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November 28, 2012

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Chevron Facility No. 351645 (Former Unocal Service Station No. 1156)**
4276 MacArthur Boulevard, Oakland, California

ACEH Fuel Leak Case No. RO0000409
RWQCB Case No. 01-2474
GeoTracker Global ID T0600102279

I have reviewed the attached *Work Plan for Limited Site Assessment*, dated November 28, 2012.

I agree with the information 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 AECOM, upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13257(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,

Roya Kambin
Project Manager

Attachment: *Work Plan for Limited Site Assessment*

AECOM Environment

Prepared for:
Chevron, Inc.
San Ramon, California

Prepared by:
AECOM
Camarillo, California
November 28, 2012

Work Plan for Limited Site Assessment

Former Unocal Station No. 1156
(Chevron Facility 351645)
4276 MacArthur Boulevard
Oakland, California

ACEH Case No. RO409
RWQCB Case No. 01-2474

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Prepared for:
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Work Plan for Limited Site Assessment

Former Unocal Station No. 1156
(Chevron Facility 351645)
4276 MacArthur Boulevard
Oakland, California

ACEH Case No. RO409
RWQCB Case No. 01-2474

Prepared by:

Bryan Elder
Project Engineer

Reviewed by:

Brenda Evans
Project Manager

Carmen Caceres-Schnell, P.G.
Project Geologist

Contents

Appendices

1.0 Introduction

On behalf of Chevron Environmental Management Company, for itself and as Attorney-in-Fact for Union Oil Company of California (hereinafter "EMC"), AECOM is pleased to submit this Work Plan for Limited Site Assessment. AECOM has prepared this work plan in association with Alameda County Environmental Health (ACEH) Case No. RO409, for Unocal Service Station No. 1156 (Chevron Site 351645), located at 4276 MacArthur Boulevard, Oakland, California (see **Appendix A – Figures 1 and 2**).

1.1 Objectives

AECOM has reviewed and evaluated available data for the site and prepared a Conceptual Site Model (CSM; attached as **Appendix B**). Based on this evaluation, the following data gaps were identified.

- The horizontal soil and groundwater impacts in vertically isolated water-bearing zones (if any) less than 20 feet below ground surface (bgs) have not been sufficiently evaluated to determine potential down-gradient migration of source zone residual impacts (e.g., the former underground storage tanks [USTs]).
- The nature of the previously "unidentified underground concrete vault" (that appears to be a sewer cleanout rather than a "vault") has not been sufficiently determined. Therefore, whether the structure is a source of elevated petroleum hydrocarbons detected in soil, soil vapor, and groundwater in the area of former monitoring well MW-1 has not been evaluated.
- Soil vapor impacts associated with the site, and the potential for soil vapor intrusion to the adjacent Oakland Veterinary Hospital, has not been sufficiently assessed. Additional assessment has been proposed (AECOM 2012) and approved by the ACEH (2012). This assessment will be completed following execution of an access agreement with the property owner.

The proposed scope of work will focus on soil boring and monitoring well installation and investigation of the "vault".

1.2 Rationale for Proposed Scope of Work

Current groundwater concentrations from on-site monitoring wells (MW-1B to MW-4B) represent a discrete interval (i.e., 20 to 25 feet bgs) of a permanent saturated zone. Groundwater in this zone is under significant hydrostatic pressure, with minimal hydrocarbon impacts. Groundwater concentrations collected from previously abandoned on-site monitoring wells (MW-1 to MW-4) screened over a much larger interval (5 to 25 feet bgs) were significantly higher than current concentrations. These former wells likely allowed groundwater confined to the permanent saturated zone (under pressure) to saturate the upper vadose layers, mobilizing soil impacts and, thus, contributing to higher dissolved-phase concentrations in the former wells. The current scope of work will focus on installing six shallow groundwater monitoring wells on site to determine what discrete groundwater zones may exist above the known permanent groundwater zone below 20 feet bgs.

In addition, site assessment activities will include further investigation of the previously identified "unknown vault" located near the northern boundary of the site. This "vault" was previously investigated by Delta in 2009 and 2010, during which it was described to appear to be a "sewer

cleanout". Delta reported that they were "unable to open and better identify the structure" based on "the age and deterioration of the cleanout cap". To further assess the structure, Delta employed ground penetrating radar (GPR) to identify utility lines running to and from this "cleanout". A line running from the restroom area of the building to the "cleanout" was identified, but no other lines were identified. No details regarding the materials, size, etc., for the cleanout, were provided in Delta's reports, except that the "vault" appeared to be filled with sand, and the bottom could not be determined beyond 2 feet bgs.

AECOM visited the site on November 16, 2012, and visually inspected the "unknown vault" by removing the surface lid. What appeared to be a typical sewer cleanout pipe and cap (approximately 4-inch-diameter) was observed within an approximately 8-inch-diameter casing (see photograph provided in **Appendix A – Figure 3**). There are bindings on the "plastic" (non-metal) piping holding the metal cap in place. No odors were noted and no hydrocarbons were detected with the photoionozation detector (PID). No other potential sewer cleanouts were found on site. The primary utility corridor for the site is located along MacArthur Boulevard. Typical sewer construction would indicate that this "unknown vault" is the station's sewer cleanout. The surface grade at the cleanout is at an approximately 4- to 5-foot higher elevation than MacArthur Boulevard. Therefore, based on the "plastic" nature of the piping, and that it is likely buried up to 10 feet bgs, it is not surprising that GPR did not detect a line running from the cleanout toward MacArthur Boulevard. AECOM plans to further investigate the vault and associated piping.

1.3 Site Location and Description

The site is located in an urbanized area of Oakland at the base of the San Leandro Hills. The station site is located at the north corner of the intersection between MacArthur Boulevard and High Street in Oakland (see **Figures 1 and 2**).

The site area consists of mixed commercial and residential development. The Oakland Veterinary Hospital borders the site to the northwest, beyond which is a pharmacy/drug store. Single-family dwellings border the station site to the northeast. An apartment building and commercial businesses (cleaners, tax service, pizza place, and sandwich shop) are present across High Street to the southeast. A vacant lot is located south of the station site at the south corner of the MacArthur Boulevard and High Street intersection. A vacant lot is also located across MacArthur Boulevard to the southwest of the station site.

Based on site survey data (Morrow Surveying 2010), surface elevations at the site range from 179.42 feet above mean sea level (amsl) at MW-4B to 173.99 feet amsl at MW-2B. Observations during the area reconnaissance on March 15, 2012, further revealed that the elevation at the northeast site boundary is noticeably higher than at MW-4B. Additionally, the elevation at MW-5 is 169.67 feet amsl. MW-5 is located in the street in front of the Oakland Veterinary Hospital (adjacent to the northwest of the station site). To summarize, the southwest portion of the station site is at least 8 feet lower in elevation than the northeast portion; and the west corner is approximately 4 feet lower in elevation than the south corner.

1.4 History

A review of historical aerial photographs, city directories, and Sanborn fire insurance maps indicate that the site has been in use as a gasoline service station since at least 1950. The 1950 Sanborn map indicates that MacArthur Boulevard was formerly known as Hopkins. Aerial photographs and Sanborn maps indicate that the station underwent a complete remodel in 1965/1966. Earlier Sanborn maps indicate that dwellings were formerly present on site. Copies of the Sanborn maps were previously

provided with the *Revised Work Plan for Vapor Intrusion Investigation and Risk Assessment*, dated August 27, 2012.

A site map with historical sampling locations is included as **Figure 2**. Historical information provided in previously prepared reports (Miller Brooks Environmental 2004; ATC 2005; Delta 2007b, 2008a, 2009, 2010) is summarized below.

Historical information provided in previously prepared reports indicates investigative activities have been conducted at the site from 1997 through 2010. The investigations have included the drilling of numerous soil borings, installation of 12 groundwater monitoring wells, four of which (MW-1 through MW-4) have been abandoned, and several soil vapor assessments.

The most recent investigative activities were conducted by Delta Consultants in 2010 and included soil vapor point sampling, soil vapor well installation and sampling, monitoring well abandonment and re-installation, soil and groundwater borings, and assessment of a previously unidentified underground vault/utility. The investigations were conducted to determine if a pathway existed between the former gasoline UST pit and MW-1, to adjust the effective screen interval of four on-site monitoring wells, and to assess the soil vapor intrusion risk to the Oakland Veterinary Hospital, located adjacent to the northwest of the station.

A total of eight sonic borings (SB-12 through SB-19) were sited along the northwest, northeast, and southeast portions of the station building; six soil vapor wells were installed along the northwest portion of the station; and the four on-site monitoring wells (MW-1 through MW-4) were abandoned and reinstalled with different screen intervals (MW-1B through MW-4B).

Groundwater samples were collected from SB-15, SB-16, SB-17, SB-18, and SB-19. SB-18, located between the unknown vault location and the former waste oil UST on the northwest side of the station building had the highest concentrations of petroleum hydrocarbons. SB-15, located near the current waste oil aboveground storage tank, on the northeast side of the station building, had the lowest concentrations.

Of the six vapor wells installed, extractable soil vapor samples were collected from only five – SVW-1, SVW-2, SVW-3, SVW-5, and SVW-6. A soil vapor sample was not collected from SVW-4 due to water in the well. The soil vapor wells that were sampled contained very high concentrations of petroleum hydrocarbons as gasoline (TPHg) up to 420,000,000 micrograms per cubic meter (µg/m3) at SVW-6, benzene up to 1,100,000 µg/m3 at SVW-3, toluene up to 19,000 µg/m3 at SVW-2, ethylbenzene up to 610,000 µg/m3 at SVW-3, and total xylenes up to 820,000 µg/m3 at SVW-3. Methyl tertiary butyl ether (MTBE) was not detected in the soil vapor analyses, though reporting limits were higher than Environmental Screening Level values in many cases.

1.5 Geology/Hydrogeology

AECOM reviewed boring logs prepared by other consultants during previously completed subsurface investigations (Delta 2007a, 2007b, 2008a, 2009, 2010). The boring logs indicate that soil types encountered beneath the site consist of unconsolidated deposits of sand and silt in a clay matrix, with some intermixed fine-to-medium-grained gravel. Clay is predominant in the upper lithology with sandy/silty clay and clayey sand units, between approximately 1 to 15 feet bgs. The clay unit is underlain by clay interbedded with sandy clay, clayey sand, silty sands, and some gravelly sandy clay units, observed to the maximum depth explored (50.5 feet bgs).

Based on a review of boring logs and groundwater monitoring data tables prepared by previous consultants (Delta, 2007b, 2008a, 2009, 2010; CRA, 2011), discontinuous confined and/or unconfined water bearing zones may exist within the stratified clay matrices. Soil boring logs depict groundwater being encountered first between 4 (SB-1) and 42 (SB-11) feet bgs. During monitoring well installations in 1999, groundwater was typically encountered at a depth of approximately 23.5 feet bgs (MW-1, MW-2, MW-3, MW-4). During well installations in 2001, groundwater was encountered at 6 and 5.5 feet bgs in MW-5 and MW-6, respectively. Groundwater was encountered at 15 feet bgs in MW-7 during installation in 2001.

During the most recent groundwater monitoring event, conducted on July 24, 2012 (third quarter), the static groundwater elevation ranged from 164.86 feet (MW-7) to 172.87 feet (MW-4B) amsl. The depth to water measurements during the third quarter 2012 ranged from 7.25 feet bgs (MW-7) to 1.90 feet bgs (MW-5). To note, the southwest portion of the station site is at least 8 feet lower in elevation than the northeast portion; and the west corner is approximately 4 feet lower in elevation than the south corner. The groundwater flow direction and gradient was interpreted to be to the southwest at 0.06 foot per foot (ft/ft). The predominant historical groundwater flow at the station site has been to the west (with variations to the southwest) at an average gradient of approximately 0.05 ft/ft.

Varying groundwater-encounter depths during soil boring installations are indicative of multiple water-bearing zones due to semi-impermeable, discontinuous clay layers identified in the soil boring logs. In addition, shallow static groundwater levels indicate a confined groundwater aquifer below 20 feet bgs under hydrostatic pressure. Previous well installations (MW-1 through MW-4) were screened across multiple confining layers, thus providing a conduit for deeper groundwater to saturate upper layers with higher hydrocarbon impacts. While there may be some perched water in the area (as observed in some of the soil borings above), the deeper, confined aquifer is considered indicative of true groundwater elevation.

2.0 Proposed Scope of Work

The proposed investigation will consist of installing six collocated groundwater monitoring wells for the purpose of evaluating the groundwater contaminant pathways that may exist in the source areas to complete data gaps identified in the CSM (**Appendix B**). The locations of the proposed well installations are shown on **Figure 2**. These locations were selected based on their proximity to existing monitoring wells in the permanent saturated zone, and down-gradient of known source impacts.

In addition, AECOM proposes to further investigate the "unknown vault" located in the northwestern portion of the site. AECOM will attempt to confirm this structure is the sewer cleanout for the site. Additional information regarding the scopes of work is provided in the subsections below. AECOM will commence work upon receipt of regulatory acceptance of this work plan, and contingent upon successful completion of an access agreement with the property owner, the availability of subcontractors, and securing appropriate permits. A report will be prepared and submitted upon completion of the investigation.

2.1 Pre-Field Activities

Prior to drilling and installing monitoring wells on site, AECOM will mark and identify the proposed boring locations and request an underground utility line clearance at least 48 hours in advance of any subsurface activities. In addition, AECOM will contract with a private utility line locating service to establish that there are no obstructions near the proposed boring areas.

AECOM will obtain necessary well permits from the appropriate Alameda County and City of Oakland agencies. AECOM will comply with the terms specified in the permits and will provide a minimum 72-hour notification to the agencies prior to mobilization. AECOM will contract with and schedule a State of California C-57-licensed drilling contractor to advance the boreholes and install the monitoring wells.

2.2 Field Activities

Field activities will be performed under the supervision of a State of California Professional Engineer or Geologist. At the commencement of field activities, AECOM will perform the following tasks:

- Conduct a tailgate safety meeting at the site.
- Review the contents of the Health and Safety Plan with all AECOM and subcontracted workers, and review the requirements mandated by the Chevron Operational Excellence and Safety Program.
- Set up and demarcate an Exclusion Zone around the work area for each boring location to preclude access by anyone whose entry is unauthorized.
- Keep written documentation of field conditions during sampling and drilling. This will include, but not be limited to, weather conditions (e.g., temperature, wind direction, degree of cloud cover, etc.); and surface soil conditions (e.g., presence of standing water). AECOM will maintain detailed field records of all activities, conditions, and sampling processes, including names of field personnel, dates and times, etc.

2.2.1 Unknown Vault Investigation

Based on site reconnaissance conducted by AECOM on November 16, 2012, the vault appears to be a sewer cleanout for the station restroom. The location of the vault is between the station's restroom facility and sewer lateral in MacArthur Boulevard. Previous investigations determined (via GPR) that a subsurface line from the cleanout terminates near the station restroom, but a line from the cleanout to the main sewer line could not be confirmed. This is likely due to the difference in elevation from the cleanout location to MacArthur Boulevard.

AECOM proposes to remove the lid to access the cleanout. The cleanout cap will be removed and the piping will be video scoped and traced using a third-party sewer inspection company. Upon determination of the purpose of the cleanout, AECOM will re-cap the pipe and replace the steel lid. The sand surrounding the cleanout was previously probed and hydrocarbon odors were noted (Delta 2010). AECOM will examine the sand using a probe and PID monitoring device. If elevated hydrocarbon concentrations are detected with the PID, a sample of the sand may be collected for laboratory analysis, if possible.

2.2.2 Soil Borings and Soil Sampling

As stated in section 1.2, the focus of the soil boring scope of work is to determine the subsurface lithology at depths up to 20 feet bgs, as this zone has not been sufficiently assessed to determine what (if any) discrete permanent/temporary saturated zones may be present. Determining the presence of such zones will facilitate evaluation of source pathways (if any) to down-gradient receptors.

AECOM will supervise a truck-mounted roto-sonic drill rig to advance and sample six soil borings (MW-9A/B, MW-10A/B, and MW-11A/B) that will be converted into six groundwater monitoring wells (approximate locations on **Figure 2**). The borings will be continuously cored from the surface to approximately 20 feet bgs.

Soil cores will be collected in 5- to 10-foot lengths. Each cored interval will be visually inspected and logged in accordance with ASTM guidelines. At each of the paired locations, the deepest boring will be advanced first. During the boring advancement, should perched groundwater be identified, the proposed well construction may be modified to target the zone.

Soil samples will be labeled in accordance with EMC sample naming standards, which include the field point name (e.g., MW-9A), the matrix sampled (e.g., S for soil), whether the sample is a duplicate (e.g., Y or N), the depth in feet (e.g., 15), and the date (YYYYMMDD). For example, a non-duplicate soil sample collected from boring MW-9A at 15 feet bgs on November 19, 2012, would be labeled MW9A-S-N-15-20121119. If refusal is encountered in the boring and the boring is relocated to avoid the subsurface obstruction, the relocated boring will be identified with the original boring number using the letter suffix "R" (e.g., MW-9R).

Soil samples for laboratory analyses will be collected from the core at a minimum of 5-foot intervals, and will be biased towards the highest probable degree of contamination based on field screening results. A 6-inch-long pre-cleaned brass or stainless steel sampling sleeve will be pushed into the center of each core at the prescribed interval to collect the soil sample.

The soil samples will be sealed with Teflon sheets and capped with plastic end caps, labeled, and placed in a cooler with ice (Standard Operating Procedures [SOP] for soil sampling methods are provided in **Appendix C**). The remaining soil will be used for field headspace volatile analysis with a

PID and lithologic description. For volatile organic compounds and total petroleum hydrocarbon (TPH) volatile fraction analyses, an EnCore® sampler (or pre-weighed laboratory-prepared VOA vials and an Easy Draw® syringe) will be used for sample collection and field preservation, consistent with U.S. Environmental Protection Agency (EPA) Method 5035 requirements. The sample containers will be sealed, labeled, recorded on a chain-of-custody form and placed in a cooler with ice pending delivery to the analytical laboratory.

2.2.3 Groundwater Monitoring Well Installation

Following completion of the soil sampling, soil borings will be completed as groundwater monitoring wells. Each well location will consist of a 2-inch-diameter monitoring well. The wells will be constructed with 2-inch-diameter schedule 40 polyvinyl chloride (PVC) well casings with 5 feet of 0.020-inch slot PVC screen. Proposed well screen depths and screened intervals are based on lithology and groundwater elevation data compiled to date. Final screen intervals may be adjusted based on field observations during drilling activities. Shallow wells will be labeled “MW-XA, with screen intervals set from approximately 10 to 15 feet bgs. Intermediate wells will be labeled “MW-XB”, with screen intervals set from approximately 15 to 20 feet bgs.

A 2-inch-diameter end cap will be added to the bottom of each well casing. A sand pack (Monterey #3) will be placed in the annular space from the bottom of the well screen to approximately 2 feet above the top slot of the well screen. The well will be surged during sand emplacement to settle the sand pack and prevent bridging. A 3-foot-long hydrated bentonite seal will be placed in the annular space above the sand pack using bentonite chips. The remaining annular space will be filled with bentonite cement grout. Well construction diagrams are included as **Figures 4a and 4b**. The SOP for monitoring well installation is included in **Appendix C**. Well construction details may change depending on the lithology and site conditions encountered during installation.

Each monitoring well will be completed with a traffic-rated well box with a locking well cap. The cap will be permanently labeled with the well identification number. The well box will be set in concrete colored to match surrounding conditions.

2.2.4 Groundwater Monitoring Well Development and Survey

The groundwater monitoring well will be developed at least 48 hours after installation to allow the annular seal to adequately set. The well will then be developed using a surge block. The well will be surged along the entire length of well screen for approximately 10 minutes. The well will then be purged using a stainless steel bailer or Grundfos pump until the water is visibly free of suspended sediments to the extent feasible. Additionally, water quality parameters, including temperature, pH, turbidity, dissolved oxygen, and electrical conductivity, will periodically be collected from the bailer or pump effluent. AECOM’s SOP for monitoring well development is included in **Appendix C**.

A licensed land surveyor will survey each monitoring well during well development.

2.2.5 Laboratory Analysis

The soil samples will be analyzed by a State of California-certified laboratory for the following constituents:

- TPH carbon chain (TPH-CC) by EPA Method 8015B(M); and

- TPHg, benzene, toluene, ethylbenzene, xylenes, and fuel oxygenates, including MTBE, tertiary butyl alcohol, diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, and ethanol by EPA Method 8260B

2.2.6 Investigation-Derived Wastes

Soil cuttings will be stored on site in Department of Transportation-approved 55-gallon drums. Decontamination water and purge water from well development will also be stored in 55-gallon drums. Following receipt of analytical results, the 55-gallon drums will be removed from the site and transported to an appropriately permitted facility.

3.0 Reporting

Upon completion of field activities, AECOM will prepare a report for submittal to ACEH documenting the findings of the site assessment. The report will include field observations, boring logs, laboratory results, conclusions, and recommendations. The report will be prepared under the supervision of and signed by a California Professional Geologist or Engineer. AECOM will submit all required electronic files necessary to comply with ACEH and State of California GeoTracker requirements.

4.0 References

ACEH, 2012.Letter of Conditional Work Plan Approval for Fuel Leak Case No. RO0000409 and GeoTracker Global ID T0600102279, Unocal #1156, 4276 MacArthur Boulevard, Oakland, CA 94619. October 4.

AECOM, 2012. Revised Work Plan for Vapor Intrusion Investigation and Risk Assessment. August 27.

Aerial photographs dated 1939, 1946, 1958, 1965, 1974, 1982, 1993, and 1998. Provided by Environmental Data Resources, 440 Wheelers Farms Road, Milford, Connecticut 06461, 800-352-0050, www.edrnet.com.

ATC Associates, Inc., 2005. Quarterly Summary Report – Second Quarter 2005, 76 Service Station No. 1156/WNO1112, ATC Project No. 75.75118.1112, 4276 MacArthur Boulevard, Oakland, California. Prepared by ATC Associates, Inc., 6602 Owens Drive, Suite 100, Pleasanton, Californai 94588, 925-460-5300. Dated June21.

CRA, 2011. Fourth Quarter 2011 Groundwater Monitoring and Sampling Report. Dated December 16. Prepared by Conestoga-Rovers & Associates, 5900 Hollis Street, Suite A, Emeryville, California 94608.

Delta, 2007a. Work Plan – Site Investigation, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, dated March 1. Prepared for ConocoPhillips Company, 76 Broadway, Sacramento, California. Prepared by Delta Consultants, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, California 95670.

Delta, 2007b. Site Investigation Report, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, dated December 28. Prepared for ConocoPhillips Company, 76 Broadway, Sacramento, California. Prepared by Delta Consultants, 3164 Gold Camp Drive, Suite 200, Rancho Cordova, California 95670.

Delta, 2008a. Draft Corrective Action Plan, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, dated April 24. Prepared for ConocoPhillips Company, 76 Broadway, Sacramento, California. Prepared by Delta Consultants, 11050 White Rock Road, Suite 110, Rancho Cordova, California 95670.

Delta 2008b. Aquifer and Utility Survey, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, dated May 8. Prepared for ConocoPhillips Company, 76 Broadway, Sacramento, California. Prepared by Delta Consultants, 11050 White Rock Road, Suite 110, Rancho Cordova, California 95670.

Delta, 2009. Site Investigation Report, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, dated September 8. Prepared for ConocoPhillips Company, 76 Broadway, Sacramento, California. Prepared by Delta Consultants, 11050 White Rock Road, Suite 110, Rancho Cordova, California 95670.

Delta, 2010. Additional Assessment Report, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, dated October 21. Prepared for ConocoPhillips Company, 76 Broadway,

Sacramento, California. Prepared by Delta Consultants, 11050 White Rock Road, Suite 110, Rancho Cordova, California 95670.

Miller Brooks Environmental, 2004. Summary of Potential Receptor Survey, 76 Service Station No. 1156, 4276 MacArthur Boulevard, Oakland, California, COP No. WNO.1112. Dated April 30.

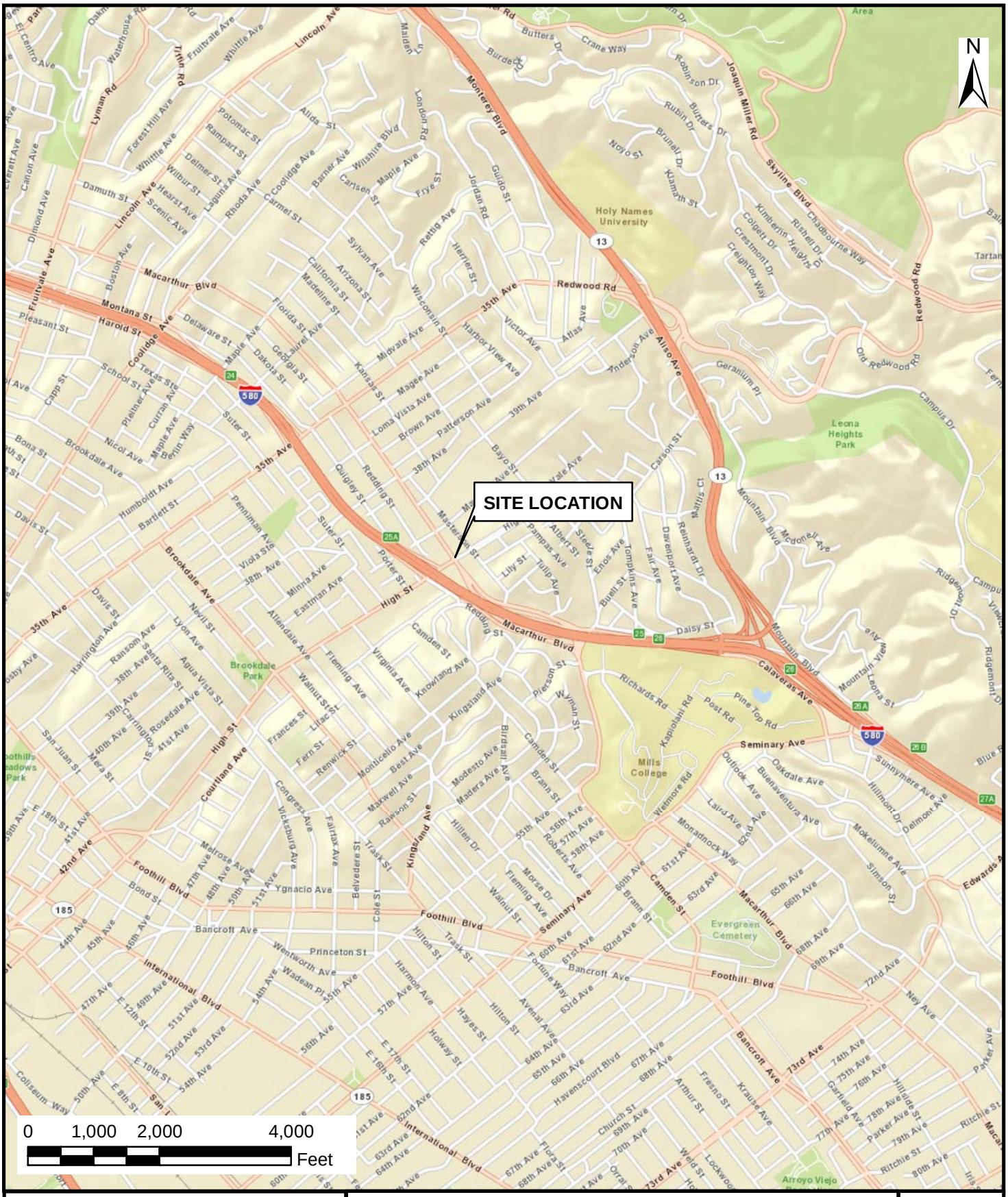
Morrow Surveying, 2010. Monitoring Well Exhibit prepared for Delta Environmental by Morrow Surveying, 1255 Starboard Drive, West Sacramento, California 95691, 916-372-8124. Drawing No. 1275-106 MAM. Dated 1-10-08, Revised 8-24-10.

Sanborn fire insurance maps dated 1912, 1926, 1950, 1952, 1957, 1965, 1966, 1968, and 1969. Provided by Environmental Data Resources, 440 Wheelers Farms Road, Milford, Connecticut 06461, 800-352-0050, www.edrnet.com.

USGS 7.5-minute Topographic Map. Oakland East dated 1980 (photorevised from 1959).

APPENDIX A

Figures



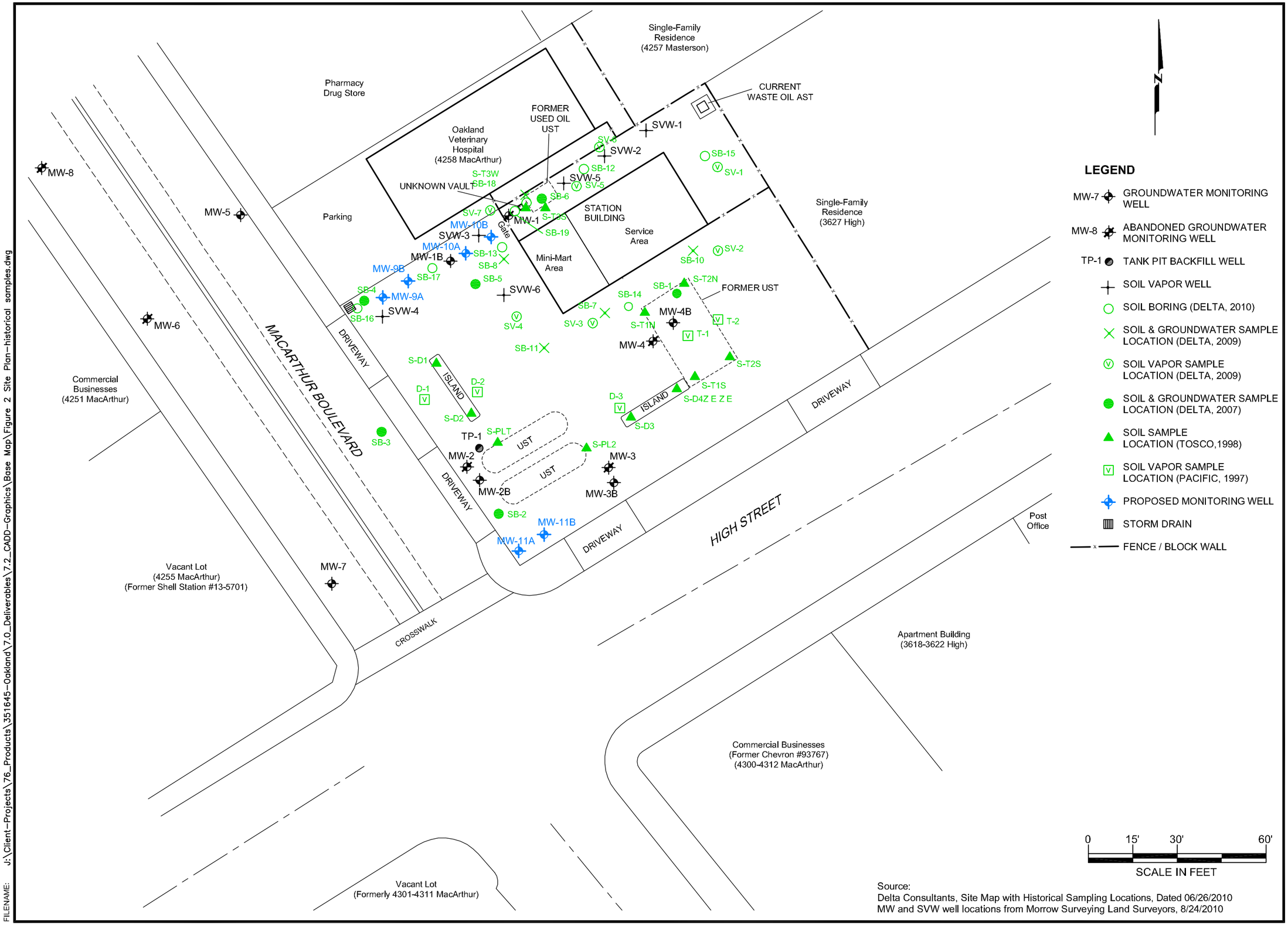
AECOM
1220 AVENIDA ACASO
CAMARILLO, CALIFORNIA 93012
PHONE: 805.388.3775
FAX: 805.388.3577
WEB: HTTP://WWW.AECOM.COM

SITE LOCATION MAP

76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

FIGURE NUMBER:
1

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
M. Scop	5/2/2012	60249149	1 of 1



Source:
Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW and SVW well locations from Morrow Surveying Land Surveyors, 8/24/2010

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
X	M. Scop	X	B. Evans

AECOM
1220 AVENIDA ACASO
CAMARILLO, CALIFORNIA 93012
PHONE: (805) 388-3775
FAX: (805) 388-3577

SITE PLAN

Chevron Site #351645 (76 Service Station #1156)
4276 MacArthur Boulevard
Oakland, California

PROJECT NUMBER:	DATE:	SCALE:
60264254 - A50	5/2/2012	1" = 30'

FIGURE NUMBER:

2

SHEET NUMBER:

X

FILENAME: J:\Client--Projects\76_Products\351645--Oakland\7.0_Deliverables\7.2_CADD--Graphics\Base Map\Figure 2 Site Plan--historical samples.dwg

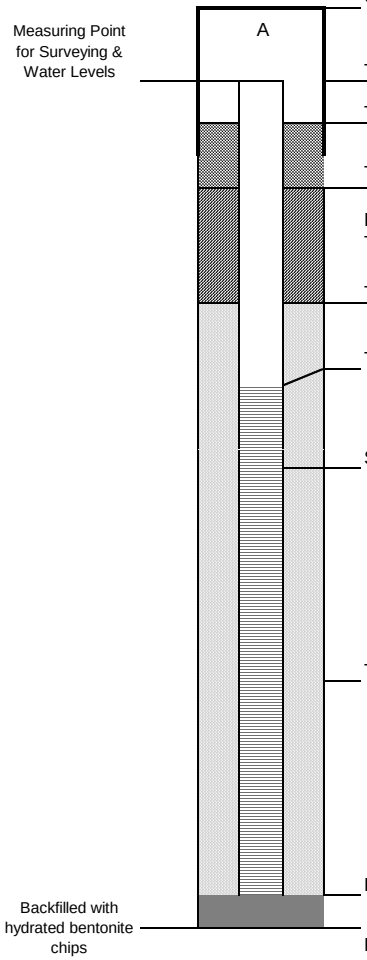
View of sewer cleanout/vault on northwest side of station building

View inside sewer cleanout/vault

Figure 3 – Sewer Cleanout/Vault Photographs

AECOM	Chevron EMC	***WELL ID: MW-9A, MW-10A, MW-11A***
	60249149	
	4276 MacArthur Boulevard, Oakland, CA	Date Installed: TBD
	NA Coords: NA	Inspector: NA
	Sonic	Contractor: TBD

FIGURE 4a -- PROPOSED MONITORING WELL CONSTRUCTION DIAGRAM



		Depth from G.S. (feet)
Ground Surface (G.S.)		0 ft
Top of Riser Pipe		~0.25 ft
Top of Concrete Slurry		1 ft
Top of Bentonite		1.5 ft
Bentonite Seal Thickness	3 ft	
Top of Sand		8 ft
Top of Screen		10 ft
Screen:		
Length	5 ft	
Inside Diameter (ID)	2 in.	
Slot Size	0.020 in.	
Type of Material	Sch. 40 PVC	
Type/Size of Sand:	Monterey No.3	
Bottom of Screen/Top of Bentonite Seal		15 ft
Bottom of Borehole		16 ft

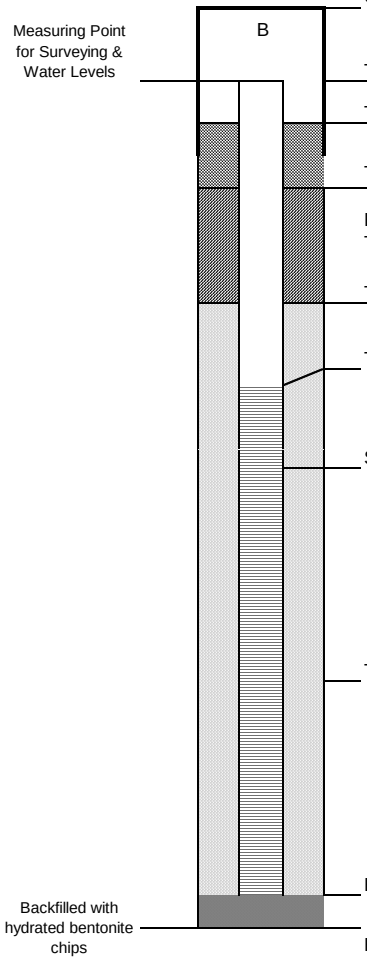
Borehole Diameter: 6 in

Riser Pipe:	A
Length	10 ft
Inside Diameter (ID)	2 in.
Type of Material	Sch. 40 PVC

NOT TO SCALE

AECOM	Chevron EMC	***WELL ID: MW-9B, MW-10B, MW-11B***
	60249149	
	4276 MacArthur Boulevard, Oakland, CA	Date Installed: TBD
	NA Coords: NA	Inspector: NA
	Sonic	Contractor: TBD

FIGURE 4b -- PROPOSED MONITORING WELL CONSTRUCTION DIAGRAM



		Depth from G.S. (feet)
Ground Surface (G.S.)		0 ft
Top of Riser Pipe		~0.25 ft
Top of Concrete Slurry		1 ft
Top of Bentonite		1.5 ft
Bentonite Seal Thickness	3 ft	
Top of Sand		13 ft
Top of Screen		15 ft
Screen:		
Length	5 ft	
Inside Diameter (ID)	2 in.	
Slot Size	0.020 in.	
Type of Material	Sch. 40 PVC	
Type/Size of Sand:	Monterey No.3	
Bottom of Screen/Top of Bentonite Seal		20 ft
Bottom of Borehole		21 ft

Borehole Diameter: 6 in

Riser Pipe:	B
Length	15 ft
Inside Diameter (ID)	2 in.
Type of Material	Sch. 40 PVC

NOT TO SCALE

APPENDIX B

Conceptual Site Model

AECOM Environment

Prepared for:
Chevron, Inc.
San Ramon, CA

Prepared by:
AECOM
Camarillo, CA
November 2012

Conceptual Site Model

Former Unocal Station No. 1156
(Chevron Facility 351645)
4276 MacArthur Boulevard
Oakland, California

ACEH Case No. RO409
RWQCB Case No. 01-2474

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Former Unocal Station No. 1156
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4276 MacArthur Boulevard
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ACEH Case No. RO409
RWQCB Case No. 01-2474

Prepared by:

Bryan Elder
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STATE OF CALIFORNIA

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1.0 Site Background, Context, and History

1.1 Site Description and Vicinity

The site is a branded 76 Service Station located at the north corner of the intersection between MacArthur Boulevard and High Street within the Oakland city limits (Attachment A – Figure 1). The station building is situated in the north portion of the site. An automotive service bay is located in the north portion of the building and a mini-mart/cashier area is located in the south portion. Two dispenser islands are located on site, both in the south portion of the site – one parallel to MacArthur Boulevard and one parallel to High Street. Previously prepared environmental documents (e.g., Delta 2010 and 2010b) indicate that two 10,000-gallon gasoline underground storage tanks (USTs) are located in the southwestern portion of the site (Figure 2).

What appears to be a sewer cleanout (formerly identified as an "unidentified concrete vault" [Delta 2010a]) was reported to be located on the northwest side of the station building, in the vicinity of former groundwater monitoring well MW-1. There are currently four groundwater monitoring wells (MW-1B through MW-4B) and one tank backfill well (TP-1) located on site, and two groundwater monitoring wells (MW-5 and MW-7) located off site on MacArthur Boulevard.

The site area consists of mixed commercial and residential development, with the following adjacent site uses (see Figure 2):

- Northwest – The Oakland Veterinary Hospital (4258 MacArthur Boulevard) abuts the station site to the northwest, beyond which is a pharmacy/drug store.
- North and northeast – Single-family dwellings (4257 Masterson Street and 3627 High Street) abut the station site to the north and northeast.
- East and southeast – High Street borders the station site to the southeast, beyond which are a post office, apartment building (3618 to 3622 High Street), and commercial businesses (4300 to 4312 MacArthur Boulevard – cleaners, tax service, pizza place, and sandwich shop). Based on a review of the State Water Resources Control Board GeoTracker database, a leaking underground storage tank (LUST) site was formerly located at this corner – Chevron gasoline service station #93676 (4300 MacArthur Boulevard, Case No. 01-0371). The LUST case was closed in 1999.
- South – A vacant lot is located south of the station site, beyond the intersection of MacArthur Boulevard and High Street. The GeoTracker database indicates that an open LUST case is located in this area – the former Robert's Tires facility, 4311-4333 MacArthur Boulevard (Case No. 01-3601).
- Southwest and west – MacArthur Boulevard borders the station site to the southwest, beyond which are a vacant lot and commercial businesses. The GeoTracker database indicates that Shell gasoline service station #13-5701 (4255 MacArthur Boulevard) was formerly located at the vacant lot. There is an open LUST case (Case No. 01-1366) associated with the former Shell station.

Site and neighboring property uses are not expected to change significantly in the near future. The vacant lots are not expected to be redeveloped without resolution of the open LUST cases.

Drinking water for the city of Oakland is provided by East Bay Municipal Utility District (EBMUD). Information provided on the EBMUD website (EBMUD 2012) indicates that their water supply begins at the Mokelumne River watershed in the Sierra Nevada and extends 90 miles to the East Bay.

1.2 Regional Setting

1.2.1 Geography, Topography, and Site Elevation

Based on a review of boring logs prepared by previous consultants (Delta 2007b, 2008a, 2009a, 2009b, 2010a, 2010b), the site geology consists of unconsolidated deposits of sand and silt in a clay matrix, with some intermixed fine-to-medium-grained gravel. Clay is predominant in the upper lithology with sandy/silty clay and clayey sand units, between approximately 1 to 15 feet below grade surface (bgs). The clay unit is underlain by clay interbedded with sandy clay, clayey sand, silty sands, and some gravelly sandy clay units, observed to the maximum depth explored (50.5 feet bgs). Available boring logs are provided as Attachment B and cross-sections prepared by Delta are provided as Attachment C.

The site is located in a highly urbanized area of Oakland at the base of the San Leandro Hills. Based on site survey data (Morrow Surveying 2008 – Figure 4) surface elevations at the site range from 179.42 feet above mean sea level (amsl) at MW-4B to 173.99 feet amsl at MW-2B. Observations during the area reconnaissance on March 15, 2012, further revealed that the elevation at the northeast site boundary is noticeably higher than at MW-4B. Additionally, the elevation at MW-5 is 169.67 feet amsl. MW-5 is located in the street in front of the Oakland Veterinary Hospital (adjacent to the northwest portion of the station site). To summarize, the southwest portion of the station site is at least 8 feet lower in elevation than the northeast portion; and the west corner is approximately 4 feet lower in elevation than the south corner.

1.2.2 Hydrogeology

According to an aquifer study performed by Delta in 2008 (Delta 2008b), the site is located on the eastern edge of the East Bay Plain subbasin of the Santa Clara Valley Groundwater Basin. The East Bay Plain is bounded by San Pablo Bay to the north and by Franciscan Basement rock to the east, and extends beneath the San Francisco Bay to the west. The Niles Cone Groundwater Basin is located to the south.

Groundwater in the East Bay Plain subbasin is both unconfined and confined. The shallow aquifer system consists of the Newark aquifer (30 to 130 feet bgs) and Centerville aquifer (extends to 220 feet bgs) (WRIR 2003). The lower aquifer system consists of the Freemont aquifer (240 to 400 feet bgs) and Deep aquifer (500 to 650 feet bgs). Depth to groundwater in the upper aquifer system ranges from 5 to 40 feet bgs. Groundwater in both aquifers generally flows in a western direction from the mountain front to the San Francisco Bay (WRIR 02-4259); however, pumping in the northern portion of the subbasin has drawn groundwater in from the south.

Based on a review of boring logs and groundwater monitoring data tables (Attachment D) prepared by previous consultants (Delta 2007b, 2008a, 2009a, 2009b, 2010a, 2010b; CRA 2011), discontinuous confined and/or unconfined water bearing zones may exist within the stratified clay matrices. Soil boring logs reported groundwater being encountered first between 4 (SB-1) and 42 (SB-11) feet bgs. During monitoring well installations in 1999, groundwater was typically encountered at a depth of 23.5 feet bgs (MW-1, MW-2, MW-3, MW-4). During well installations in 2001, groundwater was encountered at 6 and 5.5 feet in MW-5 and MW-6, respectively. Additionally, groundwater was encountered at 15 feet bgs in MW-7 during installation in 2001. Finally, groundwater was encountered at 23.5 feet bgs in borings MW-1B, MW-2B, MW-3B, and MW-4B in 2010; however, significant moisture content was noted at 5 feet bgs and deeper. Cross-sections prepared by Delta are provided in Attachment C.

During the most recent groundwater monitoring event, conducted on July 24, 2012 (third quarter), the static groundwater elevation ranged from 164.86 feet (MW-7) to 172.87 feet amsl (MW-4B) (Figure 3). The depth to water measurements during the third quarter 2012 ranged from 1.90 feet bgs (MW-5) to 7.25 feet bgs (MW-7). As stated above, the southwest portion of the station site is at least 8 feet lower in surface elevation than the northeast portion; and the west corner is approximately 4 feet lower in surface elevation than the south corner. The groundwater flow direction and gradient was interpreted to be to the west-southwest at 0.06 foot per foot (ft/ft). This is consistent with the predominant historical groundwater flow at the station site, which has been to the west (with variations to the southwest) at an average gradient of approximately 0.06 ft/ft.

Varying groundwater-encounter depths are indicative of multiple water-bearing zones due to semi-impermeable, discontinuous clay layers identified in the soil boring logs. In addition, shallow static groundwater levels indicate a confined groundwater aquifer below 20 feet bgs under hydrostatic pressure. Previous well installations (MW-1 through MW-4) were likely screened across multiple confining layers, thus providing a conduit for deeper groundwater to contact and potentially mix with upper layers.

Additional assessment is required to determine the horizontal groundwater impacts in vertically isolated water-bearing zones (if any).

1.2.3 Surface Water Drainage / Distance to Closest Surface Water Body

Surface water drainage at the site is directed downslope toward MacArthur Boulevard. Based on a review of Google Earth images on the internet and the United States Geological Survey (USGS) 7.5-minute topographic map (Oakland East quadrangle) dated 1980, the nearest surface water bodies are the Thirtyninth Avenue Reservoir, located approximately 0.6 mile to the northeast (topographically upgradient), and Peralta Creek, located approximately 0.6 mile to the northwest (topographically cross-gradient).

1.3 Release History

1.3.1 First Release

Soil contamination was identified during the removal of the USTs and waste oil tank (WOT) in 1998. No releases or leaks were documented prior to tank removals.

1.3.2 Any Subsequent Release(s)

No subsequent releases on site have been documented.

1.4 Summary of Previous Site Investigations and Remedial Activities

1.4.1 Previous Site Investigations

A site map with historical sampling locations is included as Figure 2. Historical information provided in previously prepared reports (Miller Brooks Environmental [MBE] 2004; ATC 2005; Delta 2007b, 2008a, 2009a, 2009b, 2010a, 2010b) indicates the following.

As reported by Delta (Delta 2010b), in 1997, Pacific Environmental Group Inc. advanced five soil vapor probes (D-1, D-2, D-3, T-1, T-2) in the vicinity of the USTs and dispenser islands to depths ranging from 3 to 15 feet bgs. Soil vapor concentrations of total petroleum hydrocarbons as gasoline (TPHg), benzene, and methyl tert butyl ether (MTBE) were reported at up to 4,700 micrograms per liter (µg/L), 70 µg/L, and 140 µg/L, respectively.

In 1998, Tosco Marketing Company (Tosco, now ConocoPhillips) removed one 280-gallon WOT, and removed and replaced two 10,000-gallon gasoline USTs, associated piping, and fuel dispensers. Laboratory analyses of soil samples collected at 6 feet bgs from the sidewall at each end of the gasoline UST excavations revealed concentrations of total purgeable petroleum hydrocarbons as gasoline (TPPHg) of up to 1,200 milligrams per kilogram (mg/kg). TPPHg was not detected at or above laboratory method detection limits in soil samples collected adjacent to dispensers D1 (S-D1 at 2 feet bgs) and D4 (S-D4 at 3 feet bgs), but was detected in soil samples collected adjacent to dispensers D2 (S-D2 at 3 feet bgs) and D3 (S-D3 at 3 feet bgs), and within the former product line trenching at concentrations up to 590 mg/kg. Laboratory analyses of soil samples from the bottom, and western and southern limits of the WOT excavation detected TPPHg (6.5 feet bgs) up to 130 mg/kg; total extractable petroleum hydrocarbons as diesel (TEPHd) up to 78,000 mg/kg; benzene up to 0.55 mg/kg; and total recoverable petroleum hydrocarbons (TRPH) up to 8,400 mg/kg. Following the over-excavation of approximately 4.6 tons of soil from the WOT excavation, samples collected from the excavation (6 feet bgs) revealed concentrations of TEPHd at 560 mg/kg, TPPHg at 81 mg/kg, benzene at 0.64 mg/kg, and TRPH at 360 mg/kg. Analytical data from a groundwater sample collected from the gasoline UST excavation (7.5 feet bgs) reported TPPHg at 41,000 µg/L, toluene at 400 µg/L, ethyl-benzene at 770 µg/L, and xylenes at 8,900 µg/L. Benzene was reported to be below the laboratory's indicated reporting limit in the groundwater sample collected for analysis. Available historical soil and groundwater analytical data are provided in Attachment D.

In 1999, Environmental Resolutions Inc. (ERI) conducted a soil and groundwater assessment which included the installation of four on-site groundwater monitoring wells (MW-1 through MW-4). Analytical data from the soil samples collected from the borings at a depth of 10.5 feet bgs reported TPPHg at 6,800 mg/kg, benzene at 2.6 mg/kg, and MTBE at 0.71 mg/kg. The soil sample collected from MW-1, near the former WOT, was also analyzed for total petroleum hydrocarbons as diesel (TPHd) and TPPH. Analytical data from this soil sample reported TEPHd at 140 mg/kg and TRPH at 73 mg/kg. A soil sampled collected from MW-4 at 20.5 feet bgs did not contain TPHg, benzene, or MTBE at or above the laboratory detection limit. The groundwater sample collected from MW-1, near the former WOT, was analyzed for TEPHd, TRPH, TPPHg, benzene, toluene, ethylbenzene and xylenes (BTEX), and MTBE. Analytical data from this water sample reported TEPHd at 16,000 µg/L, TPPHg at 120,000 µg/L, benzene at 11,000 µg/L, toluene 27,000 µg/L, ethylbenzene at 3,300 µg/L, and xylenes at 18,000 µg/L. MTBE was at or below laboratory detection limits in MW-1. However, MTBE was detected in the groundwater sample from MW-2 at a concentration that varied from 4,500 µg/L (U.S. Environmental Protection Agency [EPA] Method 8021B) to 11,000 µg/L (EPA Method 8260B). Analytical data from an additional soil sample collected at a depth of 20.5 feet bgs from the MW-4 boring reported TPPHg, benzene, and MTBE below the laboratory's indicated reporting limits. Available historical soil and groundwater analytical data are provided in Attachment D.

Quarterly groundwater monitoring and sampling activities commenced in July 1999 and are currently ongoing.

In July 2001, ERI installed a UST pit backfill well (TP-1) in the vicinity of the new USTs and initiated monthly purging of groundwater "from the UST excavation". Monthly and/or bi-weekly groundwater purging was conducted at the site using wells TP-1 and MW-1 from July 2001 through December 2004. Well construction details for TP-1 were not found in the historical documents available to AECOM.

In August 2001, ERI installed three off-site monitoring wells (MW-5 though MW-7; see Figure 2). Analytical data from soil samples collected from these well borings indicated TPHg and MTBE below the laboratory's indicated reporting limits. Analytical data reported benzene in one soil sample collected from MW-7 (10 feet bgs) at a concentration of 0.18 mg/kg (see historical data tables in Attachment D).

Beginning in June 2004, monitoring well MW-7 was added to the ongoing bi-weekly purging events. Approximately 1,600 gallons of groundwater were removed from monitoring well MW-7 from June through December 2004. A cumulative total of approximately 476,015 gallons of groundwater was removed from the site from July 2001 through December 2004. ATC Associates became the new lead consultant for the site in January 2005. Delta Consultants became the new consultant for the site in September 2005.

In October and November 2007, Delta advanced six on-site soil borings (SB-1 through SB-6) and installed an additional off-site monitoring well (MW-8) (Delta, 2007b). The subsurface materials reported to be encountered consisted of predominantly lean clay and sand with some silt. First water was reported at depths ranging from approximately 17.5 to 23 feet bgs in borings SB-2 through SB-6 and MW-8. First water was reported at 4 feet bgs in boring SB-1. Static groundwater was reported at depths ranging from approximately 4 to 6 feet bgs in borings SB-2 through SB-6. Static groundwater in MW-8 was measured prior to well development at 0.11 feet below the top of the casing. Groundwater was first observed at a depth of approximately 4 feet bgs in boring SB-1. The above information indicates that the groundwater at the site is under confined/partially-confined conditions. Boring SB-1 was advanced in the former UST excavation area, which was backfilled with fill material, gravel, sand, and clay. Based on the shallow depth to first water that was encountered, the former UST excavation was reported to be acting as a basin and that this shallow groundwater is perched in the fill material above the lean clay below.

Based on the analytical data collected during Delta's 2007 investigation, the soil and groundwater beneath the site were reported to not be significantly impacted by total oil and grease (TOG), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs), indicating that the former WOT had not significantly impacted soil and groundwater quality beneath the site. However, due to insufficient water volume, groundwater samples from soil borings SB-5 and SB-6 in the vicinity of and downgradient of the former WOT were not collected. Delta recommended that groundwater samples collected from monitoring wells MW-1, MW-5, MW-6, and MW-8 (downgradient of the former waste oil tank) be analyzed for VOCs by EPA Method 8260B, SVOCs by EPA Method 8270, and TOG by EPA Method 1664.

Based on the data obtained during the investigation, Delta reported that the soil appeared to be impacted to depths ranging from approximately 12 feet bgs in boring SB-2 to 17 feet bgs in boring SB-5. Additionally, the soil did not appear to be significantly impacted in the vicinity of borings SB-3, SB-4, and MW-8, indicating that the extent of the petroleum hydrocarbon impact to the soil was predominantly located on site in the vicinity of the former USTs, the current USTs, and downgradient of the station building.

Based on the data obtained during the investigation, Delta reported that groundwater appeared to be impacted across the site with the highest concentration of TPPH found in boring SB-1 at a depth of approximately 16 feet bgs, beneath the former UST location. However, based on the quarterly groundwater data obtained from MW-4, downgradient of the former USTs, with the exception of MTBE, the petroleum hydrocarbon impact to the groundwater was significantly lower than that found in the groundwater beneath the former USTs. Delta recommended that a revised Corrective Action Plan be prepared.

In July 2009, Delta performed site assessment activities to further assess the horizontal and vertical migration potential of petroleum hydrocarbons in soil, groundwater, and soil vapor, and to evaluate if a preferential pathway existed between the former UST pit and MW-1 (Delta 2009a). A total of five CPT/direct push borings (SB-7 through SB-11) were advanced outside the southeast, southwest and northwest perimeter of the station building. Seven temporary soil vapor sampling points (SV-1 through SV-7) were installed outside and around the station building.

Subsurface geology was reported to consist of clay from the surface to 25 feet bgs. Below this clay unit was another clay unit that contained discontinuous stringers or small deposits of sandy clay and clayey sand to the maximum depth explored of 44 feet bgs. The discontinuity of sandy clay/clayey sand stringers, or deposits, was demonstrated in the boring logs of SB-7, SB-9, and SB-11, which showed first water being encountered at depths of 23.5 feet bgs, 26 feet bgs, and 42 feet bgs, respectively.

Results of the UVOST analyses of borings SB-7, SB-9, and SB-11 indicated low levels of petroleum hydrocarbons from approximately 5 feet bgs to 17 feet bgs. Analyses of soil samples extracted from direct push borings and the soil vapor points indicated petroleum hydrocarbon impact from 4.5 feet bgs to approximately 18.5 feet bgs. Hydrocarbon concentrations decreased rapidly with depth within the clay soil column.

Groundwater samples were collected from SB-7, SB-9, and SB-11. SB-7 had the highest concentrations of petroleum hydrocarbons. SB-9 and SB-11 had much lower concentrations of petroleum hydrocarbons. This appeared to indicate that there was no preferred pathway between the former UST pit and MW-1. The soil vapor points that were sampled contained very high concentrations of petroleum hydrocarbons. Of the seven soil vapor points installed, only SV-2, SV-4, SV-6, and SV-7 had extractable soil vapors – TPHg up to 82,000,000 micrograms per cubic meter (µg/m3) (SV-7); benzene up to 120,000 µg/m3 (SV-7); toluene at 370 µg/m3 (SV-2); ethylbenzene up to 32,000 µg/m3 (SV-7); m,p-xylenes up to 6,200 µg/m3 (SV-4); and o-xylenes at 140 µg/m3 (SV-2). MTBE was not detected in the soil vapor samples.

Analysis of the data gathered indicates that the highest concentration of petroleum hydrocarbons in groundwater occurred in the vicinity of SB-7, SB-9, and SB-11. Though concentrations of petroleum hydrocarbons exist in the clay soil, Delta reported that little could be done to eliminate or reduce these concentrations due to the tight structure of the clay, with the exception of site excavation.

According to Delta (2010a), during a site visit on November 10, 2009, a “previously unidentified underground concrete vault was observed in the northwest corner of the site, in proximity to MW-1.” The “vault” was reported to be of unknown depth and filled with sand. Delta probed the sand with a 2-foot-long field instrument and was “unable to locate the bottom o f the vault.” A “faint hydrocarbon odor” was reported to have been “noted” upon removal of the instrument.

In August and September 2010, Delta conducted additional assessment of the horizontal and vertical potential for petroleum hydrocarbon migration in the soil, groundwater and soil gas (Delta 2010b). The activities included soil vapor point sampling, soil vapor well installation and sampling, monitoring well abandonment and reinstallation, soil and groundwater borings, and assessment of a previously unidentified underground vault/utility. The investigations were conducted to determine if a pathway existed between the former gasoline UST pit and MW-1, to adjust the effective screen interval of the on-site monitoring wells, and to assess the soil vapor intrusion risk to the Oakland Veterinary Hospital, located adjacent to the northwest of the station.

Delta used ground-penetrating radar (GPR) to attempt to identify utility lines running to and from this “cleanout”. A line running from the restroom area of the building to the “cleanout” was identified, but no line running from the “cleanout” to the sewer main approximately 6 feet to the north could be identified. Delta reported that the only way to positively identify the nature of this structure would be to open the “cleanout” lid, but that it was highly likely that the structure would be destroyed or badly damaged in the process due to age and deterioration.

A total of eight sonic borings (SB-12 through SB-19) were sited along the northwest, northeast, and southeast portions of the station building; six soil vapor wells were installed along the northwest portion of the station; and the four on-site monitoring wells (MW-1 through MW-4) were abandoned and reinstalled with different screen intervals (MW-1B through MW-4B).

Groundwater samples were collected from SB-15, SB-16, SB-17, SB-18, and SB-19. SB-18, located between the unknown vault location and the former waste oil UST on the northwest side of the station building had the highest concentrations of petroleum hydrocarbons. SB-15, located near the current waste oil AST, on the northeast side of the station building, had the lowest concentrations.

Of the six vapor wells installed, extractable soil vapor samples were collected from only five – SVW-1, SVW-2, SVW-3, SVW-5, and SVW-6. The soil vapor wells that were sampled contained very high concentrations of petroleum hydrocarbons – TPHg up to 420,000,000 µg/m3 at SVW-6, benzene up to 1,100,000 µg/m3 at SVW-3, toluene up to 19,000 µg/m3 at SVW-2, ethylbenzene up to 610,000 µg/m3 at SVW-3, and total xylenes up to 820,000 µg/m3 at SVW-3. MTBE was not detected in the soil vapor analyses, though reporting limits were higher than Environmental Screening Level (ESL) values in many cases.

1.4.2 First Remediation

Approximately 1,350 tons of soil were excavated and removed during the UST removal in 1998 (Delta 2009a). In addition, approximately 4.6 tons of soil were over-excavated and removed during the WOT removal, also in 1998.

1.4.3 Any Subsequent Remediation(s)

A UST pit backfill well (TP-1) was installed in July 2001 and monthly purging of groundwater from the excavation was initiated (Delta 2009a). Bi-weekly groundwater purging was conducted from July 2001 to December 2004 at TP-1 and MW-1. In addition, biweekly purging of MW-7 was conducted in June 2004. Approximately 1,600 gallons of groundwater were removed from MW-7. In total, approximately 476,015 gallons of groundwater were removed through December 2004 from the site (Delta 2009b).

1.5 Off-site Sources

Two gasoline service stations were formerly located adjacent to the station site (Figure 2). The southwest former Shell Station No. 13-5701, located at 4255 MacArthur Boulevard, operated from at least 1965 (from aerial photographs) to 2003 when the final USTs were removed (Cambria 2005). The Shell station previously operated three USTs and three dispenser islands. The former Shell station has an active LUST case since 1985 with Alameda County Environmental Health (ACEH) and the San Francisco Regional Water Quality Control Board (RWQCB).

To the southeast, former Chevron Station No. 9-3676 operated from at least 1965 (from aerial photographs) to approximately 1988 when a leak was reported to RWQCB during the UST excavations (GeoTracker). The station was no longer visible in aerial photographs taken in 1993. Previous operations for the station (i.e., number of USTs and dispenser islands) are unknown. The former Chevron station has a closed LUST case with Alameda County and the RWQCB as of 1999.

2.0 Source

2.1 Ongoing

Migration of residual contamination in the unsaturated zone is the only likely source contributing to groundwater contamination aside from unknown upgradient sources. However, dense clay matrices layered beneath the site have prevented significant vertical transport as identified by relatively low contaminant concentrations in groundwater wells screened from 20 to 25 feet (MW-1B through 4B). Known off-site sources are downgradient from the station site.

2.2 Contained / Stable

Based on declining concentrations in off-site, downgradient wells MW-5 and MW-7, the plume is stable and shrinking (see Attachment E – Hydrographs). On-site well concentrations (MW-1B, MW-2B, MW-3B, and MW-4B), also exhibit stable to decreasing trends. In addition, benzene concentrations in soil below 20 feet bgs have not been detected above the EPA Residential Screening Level in any boring installed on or off site. Therefore, no saturated zone source of benzene is believed to exist.

2.3 Remedial Measures

As stated above in section 1.4.2, approximately 1,350 tons of soil were excavated and removed during the UST removal in 1998 (Delta 2009a). In addition, approximately 4.6 tons of soil were over-excavated and removed during the WOT removal, also in 1998.

Over-purging events were conducted on up to three wells from 2001 to 2004 (MW-1, TP-1, and MW-7). Approximately 476,000 gallons of water were removed during that period. No data regarding these overpurge events was found in the documentation available to AECOM.

2.4 Release Mechanism

The location and vertical extent of contaminated soil and groundwater indicate on-site releases occurred at the subsurface dispenser/product piping, WOT, and USTs.

Additionally, an “unidentified underground concrete vault” was previously investigated by Delta in 2009 and 2010, during which it was described to appear to be a “sewer cleanout”. Delta reported that they were “unable to open and better identify the structure” based on “the age and deterioration of the cleanout cap”. To further assess the structure, Delta employed GPR to identify utility lines running to and from this “cleanout”. A line running from the restroom area of the building to the “cleanout” was identified, but no other lines were identified. No details regarding the materials, size, etc., for the cleanout, were provided in Delta’s reports, except that the “vault” appeared to be filled with sand, and the bottom could not be determined beyond 2 feet bgs.

AECOM visited the site on November 16, 2012, and visually inspected the “unknown vault” by removing the surface lid. What appeared to be a typical sewer cleanout pipe and cap (approximately 4-inch diameter) was observed within an approximately 8-inch-diameter casing. There are bindings on the “plastic” (non-metal) piping holding the metal cap in place. No odors were noted and no VOCs were detected with the photoionization detector. No other potential sewer cleanouts were found on site. The primary utility corridor for the site is located along MacArthur Boulevard. Typical sewer construction would indicate that this “unknown vault” is the station’s sewer cleanout. The surface grade at the cleanout is at an approximately 4- to 5-foot higher elevation than MacArthur Boulevard. Therefore, based on the “plastic” nature of the piping, and that it is likely buried up to 10 feet bgs, it is not surprising that GPR did not detect a line running from the cleanout toward MacArthur Boulevard.

Additional assessment is required to determine the nature of the structure (that appears to be a sewer cleanout rather than a “vault”) and to evaluate whether the structure is a source of elevated petroleum hydrocarbons detected in soil, soil vapor, and groundwater in the area of former monitoring well MW-1.

3.0 Media of Concern

Media of concern include groundwater, soil, and soil vapor (potentially indoor air concentrations, off site).

4.0 Contaminant(s) of Concern

4.1 Contaminant Name(s)

Contaminants of concern are related to gasoline, diesel, and motor oil (e.g., TPHg, BTEX, MTBE) releases.

4.2 Analytical Results

4.2.1 Soil

Soil boring samples collected from 1997 to date indicate that soil contamination is largely confined to the upper 15 feet of the unsaturated zone. Maximum benzene concentrations of 7.8 mg/kg were observed in soil boring SB-2 at 8.5 feet bgs in 2007. Maximum MTBE concentrations of 1.2 mg/kg were collected from the same boring at 12 feet bgs. Table 4-1 (below) summarizes maximum observed soil concentrations for constituents of concern.

Table 4-1 Maximum Historical Soil Concentrations for Constituents of Concern

Constituent	Boring ID	Date	Depth [ft bgs]	Concentration [mg/kg]
Benzene	SB-2	2007	8.5	7.8
Toluene	SB-2	2007	8.5	51
Ethylbenzene	B1/MW-1	1999	10.5	110
Total Xylenes	B1/MW-1	1999	10.5	470
MTBE	SB-2	2007	12	1.2

4.2.2 Current Groundwater

Groundwater monitoring from 1999 to 2010 included monitoring of MW-1, MW-2, MW-3, and MW-4. These wells were screened from 5 to 25 feet bgs. In 2010, these wells were abandoned and replaced with monitoring wells screened from 20 to 25 feet bgs located near the former well locations. Differences in groundwater concentrations at the same well locations (but different screen intervals) indicate confined water-bearing zones. Current maximum groundwater concentrations are summarized in Table 4-2.

Table 4-2 Current Maximum Groundwater Concentrations

Constituent	Well ID	Date	Concentration [µg/L]
TPHg	MW-3B	7/24/2012	1,500
TPHd	MW-3B	7/24/2012	190
Benzene	MW-3B	7/24/2012	66
Toluene	MW-3B	7/24/2012	10
Ethylbenzene	MW-3B	7/24/2012	76
Total Xylenes	MW-3B	7/24/2012	39
MTBE	MW-7	7/24/2012	300

4.2.3 Historical Groundwater

In comparison to current concentrations, maximum groundwater concentrations prior to well abandonments in 2010 are provided in Table 4-3.

Table 4-3 Historical Maximum Groundwater Concentrations

Constituent	Well ID	Date	Concentration [µg/L]
TPHg	MW-1	8/2/2010	71,000
TPHd	MW-1	8/2/2010	3,900
Benzene	MW-1	8/2/2010	7,000
Toluene	MW-1	8/2/2010	11,000
Ethylbenzene	MW-1	8/2/2010	3,300
Total Xylenes	MW-1	8/2/2010	10,000
MTBE	MW-7	8/2/2010	770

Average depth to water measurements during the August 2010 sampling event for on-site wells (MW-1 to MW-4) was 5.90 feet bgs while average depth to water measurements during the July 2012 sampling event for on-site wells (MW-1B to MW-4B) was 6.23 feet bgs. The similarities in depth to water indicate that wells MW-1 to MW-4 were screened across multiple water-bearing zones, including that which is monitored by recent well installations (MW-1B to MW-4B). Furthermore, the long screen of the original monitoring wells may have allowed groundwater from the deeper confined aquifer under hydrostatic pressure to mix with impacted soils in the 5- to 20-foot unsaturated zone, contributing to higher groundwater impacts observed in these wells.

Furthermore, temporary monitoring wells were installed in soil borings SB-15 through SB-19 in June 2010. The wells were allowed to accumulate groundwater overnight before grab samples were collected. Table 4-4 provides a summary of the results obtained.

Table 4-4 Temporary Monitoring Well Groundwater Concentrations (June 2010)

Boring	Screen Interval [ft bgs]	Dissolved-Phase Concentration				
		TPHg [µg/L]	TPHd [µg/L]	TPHmo [µg/L]	Benzene [µg/L]	MTBE [µg/L]
SB-12	20-25	Dry				
SB-14	19-24	Dry				
SB-15	19-24	ND<50	54	ND<200	ND<0.50	29
SB-16	20-25	ND<50	150	ND<200	140	460
SB-17	14-19	260	260	ND<290	8.7	82
SB-18	15-20	1,900	720	480	94	180
SB-19	15-20	1,100	230	230	8.6	93
Notes: TPHmo = Total Petroleum Hydrocarbons as motor oil.						

4.2.4 Soil Vapor

Soil vapor samples were collected along the northern property boundary for vapor intrusion risk assessment. Table 4-5 presents the maximum observed concentrations.

Table 4-5 Maximum Soil Vapor Concentrations

Constituent	Boring ID	Date	Depth [ft bgs]	Concentration [µg/m3]
Benzene	SVW-3	9/8/2010	4.5	1,100,000
Toluene	SVW-2	9/8/2010	4.5	19,000
Ethylbenzene	SVW-3	9/8/2010	4.5	610,000
Total Xylenes	SVW-3	9/8/2010	4.5	820,000
MTBE	SVW-6	9/8/2010	4.5	ND<37,000

4.3 Monitoring Results

A summary of results of contaminant of concern monitoring are presented in the above Tables 4-1 through 4-5. Additional historical monitoring results are presented in Attachment D.

5.0 Plume Delineation and Stability

The vertical/horizontal extent and stability of impacts for impacted media are discussed below.

5.1 Vertical

5.1.1 Soil

Soil impacts have been vertically delineated at the site to a maximum depth of 50 feet bgs. A review of historical soil data indicates that, in soil samples collected from >20 feet bgs, no compounds of concern have been detected that exceed the residential ESLs for deep soils for non-drinking water sources (San Francisco RWQCB 2008).

5.1.2 Groundwater

Vertical groundwater contamination has not been delineated. The vertical soil profile is such that multiple confined/semi-confined water-bearing zones may exist. A more extensive confined (i.e., under hydrostatic pressure) aquifer has been identified at a depth of approximately 20 feet bgs. Initial groundwater monitoring wells screened from 5 to 25 feet bgs exhibited much higher groundwater concentrations than more recent monitoring wells installed with screens from 20 to 25 feet bgs. Hydrostatic pressure from the underlying aquifer (below 20 feet bgs) is likely to have contacted impacted shallow soils due to the exposed screen and, therefore, resulting concentrations of COCs detected may not be representative of interlayer groundwater concentrations.

5.1.3 Vapor

Soil vapor samples have been collected to a maximum depth of 5 feet bgs near the northern property line. Contaminants of concern were measurable to the maximum depth of observation (see Table 4-5, above); however, in some samples, concentrations declined significantly at 3.5 feet bgs compared to 5 feet bgs.

The vertical extent of soil vapor at the station site has been delineated to the extent necessary given the site's use as an active service station.

5.2 Horizontal

5.2.1 Soil

Soil contamination is confined to the site property, in the vicinity of the former USTs, WOT, and product lines. In the northern portion of the site, soil contamination is distributed laterally downgradient to the west from the former WOT. This trend is evident from approximately surface to 20 feet bgs. Horizontal distribution of soil impacts downgradient of the WOT, USTs, and dispensers may be a result of perched groundwater conditions. Additional assessment is required to make this determination.

5.2.2 Groundwater

Groundwater contamination has been identified in the four on-site wells, in addition to off-site, downgradient wells MW-5 and MW-7. The plume extends west from the station site where it comingles with the horizontal plume of former Shell Station No. 13-5701. Currently, groundwater contamination is delineated in the water-bearing zone below 20 feet bgs. Additional assessment is required to determine the horizontal groundwater impacts in vertically isolated water-bearing zones (if any).

5.2.3 Vapor

Soil vapor concentrations have been measured along the northern property boundary to identify vapor intrusion risk to the adjacent commercial building. The concentrations are highest near the former WOT location (see Table 5, above). Additional assessment has been proposed (AECOM 2012) and approved by the ACEH (2012) to address off-site soil vapor intrusion.

5.3 Plume Stability

5.3.1 Soil

The vertical extent of soil contamination is confined to the unsaturated/partially saturated shallow one. Additional assessment is required to determine the stability and extent of horizontal soil impacts in the unsaturated zone(s).

5.3.2 Groundwater

Limited groundwater concentration data from monitoring wells MW-1B through MW-4B suggest a stable to shrinking plume in the confined saturated zone. Concentrations in fringe wells MW-5 and MW-7 have declined from historic highs for TPHg, benzene, and MTBE. Additional assessment is required to determine the vertical and horizontal extent of groundwater zones/impacts.

5.3.3 Vapor

Additional assessment has been proposed (AECOM 2012) and approved by the ACEH (2012) to further determine soil vapor impacts associated with the site.

6.0 Pathways and Receptors

6.1 Potential Receptors

In 2001 a GeoTracker database search was performed by Environmental Resolutions, Inc. (MBE 2004). Four public water supply wells owned by the East Bay Regional Park District (Park District) were identified within a ½-mile radius of the site. Representatives from the Park District reported having no knowledge or records of any wells under their ownership or oversight located in this area and indicated that the wells may have belonged to the EBMUD. EBMUD was contacted and reported no knowledge or records of any wells under their ownership or oversight located in the area.

Also in 2001 a Department of Water Resources (DWR) database search was performed by Environmental Resolutions, Inc. (MBE 2004). Four water supply wells belonging to Mills College were identified within a ½-mile radius search area. A representative from Mills College indicated that all wells associated with Mills College had been destroyed and Mills College was now connected to a municipal water supply. The DWR search also indicated a well was located at 3397 Arkansas Street, approximately 880 feet outside of the search area. No other wells, surface water bodies, or potentially sensitive environmental habitats were reported to have been identified during ERI's field receptor search.

In 2006, a well survey, which included a visit to the DWR office in Sacramento, was performed to examine well log records and identify domestic wells within the survey area (Delta 2007a). The DWR survey identified two potential receptors within 1 mile of the site – one irrigation well located 0.9 mile northwest of the site, and one domestic/irrigation well located 1.0 mile northeast of the site. Two additional potential receptors were reported to have been identified, although the specific addresses could not be verified.

The adjacent Oakland Veterinary Hospital has been identified as a potential “receptor” due to elevated soil vapor concentrations detected along the northwest property boundary of the station site. Additional assessment has been proposed (AECOM 2012) and approved by the ACEH (2012) to further determine soil vapor impacts associated with the site.

Based on the information above, no other potential receptors have been identified.

6.2 Potential Exposure Pathways

As shown on Figure 5, potential exposure pathways were evaluated. The exposure pathways determination was based on the information obtained to date.

Additional assessment has been proposed (AECOM 2012) and approved by the ACEH (2012) to further determine soil vapor impacts associated with the site, and the potential for soil vapor intrusion to the adjacent Oakland Veterinary Hospital.

7.0 Data Gap Analysis

Based on a review of the data collected to date, the following data gaps have been identified for additional assessment:

- The horizontal extent of impacts in vertically isolated water-bearing zones above 20 feet bgs (if any) need to be assessed downgradient of potential sources (e.g., the former WOT and USTs).
- The nature of the structure (that appears to be a sewer cleanout rather than a “vault”) needs to be assessed to determine and to evaluate whether the structure is a source of elevated petroleum hydrocarbons detected in soil, soil vapor, and groundwater in the area of former monitoring well MW-1.
- Soil vapor impacts associated with the site, and the potential for soil vapor intrusion to the adjacent Oakland Veterinary Hospital, need to be assessed. Additional assessment has been proposed (AECOM 2012) and approved by the ACEH (2012).

8.0 References

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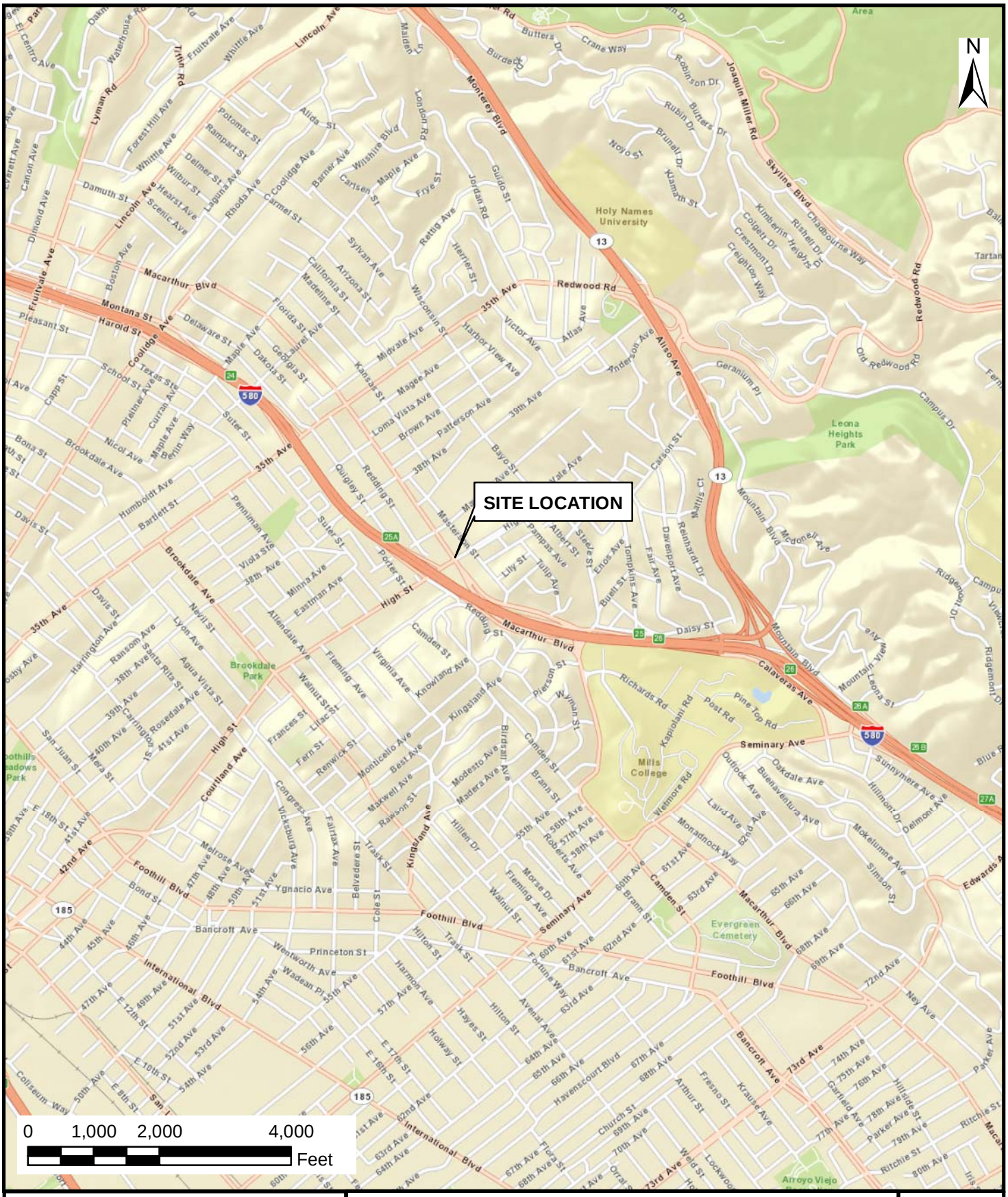
Attachment A

Figures



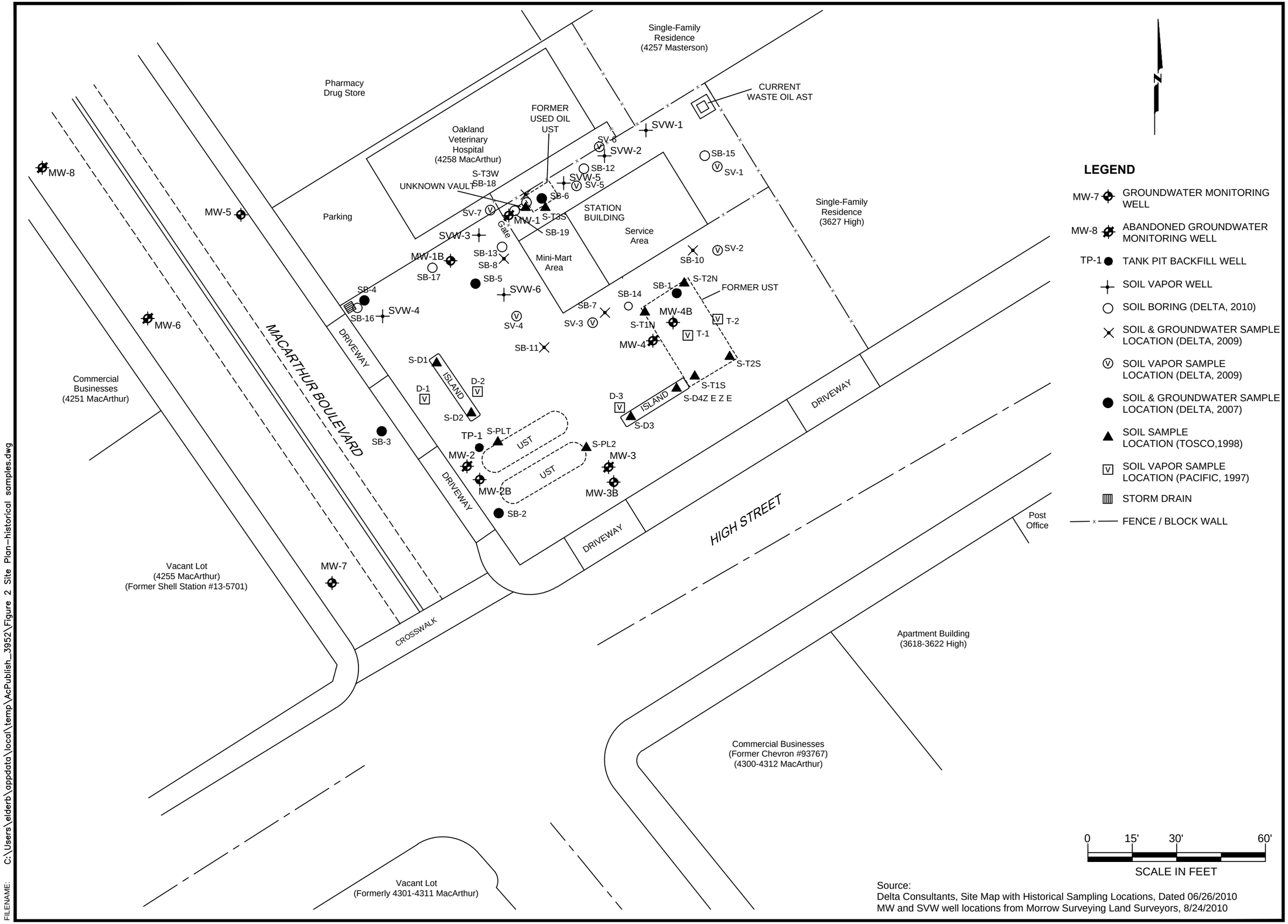
AECOM
1220 AVENIDA ACASO
CAMARILLO, CALIFORNIA 93012
PHONE: 805.388.3775
FAX: 805.388.3577
WEB: HTTP://WWW.AECOM.COM

SITE LOCATION MAP

76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

FIGURE NUMBER:
1

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
M. Scop	5/2/2012	60249149	1 of 1



LEGEND

- MW-7 — GROUNDWATER MONITORING WELL
- MW-8 — ABANDONED GROUNDWATER MONITORING WELL
- TP-1 — TANK PIT BACKFILL WELL
- SOIL VAPOR WELL
- SOIL BORING (DELTA, 2010)
- SOIL & GROUNDWATER SAMPLE LOCATION (DELTA, 2009)
- SOIL VAPOR SAMPLE LOCATION (DELTA, 2009)
- SOIL & GROUNDWATER SAMPLE LOCATION (DELTA, 2007)
- SOIL SAMPLE LOCATION (TOSCO,1998)
- SOIL VAPOR SAMPLE LOCATION (PACIFIC, 1997)
- STORM DRAIN
- FENCE / BLOCK WALL

Source:
Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW and SVW well locations from Morrow Surveying Land Surveyors, 8/24/2010

REVISIONS	NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
X	M. Scop	X	B. Evans

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SITE PLAN

Chevron Site #351645 (76 Service Station #1156)
4276 MacArthur Boulevard
Oakland, California

PROJECT NUMBER:	DATE:	SCALE:
60264254 - A50	5/2/2012	1" = 30'

FIGURE NUMBER:

2

SHEET NUMBER:

X

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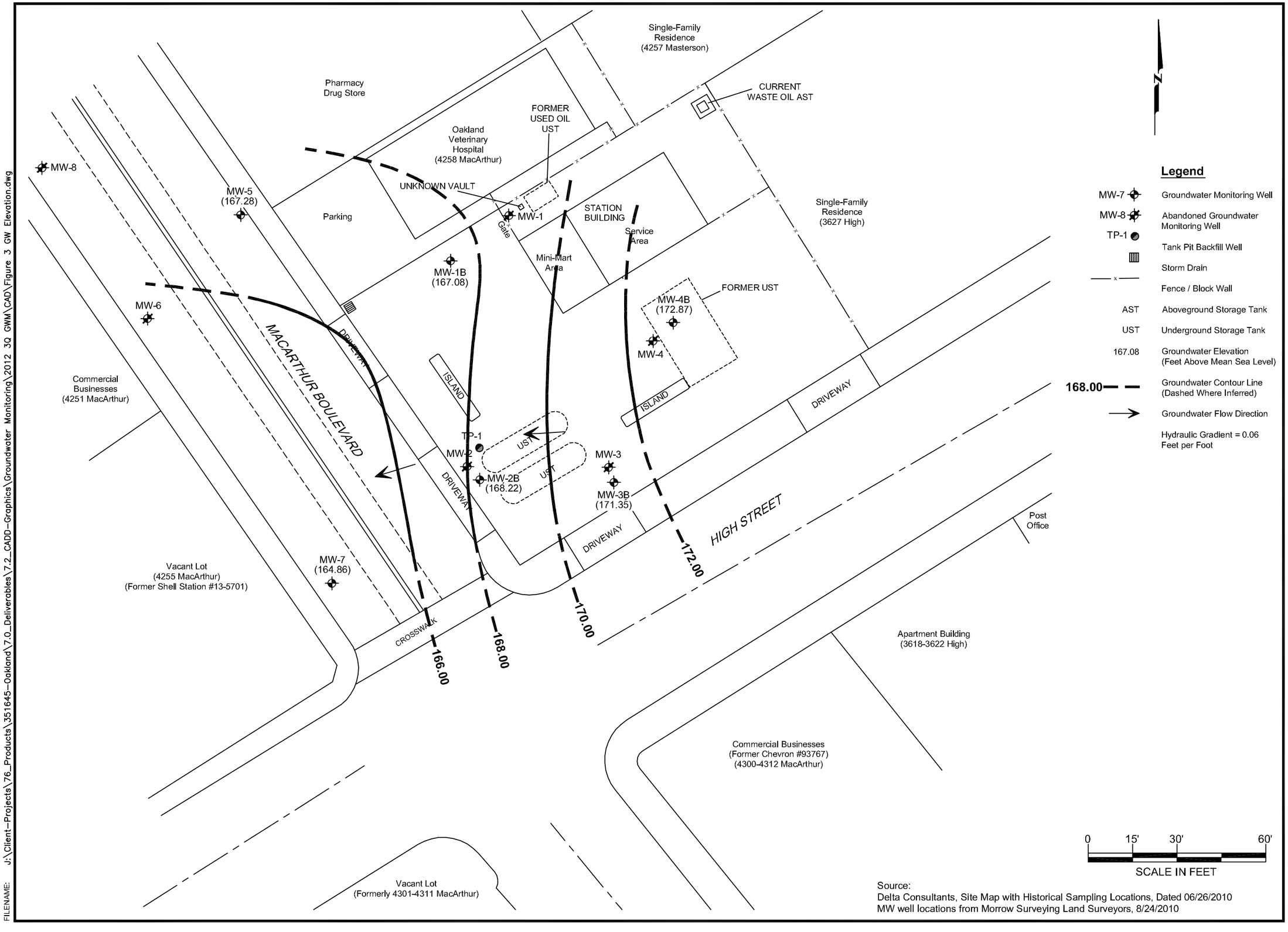

Source:
Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW well locations from Morrow Surveying Land Surveyors, 8/24/2010

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
T. Quiroz	T. Quiroz	T. Couture	B. Evans

AECOM
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CAMARILLO, CALIFORNIA 93012
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FAX: (805) 388-3577

3rd Quarter 2012 Groundwater Elevation Contour Map

76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

SCALE:	DATE:	PROJECT NUMBER:
1" = 30'	08/14/2012	60249149

FIGURE NUMBER:
3

SHEET NUMBER:
X

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Monitoring Well Exhibit

Prepared For:

Delta Environmental

BASIS OF COORDINATES:

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 3 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.
COORDINATE DATUM IS NAD 83(CORS)
DATUM ELLIPSOID IS GRS80
REFERENCE GEOID IS GEOID99
VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS

CORS STATION USED WAS DIAB AND MOLA.

*Note: MW-1, 2, 3, 4, 6, and 8 have been abandoned. MW-1, 2, 3, and 4 have been replaced by MW-1B, 2B, 3B, and 4B as of 8-24-10. MAM

DESC.	NORTHING	EASTING	LATITUDE	LONGITUDE	EL. PVC	EL. BOX
MW-1B	2113738.0	6071926.4	37.7877602	-122.1948610	174.05	174.58
MW-2B	2113664.1	6071936.3	37.7875576	-122.1948223	173.55	173.99
MW-3B	2113663.2	6071981.6	37.7875574	-122.1946655	177.77	178.37
MW-4B	2113717.2	6072001.6	37.7877067	-122.1945995	179.07	179.42
MW-5	2113753.6	6071855.6	37.7877993	-122.1951072	169.18	169.67
MW-7	2113629.1	6071886.3	37.7874591	-122.1949929	172.11	172.39
SVW-1	2113782.1	6071992.4	37.7878845	-122.1946353		
SVW-2	2113773.4	6071978.4	37.7878600	-122.1946833		
SVW-3	2113746.7	6071936.0	37.7877844	-122.1948285		
SVW-4	2113719.2	6071903.5	37.7877075	-122.1949393		
SVW-5	2113764.2	6071964.7	37.7878341	-122.1947304		
SVW-6	2113726.5	6071944.4	37.7877295	-122.1947980		

Figure 4
Site Survey Map

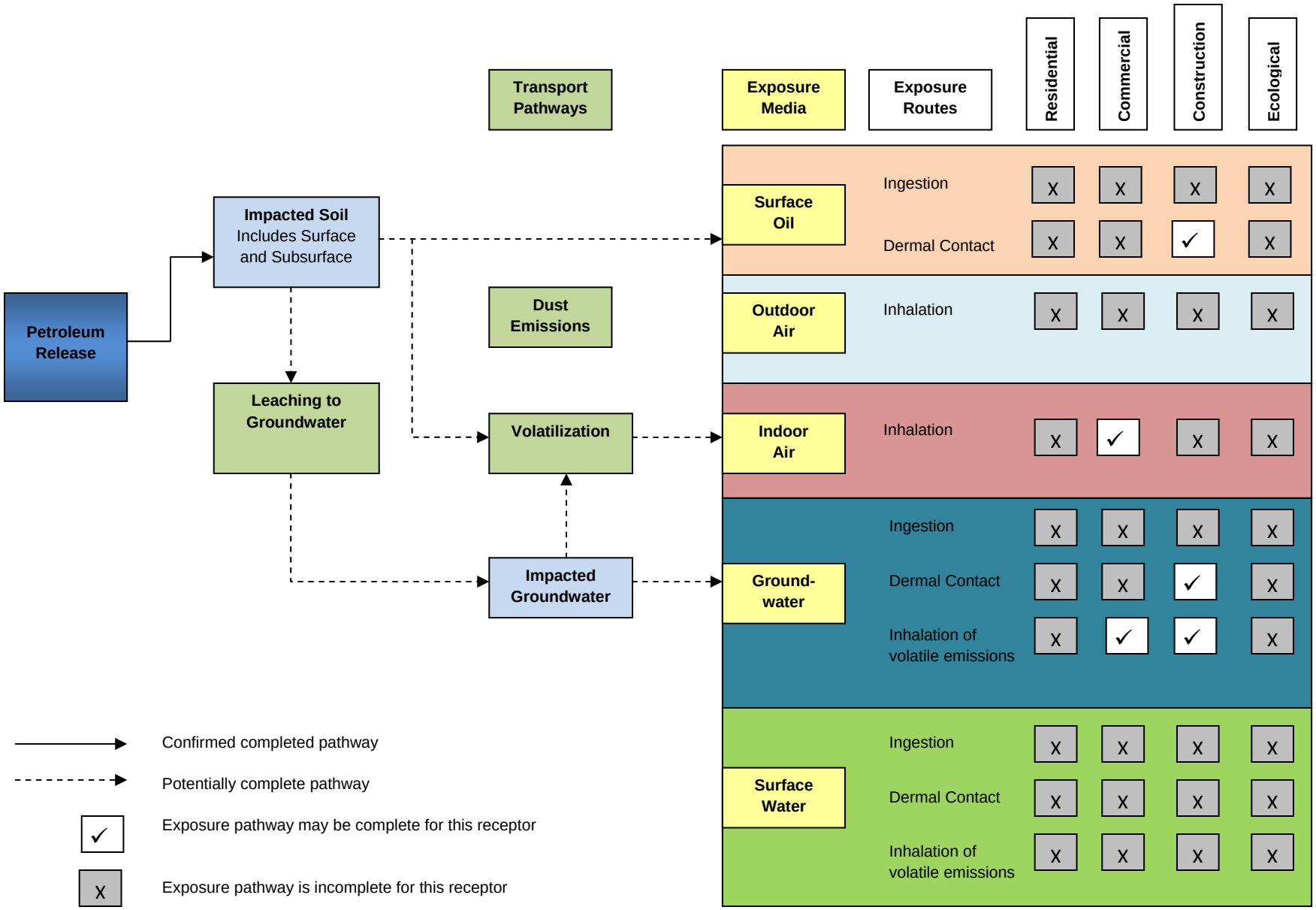
76 Service Station # 1156
4276 MacArthur Blvd.
Oakland
Alameda County
California

Morrow Surveying
LAND SURVEYORS

1255 Starboard Drive
West Sacramento
California 95691
(916) 372-8124
mark@morrowsurveying.com

Date: 1-10-08
Scale: 1" = 30'
Sheet 1 of 1
Revised: 8-24-10
Field Book: 517,MW-2,38,50
Dwg. No. 1275-106 MAM

Figure 5 – Conceptual Site Model Transport and Exposure Pathways



Attachment B

Boring Logs

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: P1 /MW1 Plate: APPENDIX

Site: Tosco 76 Service Station 11. Date: 7/16/99

Drill Contractor: Woodward Drlling

Sample Method: Split Spoon Geologist: MARK S. DOCKUM

Drill Rig: B57 Bore Hole Diameter: 6" Signature:

Location: 10 Feet North of Northwestern Corner of Station Registration: R.G. 4412

Logged by: Dylan Crouse

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						2 1/2" asphalt	
					CH	Clay, grayish green, very moist, high plasticity	
					SP	Sand, fine-grained, grayish green, moist, no plasticity, black staining	
5	39	253					
					CH	Clay, grayish green, very moist, high plasticity	
10	27	87					
					ML	Silty sand, fine-grained sand, black, very moist, no plasticity, (65% silt, 35% sand)	
						Clay, with some sand, medium-grained, light olive brown, medium plasticity, wet	
15	36	222					
					CL		
20	37	22				sandy clay, strong brown, (40% sand, 60% clay)	
						yellow orange, high plasticity, very moist	
25	33	9					
						Total depth at 26.5 feet. Groundwater encountered at 23'7".	

Casing Diameter: 2" Slot Size: 010 , Sand Size: 2/12 , Grout: Portland I,II

FN: 2235B001

Delta
Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/17/2010
Drilling Method:	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	First Water Depth:	
		Static Water Depth:	
Elevation:		Northing:	Easting:

Boring/Well No: **MW-1B**
Page 1 of 2

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					0				Airknife to 5'
					1				Brown and grayish-sgrren clay
					2				
					3				
					4				
					5				
			299	MW-1B -5	5			CL	Greenish-gray sandy lean clay with gravel, 15% sand, 15%, gravel, strong odor, damp
					6				
					7				
					8				
					9				
					10				
			173	MW-1B -10	10			CL	Black lean clay with sand, mottled with granular black organic material, 20% sand, strong odor, moist
					11				
					12				
					13				
					14				
					15				
			952	MW-1B -15	15			CL	Brown sandy clay, fine-course sand, 35% sand, strong odor, damp
					16				
					17				
					18				
					19				
					20				
			19	MW-1B -20	20			CL	Black sandy lean clay with gravel, 30% sand, 10% gravel, strong odor, wet
					21			CL	Brn lean clay with sand, 25% sand, some odor, damp
					22				

Delta
Environmental Consultants, Inc.

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/17/2010
Drilling Method:	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	First Water Depth:	23.5'
		Static Water Depth:	
Elevation:		Northing:	Easting:

Boring/Well No: **MW-1B**
Page 2 of 2

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
	▼				23			CL	Brown sandy gravely clay, 25% sand, 10% gravel, saturated, mild odor
					24			CL	Brown sandy clay, 15% samp, mild odor, damp
			44	MW-1B -25	25				Total Depth = 25'
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

ERI ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: B2/MW2 Plate: APPENDIX
Site: Tosco 76 Service Station 1156 Date: 7/16/99
Drill Contractor: Woodward Drilling
Sample Method: Split Spoon Geologist: MARK S. DOCKUM
Drill Rig: B57 Bore Hole Diameter: 8" Signature:
Location: 2 Feet EAst of Southernmost Driveway Registration: R.G. 4412
Along MacArthur Boulevard Logged by: Dylan Crouse

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						4" asphalt	
						Clay, dark greenish gray, mottled redish orange, some coarse-grained sand, slightly damp, high plasticity, (35% sand, 65% clay)	
5	11	20			CH		
10	18	0				15% fine gravels up to 0.5", 20% sand, medium-grained, damp	
						Silty clay, orange brown, mottled green gray, (35% silt, 65% clay), moist, medium plasticity	
15	21	130			CL		
20	29	20				gravelly clay, light yellowish brown, (40% fine gravel, 60% clay), medium plasticity, very moist, black staining	
		▼					
25	45	18			ML	Sandy clay, trace of silt, yellowish brown, wet, medium plasticity, (35% sand, 15% silt, 50% clay)	
						Total depth at 26.5 feet. Groundwater encountered at 23' 6".	

Casing Diameter: 2" Slot Size: .010 , Sand Size: 2/12 , Grout: Portland I/II

FN: 2235B002

Delta
Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/16/2010
Drilling Method:	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	▼ First Water Depth:	
		▽ Static Water Depth:	

Boring/Well No: **MW-2B**
Page 1 of 2

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					1			CL	Airknife to 5' Brown and greenish lean clay with sand
					2				
					3				
					4				
					5				
			181	MW-2B -5	6			CL	Light brown/green mottled lean clay with sand, 15% sand, strong odor, damp
					7				
					8				
					9				
					10				
			0	MW-2B -10	11			CH	Greenish fat clay, dense, damp, odor
					12				
					13				
					14				
					15				
			120	MW-2B -15	16			CL	Green lean clay with sand, 15% med-course sand, damp, odor
					17				
					18				
					19				
					20				
			8	MW-2B -20	21			CL	Dark borwn lean clay with sand, 15% sand, fine-med sand, damp, odor
					22				

Delta
Environmental Consultants, Inc.

Project No: C101156	Client: COP	Boring/Well No: **MW-2B**
Logged By: Alan Buehler	Location: Oakland	Page 2 of 2
Driller: Gregg Drilling	Date Drilled: 8/16/2010	
Drilling Method: HAS	Hole Diameter: 8"	
Sampling Method: Split Spoon	Hole Depth: 25'	
Casing Type: Sch 40	Well Diameter: 2"	
Slot Size: 0.02	Well Depth: 25'	
Gravel Pack: 2/12	▼ First Water Depth: 23.5'	
	▽ Static Water Depth:	
Elevation:	Northing:	Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					23				
								CL	Brown lean clay with sand, 25% sand, some gravel, mild odor
					24			CL	Black/brown mottled clay, damp, mild odor
			190	MW-2B -25	25				Total Depth = 25'
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: B3/MW3 Plate: APPENDIX
Site: Tosco 76 Service Station 1156 Date: 7/16/99
Drill Contractor: Woodward Drilling
Sample Method: Split Spoon Geologist: MARK S. DOCKUM
Drill Rig: B57 Bore Hole Diameter: 8" Signature:
Location: Approximately 15' South West of Southern-most Dispenser Island Parallel to High Street Registration: R.G. 4412
Logged by: Dylan Crouse

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						4 1/2" asphalt	
						Clay, dark yellowish brown, mottled, trace of medium-grained sand, slightly damp, high plasticity, (15% sand, 85% clay)	
5	18	235			CH	brown, mottled gray, dry	
10	33	265				staining, trace of coarse gravel and rootlets (15% gravel, 85% clay), slightly damp	
		▽					
						Sandy clay, greenish gray, mottled, orange, some medium-grained sand, slight plasticity, caliche present, (35% sand, 65% clay)	
15	25	81			CL		
						Clay, strong brown, slight mottling, trace of medium-grained sand, 20% sand, high plasticity, black staining, 80% clay	
20	36	9			CH		
		▼				Gravel, yellowish brown, wet	
					GW		
25	25	0			CH	Clay, trace of medium-grained sand, yellowish brown, very moist, high plasticity, (15% sand)	
					GW	Gravel, orange, slight plasticity, wet	
						Clay, yellowish brown, moist, high plasticity	
30	22	0			CH		
						Total depth at 31.5 feet. Groundwater encountered at 23.3 feet. Static groundwater at 12 feet.	

Casing Diameter: 2" Slot Size: 010 , Sand Size: 2/12 , Grout: Portland I,II

FN: 2235B003

Delta Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/16/2010
Drilling Method:	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	▼ First Water Depth:	
		▽ Static Water Depth:	

Boring/Well No: **MW-3B**

Page 1 of 2

Elevation: | Northing: | Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					0				Airknife to 5'
					1			CL	Brown lean clay with sand, some gravel, no odor
					2				
					3				
					4				
					5				
			6	MW-3B -5	5			CL	Light brown/greenish mottled clay, moist, slight odor
					6				
					7				
					8				
					9				
					10				
			36	MW-3B -10	10			CH	Light brown/green/black mottled lean clay with sand, 15% fine sand, damp, mild odor
					11				
					12				
					13				
					14				
					15				
			790	MW-3B -15	15			CL	Light brown/green mottled lean clay with sand, 20% fine-med sand, damp, strong odor
					16				
					17				
					18				
					19				
					20				
			9	MW-3B -20	20			CH	Light brown fat clay, damp, mild odor
					21			CL	Dark brown lean clay with sand, 15% fine sand, damp, mild odor
					22				

Delta

Environmental Consultants, Inc.

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/16/2010
Drilling Meth	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	First Water Depth:	23.5'
		Static Water Depth:	

Boring/Well No: **MW-3B**

Elevation: Northing: Easting:

Well Completion: Backfill	Well Completion: Casing	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
				15	MW-3B -25	23			CL	Light brown lean clay with sand, 30% fine-med sand, moist, very slight odor
						24				
						25				Total Depth = 25'
						26				
						27				
						28				
						29				
						30				
						31				
						32				
						33				
						34				
						35				
						36				
						37				
						38				
						39				
						40				
						41				
						42				
						43				
						44				

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: B4/MW4 Plate: APPENDIX
Site: Tosco 76 Service Station 1156 Date: 7/16/99
Drill Contractor: Woodward Drilling
Sample Method: Split Spoon Geologist: MARK S. DOCKUM
Drill Rig: B57 Bore Hole Diameter: 8" Signature:
Location: 18 Feet North of Southernmost Dispenser Island Parallel High Street Registration: R.G. 4412
Logged by: Dylan Crouse

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						4 1/2" asphalt	
						Clay, greenish gray, mottled, orange slightly damp, high plasticity	
5	17	309					
10	22	253			CH	trace of medium-grained sand, slightly moist	
15	19	4				moist	
20	28	4				brownish yellow, black staining, 20% gravel, 20% medium-grained sand, moist	
		▼				brown, mottled, olive yellow, moist, black staining	
25	36	0					
						Total depth at 26.5 feet. Groundwater encountered at 23.6 feet.	

Casing Diameter: 2" Slot Size: 010 , Sand Size: 2/12 , Grout: Portland I,II

FN: 2235D004

Delta Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/13/2010
Drilling Method:	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	First Water Depth:	
		Static Water Depth:	
Elevation:		Northing:	Easting:

Boring/Well No: **MW-4B**

Page 1 of 2

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					0				Airknife to 5'
					1			GC	Brown clayey gravel with sand,
					2				
					3				
					4			GW	Well graded gravel with sand, cobbles up to 4"
			2.1	MW-4B -5	5			SW-SM	Greenish gray well graded sand with silt and gravel, 60% sand, 20% gravel, no odor
					6				
					7				
					8				
					9				
			1401	MW-4B -10	10			SW-SM	Black well graded sand with silt, 60% fine sand, strong odor
					11				
					12				
					13				
					14				
			19.5	MW-4B -15	15			CL	Brown/green mottled lean clay with sand, 15% fine sand, some odor
					16				
					17				
					18				
					19				
				MW-4B -20	20			CL	Brown/black mottled sandy lean clay, 30% fine-med sand, some odor
					21				
					22				

Delta
Environmental Consultants, Inc.

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/16/2010
Drilling Meth	HAS	Hole Diameter:	8"
Sampling Method:	Split Spoon	Hole Depth:	25'
Casing Type:	Sch 40	Well Diameter:	2"
Slot Size:	0.02	Well Depth:	25'
Gravel Pack:	2/12	▼ First Water Depth:	23.5'
		▽ Static Water Depth:	

Boring/Well No: **MW-4B**

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
			19	MW-4B -25	25			CL	Brown lean clay, 10% fine-med sand, some odor
									Total Depth = 25'

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: MW5 Plate: Attachment
Site: Tosco 76 Service Station 1156 Date: 8/29/01
Drill Contractor: Woodward Drilling Company, Inc.
Sample Method: Split Spoon Geologist: JOHN B. BOBBITT
Drill Rig: BK-81 Bore Hole Diameter: 8" Signature:
Location: Eastern side of MacArthur Boulevard Registration: R.G. 4313
approximately 40 feet north of site Logged by: Rob Saur

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" Concrete	
5	23	8.3 ▽			CL	CLAY WITH SAND AND TRACE OF GRAVEL: greenish gray, moist, high plasticity, fine-grained sand, fine-grained poorly-sorted subangular gravel.	
10	27	7.7				SANDY CLAY: orange brown, moist, low plasticity, fine-grained sand.	
15	57	11.2			ML	SANDY SILT: orange brown, moist, low plasticity, fine-grained sand.	
20	30						
25	38	7.7				light brown, wet.	
						Boring Terminated at 25 feet. Boring converted to groundwater monitoring well. Groundwater encountered at 6 feet.	

Casing Diameter: 2" Slot Size: 0.020 , Sand Size: #3 , Grout: Portland Cement

FN: 02358005

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: MW6 Plate: Attachment
Site: Tosco 76 Service Station 1156 Date: 8/29/01
Drill Contractor: Woodward Drilling Company, Inc.
Sample Method: Split Spoon Geologist: JOHN B. ROBBITT
Drill Rig: BK-81 Bore Hole Diameter: 8" Signature:
Location: Western side of MacArthur Boulevard Registration: R.G. 4313
approx. 30 feet north of Shell station Logged by: Rob Saur

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" Concrete	
5	24	10.6			ML	CLAYEY SILT: greenish gray, very moist, medium plasticity.	
10	19	10.0				light brown, trace of fine-grained sub-angular sand (approx. 5%).	
15	24	6.0				CLAYEY SILT WITH SAND: light brown, fine-grained sub-angular sand (approx. 15%).	
20	48	7.7			SM	SAND WITH SILT: orange brown, wet, medium-grained well-sorted well-rounded sand.	
25	50/5"					Boring terminated at 25 feet. Boring converted to groundwater monitoring well. Groundwater encountered at 5.5 feet.	

Casing Diameter: 2" Slot Size: 0.020 , Sand Size: #3 , Grout: Portland Cement

JN: 2235B008

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2235 Boring: MW7 Plate: Attachment
Site: Tosco 76 Service Station 1156 Date: 8/29/01
Drill Contractor: Woodward Drilling Company, Inc.
Sample Method: Split Spoon Geologist: JOHN B. BOBBITT
Drill Rig: BK-81 Bore Hole Diameter: 8" Signature: [signature]
Location: Western side of MacArthur Boulevard Registration: R.G. 4313
approx. 40 feet north of High Street Logged by: Rob Saur

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" Concrete	
5	50/5"	25				SANDY SILT: brown with bluish green mottling, moist, low plasticity, 40% fine-grained sand.	
10	36	236					
15	35	8.9	▽		ML	light brown, wet.	
20	25	57					
25	50/5"	19.3				reddish brown, 30% medium-grained sand.	
						Boring terminated at 25 feet. Boring converted to groundwater monitoring well. Groundwater encountered at 15 feet.	

Casing Diameter: 2" Slot Size: 0.020 , Sand Size: #3 , Grout: Portland Cement

FN: 2235B007

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Well No: **MW-8**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Boulevard** | Date Drilled: **10/30/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: **8"**
Sampling Method: **Split Spoon** | Hole Depth: **25'**
Casing Type: **Schedule 40 PVC** | Well Diameter: **2"**
Slot Size: **0.010"** | Well Depth: **25'**
Gravel Pack: **#2/12** | First Water Depth: **23'**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Well Box; Neat Cement	▼			Air-Knife					**Concrete = 6"**
					1–4				**CL** **Silty clay;** black and brown; medium soft; medium to high plasticity; low toughness; trace orange mottling; moist; (0,0,100)
		moist	0.1	@ 5 9:46	5–7				**CL** **Lean clay**; black; medium stiff; medium plasticity and toughness; some fine sand; some fine to medium sub round gravel; moist; no odor; (15,20,65)
		moist	0.2	@ 10* 9:51	8–13				Tan; some orange mottling; trace roots; some black staining; slight odor; (5,15,80)
		moist	0.2	@ 15* 9:56	14–17				**CL** **Sandy clay**; tan; orange mottling; trace roots; trace black staining; medium stiff; medium plasticity and toughness; sand fine grain; moist; no odor; (0,40,60)
		moist	0.2	@ 20* 10:P37	18–20				Soft; medium to high plasticity; low toughness; (0,30,70)
					21–22				**SC**

Delta
Consultants

Project No: **C101156151**
Logged By: **Tabbitha Croy**
Driller: **Gregg Drilling & Testing**
Drilling Method: **HSA**
Sampling Method: **Split Spoon**
Casing Type: **Schdule 40 PVC**
Slot Size: **0.010"**
Gravel Pack: **#2/12**

Client: **ConocoPhillips**
Location: **4276 MacArthur Boulevard**
Oakland, CA
Hole Diameter: **8"**
Hole Depth: **25'**
Well Diameter: **2"**
Well Depth: **25'**
First Water Depth: **23'**

Well No: **MW-8**
Date Drilled: **10/30/07**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
	▽				23				
					24				SC **Clayey sand;** tan; orange mottling; medium grain; poorly graded; loose; wet; no odor (0,65,35)
					25				
					26				**Total Depth = 25 feet bgs**
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-1**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/6/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: 4"
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **4'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement	▽			Air-Knife	1			**Asphalt - 6"**
								Fill; tan, with medium gravel; surrounded; no plasticity; high toughness; soft; moist; (45,5,50)
					2			**Fill;** some clay; brown; gravel medium to coarse; sub rounded; some fine sand; moist
					3			
					4			@ 4' large rocks; subround; wet; trace fine sand and clay; (90,5,5)
		wet	6.2		5			
					6			CL **Lean clay;** olive green; some fine to medium sand; some orange mottling; medium stiff; medium plasticity and toughness; wet; strong odor (0,30,70)
		wet	326	@ 7* 8:39	7			
					8			
		wet	165	@ 8.5 8.42	9			Some black specs
		wet	221	@ 10 8:45	10			Some black and red staining
					11			
		wet	140	@ 12* 8:48	12			Sand fine to medium grain (0,40,60)
					13			SC **Poorly graded sand with clay;** brown; some olive green mottling and gray staining; sand fine to medium grain; soft; loose; wet; strong odor (0,70,30)
		wet	118	@ 13.5 8:50	14			
		wet	133	@ 15 8:52	15			
					16			Red brown with orange and olive green mottling; medium stiff; (0,50,50)
		wet	419	@ 17 8:56	17			CL **Lean clay;** some fine to medium sand; red brown with orange mottling and black specs; medium plasticity and toughness; medium stiff; wet; strong odor; (0,35,65)
		wet	1056	@ 18.5* 8:58	18			
					19			
		wet	148	@ 20 9:02	20			Stiff; trace medium gravel; sand medium grain; (5,35,60)
					21			
		wet	152	@ 22 9:04	22			Some black staining

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-1**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/6/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **2** of **2**
Drilling Method: **HSA** | Hole Diameter: 4"
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **4'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23			(5,40,55)
		wet	61.1		24			A lot of black specs, very stiff; sand medium to coarse; low plasticity; high toughness; odor; (5,40,55)
		wet	78.1	@ 25 9:13	25			
					26			Tan; some black specs; trace orange mottling; coarse sand; trace fine gravel; sub angular; very stiff; (5,35,60)
		wet	41.2	@ 27 9:15	27			Red brown with orange mottling; soft; no plasticity; sand fine to medium; crumbles easily; (5,40,55)
		wet	53.9		28			
		wet	76.8		29			No orange mottling; medium stiff; low plasticity; (0,40,60)
					30			Stiff; red brown; some tan mottling; a lot of black specs; sand fine grain; trace coarse sand; (0,35,65)
		wet	38.3		31			
					32			Medium stiff; red brown with black specs; medium plasticity and toughness
		wet	65.8	@ 33.5* 9:32	33			
					34		SC	**Poorly graded sand with clay**; trace fine gravel; sand medium to coarse; red brown and orange; dark red staining; hard but crumbles easily; some
					35			black specs; gravel sub angular; wet; odor; (5,65,30)
					36			**TD = 35 feet bgs**
					37			
					38			
					39			
					40			
					41			
					42			
					43			
					44			

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-2**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/5/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **22'**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
								Asphalt - 2"
Neat Cement				Air-Knife	1			**CL** **Lean clay with gravel;** tan; low to medium plasticity; high toughness; stiff; moist; gravel fine to medium; (30,0,70)
					2			
					3			
					4			
		moist	932.0	@ 5 8:43	5			Tan with olive green mottling; medium plasticity and toughness; some silt; trace fine sand; moist; strong odor; (0,10,90)
		moist	1599	@ 7 8:45	6			
					7			Red brown specs; some roots; medium stiff; trace fine gravel; (5,25,70)
		moist	1307	@ 8.5* 8:47	8			
					9			(5,40,55)
		moist	1528	@ 10 8:49	10			**SC** **Clayey sand;** tan and olive green; some red brown mottling; red specs; sand fine to medium medium stiff; crumbles easily; no plasticity; gravel fine grain; moist; strong odor; (15,50,35)
					11			Loose; some black specs; red brown and tan
		moist	1335	@ 12* 8:51	12			**CL** **Lean clay;** red brown; some olive green mottling; stiff; silty; some fine sand; some black specs; low plasticity; high toughness; moist; strong odor; (0,35,65)
		moist	1227	@ 13.5 8:53	13			
					14			Sand fine to medium; trace fine gravel; red brown and tan; some olive green; (5,25,70)
		moist	762	@ 15 8:55	15			
					16			Medium stiff; medium plasticity and toughness; red brown; some olive green; some black specs; (0,35,65)
		moist	308	@ 17 8:57	17			
					18			Red brown; some pink staining; olive green mottling; crumbles easily; some fine gravel; (10,35,55)
		moist	182	@ 18.5 8:59	19			
								Red brown; doesn't crumble easily; some fine sand; odor; (0,40,60)
		moist	124	@ 20* 9:04	20			
					21			Medium soft; medium sand; trace fine gravel; some black specs; low plasticity; high toughness; (10,40,50)
	▽	wet	228	@ 22 9:06	22			**SC** **Clayey sand;** red brown with orange mottling;

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-2**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/5/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **2** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: **NA** | Well Diameter: **NA**
Slot Size: **NA** | Well Depth: **NA**
Gravel Pack: **NA** | First Water Depth: **22'**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement		wet	55.1		23			black specs; silty; sand fine to medium; fine gravel loose; slightly cemented; wet; odor; (15,50,35)
					24			
		wet	51.2	@ 25* 9:30	25			Cemented; very stiff; sand medium grain; red brown; some orange mottling; (5,55,40)
					26			
		wet	14.6		27			CL **Lean clay;** red brown and tan with orange mottling; some black specs; medium stiff; medium plasticity and toughness; sand fine grain; wet; odor; (0,40,60)
		wet	21.1		28			Red brown with tan mottling
					29			
		wet	13.7		30			Black specs; stiff; trace fine gravel; low plasticity; high toughness; (5,35,60)
					31			
		wet	2.3		32			Some pink staining Medium soft; (5,40,55)
					33			
		wet	11.1		34			Red brown with black specs; very stiff; some fine sand; slight odor; (0,30,70)
					35			Medium stiff; (0,20,80)
					36			
					37			**TD = 35 feet bgs**
					38			
					39			
					40			
					41			
					42			
					43			
					44			

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-3**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/2/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **21'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
								Concrete - 6"
Neat Cement				Air-Knife	1			**CL** **Silty clay;** tannish brown; medium plasticity; medium soft; low to medium toughness; moist; (0,0,100)
					2			
					3			@ 3' lean clay; stiff; medium plasticity; high toughness; moist; (0,0,100)
					4			
		moist	1.1	@ 5 8:54	5			Some black streaks; tan; some red brown specs; some medium sand; no odor; (0,15,85)
		moist	0.7	@ 7* 8:57	6			Some gray streaks; (0,20,80)
		moist	0.4	@ 8.5 9:00	7			Some black specs; some white caliche; trace fine gravel; sand medium to coarse; (5,25,70)
		moist	0.6	@ 10 9:02	8			Tan with red brown mottling
		miost	0.8	@ 12 9:04	9			Red brown with tan; black specs; trace fine gravel; (10,25,65)
		moist	0.6	@ 13.5 9:07	10			A lot of black specs; crumbles easily
		moist	0.6	@ 15* 9:09	11			Very stiff; low plasticity
					12			More sand; some silt; (5,35,60)
		moist	0.8	@ 17 9:11	13			**Silty lean clay;** red brown with tan mottling; soft; some black specs; (0,35,65)
		moist	2.6	@ 18.5 9:15	14			Trace fine gravel; meidum soft; medium palsticity; crumbles easily; silty; (5,40,565)
		wet	36.1	@ 20* 9:21	15			
	▽				16			
		wet	8.8		17			**SC** **Clayey sand;** poorly graded with fine gravel; sand fine to medium; red brown with tan mottling; soft; loose; trace black specs; wet; slight odor; (5,55,40)
					18			
					19			
					20			
					21			
					22			

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-3**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/2/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **2** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **21'**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23			Breaks easily
		wet	3.7		24			Sand mostly medium grain; trace fine sand; red brown
		wet	1.8	@ 25* 9:48	25			CL **Lean clay with sand;** fine to medium; red brown and tan with orange mottling; some red specs; stiff; low plasticity; high toughness; wet; no odor; (0,35,65)
		wet	1.7		26			
					27			Some black specs; red brown and some tan; medium stiff; trace fine gravel; (5,40,55)
		wet	0.7		28			
					29			Stiff; sand fine grain; tan with red brown mottling; (0,30,70)
		wet	0.5		30			
					31			Tan; some red brown mottling; trace medium sand; very stiff; wet; (0,30,70)
		wet	1.1		32			
					33			Trace gravel; sand medium to fine grain; wet; (5,30,65)
		wet	1.8		34			
					35			A lot of black specs; red brown with tan mottling; sand fine grain; some medium grain; (0,25,75)
					36			
					37			**TD = 35 feet bgs**
					38			
					39			
					40			
					41			
					42			
					43			
					44			

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-4**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **10/30/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **17.5'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
								Asphalt - 6"
Neat Cement				Air-Knife	1			**CL** **Lean clay;** tan to olive green; medium plasticity; medium toughness; stiff; moist; some black staining; (0,0,100)
					2			
					3			
					4			
		moist	7.5	@ 5 3:30	5			Very stiff; high toughness; some red specs; trace medium sand; odor; (0,5,95)
		moist	27.5	@ 8* 3:32	6			
					7			
		moist	25.3	@ 9 3:35	8			Orange mottling
					9			
		moist	11.5	@ 11 3:37	10			Tan some gray staining; stiff
					11			
		miost	6.5	@ 13.5* 3:39	12			Tan and red brown; some medium sand; slight odor; (0,25,75)
		moist	5.5	@ 14 3:40	13			Trace fine gravel; (5,30,65)
					14			
		moist	0.8	@ 16* 3:43	15			**SC** **Clayey sand;** red brown and tan; slightly cemented but crumbles easily; soft; no plasticity; high toughness; sand medium grain; moist; slight odor; (5,60,30)
	▽	wet	0.7		16			
					17			Low plasticity; sand fine to medium; wet; (0,60,40)
		wet	1		18			
					19			Trace gray staining
		wet	1.1		20			
					21			No plasticity; (0,65,35)
		wet	0.3		22			

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-4**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **10/30/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **2** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **17.5'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement		wet	0.6		23			CL	**Lean clay;** tan to red brown; medium soft; medium plasticity and toughness; some fine sand; moist; no odor; (0,15,85)
		wet	0.6		24–25				With fine to medium sand; some black specs; (0,25,75)
		moist	0.4	@ 27* 4:15	26–27				Olive green and tan; stiff; (0,0,100)
		moist	0.4		28–29				
					30–31				No Recovery
		moist	0.5		32–33				Very stiff; trace fine gravel; some medium sand; low plasticity; high toughness; tan to red brown; (5,20,70)
		moist	0.4		34–35				(10,30,60)
					36–44				**TD = 35 feet bgs**

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-5**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/1/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **18'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
								Asphalt - 5"
Neat Cement				Air-Knife	1–4			**CL** **Lean clay;** olive green; medium stiff; medium plasticity and toughness; some medium sand and trace fine gravel; some gray staining; moist; strong odor; (10,25,65)
		moist	468	@ 5 11:11	5			Trace white caliche; very stiff; low plasticity; high touchness; with medium to coarse sand; trace fine gravel; (10,30,60)
		moist	688	@ 7* 11:19	6–7			Tan and olive green; some red brown mottling; some medium sand; (0,20,80)
		moist	638	@ 8.5 11:20	8–9			Low to medium plasticity
		moist	573	@ 10 11:22	10–11			
		miost	623	@ 12* 11:25	12			(0.25,75) Trace fine gravel; low plasticity; meidum soft; (5,25,70)
		moist	570	@ 13.5 11:27	13–14			Crumbles easily; (5,35,60)
		moist	532	@ 15 11:30	15–16			Red brown with olive green mottling; stiff; (0,35,65)
	▽	moist	157	@ 17* 11:32	17–18			
		wet	100		19			**SC** **Clayey sand;** red brown and olive; trace gravel; green; poorly graded; loose; soft; crumbles easily; medium sand; fine gravel; wet; odor; (10,50,40)
		wet	53.6	@ 20 11:41	20–21			Red brown; soft; sand fine grain; trace fine gravel; black specs; medium plasticity and toughness; wet; odor; (5,50,45)
		wet	57	@ 22* 11:44	22			

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-5**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **11/1/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **2** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **18'**
Elevation | Northing | Easting

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement		wet	51.8		23–24			**CL** **Lean clay;** tan with red brown mottling; black specs; fine sand; medium soft; medium plasticity and toughness; wet; odor; (0,30,70)
		moist	7.3		25–26			Some fine to medium sand; moist; slight odor
		moist	8.6		27–28			Stiff; (0,15,85) Tan and red brown with some olive green mottling
		moist	11.4		29			Medium stiff; (0,35,65)
		wet	16.8	@ 30* 12:07	30–31			**SC** **Clayey sand;** red brown; some black specs; trace fine gravel; sand medium grain; soft; loose; no plasticity; wet; slight odor; (10,50,40)
		wet	14.1		32–33			Some olive green mottling; medium stiff
		moist	13.5		34			**CL** **Lean clay;** light tan to olive green; stiff; some coarse sand; trace black specs; low to medium plasticity; high toughness; moist; odor; (0,15,85)
					35–44			**TD = 35 feet bgs**

Delta
Consultants

Project No: **C101156151** | Client: **ConocoPhillips** | Boring No: **SB-6**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd** | Date Drilled: **10/31/07**
Driller: **Gregg Drilling & Testing** | **Oakland, CA** | Page **1** of **2**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **17'**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
								Asphalt - 3"
Neat Cement				Air-Knife	1			**CL** **Lean clay;** olive green; medium stiff; medium plasticity and toughness; some tan coloring; some medium sand; medium to coarse gravel; moist; slight odor; (15,25,60)
					2			
					3			
					4			
		moist	253	@ 5* 1:02	5			Strong odor
					6			
		moist	47.4	@ 7 1:05	7			Stiff; sand fine to medium grain; (0,20,80)
					8			
		moist	96.9	@ 8.5* 1:07	9			Tan with olive green mottling; (0,25,75)
		moist	33.8	@ 10 1:09	10			Red brown and tan with olive green mottling; (0,30,70)
					11			
		moist	12.7	@ 12* 1:11	12			Low plasticity; high toughness; medium stiff; odor; (0,40,60)
		moist	20.6	@ 13.5 1:14	13			**SC** **Clayey sand;** red brown and tan; black specs; medium soft; slightly cemented but crumbles easily; poorly graded; no plasticity; high toughness; sand fine to medium; moist; odor; (0,55,45)
		moist	21	@ 15* 1:16	14			
					15			Red brown with black specs; (0,70,35)
	▽				16			
		wet	4.1	@ 17* 1:19	17			Olive green and tan; some gray staining; loose; sand medium to coarse; wet; (0,65,35)
		wet	15		18			**CL** **Lean clay with sand;** red brown with black specs; sand fine grain; medium stiff; medium plasticity and toughness; wet; odor; (0,40,60)
					19			
		wet	3.4		20			Moist; slight odor; (0,30,70)
					21			
		moist	1.8		22			With fine to medium gravel; coarse sand; low

Delta
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Project No: **C101156151** | Client: **ConocoPhillips**
Logged By: **Tabbitha Croy** | Location: **4276 MacArthur Blvd**
Driller: **Gregg Drilling & Testing** | **Oakland, CA**
Drilling Method: **HSA** | Hole Diameter: **4"**
Sampling Method: **Continuous** | Hole Depth: **35'**
Casing Type: NA | Well Diameter: NA
Slot Size: NA | Well Depth: NA
Gravel Pack: NA | First Water Depth: **17'**

Boring No: **SB-6**
Date Drilled: **10/31/07**
Page **2** of **2**

▽ = First Water
▼ = Static Groundwater
* = Selected for lab analysis

Elevation | Northing | Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23			plasticity; high toughness; moist; (15,35,50)
		moist	1.8	@ 24.5 1:30	24			
		moist	1.4		25			Red brown to tan; ;some medium sand; trace fine gravel; stiff; low plasticity; high toughness; moist; no odor; (5,30,65)
		moist	1.1		26			
		moist	0.8		27			Tan; some red brown speca; medium plasticity; (0,10,90)
		moist	0.6	@ 30.5* 1:43	28			Some black specs; medium soft; no plasticity; fine to medium red brown sand; high toughness; (0,25,75)
		moist	0.5		29			
		moist	0.9		30			Dark brown and tan; stiff; some black staining; no odor; (0,40,60)
					31			
					32			Olive green and tan; fine to medium sand; trace fine gravel; very stiff; some black specs but no staining; (5,25,70)
					33			
					34			(0,20,80)
					35			
					36			**TD = 35 feet bgs**
					37			
					38			
					39			
					40			
					41			
					42			
					43			
					44			

Delta Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-7
Logged By: S. Meninger/ C. Morgan	Location: **4276 MacArthur Blvd.** Oakland, California	Date Drilled: 07/09/09
Driller: **Gregg Drilling**		Page **1** of **2**
Drilling Method: Macrocore	Hole Diameter: 3"	▽ = First Water
Sampling Method: Continuous	Hole Depth: 30'	▼ = Static Groundwater
Casing Type: N/A	First Water Depth: 23.5	
Slot Size: N/A	Static Water Depth: 6.21	
Gravel Pack: N/A	Well Depth: N/A	
Elevation	Northing	Easting

Boring Completion: Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement	▼	Moist	3.9 ppm	Air-Knife	1			CL	**Lean Clay with Sand;** light olive green to dark brown, stiff, medium plastic, hydrocarbon odor present.
					2				
					3				
					4				
					5			CL	**Lean Clay with Sand;** olive green-brown, moist, medium stiff, fine to medium grained sand, strong hydrocarbon odor, visible contamination, low to medium plastic.
					6				
					7				
			405 ppm		8		☒		
					9			CL	**Lean Clay with Sand;** same as above
					10				
					11				
			6.5 ppm		12			CL	**Lean Clay with Sand;** same as above, with increased stiffness; visible contamination, and strong petroleum hydrocarbon odor.
		Moist			13				
					14				
					15				
			64.1 ppm		16		☒		
					17			CL	**Lean Clay with Sand;** brown to red brown, fine to coarse grained sand, low plasticity increased sand content, increasing moisture, slight hydrocarbon odor, stiff.
					18				
					19				
			6.7 ppm		20				
					21			CL	**Lean Clay with Sand**; same as above with increasing sand content; very stiff to hard.
					22				

Delta
Consultants

Project No: C101156 Client: **ConocoPhillips**
Logged By: S. Meninger/ C. Morgai Location: **4276 MacArthur Blvd.**
Driller: **Gregg Drilling**
Drilling Method: Macrocore Hole Diameter: 3"
Sampling Method: Continuous Hole Depth: 30.0'
Casing Type: N/A First Water Depth: 23.5
Slot Size: N/A Static Water Depth: 6.5'
Gravel Pack: N/A Well Depth: N/A
Elevation Northing Easting

Boring No: SB-7
Date Drilled: 07/09/09
Page **2** of 2

▽ = First Water
▼ = Static Groundwater

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement	▽	Moist / Wet / Moist	0.5 ppm		23		☒	CL	**Lean Clay with Sand;** same as above; very strong hydrocarbon odor.
					24			SC	**Clayey Sand;** brown, medium to coarse grained sand with clay, medium dense to dense, moist to wet, some olive green smearing.
					25				
					26			SM	**Silty Sand;** brown, wet, medium to coarse grained, strong hydrocarbon odor.
					27			CL	**Lean Clay with Sand;** brown, low to medium plastic, stiff, hydrocarbon odor.
					28				
					29			SP	**Poorly Graded Sand;** light brown.
					30				**Total Depth of Boring = 30' bgs.**
					31				Soil Sample SB-7@ 7.5-8' collected at 15:05 7/9/2009.
					32				Soil Sample SB-7@ 15.5-16' collected at 15:10 7/9/2009.
					33				Soil Sample SB-7 @ 23-23.5' collected at 15:15 7/9/2009.
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

Delta
Consultants

Project No:	C101156	Client: **ConocoPhillips**	Boring No: SB-8
Logged By:	S. Meninger/ C. Morgan	Location: **4276 MacArthur Blvd.**	Date Drilled: 07/10/09
Driller: **Gregg Drilling**		Oakland, California	Page **1** of **1**
Drilling Method:	Macrocore	Hole Diameter: 3"	
Sampling Method:	Continuous	Hole Depth: 8.5'	▽ = First Water
Casing Type:	N/A	First Water Depth: N/A	▼ = Static Groundwater
Slot Size:	N/A	Static Water Depth: N/A	
Gravel Pack:	N/A	Well Depth: N/A	
Elevation		Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement		Moist		Air-Knife & Hand Augered	1			CL	**Lean Clay with Sand;** thumb to fist sized gravel, with non-native pumice fill and black fines; high petroleum hydrocarbon odor.
					2				
					3				
					4				
					5			GP	**Gravel with Sand;** gray, fine to medium grained with presence of possible compressed asphalt; visible black product; very moist.
		Very Moist	1453 ppm		6				
					7		☒		
					8				
					9				**Total Depth of Boring = 8.5' bgs.**
					10				*Note that boring was terminated at 8.5' bgs due to drilling conditions. At 7'bgs drillers indicated a slight resistance was felt on the rig. A sudden push through and drop was then recorded while advancing from 8.0-8.5' bgs, at which point a vibrating feel in the rod was felt.*
					11				
					12				
					13				Soil sample SB-8 @ 7-7.5' collected at 13:21 7/10/2009.
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No:	C101156	Client: **ConocoPhillips**	Boring No: SB-9
Logged By:	S. Meninger/ C. Morgan	Location: **4276 MacArthur Blvd.** Oakland, California	Date Drilled: 07/08/09
Driller: **Gregg Drilling**			Page **1** of **2**
Drilling Method:	Macrocore	Hole Diameter: 3"	
Sampling Method:	Continuous	Hole Depth: 26.5'	
Casing Type:	N/A	First Water Depth: 26'	
Slot Size:	N/A	Static Water Depth: 24	
Gravel Pack:	N/A	Well Depth: N/A	
Elevation		Northing	Easting

▽ = First Water

▼ = Static Groundwater

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Air-Knife & Hand Augered	1–5			CL	**Lean clay with sand;** light olive green to bronw, medium plastidty, thick.
			3.6 ppm		6–11			CL	**Lean clay with sand;** same as above with gravel; visible contamination, and mild petroleum hydrocarbon odors.
			2.5 ppm		12–15			CL	**Lean clay with sand;** brown to orange brown, dry, medium plasticity, firm.
					16–19			CL	**Same as above.**
					20–22			CL	**Same as above.**

Delta
Consultants

Project No: C101156
Logged By: S. Meninger/ C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Macrocore
Sampling Method: Continuous
Casing Type: N/A
Slot Size: N/A
Gravel Pack: N/A

Client: **ConocoPhillips**
Location: 4276 MacArthur Blvd.
Oakland, CA
Hole Diameter: 3"
Hole Depth: 26'
First Water Depth: 26'
Static Water Depth: 24'
Well Depth: 26'

Boring No: SB-9
Date Drilled: 07/08/09
Page **2** of 2

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement	▼ ▽				23			CL	**Same as above**, with increased sands.
					24				
					25				
					26		X		
					27				**Total Depth of Boring = 26' bgs.**
					28				Soil Sample SB-9@26' collected @ 18:40 07/08/09.
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

Delta Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-10
Logged By: S. Meninger/ C. Morgan	Location: **4276 MacArthur Blvd.** Oakland, California	Date Drilled: 07/08/09
Driller: **Gregg Drilling**		Page **1** of **2**
Drilling Method: Macrocore	Hole Diameter: 3"	▽ = First Water
Sampling Method: Continuous	Hole Depth: 23'	▼ = Static Groundwater
Casing Type: N/A	First Water Depth: 16	
Slot Size: N/A	Static Water Depth: 6.21	
Gravel Pack: N/A	Well Depth: N/A	
Elevation	Northing	Easting

Boring Completion	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Backfill / Neat Cement	Moisture Content			Air-Knife & Hand Augered	1–4			CL	**Lean clay with sand;** oilve green to brown, medium plastic, medium stiff, mild hydrocarbon odor; possible fill material.
		Moist			5			GP	**Gravel with Sand;** gray, fine to medium gravel with fine to medium grained sand, loose, wet, fill material from former UST pit, no odor.
		Wet- Perched water in former UST pit.	1.8 ppm		6–9				
					10			SP	**Poorly Graded Sand with Gravel;** gray to dark gray, fine to medium grained sand, loose, wet, very strong hydrocarbon odor.
					11				
		Moist	899 ppm		12		☒	CL	**Lean Clay with Sand;** Olive green to brown, medium stiff, low to medium plastic, moist, slight hydrocarbon odor, visible contamination, ...
					13–15				
	▽		7.6 ppm		16				
					17			SC	**Clayey Sand;** Dark gray, loose, wet, fine to medium grained sand, very strong hydrocarbon odor, visible contamination, trace fine gravel.
			545 ppm		18		☒		
		Moist			19				
			6.6 ppm		20			CL	**Lean Clay with Sand;** brown with olive green mottling, stiff, low to medium plastic, fine to coarse grained sand, slight odor, trace fine gravel.
					21–22				

Delta
Consultants

Project No: C101156
Logged By: S. Meninger/ C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Macrocore
Sampling Method: Continuous
Casing Type: N/A
Slot Size: N/A
Gravel Pack: N/A

Client: **ConocoPhillips**
Location: 4276 MacArthur Blvd.
Oakland, California
Hole Diameter: 3"
Hole Depth: 28'
First Water Depth: 16'
Static Water Depth: 28'
Well Depth: N/A

Boring No: SB-10
Date Drilled:
Page **2** of 2

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement	▼	moist	1.1 ppm		23		☒	CL	**Same as above**, with increased sands.
					24				
					25				
					26				
					27				**Total Depth of Boring =**
					28				Soil Sample SB-10@ 12-12.5' collected at 7:55 07/10/09.
					29				Soil Sample SB-10@ 18-18.5' collected at 8:00 07/10/09.
					30				Soil Sample SB-10@ 22.5-23' collected at 8:05 07/10/09.
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				
					41				
					42				
					43				
					44				

Delta
Consultants

Project No:	C101156	Client: **ConocoPhillips**	Boring No: SB-11
Logged By:	S. Meninger/ C. Morgan	Location: **4276 MacArthur Blvd.** Oakland, California	Date Drilled: 07/10/09
Driller:	**Gregg Drilling**		Page **1** of **2**
Drilling Method:	Macrocore	Hole Diameter: 3"	
Sampling Method:	Continuous	Hole Depth: 44'	▽ = First Water
Casing Type:	N/A	First Water Depth: 42'	▼ = Static Groundwater
Slot Size:	N/A	Static Water Depth: N/A	
Gravel Pack:	N/A	Well Depth: N/A	
Elevation		Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Air-Knife & Hand Augered	1–5			CL	**Lean clay with sand;** light olive green to brown, medium stiff to stiff, low to medium plasticity.
			405 ppm		6–8		☒	CL	**Lean clay with sand;** olive green, gray, brown; fine to medium coarse grained sand; trace fine to medium grained gravel; low plasticity; moist; strong hydrocarbon odor.
			6.8 ppm		9–11			CL	**Lean clay with sand;** entirely green in color, very stiff to hard.
			16.7 ppm		12–15			CL	**Lean clay with sand;** brown and olive green, moist, very stiff to hard, very strong hydrocarbon odor, low to medium plastic.
			108 ppm		16–19		☒	CL	**Lean clay with sand;** decreasing sand content, medium to high plasticity, increasing moisture, slight hydrocarbon odor, very stiff to hard, trace fine gravel, visible contamination. *Driller reports very hard direct pushing.
			12.1 ppm		20–22			CL	**Lean clay with sand;** brown with green mottling, medium plastic, trace fine gravel, slight odor, increasing mositure.

Delta Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-11
Logged By: S. Meninger/ C. Morgan	Location: **4276 MacArthur Blvd.**	Date Drilled: 07/10/09
Driller: **Gregg Drilling**	**Oakland, CA**	Page **2** of 2
Drilling Method: Macrocore	Hole Diameter: 3"	
Sampling Method: Continuous	Hole Depth: 44'	▽ = First Water
Casing Type: N/A	First Water Depth: 42'	▼ = Static Groundwater
Slot Size: N/A	Static Water Depth: N/A	
Gravel Pack: N/A	Well Depth: N/A	
Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement		Wet	5.8 ppm		23			CL	**Poorly graded sand;** brown, wet, no odor. Wetness in small portion-Not first water.
					24				
					25			CL	**Same as above;** less visible contamination, increasing sand content.
					26				
					27				
			6.7 ppm		28			CL	**Lean clay with sand;** brownand olive green, increasing moisture, less visible contamination.
					29				
					30				
					31				
			6.8 ppm		32			CL	**Same as above;** increasing sand content, visible contamination, red brown.
					33				
					34				
					35				
			5.7 ppm		36			CL	**Same as above;** increasing moisture conent.
					37				
					38				
					39				
			7.5 ppm		40				
		▽			41		☒	CL	**Same as above;** wet.
					42				
					43				
					44				**Total Depth of Boring = 44' bgs.** SB-11 samples collected at 10:50, 10:55 & 11:00

Delta
Consultants

Project No: C101156
Logged By: A.Buehler
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method:
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 MacArthur Blvd.**
Oakland, CA
Hole Diameter:
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-12
Date Drilled: 06/14/10
Page **1** of **3**

▽ = First Water
▼ = Static Groundwater

Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered	1–5				
			5.2	SB-12 @ 12 9:44	6–9			CL	Sandy lean clay with gravel; brown with visible green contamination; moist.
			30.1	SB-12 @ 10 9:58	10–14			CL	Sandy lean clay clay; light brown; wet.
			NA	SB-12 @ 15 10:25	15–19			CL	Same as above. Saturated.
			64.7	SB-12 @ 20 10:36	20–22			CL	Sandy lean clay; brown; moist.

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-12
Logged By: A. Buehler	Location: **4276 MacArthur Blvd.**	Date Drilled:
Driller: **Gregg Drilling**	Oakland, CA	Page **2** of 3
Drilling Method: Sonic	Hole Diameter:	
Sampling Method:	Hole Depth:	
Casing Type:	First Water Depth:	
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

▽ = First Water

▼ = Static Groundwater

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23				
					24				
					25				
			10.2	SB-12 @ 26 10:45	26			CL	Same as above, very stiff with large gravel
					27				
					28				
					29				
			NA	SB-12 @ 30 10:47	30			CL	Same as above; damp.
					31				
					32				
					33				
					34				
			3.5	SB-12 @ 35 10:58	35			CL	Same as above.
					36				
					37				
					38				
					39				
					40				No recovery.
			5.6	SB-12 @ 41 11:42	41			CL	Sandy clay; <10% sands; brown; moist; slight odor.
					42				
					43				
					44				

Delta
Consultants

Project No: C101156
Logged By: A. Buehler
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method:
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 MacArthur Blvd.**
Oakland, CA
Hole Diameter:
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-12
Date Drilled:
Page 3 of 3

▽ = First Water
▼ = Static Groundwater

Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement			NA	SB-12 @ 45 11:45	45			CL	Same as above with 20% gravel; 10% sand; damp.
					46				Sandy clay; light brown; 20% sand, no odor.
					47				
					48				
					49				
					50			CL	Same as above, with 15% gravel and 15% sand.
			3.3	SB-12 @ 50 11:54					**Boring terminated at 50 feet bgs.**
					51				
					52				
					53				
					54				
					55				
					56				
					57				
					58				
					59				
					60				
					61				
					62				
					63				
					64				
					65				
					66				

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-13
Logged By: A.Buehler	Location: **4276 MacArthur Blvd.** Oakland, CA	Date Drilled: 06/18/10
Driller: **Gregg Drilling**		Page **1** of **1**
Drilling Method: Sonic	Hole Diameter:	
Sampling Method:	Hole Depth:	▽ = First Water
Casing Type:	First Water Depth:	▼ = Static Groundwater
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion (Backfill)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered SB-13 @ 6 8:45	1–22				Black, sandy, granular, tar-like material, very strong odor **Boring terminated at 6 feet bgs due to refusal.**

Delta
Consultants

Project No: C101156
Logged By: C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method:
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 MacArthur Blvd.**
Oakland, CA
Hole Diameter: 3"
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-14
Date Drilled: 06/17/10
Page **1** of **3**

▽ = First Water
▼ = Static Groundwater

Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered	1–5			CL	Clay; green, visible contamination; with some tan, black and white gravel.
			3335	SB-14 @ 8 11:50	8			CL	Lean Clay with sand; gray with visible green contamination, strong odor; moist.
			5553	SB-14 @ 10 11:50	10				
			107.5	SB-14 @15 11:54	15			CL	Same as above, with small coarse grained white and tan gravel at 16.5 to 18 feet bgs; moist.
	▽		11.2	SB-14 @ 20 12:01	20			CL	Same as above, with increased fines at 21 feet bgs.
					21				Same as above, with continued increased fines; gravel also present.
					22			GC	Clayey Gravel with sand, thumb-sized white

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-14
Logged By: C.Morgan	Location: **4276 MacArthur Blvd.**	Date Drilled: 06/17/10
Driller: **Gregg Drilling**	**Oakland, CA**	Page **2** of 3
Drilling Method:	Hole Diameter:	
Sampling Method:	Hole Depth:	▽ = First Water
Casing Type:	First Water Depth:	▼ = Static Groundwater
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23				rock present; less odor then at previous depths.
					24				
					25				
			11.9	SB-14 @ 26 12:07	26			CH	Sandy fat clay with gravel; gray, tan, moist.
					27				
					28				
					29				
			NA	SB-14 @ 30 12:07	30			CH	Same as above.
					31				
					32				
					33				
					34				
			10.5	SB-14 @ 35 12:16	35			CL	Lean clay; light brown to tan; some small grained gravel; firm; slight odor; moist.
					36				
					37				
					38				
					39				
			18.5	SB-14 @ 40 12:22	40			CL	Same as above, with increased moisture and softness.
					41				
					42				
					43				
					44				

Delta
Consultants

Project No: C101156
Logged By: C.Morgan
Driller: **Gregg Drilling**
Drilling Method:
Sampling Method:
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 MacArthur Blvd.**
Oakland, CA
Hole Diameter:
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-14
Date Drilled: 06/17/10

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement	▽		14.5	SB-14 @45 12:28	45			CL	*Possible second water bearing zone.* Sandy lean clay with silt to 48 feet bgs, then clay with sand and gravel to bottom of boring.
					46				
					47				
					48				
					49				
			10.6	SB-14 @ 50 12:28	50				**Boring terminated at 50.5 feet bgs.**
					51				
					52				
					53				
					54				
					55				
					56				
					57				
					58				
					59				
					60				
					61				
					62				
					63				
					64				
					65				
					66				

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-15
Logged By: C. Morgan	Location: 4276 MacArthur Blvd.	Date Drilled: 06/17/10
Driller: **Gregg Drilling**	Oakland, CA	Page **1** of **2**
Drilling Method: Sonic	Hole Diameter: 3"	
Sampling Method:	Hole Depth:	▽ = First Water
Casing Type:	First Water Depth:	▼ = Static Groundwater
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion: Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample: Recovery	Sample: Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered	1				Sandy gravel; brown.
					2				
					3				
					4				
			14.8	SB-15 @ 5 2:01	5			CH	Tight fat clay, with fine grained sand; at approx 8 feet bgs, color had orange mottling, otherwise constant lithology to 11.5 feet.
					6				
					7				
					8				
					9				
			24.4	SB-15 @ 10 2:01	10				
					11				
					12				
					13				
					14				
			6.3	SB-15 @ 15 2:04	15			CH	Same as above to 16 feet bgs.
					16			CL	Sandy lean clay; fine grained; increased moisture.
	▽				17				
					18			GC	Sandy gravel with clay from 17.5 to 18 feet; moist-saturated.
					19				
					20				
			12.3	SB-15 @ 21 2:10	21			GC	Same as above, with thumb-sized, angular to subangular gravel.
					22				

Delta
Consultants

Project No: C101156
Logged By: C.Morgan
Driller: **Gregg Drilling**
Drilling Method:
Sampling Method:
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 MacArthur Blvd.**
Oakland, CA
Hole Diameter:
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-15
Date Drilled: 06/17/10
Page **2** of 2

▽ = First Water
▼ = Static Groundwater

Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23				
					24				
					25				
					26				
			10.9	SB-15 @ 26.5 2:18	27			GC	Same as above.
					28			CL	Sandy lean clay with with gravel, fine grained sands and gravel, more saturated (saturation due to sluff during drilling)
			5.2	SB-15 @ 30 2:18	30				
					31				
					32				
					33				
					34				
			10.7	SB-15 @ 35 2:24	35			CL	Same as above, moist.
					36				
					37				
					38				
					39				
			2.6	SB-15 @ 40 2:40	40			CL	Same as above.
					41				**Boring teminated at 41 ft due to refusal.**
					42				
					43				
					44				

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-16
Logged By: A. Buehler	Location: **4276 Mac Arthur Blvd.**	Date Drilled: 6/17/10
Driller: **Gregg Drilling**	**Oakland, CA**	Page **1** of
Drilling Method: Sonic	Hole Diameter: 3"	▽ = First Water
Sampling Method: Direct Push	Hole Depth: 5.5'	▼ = Static Groundwater
Casing Type:	First Water Depth:	
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Air-Knife	1				
					2				
					3				
					4				
			53.4		5				
					6				
					7				
		moist		SB-16 @ 8' 12:46	8			CL	Lean clay; brown with green mottling, 5% sand, moist, strong odor.
		moist	90.1	SB-16 @ 10'	9				
					10				
		moist		10:49	11				
					12			CL	Lean clay; light brown, <5% fine grained sand, very dense/firm, moist, strong odor.
					13				
					14				
			13.7	SB-16 @ 15' 12:55	15			CL	Same as above, with light brown and orange mottling to 16 feet bgs.
					16				
					17				
					18			CL	Same as above to 21 feet bgs.
					19				
					20				
			12.0	SB-16 @ 20' 1:00	21			GC	Clayey gravel with sand, bown, wet
					22				

Delta
Consultants

Project No: C101156
Logged By: A. Buehler
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method: Direct Push
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 Mac Arthur Blvd.**
Oakland, CA
Hole Diameter: 3"
Hole Depth: 5.5'
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-16
Date Drilled: 6/17/10

▽ = First Water
▼ = Static Groundwater

Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23			CL	Sandy Lean clay, brown, 15% sand, damp
					24				
					25			CL	Sandy lean clay; brown, wet. At 25' bgs, clay contains more gravels, and is more firm, damp.
			9.3	SB-16 @ 25' 1:10	26				
					27				
					28				
					29				
			12.3	SB-16 @ 30' 1:10	30				
					31				
					32				
					33				
					34			CL	Sandy lean clay with gravel; brown and some orange mottling; <5% gravel and <15% sand, damp.
			7.7	SB-16 @ 34' 1:25	35				
					36				
					37				
					38				
					39			CL	Same as above.
			12.2	B-16 @ 40' 1:37	40				
					41				
					42				
					43				
					44				

Delta
Consultants

Project No: C101156
Logged By: A. Buehler
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method: Direct Push
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 Mac Arthur Blvd.**
Oakland, CA
Hole Diameter: 3"
Hole Depth: 5.5'
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-16
Date Drilled: 6/17/10
Page 3 of **3**

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

Boring Completion (Backfill)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement			11.5	SB-16 @ 46' 1:46	45–46			CL	Clay; brown with <5% coarse grained sand very dense; moist.
					47–48			CL	Clay; tan with orange mottling <10% sand with some gravel; moist; very dense/firm.
			8.3	SB-16 @ 50' 1:48	49–50				Boring Terminated @ 50' bgs.
					51–66				

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-17
Logged By: C. Morgan	Location: **4276 Mac Arthur Blvd.**	Date Drilled: 06/16/10
Driller: **Gregg Drilling**	**Oakland, California**	Page **1** of **3**
Drilling Method: Sonic	Hole Diameter: 3"	
Sampling Method: Direct Push	Hole Depth:	▽ = First Water
Casing Type:	First Water Depth:	▼ = Static Groundwater
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion (Backfill)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered	1–4				
			259.0	SB-17 @ 5 10:25	5–7			CL	Sandy lean clay; gray with visible green contamination; trace ammount of wood chips and coarse grained sand, pea to thumb sized gravel from 6-8 feet bgs.
					8–9			CL	Same as above, however sand becomes fine grained. Clay has more tan and orange coloring with hints of green contamination. Strong petroleum hydrocarbon odor.
			239.0	SB-17 @ 10 10:28	10–12				
					13–14			CL	Sandy lean clay with gravel, pea to thumb sized gravel, green and gray, moist, strong hydrocarbon odor.
			19.4	SB-17 @ 15 10:30	15–17			CL	Lean Clay with sand; tan, orange and some white and red mottling; more firm, and more coarse grained sand; moist.
					18–19			CL	Sandy lean clay with gravel, green, and white trace roots; rounded to subrounded, thumb sized gravel, very moist.
	▽		79.4	SB-17 @ 20 10:11	20–22			CL	Same as above, however sandy clay becomes orange to tan; still very moist.

Delta
Consultants

Project No: C101156
Logged By: C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method: Direct Push
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 Mac Arthur Blvd.**
Oakland, California
Hole Diameter: 3"
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-17
Date Drilled: 06/16/10

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement					23			CL	Same as above, with increased firmness.
					24				
					25				
			NA	SB-17 @ 25 10:17	26				
					27				
					28				
					29				
					30			CL	Same as above.
			12.5	SB-17 @ 30 10:20	31				
					32				
					33				
					34				
					35			CL	Same as above.
			3.8	SB-17 @ 35 10:24	36				
					37				
					38				
					39				
					40			CL	Same as above.
			10.5	SB-17 @ 40 10:44	41				
					42				
					43				
					44				

Delta
Consultants

Project No: C101156
Logged By: C. Morgan
Driller: **Gregg Drilling**
Drilling Method: Sonic
Sampling Method: Direct Push
Casing Type:
Slot Size:
Gravel Pack:

Client: **ConocoPhillips**
Location: **4276 Mac Arthur Blvd.**
Oakland, California
Hole Diameter: 3"
Hole Depth:
First Water Depth:
Static Water Depth:
Well Depth:

Boring No: SB-17
Date Drilled: 06/16/10
Page 3 of **3**

▽ = First Water
▼ = Static Groundwater

Elevation | Northing | Easting

Boring Completion (Backfill)	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement			36	SB-17 @ 47 11:02	45–47			CL	same as above.
			9.2	SB-17 @ 50 11:03	48–50				
					50				**Boring terminated at 50.5 feet bgs.**
					51–66				

Delta
Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-18
Logged By: C. Morgan	Location: **4276 MacArthur Blvd.**	Date Drilled: 06/14/10
Driller: **Gregg Drilling**	**Oakland, California**	Page **1** of **1**
Drilling Method: Sonic	Hole Diameter:	
Sampling Method:	Hole Depth:	▽ = First Water
Casing Type:	First Water Depth:	▼ = Static Groundwater
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered	1–5				
			12.5	SB-18 @ 7.5 3:05	8			CL	Fat clay, gray and green, some thumb sized white gravel/rock, moist.
			25.1	SB-18 @ 10 3:13	10				
			476.0	SB-18 @ 15 3:19	15			SM	Fine grained silty sand; black, saturated, very strong odor
					16			CH	Fat clay with sand, tan and gray, visible contamination.
					18				Clay with silt and sand; tan to gray; increased moisture; fine grained sand more abundant in bottom of sample with tan and orange coloring.
			11.1	SB-18 @ 20 3:26	20			CL	**Boring terminated at 20 feet bgs.**

Delta Consultants

Project No: C101156	Client: **ConocoPhillips**	Boring No: SB-19
Logged By: C. Morgan	Location: **4276 MacArthur Blvd.**	Date Drilled: 06/15/10
Driller: **Gregg Drilling**	**Oakland, California**	Page **1** of **1**
Drilling Method: Sonic	Hole Diameter: 3"	▽ = First Water
Sampling Method:	Hole Depth: 20'	▼ = Static Groundwater
Casing Type:	First Water Depth:	
Slot Size:	Static Water Depth:	
Gravel Pack:	Well Depth:	
Elevation	Northing	Easting

Boring Completion / Backfill	Static Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Analyzed	Soil Type	LITHOLOGY / DESCRIPTION
Neat Cement				Hand Augered	1–5				
			33.7	SB-19 @ 7.5 2:30	8			CL	Lean clay; gray with visible green contamination, some gravel.
			26.9	SB-19 @ 10 2:30	10			CL	Same as above.
			55.3	SB-19 @15 2:30	15			CL	Sandy lean clay; light brown to tan; some green contamination present; very firm; moist.
			58.4	SB-19 @20 2:52	19–20			CH	Fat clay with gravel; gray and some orange increased moisture; slight odor.
					20				**Boring terminated at 20 feet bgs.**

Delta
Consultants

Project No: **C101156203**
Logged By: **S. Meninger/C. Morgan**
Driller: **Gregg**
Drilling Method: **Hand Auger**
Sampling Method: **Hand Drive**
Casing Type: **N/A**
Slot Size: **N/A**
Gravel Pack: **3.5' - 5'**

Client: **ConocoPhillips**
Location: **Oakland, CA**
Date Drilled: **7/7/2009**
Hole Diameter: **3.5"**
Hole Depth: **5'**
Well Diameter: **N/A**
Well Depth: **N/A**
First Water Depth: **N/A**
Static Water Depth: **N/A**

Boring: SV-1
Page 1 of 1

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt / Bent. Grout		Moist			1			SM	**Sand with Gravel (SM)** - Possible fill material, brown to red brown, moist, medium dense to dense, medium to coarse sand
					2				
Bent. Chips					3			SM	**Silty Sand (SM)** - Light brown, moist, medium dense, fine to coarse grained sand
#2/12 Sand		Moist		SV-1-S	4				
					5				Boring Terminated at 5' bgs.
					6				Groundwater Not Enountered
					7				Soil Sample SV-1-S collected at 10:15 7/7/2009
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No: **C101156203**
Logged By: **S. Meninger/C. Morgan**
Driller: **Gregg**
Drilling Method: **Hand Auger**
Sampling Method: **Hand Drive**
Casing Type: **N/A**
Slot Size: **N/A**
Gravel Pack: **3' - 4'**

Client: **ConocoPhillips**
Location: **Oakland, CA**
Date Drilled: **7/7/2009**
Hole Diameter: **3.5"**
Hole Depth: **5'**
Well Diameter: **N/A**
Well Depth: **N/A**
First Water Depth: **N/A**
Static Water Depth: **N/A**

Boring: SV-2
Page 1 of 1

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt / Bent. Grout / Bent. Chips / #2/12 Sand		Moist / Moist		SV-2-S	1–4			SM	**Silty Sand with Gravel (SM)** - Brown, moist, medium dense, no odor, fine to coarse sand, well graded fine to medium grained gravel
					4				Boring Terminated at 4' bgs.
					5				Groundwater Not Enountered
					6				Soil Sample SV-2-S collected at 14:05 7/7/2009
					7–22				

Delta
Consultants

Project No: **C101156203**
Logged By: **S. Meninger/C. Morgan**
Driller: **Gregg**
Drilling Method: **Hand Auger**
Sampling Method: **Hand Drive**
Casing Type: **N/A**
Slot Size: **N/A**
Gravel Pack: **3.5' - 5'**

Client: **ConocoPhillips**
Location: **Oakland, CA**
Date Drilled: **7/7/2009**
Hole Diameter: **3.5"**
Hole Depth: **5'**
Well Diameter: **N/A**
Well Depth: **N/A**
First Water Depth: **N/A**
Static Water Depth: **N/A**

Boring: SV-3
Page 1 of 1

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt / Bent. Grout		Moist	17.2		1			SM	**Silty Sand with Gravel (SM)** - Dark brown, medium dense, moist, no odor, fine to medium grained sand, possible fill material
					2				
Bent. Chips					3			CL	**Lean Clay with Sand (CL)** - Dark brown, moist, medium plastic, stiff, hydrocarbon odor, lenses of olive green
#2/12 Sand		Moist	78.9	SV-3-S	4				
					5				Boring Terminated at 5' bgs.
					6				Groundwater Not Enountered
					7				Soil Sample SV-3-S collected at 13:25 7/7/2009
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No: **C101156203**
Logged By: **S. Meninger/C. Morgan**
Driller: **Gregg**
Drilling Method: **Hand Auger**
Sampling Method: **Hand Drive**
Casing Type: **N/A**
Slot Size: **N/A**
Gravel Pack: **3.5' - 5'**

Client: **ConocoPhillips**
Location: **Oakland, CA**
Date Drilled: **7/7/2009**
Hole Diameter: **3.5"**
Hole Depth: **5'**
Well Diameter: **N/A**
Well Depth: **N/A**
First Water Depth: **N/A**
Static Water Depth: **N/A**

Boring: SV-4

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt / Bent. Grout		Moist	14.8		1			CL	**Lean Clay (CL)** - Dark brown with black mottling, moist, stiff, medium plastic
					2				
Bent. Chips / #2/12 Sand		Moist	21.6		3			CL	**Sandy Lean Clay (CL)** - Dark olive green to black, moist, medium stiff, medium plastic, slight hydrocarbon odor
					4				
				SV-4-S	5			ML	**Clayey Silt (ML)** - light brown with black mottling, moist, very dense, non-plastic
					6				Boring Terminated at 5' bgs.
					7				Groundwater Not Enountered
					8				Soil Sample SV-4-S collected at 12:40 7/7/2009
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No: **C101156203**
Logged By: **S. Meninger/C. Morgan**
Driller: **Gregg**
Drilling Method: **Hand Auger**
Sampling Method: **Hand Drive**
Casing Type: **N/A**
Slot Size: **N/A**
Gravel Pack: **3.5' - 5'**

Client: **ConocoPhillips**
Location: **Oakland, CA**
Date Drilled: **7/7/2009**
Hole Diameter: **3.5"**
Hole Depth: **5'**
Well Diameter: **N/A**
Well Depth: **N/A**
First Water Depth: **N/A**
Static Water Depth: **N/A**

Boring: SV-5
Page 1 of 1

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt					1			GW	**Well-Graded Gravel with Sand (GW)** - light brown, dense, medium grained, moist, possible fill material
Bent. Grout		Moist	27.3		2				
Bent. Chips					3			CL	**Lean Clay (CL)** - Gray/black to olive green, moist, medium stiff, medium, plastic, hydrocarbon odor
#2/12 Sand		Moist	237	SV-5-S	4				
					5				Boring Terminated at 5' bgs.
					6				Groundwater Not Enountered
					7				Soil Sample SV-5-S collected at 11:00 7/7/2009
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No: **C101156203** | Client: **ConocoPhillips** | **Boring: SV-6**
Logged By: **S. Meninger/C. Morgan** | Location: **Oakland, CA** | Page 1 of 1
Driller: **Gregg** | Date Drilled: **7/7/2009**
Drilling Method: **Hand Auger** | Hole Diameter: **3.5"**
Sampling Method: **Hand Drive** | Hole Depth: **5'**
Casing Type: **N/A** | Well Diameter: **N/A**
Slot Size: **N/A** | Well Depth: **N/A**
Gravel Pack: **3.5' - 5'** | First Water Depth: **N/A**
Static Water Depth: **N/A**

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt / Bent. Grout		Moist			1			GW	**Well-Graded Gravel with Sand (GW)** - light brown, dense, medium grained, dry to moist, possible fill material
					2				
Bent. Chips / #2/12 Sand		Moist			3			CL	**Lean Clay with Sand (CL)** - light olive green, moist, soft to stiff, low plastic, strong hydrocarbon odor
					4				
				SV-6-S	5				Boring Terminated at 5' bgs.
					6				Groundwater Not Enountered
					7				Soil Sample SV-6-S collected at 9:45 7/7/2009
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No: **C101156203**
Logged By: **S. Meninger/C. Morgan**
Driller: **Gregg**
Drilling Method: **Hand Auger**
Sampling Method: **Hand Drive**
Casing Type: **N/A**
Slot Size: **N/A**
Gravel Pack: **3.5' - 5'**

Client: **ConocoPhillips**
Location: **Oakland, CA**
Date Drilled: **7/7/2009**
Hole Diameter: **3.5"**
Hole Depth: **5'**
Well Diameter: **N/A**
Well Depth: **N/A**
First Water Depth: **N/A**
Static Water Depth: **N/A**

Boring: SV-7
Page 1 of 1

Location Map

Well Completion (Backfill)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Asphalt / Bent. Grout		Moist	25.9		1–2			SM	**Gravelly Sand with Clay (SM)** - Brown to black, moist, medium dense to dense, medium grained gravel, possible fill material
Bent. Chips / #2/12 Sand		Moist	54.5	SV-7-S	3–5			CL	**Lean Clay (CL)** - Blue-gray to light olive green, moist, stiff, medium plastic, slight hydrocarbon odor
					5				Boring Terminated at 5' bgs.
					6				Groundwater Not Enountered
					7				Soil Sample SV-7-S collected at 11:30 7/7/2009
					8–22				

Delta
Consultants

Project No:	C101156	Client:	COP	Boring/Well No: **SVW-1**	
Logged By:	Alan Buehler	Location:	Oakland	Page 1 of 2	
Driller:	Gregg Drilling	Date Drilled:	8/9/2010		
Drilling Method:	Hand Auger	Hole Diameter:	36"		
Sampling Method:		Hole Depth:	5'		
Casing Type:	1/4" Tubing	Well Diameter:	1/4"		
Slot Size:		Well Depth:	5'		
Gravel Pack:	#30	▼ First Water Depth:			
		▽ Static Water Depth:			
Elevation:		Northing:		Easting:	

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
See Construction Detail					1–5			CL	Brown lean clay with sand and gravel, moist
								CH	Green/gray fat clay
									Total Depth = 5'

Delta
Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/9/2010
Drilling Method:	Hand Auger	Hole Diameter:	36"
Sampling Method:		Hole Depth:	5'
Casing Type:	1/4" Tubing	Well Diameter:	1/4"
Slot Size:		Well Depth:	5'
Gravel Pack:	#30	First Water Depth:	
		Static Water Depth:	
Elevation:		Northing:	Easting:

Boring/Well No: **SVW-2**

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
See Construction Detail					1–3			CL	Brown/green lean clay with sand and gravel, 20% sand, some gravel, cobbles, moist
					4–5			CH	Green/gray clay
									Total Depth = 5'
					6–22				

Delta
Consultants

Project No:	C101156	Client:	COP	Boring/Well No: **SVW-3**	
Logged By:	Alan Buehler	Location:	Oakland	Page 1 of 2	
Driller:	Gregg Drilling	Date Drilled:	8/9/2010		
Drilling Method:	Hand Auger	Hole Diameter:	36"		
Sampling Method:		Hole Depth:	5'		
Casing Type:	1/4" Tubing	Well Diameter:	1/4"		
Slot Size:		Well Depth:	5'		
Gravel Pack:	#30	▼ First Water Depth:			
		▽ Static Water Depth:			
Elevation:		Northing:		Easting:	

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
See Construction Detail					1–2			CL	Brown/green lean clay with sand and gravel, strong odor
					3–4			CH	Gray/green clay, strong odor
					5				Total Depth = 5'
					6				
					7				
					8				
					9				
					10				
					11				
					12				
					13				
					14				
					15				
					16				
					17				
					18				
					19				
					20				
					21				
					22				

Delta
Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/10/2010
Drilling Method:	Hand Auger	Hole Diameter:	36"
Sampling Method:		Hole Depth:	5'
Casing Type:	1/4" Tubing	Well Diameter:	1/4"
Slot Size:		Well Depth:	5'
Gravel Pack:	#30	▼ First Water Depth:	
		▽ Static Water Depth:	

Boring/Well No: **SVW-4**

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
See Construction Detail					1–3			CL	Dark brown/greenish lean clay with sand, strong odor
					3–5			CH	Green/brown clay, stong odor
					5				Total Depth = 5'
					6–22				

Delta
Consultants

Project No:	C101156	Client:	COP	Boring/Well No:	**SVW-5**
Logged By:	Alan Buehler	Location:	Oakland	Page 1 of	2
Driller:	Gregg Drilling	Date Drilled:	8/9/2010		
Drilling Method:	Hand Auger	Hole Diameter:	36"		
Sampling Method:		Hole Depth:	5'		
Casing Type:	1/4" Tubing	Well Diameter:	1/4"		
Slot Size:		Well Depth:	5'		
Gravel Pack:	#30	▼ First Water Depth:			
		▽ Static Water Depth:			
Elevation:		Northing:		Easting:	

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
See Construction Detail					1–2			CL	Green/gray/black lean clay with sand, some gravel, wood debris, strong odor
					3–4			CH	Greenish gray clay, strong odor
					5				Total Depth = 5'
					6–22				

Delta
Consultants

Project No:	C101156	Client:	COP
Logged By:	Alan Buehler	Location:	Oakland
Driller:	Gregg Drilling	Date Drilled:	8/9/2010
Drilling Method:	Hand Auger	Hole Diameter:	36"
Sampling Method:		Hole Depth:	5'
Casing Type:	1/4" Tubing	Well Diameter:	1/4"
Slot Size:		Well Depth:	5'
Gravel Pack:	#30	▼ First Water Depth:	
		▽ Static Water Depth:	

Boring/Well No: **SVW-6**

Elevation: Northing: Easting:

Well Completion (Backfill / Casing)	Water Level	Moisture Content	PID Reading (ppm)	Sample Identification	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
See Construction Detail					1–3			CL	Green/gray lean clay with sand, some gravel, some odor, asphault debris
					4–5			CH	Green/brown clay, strong odor
									Total Depth = 5'
					6–22				

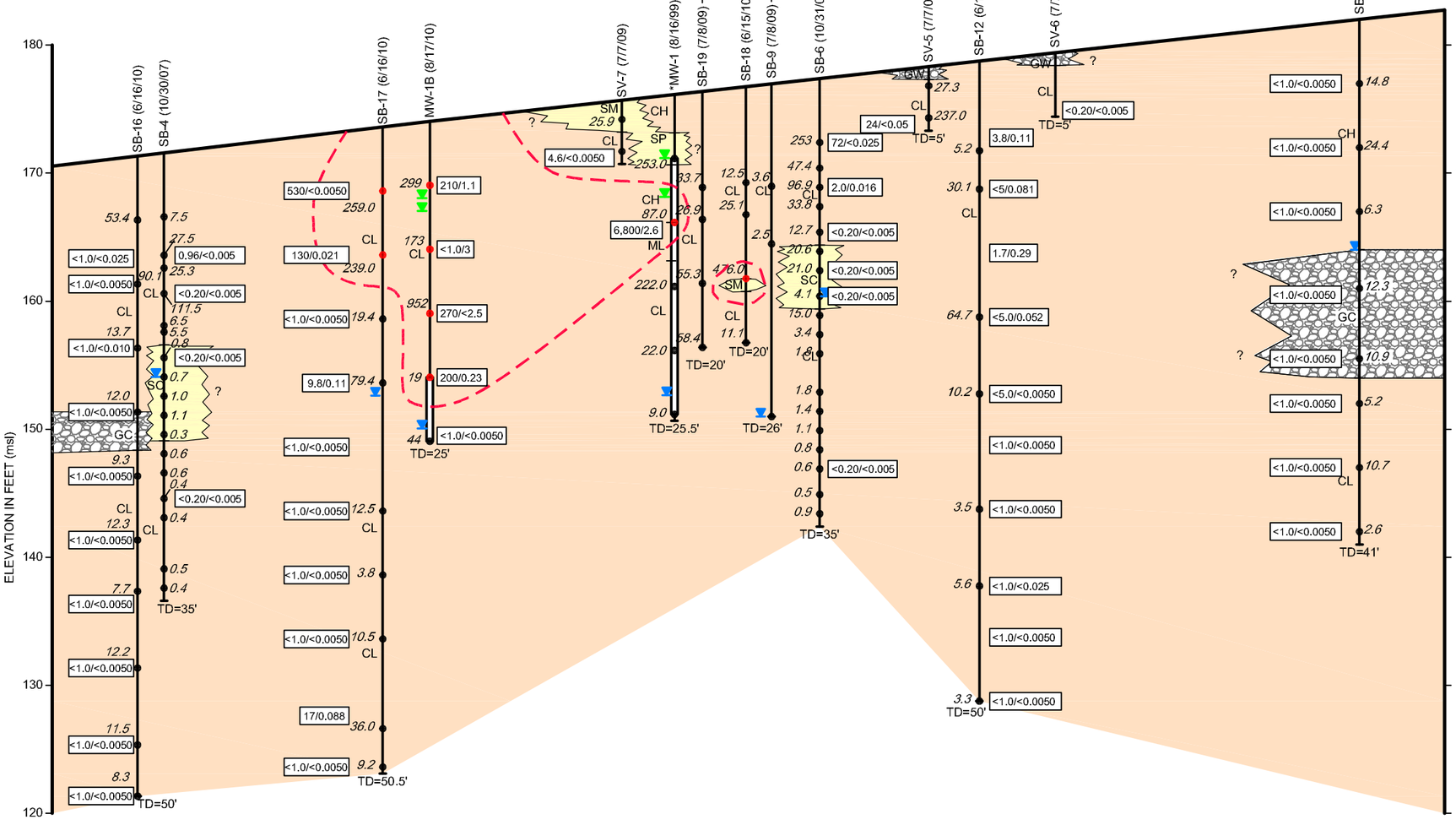
Attachment C

Cross Sections

SB-18		
DEPTH	TPHg	BENZENE
7.5	<1.0	<0.0050
10	2.6	<0.0050
15	<1.0	5
20	<1.0	<0.0050

SB-19		
DEPTH	TPHg	BENZENE
7.5	1.5	<0.050
10	1.6	<0.050
15	<1.0	<0.0050
20	<1.0	<0.0050

SB-9		
DEPTH	TPHg	BENZENE
15.5	<0.20	<0.005
26	<0.20	<0.005

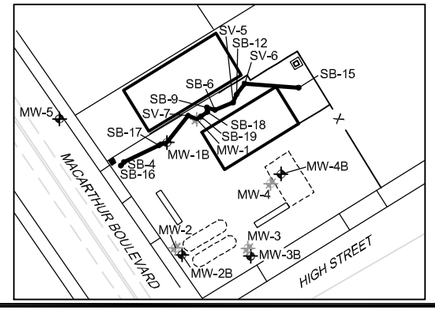


LEGEND

- SB-15 (6/18/10) — WELL ID (DATE DRILLED)
- 14.8 — PHOTOIONIZATION DETECTOR (PID) READING ONLY (parts per million)
- TPHg CONCENTRATION > 100 mg/kg AND/OR BENZENE CONCENTRATION > 1.1 mg/kg
- SCREEN INTERVAL
- GROUNDWATER ENCOUNTERED DURING DRILLING
- HISTORIC HIGH/LOW GROUNDWATER LEVEL
- TD=41' — TOTAL DEPTH (below ground surface)
- * — ABANDONED
- TPH-g / B — BENZENE; TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- ALL CONCENTRATION IN MILLIGRAMS PER KILOGRAM
- EXTENT OF TPH OVER 100 mg/kg BENZENE OVER 1.1 mg/kg
- GRAVELS (GW, GC)
- SAND (SC, SM, SP)
- FINES (CL, CH, ML)

NOTE

ELEVATION APPROXIMATE, ELEVATION WAS DETERMINED BY USING THE MW-5, MW-2 MIDPOINT; MW-1, MW-1B EXACT ELEVATIONS; AND CHANGE IN ELEVATION BASED ON GOOGLE EARTH ELEVATIONS.



10' / 5' / 0' — 0' 5' 10' 15'

REVISIONS			
NO.:	DESCRIPTION:	DATE:	BY:

DESIGNED BY:	DRAWN BY:	CHECKED BY:	APPROVED BY:
E. Nelson	M. Scop	E. Nelson	B. Evans

AECOM
1220 AVENIDA ACASO
CAMARILLO, CALIFORNIA 93012
PHONE: (805) 388-3775
FAX: (805) 388-3577

CROSS SECTION

Chevron Site #351645 (76 Service Station #1156)
4276 MacArthur Boulevard
Oakland, California

SCALE:	DATE:	PROJECT NUMBER:
AS NOTED	4/27/2012	60249149 - A50

FIGURE NUMBER: X

SHEET NUMBER: X

FILENAME: J:\Client--Projects\76_Products\351645--Oakland\7.0_Deliverables\7.2_CADD--Graphics\cross section\cross section.dwg

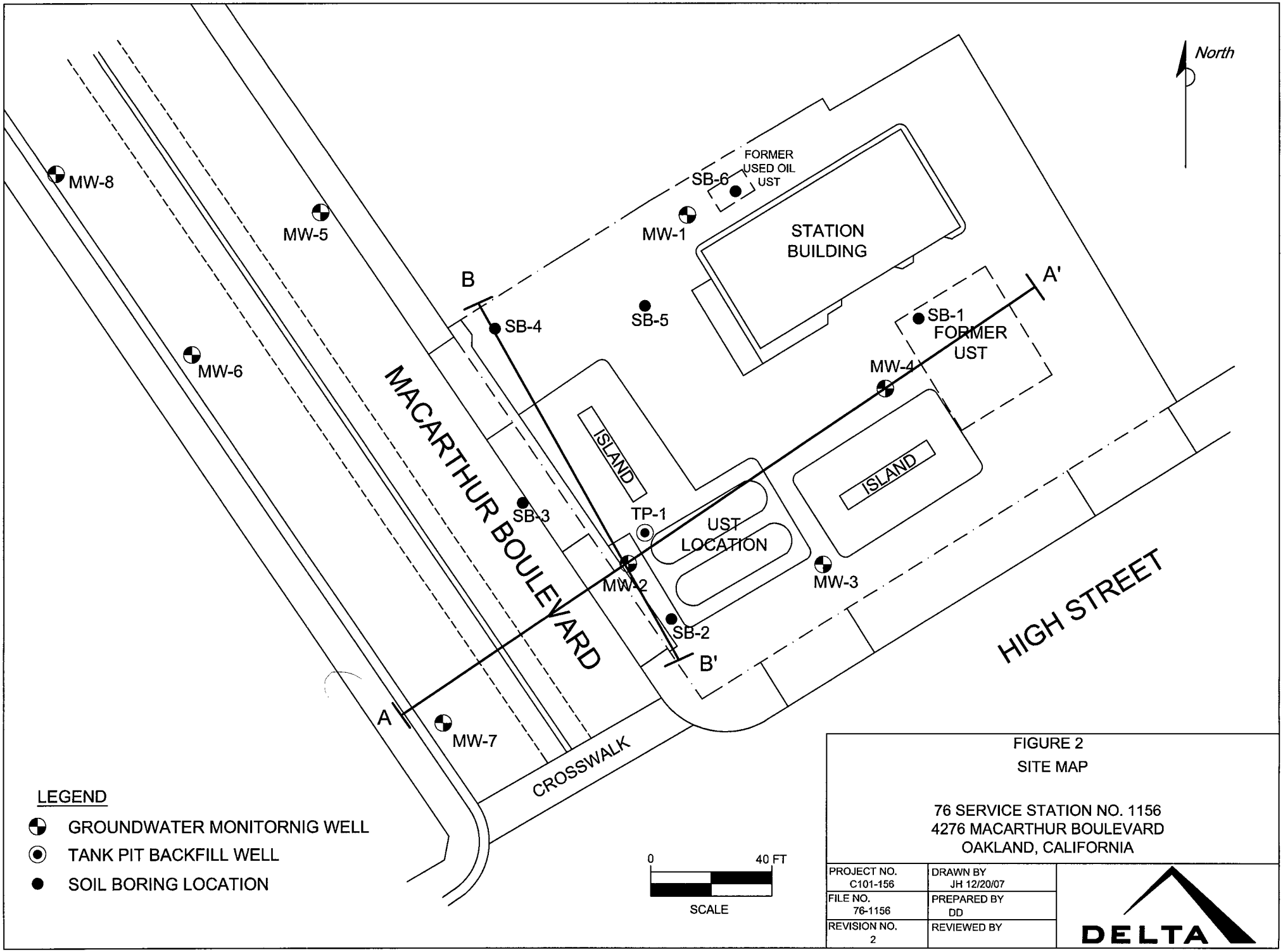
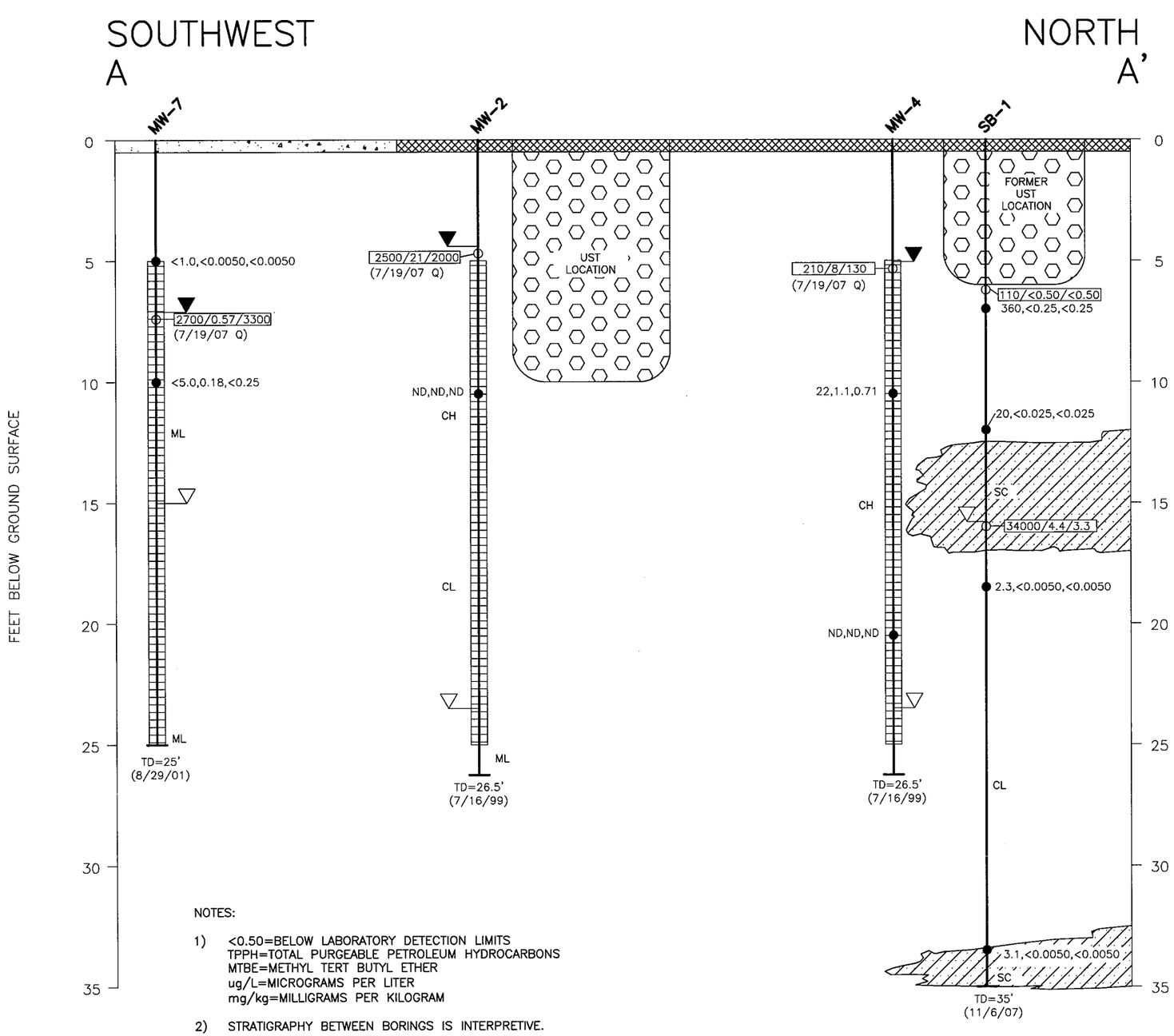


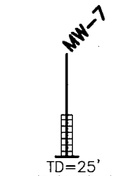
FIGURE 2
SITE MAP

76 SERVICE STATION NO. 1156
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO. C101-156	DRAWN BY JH 12/20/07
FILE NO. 76-1156	PREPARED BY DD
REVISION NO. 2	REVIEWED BY

DELTA





LEGEND

- MONITORING WELL/SOIL BORING
- WELL CASING/EXPLORATORY BORING
- WELL SCREEN
- TOTAL DEPTH (DRILLING DATE)
- DEPTH TO FIRST WATER
- DEPTH TO GROUNDWATER (STATIC)
- 1000,70,2 — SOIL SAMPLE LOCATION WITH ANALYTICAL DATA: TPPH, BENZENE, MTBE (mg/kg)
- 200/29/14 — GROUNDWATER SAMPLE LOCATION WITH ANALYTICAL DATA: TPPH, BENZENE, MTBE (ug/L)
- (7/19/07 Q) — MONITORING WELL GROUNDWATER SAMPLE DATE Q=QUARTERLY SAMPLE
- ASPHALT
- CONCRETE
- CLAY AND/OR SILT (CH,CL,ML)
- SAND WITH CLAY (SC)
- UST FILL MATERIAL
- APPROXIMATE STRATIGRAPHIC BOUNDARY

NOTES:

1) <0.50=BELOW LABORATORY DETECTION LIMITS
TPPH=TOTAL PURGEABLE PETROLEUM HYDROCARBONS
MTBE=METHYL TERT BUTYL ETHER
ug/L=MICROGRAMS PER LITER
mg/kg=MILLIGRAMS PER KILOGRAM

2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.

3) GROUNDWATER SAMPLES FROM BORINGS WERE COLLECTED ON THE DRILLING DATE.

4) DEPTH TO FIRST WATER IN WELLS WAS MEASURED ON THE DRILLING DATE. DEPTH TO STATIC WATER IN WELLS MEASURED DURING MOST RECENT QUARTERLY SAMPLING EVENT.

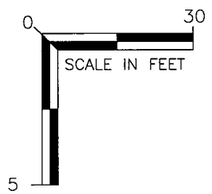
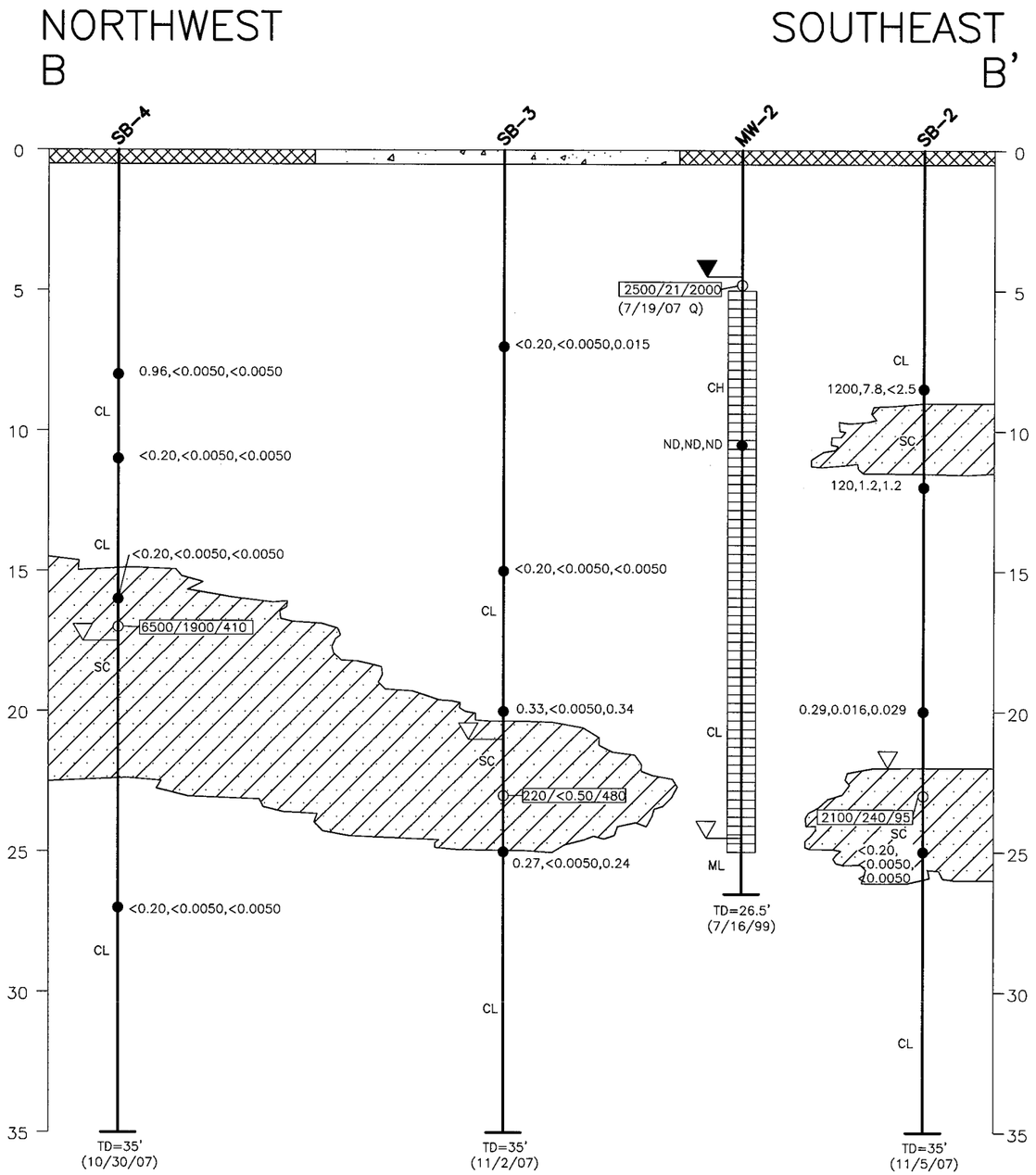


FIGURE 3
GEOLOGIC CROSS SECTION A–A'

76 SERVICE STATION 1156
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
C101156	MH	JH
DATE	REVIEWED BY	FILE NAME
12/26/07		1156-CrosA

DELTA



LEGEND

MW-2
TD=25'
(9/12/84)

MONITORING WELL/SOIL BORING

WELL CASING/EXPLORATORY BORING

WELL SCREEN

TOTAL DEPTH
(DRILLING DATE)

DEPTH TO FIRST WATER

DEPTH TO GROUNDWATER (STATIC)

1000,70,2

SOIL SAMPLE LOCATION WITH
ANALYTICAL DATA: TPPH, BENZENE, MTBE (mg/kg)

200/29/14

GROUNDWATER SAMPLE LOCATION WITH
ANALYTICAL DATA: TPPH, BENZENE, MTBE (ug/L)

(7/19/07 Q)

MONITORING WELL GROUNDWATER SAMPLE DATE
Q=QUARTERLY SAMPLE

ASPHALT

CONCRETE

CLAY AND/OR SILT (CH,CL,ML)

SAND WITH CLAY (SC)

APPROXIMATE STRATIGRAPHIC BOUNDARY

NOTES:

1) <0.50=BELOW LABORATORY REPORTING LIMITS
TPPH=TOTAL PURGEABLE PETROLEUM HYDROCARBONS
MTBE=METHYL TERT BUTYL ETHER
ug/L=MICROGRAMS PER LITER
mg/kg=MILLIGRAMS PER KILOGRAM

2) STRATIGRAPHY BETWEEN BORINGS IS INTERPRETIVE.

3) GROUNDWATER SAMPLES FROM BORINGS WERE COLLECTED ON THE DRILLING DATE.

4) DEPTH TO FIRST WATER IN WELLS WAS MEASURED ON THE DRILLING DATE. DEPTH TO STATIC WATER IN WELLS MEASURED DURING MOST RECENT QUARTERLY SAMPLING EVENT.

0 20
SCALE IN FEET
5

FIGURE 4
GEOLOGIC CROSS SECTION B–B'

76 SERVICE STATION 1156
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

PROJECT NO.	PREPARED BY	DRAWN BY
C101156	MH	JH
DATE	REVIEWED BY	FILE NAME
12/26/07		1156-CrosB

DELTA

Attachment D

Historical Data Tables

TABLE 1

Soil Analytical Results - 1998 through 2009

76 Service Station No. 1156

4276 MacArthur Boulevard, Oakland, California

	Sample ID	Date	Sample Depth (feet)	TPH-G (mg/kg)	TPH-D (mg/kg)	Total Oil & Grease (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	DIPE (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)
Soil																		
Environmental Resolutions, Inc.	S-6-T1N	3/23/98	6	**1,200**	--	--	**0.90**	ND	**14**	**100**	--	--	--	--	--	--	--	--
	S-9.5-T1S	3/23/98	9.5	**590**	--	--	**1.5**	ND	**5.6**	**33**	--	--	--	--	--	--	--	--
	S-7-T2S	3/23/98	7	**670**	--	--	**1.0**	**0.74**	**6.8**	**51**	--	--	--	--	--	--	--	--
	S-6-T2N	3/23/98	6	**83**	--	--	ND	ND	**0.15**	**0.41**	--	--	--	--	--	--	--	--
	~~S-6.5-T35*~~	~~3/23/98~~	~~6.5~~	~~130~~	~~78,000~~	~~—~~	~~0.55~~	~~1.3~~	~~1.2~~	~~11~~	--	--	--	--	--	--	--	--
	S-2-D1	4/9/98	2	ND	--	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--
	S-3-D2	4/9/98	3	**16**	--	--	ND	ND	ND	**0.13**	--	--	--	--	--	--	--	--
	S-3-D3	4/9/98	3	**590**	--	--	**1.6**	**15**	**18**	**99**	--	--	--	--	--	--	--	--
	S-3-D4	4/9/98	3	ND	--	--	ND	ND	ND	**0.07**	--	--	--	--	--	--	--	--
	S-3-PL1	4/9/98	3	**160**	--	--	ND	ND	ND	**8.4**	--	--	--	--	--	--	--	--
	S-3.5-PL2	4/9/98	3.5	**63**	--	--	ND	ND	ND	**0.45**	--	--	--	--	--	--	--	--
	S-4.5-T3W	4/9/98	4.5	**5.0**	**2.3**	--	ND	**0.066**	ND	**0.011**	--	--	--	--	--	--	--	--
	S-3-T3S	4/9/98	3	**1.6**	ND	--	**0.043**	**ND**	**0.0091**	ND	--	--	--	--	--	--	--	--
	S-6-T3S	4/9/98	6	**81**	**560**	--	**0.64**	**1.4**	**1.1**	**5.9**	--	--	--	--	--	--	--	--
	S-10.5-B1 (MW-1)	7/16/99	10.5	**6,800**	--	--	**2.6**	**25**	**110**	**470**	ND	--	--	--	--	--	--	--
	S-10.5-B2 (MW-2)	7/16/99	10.5	ND	--	--	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
	S-10.5-B3 (MW-3)	7/16/99	10.5	**16**	--	--	**0.32**	**0.43**	**0.28**	**1.8**	**0.60**	--	--	--	--	--	--	--
	S-10.5-B4 (MW-4)	7/16/99	10.5	**22**	--	--	**1.1**	**0.32**	**0.46**	**1.3**	**0.71**	--	--	--	--	--	--	--
	S-20.5-B4 (MW-4)	7/16/99	20.5	ND	--	--	ND	ND	**0.0069**	ND	ND	--	--	--	--	--	--	--
	S-5-MW5	8/29/01	5	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--
	S-5-MW6	8/29/01	5	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--
	S-5-MW7	8/29/01	5	<1.0	--	--	<0.005	<0.005	<0.005	<0.005	<0.005	--	--	--	--	--	--	--
	S-10-MW7	8/29/01	10	<5.0	--	--	**0.18**	<0.025	**0.085**	**0.234**	<0.25	--	--	--	--	--	--	--
Delta Consultants	MW-8-10	10/30/07	10	<0.20	--	**220**	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	MW-8-15	10/30/07	15	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	MW-8-20	10/30/07	20	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-1-7	11/6/07	7	**360**	--	<50	<0.25	<0.25	**4.2**	**17**	<0.25	--	--	--	--	--	--	--
	SB-1-12	11/6/07	12	**20**	--	<50	<0.025	<0.025	**1.7**	**2.2**	<0.025	--	--	--	--	--	--	--
	SB-1-18.5	11/6/07	8.5	**2.3**	--	<50	<0.005	<0.005	**0.067**	**0.30**	<0.005	--	--	--	--	--	--	--
	SB-1-33.5	11/6/07	33.5	**3.1**	--	<50	<0.005	**0.012**	**0.26**	**0.14**	<0.005	--	--	--	--	--	--	--
	SB-2-8.5	11/5/07	8.5	**1,200**	--	<50	**7.8**	**51**	**24**	**120**	<2.5	--	--	--	--	--	--	--
	SB-2-12	11/5/07	12	**120**	--	<50	**1.2**	<0.25	**2.3**	**12**	**1.2**	--	--	--	--	--	--	--
	SB-2-20	11/5/07	20	**0.29**	--	<50	**0.016**	**0.011**	**0.0079**	**0.029**	**0.029**	--	--	--	--	--	--	--
	SB-2-25	11/5/07	25	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-3-7	11/2/07	7	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	**0.015**	--	--	--	--	--	--	--
	SB-3-15	11/2/07	15	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-3-20	11/2/07	20	**0.33**	--	<50	<0.005	<0.005	<0.005	<0.01	**0.34**	--	--	--	--	--	--	--
	SB-3-25	11/2/07	25	**0.27**	--	<50	<0.005	<0.005	<0.005	<0.01	**0.24**	--	--	--	--	--	--	--
	SB-4-8	10/30/07	8	**0.96**	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-4-11	10/30/07	11	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-4-16	10/30/07	16	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-4-27	10/30/07	27	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-5-7	11/1/07	7	**150**	--	<50	**0.28**	**0.31**	**1.7**	**8.6**	<0.12	--	--	--	--	--	--	--
	SB-5-12	11/1/07	12	**6.0**	--	<50	<0.025	<0.025	<0.025	<0.05	<0.025	--	--	--	--	--	--	--
	SB-5-17	11/1/07	17	**1,700**	--	<50	**3.0**	**13**	**28**	**99**	<1.0	--	--	--	--	--	--	--
	SB-5-22	11/1/07	22	<0.20	--	<50	**0.009**	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-5-30	11/1/07	30	<0.20	--	<50	**0.0087**	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-6-5	10/31/07	5	**72**	--	<50	<0.025	<0.025	**0.047**	<0.01	<0.025	--	--	--	--	--	--	--
	SB-6-8.5	10/31/07	8.5	**2.0**	--	<50	**0.016**	<0.005	**0.016**	<0.01	**0.016**	--	--	--	--	--	--	--
	SB-6-12	10/31/07	12	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	**0.016**	--	--	--	--	--	--	--
	SB-6-15	10/31/07	15	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	**0.029**	--	--	--	--	--	--	--
	SB-6-17	10/31/07	17	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--
	SB-6-30.5	10/31/07	30.5	<0.20	--	<50	<0.005	<0.005	<0.005	<0.01	<0.005	--	--	--	--	--	--	--

TABLE 1

Soil Analytical Results - 1998 through 2009

76 Service Station No. 1156

4276 MacArthur Boulevard, Oakland, California

	Sample ID	Date	Sample Depth (feet)	TPH-G (mg/kg)	TPH-D (mg/kg)	Total Oil & Grease (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	TBA (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	DIPE (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)
Soil																		
Delta Consultants	SV-1-S	7/7/09	4.5	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SV-2-S	7/7/09	3	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	<0.005	<0.5	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SV-3-S	7/7/09	4.5	**17**	--	--	<0.025	<0.025	<0.025	**0.15**	<0.025	<0.25	<0.025	<0.025	<0.025	<0.025	<0.005	<5.0
	SV-4-S	7/7/09	4.5	**0.23**	--	--	**0.027**	<0.005	<0.005	<0.01	**0.02**	**0.16**	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SV-5-S	7/7/09	4.5	**24**	--	--	<0.05	<0.05	<0.05	**0.15**	<0.05	<0.5	<0.50	<0.50	<0.50	<0.50	<0.005	<10
	SV-6-S	7/7/09	4.5	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SV-7-S	7/7/09	4.5	**4.6**	--	--	<0.005	<0.005	<0.005	<1.0	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-7 @ 7.5-8	7/9/09	7.5-8	**260**	--	--	<0.50	<0.50	**5.7**	**32**	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.005	<100
	SB-7 @ 15.5-16	7/9/09	15.5-16	**1.3**	--	--	**0.008**	<0.005	<0.005	**0.023**	**0.0085**	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-7 @ 23-23.5	7/9/09	23-23.5	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-8 @ 7.0-7.5	7/10/09	7.0-7.5	**760**	--	--	<0.50	<0.50	**7.7**	<1.0	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.005	<250
	SB-9 @ 15.5-16	7/8/09	15.5-16	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	**0.019**	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-9 @ 26	7/8/09	26	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-10 @ 12-12.5	7/10/09	12-12.5	**400**	--	--	<0.50	<0.50	**6.1**	**46**	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.005	<100
	SB-10 @ 18-18.5	7/10/09	18-18.5	**290**	--	--	<0.50	<0.50	**5**	**34**	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<0.005	<100
	SB-10 @ 22.5-23	7/10/09	22.5-23	**0.78**	--	--	<0.005	<0.005	<0.005	**0.056**	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-11 @ 7.5-8	7/10/09	7.5-8	**41**	--	--	<0.05	<0.50	**0.5**	**0.77**	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.005	<10
	SB-11 @ 15.5-16	7/10/09	15.5-16	**200**	--	--	**0.26**	**0.0094**	<0.005	**0.015**	<0.005	<0.50	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0
	SB-11 @ 41-41.5	7/10/09	41-41.5	<0.20	--	--	<0.005	<0.005	<0.005	<0.01	<0.005	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<1.0

TPH-G = total purgeable petroleum hydrocarbons as gasoline by EPA Method 8260B
TPH-D = total purgeable petroleum hydrocarbons as diesel by EPA Method 8015M
TOG = total oil and grease by EPA Method 1664
BTEX = benzene, toluene, ethylbenzene, total xylenes by EPA Method 8260B
MTBE = methyl tertiary butyl ether by EPA Method 8260B
TBA = tertiary butyl alcohol by EPA Method 8260B
ETBE = ethyl tertiary butyl ether by EPA Method 8260B
TAME = tertiary amyl methyl ether by EPA Method 8260B
DIPE = di-isopropyl ether by EPA Method 8260B

1,2-DCA = 1,2-Dichloroethane (also known as ethylene dichloride) by EPA Method 8260B
EDB = ethylene dibromide (also known as 1,2-Dibromoethane) by EPA method 8260B
Ethanol was analyzed by EPA Method 8260B
mg/kg = milligrams per kilogram
ND = not detected above the laboratory detection limit
Bold = detected compound concentration
EPA = US Environmental Protection Agency
* = Overexcavated on April 9, 1989

Table 2a

Soil Analytical Results - August 2010

76 Service Station No. 1156

4276 MacArthur Boulevard

Oakland, California

Boring	Depth (ft)	Date	TPHg (8015M) (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	Ethanol (mg/kg)
SB-12	6	6/15/2010	**3.8**	<2.0	**28**	**0.11**	<0.0050	**0.37**	**0.44**	<0.0050	<0.0050	<0.0050	<0.0050	**0.11**	<0.0050	<0.0050	<1.0
	10	6/15/2010	<5	<2.0	<10	**0.081**	<0.0050	**0.43**	**0.5**	<0.0050	<0.0050	<0.0050	<0.0050	**0.091**	<0.0050	<0.0050	<1.0
	15	6/15/2010	**1.7**	<100	**830**	**0.29**	<0.0050	**0.45**	**0.58**	<0.0050	<0.0050	<0.0050	<0.0050	**0.062**	<0.0050	<0.0050	<1.0
	20	6/15/2010	<5.0	<2.0	**11**	**0.052**	<0.0050	**0.41**	**0.72**	<0.0050	<0.0050	<0.0050	<0.0050	**0.05**	<0.0050	<0.0050	<1.0
	26	6/15/2010	<5.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	30	6/15/2010	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	35	6/15/2010	<1.0	<2.0	<10	<0.0050	<0.0050	**0.0068**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	41	6/15/2010	<1.0	<2.0	**12**	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<5.0
	45	6/15/2010	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	50	6/15/2010	<1.0	<2.0	**24**	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
SB-13	6	6/18/10	**680**	**76**	<100	<0.50	<0.50	**4.4**	<1.0	<0.50	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<100
SB-14	8	6/17/10	**9.9**	<2.0	<10	**0.073**	**0.26**	**1.7**	**8**	**0.0088**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	6/17/10	35	<2.0	<10	**0.28**	**0.21**	**1.7**	**7.9**	**0.033**	<0.0050	<0.0050	<0.0050	**0.093**	<0.0050	<0.0050	<1.0
	15	6/17/10	<1.0	<10	**100**	**0.097**	<0.0050	**0.031**	**0.051**	**0.031**	<0.0050	<0.0050	<0.0050	**0.081**	<0.0050	<0.0050	<1.0
	20	6/17/10	<1.0	<2.0	**17**	**0.0064**	**0.0099**	**0.05**	**0.24**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	26	6/17/10	<1.0	<2.0	**31**	**0.0076**	**0.012**	**0.085**	**0.36**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	30	6/17/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	35	6/17/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	40	6/17/10	<1.0	<2.0	**19**	<0.0050	<0.0050	**0.014**	**0.079**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	45	6/17/10	**6.8**	<2.0	**20**	**0.018**	<0.0050	**0.27**	**1**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	50	6/17/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
SB-15	5	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	15	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	21.5	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	26.5	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	30	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	35	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	40	6/18/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
SB-16	8	6/16/10	<1.0	<2.0	<10	<0.025	<0.025	<0.025	<0.050	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<5.0
	10	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	15	6/16/10	<1.0	<99	<500	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010	<2.0
	20	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	25	6/16/10	<1.0	<2.0	**30**	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	30	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	**0.041**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	35	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	40	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	46	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	50	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
SB-17	5	6/16/10	**530**	<2.0	**40**	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	6/16/10	**130**	<2.0	<10	**0.021**	<0.0050	0.0081	<0.010	**0.024**	<0.0050	<0.0050	<0.0050	**0.17**	<0.0050	<0.0050	<1.0
	15	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	**0.13**	<0.0050	<0.0050	<1.0
	20	6/16/10	**9.8**	<2.0	**130**	**0.11**	**0.0093**	**0.5**	**0.058**	**0.011**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	25	6/16/10	<1.0	<20	<100	<0.0050	<0.0050	**0.031**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	30	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	35	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	40	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	47	6/16/10	**17**	<2.0	<10	**0.088**	<0.050	**0.49**	<0.10	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<10
	50	6/16/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0

Table 2a

Soil Analytical Results - August 2010

76 Service Station No. 1156
4276 MacArthur Boulevard
Oakland, California

Boring	Depth (ft)	Date	TPHg (8015M) (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	EDB (mg/kg)	1,2-DCA (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	Ethanol (mg/kg)
SB-18	7.5	6/15/10	<1.0	<200	<1000	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	6/15/10	**2.6**	<2.0	<10	<0.0050	<0.050	**0.081**	<0.10	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<10
	15	6/15/10	<1.0	**6.7**	<10	**5**	**25**	**51**	**210**	<0.25	<0.25	<0.25	<0.25	<2.5	<0.25	<0.25	<50
	20	6/15/10	<1.0	<2.0	<10	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
SB-19	7.5	6/15/10	**1.5**	<2.0	<10	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<10
	10	6/15/10	**1.6**	<2.0	<10	<0.050	<0.050	<0.050	<0.10	<0.050	<0.050	<0.050	<0.050	<0.50	<0.050	<0.050	<10
	15	6/15/10	<1.0	<2.0	**39**	<0.0050	<0.0050	<0.0050	<0.010	**0.017**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	20	6/15/10	<1.0	<2.0	**11**	<0.0050	<0.0050	<0.0050	<0.010	**0.013**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
MW-1B	5	8/17/2010	**210**	**31**	--	**1.1**	**0.054**	**4.5**	**0.48**	<0.0050	<0.0050	**0.031**	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	8/17/2010	<1.0	**2.7**	--	**3**	**9.8**	**57**	**220**	**0.3**	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<500
	15	8/17/2010	**270**	**110**	--	<2.5	**6.2**	**38**	**150**	<2.5	<2.5	<2.5	<2.5	<25	<2.5	<2.5	<500
	20	8/17/2010	**200**	<200	--	**0.23**	**0.15**	**2.4**	**0.88**	**0.061**	<0.010	<0.010	<0.010	<0.10	<0.010	<0.010	<2.0
	25	8/17/2010	<1.0	<2.0	--	<0.0050	**0.0085**	**0.012**	**0.056**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
MW-2B	5	8/16/2010	<1.0	<200	--	**0.009**	<0.0050	**0.011**	**0.12**	**0.03**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	8/16/2010	**54**	<2.0	--	<0.0050	**0.02**	**0.28**	**0.84**	**0.0085**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	15	8/16/2010	**55**	<200	--	<0.0050	<0.0050	**0.32**	**0.69**	**0.25**	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	20	8/16/2010	**4.4**	<1200	--	**0.076**	**0.18**	**1.1**	**3.3**	**0.099**	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<5
	25	8/16/2010	<1.0	**2**	--	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
MW-3B	5	8/16/2010	<1.0	<20	--	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	8/16/2010	**1.3**	<20	--	**0.018**	**0.075**	**0.1**	**0.54**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	15	8/16/2010	**310**	**150**	--	<5	**20**	**33**	**180**	<5	<5	<5	<5	<50	<5	<5	<1000
	20	8/16/2010	<1.0	<20	--	<0.12	**0.46**	**0.38**	**2**	<0.12	<0.12	<0.12	<0.12	<1.2	<0.12	<0.12	<25
	25	8/16/2010	**4.6**	<2.0	--	<0.0050	**0.042**	**0.061**	**0.37**	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
MW-4B	5	8/13/2010	<1.0	<20	--	<0.0050	<0.0050	**0.025**	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.050	<0.0050	<0.0050	<1.0
	10	8/13/2010	**15**	**27**	<10	<0.025	<0.025	**0.43**	**0.15**	<0.025	<0.025	<0.025	<0.025	<0.25	<0.025	<0.025	<5
	15	8/13/2010	**840**	**15**	--	<0.50	**0.89**	**41**	**170**	<0.50	<0.50	<0.50	<0.50	<5	<0.50	<0.50	100
	20	8/13/2010	**1.1**	<2.0	--	<0.50	<0.50	**0.76**	**4.3**	<0.50	<0.50	<0.50	<0.50	<5	<0.50	<0.50	100
	25	8/13/2010	**150**	**4.4**	--	<0.12	<0.12	**0.39**	**2.4**	<0.12	<0.12	<0.12	<0.12	<1.2	<0.12	<0.12	<25

TPHg = total petroleum hydrocarbons as gaoline TPHd = total petroleum hydrocarbons as diesel TPHmo = total petroleum hydrocarbons as motor oil EDB = ethylene dibromide 1,2-DCA = 1,2 dichloroethane
MTBE = mety; tert butyl ether TAME = tert amyl methyl ether TBA = tert butyl alcohol DIPE = diisopropyl ether ETBE = ethyl tert butyl ether ug/L = micrograms per liter bold = above laboratory reporting limits

Table 2b

Additional Soil Analytical Results - August 2010

76 Service Station No. 1156
4276 MacArthur Boulevard
Oakland, California

Boring	Depth (ft)	Date	TPHln mg/kg	TPHag mg/kg	TPHss mg/kg	TPHhn mg/kg	TPHg (8260B) mg/kg	TPHjf4 mg/kg	TPHjf5 mg/kg	TPHjf8 mg/kg	TPHk mg/kg	TPHfo mg/kg	TPHco mg/kg	TPHwd40 mg/kg	TOG mg/kg
SB-13	6	6/18/10	<200	<200	<100	<50	<100	<20	<20	<20	<20	<20	<100	<20	**140**
SB-18	15	6/14/10	<20	<20	<10	<5	<10	<20	<20	<20	<20	<20	<10	<20	<50
MW-4B	10	8/13/10	--	--	--	--	--	--	--	--	--	--	--	--	<50

TPHln = total petroleum hydrocarbons as light naptha TPHag = TPH as aviation gas TPHss = TPH as stoddard solvent TPHhn = TPH as heavy naptha TPHg = TPH as gasoline TPHjf4 = TPH as JP4 jet fuel
TPHjf5 = TPH as JP5 jet fuel TPHjf8 = TPH as JP8 jet fuel TPHk = TPH as kerosene TPHfo = TPH as fuel oil TPHco = TPH as crude oil TPHwd40 = TPH as WD-40 TOG = total oil and grease

Table 3
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-1	7/20/1999	174.86	7.50	0	167.36	--	16,000	120,000	--	11,000	27,000	3,300	18,000	
	9/28/1999	174.86	8.75	0	166.11	--	2,410	6,020	--	1,030	1,040	68.5	412	
	1/7/2000	174.86	9.05	0.02	165.82	--	7,870	72,700	--	7,410	13,900	2,070	9,620	GWE corrected
	3/31/2000	174.86	7.18	0	167.68	--	3,600	92,000	--	10,000	23,000	3,200	14,000	
	7/14/2000	174.86	7.68	0	167.18	--	8,580	108,000	--	8,250	18,700	3,750	17,800	
	10/3/2000	174.86	7.99	0	166.87	--	9,260	96,000	--	8,760	20,000	3,350	15,600	
	1/3/2001	174.86	9.18	0	165.68	--	11,000	37,000	--	5,800	13,000	1,700	8,100	
	4/4/2001	174.86	8.05	0	166.81	--	14,000	86,900	--	7,780	18,500	2,470	11,800	
	7/17/2001	174.86	7.01	0	167.85	--	2,200	79,000	--	5,600	11,000	2,800	12,000	
	10/3/2001	177.54	7.89	0	169.65	--	--	99,000	--	8,200	18,000	3,000	16,000	
	10/5/2001	177.54	7.91	0	169.63	--	13,000	--	--	--	--	--	--	
	1/28/2002	177.54	5.98	0	171.56	--	4,400	110,000	--	8,900	19,000	2,600	12,000	
	4/25/2002	177.54	6.19	0	171.35	--	9,000	93,000	--	8,100	18,000	3,000	15,000	
	7/18/2002	177.54	6.99	0	170.55	--	9,200	69,000	--	5,400	10,000	2,100	10,000	
	10/7/2002	177.54	7.73	0	169.81	--	3,400	82,000	--	9,200	20,000	2,600	13,000	
	1/6/2003	177.54	5.48	0	172.06	--	5,100	82,000	--	6,500	18,000	2,700	11,000	
	4/7/2003	177.54	6.30	0	171.24	--	2,800	74,000	--	7,000	15,000	2,400	11,000	
	7/7/2003	177.54	6.47	0	171.07	--	7,000	60,000	--	6,400	11,000	2,600	11,000	
	10/9/2003	177.54	7.85	0	169.69	--	4,300	91,000	81,000	8,100	17,000	3,200	14,000	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	177.54	6.69	0	170.85	--	6,200	98,000	--	8,000	21,000	2,600	15,000	
	4/28/2004	177.54	6.43	0	171.11	--	--	93,000	--	9,000	20,000	1,300	10,000	
	7/12/2004	177.54	7.44	0	170.10	--	270	57,000	--	6,900	7,200	1,600	580	
	10/25/2004	177.54	7.54	0	170.00	--	5,100	66,000	--	7,300	19,000	2,700	14,000	
	1/17/2005	177.54	5.79	0	171.75	--	6,400	86,000	--	8,600	21,000	3,200	15,000	
	4/6/2005	177.54	4.93	0	172.61	--	2,800	85,000	--	8,400	20,000	3,200	16,000	
	7/8/2005	177.54	5.35	0	172.19	--	6,400	69,000	--	7,100	17,000	2,700	14,000	
	10/7/2005	177.54	5.96	0	171.58	--	5,500	68,000	--	5,900	8,300	1,800	8,300	
	1/27/2006	177.54	5.08	0	172.46	--	9,000	94,000	--	7,400	19,000	3,700	14,000	
	4/28/2006	177.54	4.85	0	172.69	--	9,200	74,000	--	6,400	13,000	2,300	10,000	
	7/28/2006	177.54	5.32	0	172.22	--	5,100	74,000	--	6,600	12,000	3,100	13,000	
	10/27/2006	177.54	6.13	0	171.41	--	4,600	100,000	--	8,300	20,000	3,600	16,000	
	1/10/2007	177.54	5.47	0	172.07	--	12,000	84,000	--	7,100	15,000	2,600	13,000	
	4/13/2007	177.54	5.60	0	171.94	--	8,400	27,000	--	5,600	840	2,300	3,200	
	7/19/2007	177.54	5.69	0	171.85	--	10,000	83,000	--	6,000	15,000	2,600	13,000	
	10/8/2007	177.54	--	--	--	--	--	--	--	--	--	--	--	Gate locked; no key available
	1/9/2008	177.54	5.15	0	172.39	--	12,000	40,000	--	6,000	4,800	2,600	5,100	Gauged on 1/18/2008
	4/4/2008	177.54	5.25	0	172.29	--	15,000	71,000	--	6,800	12,000	3,300	13,000	
	7/3/2008	177.54	6.00	0	171.54	--	9,300	92,000	--	7,000	16,000	3,500	15,000	
	10/3/2008	177.54	7.16	0	170.38	--	4,400	69,000	--	7,200	18,000	3,500	14,000	
	1/22/2009	177.54	6.61	0	170.93	--	8,000	45,000	--	410	720	2,400	9,600	
	4/13/2009	177.54	5.11	0	172.43	--	4,800	5,400	--	300	640	300	940	
	7/23/2009	177.54	6.04	0	171.50	--	2,800	85,000	--	5,800	15,000	3,500	13,000	
	2/1/2010	177.54	4.86	0	172.68	ND<5,000	3,900	74,000	--	7,000	11,000	3,100	10,000	
	8/2/2010	177.54	5.68	0	171.86	ND<5,000	3,900	71,000	--	7,000	11,000	3,300	10,000	
	8/24/2010						ABANDONED							

Table 3
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-1B	11/1/2010	174.05	7.15	0	166.90	ND<5,000	ND<50	99	--	3.0	0.30	ND<0.30	ND<0.60	
	1/31/2011	174.05	6.62	0	167.43	ND<5,000	ND<50	170	--	6.7	0.64	0.33	ND<0.60	
	4/26/2011	174.05	6.14	0	167.91	ND<5,000	ND<50	220	--	7.3	0.55	0.32	0.69	
	7/25/2011	174.05	6.69	0	167.36	ND<5,000	ND<40	140	--	7.8	0.35	ND<0.30	ND<0.60	
	10/7/2011	174.06	6.86	0	167.20	ND<5,000	ND<40	120	--	5.7	ND<0.30	ND<0.30	ND<0.60	
	1/23/2012	174.06	6.96	0	167.10	ND<5,000	ND<40	89	--	3.6	ND<0.30	ND<0.30	ND<0.60	
	4/6/2012	174.06	5.89	0	168.17	ND<5,000	ND<40	110	--	4.5	ND<0.30	ND<0.30	ND<0.60	
	7/24/2012	**174.06**	**6.98**	**0**	**167.08**	**ND<5,000**	**ND<40**	**130**	**--**	**6.2**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-2	7/20/1999	173.01	5.40	--	167.61	--	--	ND	--	ND	ND	ND	ND	
	9/28/1999	173.01	5.60	0	167.41	--	--	1,390	--	124	ND	62.9	43.1	
	1/7/2000	173.01	5.92	0	167.09	--	--	1,450	--	99	ND	23.8	16	
	3/31/2000	173.01	5.23	0	167.78	--	--	ND	--	42	ND	ND	ND	
	7/14/2000	173.01	5.52	0	167.49	--	--	ND	--	44.7	ND	ND	ND	
	10/3/2000	173.01	6.04	0	166.97	--	--	ND	--	56.7	ND	ND	ND	
	1/3/2001	173.01	6.42	0	166.59	--	--	ND	--	ND	ND	ND	ND	
	4/4/2001	173.01	6.14	0	166.87	--	--	ND	--	ND	ND	ND	ND	
	7/17/2001	173.01	5.30	0	167.71	--	--	ND	--	ND	ND	ND	ND	
	10/3/2001	173.50	7.38	0	166.12	--	--	ND<250	--	2.7	ND<2.5	ND<2.5	ND<2.5	
	1/28/2002	173.50	5.68	0	167.82	--	--	ND<250	--	2.5	4.4	2.8	7.4	
	4/25/2002	173.50	5.82	0	167.68	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/18/2002	173.50	6.90	0	166.60	--	--	ND<500	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	10/7/2002	173.50	7.54	0	165.96	--	--	4,300	--	ND<10	27	21	75	
	1/6/2003	173.50	6.79	0	166.71	--	--	5,900	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	4/7/2003	173.50	6.49	0	167.01	--	--	1,500	--	ND<10	14	11	38	
	7/7/2003	173.50	6.72	0	166.78	--	--	ND<2,500	--	ND<25	ND<25	ND<25	ND<25	
	10/9/2003	173.50	7.16	0	166.34	--	--	3,500	ND<5,000	ND<50	ND<50	ND<50	ND<100	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	173.50	5.53	0	167.97	--	--	3,200	--	ND<25	ND<25	ND<25	ND<25	
	4/28/2004	173.50	5.21	0	168.29	--	--	22,000	--	ND<3	9.2	ND<3	ND<6	
	7/12/2004	173.50	5.83	0	167.67	--	--	1,700	--	3.8	18	2.6	16	
	10/25/2004	173.50	6.89	0	166.61	--	--	3,400	--	ND<25	ND<25	ND<25	ND<25	
	1/17/2005	173.50	5.70	0	167.80	--	--	1,700	--	ND<10	ND<10	ND<10	ND<10	
	4/6/2005	173.50	4.50	0	169.00	--	--	3,000	--	ND<20	ND<20	ND<20	ND<20	
	7/8/2005	173.50	4.69	0	168.81	--	--	ND<2,000	--	ND<20	ND<20	ND<20	ND<20	
	10/7/2005	173.50	4.61	0	168.89	--	--	7,500	--	6.7	6.6	ND<3.0	ND<6.0	
	1/27/2006	173.50	4.10	0	169.40	--	--	2,500	--	1.0	2.6	ND<0.30	ND<0.60	
	4/28/2006	173.50	3.75	0	169.75	--	--	3,100	--	9.4	3.6	0.94	3.4	
	7/28/2006	173.50	4.34	0	169.16	--	--	3,000	--	2.0	ND<1.5	ND<1.5	ND<3.0	
	10/27/2006	173.50	5.62	0	167.88	--	--	1,800	--	1.5	ND<1.5	ND<1.5	ND<3.0	
	1/10/2007	173.50	4.02	0	169.48	--	--	2,100	--	1.1	ND<0.60	ND<0.60	ND<1.2	
	4/13/2007	173.50	4.03	0	169.47	--	--	3,300	--	12	1.6	0.46	1.1	
	7/19/2007	173.50	4.41	0	169.09	--	--	2,500	--	21	0.64	5.1	1.5	
	10/8/2007	173.50	4.93	0	168.57	--	--	3,400	--	38	1.6	13	2.1	
	1/9/2008	173.50	3.03	0	170.47	--	--	1,700	--	6.2	2.5	0.61	0.91	Gauged on 1/18/2008
	4/4/2008	173.50	3.52	0	169.98	--	--	1,400	--	15	2.1	0.76	ND<0.60	
	7/3/2008	173.50	4.70	0	168.80	--	--	1,100	--	14	1.1	2.0	1.2	

Table 3
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-2 cont.	10/3/2008	173.50	5.57	0	167.93	--	ND<50	740	--	14	ND<0.30	4.5	6.9	
	1/22/2009	173.50	5.03	0	168.47	--	ND<50	640	--	4.6	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	173.50	3.73	0	169.77	--	ND<50	940	--	7.1	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	173.50	4.39	0	169.11	--	230	700	--	12	6.0	5.4	13	
	2/1/2010	173.50	4.33	0	169.17	--	140	860	--	17	13	0.83	2.4	
	8/2/2010	173.50	5.16	0	168.34	--	210	1,200	--	9.5	32	1.4	2.4	
	8/24/2010						ABANDONED							
MW-2B	11/1/2010	173.55	11.27	0	162.28	--	57	550	--	7.8	2.7	2.1	0.99	
	1/31/2011	173.55	7.79	0	165.76	--	ND<50	420	--	1.7	0.47	0.59	ND<0.60	
	4/26/2011	173.55	9.09	0	164.46	--	ND<50	390	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/25/2011	173.55	3.91	0	169.64	--	ND<40	210	--	1.7	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	173.55	4.50	0	169.05	--	52	110	--	1.0	ND<0.30	ND<0.30	ND<0.60	
	1/23/2012	173.55	6.96	0	166.59	--	ND<40	110	--	0.73	ND<0.30	ND<0.30	ND<0.60	
	4/6/2012	173.55	5.67	0	167.88	--	ND<40	120	--	0.36	ND<0.30	ND<0.30	ND<0.60	
	7/24/2012	**173.55**	**5.33**	**0**	**168.22**	**--**	**ND<40**	**73**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-3	7/20/1999	178.44	8.50	--	169.94	--	--	1,000	--	76	52	79	76	
	9/28/1999	178.44	8.31	0	170.13	--	--	1,860	--	174	95.4	71.8	135	
	1/7/2000	178.44	8.56	0	169.88	--	--	28,400	--	2,450	3,090	1,560	3,910	
	3/31/2000	178.44	8.42	0	170.02	--	--	26,000	--	1,300	2,900	2,600	3,500	
	7/14/2000	178.44	8.61	0	169.83	--	--	24,500	--	1,850	2,630	2,750	3,900	
	10/3/2000	178.44	9.14	0	169.30	--	--	22,000	--	1,910	2,020	2,400	2,680	
	1/3/2001	178.44	9.06	0	169.38	--	--	14,000	--	1,600	1,100	2,300	1,400	
	4/4/2001	178.44	8.98	0	169.46	--	--	19,600	--	1,150	1,470	2,100	1,820	
	7/17/2001	178.44	7.46	0	170.98	--	--	26,000	--	1,500	2,100	2,100	3,400	
	10/3/2001	178.13	9.81	0	168.32	--	--	22,000	--	830	1,900	1,700	3,000	
	1/28/2002	178.13	7.39	0	170.74	--	--	30,000	--	880	2,600	1,800	4,300	
	4/25/2002	178.13	7.86	0	170.27	--	--	18,000	--	500	2,000	1,300	3,800	
	7/18/2002	178.13	8.83	0	169.30	--	--	37,000	--	1,800	3,800	2,200	8,000	
	10/7/2002	178.13	9.71	0	168.42	--	--	26,000	--	600	2,000	1,800	6,400	
	1/6/2003	178.13	7.40	0	170.73	--	--	27,000	--	800	2,100	2,000	6,400	
	4/7/2003	178.13	8.17	0	169.96	--	--	28,000	--	660	2,200	1,900	6,300	
	7/7/2003	178.13	8.35	0	169.78	--	--	33,000	--	1,200	2,500	2,700	8,300	
	10/9/2003	178.13	9.39	0	168.74	--	--	3,800	6,000	120	260	390	1,200	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	178.13	6.86	0	171.27	--	--	5,100	--	120	240	310	720	
	4/28/2004	178.13	6.63	0	171.50	--	--	7,300	--	250	440	580	1300	
	7/12/2004	178.13	7.41	0	170.72	--	--	5,500	--	350	310	120	350	
	10/25/2004	178.13	8.81	0	169.32	--	--	3,300	--	96	140	270	490	
	1/17/2005	178.13	6.37	0	171.76	--	--	3,400	--	150	270	360	750	
	4/6/2005	178.13	4.69	0	173.44	--	--	14,000	--	420	1,300	1,000	3,100	
	7/8/2005	178.13	5.23	0	172.90	--	--	5,000	--	180	290	500	800	
	10/7/2005	178.13	6.35	0	171.78	--	--	6,800	--	270	120	ND<0.30	210	
	1/27/2006	178.13	5.24	0	172.89	--	--	3,200	--	120	140	270	460	
	4/28/2006	178.13	5.01	0	173.12	--	--	4,500	--	130	250	380	670	
	7/28/2006	178.13	6.21	0	171.92	--	--	4,700	--	160	240	510	730	

Table 3
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76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-3 cont.	10/27/2006	178.13	6.93	0	171.20	--	--	3,700	--	150	160	460	530	
	1/10/2007	178.13	5.93	0	172.20	--	--	4,800	--	180	160	550	600	
	4/13/2007	178.13	6.10	0	172.03	--	--	5,100	--	180	240	550	710	
	7/19/2007	178.13	6.51	0	171.62	--	--	2,000	--	110	64	220	190	
	10/8/2007	178.13	7.05	0	171.08	--	--	2,100	--	72	65	180	290	
	1/9/2008	178.13	3.65	0	174.48	--	--	4,200	--	200	160	510	580	Gauged on 1/18/2008
	4/4/2008	178.13	5.69	0	172.44	--	--	7,500	--	270	390	810	1,200	
	7/3/2008	178.13	7.28	0	170.85	--	--	2,300	--	99	66	210	220	
	10/3/2008	178.13	8.40	0	169.73	--	1,200	12,000	--	740	620	1,500	2,700	
	1/22/2009	178.13	7.68	0	170.45	--	270	2,000	--	120	79	290	290	
	4/13/2009	178.13	6.28	0	171.85	--	150	3,600	--	110	150	180	510	
	7/23/2009	178.13	7.20	0	170.93	--	310	3,400	--	180	150	360	650	
	2/1/2010	178.13	5.29	0	172.84	--	390	6,500	--	180	92	300	250	
	8/2/2010	178.13	6.83	0	171.30	--	540	8,600	--	140	110	320	1,000	
	8/24/2010						ABANDONED							
MW-3B	11/1/2010	177.77	6.82	0	170.95	--	58	990	--	31	32	47	50	
	1/31/2011	177.77	5.30	0	172.47	--	65	2,800	--	32	20	39	47	
	4/26/2011	177.77	4.64	0	173.13	--	93	2,800	--	36	55	80	82	
	7/25/2011	177.77	5.53	0	172.24	--	100	1,700	--	28	33	80	73	
	10/7/2011	177.77	6.08	0	171.69	--	81	1,700	--	32	20	88	47	
	1/23/2012	177.77	6.90	0	170.87	--	120	1,800	--	39	17	75	20	
	4/6/2012	177.77	4.23	0	173.54	--	ND<40	1,200	--	36	25	80	41	
	7/24/2012	**177.77**	**6.42**	**0**	**171.35**	**--**	**190**	**1,500**	**--**	**66**	**10**	**76**	**39**	
MW-4	7/20/1999	179.10	7.40	--	171.70	--	--	69	--	2.7	0.77	ND	7.1	
	9/28/1999	179.10	7.19	0	171.91	--	--	4,050	--	1,250	72	51.3	133	
	1/7/2000	179.10	8.98	0	170.12	--	--	7,010	--	2,260	167	271	276	
	3/31/2000	179.10	7.26	0	171.84	--	--	5,500	--	1,800	230	330	400	
	7/14/2000	179.10	7.67	0	171.43	--	--	7,940	--	2,810	332	450	247	
	10/3/2000	179.10	8.12	0	170.98	--	--	11,400	--	3,110	437	519	816	
	1/3/2001	179.10	9.10	0	170.00	--	--	8,600	--	2,500	340	480	960	
	4/4/2001	179.10	8.63	0	170.47	--	--	9,950	--	2,380	126	416	725	
	7/17/2001	179.10	6.49	0	172.61	--	--	10,000	--	2,300	110	410	800	
	10/3/2001	178.96	7.01	0	171.95	--	--	7,800	--	2,100	85	380	390	
	1/28/2002	178.96	6.21	0	172.75	--	--	12,000	--	2,100	130	350	670	
	4/25/2002	178.96	5.49	0	173.47	--	--	3,300	--	1,300	42	270	250	
	7/18/2002	178.96	8.28	0	170.68	--	--	4,800	--	1,300	71	290	220	
	10/7/2002	178.96	7.49	0	171.47	--	--	5,100	--	1,400	110	330	380	
	1/6/2003	178.96	6.36	0	172.60	--	--	5,600	--	1,100	57	260	320	
	4/7/2003	178.96	6.24	0	172.72	--	--	5,100	--	1,100	55	190	370	
	7/7/2003	178.96	6.43	0	172.53	--	--	3,000	--	920	28	170	330	
	10/9/2003	178.96	7.97	0	170.99	--	--	530	700	100	2.2	5.4	14	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	178.96	6.30	0	172.66	--	--	530	--	88	4.1	9.9	11	
	4/28/2004	178.96	5.68	0	173.28	--	--	1,200	--	200	5.3	21	13	
	7/12/2004	178.96	6.48	0	172.48	--	--	3,600	--	1,000	14	260	72	

Table 3
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-4 cont.	10/25/2004	178.96	6.85	0	172.11	--	--	490	--	34	ND<2.5	ND<2.5	ND<2.5	
	1/17/2005	178.96	4.56	0	174.40	--	--	620	--	100	2.6	15	8.0	
	4/6/2005	178.96	2.90	0	176.06	--	--	630	--	81	9.6	16	41	
	7/8/2005	178.96	3.74	0	175.22	--	--	980	--	170	24	44	140	
	10/7/2005	178.96	4.24	0	174.72	--	--	4,900	--	1,100	11	110	110	
	1/27/2006	178.96	3.65	0	175.31	--	--	2,800	--	580	20	130	230	
	4/28/2006	178.96	3.94	0	175.02	--	--	710	--	110	2.4	21	22	
	7/28/2006	178.96	4.63	0	174.33	--	--	550	--	120	2.1	12	19	
	10/27/2006	178.96	5.19	0	173.77	--	--	260	--	37	2.0	1.9	6.7	
	1/10/2007	178.96	4.82	0	174.14	--	--	270	--	29	0.72	1.8	2.7	
	4/13/2007	178.96	4.25	0	174.71	--	--	390	--	53	1.2	3.1	4.1	
	7/19/2007	178.96	5.35	0	173.61	--	--	210	--	8.0	1.0	1.4	4.5	
	10/8/2007	178.96	5.48	0	173.48	--	--	290	--	17	2.3	3.8	14	
	1/9/2008	178.96	3.40	0	175.56	--	--	770	--	190	5.9	21	40	Gauged on 1/18/2008
	4/4/2008	178.96	4.20	0	174.76	--	--	180	--	11	2.0	0.67	2.9	
	7/3/2008	178.96	5.89	0	173.07	--	--	140	--	4.5	1.3	ND<0.30	ND<0.60	
	10/3/2008	178.96	7.34	0	171.62	--	96	430	--	29	3.4	9.6	20	
	1/22/2009	178.96	6.75	0	172.21	--	ND<50	190	--	25	1.7	0.87	1.5	
	4/13/2009	178.96	4.74	0	174.22	--	110	290	--	17	2.1	4.4	12	
	7/23/2009	178.96	6.01	0	172.95	--	85	360	--	33	2.3	5.4	18	
	2/1/2010	178.96	6.42	0	172.54	--	80	490	--	35	3.1	2.7	5.5	
	8/2/2010	178.96	5.92	0	173.04	--	120	470	--	17	3.4	2.5	12	
	8/24/2010						ABANDONED							
MW-4B	11/1/2010	179.07	7.20	0	171.87	--	ND<50	230	--	ND<0.30	2.1	1.3	43	
	1/31/2011	179.07	4.49	0	174.58	--	ND<50	68	--	ND<0.30	ND<0.30	ND<0.30	2.0	
	4/26/2011	179.07	4.32	0	174.75	--	ND<50	52	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/25/2011	179.07	5.52	0	173.55	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	179.07	6.04	0	173.03	--	ND<40	ND<50	--	ND<0.30	0.46	ND<0.30	ND<0.60	
	1/23/2012	179.07	6.58	0	172.49	--	ND<40	ND<50	--	ND<0.30	0.36	0.87	ND<0.60	
	4/6/2012	179.07	4.41	0	174.66	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/24/2012	**179.07**	**6.20**	**0**	**172.87**	**--**	**ND<40**	**75**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-5	10/3/2001	169.18	2.81	0	166.37	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/28/2002	169.18	1.88	0	167.30	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/25/2002	169.18	1.99	0	167.19	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/18/2002	169.18	2.49	0	166.69	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	10/7/2002	169.18	2.80	0	166.38	--	--	140	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/6/2003	169.18	1.86	0	167.32	--	ND<50	120	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/7/2003	169.18	2.15	0	167.03	--	--	220	--	0.53	ND<0.50	ND<0.50	ND<0.50	
	7/7/2003	169.18	2.26	0	166.92	--	--	120	--	ND<1.2	ND<1.2	ND<1.2	ND<1.2	
	10/9/2003	169.18	2.72	0	166.46	--	--	560	210	ND<1.0	ND<1.0	ND<1.0	ND<2.0	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	169.18	2.00	0	167.18	--	--	560	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5	
	4/28/2004	169.18	2.01	0	167.17	--	--	760	--	ND<0.3	1.8	ND<0.3	ND<0.6	
	7/12/2004	169.18	2.56	0	166.62	--	--	96	--	1.8	3.3	0.54	3.6	
	10/25/2004	169.18	2.43	0	166.75	--	--	1,100	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	

Table 3
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-5 cont.	1/17/2005	169.18	1.49	0	167.69	--	--	720	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	4/6/2005	169.18	0.95	0	168.23	--	--	830	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	7/8/2005	169.18	1.49	0	167.69	--	--	ND<500	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	10/7/2005	169.18	1.92	0	167.26	--	--	540	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/27/2006	169.18	2.03	0	167.15	--	--	490	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/28/2006	169.18	1.02	0	168.16	--	--	430	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/28/2006	169.18	1.57	0	167.61	--	--	480	--	0.34	ND<0.30	ND<0.30	ND<0.60	
	10/27/2006	169.18	2.20	0	166.98	--	--	420	--	0.34	ND<0.30	ND<0.30	ND<0.60	
	1/10/2007	169.18	1.57	0	167.61	--	--	390	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2007	169.18	1.89	0	167.29	--	--	170	--	3.8	5.9	1.5	3.8	
	7/19/2007	169.18	1.92	0	167.26	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/8/2007	169.18	2.28	0	166.90	--	--	200	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/9/2008	169.18	1.09	0	168.09	--	--	150	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	Gauged on 1/18/2008
	4/4/2008	169.18	1.72	0	167.46	--	--	210	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/3/2008	169.18	2.27	0	166.91	--	--	260	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	169.18	2.80	0	166.38	--	60	200	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/22/2009	169.18	2.45	0	166.73	--	ND<50	130	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	169.18	1.81	0	167.37	--	ND<50	190	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	169.18	2.33	0	166.85	--	ND<50	210	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/1/2010	169.18	1.32	0	167.86	--	ND<50	170	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	8/2/2010	169.18	2.20	0	166.98	--	ND<50	64	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	11/1/2010	169.18	3.92	0	165.26	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/31/2011	169.18	1.63	0	167.55	--	ND<50	160	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/26/2011	169.18	1.32	0	167.86	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/25/2011	169.18	1.79	0	167.39	--	ND<40	140	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	169.18	2.18	0	167.00	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/23/2012	169.18	1.98	0	167.20	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/6/2012	169.18	1.18	0	168.00	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/24/2012	**169.18**	**1.90**	**0**	**167.28**	**--**	**ND<40**	**ND<50**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-6	10/3/2001	169.04	2.87	0	166.17	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/28/2002	169.04	1.82	0	167.22	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/25/2002	169.04	2.01	0	167.03	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/18/2002	169.04	2.44	0	166.60	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	10/7/2002	169.04	2.72	0	166.32	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/6/2003	169.04	1.90	0	167.14	--	--	ND<50	--	0.62	1.2	1.2	3.5	
	4/7/2003	169.04	2.02	0	167.02	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/7/2003	169.04	2.21	0	166.83	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	10/9/2003	169.04	2.71	0	166.33	--	--	ND<50	ND<50	0.95	3.0	1.4	5.5	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	169.04	2.00	0	167.04	--	--	ND<50	--	ND<0.50	0.57	ND<0.50	0.64	
	4/28/2004	169.04	2.18	0	166.86	--	--	ND<50	--	0.39	0.78	ND<0.3	ND<0.6	
	7/12/2004	169.04	2.69	0	166.35	--	--	ND<50	--	ND<0.3	ND<0.3	ND<0.3	ND<0.6	
	10/25/2004	169.04	2.46	0	166.58	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/17/2005	169.04	1.54	0	167.50	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/6/2005	169.04	1.15	0	167.89	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/8/2005	169.04	1.05	0	167.99	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	

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WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-6 cont.	10/7/2005	169.04	1.90	0	167.14	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/27/2006	169.04	1.32	0	167.72	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/28/2006	169.04	0.00	0	169.04	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/28/2006	169.04	1.68	0	167.36	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/27/2006	169.04	1.98	0	167.06	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/10/2007	169.04	1.60	0	167.44	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2007	169.04	2.01	0	167.03	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/19/2007	169.04	1.96	0	167.08	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/8/2007	169.04	2.35	0	166.69	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/9/2008	169.04	1.10	0	167.94	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	Gauged on 1/18/2008
	4/4/2008	169.04	1.60	0	167.44	--	--	ND<50	--	ND<0.30	0.40	ND<0.30	0.71	
	7/3/2008	169.04	2.19	0	166.85	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	169.04	2.78	0	166.26	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/22/2009	169.04	2.35	0	166.69	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	169.04	1.81	0	167.23	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	169.04	--	--	--	--	--	--	--	--	--	--	--	Paved over
	2/1/2010	169.04	--	--	--	--	--	--	--	--	--	--	--	Paved over
	8/2/2010	169.04	--	--	--	--	--	--	--	--	--	--	--	Paved over
	8/24/2010						ABANDONED							
MW-7	10/3/2001	171.64	7.62	0	164.02	--	--	10,000	--	210	ND<50	ND<50	800	
	1/28/2002	171.64	7.21	0	164.43	--	--	ND<1,000	--	ND<10	ND<10	ND<10	ND<10	
	4/25/2002	171.64	7.25	0	164.39	--	--	ND<5,000	--	660	ND<50	ND<50	ND<50	
	7/18/2002	171.64	8.12	0	163.52	--	--	ND<5,000	--	130	ND<50	ND<50	ND<50	
	10/7/2002	171.64	7.71	0	163.93	--	--	18,000	--	ND<50	ND<50	ND<50	ND<50	
	1/6/2003	171.64	7.63	0	164.01	--	ND<50	410	--	0.61	1.0	0.89	2.9	
	4/7/2003	171.64	7.58	0	164.06	--	--	13,000	--	ND<20	ND<20	ND<20	ND<20	
	7/7/2003	171.64	7.56	0	164.08	--	--	990	--	8.2	ND<0.50	1.2	ND<0.50	
	10/9/2003	171.64	7.72	0	163.92	--	--	6,800	ND<13,000	ND<130	ND<130	ND<130	ND<250	Sampled for TPH-G by 8015M on 11/14/2003
	1/14/2004	171.64	6.97	0	164.67	--	--	19,000	--	ND<100	ND<100	ND<100	ND<100	
	4/28/2004	171.64	8.70	0	162.94	--	--	19,000	--	ND<3	ND<3	ND<3	ND<6	
	7/12/2004	171.64	9.44	0	162.20	--	--	12,000	--	28	14	330	200	
	10/25/2004	171.64	7.23	0	164.41	--	--	28,000	--	ND<250	ND<250	ND<250	ND<250	
	1/17/2005	171.64	6.30	0	165.34	--	--	15,000	--	ND<100	ND<100	ND<100	ND<100	
	4/6/2005	171.64	5.96	0	165.68	--	--	13,000	--	ND<100	ND<100	ND<100	ND<100	
	7/8/2005	171.64	6.45	0	165.19	--	--	ND<10,000	--	ND<100	ND<100	ND<100	ND<100	
	10/7/2005	171.64	6.78	0	164.86	--	--	13,000	--	ND<3.0	ND<3.0	ND<3.0	ND<6.0	
	1/27/2006	171.64	5.82	0	165.82	--	--	8,200	--	0.64	1.6	ND<0.30	ND<0.60	
	4/28/2006	171.64	5.57	0	166.07	--	--	6,900	--	0.88	1.5	0.34	1.0	
	7/28/2006	171.64	6.67	0	164.97	--	--	5,400	--	5.2	ND<3.0	ND<3.0	ND<6.0	
	10/27/2006	171.64	6.93	0	164.71	--	--	4,500	--	ND<1.5	ND<1.5	ND<1.5	ND<3.0	
	1/10/2007	171.64	6.41	0	165.23	--	12,000	4,000	--	ND<1.2	ND<1.2	ND<1.2	ND<2.4	
	4/13/2007	171.64	--	--	--	--	--	--	--	--	--	--	--	Paved over
	7/19/2007	171.64	7.10	0	164.54	--	--	2,700	--	0.57	ND<0.30	ND<0.30	ND<0.60	
	10/8/2007	171.64	7.42	0	164.22	--	--	1,600	--	0.47	0.49	ND<0.30	ND<0.60	
	1/9/2008	171.64	5.98	0	165.66	--	--	1,500	--	0.45	0.49	ND<0.30	ND<0.60	Gauged on 1/18/2008

Table 3
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	TOTAL OIL AND GREASE (µg/L)	TPH-d (µg/L)	TPH-g 8015 (µg/L)	TPH-g (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-7 cont.	4/4/2008	171.64	6.80	0	164.84	--	--	1,800	--	0.72	0.58	ND<0.30	ND<0.60	
	7/3/2008	171.64	7.31	0	164.33	--	--	1,600	--	0.45	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	171.64	7.79	0	163.85	--	ND<50	1,300	--	0.53	0.59	ND<0.30	ND<0.60	
	1/22/2009	171.64	7.26	0	164.38	--	ND<50	890	--	0.43	0.49	ND<0.30	ND<0.60	
	4/13/2009	171.64	6.83	0	164.81	--	ND<50	1,100	--	0.46	0.30	ND<0.30	ND<0.60	
	7/23/2009	171.64	7.32	0	164.32	--	ND<50	920	--	ND<0.30	0.73	ND<0.30	ND<0.60	
	2/1/2010	171.64	6.21	0	165.43	--	53	1,000	--	5.6	4.0	1.2	2.0	
	8/2/2010	171.64	7.08	0	164.56	--	ND<50	880	--	ND<0.30	0.62	ND<0.30	ND<0.60	
	11/1/2010	172.11	6.97	0	165.14	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/31/2011	172.11	6.58	0	165.53	--	ND<50	730	--	0.31	0.59	ND<0.30	ND<0.60	
	4/26/2011	172.11	5.21	0	166.90	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/25/2011	172.11	6.89	0	165.22	--	ND<40	610	--	2.5	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	172.11	7.15	0	164.96	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/23/2012	172.11	6.92	0	165.19	--	ND<40	300	--	ND<0.30	0.55	ND<0.30	ND<0.60	
	4/6/2012	172.11	6.01	0	166.10	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/24/2012	**172.11**	**7.25**	**0**	**164.86**	**--**	**ND<40**	**270**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-8	1/18/2008	167.97	0.43	0	167.54	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/4/2008	167.97	0.55	0	167.42	--	--	ND<50	--	0.76	1.6	0.72	2.3	
	7/3/2008	167.97	0.91	0	167.06	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	167.97	1.71	0	166.26	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/22/2009	167.97	1.59	0	166.38	--	64	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	167.97	0.08	0	167.89	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	167.97	1.10	0	166.87	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/1/2010	167.97	0.65	0	167.32	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	8/2/2010	167.97	--	--	--	--	--	--	--	--	--	--	--	Paved over
	8/24/2010						ABANDONED							

NOTES:
TOC = top of casing
DTW = depth to water
LNAPL = Liquid non-aqueous phase liquid
GWE = groundwater elevation
ND<# = Analyte not detected below indicated practical quantitation limit
-- = Not available/not sampled
µg/L = Micrograms per liter
GC/MS = Gas chromatograph/mass spectrometer

TPH-d = Total petroleum hydrocarbons as diesel
TPH-g = Total petroleum hydrocarbons as gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes

* TOC and GWE are in feet above mean sea level.
Oxygenate compounds analyzed by U.S. EPA Method 8260B

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
MW-1	7/20/1999	ND	--	--	--	--	--	--	--	--	--	--
	9/28/1999	321	333	ND	--	--	--	--	--	ND	ND	ND
	1/7/2000	ND	--	--	--	--	--	--	--	--	--	--
	3/31/2000	ND	--	--	--	--	--	--	--	--	--	--
	7/14/2000	ND	--	--	--	--	--	--	--	--	--	--
	10/3/2000	ND	--	--	--	--	--	--	--	--	--	--
	1/3/2001	2,200	--	--	--	--	--	--	--	--	--	--
	4/4/2001	ND	481	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	ND	230	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	ND<2,500	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	3,000	440	--	--	--	--	--	--	--	--	--
	4/25/2002	810	670	--	--	--	--	--	--	--	--	--
	7/18/2002	ND<500	620	ND<100	--	ND<2,500,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	10/7/2002	1,300	760	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/6/2003	ND<1,000	790	ND<20,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	4/7/2003	1,000	800	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	7/7/2003	600	530	ND<25,000	ND<120000	--	ND<500	--	ND<500	ND<500	ND<500	ND<500
	10/9/2003	--	660	ND<2,0000	--	ND<100,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	1/14/2004	ND<1,300	ND<800	ND<40,000	--	ND<200,000	ND<800	--	ND<800	ND<800	ND<800	ND<800
	4/28/2004	1,400	560	800	--	ND<1,000	ND<50	--	ND<50	ND<1	ND<1	ND<1
	7/12/2004	490	440	1,100	--	ND<20,000	ND<10	--	ND<10	ND<20	ND<20	ND<20
	10/25/2004	ND<1,300	330	ND<2,000	--	ND<20,000	ND<200	--	ND<200	ND<400	ND<200	ND<200
	1/17/2005	ND<1,300	570	3,100	--	ND<20,000	ND<200	--	ND<200	ND<400	ND<200	ND<200
	4/6/2005	ND<1,300	580	1,500	--	ND<10,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	7/8/2005	ND<1,300	290	ND<1,300	--	ND<13,000	ND<130	--	3.8	ND<130	ND<130	ND<130
	10/7/2005	330	250	680	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	450	360	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	4/28/2006	460	280	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	7/28/2006	330	220	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	280	250	ND<2,500	--	ND<62,000	ND<120	--	ND<120	ND<120	ND<120	ND<120
	1/10/2007	350	260	ND<1,000	--	ND<25,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	4/13/2007	270	220	730	--	ND<250	ND<0.50	--	0.68	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	1,000	200	ND<1,000	--	ND<25,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	840	170	ND<250	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	4/4/2008	--	160	770	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
MW-1 cont.	7/3/2008	--	110	ND<250	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	10/3/2008	--	180	ND<200	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	1/22/2009	--	160	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	4/13/2009	--	150	280	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/23/2009	--	140	ND<2,000	--	ND<50,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	2/1/2010	--	ND<50	--	--	--	--	--	--	--	--	--
	8/2/2010	--	ND<10	--	--	--	ND<10	ND<10	ND<10	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	30	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	46	28	--	ND<250	ND<0.50	--	0.76	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	44	33	--	ND<250	ND<0.50	--	0.82	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	47	28	--	ND<250	ND<0.50	--	0.75	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	41	30	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	32	23	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	55	18	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	**--**	**46**	**27**	**--**	**ND<250**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-2	7/20/1999	4,500	11,000	--	--	--	--	--	--	--	--	--
	9/28/1999	5,280	6,150	ND	--	--	--	--	--	ND	ND	ND
	1/7/2000	33,100	--	--	--	--	--	--	--	--	--	--
	3/31/2000	17,000	--	--	--	--	--	--	--	--	--	--
	7/14/2000	66,500	--	--	--	--	--	--	--	--	--	--
	10/3/2000	57,500	--	--	--	--	--	--	--	--	--	--
	1/3/2001	49,000	--	--	--	--	--	--	--	--	--	--
	4/4/2001	38,700	37,800	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	65,000	56,000	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	14,000	18,000	--	--	--	--	--	--	--	--	--
	1/28/2002	11,000	10,000	--	--	--	--	--	--	--	--	--
	4/25/2002	8,400	8,100	--	--	--	--	--	--	--	--	--
	7/18/2002	4,300	8,800	ND<1,000	--	ND<25,000,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	10/7/2002	7,100	5,900	ND<20,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	1/6/2003	31,000	35,000	ND<50,000	--	ND<250,000,000	ND<1,000	--	ND<1,000	ND<1,000	ND<1,000	ND<1,000
	4/7/2003	2,000	1,500	ND<2,000	--	ND<10,000,000	ND<40	--	ND<40	ND<40	ND<40	ND<40
	7/7/2003	5,500	8,300	ND<5,000	--	ND<25,000,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	10/9/2003	--	8,500	ND<10,000	--	ND<50,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/14/2004	2,600	3,200	ND<2,500	--	ND<13,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
MW-2 cont.	4/28/2004	35,000	22,000	13,000	--	ND<1,000	ND<0.5	--	ND<0.5	ND<1	ND<1	11
	7/12/2004	3,000	3,000	110	--	ND<4,000	ND<3	--	ND<3	ND<5	ND<5	ND<5
	10/25/2004	1,800	1,600	1,100	--	ND<1,300	ND<13	--	ND<13	ND<25	ND<13	ND<13
	1/17/2005	1,600	1,500	1,200	--	ND<1,300	ND<13	--	ND<13	ND<25	ND<13	ND<13
	4/6/2005	2,500	3,200	2,800	--	ND<2,500	ND<25	--	ND<25	ND<25	ND<25	ND<25
	7/8/2005	2,900	3,100	4,300	--	ND<2,500	ND<25	--	ND<25	ND<25	ND<25	ND<25

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/7/2005	5,900	5,200	8,700	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	2,600	2,800	5,200	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	4/28/2006	3,700	3,600	6,700	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	1.6
	7/28/2006	3,000	2,900	5,100	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	10/27/2006	1,600	1,300	6,600	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	1/10/2007	2,300	2,000	6,000	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	4/13/2007	3,600	3,200	7,400	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	7/19/2007	2,000	2,000	6,200	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/8/2007	5,000	4,000	20,000	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/9/2008	2,100	2,200	9,900	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	2,100	5,800	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/3/2008	--	1,400	8,300	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	750	5,900	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	1/22/2009	--	850	7,400	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	990	5,500	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	7/23/2009	--	390	5,000	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	2/1/2010	--	290	--	--	--	--	--	--	--	--	--
	8/2/2010	--	140	--	--	--	ND<1.0	ND<1.0	ND<1.0	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	250	2,000	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	310	1,300	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	240	770	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	170	1,100	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	100	840	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	95	370	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	140	310	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	**--**	**53**	**270**	**--**	**ND<250**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-3	7/20/1999	330	--	--	--	--	--	--	--	--	--	--
	9/28/1999	443	288	ND	--	--	--	--	--	ND	ND	8.80
MW-3 cont.	1/7/2000	1,940	--	--	--	--	--	--	--	--	--	--
	3/31/2000	2,800	--	--	--	--	--	--	--	--	--	--
	7/14/2000	548	--	--	--	--	--	--	--	--	--	--
	10/3/2000	965	--	--	--	--	--	--	--	--	--	--
	1/3/2001	3,300	--	--	--	--	--	--	--	--	--	--
	4/4/2001	1,050	450	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	ND	350	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	ND<1000	--	--	--	--	--	--	--	--	--	--
	1/28/2002	3,200	210	--	--	--	--	--	--	--	--	--

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	4/25/2002	500	260	--	--	--	--	--	--	--	--	--
	7/18/2002	ND<250	270	ND<50	--	ND<1,200,000	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/7/2002	ND<120	ND<200	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/6/2003	440	110	ND<4,000	--	23,000,000	ND<80	--	ND<80	ND<80	ND<80	ND<80
	4/7/2003	440	100	ND<4,000	--	ND<20,000,000	ND<80	--	ND<80	ND<80	ND<80	ND<80
	7/7/2003	280	100	ND<2,000	--	ND<10,000,000	ND<40	--	ND<40	ND<40	ND<40	ND<40
	10/9/2003	--	190	ND<1,000	--	ND<5,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	1/14/2004	190	230	ND<1,000	--	ND<5,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	4/28/2004	740	240	ND<12	--	ND<1,000	ND<3	--	ND<3	ND<1	ND<1	ND<1
	7/12/2004	180	100	350	--	ND<20,000	ND<10	--	ND<10	ND<20	ND<20	ND<20
	10/25/2004	94	260	39	--	ND<250	ND<2.5	--	ND<2.5	ND<5.0	ND<2.5	ND<2.5
	1/17/2005	55	200	120	--	ND<250	ND<2.5	--	ND<2.5	ND<5.0	ND<2.5	ND<2.5
	4/6/2005	ND<250	200	150	--	ND<1,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/8/2005	ND<250	150	64	--	ND<250	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	10/7/2005	260	180	ND<200	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	1/27/2006	280	250	ND<10	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	4/28/2006	230	180	190	--	ND<250	ND<0.50	--	0.63	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	250	150	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	250	140	ND<10	--	ND<250	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	230	150	66	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	230	160	ND<10	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	190	180	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	180	120	ND<20	--	ND<500	ND<1.0	--	1.1	ND<1.0	ND<1.0	ND<1.0
	1/9/2008	290	120	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	4/4/2008	--	120	ND<50	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/3/2008	--	190	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	71	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/22/2009	--	130	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
MW-3 cont.	4/13/2009	--	120	ND<10	--	ND<250	ND<0.50	--	1.0	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	120	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	2/1/2010	--	97	--	--	--	--	--	--	--	--	--
	8/2/2010	--	89	--	--	--	ND<0.50	--	ND<0.50	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	46	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	73	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	52	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	62	47	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	61	64	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	56	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	4/6/2012	--	68	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	**--**	**54**	**ND<10**	**--**	**ND<250**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-4	7/20/1999	100	--	--	--	--	--	--	--	--	--	--
	9/28/1999	416	459	ND	--	--	--	--	--	ND	ND	ND
	1/7/2000	764	--	--	--	--	--	--	--	--	--	--
	3/31/2000	1,000	--	--	--	--	--	--	--	--	--	--
	7/14/2000	1,530	--	--	--	--	--	--	--	--	--	--
	10/3/2000	1,040	--	--	--	--	--	--	--	--	--	--
	1/3/2001	850	--	--	--	--	--	--	--	--	--	--
	4/4/2001	1,140	819	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	1,200	900	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	580	820	--	--	--	--	--	--	--	--	--
	1/28/2002	1,100	500	--	--	--	--	--	--	--	--	--
	4/25/2002	680	600	--	--	--	--	--	--	--	--	--
	7/18/2002	530	760	ND<100	--	ND<2,500,000	ND<10	--	49	ND<10	ND<10	ND<10
	10/7/2002	650	540	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/6/2003	370	520	ND<1,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	4/7/2003	550	420	ND<1,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	7/7/2003	480	450	ND<1,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	10/9/2003	--	270	ND<200	--	ND<1,000	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
	1/14/2004	150	180	ND<200	--	ND<1,000	ND<4.0	--	6.5	ND<4.0	ND<4.0	ND<4.0
	4/28/2004	490	310	150	--	ND<1,000	ND<0.5	--	ND<0.5	ND<1	ND<1	ND<1
	7/12/2004	710	470	210	--	ND<4,000	ND<3	--	14	ND<5	ND<5	ND<5
	10/25/2004	200	170	38	--	ND<100	ND<1.0	--	2.0	ND<2.0	ND<1.0	ND<1.0
MW-4 cont.	1/17/2005	240	200	110	--	ND<100	ND<1.0	--	3.6	ND<2.0	ND<1.0	ND<1.0
	4/6/2005	ND<25	26	ND<25	--	73,000	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/8/2005	ND<25	64	29	--	ND<50	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	10/7/2005	370	310	210	--	ND<250	ND<0.50	--	26	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	320	240	280	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	4/28/2006	140	140	130	--	ND<250	ND<0.50	--	0.97	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	170	150	64	--	ND<250	ND<0.50	--	5.8	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	130	130	54	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	160	150	33	--	310	ND<0.50	--	1.9	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	210	160	82	--	ND<250	ND<0.50	--	0.77	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	120	130	13	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	160	150	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	1/9/2008	210	220	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	4/4/2008	--	110	27	--	ND<250	ND<0.50	--	1.0	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	100	27	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50

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76 Service Station #1156 (Chevron Site #351645)
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WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/3/2008	--	100	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	96	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	88	39	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	92	42	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	2/1/2010	--	51	--	--	--	--	--	--	--	--	--
	8/2/2010	--	48	--	--	--	ND<0.50	ND<1.0	1.4	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	20	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	30	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	26	25	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	28	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	25	25	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	17	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	21	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	**--**	**24**	**ND<10**	**--**	**ND<250**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-5	10/3/2001	1,800	2,100	--	--	--	--	--	--	--	--	--
	1/28/2002	650	550	--	--	--	--	--	--	--	--	--
	4/25/2002	2,200	2,400	--	--	--	--	--	--	--	--	--
	7/18/2002	530	690	ND<20	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	10/7/2002	300	330	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
MW-5 cont.	1/6/2003	410	350	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	4/7/2003	450	420	ND<500	--	ND<2,500,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/7/2003	220	200	ND<200	--	ND<1,000,000	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
	10/9/2003	--	290	ND<200	--	ND<1,000	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
	1/14/2004	670	760	ND<2,000	--	ND<10,000	ND<40	--	ND<40	ND<40	ND<40	ND<40
	4/28/2004	1,200	790	ND<12	--	ND<1,000	ND<0.5	--	1.8	ND<1	ND<1	ND<1
	7/12/2004	2.8	ND<0.5	ND<12	--	ND<800	ND<0.5	--	0.76	ND<1	ND<1	ND<1
	10/25/2004	780	1100	ND<500	--	ND<5,000	ND<50	--	ND<50	ND<100	ND<50	ND<50
	1/17/2005	530	550	100	--	ND<250	ND<2.5	--	ND<2.5	ND<5.0	ND<2.5	ND<2.5
	4/6/2005	600	760	7.6	--	ND<50	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	7/8/2005	570	630	180	--	ND<500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/7/2005	530	490	ND<10	--	ND<250	ND<0.50	--	1.0	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	580	610	1,000	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	4/28/2006	590	520	130	--	ND<250	ND<0.50	--	0.95	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	440	420	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/27/2006	460	390	43	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	430	420	28	--	ND<250	ND<0.50	--	1.7	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	160	120	ND<10	--	ND<250	ND<0.50	--	0.84	ND<0.50	ND<0.50	ND<0.50

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WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	7/19/2007	19	23	ND<10	--	ND<250	ND<0.50	--	ND<5.0	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	310	280	ND<10	--	ND<250	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	1/9/2008	170	170	ND<10	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	260	ND<10	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	360	ND<10	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	240	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	170	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	190	ND<10	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	210	ND<10	--	ND<250	ND<0.50	--	1.8	ND<0.50	ND<0.50	ND<0.50
	2/1/2010	--	120	--	--	--	--	--	--	--	--	--
	8/2/2010	--	42	--	--	--	ND<0.50	--	ND<0.50	--	--	--
	11/1/2010	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	130	ND<10	--	ND<250	ND<0.50	--	1.6	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	130	ND<10	--	ND<250	ND<0.50	--	1.6	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	52	22	--	ND<250	ND<0.50	--	0.92	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**81**	**20**	**--**	**ND<250**	**ND<0.50**	**--**	**1.4**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-6	10/3/2001	200	270	--	--	--	--	--	--	--	--	--
	1/28/2002	ND<2.5	--	--	--	--	--	--	--	--	--	--
	4/25/2002	ND<2.5	--	--	--	--	--	--	--	--	--	--
	7/18/2002	ND<2.5	ND<2.0	ND<20	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	10/7/2002	ND<2.5	ND<2.0	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	1/6/2003	ND<2.0	ND<2.0	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	4/7/2003	46	46	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	7/7/2003	ND<2.0	ND<2.0	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	10/9/2003	--	ND<2.0	ND<100	--	ND<500	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	1/14/2004	ND<5.0	ND<2.0	ND<100	--	ND<500	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	4/28/2004	ND<1	ND<0.5	ND<12	--	ND<1,000	ND<0.5	--	ND<0.5	ND<1	ND<1	ND<1
	7/12/2004	6.4	ND<0.5	ND<12	--	ND<800	ND<0.5	--	ND<0.5	ND<1	ND<1	ND<1
	10/25/2004	ND<5.0	0.57	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<1.0	ND<0.50	ND<0.50
	1/17/2005	ND<5.0	ND<0.50	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<1.0	ND<0.50	ND<0.50
	4/6/2005	ND<5.0	ND<0.50	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/8/2005	ND<5.0	ND<0.50	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2005	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/28/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/27/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	ND<1.0	0.80	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/9/2008	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	1.4	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	1.8	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	1.2	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	0.72	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/3/2001	35,000	40,000	--	--	--	--	--	--	--	--	--
	1/28/2002	42,000	38,000	--	--	--	--	--	--	--	--	--
	4/25/2002	42,000	45,000	--	--	--	--	--	--	--	--	--
	7/18/2002	51,000	53,000	33,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	10/7/2002	33,000	38,000	26,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	1/6/2003	3,900	3,100	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	4/7/2003	32,000	28,000	ND<40,000	--	ND<200,000,000	ND<800	--	ND<800	ND<800	ND<800	ND<800
	7/7/2003	36,000	45,000	27,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	10/9/2003	--	20,000	ND<25,000	--	ND<130,000	ND<500	--	ND<500	ND<500	ND<500	ND<500
	1/14/2004	20,000	25,000	ND<40,000	--	ND<200,000	ND<800	--	ND<800	ND<800	ND<800	ND<800
	4/28/2004	30,000	21,000	9,200	--	ND<1,000	ND<0.5	--	6.8	ND<1	ND<1	12
	7/12/2004	12,000	11,000	4,600	--	ND<8,000	ND<5	--	5.1	ND<10	ND<10	ND<10
	10/25/2004	13,000	14,000	3,900	--	ND<5,000	ND<50	--	ND<50	ND<100	ND<50	ND<50
	1/17/2005	17,000	16,000	4,200	--	ND<5,000	ND<50	--	ND<50	ND<100	ND<50	ND<50
	4/6/2005	14,000	17,000	4,200	--	ND<10,000	ND<0.50	--	6.4	ND<0.50	ND<0.50	9.3
	7/8/2005	8,600	11,000	4,300	--	ND<5,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	10/7/2005	9,400	9,800	1,100	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	1/27/2006	9,900	7,900	1,600	--	ND<25,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	4/28/2006	9,600	11,000	2,900	--	ND<250	ND<0.50	--	3.4	ND<0.50	ND<0.50	6.3
	7/28/2006	5,000	5,300	1,300	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	10/27/2006	4,700	3,700	1,700	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/10/2007	4,400	4,400	1,300	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	2,700	3,300	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE (8021B) (µg/L)	MTBE (8260B) (µg/L)	TBA (µg/L)	Ethanol (8260B) (µg/L)	Ethanol (8015B) (µg/L)	EDB (µg/L)	EDB (504) (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/8/2007	2,500	2,200	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	1/9/2008	1,900	1,900	2,700	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	1.1
	4/4/2008	--	2,700	1,400	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	7/3/2008	--	2,300	940	--	ND<250	ND<0.50	--	2.2	ND<0.50	ND<0.50	1.2
	10/3/2008	--	1,800	540	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	1/22/2009	--	1,300	370	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	4/13/2009	--	1,200	420	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/23/2009	--	900	370	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	2/1/2010	--	720	--	--	--	--	--	--	--	--	--
	8/2/2010	--	770	--	--	--	ND<0.50	--	1.9	--	--	--
	11/1/2010	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	600	160	--	ND<250	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	7/25/2011	--	620	220	--	ND<250	ND<0.50	--	1.6	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	390	190	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**300**	**160**	**--**	**ND<250**	**ND<0.50**	**--**	**1.5**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-8	1/18/2008	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	2/1/2010	--	ND<0.50	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--

NOTES:

Oxygenate compounds analyzed by U.S. EPA Method 8260B

ND<# = Analyte not detected below indicated practical quantitation limit

µg/L = Micrograms per liter

-- = Not available

MTBE = Methyl tertiary butyl ether
TBA = Tertiary butyl alcohol
EDB = 1,2-Dibromoethane
EDC = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
ETBE = Ethyl tertiary butyl ether
TAME = Tertiary amyl methyl ether
1,1-DCA = 1,1-Dichloroethane

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
MW-1	7/20/1999	--	--	--	--	--	12	--	--	--	--	3.9	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	6.2	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	5.6	--	--	--	--	4.6	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	18	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	5.9	1.1	--	--	--	5.8	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	ND<120	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	ND<2	ND<10	ND<10	ND<20	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<2	ND<2
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	ND<0.50	ND<2.0	ND<1.0	ND<0.50	12	1.0	ND<0.50	ND<1.0	ND<0.50	9.0	ND<0.50
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	ND<50	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	ND<12	ND<12	ND<25	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	ND<0.50	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	ND<50	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/l)	Bromo-dichloro-methane (µg/l)	Bromo-form (µg/l)	Bromo-methane (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-benzene (µg/l)	Chloro-ethane (µg/l)	Chloroform (µg/l)	Chloro-methane (µg/l)	Dibromo-chloro-methane (µg/l)	1,2-Dichloro-benzene (µg/l)	1,3-Dichloro-benzene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
MW-1	7/20/1999	--	--	2.0	--	3.6	--	0.92	--	--	--	--	600
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	534
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	1,050
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	140
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	690
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	361
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	400
	4/4/2001	--	--	--	--	3.4	--	--	--	--	--	--	490
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	740
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	1.3	--	--	--	1.3	--	--	--	--	--	--	910
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	ND<120	--	--	--	--	--	--	850
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	ND<2	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<2	ND<20	450
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	1.2	ND<1.0	1.3	ND<0.50	3.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<5.0	250
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.5	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<1.0	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	--	ND<100	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	--	ND<25	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	ND<0.50	--	--	--	--	--	--	ND<10
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	ND<50	--	--	--	--	--	--	ND<10
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/l)	Dichloro-difluoro-methane (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,2-Dichloro-propane (µg/l)	cis-1,3-Dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	Hexa-chloro-butadiene (µg/l)	Methylene chloride (µg/l)	Naph-thalene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	--	--	--	--	--	--	--	--	--	1240	318	--
	1/7/2000	371	--	--	--	--	--	--	--	--	2210	597	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	334	--	--	--	--	--	--	--	--	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	ND<0.60	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	ND<120	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	ND<10	ND<10	ND<10	ND<2	ND<10	ND<10	ND<10	ND<10	--	--	ND<10
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<0.50	ND<0.50	0.73	ND<1.0	--	--	ND<0.50
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	ND<0.50
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	ND<50	ND<50	ND<50	--	ND<50	ND<50	ND<50	ND<50	--	--	ND<50
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	ND<12	ND<12	ND<12	--	ND<12	ND<12	ND<12	ND<12	--	--	ND<12
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	ND<0.50	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	ND<50	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)	Tetrachloro-ethene (PCE) (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2,4-Trichloro-benzene (µg/l)	1,1,1-Trichloro-ethane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	Trichloro-ethene (TCE) (µg/l)	Trichloro-fluoro-methane (µg/l)	1,2,4-Trimethyl-benzene (µg/l)	1,3,5-Trimethyl-benzene (µg/l)	Vinyl chloride (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	ND<2	--	ND<2	ND<2	ND<2	ND<2	ND<2	ND<2	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<50	ND<10	ND<10	ND<10
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2	ND<2.2	ND<2.2
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	ND<20	ND<20	ND<20
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/l)	Acena-phthylene (svoc) (µg/l)	Anthra-cene (µg/l)	Benzo[a]-anthracene (µg/l)	Benzo[a]-pyrene (µg/l)	Benzo[b]-fluor-anthene (µg/l)	Benzo-[g,h,l]-perylene (µg/l)	Benzo[k]-fluor-anthene (µg/l)	Benzoic Acid (µg/l)	Benzyl Alcohol (µg/l)	Bis(2-chloro-ethoxy) methane (µg/l)	Bis(2-chloro-ethyl) ether (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	10	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	51.6	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	55	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	400	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	120	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	70	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	ND<5	--	--	--	--	--	--	--	ND<2	ND<3	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<10	33	ND<10	ND<10	ND<25	ND<10	ND<10	ND<10	ND<10	ND<10	ND<15	ND<10
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	ND<2.2	ND<4.4	ND<2.2	ND<2.2	ND<5.5	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<3.3	ND<2.2
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	ND<20	ND<40	ND<20	ND<20	ND<50	ND<20	ND<20	ND<20	ND<20	ND<20	ND<30	ND<20
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
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WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	ND<5.0	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	ND<5.0	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/l)	Bis(2-ethyl-hexyl) phthalate (µg/l)	4-Bromo-pheny phe-nyl ether (µg/l)	Butyl-benzyl phthalate (µg/l)	4-Chloro-3-methyl-phenol (µg/l)	4-Chloro-aniline (µg/l)	2-Chloro-naphtha-lene (µg/l)	2-Chloro-phenol (µg/l)	4-Chloro-phenyl phenyl ether (µg/l)	Chrysene (µg/l)	Dibenzo-[a,h]-anthracene (µg/l)	Dibenzo-furan (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<50	ND<10	ND<10
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2	ND<2.2
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	ND<20	ND<20	ND<20	ND<100	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	ND<20	ND<20
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/l)	1,3-Dichloro-benzene (svoc) (µg/l)	1,4-Dichloro-benzene (svoc) (µg/l)	3,3-Dichloro-benzidine (µg/l)	2,4-Dichloro-phenol (µg/l)	Diethyl phthalate (µg/l)	2,4-Dimethyl-phenol (µg/l)	Dimethyl phthalate (µg/l)	Di-n-butyl phthalate (µg/l)	2,4-Dinitro-phenol (µg/l)	2,4-Dinitro-toluene (µg/l)	2,6-Dinitro-toluene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5g
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	240	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	87.4	26.4
	1/7/2000	--	--	--	--	--	--	--	--	--	--	315	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	73	31
	7/14/2000	--	--	--	--	--	--	--	--	--	--	300	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	98.1	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	180	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	78	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	290	47
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	420	13
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	260	ND<5.0
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	ND<2	ND<2	--	--	--	--	ND<2	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<10	ND<5.0	ND<10	ND<10	ND<10	ND<10	--	280	ND<10
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<1.1	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	230	29
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	270	ND<20
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5g
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5g
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

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WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5g
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76 Service Station #1156 (Chevron Site #351645)
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WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	ND<5.0	ND<5.0
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

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	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5g
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	ND<5.0	ND<5.0
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5g
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Di-n-octyl phthalate (µg/l)	Fluoran-thene (µg/l)	Fluorene (µg/l)	Hexa-chloro-benzene (µg/l)	HCBD (svoc) (µg/l)	Hexachloro cyclopenta-diene (µg/l)	Hexachloro -ethane (µg/l)	Indeno-[1,2,3-c,d] pyrene (µg/l)	Isophorone (µg/l)	2-Methyl-4,6-dinitro-phenol (µg/l)	2-Methyl-naphtha-lene (µg/l)	2-Methyl-phenol (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
MW-1	7/20/1999	27	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	35.6	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	18	--	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	28.9	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	25	--	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	25	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	22	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	ND<2
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	660	ND<10	ND<10	ND<25	ND<10	ND<10	ND<10	ND<10	ND<10	ND<50	ND<10
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	770	ND<2.2	ND<2.2	ND<5.5	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	750	ND<20	ND<20	ND<50	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	ND<20
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	ND<5.0	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	ND<5.0	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/l)	Naphtha-lene (svoc) (µg/l)	2-Nitro-aniline (µg/l)	3-Nitro-aniline (µg/l)	4-Nitro-aniline (µg/l)	Nitro-benzene (µg/l)	2-Nitro-phenol (µg/l)	4-Nitro-phenol (µg/l)	N-nitrosodi-n-propyl-amine (µg/l)	N-Nitro-sodiphenyl-amine (µg/l)	Penta-chloro-phenol (µg/l)	Phen-anthrene (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	--	--	--	--	--	--	--
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	ND<2	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<25	ND<25	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<5.5	ND<5.5	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	ND<20	ND<20	ND<20	ND<50	ND<50	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	26	ND<2.0	ND<3.0	280	160	200	8.6

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	4.4	ND<2.0	9.3	740	110	230	1.1
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	3.0	ND<2.0	14	1,800	2,800	2,500	4.7
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	1.9	ND<2.0	8.1	1,500	2,000	3,500	7.2
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	1.4	ND<2.0	19	ND<500	1.4	650	1.2
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	1.4	ND<2.0	32	ND<500	14	530	2.6
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/l)	Pyrene (µg/l)	1,2,4-Trichloro-benzene (svoc) (µg/l)	2,4,6-Trichloro-phenol (µg/l)	2,4,5-Trichloro-phenol (µg/l)	Carbon (organic, total) (µg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Iron Ferrous (µg/l)	Manganese (dissolved) (µg/l)	Manganese (total) (µg/l)	Molyb-denum (total) (µg/l)
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	2.3	ND<2.0	100	3,200	960	2,300	1.1
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	0.48	ND<2.0	3.3	130	ND<1.0	47	1.2
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	--
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	--	--	--	--	--	--	--	--	--	--	--	--
	4/25/2002	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	7.5	ND<2.0	ND<2.0	ND<3.0	ND<3.0	ND<25	0.77	23	ND<0.44	ND<1.0	390	750
MW-1 cont.	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-2	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
MW-2 cont.	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	ND<1.0	ND<2.0	ND<2.0	31	12	ND<25	0.40	25	0.85	14	350	688
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-3	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
MW-3 cont.	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	3.7	ND<2.0	ND<2.0	22	ND<3.0	ND<25	0.41	30	2.9	16	360	681
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-4 cont.	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
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WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	6.4	ND<2.0	ND<2.0	13	3.4	ND<25	0.40	37	4.4	23	320	704
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-5	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-5 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	1.5	ND<2.0	ND<2.0	59	6.1	ND<25	0.71	68	5.7	26	350	860
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-6	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
MW-6 cont.	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	2.9	ND<2.0	ND<2.0	80	5.2	ND<25	0.58	72	8.9	37	280	754
MW-7	7/18/2002	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2002	--	--	--	--	--	--	--	--	--	--	--	--
	1/6/2003	--	--	--	--	--	--	--	--	--	--	--	--
	4/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	--	--	--	--	--	--	--	--	--	--
	10/9/2003	--	--	--	--	--	--	--	--	--	--	--	--
	1/14/2004	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2004	--	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	--
	10/25/2004	--	--	--	--	--	--	--	--	--	--	--	--
	1/17/2005	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2005	--	--	--	--	--	--	--	--	--	--	--	--
	7/8/2005	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2005	--	--	--	--	--	--	--	--	--	--	--	--
	1/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	4/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	7/28/2006	--	--	--	--	--	--	--	--	--	--	--	--
	10/27/2006	--	--	--	--	--	--	--	--	--	--	--	--
	1/10/2007	--	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	--	--	--	--	--	--	--	--	--	--	--	--
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--	--
MW-7 cont.	1/9/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	1.3	ND<2.0	ND<2.0	190	5.6	ND<25	0.50	37	ND<0.44	9.3	430	848
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--

Table 5j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station #1156 (Chevron Site #351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/l)	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Bromate (µg/l)	Bromide (µg/l)	Chloride (µg/l)	Nitrogen as Nitrate (µg/l)	Sulfate (µg/l)	Alkalinity (total) (µg/l)	Specific Con-ductance (µg/l)
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	--	--	--	--	--	--	--	--	--	--	--
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	--	--	--	--	--	--	--	--	--	--	--
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	--	--	--	--	--	--	--	--	--	--	--
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
MW-8	1/18/2008	--	--	--	--	--	--	--	--	--	--	--	--
	4/4/2008	--	--	--	--	--	--	--	--	--	--	--	--
	7/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	10/3/2008	--	--	--	--	--	--	--	--	--	--	--	--
	1/22/2009	--	--	--	--	--	--	--	--	--	--	--	--
	4/13/2009	1.2	ND<2.0	ND<2.0	12	4.5	ND<25	ND<0.10	81	19	40	210	690
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--	--

NOTES:
ND<# = Analyte not detected below indicated practical quantitation limit

-- = Not sampled
µg/L = Micrograms per liter

Table 6

Grab Groundwater Analytical Results - July 2009

76 Service Station No. 1156

4276 MacArthur Boulevard, Oakland, California

Sample ID	Date	Time	TPH-G (µg/L)	TPH-D (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)
Groundwater																
SB-7	7/9/09	15:25	**7,900**	**1,400**	**16**	**6.8**	**270**	**1,400**	**21**	ND<100	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<250
SB-9	7/8/09	18:58	**630**	**350**	**62**	**3.9**	**3.8**	**29**	**50**	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<250
SB-11	7/10/09	11:55	**310**	**230**	**27**	**1.4**	**9.7**	**7.1**	**25**	**79**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<250
1156-CompB	7/10/09	13:45	**73**	**--**	ND<0.50	ND<0.50	**0.87**	**4.7**	ND<0.50	ND<10	**0.87**	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<250

TPH-G = total petroleum hydrocarbons as gasoline by EPA Method 8260B

TPH-D total petroleum hydrocarbons as diesel by EPA Method 8260B

MTBE = methyl tertiary butyl ether by EPA Method 8260B

TBA = tertiary butyl alcohol by EPA Method 8260B

ETBE = ethyl tertiary butyl ether by EPA Method 8260B

TAME = tertiary amyl methyl ether by EPA Method 8260B

DIPE = di-isopropyl ether by EPA Method 8260B

1,2-DCA = 1,2-Dichloroethane (also known as ethylene dichloride) by EPA Method 8260B

EDB = ethylene dibromide (also known as 1,2-Dibromoethane) by EPA method 8260B

Ethanol was analyzed by EPA Method 8260B

µg/L = micrograms per liter

ND = not detected above the laboratory detection limit

Bold = detected compound concentration

EPA = US Environmental Protection Agency

Table 7

Discrete Groundwater Analytical Results - June 2010

76 Service Station No. 1156
4276 MacArthur Boulevard
Oakland, California

Boring	Depth	Date	TPHg ug/L	TPHd ug/L	TPHmo ug/L	Benzene ug/L	Toluene ug/L	Ethylbenzene ug/L	Total Xylenes ug/L	MTBE ug/L	EDB ug/L	1,2-DCA ug/L	TAME ug/L	TBA ug/L	DIPE ug/L	ETBE ug/L	Ethanol ug/L
SB-15	19-24	6/18/2010	<50	**54**	<200	<0.50	<0.50	<0.50	<1.0	**29**	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
SB-16	20-25	6/17/2010	<50	**150**	<200	**140**	**7.5**	**14**	**7.8**	**460**	<0.50	**23**	<0.50	**730**	<0.50	<0.50	<250
SB-17	14-19	6/17/2010	**260**	**260**	<290	**8.7**	**0.51**	**6.6**	**1.6**	**82**	<0.50	**14**	<0.50	**640**	<0.50	<0.50	<250
SB-18	15-20	6/16/2010	**1900**	**720**	**480**	**94**	**4.1**	**4.8**	**12**	**180**	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250
SB-19	15-20	6/16/2010	**1100**	**230**	**230**	**8.6**	**1.2**	**4.3**	**9.5**	**93**	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<250

TPHg = total petroleum hydrocarbons as gaoline TPHd = total petroleum hydrocarbons as diesel TPHmo = total petroleum hydrocarbons as motor oil EDB = ethylene dibromide 1,2-DCA = 1,2 dichloroethane
MTBE = mety; tert butyl ether TAME = tert amyl methyl ether TBA = tert butyl alcohol DIPE = diisopropyl ether ETBE = ethyl tert butyl ether ug/L = micrograms per liter bold = above laboratory reporting limits

Table 8
Soil Gas Analytical Results - August 2009 and September 2010
Chevron Site #351645 (76 Station No. 1156)
Oakland, California

Sample ID	Date	Time	Sample Depth (feet)	TPH-G ($\mu g/m^3$)	Benzene ($\mu g/m^3$)	Toluene ($\mu g/m^3$)	Ethyl-benzene ($\mu g/m^3$)	m,p-Xylenes ($\mu g/m^3$)	o-Xylenes ($\mu g/m^3$)	Total Xylenes ($\mu g/m^3$)	MTBE ($\mu g/m^3$)	TBA ($\mu g/m^3$)	ETBE ($\mu g/m^3$)	TAME ($\mu g/m^3$)	DIPE ($\mu g/m^3$)	EDB ($\mu g/m^3$)	1,2-DCA ($\mu g/m^3$)	Ethanol ($\mu g/m^3$)	1,1 DFA ($\mu g/m^3$)	IPA ($\mu g/m^3$)	Oxygen (% Vol)	Carbon Dioxide (% Vol)	Methane (ppmV)
Soil Gas																							
SV-2	8/11/09	14:43	5	**23**	**350**	**370**	**370**	**380**	**140**	--	<100	<10,000	<100	<100	<100	--	--	--	<10,000	--	**11**	**5.1**	<500
SV-4	8/11/09	13:49	3.5	**67,000,000**	**1,100**	<200	**17,000**	**6,200**	<100	--	<100	<10,000	<100	<100	<100	--	--	--	<10,000	--	**5.2**	**9.5**	**20,000**
SV-6	8/11/09	10:40	5	**3,000,000**	**2,000**	<200	**2,700**	**2,200**	<100	--	<100	<10,000	<100	<100	<100	--	--	--	<10,000	--	**20**	<1.0	<500
SV-7	8/11/09	12:09	3.5	**82,000,000**	**120,000**	<200	**32,000**	**330**	**130**	--	<100	<10,000	<100	<100	<100	--	--	--	<10,000	--	**21**	<1.0	**24,000**
SVW-1	9/8/10	--	4.5	**4,700**	<22	<17	<20	**--**	**--**	<20	<15	<92	<17	<17	<17	<31	<25	<190	--	<56	**11**	**4.4**	**<0.00040**
SVW-2	9/8/10	--	4.5	**78,000,000**	<20,000	**19,000**	**35,000**	**--**	**--**	**99,000**	<15,000	<94,000	<17,000	<17,000	<17,000	<32,000	<25,000	<190,000	--	<51,000	**1.3**	**14**	**8.1**
SVW-3	9/8/10	--	4.5	**250,000,000**	**1,100,000**	<18,000	**610,000**	**--**	**--**	**820,000**	<18,000	<110,000	<20,000	<20,000	<20,000	<37,000	<30,000	<230,000	--	<60,000	**1.1**	**11**	**38**
SVW-4	9/8/10	--	4.5	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
SVW-5	9/8/10	--	4.5	**320,000,000**	**540,000**	<28,000	**23,000**	**--**	**--**	<32,000	<27,000	<170,000	<31,000	<31,000	<31,000	<57,000	<45,000	<350,000	--	<3,700	**1.4**	**13**	**7.5**
SVW-6	9/8/10	--	4.5	**420,000,000**	**1,000,000**	<38,000	**240,000**	**--**	**--**	**170,000**	<37,000	<230,000	<43,000	<43,000	<43,000	<78,000	<62,000	<480,000	--	<130,000	**1.1**	**16**	**27**
Shallow Soil Gas CHHSLs for Residential Land Use				NE	**36.2**	**135,000**	NE	**319,000**	**315,000**	NE	**4,000**	NE	NE	NE	NE	NE	**49.6**	NE	--	--	--	--	--
Shallow Soil Gas CHHSLs for Commercial Land Use				NE	**122**	**378,000**	NE	**887,000**	**879,000**	NE	**13,400**	NE	NE	NE	NE	NE	**167**	NE	--	--	--	--	--
Lowest Residential Shallow Soil Gas ESLs				**10,000**	**84**	**63,000**	**980**	NE	NE	**21,000**	**9,400**	NE	NE	NE	NE	**4.1**	**94**	NE	--	--	--	--	--
Lowest Commercial Shallow Soil Gas ESLs				**29,000**	**280**	**180,000**	**3,300**	NE	NE	**58,000**	**31,000**	NE	NE	NE	NE	**140**	**310**	NE	--	--	--	--	--

TPH-G = total petroleum hydrocarbons as gasoline by EPA Method 8260B
MTBE = methyl tertiary butyl ether by EPA Method 8260B
TBA = tertiary butyl alcohol by EPA Method 8260B
ETBE = ethyl tertiary butyl ether by EPA Method 8260B
TAME = tertiary amyl methyl ether by EPA Method 8260B

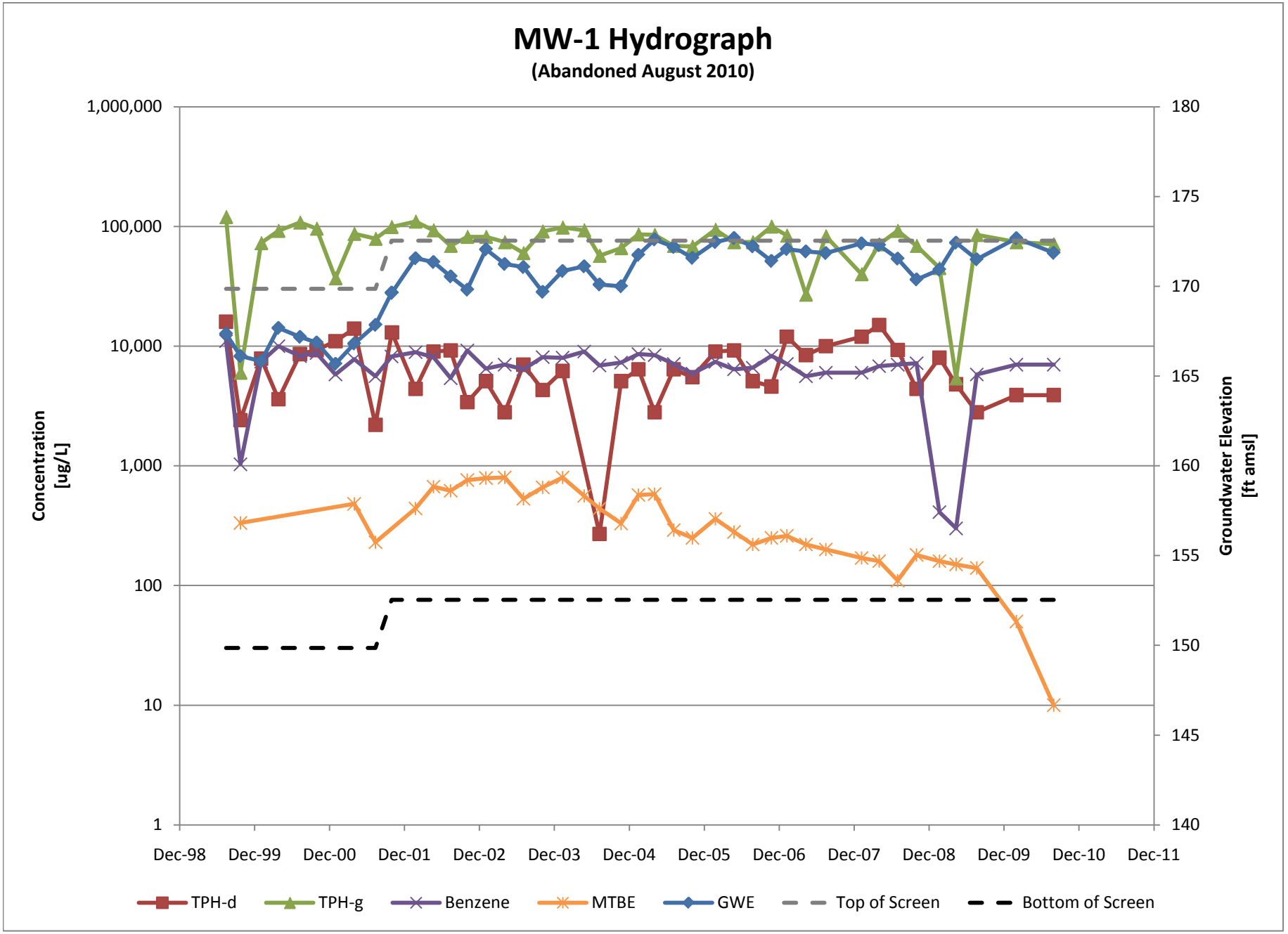
CHHSLs = California Human Health Screening Levels set by the California EPA (January 2005)
ESLs = Environmental Screening Levels set by the San Francisco Bay Regional Water Quality Control Board (November 2007)

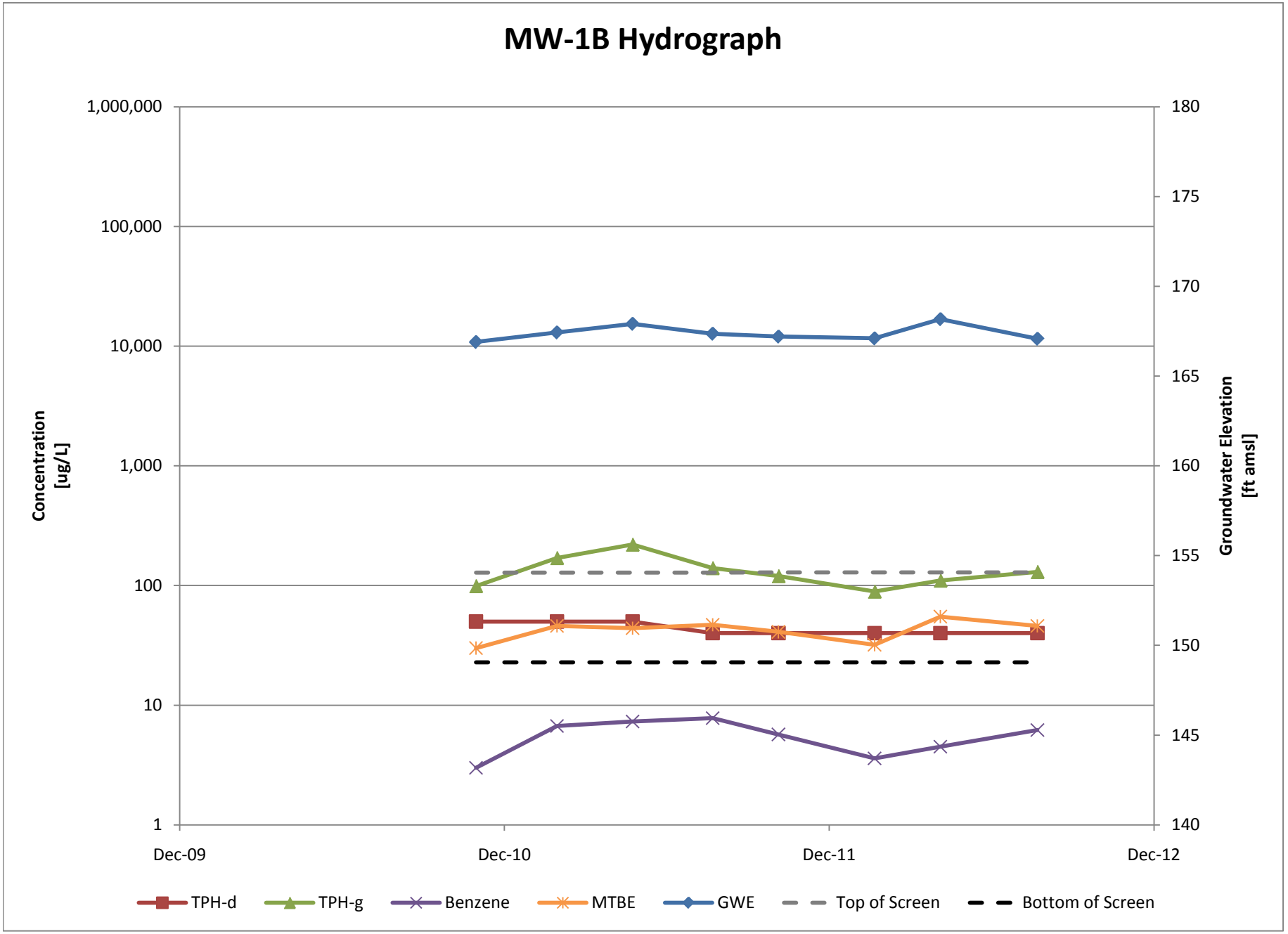
DIPE = di-isopropyl ether by EPA Method 8260B
EDB = ethylene dibromide (also known as 1,2-Dibromoethane) by EPA method TO-15
Ethanol was analyzed by EPA Method TO-15
1,2-DCA = 1,2-Dichloroethane (also known as ethylene dichloride) by EPA MethodTO-15
1,1-DFA = 1,1 - Difluoroethane (leak check)
IPA = Isopropyl Alcohol (Leak Detection Compound)

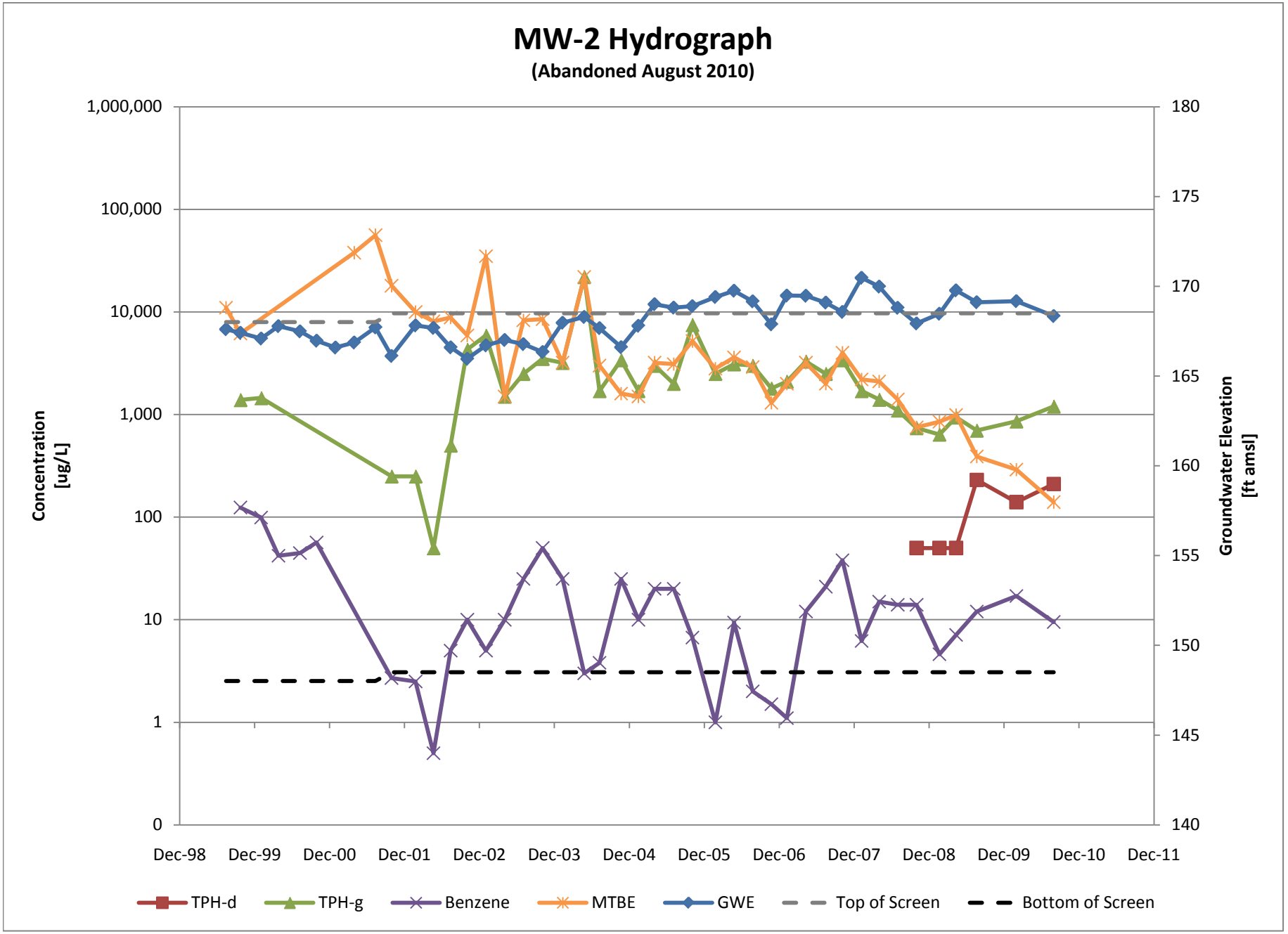
dup = duplicate sample
$\mu g/m^3$ = micrograms per cubic meter
ppmV = parts per million by volume
% Vol = percent by volume
Bold = Compound concentrations above reporting limit
** = Sample analyzed by EPA Method TO-15
NE = Not Established
-- = No Sample/No Data

Attachment E

Hydrographs


MW-1 Hydrograph
(Abandoned August 2010)
Concentration [ug/L]
Groundwater Elevation [ft amsl]
1,000,000
100,000
10,000
1,000
100
10
1
180
175
170
165
160
155
150
145
140
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
TPH-d
TPH-g
Benzene
MTBE
GWE
Top of Screen
Bottom of Screen


MW-1B Hydrograph
1,000,000
100,000
10,000
1,000
100
10
1
Concentration [ug/L]
180
175
170
165
160
155
150
145
140
Groundwater Elevation [ft amsl]
Dec-09
Dec-10
Dec-11
Dec-12
TPH-d
TPH-g
Benzene
MTBE
GWE
Top of Screen
Bottom of Screen


MW-2 Hydrograph
(Abandoned August 2010)
Concentration [ug/L]
1,000,000
100,000
10,000
1,000
100
10
1
0
Groundwater Elevation [ft amsl]
180
175
170
165
160
155
150
145
140
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
TPH-d
TPH-g
Benzene
MTBE
GWE
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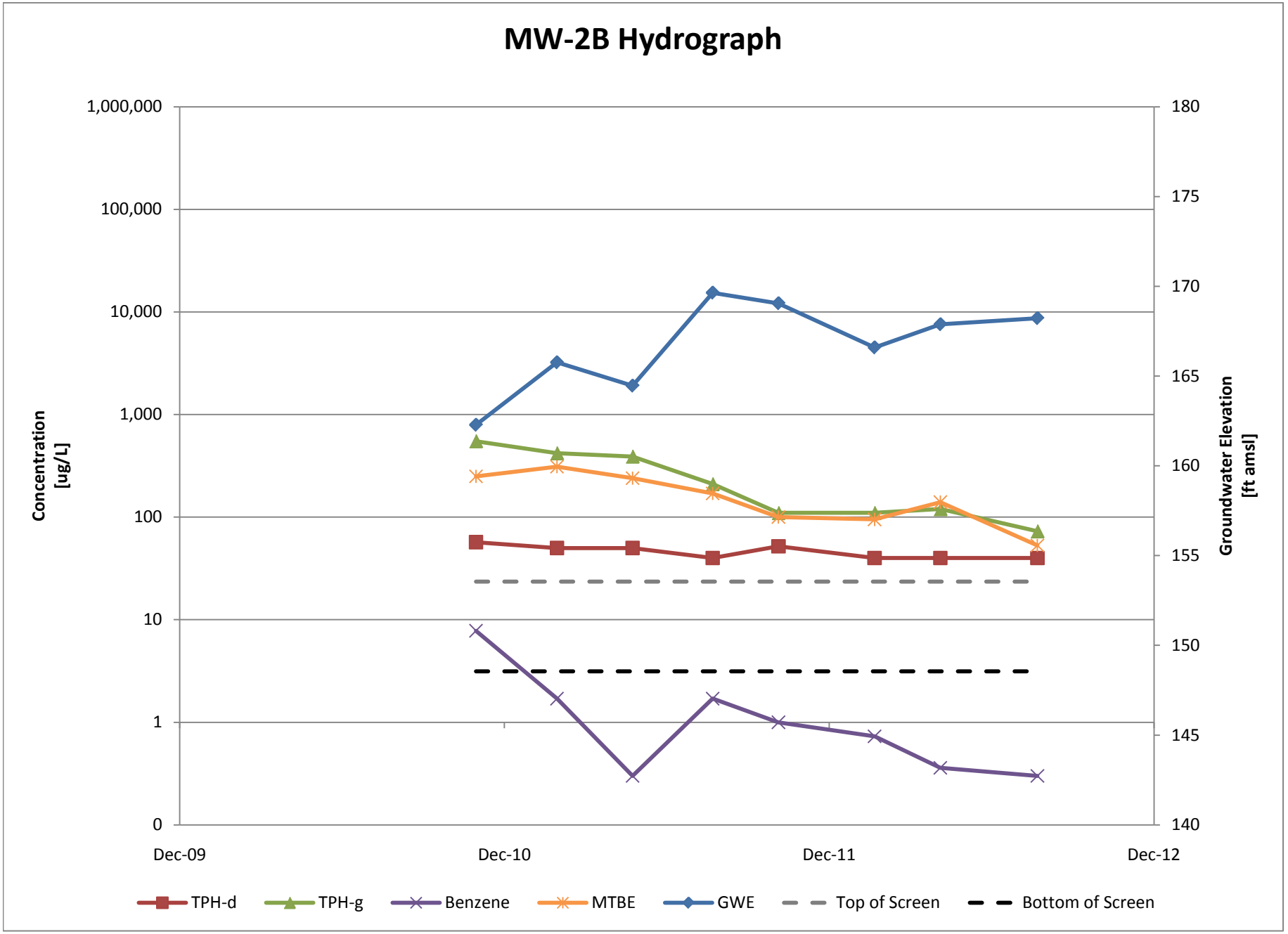
Bottom of Screen


MW-2B Hydrograph
Concentration [ug/L]
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100,000
10,000
1,000
100
10
1
0
Groundwater Elevation [ft amsl]
180
175
170
165
160
155
150
145
140
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Dec-10
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Dec-12
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TPH-g
Benzene
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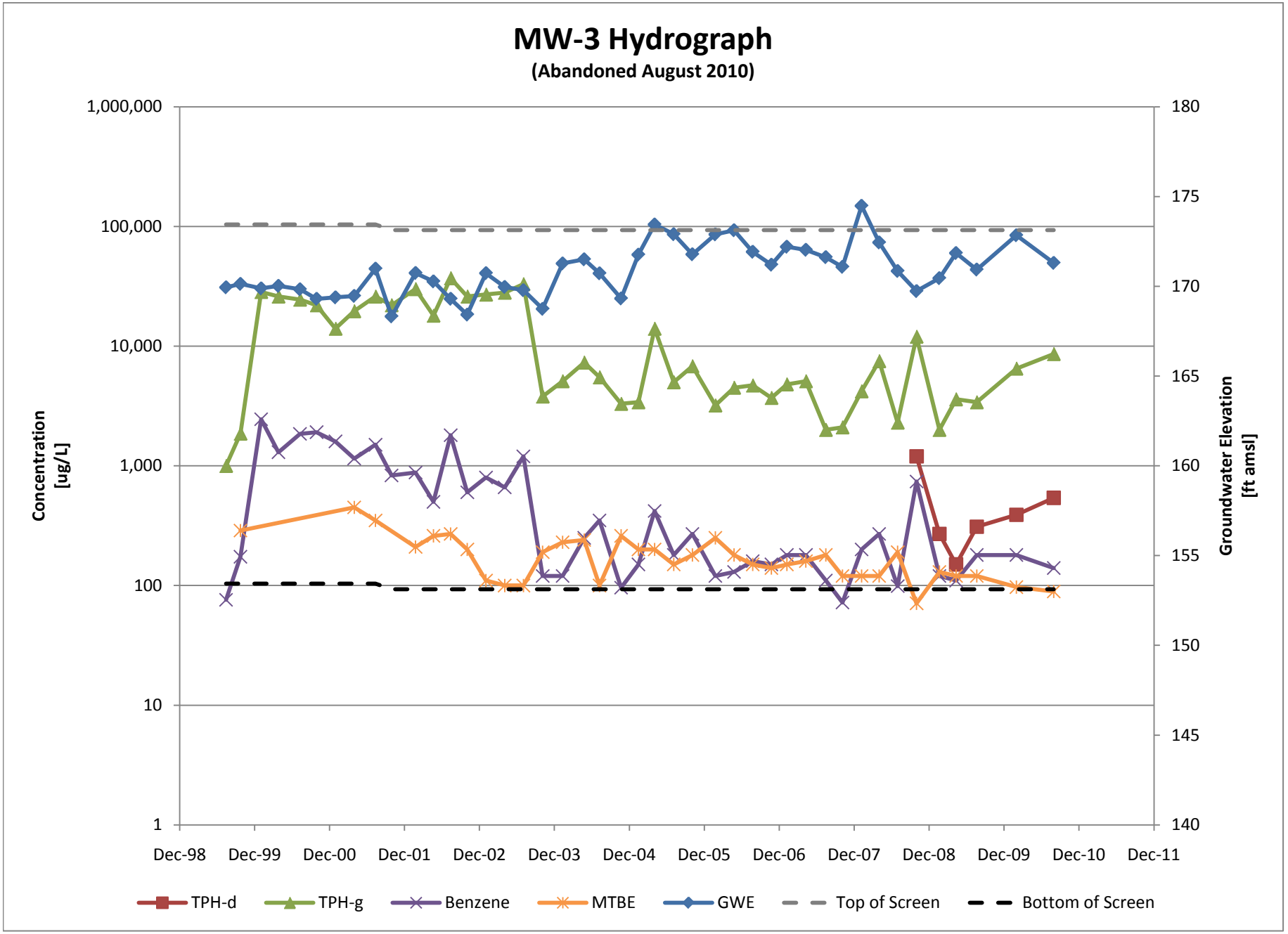
Bottom of Screen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(Abandoned August 2010)
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1,000
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Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
TPH-d
TPH-g
Benzene
MTBE
GWE
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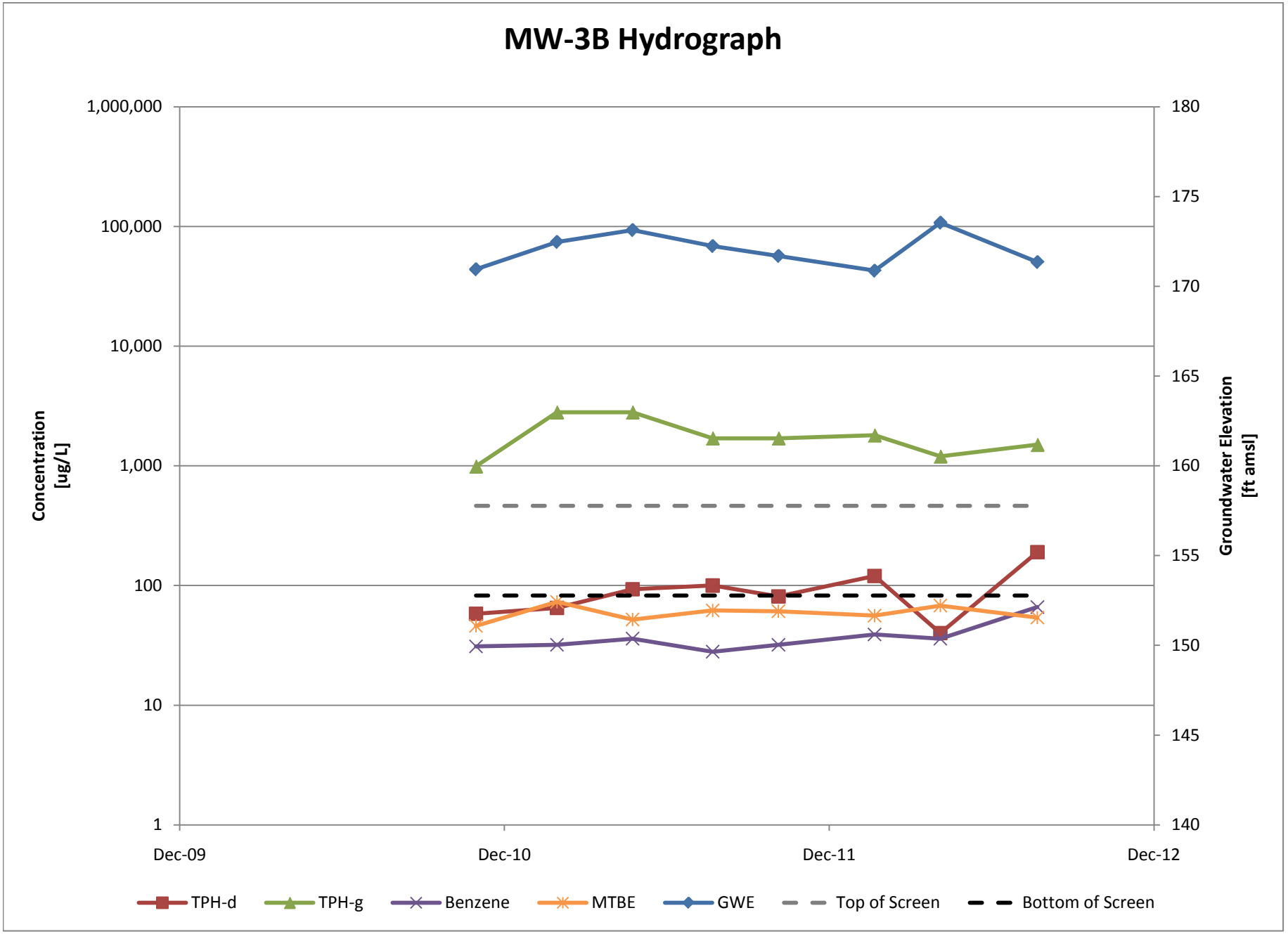
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1,000
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Concentration [ug/L]
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175
170
165
160
155
150
145
140
Groundwater Elevation [ft amsl]
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Dec-10
Dec-11
Dec-12
TPH-d
TPH-g
Benzene
MTBE
GWE
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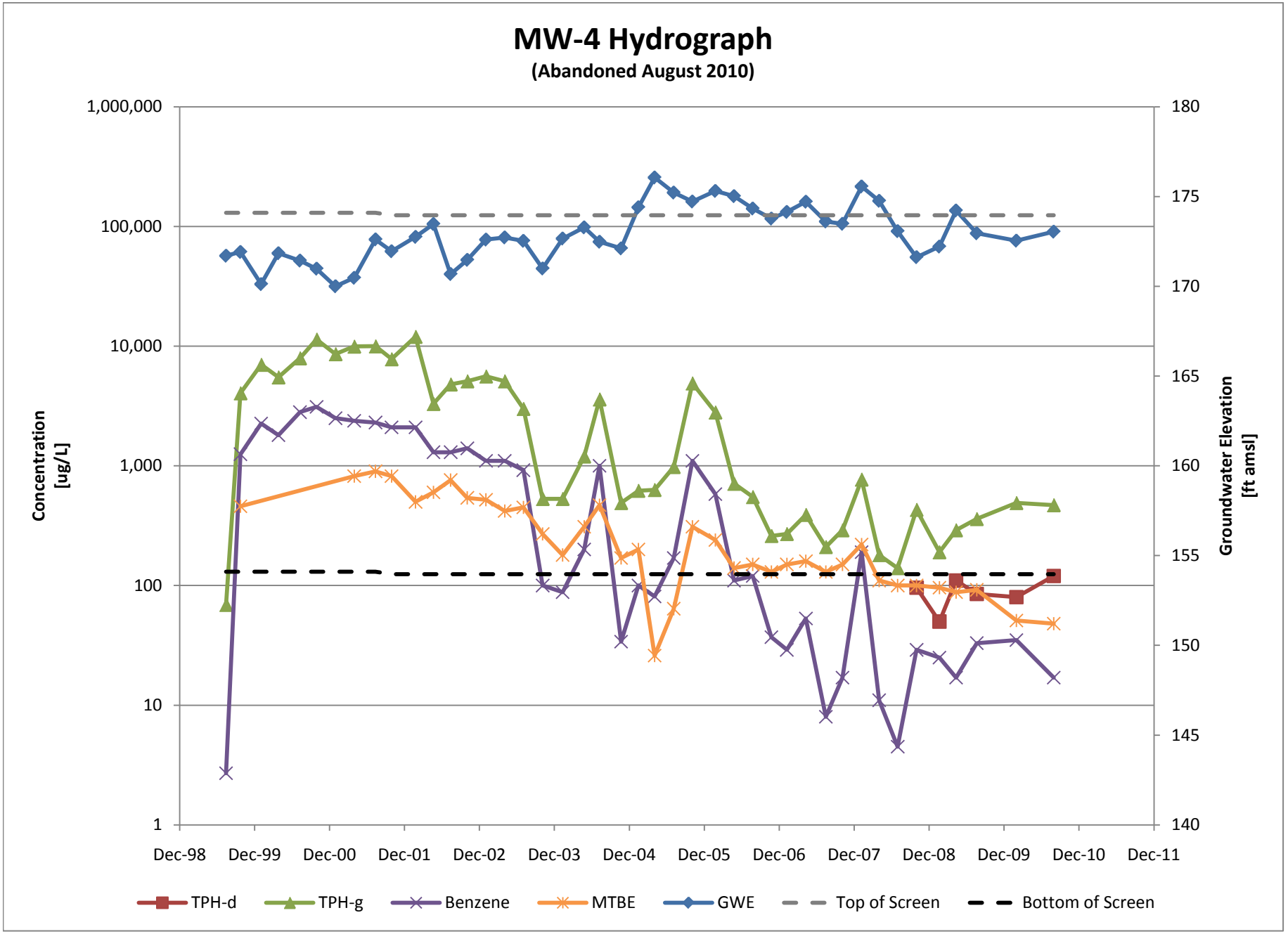
Bottom of Screen


MW-4 Hydrograph
(Abandoned August 2010)
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Groundwater Elevation [ft amsl]
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100,000
10,000
1,000
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165
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145
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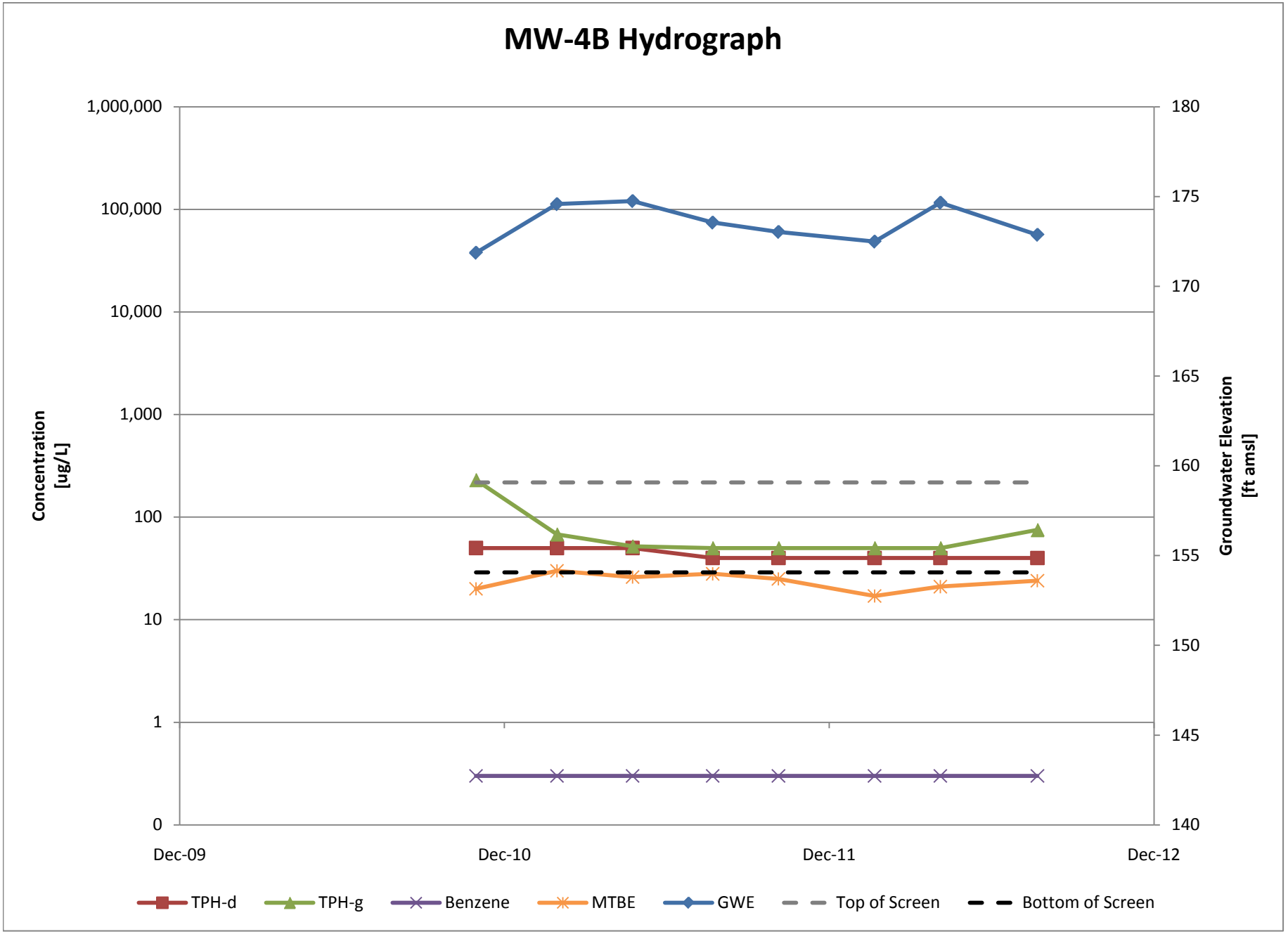
Dec-98
Dec-99
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
Dec-11
TPH-d
TPH-g
Benzene
MTBE
GWE
Top of Screen
Bottom of Screen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Concentration [ug/L]
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1,000
100
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1
0
Groundwater Elevation [ft amsl]
180
175
170
165
160
155
150
145
140
Dec-09
Dec-10
Dec-11
Dec-12
TPH-d
TPH-g
Benzene
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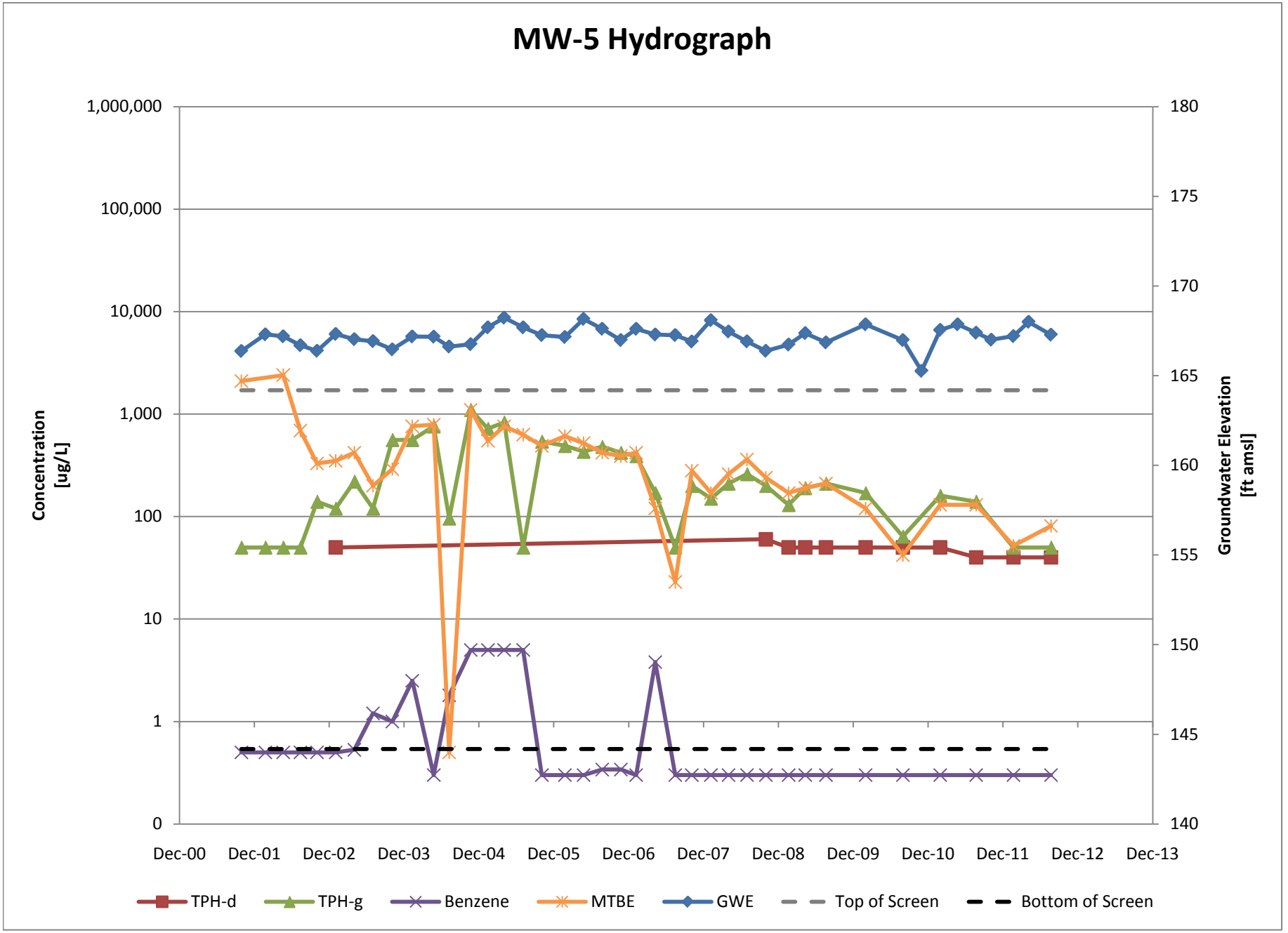
GWE
Top of Screen
Bottom of Screen


MW-5 Hydrograph
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1,000
100
10
1
0
Groundwater Elevation [ft amsl]
180
175
170
165
160
155
150
145
140
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
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Benzene
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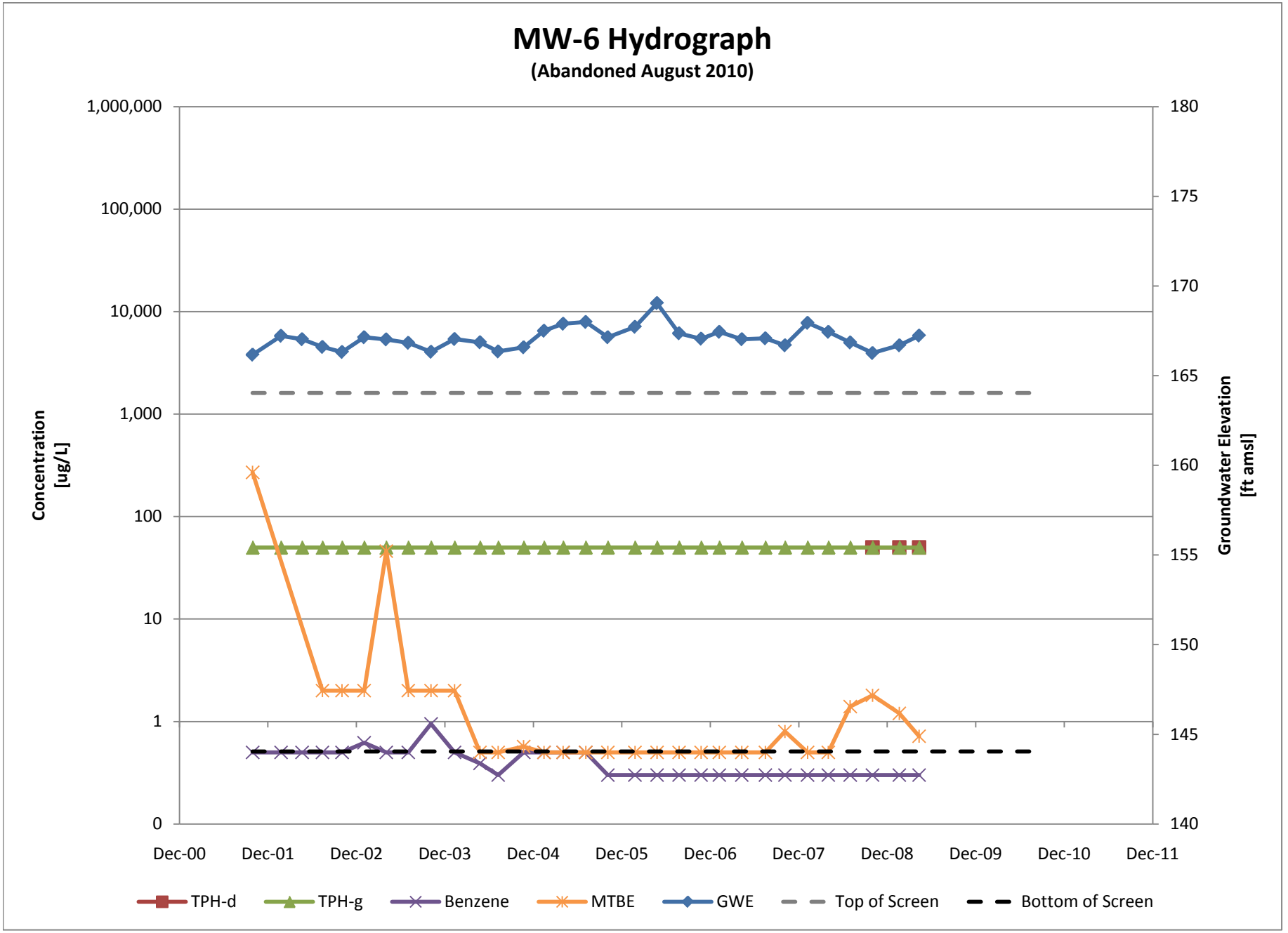
Bottom of Screen


MW-6 Hydrograph
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Groundwater Elevation [ft amsl]
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1,000
100
10
1
0
180
175
170
165
160
155
150
145
140
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
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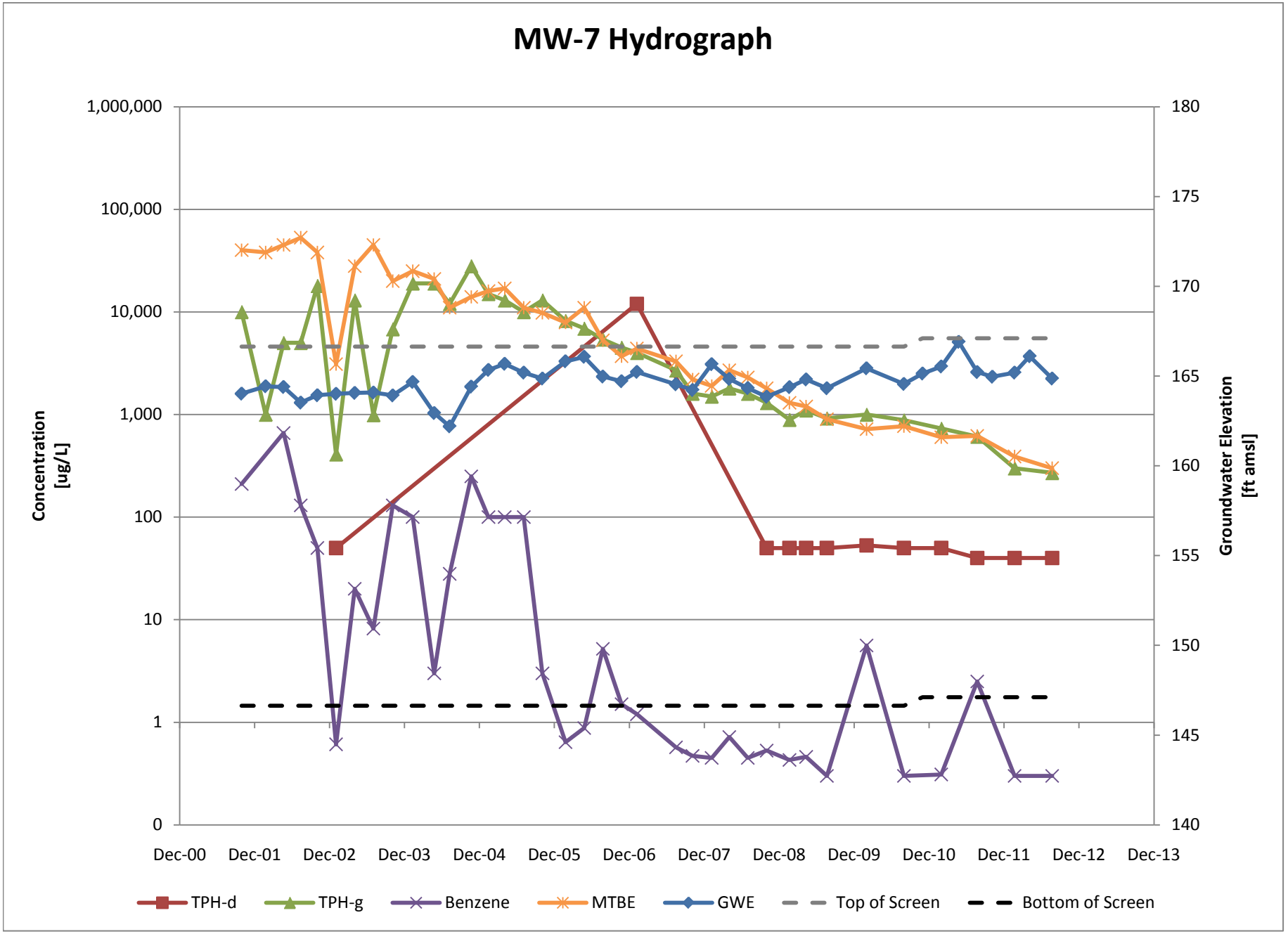
Dec-11
TPH-d
TPH-g
Benzene
MTBE
GWE
Top of Screen
Bottom of Screen


MW-7 Hydrograph
Concentration [ug/L]
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10,000
1,000
100
10
1
0
Groundwater Elevation [ft amsl]
180
175
170
165
160
155
150
145
140
Dec-00
Dec-01
Dec-02
Dec-03
Dec-04
Dec-05
Dec-06
Dec-07
Dec-08
Dec-09
Dec-10
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Dec-12
Dec-13
TPH-d
TPH-g
Benzene
MTBE
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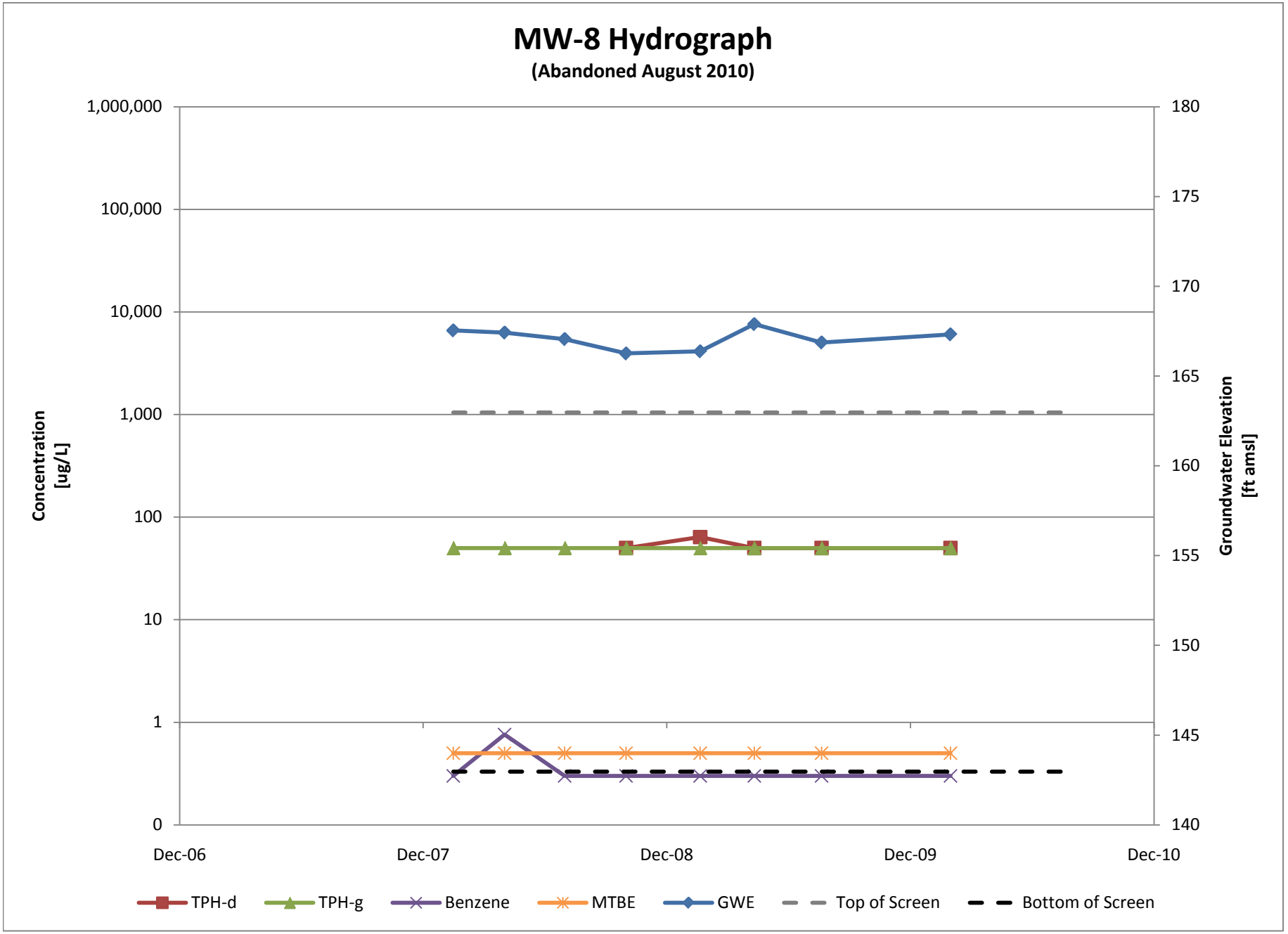
Bottom of Screen


MW-8 Hydrograph
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Groundwater Elevation [ft amsl]
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1,000
100
10
1
0
180
175
170
165
160
155
150
145
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Dec-06
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Dec-09
Dec-10
TPH-d
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Benzene
MTBE
GWE
Top of Screen
Bottom of Screen

APPENDIX C

Standard Operating Procedures

SOP NUMBER: 7115

Subsurface Soil Sampling by Split Spoon

Date:	3rd Qtr. 1994
Revision Number:	3
Author:	Charles Martin
Discipline:	Geosciencies

1.0 PURPOSE AND APPLICABILITY

1.1 Purpose and Applicability

This Standard Operating Procedure (SOP) describes the methods used in obtaining subsurface soil samples for physical and/or chemical analysis. Subsurface soil samples are obtained in conjunction with soil boring programs and provide information as to the physical and/or chemical makeup of the subsurface environment.

The purpose of this SOP is to provide a description of a specific method or procedure to be used in the collection of subsurface soil samples. Subsurface soil is defined as unconsolidated material which may consist of one or a mixture of the following materials: sand, gravel, silt, clay, peat (or other organic soils), and fill material. Subsurface soil sampling, conducted in accordance with this SOP will promote consistency in sampling and provide a basis for sample representativeness.

This SOP covers subsurface soil sampling by split-spoon only, as this is the means most often used for obtained samples of unconsolidated deposits. Other types of equipment are available for use in subsurface soil sampling, including thin-wall tube samplers (Shelby tubes), piston samplers, and continuous core barrel samplers. Information on the use of these other sampling devices may be found in several available drilling handbooks and respective state and/or federal agency technical guidance documents. The American Society for Testing and Materials (ASTM) also provides procedures for use of split-spoon and other sampling devices.

Deviations from this SOP to accommodate other regulatory requirements should be reviewed in advance of the field program, should be explained in the project work plan, and must be documented in the field project notebook when they occur.

1.2 General Principles

Split-spoon subsurface soil sampling generally requires use of a drilling rig and typically the hollow-stem auger or other common drilling method to generate a borehole in which to use the split-spoon sampler. The split-spoon sampler is

inserted through the augers (or other type of drill casing) then is driven into the subsurface soil with a weighted hammer. The sampler is then retrieved and opened to reveal the recovered soil sample. Soil samples may be collected at a continuous interval or at pre-selected vertically spaced intervals within the borehole.

1.3 Quality Assurance Planning Considerations

Sampling personnel should follow specific quality assurance guidelines as outlined in the site-specific Quality Assurance Project Plan (QAPP). Proper quality assurance requirements should be provided which will allow for collection of representative samples from representative sampling points. Quality assurance requirements outlined in the QAPP typically suggest the collection of a sufficient quantity of field duplicate, field blank, and other samples.

1.4 Health and Safety Considerations

Subsurface soil sampling may involve chemical hazards associated with the types of contaminants potentially encountered and will always involve potential physical hazards associated with use of drilling equipment. When sampling is performed in materials which may contain hazardous constituents, or when the quality assurance objectives of the project require the use of hazardous solvents, adequate Health and Safety measures must be taken to protect sampling personnel. These measures must be addressed in the project Health and Safety Plan (HASP). This plan must be approved by the project Health and Safety Officer before work commences, must be distributed to all personnel performing sampling, and must be adhered to as field activities are performed.

2.0 RESPONSIBILITIES

2.1 Drilling Subcontractor

It will be the responsibility of the drilling subcontractor to provide the necessary materials for obtaining subsurface soil samples. This generally includes one or more split-spoon samplers in good operating condition and sample containers used for stratigraphic characterization samples (sample containers for environmental samples should be provided by the designated analytical laboratory). It is the drilling subcontractor's responsibility to provide and maintain their own boring logs if desired. Equipment decontamination materials should also be supplied by the subcontractor and should meet project specifications.

2.2 Project Geologist/Sampling Engineer

It will be the responsibility of the project geologist/sampling engineer to conduct subsurface soil sampling in a manner which is consistent with this SOP. The project geologist/sampling engineer will observe all activities pertaining to subsurface soil sampling to ensure that the SOP is followed, and to record all pertinent data onto a boring log. It is also the project geologist/sampling engineer's responsibility to indicate the specific targeted sampling depth or sampling interval to the drilling subcontractor. The project geologist/sampling engineer is also responsible for the collection of representative environmental or stratigraphic characterization samples once the sampling device has been retrieved and opened. Additional sample collection responsibilities include labeling, handling, and storage of samples until further chain-of-custody procedures are implemented.

3.0 REQUIRED MATERIALS

In addition to those materials provided by the subcontractor, the project geologist/sampling engineer will require:

- Project Sampling Plan, QAPP, and HASP
- Boring logs
- Teaspoon or spatula (stainless steel is recommended)
- Sample kit (bottles, labels, custody records and tape, cooler)
- Sample collection pen
- Folding rule or tape measure
- Equipment decontamination materials
- Health and safety equipment (as required by HASP)
- Field project notebook/pen

4.0 METHOD

4.1 General Method Description

Split-spoon sampling devices are typically constructed of steel and are most commonly available in lengths of 18 and 24 inches and diameters of 1.5 to 3 inches. The split-spoon consists of a tubular body with two halves that split apart lengthwise, a drive head on the upper end with a ball-check valve for venting, and a hardened steel cutting shoe at the bottom. The soil sample enters the split-spoon through the cutting shoe as the device is driven into the ground. A replaceable plastic or metal basket is often inserted into the shoe to assist with retaining samples. Once the

sampler is retrieved, the drive head and cutting shoes are removed and the split-spoon halves are then separated, revealing the sample.

Sample depth intervals are usually defined on a project-specific basis with these requirements specified in the project sampling plan. Sampling intervals typically range from one (1) sample per five (5) feet of drilling to continuous sampling where the entire drilled interval is sampled.

Subsurface soil sampling is usually accomplished as part of a drilling program where a soil boring is advanced with drilling equipment to the designated depth prior to collection of a representative sample. The general procedures outlined briefly in the following section provide requirements for advancing drill casing/augers in preparation for sampling.

4.2 General Procedures - Borehole Preparation

4.2.1 Advancing Casing/Augers

Soil borings that are completed for soil sampling purposes are typically advanced using hollow-stem augers and sometimes drive-and-wash or other casing methods. The casing/augers must be of sufficient diameter to allow for soil sampling at a minimum. The casing/augers will be advanced according to project requirements to the required depth for sampling. If hollow-stem augers are used, a temporary plug shall be used in the lead auger to prevent the auger from becoming filled with drill cuttings while drilling is in progress.

4.2.2 Obstructions

For those borings which encounter obstructions, the casing/augers will be advanced past or through the obstruction if possible. Caution should be exercised when obstructions are encountered and an effort made to identify the obstruction before drilling is continued. If the obstruction is not easily drilled through or removed, the boring should be relocated to an adjacent location.

4.2.3 Use of Added Water

The use of added or recirculated water during drilling is permitted when necessary. Use of extraneous water should be minimized or avoided if possible as it may impact sample quality. Water usage should be documented in the field notebook. Sampling and analysis of added or

recirculated water may be required for quality assurance purposes (refer to QAPP). If a well is installed within the completed borehole, removal of the added water may be required.

4.3 Sampling Procedure

4.3.1 Equipment Decontamination

Each split-spoon must be decontaminated prior to its initial use and following collection of each soil sample. Site-specific requirements for equipment decontamination should be outlined within the Project Sampling Plan. Equipment decontamination procedures are also outlined within SOP 7600 - Decontamination of Equipment.

4.3.2 Standard Penetration Test

The drilling subcontractor will lower the split-spoon into the borehole. Samples are generally obtained using the Standard Penetration Test (SPT) in accordance with ASTM standards (ASTM D 1586-84). Following this method, the sampler will be driven using the 140-pound hammer with a vertical free drop of 30 inches using two turns of the rope on the cathead. The number of hammer blows required for every 6 inches of penetration will be recorded on the boring log. Blowcount information is used as an indicator of soil density for geotechnical as well as stratigraphic logging purposes. Once the split-spoon has been driven to its fullest extent, or to refusal, it will be removed from the borehole.

4.3.3 Sample Recovery

The split-spoon will be immediately opened upon removal from the casing/auger. The open sampler shall then be screened for volatile organics with a photoionization device (PID) if required by the Project Sampling Plan. If the Sampling Plan also requires individual soil sample headspace screening for volatile organic compounds, then a small portion of the split-spoon sample shall be removed and properly contained for that purpose.

Sample recovery will be determined by the project geologist/sampling engineer who will examine the soil core once the sampler is opened. The length of sample shall then be measured with a folding rule or tape measure. Any portion of the split-spoon contents which are not considered part of the true sample (i.e., heaved soils) will be discarded. If the sample recovery is considered inadequate for sample characterization or analytical testing

purposes, another sample should be collected from the next vertical interval if possible before drilling is reinitiated.

Adequate sample recovery for stratigraphic logging purposes and/or headspace organic vapor testing purposes should be approximately 6 inches. Adequate sample recovery for analytical testing purposes should be a minimum of 12 inches and is somewhat dependent on the type of analytical testing required. In some cases, continuous sampling over a short interval, and compositing of the sample, may be required to satisfy analytical testing requirements. Larger diameter samplers may be used if large volumes of soil are required for analytical testing.

4.3.4 Sample Containment - General

Once retrieved, the sample will be removed from the split-spoon with a teaspoon or spatula and placed into the appropriate sample container. The sample will be split if necessary to meet sampling program requirements. Sample splitting may be necessary to provide individual samples for headspace testing, visual characterization, physical testing, analytical testing, or simply for archiving purposes. In general, most sampling programs are structured around environmental characterization needs; therefore, sample portions required for analytical testing should be collected first. The Project Sampling Plan and QAPP provides specific sample container requirements for each type of sample and should be referred to for guidance.

Once filled, the sample containers should be properly capped, cleaned, and labeled, and chain-of-custody and sample preservation procedures initiated. Sampling equipment should then be properly decontaminated.

4.3.5 Sample Containment - Volatile Organic Analyses

Collection of subsurface soil samples for volatile organic analysis (VOA) is slightly more complex than collection of samples for other routine chemical or physical testing primarily because of the concern for the potential loss of volatiles during the sample collection procedure. To limit the potential for loss of volatiles, the soil sample needs to be obtained as quickly and as directly as possible from the split-spoon. This generally means that the VOA sample is to be collected and placed into the appropriate sample container first. The VOA sample should also be obtained from a discrete portion of the entire sample interval and not composited or homogenized. The remainder of the recovered sample can then be composited, homogenized or split to meet the other testing requirements. The boring log and/or sample logbook should be

filled out to indicate actual sample collection depths for both VOA samples and other portions of the sample which may have been composited over a larger vertical interval.

5.0 QUALITY CONTROL

Quality control requirements are dependent on project-specific sampling objectives. The QAPP will provide requirements for sample preservation and holding times, sample container types, sample packaging and shipment, as well as requirements for the collection of various quality assurance samples such as trip blanks, field blanks, equipment blanks, and field duplicate samples.

6.0 DOCUMENTATION

Various forms are required to ensure that adequate documentation is made of sample collection activities. These forms include:

- Boring logs
- Field log books
- Sample collection records
- Chain-of-custody records
- Shipping labels

Boring logs (Figure 1) will provide visual and descriptive information for each sample collected and are often the most critical form of documentation generated during a sampling program. The field log book is kept as a general log of activities. Chain-of-custody forms are transmitted with the samples to the laboratory for sample tracking purposes. Shipping labels are required if sample coolers are to be transported to the laboratory by a third party (courier service). Original copies of these records should be maintained in the appropriate project files.

7.0 REFERENCES

ASTM D 1586-84

Figure 1

R:\pubs\mw97\SOPs\7115\fig-1.doc

Sheet 1 of __

BORING LOG

Project No. _____ Date – Start _____ Finish _____ Boring _____

Project Name _____ Drilling Co. _____

Location _____ Drilling Method _____

Total Depth _____ Inspector _____ Reviewer _____

Remarks _____

Depth Feet	Sample				Graphic Log	Lithologic Description	Equipment Installed
	Type & No.	Blows per 6 in.	Depth Range	Rec.			

SOP NUMBER: 7220

Monitoring Well Construction and Installation

Date:	3rd Qtr., 1995
Revision Number:	4
Author:	Charles Martin
Discipline:	Geosciences

1.0 PURPOSE AND APPLICABILITY

1.1 Purpose and Applicability

This SOP provides guidance for installing groundwater monitoring wells. Monitoring wells are installed to monitor the depth to groundwater, to measure aquifer properties, and to obtain samples of groundwater for chemical analysis.

This SOP is applicable to installation of single monitoring wells within a borehole. The construction and installation of nested, multilevel or other special well designs is not covered within this SOP as these type of wells are not frequently constructed. This SOP applies to both overburden and bedrock monitoring wells.

Some states and EPA Regions have promulgated comprehensive guidelines for monitoring well construction and for subsurface investigation procedures. Deviations from this SOP to accommodate other regulatory requirements should be reviewed in advance of the field program, should be explained in the project work plan, and must be documented in the field project notebook when they occur.

1.2 General Principles

Monitoring well construction and installation generally involves drilling a borehole using conventional drilling equipment, installing commercially available well construction and filter/sealing materials, and development of the well prior to sampling. This SOP covers well construction and installation methods only. Borehole drilling and well development methods are covered under SOP-7115 (Subsurface Soil Sampling) and SOP-7221 (Monitoring Well Development), respectively.

1.3 Quality Assurance Planning Considerations

Field personnel should follow specific quality assurance guidelines as outlined in the site-specific QAPP.

The following aspects of monitoring well design and installation procedures depend on project-specific objectives which should be addressed in the QAPP and in the project work plan:

- Borehole drilling method and diameter,
- Type of construction materials for well screen, riser, filter pack and seals,
- Diameter of well materials,
- Length of well screen,
- Location, thickness, and composition of annular seals, and
- Well completion and surface protection requirements.

1.4 Health and Safety Considerations

Monitoring well installation may involve chemical hazards associated with materials in the soil or groundwater being investigated; and always involves physical hazards associated with drilling equipment and well construction methods. When wells are to be installed in locations where the aquifer and/or overlying materials may contain chemical hazards, a Health and Safety Plan (HASP) must be prepared and approved by the Health and Safety Officer before field work commences. This plan must be distributed to all field personnel and must be adhered to as field activities are performed.

2.0 RESPONSIBILITIES

2.1 Drilling Subcontractor

It is the responsibility of the drilling subcontractor to provide the necessary equipment for well construction and installation. Well construction materials should be consistent with project requirements.

2.2 Surveying Subcontractor

It is the responsibility of the surveying subcontractor to provide one or more of the following well measurements as specified in the project work plan: ground surface elevation, horizontal well coordinates, top of well casing elevation (i.e., top-of-casing, or measuring point elevation), and/or top of protective casing elevation.

2.3 Project Geologist/Engineer

It is the responsibility of the Project Geologist/Engineer to directly oversee the construction and installation of the monitoring well by the drilling subcontractor to ensure that the well-installation specifications defined in the project work plan are adhered to, and that all pertinent data are recorded on the appropriate forms.

2.4 Project Manager

It is the responsibility of the Project Manager to ensure that each project involving monitoring well installation is properly planned and executed.

3.0 REQUIRED MATERIAL

3.1 Well Construction Materials

Well construction materials are usually provided by the drilling subcontractor and most often consist of commercially available flush-threaded well screen and riser pipe constructed of PVC or stainless steel with a minimum 2-inch inside diameter. The length of the screen and the size of the screen slots should be specified in the project work plan.

3.2 Well Completion Materials

Well completion materials include silica sand, bentonite, cement, protective casings and locks. Completion materials are generally provided by the drilling subcontractor.

3.3 Other required materials include the following:

- Potable water supply
- Fiberglass or steel measuring tape
- Water level indicator
- Well construction diagrams (Figure 1)
- Waterproof marker or paint (to label wells)
- Health and Safety supplies

- Equipment decontamination materials
- Field project notebook/pen

4.0 METHOD

4.1 General Preparation

4.1.1 Borehole Preparation

Standard drilling methods should be used to achieve the desired drilling/well installation depths specified in the project work plan. Soil sampling, if conducted, should be conducted in accordance with ENSR SOP-7115 (Subsurface Soil Sampling).

The diameter of the borehole must be a minimum of 2 inches greater than the outside diameter of the well screen or riser pipe used to construct the well. This is necessary so that sufficient annular space is available to install filter packs, bentonite seals, and grout seals. Bedrock wells may require reaming after coring in order to provide a large enough borehole diameter for well installation.

Rotary drilling methods requiring bentonite-based drilling fluids, if selected, should be used with caution to drill boreholes that will be used for monitoring well installation. The bentonite mud builds up on the borehole walls as a filter cake and permeates the adjacent formation, potentially reducing the permeability of the material adjacent to the well screen.

If water or other drilling fluids have been introduced into the boring during drilling or well installation, samples of these fluids should be obtained and analyzed for chemical constituents that may be of interest at the site. In addition, an attempt should be made to recover the quantity of fluid or water that was introduced, either by flushing the borehole prior to well installation and/or by overpumping the well during development.

4.1.2 Well Material Decontamination

Although new well materials (well screen and riser pipe) generally arrive at the site boxed and sealed within plastic bags, it is sometimes necessary to decontaminate the materials prior to their use. Well materials should be inspected by the project geologist/engineer upon delivery to check

cleanliness. If the well materials appear dirty, or if local or regional regulatory guidance requires decontamination, then well material decontamination should be performed by the drilling subcontractor in accordance with ENSR SOP-7600 (Decontamination of Equipment).

4.2 Well Construction Procedure

4.2.1 Depth Measurement

Once the target drilling depth has been reached, the drilling subcontractor will measure the total open depth of the borehole with a weighted, calibrated tape measure. Adjustments of borehole depth can be made at this time by drilling further or installing a small amount of sand filter material to achieve the desired depth. If drilling fluids were used during the drilling process, the borehole should be flushed at this time using potable water. The water table depth may also be checked with a water level indicator if this measurement cannot be obtained with the calibrated tape.

4.2.2 Centralizers

In order to install a well which is centered within the borehole, it is recommended that centralizers be used. Centralizers are especially helpful for deep well installations where it may be difficult to position the well by hand. Centralizers may not be necessary on shallow water table well installations where the well completion depth is within 25 feet of the ground surface.

4.2.3 Well Construction

The well screen and riser pipe generally are assembled by hand as they are lowered into the borehole. Before the well screen is inserted into the borehole, the full length of the slotted portion of the well screen as well as the unslotted portion of the bottom of the screen should be measured with the measuring tape. These measurements should be recorded on the well construction diagram.

After the above measurement has been taken, the drilling subcontractor may begin assembling the well. As the assembled well is lowered, care should be taken to ensure that it is centered in the hole if centralizers are not used. The well should be temporarily capped before filter sand and other annular materials are installed.

4.2.4 Filter Sand Installation

The drilling subcontractor should fill the annular space surrounding the screened section of the monitoring well to at least 1 foot above the top of the screen with an appropriately graded, clean sand or fine gravel. In general, the filter pack should not extend more than 3 feet above the top of the screen to limit the thickness of the monitoring zone. If coarse filter materials are used, an additional 1-foot thick layer of fine sand should be placed immediately above the filter pack to prevent the infiltration of sealing components (bentonite or grout) into the filter pack. As the filter pack is placed, a weighted tape should be lowered in the annular space to verify the depth to the top of the layer. Depending upon depth, some time may be required for these materials to settle. If necessary, to eliminate possible bridging or creation of voids, placement of the sand pack may require the use of a tremie pipe. Tremie pipe sandpack installations are generally suggested for deep water table wells and for wells which are screened some distance beneath the water table.

4.2.5 Bentonite Seal Installation

A minimum 2-foot thick layer of bentonite pellets or slurry seal will be installed by the drilling subcontractor immediately above the well screen filter pack in all monitoring wells. The purpose of the seal is to provide a barrier to vertical flow of water in the annular space between the borehole and the well casing. Bentonite is used because it swells significantly upon contact with water. Pellets generally can be installed in shallow boreholes by pouring them very slowly from the surface. If they are poured too quickly, they may bridge at some shallow, undesired depth. As an option, powdered bentonite may be mixed with water into a very thick slurry and a tremie pipe used to inject the seal to the desired depth.

4.2.6 Annular Grout Seal Installation

This grout seal should consist of a bentonite/cement mix with a ratio of bentonite to cement of between 1:5 and 1:20. The grout ratio should be chosen based on site conditions with a higher percentage of bentonite generally used for formations with higher porosity. A mud balance should be used if a specific mud density is required at a particular site. Grout slurry should be pumped into the annular space using a side-discharging tremie pipe located about 2 feet above the sand pack. Side discharge will help preserve the integrity of the sand pack.

In situations where the monitoring well screen straddles the water table, the seal will be in the unsaturated zone and pure bentonites (pellets or powder) will not work effectively as seals without hydration. Dry bentonite may be used if sufficient time to hydrate the seal is allowed. Seal hydration requires the periodic addition of clean water. Optionally, seals in this situation may be a cement/bentonite mixture containing up to 10 percent bentonite by weight. This type of mixture shall be tremied to the desired depth in the borehole.

The borehole annulus will be grouted with seal materials to within 3 feet of the ground surface. Drill cuttings, even those known not to be contaminated, will not be used as backfill material.

4.2.7 Well Completion

The drilling subcontractor will cut the top of the well to the desired height and install a vented (if possible), locking cap. The upper portion of the well casing can optionally be drilled to allow venting. Well casings are usually cut to be a certain height above ground surface (typically 2.5 to 3 feet) or are cut to be flush with the ground surface.

4.2.8 Protective Casing/Concrete Pad Installation

The drilling subcontractor will install a steel guard pipe on the well as a protective casing. The borehole around the guard pipe will be dug out to an approximate 2 to 3-foot radius to a minimum depth of 1 foot at the center and 6 inches at the edges. After installing the protective casing, the excavation will be filled with a concrete/sand mix. The surface of the concrete pad will be sloped so that drainage occurs away from the well. Flush-mount protective casings may not require an extensive concrete pad and should be completed such that they are slightly mounded above the surrounding surface to prevent surface water from running over or ponding on top of the casing. It should be noted, however, that in areas subject to snowfall, flush-mount casings may have to be installed so that they are entirely flush with the ground surface as they may be damaged by snow plows.

Above-ground protective casings should also be vented or should have non-air tight caps. Road box installations should not be vented. Installation of additional guard pipes may be necessary around above-ground well completions in traffic areas. Protective casings should be lockable to prevent unauthorized access.

4.2.9 Well Numbering

The project geologist/engineer will number each well casing with an indelible marker or paint to identify the well. This is particularly important with nested or paired wells to distinguish between shallow and deep wells. The well should be labeled on both the outside of the protective casing and inside beneath the protective casing lid.

4.2.10 Measuring Point Identification

The project geologist/engineer will mark the measuring point from which water level measurements will be made at a specific location along the upper edge of the well casing. PVC wells can easily be notched with a pocket knife or saw. Stainless steel wells (or PVC wells) can be marked with a waterproof marker on the outside of the well casing with an arrow pointing to the measuring point location. The measuring point is the point which will require surveying during the well elevation survey task.

4.2.11 Well Measurements

Upon completion, the following well measurements should be taken by the project geologist/engineer and recorded on the well construction diagram (Figure 1):

- Depth to static water level if water level has stabilized,
- Total length of well measured from top-of-well casing,
- Height of well casing above ground surface,
- Height of protective casing above ground surface,
- Depth of bottom of protective casing below ground surface (may be estimated).

Well screen filter pack, bentonite seal and annular seal thicknesses and depths should also be recorded on the well construction diagram.

4.2.12 Disposal of Drilling Wastes

Drill cuttings and other investigation-derived wastes such as drilling mud or well development/purge water must be properly contained and disposed of. Site-specific requirements for collection and removal of these waste materials should be outlined within the project work plan. Containment of these materials should be performed by the drilling subcontractor.

4.2.13 Well Development

At some point after installation of a well and prior to use of the well for water-level measurements or collection of water quality samples, development of the well shall be undertaken in accordance with ENSR SOP-7221 (Monitoring Well Development). Well development may be performed by the drilling subcontractor if contracted to do so, or by the project geologist/engineer or other project staff.

4.2.14 Well Elevation Survey

At the completion of the well installation program, all monitoring wells are usually surveyed to provide, at a minimum, the top-of-casing measuring point elevation for water level monitoring purposes. Other surveyed points which may be required by the project work plan include: ground surface elevation, top of protective casing elevation, and well coordinate position. Well elevation surveys are usually conducted by a surveying subcontractor.

5.0 QUALITY CONTROL

Certain quality control measures should be taken to ensure proper well completion.

5.1 The borehole will be checked for total open depth, and extended by further drilling or shortened by backfilling, if necessary, before any well construction materials are placed.

5.2 Water level and non-aqueous phase liquid (NAPL) presence will be checked during well installation to ensure that the positions of well screen, sand pack, and seal, relative to water level, conform to project requirements.

5.3 The depth to the top of each layer of packing (i.e., sand, bentonite, grout, etc.) will be verified and adjusted if necessary to conform to project requirements before the next layer is placed.

5.4 If water or other drilling fluids have been introduced into the boring during drilling or well installation, samples of these fluids may be required for analysis of chemical constituents of interest at the site.

6.0 DOCUMENTATION

All well construction data will be recorded on the Monitoring Well Construction Detail form (Figure 1). All wells will be referenced onto the appropriate site map. A field notebook and/or boring log will be used as additional means of recording data. In no case will the notebook or boring log take the place of the well construction diagram.

7.0 TRAINING/QUALIFICATIONS

Well construction and installation requires a moderate degree of training and experience as numerous drilling situations may occur which will require field decisions to be made. It is recommended that inexperienced personnel be supervised for several well installations before working on their own. Experienced drillers are also of great assistance with problem resolution in the field. Field personnel should be health and safety certified as specified by OSHA (29 CFR 1910.120(e)(3)(i)) to work on sites where hazardous waste materials are considered to be present.

8.0 REFERENCES

1. Standard References for Monitoring Wells, Massachusetts Department of Environmental Protection, WSC-310-91, 1991.

APPENDIX: DEFINITIONS

Annulus: The measured width between the borehole wall and the outside of the well screen or riser pipe.

Bentonite Seal: A granular, chip, or pellet-size bentonite material that is often used to provide an annular seal above the well screen filter pack. This seal is typically installed dry followed by in-place hydration with or without the addition of water. Hydrated bentonite is sometimes used as a grout seal.

Bottom Cap/Plug: Threaded or slip-on cap placed at the bottom of the well prior to installation. Often serves as a sump for accumulation of silt which settles within the well. The measured length from the lowermost well screen slot to the bottom of the bottom cap is known as the sump or tail pipe portion of the well.

Centralizers: Stainless steel expansion clamps which, when fitted to well screens or riser pipe, expand to contact the borehole walls positioning the well centrally within the open borehole. Centralizers assist with even positioning and distribution of filter pack and sealant materials and assist with maintaining well plumbness.

Expansion Cap/Well Cap: Cap used to cover the opening at the top of the well riser pipe. Expansion caps are equipped with a rubber gasket and threaded wing nut which, when turned, provides a watertight seal. Expansion caps may also be locked, and generally are recommended for use with flush-constructed wells where road box protective casings are also used. Other well caps may include slip-on or threaded caps made of the same material as the well casing.

Filter Pack: A well-graded, clean sand or gravel placed around the well screen to act as a filter in preventing the entry of very fine soil particles into the well.

Grout Seal: A cement/bentonite mixture used to seal a borehole that has been drilled to a depth greater than the final well installation depth or to seal the remaining borehole annulus once the well has been installed. Occasionally, pure cement or pure bentonite is used as a grout seal.

Measuring Point: A selected point at the top of the well casing (riser pipe) used for obtaining periodic water-level measurements. The measuring point should consist of either a notch or indelibly marked point on the upper surface of the casing. Typically, the highest point on the casing (if not level) is used as the measuring point. The measuring point is also the point that is surveyed when well elevation data is obtained.

Protective Casing: A locking metal casing, placed around that portion of the well riser pipe that extends above the ground surface. The protective casing is generally cemented in place when the concrete pad is constructed around the well.

Riser Pipe: The section of unperforated well casing material used to connect the well screen with the ground surface. Frequently, it is made of the same material and has the same diameter as the well screen. Riser pipe is typically available pre-cleaned and pre-threaded for immediate use.

Road Box: A protective casing that is flush-mounted with the ground around a well installation. Road boxes are used in areas where the monitoring well cannot extend above the ground surface for traffic or security reasons. Road boxes usually require a special key to open.

Tremie Pipe: A small diameter pipe which fits in the open borehole annulus and is used to inject filter sands or hydrated seal materials under pressure.

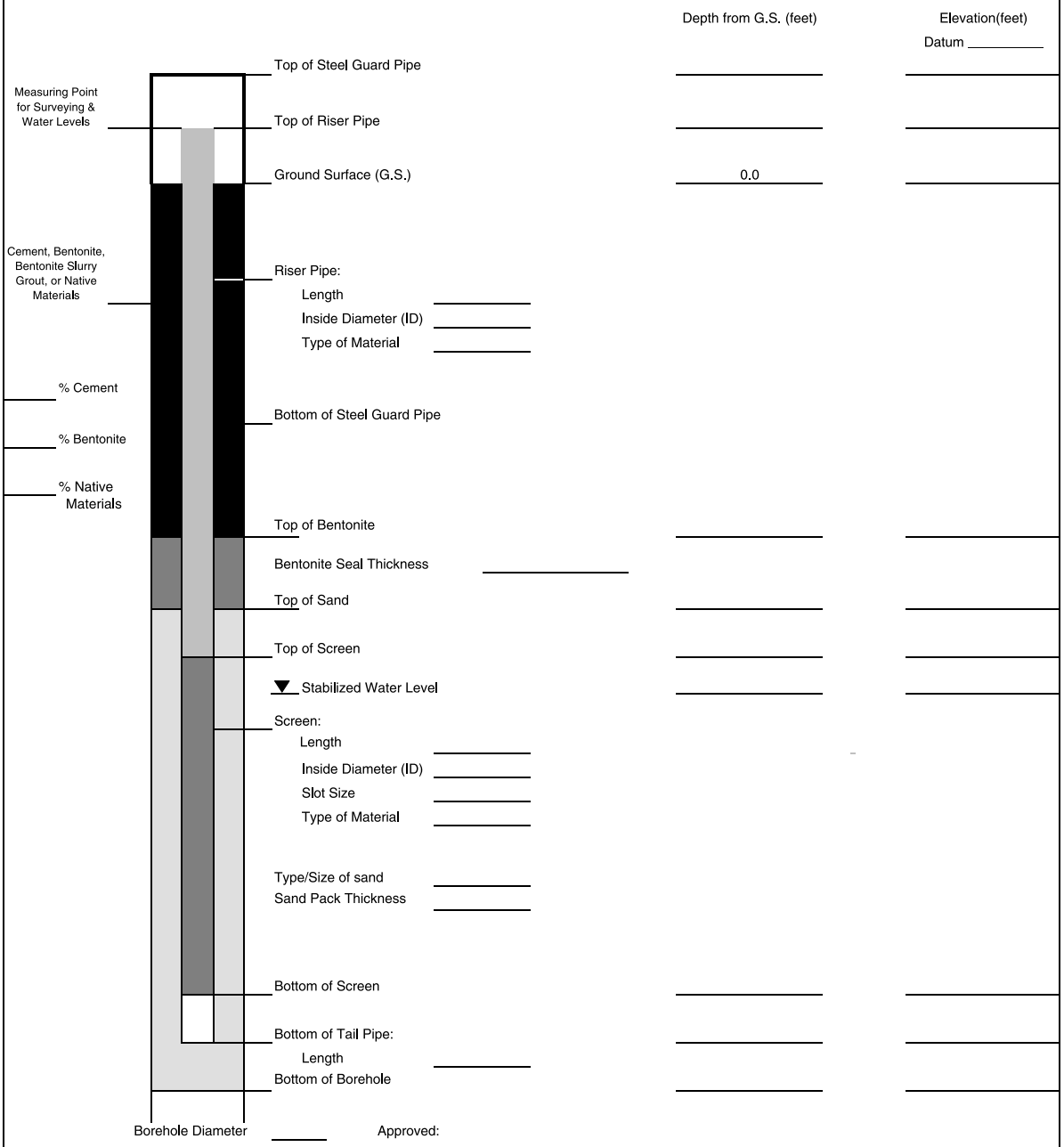
Well Screen: That portion of the well casing material that is perforated in some manner so as to provide a hydraulic connection to the aquifer. Typically a well screen is purchased pre-slotted, pre-cleaned, and pre-threaded for immediate use.

Vent Hole: Small diameter hole drilled in the upper portion of the well riser pipe which provides atmospheric venting of the well. Allows for constant equilibration of the water level with changing atmospheric conditions. In flood-prone areas, or with flush-mount wells, vent holes should not be used.

Figure 1 Monitoring Well Construction Detail

ENSR	*Client:*	WELL ID:
	Project Number:	
	Site Location:	*Date installed:*
	Well Location: *Coords:*	*Inspector:*
	Method:	*Contractor:*

MONITORING WELL CONSTRUCTION DETAIL



SOP NUMBER: 7221

Monitoring Well Development

Date: 4th Qtr., 1994
Revision Number: 2
Author: Charles Martin
Discipline: Geosciences

1.0 PURPOSE AND APPLICABILITY

1.1 Purpose and Applicability

This SOP describes the methods used for developing newly installed monitoring wells and/or existing wells which may require redevelopment/rehabilitation. This SOP is applicable to monitoring wells and/or small diameter recovery wells and piezometers.

Monitoring well development and/or redevelopment is necessary for several reasons:

- To improve/restore hydraulic conductivity of the surrounding formations as they have likely been disturbed during the drilling process, or may have become partially plugged with silt,
- To remove drilling fluids (water, mud), when used, from the borehole and surrounding formations, and
- To remove residual fines from well filter materials and reduce turbidity of groundwater, therefore, reducing the chance of chemical alteration of groundwater samples caused by suspended sediments.

Respective state or federal agency (regional offices) regulations may require specific types of equipment for use or variations in the indicated method of well development. Deviations from this SOP to accommodate other regulatory requirements should be reviewed in advance of the field program, should be explained in the project work plan, and must be documented in the field project notebook when they occur.

1.2 General Principles

Well development generally involves withdrawal of an un-specified volume of water from a well using a pump, surge block or other suitable method such that, when completed effectively, the well is in good or restored hydraulic connection with the surrounding water bearing unit and is suitable for obtaining representative groundwater samples or for other testing purposes.

1.3 Quality Assurance Planning Considerations

Field project personnel should follow specific quality assurance guidelines as outlined in the site-specific Quality Assurance Project Plan (QAPP) and/or Sampling Plan. The plan should indicate the preferred method of well development at a particular site based on project objectives, aquifer conditions, and agency requirements. Specific well performance criteria such as low turbidity values to be achieved following well development should also be specified as well as any requirements for collection/containerization and disposal of well development water.

1.4 Health and Safety Considerations

Monitoring well development may involve chemical hazards associated with materials in the soil or aquifer being characterized and may involve physical hazards associated with use of well development equipment. When wells are to be installed and developed on hazardous waste investigation sites, a Health and Safety Plan must be prepared and approved by the Health and Safety Officer before field work commences. This plan must be approved by the project Health and Safety Officer before work commences, must be distributed to all field project personnel, and must be adhered to as field activities are performed.

2.0 RESPONSIBILITIES

2.1 Project Geologist/Engineer

Development or oversight of development of new monitoring wells is the responsibility of the project geologist/engineer involved in the original installation of the well. Records of well development methods and results will be retained in the project file.

2.2 Project Manager

The project manager is responsible for ensuring that the appropriate method of well development has been chosen which best meets project objectives, site hydrogeologic conditions, and/or relevant regulatory requirements.

3.0 REQUIRED MATERIALS

Well development can be performed using a variety of methods and equipment. The specific method chosen for development of any given well is governed by the purpose of the

well, well diameter and materials, depth, accessibility, geologic conditions, static water level in the well, and type of contaminants present, if any.

The following list of equipment, each with their own particular application, may be used to develop and/or purge monitoring wells.

3.1 Bailer Purging

A bailer is used to purge silt-laden water from wells after using other devices such as a surge block. In some situations, the bailer can be used to develop a well by bailing and surging, often accompanied with pumping. A bailer should be used for purging in situations where the depth to static water is greater than 25 feet and/or where insufficient hydraulic head is available for use of other development methods.

3.2 Surge Block Development

Surge blocks are commercially available for use with Waterra™-type pumping systems or may be manufactured using a rubber or teflon "plunger" attached to a rod or pipe of sufficient length to reach the bottom of the well. Well drillers usually can provide surge blocks if requested. A recommended design is shown in Figure 1.

3.3 Pump Development

A pump is often necessary to remove large quantities of silt-laden ground water from a well after using the surge block. In some situations, the pump alone can be used to develop the well and remove the fines by overpumping. Since the purpose of well development is to remove suspended solids from a well and surrounding filter pack, the pump must be capable of moving some solids without damage. The preferred pump is a submersible pump which can be used in both shallow and deep ground water situations. A centrifugal pump may be used in shallow wells but will work only where the depth to static ground water is less than approximately 25 feet. Pumping may not be successful in low-yielding aquifer materials or in wells with insufficient hydraulic head.

3.4 Compressed Gas Development

Compressed gas, generally nitrogen from a tank or compressed air through a compressor, can be used to both surge and develop a monitoring well. The method works by injection of compressed gas at the bottom of the water column, driving sediment-laden water to the surface. Compressed gas can also be used for "jetting" - a process by which the gas is directed at the slots in the well screen to cause

turbulence (thereby disturbing fine materials in the adjacent filter pack). Compressed gas is not limited by any depth range.

Since the compressed gas will be used to "lift" water from the monitoring well, provisions must be made for controlling the discharge from contaminated wells. This is generally accomplished by attaching a "tee" discharge to the top of the casing and providing drums to contain the discharged water. Gas-lifting should never be done in contaminated wells without providing a means to control discharge.

3.5 Other Required Materials:

- Well development records (Figure 2)
- Health and Safety equipment
- Equipment decontamination materials
- Water quality instrumentation: nephelometer, pH, temperature, specific conductance meters, as required
- Field project notebook/pen

4.0 METHOD

4.1 General Preparation

4.1.1 Well Records Review: Well completion diagrams should be reviewed to determine well construction characteristics. Formation characteristics should also be determined from review of available boring logs.

4.1.2 Site Preparation: Well development, similar to groundwater sampling, should be conducted in as clean an environment as possible. This usually requires, at a minimum, placing sheet plastic on the ground to provide a clean working area for development equipment.

4.1.3 IDW Containment: Provisions should be in place for collection and management of investigation-derived wastes (IDW), specifically well development water and miscellaneous expendable materials generated during the development process. The collection of IDW in drums or tanks may be required depending on project-specific requirements. The QAPP should specify the requirements for IDW containment.

4.1.4 Water Level/Well Depth Measurement: The water level and well depth should be measured with a water level indicator and written on the well development record. This information is used to calculate the volume of standing water (i.e., the well volume) within the well.

4.1.5 Equipment Decontamination: All down-well equipment should be decontaminated prior to use in accordance with ENSR SOP-7600 (Decontamination of Equipment).

4.1.6 Removal of Drilling Fluids: Drilling fluids such as mud or water, if used during the drilling and well installation process, should be removed during the well development procedure. It is recommended that a minimum of 1.5 times the volume of added fluid be removed from the well during development. Drilling muds should initially have been flushed from the drilling casing during the well installation procedure with water added during the flushing process. If the quantity of added fluid is not known or could not be reasonably estimated, removal of a minimum of 10 well volumes of water is recommended during the development procedure.

4.2 Development Procedures

4.2.1 Development Method Selection

The construction details of each well shall be used to define the most suitable method of well development. Some consideration should be given to the potential degree of contamination in each well as this will impact IDW containment requirements.

The criteria for selecting a well development method include well diameter, total well depth, static water depth, screen length, the likelihood and level of contamination, and characteristics of the geologic formation adjacent to the screened interval.

The limitations, if any, of a specific procedure are discussed within each of the following procedures.

4.2.2 General Water Quality Measurements

Measure and record water temperature, pH, specific conductance, and turbidity periodically during development using the available water quality instruments. These measurements will aid in determining whether well

development is proceeding efficiently, will assist in identifying when well development is complete, will determine whether the development process is effective or not with any given well and, potentially, may identify well construction irregularities (i.e., grout in well, poor well screen slot-size selection). Water quality parameters should be checked a minimum of 3 to 5 times during the development process.

4.2.3 Bailer Procedure

- As stated previously, bailers shall preferably not be used for well development but may be used in combination with a surge block to remove silt-laden water from the well.
- When using a bailer to purge well water; select the appropriate bailer, then tie a length of bailer cord onto the end of it.
- Lower the bailer into the screened interval of the monitoring well. Silt, if present, will generally accumulate within the lower portions of the well screen.
- The bailer may be raised and lowered repeatedly in the screened interval to further simulate the action of a surge block and pull silt through the well screen.
- Remove the bailer from the well and empty it into the appropriate storage container.
- Continue surging/bailing the well until sediment-free water is obtained. If moderate to heavy siltation is still present, the surge block procedure should be repeated and followed again with bailing.
- Check water quality parameters periodically.

4.2.4 Surge Block Procedure

- A surge block effectively develops most monitoring wells. This device first forces water within the well through the well screen and out into the formation, and then pulls water back through the screen into the well along with fine soil particles. Surge blocks may be manufactured to meet the design criteria shown in the example (Figure 1) or may be

purchased as an adaptor to fit commercially available well purging systems such as the Waterra system.

- Insert the surge block into the well and lower it slowly to the level of static water. Start the surge action slowly and gently above the well screen using the water column to transmit the surge action to the screened interval. A slow initial surging, using plunger strokes of approximately 3 feet, will allow material which is blocking the screen to separate and become suspended.

- After 5 to 10 plunger strokes, remove the surge block and purge the well using a pump or bailer. The returned water should be heavily laden with suspended silt and clay particles. Discharge the purged water into the appropriate storage container.

- Repeat the process. As development continues, slowly increase the depth of surging to the bottom of the well screen. For monitoring wells with long screens (greater than 10 feet) surging should be undertaken along the entire screen length in short intervals (2 to 3 feet) at a time. Continue this cycle of surging and purging until the water yielded by the well is free of visible suspended material.

- Check water quality parameters periodically.

4.2.5 Pump Procedure

- Well development using only a pump is most effective in monitoring wells that will yield water continuously. Theoretically, pumping will increase the hydraulic gradient and velocity of groundwater near the well by drawing the water level down. The increased velocity will move residual fine soil particles into the well and clear the well screen of this material. Effective development cannot be accomplished if the pump has to be shut off to allow the well to recharge.

- When using a submersible pump or surface pump, set the intake of the pump or intake line in the center of the screened interval of the monitoring well.

- Pump a minimum of three well volumes of water from the well and raise and lower the pump line through the screened interval to remove any silt/laden water.

- Continue pumping water from the well until sediment-free water is obtained. This method may be combined with the manual surge block method if well yield is not rapid enough to extract silt from the surrounding formations.

- Check water quality parameters periodically.

4.2.6 Compressed Gas Procedure

- Although the equipment used to develop a well using this method is more difficult to obtain and use, well development using compressed gas is considered to be a very effective method. This method is also not limited by well depth, well diameter, or depth to static water. Caution must be exercised, however, in highly permeable formations not to inject gas into the formation. Drilling subcontractors will often provide the necessary materials as well as perform this method , if requested. When using a compressor, an oil-less compressor should be used, or an oil trap/filter should be placed on the air discharge line which enters the well.

- Lower the gas line into the well, setting it near the bottom of the screened interval. Install the discharge control equipment (i.e., tee fitting) at the well head.

- Set the gas flow rate to allow continuous discharge of water from the well.

- At intervals during gas-lifting, especially when the discharge begins to contain less suspended material , shut off the air flow and allow the water in the well to backflush through the screened interval to disturb any bridging that may have occurred. Re-establish the gas flow when the water level in the well has returned to the pre-development level.

- Continue gas-lifting and/or jetting until the discharged water is free from suspended material.

- Check water quality parameters periodically.

5.0 QUALITY CONTROL

A well has been successfully developed when one or more of the following criteria are met:

- The sediment load in the well has been eliminated or greatly reduced. Regulatory requirements may be in place which state that water turbidity values ranging from 5 to 50 NTU must be achieved at the end of the development procedure. Use of a nephelometer is required during the well development procedure to measure water turbidity if meeting a specific turbidity value is required by the regulations. Attaining low turbidity values in fine-grained formations may be difficult to achieve.

- Permeability tests conducted in accordance with ENSR SOP-7720 (Hydraulic Conductivity Testing) yield repeatable hydraulic conductivity values.

6.0 DOCUMENTATION

The Monitoring Well Development Record (Figure 2) will be completed by the geologist or hydrogeologist conducting the development. In addition, a field project notebook should be maintained detailing any problems or unusual conditions which may have occurred during the development process.

7.0 TRAINING/QUALIFICATIONS

Well development procedures vary in complexity. It is recommended that initial development attempts be supervised by more experienced personnel. Field personnel should be health and safety certified as specified by OSHA (29 CFR 1910.120(e)(3)(i)) to work on sites where hazardous waste materials are considered to be present.

8.0 REFERENCES

Standard References for Monitoring Wells, Massachusetts Department of Environmental Protection, WSC-310-91, 1991.

APPENDIX: DEFINITIONS

Bridging: A condition within the filter pack outside the well screen whereby the smaller particles are wedged together in a manner that causes blockage of pore spaces.

Hydraulic Conductivity: a characteristic property of aquifer materials which describes the permeability of the material with respect to flow of water.

Hydraulic Connection: A properly installed and developed monitoring well should have good hydraulic connection with the aquifer. The well screen and filter material should not provide any restriction to the flow of water from the aquifer into the well.

Permeability Test: Used to determine the hydraulic conductivity of the aquifer formation near a well screen. Generally conducted by displacing the water level in a well and monitoring the rate of recovery of the water level as it returns to equilibrium. Various methods of analysis are available to calculate the hydraulic conductivity from these data.

Static Water Level: The water level in a well that represents an equilibrium or stabilized condition, usually with respect to atmospheric conditions in the case of monitoring wells.

Well Surging: That process of moving water in and out of a well screen to remove fine sand, silt and clay size particles from the adjacent formation.

Well Purging: The process of removing standing water from a well to allow surrounding formation water to enter the well.

Well Screen: That portion of the well casing material that is perforated in some manner so as to provide a hydraulic connection to the aquifer. The perforated, or slotted, portion of a well is also known as the screened interval.

Figure 1
Recommended Surge Block Design

SURGE BLOCK DESIGN
(Not to Scale)

Steel washers should be 1/2" to 3/4" smaller in diameter than the well ID. Gasket can be rubber or leather and should be the same diameter or 1/8" smaller than the well ID to compensate for swelling of the leather/ Rod can be steel, fiberglass, or plastic but must be strong and lightweight.

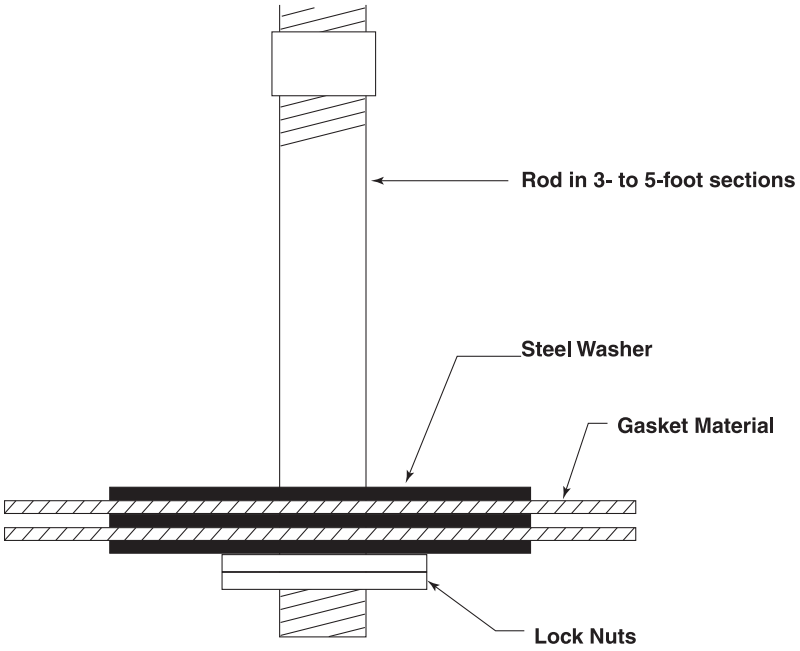


Figure 2
Well Development Record

ENSR

MONITORING WELL DEVELOPMENT RECORD

DATE: _____ WELL I.D.: _____

PROJECT NAME: _____ LOCATION: _____

PROJECT NUMBER: _____ DEVELOPER: _____

☐ ORIGINAL DEVELOPMENT ☐ REDEVELOPMENT ORIGINAL DEVELOPMENT DATE: _____

WELL DATA

Well Diameter: _____

Total Well Depth: _____

Depth to Top of Screen: _____

Depth to Bottom of Screen: _____

Depth to Static Water Level: _____

Geology at Screened Interval:

Likely Contaminants:

Purge Water & Sediment Disposal Method:

DEVELOPMENT METHOD	PURGE METHOD	PERMEABILITY TEST RESULTS

ACCEPTANCE CRITERIA

Signature: _____ Date: _____