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By Iopprojectop at 9:07 am, May 08, 2006

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

RE: Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP StID# 2118
Fuel Leak Case No. RO0000096
USTCF Claim No. 014551
Clearwater Group Project # ZP046

Dear Mr. Wickham,

As the legally authorized representative of the above-referenced project location I have reviewed the following lists of reports prepared by my consultant of record, Clearwater Group, Inc. I declare, under penalty of perjury, that the information and/or recommendations contained in each report listed below are true and correct to the best of my knowledge.

- *Recommendations for Interim Site Remediation* dated June 13, 2005.
- *Soil and Groundwater Investigation Work Plan* dated August 10, 2005.
- *3) Response to Comments (RTC)* dated October 6, 2005.
- *4) Notice for Interim Remediation Groundwater Treatment Pilot* dated November 1, 2005.
- *Workplan for Ozone Bench Test* dated December 19, 2005.
- *Request for Extension of the Interim Remediation Start-up Report* dated January 11, 2006.
- *Activity Status Report/Request for Extension of the Soil and Groundwater Investigation Report* on March 1, 2006.
- *Bench Test for Using Advanced Oxidation – A Summary Report* dated March 22, 2006.
- *Groundwater Monitoring Reports First Quarter through Fourth Quarter 2005.*

Sincerely,



Mr. Muhammad Jamil

CLEARWATER
G R O U P
Environmental Services

December 16, 2005

FILE COPY

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health Services
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RECEIVED


By loprojectop at 9:07 am, May 08, 2006

RE: *Groundwater Monitoring Report - Fourth Quarter 2005*
Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP StID# 2118
USTCF Claim No. 014551
Clearwater Group Project No. ZP046E

Dear Mr. Wickham,

Enclosed please find a copy of the *Fourth Quarter 2005 Groundwater Monitoring Report* for the above referenced project location. If you have any questions regarding this monitoring report, please do not hesitate to call me at (510) 307-9943 ext 231.

Sincerely,
Clearwater Group



Jim Ho, Ph.D., CGWP
Principal Engineer

Enclosure


CLEARWATER
GROUP
Environmental Services

December 16, 2005

Mr. Muhammad Jamil
40092 Davis Street
Fremont, CA 94538

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RECEIVED

By lopprojectop at 9:07 am, May 08, 2006

RE: *Groundwater Monitoring Report - Fourth Quarter 2005*
Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP StID# 2118
USTCF Claim No. 014551
Clearwater Group Project No. ZP046E


Dear Mr. Jamil,

Enclosed please find a copy of the *Fourth Quarter 2005 Groundwater Monitoring Report* prepared for the subject property. I have forwarded the original to the Alameda County Environmental Health Services (ACEHS) on your behalf.

Following ACEHS' requests included in letters dated on 26 May 2005, September 21, 2005, and November 1, 2005, we are conducting a soil and groundwater investigation as well as the design, permitting, and construction/installation of an interim remedial system for the subject site. If there are any questions regarding the status of the project, please do not hesitate to call me at (510) 307-9943 ext 231.

Thank you so much for your cooperation and support for this site closure effort.

Sincerely,
Clearwater Group



Jim Ho, Ph.D., P.E., CGWP
Principal Engineer

Enclosure

CLEARWATER
G R O U P
Environmental Services

December 16, 2005

RECEIVED

By lopprojectop at 9:07 am, May 08, 2006

FILE COPY

San Francisco Bay
Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

RE: *Groundwater Monitoring Report - Fourth Quarter 2005*
Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP StID# 2118
USTCF Claim No. 014551
Clearwater Group Project No. ZP046E

Dear Sir/Madam:

Enclosed please find a copy of the *Fourth Quarter 2005 Groundwater Monitoring Report* prepared for the above referenced site for your files. If you have any questions regarding the status of the project, please do not hesitate to call me at (510) 307-9943 ext 231.

Sincerely,
Clearwater Group



Jim Ho, Ph.D., P.E., CGWP
Principal Engineer

Enclosure

CLEARWATER GROUP

Environmental Services

December 16, 2005

Mr. Jerry Wickham
Hazardous Materials Specialist
Alameda County Environmental Health Services
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

FILE COPY

RECEIVED

By lopprojectop at 9:07 am, May 08, 2006

Re: *Quarterly Groundwater Monitoring Report – Fourth Quarter 2005*
Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP Site ID# 2118
USTCF Claim No. 014551
Clearwater Project No. ZP046E

Dear Mr. Wickham:

Clearwater Group (Clearwater) has prepared a quarterly groundwater monitoring report for the subject site. This report presents the Fourth Quarter 2005 groundwater monitoring activities and associated results. The groundwater samples were collected in accordance with standard field protocols, and submitted to a California-certified analytical laboratory for analysis. During all previous monitoring events, only the following compounds including Total Petroleum Hydrocarbons as gasoline (TPH-g), Total Petroleum Hydrocarbons as diesel (TPH-d), benzene, toluene, ethylbenzene, xylenes (BTEX), and fuel oxygenates such as Methyl Tert-Butyl Ether (MTBE) and Tert-Butyl Alcohol (TBA) have been analyzed. Additional analysis for compounds including ethanol, 1,2-Dichloroethane (DCA), and 1,2-Dibromoethane (EDB) was requested for this quarterly monitoring event in Alameda County Environmental Health Services' (ACEHS) review letter dated September 21, 2005 and during a meeting held in ACEHS' Alameda Office on September 7, 2005.

SITE DESCRIPTION

The site is located in the southern portion of Oakland, Alameda County, California at the southern corner of the intersection of San Leandro Street and High Street, and is approximately 1,000 feet east of Interstate Highway 880 (Figure 1). The site is bounded by commercial property to the southeast, southwest and northwest and by the Bay Area

Rapid Transit (BART) tracks to the northeast (see Figure 2). The site is underlain predominantly by clays with some clayey gravel and clayey sand at depths to approximately 10 feet below ground surface (bgs), and silty sand below 20 feet bgs in some areas.

BACKGROUND

On 21 and 22 April 1999, Clearwater (formerly Artesian Environmental) oversaw the removal of five underground storage tanks (USTs) consisting of two 6,000-gallon gasoline tanks, two 4,000-gallon diesel tanks, and one 300-gallon used-oil tank from the site. Strong petroleum odors were detected from soils near the former UST locations during field observation. A total of five soil samples and three groundwater samples were collected from the UST excavation for confirmation. Laboratory analysis suggested that an unauthorized release of petroleum had occurred. The former UST excavation area is shown in Figure 2.

In a letter dated 10 May 1999, the ACEHS recommended that soil be remediated by over-excavation and "as much groundwater as possible" be pumped from the excavation. Approximately 800 tons of petroleum-impacted soils were excavated and disposed of as Class II non-hazardous waste; and approximately 1,000 gallons of petroleum-impacted groundwater was pumped and removed from the site. Groundwater did not recharge quickly after the initial pumping. Existing on- and off-site structures limited the amount of soil that could be safely excavated. Soil samples collected from the excavation walls and product-piping trenches indicated that residual concentrations of petroleum hydrocarbons and MTBE still existed.

On 4 and 5 August 1999, approximately 100 linear feet of product piping was removed. Vent piping from between the former USTs and the south corner of the on-site building was also removed. All piping was cut up and disposed of as scrap metal. On 5 August 1999, confirmation soil samples were collected along the piping trench. Six samples were collected from approximately three feet bgs. An additional four samples were collected, one for each of the four former fuel dispensers. Laboratory analytical results indicated that hydrocarbon-related contamination existed along the piping trenches.

On 26 September 2000, West Hazmat of Rancho Cordova, California, used a CME 75 drill rig to advance three borings to approximately 25 feet bgs and collect soil samples. Each of the three borings was converted to a groundwater-monitoring well (see Figure 2) using clean, flush-threaded, 2-inch diameter polyvinyl chloride (PVC) for well casing. The construction data for these three wells are presented in Table 1.

On 3 and 10 October 2000, Clearwater surveyed the top of the casing elevation for each of the wells relative to an arbitrary datum, and developed the wells for monitoring purposes. Initial groundwater samples collected from these wells contained 83,000 micrograms per liter ($\mu\text{g/L}$) to 250,000 $\mu\text{g/L}$ TPH-g and 33,000 $\mu\text{g/L}$ to 400,000 $\mu\text{g/L}$ MTBE.

On 3 August 2001, Clearwater submitted its *Groundwater Monitoring Report - Second Quarter 2001* and *Sensitive Receptor Survey and Workplan for Continuing Investigation*. It was determined, at that time, that there were no major ecological receptors, permanent surface waters or domestic-use wells within a 2,000-foot radius of the site. The proposed scope of the workplan included the installation of eight groundwater monitoring wells around the site to delineate the MTBE plume in groundwater. In response to Clearwater's workplan, the ACEHS, in a correspondence dated 18 October 2001, recommended that the installation of additional off-site wells not be performed for the time being. Instead, the ACEHS requested that further characterization of subsurface soils and groundwater on the subject site be completed prior to the installation of any off-site wells.

Quarterly monitoring was suspended after the Third Quarter 2001 event that took place on August 3, 2001. Quarterly monitoring resumed in July 2003 and has continued every quarter since then. The historical groundwater monitoring and sampling results are listed in Table 2.

On 9 January 2004, after completing its review of the Third Quarter 2003 groundwater monitoring report, ACEHS requested a work plan to include additional on-site and off-site subsurface investigations and address the extent of groundwater impact on site. Clearwater, then, proceeded to submit an Interim Remedial Action Plan (IRAP) on 14 January 2004.

In order to expedite the implementation of the IRAP, Clearwater formally requested Oakland Fire Department to review the IRAP and the Fourth Quarter 2004 groundwater monitoring report as well as to oversee the project. The Fire Department verbally agreed to oversee this project. The correspondence is shown in letters to the Fire Department dated 3 and 15 December 2004. Fire Department turned the project over to ACEHS. ACEHS provided its review comments for the IRAP and the *First Quarter 2005 Groundwater Monitoring Report* in a letter dated May 26, 2005. Pursuant to ACEHS' request described in this letter, Clearwater submitted a *Soil and Groundwater Investigation Workplan* on August 10, 2005. In review letters dated September 21, 2005 and November 1, 2005, ACEHS approved the implementation of a modified IRAP proposed in Clearwater's June 13, 2005 letter entitled "*Recommendations for Interim Remedial Actions*" and the August 10, 2005 *Soil and Groundwater Investigation Workplan*.

GROUNDWATER MONITORING ACTIVITIES

The Fourth Quarter 2005 groundwater monitoring event included gauging of groundwater depth, well purging and sampling, and laboratory analysis. These activities are described below:

Groundwater Gauging, Purging, and Sampling

On 16 November 2005, all three existing on-site monitoring wells were monitored. An electronic water level indicator accurate to within ± 0.01 feet was used to gauge the depth to water. All wells were checked for the presence of Separate Phase Hydrocarbons (SPH) prior to purging.

Prior to groundwater sampling, all wells were purged of groundwater until measurements of temperature, pH, and conductivity stabilized which occurred by removal of approximately three wetted casing volumes. Depth to water and well purging information were recorded on Well Gauging/Purging Calculations and Purging Data Sheets (see Attachment 1). Purging devices were decontaminated between wells with an Alconox® wash followed by double rinsing in clean tap water to prevent cross-contamination. Purge water and rinseate were pumped into labeled 55-gallons drums and removed from the site for future disposal. Following recovery of water levels to at least 80% of their static levels, groundwater samples were collected from the monitoring wells using disposable polyethylene bailers. Samples were labeled, documented on a chain-of-custody form, and placed on ice in a chilled cooler for transport to the project laboratory.

All work was performed in accordance with Clearwater's Groundwater Monitoring and Sampling Field Procedures (see Attachment 2).

Laboratory Analysis

Groundwater samples were analyzed by Kiff Analytical LLC, a California Department of Health Services certified laboratory, located in Davis, California. EPA Method 8260B conducted analyses for TPH-g, BTEX, seven oxygenates that included MTBE, diisopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), TBA, methanol, and ethanol, and lead scavengers: DCA, and EDB. Analysis for TPH-d was conducted by EPA Method 8015M. Complete laboratory analytical reports including chain-of-custody forms are included in Attachment 3.

GROUNDWATER MONITORING RESULTS

During well purging, strong odors were detected from monitoring wells MW-2 and MW-3. This may indicate the existence of high concentrations of volatiles in groundwater. Odors emanated from monitoring well MW-1 were not as strong. However, sheen was primarily found in monitoring well MW-1. This suggests that low solubility hydrocarbon product or semi-volatiles such as THP-d are primarily present in MW-1. This judgment has been confirmed by a higher TPH-d concentration of 3,600 $\mu\text{g/L}$ in MW-1, and lower TPH-d concentrations of 890 $\mu\text{g/L}$ and less than 200 $\mu\text{g/L}$ in wells MW-2 and MW-3, respectively. These data are included in the laboratory analysis report. Water purged from wells MW-1 and MW-2 was clear with relatively low turbidity. Water purged from well MW-3 was not as clear, but also with low turbidity. Most importantly, groundwater recovered slowly in all three wells after purging.

Groundwater Elevation and Flow

Depths to water ranged from approximately 9.81 feet (MW-1) to 14.51 (MW-2) feet bgs on November 16, 2005 (see Table 2). Depth to water data combined with the surveyed top of casing elevation was used to calculate the groundwater elevation. The calculated groundwater elevation ranged from 10.27 ft (MW-1) to 7.54 ft (MW-2) above mean sea level. A groundwater elevation contour map was generated and is shown in Figure 3. Compared with the groundwater elevation data measured on August 8, 2005, the groundwater elevation change observed within this quarterly monitoring event is not consistent in all wells. Since precipitation has been low in fall, groundwater levels normally should remain in decline. Therefore, groundwater elevation has decreased approximately one to two feet in wells MW-2 and MW-3. However, groundwater in well MW-1 raised approximately 3.4 inches, instead. This inconsistent response may suggest that:

- MW-1 and MW-2/MW-3 likely are located in a separate water-bearing zone;
- Groundwater near MW-1 has been recharged by an un-identified local source; and
- Sediments near MW-1 are much less permeable compared with sediments near MW-2 and MW-3 (Note: A silty sand layer has been found at a depth of 20 to 22 feet bgs based on boring logs for MW-2 and MW-3. However, no silty sand has been found in MW-1 at a depth interval of 25 feet bgs.)

Assuming these three monitoring wells are located in the same water bearing zone, the measured groundwater data on November 16, 2005 indicates a stronger horizontal hydraulic gradient, which was 0.040 ft/ft, as opposed to a gradient of 0.015 ft/ft determined from the Third Quarter 2005 monitoring event. Also, the resulted groundwater flow direction observed in this monitoring event was in the easterly direction, which is approximately 45 degrees north of the norm with respect to the normal groundwater flow direction determined from all previous groundwater monitoring events in 2005. Groundwater flow of the First through Third Quarter 2005 monitoring events was consistently in a southeasterly direction with a gradient of 0.028, 0.025, and 0.015 ft/ft, respectively.

Laboratory Analytical Results

Diesel-range hydrocarbons were once again detected in samples collected from all monitoring wells. The detected TPH-d concentration ranged from less than 200 $\mu\text{g/L}$ (MW-3) to 3,600 $\mu\text{g/L}$ (MW-1), which has slightly increased since August 2005. Although the TPH-g concentration in groundwater under the site very likely is much higher than the TPH-d concentration, the level of petroleum hydrocarbon impact at the site has not significantly changed. High levels of MTBE were identified in all monitoring wells with concentration ranging from 3,800 $\mu\text{g/L}$ (MW-1) to 430,000 $\mu\text{g/L}$ (MW-2). It should be noted that both the TPH-g and MTBE concentrations have declined slightly since August 2005. This situation is probably due to the presence of the deeper groundwater elevation and/or higher groundwater flow velocity. Also, it may indicate

that the deeper groundwater zone is not as contaminated. The source of groundwater contamination probably exists at a depth interval of 25 feet bgs. Samples collected from monitoring well MW-1, MW-2, and MW-3 once again contained elevated TBA concentration of 140,000 µg/L, 130,000 µg/L and 38,000 µg/L, respectively. Like the TPH-g and MTBE concentrations, the TBA concentrations in wells MW-1 and MW-3 have declined significantly since August 2005. However, the TBA concentration in MW-2 has increased from 85,000 µg/L to 130,000 µg/L since August 2005. Laboratory analytical data for the above results are listed in Table 2 as well as shown in Figure 4.

FINDINGS

Based on the Fourth Quarter 2005 monitoring results discussed above, findings for this monitoring event are listed below:

- Groundwater flow direction determined from the Fourth Quarter 2005 monitoring on November 16, 2005 shifted approximately 45 degrees to the north with an increased gradient of 0.040 ft/ft. Site characterization is needed in order to clarify this observation.
- The MTBE concentration is slightly lower than August 2005, probably due to the existence of deeper groundwater elevation and higher groundwater flow velocity. The high levels of MTBE and TBA still exist in the groundwater at the site. Current concentrations of MTBE and TBA are from 3,800 µg/L (MW-1) to 430,000 µg/L (MW-2) and from 38,000 µg/L (MW-3) to 140,000 µg/L (MW-1), respectively. Thus, oxygenates are the major source of groundwater impact at the subject site.
- Based on the historical groundwater data and the Fourth Quarter 2005 monitoring results, the former UST excavation area is up gradient of monitoring well MW-2. As a result, unlike monitoring wells MW-1 and MW-3, significant reduction of MTBE concentration has not been found in monitoring well MW-2. This further suggests that residual MTBE still exists at the subject site.
- During groundwater monitoring since October 2000, MTBE has consistently been detected at high concentrations in well MW-2. Also, the MTBE concentration detected in wells MW-1 and MW-3 has consistently declined. This situation suggests that residual hydrocarbons and oxygenates in the former UST area are the major source of groundwater contamination.
- The trend of the MTBE concentration change is opposite to that of TBA. This observation appears in all monitoring wells. It suggests that biodegradation from MTBE to TBA has been occurring at the site.
- The TBA concentration continuously increases in every monitoring well, especially well MW-1. Since TBA has much higher mobility than MTBE, and sediments near

MW-1, relatively, have lower permeabilities, the biodegradation of MTBE to TBA is occurring at the subject site.

FORECASTED ACTIVITIES

The ACEHS letter dated May 26, 2005 requested the following activities for the subject site: implementation of an interim remedial action, performance of a three-dimensional soil and groundwater investigation, preparation of a Corrective Action Plan, and continuous quarterly groundwater monitoring. A *Soil and Groundwater Investigation Workplan* submitted on August 10, 2005 has been reviewed and approved with minor comments. The above requests have been confirmed by ACEHS' review/response letters dated September 21, 2005 and November 1, 2005. The design and permitting of an interim remedial system presented in the August 10, 2005 *Workplan* is ongoing. The permits for soil sampling and the installation of extraction, bio-enhancement, and monitoring wells have been acquired. The soil and groundwater investigation activities have been ongoing since December 6, 2005.

FIGURES

- Figure 1: Site Location Map
- Figure 2: Site Plan
- Figure 3: Groundwater Elevation Map – 11/16/05
- Figure 4: Dissolved Hydrocarbon Map – 11/16/05

TABLES

- Table 1: Well Construction Data
- Table 2: Groundwater Elevations and Sample Analytical Results

ATTACHMENTS

- Attachment 1: Well Gauging Data/Purge Calculations, Purging Data
- Attachment 2: Groundwater Monitoring and Sampling Field Procedures
- Attachment 3: Laboratory Analytical Reports and Chain-of-Custody Form

Cc: Mr. Muhammad Jamil
40092 Davis Street
Fremont, CA 94538

San Francisco Bay Regional
Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

CLEARWATER

G R O U P

Environmental Services

CERTIFICATION

This report was prepared under the supervision of a professional Registered Geologist in the State of California. All statements, conclusions and recommendations are based solely upon published results from previous consultants, field observations by Clearwater and laboratory analyses performed by a State of California certified laboratory related to the work performed by Clearwater.

Information and interpretation presented herein are for the sole use of the client and regulating agency. The information and interpretation contained in this document should not be relied upon by a third party.

The service provided by Clearwater has been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of this profession currently practicing under similar conditions in the area of the site. No other warranty, expressed or implied, is made.

Sincerely,
Clearwater Group

Prepared by:

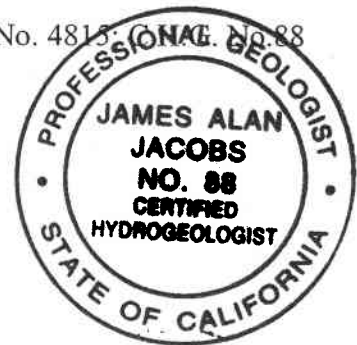


Jim Ho, Ph.D., CGWP
Principal Engineer

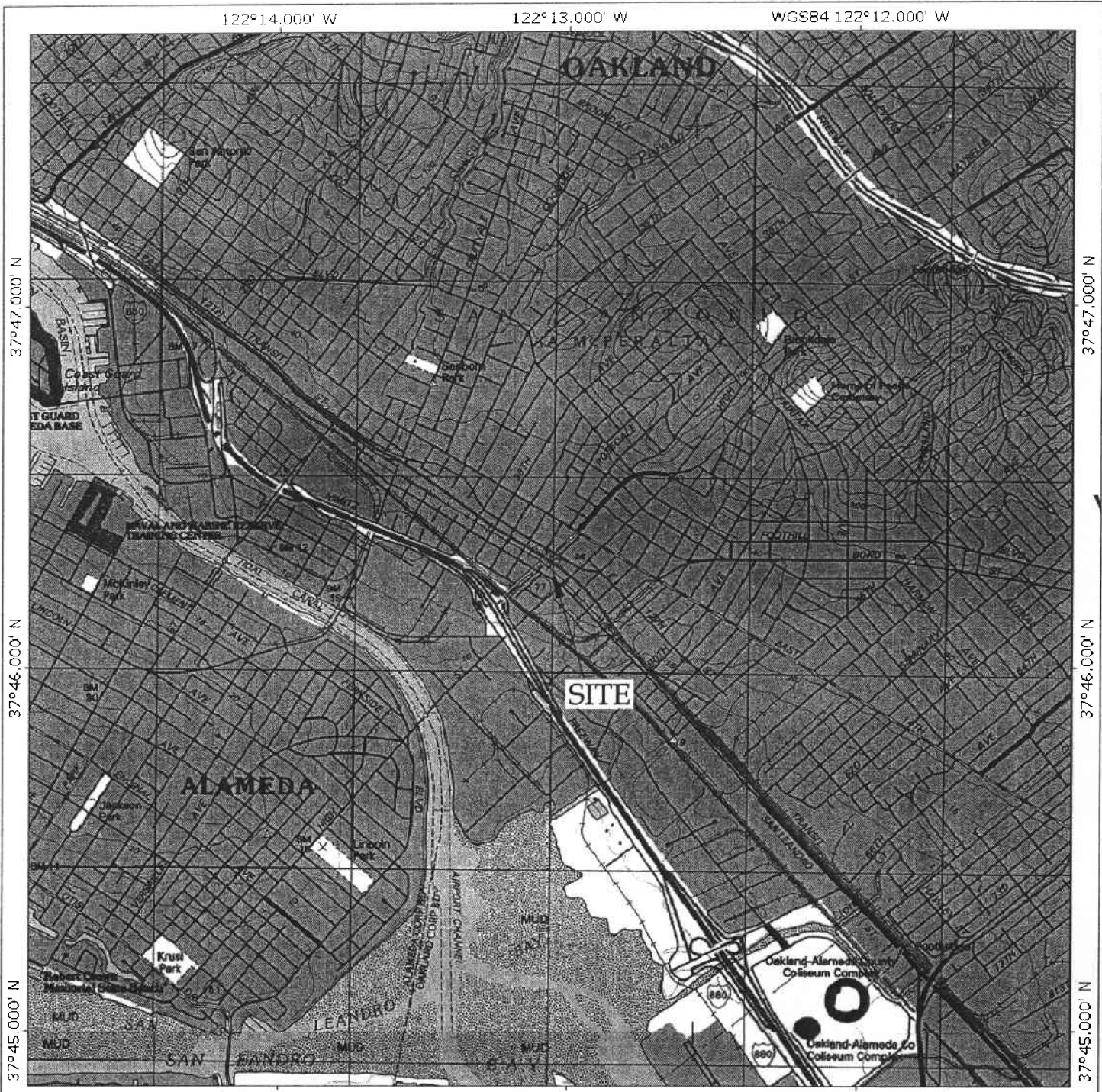
Reviewed by:



James A. Jacobs, P.G. No. 4815, C.G. No. 88
Chief Hydrogeologist



Figures

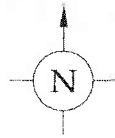


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TN
MN
15°



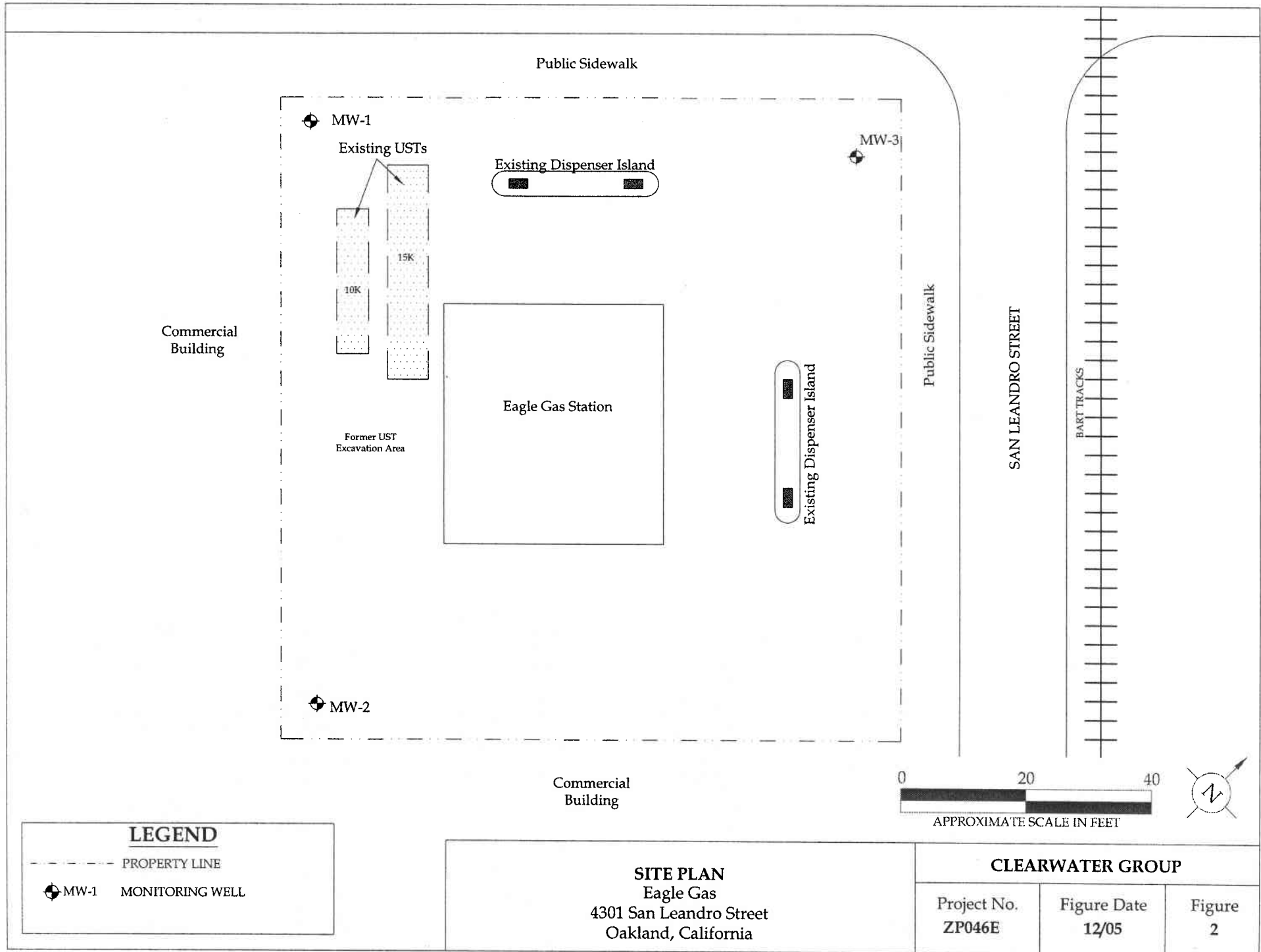
Map created with TOPO!® ©2002 National Geographic (www.nationalgeographic.com/topo)



SITE VICINITY MAP
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No. ZP046E	Figure Date 12/05	Figure 1
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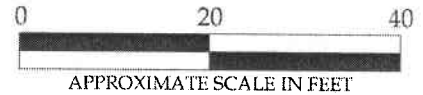


LEGEND

- PROPERTY LINE
- ◆ MW-1 MONITORING WELL

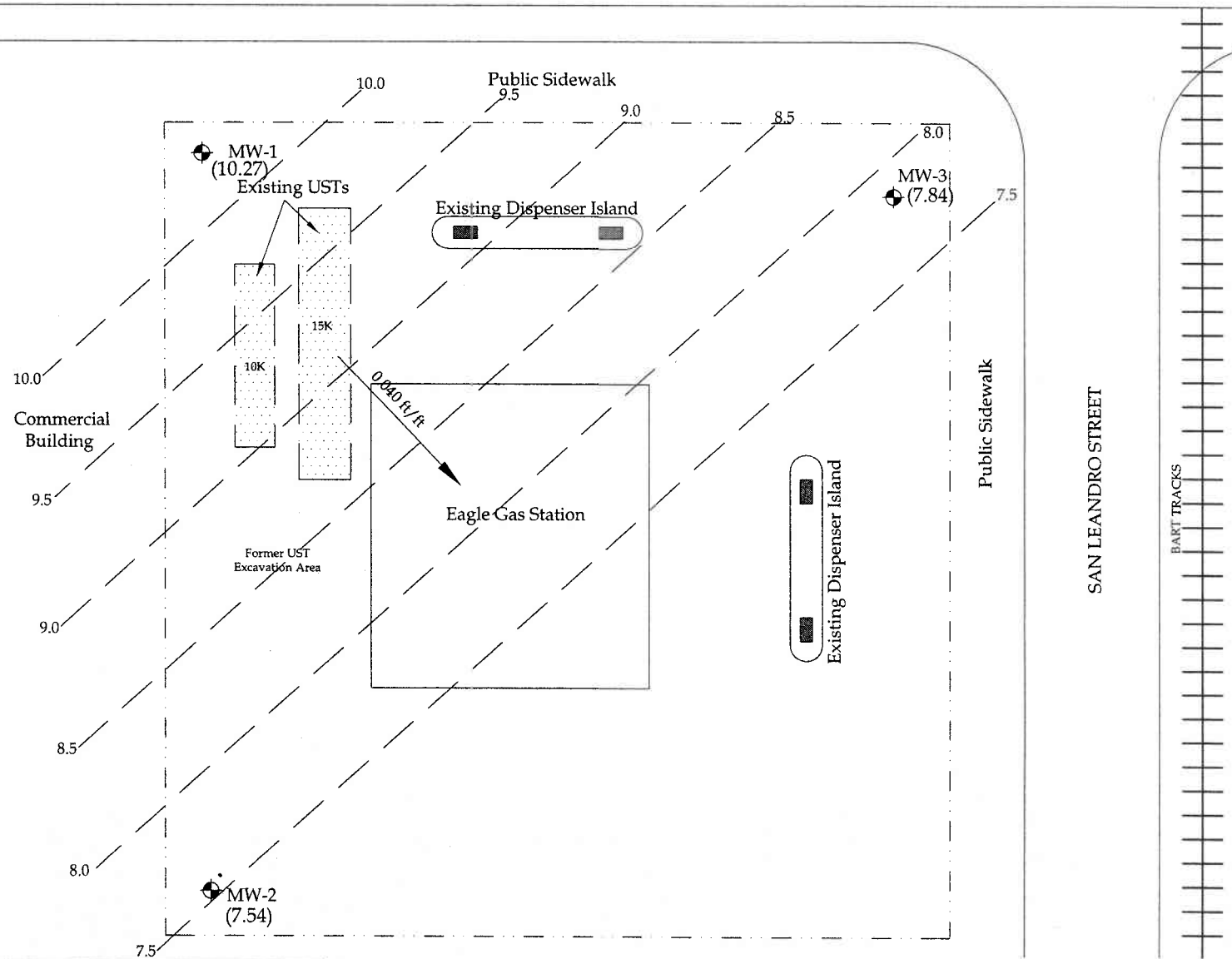
Commercial Building

SITE PLAN
 Eagle Gas
 4301 San Leandro Street
 Oakland, California



CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046E	12/05	2



LEGEND

0.040 ft/ft

APPROX. GROUNDWATER FLOW DIRECTION & GRADIENT

9.5

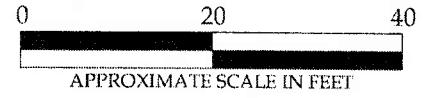
GROUNDWATER ELEVATION CONTOUR (HEIGHT IN FEET ABOVE MSL)

PROPERTY LINE

MW-1 (7.84)

MONITORING WELL (HEIGHT IN FEET ABOVE MSL)

Commercial Building



GROUNDWATER ELEVATION MAP

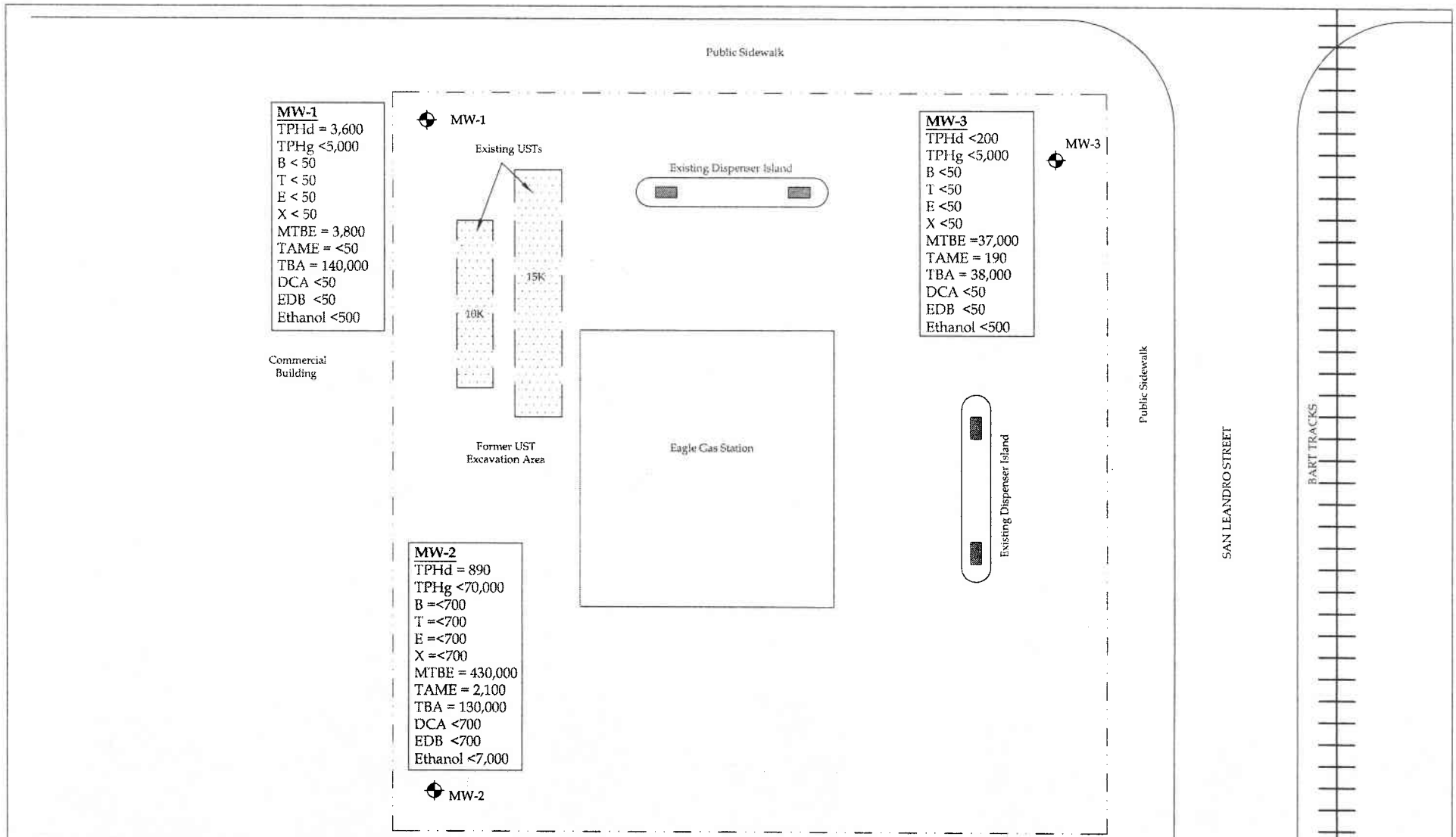
November 16, 2005
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.
ZP046E

Figure Date
12/05

Figure
3



MW-1
 TPHd = 1,800
 TPHg <10,000
 B < 100
 T <100
 E <100
 X <100
 MTBE = 85,000
 TAME = 390
 TBA = 79,000
 DCA <50
 EDA <50
 Ethanol <500

LEGEND

CONCENTRATIONS OF: TOTAL PETROLEUM HYDROCARBONS AS DESIEL (TPHd), HYDROCARBONS AS GASOLINE (TPHg), BENZENE (B),TOLUENE (T), ETHYLBENZENE (E), TOTAL XYLENES (X), AND METHYL TERT-BUTYL ETHER (MTBE), TERT AMYL METHYL ETHER (TAME), TERTIARY BUTYL ALCOHOL (TBA), 1,2-DICLOROETHANE (DCA), 1,2-DIBROMOETHANE (EDB). ALL CONCENTRATIONS REPORTED IN MICROGRAMS PER LITER (µg/L)

--- PROPERTY LINE
 MW-1 MONITORING WELL

Commercial Building

0 20 40
 APPROXIMATE SCALE IN FEET

DISSOLVED HYDROCARBON MAP
 November 16, 2005
 Eagle Gas
 4301 San Leandro Street
 Oakland, California

CLEARWATER GROUP

Project No. ZP046E	Figure Date 12/05	Figure 4
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Tables

Table 1
WELL CONSTRUCTION DATA
Eagle Gas
 4301 San Leandro Street
 Oakland, California
 Clearwater Group Project No. ZP046A

Well I.D.	Date Installed	Borehole Diameter (inches)	Depth of Borehole (feet)	Casing Diameter (inches)	Screened Interval (feet)	Filter Pack (feet)	Bentonite Seal (feet)	Cement (feet)
MW-1	9/26/2000	8	25	2	10-25	6-25	3-6	0-3
MW-2	9/26/2000	8	25	2	10-25	6-25	3-6	0-3
MW-3	9/26/2000	8	25	2	10-25	6-25	3-6	0-3

Note: All depths and Intervals are below ground surface

**TABLE 2
GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**

Eagle Gas Station
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
MW-1	10/3/2000	18.37	8.96	9.41	460	93,000	<500	<500	<500	<500	130,000	<10,000	<10,000	<10,000	<2,000	---	---	---	---
	10/27/2000	18.37	7.27	11.1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/26/2001	18.37	7.60	10.77	1,600*	51,000	270	<100	<100	<100	77,000	<5,000	<5,000	<5,000	<20,000	---	---	---	---
	5/8/2001	18.37	7.50	10.87	470*	36,000*	<100	<100	<100	<100	15,000	<5,000	<5,000	<5,000	<20,000	---	---	---	---
	8/3/2001	18.37	7.09	11.28	2,200*	19,000*	<50	59	<50	<50	96,000	<5,000	<5,000	<5,000	<20,000	---	---	---	---
	7/1/2003	18.37	7.59	10.78	3,000	<25,000	<250	<250	<250	<250	170,000	<250	<250	980	8700	---	---	---	---
	10/1/2003	18.37	8.36	10.01	2,600	<20,000	<200	<200	<200	<200	69,000	<200	<200	270	15,000	---	---	---	---
	2/13/2004	18.37	8.80	9.57	1,800	<10,000	<100	<100	<100	<100	85,000	<100	<100	390	79,000	---	---	---	---
	5/17/2004	18.37	10.92	7.45	5,400	<15,000	<150	<150	<150	<150	60,000	<150	<150	260	160,000	---	---	---	---
	8/6/2004	18.37	7.76	10.61	510	<10,000	<100	<100	<100	<100	26,000	<100	<100	100	250,000	---	---	---	---
	11/12/2004	18.37	9.25	9.12	3,500	<5,000	<50	<50	<50	<50	25,000	<50	<50	150	160,000	---	---	---	---
	2/15/2005	18.37	10.12	8.25	2,900	<5,000	<50	<50	<50	<50	12,000	<50	<50	70	160,000	---	---	---	---
	5/9/2005	18.37	9.58	8.79	1,700	<5,000	<50	<50	<50	<50	11,000	<50	<50	53	200,000	---	---	---	---
	8/8/2005**	20.08	10.09	9.99	2,000	<5,000	<50	<50	<50	<50	8,500	<50	<50	<50	250,000	---	---	---	---
	11/16/2005	20.08	9.81	10.27	3,600	<5,000	<50	<50	<50	<50	3,800	<50	<50	<50	140,000	<5,000	<500	<50	<50
MW-2	10/3/2000	20.28	20.26	0.02	210	250,000	<1,250	<1,250	<1,250	<1,250	400,000	<25,000	<25,000	<25,000	<100,000	---	---	---	---
	10/27/2000	20.28	13.88	6.40	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/26/2001	20.28	12.10	8.18	6,000*	740,000	3,800	<500	940	1,600	1,000,000	<50,000	<50,000	<50,000	<200,000	---	---	---	---
	5/8/2001	20.28	12.05	8.23	2,100*	140,000	2,800	<250	780	640	840,000	<50,000	<50,000	<50,000	<200,000	---	---	---	---
	8/3/2001	20.28	13.30	6.98	2,600*	42,000*	1,100	63	230	130	880,000	<25,000	<25,000	<25,000	<100,000	---	---	---	---
	7/1/2003	20.28	14.98	5.30	2,200	<200,000	<2,000	<2,000	<2,000	<2,000	790,000	<2,000	<2,000	3,400	<20,000	---	---	---	---
	10/1/2003	20.28	15.99	4.29	870	<100,000	<1,000	<1,000	<1,000	<1,000	620,000	<1,000	<1,000	2,700	<20,000	---	---	---	---
	2/13/2004	20.28	13.88	6.40	1200	<20,000	860	<200	260	<200	710,000	<200	<200	2,000	<25,000	---	---	---	---
	5/17/2004	20.38	14.68	5.70	2,500	<50000	860	<500	<500	<500	760,000	<500	<500	2,500	13000J	---	---	---	---
	8/6/2004	20.38	15.36	5.02	420	<50000	590	<500	<500	<500	810,000	<500	<500	3,600	17,000J	---	---	---	---
	11/12/2004	20.38	15.49	4.89	500	<150,000	<1500	<1500	<1500	<1500	700,000	<1500	<1500	2,800	25,000J	---	---	---	---
	2/15/2005	20.38	14.16	6.22	990	<150,000	<1,500	<1,500	<1,500	<1,500	630,000	<1,500	<1,500	2,600	32,000	---	---	---	---
	5/9/2005	20.38	13.62	6.76	1,100	<150,000	<1,500	<1,500	<1,500	<1,500	570,000	<1,500	<1,500	2,300	32,000	---	---	---	---
MW-2	8/8/2005**	22.05	13.36	8.69	770	<150,000	<1,500	<1,500	<1,500	<1,500	770,000	<1,500	<1,500	2,200	85,000	---	---	---	---

**TABLE 2
GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**

Eagle Gas Station
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
	11/16/2005	22.05	14.51	7.54	890	<70,000	<700	<700	<700	<700	430,000	<700	<700	2,100	130,000	<100,000	<7,000	<700	<700
MW-3	10/3/2000	18.98	---	---	120	83,000	<500	<500	<500	<500	33,000	<2,500	<2,500	<2,500	<10,000	---	---	---	---
	10/27/2000	18.98	18.75	0.23	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	1/26/2001	18.98	13.38	5.60	900*	230,000	930	<500	<500	<500	330,000	<25,000	<25,000	<25,000	<100,000	---	---	---	---
	5/8/2001	18.98	11.82	7.16	1,100*	95,000	840	<250	<250	<250	390,000	<12,500	<12,500	<12,500	<50,000	---	---	---	---
	8/3/2001	18.98	13.44	5.54	290*	30,000*	<50	51	<50	<50	270,000	<12,500	<12,500	<12,500	<50,000	---	---	---	---
	7/1/2003	18.98	12.67	6.31	620	<50,000	<500	<500	<500	<500	230,000	<500	<500	1,800	<5,000	---	---	---	---
	10/1/2003	18.98	14.04	4.94	370	<20,000	<200	<200	<200	<200	120,000	<200	<200	1,200	<5,000	---	---	---	---
	2/13/2004	18.98	12.20	6.78	430	<20,000	280	<200	<200	<200	210,000	<200	<200	1,200	<5000	---	---	---	---
	5/17/2004	18.98	11.87	7.11	920	<25,000	<250	<250	<250	<250	150,000	<250	<250	1,100	5600J	---	---	---	---
	8/6/2004	18.98	13.07	5.91	78	<20,000	<200	<200	<200	<200	110,000	<200	<200	760	<2,500	---	---	---	---
	11/12/2004	18.98	12.83	6.15	120	<20,000	<200	<200	<200	<200	100,000	<200	<200	660	6,000	---	---	---	---
	2/15/2005	18.98	11.95	7.03	130	<25,000	<250	<250	<250	<250	110,000	<250	<250	760	12,000	---	---	---	---
	5/9/2005	18.98	10.51	8.47	320	<15,000	<150	<150	<150	<150	97,000	<150	<150	780	30,000	---	---	---	---
	8/8/2005**	20.73	10.98	9.75	180	<15,000	<150	<150	<150	<150	75,000	<150	<150	500	44,000	---	---	---	---
	11/16/2005	20.73	12.89	7.84	<200	<5,000	<50	<50	<50	<50	37,000	<50	<50	190	38,000	<5,000	<500	<50	<50

NOTES:

- TOC Top of well casing referenced to arbitrary datum prior to 3Q2005
- DTW Depth to water
- GWE Groundwater elevation
- TPHd Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified)
- TPHg Total petroleum hydrocarbons as gasoline by EPA Method 8260B
- BTEX Benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
- MTBE Methyl tertiary butyl ether by EPA Method 8260B
- DIPE Di-isopropyl ether by EPA Method 8260B
- ETBE Ethyl tertiary butyl ether by EPA Method 8260B
- TAME Tertiary amyl methyl ether by EPA Method 8260B
- TBA Tertiary butyl alcohol by EPA Method 8260B

**TABLE 2
GROUNDWATER ELEVATIONS AND SAMPLE ANALYTICAL RESULTS**

Eagle Gas Station
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC (feet)	DTW (feet)	GWE (feet)	TPH-d (µg/L)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	DCA (µg/L)	EDB (µg/L)
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DCA 1,2-Dichloroethane

EDB 1,2-Dibromoethane

(µg/L) Micrograms per liter

<# Not detected in concentrations above laboratory reporting limit

--- no samples collected, no data available

* Laboratory note: "Results within quantitation range; chromatographic pattern not typical of fuel"

** wells re-surveyed on 3/28/2005

Attachments

PURGE DATA SHEET

Job No.: ZFO16E Location: 4301 SAN LEANDRO ST. OAKLAND, CA Date: 11/16/05 Sheet 1 of 1 Tech: Rodney Berry

WELL #	TIME	VOL. (gal.)	ORP	CND	TMP	DO	pH	Fe ²⁺	Fe _T	
MW-1	1115	2.00	NA	1148	69.8	NA	6.69	NA	NA	Sample for: <u>70XYS</u> TBA, AND ETHANOL TPHg TPHd 8260 BTEX MTBE Metals Purging Method: PVC Bailer/Pump/Disp. Bailer
Calc. purge	1118	4.00	↓	1147	69.8	↓	6.71	↓	↓	
volume	1121	7.06	↓	1148	69.8	↓	6.75	↓	↓	

COMMENTS: color, turbidity, recharge, sheen, odor
CLEAR, low, poor, sheen, odor
 POST DEPTH TO WATER: 9.78 SAMPLE TIME: 1200

WELL #	TIME	VOL. (gal.)	ORP	CND	TMP	DO	pH	Fe ²⁺	Fe _T	
MW-3	1127	2.00	NA	832	70.1	NA	6.82	NA	NA	Sample for: <u>70XYS</u> TBA, AND ETHANOL TPHg TPHd 8260 BTEX MTBE Metals Purging Method: PVC Bailer/Pump/Disp. Bailer
Calc. purge	1129	3.00	↓	833	70.3	↓	6.78	↓	↓	
volume	1131	5.00	↓	832	70.5	↓	6.78	↓	↓	

COMMENTS: color, turbidity, recharge, sheen, odor
CLOUDY, low, poor, slight sheen, strong odor
 POST DEPTH TO WATER: 12.83 SAMPLE TIME: 1215

WELL #	TIME	VOL. (gal.)	ORP	CND	TMP	DO	pH	Fe ²⁺	Fe _T	
MW-2	1138	2.00	NA	1171	65.9	NA	6.83	NA	NA	Sample for: <u>70XYS</u> TBA, AND ETHANOL TPHg TPHd 8260 BTEX MTBE Metals Purging Method: PVC Bailer/Pump/Disp. Bailer
Calc. purge	1140	3.00	↓	1172	65.6	↓	6.81	↓	↓	
volume	1142	5.00	↓	1172	65.6	↓	6.79	↓	↓	

COMMENTS: color, turbidity, recharge, sheen, odor
CLEAR, low, poor, slight sheen, strong odor
 POST DEPTH TO WATER: 14.46 SAMPLE TIME: 1230

CLEARWATER GROUP

Groundwater Monitoring and Sampling Field Procedures

Groundwater Monitoring

Prior to beginning, a decontamination area is established. Decontamination procedures consist of scrubbing downhole equipment in an Alconox® solution wash (wash solution is pumped through any purging pumps used), and rinsing in a first rinse of potable water and a second rinse of potable water or deionized water if the latter is required. Any non-dedicated downhole equipment is decontaminated prior to use.

Prior to gauging, purging, and sampling a well, caps for all on-site wells should be opened to allow atmospheric pressure to equalize if local groundwater is under confined or semi-confined conditions. The static water level is measured to the nearest 0.01 feet with an electronic water sounder. Depth to bottom is typically measured once per year, at the request of the project manager, and during Clearwater's first visit to a site. If historical analytical data are not available, with which to establish a reliable order of increasing well contamination, the water sounder and tape will be decontaminated between each well. Floating separate-phase hydrocarbons (SPH) where suspected or observed, will be collected using a clear, open-ended product bailer, and the thickness is measured to the nearest 0.01 feet in the bailer. SPH may alternatively be measured with an electronic interface probe. Any monitoring well containing a measurable thickness of SPH before or during purging is not additionally purged and no sample is collected from that well. Wells containing hydrocarbon sheen are sampled, unless otherwise specified by the project manager. Field observations of well integrity, water level and floating product thicknesses are noted on the Gauging Data/Purge Calculations form.

Well Purging

Each monitoring well to be sampled is purged using either a PVC bailer or a submersible pump. Physical parameters (pH, temperature and conductivity) of the purge water are monitored during purging activities to assess if the water sample collected is representative of the aquifer. If required, parameters such as dissolved oxygen, turbidity, salinity etc. are also measured. Samples are considered representative if parameter stability is achieved. Stability is defined as a change of less than 0.25 pH units, less than 10% change in conductivity in micro mhos, and less than 1.0 degree centigrade (1.8 degrees Fahrenheit) change in temperature. Parameters are measured in a discreet sample decanted from the bailer separately from the rest of the purge water. Parameters are measured at least four times during purging: initially, and at purging volume intervals of one casing volume. Purging continues until three well casing volumes have been removed or until the well completely dewater. Wells that dewater or demonstrate a slow recharge rate may be sampled after fewer than three well volumes have been removed. Well purging information is recorded on the Purge Data sheet. All meters used to measure parameters are calibrated daily. Investigation derived wastes (purge and rinseate water) is handled in one of three ways: 1) Purge and rinseate water is sealed, labeled, and stored on site in D.O.T.-approved 55-gallon drums. After being chemically profiled, the water is removed to an appropriate disposal facility. 2) Purge and rinseate water is collected into a 250-gallon portable holding tank and transported to the Clearwater equipment yard in Point Richmond, CA. At the yard the investigation derived waste is then transferred to 55-gallon drums pending disposal at an appropriate disposal facility, or 3) Purge and rinseate water is collected in a 250-gallon portable holding tank and transported to the appropriate disposal facility. The applicable method will be indicated in the field log sheets and the corresponding technical report.

Groundwater Sample Collection

Groundwater samples are collected immediately after purging, with the following exception: If the purging rate exceeds well recharge rate, samples are collected when the well has recharged to at least 80% of its static water level. If recharge is extremely slow, the well is allowed to recharge for at least two hours, if practicable, or until sufficient volume for sampling has accumulated. The well is sampled within 24 hours of purging or is re-purged. Samples are collected using polyethylene bailers, either disposable or dedicated to the well. Samples being analyzed for compounds most sensitive to volatilization are collected first. Water samples are placed in appropriate laboratory-supplied containers, labeled, documented on a chain of custody form and placed on ice in a chilled cooler for transport to a state-certified analytical laboratory. Analytical detection limits match or surpass standards required by relevant local or regional guidelines.

Quality Assurance Procedures

To prevent contamination of the samples, Clearwater personnel adhere to the following procedures in the field:

- A new, clean pair of latex gloves is put on prior to sampling each well.
- Wells are gauged, purged and groundwater samples are collected in the expected order of increasing degree of contamination based on historical analytical results.
- All purging equipment is thoroughly decontaminated between each well, using the procedures previously described at the beginning of this section.
- During sample collection for volatile organic analysis, the amount of air passing through the sample is minimized. This helps prevent the air from stripping the volatiles from the water. Sample bottles are filled by slowly running the sample down the side of the bottle until there is a convex meniscus over the mouth of the bottle. The lid is carefully screwed onto the bottle such that no air bubbles are present within the bottle. If a bubble is present, the cap is removed and additional water is added to the sample container. After resealing the sample container, if bubbles still are present inside, the sample container is discarded and the procedure is repeated with a new container.

Laboratory and field handling procedures may be monitored, if required by the client or regulators, by including quality control (QC) samples for analysis with the groundwater samples. Examples of different types of QC samples are as follows:

- Trip blanks are prepared at the analytical laboratory by laboratory personnel to check field handling procedures. Trip blanks are transported to the project site in the same manner as the laboratory-supplied sample containers to be filled. They are not opened, and are returned to the laboratory with the samples collected. Trip blanks are analyzed for purgeable organic compounds.
- Equipment blanks are prepared in the field to determine if decontamination of field sampling equipment has been effective. The sampling equipment used to collect the groundwater samples is rinsed with distilled water which is then decanted into laboratory-supplied containers. The equipment blanks are transported to the laboratory, and are analyzed for the same chemical constituents as the samples collected at the site.
- Duplicates are collected at the same time standard groundwater samples are collected; They are analyzed for the same compounds in order to verify the reproducibility of laboratory data. They are usually collected from only one well per sampling event. The duplicate is assigned an identification number that will not associate it with the source well.

Generally, trip blanks and field blanks verify field handling and transportation procedures. Duplicates verify laboratory procedures. The configuration of QC samples is determined by Clearwater depending on site conditions and regulatory requirements.



Report Number : 46982

Date : 11/22/2005

Jim Ho
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 3 Water Samples
Project Name : NAZ EAGLE GAS STATION
Project Number : ZP046E

Dear Mr. Ho,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 46982

Date : 11/22/2005

Subject : 3 Water Samples
Project Name : NAZ EAGLE GAS STATION
Project Number : ZP046E

Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for sample MW-3.

Approved By: _____

A handwritten signature in black ink, appearing to read "Joel Kiff", is written over a horizontal line. Below the signature, the name "Joel Kiff" is printed in a small, sans-serif font.



Report Number : 46982

Date : 11/22/2005

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046E**

Sample : **MW-1**

Matrix : Water

Lab Number : 46982-01

Sample Date :11/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 50	50	ug/L	EPA 8260B	11/21/2005
Toluene	< 50	50	ug/L	EPA 8260B	11/21/2005
Ethylbenzene	< 50	50	ug/L	EPA 8260B	11/21/2005
Total Xylenes	< 50	50	ug/L	EPA 8260B	11/21/2005
Methyl-t-butyl ether (MTBE)	3800	50	ug/L	EPA 8260B	11/21/2005
Diisopropyl ether (DIPE)	< 50	50	ug/L	EPA 8260B	11/21/2005
Ethyl-t-butyl ether (ETBE)	< 50	50	ug/L	EPA 8260B	11/21/2005
Tert-amyl methyl ether (TAME)	< 50	50	ug/L	EPA 8260B	11/21/2005
Tert-Butanol	140000	250	ug/L	EPA 8260B	11/21/2005
Methanol	< 5000	5000	ug/L	EPA 8260B	11/21/2005
Ethanol	< 500	500	ug/L	EPA 8260B	11/21/2005
1,2-Dichloroethane	< 50	50	ug/L	EPA 8260B	11/21/2005
1,2-Dibromoethane	< 50	50	ug/L	EPA 8260B	11/21/2005
TPH as Gasoline	< 5000	5000	ug/L	EPA 8260B	11/21/2005
Toluene - d8 (Surr)	98.0		% Recovery	EPA 8260B	11/21/2005
4-Bromofluorobenzene (Surr)	116		% Recovery	EPA 8260B	11/21/2005
TPH as Diesel	3600	50	ug/L	M EPA 8015	11/19/2005
Octacosane (Diesel Surrogate)	94.4		% Recovery	M EPA 8015	11/19/2005

Approved By:

Joel Kiff



Report Number : 46982

Date : 11/22/2005

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046E**

Sample : **MW-2**

Matrix : Water

Lab Number : 46982-03

Sample Date :11/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 700	700	ug/L	EPA 8260B	11/21/2005
Toluene	< 700	700	ug/L	EPA 8260B	11/21/2005
Ethylbenzene	< 700	700	ug/L	EPA 8260B	11/21/2005
Total Xylenes	< 700	700	ug/L	EPA 8260B	11/21/2005
Methyl-t-butyl ether (MTBE)	430000	1500	ug/L	EPA 8260B	11/20/2005
Diisopropyl ether (DIPE)	< 700	700	ug/L	EPA 8260B	11/21/2005
Ethyl-t-butyl ether (ETBE)	< 700	700	ug/L	EPA 8260B	11/21/2005
Tert-amyl methyl ether (TAME)	2100	700	ug/L	EPA 8260B	11/21/2005
Tert-Butanol	130000	7000	ug/L	EPA 8260B	11/20/2005
Methanol	< 100000	100000	ug/L	EPA 8260B	11/21/2005
Ethanol	< 7000	7000	ug/L	EPA 8260B	11/21/2005
1,2-Dichloroethane	< 700	700	ug/L	EPA 8260B	11/21/2005
1,2-Dibromoethane	< 700	700	ug/L	EPA 8260B	11/21/2005
TPH as Gasoline	< 70000	70000	ug/L	EPA 8260B	11/21/2005
Toluene - d8 (Surr)	98.1		% Recovery	EPA 8260B	11/21/2005
4-Bromofluorobenzene (Surr)	116		% Recovery	EPA 8260B	11/21/2005
TPH as Diesel	890	50	ug/L	M EPA 8015	11/19/2005
Octacosane (Diesel Surrogate)	97.8		% Recovery	M EPA 8015	11/19/2005

Approved By:

Joel Kiff

Report Number : 46982

Date : 11/22/2005

QC Report : Method Blank Data

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046E**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/18/2005
Octacosane (Diesel Surrogate)	96.0		%	M EPA 8015	11/18/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/20/2005
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	11/20/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	11/20/2005
Methanol	< 50	50	ug/L	EPA 8260B	11/20/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/20/2005
Toluene - d8 (Surr)	97.5		%	EPA 8260B	11/20/2005
4-Bromofluorobenzene (Surr)	115		%	EPA 8260B	11/20/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/21/2005
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	11/21/2005
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	11/21/2005
Methanol	< 50	50	ug/L	EPA 8260B	11/21/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/21/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene - d8 (Surr)	98.3		%	EPA 8260B	11/21/2005
4-Bromofluorobenzene (Surr)	116		%	EPA 8260B	11/21/2005

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 46982

Date : 11/22/2005

Project Name : **NAZ EAGLE GAS STATION**

Project Number : **ZP046E**

Sample : **MW-3**

Matrix : Water

Lab Number : 46982-02

Sample Date :11/16/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 50	50	ug/L	EPA 8260B	11/20/2005
Toluene	< 50	50	ug/L	EPA 8260B	11/20/2005
Ethylbenzene	< 50	50	ug/L	EPA 8260B	11/20/2005
Total Xylenes	< 50	50	ug/L	EPA 8260B	11/20/2005
Methyl-t-butyl ether (MTBE)	37000	50	ug/L	EPA 8260B	11/20/2005
Diisopropyl ether (DIPE)	< 50	50	ug/L	EPA 8260B	11/20/2005
Ethyl-t-butyl ether (ETBE)	< 50	50	ug/L	EPA 8260B	11/20/2005
Tert-amyl methyl ether (TAME)	190	50	ug/L	EPA 8260B	11/20/2005
Tert-Butanol	38000	250	ug/L	EPA 8260B	11/20/2005
Methanol	< 5000	5000	ug/L	EPA 8260B	11/20/2005
Ethanol	< 500	500	ug/L	EPA 8260B	11/20/2005
1,2-Dichloroethane	< 50	50	ug/L	EPA 8260B	11/20/2005
1,2-Dibromoethane	< 50	50	ug/L	EPA 8260B	11/20/2005
TPH as Gasoline	< 5000	5000	ug/L	EPA 8260B	11/20/2005
Toluene - d8 (Surr)	97.7		% Recovery	EPA 8260B	11/20/2005
4-Bromofluorobenzene (Surr)	118		% Recovery	EPA 8260B	11/20/2005
TPH as Diesel	< 200	200	ug/L	M EPA 8015	11/19/2005
Octacosane (Diesel Surrogate)	95.6		% Recovery	M EPA 8015	11/19/2005

Approved By:

Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 46982

Date : 11/22/2005

Project Name : **NAZ EAGLE GAS**

Project Number : **ZP046E**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	11/20/05	92.4	70-130
Toluene	40.0	ug/L	EPA 8260B	11/20/05	90.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/20/05	94.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/20/05	107	70-130
Benzene	40.0	ug/L	EPA 8260B	11/21/05	96.8	70-130
Toluene	40.0	ug/L	EPA 8260B	11/21/05	95.0	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/21/05	91.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/21/05	107	70-130

KIFF ANALYTICAL, LLC

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Approved By:


Joel Kiff



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 Davis, CA 95616
 Lab: 530.297.4800
 Fax: 530.297.4808

Lab No. 46982 Page 1 of 1

Project Contact (Hardcopy or PDF To): Jim Ho California EDF Report? Yes No

Chain-of-Custody Record and Analysis Request

Company/Address: CLEARWATER GROUP Recommended but not mandatory to complete this section:
229 TEWKSBURY AVE. #4, RICHMOND, CA Sampling Company Log Code: CWGC

Phone No.: (510) 307-9943 FAX No.: (510) 232-2823 Global ID: T-06-05-300-21-9

Project Number: ZPO46E P.O. No.: _____ EDF Deliverable To (Email Address): JHOES@CLEARWATERGROUP.COM

Project Name: NAZ Eagle GAS STATION Sampler Signature: ROBERT BERRY

Project Address: 4301 SAN LEANDRO ST. OAKLAND, CA

Sample Designation	Sampling		Container	Preservative				Matrix		BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only
	Date	Time	40 ml VOA SLEEVE	HCl	HNO ₃	ICE	NONE	WATER	SOIL															

<u>MW-1</u>	<u>11/16/05</u>	<u>12016</u>		<u>X</u>				<u>X</u>			<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>01</u>
<u>MW-2</u>	<u>↓</u>	<u>1215</u>		<u>↓</u>				<u>↓</u>			<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>02</u>
<u>MW-3</u>	<u>↓</u>	<u>1230</u>		<u>↓</u>				<u>↓</u>			<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>03</u>

Relinquished by: <u>ROBERT BERRY</u>	Date: <u>11/16/05</u>	Time: <u>1430</u>	Received by: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____
Relinquished by: _____	Date: <u>11/20/05</u>	Time: <u>1026</u>	Received by Laboratory: <u>Michelle Spencer</u>

Remarks: _____

Sample Receipt
 Temp °C 2.0 Therm. ID# JK-1
 Initial MAS Date 11/20/05
 Time 1425 Coolant present Y/N

Bill to: KIFF ANALYTICAL