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

Re: Chevron Service Station No. 9-1851
451 Hegenberger Drive
Oakland, CA

I have reviewed the attached report dated August 9, 2012.

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 Conestoga-Rovers & Associates, 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 to the best of my knowledge.

Sincerely,

Catalina Espino Devine
Project Manager

Attachment: Report

CONESTOGA-ROVERS & ASSOCIATES

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Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
http://www.craworld.com

August 9, 2012 Reference No. 311976

Mr. Mark Detterman
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Work Plan for Subsurface Investigation
Former Chevron Service Station 91851
451 Hegenberger Road
Oakland, California
Fuel Leak Case RO0000464

Dear Mr. Detterman:

Conestoga-Rovers & Associates (CRA) is submitting this *Work Plan for Subsurface Investigation* for the site referenced above on behalf of Chevron Environmental Management Company (Chevron). The purpose of this scope of work, outlined in this work plan, is to further assess and delineate hydrocarbon distribution in soil in the area surrounding the former used-oil underground storage tank (UST). Site background and CRA's proposed scope of work are presented below.

SITE BACKGROUND

Site Description

The site is currently an active gasoline service station located at 451 Hegenberger Road, on the northwest corner of Hegenberger and Edgewater Roads in Oakland, California (Figure 1). The operating gasoline service station consists of one building, two fuel dispenser islands, three 10,000-gallon USTs in one tank complex and one 10,000-gallon diesel UST in a separate tank complex (Figure 2). Chevron operated at the site from 1961 to 1999. In 1982, the used-oil tank was determined to be taking on water and was replaced with a 1,000-gallon single wall fiberglass tank; the fiberglass used-oil tank was removed in 1998. In 1984, the existing steel fuel USTs were removed and replaced with three 10,000-gallon single wall fiberglass USTs. Surrounding land use is commercial and industrial.

Previous Environmental Work

A total of 10 soil borings and 7 groundwater monitoring wells have been installed since 1995. A summary of previous environmental investigation is included as Attachment A.

Site Geology
Sediments in the vicinity consist of Holocene-age estuarine deposits comprised of organic clay and silty clay (Bay Mud) overlying Holocene-age alluvial sand and silt and Pleistocene-age interbedded clay, silt, sand, and gravel.[1] Soils encountered beneath the site generally consist of silts, clays, silty sands and poorly graded sand to approximately 20 feet below grade (fbg), the total depth explored.

Site Hydrogeology
The site is located in the East Bay Plain Groundwater Basin, near the boundary of the Oakland and San Leandro Sub Basins. Groundwater in the basin typically flows towards San Francisco Bay. Site topography is relatively flat at an elevation of approximately 3 feet above mean sea level, with the surrounding topography sloping towards the southwest. The nearest down gradient surface water is San Leandro Creek, which is located approximately one-fourth of a mile to the southwest. Depth to groundwater has historically ranged from approximately 2 to 7 fbg. Groundwater flow direction fluctuates, but is predominately to the southwest at a gradient of 0.003 to 0.06.

PROPOSED SCOPE OF WORK

CRA proposes to advance up to 11 soil borings to further delineate the lateral and vertical extent of hydrocarbons in soil in the area of the former used-oil UST. Inside the station building 3 soil borings will be advanced as shown on Figure 3. Based on field observations, up to 3 additional step out borings will be advanced in the station building, as necessary, to delineate hydrocarbons in soil east of the former used-oil UST. Approximately 5 borings will be advanced outside the building surrounding the former used-oil UST. To accomplish this work, CRA will conduct the following.

Site Health and Safety Plan
CRA will prepare a site safety plan to protect site workers. The plan will be reviewed and signed by all site workers and visitors. The plan will be kept onsite during all field activities.

1 *California's Groundwater Bulletin 118*; The State of California Department of Water Resources Agency February 27, 2004.

Permits
CRA will obtain drilling permits from Alameda County Public Works and schedule the required inspections prior to beginning field work.

Underground Utility Location and Utility Clearance
CRA will contact Underground Service Alert to identify locations of underground utilities. A licensed geophysicist will also be contracted to perform a Ground Penetrating Radar survey of pertinent areas to confirm utility locations and identify any previously unidentified utilities. Per Chevron and CRA safety procedures, each soil boring location will be cleared of utilities using hand augers to 8 fbg.

Soil Borings
Using 3-inch outside diameter hand auger, CRA will advance one soil boring at each location to a maximum depth of approximately 9 fbg. CRA geologists will log soils using the ASTM D2488-06 Unified Soil Classification System. Soils will be field-screened using a photo-ionization detector and visual observations. Once completed, the borings will be filled with Portland Type I/II cement through a tremie pipe from the bottom to approximately two inches below grade and capped with concrete to match the existing grade. CRA's Standard Field Procedures for Soil Borings are included as Attachment B.

Soil Sampling
At least one soil sample will be collected for laboratory analysis approximately every 3 feet. Soil samples will be collected directly from the hand auger bucket and considered disturbed samples. The samples will be sealed, capped, labeled, logged on a chain-of-custody form, placed on ice, and transported to a Chevron and California State-approved laboratory for analysis.

Chemical Analyses
Select soil samples will be analyzed for:

- Total petroleum hydrocarbons as motor oil (TPHmo) and Total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015B modified with Silica Gel clean up
- Total petroleum hydrocarbons as gasoline (TPHg) by Environmental Protection Agency (EPA) Method 8015B modified
- Benzene, toluene, ethylbenzene, total xylenes (BTEX) and methyl tertiary-butyl ether (MTBE) by EPA Method 8260B

Waste Disposal
Soil cuttings generated will be placed in Department of Transportation approved 55-gallon drums and stored onsite pending analytical waste profiling. Once characterized, these wastes will be disposed at the appropriate Chevron-approved facility.

Reporting
Upon completion of field activities and review of the analytical results, CRA will prepare an investigation report that, at a minimum, will contain:

- Descriptions of drilling and sampling methods
- Boring logs
- Tabulated soil analytical results
- A figure illustrating the boring locations
- Analytical reports and chain-of-custody forms
- Soil disposal methods
- Conclusions and recommendations

Schedule
CRA will proceed with the proposed scope of work upon receipt of written approval from ACEH. In anticipation of ACEH approval, CRA has scheduled drilling activities on August 16 and 17, 2012. CRA will submit our investigation report approximately 6 to 8 weeks after completion of field activities and receipt of analytical data.

If you have any questions or comments regarding this work plan, please contact Nathan Lee at (510) 420-3333 or email at nlee@craworld.com.

Sincerely,

CONESTOGA-ROVERS & ASSOCIATES

Nathan Lee, PG #8486.

APM/mws/17
Encl.

Figure 1 Vicinity Map
Figure 2 Site Plan
Figure 3 Proposed Boring Locations

Attachment A Site Environmental History
Attachment B Standard Operating Procedures for Soil Borings

c.c.: Ms. Catalina Espino Devine, Chevron
Mr. Navdeep Sigh Grewal, Property Owner
Mr. Bob Clark-Riddell, Property Owners Consultant

FIGURES

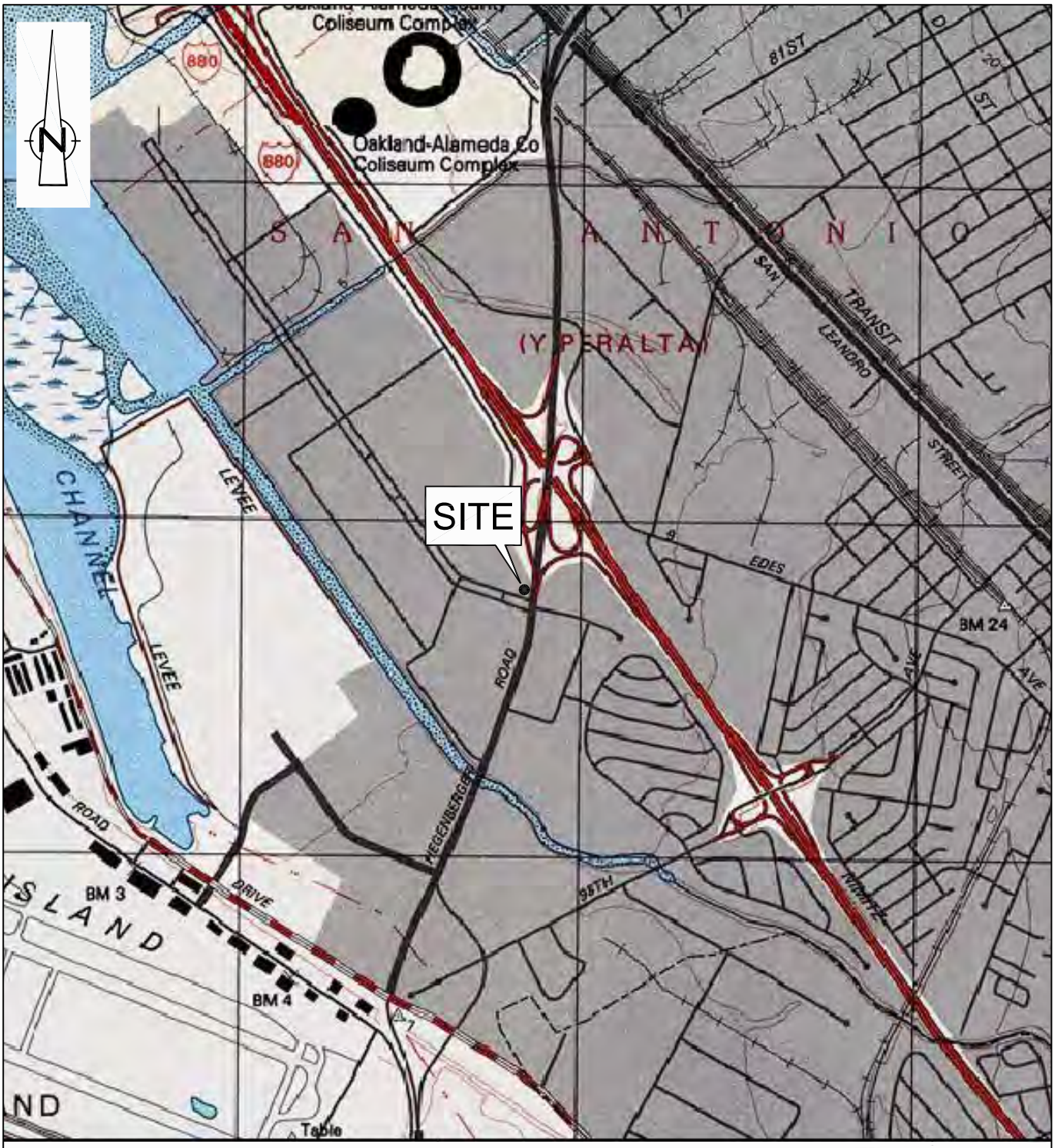

Figure 1

VICINITY MAP
FORMER CHEVRON SERVICE STATION 9-1851
451 HEGENBERGER ROAD
Oakland, California

311976-2008(PRES001)GN-EM001

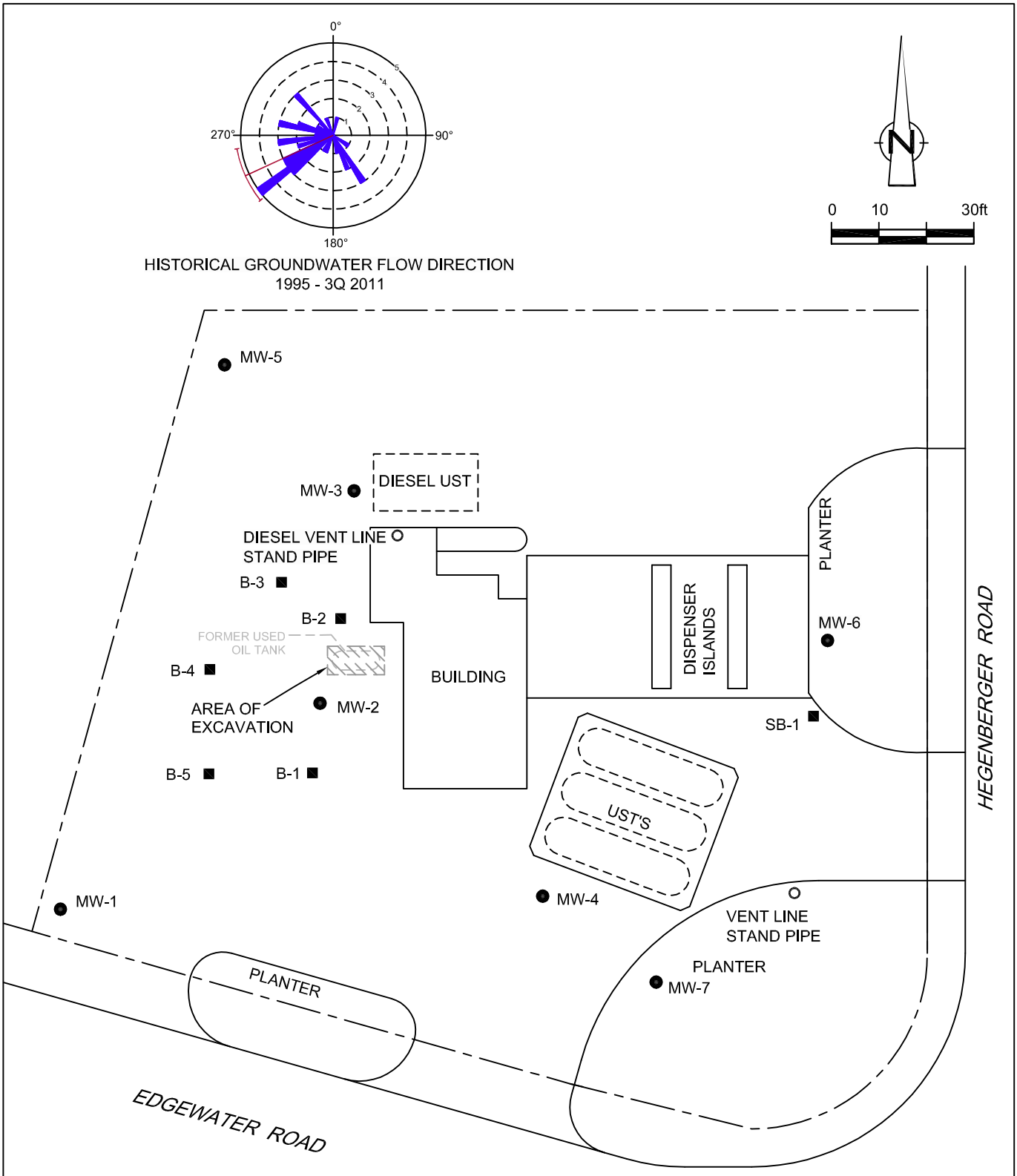

Figure 2

SITE PLAN
CHEVRON SERVICE STATION 9-1851
451 HEGENBERGER ROAD
Oakland, California

311976-2012(016) GN-EM001 APRIL 19/2011

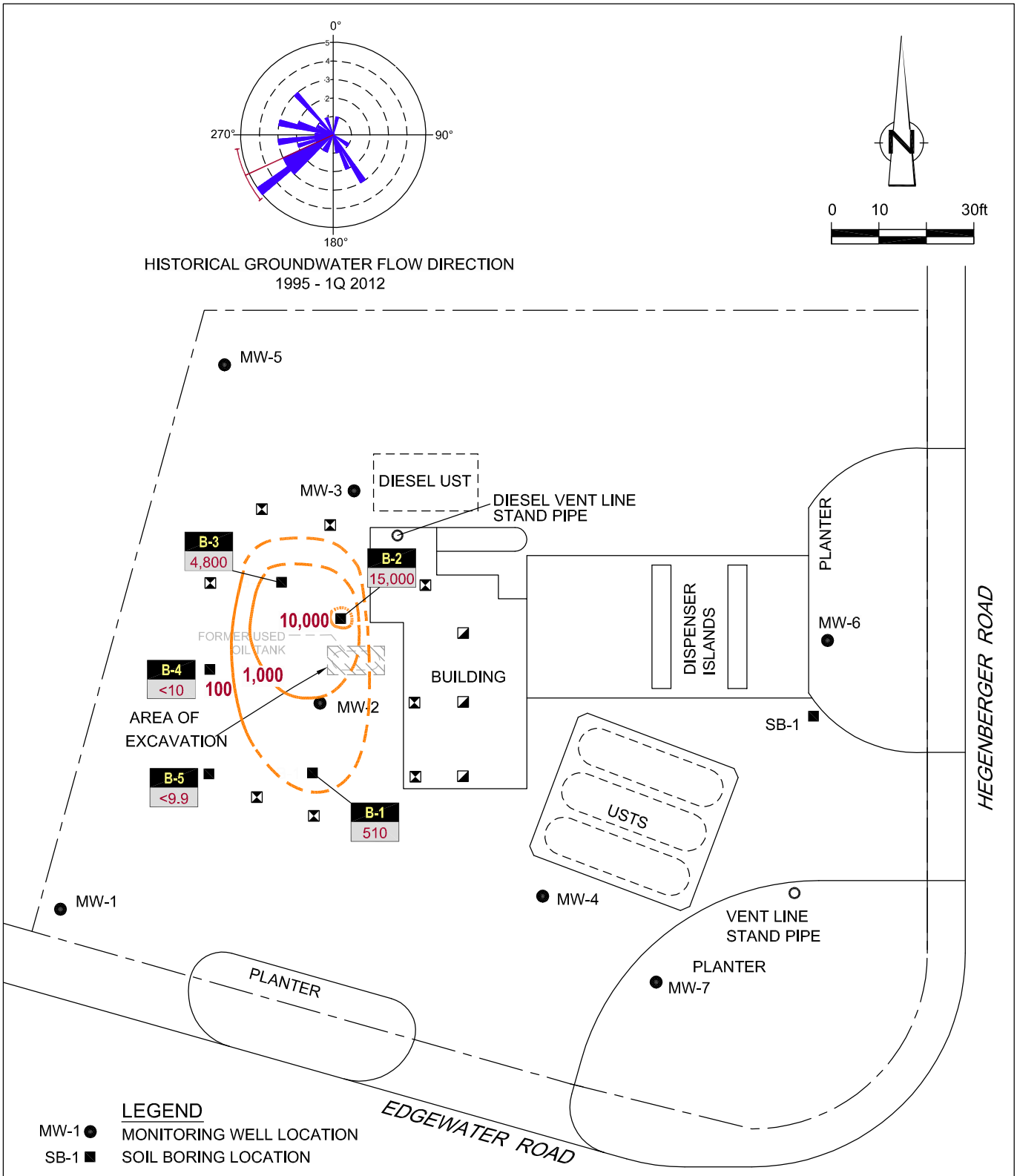

Figure 3

PROPOSED SOIL BORING LOCATIONS
CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD
Oakland, California

311976-95(017) GN-EM003 AUG 8/2012

ATTACHMENT A

SITE ENVIRONMENTAL HISTORY

SUMMARY OF PREVIOUS ENVIRONMENTAL HISTORY
FORMER CHEVRON SERVICE STATION 91851
451 HEGENBERGER ROAD OAKLAND, CALIFORNIA

1995 Preliminary Site Assessment

In October 1995, Gettler-Ryan (G-R) performed a preliminary site assessment to assess the presence and extent of petroleum hydrocarbon in soil and groundwater. Soil boring, SB-1 and monitoring wells MW-1 through MW-4 were completed. Additional information is available in G-R's *Preliminary Site Assessment* dated December 29, 1995.

1997 Site Evaluation

In September 1997, Pacific Environmental Group, Inc. (PEG) submitted an evaluation of the potential impacts of methyl tert-butyl ether (MTBE) in groundwater, including a file review, well survey, utility survey, and a sensitive receptor survey. Additional information is available in PEG's *Site Evaluation for Potential MtBE Impacts* dated September 30, 1997.

1998 Soil Borings

In April 1998, hand auger soil borings GW-2 through GW-5 were advanced, and grab ground water samples were taken at each location. Additional information is available in PEG's *Groundwater Investigation* dated May 21, 1998

1998 UST Removal and Dispenser Sampling

In December 1998, Geo-Logic (G-L) removed a 1,000-gallon used oil UST. Free product was noted on the groundwater during the removal. Additional information is available in G-L's *Report of Soil Sampling Below Waste Oil Tank and Fuel Dispensers* dated December 23, 1998.

2000 Monitoring Well Installation

In October 2000, Delta Environmental Consultants, Inc. (Delta) installed monitoring wells MW-5, MW-6 and MW-7. Additional information is available in Delta's *Monitoring Well Installation and Groundwater Sampling Results – Revised* dated January 25, 2001.

2001 – 2005 Groundwater Overpurging

Delta conducted eight overpurging events from May 3, 2001 to October 31, 2002. From May 20, 2003 to October 13, 2005, Cambria Environmental Technology, Inc. (Cambria) conducted five overpurging events. In November 2005 Cambria ceased the overpurge events based on diminishing concentrations of MTBE and TPHg. Additional information is available in Cambria's *Interim Corrective Action Overpurge Results* dated November 7, 2005.

2012 Soil Boring Advancement

On March 26 and 27, 2012 Conestoga-Rovers & Associates (CRA) advanced five soil borings (B-1 through B-5) to 20 feet below grade (fbg). Additional information is available in CRA's *Subsurface Investigation Report* dated May 11, 2012.

ATTACHMENT B

STANDARD OPERATING PROCEDURES FOR SOIL BORINGS

STANDARD FIELD PROCEDURES FOR SOIL BORINGS

This document presents standard field methods for drilling and sampling soil borings and installing, developing and sampling groundwater monitoring wells. These procedures are designed to comply with Federal, State and local regulatory guidelines. Specific field procedures are summarized below.

SOIL BORINGS

Objectives
Soil samples are collected to characterize subsurface lithology, assess whether the soils exhibit obvious hydrocarbon or other compound vapor or staining, and to collect samples for analysis at a State-certified laboratory. All borings are logged using the ASTM D2488-06 Unified Soil Classification System by a trained geologist working under the supervision of a California Professional Geologist (PG).

Soil Boring and Sampling
Prior to drilling, the first 8 feet of the boring are cleared using an air or water knife and vacuum extraction or hand auger. This minimizes the potential for impacting utilities. Soil borings are typically drilled using hollow-stem augers or direct-push technologies such as the Geoprobe®. Soil samples are collected at least every five ft to characterize the subsurface sediments and for possible chemical analysis. Additional soil samples are collected near the water table and at lithologic changes. Samples are collected using lined split-barrel or equivalent samplers driven into undisturbed sediments at the bottom of the borehole.

Drilling and sampling equipment is steam-cleaned prior to drilling and between borings to prevent cross-contamination. Sampling equipment is washed between samples with trisodium phosphate or an equivalent EPA-approved detergent.

Sample Analysis
Sampling tubes chosen for analysis are trimmed of excess soil and capped with Teflon tape and plastic end caps. Soil samples are labeled and stored at or below 4° C on either crushed or dry ice, depending upon local regulations. Samples are transported under chain-of-custody to a State-certified analytic laboratory.

Field Screening
One of the remaining tubes is partially emptied leaving about one-third of the soil in the tube. The tube is capped with plastic end caps and set aside to allow hydrocarbons to volatilize from the soil. After ten to fifteen minutes, a portable volatile vapor analyzer measures volatile hydrocarbon vapor concentrations in the tube headspace, extracting the vapor through a slit in the cap. Volatile vapor analyzer measurements are used along with the field observations, odors, stratigraphy and groundwater depth to select soil samples for analysis.

Water Sampling
Water samples, if they are collected from the boring, are either collected using a driven Hydropunch® type sampler or are collected from the open borehole using bailers. The groundwater samples are decanted into the appropriate containers supplied by the analytic laboratory. Samples are labeled, placed in protective foam sleeves, stored on crushed ice at or below 4°C, and transported under chain-of-custody to the laboratory. Laboratory-supplied trip blanks accompany the samples and are analyzed to check for cross-contamination. An equipment blank may be analyzed if non-dedicated sampling equipment is used.

Grouting
If the borings are not completed as wells, the borings are filled to the ground surface with cement grout poured or pumped through a tremie pipe.

Waste Handling and Disposal
Soil cuttings from drilling activities are usually stockpiled onsite and covered by plastic sheeting. At least three individual soil samples are collected from the stockpiles and composited at the analytic laboratory. The composite sample is analyzed for the same constituents analyzed in the borehole samples in addition to any analytes required by the receiving disposal facility. Soil cuttings are transported by licensed waste haulers and disposed in secure, licensed facilities based on the composite analytic results.

Groundwater removed during development and sampling is typically stored onsite in sealed 55-gallon drums. Each drum is labeled with the drum number, date of generation, suspected contents, generator identification and consultant contact. Upon receipt of analytic results, the water is either pumped out using a vacuum truck for transport to a licensed waste treatment/disposal facility or the individual drums are picked up and transported to the waste facility where the drum contents are removed and appropriately disposed.