300**	**250**	**2,000**	**4,100**	--	--	--	--	--
	3/31/1995	16.72	7.44	15.39	**28,000**	**4,000**	ND<120	**1,100**	**1,400**	--	--	--	--	--
	6/28/1995	13.50	0.73	13.24	**40,000**	**2,700**	**130**	**1,700**	**2,900**	--	--	--	--	--
	9/28/1995	14.63	0.54	11.96	**7,500**	**420**	14	**250**	**190**	ND<62	--	--	--	--
	12/26/1995	12.58	0.90	14.30	**22,000**	**1,300**	**88**	**950**	**1,800**	ND<250	--	--	--	--
	3/22/1996	11.46	0.15	14.82	**9,800**	**2,200**	ND<120	**400**	ND<380	ND<1,200	--	--	--	--
	6/20/1996	13.08	0.37	13.38	**35,000**	**770**	ND<0.50	**240**	ND<0.50	**550**	--	--	--	--
	9/30/1996	16.67	3.75	12.49	**58,000**	**1,600**	**230**	**2,200**	**4,000**	ND<5.0	--	--	--	--
	12/27/1996	15.74	7.57	16.48	**29,000**	**2,100**	ND<0.50	**1,200**	**1,800**	ND<5.0	--	--	--	--
	3/7/1997	12.55	0.00	13.61	**13,000**	**1,300**	37	**290**	**180**	ND<5.0	--	--	--	--
	6/28/1997	11.98	0.04	14.21	**12,000**	**840**	ND<0.50	**640**	**360**	ND<5.0	--	--	--	--
	9/18/1997	13.44	0.00	12.72	**12,000**	**680**	ND<0.50	**320**	**84**	ND<5.0	--	--	--	--
	12/30/1997	11.31	0.00	14.85	**13,000**	**1,100**	**40**	**350**	**220**	ND<5.0	--	--	--	--
	3/25/1998	10.02	0.00	16.14	**8,100**	**1,300**	**51**	**410**	**230**	**670**	--	--	--	--
	6/29/1998	11.96	0.00	14.20	**12,000**	**880**	13	**180**	**72**	**430**	--	--	--	--
	10/2/1998	13.74	0.00	12.42	**47,000**	**140**	**100**	**110**	**200**	ND<0.50	--	--	--	--
	12/10/1998	12.91	2.10	14.93	**26,000**	**1,000**	**210**	**1,500**	**1,900**	ND<1,000	--	--	--	--
	3/26/1999	9.06	0.20	17.26	**110,000**	**190**	**150**	**120**	**380**	ND<0.50	--	--	--	--
	6/11/1999	12.18	0.00	13.98	**190,000**	**310**	**250**	**320**	**540**	ND<0.50	--	--	--	--
	9/15/1999	15.59	3.00	12.97	**25,000**	**720**	ND<100	**1,300**	**1,600**	ND<1,000	--	--	--	--
	12/28/1999	16.81	4.50	12.95	**75,000**	**130**	**98**	**130**	**230**	ND<0.50	--	--	--	--
	6/13/2001	14.84	3.15	10.84	--	--	--	--	--	--	--	--	--	--
	6/20/2002	14.80	0.70	8.92	**53,000**	**2,200**	**140**	**3,300**	**3,000**	ND<1,000	--	--	--	--
	10/21/2002	16.98	0.24	6.37	--	--	--	--	--	--	--	--	--	--
	12/27/2002	13.58	0.43	9.92	--	--	--	--	--	--	--	--	--	--
	3/23/2003	15.49	0.29	10.66	--	--	--	--	--	--	--	--	--	--
	5/29/2003	16.08	0.44	10.19	--	--	--	--	--	--	--	--	--	--
	9/26/2003	17.14	0.87	9.48	--	--	--	--	--	--	--	--	--	--
	12/4/2003	16.75	1.01	9.98	--	--	--	--	--	--	--	--	--	--
	3/12/2004	11.19	2.14	16.44	--	--	--	--	--	--	--	--	--	--
	6/18/2004	12.66	0.87	13.96	--	--	--	--	--	--	--	--	--	--
	9/23/2004	15.39	0.10	10.85	--	--	--	--	--	--	--	--	--	--
	12/10/2004	14.81	0.41	11.68	--	--	--	--	--	--	--	--	--	--
	2/9/2005	10.95	0.77	15.83	--	--	--	--	--	--	--	--	--	--
MW-2	3/25/2005	7.83	0.08	18.39	--	--	--	--	--	--	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
(cont'd)	6/24/2005	11.73	0.85	15.11	--	--	--	--	--	--	--	--	--	--
	←						8/9/2005 - Well MW-2 reconstructed as well MW-2A							→
MW-2A	9/29/2005	10.95	0.00	14.87	--	--	--	--	--	--	--	--	--	--
25.82	12/29-30/2005	5.41	0.00	20.41	**14,000** b,c	**610**	21	**1,500**	**320**	ND<90	--	--	--	--
	3/27-28/2006	5.04	0.00	20.78	**18,000** b	**500**	21	**900**	**180**	ND<100	--	--	--	--
	4/28/2006	6.92	0.00	18.90	--	--	--	--	--	--	--	--	--	--
MW-3	8/23/1991	15.07	0.00	12.50	ND<5,000	ND<5	ND<5	ND<5	ND<5	--	--	--	--	--
27.57[a]	4/16/1992	14.14	0.16	13.56	--	--	--	--	--	--	--	--	--	--
	6/11/1993	14.28	0.00	13.30	--	--	--	--	--	--	--	--	--	--
	8/17/1993	15.77	0.00	11.80	**9,600**	**4.1**	17	28	**54**	--	--	--	--	--
	3/28/1994	14.35	0.00	13.22	**8,400**	**2,400**	**56**	**67**	**200**	--	--	--	--	--
	6/27/1994	14.77	0.00	12.80	**9,900**	**3,300**	ND<22	ND<25	**73**	--	--	--	--	--
	9/16/1994	15.42	0.05	12.19	**16,000**	**2,300**	**80**	**620**	**240**	--	--	--	--	--
	3/31/1995	12.98	0.46	14.96	**16,000**	**2,800**	**70**	ND<25	**920**	--	--	--	--	--
	6/28/1995	14.20	0.05	13.41	**11,000**	**2,300**	32	**81**	**240**	--	--	--	--	--
	9/28/1995	15.17	0.00	12.40	**6,300**	**1,900**	ND<42	**200**	ND<120	ND<420	--	--	--	--
	12/26/1995	13.33	0.06	14.29	**25,000**	**3,800**	**97**	**94**	**1,600**	ND<250	--	--	--	--
	3/22/1995	12.81	0.04	14.79	**16,000**	**3,100**	**75**	**69**	**350**	**250**	--	--	--	--
	6/20/1996	13.95	0.07	13.68	**8,500**	**1,400**	28	**140**	15	**220**	--	--	--	--
	9/24/1996	14.86	0.04	12.74	**12,000**	**2,400**	**87**	**340**	**110**	ND<5.0	--	--	--	--
	12/27/1996	11.04	0.06	16.58	**5,800**	**1,700**	28	ND<0.50	**42**	**240**	--	--	--	--
	3/10/1997	13.80	0.00	13.77	**9,000**	**1,700**	ND<0.50	**110**	ND<0.50	ND<5.0	--	--	--	--
	6/28/1997	13.72	0.06	13.90	**15,000**	**2,200**	ND<0.50	**160**	**190**	ND<5.0	--	--	--	--
	9/18/1997	14.76	0.00	12.81	**28,000**	**3,800**	ND<0.50	**100**	ND<0.50	ND<5.0	--	--	--	--
	12/30/1997	12.97	0.00	14.60	**21,000**	**2,200**	ND<0.50	**31**	ND<0.50	**300**	--	--	--	--
	3/24/1998	11.75	0.00	15.82	**2,300**	**870**	7.2	20	ND<0.50	**85**	--	--	--	--
	6/29/1998	13.38	0.00	14.19	**6,500**	**1,300**	12	**62**	14	**140**	--	--	--	--
	10/2/1998	14.42	0.00	13.15	**11,000**	**31**	27	**35**	**69**	ND<0.50	--	--	--	--
	12/10/1998	12.55	0.00	15.02	ND<2,500	**2,800**	**68**	**42**	**55**	ND<250	--	--	--	--
	3/26/1999	10.54	0.00	17.03	**10,000**	**21**	14	10	**41**	ND<0.50	--	--	--	--
	6/15/1999	13.91	0.00	13.66	**87,000**	**90**	**71**	**92**	**180**	ND<0.50	--	--	--	--
	9/15/1999	14.70	0.00	12.87	**8,700**	**2,100**	**71**	**110**	**66**	ND<100	--	--	--	--
	12/28/1999	15.16	0.25	12.61	**4,300**	**7.7**	5.2	7.2	13	ND<0.50	--	--	--	--
	6/13/2001	14.70	0.40	13.19	**8,400**	**1,300**	25	**64**	**32**	ND<20	--	--	--	--
	6/20/2002	14.68	0.02	12.91	**7,800**	**1,100**	23	**66**	15	ND<50	--	--	--	--
	12/27/2002	11.37	0.17	16.34	--	--	--	--	--	--	--	--	--	--
	3/23/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/29/2003	13.99	0.08	13.64	--	--	--	--	--	--	--	--	--	--
	9/26/2003	14.51	0.05	13.10	--	--	--	--	--	--	--	--	--	--
	12/4/2003	14.28	0.10	13.37	--	--	--	--	--	--	--	--	--	--
	3/12/2004	11.95	0.42	15.96	--	--	--	--	--	--	--	--	--	--
	6/18/2004	13.33	0.55	14.68	--	--	--	--	--	--	--	--	--	--
	9/23/2004	16.17	0.02	11.42	--	--	--	--	--	--	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
MW-3	12/10/2004	16.51	0.10	11.14	--	--	--	--	--	--	--	--	--	--
(cont'd)	2/9/2005	13.98	0.33	13.85	--	--	--	--	--	--	--	--	--	--
	3/25/2005	11.29	0.16	16.41	--	--	--	--	--	--	--	--	--	--
	6/24/2005	13.47	0.09	14.17	--	--	--	--	--	--	--	--	--	--
	←						8/10/2005 - Well MW-3 reconstructed as well MW-3A							→
MW-3A	9/29/2005	12.52	0.00	14.18	--	--	--	--	--	--	--	--	--	--
26.70	12/29-30/2005	5.37	0.00	21.33	**5,600** b	**420**	5.5	**210**	**140**	ND<50	--	--	--	--
	3/27-28/2006	5.59	0.00	21.11	**8,200** b	**210**	4.4	**120**	**150**	ND<25 (ND<1.0)	ND<1.0	ND<10	ND<1.0	ND<1.0
	4/28/2006	7.94	0.00	18.76	--	--	--	--	--	--	--	--	--	--
TMW-4	8/17/1993	13.26	0.00	13.24	**150**	ND<0.50	0.8	**1.4**	3.7	--	--	--	--	--
26.50[a]	3/28/1994	12.40	0.00	14.10	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	--	--	--	--	--
	6/27/1994	12.84	0.00	13.66	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	--	--	--	--	--
	9/16/1994	13.58	0.00	12.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	--	--	--	--	--
	3/31/1995	10.23	0.00	16.27	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	--	--	--	--	--
	6/28/1995	12.21	0.00	14.29	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	--	--	--	--	--
	9/28/1995	13.38	0.00	13.12	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<5.0	--	--	--	--
	12/26/1995	11.32	0.00	15.18	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<5.0	--	--	--	--
	3/22/1996	10.54	0.00	15.96	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND<5.0	--	--	--	--
	6/20/1996	12.14	0.00	14.36	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	9/24/1996	13.01	0.00	13.49	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	12/27/1996	9.51	0.00	16.99	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	3/10/1997	11.92	0.00	14.58	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	6/27/1997	10.70	0.00	15.80	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	9/18/1997	12.94	0.00	13.56	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	12/30/1997	10.92	0.00	15.58	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	3/25/1998	9.60	0.00	16.90	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	6/29/1998	11.32	0.00	15.18	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	10/2/1998	12.56	0.00	13.94	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--
	12/10/1998	10.44	0.00	16.06	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--
	3/26/1999	9.38	0.00	17.12	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--
	6/15/1999	11.58	0.00	14.92	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--
	9/15/1999	12.89	0.00	13.61	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--	--	--
	12/28/1999	12.92	0.00	13.58	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--
	10/21/2002	12.70	0.00	13.80	--	--	--	--	--	--	--	--	--	--
	12/27/2002	9.07	0.12	17.53	--	--	--	--	--	--	--	--	--	--
	3/23/2003	10.73	0.03	15.79	--	--	--	--	--	--	--	--	--	--
	5/29/2003	12.50	0.02	14.02	--	--	--	--	--	--	--	--	--	--
	9/26/2003	13.27	0.06	13.28	--	--	--	--	--	--	--	--	--	--
	12/4/2003	13.07	0.10	13.51	--	--	--	--	--	--	--	--	--	--
	3/12/2004	9.82	0.02	16.70	--	--	--	--	--	--	--	--	--	--
	6/18/2004	10.49	0.03	16.03	--	--	--	--	--	--	--	--	--	--
	9/23/2004	13.29	0.01	13.22	--	--	--	--	--	--	--	--	--	--
	12/10/2004	12.75	0.01	13.76	--	--	--	--	--	--	--	--	--	--
	2/9/2005	9.95	0.02	16.57	--	--	--	--	--	--	--	--	--	--
	3/25/2005	8.13	0.02	18.39	--	--	--	--	--	--	--	--	--	--
	6/24/2005	10.40	0.00	16.10	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	←						8/9/2005 - Well TMW-4 reconstructed as well TMW-4A							→

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
TMW-4A	9/29/2005	10.00	0.00	16.42	--	--	--	--	--	--	--	--	--	--
26.42	12/29/2005	5.03	0.00	21.39	ND<50	ND<0.5	ND<0.5	ND<0.5	0.68	ND<5.0	--	--	--	--
	3/27/2006	4.63	0.00	21.79	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	4/28/2006	5.70	0.00	20.72	--	--	--	--	--	--	--	--	--	--
TMW-5	8/17/1993	12.98	0.03	13.55	**120,000**	**640**	**730**	**790**	**3,600**	--	--	--	--	--
26.85[a]	3/28/1994	11.39	0.00	15.46	**70,000**	**23,000**	**1,500**	**4,100**	**15,000**	--	--	--	--	--
	6/28/1994	12.24	0.00	14.61	**56,000**	**26,000**	**940**	**5,500**	**26,000**	--	--	--	--	--
	9/16/1994	13.02	0.05	13.87	**96,000**	**17,000**	**720**	**3,500**	**12,000**	--	--	--	--	--
	3/31/1995	7.38	0.00	19.47	**64,000**	**13,000**	**470**	**3,500**	**6,100**	--	--	--	--	--
	6/28/1995	11.31	0.06	15.59	**65,000**	**9,000**	**240**	**2,600**	**5,300**	--	--	--	--	--
	9/28/1995	14.42	0.00	12.43	**79,000**	**17,000**	**1,800**	**2,700**	**7,000**	ND<1,200	--	--	--	--
	12/26/1995	10.16	0.05	16.73	**110,000**	**11,000**	**800**	**2,300**	**4,500**	ND<1,200	--	--	--	--
	3/22/1996	7.59	0.05	19.30	--	--	--	--	--	--	--	--	--	--
	6/26/1996	7.12	0.00	--	**30,000**	**4,000**	**180**	**1,500**	**2,500**	**830**	--	--	--	--
	9/30/1996	7.42	0.00	--	**6,900**	**1,600**	**79**	**130**	**370**	ND<5.0	--	--	--	--
	12/27/1996	6.38	0.00	--	**78,000**	**12,000**	**1,900**	**2,900**	**9,700**	ND<5.0	--	--	--	--
	3/10/1997	11.12	0.00	--	**84,000**	**9,900**	**1,100**	**2,600**	**8,800**	ND<5.0	--	--	--	--
	8/17/1997	12.98	0.03	--	--	--	--	--	--	--	--	--	--	--
	9/18/1997	12.00	0.00	--	**65,000**	**8,000**	ND<0.5	**2,000**	**4,700**	ND<5.0	--	--	--	--
	12/30/1997	8.97	0.00	--	**79,000**	**6,400**	**340**	**2,300**	**5,500**	ND<5.0	--	--	--	--
	3/25/1998	7.32	0.00	--	**20,000**	**6,000**	**260**	**2,700**	**5,800**	**2,400**	--	--	--	--
	6/29/1998	11.50	0.00	--	--	--	--	--	--	--	--	--	--	--
	10/8/1998	12.56	0.00	--	**46,000**	**120**	**98**	**120**	**240**	ND<0.50	--	--	--	--
	12/8/1998	10.14	0.00	--	**46,000**	**5,900**	**320**	**2,200**	**5,400**	ND<1,200	--	--	--	--
	3/26/1999	7.08	0.00	--	**35,000**	**69**	**61**	**37**	**120**	ND<0.50	--	--	--	--
	6/11/1999	11.40	0.00	--	**26,000**	**29**	32	**43**	**72**	ND<0.50	--	--	--	--
	9/15/1999	12.52	0.00	--	**37,000**	**7,300**	**400**	**2,400**	**6,000**	ND<1,000	--	--	--	--
	12/28/1999	12.44	0.00	--	**25,000**	**44**	32	**41**	**75**	ND<0.50	--	--	--	--
	6/13/2000	11.31	0.00	12.54	--	--	--	--	--	--	--	--	--	--
	6/20/2002	11.29	0.05	15.60	**51,000**	**5,100**	**290**	**2,300**	**5,800**	ND<250	--	--	--	--
	10/21/2002	13.60	0.10	13.33	--	--	--	--	--	--	--	--	--	--
	12/27/2002	6.60	0.07	20.31	--	--	--	--	--	--	--	--	--	--
	3/23/2003	9.79	0.04	16.75	--	--	--	--	--	--	--	--	--	--
	5/29/2003	11.29	0.04	15.25	--	--	--	--	--	--	--	--	--	--
	9/26/2003	12.47	0.07	14.10	--	--	--	--	--	--	--	--	--	--
	12/4/2003	12.35	0.10	14.24	--	--	--	--	--	--	--	--	--	--
	3/12/2004	8.15	0.02	18.38	--	--	--	--	--	--	--	--	--	--
	6/18/2004	9.66	0.03	16.87	--	--	--	--	--	--	--	--	--	--
	9/23/2004	12.42	0.01	14.44	--	--	--	--	--	--	--	--	--	--
	12/10/2004	11.86	0.01	15.00	--	--	--	--	--	--	--	--	--	--
	2/9/2005	8.77	0.02	18.10	--	--	--	--	--	--	--	--	--	--
	3/25/2005	6.22	0.02	20.65	--	--	--	--	--	--	--	--	--	--
	6/24/2005	9.84	0.00	17.01	**38,000** b,c	**2,700**	**66**	**2,100**	**3,100**	ND<350	--	--	--	--
26.60	9/29/2005	11.72	0.00	14.88	--	--	--	--	--	--	--	--	--	--
	9/30/2005	--	--	--	**31,000** b,c	**1,800**	ND<50	**1,900**	**2,400**	ND<500	--	--	--	--
	12/29-30/2005	5.82	0.00	20.78	**43,000** b, c	**3,600**	**110**	**2,500**	**3,500**	ND<500	--	--	--	--
	3/27-28/2006	5.19	0.00	21.41	**63,000** b,c	**3,800**	**120**	**2,600**	**3,900**	ND<500	--	--	--	--
	4/28/2006	7.03	0.00	19.57	--	--	--	--	--	--	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
MW-6	6/13/2001	12.47	0.00	11.34	**7,600**	**1,400**	**42**	19	14	ND<10	--	--	--	--
26.81 [a]	6/20/2002	12.45	0.00	14.36	79	**5.7**	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	12/27/2002	7.24	0.04	19.60	--	--	--	--	--	--	--	--	--	--
	3/23/2003	--	--	--	--	--	--	--	--	--	--	--	--	--
	5/29/2003	11.95	0.02	14.88	--	--	--	--	--	--	--	--	--	--
	9/26/2003	13.11	0.03	10.72	--	--	--	--	--	--	--	--	--	--
	12/4/2003	13.14	0.10	10.75	--	--	--	--	--	--	--	--	--	--
	3/12/2004	8.93	0.02	14.90	--	--	--	--	--	--	--	--	--	--
	6/18/2004	10.30	0.03	13.53	--	--	--	--	--	--	--	--	--	--
	9/23/2004	12.44	0.01	14.38	--	--	--	--	--	--	--	--	--	--
	12/10/2004	11.88	0.01	14.94	--	--	--	--	--	--	--	--	--	--
	2/9/2005	9.23	0.02	17.60	--	--	--	--	--	--	--	--	--	--
	3/25/2005	6.82	0.02	20.01	--	--	--	--	--	--	--	--	--	--
	6/24/2005	10.10	0.00	16.71	**6,200** b	**1,100**	33	**43**	15	ND<200	--	--	--	--
26.50	9/29/2005	11.50	0.00	15.00	**5,500** b	**920**	27	ND<2.5	14	ND<50	--	--	--	--
	12/29-30/2005	6.34	0.00	20.16	**4,500** b	**820**	32	21	15	ND<50	--	--	--	--
	3/27-28/2006	6.23	0.00	20.27	**6,000** b	**650**	30	20	14	ND<120	--	--	--	--
	4/28/2006	7.42	0.00	19.08	--	--	--	--	--	--	--	--	--	--
MW-7	9/29/2005	8.80	0.00	16.32	--	--	--	--	--	--	--	--	--	--
25.12	12/29/2005	7.45	0.00	17.67	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	3/27/2006	7.56	0.00	17.56	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	4/28/2006	7.93	0.00	17.19	--	--	--	--	--	--	--	--	--	--
MW-8	9/29/2005	10.08	0.00	16.01	--	--	--	--	--	--	--	--	--	--
26.09	12/29-30/2005	7.65	0.00	18.44	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	3/27-28/2006	7.59	0.00	18.50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	4/28/2006	8.29	0.00	17.80	--	--	--	--	--	--	--	--	--	--
MW-9	9/29/2005	9.40	0.00	15.91	--	--	--	--	--	--	--	--	--	--
25.31	12/29/2005	5.41	0.00	19.90	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	3/27/2006	5.43	0.00	19.88	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	4/28/2006	8.67	0.00	16.64	--	--	--	--	--	--	--	--	--	--
MW-10	9/29/2005	9.43	0.00	14.87	--	--	--	--	--	--	--	--	--	--
24.30	12/29/2005	5.34	0.00	18.96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	--	--	--	--
	3/27/2006	5.21	0.00	19.09	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	**12 (13)**	--	--	--	--
	4/28/2006	6.64	0.00	17.66	--	--	--	--	--	--	--	--	--	--
MW-11	12/29/2005	2.73	0.00	20.84	**1,700** c,d	ND<0.5	0.53	0.64	1.6	ND<5.0	--	--	--	--
23.57	3/27/2006	2.63	0.00	20.94	**880** e,d,c	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<20 (ND<0.5)	ND<0.5	ND<5.0	ND<0.5	ND<0.5
	4/28/2006	4.68	0.00	18.89	--	--	--	--	--	--	--	--	--	--
MW-12	12/29/2005	1.38	0.00	21.57	**1,500** b	**38**	ND<5.0	**77**	**60**	**10,000 (12,000)**	--	--	--	--
22.95	3/27-28/2006	2.35	0.00	20.60	**1,200** b	**34**	ND<2.5	**76**	**47**	**8,200 (8,000)**	**190**	ND<1,700	ND<170	ND<170
	4/28/2006	7.72	0.00	15.23	--	--	--	--	--	--	--	--	--	--

Table 2. Groundwater Elevation and Analytical Data - Credit World Auto Sales, 2345 International Blvd., Oakland, CA

Well ID *TOC*	Date Sampled	Depth to Groundwater (feet below TOC)	SPH Thickness (feet)	Groundwater Elevation (feet above msl)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TAME	TBA	DIPE	ETBE
					←					(µg/L)				→
RW-1	9/29/2005	11.60	0.00	15.11	--	--	--	--	--	--	--	--	--	--
26.71	12/29/2005	--	--	--	--	--	--	--	--	--	--	--	--	--
	3/27-28/2006	6.60	0.00	20.11	**19,000** b,c	**1,800**	**45**	**340**	**92**	ND<180	--	--	--	--
	4/28/2006	7.80	0.00	18.91	--	--	--	--	--	--	--	--	--	--

Abbreviations and Methods:

TOC = Top of well casing elevation, measured in feet above mean sea level

msl = Mean sea level

SPH = Separate phase hydrocarbons

Groundwater elevation calculated according to the relationship Groundwater Elevation = TOC - (Depth to Groundwater) + (0.8)(SPH Thickness)

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA Method SW8015C

Benzene, Toluene, Ethylbenzene, Xylenes by EPA Method SW8021B (by SW8260B if in parenthesis)

MTBE = Methyl tertiary butyl ether by EPA Method SW8021B (by SW8260B if in parenthesis)

TAME =Tertiary amyl methyl ether by EPA Method SW8260B

TBA = Tertiary butyl alcohol by EPA Method SW8260B

DIPE = Diisopropyl ether by EPA Method SW8260B

ETBE = Ethyl tertiary butyl ether by EPA Method SW8260B

µg/L = Micrograms per liter

ESL = Interim Final - February 2005 Environmental Screening Level as established by the Regional Water Quality Control Board - San Francisco Bay Region.

Drinking Water Resource ESL = Table F-1a - groundwater screening levels (groundwater is a current or potential drinking water resource)

NE = Not established

ND = not detected above laboratory detection limits

Bold = Concentrations shown in bold exceed ESL.

-- = Not available, not analyzed, or does not apply.

a = Top of casing elevation surveyed 6/13/01 to City of Oakland datum by Renner Survey Company of Burlingame, California for Sequoia Environmental.

b = Unmodified or weakly modified gasoline is significant.

c = Lighter that water immiscible sheen / product is present.

d = No recognizable pattern.

e = Heavier gasoline range compounds are significant (aged gasoline?).

Note:

Wells were surveyed on December 7, 2005 by Virgil Chavez Land Surveying (PLS 6323). The benchmark was a pin in monument well located at the centerline of Internation Boulevard and Miller Avenue. The benchmark elevation is 25.86 (NGVD 29).

Table 3. **Separate-Phase Hydrocarbon Removal Summary** - Credit World Auto Sales, 2345 International Blvd, Oakland, California

Well ID	Date Sampled	Depth to SPH (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Hydrocarbons Removed (liters)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)
MW-1	12/30/1997	10.79	10.96	0.17	0.10	0.03	0.03
	6/11/1999	12.55	12.56	0.01	0.01	0.00	0.03
	9/15/1999	13.85	14.85	1.00	0.60	0.16	0.19
	12/28/1999	8.15	8.31	0.16	0.10	0.03	0.21
	6/13/2001	11.47	15.83	4.36	2.62	0.69	0.90
	12/27/2003	8.15	8.31	0.16	3.00	0.79	1.70
	3/23/2003	10.60	10.65	0.05	1.26	0.33	2.03
	4/4/2003	10.19	10.23	0.04	0.94	0.25	2.28
	5/1/2003	9.80	9.85	0.05	0.49	0.13	2.40
	5/29/2003	11.83	12.11	0.28	1.00	0.26	2.67
	7/25/2003	11.99	12.24	0.25	0.50	0.13	2.80
	8/11/2003	12.07	12.37	0.30	0.50	0.13	2.93
	8/29/2003	12.07	12.40	0.33	0.50	0.13	3.06
	9/12/2003	12.59	12.90	0.31	0.48	0.13	3.19
	9/26/2003	12.55	12.84	0.29	0.50	0.13	3.32
	10/10/2003	12.61	12.72	0.11	0.11	0.03	3.35
	10/30/2003	12.68	12.75	0.07	0.08	0.02	3.37
	11/25/2003	12.59	12.69	0.10	0.10	0.03	3.40
	12/4/2003	12.40	12.50	0.10	0.10	0.03	3.43
	12/23/2003	11.97	12.08	0.11	0.10	0.03	3.45
	1/30/2004	9.64	10.05	0.41	0.75	0.20	3.65
	2/20/2004	9.50	9.97	0.47	0.50	0.13	3.78
	3/12/2004	9.93	10.45	0.52	1.00	0.26	4.05
	3/30/2004	10.35	11.21	0.86	1.11	0.29	4.34
	4/14/2004	11.77	12.65	0.88	1.00	0.26	4.60
	4/23/2004	11.60	12.11	0.51	1.00	0.26	4.87
	5/7/2004	11.63	12.05	0.42	1.00	0.26	5.13
	5/28/2004	11.68	12.08	0.40	1.00	0.26	5.40
	6/4/2004	11.51	11.94	0.43	0.50	0.13	5.53
	6/18/2004	11.55	12.01	0.46	0.33	0.09	5.62
	7/29/2004	12.65	13.25	0.60	1.00	0.26	5.88
	8/13/2004	12.97	13.40	0.43	1.00	0.26	6.14
	8/27/2004	12.96	13.46	0.50	1.00	0.26	6.41
	9/10/2004	12.96	13.48	0.52	1.50	0.40	6.81
	9/23/2004	13.06	13.56	0.50	2.50	0.66	7.47
	10/5/2004	13.00	13.50	0.50	2.50	0.66	8.13
	10/21/2004	13.49	13.59	0.10	2.50	0.66	8.79
	11/2/2004	13.00	13.10	0.10	2.00	0.53	9.31
	11/12/2004	12.83	12.97	0.14	1.50	0.40	9.71
	12/2/2004	12.81	12.91	0.10	1.50	0.40	10.11
	12/10/2004	12.84	12.94	0.10	1.50	0.40	10.50
	2/9/2005	10.01	10.53	0.52	0.51	0.13	10.64
	2/25/2005	8.01	8.51	0.50	1.00	0.26	10.90
	3/11/2005	8.32	8.40	0.08	0.20	0.05	10.96
	3/25/2005	7.70	7.76	0.06	0.05	0.01	10.97
	4/7/2005	8.26	8.29	0.03	0.10	0.03	10.99
	4/22/2005	9.71	9.93	0.22	0.66	0.17	11.17
	5/13/2005	9.71	9.81	0.10	0.30	0.08	11.25
	5/27/2005	10.55	10.63	0.08	0.45	0.12	11.37
	6/10/2005	10.10	10.38	0.28	0.70	0.18	11.55
	6/24/2005	10.94	11.00	0.06	0.55	0.15	11.70
	7/7/2005	11.63	11.70	0.07	0.24	0.06	11.76
	7/22/2005	11.90	11.95	0.05	0.05	0.01	11.77
	8/5/2005	12.20	12.29	0.09	0.03	0.01	11.78
	←		8/8/2005 - Well MW-1 reconstructed as well MW-1B				→

Table 3. **Separate-Phase Hydrocarbon Removal Summary** - Credit World Auto Sales, 2345 International Blvd, Oakland, California

Well ID	Date Sampled	Depth to SPH (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Hydrocarbons Removed (liters)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)
MW-2	6/28/1995	12.77	13.50	0.73	0.44	0.12	2.78
	9/28/1995	14.09	14.63	0.54	0.32	0.09	2.87
	12/26/1995	11.68	12.58	0.90	0.54	0.14	3.01
	3/22/1996	11.31	11.46	0.15	0.09	0.02	3.04
	6/20/1996	12.71	13.08	0.37	0.22	0.06	3.09
	9/30/1996	12.92	16.67	3.75	2.25	0.59	3.69
	12/27/1996	8.17	15.74	7.57	4.54	1.20	4.89
	6/28/1997	11.94	11.98	0.04	0.02	0.01	4.90
	9/18/1997	13.44	13.44	0.00	0.00	0.00	4.90
	12/10/1998	10.81	12.91	2.10	1.26	0.33	5.23
	3/26/1999	8.86	9.06	0.20	0.12	0.03	5.26
	9/15/1999	12.59	15.59	3.00	1.80	0.48	5.74
	12/28/1999	12.31	16.81	4.50	2.70	0.71	6.45
	6/13/2001	11.69	14.84	3.15	1.89	0.50	6.95
	6/20/2002	14.10	14.80	0.70	0.42	0.11	7.06
	10/21/2002	16.74	16.98	0.24	0.14	0.04	7.10
	12/27/2002	13.15	13.58	0.43	3.00	0.79	7.89
	3/23/2003	15.20	15.49	0.29	5.68	1.50	9.39
	4/4/2003	14.72	14.80	0.08	3.78	1.00	10.39
	5/1/2003	13.59	13.63	0.04	0.49	0.13	10.51
	5/29/2003	15.64	16.08	0.44	1.00	0.26	10.78
	7/25/2003	15.81	16.31	0.50	0.50	0.13	10.91
	8/11/2003	15.99	16.44	0.45	0.50	0.13	11.04
	8/29/2003	15.92	16.75	0.83	0.50	0.13	11.17
	9/12/2003	16.29	17.10	0.81	0.95	0.25	11.43
	9/26/2003	16.27	17.14	0.87	1.90	0.50	11.93
	10/10/2003	16.35	17.10	0.75	1.89	0.50	12.43
	10/30/2003	16.41	17.03	0.62	0.95	0.25	12.68
	11/25/2003	16.08	16.98	0.90	3.79	1.00	13.68
	12/4/2003	15.74	16.75	1.01	3.79	1.00	14.68
	12/11/2003	15.81	16.90	1.09	3.79	1.00	15.68
	12/23/2003	15.60	16.55	0.95	3.79	1.00	16.68
	1/30/2004	8.91	10.69	1.78	3.00	0.79	17.47
	2/20/2004	8.74	10.72	1.98	4.00	1.06	18.53
	3/12/2004	9.05	11.19	2.14	6.41	1.69	20.22
	3/30/2004	10.16	10.67	0.51	0.51	0.13	20.35
	4/14/2004	11.18	12.61	1.43	1.50	0.40	20.75
	4/23/2004	11.79	12.84	1.05	3.50	0.92	21.68
	5/7/2004	11.75	12.89	1.14	5.00	1.32	23.00
	5/28/2004	11.83	12.77	0.94	5.00	1.32	24.32
	6/4/2004	11.77	12.62	0.85	4.50	1.19	25.51
	6/18/2004	11.79	12.66	0.87	5.00	1.32	26.83
	7/29/2004	15.05	15.10	0.05	1.00	0.26	27.09
	8/13/2004	15.23	15.28	0.05	1.50	0.40	27.49
	8/27/2004	15.31	15.39	0.08	1.50	0.40	27.88
	9/10/2004	15.24	15.33	0.09	2.00	0.53	28.41
	9/23/2004	15.29	15.39	0.10	2.00	0.53	28.94
	10/5/2004	15.17	15.33	0.16	2.00	0.53	29.47
	10/21/2004	15.23	15.46	0.23	2.00	0.53	30.00
	11/2/2004	14.28	14.96	0.68	3.50	0.92	30.92
	11/12/2004	14.38	14.83	0.45	3.00	0.79	31.71
	12/2/2004	14.34	14.79	0.45	2.50	0.66	32.37
	12/10/2004	14.40	14.81	0.41	2.50	0.66	33.04
	2/9/2005	10.18	10.95	0.77	2.28	0.60	33.64
	2/25/2005	8.21	8.65	0.44	1.50	0.40	34.03
	3/11/2005	8.83	8.89	0.06	1.10	0.29	34.32
	3/25/2005	7.75	7.83	0.08	0.70	0.18	34.51
	4/7/2005	8.49	8.53	0.04	1.15	0.30	34.81
	4/22/2005	9.76	10.08	0.32	1.66	0.44	35.25
	5/13/2005	9.85	9.98	0.13	1.20	0.32	35.57

Table 3. **Separate-Phase Hydrocarbon Removal Summary** - Credit World Auto Sales, 2345 International Blvd, Oakland, California

Well ID	Date Sampled	Depth to SPH (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Hydrocarbons Removed (liters)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)
MW-2	5/27/2005	10.38	10.97	0.59	2.00	0.53	36.10
(cont.)	6/10/2005	9.98	10.01	0.03	1.20	0.32	36.41
	6/24/2005	10.88	11.73	0.85	1.90	0.50	36.92
	7/7/2005	11.50	12.08	0.58	1.75	0.46	37.38
	7/22/2005	11.74	12.49	0.75	1.50	0.40	37.77
	8/5/2005	12.00	12.37	0.37	1.36	0.36	38.13
	←			8/9/2005 - Well MW-2 reconstructed as well MW-2A			→
MW-3	4/16/1992	13.98	14.14	0.16	0.10	0.03	0.03
	9/16/1994	15.37	15.42	0.05	0.03	0.01	0.04
	3/31/1995	12.52	12.98	0.46	0.28	0.07	0.11
	6/28/1995	14.15	14.20	0.05	0.03	0.01	0.12
	12/26/1995	13.27	13.33	0.06	0.04	0.01	0.13
	3/22/1995	12.77	12.81	0.04	0.02	0.01	0.13
	6/20/1996	13.88	13.95	0.07	0.04	0.01	0.15
	9/24/1996	14.82	14.86	0.04	0.02	0.01	0.15
	12/27/1996	10.98	11.04	0.06	0.04	0.01	0.16
	6/28/1997	13.66	13.72	0.06	0.04	0.01	0.17
	12/28/1999	14.91	15.16	0.25	0.15	0.04	0.21
	6/13/2001	14.30	14.70	0.40	0.24	0.06	0.27
	6/20/2002	14.66	14.68	0.02	0.01	0.00	0.28
	12/27/2002	11.20	11.37	0.17	3.00	0.79	1.07
	5/29/2003	13.91	13.99	0.08	0.01	0.03	1.10
	7/25/2003	14.02	14.12	0.10	0.20	0.05	1.15
	8/11/2003	14.25	14.35	0.10	0.15	0.04	1.19
	8/29/2003	14.18	14.33	0.15	0.15	0.04	1.23
	9/12/2003	14.41	14.55	0.14	0.10	0.03	1.25
	9/26/2003	14.46	14.51	0.05	0.15	0.04	1.29
	10/10/2003	14.50	14.58	0.08	0.20	0.05	1.35
	10/30/2003	14.59	14.63	0.04	0.12	0.03	1.38
	11/25/2003	14.30	14.40	0.10	0.11	0.03	1.41
	12/4/2003	14.18	14.28	0.10	0.10	0.03	1.43
	12/23/2003	13.81	13.91	0.10	0.05	0.01	1.45
	1/30/2004	10.16	10.53	0.37	1.00	0.26	1.71
	2/20/2004	10.08	10.48	0.40	1.00	0.26	1.98
	3/12/2004	11.53	11.95	0.42	2.25	0.59	2.57
	3/30/2004	12.14	12.18	0.04	0.60	0.16	2.73
	4/14/2004	12.81	13.42	0.61	1.50	0.40	3.13
	4/23/2004	12.94	13.53	0.59	3.50	0.92	4.05
	5/7/2004	12.99	13.43	0.44	4.50	1.19	5.24
	5/28/2004	12.74	13.32	0.58	5.00	1.32	6.56
	6/4/2004	12.70	13.29	0.59	5.00	1.32	7.88
	6/18/2004	12.78	13.33	0.55	5.00	1.32	9.20
	7/29/2004	15.80	15.81	0.01	0.05	0.01	9.21
	8/13/2004	15.97	15.99	0.02	0.10	0.03	9.24
	8/27/2004	16.05	16.07	0.02	0.50	0.13	9.37
	9/10/2004	16.03	16.05	0.02	0.75	0.20	9.57
	9/23/2004	16.15	16.17	0.02	0.50	0.13	9.70
	10/5/2004	16.05	16.10	0.05	0.75	0.20	9.90
	10/21/2004	16.17	16.22	0.05	1.00	0.26	10.17
	11/2/2004	16.58	16.68	0.10	1.00	0.26	10.43
	11/12/2004	16.50	16.60	0.10	1.50	0.40	10.83
	12/2/2004	16.40	16.53	0.13	2.00	0.53	11.35
	12/10/2004	16.41	16.51	0.10	2.00	0.53	11.88
	2/9/2005	13.65	13.98	0.33	2.55	0.67	12.56
	2/25/2005	10.85	11.15	0.30	1.50	0.40	12.95
	3/11/2005	13.06	13.19	0.13	0.60	0.16	13.11
	3/25/2005	11.13	11.29	0.16	0.60	0.16	13.27
	4/7/2005	11.75	11.88	0.13	1.45	0.38	13.65
	4/22/2005	13.59	13.91	0.32	1.31	0.35	14.00

Table 3. **Separate-Phase Hydrocarbon Removal Summary** - Credit World Auto Sales, 2345 International Blvd, Oakland, California

Well ID	Date Sampled	Depth to SPH (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Hydrocarbons Removed (liters)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)
MW-3	5/13/2005	13.02	13.07	0.05	1.17	0.31	14.31
(cont.)	5/27/2005	13.50	13.52	0.02	1.30	0.34	14.65
	6/10/2005	12.64	12.70	0.06	1.40	0.37	15.02
	6/24/2005	13.38	13.47	0.09	1.10	0.29	15.31
	7/7/2005	14.65	14.81	0.16	1.32	0.35	15.66
	7/22/2005	14.23	14.70	0.47	1.20	0.32	15.98
	8/5/2005	14.31	14.40	0.09	1.10	0.29	16.27
	←		8/10/2005 - Well MW-3 reconstructed as well MW-3A			→	
TMW-4	12/27/2002	8.95	9.07	0.12	1.50	0.40	0.40
	3/23/2003	10.70	10.73	0.03	0.95	0.25	0.65
	4/4/2003	10.35	10.40	0.05	0.95	0.25	0.90
	5/1/2003	10.07	10.09	0.02	0.49	0.13	1.02
	5/29/2003	12.48	12.50	0.02	0.00	0.00	1.02
	7/25/2003	12.61	12.67	0.06	0.05	0.01	1.03
	8/11/2003	14.49	14.59	0.10	0.10	0.03	1.06
	8/29/2003	12.93	12.95	0.02	0.05	0.01	1.07
	9/12/2003	13.24	13.29	0.05	0.03	0.01	1.08
	9/26/2003	13.21	13.27	0.06	0.04	0.01	1.09
	10/10/2003	13.31	13.40	0.09	0.05	0.01	1.11
	10/30/2003	13.30	13.38	0.08	0.04	0.01	1.12
	11/25/2003	13.09	13.19	0.10	0.02	0.01	1.12
	12/4/2003	12.97	13.07	0.10	0.05	0.01	1.14
	12/23/2003	13.59	13.69	0.10	0.05	0.01	1.15
	1/30/2004	9.45	9.47	0.02	0.01	0.00	1.15
	2/20/2004	9.37	9.39	0.02	0.01	0.00	1.15
	3/12/2004	9.80	9.82	0.02	0.01	0.00	1.16
	3/30/2004	10.11	10.12	0.01	0.00	0.00	1.16
	4/14/2004	10.89	10.93	0.04	0.01	0.00	1.16
	4/23/2004	10.68	10.71	0.03	0.01	0.00	1.16
	5/7/2004	10.50	10.53	0.03	0.04	0.01	1.17
	5/28/2004	10.56	10.60	0.04	0.01	0.00	1.18
	6/4/2004	10.49	10.52	0.03	0.01	0.00	1.18
	6/18/2004	10.46	10.49	0.03	0.01	0.00	1.18
	7/29/2004	11.99	12.00	0.01	0.05	0.01	1.19
	8/13/2004	12.06	12.07	0.01	0.10	0.03	1.22
	8/27/2004	12.09	12.11	0.02	0.10	0.03	1.25
	9/10/2004	13.16	13.18	0.02	0.10	0.03	1.27
	9/23/2004	13.28	13.29	0.01	0.10	0.03	1.30
	10/5/2004	13.25	13.26	0.01	0.01	0.00	1.30
	10/21/2004	13.34	13.35	0.01	0.01	0.00	1.30
	11/2/2204	12.81	12.82	0.01	0.01	0.00	1.31
	11/12/2004	12.77	12.78	0.01	0.01	0.00	1.31
	12/2/2004	12.71	12.72	0.01	0.01	0.00	1.31
	12/10/2004	12.74	12.75	0.01	0.01	0.00	1.32
	2/9/2005	9.92	9.94	0.02	0.01	0.00	1.32
	2/25/2005	8.63	8.65	0.02	0.01	0.00	1.32
	3/11/2005	8.84	8.86	0.02	0.01	0.00	1.32
	3/25/2005	8.11	8.13	0.02	0.01	0.00	1.33
	4/7/2005	8.42	8.44	0.02	0.01	0.00	1.33
	4/22/2005	9.55	9.57	0.02	0.01	0.00	1.33
	←		8/9/2005 - Well TMW-4 reconstructed as well TMW-4A			→	
TMW-5	8/17/1993	12.95	12.98	0.03	0.02	0.00	0.00
	9/16/1994	12.97	13.02	0.05	0.03	0.01	0.01
	6/28/1995	11.25	11.31	0.06	0.04	0.01	0.02
	12/26/1995	10.11	10.16	0.05	0.03	0.01	0.03
	3/22/1996	7.54	7.59	0.05	0.03	0.01	0.03
	8/17/1997	12.95	12.98	0.03	0.02	0.00	0.04
	5/23/2001	--	11.31	0.00	0.00	0.00	0.04

Table 3. **Separate-Phase Hydrocarbon Removal Summary** - Credit World Auto Sales, 2345 International Blvd, Oakland, California

Well ID	Date Sampled	Depth to SPH (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Hydrocarbons Removed (liters)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)
TMW-5	6/20/2002	11.24	11.29	0.05	0.03	0.01	0.05
(cont.)	10/21/2002	13.50	13.60	0.10	0.06	0.02	0.06
	12/27/2002	13.50	13.60	0.10	1.50	0.40	0.46
	3/23/2003	9.75	9.79	0.04	0.95	0.25	0.71
	4/4/2003	9.40	9.45	0.05	0.49	0.13	0.83
	5/1/2003	8.93	8.95	0.02	0.38	0.10	0.93
	5/29/2003	11.25	11.29	0.04	0.01	0.01	0.95
	7/25/2003	11.33	11.37	0.04	0.02	0.01	0.95
	8/11/2003	11.47	11.49	0.02	0.01	0.00	0.95
	8/29/2003	12.10	12.17	0.07	0.02	0.01	0.96
	9/12/2003	12.45	12.50	0.05	0.03	0.01	0.97
	9/26/2003	12.40	12.47	0.07	0.02	0.01	0.97
	10/10/2003	12.51	12.61	0.10	0.02	0.01	0.98
	10/30/2003	12.65	12.70	0.05	0.01	0.00	0.98
	11/25/2003	12.39	12.49	0.10	0.01	0.00	0.98
	12/4/2003	12.25	12.35	0.10	0.01	0.00	0.98
	12/23/2003	13.78	13.88	0.10	0.01	0.00	0.99
	1/30/2004	7.63	7.65	0.02	0.01	0.00	0.99
	2/20/2004	7.65	7.67	0.02	0.01	0.00	0.99
	3/12/2004	8.13	8.15	0.02	0.01	0.00	1.00
	3/30/2004	9.09	9.09	0.00	0.00	0.00	1.00
	4/14/2004	9.69	9.73	0.04	0.01	0.00	1.00
	4/23/2004	9.74	9.77	0.03	0.01	0.00	1.00
	5/7/2004	9.61	9.64	0.03	0.04	0.01	1.01
	5/28/2004	9.69	9.72	0.03	0.01	0.00	1.01
	6/4/2004	9.61	9.64	0.03	0.01	0.00	1.02
	6/18/2004	9.63	9.66	0.03	0.01	0.00	1.02
	7/29/2004	12.05	12.06	0.01	0.05	0.01	1.03
	8/13/2004	12.21	12.22	0.01	0.10	0.03	1.06
	8/27/2004	12.28	12.30	0.02	0.10	0.03	1.08
	9/10/2004	12.33	12.35	0.02	0.10	0.03	1.11
	9/23/2004	12.41	12.42	0.01	0.10	0.03	1.14
	10/5/2004	13.37	13.38	0.01	0.01	0.00	1.14
	10/21/2004	12.45	12.46	0.01	0.01	0.00	1.14
	11/2/2004	11.90	11.91	0.01	0.01	0.00	1.15
	11/12/2004	11.84	11.85	0.01	0.01	0.00	1.15
	12/2/2004	11.80	11.81	0.01	0.01	0.00	1.15
	12/10/2004	11.85	11.86	0.01	0.01	0.00	1.15
	2/9/2005	8.75	8.77	0.02	0.01	0.00	1.16
	2/25/2005	6.45	6.48	0.03	0.01	0.00	1.16
	3/11/2005	6.83	6.85	0.02	0.01	0.00	1.16
	3/25/2005	6.20	6.22	0.02	0.01	0.00	1.16
	4/7/2005	6.67	6.69	0.02	0.01	0.00	1.17
	4/22/2005	8.25	8.26	0.01	0.01	0.00	1.17
	7/22/2005	11.01	11.02	0.01	0.01	0.00	1.17
	8/5/2005	11.29	11.33	0.04	0.01	0.00	1.17
MW-6	12/27/2002	7.20	7.24	0.04	1.50	0.39	0.39
	5/29/2003	11.93	11.95	0.02	0.01	0.01	0.40
	7/25/2003	12.05	12.07	0.02	0.02	0.01	0.41
	8/11/2003	12.18	12.20	0.02	0.01	0.00	0.41
	8/29/2003	12.74	12.77	0.03	0.05	0.01	0.42
	9/12/2003	13.09	13.15	0.06	0.05	0.01	0.44
	9/26/2003	13.08	13.11	0.03	0.05	0.01	0.45
	10/10/2003	13.27	13.43	0.16	0.08	0.02	0.47
	10/30/2003	13.32	13.40	0.08	0.05	0.01	0.49
	11/25/2003	13.09	13.24	0.15	0.04	0.01	0.50
	12/4/2003	13.04	13.14	0.10	0.02	0.01	0.50
	12/23/2003	13.50	13.60	0.10	0.01	0.00	0.50
	1/30/2004	8.42	8.44	0.02	0.01	0.00	0.51

Table 3. **Separate-Phase Hydrocarbon Removal Summary** - Credit World Auto Sales, 2345 International Blvd, Oakland, California

Well ID	Date Sampled	Depth to SPH (feet)	Depth to Groundwater (feet)	SPH Thickness (feet)	Hydrocarbons Removed (liters)	Hydrocarbons Removed (gallons)	Cumulative Hydrocarbons Removed (gallons)
MW-6	2/20/2004	8.38	8.40	0.02	0.01	0.00	0.51
(cont.)	3/12/2004	8.91	8.93	0.02	0.01	0.00	0.51
	3/30/2004	9.68	9.69	0.01	0.00	0.00	0.51
	4/14/2004	10.14	10.18	0.04	0.01	0.00	0.51
	4/23/2004	10.19	10.22	0.03	0.01	0.00	0.52
	5/7/2004	10.25	10.28	0.03	0.04	0.01	0.53
	5/28/2004	10.27	10.30	0.03	0.01	0.00	0.53
	6/4/2004	10.24	10.27	0.03	0.01	0.00	0.53
	6/18/2004	10.27	10.30	0.03	0.01	0.00	0.54
	7/29/2004	12.01	12.02	0.01	0.05	0.01	0.55
	8/13/2004	12.18	12.19	0.01	0.10	0.03	0.57
	8/27/2004	12.25	12.27	0.02	0.10	0.03	0.60
	9/10/2004	12.32	12.33	0.01	0.10	0.03	0.63
	9/23/2004	12.43	12.44	0.01	0.10	0.03	0.65
	10/5/2004	13.36	13.38	0.02	0.01	0.00	0.66
	10/21/2004	12.48	12.49	0.01	0.01	0.00	0.66
	11/2/2004	11.95	11.96	0.01	0.01	0.00	0.66
	11/12/2004	11.88	11.89	0.01	0.01	0.00	0.66
	12/2/2004	11.82	11.83	0.01	0.01	0.00	0.67
	12/10/2004	11.87	11.88	0.01	0.01	0.00	0.67
	2/9/2005	9.21	9.23	0.02	0.01	0.00	0.67
	2/25/2005	7.23	7.25	0.02	0.02	0.01	0.68
	3/11/2005	7.39	7.41	0.02	0.01	0.00	0.68
	3/25/2005	6.80	6.82	0.02	0.01	0.00	0.68
	4/7/2005	6.95	6.96	0.01	0.01	0.00	0.69
	4/22/2005	8.95	8.97	0.02	0.01	0.00	0.69
						Hydrocarbons removed during the 1st Quarter 2006 (gallons) =	***0.00***
						Cumulative hydrocarbons removed by bailing or purging (gallons) =	***69.37***
						Hydrocarbons removed by Tank Protect (see below) (gallons) =	***5.0***
						Cumulative estimated hydrocarbons removed to date (gallons) =	***74.37***

Abbreviations and Notes:

SPH = Separate phase hydrocarbons

Depths measured in feet from top of well casing.

SPH removal volumes were provided for 5/23/01, 6/13/01, and 12/27/02 data.

The volume of hydrocarbons removed prior to 12/27/2002 were estimated by multiplying the well casing volume (2" diameter casing = 0.60 liters/foot) by the SPH thickness (feet). After 12/27/2002 SPH volumes were measured in the field and recorded.

Note = approximately 3 to 5 gallons was reported to have been removed by Tank Protect between 8/20/97 and 1/14/98 with continuous free product removal system.

Table 4. **Well Completion Data** - Credit World Auto Sales, 2345 International Boulevard, Oakland, California

Well ID	Installation Date	Destruction Date	Boring Diameter (inches)	Borehole Depth (feet bgs)	Well Diameter (inches)	Screen Size (inches)	Well Depth (feet bgs)	Surface Seal (feet bgs)	Sand Pack Interval (feet bgs)	Screened Interval (feet bgs)	First Encountered GW Depth (feet bgs)	TOC Elevation (feet amsl)
MW-1	5/22/1991	8/8/2005	8	35	2	0.010	35	0-12	12-35	15-35	17.5	na
MW-1A	**8/8/2005**	**n/a**	**10**	**20**	**4**	**0.010**	**20**	**0-9.5**	**9.5-20**	**10-20**	**18.5**	**26.95**
MW-1B*	**8/8/2005**	**n/a**	**10**	**35**	**4**	**0.010**	**35**	**0-29**	**29-35**	**30-35**	**n/a -overdrill**	**26.85**
MW-2	8/21/1991	8/9/2005	8	35	2	0.010	35	0-12	12-35	15-35	17.5	na
MW-2A**	**8/9/2005**	**n/a**	**10**	**35**	**4**	**0.010**	**18**	**0-7.5**	**7.5-18**	**8-18**	**n/a -overdrill**	**25.82**
MW-3	8/21/1991	8/10/2005	8	35	2	0.010	35	0-12	12-35	15-35	19	na
MW-3A***	**8/10/2005**	**n/a**	**10**	**35**	**4**	**0.010**	**20**	**0-9.5**	**9.5-20**	**10-20**	**n/a -overdrill**	**26.70**
TMW-4	7/22/1993	8/9/2005	8	34.5	2	0.010	36	0-12	12-34	14-34	~17	na
TMW-4A****	**8/9/2005**	**n/a**	**10**	**35**	**4**	**0.010**	**20**	**0-9.5**	**9.5-20**	**10-20**	**n/a -overdrill**	**26.42**
TMW-5	7/23/1993	n/a	8	24	2	0.010	27	0-15	15-24	17-24	~18	na
MW-6	5/22/2001	n/a	6.75	20	4	0.020	20	0-13	13-20	15-20	~20	na
MW-7	**8/10/2005**	**n/a**	**10**	**20.5**	**4**	**0.010**	**18**	**0-7.5**	**7.5-18**	**8-18**	**13**	**25.12**
MW-8	**8/11/2005**	**n/a**	**10**	**20**	**4**	**0.010**	**18**	**0-7.5**	**7.5-18**	**8-18**	**13**	**26.09**
MW-9	**8/9/2005**	**n/a**	**10**	**21.5**	**4**	**0.010**	**20**	**0-9.5**	**9.5-20**	**10-20**	**18**	**25.31**
MW-10	**8/11/2005**	**n/a**	**10**	**20**	**4**	**0.010**	**18**	**0-7.5**	**7.5-18**	**8-18**	**14**	**24.30**
MW-11	**10/20/2005**	**n/a**	**10**	**18.5**	**4**	**0.010**	**18**	**0-7**	**7-18**	**8-18**	**13.5**	**23.57**
MW-12	**10/20/2005**	**n/a**	**10**	**24**	**4**	**0.010**	**20**	**0-9**	**9-20**	**10-20**	**~18.5**	**22.95**
RW-1	**8/9/2005**	**n/a**	**10**	**24.5**	**4**	**0.010**	**23**	**0-7.5**	**7.5-23**	**8-23**	**22**	**26.71**

Abbreviations and Notes:
bgs = below ground surface
GW = groundwater
TOC = top of casing
amsl = measured relative to mean sea level
* = Drill-out and reconstruction of original MW-1
** = Drill-out and reconstruction of original MW-2
*** = Drill-out and reconstruction of original MW-3
**** = Drill-out and reconstruction of original TMW-4
Bold = Wells installed by Cambria
n/a = not applicable

Table 5. Dual-phase Extraction - Summary of Field Data - Wong (Credit World Auto Sales Facility), 2345 International Blvd, Oakland, California

Date	Time	Cumulative Operation (hours)	Stinger Depth (ft. below TOC)	GW Flow Totalizer (gallons)	Applied Vacuum		Flow Rate (cfm)		Observed GW Drawdown (ft.)			Vacuum Influence (in. H_2O)				Hydrocarbon Concentrations (ppmv)			
					System (in. Hg)	Well Head (in. H_2O)	System	Well Head	MW-1A	TMW-5	MW-6	MW-1A	TMW-5	MW-6	MW-7	Field Readings	TPHg	Benzene	MTBE
							Static Depth to GW:		11.67	11.31	11.29								
RW-1 SVE Step Test																			
8/29/2005	14:20	0.00	0.0	60950.0	--	--	--	--	0.17	0.06	0.00	--	--	--	--	--	--	--	--
	14:25	0.08	0.0	--	2.25	22	4.0	4.0	0.18	0.06	0.00	0.02	0.02	0.05	--	250	--	--	--
	14:30	0.17	0.0	--	2.50	34	3.9	3.9	0.19	0.06	0.03	0.03	0.02	0.05	--	370	--	--	--
	14:35	0.25	0.0	--	2.25	30	3.5	3.5	0.19	0.06	0.05	0.02	0.01	0.05	--	553	--	--	--
	14:40	0.33	0.0	--	5.0	78	6.3	6.3	0.20	0.06	0.06	0.02	0.01	0.07	--	1,542	--	--	--
	14:45	0.42	0.0	--	5.5	78	5.8	5.8	0.21	0.06	0.08	0.04	0.01	0.17	--	3,040	--	--	--
	14:50	0.50	0.0	--	5.0	76	6.0	6.0	0.22	0.06	0.12	0.05	0.01	0.18	--	4,050	--	--	--
	14:55	0.58	0.0	--	5.0	70	5.9	5.9	0.23	0.06	0.16	0.04	0.01	0.14	--	4,150	--	--	--
	15:00	0.67	0.0	--	10.0	> 100	7.5	7.5	0.24	0.06	0.19	0.05	0.01	0.25	--	17,900	--	--	--
	15:05	0.75	0.0	--	9.8	> 100	9.1	9.1	0.25	0.06	0.24	0.06	0.01	0.30	--	14,250	--	--	--
	15:10	0.83	0.0	--	10.0	> 100	7.5	7.5	0.26	0.06	0.30	0.07	0.01	0.23	--	7,660	--	--	--
RW-1 DPE Step Test																			
8/29/2005	15:20	1.00	11.25	--	15.0	> 100	10.0	10.0	0.29	0.05	0.37	0.07	0.01	0.30	--	11,500	--	--	--
	15:40	1.33	11.25	--	14.0	-- a	11.1	-- a	0.33	0.05	0.38	0.06	0.01	0.16	--	12,500	--	--	--
	15:45	1.42	11.25	--	14.5	-- a	10.1	-- a	0.34	0.04	0.43	0.07	0.01	0.19	--	6,100	--	--	--
	15:50	1.50	11.25	60955.5	14.0	-- a	11.3	-- a	0.36	0.04	0.48	0.07	0.02	0.17	--	4,670	--	--	--
	15:55	1.58	11.25	--	16.0	-- a		-- a	0.37	0.04	0.52				--	--	--	--	--
	16:00	1.67	11.25	--	16.0	-- a	11.6	-- a	0.38	0.04	0.57	0.08	0.01	0.34	--	6,360	--	--	--
	16:05	1.75	11.25	--	16.0	-- a	11.8	-- a	0.39	0.04	0.64	0.08	0.01	0.36	--	15,500	--	--	--
	16:10	1.83	11.25	60961.4	16.0	-- a	11.5	-- a	0.41	0.04	0.70	0.09	0.01	0.37	--	7,860	--	--	--
	16:15	1.92	11.25	--	20.0	-- a	13.8	-- a	0.42	0.04	0.77	0.10	0.01	1.30	--	70,000	--	--	--
	16:20	2.00	11.25	--	20.0	-- a	13.6	-- a	0.44	0.04	0.90	0.10	0.01	1.60	--	--	--	--	--
	16:25	2.08	11.25	60973.9	20.0	-- a	12.9	-- a	0.46	0.04	1.09	0.12	0.01	1.80	--	--	--	--	--
	16:35	2.25	16.0	--	17.8	-- a	13.1	-- a	0.51	0.05	1.35	0.13	0.01	0.90	--	99,999	--	--	--
	16:40	2.33	16.0	--	17.8	-- a	13.9	-- a	0.54	0.05	1.41	0.14	0.01	1.50	--	--	--	--	--
	16:45	2.42	16.0	60991.1	17.5	-- a	12.7	-- a	0.57	0.05	1.60	0.15	0.01	1.80	--	--	--	--	--
	16:55	2.58	16.0	--	20.0	-- a	12.3	-- a	0.63	0.05	1.93	0.18	0.01	2.40	--	--	--	--	--
	17:00	2.67	16.0	--	20.0	-- a	12.6	-- a	0.66	0.04	2.14	0.18	0.01	2.40	--	--	--	--	--
	17:05	2.75	16.0	61019.2	20.0	-- a	12.3	-- a	0.70	0.04	2.32	0.19	0.01	2.30	--	--	--	--	--
RW-1 DPE Constant Vacuum Test																			
8/29/2005	17:09	2.82	16.0	--	17.5	-- a		-- a	0.73	0.04	2.46	--	--	--	--	--	--	--	--
	17:30	3.17	16.0	--	17.5	-- a	13.2	-- a	0.89	0.04	2.95	0.19	0.01	1.15	--	82,000	**14,000**	**170**	**< 100**
8/30/2005	10:15	19.92	16.0	61498.3	18.5	130	12.0	12.0	5.45	0.89	5.98					22,300	--	--	--
	10:30	20.17	16.0	--	18.5	126	13.0	13.0	5.47	0.90	5.96	0.08	0.00	0.18	0.00	21,000	--	--	--
	11:00	20.67	16.0	--	20.0	132	13.7	13.7	5.52	0.91	5.98	0.09	0.01	0.11	0.01	20,600	--	--	--
	11:30	21.17	16.0	61567.2	20.5	134	14.0	14.0	5.56	0.93	6.05	0.10	0.01	0.60	0.01	19,700	--	--	--
	12:00	21.67	16.0	--	20.0	128	13.7	13.7	5.61	0.94	6.04	0.10	0.01	0.20	0.00	18,100	--	--	--
	12:30	22.17	16.0	--	19.8	127	13.6	13.6	5.65	0.95	6.02	0.10	0.02	0.08	0.00	17,500	--	--	--
	13:00	22.67	16.0	--	20.0	127	13.7	13.7	5.69	0.94	6.02	0.10	0.02	0.10	0.00	16,900	**4,300**	**39**	**< 170**
	13:30	23.17	16.0	--	20.0	133	13.0	13.0	5.73	0.95	6.07	0.11	0.02	0.36	0.00	16,100	--	--	--
	14:00	23.67	16.0	61636.0	19.5	134	13.2	13.2	5.77	0.95	6.09	0.14	0.02	0.35	0.01	15,500	--	--	--

Table 5. Dual-phase Extraction - Summary of Field Data - Wong (Credit World Auto Sales Facility), 2345 International Blvd, Oakland, California

Date	Time	Cumulative Operation (hours)	Stinger Depth (ft. below TOC)	GW Flow Totalizer (gallons)	Applied Vacuum		Flow Rate (cfm)		Observed GW Drawdown (ft.)			Vacuum Influence (in. H_2O)				Hydrocarbon Concentrations (ppmv)			
					System (in. Hg)	Well Head (in. H_2O)	System	Well Head	MW-1A	TMW-5	MW-6	MW-1A	TMW-5	MW-6	MW-7	Field Readings	TPHg	Benzene	MTBE
							Static Depth to GW:		11.67	11.31	11.29								
8/30/2005	14:30	24.17	16.0	--	19.0	133	13.9	13.9	5.81	0.95	6.10	0.17	0.02	0.29	0.01	14,600	--	--	--
	15:00	24.67	16.0	--	18.8	132	14.5	14.5	5.85	0.96	6.12	0.18	0.02	0.28	0.01	14,100	--	--	--
	15:30	25.17	16.0	--	18.5	134	14.2	14.2	5.88	0.97	6.13	0.18	0.02	0.24	0.01	13,900	--	--	--
	16:00	25.67	16.0	--	18.0	133	14.9	14.9	5.91	0.97	6.14	0.19	0.02	0.23	0.00	13,700	--	--	--
	16:30	26.17	16.0	61704.9	17.5	128	14.7	14.7	5.94	0.98	6.13	0.18	0.02	0.09	0.01	13,400	--	--	--
	17:00	26.67	16.0	--	17.8	133	15.0	15.0	5.97	0.99	6.14	0.19	0.02	0.20	0.01	13,900	--	--	--
	17:30	27.17	16.0	--	17.5	132	15.0	15.0	6.00	0.99	6.16	0.20	0.02	0.28	0.02	14,100	--	--	--
	18:00	27.67	16.0	--	17.3	131	15.3	15.3	6.03	1.00	6.18	0.21	0.02	0.28	0.02	15,700	--	--	--
8/31/2005	10:30	44.17	16.0	62120.0	18.5	126	14.0	14.0	6.47	1.30	6.13	0.72	0.00	0.18	0.00	11,500	--	--	--
	11:00	44.67	16.0	--	18.8	127	14.2	14.2	6.47	1.29	6.12	0.76	0.00	0.14	0.00	11,400	--	--	--
	11:30	45.17	16.0	62188.0	19.0	126	14.5	14.5	6.48	1.29	6.13	0.82	0.02	0.16	0.01	11,700	--	--	--
	12:00	45.67	16.0	--	19.3	126	14.9	14.9	6.48	1.29	6.12	0.80	0.02	0.15	0.00	11,900	--	--	--
	12:30	46.17	16.0	--	19.3	125	14.7	14.7	6.49	1.29	6.12	0.80	0.02	0.10	0.00	11,500	--	--	--
	13:00	46.67	16.0	--	19.3	125	14.9	14.9	6.49	1.29	6.10	0.80	0.02	0.08	0.00	11,800	**1,800**	**12**	**< 50**
	13:30	47.17	16.0	--	19.0	126	15.0	15.0	6.49	1.29	6.10	0.81	0.01	0.10	0.00	11,700	--	--	--
	14:00	47.67	16.0	--	18.5	127	15.2	15.2	6.50	1.29	6.09	0.81	0.01	0.13	0.00	11,500	--	--	--
	14:30	48.17	16.0	62257.0	18.5	126	15.1	15.1	6.50	1.29	6.12	0.81	0.01	0.14	0.00	11,800	--	--	--
	15:00	48.67	16.0	--	18.3	126	14.9	14.9	6.55	1.29	6.13	0.80	0.01	0.09	0.00	12,100	--	--	--
	15:30	49.17	16.0	--	18.3	127	15.0	15.0	6.57	1.29	6.14	0.79	0.01	0.13	0.00	11,700	--	--	--
	16:00	49.67	16.0	--	18.0	128	14.5	14.5	6.58	1.30	6.14	0.80	0.01	0.12	0.00	11,400	--	--	--
9/1/2005	8:30	66.17	16.0	62597.0	11.3	100	17.1	17.1	5.97	1.40	5.33	1.85	0.02	0.33	0.01	7,900	--	--	--
	9:00	66.67	16.0	--	11.5	100	19.0	19.0	5.93	1.42	5.34	1.45	0.01	0.28	0.01	7,900	--	--	--
	9:30	67.17	16.0	--	12.5	100	19.5	19.5	5.91	1.42	5.36	1.40	0.00	0.29	0.00	7,700	--	--	--
	10:00	67.67	16.0	--	13.3	101	19.8	19.8	5.91	1.42	5.38	1.40	0.00	0.33	0.01	7,500	--	--	--
	10:30	68.17	16.0	--	13.3	102	20.0	20.0	5.91	1.43	5.40	1.35	0.01	0.32	0.00	7,800	--	--	--
	11:00	68.67	16.0	--	12.8	103	18.4	18.4	5.91	1.42	5.41	1.35	0.01	0.28	0.00	7,800	--	--	--
	11:30	69.17	16.0	62683.5	13.0	103	18.6	18.6	5.99	1.42	5.42	--	--	--	--	7,700	**3,300**	**29**	**< 50**

Abbreviations and Notes:

ft = Feet
TOC = Top of Casing
GW = Groundwater
in. Hg = Inches of mercury column
in. H_2O = Inches of water column
a = Bleed air required for groundwater extraction from the well
Laboratory sample analyzed for TPHg/BTEX/MTBE by EPA method 8015M/8021B
BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes

cfm = Cubic feet per minute
ppmv = Parts per million by volume
TPHg = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl tertiary butyl ether
-- = Not measured / Not calculated
< X = Constituent not detected at or above the laboratory reporting limit
Field hydrocarbon concentrations measured using Horiba organic vapor analyzer
Bold concentrations are analytical lab values.

Table 6. Dual-phase Extraction - Vapor Phase Hydrocarbon Mass Removed - Wong (Credit World Auto Sales Facility), 2345 International Blvd, Oakland, California

Date	Time	Cumulative Operation (hours)	Stinger Depth (ft. below TOC)	Applied Vacuum		Flow Rate (cfm)		HC Concentrations (ppmv)				HC Mass Removal Rate (#/day)			HC Mass Removed (#)		
				System (in. Hg)	Well Head (in. H_2O)	System	Well Head	Field Readings	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE
SVE Step Test																	
8/29/2005	14:20	0.00	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	14:25	0.08	0.0	2.25	22	4.0	4.0	250	--	--	--	0.32	--	--	0.00	--	--
	14:30	0.17	0.0	2.50	34	3.9	3.9	370	--	--	--	0.46	--	--	0.00	--	--
	14:35	0.25	0.0	2.25	30	3.5	3.5	553	--	--	--	0.62	--	--	0.00	--	--
	14:40	0.33	0.0	5.0	78	6.3	6.3	1,542	--	--	--	3.12	--	--	0.01	--	--
	14:45	0.42	0.0	5.5	78	5.8	5.8	3,040	--	--	--	5.66	--	--	0.02	--	--
	14:50	0.50	0.0	5.0	76	6.0	6.0	4,050	--	--	--	7.80	--	--	0.03	--	--
	14:55	0.58	0.0	5.0	70	5.9	5.9	4,150	--	--	--	7.86	--	--	0.03	--	--
	15:00	0.67	0.0	10.0	> 100	7.5	7.5	17,900	--	--	--	43.12	--	--	0.15	--	--
	15:05	0.75	0.0	9.8	> 100	9.1	9.1	14,250	--	--	--	41.65	--	--	0.14	--	--
	15:10	0.83	0.0	10.0	> 100	7.5	7.5	7,660	--	--	--	18.45	--	--	0.06	--	--
DPE Step Test																	
8/29/2005	15:20	1.00	11.25	15.0	> 100	10.0	10.0	11,500	--	--	--	36.94	--	--	0.26	--	--
	15:40	1.33	11.25	14.0	-- a	11.1	-- a	12,500	--	--	--	44.57	--	--	0.62	--	--
	15:45	1.42	11.25	14.5	-- a	10.1	-- a	6,100	--	--	--	19.79	--	--	0.07	--	--
	15:50	1.50	11.25	14.0	-- a	11.3	-- a	4,670	--	--	--	16.95	--	--	0.06	--	--
	15:55	1.58	11.25	16.0	-- a	--	-- a	--	--	--	--	--	--	--	--	--	--
	16:00	1.67	11.25	16.0	-- a	11.6	-- a	6,360	--	--	--	23.70	--	--	0.16	--	--
	16:05	1.75	11.25	16.0	-- a	11.8	-- a	15,500	--	--	--	58.75	--	--	0.20	--	--
	16:10	1.83	11.25	16.0	-- a	11.5	-- a	7,860	--	--	--	29.03	--	--	0.10	--	--
	16:15	1.92	11.25	20.0	-- a	13.8	-- a	70,000	--	--	--	310.27	--	--	1.08	--	--
	16:20	2.00	11.25	20.0	-- a	13.6	-- a	--	--	--	--	305.77	--	--	1.06	--	--
	16:25	2.08	11.25	20.0	-- a	12.9	-- a	--	--	--	--	290.03	--	--	1.01	--	--
	16:35	2.25	16.0	17.8	-- a	13.1	-- a	99,999	--	--	--	420.75	--	--	2.92	--	--
	16:40	2.33	16.0	17.8	-- a	13.9	-- a	--	--	--	--	446.45	--	--	1.55	--	--
	16:45	2.42	16.0	17.5	-- a	12.7	-- a	--	--	--	--	407.91	--	--	1.42	--	--
	16:55	2.58	16.0	20.0	-- a	12.3	-- a	--	--	--	--	--	--	--	2.74	--	--
	17:00	2.67	16.0	20.0	-- a	12.6	-- a	--	--	--	--	--	--	--	1.41	--	--
	17:05	2.75	16.0	20.0	-- a	12.3	-- a	--	--	--	--	--	--	--	1.37	--	--
DPE Constant Vacuum Test																	
8/29/2005	17:09	2.82	16.0	17.5	-- a		-- a	--	--	--	--	--	--	--	--	--	--
	17:30	3.17	16.0	17.5	-- a	13.2	-- a	82,000	**14,000**	**170**	**< 100**	59.36	0.65	0.43	1.03	0.01	0.00
8/30/2005	10:15	19.92	16.0	18.5	130	12.0	12.0	22,300	--	--	--	53.96	0.59	0.40	37.66	0.42	0.14
	10:30	20.17	16.0	18.5	126	13.0	13.0	21,000	--	--	--	58.46	0.64	0.43	0.61	0.01	0.00
	11:00	20.67	16.0	20.0	132	13.7	13.7	20,600	--	--	--	61.60	0.68	0.45	1.28	0.01	0.00
	11:30	21.17	16.0	20.5	134	14.0	14.0	19,700	--	--	--	62.95	0.69	0.46	1.31	0.01	0.00
	12:00	21.67	16.0	20.0	128	13.7	13.7	18,100	--	--	--	61.60	0.68	0.45	1.28	0.01	0.00
	12:30	22.17	16.0	19.8	127	13.6	13.6	17,500	--	--	--	61.15	0.67	0.45	1.27	0.01	0.00
	13:00	22.67	16.0	20.0	127	13.7	13.7	16,900	**4,300**	**39**	**< 170**	18.92	0.16	0.77	0.39	0.00	0.01
	13:30	23.17	16.0	20.0	133	13.0	13.0	16,100	--	--	--	17.95	0.15	0.73	0.37	0.00	0.01

Table 6. Dual-phase Extraction - Vapor Phase Hydrocarbon Mass Removed - Wong (Credit World Auto Sales Facility), 2345 International Blvd, Oakland, California

Date	Time	Cumulative Operation (hours)	Stinger Depth (ft. below TOC)	Applied Vacuum		Flow Rate (cfm)		HC Concentrations (ppmv)				HC Mass Removal Rate (#/day)			HC Mass Removed (#)		
				System (in. Hg)	Well Head (in. H_2O)	System	Well Head	Field Readings	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE	TPHg	Benzene	MTBE
8/30/2005	14:00	23.67	16.0	19.5	134	13.2	13.2	15,500	--	--	--	18.23	0.15	0.74	0.38	0.00	0.01
	14:30	24.17	16.0	19.0	133	13.9	13.9	14,600	--	--	--	19.20	0.16	0.78	0.40	0.00	0.01
	15:00	24.67	16.0	18.8	132	14.5	14.5	14,100	--	--	--	20.03	0.16	0.81	0.42	0.00	0.01
	15:30	25.17	16.0	18.5	134	14.2	14.2	13,900	--	--	--	19.61	0.16	0.79	0.41	0.00	0.01
	16:00	25.67	16.0	18.0	133	14.9	14.9	13,700	--	--	--	20.58	0.17	0.83	0.43	0.00	0.01
	16:30	26.17	16.0	17.5	128	14.7	14.7	13,400	--	--	--	20.30	0.17	0.82	0.42	0.00	0.01
	17:00	26.67	16.0	17.8	133	15.0	15.0	13,900	--	--	--	20.72	0.17	0.84	0.43	0.00	0.01
	17:30	27.17	16.0	17.5	132	15.0	15.0	14,100	--	--	--	20.72	0.17	0.84	0.43	0.00	0.01
	18:00	27.67	16.0	17.3	131	15.3	15.3	15,700	--	--	--	21.13	0.17	0.86	0.44	0.00	0.01
8/31/2005	10:30	44.17	16.0	18.5	126	14.0	14.0	11,500	--	--	--	19.34	0.16	0.78	13.29	0.11	0.27
	11:00	44.67	16.0	18.8	127	14.2	14.2	11,400	--	--	--	19.61	0.16	0.79	0.41	0.00	0.01
	11:30	45.17	16.0	19.0	126	14.5	14.5	11,700	--	--	--	20.03	0.16	0.81	0.42	0.00	0.01
	12:00	45.67	16.0	19.3	126	14.9	14.9	11,900	--	--	--	20.58	0.17	0.83	0.43	0.00	0.01
	12:30	46.17	16.0	19.3	125	14.7	14.7	11,500	--	--	--	20.30	0.17	0.82	0.42	0.00	0.01
	13:00	46.67	16.0	19.3	125	14.9	14.9	11,800	**1,800**	**12**	**< 50**	8.61	0.05	0.25	0.18	0.00	0.00
	13:30	47.17	16.0	19.0	126	15.0	15.0	11,700	--	--	--	8.67	0.05	0.25	0.18	0.00	0.00
	14:00	47.67	16.0	18.5	127	15.2	15.2	11,500	--	--	--	8.79	0.05	0.25	0.18	0.00	0.00
	14:30	48.17	16.0	18.5	126	15.1	15.1	11,800	--	--	--	8.73	0.05	0.25	0.18	0.00	0.00
	15:00	48.67	16.0	18.3	126	14.9	14.9	12,100	--	--	--	8.61	0.05	0.25	0.18	0.00	0.00
	15:30	49.17	16.0	18.3	127	15.0	15.0	11,700	--	--	--	8.67	0.05	0.25	0.18	0.00	0.00
	16:00	49.67	16.0	18.0	128	14.5	14.5	11,400	--	--	--	8.38	0.05	0.24	0.17	0.00	0.00
9/1/2005	8:30	66.17	16.0	11.3	100	17.1	17.1	7,900	--	--	--	9.89	0.06	0.28	6.80	0.04	0.10
	9:00	66.67	16.0	11.5	100	19.0	19.0	7,900	--	--	--	10.98	0.07	0.31	0.23	0.00	0.00
	9:30	67.17	16.0	12.5	100	19.5	19.5	7,700	--	--	--	11.27	0.07	0.32	0.23	0.00	0.00
	10:00	67.67	16.0	13.3	101	19.8	19.8	7,500	--	--	--	11.45	0.07	0.33	0.24	0.00	0.00
	10:30	68.17	16.0	13.3	102	20.0	20.0	7,800	--	--	--	11.56	0.07	0.33	0.24	0.00	0.00
	11:00	68.67	16.0	12.8	103	18.4	18.4	7,800	--	--	--	10.64	0.06	0.30	0.22	0.00	0.00
	11:30	69.17	16.0	13.0	103	18.6	18.6	7,700	**3,300**	**29**	**< 50**	19.71	0.16	0.31	0.41	0.00	0.00
														TOTAL:	90.1	0.7	0.7

Abbreviations and Notes:

ft = Feet
TOC = Top of Casing
in. Hg = Inches of mercury column
in. H_2O = Inches of water column
cfm = Cubic feet per minute
# = Pounds
TPHg, Benzene, and MTBE analyzed by EPA Method 8260 respectively from 1 liter tedlar bag samples
When consituents are not detected by laboratory analysis, half the detection limit is used in subsequent calculations
#/day = HC concentration (ppmv) x wellhead flow rate (cfm) x CF x 28.32 (L/ft^3) x 1 x 10^{-6} ($g/\mu g$) x 0.0022 (lbs/g) x 1440 (min/day)
= HC concentration (ppmv) x wellhead flow rate (cfm) x duration (min) x CF x 28.32 (L/ft^3) x 1 x 10^{-6} ($g/\mu g$) x 0.0022 (lbs/g) x 1440 (min/day)

HC = Hydrocarbons
ppmv = Parts per million by volume
TPHg = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl tertiary butyl ether
-- = Not measured / Not calculated
< X = Constituent not detected at or above the laboratory reporting limit
Bold concentrations are analytical lab values.
a = Bleed air required for groundwater extraction from the well
Field hydrocarbon concentrations measured using Horiba organic vapor analyzer
CF = 3.58 µg/L per ppmv for TPHg, 3.25 µg/L per ppmv for Benzene, 3.67 µg/L per ppmv for MTBE.

CAMBRIA

Table 7: Dual Phase Extraction - Vapor-Phase Analytical Data - Wong (Credit World Auto Sales Facility), 2345 International Blvd, Oakland, California

Date	Time	Sample ID	TPHg		MTBE	Benzene	Toluene	Ethylbenzene	Xylenes
			←				(ppmv)		→
8/29/2005	17:30	RW-1-A	14000	b	< 100	170	15	33	< 10
8/30/2005	13:00	RW-1-B	4300	b	< 170	39	< 17	9.2	< 17
8/31/2005	13:00	RW-1-C	1800	a	< 50	12	4.5	3.3	2.3
9/1/2005	11:30	RW-1-D	3300	a	< 50	29	11	7.8	2.6
9/1/2005	11:30	RW-1-EFF	< 10		< 1.5	< 0.15	< 0.15	< 0.15	< 0.15

Abbreviations and Notes:

ppmv = Parts per million by volume

MTBE = Methyl tertiary butyl ether

TPHg = Total Petroleum Hydrocarbons as Gasoline analyzed by EPA Method 8015M from 1 liter tedlar bag samples

Benzene, Toluene, Ethylbenzene, Xylenes, and MTBE analyzed by EPA Method 8021B from 1 liter tedlar bag samples

a = unmodified or weakly modified gasoline is significant

b = lighter gasoline range compounds (the most mobile fraction) are significant