ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

ENVIRONMENTAL HEALTH DEPARTMENT
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

December 19, 2014

BP Oil
Attn: Charles Carmel
6 Centerpointe Dr., # 750
La Palma, CA 90623
(*Sent via E-mail to: charles.carmel@bp.com*)

Atlantic Richfield Company
C/O: Charles Carmel
PO Box 1257
San Ramon, CA 94583
(*Sent via E-mail to: charles.carmel@bp.com*)

Subject: Case Closure for Fuel Leak Case No. RO0000190 and GeoTracker Global ID T0600100084, ARCO #2162, 15135 Hesperian Blvd., San Leandro, CA 94578

Dear Mr. Carmel:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25296.10[g]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (http://geotracker.waterboards.ca.gov) and the Alameda County Environmental Health website (http://www.acgov.org/aceh/index.htm).

Due to residual contamination, the site was closed with Site Management Requirements that limit future land use to the current commercial land use as an active fueling station. Site Management Requirements are further described in Additional Information of the attached Case Closure Summary.

If you have any questions, please call Keith Nowell at (510) 567-6764. Thank you.

Sincerely,

Dilan Roe

Dilan Roe, P.E.
LOP and SCP Program Manager

Enclosures:
1. Remedial Action Completion Certification
2. Case Closure Summary

Cc w/enc.:

John Camp, City of San Leandro Environmental Services, 835 East 14th Street, San Leandro, CA 94577 (Sent via E-mail to: jcamp@sanleandro.org)

Debbie Pollart, City of San Leandro Public Works, 14200 Chapman Road, San Leandro, CA 94578 (Sent via E-mail to: dpollart@sanleandro.org)

Kristene Tidwell, PG, Broadbent & Associates, Inc., 875 Cotting Ln., Suite G, Vacaville, CA 95688 (Sent via E-mail to: Ktidwell@broadbentinc.com)

Case Worker (sent via electronic mail to keith.nowell@acgov.org)
e-File, GeoTracker

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

REMEDIAL ACTION COMPLETION CERTIFICATION

December 19, 2014

BP Oil
Attn: Charles Carmel
6 Centerpointe Dr., # 750
La Palma, CA 90623
(*Sent via E-mail to: charles.carmel@bp.com*)

Atlantic Richfield Company
C/O: Charles Carmel
PO Box 1257
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Subject: Case Closure for Fuel Leak Case No. RO0000190 and GeoTracker Global ID T0600100084, ARCO #2162, 15135 Hesperian Blvd., San Leandro, CA 94578

Dear Mr. Carmel:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

Please be aware that claims for reimbursement of corrective action costs submitted to the Underground Storage Tank Cleanup Fund more than 365 days after the date of this letter or issuance or activation of the Fund's Letter of Commitment, whichever occurs later, will not be reimbursed unless one of the following exceptions applies:

- Claims are submitted pursuant to Section 25299.57, subdivision (k) (reopened UST case); or
- Submission within the timeframe was beyond the claimant's reasonable control, ongoing work is required for closure that will result in the submission of claims beyond that time period, or that under the circumstances of the case, it would be unreasonable or inequitable to impose the 365-day time period.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi
Director

UST Case Closure Summary Form

Agency Information Date: December 15, 2014

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6764
Staff Person: Keith Nowell	Title: Hazardous Materials Specialist

Case Information

Facility Name: ARCO #2162		
Facility Address: 15135 Hesperian Blvd., San Leandro, CA 94578		
RB LUSTIS Case No: RB # 01-0091	Local Case No.: STID 1259	LOP Case No.: RO0000190
URF Filing Date: December 17, 1991	GeoTracker Global ID: T0600100084	
APN: 77D-1487-20-5	Current Land Use: Active Fueling Station	
Responsible Party(s):	Address:	Phone:
BP Oil Attn: Charles Carmel	6 Centerpointe Dr. #750 La Palma, CA 90623	714 / 228 - 6411
Atlantic Richfield Company c/o: Charles Carmel	PO Box 1257 San Ramon, CA 94583	925 / 275 - 3803

Tank Information

Tank No.	Size (gal)	Contents	Closed in-Place/ Removed/Active	Date
T1	6,000 steel	Gasoline	Removed	December 5, 1991
T2	8,000 steel	Gasoline	Removed	December 5, 1991
T3	8,000 steel	Gasoline	Removed	December 5, 1991
T4	12,000 fiberglass	Gasoline	Removed	December 5, 1991
T5	560	Waste oil	Removed	December 5, 1991
Piping	----	----	----	December 4, 1991

Conceptual Site Model (Attachment 1, 2 pages)

Closure Criteria Met (Attachment 2, 2 pages)

LTCP Groundwater Specific Criteria (Attachment 3, 2 pages)

LTCP Vapor Specific Criteria (Attachment 4, 2 pages)

LTCP Direct Contact and Outdoor Air Exposure Criteria (Attachment 5, 2 pages)

Site Maps (Attachment 6, 21 pages)

Analytical Data (Attachment 7, 45 pages)

Additional Information:

Site Management Requirements:

1) **VAPOR ISSUE and DIRECT CONTACT ISSUE - SITE DOES NOT MEET COMMERCIAL AND RESIDENTIAL SCENARIOS**

This fuel leak case has been evaluated for closure consistent with the State Water Resource Control Board Low-Threat Underground Storage Tank Closure Policy (LTCP). The maximum concentration of benzene and ethylbenzene documented at the site are reported to be 17 and 41 milligrams per kilogram (mg/kg), respectively. These concentrations are above the LTCP Table 1 values for Residential, Commercial/industrial Volatilization to Outdoor Air scenarios, and for the LTCP Utility Worker Direct Contact/volatilization to Outdoor Air scenario.

However, Alameda County Environmental Health (ACEH) has evaluated case information and, as a result of controlling exposure through the use of institutional and/or engineering controls, has determined that the concentrations of petroleum constituents in soil will not have a significant risk of adversely affecting human health. Specifically, except for limited areas around the perimeter of the Site, the Site is entirely paved and exposure to Site soils is prevented, except in controlled conditions. Additionally, exposure to contaminated soil and soil vapors is limited by low permeability pavements. As a commercial fueling facility, maintenance or construction workers employed at the facility are required by California regulations to be trained in health and safety concerns associated with volatile motor fuels, and thus are expected to be prepared for potential exposures in their standard work routines. Potential exposures to the general public are expected to be transitory and could occur only while temporarily present for the purpose of fueling their vehicles or obtaining related automotive services. Additionally, under the current land use as an active fueling station, the Site is not required to meet media-specific criteria for Vapor Intrusion to Indoor Air. Therefore, case closure is granted for the current commercial land use as an active fueling station.

If a change in land use to any residential, commercial other than as a commercial fueling station, or conservative land use, or if any redevelopment occurs, ACEH must be notified as required by Government Code Section 65850.2.2. Due to the potential for vapor intrusion to indoor air for future buildings, ACEH will re-evaluate the case upon receipt of approved development/construction plans.

Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party prior to and during excavation and construction activities.

UST Case Closure Summary Form

RWQCB Notification **Notification Date: August 28, 2014**

RWQCB Staff Name: Cherie McCaulou	Title: Engineering Geologist

Local Agency Representative

Prepared by: Keith Nowell, PG, CHG	Title: Hazardous Materials Specialist
Signature: Keith Nowell	Date: 12/19/2014
Approved by: Dilan Roe, PE	Title: LOP and SCP Program Manager
Signature: Dilan Roe	Date: 12/19/2014

This Case Closure Summary along with the Case Closure Transmittal letter and the Remedial Action Completion Certification provides documentation of the case closure. This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions. The Conceptual Site Model may not contain all available data. Additional information on the case can be viewed in the online case file. The entire case file can be viewed over the Internet on the Alameda County Environmental Health (ACEH) website (http://www.acgov.org/aceh/lop/ust.htm) or the State of California Water Resources Control Board GeoTracker website (http://geotracker.waterboards.ca.gov). Not all historic documents for the fuel leak case may be available on GeoTracker. A more complete historic case file for this site is located on the ACEH website.

ATTACHMENT 1

CSM Report Go

ARCO #2162 (T0600100084) - MAP THIS SITE

OPEN - ELIGIBLE FOR CLOSURE

15135 HESPERIAN
SAN LEANDRO , CA 94578
ALAMEDA COUNTY

VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT

PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES

ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0000190*
CASEWORKER: *KEITH NOWELL* - ***SUPERVISOR:*** *DILAN ROE*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-0091*
CASEWORKER: *Cherie McCaulou* - ***SUPERVISOR:*** *Cheryl L. Prowell*

CUF Claim #: 9568 **CUF Priority Assigned:** D **CUF Amount Paid:** $0

CR Site ID #: NOT SPECIFIED

THIS PROJECT WAS LAST MODIFIED BY ***KEITH NOWELL*** ON 12/19/2014 8:43:55 AM - HISTORY

THIS SITE HAS SUBMITTALS. CLICK HERE TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

CSM REPORT - VIEW PUBLIC NOTICING VERSION OF THIS REPORT

UST CLEANUP FUND CLAIM INFORMATION (DATA PULLED FROM SCUFIIS)

CLAIM NO	PRIORITY	CLAIMANT	SITE ADDRESS	AMT REIMB TO DATE	AGE OF LOC	IMPACTED WELLS?	FIVE YEAR REVIEW INFORMATION: REVIEW NUM	REVIEWER	FUND RECOMMENDATION	TO OVERSIGHT DATE	TO CLAIMANT DATE
9568	D	BP PRODUCTS NORTH AMERICA, INC., ASSIGNEE 6 CENTERPOINTE DR, LA PALMA CA 90623	15135 HESPERIAN BLVD SAN LEANDRO, CA 94578				1	Kirk T. Larson			

PROJECT INFORMATION (DATA PULLED FROM GEOTRACKER) - MAP THIS SITE

SITE NAME / ADDRESS	STATUS	STATUS DATE	RELEASE REPORT DATE	AGE OF CASE	CLEANUP OVERSIGHT AGENCIES
ARCO #2162 (Global ID: T0600100084) 15135 HESPERIAN SAN LEANDRO, CA 94578	Open - Eligible for Closure	8/11/2014	9/3/1991	23	ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0000190* ***CASEWORKER:*** *KEITH NOWELL* - ***SUPERVISOR:*** *DILAN ROE* SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-0091* ***CASEWORKER:*** *Cherie McCaulou* - ***SUPERVISOR:*** *Cheryl L. Prowell*

STAFF NOTES (INTERNAL)
RSR/CSM initiated 07/14/14 MLC

Direct contact issues can be managed with a site management plan.

SITE HISTORY
1991, after a UST leak was reported, existing USTs, product lines and dispensers were removed and replacee with four, double-wall fiberglass, 10,000 gallon tanks. Approxiamtely 100 cubic yards of contaminated soil and 50,000 gallons of groundwater was removed from the site. However, elevated concentrations of hydrocarbons were detected in compliance samples. A limited soil vapor performance test was reportedly completed in late 1991 to determine if Soil Vapor Extraction (SVE) was feasible at the site, however results of the test using vapor wells VW-1 and VW-2 indicated it was not an appropriate technology for the site. In January 2003, approximatley 140 cubic yards of petroluem hydrocarbon contaminated soil was removed from the site during upgrades to product lines and dispensers, Free product was detected in MW-4. In 2007, five borings were installed at the site. Groundwater monitoirng at the site began in 1992 when four monitoring wells were installed (MW-1 thorugh MW-4). In April 2009, two addiitional wells (MW-5 and MW-6) were installed. In December 2013, three off-site borings were advanced to delineate the down gradient edge of the contaminant plume. TPHg was detected in one grab-groundwater sample (SB-1) at a concentration of 59 ug/L. MTBE was reported in 2 grab-groundwater sample at 6.0 & 15 ug/L. Based on these reported concentrations, a plume map was constructed showing the leading edge of the plume, based on WQOs. The plume was determined to terminate beneath the adjacent commercial property. Due to the lack of volatiles in GW, and the distance to identified receptors the case is considered to meet the LTCP. Due to the presence of a domestic well approximately 330 feet down gradient of the fueling station, the well was considered a potential receptor though beyond the identified plume boundary. The well was tested and determined to contain TPHg, BTEX and MTBE at concentrations below the laboratory reporting limits.

RESPONSIBLE PARTIES

NAME	ORGANIZATION	ADDRESS	CITY	EMAIL
CHARLES CARMEL	BP WEST COAST PRODUCTS, LLC	6 CENTERPOINTE DR. #750	LA PALMA	chuck.carmel@bp.com
PAUL SUPPLE	BP WEST COAST PRODUCTS, LLC	PO BOX 1257	SAN RAMON	

CLEANUP ACTION INFO

ACTION TYPE	BEGIN DATE	END DATE	PHASE	CONTAMINANT MASS REMOVED	DESCRIPTION
EXCAVATION	12/9/1991	4/1/1992			900 cu yds soil excavated and transported BFI Vasco Road Landfill, Livermore, CA. 49,500 gallons of excavation pit water removed and transported to H&H Ship Service Company, san Francisco, CA.
EXCAVATION	12/9/1991	4/1/1992	Soil		

RISK INFORMATION VIEW LTCP CHECKLIST VIEW PATH TO CLOSURE PLAN VIEW CASE REVIEWS

CONTAMINANTS OF CONCERN	CURRENT LAND USE	BENEFICIAL USE	DISCHARGE SOURCE	DATE REPORTED	STOP METHOD	NEARBY / IMPACTED WELLS
Gasoline		GW - Municipal and Domestic Supply		9/3/1991	Close and Replace Tank	0

FREE PRODUCT	OTHER CONSTITUENTS	NAME OF WATER SYSTEM	LAST REGULATORY ACTIVITY	LAST ESI UPLOAD	LAST EDF UPLOAD	EXPECTED CLOSURE DATE	MOST RECENT CLOSURE REQUEST
NO	NO	EBMUD	12/16/2014	11/21/2014	7/28/2014		6/16/2014

CDPH WELLS WITHIN 1500 FEET OF THIS SITE

NONE

CALCULATED FIELDS (BASED ON LATITUDE / LONGITUDE)

APN
077D148702005

GW BASIN NAME
Santa Clara Valley - East Bay Plain (2-9.04)

WATERSHED NAME
South Bay - East Bay Cities (20420)

COUNTY
Alameda

PUBLIC WATER SYSTEM(S)
- **EAST BAY MUD** - 375 ELEVENTH STREET, OAKLAND, CA 94607

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN GROUNDWATER - HIDE VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
CB1-W	7/17/2007	OTHER	ND	ND	ND	ND	ND	ND
CB2-W	7/17/2007	OTHER	12 UG/L	ND	110 UG/L	140 UG/L	ND	ND
CB3-W	7/17/2007	OTHER	ND	ND	0.92 UG/L	ND	0.82 UG/L	ND
CB4-W	7/17/2007	OTHER	1 UG/L	ND	ND	ND	20 UG/L	ND
CB5-W	7/17/2007	OTHER	2.1 UG/L	ND	ND	ND	70 UG/L	ND
MW-1	5/27/2014	OTHER	ND	ND	ND	ND	ND	ND
MW-2	5/27/2014	OTHER	ND	ND	ND	ND	ND	ND
MW-3	5/27/2014	OTHER	ND	ND	ND	ND	ND	ND
MW-4	5/27/2014	OTHER	ND	ND	ND	ND	ND	ND
MW-5	5/27/2014	OTHER	ND	ND	ND	ND	ND	ND
MW-6	5/27/2014	OTHER	1.6 UG/L	0.64 UG/L	3 UG/L	ND	82 UG/L	ND
SB-1	12/23/2013	OTHER	ND	ND	ND	ND	15 UG/L	ND
SB-2	12/23/2013	OTHER	ND	ND	ND	ND	6 UG/L	ND
SB-3	12/23/2013	OTHER	ND	ND	ND	ND	ND	ND
TB	3/14/2002	OTHER	ND	ND	ND	ND	ND	

MOST RECENT CONCENTRATIONS OF PETROLEUM CONSTITUENTS IN SOIL - HIDE VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	TBA
CB1- 11.5	7/17/2007		ND	ND	ND	ND	ND	ND
CB1- 15.5	7/17/2007		ND	ND	ND	ND	ND	ND
CB1- 7.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB2 11.5-	7/17/2007		ND	ND	ND	0.0071 MG/KG	ND	ND
CB2 15.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB3 11.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB3 15.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB3 7.5-8	7/17/2007		ND	ND	ND	ND	0.0063 MG/KG	ND
CB4 11.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB4 15.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB4 7.5-8	7/17/2007		ND	ND	ND	ND	ND	ND
CB5 11.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB5 15.5-	7/17/2007		ND	ND	ND	ND	ND	ND
CB5 7.5-8	7/17/2007		ND	ND	ND	ND	ND	ND
SB-1 @ 14	12/23/2013		ND	ND	ND	ND	ND	ND
SB-2 @ 14	12/23/2013		ND	ND	ND	ND	ND	ND
SB-3 @ 14	12/23/2013		ND	ND	ND	ND	ND	ND

MOST RECENT GEO_WELL DATA - HIDE VIEW ESI SUBMITTALS

FIELD PT NAME	DATE	DEPTH TO WATER (FT)	SHEEN	DEPTH TO FREE PRODUCT (FT)
MW-1	5/27/2014	9.03	N	
MW-2	5/27/2014	8.19	N	
MW-3	5/27/2014	8.43	N	
MW-4	5/27/2014	9.63	N	
MW-5	5/27/2014	9.34	N	
MW-6	5/27/2014	9.08	N	
TB	4/18/2002		U	0

LOGGED IN AS KNOWELL CONTACT GEOTRACKER HELP

ATTACHMENT 2

LTCP Checklist Go

ARCO #2162 (T0600100084) - MAP THIS SITE

OPEN - ELIGIBLE FOR CLOSURE

15135 HESPERIAN
SAN LEANDRO , CA 94578
ALAMEDA COUNTY

VIEW PRINTABLE CASE SUMMARY FOR THIS SITE

ACTIVITIES REPORT

PUBLIC WEBPAGE

CLEANUP OVERSIGHT AGENCIES
ALAMEDA COUNTY LOP *(LEAD)* - *CASE #: RO0000190*
CASEWORKER: *KEITH NOWELL* - ***SUPERVISOR:*** *DILAN ROE*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 01-0091*
CASEWORKER: *Cherie McCaulou* - ***SUPERVISOR:*** *Cheryl L. Prowell*

CUF Claim #: 9568 **CUF Priority Assigned:** D **CUF Amount Paid:** $0

CR Site ID #: NOT SPECIFIED

THIS PROJECT WAS LAST MODIFIED BY ***KEITH NOWELL*** ON 12/19/2014 8:47:45 AM - HISTORY

THIS SITE HAS SUBMITTALS. CLICK HERE TO OPEN A NEW WINDOW WITH THE SUBMITTAL APPROVAL PAGE FOR THIS SITE.

CLOSURE POLICY

THIS VERSION IS FINAL AS OF 12/19/2014

CHECKLIST INITIATED ON 8/11/2013

CLOSURE POLICY HISTORY

General Criteria - *The site satisfies the policy general criteria* - CLEAR SECTION ANSWERS — **YES**

a. Is the unauthorized release located within the service area of a public water system?
Name of Water System : EBMUD — ◉ YES ○ NO

b. The unauthorized release consists only of petroleum (info). — ◉ YES ○ NO

c. The unauthorized ("primary") release from the UST system has been stopped. — ◉ YES ○ NO

d. Free product has been removed to the maximum extent practicable (info). — ○ FP Not Encountered ◉ YES ○ NO

e. A conceptual site model that assesses the nature, extent, and mobility of the release has been developed (info). — ◉ YES ○ NO

f. Secondary source has been removed to the extent practicable (info). — ◉ YES ○ NO

g. Soil or groundwater has been tested for MTBE and results reported in accordance with Health and Safety Code Section 25296.15. — ○ Not Required ◉ YES ○ NO

h. Does a nuisance exist, as defined by Water Code section 13050. — ○ YES ◉ NO

1. Media-Specific Criteria: Groundwater - *The contaminant plume that exceeds water quality objectives is stable or decreasing in areal extent, and meets all of the additional characteristics of one of the five classes of sites listed below.* - CLEAR SECTION ANSWERS — **NO**

EXEMPTION - Soil Only Case (Release has not Affected Groundwater - Info) — ○ YES ◉ NO

Does the site meet any of the Groundwater specific criteria scenarios? — ○ YES ◉ NO

ADDITIONAL QUESTIONS - Please indicate only those conditions that do not meet the policy criteria:

Plume Length (That Exceeds Water Quality Objectives) :
◉ ≥ 100 Feet and < 250 Feet ○ ≥ 250 Feet and < 1,000 Feet ○ ≥ 1,000 Feet ○ Unknown

Plume is Stable or Decreasing in AREAL Extent :
○ No ○ Unknown

Free Product in Groundwater :
○ Yes ◉ No ○ Unknown

Free Product Has Been Removed to the Maximum Extent Practicable :
○ No ○ Unknown

For sites with free product, the Plume Has Been Stable or Decreasing for 5-Years (info) :
○ No ○ Unknown

For sites with free product, owner Willing to Accept a Land Use Restriction (if required) :
○ No ○ Unknown

Free Product Extends Offsite :
○ Yes ○ Unknown

Benzene Concentration :
○ ≥ 1,000 µg/l and < 3,000 µg/l ○ ≥ 3,000 µg/l ○ Unknown

MTBE Concentration :
○ ≥ 1,000 µg/l ○ Unknown

Nearest Supply Well (From Plume Boundary) :
◉ ≤ 250 Feet ○ > 250 Feet and ≤ 1,000 Feet ○ Unknown

Nearest Surface Water Body (From Plume Boundary) :
○ ≤ 250 Feet ◉ > 250 Feet and ≤ 1,000 Feet ○ Unknown

2. Media Specific Criteria: Petroleum Vapor Intrusion to Indoor Air - *The site is considered low-threat for the vapor-intrusion-to-air pathway if site-specific conditions satisfy items 2a, 2b, or 2c* - CLEAR SECTION ANSWERS — **YES**

EXEMPTION - Active Commercial Petroleum Fueling Facility — ◉ YES ○ NO

3. Media Specific Criteria: Direct Contact and Outdoor Air Exposure - *The site is considered low-threat for direct contact and outdoor air exposure if it meets 1, 2, or 3 below.* - CLEAR SECTION ANSWERS — **NO**

EXEMPTION - The upper 10 feet of soil is free of petroleum contamination — ○ YES ◉ NO

Does the site meet any of the Direct Contact and Outdoor Air Exposure criteria scenarios? — ○ YES ◉ NO

ADDITIONAL QUESTIONS - Please indicate only those conditions that do not meet the policy criteria:

Exposure Type :
○ Residential ◉ Commercial ○ Utility Worker

Petroleum Constituents in Soil :
○ ≤ 5 Feet bgs ◉ >5 Feet bgs and ≤10 Feet bgs ○ Unknown

Soil Concentrations of Benzene :
○ > 1.9 mg/kg and ≤ 2.8 mg/kg ○ > 2.8 mg/kg and ≤ 8.2 mg/kg ○ > 8.2 mg/kg and ≤ 12 mg/kg ○ > 12 mg/kg and ≤ 14 mg/kg ◉ > 14 mg/kg ○ Unknown

Soil Concentrations of EthylBenzene :
○ > 21 mg/kg and ≤ 32 mg/kg ◉ > 32 mg/kg and ≤ 89 mg/kg ○ > 89 mg/kg and ≤ 134 mg/kg ○ > 134 mg/kg and ≤ 314 mg/kg ○ > 314 mg/kg ○ Unknown

Soil Concentrations of Naphthalene :

○ > 9.7 mg/kg and ≤ 45 mg/kg ○ > 45 mg/kg and ≤ 219 mg/kg ○ > 219 mg/kg ◉ Unknown

Soil Concentrations of PAH :

○ > 0.063 mg/kg and ≤ 0,68 mg/kg ○ > 0.68 mg/kg and ≤ 4.5 mg/kg ○ > 4.5 mg/kg ◉ Unknown

Area of Impacted Soil :

○ Area of Impacted Soil > 82 by 82 Feet ○ Unknown

Additional Information

Should this case be closed in spite of NOT meeting policy criteria? ◉ YES ○ NO

Explain:

Case does not meet Media-Specific Criteria: Groundwater as plume length approx. 195 feet & nearest irrigation well is approx. 200 feet from plume boundary. ACEH requested the well be sampled prior to making a determination the site is closable. The laboratory analysis report did not identify TPHg, BTEX, and MTBE at concentrations above the laboratory reporting limits.

Case does not meet Direct Contact and Outdoor Air Exposure criteria scenarios as benzene & ethyl benzene concentrations exceed Table 1 values. As the gas station surface is predominantly covered with low-permeability asphalt and concrete with minor landscaped areas on the site boundary, exposure to residual impacted soil is limited to construction/utility workers as the exposure pathway for the general public is considered incomplete.

Naphthalene and related PAHs were not analyzed in soil during excavation of the waste oil UST. However, indirect and multiple lines of evidence indicate a low likelihood of a significant waste oil UST release of PAHs as the wear metals (cadmium, chromium, lead, nickel, and zinc) concentrations do not exceed background soil concentrations, suggesting a minor release from the WO UST, if one occurred. Additionally, concentrations of chlorinated solvents were not detected above laboratory RLs for soil sample WO-1. Naphthalene was analyzed in soil and grab-groundwater during the December 2013 off-site investigation at borings SB-1, SB-2, and SB-3. Naphthalene was not detected above the laboratory reporting limits in either soil or groundwater. As naphthalene is the lowest molecular weight PAH, this data indicates a low likelihood that PAHs potentially released from the waste oil UST may have migrated off-site.

Has this LTCP Checklist been updated for FY 14/15? ◉ YES ○ NO

SPELL CHECK

Save Form as Partially Completed | Save Form as Complete

LOGGED IN AS KNOWELL CONTACT GEOTRACKER HE

ATTACHMENT 3
LTCP GROUNDWATER SPECIFIC CRITERIA

LTCP Groundwater Specific Scenario under which case was closed:

This case should be closed in spite of not meeting the groundwater specific media criteria.

Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3 Criteria	LTCP Scenario 4 Criteria
Plume Length	<250 feet (plume length approximately 195 feet from boring B4 to 5 μg/L isoconcentration contour)	<100 feet	<250 feet	<250 feet	<1,000 feet
Free Product	No free product.	No free product	No free product	Removed to maximum extent practicable	No free product
Plume Stable or Decreasing	Decreasing	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	<250 feet (approx. 200 feet to the Nabor Street private well)	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	>250 feet (880 feet southeast and cross-gradient to concrete-lined Estudillo Canal)	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	Not applicable	Not applicable	Not applicable	Yes	Not applicable

GROUNDWATER CONCENTRATIONS

Constituent	Historic Site Maximum (μg/L)	Current Site Maximum (μg/L)	LTCP Scenario 1 Criteria (μg/L)	LTCP Scenario 2 Criteria (μg/L)	LTCP Scenario 3 Criteria (μg/L)	LTCP Scenario 4 Criteria (μg/L)
Benzene	86 (MW-3 on 4/14/1993)	1.6 (MW-6 on 5/27/2014)	No criteria	<3,000	No criteria	<1,000
MTBE	1,900 (MW-3 on 6/10/1997)	82 (MW-6 on 5/27/2014)	No criteria	<1,000	No criteria	<1,000
TPH-g	7,800 (MW-2 on 1/14/1993)	2,000 (MW-6 on 5/27/2014)				

Scenario 5: If the site does not meet scenarios 1 through 4, has a determination been made that under current and reasonably expected future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame?	**Yes**

Attachment 3 Comments:

Light Non-Aqueous Phase Liquid (LNAPL) was observed during the 1991 Phase 1 in soil bores B3 and B4 and LNAPL was reported entering well MW-4 on April 14, 1993 during well purging. Additionally, monitoring well screens for five of the six groundwater monitoring wells have been historically submerged from between 10%- to 88% of the time. However, LNAPL is not considered a current risk driver at the Site as LNAPL has not been observed at the Site since 1993, and groundwater concentrations do not exceed effective solubility for benzene, toluene, ethylbenzene, or xylenes (BTEX) compounds.

The dissolved-phase plume length of <200 feet is based on the distance from B4 (in-situ tank pit sidewall soil sample exhibiting elevated TPHg/BTEX concentrations) to the plume 5 microgram per liter (μg/L) isoconcentration contour. The 5 μg/L methyl-butyl-tertiary-ether (MTBE) isoconcentration contour represents the potential down-gradient location where the MTBE plume is expected to achieve water quality objectives (WQOs).

Water Supply Wells in Vicinity:

GeoTracker Groundwater Ambient Monitoring & Assessment search yielded zero (0) water supply wells for California Dept. of Public Health, Dept. of Pesticide Regulation, or Dept. of Water Resources purposes within a 2,000 foot radius of the Site.

An ACPWA well records search identified the closest wells to the Site are located approximately 320 feet south-southwest down-gradient on Nabor Street and 800 feet south-southeast cross-gradient. The Nabor Street well is considered a potential sensitive receptor based on its down-gradient position from the site. However, water from the well was tested and determined to contain TPHg, BTEX, and MTBE at concentrarions below the laboratory reporting limit. Therefore, this case should be closed in spite of not meeting the groundwater-specific criteria.

ATTACHMENT 4
LTCP VAPOR SPECIFIC CRITERIA

LTCP Vapor Specific Scenario under which case was closed:
Active fueling station exempt from vapor specific criteria *

Active Fueling Station	Active as of 1987 and currently active

Site Data		LTCP Scenario 1 Criteria	LTCP Scenario 2 Criteria	LTCP Scenario 3A Criteria	LTCP Scenario 3B Criteria	LTCP Scenario 3C Criteria	LTCP Scenario 4 Criteria
Unweathered LNAPL	No LNAPL	LNAPL in groundwater	LNAPL in soil	No LNAPL	No LNAPL	No LNAPL	No criteria
Thickness of Bioattenuation Zone Beneath Foundation	≥5 feet (shallowest DTW approx. 6.27 feet btoc at MW-2)	≥30 feet	≥30 feet	≥5 feet	≥10 feet	≥5 feet	≥5 feet
Total TPH in Soil in Bioattenuation Zone	>100 mg/kg (2,400 mg/kg at B4 at 7.5 feet)	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg	<100 mg/kg
Maximum Current Benzene Concentration in Groundwater	<100 µg/L (1.6 ug/L at MW-6 on 5/27/2014) (historical maximum of 86 ug/L at MW-3 on 4/14/1993)	No criteria	No criteria	<100 µg/L	≥100 and <1,000 µg/L	<1,000 µg/L	No criteria
Oxygen Data within Bioattenuation Zone	---- *	No criteria	No criteria	No oxygen data or <4%	No oxygen data or <4%	≥4% at lower end of zone	≥4% at lower end of zone
Depth of soil vapor measurement beneath foundation	---- *	No criteria	No criteria	No criteria	No criteria	No criteria	≥5 feet

SCENARIO 4 DIRECT MEASUREMENT OF SOIL VAPOR CONCENTRATIONS

Site Soil Vapor Data *			No Bioattenuation Zone		Bioattenuation Zone	
Constituent	Historic Maximum (µg/m^3)	Current Maximum (µg/m^3)	Residential	Commercial	Residential	Commercial
Benzene	----	----	<85	<280	<85,000	<280,000
Ethylbenzene	----	----	<1,100	<3,600	<1,100,000	<3,600,000
Naphthalene	----	----	<93	<310	<93,000	<310,000

If the site does not meet scenarios 1 through 4, does a site-specific risk assessment for the vapor intrusion pathway demonstrate that human health is protected?	No
If the site does not meet scenarios 1 through 4, has a determination been made that petroleum vapors from soil or groundwater will have no significant risk of adversely affecting human health?	**Yes**

Attachment 4 Comments:

* The extent of environmental impact in soil vapor has not been investigated at the Site as the Site is exempt from the LTCP vapor specific criteria as it is an active fueling station. Based on the current lack of volatile petroleum hydrocarbon compounds in soil and groundwater samples, an off-site soil vapor assessment is not warranted due to the release(s) at the Site. Note that soil bores SB-1 to SB-3, advanced December 2013, show soil concentrations of total petroleum hydrocarbons as gasoline (TPH-g), BTEX, and naphthalene are below laboratory RLs at 14 feet bgs. Additionally, grab groundwater collected from 10 feet bgs at SB-1 to SB-3 show concentrations of BTEX and naphthalene do not exceed laboratory RLs, and TPH-g does not exceed 100 µg/L.

The nearest residential area is located 135 feet west and cross-gradient of the site; the nearest down-gradient residential area is 250 feet south-west and down-gradient. Therefore, due to their relative hydrogeologic location (and lack of BTEX and oxygenates), the western and south-west residences are not likely at risk due to their distance from the defined plume edge and lack of down-gradient dissolved-phase BTEX and naphthalene at SB-1 to SB-3.

DTW = depth to water.
btoc = below top-of-well case.

ATTACHMENT 5
LTCP DIRECT CONTACT AND OUTDOOR AIR EXPOSURE CRITERIA

LTCP Direct Contact and Outdoor Air Exposure Specific Scenario under which case was closed:
This case should be closed in spite of not meeting the direct contact and outdoor air exposure criteria.

Are maximum concentrations less than those in Table 1 below?	No

Constituent		Residential		Commercial/Industrial		Utility Worker
		0 to 5 feet bgs (mg/kg)	Volatilization to outdoor air (5 to 10 feet bgs) mg/kg	0 to 5 feet bgs (mg/kg)	Volatilization to outdoor air (5 to 10 feet bgs) mg/kg	0 to 10 feet bgs (mg/kg)
Site Maximum	Benzene	1.0 (L-6 at 2.5)	17 (B4-7.5)	1.0 (L-6 at 2.5)	17 (B4-7.5)	17 (B4-7.5)
LTCP Criteria	Benzene	≤1.9	≤2.8	≤8.2	≤12	≤14
Site Maximum	Ethylbenzene	1.2 (L5-3.5)	41 (B4-7.5)	1.2 (L5-3.5)	41 (B4-7.5)	41 (B4-7.5)
LTCP Criteria	Ethylbenzene	≤21	≤32	≤89	≤134	≤314
Site Maximum	Naphthalene	----	----	----	----	----
LTCP Criteria	Naphthalene	≤9.7	≤9.7	≤45	≤45	≤219
Site Maximum	PAHs	----	----	----	----	----
LTCP Criteria	PAHs	≤0.063	NA	≤0.68	NA	≤4.5

If maximum concentrations are greater than those in Table 1, are they less than levels from a site-specific risk assessment?	No
If maximum concentrations are greater than those in Table 1, has a determination been made that the concentrations of petroleum in soil will have no significant risk of adversely affecting human health as a result of controlling exposure through the use of mitigation measures or through the use of institutional controls?	**Yes**

Attachment 5 Comments:

The Site is an active commercial gasoline station. As concentrations of benzene and ethylbenzene exceed the LTCP Direct Contact and Outdoor Air Exposure criteria, land use is restricted to commercial purpose as an active gasoline station; further evaluation is warranted if land use changes to more conservative purpose (e.g. residential).

The gas station surface is predominantly covered with low-permeability asphalt and concrete with minor landscaped areas on the site boundary; therefore, exposure to residual impacted soil is limited to construction/utility workers as the exposure pathway for the general public is considered incomplete.

Extent of soil impacts at boring B4 (highest historical concentrations in soil on-site lie adjacent to the excavated former UST pit) are laterally defined by boring CB-1 to the east (TPH-g, BTEX, and oxygenates concentrations below RLs), and boring SW-3 to the south and boring SW-4 to the north (benzene and ethylbenzene concentrations are below Table 1). As ACEH is unable to determine if bore B4 was over-excavated as it is located near the eastern lateral extent of the replacement UST over-excavation, boring B4 was utilized as the highest concentration point.

Naphthalene and related PAHs were not analyzed in soil during excavation of the waste oil UST. However, indirect and multiple lines of evidence indicate a low likelihood of a significant waste oil UST release of PAHs as the wear metals (cadmium, chromium, lead, nickel, and zinc) concentrations do not exceed background soil concentrations ("Background Concentrations of Trace and Major Elements in California Soils" Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California, March 1996; and "Analysis of Background Distributions of Metals in the Soil at Lawrence Berkeley National Laboratory, June 2002). Additionally, concentrations of chlorinated solvents were not detected above laboratory RLs for soil sample WO-1.

Attachment 5 Comments continued:

Naphthalene was analyzed in soil and grab-groundwater during the December 2013 off-site investigation at borings SB-1, SB-2, and SB-3. Naphthalene was not detected above the laboratory reporting limits in either soil or groundwater. As naphthalene is the lowest molecular weight PAH, this data indicates a low likelihood that PAHs potentially released from the waste oil UST may have migrated off-site.

ATTACHMENT 6

Google earth

feet 400

meters 100

Image Date 6/2014

Google earth

feet 10

meters 5

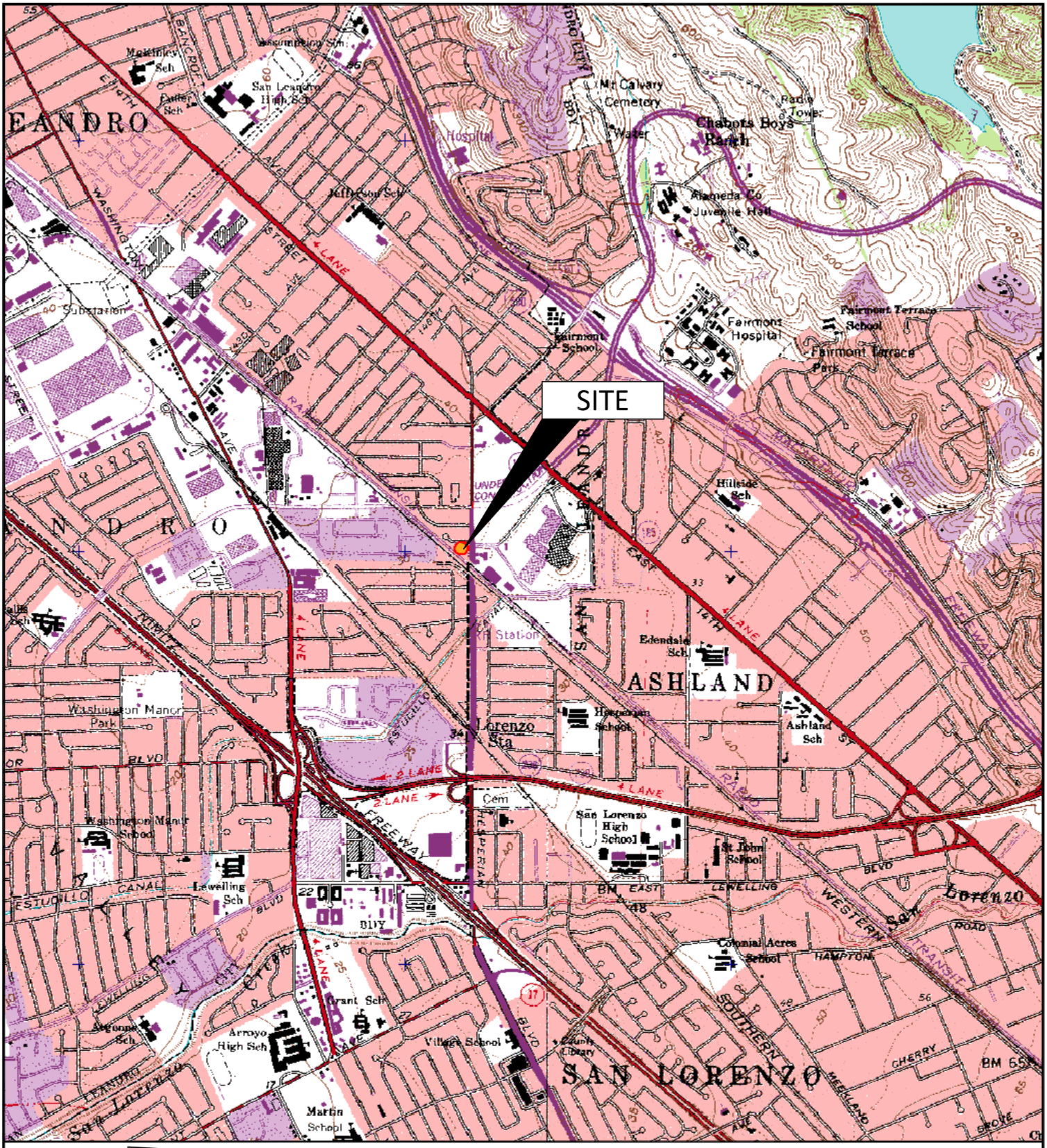
Image Date 4/2011

Google earth

feet 10

meters 5

Image Date 1/2014



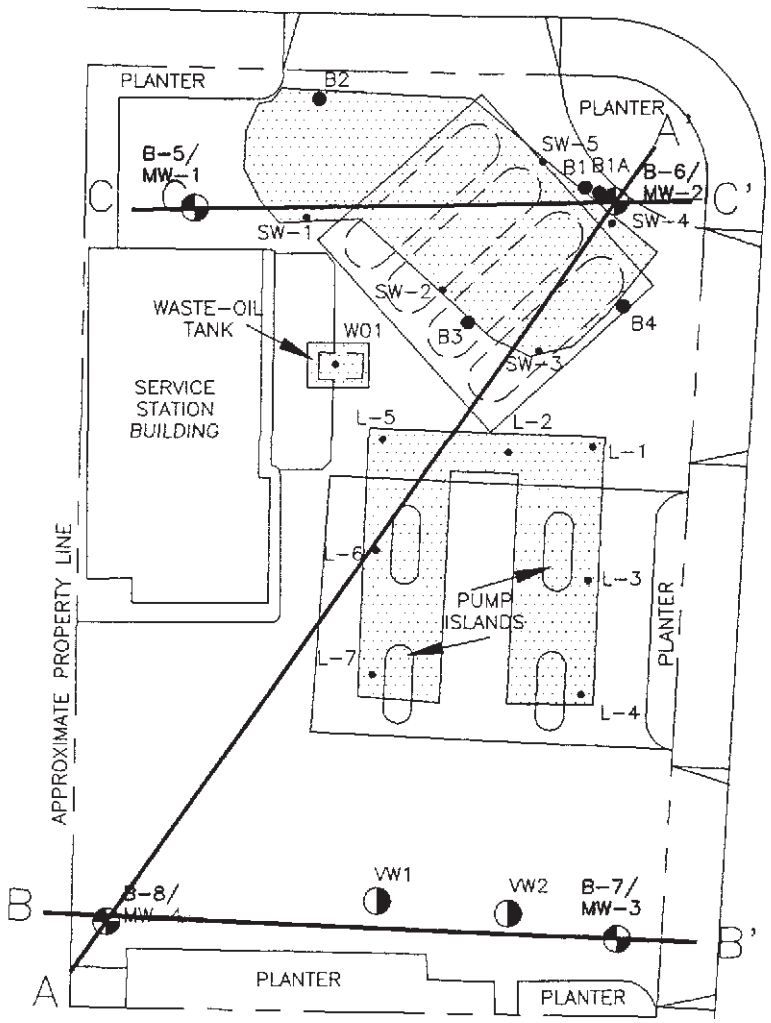
BROADBENT
2000 Kirman Ave.
Reno, Nevada 89502
Project No.: 06-88-620 Date: 7/2/2013

Station #2162
15135 Hesperian Boulevard
San Leandro, California

Site Location Map

Drawing
1

RUTH COURT



HESPERIAN BOULEVARD

EXPLANATION

B-8/ MW-4 = Monitoring well RESNA September 1992

VW2 = Vapor extraction well (Roux Associates, Inc., 1991)

B4 = Soil boring (Roux Associates, Inc., 1991)

L-7 = Product line sample

SW-5 = Sidewall soil sample

= Former underground storage tank and product line excavations

= Existing underground storage tank

N

Approximate Scale

30 15 0 30 60

feet

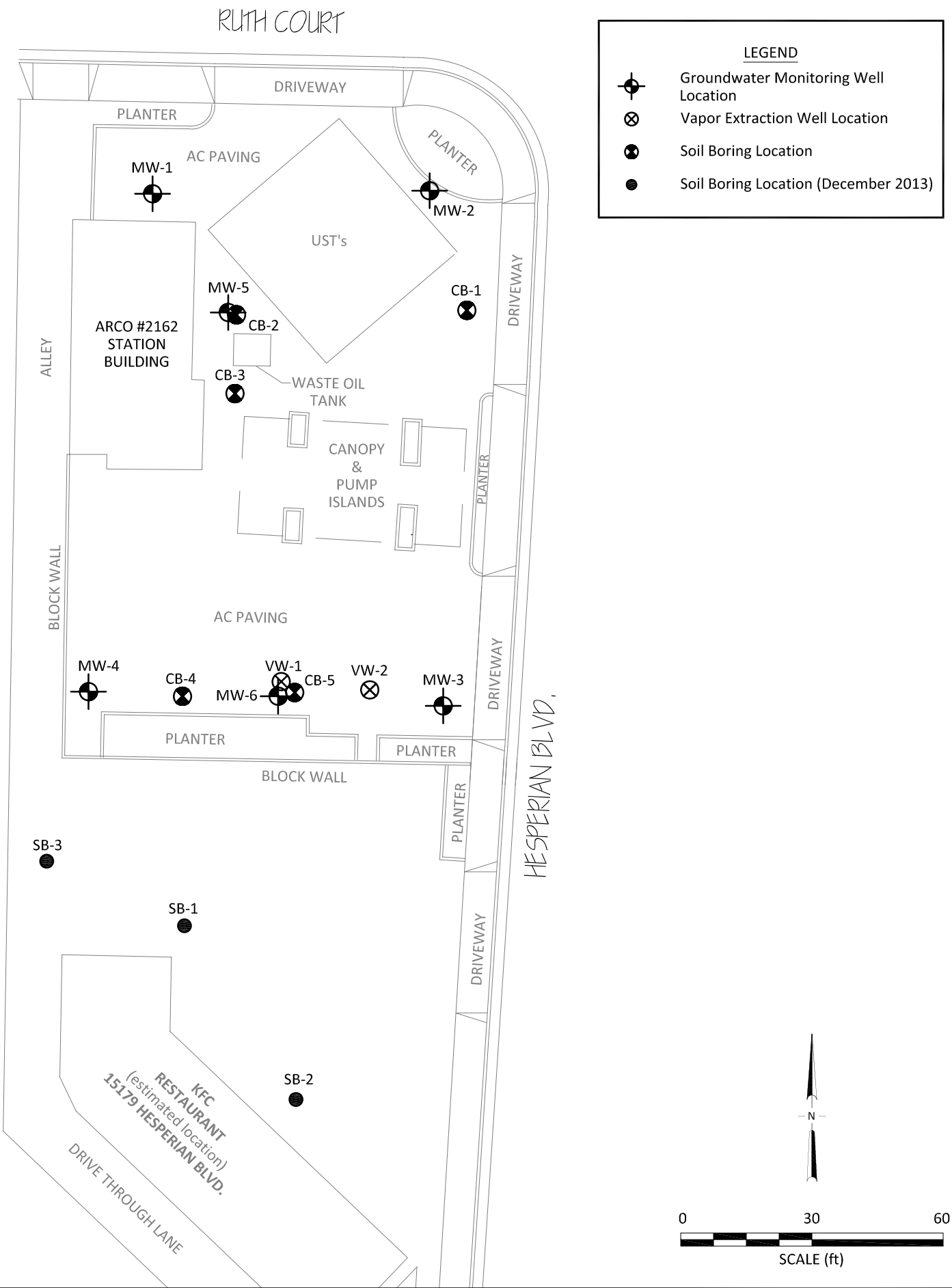
Source: Modified from site plan provided by Roux Associates, and survey data from John Koch, licensed land surveyor (9/16/92)

RESNA
Working to Restore Nature

PROJECT 62019.02

GENERALIZED SITE PLAN
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California

PLATE
2

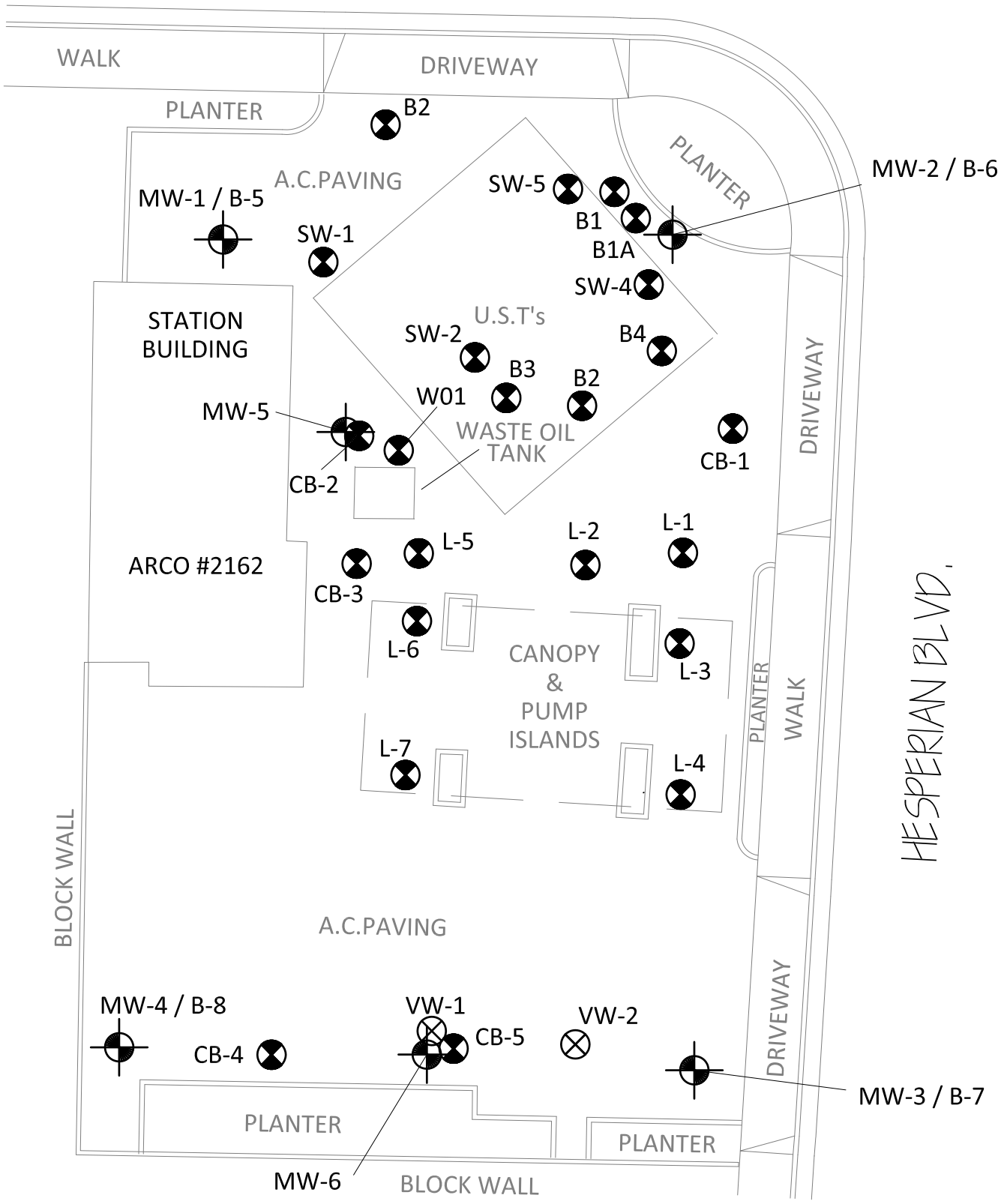


BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 02/17/2014

Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

Site Map with Soil Boring Locations

Drawing
2



LEGEND

- Groundwater Monitoring Well Location
- Vapor Extraction Well Location
- Soil Boring Location

N

0 30 60

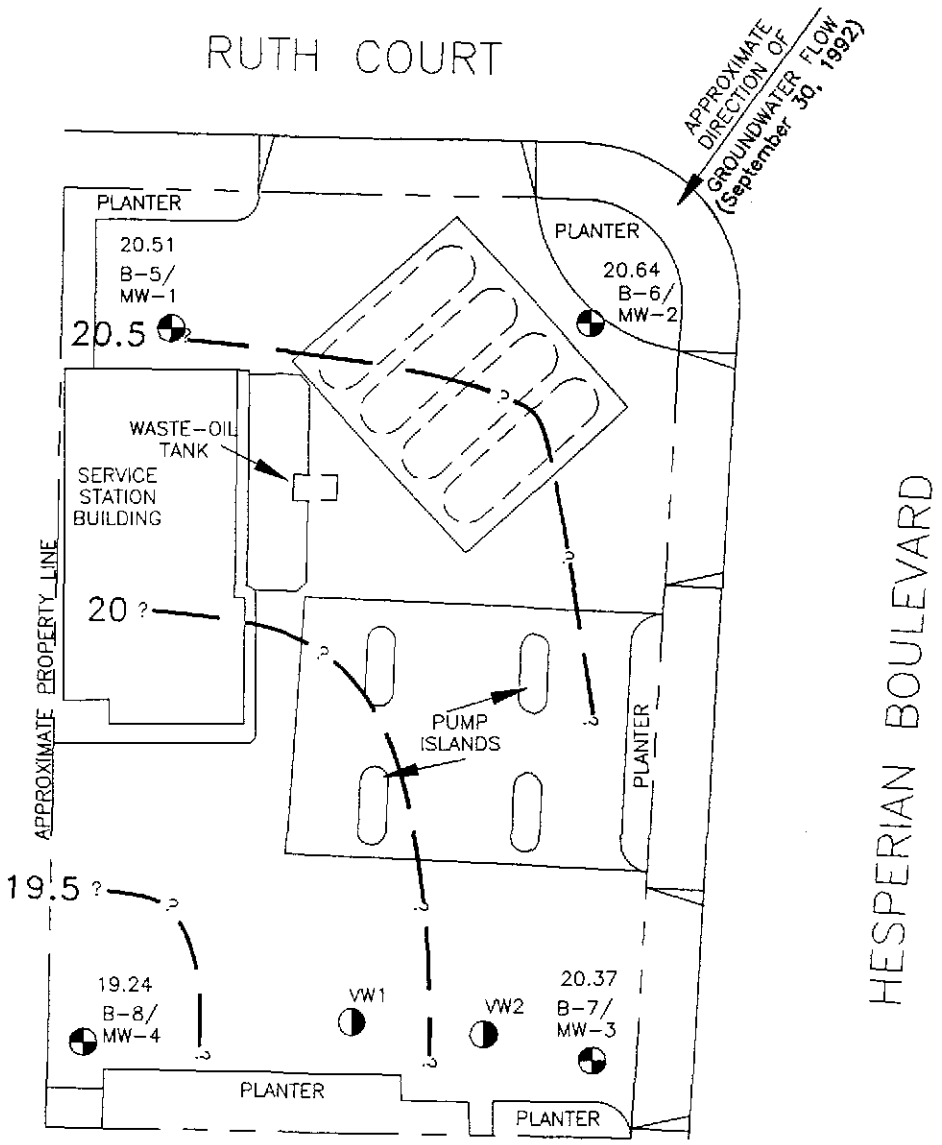
SCALE (ft)

BROADBENT
1370 Ridgewood Dr., Suite 5
Chico, California 95973
Project No.: 06-88-620 Date: 7/2/2013

Station #2162
15135 Hesperian Boulevard
San Leando, California

Site Map with Monitoring Well, Historical Boring, and Soil Vapor Well Locations

Drawing
2



EXPLANATION

B-8/MW-4 = Monitoring well RESNA September 1992

VW2 = Vapor extraction well (Roux Associates, Inc., 1991)

= Existing underground storage tank

20.5 = Line of equal elevation of groundwater in feet above mean sea level (MSL)

20.64 = Elevation of groundwater in feet above MSL September 30, 1992

N

Approximate Scale

30 15 0 30 60

feet

Source: Modified from site plan provided by Roux Associates. and survey data from John Koch, licensed land surveyor (9/16/92)

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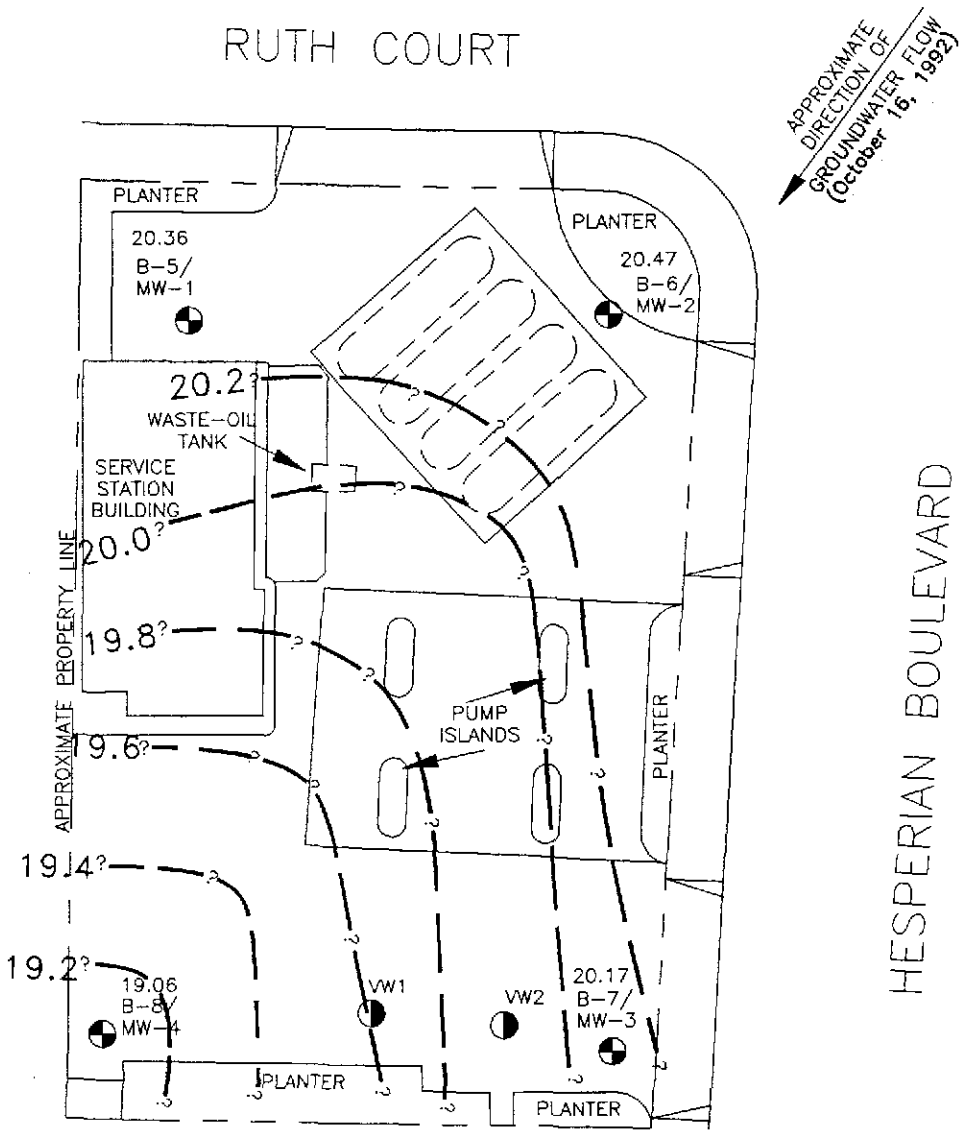
PROJECT 62019.02

GROUNDWATER GRADIENT MAP
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California

PLATE
10



EXPLANATION

B-8/MW-4 = Monitoring well RESNA September 1992

VW2 = Vapor extraction well (Roux Associates, Inc., 1991)

= Existing underground storage tank

20.2 = Line of equal elevation of groundwater in feet above mean sea level (MSL)

20.47 = Elevation of groundwater in feet above MSL October 16, 1992

N

Approximate Scale

30 15 0 30 60

feet

Source: Modified from site plan provided by Roux Associates. and survey data from John Koch, licensed land surveyor (9/16/92)

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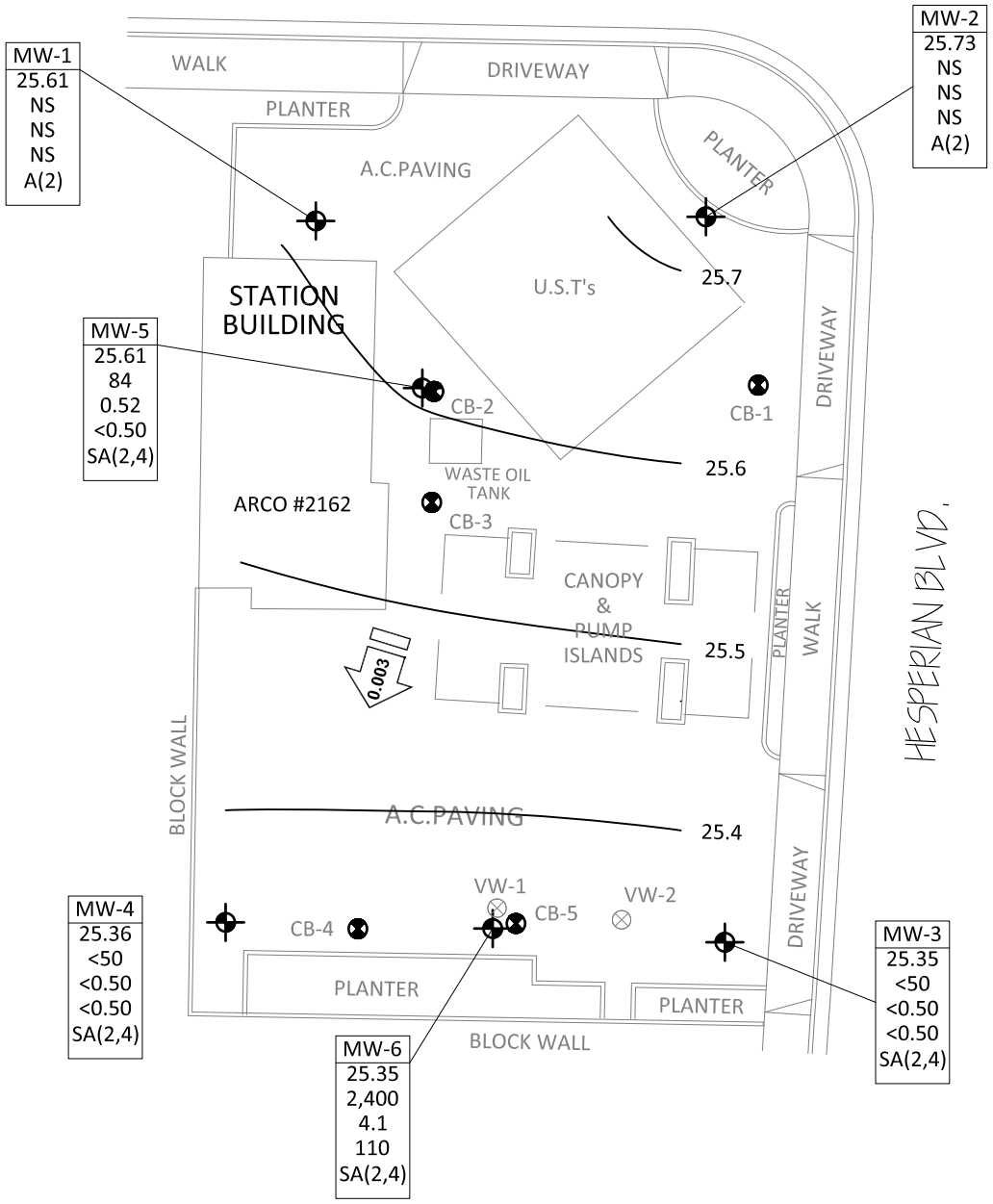
PROJECT 62019.02

GROUNDWATER GRADIENT MAP
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California

PLATE
11



LEGEND

- Groundwater Monitoring Well Location
- Vapor Extraction Well Location
- Soil Boring Location
- 25.1 — Groundwater Elevation Contour (Feet Above Site Datum)
- 0.003 — Approximate Groundwater Flow Direction and Gradient (ft/ft)

- SA — Sampled Semi-Annually
- * — Data Not Used for Contouring
- < — Not Detected at or above Laboratory Reporting Limits

WELL	Well Designation
ELEV	Groundwater Elevation (ft)
GRO BZ MTBE	GRO, Benzene, and MTBE Concentrations (µg/L)
A/SA/Q	Sampling Frequency

N

0 30 60

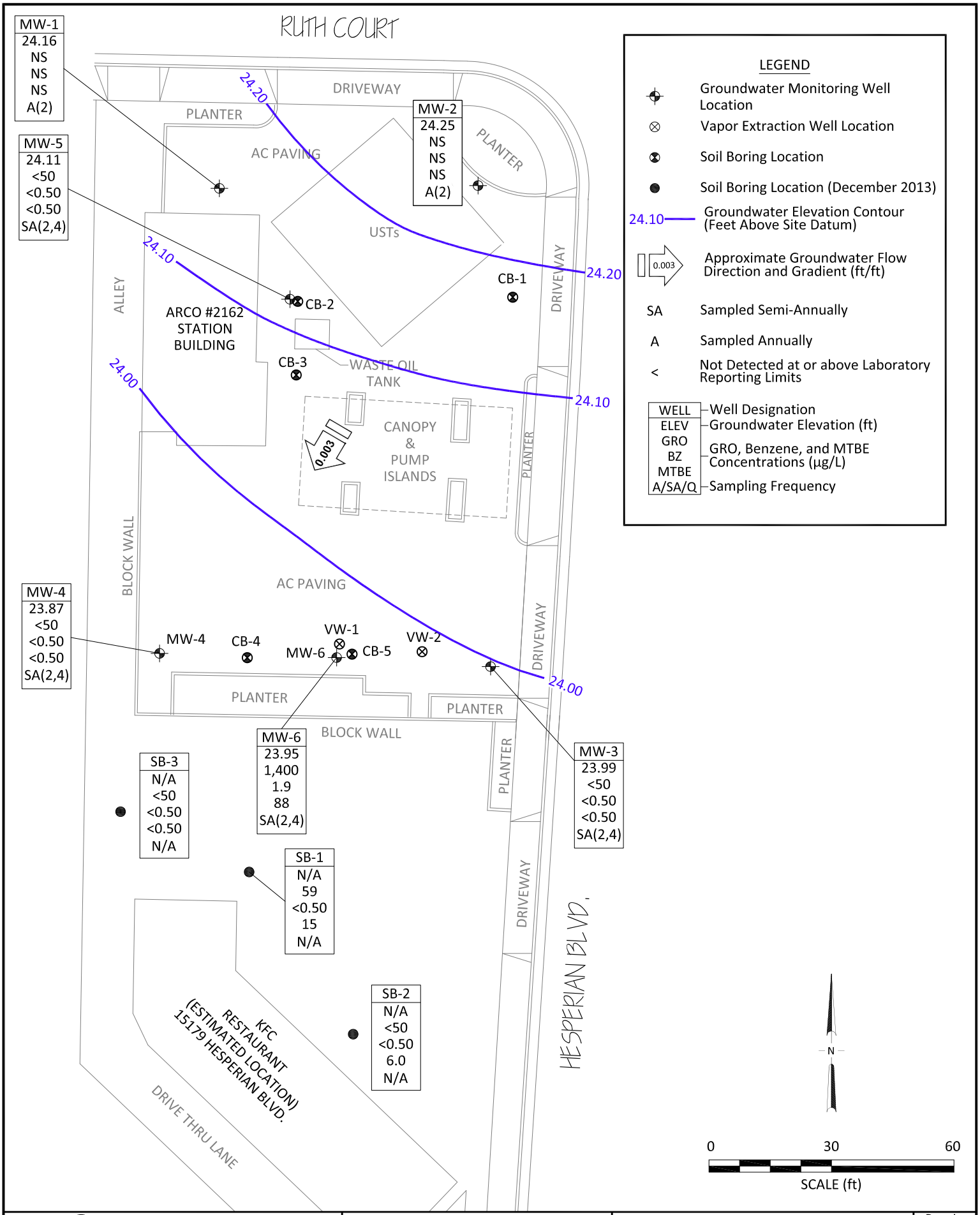
SCALE (ft)

BROADBENT
1370 Ridgewood Dr., Suite 5
Chico, California 95973
Project No.: 06-88-620 Date: 7/3/2013

Station #2162
15135 Hesperian Boulevard
San Leando, California

Groundwater Elevation Contours and Analytical Summary Map
December 20, 2012

Drawing
4



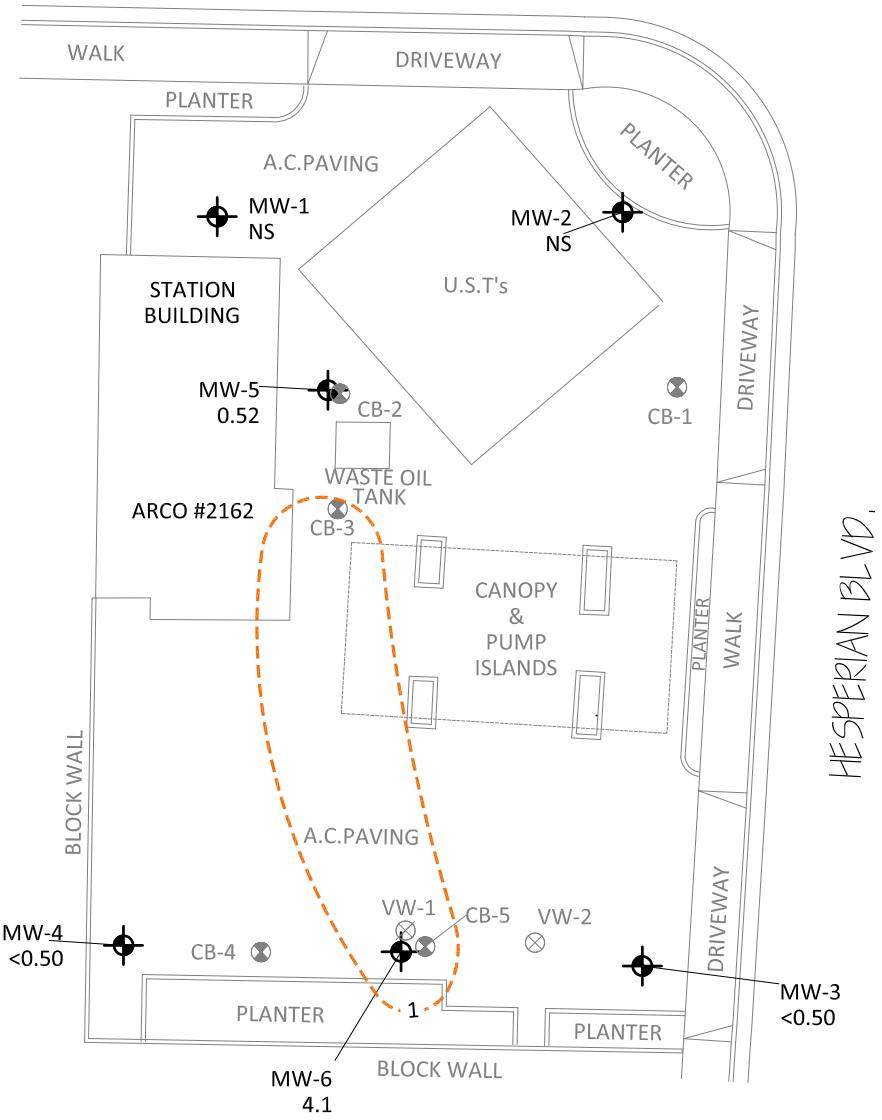
BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 3/21/2014

Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

Groundwater Elevation and Analytical Summary Map
December 2, 2013 (Monitoring Wells)
December 23, 2013 (Soil Borings)

Drawing
3

RUTH COURT



LEGEND

- Groundwater Monitoring Well Location with Benzene Concentration (µg/L)
- Vapor Extraction Well Location
- Soil Boring Location
- Benzene Isoconcentration Contour (µg/L)
- * Results from 4th Quarter, 2012

N

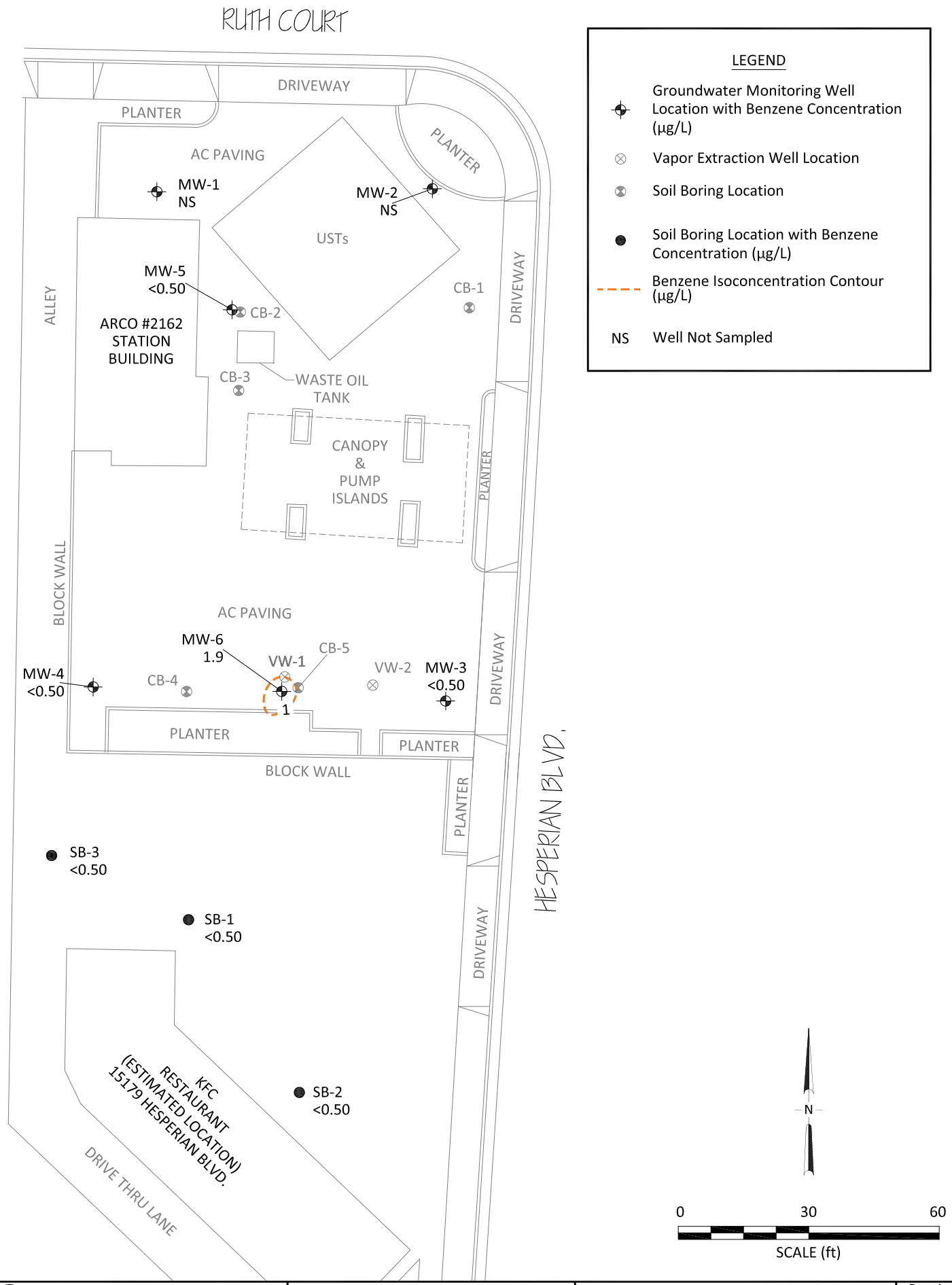
0 30 60

SCALE (ft)

BROADBENT 1370 Ridgewood Dr., Suite 5 Chico, California 95973 Project No.: 06-88-620 Date: 7/3/2013	Station #2162 15135 Hesperian Boulevard San Leando, California	Benzene Isoconcentration Map December 20, 2012

Drawing

6



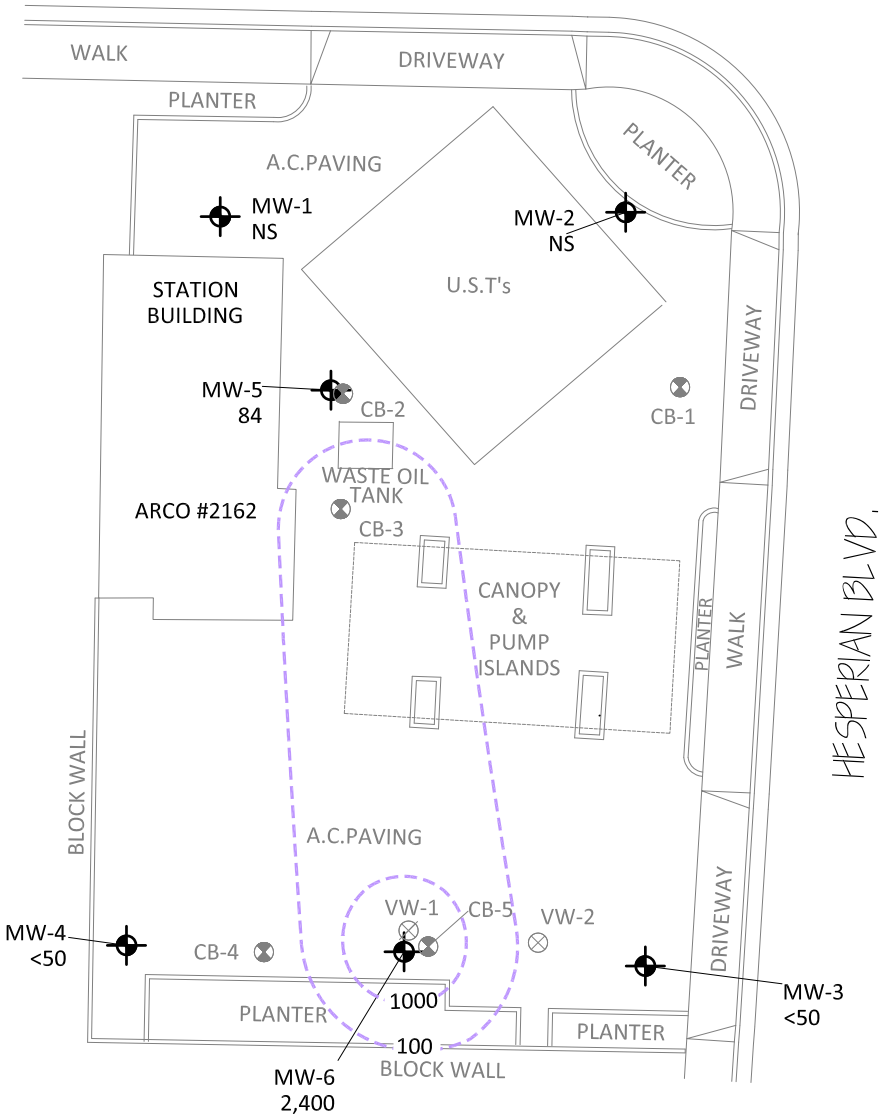
BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 3/21/2014

Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

Benzene Isoconcentration Map
December 2, 2013 (Monitoring Wells)
December 23, 2013 (Soil Borings)

Drawing
8

RUTH COURT



LEGEND

- Groundwater Monitoring Well Location with GRO Concentration Contour (µg/L)
- Vapor Extraction Well Location
- Soil Boring Location
- GRO Isoconcentration Contour (µg/L)
- * Results from 4th Quarter, 2012

N

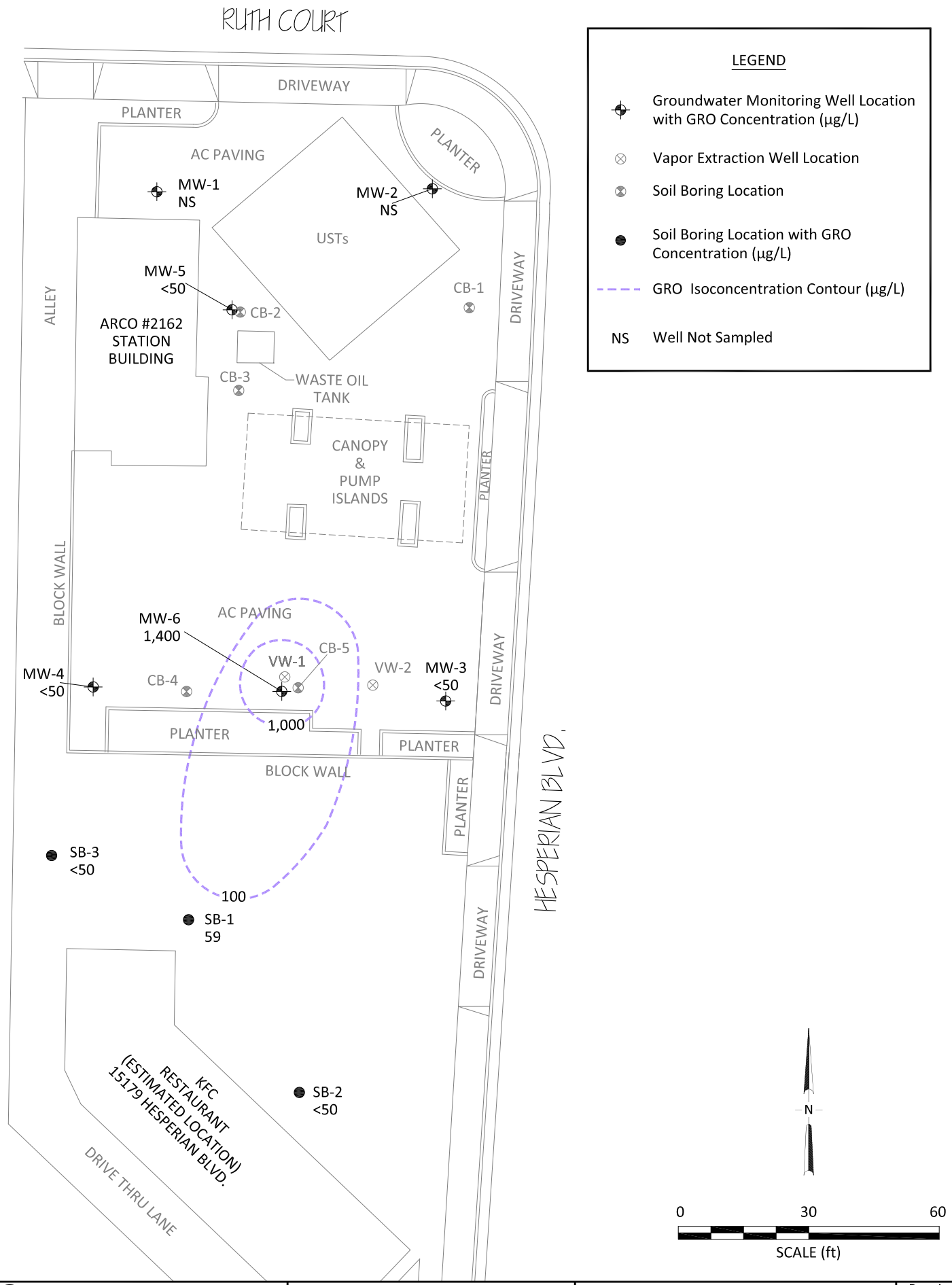
0 30 60

SCALE (ft)

BROADBENT 1370 Ridgewood Dr., Suite 5 Chico, California 95973 Project No.: 06-88-620 Date: 7/3/2013	Station #2162 15135 Hesperian Boulevard San Leando, California	GRO Isoconcentration Map December 20, 2012

Drawing

5



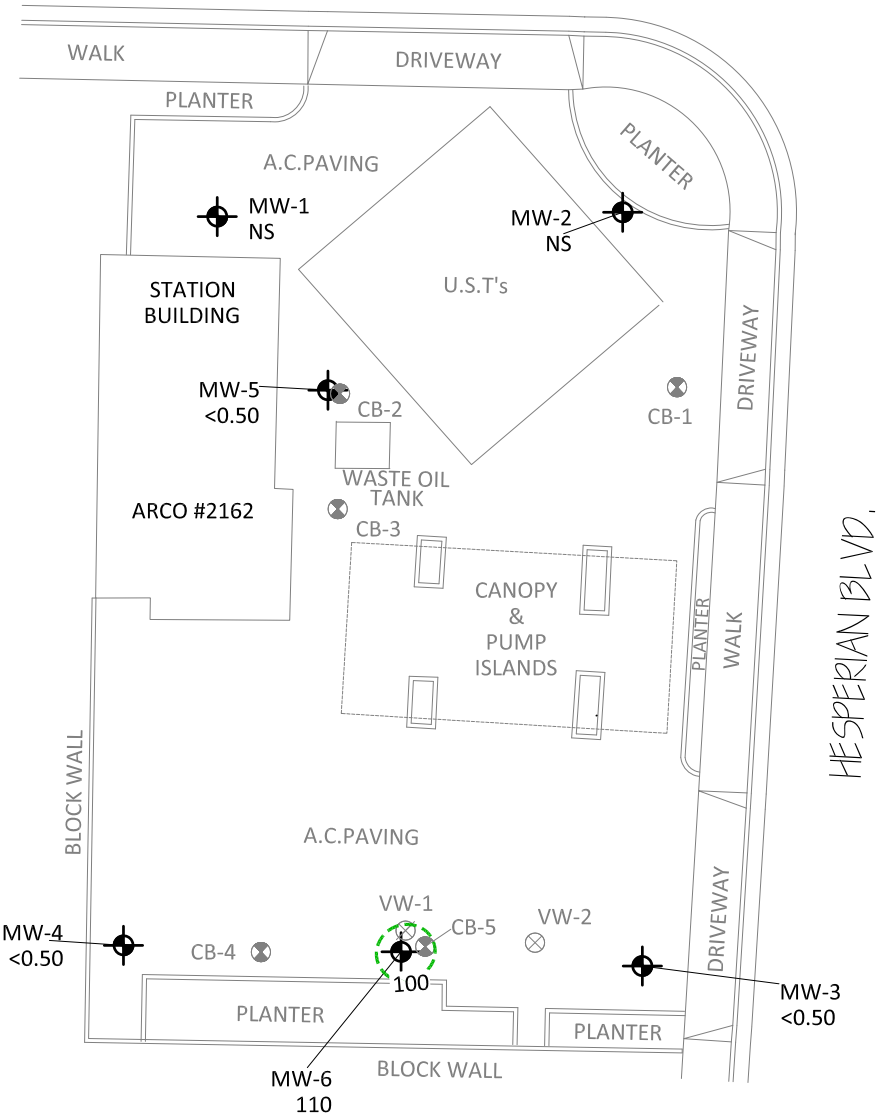
BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 3/21/2014

Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

GRO Isoconcentration Map
December 2, 2013 (Monitoring Wells)
December 23, 2013 (Soil Borings)

Drawing
7

RUTH COURT



LEGEND

- Groundwater Monitoring Well Location with MTBE Concentration (µg/L)
- Vapor Extraction Well Location
- Soil Boring Location
- MTBE Isoconcentration Contour (µg/L)
- * Results from 4th Quarter, 2012

N

0 30 60

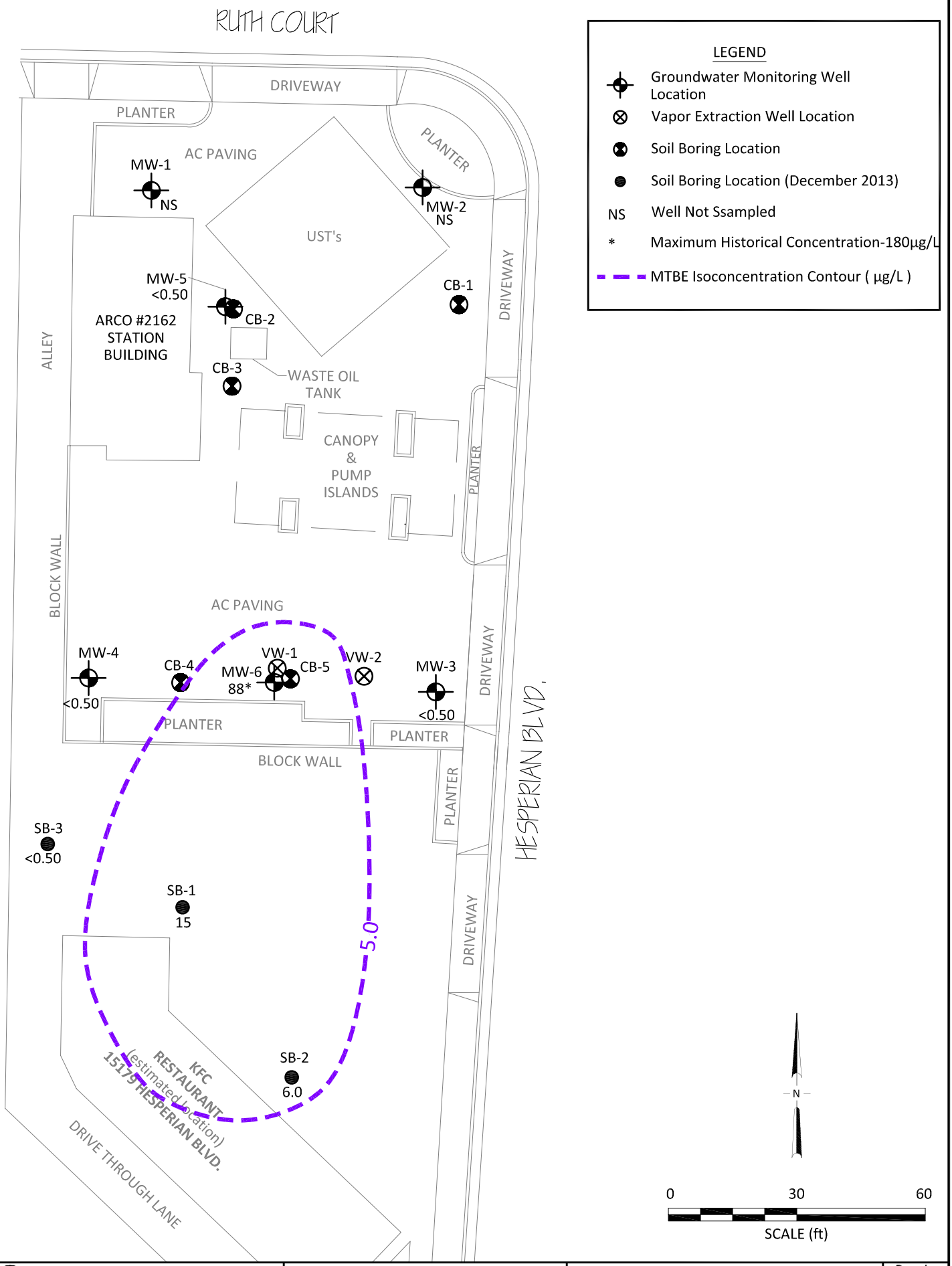
SCALE (ft)

BROADBENT
1370 Ridgewood Dr., Suite 5
Chico, California 95973
Project No.: 06-88-620 Date: 7/3/2013

Station #2162
15135 Hesperian Boulevard
San Leando, California

MTBE Isoconcentration Map
December 20, 2012

Drawing
7

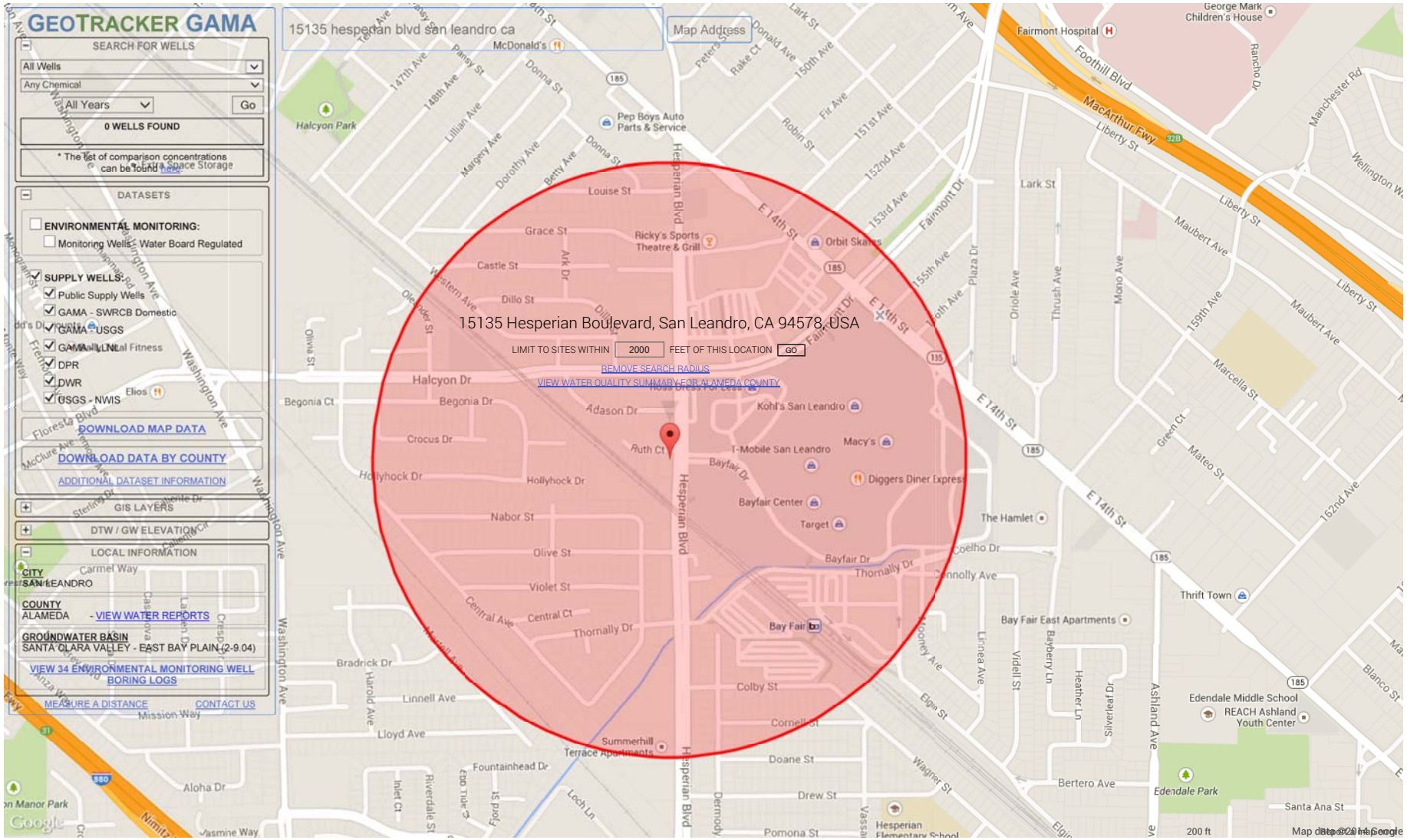


BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 02/17/2014

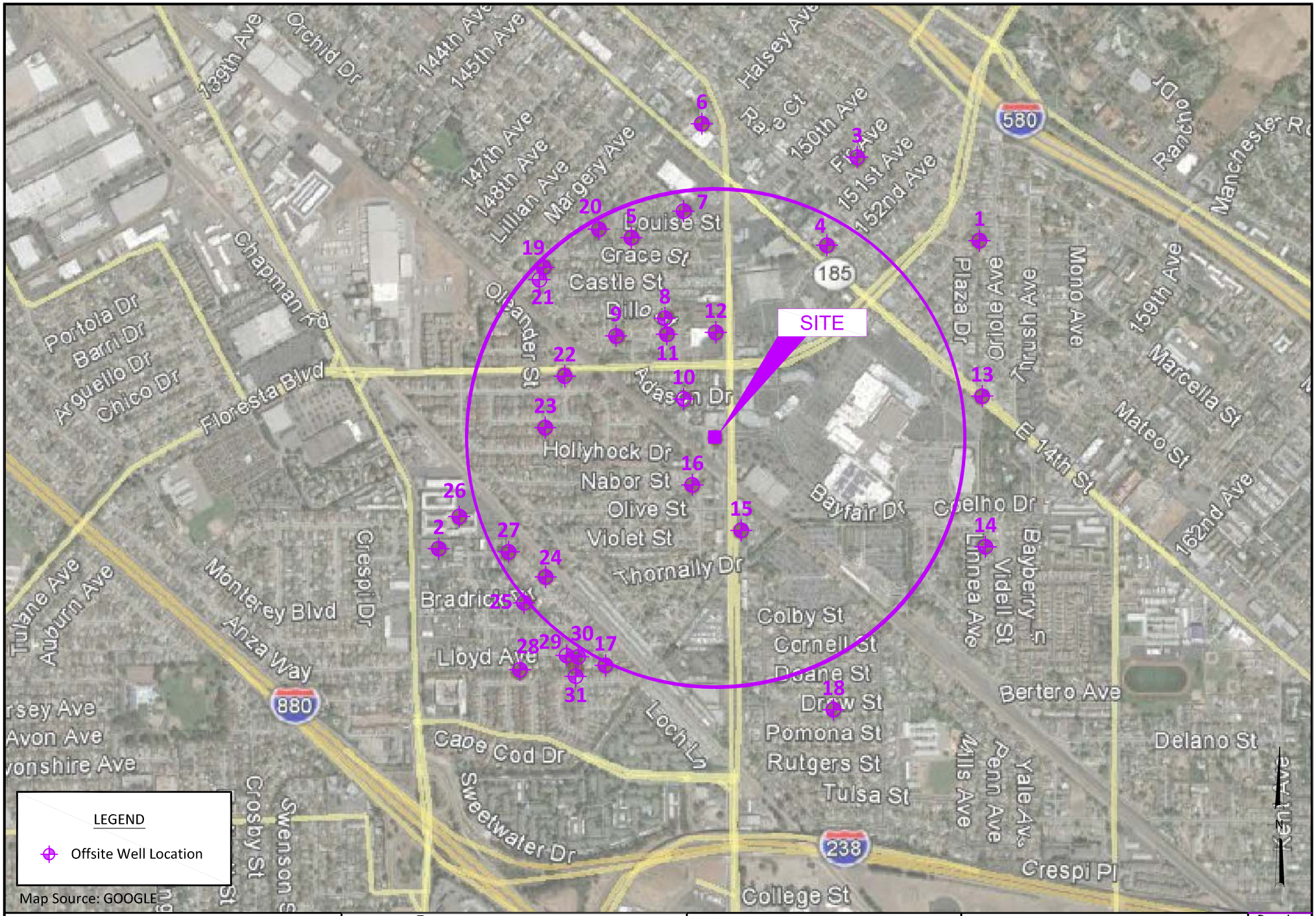
Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

MTBE Isoconcentration Map
December 2, 2013 (Monitoring Well)
December 23, 2013 (Soil Boring)

Drawing
1



LOCATIONS FOUND



BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 02/21/2014

ARCO Station No. 2162
15135 Hesperian Blvd.
San Leandro

ACPWA Well Survey Results

Drawing
2

Figure 1 - Approximate Well Locations ARCO #2162 - 15135 Hesperian Blvd., CA

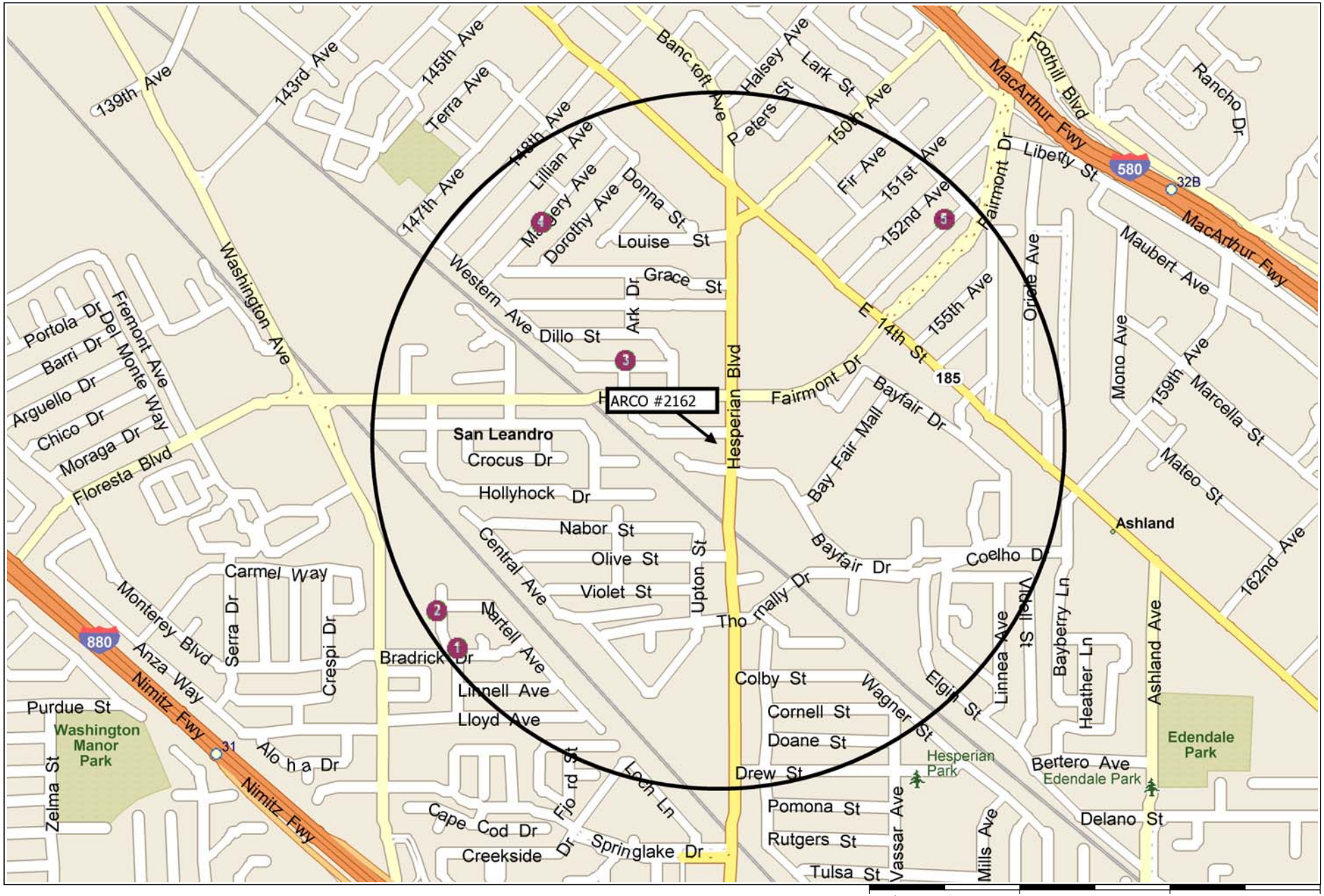


Table 1 - Wells Located Within 0.5-Mile Radius
ARCO Service Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

Map ID No.	Approximate Distance from Site	Well Type	Installation Date	Screen Interval
1	2,250 ft. WSW	irr	Aug-56	15-30 ft.
2	2,350 ft. WSW	irr	Nov-77	20-60 ft.
3	1,050 ft. NW	irr	Mar-77	20-40 ft.
3	1,100 ft. NW	irr	Mar-77	17-37 ft.
4	2,250 ft. NW	irr	May-77	20-48 ft.
4	2,350 ft. NW	dom	May-77	25-45 ft.
5	2,500 ft. NNE	irr	Aug-77	10-30 ft.

Abbreviations:

ft = feet
N = North
S = South
E = East
W = West
dom = domestic well
irr = irrigation well
mun = municipal well
pub = public well
unk = unknown

ATTACHMENT 7

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
02/26/96	Southwest	0.009
05/23/96	South-Southwest	0.010
08/21/96	South-Southwest	0.01
11/20/96	South-Southwest	0.011
04/01/97	South-Southwest	0.004
06/10/97	South-Southwest	0.010
09/17/97	South-Southwest	0.01
12/12/97	Southwest	0.01
03/25/98	South-Southwest	0.008
05/14/98	Southwest	0.01
07/31/98	Southwest	0.01
10/12/98	Southwest	0.01
02/11/99	Southwest	0.008
06/23/99	Southwest	0.02
08/23/99	Southwest	0.013
10/27/99	South-Southwest	0.02
02/09/00	**Southwest**	**0.01**

3. Summary of Groundwater Gradient - Direction and Magnitude

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Date Measured	Approximate Gradient Direction	Approximate Gradient Magnitude (ft/ft)
3/23/2001	Southwest	0.011
6/20/2001	Southwest	0.013
9/22/2001	Southwest	0.012
12/28/2001	Southwest	0.010
3/14/2002	Southwest	0.011
4/18/2002	Southwest	0.012
7/19/2002	Southwest	0.012
10/9/2002	Southwest	0.013
3/28/2003	Southwest	0.013
4/7/2003	Southwest	0.011
7/9/2003	Southwest	0.010
10/8/2003	Southwest	0.010
1/15/2004	Southwest	0.008
4/5/2004	South-Southwest	0.004
7/12/2004	South and Southwest	0.003 and 0.005
10/19/2004	Southwest	0.004
1/11/2005	Southwest (a) to Southeast (b)	0.005 to 0.004
4/14/2005	Southeast	0.004
8/1/2005	Southwest	0.002
7/31/2006	South-Southwest	0.003
6/12/2009	South	0.003
11/6/2009	South-Southwest	0.003
6/4/2010	South-Southwest	0.004
11/19/2010	South-Southwest	0.003
5/19/2011	South-Southeast	0.003
12/1/2011	South-Southwest	0.001
6/21/2012	South-Southwest	0.003
12/20/2012	South-Southwest	0.003
6/13/2013	South-Southwest	0.003
12/2/2013	Southwest	0.003
5/27/2014	**Southwest**	**0.003**

Footnotes:
a = Direction at underground storage tanks
b = Direction at dispensers

Notes:
The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information

Table 3
Grab-Groundwater Analytical Results
December 2013 Soil Boring Investigation
ARCO Station No. 2162
15135 Hesperian Boulevard, San Leandro, California

Boring Identification	Grab-Groundwater Sample Depth (feet bgs)	Date Collected	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	DIPE (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)	Naphthalene (µg/L)
SB-1	10	12/23/2013	59	ND<0.50	ND<0.50	ND<0.50	ND<1.0	15	ND<0.50	0.92	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<150	ND<1.0
SB-2	10	12/21/2013	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	6.0	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<150	ND<1.0
SB-3	10	12/23/2013	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	ND<0.50	ND<150	ND<1.0
ESLs			**100**	**1.0**	**40**	**30**	**20**	**5**	NA	NA	NA	NA	0.5	0.5	5000	17

Notes:

feet bgs = feet below ground surface
µg/L = micrograms per liter
GRO = gasoline range organics (C6-C12)
MTBE = methyl tert-butyl ether
ETBE = ethyl tert-butyl ether
TAME = tert-amyl methyl ether
TBA = tert butyl alcohol
DIPE = di isopropyl ether
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane

ND<X.XX = not detected above reporting limit of X.XX µg/L
ESLs = Environmental Screening Levels as presented in *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater - Interim Final December 2013* assuming a commercial/industrial exposure scenrio where groundwater is a potential drinking water resource

Table 5 Summary of Depth-Discrete Ground-Water Sampling Data
Atlantic Richfield Company Station No. 2162
15135 Hesperian Boulevard, San Leandro, California (ACEH Case No. RO0000190)

Boring I.D.	Date	Laboratory Analytical Results (µg/l)													
		GRO	DRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DIPE	ETBE	TBA	TAME	Ethanol	EDB	1,2 DCA
CB1-W	7/17/2007	<50	<47	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<20	<0.50	<300	<0.50	<0.50
CB2-W	7/17/2007	**1,900**	**2,000**	**12**	<2.5	**110**	**140**	<2.5	<2.5	<2.5	<100	<2.5	<1,500	<2.5	<2.5
CB3-W	7/17/2007	**490**	**440**	<0.50	<0.50	**0.92**	<0.50	**0.82**	<0.50	<0.50	<20	<0.50	<300	<0.50	<0.50
CB4-W	7/17/2007	<50	**220**	**1.0**	<0.50	<0.50	<0.50	**20**	<0.50	<0.50	<20	<0.50	<300	<0.50	<0.50
CB5-W	7/17/2007	**490**	**360**	**2.1**	<0.50	<0.50	<0.50	**70**	<0.50	<0.50	<20	**3.9**	<300	<0.50	<0.50

Bolded values indicate concentrations above laboratory detection limits
GRO = Gasoline Range Organics, C4-C12
DRO = Diesel Range Organics, C10-C36
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TBA = Tertiary butyl alcohol
TAME = Tertiary amyl methyl ether
EDB = 1,2-Dibromoethane
1,2 DCA = 1,2 Dichloroethane

1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1															
6/20/2000	--	31.19	8.00	16.00	8.33	22.86	<50	<0.5	0.8	<0.5	<1.0	<10	--	--	
9/29/2000	--		8.00	16.00	9.07	22.12	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/17/2000	--		8.00	16.00	8.69	22.50	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
3/23/2001	--		8.00	16.00	8.19	23.00	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
6/20/2001	--		8.00	16.00	8.97	22.22	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
9/22/2001	--		8.00	16.00	9.56	21.63	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/28/2001	--		8.00	16.00	8.40	22.79	<50	<0.5	<0.5	<0.5	0.63	<2.5	--	--	
3/14/2002	--		8.00	16.00	8.05	23.14	<50	<0.5	<0.5	<0.5	<0.5	170	--	--	
4/18/2002	--		8.00	16.00	8.27	22.92	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
7/19/2002	NP		8.00	16.00	8.88	22.31	<50	<0.5	<0.5	<0.5	<0.5	11	1.0	8.2	
10/09/02	NP		8.00	16.00	--	--	--	--	--	--	--	--	--	--	a
03/28/2003	NP		8.00	16.00	--	--	--	--	--	--	--	--	--	--	a, c
4/7/2003	NP		8.00	16.00	8.28	22.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	6.9	
7/9/2003	NP		8.00	16.00	8.62	22.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	7.2	
10/08/2003	--	31.13	8.00	16.00	9.19	21.94	--	--	--	--	--	--	--	--	d, e
01/13/2004	--		8.00	16.00	8.35	22.78	--	--	--	--	--	--	--	--	
04/05/2004	--	33.70	8.00	16.00	7.29	26.41	--	--	--	--	--	--	--	--	
07/12/2004	NP		8.00	16.00	9.00	24.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8	7.0	
10/19/2004	--		8.00	16.00	9.47	24.23	--	--	--	--	--	--	--	--	
01/11/2005	--		8.00	16.00	7.64	26.06	--	--	--	--	--	--	--	--	
04/14/2005	--		8.00	16.00	7.35	26.35	--	--	--	--	--	--	--	--	
08/01/2005	--		8.00	16.00	8.21	25.49	--	--	--	--	--	--	--	--	
7/31/2006	--		8.00	16.00	8.10	25.60	--	--	--	--	--	--	--	--	
6/12/2009	P		8.00	16.00	8.93	24.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	7.40	
11/6/2009	--		8.00	16.00	9.18	24.52	--	--	--	--	--	--	--	--	
6/4/2010	P		8.00	16.00	8.13	25.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.31	7.2	
11/19/2010	--		8.00	16.00	9.28	24.42	--	--	--	--	--	--	--	--	
5/19/2011	P		8.00	16.00	7.76	25.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.36	6.8	
12/1/2011	--		8.00	16.00	8.40	25.30	--	--	--	--	--	--	--	--	
6/21/2012	P		8.00	16.00	8.49	25.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.73	7.39	

1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-1 Cont.															
12/20/2012	--	33.70	8.00	16.00	8.09	25.61	--	--	--	--	--	--	--	--	
6/13/2013	P		8.00	16.00	8.94	24.76	<50	<0.50	<0.50	<0.50	<1.0	<0.50	2.08	6.76	
12/2/2013	--		8.00	16.00	9.54	24.16	--	--	--	--	--	--	--	--	
5/27/2014	**P**		**8.00**	**16.00**	**9.03**	**24.67**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**2.82**	**7.02**	
MW-2															
6/20/2000	--	30.38	8.00	16.00	7.38	23.00	--	--	--	--	--	--	--	--	
9/29/2000	--		8.00	16.00	8.08	22.30	266	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/17/2000	--		8.00	16.00	7.80	22.58	175	<0.5	<0.5	0.659	<0.5	<2.5	--	--	
3/23/2001	--		8.00	16.00	7.23	23.15	351	<0.5	<0.5	0.912	<0.5	<2.5	--	--	
6/20/2001	--		8.00	16.00	7.98	22.40	360	<0.5	<0.5	0.74	<0.5	<2.5	--	--	
9/22/2001	--		8.00	16.00	8.55	21.83	190	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
12/28/2001	--		8.00	16.00	7.53	22.85	130	<0.5	0.93	<0.5	0.51	<2.5	--	--	
3/14/2002	--		8.00	16.00	7.17	23.21	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
4/18/2002	--		8.00	16.00	7.31	23.07	74	<0.5	<0.5	<0.5	<0.5	--	--	--	
7/19/2002	P		8.00	16.00	7.93	22.45	<50	<0.5	<0.5	<0.5	<0.5	<2.5	1.1	7.6	
10/9/2002	P		8.00	16.00	8.55	21.83	<50	<0.5	<0.5	<0.5	<0.5	<2.5	0.7	7.3	
03/28/2003	P		8.00	16.00	7.30	23.08	<50	<0.50	0.83	<0.50	<0.50	<0.50	1.48	7.7	c
4/7/2003	P		8.00	16.00	7.36	23.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	7.0	
7/9/2003	P		8.00	16.00	7.71	22.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.5	7.6	
10/08/2003	--		8.00	16.00	8.25	22.13	--	--	--	--	--	--	--	--	
01/13/2004	--		8.00	16.00	7.55	22.83	--	--	--	--	--	--	--	--	
04/05/2004	--	32.97	8.00	16.00	7.29	25.68	--	--	--	--	--	--	--	--	
07/12/2004	NP		8.00	16.00	8.09	24.88	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	7.2	
10/19/2004	--		8.00	16.00	8.29	24.68	--	--	--	--	--	--	--	--	
01/11/2005	--		8.00	16.00	6.81	26.16	--	--	--	--	--	--	--	--	
04/14/2005	--		8.00	16.00	6.69	26.28	--	--	--	--	--	--	--	--	
08/01/2005	--		8.00	16.00	7.40	25.57	--	--	--	--	--	--	--	--	
7/31/2006	--		8.00	16.00	7.22	25.75	--	--	--	--	--	--	--	--	
6/12/2009	P	32.95	8.00	16.00	8.18	24.77	51	<0.50	<0.50	<0.50	<0.50	<0.50	0.60	7.55	
11/6/2009	--		8.00	16.00	8.32	24.63	--	--	--	--	--	--	--	--	

1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-2 Cont.															
6/4/2010	P	32.95	8.00	16.00	7.24	25.71	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	7.33	
11/19/2010	--		8.00	16.00	8.38	24.57	--	--	--	--	--	--	--	--	
5/19/2011	P		8.00	16.00	7.12	25.83	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.24	9.0	
12/1/2011	--		8.00	16.00	7.57	25.38	--	--	--	--	--	--	--	--	
6/21/2012	P		8.00	16.00	7.63	25.32	62	<0.50	<0.50	<0.50	<0.50	<0.50	1.47	7.42	lw
12/20/2012	--		8.00	16.00	7.22	25.73	--	--	--	--	--	--	--	--	
6/13/2013	P		8.00	16.00	8.10	24.85	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.41	7.0	
12/2/2013	--		8.00	16.00	8.70	24.25	--	--	--	--	--	--	--	--	
5/27/2014	**P**		**8.00**	**16.00**	**8.19**	**24.76**	**55**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**1.24**	**7.14**	
MW-3															
6/20/2000	--	30.30	8.00	15.00	7.75	22.55	--	--	--	--	--	--	--	--	
9/29/2000	--		8.00	15.00	8.46	21.84	<50	<0.5	<0.5	<0.5	<0.5	128	--	--	
12/17/2000	--		8.00	15.00	8.01	22.29	<50	<0.5	<0.5	<0.5	<0.5	46.7	--	--	
3/23/2001	--		8.00	15.00	7.70	22.60	<50	<0.5	<0.5	<0.5	<0.5	26.8	--	--	
6/20/2001	--		8.00	15.00	8.23	22.07	<50	<0.5	<0.5	<0.5	<0.5	30	--	--	
9/22/2001	--		8.00	15.00	8.89	21.41	<50	<0.5	<0.5	<0.5	<0.5	12	--	--	
12/28/2001	--		8.00	15.00	7.83	22.47	<50	<0.5	<0.5	<0.5	<0.5	6.2	--	--	
3/14/2002	--		8.00	15.00	7.48	22.82	<50	<0.5	<0.5	<0.5	<0.5	47	--	--	
4/18/2002	--		8.00	15.00	7.62	22.68	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
7/19/2002	P		8.00	15.00	8.23	22.07	100	<1.0	<1.0	<1.0	<1.0	330	0.9	7.6	b (TPH-g)
10/9/2002	P		8.00	15.00	8.83	21.47	<50	<0.5	<0.5	<0.5	<0.5	61	0.5	7.4	
03/28/2003	P		8.00	15.00	7.85	22.45	52	<0.50	1.2	<0.50	<0.50	45	1.42	7.6	c
4/7/2003	P		8.00	15.00	7.71	22.59	56	<0.50	<0.50	<0.50	<0.50	56	1.1	6.8	
7/9/2003	P		8.00	15.00	8.00	22.30	<500	<5.0	<5.0	<5.0	<5.0	87	1.6	7.4	
10/08/2003	P		8.00	15.00	8.59	21.71	<50	<0.50	<0.50	<0.50	<0.50	25	0.9	--	
01/15/2004	P		8.00	15.00	7.90	22.40	<50	<0.50	<0.50	<0.50	<0.50	9.8	2.9	7.3	
04/05/2004	P	32.89	8.00	15.00	7.61	25.28	<50	<0.50	<0.50	<0.50	<0.50	15	1.5	7.0	
07/12/2004	P		8.00	15.00	8.45	24.44	<50	<0.50	<0.50	<0.50	<0.50	7.3	1.6	6.9	
10/19/2004	P		8.00	15.00	8.95	23.94	<50	<0.50	<0.50	<0.50	<0.50	5.0	0.96	7.1	
01/11/2005	P		8.00	15.00	7.27	25.62	<50	<0.50	<0.50	<0.50	<0.50	2.3	--	7.2	

1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE			
MW-3 Cont.															
04/14/2005	P	32.89	8.00	15.00	7.10	25.79	<50	<0.50	<0.50	<0.50	1.5	5.6	2.0	7.2	
08/01/2005	P		8.00	15.00	7.71	25.18	<50	<0.50	<0.50	<0.50	<0.50	5.2	1.18	7.0	
7/31/2006	P		8.00	15.00	7.64	25.25	<50	<0.50	<0.50	<0.50	<0.50	4.3	--	6.8	
6/12/2009	P	32.88	8.00	15.00	8.36	24.52	<50	0.75	<0.50	<0.50	<0.50	0.53	0.61	7.45	
11/6/2009	P		8.00	15.00	8.58	24.30	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.51	7.17	
6/4/2010	P		8.00	15.00	7.60	25.28	<50	<0.50	<0.50	<0.50	<0.50	1.9	0.69	7.4	
11/19/2010	NP		8.00	15.00	8.63	24.25	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.69	7.0	
5/19/2011	P		8.00	15.00	7.22	25.66	56	<0.50	<0.50	<0.50	<0.50	2.1	0.83	9.2	lw
12/1/2011	P		8.00	15.00	8.00	24.88	<50	<0.50	<0.50	<0.50	<0.50	0.50	3.15	7.8	
6/21/2012	P		8.00	15.00	7.90	24.98	<50	<0.50	<0.50	<0.50	<0.50	1.4	1.24	7.33	
12/20/2012	p		8.00	15.00	7.53	25.35	<50	<0.50	<0.50	<0.50	<1.0	<0.50	3.62	8.17	
6/13/2013	P		8.00	15.00	8.39	24.49	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.22	7.07	
12/2/2013	P		8.00	15.00	8.89	23.99	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.32	6.81	
5/27/2014	**P**		**8.00**	**15.00**	**8.43**	**24.45**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**1.20**	**7.23**	
MW-4															
6/20/2000	--	30.39	10.00	18.00	8.87	21.52	--	--	--	--	--	--	--	--	
9/29/2000	--		10.00	18.00	9.61	20.78	<50	1.02	<0.5	<0.5	<0.5	12.2	--	--	
12/17/2000	--		10.00	18.00	9.17	21.22	<50	<0.5	<0.5	<0.5	<0.5	5.81	--	--	
3/23/2001	--		10.00	18.00	8.70	21.69	<50	<0.5	<0.5	<0.5	<0.5	3.04	--	--	
6/20/2001	--		10.00	18.00	9.51	20.88	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	--	
9/22/2001	--		10.00	18.00	10.06	20.33	<50	<0.5	<0.5	<0.5	<0.5	5.2	--	--	
12/28/2001	--		10.00	18.00	8.86	21.53	<50	<0.5	<0.5	<0.5	<0.5	4.3	--	--	
3/14/2002	--		10.00	18.00	8.52	21.87	<50	<0.5	<0.5	<0.5	<0.5	5.1	--	--	
4/18/2002	--		10.00	18.00	8.76	21.63	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	
7/19/2002	NP		10.00	18.00	9.39	21.00	<50	<0.5	<0.5	<0.5	<0.5	30	1.8	7.8	
10/9/2002	NP		10.00	18.00	10.08	20.31	<50	<0.5	<0.5	<0.5	<0.5	28	1.0	8.0	
03/28/2003	NP		10.00	18.00	8.88	21.51	<50	<0.50	1.3	<0.50	<0.50	4.4	0.98	7.2	c
4/7/2003	NP		10.00	18.00	8.78	21.61	<50	<0.50	<0.50	<0.50	<0.50	14	1.1	7.0	
7/9/2003	NP		10.00	18.00	9.14	21.25	<50	<0.50	<0.50	<0.50	<0.50	1.8	1.6	7.4	
10/08/2003	NP		10.00	18.00	9.77	20.62	<50	<0.50	<0.50	<0.50	<0.50	3.1	2.6	6.4	

1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE			
MW-4 Cont.															
01/15/2004	P	30.39	10.00	18.00	8.68	21.71	<50	1.4	0.84	<0.50	1.5	6.6	2.9	7.1	
04/05/2004	NP	33.97	10.00	18.00	8.77	25.20	<50	<0.50	<0.50	<0.50	<0.50	1.3	1.2	7.0	
07/12/2004	NP		10.00	18.00	9.46	24.51	<50	<0.50	<0.50	<0.50	<0.50	1.0	2.5	6.6	
10/19/2004	NP		10.00	18.00	9.91	24.06	<50	<0.50	<0.50	<0.50	<0.50	4.4	1.21	7.9	
01/11/2005	P		10.00	18.00	7.80	26.17	59	2.0	<0.50	<0.50	<0.50	11	0.9	7.1	
04/14/2005	NP		10.00	18.00	8.07	25.90	<50	<0.50	<0.50	<0.50	<0.50	0.64	2.8	7.4	
08/01/2005	NP		10.00	18.00	8.58	25.39	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.48	5.7	
7/31/2006	P		10.00	18.00	8.75	25.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	6.7	
6/12/2009	P		10.00	18.00	9.51	24.46	<50	0.68	<0.50	<0.50	<0.50	<0.50	0.70	7.51	
11/6/2009	P		10.00	18.00	9.74	24.23	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.15	7.15	
6/4/2010	P		10.00	18.00	8.71	25.26	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.70	7.24	
11/19/2010	P		10.00	18.00	9.83	24.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.09	7.1	
5/19/2011	P		10.00	18.00	8.24	25.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.88	7.5	
12/1/2011	P		10.00	18.00	9.11	24.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.09	7.6	
6/21/2012	P		10.00	18.00	9.07	24.90	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.64	7.31	
12/20/2012	P		10.00	18.00	8.61	25.36	<50	<0.50	<0.50	<0.50	<1.0	<0.50	3.90	7.99	
6/13/2013	P		10.00	18.00	9.56	24.41	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.53	6.85	
12/2/2013	P		10.00	18.00	10.10	23.87	<50	<0.50	<0.50	<0.50	<1.0	<0.50	2.07	6.74	
5/27/2014	**P**		**10.00**	**18.00**	**9.63**	**24.34**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**1.27**	**7.22**	
MW-5															
6/12/2009	NP	33.96	8.00	16.00	9.25	24.71	85	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	7.50	
11/6/2009	P		8.00	16.00	9.49	24.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	7.1	
6/4/2010	NP		8.00	16.00	8.42	25.54	67	<0.50	<0.50	<0.50	<0.50	<0.50	1.24	7.65	
11/19/2010	NP		8.00	16.00	9.58	24.38	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.72	7.3	
5/19/2011	NP		8.00	16.00	8.02	25.94	52	<0.50	<0.50	<0.50	<0.50	<0.50	2.17	9.1	lw
12/1/2011	P		8.00	16.00	8.87	25.09	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.76	7.5	
6/21/2012	P		8.00	16.00	8.76	25.20	55	<0.50	<0.50	<0.50	<0.50	<0.50	1.58	7.24	lw
12/20/2012	P		8.00	16.00	8.35	25.61	84	0.52	<0.50	<0.50	<1.0	<0.50	3.74	7.97	
6/13/2013	P		8.00	16.00	9.27	24.69	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.53	6.83	
12/2/2013	P		8.00	16.00	9.85	24.11	<50	<0.50	<0.50	<0.50	<1.0	<0.50	1.86	6.71	

1. Summary of Groundwater Monitoring Data: Relative Water Elevations and Laboratory Analyses

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	P/NP	TOC (feet)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet)	Water Level Elevation (feet)	Concentrations in µg/L						DO (mg/L)	pH	Footnote
							GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE			
MW-5 Cont.															
5/27/2014	**P**	**33.96**	**8.00**	**16.00**	**9.34**	**24.62**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<0.50**	**0.69**	**7.13**	
MW-6															
6/12/2009	NP	33.48	8.00	16.00	9.02	24.46	1,800	4.9	<0.50	2.8	<0.50	59	0.68	7.39	
11/6/2009	P		8.00	16.00	9.21	24.27	880	1.7	<0.50	0.77	<0.50	37	0.43	6.9	
6/4/2010	NP		8.00	16.00	8.22	25.26	6,200	15	1.6	8.2	1.2	190	0.87	7.16	
11/19/2010	NP		8.00	16.00	9.30	24.18	5,600	8.0	1.2	9.9	<1.0	130	0.78	6.8	
5/19/2011	P		8.00	16.00	7.77	25.71	7,100	4.0	<2.0	7.9	<2.0	76	1.40	8.2	
12/1/2011	P		8.00	16.00	8.56	24.92	4,100	9.3	1.3	8.5	<1.0	180	0.53	7.3	lw
6/21/2012	P		8.00	16.00	8.56	24.92	5,000	4.6	<2.5	3.6	<2.5	120	1.38	6.97	lw
12/20/2012	P		8.00	16.00	8.13	25.35	2,400	4.1	0.91	5.0	<1.0	110	2.96	7.84	
6/13/2013	P		8.00	16.00	9.03	24.45	2,300	3.1	0.93	4.9	<1.0	94	1.05	6.80	
12/2/2013	P		8.00	16.00	9.53	23.95	1,400	1.9	0.50	2.3	<1.0	88	1.46	6.55	
5/27/2014	**P**		**8.00**	**16.00**	**9.08**	**24.40**	**2,000**	**1.6**	**0.64**	**3.0**	**<1.0**	**82**	**0.93**	**6.94**	

Symbols & Abbreviations:
--- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in feet below ground surface
ft bgs = feet below ground surface
GRO = Gasoline Range Organics, range C4-C12
GWE = Groundwater elevation measured in feet
mg/L = Milligrams per liter
MTBE = Methyl tert butyl ether
NP = Well not purged prior to sampling
P = Well purged prior to sampling
TOC = Top of casing measured in feet above mean sea level
TPH-g = Total petroleum hydrocarbons as gasoline
ug/L = Micrograms per liter

Footnotes:
a = Well not accessable - car parked over.
b = Hydrocarbon pattern is present in the requested fuel quantitation range but does not represent the pattern of the requested fuel
c =TPH-g, BTEX and MTBE analyzed by EPA method 8260 beginning on 1st Quarter 2003 sampling event (3/28/03)
d = Guaged with stinger in well
e = Well casing lowered 0.06 feet during well repairs on 9/17/2003
lw = Quantitate against gasoline

Notes:
Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPHg was changed to GRO. The resulting data may be impacted by the potential of non-TPHg analytes within the requested fuel range resulting in a higher concentration being reported

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12

Wells were originally surveyed to NAVD'88 datum by URS Corporation on February 23, 2004

Wells were resurveyed to NAVD'88 datum by Wood Rodgers Surveying on May 11, 2009

Values for DO and pH were obtained through field measurements

GRO analysis was completed by EPA method 8260B (C4-C12) for samples collected from the time period April 2006 through February 4, 2008. The analysis for GRO was changed to EPA method 8015B (C6-C12) for samples collected from the time period February 5, 2008 through the present

The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information

2. Summary of Fuel Additives Analytical Data

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
6/20/2000	--	--	<10	--	--	--	--	--	
9/29/2000	--	--	<2.5	--	--	--	--	--	
12/17/2000	--	--	<2.5	--	--	--	--	--	
3/23/2001	--	--	<2.5	--	--	--	--	--	
6/20/2001	--	--	<2.5	--	--	--	--	--	
9/22/2001	--	--	<2.5	--	--	--	--	--	
12/28/2001	--	--	<2.5	--	--	--	--	--	
3/14/2002	--	--	170	--	--	--	--	--	
7/19/2002	--	--	11	--	--	--	--	--	
4/7/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
07/12/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/12/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/4/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/21/2012	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/13/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/27/2014	**<150**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-2									
9/29/2000	--	--	<2.5	--	--	--	--	--	
12/17/2000	--	--	<2.5	--	--	--	--	--	
3/23/2001	--	--	<2.5	--	--	--	--	--	
6/20/2001	--	--	<2.5	--	--	--	--	--	
9/22/2001	--	--	<2.5	--	--	--	--	--	
12/28/2001	--	--	<2.5	--	--	--	--	--	
3/14/2002	--	--	<2.5	--	--	--	--	--	
7/19/2002	--	--	<2.5	--	--	--	--	--	
10/9/2002	--	--	<2.5	--	--	--	--	--	
03/28/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
4/7/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
7/9/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

2. Summary of Fuel Additives Analytical Data

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-2 Cont.									
07/12/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/12/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/4/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/21/2012	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/13/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/27/2014	**<150**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-3									
9/29/2000	--	--	128	--	--	--	--	--	
12/17/2000	--	--	46.7	--	--	--	--	--	
3/23/2001	--	--	26.8	--	--	--	--	--	
6/20/2001	--	--	30	--	--	--	--	--	
9/22/2001	--	--	12	--	--	--	--	--	
12/28/2001	--	--	6.2	--	--	--	--	--	
3/14/2002	--	--	47	--	--	--	--	--	
7/19/2002	--	--	330	--	--	--	--	--	
10/9/2002	--	--	61	--	--	--	--	--	
03/28/2003	<100	<20	45	<0.50	<0.50	0.73	<0.50	<0.50	
4/7/2003	<100	<20	56	<0.50	<0.50	0.72	<0.50	<0.50	
7/9/2003	<1,000	<200	87	<5.0	<5.0	<5.0	<5.0	<5.0	
10/08/2003	<100	<20	25	<0.50	<0.50	<0.50	<0.50	<0.50	
01/15/2004	<100	<20	9.8	<0.50	<0.50	<0.50	<0.50	<0.50	a (TBA and EDB)
04/05/2004	<100	<20	15	<0.50	<0.50	<0.50	<0.50	<0.50	
07/12/2004	<100	<20	7.3	<0.50	<0.50	<0.50	<0.50	<0.50	
10/19/2004	<100	<20	5.0	<0.50	<0.50	<0.50	<0.50	<0.50	
01/11/2005	<100	<20	2.3	<0.50	<0.50	<0.50	<0.50	<0.50	b
04/14/2005	<100	<20	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	
08/01/2005	<100	<20	5.2	<0.50	<0.50	<0.50	<0.50	<0.50	b
7/31/2006	<300	<20	4.3	<0.50	<0.50	<0.50	<0.50	<0.50	c
6/12/2009	<300	<10	0.53	<0.50	<0.50	<0.50	<0.50	<0.50	
11/6/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

2. Summary of Fuel Additives Analytical Data

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
6/4/2010	<300	<10	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
11/19/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2011	<300	<10	2.1	<0.50	<0.50	<0.50	<0.50	<0.50	
12/1/2011	<300	<10	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/21/2012	<300	<10	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	
12/20/2012	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/13/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/2/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/27/2014	**<150**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4									
9/29/2000	--	--	12.2	--	--	--	--	--	
12/17/2000	--	--	5.81	--	--	--	--	--	
3/23/2001	--	--	3.04	--	--	--	--	--	
6/20/2001	--	--	<2.5	--	--	--	--	--	
9/22/2001	--	--	5.2	--	--	--	--	--	
12/28/2001	--	--	4.3	--	--	--	--	--	
3/14/2002	--	--	5.1	--	--	--	--	--	
7/19/2002	--	--	30	--	--	--	--	--	
10/9/2002	--	--	28	--	--	--	--	--	
03/28/2003	<100	<20	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	
4/7/2003	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
7/9/2003	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
10/08/2003	<100	<20	3.1	<0.50	<0.50	<0.50	<0.50	<0.50	
01/15/2004	<100	<20	6.6	<0.50	<0.50	<0.50	<0.50	<0.50	a (TBA and EDB)
04/05/2004	<100	<20	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	
07/12/2004	<100	<20	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	
10/19/2004	<100	<20	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	
01/11/2005	<100	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	b
04/14/2005	<100	<20	0.64	<0.50	<0.50	<0.50	<0.50	<0.50	
08/01/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
7/31/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	c

2. Summary of Fuel Additives Analytical Data

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-4 Cont.									
6/12/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/6/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/4/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/19/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/1/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/21/2012	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/20/2012	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/13/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/2/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/27/2014	**<150**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-5									
6/12/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/6/2009	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/4/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/19/2010	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/19/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/1/2011	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/21/2012	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/20/2012	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
6/13/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/2/2013	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
5/27/2014	**<150**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-6									
6/12/2009	<300	<10	59	<0.50	<0.50	5.2	<0.50	<0.50	
11/6/2009	<300	24	37	<0.50	<0.50	<0.50	<0.50	<0.50	
6/4/2010	<300	17	190	<0.50	<0.50	17	<0.50	<0.50	
11/19/2010	<600	<20	130	<1.0	<1.0	<1.0	<1.0	<1.0	
5/19/2011	<1,200	<40	76	<2.0	<2.0	6.1	<2.0	<2.0	
12/1/2011	<600	31	180	<1.0	<1.0	18	<1.0	<1.0	

2. Summary of Fuel Additives Analytical Data

ARCO Service Station #2162, 15135 Hesperian Blvd., San Leandro, CA

Well ID and Date Monitored	Concentrations in µg/L								Footnote
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-6 Cont.									
6/21/2012	<1,500	<50	120	<2.5	<2.5	9.1	<2.5	<2.5	
12/20/2012	<150	12	110	<0.50	<0.50	9.2	<0.50	<0.50	
6/13/2013	<150	13	94	<0.50	<0.50	7.5	<0.50	<0.50	
12/2/2013	<150	11	88	<0.50	<0.50	6.2	<0.50	<0.50	
5/27/2014	**<150**	**<10**	**82**	**<0.50**	**<0.50**	**6.1**	**<0.50**	**<0.50**	

Symbols & Abbreviations:
< = Not detected at or above specified laboratory reporting limit
--- = Not analyzed/applicable/measured/available
1,2-DCA = 1,2-Dichloroethane
DIPE = Diisopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl tert-butyl ether
TAME = Tert-amyl methyl ether
TBA = Tert-butyl alcohol
ug/L = Micrograms per liter

Footnotes:
a = The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria
b = The calbration verification for ethanol was within method limits but outside contract limits
c = LCS rec. above meth. control limits. Analyte ND. Data not impacted
d = Quantitated against gasoline

Notes:
All fuel oxygenate compounds analyzed using EPA Method 8260B

The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information

Table 1
Groundwater Elevation Data

ARCO Service Station 2162
15135 Hesperian Boulevard at Ruth Court
San Leandro, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-1	09/30/92	31.19	10.68	20.51
	10/16/92		10.83	20.36
	01/14/93		7.25	23.94
	02/24/93		7.23	23.96
	03/30/93		7.58	23.61
	04/14/93		7.96	23.23
	05/19/93		8.26	22.93
	06/17/93		8.42	22.77
	07/28/93		8.68	22.51
	08/11/93		9.07	22.12
	09/28/93		9.60	21.59
	10/15/93		9.51	21.68
	11/16/93		— Well Inaccessible —	
	12/16/93		8.70	22.49
	02/15/94		8.51	22.68
	03/18/94		8.46	22.73
	05/05/94		8.66	22.53
	08/05/94		9.50	21.69
	11/21/94		8.83	22.36
	02/24/95		7.90	23.29
	05/31/95		7.86	23.33
	08/23/95		8.74	22.45
MW-2	09/30/92	30.38	9.74	20.64
	10/16/92		9.91	20.47
	01/14/93		6.56	23.82
	02/24/93		6.67	23.71
	03/30/93		6.76	23.62
	04/14/93		7.10	23.28
	05/19/93		7.40	22.98
	06/17/93		7.51	22.87
	07/28/93		7.73	22.65
	08/11/93		8.11	22.27
	09/28/93		8.57	21.81
	10/15/93		8.56	21.82
	11/16/93		8.87	21.51
	12/16/93		7.92	22.46
	02/15/94		7.62	22.76
	03/18/94		7.57	22.81
	05/05/94		7.75	22.63
	08/05/94		8.53	21.85
	11/21/94		7.92	22.46
	02/24/95		6.98	23.40
	05/31/95		6.97	23.41
	08/23/95		7.83	22.55
MW-3	09/30/92	30.30	9.93	20.37
	10/16/92		10.13	20.17
	01/14/93		6.71	23.59
	02/24/93		6.82	23.48
	03/30/93		7.07	23.23
	04/14/93		7.41	22.89
	05/19/93		7.72	22.58
	06/17/93		7.86	22.44
	07/25/93		8.13	22.17
	08/11/93		8.45	21.85
	09/28/93		8.96	21.34

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 2162
15135 Hesperian Boulevard at Ruth Court
San Leandro, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)
MW-3	10/15/93		8.85	21.45
(cont.)	11/16/93		9.09	21.21
	12/16/93		8.10	22.20
	02/15/94		7.88	22.42
	03/18/94		7.88	22.42
	05/05/94		8.08	22.22
	08/05/94		8.82	21.48
	11/21/94		8.17	22.13
	02/24/95		7.40	22.90
	05/31/95		7.35	22.95
	08/23/95		8.15	22.15
MW-4	09/30/92	30.39	11.15	19.24
	10/16/92		11.33	19.06
	01/14/93		7.49	22.90
	02/24/93		7.57	22.82
	03/30/93		8.06	22.33
	04/14/93		8.48	21.91
	05/19/93		7.80	22.59
	06/17/93		8.94	21.45
	07/25/93		9.28	21.11
	05/11/93		9.61	20.78
	09/25/93		10.14	20.25
	10/15/93		10.00	20.39
	11/16/93		10.22	20.17
	12/16/93		9.11	21.28
	02/15/94		8.97	21.42
	03/15/94		8.99	21.40
	05/05/94		9.21	21.18
	08/05/94		10.02	20.37
	11/21/94		9.30	21.09
	02/24/95		8.46	21.93
	05/31/95		8.41	21.98
	08/23/95		9.32	21.07

MSL = Mean sea level
TOC = Top of casing

Table 2
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

ARCO Service Station 2162
15135 Hesperian Boulevard at Ruth Court
San Leandro, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-1	09/30/92	1,100	6.2	<0.50	6.9	<0.50
	10/16/92	790	3.0	0.8	5.6	2.9
	01/14/93	660	1.2	<1 a	15	4.6
	04/14/93	310	<1 a	<1 a	<1 a	
	08/11/93	660	0.8	<0.7	9.0	<1 b
	10/15/93	620	0.7	<0.5	5.9	2.2
	02/15/94	650	1.9	<0.5	4.5	4.9 b
	05/05/94	510	<0.5	<0.5	<1	1.6
	08/05/94	310	<0.5	<0.5	1.5	1.2
	11/21/94	330	<0.5	<0.5	1.5	1.1
	02/24/95	120	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
	08/23/95	160	<0.50	<0.50	<0.50	<0.50
MW-2	09/30/92	1,000	9.6	<0.50	45	110
	10/16/92	630	8	<1 a	37	64
	01/14/93	7,800	33	5	340	920
	04/14/93	1,600	7	<5 a	220	520
	08/11/93	1,600	4.3	<1 a	80	120
	10/15/93	1,100	1.7	<1 a	62	70
	02/15/94	490	1.8	1.5	49	37
	05/05/94	360	<0.5	<0.5	27	18
	08/05/94	680	<0.5	<0.5	42	37
	11/21/94	500	<0.5	<0.5	40	25
	02/24/95	650	<0.50	<0.50	52	48
	05/31/95	450	<0.50	<0.50	33	33
	08/23/95	180	<0.50	<0.50	12	9.5
MW-3	09/30/92	<50	<0.50	<0.50	<0.50	<0.50
	10/16/92	<50	<0.50	<0.50	<0.50	<0.50
	01/14/93	52	<0.50	<0.50	<0.50	<0.50
	04/14/93	360	86	2.1	5.1	4.0
	08/11/93	69	1.1	<0.5	<0.5	<0.5
	10/15/93	<50	<0.5	<0.5	<0.5	<0.5
	02/15/94	<50	<0.5	<0.5	<0.5	<0.5
	05/05/94	<50	<0.5	<0.5	<0.5	<0.5
	08/05/94	<50	<0.5	<0.5	<0.5	<0.5
	11/21/94	<50	<0.5	<0.5	<0.5	<0.5
	02/24/95	<50	0.93	<0.50	<0.50	<0.50
	05/31/95	120	24	<0.50	<0.50	<0.50
	08/23/95	85	<0.5	<0.5	<0.5	<0.5
MW-4	09/30/92	330	81	<0.50	<0.50	<0.50
	10/16/92	250	44	<0.50	<0.50	0.7
	01/14/93	260	29	0.6	<0.50	1.1
	04/14/93	NS	NS	NS	NS	NS
	08/11/93	150	21	<0.5	<0.5	<0.5
	10/15/93	190	12	<0.5	<0.5	<0.5
	02/15/94	<50	2.0	<0.5	<0.5	<0.5
	05/05/94	160	17	<0.5	<0.5	0.6
	08/05/94	120	10	<0.5	<0.5	<0.5
	11/21/94	120	17	<0.5	<0.5	0.6

Table 2 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

ARCO Service Station 2162
15135 Hesperian Boulevard at Ruth Court
San Leandro, California

Well Number	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-4	02/24/95	110	14	<0.50	<0.50	<0.50
(cont.)	05/31/95	97	11	<0.50	<0.50	<0.50
	08/23/95	110	16	<0.50	<0.50	<0.50

ppb = Parts per million
NS = Not sampled, separate-phase hydrocarbon entered well during purging.
a. Raised MRL due to high analyte concentration requiring sample dilution
b. Raised MRL due to matrix interference

Table 3
Groundwater Analytical Data
Total Methyl t-Butyl Ether

ARCO Service Station 2162
15135 Hesperian Boulevard at Ruth Court
San Leandro, California

Well Number	Date Sampled	Methyl t-Butyl Ether (ppb)
MW-1	8/23/95	<2.5
MW-2	8/23/95	<2.5
MW-3	8/23/95	41
MW-4	8/23/95	<2.5

ppb = Parts per billion

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-1	02/26/96	31.19	7.14	24.05	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-1	05/23/96	31.19	7.70	23.49	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	
MW-1	08/21/96	31.19	8.75	22.44	210	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-1	11/20/96	31.19	8.62	22.57	91	<0.5	<0.5	<0.5	<0.5	2.6	NA	NA	
MW-1	04/01/97	31.19	8.70	22.49	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-1	06/10/97	31.19	8.45	22.74	94	<0.5	<0.5	0.68	0.56	6.4	NA	NA	NP
MW-1	09/17/97	31.19	9.20	21.99	<50	<0.5	<0.5	<0.5	<0.5	10	NA	1.0	NP
MW-1	12/12/97	31.19	8.00	23.19	<200	<2	<2	<2	<2	180	NA	2.0	NP
MW-1	03/25/98	31.19	7.00	24.19	<200	<2	<2	3	<2	180	NA	2.0	
MW-1	05/14/98	31.19	7.46	23.73	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.17	P
MW-1	07/31/98	31.19	8.10	23.09	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
MW-1	10/12/98	31.19	8.60	22.59	<50	<0.5	<0.5	<0.5	<0.5	9	NA	2.5	NP
MW-1	02/11/99	31.19	7.32	23.87	<50	<0.5	<0.5	<0.5	<0.5	25	NA	1.0	P
MW-1	06/23/99	31.19	8.40	22.79	55	<0.5	<0.5	<0.5	<0.5	<3	NA	1.36	NP
MW-1	08/23/99	31.19	8.85	22.34	<50	<0.5	0.6	<0.5	<0.5	5	NA	1.42	NP
MW-1	10/27/99	31.19	8.50	22.69	<50	<0.5	<0.5	<0.5	<1	90	NA	0.83	NP
MW-1	02/09/00	31.19	8.11	23.08	<50	<0.5	<0.5	<0.5	<1	9	NA	0.77	NP
MW-2	02/26/96	30.38	6.41	23.97	770	<0.5	<0.5	45	28	NA	NA	NA	
MW-2	05/23/96	30.38	6.80	23.58	590	0.50	<0.5	35	18	NA	NA	NA	
MW-2	08/21/96	30.38	7.80	22.58	170	<0.5	<0.5	21	6.3	<2.5	NA	NA	
MW-2	11/20/96	30.38	7.73	22.65	88	<0.5	<0.5	7.9	1.1	<2.5	NA	NA	
MW-2	04/01/97	30.38	7.83	22.55	66	<0.5	<0.5	3.6	0.56	33	NA	NA	
MW-2	06/10/97	30.38	7.52	22.86	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-2	09/17/97	30.38	8.24	22.14	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	0.6	NP
MW-2	12/12/97	30.38	7.10	23.28	<50	<0.5	<0.5	<0.5	<0.5	<3.0	NA	1.2	NP
MW-2	03/25/98	30.38	6.27	24.11	<50	<0.5	<0.5	0.7	0.5	55	NA	1.0	
MW-2	05/14/98	30.38	6.54	23.84	210	<0.5	<0.5	3.3	<0.5	42	NA	1.47	P
MW-2	07/31/98	30.38	7.14	23.24	230	<0.5	<0.5	3.9	<0.5	6	NA	1.0	P

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-2	10/12/98	30.38	7.65	22.73	110	<0.5	<0.5	1.5	<0.5	<3	NA	1.0	P
MW-2	02/11/99	30.38	6.55	23.83	660	<0.5	<0.5	6.7	0.7	3	NA	1.0	P
MW-2	06/23/99	30.38	7.48	22.90	270	<0.5	<0.5	2.2	0.8	<3	NA	NM	P
MW-2	08/23/99	30.38	7.89	22.49	200	<0.5	0.9	1.8	<0.5	<3	NA	1.17	P
MW-2	10/27/99	30.38	8.30	22.08	2,100	1.0	2.5	14	3	3	NA	0.75	NP
MW-2	02/09/00	30.38	8.02	22.36	<50	<0.5	<0.5	<0.5	<1	5	NA	0.69	NP
MW-3	02/26/96	30.30	6.72	23.58	120	5.0	<0.5	<0.5	<0.5	NA	NA	NA	
MW-3	05/23/96	30.30	7.18	23.12	140	12	<0.5	<0.5	<0.5	NA	NA	NA	
MW-3	08/21/96	30.30	8.17	22.13	<50	1.1	<0.5	<0.5	<0.5	130	NA	NA	
MW-3	11/20/96	30.30	8.03	22.27	55	<0.5	<0.5	<0.5	<0.5	59	NA	NA	
MW-3	04/01/97	30.30	8.09	22.21	<50	<0.5	<0.5	<0.5	<0.5	180	NA	NA	NP
MW-3	06/10/97	30.30	7.97	22.33	<50	<0.5	<0.5	<0.5	<0.5	1,900	NA	NA	NP
MW-3	09/17/97	30.30	8.54	21.76	<5,000	<50	<50	<50	<50	1,100	860	2.2	NP
MW-3	12/12/97	30.30	7.50	22.80	560	<5.0	<5.0	<5.0	5.0	370	NA	1.4	NP
MW-3	03/25/98	30.30	6.60	23.70	<500	<5	<5	<5	<5	470	NA	1.0	
MW-3	05/14/98	30.30	7.13	23.17	750	<5	<5	<5	<5	630	NA	1.97	P
MW-3	07/31/98	30.30	7.58	22.72	<500	<5	<5	<5	<5	590	NA	1.0	P
MW-3	10/12/98	30.30	8.00	22.30	<500	<5	<5	<5	<5	600	NA	2.0	P
MW-3	02/11/99	30.30	6.90	23.40	<500	<5	<5	<5	<5	280	NA	1.0	P
MW-3	06/23/99	30.30	7.82	22.48	220	<0.5	3.2	<0.5	<0.5	740	NA	1.98	P
MW-3	08/23/99	30.30	8.28	22.02	<50	<0.5	1.1	<0.5	<0.5	230	NA	1.20	P
MW-3	10/27/99	30.30	9.27	21.03	<50	<0.5	<0.5	<0.5	<1	<3	NA	0.81	NP
MW-3	02/09/00	30.30	7.45	22.85	<50	<0.5	<0.5	<0.5	<1	80	NA	0.81	P
MW-4	02/26/96	30.39	7.59	22.80	110	9.9	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	05/23/96	30.39	8.22	22.17	69	8.0	<0.5	<0.5	<0.5	NA	NA	NA	
MW-4	08/21/96	30.39	9.28	21.11	<50	6.8	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	11/20/96	30.39	9.12	21.27	95	10	0.59	<0.5	0.52	3.8	NA	NA	

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 2162
15135 Hesperian Boulevard, San Leandro, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MTBE 8021B* (ppb)	MTBE 8260 (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-4	04/01/97	30.39	8.45	21.94	73	5.7	<0.5	<0.5	<0.5	<2.5	NA	NA	
MW-4	06/10/97	30.39	9.00	21.39	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NP
MW-4	09/17/97	30.39	9.76	20.63	<50	3.2	<0.5	<0.5	<0.5	8.0	NA	0.2	NP
MW-4	12/12/97	30.39	8.45	21.94	<50	2.9	<0.5	<0.5	<0.5	14	NA	1.0	NP
MW-4	03/25/98	30.39	7.52	22.87	58	2.8	<0.5	<0.5	<0.5	<3	NA	3.0	
MW-4	05/14/98	30.39	8.03	22.36	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	3.24	NP
MW-4	07/31/98	30.39	8.67	21.72	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	2.0	NP
MW-4	10/12/98	30.39	9.15	21.24	<50	<0.5	<0.5	<0.5	<0.5	4	NA	1.5	NP
MW-4	02/11/99	30.39	7.80	22.59	61	2.5	<0.5	<0.5	<0.5	6	NA	1.0	P
MW-4	06/23/99	30.39	9.00	21.39	<50	<0.5	<0.5	<0.5	<0.5	<3	NA	1.42	NP
MW-4	08/23/99	30.39	9.31	21.08	<50	<0.5	<0.5	<0.5	<0.5	6	NA	1.53	NP
MW-4	10/27/99	30.39	9.80	20.59	<50	<0.5	<0.5	<0.5	<1	6	NA	0.98	NP
MW-4	02/09/00	30.39	8.63	21.76	<50	<0.5	<0.5	<0.5	<1	7	NA	0.74	NP

TPPH = Total purgeable petroleum hydrocarbons by modified EPA method 8015
BTEX = Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/27/99).
MTBE = Methyl tert -Butyl Ether
* = EPA method 8020 prior to 10/27/99
MSL = Mean sea level
TOC = Top of casing
ppb = Parts per billion
ppm = Parts per million
NA = Not analyzed
NM = Not measured
< = Denotes concentration not present above laboratory detection limited stated to the right

Client: Broadbent & Associates, Inc.
Project/Site: ARCO 2162, San Leandro

TestAmerica Job ID: 440-97145-1

Client Sample ID: Irrigation Well
Date Collected: 12/16/14 18:45
Date Received: 12/18/14 10:43

Lab Sample ID: 440-97145-1
Matrix: Water

Method: 8260B/CA_LUFTMS - Volatile Organic Compounds by GC/MS

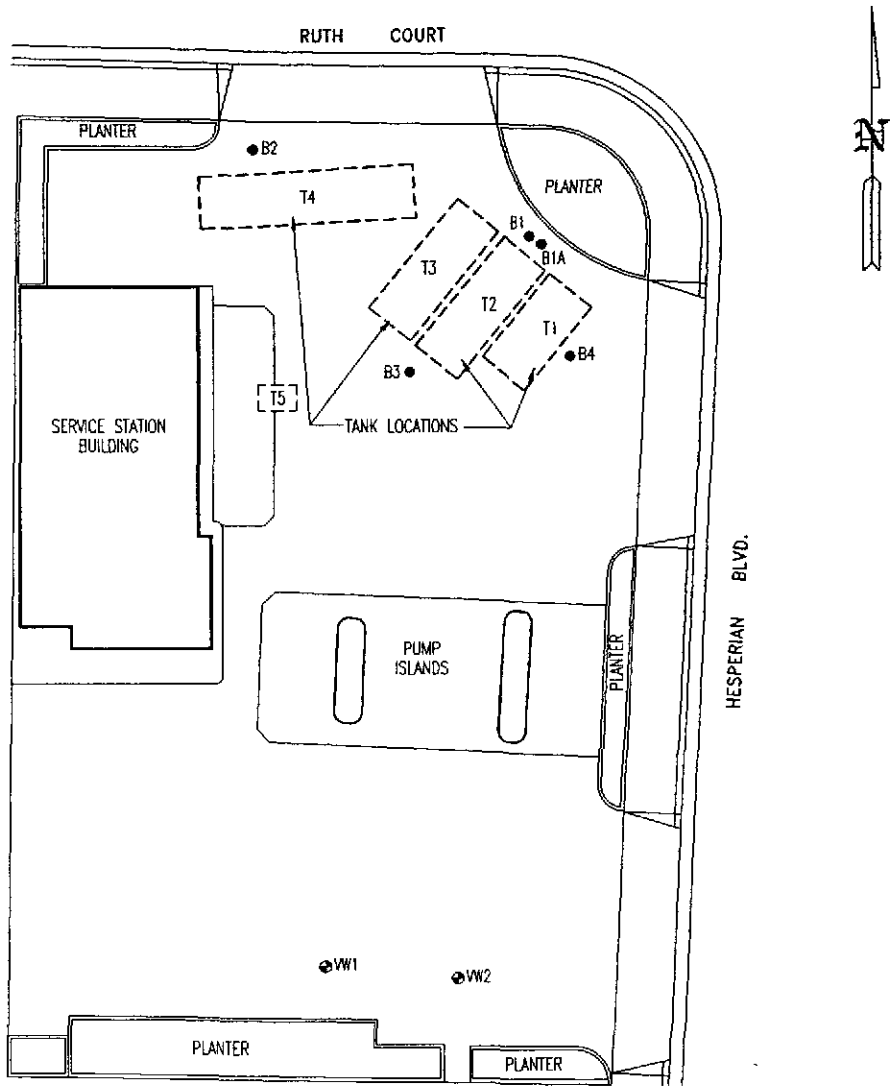
Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
GRO (C4-C12)	ND		50		ug/L			12/18/14 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*12/18/14 13:09*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/18/14 13:09*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*12/18/14 13:09*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			12/18/14 13:09	1
Ethylbenzene	ND		0.50		ug/L			12/18/14 13:09	1
m,p-Xylene	ND		1.0		ug/L			12/18/14 13:09	1
Methyl-t-Butyl Ether (MTBE)	ND		0.50		ug/L			12/18/14 13:09	1
o-Xylene	ND		0.50		ug/L			12/18/14 13:09	1
Toluene	ND		0.50		ug/L			12/18/14 13:09	1
Xylenes, Total	ND		1.0		ug/L			12/18/14 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*12/18/14 13:09*	*1*
Dibromofluoromethane (Surr)	*104*		*76 - 132*		*12/18/14 13:09*	*1*
Toluene-d8 (Surr)	*107*		*80 - 128*		*12/18/14 13:09*	*1*



EXPLANATION

- ●B1 SOIL BORING LOCATIONS AND DESIGNATIONS.
- ⊕VW1 VAPOR EXTRACTION TEST WELL LOCATIONS AND DESIGNATIONS.
- [ ] FORMER UNDERGROUND STORAGE TANK LOCATION.

T1	6,000 GAL. STEEL TANK.
T2	8,000 GAL. STEEL TANK.
T3	8,000 GAL. STEEL TANK.
T4	12,000 GAL. FIBERGLASS TANK.
T5	560 GAL. WASTE OIL TANK.

0' 30' 60'

APPROXIMATE SCALE

ROUX ASSOCIATES
ENVIRONMENTAL CONSULTING & MANAGEMENT

COMPILED BY:	T.R.
PREPARED BY:	R.P.
PROJECT MNGR.	G.M.
DATE:	06/92
SCALE:	AS SHOWN
PROJECT NO.	A117W01
FILE NAME:	AR216201

PREPARED FOR: ARCO PRODUCTS COMPANY

TITLE: SITE PLAN

ARCO FACILITY NO. 2162

FIGURE 2

TABLE 1: Summary of Soil Sample Analytical Data
ARCO Facility No. 2162, San Leandro, California

Sample Designation	Date	Depth (feet bgs)	TPH-G(1)	BTEX Distinction(1)			
				Benzene	Toluene	Ethylbenzene	Xylenes
B1-5	6/5/91	5	ND	ND	ND	ND	0.016
B1A-7.5	6/5/91	7.5	43	0.14	0.93	1.1	7.8
B2-5	6/5/91	5	1.3	ND	ND	ND	0.018
B2-9	6/5/91	9	ND	ND	ND	ND	ND
B3-4	6/5/91	4	26	0.024	0.029	0.16	1.1
B3-7.5	6/5/91	7.5	1400	2.5	4.4	29	190
B4-4.5	6/5/91	4.5	ND	0.025	0.013	0.0085	0.042
B4-7.5	6/5/91	7.5	2400	17	62	41	260
VW1-6	6/5/91	6	2.8	0.033	0.0073	0.079	0.055
VW1-9	6/5/91	9	100	0.48	1.4	2.7	4.1

FOOTNOTES:

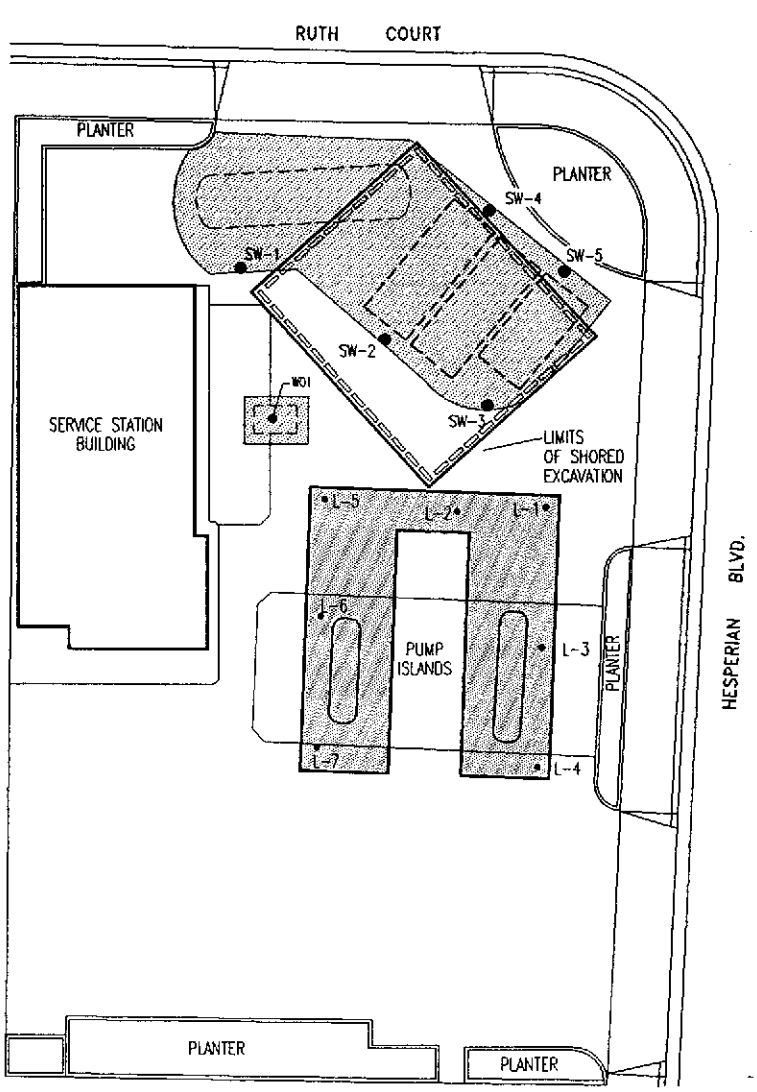
(1) = Concentrations reported in mg/kg (ppm)

TPH-G =Total Petroleum Fuel Hydrocarbons As Low/Medium Boiling Point Hydrocarbons (USEPA 8015)

BTEX Distinction (USEPA 8020)

ND = Not Detected (For detection limits see laboratory reports, Appendix C)

bgs = below ground surface



EXPLANATION

- FORMER UNDERGROUND STORAGE TANK AND PRODUCT LINE EXCAVATIONS.
- •L-1 PRODUCT LINE SAMPLE LOCATION AND DESIGNATION.
- ●SW-1 SIDEWALL SOIL SAMPLE LOCATION AND DESIGNATION.
- SHEET PILES AT LIMITS OF NEW TANK CAVITY.
- FORMER UNDERGROUND STORAGE TANK LOCATION.

0' 30' 60'

APPROXIMATE SCALE

ROUX ASSOCIATES
ENVIRONMENTAL CONSULTING & MANAGEMENT

COMPILED BY:	T.R.
PREPARED BY:	R.P.
PROJECT MNGR.	G.M.
DATE:	07/91
SCALE:	01/92
PROJECT NO.	A117W01
FILE NAME:	AR216201

PREPARED FOR: ARCO PRODUCTS COMPANY

TITLE: PRODUCT LINE AND SIDEWALL SOIL SAMPLE LOCATIONS

ARCO FACILITY NO. 2162

FIGURE 3

Table 2. Summary of Soil Analyses: Sidewall and Product Lines
ARCO Facility No. 2162, San Leandro, California

Sample Number	Date Sampled	Depth Sampled	TPH-G (1)	BTEX Distinction (1)			
				Benzene	Toluene	Ethylbenzene	Xylenes
Excavation Sidewall Samples:							
SW-1	12/5/91	9	500	ND	0.4	3.5	8.4
SW-2	12/5/91	10	140	0.1	0.38	3.0	7.2
SW-3	12/5/91	10	150	0.26	0.11	2.1	2.0
SW-4	12/5/91	10	610	0.47	7.1	11	82
SW-5	12/5/91	10	1,000	2.3	9.2	25	220
Product Line Samples:							
L-1	2/4/92	3	ND	ND	ND	ND	ND
L-2	2/4/92	3.5	4.4	0.082	0.013	0.21	0.3
L-3	2/4/92	3	ND	ND	ND	ND	ND
L-4	2/4/92	3	ND	0.0063	0.0076	ND	0.029
L-5	2/4/92	3	110	0.65	0.17	1.2	0.14
L-6	2/4/92	2.5	16	1.0	0.2	0.96	4.0
L-7	2/4/92	4	12	0.28	0.018	0.35	0.78

FOOTNOTES
(1) = Concentrations reported in mg/kg (= parts per million).
TPH-G = Total Petroleum Fuel Hydrocarbons as Low/Medium Boiling Point Hydrocarbons (USEPA Method 8015).
BTEX Distinction (USEPA Method 8020).
ND = Not Detected.

Table 3. Summary of Soil Analyses: Waste Oil Tank Cavity
ARCO Facility No. 2162, San Leandro, California

Sample Number	Date Sampled	Depth Sampled	TPH-G (1)	BTEX Distinction (1)				VOCs (1)
				Benzene	Toluene	Ethylbenzene	Xylenes	
WO-1	12/5/91	10	310	0.78	0.8	2.9	13	ND*

Sample Number	TPH-D (1)	O&G (1)	Metals (1)				
			Cadmium	Chromium	Lead	Nickel	Zinc
WO-1	360	270	ND	49	5.2	59	58

FOOTNOTES
(1) = Concentrations reported in mg/kg (= parts per million).
TPH-G = Total Petroleum Fuel Hydrocarbons as Low/Medium Boiling Point Hydrocarbons (USEPA Method 8015).
TPH-D = Total Petroleum Fuel Hydrocarbons as High Boiling Point Hydrocarbons (USEPA Method 8015).
O&G = Total Recoverable Petroluem Oil and Grease (SM 5520 E&F).
BTEX Distinction (USEPA Method 8020).
VOCs = Volatile Organic Compounds (USEPA Method 8240).
Metals by Inductively Coupled Plasma Spectroscopy (USEPA Method 6010).
ND = Not detected.
ND* = Not detected except BTEX Compounds.

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(510) 686-9600 • FAX (510) 686-9689

Roux Associates	Client Project ID:	Arco #2162/San Leandro	Sampled:	Dec 5, 1991
1350 Arnold Drive, Suite 201	Sample Descript:	Soil, WO-1	Received:	Dec 5, 1991
Martinez, CA 94553	Analysis Method:	EPA 8240	Analyzed:	Dec 10, 1991
Attention: Paul Supple	Lab Number:	112-0152	Reported:	Dec 11, 1991

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	2,500	N.D.
Benzene	**500**	**550**
Bromodichloromethane	500	N.D.
Bromoform	500	N.D.
Bromomethane	500	N.D.
2-Butanone	2,500	N.D.
Carbon disulfide	500	N.D.
Carbon tetrachloride	500	N.D.
Chlorobenzene	500	N.D.
Chloroethane	500	N.D.
2-Chloroethyl vinyl ether	2,500	N.D.
Chloroform	500	N.D.
Chloromethane	500	N.D.
Dibromochloromethane	500	N.D.
1,1-Dichloroethane	500	N.D.
1,2-Dichloroethane	500	N.D.
1,1-Dichloroethene	500	N.D.
cis-1,2-Dichloroethene	500	N.D.
trans-1,2-Dichloroethene	500	N.D.
1,2-Dichloropropane	500	N.D.
cis-1,3-Dichloropropene	500	N.D.
trans-1,3-Dichloropropene	500	N.D.
Ethylbenzene	**500**	**7,400**
2-Hexanone	2,500	N.D.
Methylene chloride	500	N.D.
4-Methyl-2-pentanone	2,500	N.D.
Styrene	500	N.D.
1,1,2,2-Tetrachloroethane	500	N.D.
Tetrachloroethene	500	N.D.
Toluene	**500**	**1,100**
1,1,1-Trichloroethane	500	N.D.
1,1,2-Trichloroethane	500	N.D.
Trichloroethene	500	N.D.
Trichlorofluoromethane	500	N.D.
Vinyl acetate	500	N.D.
Vinyl chloride	500	N.D.
Total Xylenes	**500**	**38,000**

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Kenneth K.F. Lee
Laboratory Manager

Table 4. Summary of Soil Analyses: Soil Stockpiles
ARCO Facility No. 2162, San Leandro, California

Sample Number	Date Sampled	TPH-G(1)	BTEX Distinction (1)			
			Benzene	Toluene	Ethylbenzene	Xylenes
CS-1	12/9/91	1,300	0.98	3.7	5.0	110
CS-2	12/9/91	1,000	5.6	39	14	130
CS-3	12/9/91	200	0.36	0.91	1.5	20
CS-4	12/9/91	86	0.077	0.11	0.36	2.8
CS-5	12/9/91	100	0.14	0.27	0.65	4.8
CS-6	12/9/91	140	0.032	0.085	0.47	3.7
CS-7	12/9/91	110	ND	0.082	0.074	1.9
CS-8	12/9/91	270	0.12	0.1	0.22	13
CS-9	12/9/91	54	ND	ND	ND	0.24
CS-10	12/9/91	480	0.44	0.36	3.8	26
CS-11	1/27/92	51	0.11	ND	0.18	0.95
CS-12	1/31/92	6.2	0.016	0.013	0.016	0.16
CS-13	1/31/92	23	0.028	0.066	0.11	0.82

FOOTNOTES

(1) = Concentrations reported in mg/kg (= parts per million).

TPH- G=Total Petroleum Fuel Hydrocarbons Low to Medium Boiling Point Hydrocarbons(USEPA Method 8015).

BTEX Distinction (USEPA Method 8020).

ND = Not Detected.

Table 5. Summary of Soil Analyses: Aerated Soil Stockpiles ARCO Facility No. 2162, San Leandro, California

Sample Number	Date Sampled	TPH-G(1)	BTEX Distinction (1)			
			Benzene	Toluene	Ethylbenzene	Xylenes
CSA-2	3/10/92	30	ND	ND	0.045	0.4
CSA-6	1/13/92	77	0.063	1.3	0.27	2.3
CSA-7	1/15/92	150	0.17	0.85	0.75	6.3
CSAA-7	1/21/92	41	0.033	0.096	0.056	0.6
CS-14	2/12/92	190	0.24	0.96	0.88	9.2
CSA-14	2/21/92	57	ND	0.055	0.12	0.61
CS-15	2/12/92	110	0.1	0.39	0.35	3.5
CSA-15	2/21/92	45	ND	0.07	0.068	0.91
CS-16	2/21/92	ND	ND	ND	ND	ND
CS-17	2/21/92	16	0.058	0.024	0.082	0.38
CS-18	3/23/92	19	ND	0.013	0.035	0.12
CS-19	3/23/92	40	0.009	ND	0.14	0.84
CS-20	3/23/92	8.5	ND	0.013	0.011	0.045

FOOTNOTES

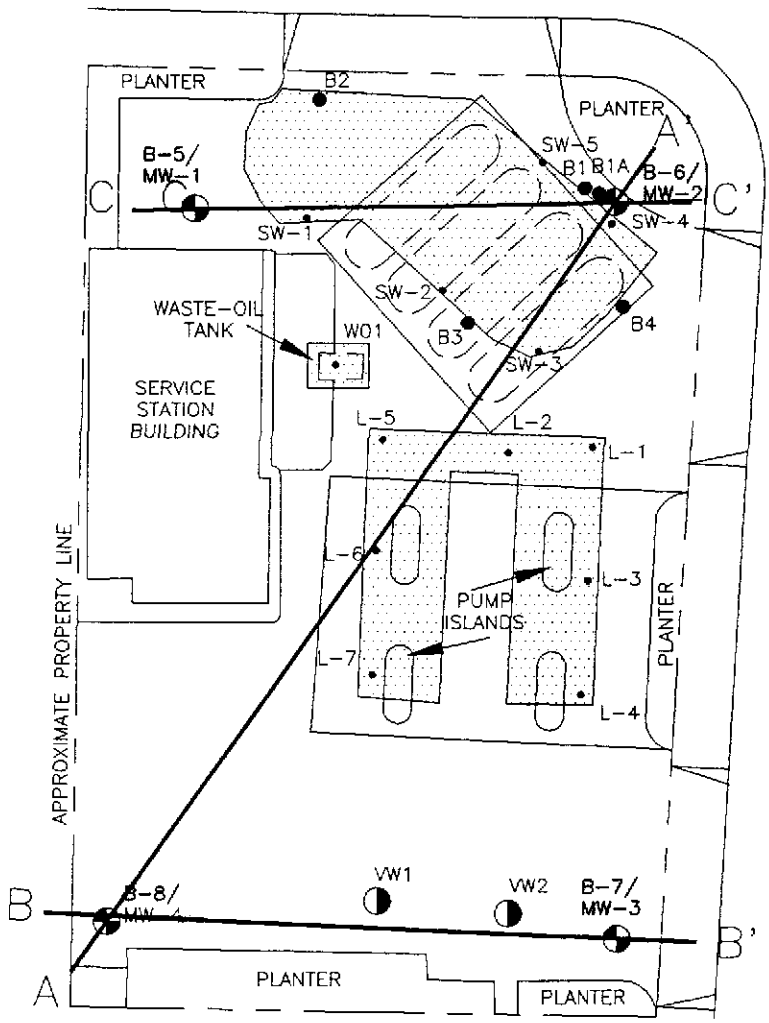
(1) = Concentrations reported in mg/kg (= parts per million).

TPH- G=Total Petroleum Fuel Hydrocarbons Low to Medium Boiling Point Hydrocarbons(USEPA Method 8015).

BTEX Distinction (USEPA Method 8020).

ND = Not Detected.

RUTH COURT



HESPERIAN BOULEVARD

EXPLANATION

B-8/ MW-4 = Monitoring well RESNA September 1992

VW2 = Vapor extraction well (Roux Associates, Inc., 1991)

B4 = Soil boring (Roux Associates, Inc., 1991)

L-7 = Product line sample

SW-5 = Sidewall soil sample

= Former underground storage tank and product line excavations

= Existing underground storage tank

N

Approximate Scale

30 15 0 30 60

feet

Source: Modified from site plan provided by Roux Associates, and survey data from John Koch, licensed land surveyor (9/16/92)

RESNA
Working to Restore Nature

PROJECT 62019.02

GENERALIZED SITE PLAN
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California

PLATE
2

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF SOIL SAMPLES
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California
(Page 1 of 3)

Sample Number	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
June 1991					
Borings					
S-B1-5	<1.0	<0.0050	<0.0050	<0.0050	0.016
S-B1A-7.5	43	0.14	0.93	1.1	7.6
S-B2-5	1.3	<0.0050	<0.0050	<0.0050	<0.018
S-B2-9	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
S-B3-4	26	0.024	0.029	0.16	1.1
S-B3-7.5	1,400	2.5	4.4	29	190
S-B4-4.5	<1.0	0.025	0.013	0.0085	0.042
S-B4-7.5	2,400	17	62	41	260
S-VW1-6	2.8	0.033	0.0073	0.079	0.055
S-VW1-9	100	0.48	1.4	2.7	4.1
December 1991					
Tank Pit Sidewall					
SW-1 at 9	500	<0.0050	0.40	3.5	8.4
SW-2 at 10	140	0.10	0.38	3.0	7.2
SW-3 at 10	150	0.26	0.11	2.1	2.0
SW-4 at 10	610	0.47	7.1	11	82
SW-5 at 10	1,000	2.3	9.2	25	220
Waste-oil Sidewall					
WO-1 at 10	310	0.78	0.8	2.9	13

Sample Number	TPHd	TOG	VOC's	Cd	Cr	Pb	Ni	Zn
WO-1 at 10	360	270	ND	ND	49	5.2	59	58

Sample Number	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
December 1991					
Soil Stockpile					
CS-1	1,300	0.98	3.7	5.0	110
CS-2	1,000	5.6	39	14	130
CS-3	200	0.36	0.91	1.5	20
CS-4	86	0.077	0.11	0.36	2.8

See notes on page 3 of 3

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF SOIL SAMPLES
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California
(Page 2 of 3)

Sample Number	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
CS-5	100	0.14	0.27	0.65	4.8
CS-6	140	0.032	0.085	0.47	3.7
CS-7	110	ND	0.082	0.074	1.9
CS-8	270	0.12	0.1	0.22	13
CS-9	54	ND	ND	ND	0.24
CS-10	480	0.44	0.36	3.8	26
January 1992 Soil Stockpile					
CS-11	51	0.11	ND	0.18	0.95
CS-12	6.2	0.016	0.013	0.016	0.16
CS-13	23	0.028	0.066	0.11	0.82
February 1992 Product Lines					
L-1 at 3	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
L-2 at 3.5	4.4	0.082	0.013	0.21	0.30
L-3 at 3	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
L-4 at 3	<1.0	0.0063	0.0076	<0.0050	0.029
L-5 at 3	110	0.65	0.17	1.2	0.14
L-6 at 2.5	16	1.0	0.20	0.96	4.0
L-7 at 4	12	0.28	0.018	0.35	0.78
September 1992 Borings					
S-4.5-B5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
mw-1 S-10-B5	100	<0.0050	<0.0050	0.46	0.36
S-5-B6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
mw-2 S-10-B6	550	0.79	1.3	10	48
S-17-B6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
S-5-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
mw-3 S-10-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
S-16.5-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

See notes on page 3 of 3

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF SOIL SAMPLES
ARCO Station 2162
15135 Hesperian Boulevard
San Leandro, California
(Page 3 of 3)

Sample Number	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
S-5-B8	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
S-9.5-B8	2.0	<0.0050	<0.0050	<0.0050	<0.0050
mw-4 S-11-B8	51	0.18	<0.0050	0.056	0.11
S-11.5-B8	91	1.4	0.11	0.22	0.86
S-18.5-B8	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

Sample Number	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	pH	I	R	Pb
September 1992 Soil Stockpile									
SP-0809 A-D	11	<0.0050	<0.0050	0.52	0.12	8.4	>100	None	0.11

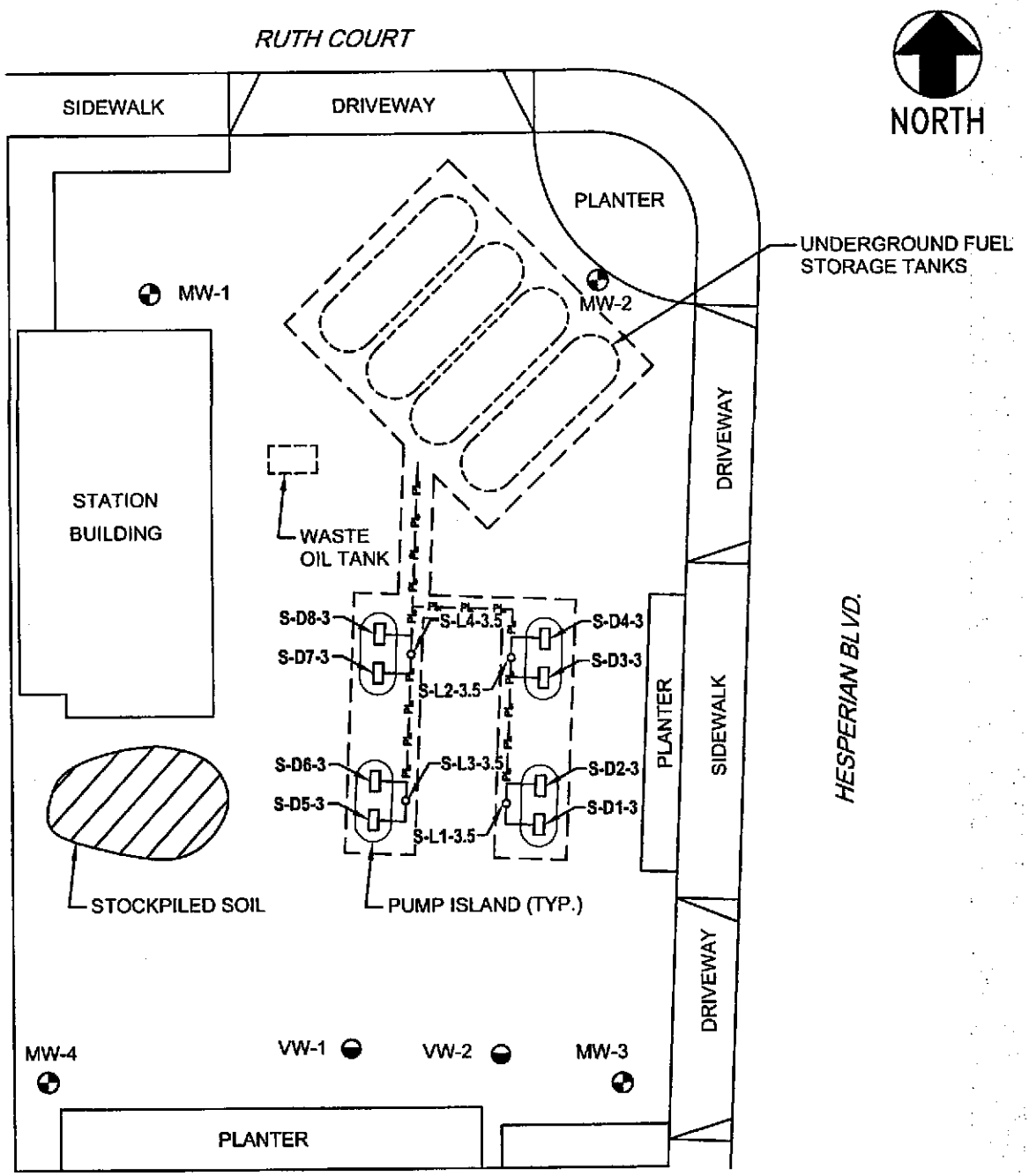
All results in parts per million (ppm).
TPHg = Total petroleum hydrocarbons as gasoline.
I = Ignitability in °C
R = Reactivity to sulfide, cyanide, or water
Pb = lead
<:Below the reporting limits of the analytical method.

Sample designations:

S-B1-5
- Sample depth
- Boring number
- Soil sample

S-12-B5
- Boring number
- Sample depth in feet
- Soil sample

SP-0809 A-D
- Sample
- Date
- Soil pile sample



LEGEND

MW-1	GROUNDWATER MONITORING WELL
VW-1	SOIL VAPOR EXTRACTION WELL
S-L1-3.5	FUEL LINE SAMPLING LOCATION
S-D1-3	FUEL DISPENSER SAMPLING LOCATION
	EXPOSED PRODUCT LINE PIPING
	APPROXIMATE LIMITS OF EXCAVATION

0 25 50

SCALE IN FEET

URS	Project No. 38486067 Arco Service Station No. 2162 15135 Hesperian Boulevard San Leandro, California	SOIL SAMPLING LOCATION PLAN January 10, 2003	FIGURE 2

Soil Analytical Data
ARCO Service Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

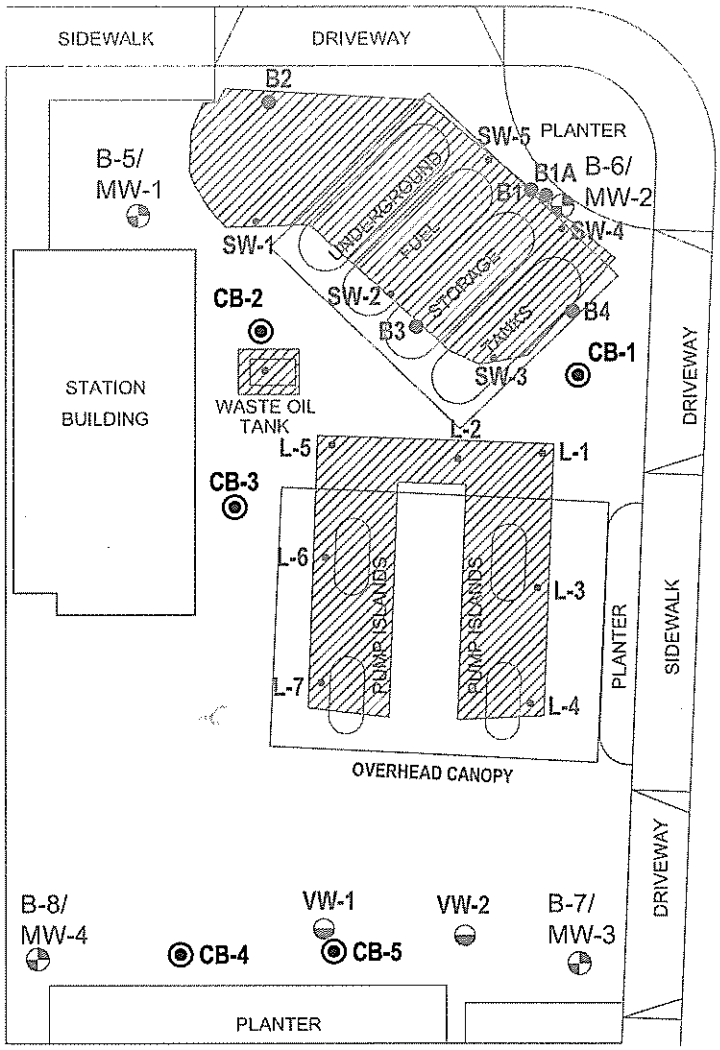
TABLE 1
Product Line/Dispenser Analytical Results

Soil Sample ID	Sample	Date	TPH as gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)
S-D1-3	3	1/10/03	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.025
S-D2-3	3	1/10/03	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.025
S-D3-3	3	1/10/03	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.025
S-D4-3	3	1/10/03	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.025
S-D5-3	3	1/10/03	**0.75**	ND<0.005	ND<0.005	**0.021**	**0.03**	**0.093**
S-D6-3	3	1/10/03	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.01	**0.021**
S-D7-3	3	1/10/03	**5.7**	ND<0.025	ND<0.025	**0.1**	**0.49**	ND<0.12
S-D8-3	3	1/10/03	**46**	ND<0.025	**0.13**	**0.17**	**0.36**	ND<0.25
S-L1-3.5	3.5	1/10/03	ND<0.5	**0.072**	**0.0095**	**0.029**	**0.032**	**0.14**
S-L2-3.5	3.5	1/10/03	ND<0.5	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.025
S-L3-3.5	3.5	1/10/03	ND<2.5	ND<0.025	ND<0.025	ND<0.025	ND<0.05	**0.55**
S-L4-3.5	3.5	1/10/03	**200**	ND<0.025	**2.1**	**1.4**	**1.5**	ND<0.25

TABLE 2
Soil Stockpile Analytical Results

Soil Sample ID	Sample	Date	TPH as gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Total Xylenes (ppm)	MTBE (ppm)	Total Lead (ppm)
SP (1-4) Composite	--	1/10/03	**0.79**	ND<0.025	ND<0.025	**0.032**	**0.14**	ND<0.12	**19**

TPH	= Total purgeable petroleum hydrocarbons using EPA Method 8015B, modified.
BTEX	= Benzene, toluene, ethylbenzene, total xylenes using EPA Method 8021B.
MTBE	= Methyl Tertiary Butyl Ether.
ppb	= Parts per billion.
ppm	= Parts per million.
ND<	= Less than stated laboratory detection limit.



LEGEND

CB-5 ◉	SOIL/GROUND-WATER BORING (STRATUS 2007)
B-8/ MW-4 ◔	MONITORING WELL RESNA (SEPTEMBER 1992)
VW-2 ◒	SOIL VAPOR EXTRACTION WELL (ROUX ASSOCIATES, INC., 1991)
B4 ●	SOIL BORING (ROUX ASSOCIATES, INC., 1991)
SW-5 •	SIDEWALL SOIL SAMPLE
L-7 •	PRODUCT LINE SAMPLE
▨	FORMER UNDERGROND STORAGE TANK AND PRODUCT LINE EXCAVATIONS

N

0 30 60

SCALE (ft)

NOTE: SITE MAP ADAPTED FROM URS CORPORATION AND RESNA FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

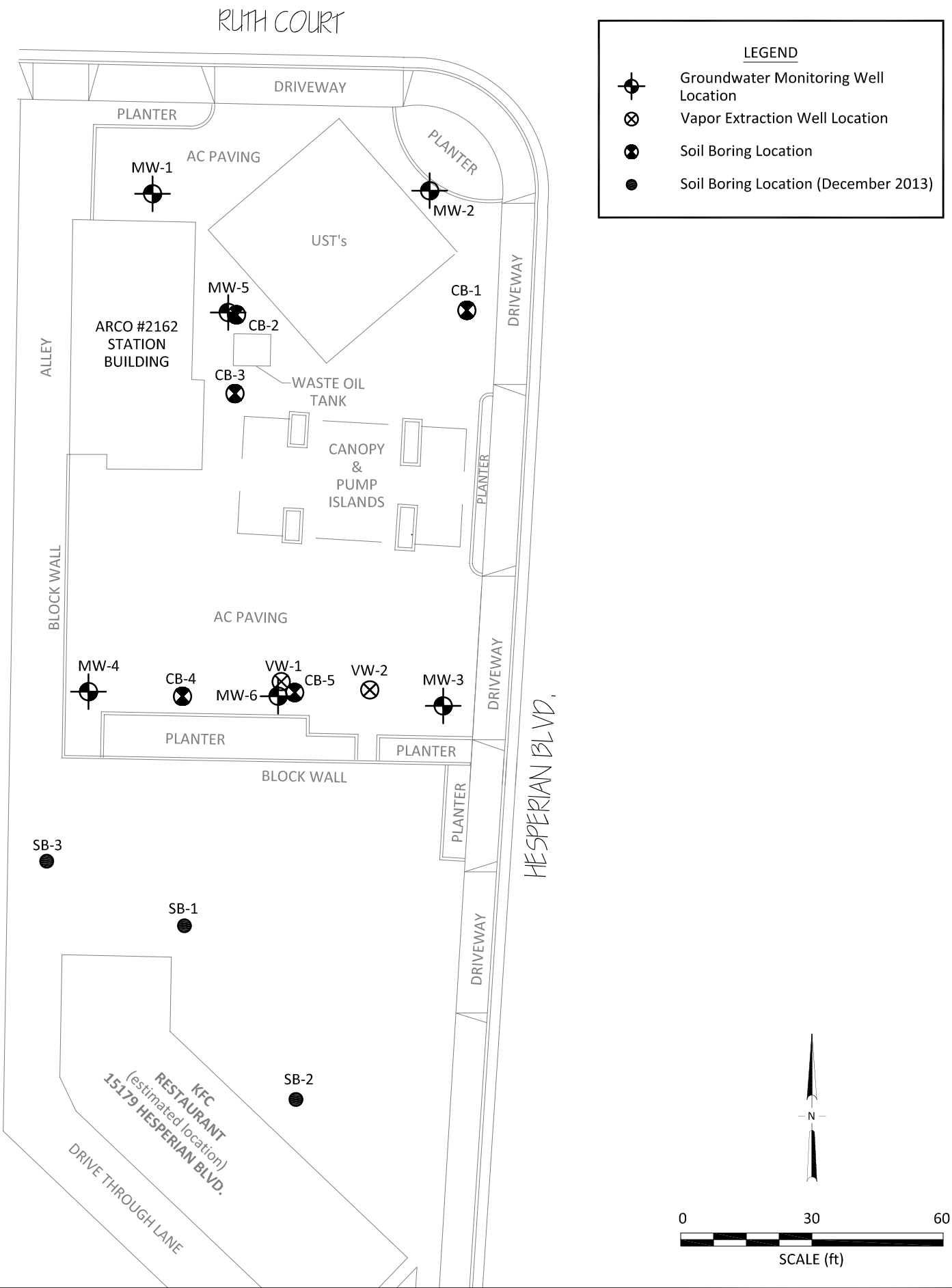
BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL 1324 Mangrove Ave. Suite 212, Chico, California Project No.: 06-08-620 Date: 09/13/07	Station #2162 15135 Hesperian Boulevard San Leandro, California	Site Sketch with Boring Locations

Drawing 2

Table 4 Summary of Depth-Discrete Soil Sampling Data
Atlantic Richfield Company Station No. 2162
15135 Hesperian Boulevard, San Leandro, California (ACEH Case No. RO0000190)

Boring I.D.	Date	Laboratory Analytical Results (mg/kg)														%
		GRO	DRO	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	DIPE	ETBE	TBA	TAME	Ethanol	EDB	1,2 DCA	Total Solids
CB1-7.5'-8'	7/17/2007	<0.13	**4.5**	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.025	<0.0063	<0.13	<0.0063	<0.0063	79
CB1-11.5'-12'	7/17/2007	<0.12	<1.2	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.024	<0.0060	<0.12	<0.0060	<0.0060	83
CB1-15.5'-16'	7/17/2007	<0.13	<1.3	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.026	<0.0064	<0.13	<0.0064	<0.0064	78
CB2 11.5'-12'	7/17/2007	**2.9**	**1,300**	<0.0058	<0.0058	<0.0058	**0.0071**	<0.0058	<0.0058	<0.0058	<0.023	<0.0058	<0.12	<0.0058	<0.0058	87
CB2 15.5'-16'	7/17/2007	<0.13	**2.3**	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.025	<0.0063	<0.13	<0.0063	<0.0063	79
CB3 7.5'-8'	7/17/2007	**0.65**	**2.2**	<0.0061	<0.0061	<0.0061	<0.0061	**0.0063**	<0.0061	<0.0061	<0.024	<0.0061	<0.12	<0.0061	<0.0061	82
CB3 11.5'-12'	7/17/2007	**400**	**12**	<0.061	<0.061	<0.061	<0.061	<0.031	<0.031	<0.031	<6.1	<0.031	<12	<0.031	<0.031	82
CB3 15.5'-16'	7/17/2007	<0.13	**1.6**	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.0063	<0.025	<0.0063	<0.13	<0.0063	<0.0063	79
CB4 7.5'-8'	7/17/2007	<0.12	**5.6**	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.0058	<0.023	<0.0058	<0.12	<0.0058	<0.0058	87
CB4 11.5'-12'	7/17/2007	**3.8**	**2.0**	<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	<0.0062	<0.025	<0.0062	<0.12	<0.0062	<0.0062	81
CB4 15.5'-16'	7/17/2007	<0.13	**1.8**	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.0064	<0.026	<0.0064	<0.13	<0.0064	<0.0064	78
CB5 7.5'-8'	7/17/2007	<0.12	**26**	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.0059	<0.023	<0.0059	<0.12	<0.0059	<0.0059	85
CB5 11.5'-12'	7/17/2007	**1,100**	**18**	<0.60	<0.60	<0.60	<0.60	<0.30	<0.30	<0.30	<60	<0.30	<120	<0.30	<0.30	83
CB5 15.5'-16'	7/17/2007	<0.13	<1.3	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.0065	<0.026	<0.0065	<0.13	<0.0065	<0.0065	77

Bolded values indicate concentrations above laboratory detection limits
GRO = Gasoline Range Organics, C4-C12
DRO = Diesel Range Organics, C10-C36
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
TBA = Tertiary butyl alcohol
TAME = Tertiary amyl methyl ether
EDB = 1,2-Dibromoethane
1,2 DCA = 1,2 Dichloroethane



BROADBENT
875 Cotting Lane, Suite G
Vacaville, California 95688
Project No.: 06-88-620 Date: 02/17/2014

Station No. 2162
15135 Hesperian Boulevard
San Leandro, California

Site Map with Soil Boring Locations

Drawing
2

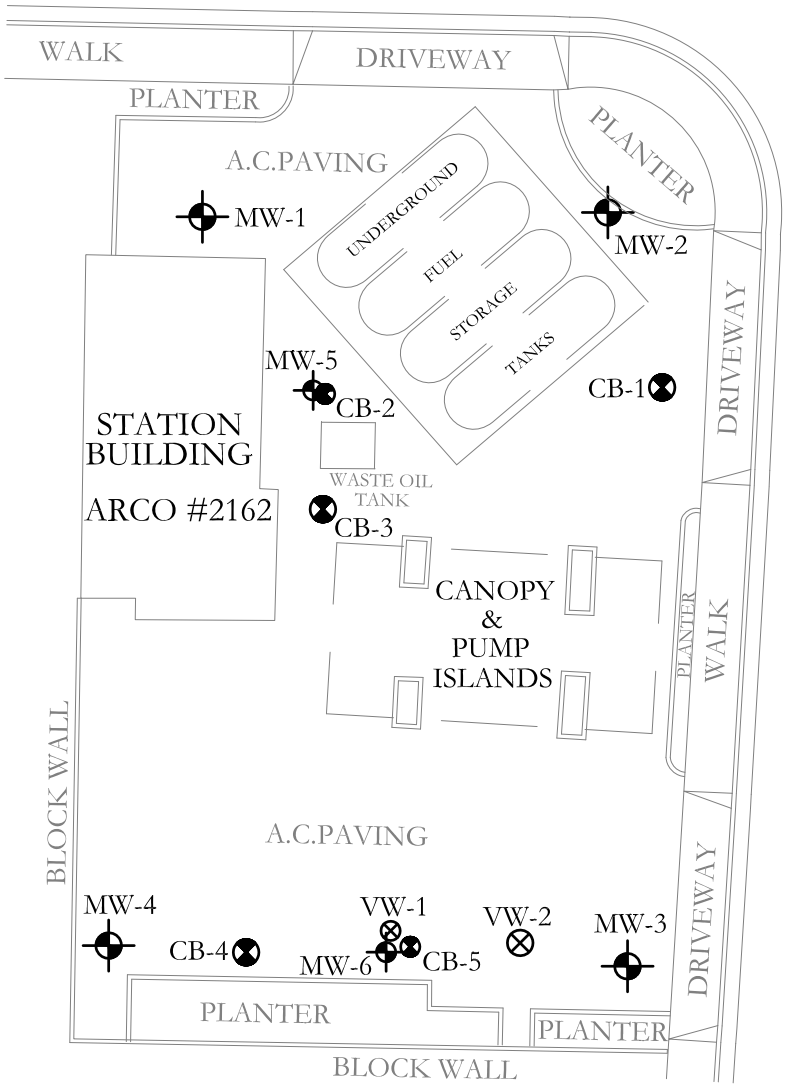
Table 2
Soil Analytical Results
December 2013 Soil Boring Investigation
ARCO Station No. 2162
15135 Hesperian Boulevard, San Leandro, California

Boring Identification	Soil Sample Depth (feet bgs)	Date Collected	GRO (mg/kg)	DRO (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	MTBE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	TBA (mg/kg)	DIPE (mg/kg)	1,2-DCA (mg/kg)	EDB (mg/kg)	Ethanol (mg/kg)	Naphthalene (mg/kg)
SB-1	14	12/23/2013	ND<0.38	ND<5.0	ND<0.0020	ND<0.0020	ND<0.0020	ND<0.0040	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.099	ND<0.0050	ND<0.0020	ND<0.0020	ND<0.30	ND<0.0050
SB-2	14	12/23/2013	ND<0.38	ND<5.0	ND<0.0020	ND<0.0020	ND<0.0020	ND<0.0040	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.099	ND<0.0050	ND<0.0020	ND<0.0020	ND<0.30	ND<0.0050
SB-3	14	12/23/2013	ND<0.38	ND<5.0	ND<0.0020	ND<0.0020	ND<0.0020	ND<0.0040	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.10	ND<0.0050	ND<0.0020	ND<0.0020	ND<0.30	ND<0.0050

Notes:

feet bgs = feet below ground surface
mg/kg = milligrams per kilogram
GRO = gasoline range organics (C6-C12)
DRO = diesel range organics (C10-C28)
MTBE = methyl tert-butyl ether
ETBE = ethyl tert-butyl ether
TAME = tert-amyl methyl ether
TBA = tert butyl alcohol
DIPE = di isopropyl ether
1,2-DCA = 1,2-dichloroethane
EDB = 1,2-dibromoethane
ND<X.XX = not detected above reporting limit of X.XX

Figure for installation of monitoring wells MW-5 and MW-6.
No analytical soil samples were collected for delineation or site assessment.



LEGEND

MW-6 ⊕	MONITORING WELL
CB-5 ⊗	SOIL/GROUND-WATER BORING
VW-2 ⊗	SOIL VAPOR EXTRACTION WELL

N

0 30 60

SCALE (ft)

NOTE: SITE MAP ADAPTED FROM STRATUS/WOOD RODGERS.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California
Project No.: 06-88-620 Date: 6/1/09

Station #2162
15135 Hesperian Boulevard
San Leandro, California

Site Layout Plan with
Monitoring Well Locations

Drawing
2