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 # ZP046I

Dear Mr. Wickham,

As the legally authorized representative of the above-referenced project location, I have reviewed the *Quarterly Groundwater Monitoring Report – Fourth Quarter 2007* prepared by my consultant of record, Clearwater Group. I declare, under penalty of perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Sincerely,

Muhamad Jamil
Mr. Muhammad Jamil
Date: 2-3-08

CLEARWATER
GROUP
Environmental Services

January 28, 2008

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

Re: ***Quarterly Groundwater Monitoring Report – Fourth Quarter 2007***
Eagle Gas Station
4301 San Leandro Street
Oakland, California 94601
LOP Site ID# 2118
USTCF Claim No. 014551
Clearwater Project No. ZP046I

Dear Mr. Wickham:

Clearwater Group (Clearwater) has prepared this Quarterly Groundwater Monitoring Report - Fourth Quarter 2007, for the Eagle Gas Station site. This report presents the groundwater monitoring activities and associated results for the groundwater monitoring performed on November 13, 14, and 16, 2007.

SITE DESCRIPTION

The site is located in the southern portion of the City of Oakland, Alameda County, California, at the southern corner of the intersection of San Leandro Street and High Street. The site is located approximately 1,100 feet northeast of Interstate Highway 880 (**Figure 1**). The site is bounded by commercial property to the southeast and southwest, by High Street to the northwest, and by San Leandro Street to the northeast (**Figure 2**). The site is operated as a gas station and convenience store.

BACKGROUND

On April 21 and 22, 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 hydrocarbon odors were reportedly observed emanating from the excavation pit of the USTs. Five soil samples and three groundwater samples were collected from the UST excavation for confirmation sampling after completion of the UST excavation. Field observations and laboratory analysis indicated that an unauthorized release of petroleum hydrocarbons had occurred. The former UST excavation is shown in **Figure 2** and was defined by driven steel shoring installed to protect the on-site and off-site buildings prior to the field activities.

In a letter dated May 10, 1999, Alameda County Environmental Health Services (ACEH) staff recommended that the soil at the site be remediated by over-excavation and that "as much groundwater as possible" be pumped from the excavation. Approximately 800 tons of petroleum hydrocarbon-impacted soil were excavated and disposed of as Class II non-hazardous waste, and approximately 1,000 gallons of petroleum hydrocarbon-impacted groundwater was pumped and removed from the site. Groundwater did not recharge quickly after the initial pumping. Existing on-site and off-site structures and associated shoring 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 methyl-tert-butyl-ether (MTBE) remained.

On August 4 and 5, 1999, approximately 100 linear feet of product piping was removed. Vent piping from between the former USTs and the southern corner of the on-site building was also removed. All piping was cut up and disposed of as scrap metal. On August 5, 1999, six confirmation soil samples were collected along the piping trench approximately 3 feet below ground surface (bgs). In addition, one soil sample was collected from each of the four former fuel dispensers. Laboratory analytical results indicated that petroleum hydrocarbon impacts remained along the piping trenches.

On September 26, 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. The three borings were completed as groundwater-monitoring wells (**Figure 2**) using clean, flush-threaded, 2-inch diameter polyvinyl chloride (PVC) for the well casing. The construction data for these three wells are presented in **Table 1**.

On October 3 and 10, 2000, Clearwater surveyed the top-of-the-casing (TOC) elevation of 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 (µg/L) to 250,000 µg/L total petroleum hydrocarbon as gasoline (TPH-g) and 33,000 µg/L to 400,000 µg/L MTBE.

On August 3, 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, ACEH staff, in correspondence dated October 18, 2001, recommended postponing the installation of the additional off-site wells. Instead, ACEH staff 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 on August 3, 2001. Quarterly monitoring resumed in July 2003 and has since continued. The historical groundwater elevation and analytical results are listed in **Table 2.**

On January 9, 2004, after completing the review of the *Third Quarter 2003 Groundwater Monitoring Report*, ACEH staff requested a workplan that included additional on-site and off-site subsurface investigations to address the extent of groundwater impacts on the site. Clearwater submitted its *Interim Remedial Action Plan* (IRAP), as requested by ACEH staff, on January 14, 2004.

ACEH staff provided review comments for the IRAP and the *First Quarter 2005 Groundwater Monitoring Report* in a letter dated May 26, 2005. Pursuant to the ACEH 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, ACEH 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.* On the basis of the recommendations made in the above-mentioned documents and correspondences, Clearwater installed 15 additional on-site wells between December 15 and December 20, 2005, and conducted Geoprobe soil sampling from December 6 to December 9, 2005, and from March 29 to April 2, 2006. In order to monitor the extent of groundwater impacts and the magnitude of vertical migration of contaminants in deeper groundwater, two deep-zone monitoring wells (MW-4D and MW-5D) were installed. These wells were screened between 35 and 45 feet bgs. The construction data for these new wells are presented in **Table 1**. All the wells were surveyed by Clearwater using a global positioning system (GPS) and laser level on March 16 and 28, 2006.

On the basis of apparent on-site groundwater mounding and unusually steep on-site groundwater gradients, ACEH staff requested a check of the groundwater elevation data. Each well's horizontal position was originally determined using a GPS survey in 2005. Clearwater field-checked the well locations of all the groundwater monitoring wells on August 18, 2006, using a 100-foot-long cloth tape. The horizontal distances between wells were measured, and the well positions were triangulated from these measurements. Several well locations were adjusted

slightly on the base map; the revised base map with the resurveyed well locations is shown on **Figure 2** and has been used throughout reports generated since that time.

The TOC elevations of all the wells were remeasured on September 12, 2006, using a survey level and survey staff, accurate to within 1/100th of a foot. The TOC elevation for well MW-1 (northwest corner of site) was the starting datum, and the TOC elevation for all the other wells was calculated as the relative difference from MW-1's TOC elevation. The surveyed TOC elevations were compared with the previously used TOC elevations, which were determined using a laser level. The relative difference in TOC elevation for each well was determined. The maximum vertical difference was found to be 0.12 foot for well IS-3. **Table 2** presents the original elevation values up to May 9, 2005, followed by the resurveyed TOC elevations after that date. The overall groundwater gradient pattern did not significantly change after completion of the monitoring well resurvey.

Sampling analysis for *Escherichia coli* (*E. coli*), total coliform, and water treatment byproducts as residual chlorine was performed in November 2006 on groundwater samples obtained from wells IS-5, MW-8, and MW-7 in an attempt to identify whether on-site groundwater mounding could be caused by water and/or sewer line leaks; both *E. coli* and total coliform were present in IS-5 and MW-8, and water treatment byproducts were present in IS-5, MW-8, and MW-7. Leak testing was performed, and both a crack and an off-set in the sewer line were identified to exist near well IS-1. The sampling results for the *E. coli*, total coliform, and water treatment byproducts were reported in the *Quarterly Groundwater Monitoring Report - Fourth Quarter 2006*, and the sewer line leak test results were reported in the *Quarterly Groundwater Monitoring Report - First Quarter 2007.*

On May 30, 2006, Clearwater submitted its *Soil and Groundwater Investigation Report* to the ACEH, which included an updated Site Conceptual Model for the site. In response to the report, ACEH requested a Workplan to present proposed additional on- and off-site investigations. ACEH staff also provided Technical Comments to be addressed in the Workplan. Clearwater's *Response to Comments* was sent to ACEH on July 7, 2006. ACEH responded with an August 11, 2006, letter with revised Technical Comments to be incorporated into the Workplan. Clearwater submitted its *Revised Workplan* to the ACEH on December 19, 2006. ACEH responded in a letter dated January 4, 2007, with Technical Comments, which were to be addressed and incorporated during the field investigation; submittal of an additional revised Workplan was not requested by ACEH staff.

A *Bioremediation Feasibility Study Report* (Feasibility Report) was submitted July 9, 2007. The Feasibility Report concluded that the bioremediation parameters suggest an environment that is generally anaerobic and reducing. It appears that the general lack of sufficient oxygen and essential nutrients is limiting the degradation of the petroleum hydrocarbons.

On August 2, 2007, Clearwater submitted the *Quarterly Groundwater Monitoring Report - Second Quarter 2007.* On October 12, 2007, Clearwater submitted the *Quarterly Groundwater Monitoring Report - Third Quarter 2007.*

Results of 2007 Soil and Groundwater Investigation
Clearwater submitted its *2007 Soil and Groundwater Investigation Report* (2007 Report) to the ACEH on December 5, 2007. The scope of work presented in the 2007 Report included an inspection of the on-site sanitary sewer lateral, driving and sampling of 15 off-site soil borings, driving of 2 cone-penetrometer test (CPT) borings, installation of additional on-site "deep-zone" groundwater monitoring wells MW-1D and MW-7D, installation of and sampling of 6 shallow soil vapor wells, surveying of 8 well and 15 boring locations using a GPS, and collection of soil samples for a persulfate bench test.

The 2007 Report included a revised Site Conceptual Model (SCM). In the new SCM, the depth of the contact between the clayey gravel layer and the underlying soil has been revised. The site lithology can be conceptually divided into an upper, shallow-zone and a lower, deep-zone. The shallow-zone is generally more clay-rich and the deep-zone is generally coarser grained. The separation between the two zones varies from 25 to 30 feet bgs. The groundwater within the shallow-zone is highly contaminated, whereas the groundwater within the deep-zone is relatively less contaminated. Grab groundwater samples collected from off-site borings indicate that the groundwater contamination within both zones extends offsite and that the extent of contamination has not been defined in either zone.

Clearwater generated the groundwater elevation contour diagrams for the 2007 Report using the same depth-to-water data used for this Fourth Quarter 2007 Groundwater Monitoring Event. With this data set the groundwater elevation contour diagram for the shallow-zone was consistent with previously reported quarterly groundwater elevation contour diagrams. The groundwater elevation contour diagrams for the deep-zone, generated using data from wells MW-1D, MW-4D, MW-5D, and MW-7D, on November 13, 2007, with a second event on November 27, 2007, to confirm the depth-to-groundwater measurements (since the upper-zone groundwater contour pattern did not conform with the shallow-zone groundwater contour pattern), indicated a partial groundwater depression, with a flow direction toward the north.

FOURTH QUARTER 2007 GROUNDWATER MONITORING EVENT

The Fourth Quarter 2007 groundwater monitoring event was performed on November 13, 14, and 16, 2007. The monitoring event included gauging the depths to groundwater, well purging and sampling, and laboratory analysis of groundwater samples. This event included the initial sampling of recently installed deep-zone groundwater monitoring wells MW-1D and MW-7D.

Groundwater Gauging, Purging, and Sampling
On November 13, 2007, the depth to static groundwater in all 20 wells was measured (**Table 1**). An electronic water-level indicator accurate to within 1/100 foot was used to measure the depth

to groundwater from the top of each well casing. All the wells were visually checked for the presence of light non-aqueous phase liquid (LNAPL) during well purging.

Prior to groundwater sampling, all the wells were purged of approximately three well volumes using a disposable polyethylene bailer until the temperature, conductivity, and pH measurements of the purge water stabilized, according to Clearwater's Groundwater Monitoring and Sampling Field Procedures (**Attachment A**). Depth-to-water and well purging data were recorded on Well Gauging/Purging Calculations and Purging Data Sheets (**Attachment B**). Following recovery of water levels to at least 80% of their static levels, groundwater samples were collected from the wells using a new disposable polyethylene bailer for each well. The samples were labeled, documented on a chain-of-custody form, and placed on ice in a chilled cooler for transport to the laboratory. The purge water and rinseate were pumped into an internal tank in the sampling van and removed from the site for disposal at InStrat, Rio Vista, California, a licensed treatment, storage, and disposal facility.

Laboratory Analysis

Groundwater samples were analyzed by Kiff Analytical LLC (Kiff), of Davis, California. Kiff is a California Department of Health Services-certified laboratory. The samples were analyzed by Environmental Protection Agency (EPA) Method 8260B for TPH-g; benzene, toluene, ethylbenzene, and total xylenes (BTEX); and seven oxygenates including MTBE, di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), tert-butanol (TBA). The samples were also analyzed for total petroleum hydrocarbon as diesel (TPH-d) by EPA Method 8015. The laboratory analytical reports (#59652, #59653, and #59685) including the chain-of-custody forms are included in **Attachment C**.

GROUNDWATER MONITORING RESULTS

Observations During Groundwater Sampling

During well purging, apparent petroleum odors were detected emanating from monitoring wells MW-1 through MW-6, MW-8, MW-1D, IS-1 through IS-6, and extraction wells EW-1 and EW-2. Slight sheens were observed in the groundwater samples collected from monitoring wells MW-1, MW-1D, MW-4D, MW-5, IS-1, and IS-4. Sheen was observed on the groundwater samples collected from wells MW-2, MW-4, MW-6, MW-8, IS-2, IS-5, EW-1, and EW-2. Neither sheen nor odor was identified in the groundwater samples collected from monitoring wells MW-7, MW-7D, and MW-5D.

Strong odor and free product were noted on the groundwater samples collected from wells MW-8 and IS-5.

Groundwater purged from wells MW-1D, MW-2, MW-3, MW-4, MW-5D, MW-7D, IS-5, and EW-1 had high turbidity; groundwater in the remaining wells had moderate to low turbidity. The water color ranged from brown to gray to tan.

Groundwater Elevation and Flow Direction

On November 13, 2007, the shallow-zone groundwater elevations ranged from a low of 6.45 feet above mean sea level (msl) in MW-1 to a high of 14.30 feet above msl in IS-4 (**Table 2**). The groundwater elevations in the deep-zone monitoring wells (MW-1D, MW-4D, MW-5D, and MW-7D) ranged from a low of 2.15 feet above msl (MW-7D) to a high of 4.37 feet above msl (MW-1D). The groundwater elevations observed in the shallow-zone wells adjacent to the deep-zone wells ranged from 2.08 (wells MW-1/MW-1D) to 8.78 (wells MW-4/MW-4D) feet higher than those observed in the deep-zone wells. The shallow-zone wells are all screened from 10 feet to 25 feet bgs, and the deep-zone monitoring wells are screened from 35 feet to 45 feet bgs.

The shallow-zone groundwater elevation contour map (**Figure 3**) shows highly variable groundwater flow directions and gradients (i) and an apparent groundwater mound. The steepest gradient is near the north corner of this site. Three representative flow directions and gradients are shown on **Figure 3**. Near the east corner of the site, the gradient is toward the northeast at i = 0.11; along the southwest side of the site, the gradient is 0.22 toward the southwest; and along the northwest side, the gradient is 0.21 toward the northwest.

The apparent groundwater flow direction and gradient in the deep-zone for November 13, 2007 (**Figure 4**), is markedly different from the groundwater flow direction and gradient in the shallow-zone for the same date. The groundwater flow direction and gradient for the deep-zone was determined from the four deep zone wells (MW-1D, MW-4D, MW-5D, and MW-7D). **Figure 4** shows two representative gradients: toward the north at 0.075 and toward the west at 0.125.

In order to check the deep-zone groundwater flow direction and gradient determined for November 13, 2007 (since the results were initially considered anomalous), Clearwater staff returned to the site on November 27, 2007, and resurveyed the top-of-casing elevations of the deep-zone wells relative to the top-of-casing elevation of well MW-1. Depth-to-water measurements within the four deep-zone wells were also remeasured at the same time. The deep-zone groundwater elevation contour pattern for November 27, 2007 is shown on **Figure 5**. Three representative gradients are shown on **Figure 5**: northeast at 0.05, north at 0.067, and northwest at 0.08. The deep-zone well top-of-casing elevations and depth-to-water measurements are presented in **Table 2**.

The groundwater elevation contour patterns for the deep-zone on November 13 and 27, 2007, are similar (**Figures 4** and **5**). This quarterly monitoring event report presents the first determination of the gradient and flow direction in the deep-zone. With the installation of additional groundwater monitoring wells in the deep-zone, a history based on subsequent quarterly groundwater monitoring event data can be built. With additional data the groundwater flow direction and gradient determinations could change significantly.

Groundwater Sample Analytical Results

Consistent with historical data, the primary constituents of concern (COCs) at the site are TPH-g, TPH-d, benzene, MTBE, and TBA. The groundwater sample analytical results are summarized in **Table 2**. TPH-g concentrations were reported below the laboratory method-reporting limit (MRL) in samples collected from all the monitoring wells, except for wells MW-1D (71 µg/L), MW-5D (51 µg/L), MW-6 (5,400 µg/L), IS-2 (15,000 µg/L), and EW-2 (8,100 µg/L). However, the reporting limits ranged from a low of 50 µg/L (MW-4D and MW-5D) to a high of 150,000 µg/L (IS-3). **Figure 6** presents the TPH-g concentration in groundwater for the shallow-zone.

The elevated concentrations for diesel-range hydrocarbons (TPH-d) in the shallow-zone wells ranged from a low of 170 µg/L (MW-1) to a high of 89,000 µg/L (MW-8). TPH-d was not reported above the laboratory MRLs in shallow-zone monitoring wells MW-3, IS-2, IS-5, and EW-2. The MRLs for TPH-d ranged from a low of 100 µg/L (MW-3) to a high of 5,000 µg/L (IS-5) in the shallow-zone monitoring wells. TPH-d was reported in deep-zone monitoring wells MW-1D, MW-5D, and MW-7D at concentrations of 140 µg/L, 3,700 µg/L, and 760 µg/L, respectively. The sample result from well MW-4D did not exceed the MRL of 50 µg/L.

Benzene concentrations reported above the laboratory MRLs ranged from a low of 27 µg/L (MW-3) to a high of 4,900 µg/L (MW-4). Benzene concentrations were not reported above the laboratory MRLs in samples collected from monitoring wells MW-1, MW-1D, MW-4D, MW-5, MW-5D, MW-7, MW-8, IS-1, IS-4, and EW-1, at MRLs ranging from 0.50 µg/L to 700 µg/L. **Figure 7** presents the benzene concentration in groundwater for the shallow-zone.

MTBE concentrations were reported above the laboratory MRLs in all the shallow-zone wells and ranged from a low of 470 µg/L (IS-1) to 880,000 µg/L (IS-3). MTBE concentrations were reported above the laboratory MRLs in deep-zone wells MW-1D, MW-5D, and MW-7D at concentrations of 600 µg/L, 3.1 µg/L, and 760 µg/L, respectively. The sample from deep-zone well MW-4D was below the MRL of 0.50 µg/L. **Figure 8** presents the MTBE concentration in groundwater for the shallow-zone.

TBA concentrations were reported above the laboratory MRLs in all the shallow-zone wells and ranged from 200 µg/L (MW-1) to 300,000 µg/L (MW-5). **Figure 9** presents the TBA concentration in groundwater for the shallow-zone. The high TBA concentrations are likely due to the biodegradation of MTBE. TBA concentrations in wells MW-5 and IS-4 have been steadily increasing over time as MTBE concentrations in these wells have been steadily decreasing (**Table 2**). For example, at well MW-5, during seven quarterly groundwater monitoring events, the MTBE concentration decreased from 480,000 µg/L to 130,000 µg/L (approximately 73% reduction) at the same time the TBA concentration increased from 95,000 µg/L to 620,000 µg/L (approximately 650% increase).

FINDINGS AND CONCLUSIONS

The mounded groundwater elevation contour pattern in the shallow-zone observed during this quarterly monitoring event (**Figure 3**) is consistent with historical shallow-zone groundwater elevation contour patterns observed since February 2006 (First Quarter 2006). A groundwater mound appears to be located between the site building and the two dispenser islands.

The groundwater elevation contour pattern within the deep-zone (**Figure 4**) was determined from data collected from the deep-zone wells MW-1D, MW-4D, MW-5D, and MW-7D on November 13, 2007. The groundwater elevation contours indicate a partial elongated groundwater depression, which appears to discharge due north, at a gradient of 0.075.

Since the deep-zone groundwater elevation contour pattern was unexpected, the depth to groundwater in the deep wells was remeasured on November 27, 2007. The groundwater elevation contour pattern for November 27, 2007, shown on **Figure 5**, indicates a partial groundwater depression, which appears to discharge due north at a gradient of 0.067.

The groundwater sample analytical results indicate that the site groundwater continues to be significantly impacted by TPH-g, TPH-d, benzene, MTBE, and TBA. TBA levels have generally increased over time as MTBE levels have decreased. Free product was noted on the purged water from wells MW-8 and IS-5 during sample collection; this is the first incidence of free product being noted during six years of quarterly groundwater monitoring.

FUTURE ACTIVITIES

Clearwater received ACEH acceptance of the 2007 Soil and Groundwater Investigation Report in a letter dated January 10, 2007. ACEH staff concurred with the use of a soil vapor gas survey to establish the locations of the off-site groundwater monitoring wells, discontinuation of the analyses of natural attenuation parameters from the groundwater sample analyses, installation of four shallow wells for a dual-phase vapor extraction test and repair of the sanitary sewer lateral. A Persulfate Bench Test was performed on soil cuttings and groundwater obtained during the installation of the deep-zone groundwater monitoring wells. The results of the bench test will be presented in a separate report.

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Environmental Services

CERTIFICATION

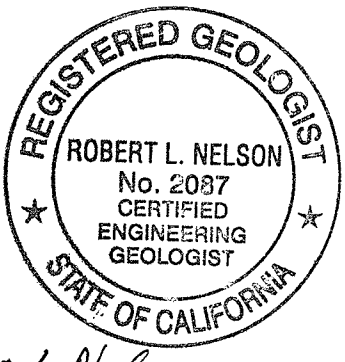
This report was prepared under the supervision of a Professional Geologist registered in the State of California. All statements, conclusions, and recommendations are based solely upon published results from previous consultants, field observations by Clearwater staff, and laboratory analyses performed 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 regulatory agency. A third party should not rely upon the information and interpretation contained in this document.

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.

LICENSED PROFESSIONALS

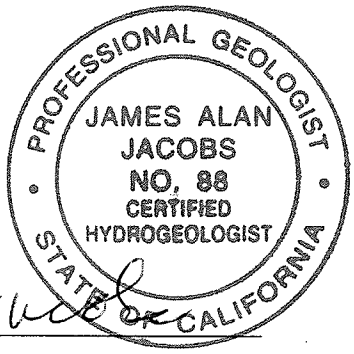
In-house licensed professionals direct all projects. These professionals, including geologists or engineers, shall be guided by the highest standards of ethics, honesty, integrity, fairness, personal honor, and professional conduct. To the fullest extent possible, the licensed professional shall protect the public health and welfare and property in carrying out their professional duties. In the course of normal business, recommendations by the in-house professional may include the use of equipment, services, or products in which the Company has an interest. Therefore, the Company is making full disclosure of potential or perceived conflicts of interest to all parties.

Sincerely,
CLEARWATER GROUP



Robert L. Nelson

Robert L. Nelson, P.G. #6270, C.E.G. #2087
Senior Geologist



James A. Jacobs, P.G. #4815, C.H.G. #88
Chief Hydrogeologist

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

CLEARWATER
GROUP
Environmental Services

FIGURES:

Figure 1: Site Vicinity Map
Figure 2: Site Plan
Figure 3: Shallow-Zone Groundwater Elevation Contour Map –November 13, 2007
Figure 4: Deep-Zone Groundwater Elevation Contour Map –November 13, 2007
Figure 5: Deep-Zone Groundwater Elevation Contour Map – November 27, 2007
Figure 6: Shallow-Zone TPH-gasoline Concentrations in Groundwater (µg/L)
Figure 7: Shallow-Zone Benzene Concentrations in Groundwater (µg/L)
Figure 8: Shallow-Zone MTBE Concentrations in Groundwater (µg/L)
Figure 9: Shallow-Zone TBA Concentrations in Groundwater (µg/L)

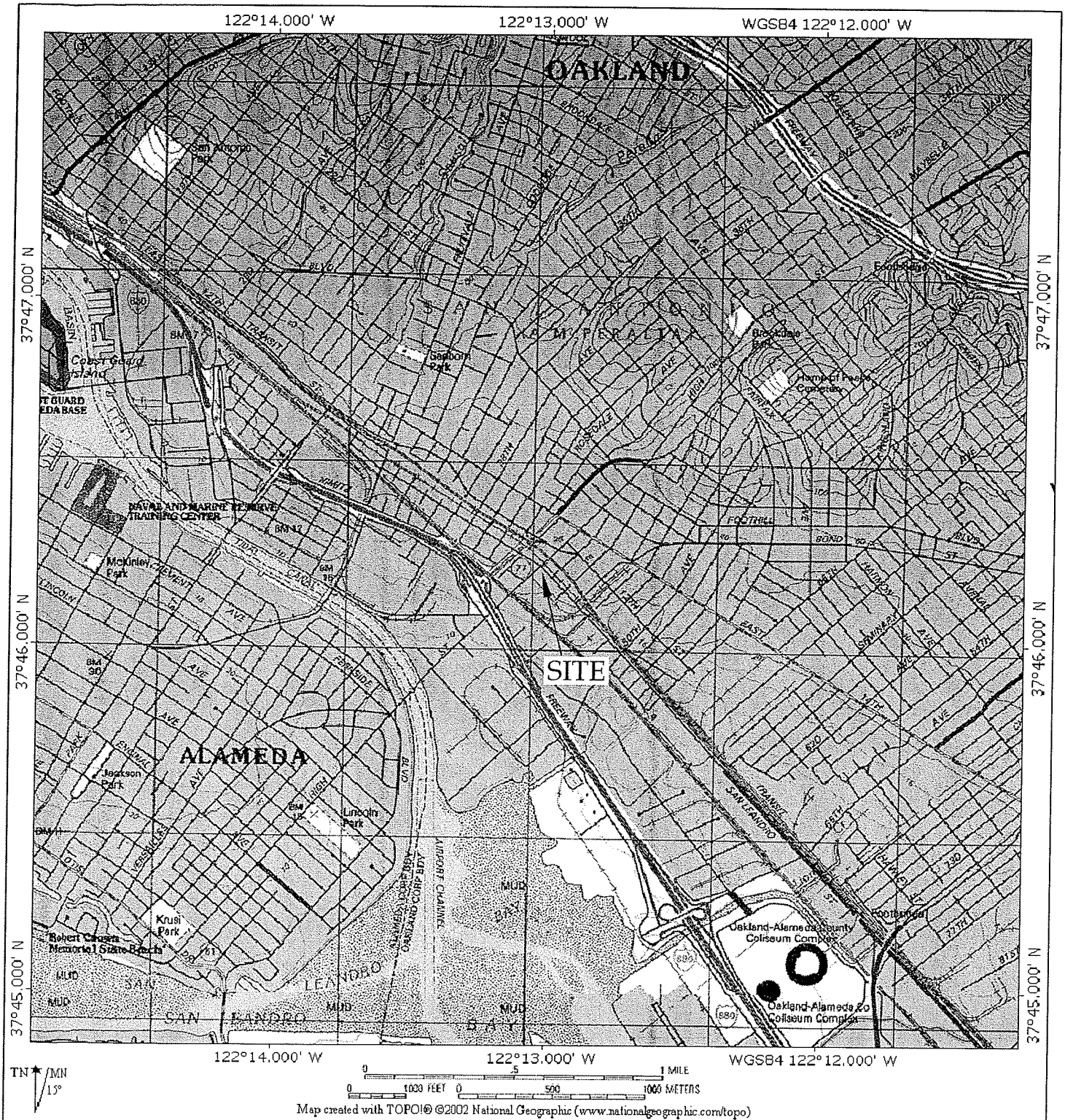
TABLES:

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

ATTACHMENTS:

Attachment A: Groundwater Monitoring and Sampling Field Procedures
Attachment B: Well Gauging/Purging Calculations Data Sheets
Attachment C: Kiff Analytical Reports #59652, #59653, and #59685 with Chain-of-Custody Documents

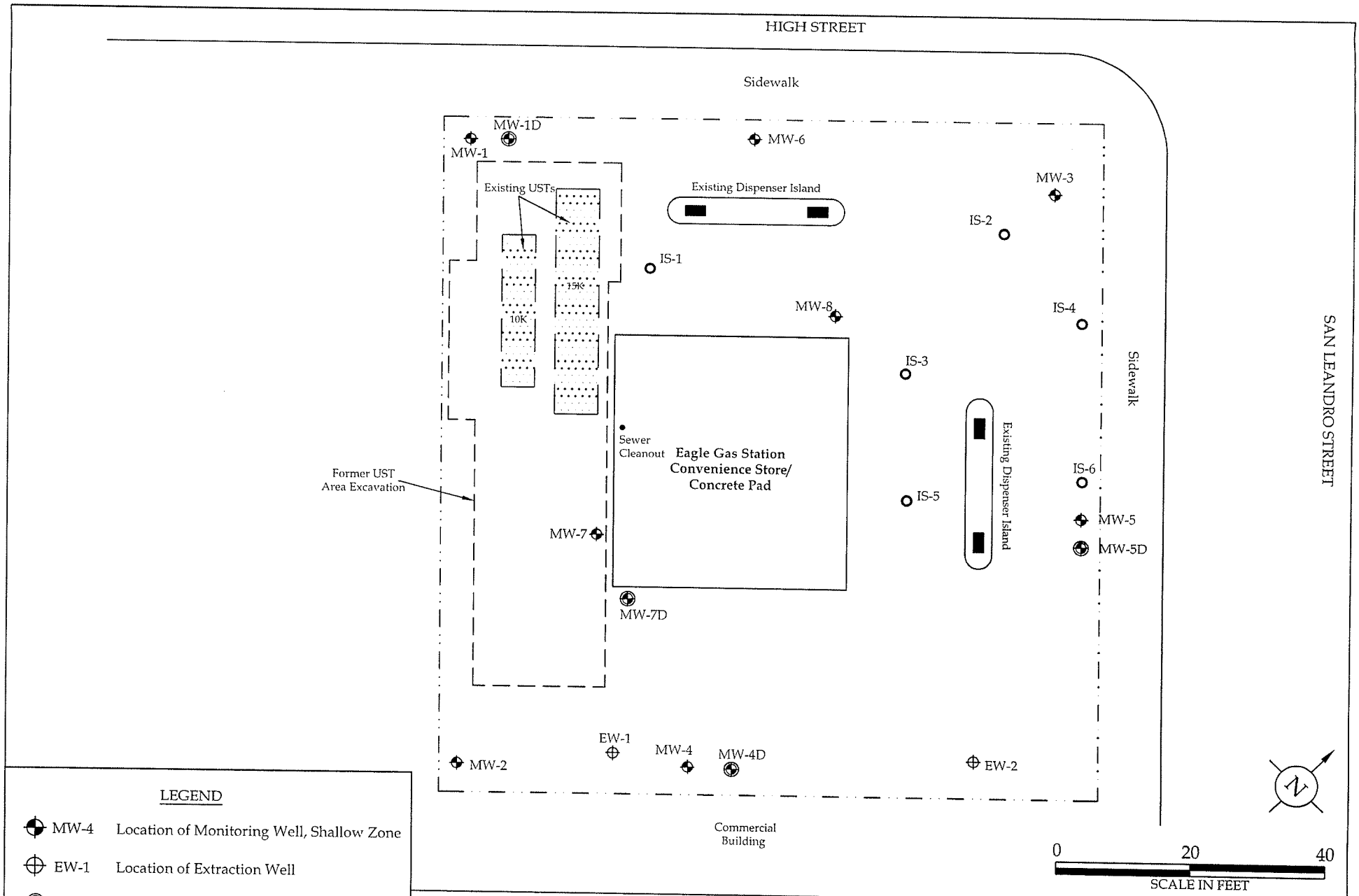
FIGURES



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

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046	**1/08**	**1**



LEGEND

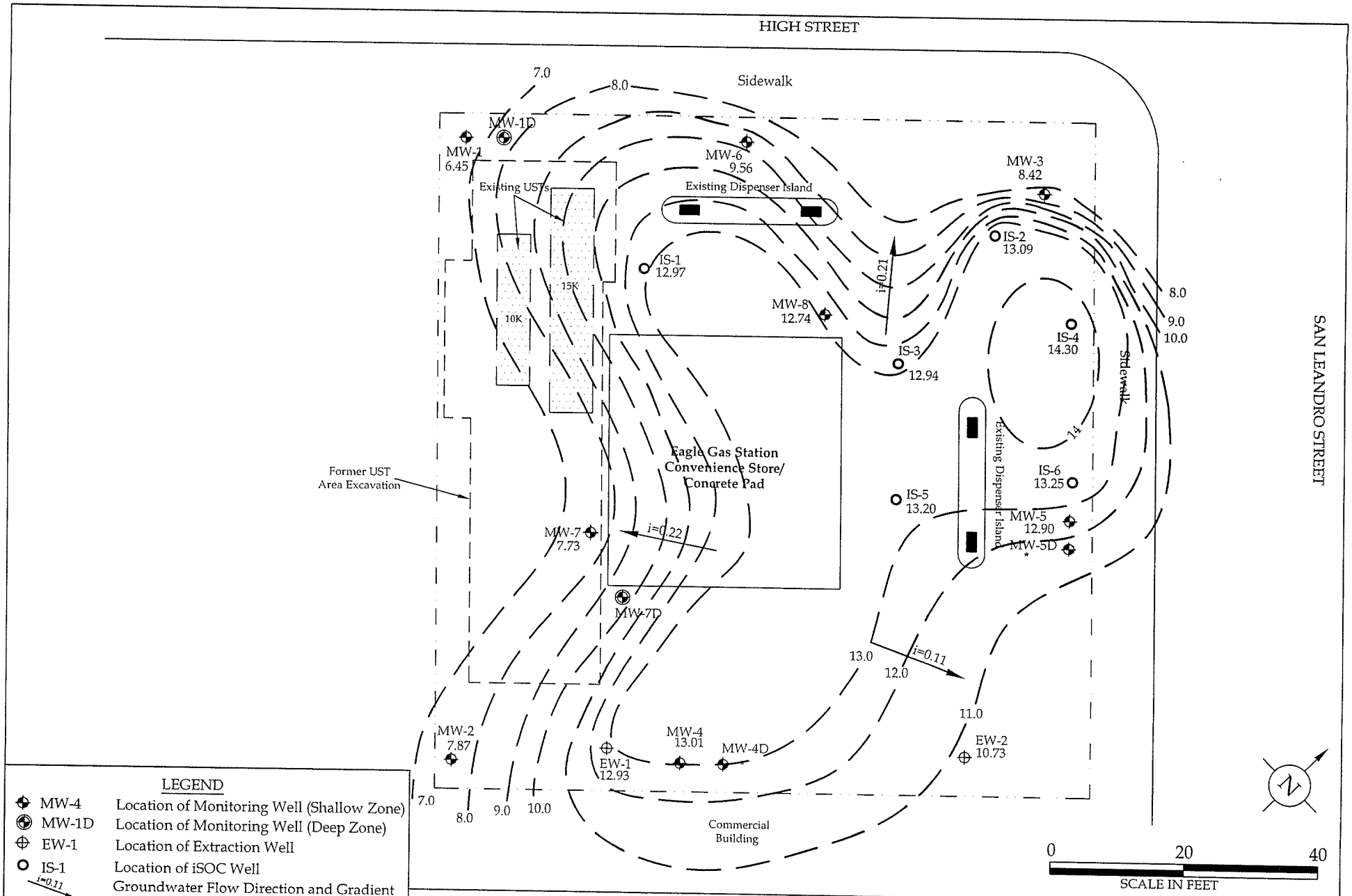
MW-4	Location of Monitoring Well, Shallow Zone
EW-1	Location of Extraction Well
IS-1	Location of iSOC Well
MW-1D	Location of Monitoring Well (Deep Zone)
— · · —	Property Line

Site Plan

Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046	1/08	2



LEGEND

MW-4	Location of Monitoring Well (Shallow Zone)
MW-1D	Location of Monitoring Well (Deep Zone)
EW-1	Location of Extraction Well
IS-1	Location of iSOC Well
i=0.11	Groundwater Flow Direction and Gradient
	Property Line
12.0	Groundwater Elevation Contour
12.04	Groundwater Elevation in Feet Above Mean Sea Level

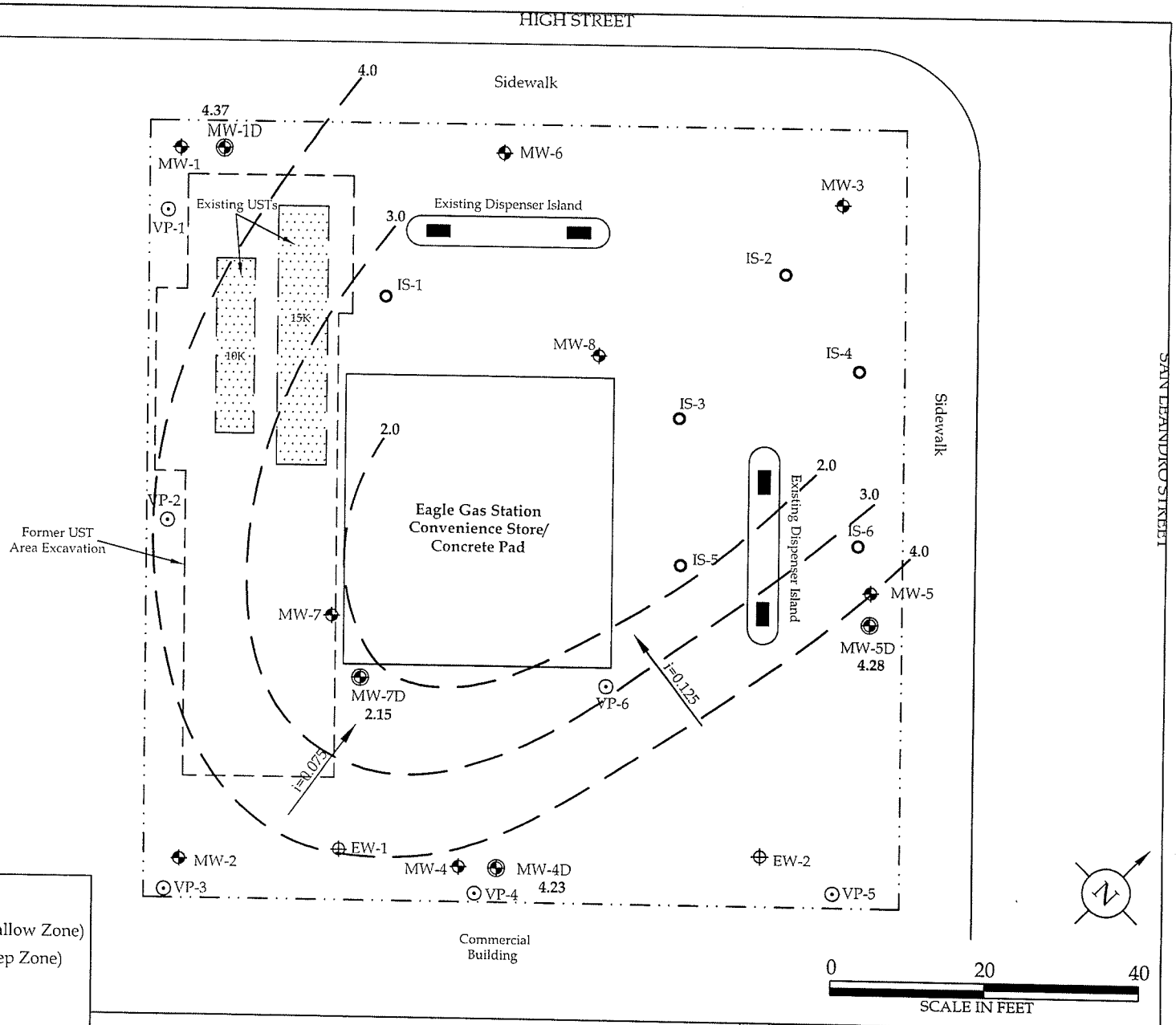
* not included in Contouring

Shallow-Zone Groundwater Elevation Contour Map
November 13, 2007
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	1/08	3

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Figure 3 Groundwater Contour Elevation Map



LEGEND

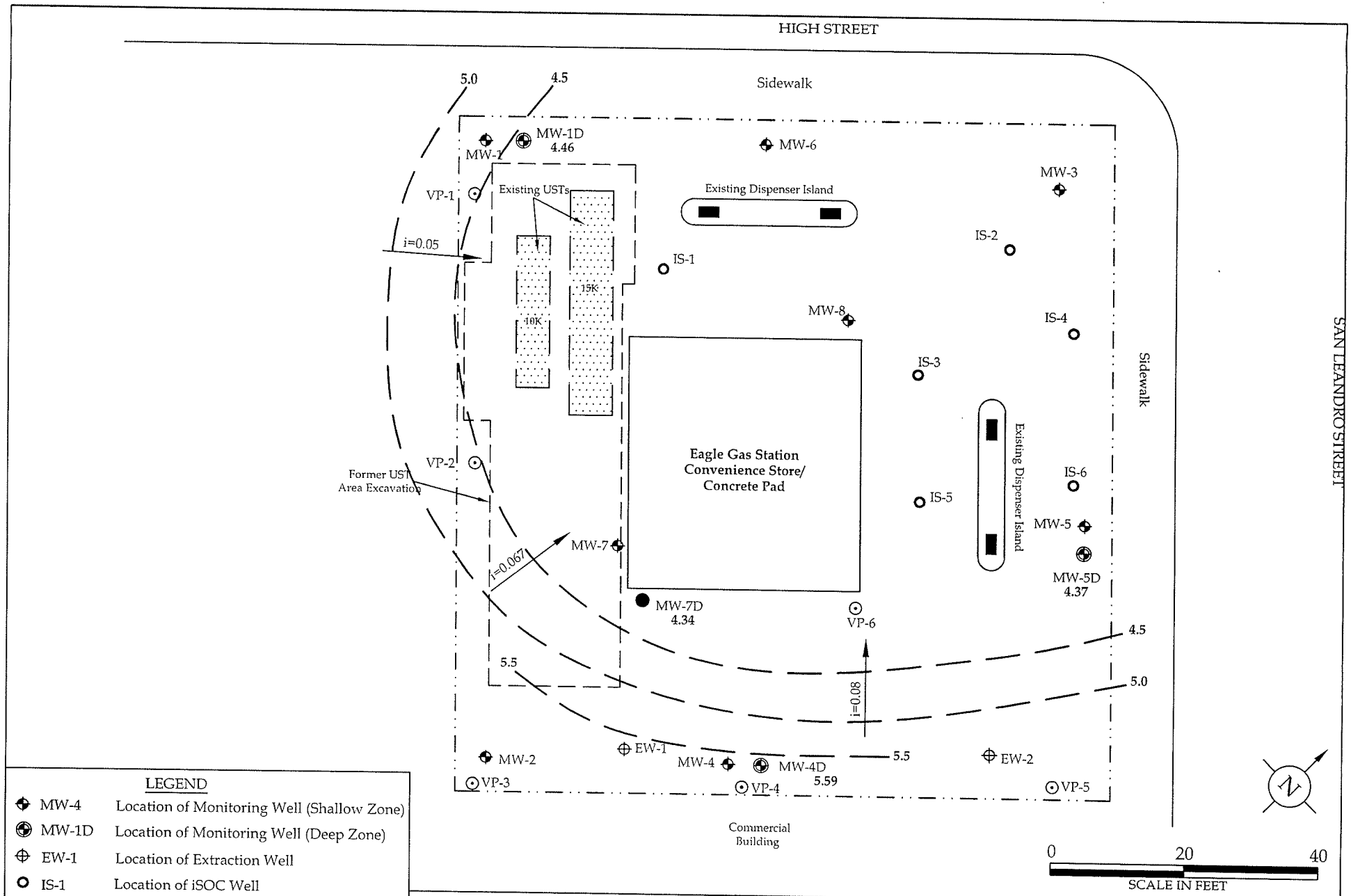
MW-4	Location of Monitoring Well (Shallow Zone)
MW-1D	Location of Monitoring Well (Deep Zone)
EW-1	Location of Extraction Well
IS-1	Location of iSOC Well
VP-1	Soil Vapor Well Location
— —	Property Line
— — 2.0	Groundwater Elevation Contour
2.15	Groundwater Elevation in Feet Above Mean Sea Level

Deep-Zone Groundwater Elevation Contour Map
November 13, 2007
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	1/08	4

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Fig 4 Groundwater Elevation Contour



LEGEND

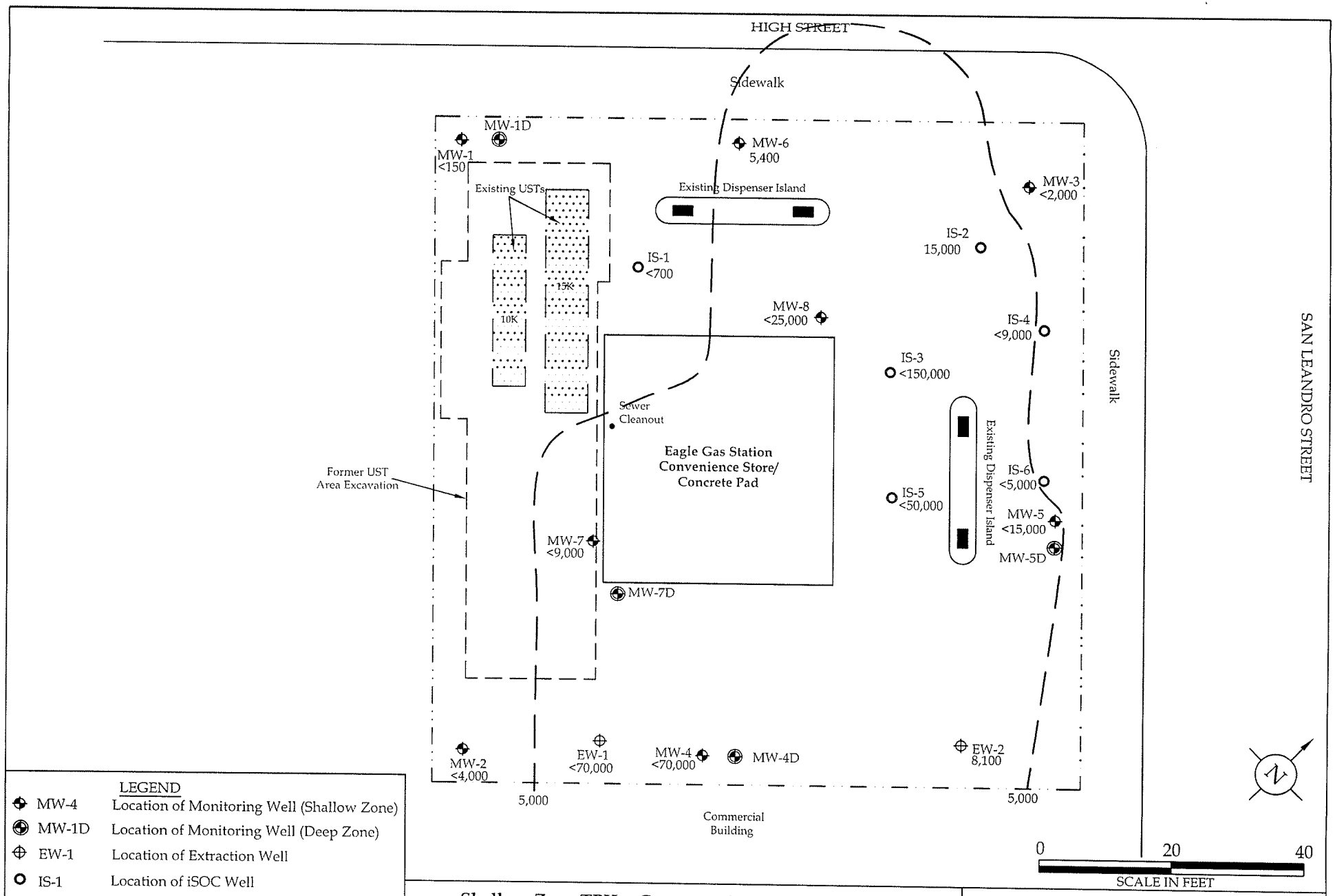
MW-4	Location of Monitoring Well (Shallow Zone)
MW-1D	Location of Monitoring Well (Deep Zone)
EW-1	Location of Extraction Well
IS-1	Location of iSOC Well
VP-1	Soil Vapor Well Location
— · —	Property Line
— — 4.5	Groundwater Elevation Contour
4.34	Groundwater Elevation in Feet Above Mean Sea Level

Deep-Zone Groundwater Elevation Contour Map
November 27, 2007
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	**1/08**	**5**

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Fig 5 Groundwater Elevation Countour



LEGEND

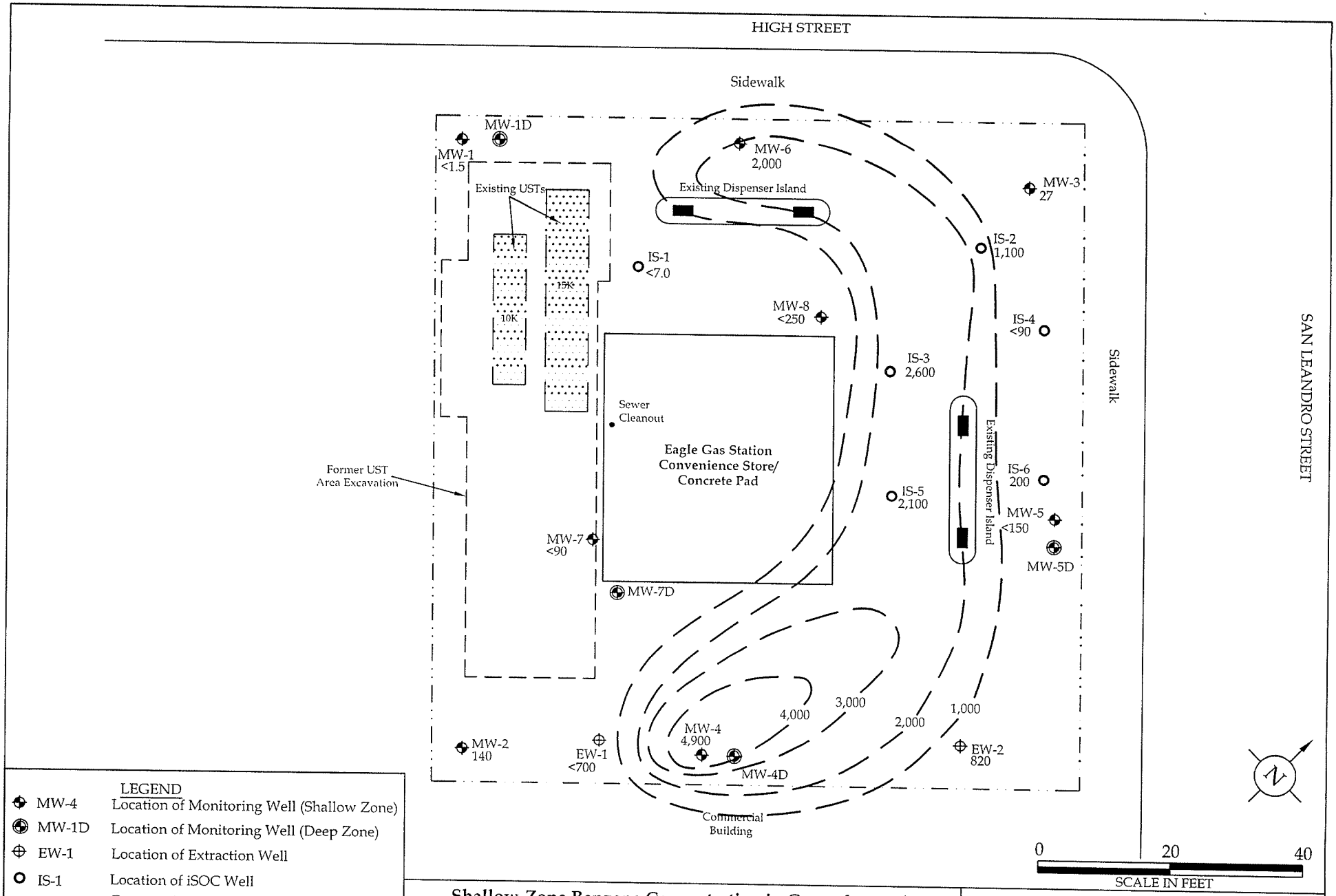
MW-4	Location of Monitoring Well (Shallow Zone)
MW-1D	Location of Monitoring Well (Deep Zone)
EW-1	Location of Extraction Well
IS-1	Location of iSOC Well
	Property Line
10,000	TPH-g Concentration Iso-Contour in µg/L
8,100	TPH-g Concentration in µg/L
<4,000	Not Detected at Indicated Method Reporting Limit

Shallow-Zone TPH-g Concentration in Groundwater (µg/L)
Fourth Quarter 2007 Groundwater Monitoring Event
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	**1/08**	**6**

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Fig 6 TPH-g Concentration groundwater (ug/L), Shallow Zone

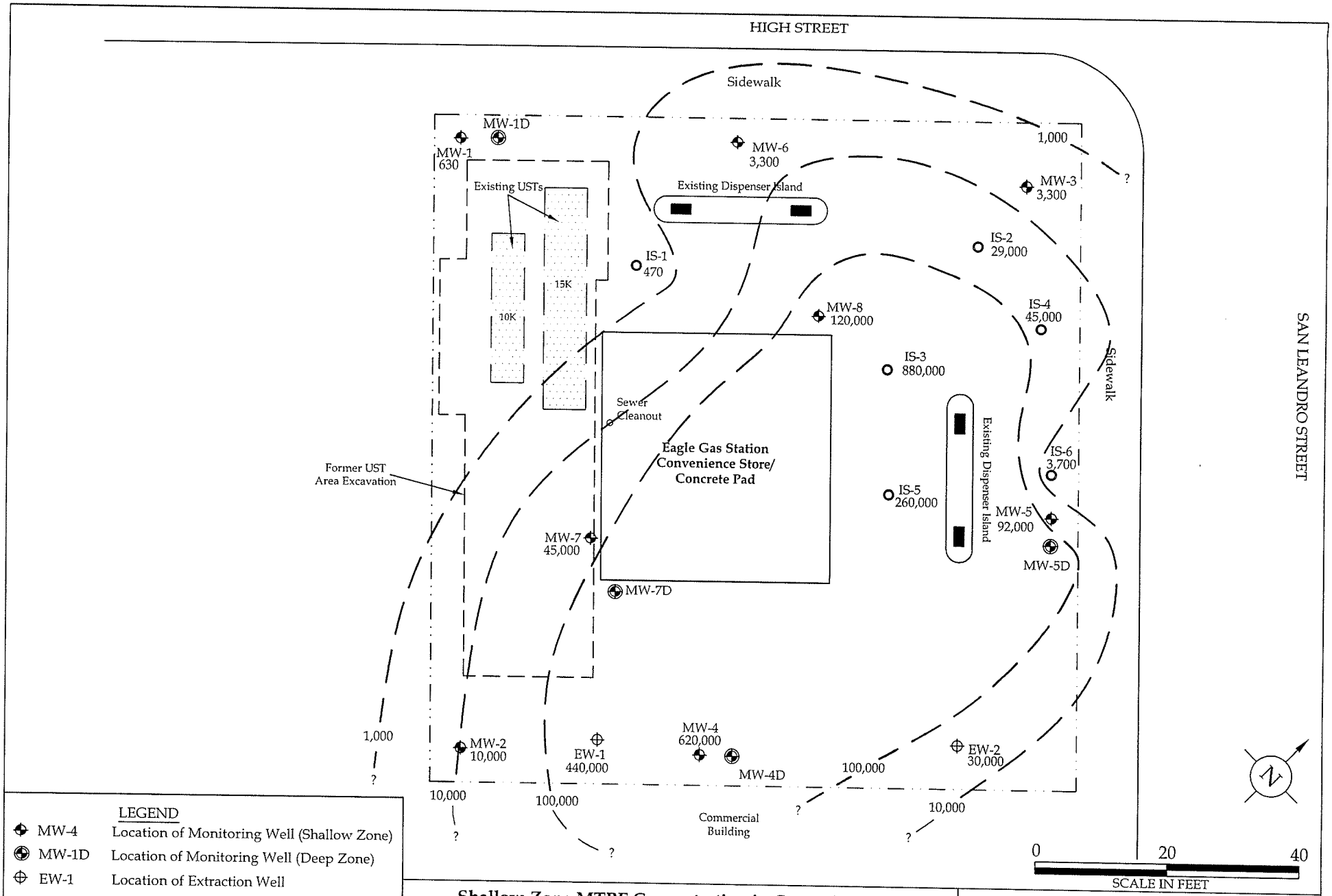


Shallow-Zone Benzene Concentration in Groundwater (µg/L)
Fourth Quarter 2007 Groundwater Monitoring Event
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	**1/08**	**7**

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Fig 7 Benzene Concentration groundwater (ug/L), Shallow Zone

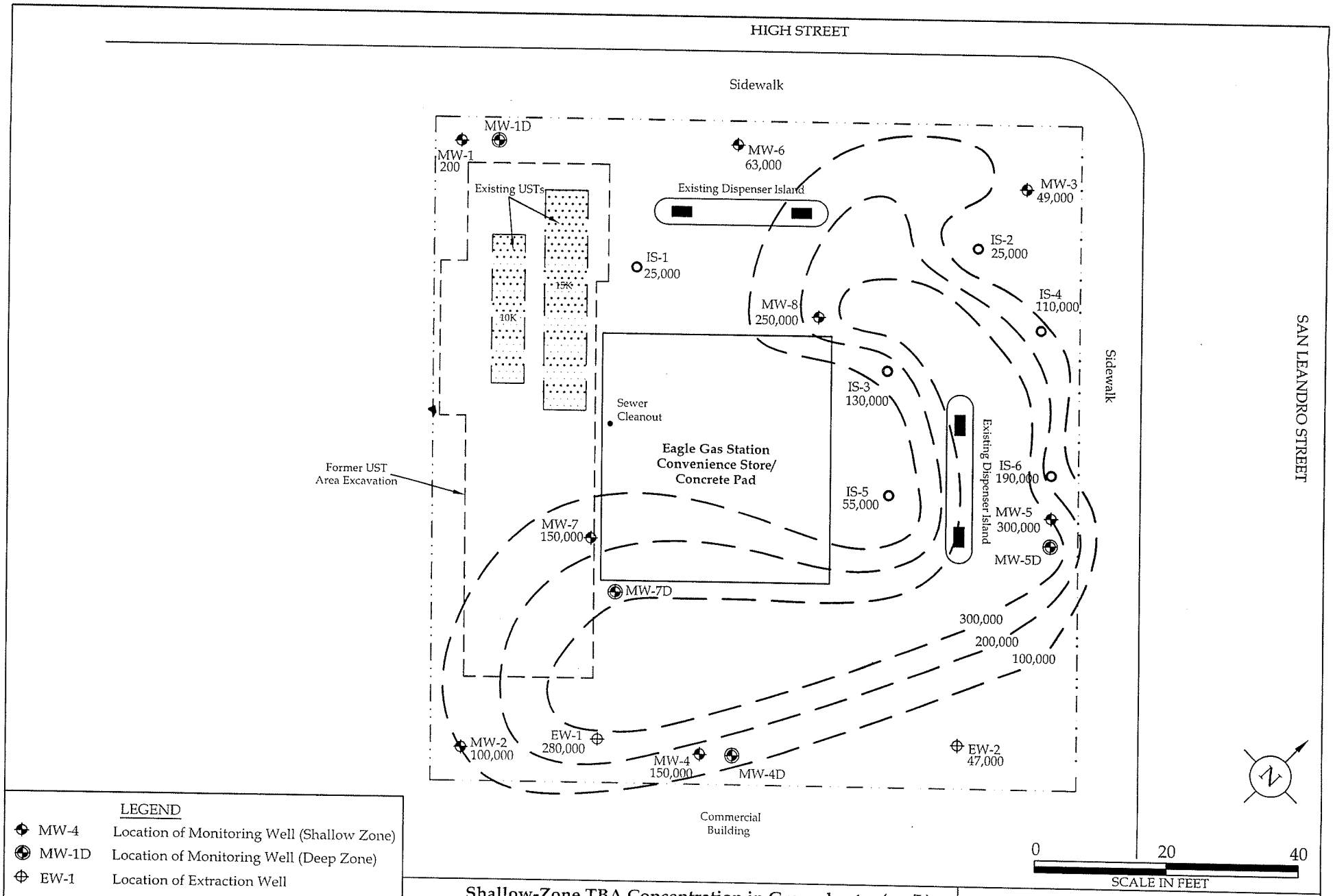


Shallow-Zone MTBE Concentration in Groundwater (µg/L)
Fourth Quarter 2007 Groundwater Monitoring Event
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	**1/08**	**8**

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Fig 8 MTBE Concentration Groundwater (ug/L), Shallow Zone



LEGEND

MW-4	Location of Monitoring Well (Shallow Zone)
MW-1D	Location of Monitoring Well (Deep Zone)
EW-1	Location of Extraction Well
IS-1	Location of iSOC Well
—— · ——	Property Line
200,000	TBA Concentration Iso-Contour in µg/L
55,000	TBA Concentration in µg/L

Shallow-Zone TBA Concentration in Groundwater (µg/L)
Fourth Quarter 2007 Groundwater Monitoring Event
Eagle Gas
4301 San Leandro Street
Oakland, California

CLEARWATER GROUP

Project No.	Figure Date	Figure
ZP046I	**1/08**	**9**

\\Tagi\Shares\Department\Jobs\ZP046 Eagle Gas\Quarterly Reports\4Q07\Figures\Fig 9 TBA Concentration groundwater (ug/L), Shallow Zone

TABLES

TABLE 1
WELL CONSTRUCTION DATA
Eagle Gas
4301 San Leandro Street
Oakland, California
Clearwater Group Project No. ZP046

Well I.D.	Date Installed	Installed by	Borehole Diameter (inches)	Casing Diameter (inches)	Depth of Borehole (feet bgs)	Cement (feet bgs)	Bentonite Seal (feet bgs)	Filter Pack (feet bgs)	Filter Pack Material	Screened Interval (feet bgs)	Slot Size (inches)
MW-1	9/26/2000	Western Hazmat	8	2	25	0-5	5-7	7-25	#2/12 sand	10-25	0.01
MW-1D	10/4/2007	Gregg Drilling	8	2	45	0-31	31-33	33-45	#2/12 sand	35-45	0.01
MW-2	9/26/2000	Western Hazmat	8	2	25	0-5	5-7	7-25	#2/12 sand	10-25	0.01
MW-3	9/26/2000	Western Hazmat	8	2	25	0-5	5-7	7-25	#2/12 sand	10-25	0.01
MW-4	12/19/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-4D	12/19/2005	HEW Drilling	8	2	45	0-30	30-33	33-45	#3 sand	35-45	0.02
MW-5	12/15/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-5D	12/15/2005	HEW Drilling	8	2	45	0-30	30-33	33-45	#3 sand	35-45	0.02
MW-6	12/20/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-7	12/19/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
MW-7D	10/4/2007	Gregg Drilling	8	2	45	0-31	31-33	33-45	#2/12 sand	35-45	0.01
MW-8	12/21/2005	HEW Drilling	8	2	25	0-5	5-8	8-25	#3 sand	10-25	0.02
IS-1	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-2	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-3	12/21/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-4	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-5	12/21/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
IS-6	12/20/2005	HEW Drilling	8	2	25	0-3	3-6	6-25	#3 sand	10-25	0.02
EW-1	12/16/2005	HEW Drilling	8	4	25	0-3	3-6	6-25	#3 sand	10-25	0.02
EW-2	12/16/2005	HEW Drilling	8	4	25	0-3	3-6	6-25	#3 sand	10-25	0.02

Note: All depths and intervals are below ground surface (bgs)

TABLE 2
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
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	11.10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	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	8,700	---	---	---	---
	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
	2/22/2006	20.08	9.58	10.50	2,600	<5,000	<50	<50	<50	<50	5,800	<50	<50	<50	120,000	<5,000	<500	<50	<50
	5/16/2006	20.08	6.89	13.19	4,700	<5,000	<50	<50	<50	<50	3,700	<50	<50	<50	150,000	<5,000	<500	<50	<50
	8/23/2006	20.08	9.21	10.87	2,000	<5,000	<50	<50	<50	<50	3,700	<50	<50	<50	110,000	<5,000	<500	<50	<50
	11/13/2006	20.08	8.55	11.53	NA	<4,000	<40	<40	<40	<40	2,000	<40	<40	<40	79,000	NA	NA	NA	NA
	2/13/2007	20.08	7.11	12.97	900	<2,500	<25	<25	<25	<25	3,700	<25	<25	25	63,000	NA	NA	NA	NA
	5/15/2007	20.08	6.63	13.45	3,000	<2,500	<25	<25	<25	<25	1,100	<25	<25	<25	52,000	NA	NA	NA	NA
	8/15/2007	20.08	9.61	10.47	1,000	<1,000	<10	<10	<10	<10	230	<10	<10	<10	34,000	NA	NA	NA	NA
	11/13/2007	20.08	13.63	6.45	**170**	<150	<1.5	<1.5	<1.5	<1.5	**630**	<1.5	<1.5	**3.1**	**200**	NA	NA	NA	NA
MW-1D	11/13/2007	19.98	15.61	4.37	**140**	**71**	<0.50	<0.50	<0.50	<0.50	**600**	<0.50	<0.50	**3.4**	**550**	<50	<5.0	<0.50	<0.50
	11/27/2007	19.98	15.52	4.46	No groundwater samples collected														
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	1,200	<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	13,000J	---	---	---	---
	8/6/2004	20.38	15.36	5.02	2,500	<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	---	---	---	---

TABLE 2
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-2	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	---	---	---	---
cont'd	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	---	---	---	---
	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	---	---	---	---
	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
	2/22/2006	22.05	12.69	9.36	<1,500	<70,000	800	<700	<700	<700	400,000	<700	<700	1,700	130,000	<70,000	<7,000	<700	<700
	5/16/2006	22.05	12.01	10.04	1,100	<70,000	<700	<700	<700	<700	250,000	<700	<700	940	140,000	<70,000	<7,000	<700	<700
	8/23/2006	21.98	11.33	10.65	660	<40,000	<400	<400	<400	<400	200,000	<400	<400	830	170,000	<40,000	<4,000	<400	<400
	11/13/2006	21.98	13.64	8.34	NA	<40,000	<400	<400	<400	<400	140,000	<400	<400	490	170,000	NA	NA	NA	NA
	2/13/2007	21.98	12.78	9.20	780	<20,000	250	<200	<200	<200	100,000	<200	<200	240	130,000	NA	NA	NA	NA
	5/16/2007	21.98	13.17	8.81	800	<7,000	150	<70	<70	<70	44,000	<70	<70	120	130,000	NA	NA	NA	NA
	8/16/2007	21.98	13.48	8.50	610	<5,000	100	<50	<50	<50	21,000	<50	<50	<80++	100,000	NA	NA	NA	NA
	11/16/2007	21.98	14.11	7.87	**480**	<4,000	**140**	<40	<40	<40	**10,000**	<40	<40	<40	**100,000**	NA	NA	NA	NA
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	<5,000	---	---	---	---
	5/17/2004	18.98	11.87	7.11	920	<25,000	<250	<250	<250	<250	150,000	<250	<250	1,100	5,600J	---	---	---	---
	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
	2/22/2006	20.73	10.31	10.42	<600	<5,000	88	<50	<50	<50	57,000	<50	<50	420	65,000	<9,000	<500	<50	<50
	5/16/2006	20.73	9.03	11.70	<600^	<9,000	110	<90	<90	<90	42,000	<90	<90	340	68,000	<9,000	<900	<90	<90
	8/23/2006	20.68	10.81	9.87	<200^	<4,000	<40	<40	<40	<40	18,000	<40	<40	120	60,000	<4,000	<400	<40	<40
	11/13/2006	20.68	12.29	8.39	NA	<2,000	<20	<20	<20	<20	6,100	<20	<20	30	54,000	NA	NA	NA	NA
	2/13/2007	20.68	11.23	9.45	<200^	<4,000	52	<40	<40	<40	13,000	<40	<40	82	65,000	NA	NA	NA	NA
	5/15/2007	20.68	10.39	10.29	<300^	<4,000	67	<40	<40	<40	12,000	<40	<40	77	71,000	NA	NA	NA	NA
	8/15/2007	20.68	11.81	8.87	<200^	<4,000	42	<40	<40	<40	4,500	<40	<40	<40	64,000	NA	NA	NA	NA
	11/14/2007	20.68	12.26	8.42	<100	<2,000	**27**	<20	<20	<20	**3,300**	25	<20	<20	**49,000**	NA	NA	NA	NA

TABLE 2
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-4	2/22/2006	21.63	7.87	13.76	<8,000	<150,000	3,200	2,000	1,600	3,800	770,000	<1,500	<1,500	3,300	59,000	<150,000	<15,000	<1,500	<1,500
	5/16/2006	21.63	8.04	13.59	3,800	<70,000	2,100	<700	930	1,500	410,000	<700	<700	2,500	110,000	<70,000	<7,000	<700	<700
	8/23/2006	21.53	9.77	11.76	8,400	89,000	4,500	<700	2,100	2,800	870,000	<700	<700	4,000	89,000	<70,000	<7,000	<700	<700
	11/13/2006	21.53	8.78	12.75	NA	<150,000	3,700	<1,500	<1,500	2,400	950,000	<1,500	<1,500	4,000	110,000	NA	NA	NA	NA
	2/13/2007	21.53	7.56	13.97	2,000	<150,000	2,000	<1,500	<1,500	<1,500	640,000	<1,500	<1,500	2,900	130,000	NA	NA	NA	NA
	5/16/2007	21.53	7.97	13.56	1,900 ^^	<70,000	3,200	<700	1,000	940	430,000	<700	<700	2,300	160,000	NA	NA	NA	NA
	8/16/2007	21.53	9.03	12.50	**4,400**	<150,000	2,400	<1,500	<1,500	<1,500	630,000	<1,500	<1,500	4,300	130,000	NA	NA	NA	NA
	11/16/2007	21.53	8.52	13.01	**2,200**	<70,000	**4,900**	<700	1,000	<700	**620,000**	<700	<700	**3,600**	**150,000**	NA	NA	NA	NA
MW-4D	2/21/2006	21.54	15.58	5.96	<50	<90	<0.90	<0.90	<0.90	<0.90	440	<0.90	<0.90	2	<5.0	<90	<9.0	<0.90	<0.90
	5/16/2006	21.54	13.23	8.31	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<50	<5.0	<0.50	<0.50
	8/23/2006	21.44	15.33	6.11	<50	<50	<0.50	<0.50	<0.50	<0.50	1	<0.50	<0.50	<0.50	<5.0	93	8	<0.50	<0.50
	11/13/2006	21.44	16.23	5.21	NA	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	2/13/2007	21.44	15.73	5.71	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	5/15/2007	21.44	15.38	6.06	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	8/15/2007	21.44	16.42	5.02	130 ^^	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	11/13/2007	21.44	17.21	4.23	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	11/27/2007	21.44	15.85	5.59	No groundwater samples collected														
MW-5	2/21/2006	20.48	6.63	13.85	<3,000	<10,000	460	<100	170	<100	480,000	<100	<100	3,000	95,000	<90,000	<1,000	<100	<100
	5/16/2006	20.48	6.62	13.86	1,600	<90,000	<900	<900	<900	<900	480,000	<900	<900	2,300	130,000	<90,000	<9,000	<900	<900
	8/23/2006	20.41	7.62	12.79	1,400	<90,000	<900	<900	<900	<900	510,000	<900	<900	2,400	270,000	<90,000	<9,000	<900	<900
	11/13/2006	20.41	7.31	13.10	NA	<90,000	<900	<900	<900	<900	430,000	<900	<900	2,200	350,000	NA	NA	NA	NA
	2/13/2007	20.41	6.54	13.87	1,000	<50,000	<500	<500	<500	<500	260,000	<500	<500	740	350,000	NA	NA	NA	NA
	5/16/2007	20.41	6.79	13.62	2,200 ^^	<15,000	650	<150	<150	<150	73,000	<150	<150	610	240,000	NA	NA	NA	NA
	8/16/2007	20.41	7.99	12.42	950	<25,000	<250	<250	<250	<250	130,000	<250	<250	550	620,000	NA	NA	NA	NA
	11/16/2007	20.41	7.51	12.90	**800**	<15,000	<150	<150	<150	<150	**92,000**	<150	<150	**250**	**300,000**	NA	NA	NA	NA
MW-5D	2/21/2006	20.32	13.68	6.64	<50	<50	<0.50	<0.50	<0.50	<0.50	8	<0.50	<0.50	<0.50	6	<50	<5.0	<0.50	<0.50
	5/16/2006	20.32	12.72	7.60	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	<50	<5.0	<0.50	<0.50
	8/23/2006	20.22	14.48	5.74	<50	<50	<0.50	<0.50	<0.50	<0.50	56	<0.50	<0.50	<0.50	<5.0	120	6	<0.50	<0.50
	11/13/2006	20.22	14.98	5.24	NA	<50	<0.50	<0.50	<0.50	<0.50	81	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	2/13/2007	20.22	14.48	5.74	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	5/15/2007	20.22	14.13	6.09	<50	<50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	8/15/2007	20.22	15.21	5.01	330 ^^	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	NA
	11/13/2007	20.22	15.94	4.28	**3,700**	**51**	<0.50	<0.50	<0.50	<0.50	**3.1**	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	NA
	11/27/2007	20.22	15.85	4.37	No groundwater samples collected														
MW-6	2/22/2006	20.45	9.88	10.57	2,900	<10,000	620	<100	<100	<100	50,000	<100	<100	210	24,000	<10,000	<1,000	<100	<100
	5/16/2006	20.45	9.35	11.10	3,200	<9,000	1,500	<90	<90	<90	50,000	<90	<90	280	27,000	<10,000	<900	<90	<90

TABLE 2
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
MW-6	8/23/2006	20.47	10.48	9.99	3,400	<9,000	1,600	<90	<90	<90	39,000	<90	<90	190	55,000	<9,000^{++}	<900	<90	<90
	11/13/2006	20.47	10.86	9.61	NA	<5,000	1,200	<50	<50	<50	17,000	<50	<50	66	71,000	NA	NA	NA	NA
	2/13/2007	20.47	10.31	10.16	2,400	4,900	1,800	<25	<25	<25	14,000	<25	<25	65	55,000	NA	NA	NA	NA
	5/15/2007	20.47	10.35	10.12	2,600	4,900	1,900	21	<20	<20	12,000	<20	<20	55	60,000	NA	NA	NA	NA
	8/15/2007	20.47	10.74	9.73	2,900	4,000	1,300	<20	<20	<20	7,000	<20	<20	32	69,000	NA	NA	NA	NA
	11/14/2007	20.47	10.91	9.56	**2,400**	**5,400**	**2,000**	<20	<20	<20	**3,300**	<20	<20	<20	**63,000**	NA	NA	NA	NA
MW-7	2/22/2006	21.13	11.72	9.41	400	<10,000	<100	<100	<100	<100	88,000	<100	<100	430	90,000	<10,000	<1,000	<100	<100
	5/16/2006	21.13	8.72	12.41	340	<5,000	<50	<50	<50	<50	28,000	<50	<50	120	47,000	<5,000	<500	<50	<50
	8/23/2006	21.14	11.34	9.80	280	<9,000	<90	<90	<90	<90	62,000	<90	<90	280	160,000	<18,000^{+}	<900	<90	<90
	11/13/2006	21.14	12.53	8.61	NA	<9,000	<90	<90	<90	<90	49,000	<90	<90	280	130,000	NA	NA	NA	NA
	2/13/2007	21.14	11.83	9.31	210	<7,000	<70	<70	<70	<70	33,000	<70	<70	170	130,000	NA	NA	NA	NA
	5/15/2007	21.14	10.99	10.15	250	<5,000	<50	<50	<50	<50	36,000	<50	<50	190	140,000	NA	NA	NA	NA
	8/15/2007	21.14	12.41	8.73	390	<9,000	<90	<90	<90	<90	37,000	<90	<90	170	160,000	NA	NA	NA	NA
	11/14/2007	21.14	13.41	7.73	**310**	<9,000	<90	<90	<90	<90	**45,000**	<90	<90	**220**	**150,000**	NA	NA	NA	NA
MW-7D	11/13/2007	21.36	19.21	2.15	**760**	<150	<1.5	<1.5	<1.5	<1.5	**760**	<1.5	<1.5	**5.3**	**7.7J**	<150	**31**	<1.5	<1.5
	11/27/2007	21.36	17.02	4.34	No groundwater samples collected														
MW-8	2/22/2006	21.03	7.28	13.75	6,800	<10,000	1,200	<100	270	220	400,000	<100	<100	2,100	63,000	<300,000	<1,000	<100	<100
	5/16/2006	21.03	7.48	13.55	3,800	<90,000	1,600	<900	<900	<900	620,000	<900	<900	3,000	46,000	<90,000	<9,000	<900	<900
	8/23/2006	20.95	8.19	12.76	17,000	<90,000	940	<900	<900	<900	340,000	<900	<900	1,200	74,000	<90,000	<9,000	<900	<900
	11/13/2006	20.95	8.15	12.80	NA	<25,000	490	<250	<250	<250	120,000	<250	<250	360	130,000	NA	NA	NA	NA
	2/13/2007	20.95	6.58	14.37	4,100	<90,000	1,700	<900	<900	<900	410,000	<900	<900	1,700	160,000	NA	NA	NA	NA
	5/16/2007	20.95	7.24	13.71	3,300	<50,000	650	<500	<500	<500	190,000	<500	<500	750	170,000	NA	NA	NA	NA
	8/16/2007	20.95	8.61	12.34	4,400	<25,000	420	<250	<250	<250	150,000	<250	<250	460	210,000	NA	NA	NA	NA
	11/16/2007	20.95	8.21	12.74	**89,000**	<25,000	<250	<250	<250	<250	**120,000**	<250	<250	<250	**250,000**	NA	NA	NA	NA
IS-1	2/22/2006	20.57	6.91	13.66	4,400	<5,000	160	<50	<50	<50	21,000	<50	<50	64	130,000	<5,000	<500	<50	<50
	5/16/2006	20.57	7.01	13.56	3,800	<5,000	150	<50	<50	<50	24,000	<50	<50	58	130,000	<5,000	<500	<50	<50
	8/23/2006	20.58	7.82	12.76	3,800	<5,000	65	<50	<50	<50	5,800	<50	<50	<50	110,000	<5,000	<500	<50	<50
	11/13/2006	20.58	8.21	12.37	NA	<5,000	<50	<50	<50	<50	1,000	<50	<50	<50	100,000	NA	NA	NA	NA
	2/13/2007	20.58	6.14	14.44	1,800	<4,000	<40	<40	<40	<40	3,600	<40	<40	<40	110,000	NA	NA	NA	NA
	5/15/2007	20.58	7.04	13.54	2,000	<4,000	49	<40	<40	<40	2,800	<40	<40	<40	98,000	NA	NA	NA	NA
	8/15/2007	20.58	8.06	12.52	2,700	<4,000	<40	<40	<40	<40	4,200	<40	<40	<40	90,000	NA	NA	NA	NA
	11/13/2007	20.58	7.61	12.97	**1,400**	<700	<7.0	<7.0	<7.0	<7.0	**470**	<7.0	<7.0	<7.0	**25,000**	NA	NA	NA	NA
IS-2	2/22/2006	20.87	6.92	13.95	<4,000	8,600	1,200	<9.0	240	17	190,000	<9.0	9	1,700	29,000	<150,000	<90	<9.0	<9.0
	5/16/2006	20.87	6.99	13.88	<3,000^	<15,000	500	<150	<150	<150	130,000	<150	<150	880	24,000	<15,000	<1,500	<150	<150
	8/23/2006	20.78	7.91	12.87	2,700	<40,000	490	<400	<400	<400	150,000	<400	<400	1,200	39,000	<40,000^{+}	<4,000	<400	<400
	11/13/2006	20.78	8.23	12.55	NA	<40,000	<400	<400	<400	<400	160,000	<400	<400	990	120,000	NA	NA	NA	NA

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4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
IS-2	2/13/2007	20.78	6.76	14.02	<1,500^	<5,000	230	<50	<50	<50	28,000	<50	<50	250	72,000	NA	NA	NA	NA
	5/15/2007	20.78	6.87	13.91	<3,000^	<7,000	690	<70	120	<70	35,000	<70	<70	370	32,000	NA	NA	NA	NA
	8/15/2007	20.78	8.08	12.70	<3,000^	<7,000	500	<70	<70	<70	20,000	<70	<70	160	160,000	NA	NA	NA	NA
	11/14/2007	20.78	7.69	13.09	<4,000	**15,000**	**1,100**	<70	**240**	<70	**29,000**	<70	<70	**380**	**25,000**	NA	NA	NA	NA
IS-3	2/22/2006	20.99	7.32	13.67	<4,000	29,000	2,700	820	1,100	2,900	750,000	<100	<100	3,400	40,000	<80,000	<1,000	<100	<100
	5/16/2006	20.99	7.86	13.13	8,000	<20,000	1,110	<200	450	<200	300,000	<200	<200	1,600	65,000	<20,000	<2,000	<200	<200
	8/23/2006	20.87	8.19	12.68	4,800	<50,000	2,900	<500	1,100	660	970,000	<500	<500	3,900	54,000	<50,000	<5,000	<500	<500
	11/13/2006	20.87	8.03	12.84	NA	<200,000	2,800	<2,000	<2,000	<2,000	1,100,000	<2,000	<2,000	4,500	65,000	NA	NA	NA	NA
	2/13/2007	20.87	7.03	13.84	<3,000	<150,000	3,200	<1,500	<1,500	<1,500	600,000	<1,500	<1,500	3,300	49,000	NA	NA	NA	NA
	5/16/2007	20.87	7.17	13.70	<4,000^	<150,000	2,900	<1,500	<1,500	<1,500	630,000	<1,500	<1,500	3,400	88,000	NA	NA	NA	NA
	8/15/2007	20.87	8.43	12.44	<3,000^	<150,000	2,800	<1,500	<1,500	<1,500	960,000	<1,500	<1,500	4,300	98,000	NA	NA	NA	NA
	11/14/2007	20.87	7.93	12.94	**1,900**	<150,000	**2,600**	<1,500	<1,500	<1,500	**880,000**	**2,000**	<1,500	**3,600**	**130,000**	NA	NA	NA	NA
IS-4	2/22/2006	20.79	6.95	13.84	3,100	11,000	790	<100	120	<100	280,000	<100	<100	2,400	51,000	<10,000	<1,000	<100	<100
	5/16/2006	20.79	7.17	13.62	5,600	<15,000	610	<150	<150	<150	220,000	<150	<150	1,700	53,000	<15,000	<1,500	<150	<150
	8/23/2006	20.68	7.83	12.85	4,300	6,100	280	<40	<40	<40	270,000	<40	<40	1,600	100,000	<80,000	<400	<40	<40
	11/13/2006	20.68	8.46	12.22	NA	<50,000	<500	<500	<500	<500	230,000	<500	<500	1,100	220,000	NA	NA	NA	NA
	2/13/2007	20.68	9.02	11.66	1,500	<25,000	380	<250	<250	<250	160,000	<250	<250	570	250,000	NA	NA	NA	NA
	5/15/2007	20.68	6.99	13.69	1,700	<25,000	<250	<250	<250	<250	150,000	<250	<250	820	260,000	NA	NA	NA	NA
	8/15/2007	20.68	8.05	12.63	1,000	<15,000	<150	<150	<150	<150	85,000	<150	<150	360	280,000	NA	NA	NA	NA
	11/14/2007	20.68	6.38	14.30	**760**	<9,000	<90	<90	<90	<90	**45,000**	<90	<90	**220**	**110,000**	NA	NA	NA	NA
IS-5	2/22/2006	21.02	7.17	13.85	35,000	66,000	4,100	<250	3,100	7,700	420,000	<250	<250	4,600	40,000	<25,000	<2,500	<250	<250
	5/16/2006	21.02	6.81	14.21	11000+	33,000	2,800	<200	1,700	1,900	350,000	<200	<200	3,400	29,000	<20,000	<2,000	<200	<200
	8/23/2006	20.91	8.12	12.79	11,000	71,000	5,200	<500	6,200	4,500	350,000	<500	<500	3,900	32,000	<50,000	<5,000	<500	<500
	11/13/2006	20.91	8.41	12.50	NA	<50,000	930	<500	<500	<500	440,000	<500	<500	2,800	89,000	NA	NA	NA	NA
	2/13/2007	20.91	6.78	14.13	<5,000	<50,000	3,600	<500	2,200	3,800	240,000	<500	<500	3,600	28,000	NA	NA	NA	NA
	5/16/2007	20.91	7.15	13.76	<5,000^	<50,000	4,500	<500	<500	<500	200,000	<500	<500	2,700	24,000	NA	NA	NA	NA
	8/15/2007	20.91	8.32	12.59	<10,000^	<50,000	4,300	<500	2,100	990	310,000	<500	<500	3,400	48,000	NA	NA	NA	NA
	11/16/2007	20.91	7.71	13.20	<5,000	<50,000	**2,100**	<500	**1,900**	**3,600**	**260,000**	<500	<500	**2,600**	**55,000**	NA	NA	NA	NA
IS-6	2/22/2006	20.56	6.89	13.67	3,000	11,000	1,000	<100	560	180	130,000	<100	<100	1,400	210,000	<15,000	<1,000	<100	<100
	5/16/2006	20.56	6.44	14.12	3,300	<20,000	1,300	<200	730	<200	96,000	<200	<200	1,300	260,000	<25,000	<2,500	<200	<200
	8/23/2006	20.47	7.69	12.78	2,900	<20,000	580	<200	<200	<200	54,000	<200	<200	500	370,000	<20,000	<2,000	<200	<200
	11/13/2006	20.47	7.72	12.75	NA	<9,000	220	<90	<90	<90	20,000	<90	<90	170	260,000	NA	NA	NA	NA
	2/13/2007	20.47	6.12	14.35	1,600	<9,000	360	<90	<90	<90	28,000	<90	<90	210	310,000	NA	NA	NA	NA
	5/16/2007	20.47	6.67	13.80	1,700	9,100	1,400	<70	300	<70	21,000	<70	<70	240	240,000	NA	NA	NA	NA
	8/15/2007	20.47	7.91	12.56	1,700	<9,000	560	<90	<90	<90	8,000	<90	<90	100	220,000	NA	NA	NA	NA
	11/14/2007	20.47	7.22	13.25	**880**	<5,000	**200**	<50	<50	<50	**3,700**	<50	<50	<50	**190,000**	NA	NA	NA	NA

TABLE 2
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150
EW-1	2/22/2006	21.74	8.06	13.68	3,200	<150,000	3,100	<1,500	<1,500	<1,500	700,000	<1,500	<1,500	5,100	59,000	<150,000	<15,000	<1,500	<1,500
	5/16/2006	21.74	7.97	13.77	1,600	<100,000	2,000	<1,000	<1,000	<1,000	630,000	<1,000	<1,000	4,700	57,000	<100,000	<10,000	<1,000	<1,000
	8/23/2006	21.65	9.61	12.04	2,600	<150,000	2,200	<1,500	<1,500	<1,500	1,000,000	<1,500	<1,500	5,200	79,000	<150,000	<15,000	<1,500	<1,500
	11/13/2006	21.65	8.78	12.87	NA	<100,000	<1,000	<1,000	<1,000	<1,000	610,000	<1,000	<1,000	4,000	110,000	NA	NA	NA	NA
	2/13/2007	21.65	6.31	15.34	840	<70,000	1,200	<700	<700	<700	530,000	<700	<700	2,500	100,000	NA	NA	NA	NA
	5/16/2007	21.65	8.13	13.52	1,500	<70,000	1,700	<700	<700	<700	990,000	<700	<700	3,900	150,000	NA	NA	NA	NA
	8/16/2007	21.65	8.71	12.94	1,400	<80,000	1,900	<800	<800	<800	680,000	<800	<800	3,400	210,000	NA	NA	NA	NA
	11/16/2007	21.65	8.70	12.95	**860**	<70,000	<700	<700	<700	<700	**440,000**	<700	<700	**1,700**	**280,000**	NA	NA	NA	NA
EW-2	2/22/2006	20.46	7.31	13.15	<3,000	10,000	1,800	<100	700	670	120,000	<100	<100	1,200	36,000	<80,000	<1,000	<100	<100
	5/16/2006	20.46	7.25	13.21	<3,000^	<25,000	2,400	<250	1,110	880	180,000	<250	<250	1,400	45,000	<25,000	<2,500	<250	<250
	8/23/2006	20.37	8.31	12.06	<2,000	<25,000	1,600	<250	520	<250	120,000	<250	<250	930	35,000	<25,000	<2,500	<250	<250
	11/13/2006	20.37	8.18	12.19	NA	<10,000	610	<100	170	<100	60,000	<100	<100	380	25,000	NA	NA	NA	NA
	2/13/2007	20.37	7.15	13.22	<2,000	<15,000	1,100	<150	230	<150	81,000	<150	<150	700	49,000	NA	NA	NA	NA
	5/16/2007	20.37	7.74	12.63	<3,000^	9,900	1,700	<50	460	170	96,000	<50	<50	870	65,000	NA	NA	NA	NA
	8/16/2007	20.37	9.45	10.92	<2,000^	<15,000	1,300	<150	250	<150	100,000	<150	<150	700	75,000	NA	NA	NA	NA
	11/16/2007	20.37	9.64	10.73	<1,500	**8,100**	**820**	**5.5**	**190**	**91**	**30000**	<0.50	4.6	**230**	**47000**	NA	NA	NA	NA

Notes:

NA Not analyzed.
TOC Top-of-well casing referenced to arbitrary datum prior to 3Q2005
DTW Depth to water
AMSL Above mean sea level
BTOC Below top of casing
GWE Groundwater elevation measured in feet above mean sea level
TPH-d Total petroleum hydrocarbons as diesel by EPA Method 8015 (modified)
TPH-g 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
DCA 1,2-Dichloroethane
EDB 1,2-Dibromoethane
ESL Environmental Screening Levels for deep soils and groundwater that are not a current or potential source of drinking water; San Francisco Bay Regional Water Quality Control Board February 2005.
(µg/L) Micrograms per liter
Date TOC was re-surveyed on September 12, 2006.

TABLE 2
GROUNDWATER ELEVATIONS AND GROUNDWATER SAMPLE ANALYTICAL RESULTS
4301 San Leandro Street
Oakland, California

Sample ID	Sample Date	TOC in feet AMSL	DTW# in feet BTOC	GWE# in feet AMSL	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)
ESL (µg/L)					640	500	46	130	290	100	1,800	--	--	--	18,000	--	50,000	200	150

NA Not analyzed.
\# See Well Gauging/Purging Calculation Data Sheets for date of depth to groundwater measurement
<50 Not detected in concentrations above indicated laboratory reporting limit.
J Estimated quantity because the MTBE-to-TBA ratio is greater than 20 to 1.
--- No samples collected, no data available
-- Not provided
* Laboratory note:"Results within quantitation range; chromatographic pattern not typical of fuel."
** Wells re-surveyed on 3/28/2005.
^ The method reporting limit for TPH-d is increased due to interference from gasoline-range hydrocarbons.
^^ Petroleum hydrocarbons reported as TPH-d do not exhibit a typical Diesel chromatogram pattern; they have a lower boiling point than typical Diesel fuel.
\+ Surrogate recovery for test method Mod. EPA 8015 was outside control limits. This may indicate a bias in the analysis due to
++ The method reporting limit has been increased due to the presence of an interfering compound.

ATTACHMENT A

CLEARWATER GROUP

Groundwater Monitoring and Sampling Field Procedures

Groundwater Monitoring

Prior to beginning purging tasks or sampling, 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 are opened to allow atmospheric pressure to equalize the water levels if local groundwater is under confined or semi-confined conditions. The static water level is measured to the nearest 0.01± foot with an electronic water sounder. Depth to bottom is measured during each monitoring event, at the request of the project manager, and during Clearwater's first visit to a site. 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 Well Gauging/Purging Calculations Data Sheet.

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 discrete 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 dewaters. 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) are 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 (glass or plastic ware depending on the analysis), 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 or cross 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 and 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 liquid being sampled down the inside wall 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 liquid 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 that 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.

ATTACHMENT B

updated on 10/18/2006 by ht

CLEARWATER GROUP

229 Tewksbury Avenue,
Point Richmond, CA 94801
Tel: (510) 307-9943 Fax: (510) 232-2823

WELL GAUGING/PURGING CALCULATIONS DATA SHEET

Date: 11-13-07

Job No.: 2P046I

Location: 4301 San Leandro St. Oakland, CA

Tech(s): Eric V. Austin

Drums on Site @ TOA/TOD
Soil: ~~10~~ 6 Water: 0

Total number of DRUMS used for this event
Soil: 0 Water:

Well No.	Diameter (in)	DTB (ft)	DTW (ft)	ST (ft)	CV (gal)	PV (gal)	SPL (ft)	Notes
Mw-5D	2 in	42.53	15.94	26.59	4.25	12.75		
Mw-4D	2 in	42.12	17.21	24.91	3.99	11.97		
Mw-1D	2 in	43.50	15.61	27.89	4.46	13.38		
Mw-1	2 in	24.53	13.63	10.90	1.74	5.22		
IS-1	2 in	24.88	7.61	17.27	2.76	8.28		
Mw-7D	2 in	38.30	19.21	19.09	3.05	9.15		
Mw-7	2 in	25.90	13.41	12.49	2.00	6.00		
Mw-3	2 in	23.03	12.26	10.77	1.72	5.16		

60.75

71.91
+135.45
207.36
20.00 - Dilon H20
- H20 ~~Drum~~ Gallons.

Explanation:
DTB = Depth to Bottom
DTW = Depth to Water
ST = Saturated Thickness (DTB-DTW) must be > 1 foot
CV = Casing Volume (ST x cf)
PV = Purge Volume (standard 3 x CV, well development 10 x CV)
SPL = Thickness of Separate Phase Liquid

Conversion Factors (cf)
2-inch diameter well cf = 0.16 gal/ft
4-inch diameter well cf = 0.65 gal/ft
6-inch diameter well cf = 1.44 gal.ft

updated on 10/10/2006 by rt

Well No.	Diameter (in)	DTB (ft)	DTW (ft)	ST (ft)	CV (gal)	PV (gal)	SPL (ft)	Notes
MW-6	2 in	25.30	10.91	14.39	2.30	6.90		
IS-2	2 in	25.31	7.69	17.62	2.82	8.46		
IS-4	2 in	24.90	6.38	18.52	2.96	8.88		
IS-6	2 in	25.35	7.22	18.13	2.90	8.70		
IS-3	2 in	24.24	7.93	16.31	2.61	7.83	40.77	
IS-5	2 in	14.30	7.71	6.59	1.05	3.15		
EW-2	4 in	25.20	9.64	15.56	10.11	30.33		
MW-2	2 in	24.59	14.11	10.48	1.68	5.04		
MW-4	2 in	24.50	8.52	15.98	2.56	7.68		
MW-5	2 in	25.51	7.51	18.00	2.88	8.64		
MW-8	2 in	24.60	8.21	16.39	2.62	7.86		
EW-1	4 in	25.10	8.70	16.40	10.66	31.98		

135.45

Explanation:
DTB = Depth to Bottom
DTW = Depth to Water
ST = Saturated Thickness (DTB-DTW) must be > 1 foot
CV = Casing Volume (ST x cf)
PV = Purge Volume (standard 3 x CV, well development 10 x CV)
SPL = Thickness of Separate Phase Liquid

Conversion Factors (cf)
2-inch diameter well cf = 0.16 gal/ft
4-inch diameter well cf = 0.65 gal/ft
6-inch diameter well cf = 1.44 gal.ft

PURGE DATA SHEET

Job No.: ZP046T Location: 4301 San Leandro St. Oakland, CA. Date: 11/13/07 Sheet 1 of 11

Tech: Eric V Austin

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-5D	10:33	5.00	23.9	432	65.82	6.71	6.08	NA	NA	Sample for: Sorys/TBA
1st vol. purge	10:54	9.00	21.0	430	65.80	5.33	6.05			TPHg TPHd 8260
Volume 12.75	11:13	13.00	21.3	431	65.73	4.21	6.05	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Tan, High, OK - No sheen and No odor

POST DEPTH TO WATER: 16.04 SAMPLE TIME: 11:30

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-4D	11:35	4.00	119.4	773	65.68	6.43	6.04	NA	NA	Sample for: Sorys/TBA
1st vol. purge	11:52	8.00	100.8	775	65.61	6.21	6.04			TPHg TPHd 8260
Volume 11.97	12:10	12.00	100.1	775	65.60	6.03	6.06	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Brown, Moderate, OK - sheen & No Odor

POST DEPTH TO WATER: 17.40 SAMPLE TIME: 12:15

Clearwater Group, Inc. - 229 Tewksbury Avenue, Point Richmond, California 94801
Phone : (510) 307-9943 Fax : (510) 232-2823

PURGE DATA SHEET

Job No.: 290467 Location: Oakland, CA Sheet 2 of 11

Date: 11/13/07 Tech: Eric V. Austin

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-10	12:18	4.00	230.7	6.86	67.44	3.80	6.45	NA	NA	Sample for: Oxys / TBA
Calc. purge	12:33	9.00	231.2	6.88	67.48	3.71	6.44			TPHg TPHd 8260
volume 13.38	12:50	13.00	229.6	6.89	67.45	3.52	6.44			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Brown, High - OK slight sheen and slight Odor

POST DEPTH TO WATER: 15.73 SAMPLE TIME: 13:00

Job No.: Location: Date: Tech:

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-1	13:03	1.00	221.2	6.93	67.37	2.78	6.41	NA	NA	Sample for: Oxys / TBA
Calc. purge	13:08	2.00	201.7	6.92	67.39	2.51	6.42			TPHg TPHd 8260
volume 5.22	13:12	5.00	198.4	6.92	67.42	2.42	6.42			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Lt. Gray, Moderate - poor - slight sheen and Odor

POST DEPTH TO WATER: 13.81 SAMPLE TIME: 13:30

PURGE DATA SHEET

Job No.: ZP046T Location: 4301 San Leandro Oakland, CA Date: 11/13/07 Sheet 3 of 11

Tech:

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-1	13:32	2.00	-87.5	1025	69.90	1.28	5.96	NA	NA	Sample for: Soxys / TBA
1st c. purge	13:41	5.00	-99.6	1030	69.69	1.30	5.95			TPHg TPHd 8260
Time 8:28	13:51	8.00	-101.4	1034	69.72	1.25	5.93			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Gray, Moderate, poor - Has sheen and Odor

POST DEPTH TO WATER: 7.78 SAMPLE TIME: 14:00

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-7D	14:05	3.00	97.6	840	66.96	2.32	6.24	NA	NA	Sample for: Soxys / TBA
1st purge	14:12	6.00	85.7	841	66.94	2.28	6.20			TPHg TPHd 8260
Time 9:15	14:25	9.00	85.1	840	66.89	2.02	6.20			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Brown, High - Poor - Has No sheen + No Odor

POST DEPTH TO WATER: 19.52 SAMPLE TIME: 14:45

Clearwater Group, Inc. - 229 Tewksbury Avenue, Point Richmond, California 94801
Phone : (510) 307-9943 Fax : (510) 232-2823

PURGE DATA SHEET

Job No.: 2P046T   Location: Oakland, CA   Date: 11/14/07   Sheet 9 of 11   Tech: Eric Valbuena

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T
MW-7	9:45	2.00	42.5	1737	69.76	2.20	6.19	NA	NA
Calc. purge	9:51	4.00	19.8	1734	69.47	1.59	6.08	↓	↓
volume 6.00	10:00	6.00	11.6	1736	69.38	1.56	6.04	↓	↓

Sample for: 5oxys/TBA — (TPHg TPHd) 8260 (BTEX MTBE) Metals

Purging Method: PVC Bailer / Pump / (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Brown, Moderate, OK - No sheen & No Odor

POST DEPTH TO WATER: 13.55   SAMPLE TIME: 10:15

Job No.:   Location: Date: Tech:

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T
MW-3	10:18	1.00	-19.1	911	70.63	1.75	6.17	NA	NA
Calc. purge	10:21	3.00	-36.9	904	70.68	1.58	6.08	↓	↓
volume 5.16	10:26	5.00	-39.6	901	70.73	1.53	6.05	↓	↓

Sample for: 5oxys/TBA — (TPHg) (TPHd) 8260 (BTEX) (MTBE) Metals

Purging Method: PVC Bailer / Pump / (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Gray, High, OK - No sheen & Slight Odor

POST DEPTH TO WATER: 12.35   SAMPLE TIME: 10:45

PURGE DATA SHEET

Job No.: ~~2806~~ 280767 Location: Oakland, CA. Date: 10/14/07 Sheet 5 of 11

Tech: Eric Kristen

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-6	10:48	2.00	-71.6	1108	70.25	1.48	5.82	NA	NA	Sample for: Soxys/TPH
lc. purge	10:54	4.00	-74.3	1108	70.32	1.50	5.81	↓	↓	TPHg TPHd 8260
ume 6.90	11:00	7.00	-75.5	1109	70.38	1.50	5.80	↓	↓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Gray, Moderate, OK - Has sheen & Odor

POST DEPTH TO WATER: 11.01 SAMPLE TIME: 11:15

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
S-2	11:21	2.00	-67.6	896	71.56	1.33	5.84	NA	NA	Sample for: Soxys/TPH
. purge	11:32	5.00	-88.2	896	71.61	1.18	5.82	↓	↓	TPHg TPHd 8260
ne 8.46	11:43	8.00	-88.9	896	71.60	1.12	5.81	↓	↓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Gray, Moderate, Poor - Has sheen & Odor

POST DEPTH TO WATER: 7.82 SAMPLE TIME: 12:00

Clearwater Group, Inc. - 229 Tewksbury Avenue, Point Richmond, California 94801
Phone : (510) 307-9943 Fax : (510) 232-2823

PURGE DATA SHEET

Job No.: 20461 Location: Oakland, CA Sheet 6 of 14

Date: 11/14/07 Tech: Eric Winston

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
IS-4	12:06	2.00	18.1	958	71.55	4.70	5.97	NA	NA	Sample for: TBA/5049
Calc. purge	12:18	5.00	19.2	958	71.58	3.58	5.99			TPHg TPHd 8260
volume 8.88	12:31	9.00	23.6	960	71.65	3.36	6.01			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Gray, Moderate, OK. - Slight sheen & Odor

POST DEPTH TO WATER: 6.52 SAMPLE TIME: 13:00

Job No.: Location: Date: Tech:

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
IS-6	13:11	2.00	-20.0	1070	71.59	1.51	5.91	NA	NA	Sample for: 5049/TBA
Calc. purge	13:24	5.00	-28.9	1069	71.64	1.32	5.90			TPHg TPHd 8260
volume 8.70	13:37	9.00	-33.6	1069	71.74	1.05	5.87			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Tan, Low, OK - No sheen & slight Odor

POST DEPTH TO WATER: 7.39 SAMPLE TIME: 14:00

PURGE DATA SHEET

Job No.: 2P06GI Location: Oakland, CA Date: 11/17/07 Sheet 7 of 11

Tech: Eric Winston

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
TS-3	14:13	2.00	-63.3	1163	69.99	1.36	5.75	NA	NA	Sample for: 5 oxys/TBA
1c. purge	14:30	5.00	-63.1	1165	70.19	1.37	5.76			TPHg TPHd 8260
lume 7.83	14:44	8.00	-63.0	1167	70.36	1.38	5.74			BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Tan, Moderate, OK - No sheen, slight Odor,

POST DEPTH TO WATER: 8.06 SAMPLE TIME: 15:00

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
:. purge										Sample for: 5 oxys/TBA
me										TPHg TPHd 8260
										BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor

POST DEPTH TO WATER: SAMPLE TIME:

Clearwater Group, Inc. - 229 Tewksbury Avenue, Point Richmond, California 94801
Phone : (510) 307-9943 Fax : (510) 232-2823

PURGE DATA SHEET

Job No.: 7P0462 Location: Oakland, CA. Date: 11/16/07 Sheet 8 of 11

Tech: Eric/Austin

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
IS-5	9:08	1.00	-55.1	1293	66.55	4.51	5.53	NA	NA	Sample for: 5 Oxys/TBA
Calc. purge	9:21	2.00	-56.1	1280	66.60	3.09	5.50			TPHg TPHd 8260
volume 3.15	9:33	3.00	-56.3	1272	66.70	2.31	5.49	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Gray, High, OK Also - Notice slight Product Has sheen, Has strong Odor

POST DEPTH TO WATER: 7.72 SAMPLE TIME: 9:45

Job No.: Location: Date: Tech:

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
EW-2	9:51	10.00	-44.9	1050	66.14	1.49	5.57	NA	NA	Sample for: 5 Oxys/TBA
Calc. purge	10:14	20.00	-45.9	1049	66.19	1.41	5.56			TPHg TPHd 8260
volume 30.33	10:32	30.00	-47.5	1049	66.24	1.33	5.57	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Tan, Moderate, Poor - Has sheen & slight Odor

POST DEPTH TO WATER: 17.94 SAMPLE TIME: 11:00

PURGE DATA SHEET

Job No.: 280461 Location: Oakland, CA. Date: 11/16/07 Sheet 9 of 11 Tech: Eric Vaughan

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-2	11:06	1.00	-56.9	957	65.26	1.37	5.51	NA	NA	Sample for: 5 oxys / TBA
1c. purge	11:19	3.00	-56.5	958	65.24	1.35	5.50			TPHg ~~TPHd~~ 8260
lume 5.04	11:33	5.00	-56.2	958	65.18	1.32	5.49	✓	✓	BTEX ... MTBE Metals

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Gray, High, OK - Has sheen, Slight Odor

POST DEPTH TO WATER: 14.15 SAMPLE TIME: 11:45

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
w-4	11:57	2.00	-65.8	1331	66.76	2.31	5.38	NA	NA	Sample for: 5 oxys / TBA
. purge	12:12	4.00	-69.1	1335	66.78	2.08	5.38			TPHg TPHd 8260
me 7.68	12:30	8.00	-70.0	1336	66.80	1.91	5.38	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / ~~Disp. Bailer~~

COMMENTS: color, turbidity, recharge, sheen, odor Gray, High, OK - Has sheen & slight Odor

POST DEPTH TO WATER: 8.61 SAMPLE TIME: 12:45

Clearwater Group, Inc. - 229 Tewksbury Avenue, Point Richmond, California 94801
Phone : (510) 307-9943 Fax : (510) 232-2823

PURGE DATA SHEET

Job No.: 29046I Location: Oakland, Ct Sheet 10 of 11

Date: 11/16/07 Tech: Eric Austin

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-5	12:56	3.00	26.5	1115	69.01	2.12	5.69	NA	NA	Sample for: SOX/GRO/TBA
Calc. purge	13:13	6.00	25.6	1118	68.79	1.64	5.67			TPHg TPHd 8260
volume 8.64	13:29	9.00	24.2	1117	68.89	1.54	5.62	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Lt. Gray, low, poor - slight sheen, slight odor

POST DEPTH TO WATER: 10.47 SAMPLE TIME: 13:45

Job No.: Location: Date: Tech:

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-8	13:58	2.00	-45.3	1408	66.89	3.70	5.15	NA	NA	Sample for: SOX/GRO/TBA
Calc. purge	14:15	5.00	-45.2	1409	66.90	2.80	5.14			TPHg TPHd 8260
volume 7.86	14:31	8.00	-45.2	1409	66.91	2.41	5.15	✓	✓	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor Gray, Moderate, Poor - Has sheen, Strong Odor & Free product

POST DEPTH TO WATER: 8.30 SAMPLE TIME: 14:45

PURGE DATA SHEET

Job No.: 290461 Location: Oakland, CA Date: 11/16/07 Sheet 11 of 11 Tech: E. McMahon

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
MW-1	14:55	10.00	-47.1	1306	66.12	1.86	5.56	NA	NA	Sample for: 5 oxys / TBA
1st vc. purge	15:15	21.00	-48.6	1307	66.09	1.79	5.55	"	"	TPHg (TPHd) 8260
Volume 31.98	15:29	32.00	-50.1	1307	66.05	1.73	5.56	"	"	BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / (Disp. Bailer)

COMMENTS: color, turbidity, recharge, sheen, odor Grey, High, poor - has sheen & slight odor

POST DEPTH TO WATER: 22.17 SAMPLE TIME: 15:45

WELL #	TIME	VOL. (gal.)	ORP	CND (µ/cm)	TMP (°F)	DO (mg/L)	pH	Fe^{2+}	Fe_T	
										Sample for:
1st vc. purge										TPHg TPHd 8260
Volume										BTEX MTBE Metals

Purging Method: PVC Bailer / Pump / Disp. Bailer

COMMENTS: color, turbidity, recharge, sheen, odor

POST DEPTH TO WATER: [redacted] SAMPLE TIME:

Clearwater Group, Inc. - 229 Tewksbury Avenue, Point Richmond, California 94801
Phone : (510) 307-9943 Fax : (510) 232-2823

ATTACHMENT C

KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 6 Water Samples
Project Name : NAZ Eagle Gas
Project Number : ZP046I

Dear Mr. Nelson,

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,

Joel Kiff

KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Subject : 6 Water Samples
Project Name : NAZ Eagle Gas
Project Number : ZP046I

Case Narrative

Tert-Butanol results for sample MW-7D may be biased slightly high and are flagged with a 'J'. A fraction of MtBE (typically less than 1%) converts to Tert-Butanol during the analysis of water samples. We consider this conversion effect to be mathematically significant in samples that contain MtBE/Tert-Butanol in ratios of over 20:1.

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-5D** Matrix : Water Lab Number : 59652-01
Sample Date :11/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	**3.1**	0.50	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	**51**	50	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	11/20/2007
TPH as Diesel	**3700**	50	ug/L	M EPA 8015	11/22/2007
Octacosane (Diesel Surrogate)	120		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

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KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-4D** Matrix : Water Lab Number : 59652-02
Sample Date :11/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	99.4		% Recovery	EPA 8260B	11/20/2007
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	11/21/2007
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	11/21/2007

Approved By: Joel Kiff

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KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-1D** Matrix : Water Lab Number : 59652-03
Sample Date :11/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**600**	1.5	ug/L	EPA 8260B	11/22/2007
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**3.4**	0.50	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**550**	5.0	ug/L	EPA 8260B	11/21/2007
Methanol	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Ethanol	**< 5.0**	5.0	ug/L	EPA 8260B	11/21/2007
1,2-Dichloroethane	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
1,2-Dibromoethane	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**71**	50	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	99.8		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	98.0		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**140**	50	ug/L	M EPA 8015	11/21/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	11/21/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-1** Matrix : Water Lab Number : 59652-04
Sample Date :11/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Toluene	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Ethylbenzene	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Total Xylenes	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Methyl-t-butyl ether (MTBE)	**630**	1.5	ug/L	EPA 8260B	11/26/2007
Diisopropyl ether (DIPE)	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Ethyl-t-butyl ether (ETBE)	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Tert-amyl methyl ether (TAME)	**3.1**	1.5	ug/L	EPA 8260B	11/26/2007
Tert-Butanol	**200**	7.0	ug/L	EPA 8260B	11/26/2007
TPH as Gasoline	**< 150**	150	ug/L	EPA 8260B	11/26/2007
Toluene - d8 (Surr)	94.4		% Recovery	EPA 8260B	11/26/2007
4-Bromofluorobenzene (Surr)	96.8		% Recovery	EPA 8260B	11/26/2007
TPH as Diesel	**170**	50	ug/L	M EPA 8015	11/28/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	99.1		% Recovery	M EPA 8015	11/28/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **IS-1** Matrix : Water Lab Number : 59652-05
Sample Date :11/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Toluene	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Ethylbenzene	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Total Xylenes	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Methyl-t-butyl ether (MTBE)	**470**	7.0	ug/L	EPA 8260B	11/26/2007
Diisopropyl ether (DIPE)	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Ethyl-t-butyl ether (ETBE)	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Tert-amyl methyl ether (TAME)	**< 7.0**	7.0	ug/L	EPA 8260B	11/26/2007
Tert-Butanol	**25000**	70	ug/L	EPA 8260B	11/27/2007
TPH as Gasoline	**< 700**	700	ug/L	EPA 8260B	11/26/2007
Toluene - d8 (Surr)	95.3		% Recovery	EPA 8260B	11/26/2007
4-Bromofluorobenzene (Surr)	97.6		% Recovery	EPA 8260B	11/26/2007
TPH as Diesel	**1400**	50	ug/L	M EPA 8015	11/21/2007
Octacosane (Diesel Surrogate)	104		% Recovery	M EPA 8015	11/21/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-7D** Matrix : Water Lab Number : 59652-06
Sample Date :11/13/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Toluene	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Ethylbenzene	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Total Xylenes	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Methyl-t-butyl ether (MTBE)	**760**	1.5	ug/L	EPA 8260B	11/26/2007
Diisopropyl ether (DIPE)	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Ethyl-t-butyl ether (ETBE)	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
Tert-amyl methyl ether (TAME)	**5.3**	1.5	ug/L	EPA 8260B	11/26/2007
Tert-Butanol	**7.7 J**	7.0	ug/L	EPA 8260B	11/26/2007
Methanol	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Ethanol	**31**	15	ug/L	EPA 8260B	11/26/2007
1,2-Dichloroethane	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
1,2-Dibromoethane	**< 1.5**	1.5	ug/L	EPA 8260B	11/26/2007
TPH as Gasoline	**< 150**	150	ug/L	EPA 8260B	11/26/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	11/26/2007
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	11/26/2007
TPH as Diesel	**760**	50	ug/L	M EPA 8015	11/22/2007
(Note: Discrete peaks in Diesel range, atypical for Diesel Fuel.)					
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Method Blank Data

Project Name : **NAZ Eagle Gas**

Project Number : **ZP046I**

Report Number : 59652

Date : 11/28/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/20/2007
Octacosane (Diesel Surrogate)	81.6		%	M EPA 8015	11/20/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/27/2007
Octacosane (Diesel Surrogate)	91.6		%	M EPA 8015	11/27/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/26/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/26/2007
Toluene - d8 (Surr)	94.4		%	EPA 8260B	11/26/2007
4-Bromofluorobenzene (Surr)	97.8		%	EPA 8260B	11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/27/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	102		%	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	98.2		%	EPA 8260B	11/20/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/21/2007
Methanol	< 50	50	ug/L	EPA 8260B	11/21/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	11/21/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	98.8		%	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	11/21/2007

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Method Blank Data

Report Number : 59652

Date : 11/28/2007

Project Name : **NAZ Eagle Gas**

Project Number : **ZP046I**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methanol	< 50	50	ug/L	EPA 8260B	11/21/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/26/2007
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	11/26/2007
1,2-Dichloroethane	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
1,2-Dibromoethane	< 0.50	0.50	ug/L	EPA 8260B	11/26/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/26/2007
Toluene - d8 (Surr)	101		%	EPA 8260B	11/26/2007
4-Bromofluorobenzene (Surr)	96.1		%	EPA 8260B	11/26/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 59652

Date : 11/28/2007

Project Name : **NAZ Eagle Gas**

Project Number : **ZP046I**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	1000	1030	ug/L	M EPA 8015	11/20/07	100	103	2.46	70-130	25
Benzene	59681-05	<0.50	40.1	40.0	36.6	36.2	ug/L	EPA 8260B	11/26/07	91.4	90.4	1.15	70-130	25
Toluene	59681-05	<0.50	40.1	40.0	36.2	36.0	ug/L	EPA 8260B	11/26/07	90.3	90.0	0.309	70-130	25
Tert-Butanol	59681-05	<5.0	200	200	180	173	ug/L	EPA 8260B	11/26/07	89.7	86.4	3.77	70-130	25
Methyl-t-Butyl Ether	59681-05	<0.50	40.1	40.0	35.7	37.2	ug/L	EPA 8260B	11/26/07	89.2	92.9	4.13	70-130	25
Benzene	59713-06	<0.50	40.0	40.0	36.5	38.9	ug/L	EPA 8260B	11/26/07	91.2	97.2	6.42	70-130	25
Toluene	59713-06	<0.50	40.0	40.0	36.0	38.2	ug/L	EPA 8260B	11/26/07	90.0	95.5	5.90	70-130	25
Tert-Butanol	59713-06	<5.0	200	200	171	184	ug/L	EPA 8260B	11/26/07	85.6	92.2	7.39	70-130	25
Methyl-t-Butyl Ether	59713-06	0.64	40.0	40.0	37.5	34.5	ug/L	EPA 8260B	11/26/07	92.2	84.7	8.41	70-130	25
Benzene	59624-16	230	39.5	39.8	218	223	ug/L	EPA 8260B	11/26/07	0.00	0.00	0.00	70-130	25
Toluene	59624-16	<0.50	39.5	39.8	39.8	39.0	ug/L	EPA 8260B	11/26/07	101	97.8	3.00	70-130	25
Tert-Butanol	59624-16	15	198	199	207	208	ug/L	EPA 8260B	11/26/07	97.2	96.7	0.528	70-130	25
Methyl-t-Butyl Ether	59624-16	<0.50	39.5	39.8	31.5	32.0	ug/L	EPA 8260B	11/26/07	79.8	80.3	0.616	70-130	25
Benzene	59637-03	<0.50	40.0	40.0	40.9	40.6	ug/L	EPA 8260B	11/20/07	102	102	0.755	70-130	25
Toluene	59637-03	<0.50	40.0	40.0	40.2	40.2	ug/L	EPA 8260B	11/20/07	100	100	0.0816	70-130	25
Tert-Butanol	59637-03	<5.0	200	200	195	184	ug/L	EPA 8260B	11/20/07	97.6	92.2	5.66	70-130	25
Methyl-t-Butyl Ether	59637-03	<0.50	40.0	40.0	38.4	38.5	ug/L	EPA 8260B	11/20/07	96.1	96.2	0.113	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 59652

Date : 11/28/2007

Project Name : **NAZ Eagle Gas**

Project Number : **ZP046I**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	59681-01	<0.50	40.0	40.0	38.8	37.6	ug/L	EPA 8260B	11/21/07	97.1	93.9	3.38	70-130	25
Toluene	59681-01	<0.50	40.0	40.0	38.8	37.3	ug/L	EPA 8260B	11/21/07	96.9	93.2	3.93	70-130	25
Tert-Butanol	59681-01	<5.0	200	200	204	202	ug/L	EPA 8260B	11/21/07	102	101	1.12	70-130	25
Methyl-t-Butyl Ether	59681-01	0.97	40.0	40.0	40.5	40.4	ug/L	EPA 8260B	11/21/07	98.8	98.5	0.320	70-130	25
Benzene	59712-01	<0.50	40.0	40.0	37.0	36.5	ug/L	EPA 8260B	11/21/07	92.6	91.3	1.34	70-130	25
Toluene	59712-01	<0.50	40.0	40.0	37.4	36.4	ug/L	EPA 8260B	11/21/07	93.5	91.1	2.63	70-130	25
Tert-Butanol	59712-01	9.2	200	200	204	204	ug/L	EPA 8260B	11/21/07	97.3	97.2	0.0859	70-130	25
Methyl-t-Butyl Ether	59712-01	5.7	40.0	40.0	44.2	44.2	ug/L	EPA 8260B	11/21/07	96.2	96.2	0.0585	70-130	25
Benzene	59747-09	<0.50	40.0	40.0	41.7	40.2	ug/L	EPA 8260B	11/26/07	104	100	3.58	70-130	25
Toluene	59747-09	<0.50	40.0	40.0	42.0	40.6	ug/L	EPA 8260B	11/26/07	105	102	3.30	70-130	25
Tert-Butanol	59747-09	<5.0	200	200	211	212	ug/L	EPA 8260B	11/26/07	105	106	0.554	70-130	25
Methyl-t-Butyl Ether	59747-09	1.2	40.0	40.0	45.6	45.2	ug/L	EPA 8260B	11/26/07	111	110	1.10	70-130	25
TPH as Diesel	Blank	<50	1000	1000	994	1040	ug/L	M EPA 8015	11/27/07	99.4	104	4.76	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	11/22/07	102	70-130
Toluene	40.0	ug/L	EPA 8260B	11/22/07	99.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/22/07	97.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/22/07	99.6	70-130
Benzene	40.0	ug/L	EPA 8260B	11/26/07	90.0	70-130
Toluene	40.0	ug/L	EPA 8260B	11/26/07	89.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/26/07	97.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/26/07	89.4	70-130
Benzene	40.0	ug/L	EPA 8260B	11/26/07	93.6	70-130
Toluene	40.0	ug/L	EPA 8260B	11/26/07	93.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/26/07	93.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/26/07	85.7	70-130
Benzene	40.0	ug/L	EPA 8260B	11/20/07	91.0	70-130
Toluene	40.0	ug/L	EPA 8260B	11/20/07	95.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/20/07	90.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/20/07	84.0	70-130
Benzene	40.0	ug/L	EPA 8260B	11/21/07	95.2	70-130

KIFF ANALYTICAL, LLC
2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 59652
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	11/21/07	96.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/21/07	98.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/21/07	101	70-130
Benzene	40.0	ug/L	EPA 8260B	11/21/07	93.0	70-130
Toluene	40.0	ug/L	EPA 8260B	11/21/07	93.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/21/07	98.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/21/07	95.8	70-130
Benzene	40.0	ug/L	EPA 8260B	11/26/07	102	70-130
Toluene	40.0	ug/L	EPA 8260B	11/26/07	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/26/07	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/26/07	110	70-130

KIFF ANALYTICAL, LLC
2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 59652

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Rob Nelson	California EDF Report? ☒ Yes ☐ No
Company / Address: Clearwater Group 229 Toyon Library Ave Pt Richmond, CA	Sampling Company Log Code: CWGO
Phone #: 510-307-7943 Fax #: 510-232-2823	Global ID: T0605300219
Project #: 20046T P.O. #:	EDF Deliverable To (Email Address): gfisco@clearwatergroup.com
Project Name: MW2 Eagle Gas	Sampler Signature: Eric V. Austin
Project Address: 4301 San Leandro St. Oakland, CA.	

Sample Designation	Sampling Date	Sampling Time	Container: 40 ml VOA	Container: Sleeve	Container: Poly	Container: Glass	Container: Tedlar	Preservative: HCl	Preservative: HNO_3	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Air	Analysis Request: MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	Analysis Request: MTBE (EPA 8260B) @ 0.5 ppb	Analysis Request: BTEX (EPA 8260B)	Analysis Request: TPH Gas (EPA 8260B)	Analysis Request: 5 Oxygenates (EPA 8260B)	Analysis Request: 7 Oxygenates (EPA 8260B)	Analysis Request: Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B)	Analysis Request: Volatile Halocarbons (EPA 8260B)	Analysis Request: Volatile Organics Full List (EPA 8260B)	Analysis Request: Volatile Organics (EPA 524.2 Drinking Water)	Analysis Request: TPH as Diesel (EPA 8015M)	Analysis Request: TPH as Motor Oil (EPA 8015M)	Analysis Request: Total Lead (EPA 6010)	Analysis Request: W.E.T. Lead (STLC)	Analysis Request: TBA	TAT: 12 hr	TAT: 24 hr	TAT: 48 hr	TAT: 72 hr	TAT: 1 wk	For Lab Use Only
MW-5D	11/13/07	1130	6					6			6			6	6	6	6	6						6				6	☐	☐	☐	☐	☒	01
MW-4D		12:15	X																															02
MW-10D		13:00																																03
MW-1		13:30																																04
IS-1		14:00																																05
MW-7D		14:45																																06
~~TRIP BLANK~~																																		

Relinquished by: Eric V. Austin	Date 11/13/07	Time 1830	Received by:
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date 11/16/07	Time 1225	Received by Laboratory: Kiff Analytical

Remarks:

Bill to:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
					Yes / No

Distribution: White - Lab; Pink - Originator
Rev: 051805

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 7 Water Samples
Project Name : NAZ Eagle Gas
Project Number : ZP046I

Dear Mr. Nelson,

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,

Joel Kiff

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Subject : 7 Water Samples
Project Name : NAZ Eagle Gas
Project Number : ZP046I

Case Narrative

Matrix Spike/Matrix Spike Duplicate Results associated with samples MW-3, IS-6 and IS-4 for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

Approved By: Joe Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-7** Matrix : Water Lab Number : 59653-01
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 90**	90	ug/L	EPA 8260B	11/20/2007
Toluene	**< 90**	90	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	**< 90**	90	ug/L	EPA 8260B	11/20/2007
Total Xylenes	**< 90**	90	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	**45000**	90	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	**< 90**	90	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	**< 90**	90	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	**220**	90	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	**150000**	500	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	**< 9000**	9000	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/20/2007
TPH as Diesel	**310**	50	ug/L	M EPA 8015	11/22/2007
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-3** Matrix : Water Lab Number : 59653-02
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**27**	20	ug/L	EPA 8260B	11/21/2007
Toluene	**< 20**	20	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**< 20**	20	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 20**	20	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**3300**	20	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	**25**	20	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**< 20**	20	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**49000**	90	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**< 2000**	2000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	93.8		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**< 100**	100	ug/L	M EPA 8015	11/22/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	106		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **MW-6** Matrix : Water Lab Number : 59653-03
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2000**	20	ug/L	EPA 8260B	11/20/2007
Toluene	**< 20**	20	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	**< 20**	20	ug/L	EPA 8260B	11/20/2007
Total Xylenes	**< 20**	20	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	**3300**	20	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	**< 20**	20	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	**< 20**	20	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	**< 20**	20	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	**63000**	90	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	**5400**	2000	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	99.4		% Recovery	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/20/2007
TPH as Diesel	**2400**	50	ug/L	M EPA 8015	11/22/2007
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **IS-2** Matrix : Water Lab Number : 59653-04
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1100**	70	ug/L	EPA 8260B	11/20/2007
Toluene	**< 70**	70	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	**240**	70	ug/L	EPA 8260B	11/20/2007
Total Xylenes	**< 70**	70	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	**29000**	70	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	**< 70**	70	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	**< 70**	70	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	**380**	70	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	**25000**	400	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	**15000**	7000	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	11/20/2007
TPH as Diesel	**< 4000**	4000	ug/L	M EPA 8015	11/21/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	90.8		% Recovery	M EPA 8015	11/21/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **IS-4** Matrix : Water Lab Number : 59653-05
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 90**	90	ug/L	EPA 8260B	11/21/2007
Toluene	**< 90**	90	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**< 90**	90	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 90**	90	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**45000**	90	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	**< 90**	90	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 90**	90	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**220**	90	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**110000**	500	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**< 9000**	9000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**760**	50	ug/L	M EPA 8015	11/27/2007
Octacosane (Diesel Surrogate)	90.1		% Recovery	M EPA 8015	11/27/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **IS-6** Matrix : Water Lab Number : 59653-06
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**200**	50	ug/L	EPA 8260B	11/21/2007
Toluene	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**3700**	50	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**< 50**	50	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**190000**	250	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**< 5000**	5000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	98.7		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**880**	50	ug/L	M EPA 8015	11/22/2007
Octacosane (Diesel Surrogate)	96.9		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Sample : **IS-3** Matrix : Water Lab Number : 59653-07
Sample Date :11/14/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2600**	1500	ug/L	EPA 8260B	11/20/2007
Toluene	**< 1500**	1500	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	**< 1500**	1500	ug/L	EPA 8260B	11/20/2007
Total Xylenes	**< 1500**	1500	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	**880000**	1500	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	**2000**	1500	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	**< 1500**	1500	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	**3600**	1500	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	**130000**	7000	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	**< 150000**	150000	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	106		% Recovery	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	110		% Recovery	EPA 8260B	11/20/2007
TPH as Diesel	**1900**	50	ug/L	M EPA 8015	11/22/2007
Octacosane (Diesel Surrogate)	95.0		% Recovery	M EPA 8015	11/22/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Method Blank Data

Project Name : **NAZ Eagle Gas**

Project Number : **ZP046I**

Report Number : 59653

Date : 11/28/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/20/2007
Octacosane (Diesel Surrogate)	80.3		%	M EPA 8015	11/20/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/27/2007
Octacosane (Diesel Surrogate)	91.7		%	M EPA 8015	11/27/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/19/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/19/2007
Toluene - d8 (Surr)	98.4		%	EPA 8260B	11/19/2007
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	11/19/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/22/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/22/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/22/2007
Toluene - d8 (Surr)	98.4		%	EPA 8260B	11/22/2007
4-Bromofluorobenzene (Surr)	99.9		%	EPA 8260B	11/22/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/19/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/19/2007
Toluene - d8 (Surr)	106		%	EPA 8260B	11/19/2007
4-Bromofluorobenzene (Surr)	111		%	EPA 8260B	11/19/2007

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 59653

Date : 11/28/2007

Project Name : **NAZ Eagle Gas**

Project Number : **ZP046I**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	59684-01	<0.50	38.8	38.6	38.3	36.8	ug/L	EPA 8260B	11/19/07	98.6	95.2	3.54	70-130	25
Toluene	59684-01	<0.50	38.8	38.6	39.7	39.0	ug/L	EPA 8260B	11/19/07	102	101	1.39	70-130	25
Tert-Butanol	59684-01	<5.0	194	193	173	174	ug/L	EPA 8260B	11/19/07	89.0	90.1	1.15	70-130	25
Methyl-t-Butyl Ether	59684-01	<0.50	38.8	38.6	34.4	35.5	ug/L	EPA 8260B	11/19/07	88.6	92.1	3.78	70-130	25
Benzene	59679-01	<0.50	39.8	39.8	39.0	39.1	ug/L	EPA 8260B	11/21/07	98.0	98.3	0.238	70-130	25
Toluene	59679-01	<0.50	39.8	39.8	40.8	40.9	ug/L	EPA 8260B	11/21/07	102	103	0.218	70-130	25
Tert-Butanol	59679-01	23	199	199	220	221	ug/L	EPA 8260B	11/21/07	99.2	99.6	0.344	70-130	25
Methyl-t-Butyl Ether	59679-01	33	39.8	39.8	55.3	55.2	ug/L	EPA 8260B	11/21/07	57.1	56.8	0.541	70-130	25
Benzene	59593-07	<0.50	40.0	40.0	38.6	37.6	ug/L	EPA 8260B	11/19/07	96.6	94.1	2.54	70-130	25
Toluene	59593-07	<0.50	40.0	40.0	40.8	40.0	ug/L	EPA 8260B	11/19/07	102	100	1.94	70-130	25
Tert-Butanol	59593-07	<5.0	200	200	206	203	ug/L	EPA 8260B	11/19/07	103	101	1.42	70-130	25
Methyl-t-Butyl Ether	59593-07	<0.50	40.0	40.0	38.8	39.0	ug/L	EPA 8260B	11/19/07	97.1	97.4	0.276	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1000	1020	ug/L	M EPA 8015	11/20/07	100	102	1.24	70-130	25
TPH as Diesel	Blank	<50	1000	1000	972	1000	ug/L	M EPA 8015	11/27/07	97.2	100	3.43	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number : 59653
Date : 11/28/2007

Project Name : **NAZ Eagle Gas**
Project Number : **ZP046I**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	11/19/07	99.6	70-130
Toluene	40.0	ug/L	EPA 8260B	11/19/07	106	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/19/07	92.7	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/19/07	93.3	70-130
Benzene	40.0	ug/L	EPA 8260B	11/21/07	98.9	70-130
Toluene	40.0	ug/L	EPA 8260B	11/21/07	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/21/07	92.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/21/07	85.3	70-130
Benzene	40.0	ug/L	EPA 8260B	11/19/07	93.9	70-130
Toluene	40.0	ug/L	EPA 8260B	11/19/07	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/19/07	105	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/19/07	97.7	70-130

KIFF ANALYTICAL, LLC
2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff

KIFF Analytical LLC

2795 2nd Street, Suite 300
Davis, CA 95616
Lab: 530.297.4800
Fax: 530.297.4802

SRG # / Lab No. 59653

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Rob Nelson	California EDF Report? ☒ Yes ☐ No
Company / Address: ClearwaterGroup 229 Tewksbury Ave. Pt. Rich, CA	Sampling Company Log Code: CWGO
Phone #: 510-307-9943	Fax #: 510-232-2823
Global ID: T0605300219	
Project #: ZP046J	P.O. #:
EDF Deliverable To (Email Address): gtisco@clearwatergroup.com	
Project Name: NAZ Eagle Gas	Sampler Signature: Eric V. Austin
Project Address: 4301 San Leandro St. Oakland, CA	

Sample Designation	Sampling: Date	Sampling: Time	Container: 40 ml VOA	Container: Sleeve	Container: Poly	Container: Glass	Container: Tedlar	Preservative: HCl	Preservative: HNO_3	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Air	Analysis Request: MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	Analysis Request: MTBE (EPA 8260B) @ 0.5 ppb	Analysis Request: BTEX (EPA 8260B)	Analysis Request: TPH Gas (EPA 8260B)	Analysis Request: 5 Oxygenates (EPA 8260B)	Analysis Request: 7 Oxygenates (EPA 8260B)	Analysis Request: Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B)	Analysis Request: Volatile Halocarbons (EPA 8260B)	Analysis Request: Volatile Organics Full List (EPA 8260B)	Analysis Request: Volatile Organics (EPA 524.2 Drinking Water)	Analysis Request: TPH as Diesel (EPA 8015M)	Analysis Request: TPH as Motor Oil (EPA 8015M)	Analysis Request: Total Lead (EPA 6010)	Analysis Request: W.E.T. Lead (STLC)	Analysis Request: TBA	For Lab Use Only
MW-7	11/14/07	1015	6					6			6				6	6	6	6						6				6	01
MW-3		1045																											02
MW-6		1115																											03
IS-2		1200																											04
IS-4		1300																											05
IS-6		1400																											06
IS-3		1500																											07

TAT: ☐ 12 hr ☐ 24 hr ☐ 48 hr ☐ 72 hr ☒ 1 wk

Relinquished by:	Date	Time	Received by:
Eric V. Austin	11/14/07	1800	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	111607	1230	Kirk Analytical

Remarks:

Bill to:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
4.2	DGP	111607	1440	IR5	(Yes) No

Distribution: White - Lab; Pink - Originator
Rev: 051805

KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Rob Nelson
Clearwater Group, Inc.
229 Tewksbury Avenue
Point Richmond, CA 94801

Subject : 7 Water Samples
Project Name : NAZ EAGLE GAS
Project Number : ZP046I

Dear Mr. Nelson,

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,

Joel Kiff

KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Subject : 7 Water Samples
Project Name : NAZ EAGLE GAS
Project Number : ZP046I

Case Narrative

Surrogate Recovery for sample MW-8 for test method Mod. EPA 8015 was outside of control limits. This may indicate a bias in the analysis due to the sample's matrix or an interference from compounds present in the sample.

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **IS-5** Matrix : Water Lab Number : 59685-01
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**2100**	500	ug/L	EPA 8260B	11/21/2007
Toluene	**< 500**	500	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**1900**	500	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**3600**	500	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**260000**	500	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	**< 500**	500	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 500**	500	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**2600**	500	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**55000**	2500	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**< 50000**	50000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	99.4		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**< 5000**	5000	ug/L	M EPA 8015	11/28/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	11/28/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **EW-2** Matrix : Water Lab Number : 59685-02
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**820**	50	ug/L	EPA 8260B	11/22/2007
Toluene	**5.5**	0.50	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**190**	0.50	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**91**	0.50	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**30000**	50	ug/L	EPA 8260B	11/22/2007
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**4.6**	0.50	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**230**	0.50	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**47000**	250	ug/L	EPA 8260B	11/22/2007
TPH as Gasoline	**8100**	5000	ug/L	EPA 8260B	11/22/2007
Toluene - d8 (Surr)	88.1		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	109		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**< 1500**	1500	ug/L	M EPA 8015	11/28/2007
(Note: MRL increased due to interference from Gasoline-range hydrocarbons.)					
Octacosane (Diesel Surrogate)	100		% Recovery	M EPA 8015	11/28/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **MW-2** Matrix : Water Lab Number : 59685-03
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**140**	40	ug/L	EPA 8260B	11/21/2007
Toluene	**< 40**	40	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**< 40**	40	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 40**	40	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**10000**	40	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	**< 40**	40	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 40**	40	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**< 40**	40	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**100000**	200	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**< 4000**	4000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	98.1		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**480**	50	ug/L	M EPA 8015	11/28/2007
Octacosane (Diesel Surrogate)	102		% Recovery	M EPA 8015	11/28/2007

Approved By: Joel Kiff

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **MW-4** Matrix : Water Lab Number : 59685-04
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**4900**	700	ug/L	EPA 8260B	11/21/2007
Toluene	**< 700**	700	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**1000**	700	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 700**	700	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**620000**	1500	ug/L	EPA 8260B	11/22/2007
Diisopropyl ether (DIPE)	**< 700**	700	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 700**	700	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**3600**	700	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**150000**	7000	ug/L	EPA 8260B	11/22/2007
TPH as Gasoline	**< 70000**	70000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**2200**	50	ug/L	M EPA 8015	11/28/2007
Octacosane (Diesel Surrogate)	108		% Recovery	M EPA 8015	11/28/2007

Approved By: Joel Kiff

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KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **MW-5** Matrix : Water Lab Number : 59685-05
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Toluene	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Ethylbenzene	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Total Xylenes	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Methyl-t-butyl ether (MTBE)	**92000**	150	ug/L	EPA 8260B	11/22/2007
Diisopropyl ether (DIPE)	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Ethyl-t-butyl ether (ETBE)	**< 150**	150	ug/L	EPA 8260B	11/22/2007
Tert-amyl methyl ether (TAME)	**250**	150	ug/L	EPA 8260B	11/22/2007
Tert-Butanol	**300000**	700	ug/L	EPA 8260B	11/22/2007
TPH as Gasoline	**< 15000**	15000	ug/L	EPA 8260B	11/22/2007
Toluene - d8 (Surr)	94.3		% Recovery	EPA 8260B	11/22/2007
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	11/22/2007
TPH as Diesel	**800**	50	ug/L	M EPA 8015	11/28/2007
Octacosane (Diesel Surrogate)	109		% Recovery	M EPA 8015	11/28/2007

Approved By: Joel Kiff

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KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **MW-8** Matrix : Water Lab Number : 59685-06
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Toluene	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Total Xylenes	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	**120000**	250	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	**< 250**	250	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	**250000**	1500	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	**< 25000**	25000	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/21/2007
TPH as Diesel	**89000**	250	ug/L	M EPA 8015	11/29/2007
Octacosane (Diesel Surrogate)	15.8		% Recovery	M EPA 8015	11/29/2007

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KIFF Analytical LLC

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Sample : **EW-1** Matrix : Water Lab Number : 59685-07
Sample Date :11/16/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 700**	700	ug/L	EPA 8260B	11/22/2007
Toluene	**< 700**	700	ug/L	EPA 8260B	11/22/2007
Ethylbenzene	**< 700**	700	ug/L	EPA 8260B	11/22/2007
Total Xylenes	**< 700**	700	ug/L	EPA 8260B	11/22/2007
Methyl-t-butyl ether (MTBE)	**440000**	700	ug/L	EPA 8260B	11/22/2007
Diisopropyl ether (DIPE)	**< 700**	700	ug/L	EPA 8260B	11/22/2007
Ethyl-t-butyl ether (ETBE)	**< 700**	700	ug/L	EPA 8260B	11/22/2007
Tert-amyl methyl ether (TAME)	**1700**	700	ug/L	EPA 8260B	11/22/2007
Tert-Butanol	**280000**	4000	ug/L	EPA 8260B	11/22/2007
TPH as Gasoline	**< 70000**	70000	ug/L	EPA 8260B	11/22/2007
Toluene - d8 (Surr)	94.5		% Recovery	EPA 8260B	11/22/2007
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	11/22/2007
TPH as Diesel	**860**	50	ug/L	M EPA 8015	11/28/2007
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	11/28/2007

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QC Report : Method Blank Data

Project Name : **NAZ EAGLE GAS**

Project Number : **ZP046I**

Report Number : 59685

Date : 11/30/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/20/2007
Octacosane (Diesel Surrogate)	81.6		%	M EPA 8015	11/20/2007
TPH as Diesel	< 50	50	ug/L	M EPA 8015	11/28/2007
Octacosane (Diesel Surrogate)	90.7		%	M EPA 8015	11/28/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/19/2007
Toluene - d8 (Surr)	98.4		%	EPA 8260B	11/19/2007
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	11/19/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	97.7		%	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	99.4		%	EPA 8260B	11/20/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/21/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	100		%	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	96.6		%	EPA 8260B	11/21/2007
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/20/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/20/2007
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/20/2007
Toluene - d8 (Surr)	102		%	EPA 8260B	11/20/2007
4-Bromofluorobenzene (Surr)	99.8		%	EPA 8260B	11/20/2007

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Approved By: Joel Kiff

QC Report : Method Blank Data

Report Number : 59685

Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**

Project Number : **ZP046I**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Toluene - d8 (Surr)	96.0		%	EPA 8260B	11/21/2007
4-Bromofluorobenzene (Surr)	111		%	EPA 8260B	11/21/2007
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/21/2007
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	11/21/2007

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff

QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 59685

Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**

Project Number : **ZP046I**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	59684-01	<0.50	38.8	38.6	38.3	36.8	ug/L	EPA 8260B	11/19/07	98.6	95.2	3.54	70-130	25
Toluene	59684-01	<0.50	38.8	38.6	39.7	39.0	ug/L	EPA 8260B	11/19/07	102	101	1.39	70-130	25
Tert-Butanol	59684-01	<5.0	194	193	173	174	ug/L	EPA 8260B	11/19/07	89.0	90.1	1.15	70-130	25
Methyl-t-Butyl Ether	59684-01	<0.50	38.8	38.6	34.4	35.5	ug/L	EPA 8260B	11/19/07	88.6	92.1	3.78	70-130	25
Benzene	59593-11	2.6	39.9	39.9	43.6	43.6	ug/L	EPA 8260B	11/20/07	103	103	0.0563	70-130	25
Toluene	59593-11	0.67	39.9	39.9	38.5	38.4	ug/L	EPA 8260B	11/20/07	94.6	94.5	0.197	70-130	25
Tert-Butanol	59593-11	11	200	200	188	189	ug/L	EPA 8260B	11/20/07	88.6	89.3	0.843	70-130	25
Methyl-t-Butyl Ether	59593-11	4.4	39.9	39.9	51.3	50.7	ug/L	EPA 8260B	11/20/07	117	116	1.43	70-130	25
Benzene	59681-05	<0.50	40.1	40.0	36.6	36.2	ug/L	EPA 8260B	11/26/07	91.4	90.4	1.15	70-130	25
Toluene	59681-05	<0.50	40.1	40.0	36.2	36.0	ug/L	EPA 8260B	11/26/07	90.3	90.0	0.309	70-130	25
Tert-Butanol	59681-05	<5.0	200	200	180	173	ug/L	EPA 8260B	11/26/07	89.7	86.4	3.77	70-130	25
Methyl-t-Butyl Ether	59681-05	<0.50	40.1	40.0	35.7	37.2	ug/L	EPA 8260B	11/26/07	89.2	92.9	4.13	70-130	25
Benzene	59661-02	<0.50	40.0	40.0	39.3	38.4	ug/L	EPA 8260B	11/20/07	98.3	96.0	2.43	70-130	25
Toluene	59661-02	<0.50	40.0	40.0	33.7	32.8	ug/L	EPA 8260B	11/20/07	84.2	82.0	2.63	70-130	25
Tert-Butanol	59661-02	<5.0	200	200	195	188	ug/L	EPA 8260B	11/20/07	97.7	94.0	3.82	70-130	25
Methyl-t-Butyl Ether	59661-02	6.5	40.0	40.0	43.7	41.8	ug/L	EPA 8260B	11/20/07	93.0	88.2	5.26	70-130	25
Benzene	59668-02	<0.50	40.0	40.0	37.0	36.6	ug/L	EPA 8260B	11/21/07	92.4	91.5	0.938	70-130	25
Toluene	59668-02	<0.50	40.0	40.0	36.9	36.5	ug/L	EPA 8260B	11/21/07	92.2	91.2	1.11	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 59685

Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**

Project Number : **ZP046I**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	59668-02	<5.0	200	200	200	199	ug/L	EPA 8260B	11/21/07	100	99.5	0.563	70-130	25
Methyl-t-Butyl Ether	59668-02	<0.50	40.0	40.0	38.0	37.4	ug/L	EPA 8260B	11/21/07	95.1	93.6	1.66	70-130	25
Benzene	59712-01	<0.50	40.0	40.0	37.0	36.5	ug/L	EPA 8260B	11/21/07	92.6	91.3	1.34	70-130	25
Toluene	59712-01	<0.50	40.0	40.0	37.4	36.4	ug/L	EPA 8260B	11/21/07	93.5	91.1	2.63	70-130	25
Tert-Butanol	59712-01	9.2	200	200	204	204	ug/L	EPA 8260B	11/21/07	97.3	97.2	0.0859	70-130	25
Methyl-t-Butyl Ether	59712-01	5.7	40.0	40.0	44.2	44.2	ug/L	EPA 8260B	11/21/07	96.2	96.2	0.0585	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1000	1030	ug/L	M EPA 8015	11/20/07	100	103	2.46	70-130	25
TPH as Diesel	Blank	<50	1000	1000	1070	1080	ug/L	M EPA 8015	11/28/07	107	108	0.574	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

QC Report : Laboratory Control Sample (LCS)

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	11/19/07	99.6	70-130
Toluene	40.0	ug/L	EPA 8260B	11/19/07	106	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/19/07	92.7	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/19/07	93.3	70-130
Benzene	40.0	ug/L	EPA 8260B	11/20/07	101	70-130
Toluene	40.0	ug/L	EPA 8260B	11/20/07	93.5	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/20/07	87.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/20/07	118	70-130
Benzene	40.0	ug/L	EPA 8260B	11/22/07	102	70-130
Toluene	40.0	ug/L	EPA 8260B	11/22/07	99.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/22/07	97.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/22/07	99.6	70-130
Benzene	40.0	ug/L	EPA 8260B	11/20/07	95.8	70-130
Toluene	40.0	ug/L	EPA 8260B	11/20/07	100	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/20/07	92.5	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/20/07	92.4	70-130
Benzene	40.0	ug/L	EPA 8260B	11/21/07	92.6	70-130

KIFF ANALYTICAL, LLC
2795 2nd Street, Suite 300 Davis, CA 95618 530-297-4800

Approved By: Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 59685
Date : 11/30/2007

Project Name : **NAZ EAGLE GAS**
Project Number : **ZP046I**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	11/21/07	93.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/21/07	95.4	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/21/07	94.8	70-130
Benzene	40.0	ug/L	EPA 8260B	11/21/07	93.0	70-130
Toluene	40.0	ug/L	EPA 8260B	11/21/07	93.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/21/07	98.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/21/07	95.8	70-130

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Approved By: Joel Kiff

KIFF Analytical LLC

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SRG # / Lab No. 59685

Page 1 of 1

Chain-of-Custody Record and Analysis Request

Project Contact (Hardcopy or PDF To): Rob Nelson	California EDF Report? ☒ Yes ☐ No
Company / Address: Clearwater Group, 229 Tewksbury Ave, Pt. Richmond, CA.	Sampling Company Log Code: CWGO
Phone #: 510-307-9943 / Fax #: 510-232-2823	Global ID: T0605300219
Project #: ZP0461 / P.O. #:	EDF Deliverable To (Email Address): sfisco@clearwatergroup.com
Project Name: NAZ Eagle Gas	Sampler Signature: Eric V. Austin
Project Address: 4301 San Leandro St. Oakland, CA.	

Sample Designation	Sampling: Date	Sampling: Time	Container: 40 ml VOA	Container: Sleeve	Container: Poly	Container: Glass	Container: Tedlar	Preservative: HCl	Preservative: HNO_3	Preservative: None	Matrix: Water	Matrix: Soil	Matrix: Air	Analysis Request: MTBE (EPA 8260B) per EPA 8021 level @ 5.0 ppb	Analysis Request: MTBE (EPA 8260B) @ 0.5 ppb	Analysis Request: BTEX (EPA 8260B)	Analysis Request: TPH Gas (EPA 8260B)	Analysis Request: 5 Oxygenates (EPA 8260B)	Analysis Request: 7 Oxygenates (EPA 8260B)	Analysis Request: Lead Scav.(1,2 DCA & 1,2 EDB-EPA 8260B)	Analysis Request: Volatile Halocarbons (EPA 8260B)	Analysis Request: Volatile Organics Full List (EPA 8260B)	Analysis Request: Volatile Organics (EPA 524.2 Drinking Water)	Analysis Request: TPH as Diesel (EPA 8015M)	Analysis Request: TPH as Motor Oil (EPA 8015M)	Analysis Request: Total Lead (EPA 6010)	Analysis Request: W.E.T. Lead (STLC)	Analysis Request: TAT	TAT: 12 hr	TAT: 24 hr	TAT: 48 hr	TAT: 72 hr	TAT: ☒ wk	For Lab Use Only
IS-5	11/16/07	9:45	6					6			6			6	6	6	6							6				6							01
EW-2		11:00																																02
MW-2		11:45																																03
MW-4		12:45																																04
MW-5		13:45																																05
MW-8		14:45																																06
EW-1		15:45																																07

Relinquished by:	Date	Time	Received by:
Eric V. Austin	11/16/07	1730	
Relinquished by:	Date	Time	Received by:
Relinquished by:	Date	Time	Received by Laboratory:
	111907	1050	Kiff Analytical

Remarks:

Bill to:

For Lab Use Only: Sample Receipt

Temp °C	Initials	Date	Time	Therm. ID #	Coolant Present
4.4	JRB	111907	1407	IR5	(Yes) / No

Distribution: White - Lab; Pink - Originator
Rev: 051805