Mike Bauer
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Chevron Environmental Management Company
145 S. State College Blvd
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August 18, 2009

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

Re: Former Signal Oil Marine Storage and Distribution Facility
(Former Chevron Bulk Plant 20-6127)
2301-2311 Blanding Avenue
Alameda, California
LOP Case RO0002466

Dear Mr. Wickham:

The purpose of this letter is to verify that as a representative for Chevron Environmental Management Company (Chevron), I reviewed, and concur with, the comments in the *First and Second Quarter 2009 Groundwater Monitoring Report* for the referenced facility, prepared on behalf of Chevron by Conestoga-Rovers & Associates.

Please feel free to contact me at (714) 671-3207 if you have any questions.

Sincerely,

Mike Bauer
Project Manager

CONESTOGA-ROVERS
& ASSOCIATES

10969 Trade Center Drive, Suite 106, Rancho Cordova, CA 95670
Telephone: 916-889-8900 Facsimile: 916-889-8999
www.CRAworld.com

August 18, 2009 Reference No. 631916

Mr. Jerry Wickham
Alameda County Environmental Health (ACEH)
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502--6577

Re: First and Second Quarter 2009 Groundwater Monitoring Report
Former Signal Oil Marine Storage and Distribution Facility
(Former Chevron Bulk Plant 20-6127)
2301-2311 Blanding Avenue
Alameda, California
SLIC Case RO0002466

Dear Mr. Wickham:

Conestoga-Rovers & Associates (CRA) is submitting this *First and Second Quarter 2009 Groundwater Monitoring and Sampling Report* on behalf of Chevron Environmental Management Company (Chevron) for the site referenced above. The current monitoring and sampling program consists of gauging and sampling groundwater from well MW-1 onsite and collecting a surface water sample (CS-2) from the adjacent Alameda Canal on a quarterly basis. Site background information, summary of previous investigation, the results of the current monitoring and sampling activities, CRA's conclusions and recommendations, and anticipated future activities are discussed below.

SITE BACKGROUND

Site Description: The approximately 3.5-acre site is located on the northeast side of Blanding Avenue between Oak and Park Streets in Alameda, California (Figure 1). Land use in the site vicinity is primarily commercial and industrial. The Alameda Canal and a marina are located adjacent to the northeast of the site. The site is currently occupied by three large commercial buildings which are used as an office and retail center, and storage identified as Park Street Landing at 2307-2337 Blanding Avenue.

Site History: A Sanborn map dated 1897 showed the site as occupied by several residential structures and outbuildings; the southeast portion of the site was shown as occupied by a laundry facility and a blacksmith. From at least 1930 until approximately 1961, the northwestern portion of the site was occupied by a petroleum bulk plant operated by Signal Oil & Gas Company. Former bulk plant facilities consisted of one large and seven smaller gasoline aboveground storage tanks (ASTs) within concrete secondary containment, underground piping, an office building, a loading rack, and a small structure containing gasoline pumps

(Figure 2). The northeast portion of the facility was shown as occupied by a structure identified as an auto garage and also used for paint storage on Sanborn maps dated between 1932 and 1950. A rail spur was shown to service the facilities on Blanding Avenue. The central portion of the site was shown as occupied by two structures identified as wholesale tires and a can warehouse. An additional larger structure was shown in the central portion of the site that was identified as vacant on the 1948 Sanborn map and as a ladder factory on the 1950 Sanborn map. Several structures appeared present in the southeast portion of the site in the 1939 aerial photograph. However, only one or two small sheds were shown in this area on the 1948 and 1950 Sanborn maps. In the 1958 aerial photograph, the ladder factory structure no longer appeared present and the southeast portion of the site appeared vacant and used for parking. Between 1957 and 1963, the buildings at the site were reportedly removed; it is assumed that the ASTs and piping were also removed at this time. In the 1965 aerial photograph, all the bulk plant facilities appear to have been removed and the majority of the site appears occupied by a construction materials yard with several small structures. Several additional structures also appear present in the southeast portion of the site. From 1973 to 1983, the northwestern portion of the site reportedly was used as a construction yard and for boat repair activities; and the southeastern portion was occupied by a restaurant, paved parking area, and a possible automobile sales lot. In 1987, the site was redeveloped with the current configuration.

To date, one groundwater monitoring well and six vapor wells have been installed at the site. Additionally, 28 soil borings have been advanced and 3 surface soil samples collected at the site. Quarterly monitoring and sampling of well MW-1 and surface water sampling from Alameda Canal (CS-2) was initiated in 2001 is ongoing. A summary of previous environmental work performed at the site is presented as Attachment A.

Site Geology and Hydrogeology: The soils encountered beneath the site generally consist of silty sand and clayey sand from just beneath grade to approximately 5 and 9 feet below grade (fbg). Fill consisting of black sand and concrete fragments has been reported in several borings at shallow depths. A 4- to 5-foot-thick layer of clay with some sand underlies the silty sand and clayey sand. Below the clay is silty sand and sandy silt to the maximum depth of explored of approximately 20.5 fbg. Groundwater is encountered in site borings at approximately 14.5 to 15 fbg within the silty sand and sandy silt and subsequently rises in the borings/well to approximately 7 to 10 fbg.

RESULTS OF THE FIRST AND SECOND QUARTER 2009 MONITORING EVENTS

Groundwater Monitoring: On January 21, 2009 and April 15, 2009, G-R gauged and sampled well MW-1 and collected grab surface water samples from canal sampling location CS-2 (Figure 2).

- Depth to water in well MW-1 was 7.19 fbg during the first quarter event and 6.93 fbg during the second quarter event.

Groundwater and surface water samples were analyzed for:

- Total petroleum hydrocarbons as diesel (TPHd)
- Total petroleum hydrocarbons as gasoline (TPHg)
- Benzene, toluene, ethylbenzene, xylenes (BTEX)
- Methyl tertiary butyl ether (MTBE).

The results are included in G-R's reports dated February 18, 2009 and May 12, 2009 (Attachment B) and are summarized below.

First Quarter Analytical Results:

- No TPHg, BTEX, and MTBE were detected in the groundwater and surface water samples collected from well MW-1 and canal sampling location CS-2. Additionally, no TPHd was detected in the surface water sample collected from canal sampling location CS-2.
- Consistent with historical data, TPHd was detected in the groundwater sample collected from well MW-1 at a concentration of 390 micrograms per liter (µg/L).

Second Quarter Analytical Results:

- No TPHg, BTEX, and MTBE were detected in the surface water sample collected from canal sampling location CS-2. Additionally, no toluene, ethylbenzene, xylenes, or MTBE were detected in the groundwater sample collected from well MW-1.
- TPHd was detected in well MW-1 at a concentration of 1,400 µg/L and in the surface water sample CS-2 at a concentration of 86 µg/L.
- TPHg and benzene were detected in well MW-1 at concentrations of 80 µg/L and 0.7 µg/L, respectively. These results are consistent with historical data.

CONCLUSIONS AND RECOMMENDATION

Results of the first and second quarter 2009 groundwater monitoring events indicate:

- Current groundwater and surface water analytical data are generally consistent with past analytical data, which continues to support that the dissolved hydrocarbon plume beneath the site is stable.
- The primary constituent of concern is TPHd; however, the limited monitoring well network may not be characteristic of the entire site.

- Given the site history and the general lack of more volatile lighter end hydrocarbon constituents present in the groundwater beneath the site, the plume is old and not likely to migrate significantly.

In response to the ACEH letter dated July 24, 2009 regarding Resolution No. 2009-0042, CRA recommends continued quarterly sampling of well MW-1 and CS-2 at this point since an ongoing assessment is in progress (newly installed wells MW-2 through MW-5 will be sampled during the third quarter 2009) and surface water samples collected at CS-2 are monitoring the potential impact from the site to Alameda Canal.

ANTICIPATED FUTURE ACTIVITIES

Quarterly Groundwater and Surface Water Sampling: G-R will gauge and sample well MW-1 and surface water sampling location CS-2, as well as newly installed wells MW-2 through MW-5, during the third quarter 2009 monitoring event. Upon completion of this event, CRA will prepare a summary of the site conditions and monitoring results.

Well Installation and Sub-slab Vapor Probe Installation Report: CRA is currently preparing a report documenting the installation of four monitoring wells MW-2 through MW-5 and installation and sampling of seven sub-slab vapor probes VP-7 through VP-13. The report will be submitted to ACEH by September 8, 2009.

We appreciate the opportunity to work with you on this project. Please contact Mr. Brian Silva at (916) 889-8908 if you have any questions or require additional information.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Brian Silva

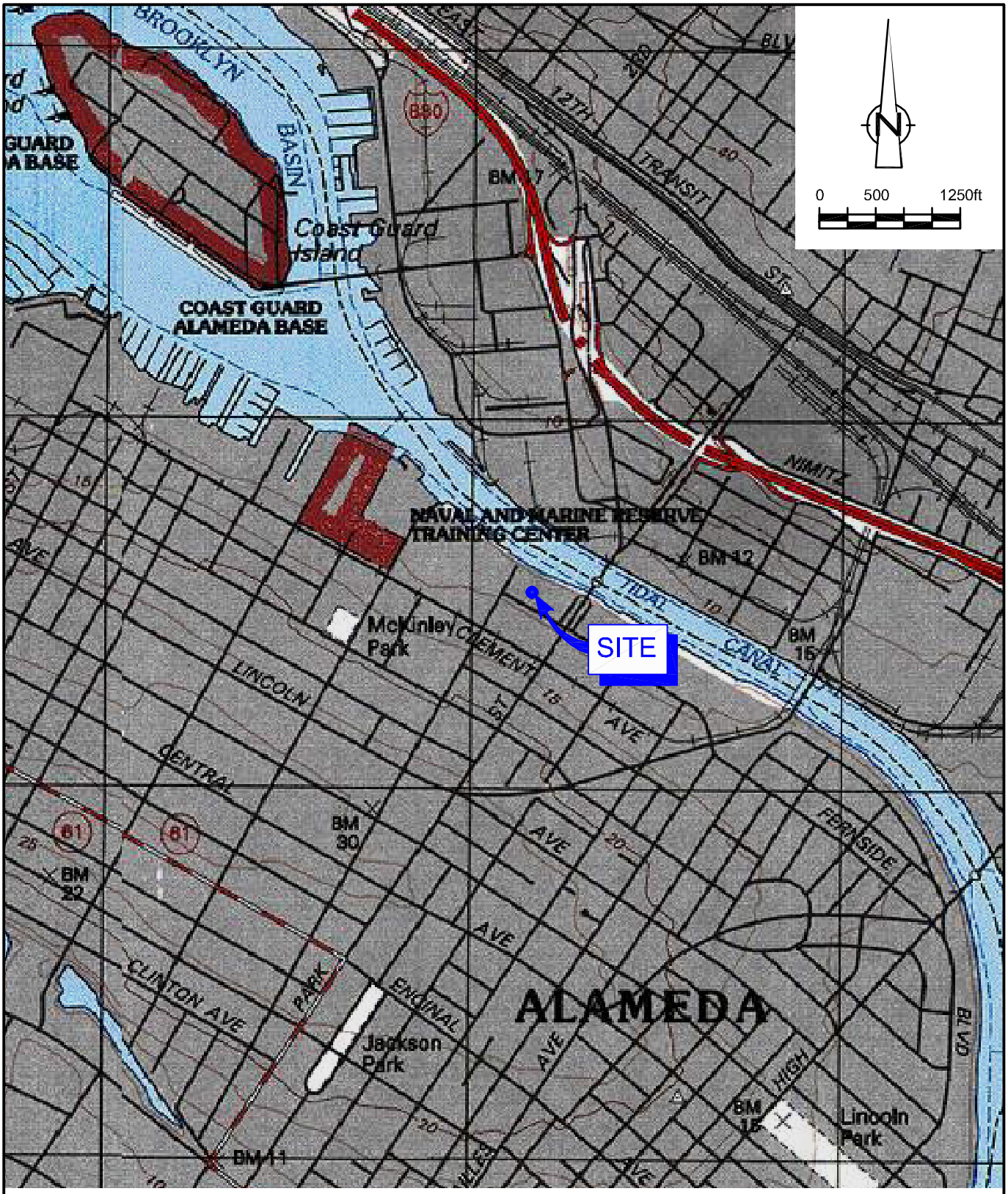
Greg Barclay, PG 6260

AR/jt/7
Encl.

Figure 1	Site Vicinity Map
Figure 2	Hydrocarbon Concentrations in Groundwater - January 21, 2009
Figure 3	Hydrocarbon Concentrations in Groundwater - April 15, 2009
Attachment A	Summary of Previous Environmental Work
Attachment B	G-R First and Second Quarter 2009 Groundwater Monitoring and Sampling Reports

cc: Mike Bauer, Chevron Environmental Management Company (***electronic only***)
Julie Beck Ball
Peter Reinhold Beck
Monroe Wingate
Tom Foley, Gallagher & Miersch

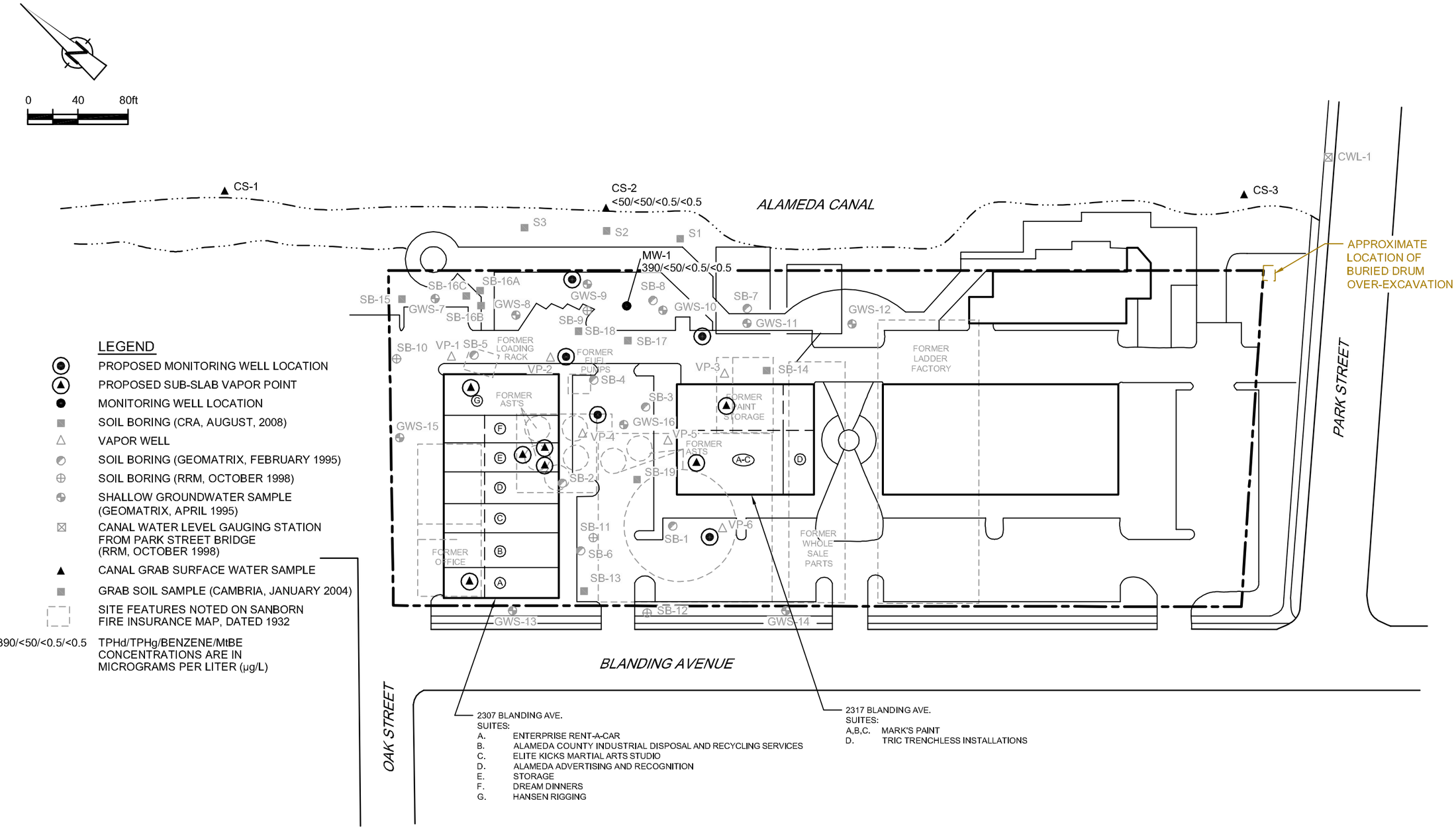
FIGURES



SOURCE: TOPO! MAPS.

figure 1

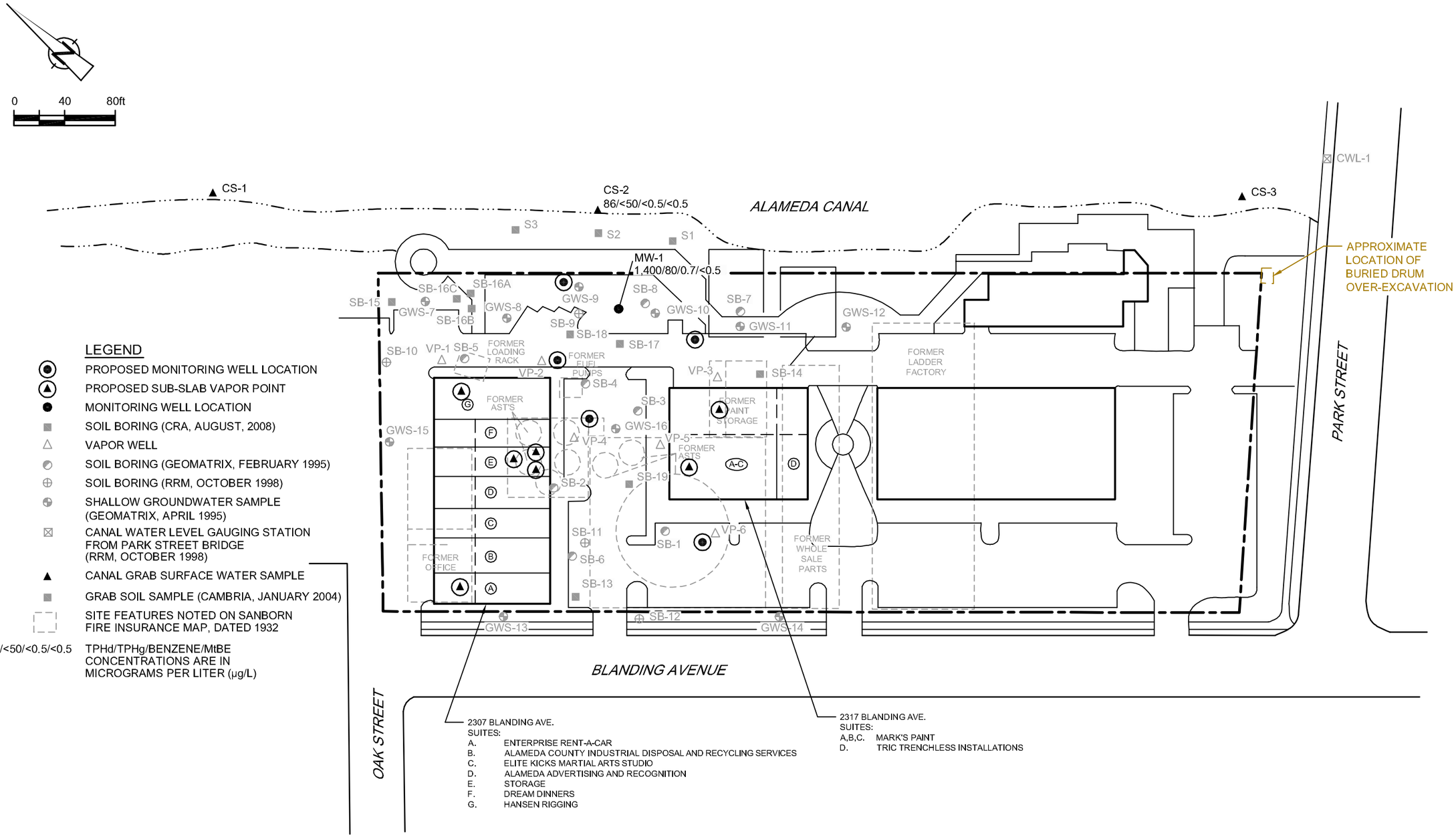
VICINITY MAP
CHEVRON # 206127 - FORMER SIGNAL OIL BULK PLANT
2301-2311 BLANDING AVENUE
Alameda, California



NOTE:
ALL LOCATIONS ARE APPROXIMATE.

figure 2

HYDROCARBON CONCENTRATIONS IN GROUNDWATER - JANUARY 21, 2009
CHEVRON 20-6127 - FORMER SIGNAL OIL BULK PLANT
2301-2311 BLANDING AVENUE
Alameda, California



NOTE:
ALL LOCATIONS ARE APPROXIMATE.

figure 3

HYDROCARBON CONCENTRATIONS IN GROUNDWATER - APRIL 15, 2009
CHEVRON 20-6127 - FORMER SIGNAL OIL BULK PLANT
2301-2311 BLANDING AVENUE
Alameda, California

ATTACHMENT A

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

SUMMARY OF PREVIOUS ENVIRONMENTAL WORK

Former Signal Oil Bulk Plant 20-6127
2301-2311 Blanding Avenue, Alameda, California

1995 Soil and Groundwater Investigation: In February 1995, Geomatrix Consultants, Inc. (Geomatrix) advanced eight soil borings (SB-1 through SB-8) to approximately 10 feet below grade (fbg) in the northwestern portion of the site to evaluate if previous site uses had impacted soil and groundwater quality. Groundwater was not encountered in the borings. Two to three soil samples were collected at various depths from each boring for laboratory analysis. Nineteen samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and diesel (TPHd); and benzene, toluene, ethylbenzene, and xylenes (BTEX). TPHg was detected in six of the samples at concentrations ranging from 4.0 to 2,000 milligrams per kilogram (mg/kg). TPHd was detected in the majority of the samples at concentrations ranging from 10 to 250 mg/kg. BTEX were also detected in several of the samples (benzene up to 3.7 mg/kg). The highest concentrations of petroleum hydrocarbons generally were detected in borings SB-2 and SB-4 located in the vicinity of the former ASTs and gasoline pump, respectively, between 4 and 7 fbg. One sample from each boring (depths ranging from 0.5 to 3 fbg) was also analyzed for CAM 17 metals. The detected metals concentrations generally appeared to be within the range of natural background levels with the exception of slightly elevated arsenic in a few samples. Arsenic was detected in the samples collected at 1 fbg from borings SB-3, SB-4, and SB-6 at 68 mg/kg, 46 mg/kg, and 130 mg/kg, respectively. As a result, deeper samples collected from borings SB-3 (6.5 fbg) and SB-6 (8 fbg) were also analyzed for arsenic; arsenic was not detected in the sample collected from SB-3, but was detected at 2.5 mg/kg in the sample collected from SB-6. Based on these results, the soil impacted with arsenic appeared to be of limited vertical extent. Three soil samples (SB-4-7', SB-5-6', and SB-8-7') were also analyzed for VOCs, which were not detected. Based on the soil analytical results, a shallow groundwater survey was recommended to evaluate if groundwater had been impacted by petroleum hydrocarbons.

In April 1995, Geomatrix collected grab-groundwater samples from 10 shallow borings (GWS-7 through GWS-16) drilled to depths of 15 to 21.5 fbg at the site. Borings GWS-7 through GWS-12 were located in the northeastern portion of the site adjacent to Alameda Canal to evaluate if impacted groundwater was flowing toward the canal; based on an assumed groundwater flow direction toward the canal. Borings GWS-13 through GWS-15 were located on the southwest and northwest property boundaries in the assumed upgradient and perimeter crossgradient directions to evaluate the quality of groundwater coming onto the site. Boring GWS-16 was located to the northeast of the former ASTs and was drilled approximately 6 feet deeper than the remaining borings to evaluate deeper groundwater quality. The groundwater samples were analyzed for TPHg, BTEX, and TPHd; the samples were filtered by the laboratory to remove turbidity and a silica-gel cleanup was performed to remove non-petroleum organic matter prior to the TPHd analysis. TPHg was detected in the samples collected from borings GWS-8 through GWS-11 and GWS-16 at concentrations ranging from 70 (GWS-16) to 22,000 micrograms per liter (µg/L) (GWS-9). TPHd was detected in the samples collected from borings GWS-8 through GWS-11 at concentrations ranging from 60 (GWS-8) to 1,200 µg/L

(GWS-9). Benzene was detected in the samples collected from borings GWS-8 through GWS-10 and GWS-16 at concentrations of 36 µg/L, 6,200 µg/L, and 880 µg/L, respectively. Toluene, ethylbenzene, and xylenes (up to 1,200 µg/L) were also detected in several of the samples. The maximum concentrations were detected in boring GWS-9 located downgradient of the gasoline pump and loading rack. Petroleum hydrocarbons were not detected in the upgradient borings GWS-13 through GWS-15. The deeper sample (GWS-16) contained only low to trace hydrocarbon concentrations.

A black granular material was encountered in boring GWS-7 in the northern corner of the site from approximately 2.5 to 6 fbg. This material appeared similar to a small pile of black granular material observed on the northwestern property boundary that appeared to have originated from the adjacent property (a metal fabrication company). A sample of this material was collected and analyzed for TPHd, VOCs, semi-VOCs, and CAM 17 metals. An elevated concentration of copper (1,700 mg/kg) was detected in the sample. The detected concentration did not exceed the Total Threshold Limit Concentration (TTLC) of 2,500 mg/kg, which is the concentration above which a waste may be considered hazardous in California. The sample was also analyzed for soluble copper using the Waste Extraction Test (WET) method; which was detected at 0.04 milligrams per liter (mg/L). The detected soluble lead concentration did not exceed the Soluble Threshold Limit Concentration (STLC) of 25 mg/L, which is also the concentration above which a waste may be considered hazardous in California. Details of this investigation were presented in the report entitled *Soil Investigation and Shallow Groundwater Survey, Northwestern Portion of the Park Street Landing Site*, prepared by Geomatrix and dated September 1995.

1998 RBCA Tier 1 Evaluation: In July 1998, RRM, Inc. (RRM) performed a Tier 1 Risk-Based Corrective Action (RBCA) assessment to evaluate the potential health risks posed by residual petroleum hydrocarbons in soil and groundwater at the site. Based on the results, RRM recommended the collection of site-specific data to complete a Tier 2 RBCA evaluation; the identification of the beneficial uses of groundwater beneath the site; an evaluation of background water quality in Alameda Canal; and to provide evidence that biodegradation was reducing hydrocarbon concentrations. Details of this investigation were presented in the report entitled *Risk-Based Corrective Action (RBCA) Tier 1 Evaluation, Park Street Landing Site*, prepared by RRM and dated July 24, 1998.

1998 Soil and Groundwater Investigation: In October 1998, RRM performed an additional soil and groundwater investigation at the site. The purpose of the investigation was to: 1) collect site-specific data to complete a Tier 2 RBCA evaluation; 2) identify the beneficial uses of groundwater beneath the site; 3) evaluate the background water quality in Alameda Canal; and 4) evaluate whether biodegradation of petroleum hydrocarbons was occurring beneath the site. Four additional borings (SB-9 through SB-12) were advanced to depths of 15 to 18 fbg during the investigation. A total of eight soil samples were collected at various depths from the borings and analyzed for TPHg, TPHd, BTEX, and methyl tertiary butyl ether (MTBE). TPHg was detected in the soil samples collected at 5 and 13 fbg from boring SB-9 (130 and 900 mg/kg, respectively); and in the sample collected at 6 fbg from boring SB-11 (140 mg/kg). TPHd was detected in the soil samples collected at 5, 13, and 15 fbg from boring SB-9 (3,300 mg/kg,

1,300 mg/kg, and 1.2 mg/kg, respectively); in the sample collected at 5.5 fbg from boring SB-10 (130 mg/kg); and in the sample collected at 6 fbg from boring SB-11 (60 mg/kg). BTEX (up to 3.3 mg/kg) were detected in the soil samples collected from borings SB-9 and SB-11; MTBE (using EPA Method 8020) was only detected in the sample collected at 13 fbg from boring SB-9 (12 mg/kg). Following the initial TPHd analysis, two rounds of silica gel cleanup followed by TPHd analysis were performed on the soil samples from boring SB-9. The detected TPHd concentrations were reduced after each round, indicating that biodegradation was occurring, and natural organic matter was present in the subsurface.

Grab-groundwater samples were collected from each boring and analyzed for TPHg, TPHd, BTEX, and MTBE. TPHg was only detected in the samples collected from borings SB-9 (14,000 µg/L) and SB-11 (310 µg/L). TPHd was detected in the samples collected from borings SB-9 (83,000 µg/L), SB-10 (97 µg/L), and SB-11 (270 µg/L). Benzene and MTBE (using EPA Method 8020) were only detected in the sample collected from boring SB-9 (1,400 and 260 µg/L, respectively); the sample was re-analyzed for MTBE using EPA Method 8260, and MTBE was not detected. Toluene, ethylbenzene, and xylenes (up to 630 µg/L) were detected in the samples collected from borings SB-9 and SB-11. As with the soil samples, a silica-gel cleanup reduced the detected TPHd concentrations. Based on the depth to water in the borings, and the elevation of the borings, the groundwater flow direction was calculated to be northerly. Based on natural biodegradation indicator parameters in groundwater (dissolved oxygen, oxidation-reduction potential, nitrate, and sulfate), it appeared that petroleum hydrocarbons were being degraded both aerobically and anaerobically; although it appeared that anaerobic processes dominated.

Three grab-water samples (CS-1 through CS-3) were collected from Alameda Canal (Figure 2) and analyzed for TPHg, TPHd, BTEX, and MTBE; which were not detected. Water level measurements were collected from the Alameda Canal and the four temporary wells placed in borings SB-9 through SB-12 to evaluate potential tidal influence on groundwater beneath the site. The fluctuations in borings SB-10 through SB-12 were minimal indicating that groundwater was tidally influenced to a limited degree in these areas. A more significant fluctuation was observed in SB-9; suggesting that groundwater in this area was tidally influenced, and tidal fluctuations would tend to stabilize the petroleum hydrocarbon plume in this area. Two concrete sea walls separated shallow groundwater beneath the site from canal water; likely causing the limited tidal influence. Based on the site data, relevant beneficial uses, and associated water quality parameters, the most applicable beneficial use of groundwater beneath the site was determined to be freshwater replenishment to surface water.

A well survey was performed for a ½-mile radius around the site. Nine wells were identified within the search radius (one recovery well, one irrigation well, five extraction wells, and two industrial wells). All the wells were either located up-gradient of the site or across the Alameda Canal. Based on the results of the Tier 2 RBCA evaluation, soil and groundwater petroleum hydrocarbon concentrations at the site did not exceed the site-specific target levels (SSTLs). Details of this investigation were presented in the report entitled *Soil and Groundwater Investigation Results, Former Signal Oil Marine Terminal*, prepared by RRM and dated May 7, 1999.

2000 Monitoring Well Installation: In December 2000, Gettler-Ryan Inc., under the supervision of Delta Environmental Consultants, Inc. (Delta), installed one groundwater monitoring well (MW-1) along the northeastern portion of the site adjacent to the Alameda Canal. Soil samples were collected at depths of 5, 10, and 15 fbg from the well boring and analyzed for TPHg, TPHd, BTEX, and MTBE. TPHg was only detected in the sample collected at 10 fbg (320 mg/kg). TPHd was only detected in the samples collected at 5 and 10 fbg (30 and 160 mg/kg, respectively). Low concentrations of BTEX were detected in all the samples; MTBE was not detected in any of the samples. The initial groundwater sample collected from the well contained TPHg, TPHd, and benzene at 5,210 µg/L, 1,100 µg/L, and 868 µg/L, respectively. Details of this investigation were presented in the report entitled *Monitoring Well Installation Report*, prepared by Delta and dated April 10, 2001.

2004 Soil Investigation: In January 2004, Cambria Environmental Technology, Inc. (Cambria) collected three surface soil samples (S1, S2, and S3) from the bank above the western shore of the Alameda Canal. Sample S2 was collected directly down-slope of well MW-1 near a water seep observed on the slope above the canal. Samples S1 and S3 were collected approximately 70 feet east and 90 feet north of well MW-1, respectively, to evaluate background concentrations. The three samples were analyzed for TPHg, TPHd, BTEX, and MTBE. TPHg, BTEX, and MTBE were not detected in any of the samples. TPHd was detected in samples S1, S2, and S3 at 14 mg/kg, 220 mg/kg, and 220 mg/kg, respectively. The laboratory chromatographs indicated that the hydrocarbon pattern observed in these soil samples was not typical of diesel fuel. Therefore, it was concluded the TPHd detections may have represented either highly-degraded diesel fuel from various historical onsite and nearby operations, or residual organic material of unknown origin present in local fill material. Details of this investigation were presented in the report entitled *Soil Sampling Report*, prepared by Cambria and dated February 18, 2004.

Based on generally decreasing petroleum hydrocarbon concentrations in well MW-1 observed during quarterly monitoring, Cambria submitted a case closure request to ACEH dated January 10, 2006. In response to this request, and in a letter dated October 17, 2007, the ACEH requested the collection of additional data to substantiate the conclusion that petroleum hydrocarbons were not migrating and discharging into Alameda Canal. In addition, the potential for vapor intrusion was to be evaluated. Therefore, CRA prepared and submitted *Soil Boring and Vapor Point Installation Work Plan*, dated January 10, 2008. In a letter dated January 30, 2008, the ACEH approved the work plan, with several provisions.

2008 Site Investigation: In July 2008, CRA advanced six soil borings (SB-13 through SB-15 and SB-17 through SB-19) to a maximum depth of 16 fbg, and installed and sampled six permanent soil vapor wells (VP-1 through VP-6) to depths of 4.5 to 6 fbg. Soil boring SB-16 was cleared to 3 fbg but could not be completed due to refusal encountered at three locations (16A, B, and C). Soil boring SB-16 was cleared to 3 fbg but could not be completed due to refusal encountered at three locations (16A, B, and C).

Soil analytical data indicated that the majority of TPHd and TPHg concentrations in soil are generally located in the area of and downgradient of the former ASTs. The highest

concentrations were detected in boring VP-4 at 5 fbg. Relatively low concentrations of TPHd and TPHg were detected in the perimeter borings. Low concentrations of petroleum-related VOCs were also detected in the majority of the soil samples. The BTEX and VOC concentrations generally did not exceed the ESLs, with the exception of a few samples. Concentrations generally appeared to attenuate or were significantly reduced at 10 fbg. Generally, concentrations of metals were consistent with background levels and only exceeded the ESLs in a few of the samples. Metals in shallow soil across the northwest portion of the site do not appear to be a result of former bulk plant operations. The metals do not appear to have impacted groundwater as only barium was detected in well MW-1.

The highest concentrations of hydrocarbons in groundwater were generally located downgradient of the former ASTs. TPHd, TPHg, and benzene were detected in downgradient boring SB-18 at 19,000 µg/L, 3,800 µg/L, and 590 µg/L, respectively; but only at 1,600 µg/L, 650 µg/L, and 3 µg/L, respectively, in boring SB-19 adjacent to the former large AST. Only relatively low concentrations of TPHd (up to 750 µg/L) were detected in perimeter borings SB-13, SB-14, and SB-15; and as evidenced by the work performed by RRM, some or most of the detected TPHd may be due to natural organic matter. The extent of the impacted groundwater is well-defined by borings GWS-7, GWS-12 through GWS-15, SB-10 (following silica gel cleanup), and SB-12. Chlorinated solvents were not detected in any of the soil samples collected, and generally were not detected in the groundwater samples with the exception of low concentrations of TCE, cis-1,2-DCE, and vinyl chloride in the sample collected from boring SB-15 in the northeast corner of the site.

The highest hydrocarbon concentrations in soil gas were detected in vapor wells VP-4, VP-5, and VP-6 located in the area of the former ASTs. Significantly lower concentrations were detected in vapor wells VP-1 and VP-2 located downgradient of VP-4. Chlorinated solvents were not detected in the soil vapor samples. Additional details of this investigation are presented in CRA's report entitled *Site Investigation Report*, dated October 2008.

ATTACHMENT B

G-R FIRST AND SECOND QUARTER 2009 GROUNDWATER MONITORING AND SAMPLING REPORTS

GETTLER-RYAN INC.

TRANSMITTAL

February 20, 2009
G-R #386498

TO: Mr. James Kiernan
Conestoga-Rovers & Associates
2000 Opportunity Drive, Suite 110
Roseville, CA 95678
(VIA PDF)

CC: Ms. Stacie H. Frerichs
Chevron EMC
6111 Bollinger Canyon Road
Room 3596
San Ramon, California 94583
(VIA PDF)

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

RE: Chevron #206127 (MTI)
2301-2337 Blanding Avenue
Alameda, California
(Former Signal Oil Marine Terminal)

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 18, 2009	Groundwater Monitoring and Sampling Report **First Quarter Event of January 21, 2009**

COMMENTS:

Pursuant to your request, we are providing you with a copy of the above referenced report for **your use and distribution to the following (via PDF):**

Mr. Steven Plunkett, Alameda County Health Care Services, Dept. of Environmental Health, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577
(Distributed by Conestoga-Rovers & Associates via PDF)

Enclosures

trans/206127-SHF

Chevron

Stacie H. Frerichs
Team Lead
Marketing Business Unit

Chevron Environmental Management Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
Tel (925) 842-9655
Fax (925) 842-8370

February 20, 2009
(date)

Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Chevron Facility # 206127

Address: 2301-2337 Blanding Ave., Alameda, California

I have reviewed the attached routine groundwater monitoring report dated February 20, 2009.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Gettler-Ryan, Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13267(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

SHFrerichs

Stacie H. Frerichs
Project Manager

Enclosure: Report

WELL CONDITION STATUS SHEET

Client/Facility #: **Chevron #206127**
Site Address: **2301-2337 Blanding Avenue**
City: **Alameda, CA**

Job # **386498**
Event Date: 1-21-09
Sampler: Joe

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS (M) Missing (R) Replaced	Bolt Flanges B= Broken S= Stripped R=Retap	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	O.k	O.k	O.k	O.k	O.k	ok	O.k	Y	Y	12" EMCO/2	No

Comments

GETTLER-RYAN INC.

February 18, 2009
G-R Job #386498

Ms. Stacie H. Frerichs
Chevron Environmental Management Company
6111 Bollinger Canyon Road, Room 3596
San Ramon, CA 94583

RE: First Quarter Event of January 21, 2009
Groundwater Monitoring & Sampling Report
Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

Dear Ms. H. Frerichs:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater level was measured and the well was checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevation, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Groundwater Elevation Map is included as Figure 1.

Groundwater samples were collected from the monitoring well and submitted to a state certified laboratory for analyses. The field data sheet for this event is attached. Analytical results are presented in the table(s) listed below. The chain of custody document and the laboratory analytical reports are also attached. All groundwater and decontamination water generated during sampling activities was removed from the site, per the Standard Operating Procedure.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

Deanna L. Harding
Project Coordinator

PROFESSIONAL GEOLOGIST
DOUGLAS J. LEE
No. 6882
STATE OF CALIFORNIA

Douglas J. Lee
Senior Geologist, P.G. No. 6882

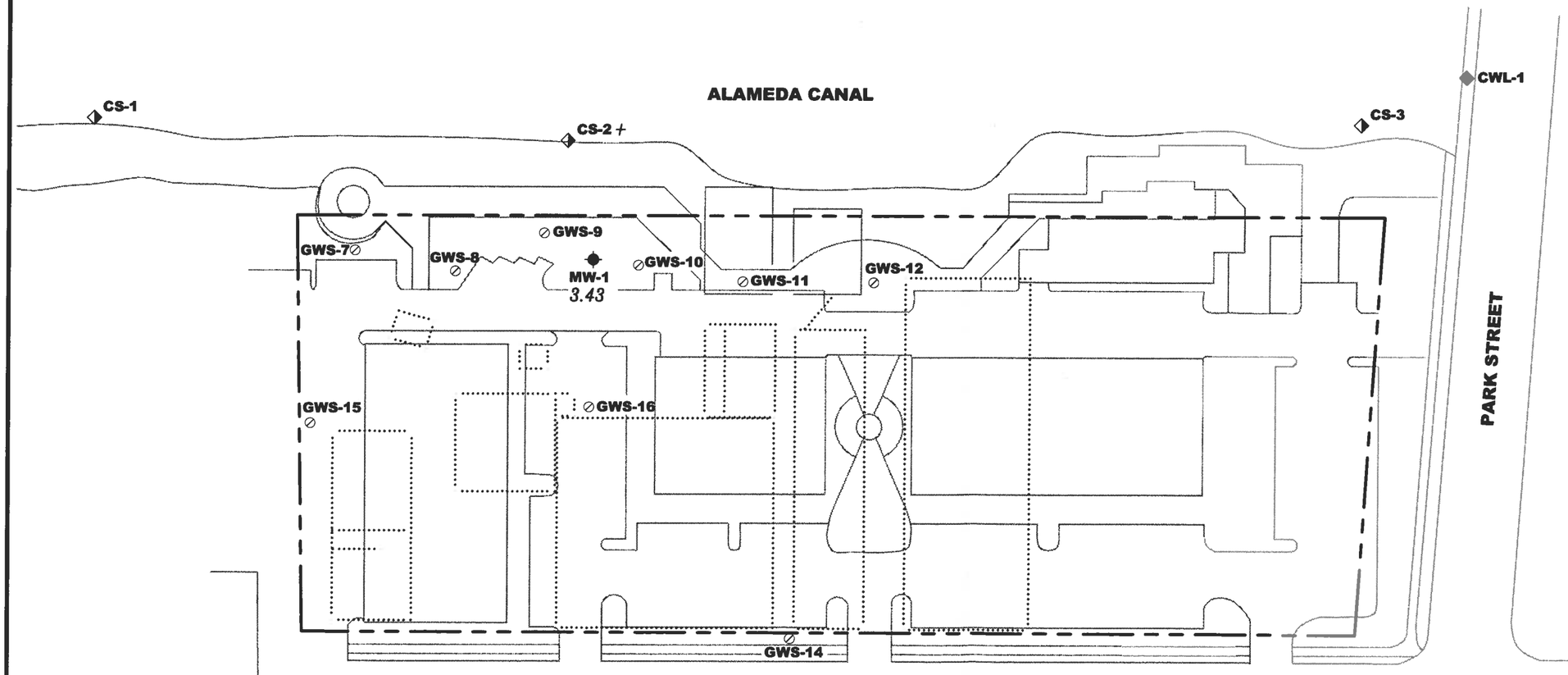
Figure 1: Groundwater Elevation Map
Table 1: Groundwater Monitoring Data and Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

EXPLANATION

- Groundwater monitoring well
- Canal water level gauging station from Park Street Bridge (RRM, October 1998)
- Canal grab surface water sample
- Shallow groundwater survey point (Geomatrix, April 1995)
- Site features noted on Sanborn Fire Insurance map, dated 1932

99.99 Groundwater elevation in feet referenced to Mean Sea Level

\+ TOC not available



Source: Figure modified from drawing provided by RRM engineering contracting firm.

FIGURE 1

GROUNDWATER ELEVATION MAP
Chevron #206127 (Former Signal Oil Marine Terminal)
2301–2337 Blanding Avenue
Alameda, California

REVISED DATE

DATE
January 21, 2009

REVIEWED BY

PROJECT NUMBER
346498

FILE NAME: P:\Enviro\Chevron\206127\Q09-20-6127.dwg | Layout Tab: Pot1

GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-D (µg/L)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-1										
01/23/01[1]	--	7.16	--	1,100[2,3]	5,210[4]	868	<50.0	<50.0	<50.0	<250
04/09/01	10.62	8.12	2.50	1,200[6]	3,000[5]	920	<20	<20	<20	<100
07/30/01	10.62	9.15	1.47	550[3,8]	2,000[7]	730	13	<5.0	<5.0	<25
10/08/01	10.62	7.86	2.76	2,200[9]	1,200	120	2.4	5.9	6.4	<2.5
01/13/02	10.62	7.02	3.60	3,300[3]	930	320	0.78	0.87	3.8	<2.5
04/08/02	10.62	9.60	1.02	1,200[3]	960	50	1.4	2.6	9.0	<2.5
07/31/02	10.62	9.27	1.35	2,800[3]	930	64	1.4	1.9	11	<5.0
10/15/02	10.62	8.00	2.62	1,000[3]	620	25	0.78	1.4	4.3	<2.5
01/14/03	10.62	7.05	3.57	960[3]	1,600	20	1.3	1.3	<1.5	<2.5
04/15/03	10.62	8.02	2.60	920[3]	870	56	1	1.4	3.1	<2.5
07/16/03[10]	10.62	10.08	0.54	1,400[3]	780	85	1	0.8	0.7	<0.5
10/18/03[10]	10.62	8.51	2.11	1,200[3]	640	42	0.8	<0.5	0.5	<0.5
01/22/04[10]	10.62	8.95	1.67	1,500[3]	440	18	<0.5	<0.5	<0.5	<0.5
04/23/04[10]	10.62	8.95	1.67	2,200[3]	410	10	<0.5	<0.5	<0.5	<0.5
07/23/04[10]	10.62	9.21	1.41	1,800[3]	400	6	<0.5	<0.5	<0.5	<0.5
10/22/04[10]	10.62	8.36	2.26	2,200[3]	150	2	<0.5	<0.5	<0.5	<0.5
01/28/05[10]	10.62	7.09	3.53	1,200[3]	55	8	<0.5	<0.5	<0.5	<0.5
04/26/05[10]	10.62	7.84	2.78	480[3]	<50	5	<0.5	<0.5	<0.5	<0.5
07/15/05[10]	10.62	8.12	2.50	610[3,11]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05[10]	10.62	8.07	2.55	920[3,12]	<50	10	<0.5	<0.5	<0.5	<0.5
01/12/06[10]	10.62	6.98	3.64	960[3,12]	<50	6	<0.5	<0.5	<0.5	<0.5
04/13/06[10]	10.62	7.04	3.58	1,200[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06[10]	10.62	7.13	3.49	1,200[3]	92	14	<0.5	<0.5	<0.5	<0.5
10/17/06[10]	10.62	7.64	2.98	990[3]	<50	3	<0.5	<0.5	<0.5	<0.5
01/16/07[10]	10.62	7.09	3.53	840[3]	83	4	<0.5	<0.5	<0.5	<0.5
04/17/07[10]	10.62	7.11	3.51	1,200[3]	57	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07[10]	10.62	7.41	3.21	1,100[3]	120	8	<0.5	<0.5	<0.5	<0.5
10/16/07[10]	10.62	7.55	3.07	750[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08[10]	10.62	6.98	3.64	1,700[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08[10]	10.62	7.36	3.26	1,100[3]	62	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08[10]	10.62	7.89	2.73	580[3]	93	3	<0.5	<0.5	<0.5	<0.5
10/15/08[10]	10.62	7.46	3.16	740[3]	56	0.7	<0.5	<0.5	0.8	<0.5
01/21/09[10]	**10.62**	**7.19**	**3.43**	**390[3]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)

2301-2337 Blanding Avenue

Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-D (µg/L)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
CS-2										
07/30/01	--	--	--	140[3,5]	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/08/01	--	--	--	53[9]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/08/02	--	--	--	77[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
07/31/02	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
10/15/02	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/14/03	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/15/03	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<1.5	<2.5
07/16/03[10]	--	--	--	<50[3]	<50	<0.5	0.7	<0.5	0.6	<0.5
10/18/03[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/23/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/23/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/22/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/15/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/12/06[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/13/06[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06[10]	--	--	--	140[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/17/06[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/17/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/16/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08[10]	--	--	--	85[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/09[10]	**--**	**--**	**--**	**<50[3]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-D (µg/L)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
TRIP BLANK										
TB-LB										
01/23/01	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
04/09/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/30/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA										
10/08/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/08/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
07/31/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
10/15/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/14/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/15/03	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5
07/16/03[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/18/03[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/23/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/23/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/22/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/15/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/12/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/13/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/17/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/17/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/16/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)

2301-2337 Blanding Avenue

Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-D (µg/L)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
QA (cont)										
01/16/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/09[10]	--	--	--	--	**<50[13]**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

EXPLANATIONS:

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
(msl) = Mean sea level
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl Tertiary Butyl Ether
(µg/L) = Micrograms per liter
-- = Not Measured/Not Analyzed
CS-2 = Creek Sample
QA = Quality Assurance/Trip Blank

* TOC elevations were surveyed on January 25, 2001, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).

1 Well development performed.
2 Laboratory report indicates unidentified hydrocarbons <C16.
3 TPH-D with silica gel cleanup.
4 Laboratory report indicates weathered gasoline C6-C12.
5 Laboratory report indicates discrete peaks.
6 Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.
7 Laboratory report indicates gasoline C6-C12.
8 Laboratory report indicates unidentified hydrocarbons C9-C24.
9 Analysis performed without silica gel cleanup although was requested on the Chain of Custody.
10 BTEX and MTBE by EPA Method 8260.
11 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel.
12 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.
13 Laboratory report indicates the original analysis was performed on an instrument where the ending calibration standard failed the method criteria. The sample was originally analyzed approximately 60 minutes after the LCS/LCSD. The LCS/LCSD showed good GRO recovery and the surrogate recovery for this sample was 85%. The sample was reanalyzed from a vial with headspace since only 1 vial was submitted. The results for the original and the reanalysis were similar. The reanalysis was reported.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by IWM to Chemical Waste Management located in Kettleman Hills, California.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #206127 Job Number: 386498
Site Address: 2301-2337 Blanding Avenue Event Date: 1-21-09 (inclusive)
City: Alameda, CA Sampler: Joe

Well ID MW-1 Date Monitored: 1-21-09
Well Diameter 2 in.
Total Depth 17.16 ft.
Depth to Water 7.19 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

9.97 xVF 0.17 = 1.69 x3 case volume = Estimated Purge Volume: 5.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.18

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Water Removed:
Product Transferred to:

Start Time (purge): 0700 Weather Conditions: cloudy
Sample Time/Date: 0738 / 1-21-09 Water Color: clear Odor: Y / (N)
Approx. Flow Rate: gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal. DTW @ Sampling: 7.81

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
0710	1.5	6.96	2268	16.2		
0716	3.5	6.90	2345	16.8		
0724	5.5	6.91	2319	16.5		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-D w/sg (8015)

COMMENTS:

Add/Replaced Lock: ✓ Add/Replaced Plug: ✓ Add/Replaced Bolt:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #206127 Job Number: 386498
Site Address: 2301-2337 Blanding Avenue Event Date: 1-21-09 (inclusive)
City: Alameda, CA Sampler: Joe

Well ID CS-2 Date Monitored: -0-
Well Diameter ____ in.
Total Depth ____ ft.
Depth to Water ____ ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

____ xVF -0- = -0- x3 case volume = Estimated Purge Volume: ____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: -0-

Purge Equipment:
Disposable Bailer ____
Stainless Steel Bailer ____
Stack Pump ____
Suction Pump ____
Grundfos ____
Peristaltic Pump ____
QED Bladder Pump ____
Other: ____

Sampling Equipment:
Disposable Bailer ____
Pressure Bailer ____
Discrete Bailer ____
Peristaltic Pump ____
QED Bladder Pump ____
Other: ____

Time Started: ____ (2400 hrs)
Time Completed: ____ (2400 hrs)
Depth to Product: ____ ft
Depth to Water: ____ ft
Hydrocarbon Thickness: ____ ft
Visual Confirmation/Description: ____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ____ gal
Amt Removed from Well: ____ gal
Water Removed: ____
Product Transferred to: ____

Start Time (purge): ____ Weather Conditions: cloudy
Sample Time/Date: 0810 / 1-21-09 Water Color: clear Odor: Y / N
Approx. Flow Rate: ____ gpm. Sediment Description: ____
Did well de-water? ____ If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: -0-

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
CS-2	6 x voa vial	YES	HCL	LANCASTER	TPH-G(8015)/BTEX+MTBE(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-D w/sg (8015)

COMMENTS: CREEK SAMPLE

Add/Replaced Lock: ____ Add/Replaced Plug: ____ Add/Replaced Bolt: ____

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

012109-10

For Lancaster Laboratories use only
Acct. #: 12099 Sample # 5582266-68 Group #: 009505
Group# 1129073

CRA MTI Project #: 63H-1915

Facility #: SS#206127 G-R#386498 Global ID#T0600744728
Site Address: 2301-2337 BLANDING AVENUE, ALAMEDA, CA
Chevron PM: MTI Lead Consultant: CRAKJ
Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568
Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)
Consultant Phone #: 925-551-7555 Fax #: 925-551-7899
Sampler: JOE AJEMIAN

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water	Matrix: Oil	Matrix: Air	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☒ Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method
QA	—	—	✓			✓			2	✓	✓					
MW-1	1-21-09	0738	"			"			8	✓	✓	✓				
CS-2	"	0810	"			"			8	✓	✓	✓				

Preservation Codes: H, H

Preservative Codes
H = HCl T = Thiosulfate
N = HNO_3 B = NaOH
S = H_2SO_4 O = Other

- ☐ J value reporting needed
- ☒ Must meet lowest detection limits possible for 8260 compounds

8021 MTBE Confirmation
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
STD. TAT | 72 hour | 48 hour | 24 hour | 4 day | 5 day

Data Package Options (please circle if required)
QC Summary | Type I - Full | Type VI (Raw Data) | ☐ Coelt Deliverable not needed | WIP (RWQCB) | Disk

EDF/EDD

	Date	Time		Date	Time
Relinquished by:	1-21-09	1250	Received by:	1/21/09	1850
Relinquished by:	1/21/09	1627	Received by: FedEx		
Relinquished by:			Received by:		
Relinquished by Commercial Carrier: UPS FedEx Other			Received by:	1/22/09	0910
Temperature Upon Receipt 01.2.2 C°			Custody Seals Intact? ☒ Yes No		

Lancaster Laboratories
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Analysis Report

ANALYTICAL RESULTS

Prepared for:

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

916-677-3407

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

SAMPLE GROUP

The sample group for this submittal is 1129073. Samples arrived at the laboratory on Thursday, January 22, 2009. The PO# for this group is 206127 and the release number is MTI.

Client Description	Lancaster Labs Number
QA-T-090121 NA Water	5582266
MW-1-W-090121 Grab Water	5582267
CS-2-W-090121 Grab Water	5582268

ELECTRONIC COPY TO Gettler-Ryan, Inc. Attn: Cheryl Hansen

Lancaster Laboratories

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Analysis Report

Questions? Contact your Client Services Representative
Jill M Parker at (717) 656-2300

Respectfully Submitted,

Valerie L. Tomayko
Group Leader

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW5582266 **Group No. 1129073**

QA-T-090121 NA Water
Facility# 206127 Job# 386498 MTI# 63H-1916 GRD
2301-2337 Blanding-Alameda T06019744728 QA
Collected:01/21/2009

Account Number: 12099

Submitted: 01/22/2009 09:10
Reported: 02/03/2009 at 16:04
Discard: 03/06/2009

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

BLAQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	ug/l	1
	The original analysis was performed on an instrument where the ending calibration standard failed the method criteria. The sample was originally analyzed approximately 60 minutes after the LCS/LCSD. The LCS/LCSD showed good GRO recovery and the surrogate recovery for this sample was 85%. The sample was reanalyzed from a vial with headspace since only 1 vial was submitted. The results for the original and the reanalysis were similar. The reanalysis was reported.					
06054	BTEX+MTBE by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	01/28/2009 20:11	Tyler O Griffin	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	01/26/2009 19:43	Kelly E Brickley	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/28/2009 20:11	Tyler O Griffin	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2009 19:43	Kelly E Brickley	1

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Analysis Report

Lancaster Laboratories Sample No. WW5582267 **Group No. 1129073**

MW-1-W-090121 Grab Water
Facility# 206127 Job# 386498 MTI# 63H-1916 GRD
2301-2337 Blanding-Alameda T06019744728 MW-1
Collected:01/21/2009 07:38 by JA

Account Number: 12099

Submitted: 01/22/2009 09:10
Reported: 02/03/2009 at 16:04
Discard: 03/06/2009

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

BLAM1

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	390	50	ug/l	1
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	ug/l	1
06054	BTEX+MTBE by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	01/26/2009 20:47	Diane V Do	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	01/28/2009 22:01	Tyler O Griffin	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	01/26/2009 20:05	Kelly E Brickley	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/28/2009 22:01	Tyler O Griffin	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2009 20:05	Kelly E Brickley	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	01/25/2009 11:30	Olivia I Santiago	1

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Analysis Report

Lancaster Laboratories Sample No. WW5582268 **Group No. 1129073**

CS-2-W-090121 Grab Water
Facility# 206127 Job# 386498 MTI# 63H-1916 GRD
2301-2337 Blanding-Alameda T06019744728 CS-2
Collected:01/21/2009 08:10 by JA

Account Number: 12099

Submitted: 01/22/2009 09:10
Reported: 02/03/2009 at 16:04
Discard: 03/06/2009

Chevron c/o CRA
Suite 110
2000 Opportunity Drive
Roseville CA 95678

BLAC2

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Units	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	N.D.	50	ug/l	1
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	ug/l	1
06054	BTEX+MTBE by 8260B					
02010	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	ug/l	1
05401	Benzene	71-43-2	N.D.	0.5	ug/l	1
05407	Toluene	108-88-3	N.D.	0.5	ug/l	1
05415	Ethylbenzene	100-41-4	N.D.	0.5	ug/l	1
06310	Xylene (Total)	1330-20-7	N.D.	0.5	ug/l	1

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Analysis Date and Time	Analyst	Dilution Factor
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	01/26/2009 21:07	Diane V Do	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	01/28/2009 22:23	Tyler O Griffin	1
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	01/26/2009 21:09	Kelly E Brickley	1
01146	GC VOA Water Prep	SW-846 5030B	1	01/28/2009 22:23	Tyler O Griffin	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	01/26/2009 21:09	Kelly E Brickley	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	01/25/2009 11:30	Olivia I Santiago	1

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Analysis Report

Quality Control Summary

Client Name: Chevron c/o CRA
Reported: 02/03/09 at 04:04 PM

Group Number: 1129073

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 090240004A	Sample number(s): 5582267-5582268							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	79	66	60-124	17	20
Batch number: 09028A20A	Sample number(s): 5582266-5582268							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	109	109	75-135	0	30
Batch number: F090261AA	Sample number(s): 5582266-5582268							
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	96		73-119		
Benzene	N.D.	0.5	ug/l	90		78-119		
Toluene	N.D.	0.5	ug/l	99		85-115		
Ethylbenzene	N.D.	0.5	ug/l	99		82-119		
Xylene (Total)	N.D.	0.5	ug/l	101		83-113		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 09028A20A	Sample number(s): 5582266-5582268 UNSPK: P582265								
TPH-GRO N. CA water C6-C12	136		63-154						
Batch number: F090261AA	Sample number(s): 5582266-5582268 UNSPK: 5582267								
Methyl Tertiary Butyl Ether	100	96	69-127	4	30				
Benzene	97	92	83-128	5	30				
Toluene	107	100	83-127	7	30				
Ethylbenzene	107	101	82-129	6	30				
Xylene (Total)	110	103	82-130	6	30				

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 090240004A

	Orthoterphenyl
5582267	88
5582268	87

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Chevron c/o CRA
Reported: 02/03/09 at 04:04 PM

Group Number: 1129073

Surrogate Quality Control

Blank	93
LCS	100
LCSD	106
Limits:	59-131

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 09028A20A

	Trifluorotoluene-F
5582266	87
5582267	85
5582268	84
Blank	84
LCS	120
LCSD	122
MS	134
Limits:	63-135

Analysis Name: BTEX+MTBE by 8260B
Batch number: F090261AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5582266	91	85	95	92
5582267	94	87	98	95
5582268	91	85	95	91
Blank	91	86	95	93
LCS	96	89	98	97
MS	92	86	95	95
MSD	91	86	94	93
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

GETTLER-RYAN INC.

May 12, 2009
G-R Job #386498

Mr. Mike Bauer
Chevron Environmental Management Company
145 S. State College Blvd., Room 4089
Brea, CA 92821

RE: Second Quarter Event of April 15, 2009
Groundwater Monitoring & Sampling Report
Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

Dear Mr. Bauer:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater level was measured and the well was checked for the presence of separate-phase hydrocarbons. Static water level data, groundwater elevation, and separate-phase hydrocarbon thickness (if any) are presented in the attached Table 1. A Groundwater Elevation Map is included as Figure 1.

Groundwater samples were collected from the monitoring well and submitted to a state certified laboratory for analyses. The field data sheet for this event is attached. Analytical results are presented in the table(s) listed below. The chain of custody document and the laboratory analytical reports are also attached. All groundwater and decontamination water generated during sampling activities was removed from the site, per the Standard Operating Procedure.

Please call if you have any questions or comments regarding this report. Thank you.

Sincerely,

Deanna L. Harding
Project Coordinator

Douglas J. Lee
Senior Geologist, P.G. No. 6882

PROFESSIONAL GEOLOGIST
DOUGLAS J. LEE
No. 6882
STATE OF CALIFORNIA

Figure 1: Groundwater Elevation Map
Table 1: Groundwater Monitoring Data and Analytical Results
Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

WELL CONDITION STATUS SHEET

Client/Facility #: **Chevron #206127** Job # **386498**

Site Address: **2301-2337 Blanding Avenue** Event Date:

City: **Alameda, CA** Sampler:

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M)missing	BOLTS *(M) Missing (R) Replaced*	Bolt Flanges *B= Broken S= Stripped R=Retap*	APRON Condition C=Cracked B=Broken G=Gone	Grout Seal *(Deficient) inches from TOC*	Casing *(Condition prevents tight cap seal)*	REPLACE LOCK Y / N	REPLACE CAP Y / N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Yes / No
MW-1	O.K	—					→	N	N	12" EMCO / 2	NO

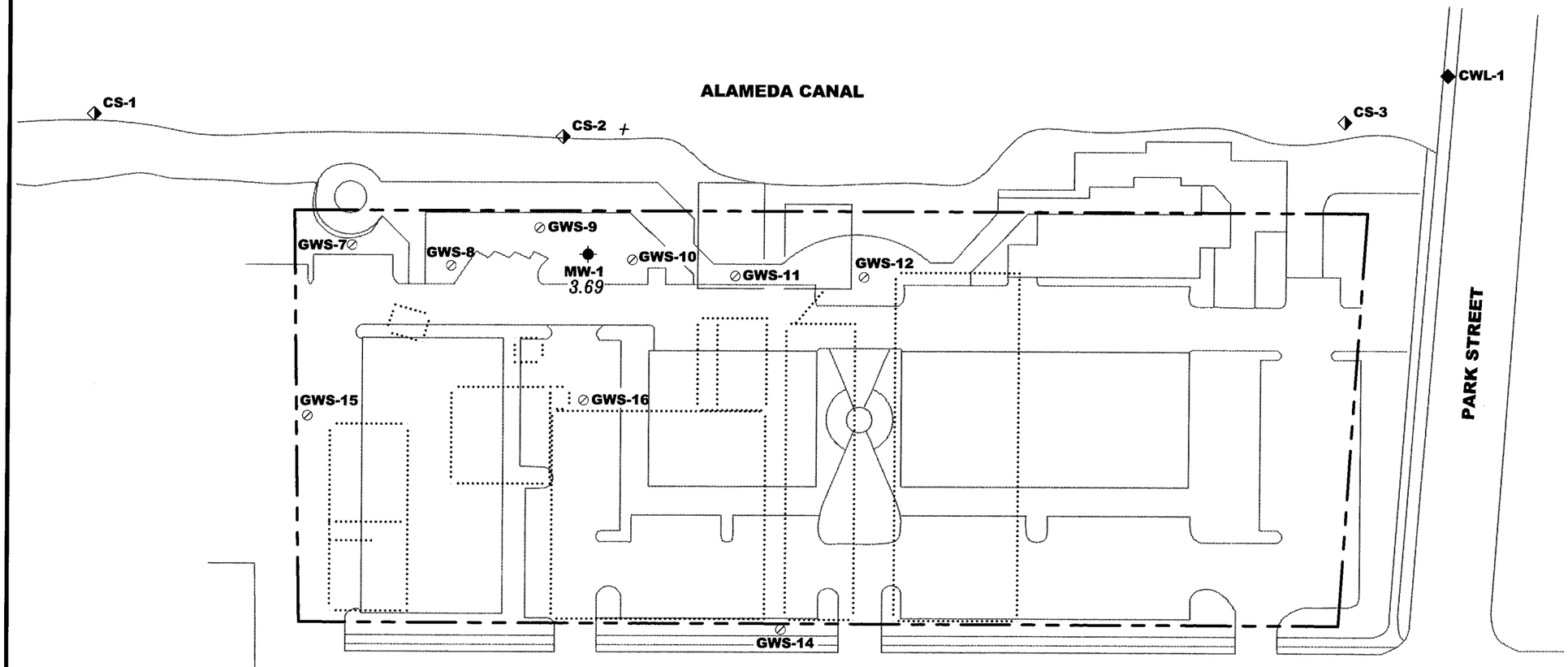
Comments

EXPLANATION

- Groundwater monitoring well
- Canal water level gauging station from Park Street Bridge (RRM, October 1998)
- Canal grab surface water sample
- Shallow groundwater survey point (Geomatrix, April 1995)
- Site features noted on Sanborn Fire Insurance map, dated 1932

99.99 Groundwater elevation in feet referenced to Mean Sea Level

\+ TOC not available



Source: Figure modified from drawing provided by RRM engineering contracting firm.

FIGURE 1

GROUNDWATER ELEVATION MAP
Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

DATE April 15, 2009

REVISED DATE

REVIEWED BY

PROJECT NUMBER 386498

GETTLER-RYAN INC.
6747 Sierra Court, Suite J
Dublin, CA 94568
(925) 551-7555

FILE NAME: P:\Enviro\Chevron\206127\Q09-20-6127.dwg | Layout Tab: Pot2

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)

2301-2337 Blanding Avenue

Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-1										
01/23/01[1]	--	7.16	--	1,100[2,3]	5,210[4]	868	<50.0	<50.0	<50.0	<250
04/09/01	10.62	8.12	2.50	1,200[6]	3,000[5]	920	<20	<20	<20	<100
07/30/01	10.62	9.15	1.47	550[3,8]	2,000[7]	730	13	<5.0	<5.0	<25
10/08/01	10.62	7.86	2.76	2,200[9]	1,200	120	2.4	5.9	6.4	<2.5
01/13/02	10.62	7.02	3.60	3,300[3]	930	320	0.78	0.87	3.8	<2.5
04/08/02	10.62	9.60	1.02	1,200[3]	960	50	1.4	2.6	9.0	<2.5
07/31/02	10.62	9.27	1.35	2,800[3]	930	64	1.4	1.9	11	<5.0
10/15/02	10.62	8.00	2.62	1,000[3]	620	25	0.78	1.4	4.3	<2.5
01/14/03	10.62	7.05	3.57	960[3]	1,600	20	1.3	1.3	<1.5	<2.5
04/15/03	10.62	8.02	2.60	920[3]	870	56	1	1.4	3.1	<2.5
07/16/03[10]	10.62	10.08	0.54	1,400[3]	780	85	1	0.8	0.7	<0.5
10/18/03[10]	10.62	8.51	2.11	1,200[3]	640	42	0.8	<0.5	0.5	<0.5
01/22/04[10]	10.62	8.95	1.67	1,500[3]	440	18	<0.5	<0.5	<0.5	<0.5
04/23/04[10]	10.62	8.95	1.67	2,200[3]	410	10	<0.5	<0.5	<0.5	<0.5
07/23/04[10]	10.62	9.21	1.41	1,800[3]	400	6	<0.5	<0.5	<0.5	<0.5
10/22/04[10]	10.62	8.36	2.26	2,200[3]	150	2	<0.5	<0.5	<0.5	<0.5
01/28/05[10]	10.62	7.09	3.53	1,200[3]	55	8	<0.5	<0.5	<0.5	<0.5
04/26/05[10]	10.62	7.84	2.78	480[3]	<50	5	<0.5	<0.5	<0.5	<0.5
07/15/05[10]	10.62	8.12	2.50	610[3,11]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05[10]	10.62	8.07	2.55	920[3,12]	<50	10	<0.5	<0.5	<0.5	<0.5
01/12/06[10]	10.62	6.98	3.64	960[3,12]	<50	6	<0.5	<0.5	<0.5	<0.5
04/13/06[10]	10.62	7.04	3.58	1,200[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06[10]	10.62	7.13	3.49	1,200[3]	92	14	<0.5	<0.5	<0.5	<0.5
10/17/06[10]	10.62	7.64	2.98	990[3]	<50	3	<0.5	<0.5	<0.5	<0.5
01/16/07[10]	10.62	7.09	3.53	840[3]	83	4	<0.5	<0.5	<0.5	<0.5
04/17/07[10]	10.62	7.11	3.51	1,200[3]	57	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07[10]	10.62	7.41	3.21	1,100[3]	120	8	<0.5	<0.5	<0.5	<0.5
10/16/07[10]	10.62	7.55	3.07	750[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08[10]	10.62	6.98	3.64	1,700[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08[10]	10.62	7.36	3.26	1,100[3]	62	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08[10]	10.62	7.89	2.73	580[3]	93	3	<0.5	<0.5	<0.5	<0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
MW-1 (cont)										
10/15/08[10]	10.62	7.46	3.16	740[3]	56	0.7	<0.5	<0.5	0.8	<0.5
01/21/09[10]	10.62	7.19	3.43	390[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/15/09[10]	**10.62**	**6.93**	**3.69**	**1,400[3]**	**80**	**0.7**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
CS-2										
07/30/01	--	--	--	140[3,5]	<50	<0.50	<0.50	<0.50	<0.50	<2.5
10/08/01	--	--	--	53[9]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/08/02	--	--	--	77[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
07/31/02	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
10/15/02	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/14/03	--	--	--	<50[3]	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/15/03	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<1.5	<2.5
07/16/03[10]	--	--	--	<50[3]	<50	<0.5	0.7	<0.5	0.6	<0.5
10/18/03[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/23/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/23/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/22/04[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/15/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/12/06[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/13/06[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/13/06[10]	--	--	--	140[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/17/06[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/17/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/16/07[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08[10]	--	--	--	85[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
CS-2 (cont)										
04/16/08[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/09[10]	--	--	--	<50[3]	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/15/09[10]	--	--	--	**86[3]**	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
TRIP BLANK										
TB-LB										
01/23/01	--	--	--	--	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50
04/09/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
07/30/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA										
10/08/01	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/13/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/08/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
07/31/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
10/15/02	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
01/14/03	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.5	<2.5
04/15/03	--	--	--	--	<50	<0.5	<0.5	<0.5	<1.5	<2.5
07/16/03[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/18/03[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/22/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/23/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/23/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/22/04[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/28/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/26/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/15/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/14/05[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/12/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/13/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

WELL ID/ DATE	TOC* (ft.)	DTW (ft.)	GWE (msl)	TPH-DRO (µg/L)	TPH-GRO (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE (µg/L)
QA (cont)										
07/13/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/17/06[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/17/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/17/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/16/07[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/16/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
04/16/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
07/16/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
10/15/08[10]	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<0.5
01/21/09[10]	--	--	--	--	<50[13]	<0.5	<0.5	<0.5	<0.5	<0.5
04/15/09[10]	--	--	--	--	**<50**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**

Table 1

Groundwater Monitoring Data and Analytical Results

Chevron #206127 (Former Signal Oil Marine Terminal)
2301-2337 Blanding Avenue
Alameda, California

EXPLANATIONS:

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
(msl) = Mean sea level
TPH = Total Petroleum Hydrocarbons

DRO = Diesel Range Organics
GRO = Gasoline Range Organics
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes

MTBE = Methyl Tertiary Butyl Ether
(µg/L) = Micrograms per liter
-- = Not Measured/Not Analyzed
CS-2 = Creek Sample
QA = Quality Assurance/Trip Blank

* TOC elevations were surveyed on January 25, 2001, by Virgil Chavez Land Surveying. The benchmark used for the survey was a City of Alameda benchmark being a cut square at the centerline return, south corner of Oak and Blanding, (Benchmark Elevation = 8.236 feet, NGVD 29).

1 Well development performed.

2 Laboratory report indicates unidentified hydrocarbons <C16.

3 Analyzed with silica gel cleanup.

4 Laboratory report indicates weathered gasoline C6-C12.

5 Laboratory report indicates discrete peaks.

6 Laboratory report indicates diesel C9-C24 + unidentified hydrocarbons <C16.

7 Laboratory report indicates gasoline C6-C12.

8 Laboratory report indicates unidentified hydrocarbons C9-C24.

9 Analysis performed without silica gel cleanup although was requested on the Chain of Custody.

10 BTEX and MTBE by EPA Method 8260.

11 Laboratory report indicates the observed sample pattern is not typical of #2 fuel/diesel. It elutes in the DRO range later than #2 fuel.

12 Laboratory report indicates the observed sample pattern includes #2 fuel/diesel and an additional pattern which elutes later in the DRO range.

13 Laboratory report indicates the original analysis was performed on an instrument where the ending calibration standard failed the method criteria. The sample was originally analyzed approximately 60 minutes after the LCS/LCSD. The LCS/LCSD showed good GRO recovery and the surrogate recovery for this sample was 85%. The sample was reanalyzed from a vial with headspace since only 1 vial was submitted. The results for the original and the reanalysis were similar. The reanalysis was reported.

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by IWM to Chemical Waste Management located in Kettleman Hills, California.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #206127** Job Number: **386498**

Site Address: **2301-2337 Blanding Avenue** Event Date: 4-15-09 (inclusive)

City: **Alameda, CA** Sampler: Joe

Well ID **MW-1** Date Monitored: 4-15-09

Well Diameter **2** in.

Total Depth 17.16 ft.

Depth to Water 6.93 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

10.23 xVF 0.17 = 1.74 x3 case volume = Estimated Purge Volume: 5.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.97

Purge Equipment:

Disposable Bailer	✓
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Water Removed: _____
Product Transferred to: _____

Start Time (purge): 1042 Weather Conditions: clear/windy

Sample Time/Date: 1105 / 4-15-09 Water Color: clear Odor: Y / (N)

Approx. Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 7.25

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm (µS))	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
1050	1.5	6.98	1815	15.7		
1055	3	7.16	1825	15.6		
1058	5.5	7.14	1837	15.8		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sg (8015)

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Add/Replaced Bolt: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #206127** Job Number: **386498**

Site Address: **2301-2337 Blanding Avenue** Event Date: 4-15-09 (inclusive)

City: **Alameda, CA** Sampler: Joe

Well ID **CS-2** Date Monitored: 4-15-09

Well Diameter ___ in.

Total Depth ___ ft.

Depth to Water ___ ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

~~xVF~~ ___ = ___ ~~x3 case volume~~ = Estimated Purge Volume: ___ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: ___

Purge Equipment:

Disposable Bailer	~~0~~
Stainless Steel Bailer	
Stack Pump	
Suction Pump	
Grundfos	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Discrete Bailer	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: ___ (2400 hrs)
Time Completed: ___ (2400 hrs)
Depth to Product: ___ ft
Depth to Water: ___ ft
Hydrocarbon Thickness: ___ ft
Visual Confirmation/Description: ___
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ___ gal
Amt Removed from Well: ___ gal
Water Removed: ___
Product Transferred to: ___

Start Time (purge): ___ Weather Conditions: clear/windy

Sample Time/Date: 1030 4-15-09 Water Color: clear Odor: Y (N)

Approx. Flow Rate: ___ gpm. Sediment Description: ___

Did well de-water? ___ If yes, Time: ___ Volume: ___ gal. DTW @ Sampling: ~~___~~

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µmhos/cm - µS)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
CS-2	6 x voa vial	YES	HCL	LANCASTER	TPH-GRO(8015)/BTEX+MTBE(8260)
	2 x 500ml ambers	YES	NP	LANCASTER	TPH-DRO w/sg (8015)

COMMENTS: ___

Add/Replaced Lock: ___ Add/Replaced Plug: ___ Add/Replaced Bolt: ___

Chevron California Region Analysis Request/Chain of Custody

Lancaster Laboratories

641709-16

Acct. #: 10904 — For Lancaster Laboratories use only — Sample #: 56503306-08 — Group #: 016855

C# 1141132

Facility #: SS#206127-OML G-R#386498 Global ID#T0601974728

Site Address: 2301-2337 BLANDING AVENUE, ALAMEDA, CA

Chevron PM: MB — Lead Consultant: CRASB

Consultant/Office: G-R, Inc., 6747 Sierra Court, Suite J, Dublin, CA 94568

Consultant Prj. Mgr.: Deanna L. Harding (deanna@grinc.com)

Consultant Phone #: 925-551-7555 — Fax #: 925-551-7899

Sampler: JOE AJEMIAN

Analyses Requested

Preservation Codes

Preservative Codes
H = HCl; T = Thiosulfate; N = HNO_3; B = NaOH; S = H_2SO_4; O = Other

- ☐ J value reporting needed
- ☒ Must meet lowest detection limits possible for 8260 compounds
- 8021 MTBE Confirmation
- ☐ Confirm highest hit by 8260
- ☐ Confirm all hits by 8260
- ☐ Run ____ oxy's on highest hit
- ☐ Run ____ oxy's on all hits

Sample Identification	Date Collected	Time Collected	Grab	Composite	Matrix: Soil	Matrix: Water (Potable ☐ NPDES ☐)	Matrix: Oil ☐ Air	Total Number of Containers	BTEX + MTBE 8260 ☒ 8021 ☐	TPH 8015 MOD GRO	TPH 8015 MOD DRO ☒ Silica Gel Cleanup	8260 full scan	Oxygenates	Total Lead Method	Dissolved Lead Method
QA	—	—	✓			✓		2	✓	✓					
MW-1	4-15-09	1105	"			"		8	✓	✓	✓				
CS-2	"	1030	"			"		8	✓	✓	✓				

Comments / Remarks

Turnaround Time Requested (TAT) (please circle)
STD. TAT; 72 hour; 48 hour; 24 hour; 4 day; 5 day

Data Package Options (please circle if required)
QC Summary; Type I - Full; Type VI (Raw Data); ☐ Coelt Deliverable not need; EDF/EDD; WIP (RWQCB); Disk

	Date	Time
Relinquished by:	4-16-09	1830
Relinquished by:	04-17-09	1230
Relinquished by:	17APR09	1630
Relinquished by Commercial Carrier: UPS; FedEx; Other		
Temperature Upon Receipt 0.7-3.9 C°		

	Date	Time
Received by:	04-17-09	1230
Received by:	17APR09	1435
Received by: FEDEX		
Received by:	4/18/09	1000
Custody Seals Intact? Yes; No		

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

925-842-8582

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

June 09, 2009

SAMPLE GROUP

The sample group for this submittal is 1141132. Samples arrived at the laboratory on Saturday, April 18, 2009. The PO# for this group is 0015039883 and the release number is BAUER.

Client Description	Lancaster Labs Number
QA-T-090415 NA Water	5650306
MW-1-W-090415 Grab Water	5650307
CS-2-W-090415 Grab Water	5650308

METHODOLOGY

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Chronicle.

ELECTRONIC COPY TO CRA c/o Gettler-Ryan Attn: Cheryl Hansen

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Analysis Report

Questions? Contact your Client Services Representative
Jill M Parker at (717) 656-2300

Respectfully Submitted,

Martha L Seidel

Martha L. Seidel
Senior Chemist

Lancaster Laboratories

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Analysis Report

Lancaster Laboratories Sample No. WW 5650306

Group No. 1141132
CA

QA-T-090415 NA Water
Facility# 206127 Job# 386498 GRD
2301-2337 Blanding-Alameda T06019744728 QA

Collected: 04/15/2009

Account Number: 10904

Submitted: 04/18/2009 10:00
Reported: 06/09/2009 at 13:17
Discard: 07/10/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

BAAQA

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		ug/l	ug/l	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846 8015B	**GC Volatiles**		ug/l	ug/l	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1

General Sample Comments

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	D091121AA	04/22/2009 13:08	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D091121AA	04/22/2009 13:08	Ginelle L Feister	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09110A08A	04/21/2009 01:05	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110A08A	04/21/2009 01:05	Tyler O Griffin	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5650307

Group No. 1141132
CA

MW-1-W-090415 Grab Water
Facility# 206127 Job# 386498 GRD
2301-2337 Blanding-Alameda T06019744728 MW-1

Collected: 04/15/2009 11:05 by JA

Account Number: 10904

Submitted: 04/18/2009 10:00
Reported: 06/09/2009 at 13:17
Discard: 07/10/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

BAA01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06054	Benzene	71-43-2	0.7	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	80	50	1
SW-846 8015B	**GC Extractable TPH w/Si Gel**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	1,400	50	1

General Sample Comments

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	D091121AA	04/22/2009 09:52	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D091121AA	04/22/2009 09:52	Ginelle L Feister	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09110A08A	04/21/2009 08:02	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110A08A	04/21/2009 08:02	Tyler O Griffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	091100008A	04/21/2009 09:49	Lisa A Reinert	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	091100008A	04/20/2009 16:50	Timothy J Attenberger	1

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Analysis Report

Lancaster Laboratories Sample No. WW 5650308

Group No. 1141132
CA

CS-2-W-090415 Grab Water
Facility# 206127 Job# 386498 GRD
2301-2337 Blanding-Alameda T06019744728 CS-2

Collected: 04/15/2009 10:30 by JA

Account Number: 10904

Submitted: 04/18/2009 10:00
Reported: 06/09/2009 at 13:17
Discard: 07/10/2009

Chevron
6001 Bollinger Canyon Rd L4310
San Ramon CA 94583

BAA02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
SW-846 8260B	**GC/MS Volatiles**		**ug/l**	**ug/l**	
06054	Benzene	71-43-2	N.D.	0.5	1
06054	Ethylbenzene	100-41-4	N.D.	0.5	1
06054	Methyl Tertiary Butyl Ether	1634-04-4	N.D.	0.5	1
06054	Toluene	108-88-3	N.D.	0.5	1
06054	Xylene (Total)	1330-20-7	N.D.	0.5	1
SW-846 8015B	**GC Volatiles**		**ug/l**	**ug/l**	
01728	TPH-GRO N. CA water C6-C12	n.a.	N.D.	50	1
SW-846 8015B	**GC Extractable TPH w/Si Gel**		**ug/l**	**ug/l**	
06610	TPH-DRO CA C10-C28 w/ Si Gel	n.a.	86	50	1

General Sample Comments

State of California Lab Certification No. 2116

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Chronicle

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06054	BTEX+MTBE by 8260B	SW-846 8260B	1	D091132AA	04/23/2009 09:12	Ginelle L Feister	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D091132AA	04/23/2009 09:12	Ginelle L Feister	1
01728	TPH-GRO N. CA water C6-C12	SW-846 8015B	1	09110A08A	04/21/2009 08:27	Tyler O Griffin	1
01146	GC VOA Water Prep	SW-846 5030B	1	09110A08A	04/21/2009 08:27	Tyler O Griffin	1
06610	TPH-DRO CA C10-C28 w/ Si Gel	SW-846 8015B	1	091100008A	04/21/2009 10:09	Lisa A Reinert	1
02376	Extraction - Fuel/TPH (Waters)	SW-846 3510C	1	091100008A	04/20/2009 16:50	Timothy J Attenberger	1

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Analysis Report

Quality Control Summary

Client Name: Chevron
Group Number: 1141132
Reported: 06/09/09 at 01:17 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank MDL	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: D091121AA	Sample number(s): 5650306-5650307							
Benzene	N.D.	0.5	ug/l	95		80-116		
Ethylbenzene	N.D.	0.5	ug/l	95		80-113		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	94		78-117		
Toluene	N.D.	0.5	ug/l	99		80-115		
Xylene (Total)	N.D.	0.5	ug/l	98		81-114		
Batch number: D091132AA	Sample number(s): 5650308							
Benzene	N.D.	0.5	ug/l	104		80-116		
Ethylbenzene	N.D.	0.5	ug/l	102		80-113		
Methyl Tertiary Butyl Ether	N.D.	0.5	ug/l	94		78-117		
Toluene	N.D.	0.5	ug/l	106		80-115		
Xylene (Total)	N.D.	0.5	ug/l	105		81-114		
Batch number: 09110A08A	Sample number(s): 5650306-5650308							
TPH-GRO N. CA water C6-C12	N.D.	50.	ug/l	118	118	75-135	0	30
Batch number: 091100008A	Sample number(s): 5650307-5650308							
TPH-DRO CA C10-C28 w/ Si Gel	N.D.	32.	ug/l	103	103	60-124	0	20

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: D091121AA	Sample number(s): 5650306-5650307 UNSPK: 5650307								
Benzene	102	102	80-126	1	30				
Ethylbenzene	102	102	77-125	0	30				
Methyl Tertiary Butyl Ether	95	97	72-126	2	30				
Toluene	104	102	80-125	1	30				
Xylene (Total)	104	103	79-125	1	30				
Batch number: D091132AA	Sample number(s): 5650308 UNSPK: 5650308								
Benzene	109	109	80-126	1	30				
Ethylbenzene	106	107	77-125	1	30				
Methyl Tertiary Butyl Ether	99	102	72-126	3	30				
Toluene	112	111	80-125	1	30				
Xylene (Total)	109	110	79-125	0	30				
Batch number: 09110A08A	Sample number(s): 5650306-5650308 UNSPK: P650267								
TPH-GRO N. CA water C6-C12	127		63-154						

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Chevron
Reported: 06/09/09 at 01:17 PM

Group Number: 1141132

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TPH-DRO CA C10-C28 w/ Si Gel
Batch number: 091100008A

	Orthoterphenyl
5650307	100
5650308	91
Blank	97
LCS	99
LCSD	100
Limits:	59-131

Analysis Name: TPH-GRO N. CA water C6-C12
Batch number: 09110A08A

	Trifluorotoluene-F
5650306	103
5650307	106
5650308	104
Blank	104
LCS	113
LCSD	117
MS	114
Limits:	63-135

Analysis Name: BTEX+MTBE by 8260B
Batch number: D091121AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5650306	86	92	86	86
5650307	84	89	86	90
Blank	86	91	87	88
LCS	85	92	88	95
MS	85	92	87	95
MSD	84	89	84	90
Limits:	80-116	77-113	80-113	78-113

Analysis Name: BTEX+MTBE by 8260B
Batch number: D091132AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
5650308	86	94	86	92

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Analysis Report

Quality Control Summary

Client Name: Chevron
Reported: 06/09/09 at 01:17 PM

Group Number: 1141132

Surrogate Quality Control

Blank	88	94	88	92
LCS	85	91	87	103
MS	86	93	90	105
MSD	85	92	88	103
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.