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4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
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Jennifer C. Sedlachek
Project Manager

ExxonMobil

March 22, 2010

Ms. Barbara Jakub, P.G.
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

RE: Former Exxon RAS #79374/990 San Pablo Avenue, Albany, California.

Dear Ms. Jakub:

Attached for your review and comment is a copy of the letter report entitled ***Sensitive Receptor, Conduit, and Well Survey,*** dated March 22, 2010, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Petaluma, California, and presents information for the subject site.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: ERI's Sensitive Receptor, Conduit, and Well Survey, dated March 22, 2010

cc: w/ attachment
Ms. Muriel T. Blank, Trustee, The Blank Family Trusts
Reverend Deborah Blank, Trustee, The Blank Family Trusts
Ms. Marcia Blank Kelly, The Blank Family Trusts

w/o attachment
Ms. Paula Sime, Environmental Resolutions, Inc.

VALUE, QUALITY, RESPONSE

Southern California
Northern California
Central California
Pacific Northwest
New England
Southwest
Montana
Texas

March 22, 2010
ERI 273503.R01

Ms. Jennifer C. Sedlachek
ExxonMobil Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611

SUBJECT **Sensitive Receptor, Conduit, and Well Survey**
Former Exxon Service Station 79374
990 San Pablo Avenue, Albany, California

At the request of ExxonMobil Environmental Services Company (EMES), on behalf of ExxonMobil Oil Corporation, Environmental Resolutions, Inc. (ERI) prepared this report documenting the results of a Sensitive Receptor Survey (SRS) preferential pathway evaluation and well survey. The purpose of an SRS is to identify potential receptors that could be sensitive to an environmental release. Those potential receptors include public and private water wells, surface water bodies, residential buildings, public use areas, sub-grade structures, storm drains, sewers, and utility vaults in the vicinity of the subject site. In a letter dated June 30, 2008, the Alameda County Health Care Services Agency, Environmental Health Services (ACEH), requested that a preferential pathway evaluation and well survey be performed and requested a detailed utility survey and examination of production and monitoring wells within a ¼-mile radius of the site (Appendix A).

BACKGROUND

Former Exxon Service Station 79374 is located at 990 San Pablo Avenue, on the northwestern corner of the intersection of Buchanan Street and San Pablo Avenue, Albany, California (Plate 1). The site is currently occupied by a retail outlet for Benjamin Moore paints and painting products and associated paved asphalt driveway and parking area. The surrounding areas consist of residential and commercial properties. A Shell Service Station and an Atlantic Richfield Company Service Station (Arco) are located approximately 350 feet and 500 feet, respectively, south-southeast of the site (Plate 2).

A former Exxon-branded service station, demolished in 1983, occupied the site since at least 1951. According to City of Albany building permits issued in 1951, the service station was owned by Signal Oil Company. Humble Oil company acquired the site in approximately 1967 from Standard Oil Company of California (Chevron) rebranding the site as an Enco station. The station was rebranded as an Exxon service station in 1972. The four USTs were removed in 1983, and the tank cavity was backfilled with sand to 90% compaction (City of Albany permit 82-0708).

Six exploratory borings (B1 through B6) were advanced on site in 2008 (EC&A, 2008). Petroleum hydrocarbons were reported in soil and grab groundwater samples. Free groundwater occurs in the sand and sandy gravel layer encountered from approximately 8 to 12 feet bgs.

During the April 2009 groundwater monitoring event conducted at the Arco Station 2035 at 1001 San Pablo Avenue, Albany, located approximately 550 feet south-southeast of the site, the groundwater flow direction was to the west with a horizontal gradient of 0.02 (Broadbent, 2009).

SENSITIVE RECEPTOR SURVEY AND PREFERENTIAL PATHWAY EVALUATION

The SRS for this site was conducted in November 2009. The SRS included a file review and a field visit. The file review consisted of a record search of the California Department of Water Resources (DWR) well driller's report archive, the Alameda Public Works (the County) well archive and the State Resources Water Control Board Geotracker database (Geotracker). Search parameters included municipal wells within a 1,500-meter radius of the site and domestic wells and monitoring wells within a ¼-mile radius of the site. Field work included a visual reconnaissance to identify municipal wells within 1,500 meters of the subject site; private water wells and surface water bodies within 300 meters of the site; residential buildings, public use areas, and sub-grade structures within 100 meters of the site; and utility vaults, storm drains, and sewers within 10 meters of the subject site. Receptors identified during the SRS are presented on Plates 1 through 4.

Well Survey

In the June 30, 2008, letter (Appendix A), the ACEH requested that a well survey be conducted to evaluate the potential of lateral migration of petroleum hydrocarbons to wells within a ¼-mile radius (approximately 40 meters) of the subject site. The ACEH requested that the well survey include municipal wells, domestic wells, and monitoring wells.

ERI contacted the DWR and the County and obtained well completion records indicating that there are not active municipal wells within 1,500 meters of the site or domestic water wells within a ¼-mile radius of the site.

A review of well information provided by the DWR, the County, Geotracker, Broadbent & Associates, Inc. and Conestoga-Rovers & Associates indicates that a total of 20 monitoring wells, 11 extraction wells, and five test wells have been installed at four properties within a ¼-mile radius of the site (Plate 2) (Broadbent, 2009; C-R&A, 2009). The wells were installed at 914 San Pablo Avenue located, 200 meters north of the site; 969 San Pablo Avenue, located 20 meters east of the site; 999 San Pablo Avenue, located 130 meters south of the site; and 1001 San Pablo Avenue, located 200 meters south of the site. Well details are presented in Table 1.

Surface Water Bodies and Wetlands

Based on visual reconnaissance and map reviews, surface water bodies are not located within 300 meters of the site.

Residential Buildings

Based on visual reconnaissance and map reviews, 16 residential buildings are located within 100 meters of the site (Plate 2).

Public Use Areas

Based on visual reconnaissance, two public use areas were identified within 100 meters of the site (Plate 2). Albany Physical Therapy is located at 948 San Pablo Avenue, approximately 50 meters north of the site. The City of Albany Fire, Police, and City Offices are located at 1000 San Pablo Avenue, approximately 15 meters south of the site.

Sub-Grade Structures

Based on visual reconnaissance, sub-grade structures were not identified within 100 meters of the site.

Utility Vaults and Conduits

In the June 30, 2008, letter (Appendix A), the ACEH requested that the utility map for the site be updated and that cross sections be generated showing the depths and flow directions of the utility lines in the immediate vicinity of the site. Though exact depths for utilities are not supplied by the individual utility providers, ERI has updated the utility map and generated cross sections using utility maps supplied by the utility providers, a private utility locator, Underground Service Alert (USA) markings, and field measurements. Approximate utility vault and conduit depths are presented in Table 2. The updated utility map and cross sections are presented as Plates 3 and 4. Site and vault pictures are included in Appendix B.

Subsurface utilities in the immediate vicinity of the site are electric, gas, telephone, water, and sewer. The on-site storm drains are used to transfer rain water from the roof of the building through pipes that daylight along the curb on Buchanan Street and empty onto the street surface.

Field measurements indicate that the electric lines running from the subsurface transformer at the corner of Buchanan Street and San Pablo Avenue across the site to the electrical box along the western side of the building are between 1.5 and 2 feet bgs.

Field measurements indicate that the electric, gas, water, and telephone lines beneath the sidewalk along San Pablo Avenue and the water and gas lines beneath Buchanan Street are located between 2 and 3 feet bgs.

Field measurements indicate that the sewer line that runs beneath both San Pablo Boulevard and Buchanan Street is located at a depth of at least 10 feet bgs. Field measurements also indicate that the high voltage electric line that runs from the light pole just to the west of the site beneath Buchanan Street to the transformer at the corner of Buchanan Street and San Pablo Avenue is buried at a depth of 5 feet bgs. The line splices off to the south just west of the crosswalk toward 1000 San Pablo Avenue and is buried at a depth of approximately 15 feet bgs.

Storm and Sanitary Sewers

Visual reconnaissance of the area shows that storm water runs west along Buchanan Street and empties toward the San Francisco Bay. The bay is located approximately 1 mile west of the site.

The city of Albany confirmed that sewage is conveyed within the subsurface lines and discharged at the East Bay Municipal District Wastewater Treatment Plant. The treatment plant is located approximately 4.5 miles south of the site.

CONCLUSIONS

File reviews and field observations identified 16 residences and two public use areas within 100 meters of the site as sensitive receptors (Table 3). Field observations and agency records indicate that the residences and the public use areas are on public water supply and do not use well water.

As noted previously, the groundwater flow direction in the vicinity of the site is to the west with a horizontal gradient of approximately 0.02 (Broadbent, 2009). Boring logs for on-site borings indicate that first water is located between 8 and 12 feet bgs (Appendix C). Field measurements indicate that electric, gas, telephone, and water lines at the site do not intersect the groundwater table and should not act as preferential pathways. The sewer line is buried at a minimum of 10 feet bgs, but is located upgradient of the site beneath San Pablo Avenue and crossgradient to the site beneath Buchanan Street and should not act as a preferential pathway. The electric line in the crosswalk of Buchanan Street is buried beneath the water table but is located crossgradient of the site and should not act as preferential pathway.

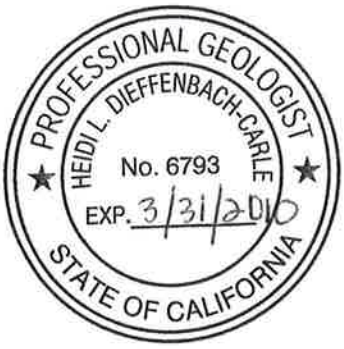
A total of 20 monitoring wells, 11 extraction wells, and five test wells have been installed at four locations within a ¼-mile radius of the site. The wells are located upgradient of the site. On-site petroleum hydrocarbons are not expected to migrate to these wells.

LIMITATIONS

For any documents cited that were not generated by ERI, the data taken from those documents is used "as is" and is assumed to be accurate. ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document was prepared in accordance with generally accepted standards of environmental, geological, and engineering practices in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

Please call Ms. Paula Sime, ERI's project manager for this site, at (707) 766-2000 with any questions regarding this report.



Sincerely,

Environmental Resolutions, Inc.

SCANNED IMAGE

Rebekah A. Westrup
Senior Staff Geologist

SCANNED IMAGE

Heidi L. Dieffenbach-Carle
P.G. 6793

cc: Ms. Barbara Jakub, Alameda County Health Care Services Agency, Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577

Ms. Muriel Blank, Trustee, The Blank Family Trusts, 1164 Solano Avenue, #406, Albany, California, 94706

Reverend Deborah Blank, Trustee, The Blank Family Trusts, 1563 Solano Avenue, #344, Berkeley, California, 94707

Ms. Marcia Blank Kelly, Trustee, The Blank Family Trusts, 641 SW Morningside Road,

Enclosures:

References

Acronym List

Plate 1	Regional Area Map
Plate 2	Local Area Map
Plate 3	Detailed Utility Map
Plate 4	Cross Section A-A'

Table 1	Well Details
Table 2	Vault Data
Table 3	Sensitive Receptors

Appendix A	Correspondence
Appendix B	Site and Utility Photographs
Appendix C	Boring Logs

ACRONYM LIST

µg/L	Micrograms per liter
µs	Microsiemens
1,2-DCA	1,2-dichloroethane
acfm	Actual cubic feet per minute
AS	Air sparge
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and total xylenes
CEQA	California Environmental Quality Act
cfm	Cubic feet per minute
COC	Chain of Custody
CPT	Cone Penetration (Penetrometer) Test
DIPE	Di-isopropyl ether
DO	Dissolved oxygen
DOT	Department of Transportation
DPE	Dual-phase extraction
DTW	Depth to water
EDB	1,2-dibromoethane
EPA	Environmental Protection Agency
ESL	Environmental screening level
ETBE	Ethyl tertiary butyl ether
FID	Flame-ionization detector
fpm	Feet per minute
GAC	Granular activated carbon
gpd	Gallons per day
gpm	Gallons per minute
GWPTS	Groundwater pump and treat system
HVOC	Halogenated volatile organic compound
J	Estimated value between MDL and PQL (RL)
LEL	Lower explosive limit
LPC	Liquid-phase carbon
LRP	Liquid-ring pump
LUFT	Leaking underground fuel tank
LUST	Leaking underground storage tank
MCL	Maximum contaminant level
MDL	Method detection limit
mg/kg	Milligrams per kilogram
mg/L	Milligrams per liter
mg/m^3	Milligrams per cubic meter
MPE	Multi-phase extraction
MRL	Method reporting limit
msl	Mean sea level
MTBE	Methyl tertiary butyl ether
MTCA	Model Toxics Control Act
NAI	Natural attenuation indicators
NAPL	Non-aqueous phase liquid
NEPA	National Environmental Policy Act
NGVD	National Geodetic Vertical Datum
NPDES	National Pollutant Discharge Elimination System
O&M	Operations and Maintenance
ORP	Oxidation-reduction potential
OSHA	Occupational Safety and Health Administration
OVA	Organic vapor analyzer
P&ID	Process & Instrumentation Diagram
PAH	Polycyclic aromatic hydrocarbon
PCB	Polychlorinated biphenyl
PCE	Tetrachloroethene or perchloroethylene
PID	Photo-ionization detector
PLC	Programmable logic control
POTW	Publicly owned treatment works
ppmv	Parts per million by volume
PQL	Practical quantitation limit
psi	Pounds per square inch
PVC	Polyvinyl chloride
QA/QC	Quality assurance/quality control
RBSL	Risk-based screening levels
RCRA	Resource Conservation and Recovery Act
RL	Reporting limit
scfm	Standard cubic feet per minute
SSTL	Site-specific target level
STLC	Soluble threshold limit concentration
SVE	Soil vapor extraction
SVOC	Semivolatile organic compound
TAME	Tertiary amyl methyl ether
TBA	Tertiary butyl alcohol
TCE	Trichloroethene
TOC	Top of well casing elevation; datum is msl
TOG	Total oil and grease
TPHd	Total petroleum hydrocarbons as diesel
TPHg	Total petroleum hydrocarbons as gasoline
TPHmo	Total petroleum hydrocarbons as motor oil
TPHs	Total petroleum hydrocarbons as stoddard solvent
TRPH	Total recoverable petroleum hydrocarbons
UCL	Upper confidence level
USCS	Unified Soil Classification System
USGS	United States Geologic Survey
UST	Underground storage tank
VCP	Voluntary Cleanup Program
VOC	Volatile organic compound
VPC	Vapor-phase carbon

REFERENCES

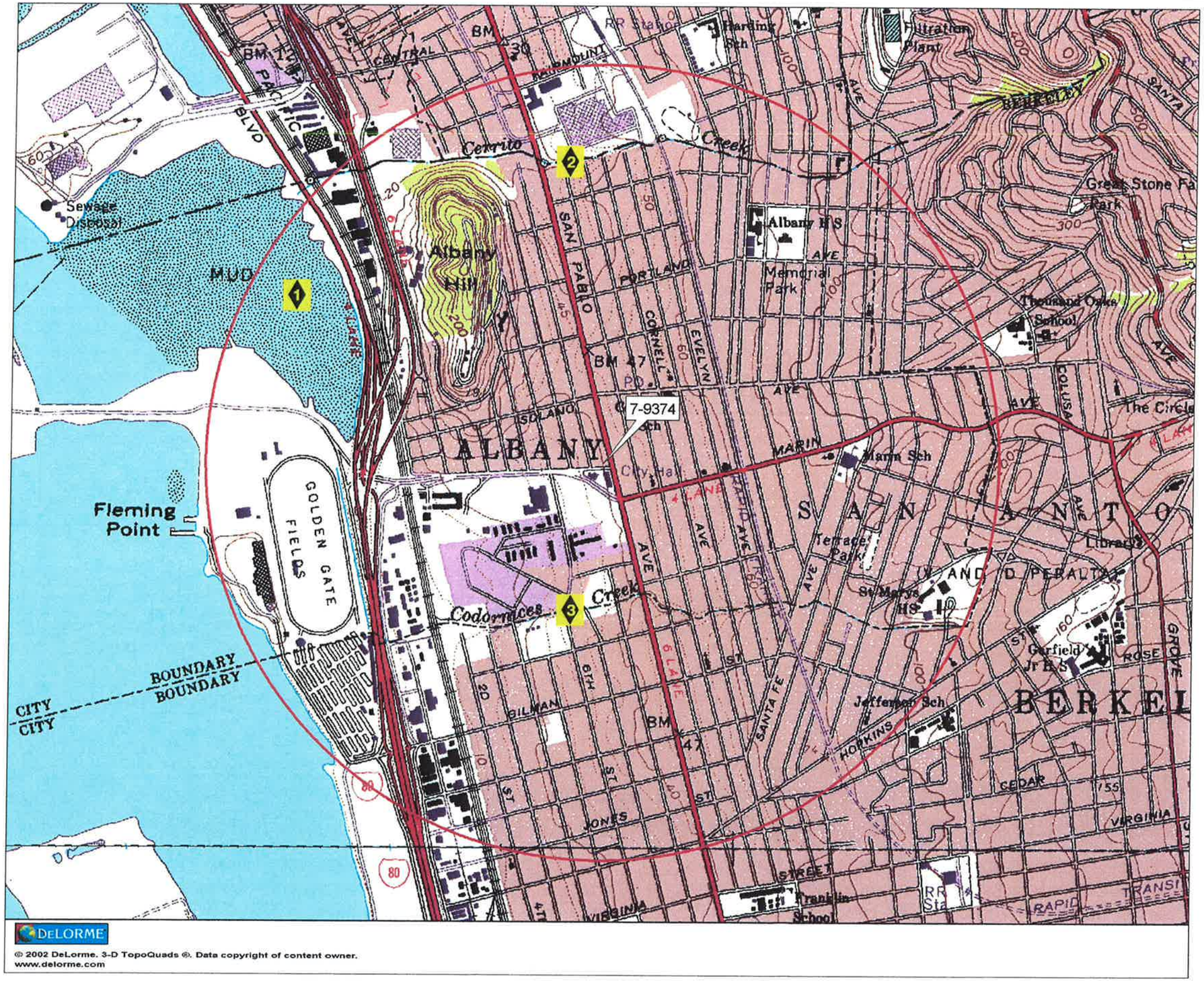
Broadbent & Associates, Inc. (Broadbent). January 5, 2009. *Work Plan for Soil & Ground-Water Investigation, Atlantic Richfield Company Station #2035, 1001 San Pablo Avenue, Albany, California.* ACEHS Case No. RO0000100.

Broadbent & Associates, Inc. (Broadbent). July 15, 2009. *Second Quarter 2009 Semi-Annual Ground-Water Monitoring Report, Atlantic Richfield Company Station #2035, 1001 San Pablo Avenue, Albany, California.* Broadbent Project No. 06-88-610.

Conestoga-Rovers & Associates (C-R&A). June 22, 2009. *Ground-Water Monitoring Report-Second Quarter 2009,Shell-Branded Service Station, 999 San Pablo Avenue, Albany, California.*

Edd Clark & Associates (EC&A). January 31, 2008. *Report of Phase II Environmental Assessment, 990 San Pablo Avenue, Albany, California 94706.* EC&A Project No 0589,002.07.

State Water Resources Control Board Geotracker database, http://geotracker.swrcb.ca.gov.



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LEGEND

WELLS (SPECIAL USE AND MUNICIPAL)

1 Public wells are not located within a 1,500-meter radius.

SURFACE WATER

1 San Francisco Bay

2 Cerrito Creek

3 Condornices Creek

1,500-Meter Radius

APPROXIMATE SCALE

0 400 800 METERS

REGIONAL AREA MAP

FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

ERI
VALUE, QUALITY, RESPONSE

PROJECT NO.	PLATE
2735	1

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APPROXIMATE SCALE

0 80 160 METERS

FN 2735 10 R01 SRS AERIAL_SP

100 Meter and 300 Meter Radius

LEGEND

- C/I — Commericial / Industrial
- VAC — Vacant Lot
- P — Parking Lot
- R — Additional Residential

WELLS

- 1 — Private wells are not located within a 300-meter radius. See the Regional Area Map.

WELLS (SPECIAL USE OR MUNICIPAL)

- 1 — Public wells are not located within a 300-meter radius.

MONITORING AND REMEDIATION WELLS

- 1 — 914 San Pablo Avenue
- 2 — 969 San Pablo Avenue
- 3 — 999 San Pablo Avenue
- 4 — 1001 San Pablo Avenue

RESIDENCES

- 1 — 1041/1043 Buchanan Street (Duplex)
- 2 — 973/975 Adams Street (Duplex)
- 3 — 971 Adams Street
- 4 — 970 Adams Street (Apartments)
- 5 — 960/962 Adams Street (Duplex)

PUBLIC USE AREAS

- 1 — City of Albany Police/Fire/City Offices
- 2 — Physical Therapy

SURFACE WATER

- 1 — Surface water is not located within a 300-meter radius.

LOCAL AREA MAP

FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

ERI
VALUE, QUALITY, RESPONSE

PROJECT NO. 2735

PLATE 2

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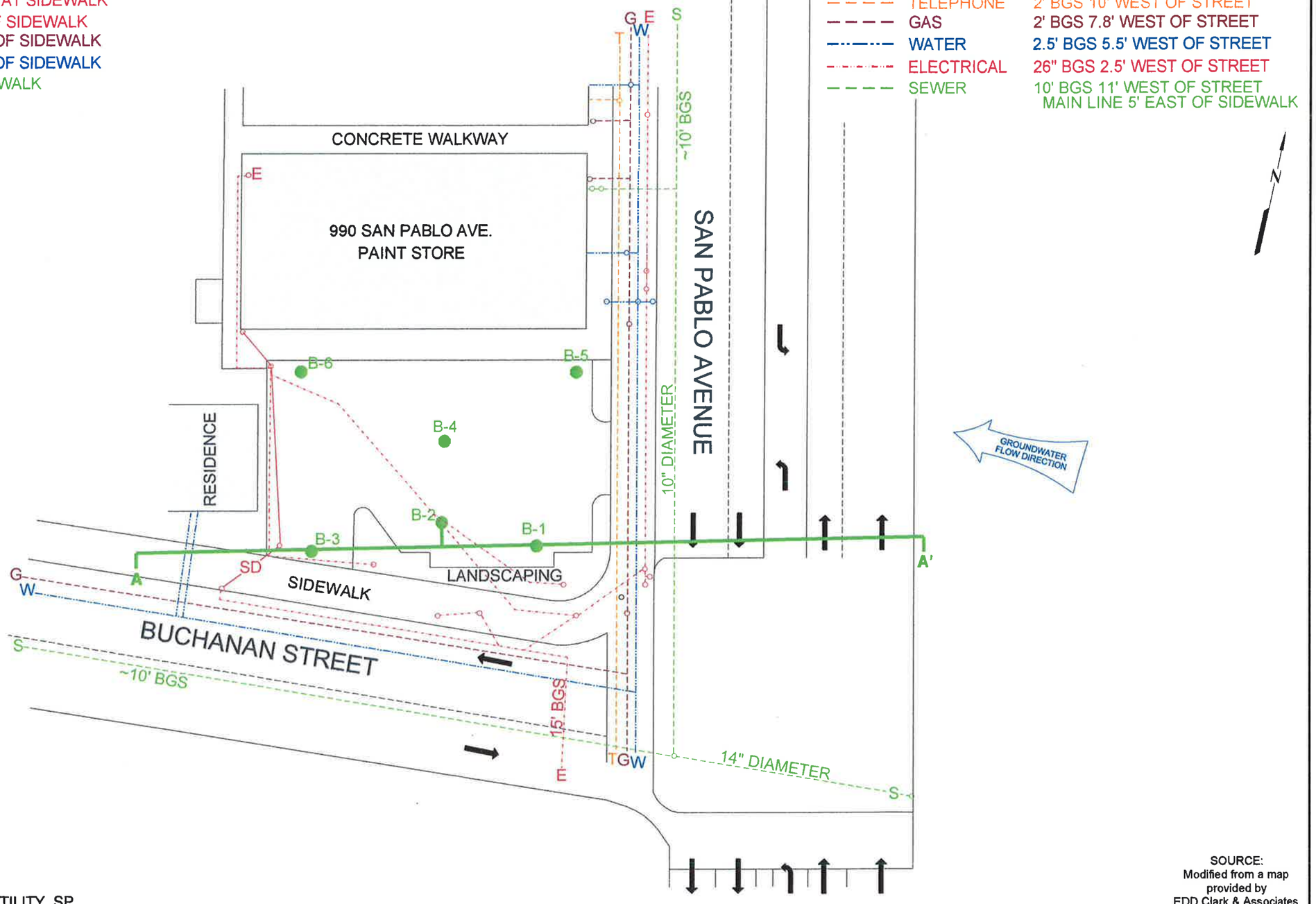
UTILITIES LEGEND (ALONG BUCHANAN)

STORM DRAIN	6" BGS DAYLIGHTS AT SIDEWALK
ELECTRICAL	5' BGS 3' SOUTH OF SIDEWALK
GAS	2.5' BGS 5' SOUTH OF SIDEWALK
WATER	3' BGS 9.5' SOUTH OF SIDEWALK
SEWER	25' SOUTH OF SIDEWALK

UTILITIES LEGEND (ALONG SAN PABLO)

TELEPHONE	2' BGS 10' WEST OF STREET
GAS	2' BGS 7.8' WEST OF STREET
WATER	2.5' BGS 5.5' WEST OF STREET
ELECTRICAL	26" BGS 2.5' WEST OF STREET
SEWER	10' BGS 11' WEST OF STREET MAIN LINE 5' EAST OF SIDEWALK



APPROXIMATE SCALE

0 30 60 Feet

SOURCE: Modified from a map provided by EDD Clark & Associates

FN 2735 10 R01 SRS CONDUIT STUDY XS LOC - UTILITY_SP

VALUE, QUALITY, RESPONSE

DETAILED UTILITY MAP

FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

bgs Below Ground Surface

B-6 ● Borings

PROJECT NO. 2735

PLATE 3

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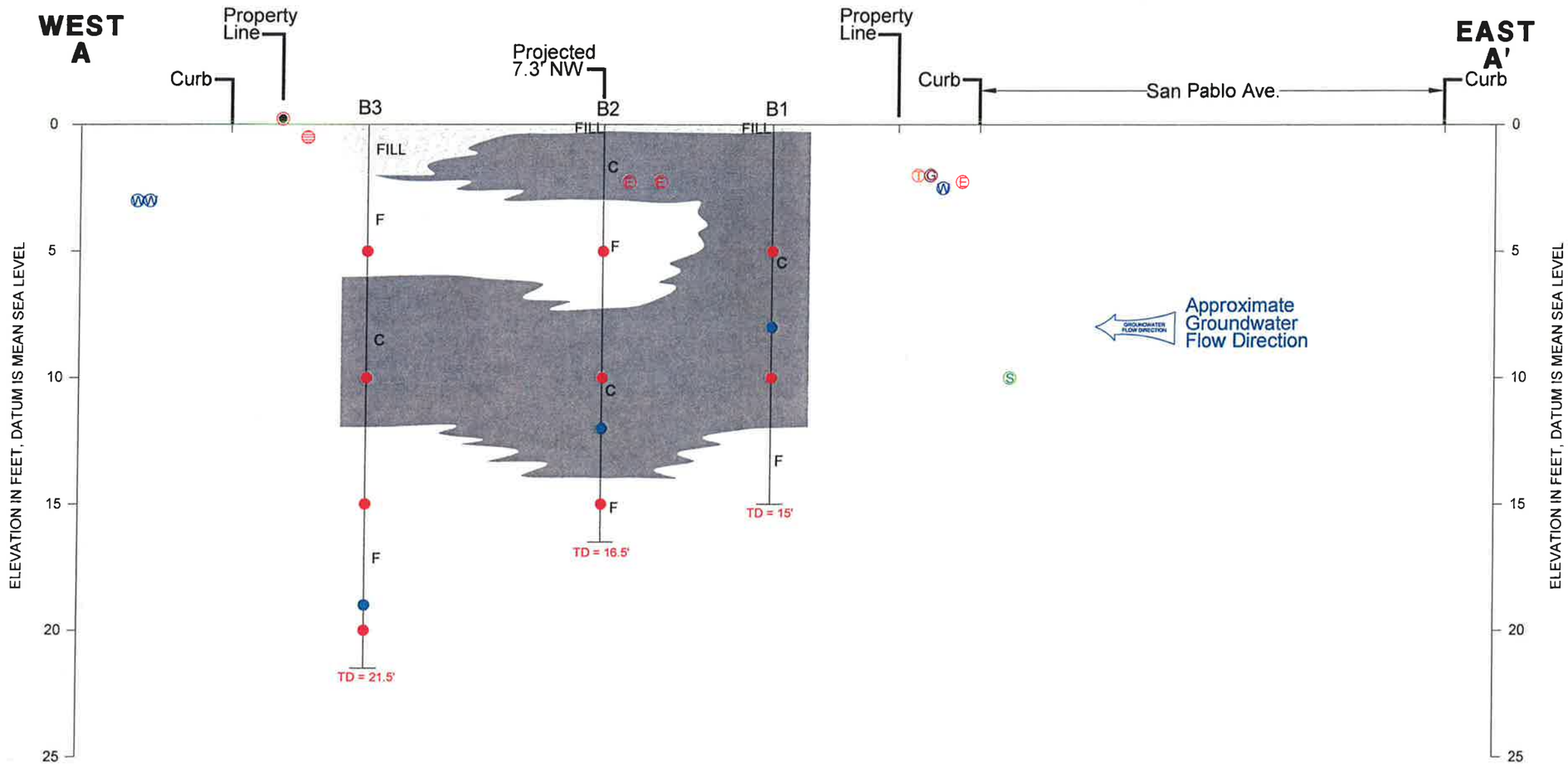
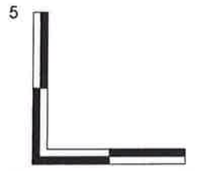


APPROXIMATE SCALE



Vertical Exaggeration x4

FN 2735 09 SRS CONDUIT STUDY XS A-A'_SP

VALUE, QUALITY, RESPONSE

CROSS SECTION A-A

FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- Fill
- Coarse-grained sediments
- Fine-grained sediments

TD = Total Depth

- Groundwater Sample
- Soil Sample

Utility Legend

- Water
- Electrical
- Storm Drain
- Sanitary Sewer
- Gas
- Telephone
- Aboveground Electrical

PROJECT NO. 2735

PLATE 4

TABLE 1
WELL DETAILS
Former Exxon Service Station 79374
990 San Pablo Avenue
Albany, California

Well ID	Distance from Site (miles)	Address	Owner	Drill Date	Total Depth of Well	Screen Interval	Diameter	Use
MW1	0.15	914 San Pablo Avenue	Dibble/Foley	7/24/1991	30	10-30	2	Monitoring
MW2	0.15	914 San Pablo Avenue	Dibble/Foley	7/24/1991	28	8-28	2	Monitoring
MW3	0.15	914 San Pablo Avenue	Dibble/Foley	7/25/1991	27	7-27	2	Monitoring
MW1	0.02	969 San Pablo Boulevard	Firestone	9/21/1990	12.5	7.5-12.5	4	Test
MW2	0.02	969 San Pablo Boulevard	Firestone	9/21/1990	14.5	9.5-14.5	4	Monitoring
MW3	0.02	969 San Pablo Boulevard	Firestone	9/21/1990	14.5	9.5-14.5	4	Monitoring
MW4	0.02	969 San Pablo Boulevard	Firestone	9/21/1990	15	10-15	4	Monitoring
S-1	0.02	999 San Pablo Avenue	Shell	1/30/1990	11.5	6.5-11.5	3	Monitoring
S-2	0.02	999 San Pablo Avenue	Shell	1/30/1990	12	6-12	3	Monitoring
S-3	0.02	999 San Pablo Avenue	Shell	1/30/1990	11.5	6.5-5.5	3	Monitoring
S-4	0.02	999 San Pablo Avenue	Shell	4/16/1990	14	5-14	3	Test
S-5	0.02	999 San Pablo Avenue	Shell	4/16/1990	16	6-16	3	Test
S-6	0.02	999 San Pablo Avenue	Shell	8/15/1990	15	5.5-15	3	Test
S-7	0.02	999 San Pablo Avenue	Shell	8/15/1990	15	5.5-15	3	Test
S-8	0.02	999 San Pablo Avenue	Shell	2004	16	?	4	Monitoring
S-9	0.02	999 San Pablo Avenue	Shell	2004	?	?	2	Monitoring
AS/SVE1	0.09	1001 San Pablo Avenue	Arco	6/16/1993	31	29-31, 5-15	2	Extraction
AS/SVE2	0.09	1001 San Pablo Avenue	Arco	6/16/1993	31	29-31, 5-15	2	Extraction
MW1	0.09	1001 San Pablo Avenue	Arco	10/1/1991	30	15-30	4	Monitoring
MW2	0.09	1001 San Pablo Avenue	Arco	10/1/1991	29	20-29	4	Monitoring
MW3	0.09	1001 San Pablo Avenue	Arco	10/1/1991	32.5	12.5-32.5	4	Monitoring
MW4	0.09	1001 San Pablo Avenue	Arco	11/24/1992	25	8-25	4	Monitoring
MW5	0.09	1001 San Pablo Avenue	Arco	11/24/1992	25	8-25	4	Monitoring
MW6	0.09	1001 San Pablo Avenue	Arco	11/25/1992	25	8-25	2	Monitoring
MW7	0.09	1001 San Pablo Avenue	Arco	3/26/2009	16	6-16	4	Monitoring
MW8	0.09	1001 San Pablo Avenue	Arco	3/26/2009	16	6-16	4	Monitoring
MW9	0.09	1001 San Pablo Avenue	Arco	3/26/2009	19	6-19	4	Monitoring
RW1	0.09	1001 San Pablo Avenue	Arco	10/15/1991	26	11-26	4	Monitoring
VW1	0.09	1001 San Pablo Avenue	Arco	8/20/1992	17	5-17	4	Extraction
VW2	0.09	1001 San Pablo Avenue	Arco	8/19/1992	17	5-17	4	Extraction
VW3	0.09	1001 San Pablo Avenue	Arco	8/19/1992	9.5	4.5-9.5	4	Extraction
VW4	0.09	1001 San Pablo Avenue	Arco	8/20/1992	17	5-17	4	Extraction
VW5	0.09	1001 San Pablo Avenue	Arco	8/21/1992	14.5	4.5-14-.5	4	Extraction
VW6	0.09	1001 San Pablo Avenue	Arco	8/21/1992	12.5	5-12.5	4	Extraction
VW7	0.09	1001 San Pablo Avenue	Arco	6/15/1993	15	6-15	4	Extraction
VW8	0.09	1001 San Pablo Avenue	Arco	6/15/1993	15	6-15	4	Extraction
VW9	0.09	1001 San Pablo Avenue	Arco	6/15/1993	15	6-15	4	Extraction

TABLE 2
VAULT DATA
Former Exxon Service Station 79374
990 San Pablo Avenue
Albany, California

New Designation	Type of Vault	Provider	Depth (in Inches)	Comments
V1	Water	EBMUD	6	Main line is 30" deep along east sidewalk
V2	Telephone	PacBell	20	Main line is 20" deep along eastern sidewalk
V3	Gas Meter	PG&E	aboveground	Main line is 24" deep along eastern sidewalk
V4	Electric	PG&E	26	Main line is 26" deep along eastern sidewalk
V5	Gas Meter	PG&E	aboveground	Main line is 24" deep along eastern sidewalk
V6	Sewer	City of Albany	120	Main line is 10' deep along eastern sidewalk
V7	Sewer	City of Albany	120	Main line is 10' deep along eastern sidewalk
V8	Water	EBMUD	6	Main line is 30" deep along eastern sidewalk
V9	Electric	City of Albany	12	Main line is 24" deep along eastern sidewalk
V10	Electric	City of Albany	12	Main line is 24" deep along eastern sidewalk
V11	Water	EBMUD	aboveground	Main line is 30" deep along eastern sidewalk
V12	Water	EBMUD	6	Main line is 30" deep along eastern sidewalk
V13	Water	EBMUD	6	Main line is 30" deep along eastern sidewalk
V14	Electric	PG&E	26	Main line is 26" deep diagonals to Transformer
V15	Traffic Box	City of Albany	8	Main line is 26" deep
V16	Traffic Signal	City of Albany	aboveground	Main line is 26" deep
V17	Anode	City of Albany	8	Could not determine which utility it connects to
V18	Electric	PG&E	unknown	TRANSFORMER DO NOT OPEN line comes in from Buchanan Street 60" deep
V19	Electric	PG&E	48	Feeds to 8' deep in Buchanan and 15' in crosswalk
V20	Electric	PG&E	aboveground	Overhead line transferred to subsurface
V21	Water	EBMUD	6	Main line is 36" deep
V22	Water	EBMUD	6	Main line is 36" deep
V23	Electric	PG&E	27	Down west side of building and across site to lighting
SD1	Storm drain	City of Albany	6	Catch pipe for roof
SD2	Storm drain	City of Albany	6	Transfer pipe from SD1
SD3	Storm drain	City of Albany	Surface	Daylight of Roof System

Notes:
EBMUD = East Bay Municipal Utilities District.
PacBell = Pacific Bell Telephone Company.
PG&E = Pacific Gas and Electric Company.

TABLE 3
SENSITIVE RECEPTORS
Former Exxon Service Station 79374
990 San Pablo Avenue
Albany, California

Sensitive Receptor	Distance	Quantity
Municipal Water Wells	1,500-meter (approximately 1-mile) radius	0
Private Water Wells	400-meter (approximately ¼-mile) radius	0
Surface Water	300-meter (approximately 1,000 -foot) radius	0
Residential Buildings	100-meter (approximately 330 foot) radius	16
Public Use Areas	100-meter (approximately 330-foot) radius	2
Basements/Subgrade Parking	100-meter (approximately 330-foot) radius	0
Utility Vaults/Lines	on and adjacent to site including water, sewer, storm drains, and electric	multiple

APPENDIX A

CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

June 30, 2008

Ms. Jennifer Sedlachek (via electronic mail)
ExxonMobil
4096 Piedmont Ave., #194
Oakland, CA 94611

Mrs. Muriel Blank
Blank Family Trust
1164 Solano Ave., #406
Albany, CA 94706

Subject: Fuel Leak Case No. RO00002974 and Geotracker Global ID T0619716673, Exxon, 990 San Pablo Ave., Albany, CA 94706

Dear Ms. Sedlachek and Mrs. Blank:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the January 31, 2008 *Report of Phase II Environmental Site Assessment* that was submitted by Edd Clark & Associates, Inc. The assessment report recommends preparing a work plan for additional soil and groundwater investigation at the site, installing wells and performing a sensitive receptor survey. This report indicates that maximum concentrations of 99,000 micrograms per liter (µg/L) total petroleum hydrocarbons as diesel (TPHd) in B-1, 77,000 µg/L total petroleum hydrocarbons as gasoline (TPHg) in B-2 and 1,500 µg/l benzene in B-2 are present in groundwater at your site. Free product was also noted in boring in B-1. The maximum TPHd concentration in soil [7,200 milligrams per kilogram (mg/Kg)] was detected in B-1 at a depth of 10.5 feet below ground surface (bgs). Maximum TPHg concentrations of 1,400 mg/Kg were detected in borings B-1 and B-2 from 10.5 ft bgs and the maximum benzene concentration (13 mg/kg) was detected in B-2 from 10.5 feet bgs.

ACEH concurs that additional assessment needs to be performed at the site. Please address the following technical comments, perform the requested work, and submit the work plan requested below.

TECHNICAL COMMENTS

1. **Groundwater Characterization** –The Phase II report indicates that free product is present at the site and that petroleum hydrocarbons and volatile organic compounds are present across the entire site. The lateral and vertical extent of the groundwater plume is

not defined. An expedited site assessment should be performed at the site using methods such as CPT, MIP or other continuous logging method to evaluate the extent of petroleum hydrocarbons. After the extent of contamination is determined, a monitoring well network can be installed using cluster wells or multi-chamber wells with screen lengths of 2 feet or less and sand packs of less than five feet.

2. **Source Area Soil Characterization** – Soil samples collected at the site indicate that the lateral and vertical extent of the contamination is undefined. The expedited site assessment requested should include sampling to define the lateral and vertical extent of petroleum hydrocarbons in the source area(s). Also please provide the tank, product piping and dispenser locations on the figures you submit.

3. **Preferential Pathway Evaluation Survey.** The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of the NAPL and/or plume encountering preferential pathways and conduits that could spread contamination. We request that you perform a preferential pathway study that details the potential migration pathways and potential conduits (wells, utilities, pipelines, etc.) for vertical and lateral migration that may be present in the vicinity of the site.

   Discuss your analysis and interpretation of the results of the preferential pathway study (including the detailed well survey and utility survey requested below) and report your results in the Soil and Water Investigation (SWI) requested below. The results of your study shall contain all information required by California Code of Regulations, Title 23, Division 3, Chapter 16, §2654(b).

   a. Utility Survey

   Included in your Phase II report is a map with some utility lines on it. No flow directions or depths are presented on the map, nor is there an evaluation of whether these provide a pathway for migration of free product and other contaminants that could migrate from your site. An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Please include maps and cross-sections illustrating the location, depth, and flow direction of all utility lines and trenches within and near the site and plume areas(s) as part of your study.

   b. Well Survey

   As recommended by your consultants, please proceed with a well survey as part of your preferential pathway evaluation. The preferential pathway study includes a detailed well survey of all wells (monitoring and production wells: active, inactive, standby, decommissioned (sealed with concrete), abandoned (improperly decommissioned or lost); and dewatering, drainage, and cathodic protection wells) within a ¼-mile radius of the subject site. Please submit an evaluation of whether there are any potential impacts to wells in the vicinity of the site in the work plan requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Barbara Jakub), according to the following schedule:

- **September 22, 2008** –Work Plan and preferential pathway evaluation.

This report is being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or

certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,

Barbara J. Jakub, P.G.
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Ms. Etta Jon VandenBosch, Edd Clark & Associates, Inc., P.O. Box 339, Rohnert Park, CA 94927, (via electronic mail, ejv@sonic.net)
Mrs. Marcia B. Kelly, 641 SW Morningside Rd., Topeka, KS 66615 (via electronic mail - marciabkelly@earthlink.net)
Rev. Deborah Blank, 1563 Solano Ave. #344, Berkeley, CA 94707 (via electronic mail- miracoli@earthlink.net)
Donna Drogos, ACEH (Sent via electronic mail)
Barbara Jakub, ACEH

File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** July 5, 2005
	REVISION DATE: December 16, 2005
	PREVIOUS REVISIONS: October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection**. (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document**. Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for.**

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the ftp site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)

APPENDIX B

SITE AND UTILITY PHOTOGRAPHS

Western Edge of Property

Southern Edge of Property

Eastern Edge of Property

Northern Edge of Property

Northwestern Side of Property

Front View of Property

Northeastern Side of Property

Southeastern Side of Property

Vault V1 (Water)

Vaults V2 (Pacbell) and V3 (Gas Meter)

Vault V4 (Electric – High Voltage)

Vault V5 (Gas Meter)

Vault V6 (Sewer)

Vault V7 (Sewer)

Vault V8 (Water)

Vaults V9 and V10 (Electric – Street Light)

Vaults V11 and V12 (Water)

Vault V13 (Water)

Vaults V14 (Electric –High Voltage), V15 (Traffic), and V16 (Signal)

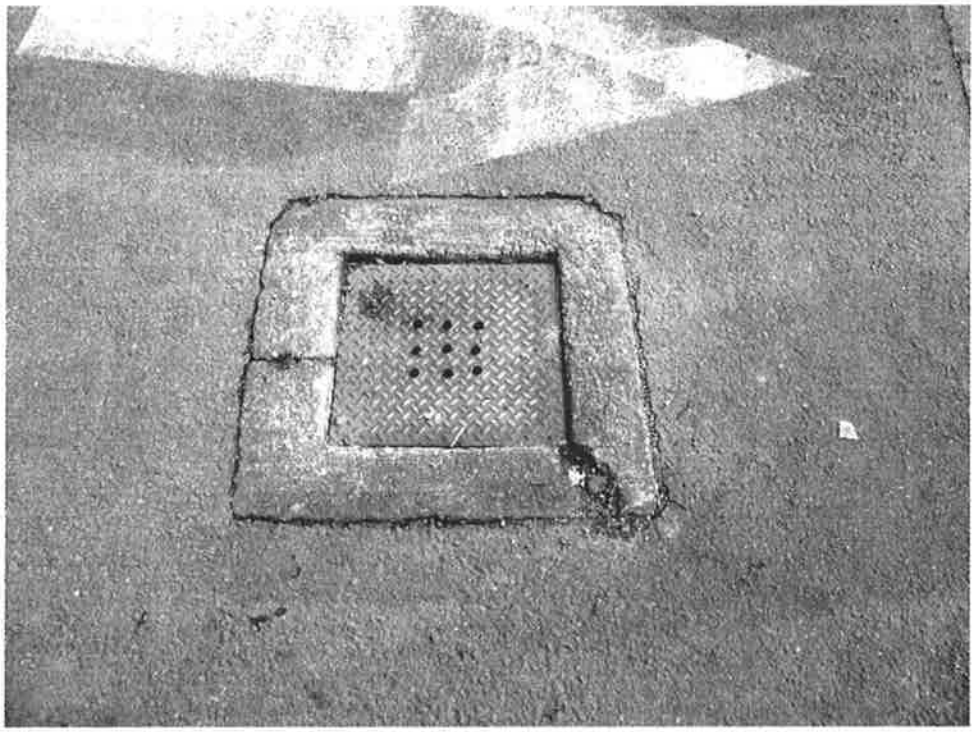
Vault V17 (Anode)

Vault V18 (Electric – Transformer HIGH VOLTAGE)

Vault V19 (Electric – High Voltage)

Vault V20 (Electric – Overhead Transfer to Subsurface)

Vaults V21 and V22 (Water)



Storm Drain (SD1)

APPENDIX C

BORING LOGS

BORING LOCATION	990 San Pablo Ave., Albany, CA (Patio, ~ 10' below dry cleaning machine)	ELEVATION AND DATUM	Ground Surface
		BORING NO.	B-1
DRILLING AGENCY	Clear Heart Drilling, Inc.	DRILLER	Pablo
DATE STARTED / DATE FINISHED	06 Jan 08 → 06 Jan 08		
DRILLING EQUIPMENT	DR-10K	COMPLETION WELL DEPTH	15.0 ft
		SAMPLER	Split Spoon
DRILLING METHOD	Solid Stem Auger	BORING DIA.	4 inches
NO. OF SAMPLES	2 Soil, 1 Grab Groundwater		
SIZE AND TYPE OF CASING	—	FROM — TO —	
WATER LEVEL	FIRST ~ 8 ft bgs	MEASURED / SAMPLED	—
TYPE OF PERFORATION	—	FROM — TO —	
CORE BARREL	2.0 inch ϕ	LENGTH	18 inches
SIZE AND TYPE OF PACK	—	FROM — TO —	
LOGGED BY:	EJVB	CHECKED BY:	RWE
TYPE OF SEAL NO. 1	Cement Grout	FROM 1.0 ft TO 15.0 ft	
TYPE OF SEAL NO. 2	Bentonite Chips and Sand Asphalt Patch	FROM 0.5 ft TO 1.0 ft FROM 0.0 ft TO 0.5 ft	
COMMENTS	Soil samples field screened with Photo-Ionization Detector (PID), results in parts per million (ppm).		

DEPTH (feet)	Samples	Sample ID	Blows/ft	PID (ppm)	MATERIAL DESCRIPTION	USCS	WELL CONSTRUCTION
					Approx. 3" asphalt.		
					SAND (SP), very moist to wet, poorly graded, fine sand.	SP	
5		d6.0'	5	6.8	CLAYEY SAND (SC), wet to very wet; ~ 15 - 20% clay; mild FHC odor and staining.	SC	
					Water at ~ 8 ft bgs. ▽		
						SW	
10		d10.5'	4	1734	SAND (SW), saturated; very fine to very coarse sand, ≤ 10% fines; very strong FHC odor.		
					From cuttings: SANDY CLAY (CL), olive (5Y 5/3), moist at ~ 12 ft (aquitard ?); FHC odor.	CL	
15					TD: 15.0 ft bgs		
					Note: Water sample collected at 1115 Very strong FHC odor, some light brown product (globules) and sheen.		
20							

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

LOG OF SOIL BORING B-1

Blank Property
990 San Pablo Avenue
Albany, California

FIGURE 3

JOB NUMBER	REVIEWED BY	DATE	REVISED	SHEET NO.
0589,002.07	EC&A, E.J. VandenBosch	January 2008		1 of 1

(TRACE #4671/RGI 8Jan08)

BORING LOCATION: 990 San Pablo Ave., Albany, CA (Center of parking, ~ 20' from S sidewalk)		ELEVATION AND DATUM: Ground Surface	BORING NO.: B-2
DRILLING AGENCY: Clear Heart Drilling, Inc.	DRILLER: Pablo	DATE STARTED / DATE FINISHED: 06 Jan 08 → 06 Jan 08	
DRILLING EQUIPMENT: DR-10K		COMPLETION WELL DEPTH: 16.5 ft	SAMPLER: Split Spoon
DRILLING METHOD: Solid Stem Auger	BORING DIA.: 4 inches	NO. OF SAMPLES: 3 Soil, 1 Grab Groundwater	
SIZE AND TYPE OF CASING: —	FROM — TO —	WATER LEVEL: FIRST ~ 12 ft bgs	MEASURED / SAMPLED: —
TYPE OF PERFORATION: —	FROM — TO —	CORE BARREL: 2.0 inch ϕ	LENGTH: 18 inches
SIZE AND TYPE OF PACK: —	FROM — TO —	LOGGED BY: EJVB	CHECKED BY: RWE
TYPE OF SEAL: NO. 1 Cement Grout	FROM 1.0 ft TO 16.5 ft	COMMENTS: Soil samples field screened with Photo-Ionization Detector (PID), results in parts per million (ppm).	
NO. 2 Bentonite Chips and Sand / Asphalt Patch	FROM 0.5 ft / 0.0 ft TO 1.0 ft / 0.5 ft		

DEPTH (feet)	Samples	Sample ID	Blows/ft	PID (ppm)	MATERIAL DESCRIPTION	USCS	WELL CONSTRUCTION
					Approx. 3" asphalt.		
					SAND (SP).	SP	
5		d5.5'	38	1.7	CLAY (CL) with Sand and Silt, dark greenish-gray and light olive brown mottling, very moist to almost wet; ~ 10-15% fine to very fine sand; FHC odor.	CL	
10		d10.5'	64	1355	Approx. 4" gray sand lense (SP) at 10 ft, very strong FHC odor, stained. CLAYEY SANDY GRAVEL (GC), gray staining, very wet; gravel up to 2", ~ 30 - 35% clay, ~ 30-35% very fine to very coarse sand; very strong FHC odor. ▽	GC	
15		d15.5'	40	14.7	SANDY SILT (ML) with Gravel, very wet to saturated; ~ 30-35% very fine sand, ~ 10-15% gravel. Some clayey sand lenses (~ 55% very fine to medium sand).	ML	
					TD: 16.5 ft bgs		
					Note: Water sample collected at 1010.		
20							

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LOG OF SOIL BORING B-2
Blank Property
990 San Pablo Avenue
Albany, California

FIGURE 4

JOB NUMBER	REVIEWED BY	DATE	REVISED	SHEET NO.
0589,002.07	EC&A, E.J. VandenBosch	January 2008		1 of 1

(TRACE #467/RG22Jan08)

BORING LOCATION: 990 San Pablo Ave., Albany, CA (Center of S entrance, ~ 5' from sidewalk)		ELEVATION AND DATUM: Ground Surface	BORING NO.: B-3
DRILLING AGENCY: Clear Heart Drilling, Inc.	DRILLER: Pablo	DATE STARTED / DATE FINISHED: 06 Jan 08 → 06 Jan 08	
DRILLING EQUIPMENT: DR-10K		COMPLETION / WELL DEPTH: 21.5 ft	SAMPLER: Split Spoon
DRILLING METHOD: Solid Stem Auger	BORING DIA.: 4 inches	NO. OF SAMPLES: 4 Soil, 1 Grab Groundwater	
SIZE AND TYPE OF CASING: —	FROM — TO —	WATER LEVEL: FIRST ~ 11 ft bgs	MEASURED / SAMPLED: ~ 19.0 ft
TYPE OF PERFORATION: —	FROM — TO —	CORE BARREL: 2.0 inch ϕ	LENGTH: 18 inches
SIZE AND TYPE OF PACK: —	FROM — TO —	LOGGED BY: EJVB	CHECKED BY: RWE
TYPE OF SEAL: NO. 1 Cement Grout	FROM 1.0 ft TO 21.5 ft	COMMENTS: Soil samples field screened with Photo-Ionization Detector (PID), results in parts per million (ppm).	
NO. 2 Bentonite Chips and Sand / Asphalt Patch	FROM 0.5 ft / 0.0 ft TO 1.0 ft / 0.5 ft		

DEPTH (feet)	Samples	Sample ID	Blows/ft	PID (ppm)	MATERIAL DESCRIPTION	USCS	WELL CONSTRUCTION
					Approx. 3" asphalt underlain by baserock fill to 1 ft bgs. [Fill] Sand, Silt and Gravel to ~ 2 ft bgs (Fill ?).		
					SILTY CLAY (CL), olive gray (5Y 4/2); faint FHC odor.	CL	
5		d5.5'	34	6.0	▼ Same as above; ~ 10 to 15% very fine sand; strong FHC odor (aged ?)		
					▼ Some gravel and increase in Silt and Sand at 6 ft, very moist to wet; ~ 15-20% gravel, ~ 20-30% sand, CLAYEY GRAVELLY SAND (SC) with Silt at 6.5 ft.	SC	
						GC	
10		d10.5'	44	269	CLAYEY SANDY GRAVEL (GC), saturated at 11 ft; gravel up to 1", increase in sand at 11.5 ft; very strong FHC odor and staining. ▽		
						CL	
15		d15.5'	27	8.0	SILTY CLAY (CL) with Sand, dark yellowish-brown (10YR 4/6) and light olive gray (5Y 6/2), moist (aquitard ?); mild FHC odor.		
					▼		
20		d20.5'	36	1.7	Approx. 2 ft water on outside of sampler at 20 ft sample; faint FHC odor. ▼ Same as above (aquitard ?), moist.		
					TD: 21.5 ft bgs		
					Note: Water sample collected at 1555. About 2.5 ft of water in boring.		

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ENVIRONMENTAL CONSULTANTS

LOG OF SOIL BORING B-3

Blank Property
990 San Pablo Avenue
Albany, California

FIGURE 5

JOB NUMBER	REVIEWED BY	DATE	REVISED	SHEET NO.
0589,002.07	EC&A, E.J. VandenBosch	January 2008		1 of 1

(TRACE #467/RG/16Jan08)

BORING LOCATION	990 San Pablo Ave., Albany, CA (Approx. center of parking lot)	ELEVATION AND DATUM	Ground Surface / BORING NO. B-4
DRILLING AGENCY	Clear Heart Drilling, Inc. / DRILLER Pablo	DATE STARTED / DATE FINISHED	06 Jan 08 → 06 Jan 08
DRILLING EQUIPMENT	DR-10K	COMPLETION WELL DEPTH / SAMPLER	16.5 ft / Split Spoon
DRILLING METHOD	Solid Stem Auger / BORING DIA. 4 inches	NO. OF SAMPLES	3 Soil, 1 Grab Groundwater
SIZE AND TYPE OF CASING	— / FROM — TO —	WATER LEVEL / FIRST / MEASURED / SAMPLED	~ 12 ft bgs / —
TYPE OF PERFORATION	— / FROM — TO —	CORE BARREL / LENGTH	2.0 inch ϕ / 18 inches
SIZE AND TYPE OF PACK	— / FROM — TO —	LOGGED BY: / CHECKED BY:	EJVB / RWE
TYPE OF SEAL NO. 1	Cement Grout / FROM 1.0 ft TO 16.5 ft	COMMENTS	Soil samples field screened with Photo-Ionization Detector (PID), results in parts per million (ppm).
TYPE OF SEAL NO. 2	Bentonite Chips and Sand Asphalt Patch / FROM 0.5 ft TO 1.0 ft; 0.0 ft TO 0.5 ft		

DEPTH (feet)	Samples	Sample ID	Blows/ft	PID (ppm)	MATERIAL DESCRIPTION	USCS	WELL CONSTRUCTION
					Approx. 3" asphalt.		
					SAND (SP), wet, poorly graded; fine to very fine sand, ≤ 10% fines; no odor.	SP	
5		d5.5'	34	948	FHC odors and staining at 5 ft bgs. SANDY SILT (ML) with Gravel and Clay, very moist; ~ 30-35% fine to very coarse sand, ~20-25% subrounded to rounded gravel up to 1/2".	ML	
10		d10.5'	28	421	SANDY CLAY (CL), very moist; FHC odor.	CL	
					GRAVELLY SAND (SM) with Silt and Clay, saturated; ~ 20-25% gravel up to ~ 5 mm, very fine to very coarse sand, ~ 10-15% silt and clay; FHC odor.	SM	
15		d15.5'	48	36.5	SANDY CLAY (CL) with Gravel, yellowish-brown (10YR 5/6), saturated, ~ 40% fine sand.	CL	
					TD: 16.5 ft bgs Note: Water sample collected at 0910.		
20							

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ENVIRONMENTAL CONSULTANTS

LOG OF SOIL BORING B-4

Blank Property
990 San Pablo Avenue
Albany, California

FIGURE 6

JOB NUMBER	REVIEWED BY	DATE	REVISED	SHEET NO.
0589,002.07	EC&A, E.J. VandenBosch	January 2008		1 of 1

(TRACE #457/RG/22Jan08)

BORING LOCATION	990 San Pablo Ave., Albany, CA (Northwest corner of parking lot)			ELEVATION AND DATUM: Ground Surface	BORING NO.: B-6
DRILLING AGENCY	Clear Heart Drilling, Inc.	DRILLER: Pablo		DATE STARTED / DATE FINISHED	06 Jan 08 → 06 Jan 08
DRILLING EQUIPMENT	DR-10K			COMPLETION WELL DEPTH: 21.5 ft	SAMPLER: Split Spoon
DRILLING METHOD	Solid Stem Auger	BORING DIA.: 4 inches		NO. OF SAMPLES	4 Soil, 1 Grab Groundwater
SIZE AND TYPE OF CASING	—	FROM — TO —		WATER LEVEL: FIRST ~ 19.5 ft bgs	MEASURED / SAMPLED: —
TYPE OF PERFORATION	—	FROM — TO —		CORE BARREL: 2.0 inch ϕ	LENGTH: 18 inches
SIZE AND TYPE OF PACK	—	FROM — TO —		LOGGED BY: EJVB	CHECKED BY: RWE
TYPE OF SEAL	NO. 1 Cement Grout	FROM 1.0 ft TO 21.5 ft		COMMENTS	Soil samples field screened with Photo-Ionization Detector (PID), results in parts per million (ppm).
	NO. 2 Bentonite Chips and Sand Asphalt Patch	FROM 0.5 ft TO 1.0 ft 0.0 ft TO 0.5 ft			

DEPTH (feet)	Samples	Sample ID	Blows/ft	PID (ppm)	MATERIAL DESCRIPTION	USCS	WELL CONSTRUCTION
					Approx. 3" asphalt underlain by ~ 0.75' baserock. [Fill]		
					SANDY SILT (CL) with Clay (Fill ?), damp.	CL	
					From cuttings: CLAY (CL), moist at 3 ft.		
5		d5.5'	58	7.9	SILTY SANDY CLAY (CL) with Gravel, moist; increase in sand, silt and gravel at 6 ft; mild FHC odor.		
					CLAYEY GRAVELLY SAND (SC).	SC	
10		d10.5'	18	102	SANDY CLAYEY SILT (ML), gray staining, very moist to wet; FHC odor.	ML	
					SANDY CLAY (CL), yellowish-brown (10YR 5/6) and light olive gray (5Y 6/2), moist; mild to moderate FHC odor.	CL	
15		d15.5'	32	5.8	SANDY SILT (ML) with Clay, ~ 25% very fine sand.	ML	
					Approx. 2 ft free water on outside of sampler. ▽		
20		d20.5'	32	2.0	SANDY SILTY CLAY (CL), moist to very moist, (aquitard material ?), medium plasticity; faint odor.	CL	
					TD: 21.5 ft bgs		
					Note: Water sample collected at 1430. Water probably entering boring in sand lense between 15 and 20 ft or in lense between 10 and 15 ft, but wasn't observed.		

(TRACE #467/RG/18Jan08)

EDD CLARK & ASSOCIATES, INC.
ENVIRONMENTAL CONSULTANTS

LOG OF SOIL BORING B-6

Blank Property
990 San Pablo Avenue
Albany, California

FIGURE 8

JOB NUMBER	REVIEWED BY	DATE	REVISED	SHEET NO.
0589,002.07	EC&A, E.J. VandenBosch	January 2008		1 of 1

BORING LOCATION	990 San Pablo Ave., Albany, CA (Northeast corner of parking lot)			ELEVATION AND DATUM: Ground Surface	BORING NO.: B-5
DRILLING AGENCY	Clear Heart Drilling, Inc.	DRILLER	Pablo	DATE STARTED / DATE FINISHED	06 Jan 08 → 06 Jan 08
DRILLING EQUIPMENT	DR-10K			COMPLETION / WELL DEPTH: 12.0 ft	SAMPLER: Split Spoon
DRILLING METHOD	Solid Stem Auger	BORING DIA.	4 inches	NO. OF SAMPLES	2 Soil, 1 Grab Groundwater
SIZE AND TYPE OF CASING	—	FROM —	TO —	WATER LEVEL: FIRST ~ 9.5 ft bgs	MEASURED / SAMPLED: —
TYPE OF PERFORATION	—	FROM —	TO —	CORE BARREL: 2.0 inch ϕ	LENGTH: 18 inches
SIZE AND TYPE OF PACK	—	FROM —	TO —	LOGGED BY: EJVB	CHECKED BY: RWE
TYPE OF SEAL	NO. 1 Cement Grout	FROM 1.0 ft	TO 12.0 ft	COMMENTS	Soil samples field screened with Photo-Ionization Detector (PID), results in parts per million (ppm).
	NO. 2 Bentonite Chips and Sand Asphalt Patch	FROM 0.5 ft 0.0 ft	TO 1.0 ft 0.5 ft		

DEPTH (feet)	Samples	Sample ID	Blows/ft	PID (ppm)	MATERIAL DESCRIPTION	USCS	WELL CONSTRUCTION
					Approx. 3" asphalt underlain by ~ 0.75' baserock. [Fill]		
					Water entering boring at ~ 2-3 ft bgs. (Perched)	CL	
5		45.5'	32	4.1	SANDY CLAY (CL) with Silt, dark yellowish-brown (10YR 4/6), moist to very moist; ~ 10-15% very fine sand; mild odor (sweet).		
10		d11.5'	54 (6") 58 (6")	240	Poor recovery (no sample). CLAYEY SANDY GRAVEL (GC). SANDY CLAYEY GRAVEL (GC), saturated; ~ 35-40% gravel, ~ 30% fine to coarse sand, ~ 30% clay, lenses of poorly graded medium sand; FHC and other odors and staining. Increase in clay at 12 ft (probably grading into sandy silty clay) and decrease in moisture to very moist.	GC	
					TD: 12.0 ft bgs		
					Note: Water sample collected at 1240.		
15							
20							

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FIGURE 7

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(TRACE #4467/RG/18Jan08)