Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
San Ramon, CA 94583
Phone: (925) 275-3801
Fax: (925) 275-3815

5 January 2009

Re: Work Plan for Soil & Ground-Water Investigation
Atlantic Richfield Company Station #2035
1001 San Pablo Avenue
Albany, California
ACEH Case # RO0000100

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by:

Paul Supple
Environmental Business Manger

Work Plan for Soil & Ground-Water Investigation
Atlantic Richfield Company Station No. 2035
1001 San Pablo Avenue, Albany, California
ACEHS Case No. RO0000100

Prepared for

Mr. Paul Supple
Environmental Business Manager
Atlantic Richfield Company
P.O. Box 1257
San Ramon, California 94583

Prepared by

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

1324 Mangrove Avenue, Suite 212
Chico, California 95926
(530) 566-1400
www.broadbentinc.com

5 January 2009

Project No. 06-08-610

Broadbent & Associates, Inc.
1324 Mangrove Ave., Suite 212
Chico, CA 95926
Voice (530) 566-1400
Fax (530) 566-1401

BROADBENT & ASSOCIATES, INC
ENVIRONMENTAL, WATER RESOURCES & ENGINEERING

5 January ~~2008~~ 2009

Project No. 06-08-610

Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583
Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Work Plan for Soil & Ground-Water Investigation, Atlantic Richfield Company Station No.2035, 1001 San Pablo Avenue, Albany, California; ACEH Case No.RO0000100

Dear Mr. Supple:

Broadbent & Associates, Inc. (BAI) is pleased to present this Work Plan for Soil and Ground-Water Investigation for additional subsurface characterization at the Atlantic Richfield Company Station No. 2035, located at 1001 San Pablo Avenue, Albany, California (Site). BAI prepared this work plan in response to the 7 November 2008 letter request from Mr. Paresh Khatri of Alameda County Environmental Health Services (ACEH). This work plan includes brief discussions on the Site background and previous investigations, regional and Site geology and hydrogeology, the proposed scope of work, and completion schedule.

Should you have questions or require additional information, please do not hesitate to contact us at (530) 566-1400.

Sincerely,
BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

Robert H. Miller, P.G., C.HG.
Principal Hydrogeologist

PROFESSIONAL GEOLOGIST
ROBERT H. MILLER
No. 561
CERTIFIED HYDROGEOLOGIST
9-30-10
STATE OF CALIFORNIA

Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
John Lestrange, 17851 State Hwy 128, Calistoga, California 94515
Mr. Robert Cave, Bay Area Air Quality Management District – Permit Division, 939 Ellis Street, San Francisco, California 94109
Electronic copy uploaded to GeoTracker

WORK PLAN FOR SOIL & GROUND-WATER INVESTIGATION
Atlantic Richfield Company Station No. 2035
1001 San Pablo Avenue, Albany, California
ACEH Fuel Leak Case No. RO100

TABLE OF CONTENTS

ATTACHMENTS

APPENDICES

WORK PLAN FOR SOIL & GROUND-WATER INVESTIGATION
Atlantic Richfield Company Station No. 2035
1001 San Pablo Avenue, Albany, California
ACEH Fuel Leak Case No. RO100

1.0 INTRODUCTION

On behalf of the Atlantic Richfield Company, RM – a BP affiliated company, Broadbent & Associates, Inc. (BAI) has prepared this Work Plan for Soil & Ground-Water Investigation at the Atlantic Richfield Company Station No. 2035, located at 1001 San Pablo Avenue, Albany, California (Site). This work plan was prepared in response to a letter request from the Alameda County Environmental Health Services (ACEH) dated 7 November 2008. A copy of this letter is provided in Appendix A. Specifically, ACEH technical comments within the 7 November 2008 letter requested confirmation soil sampling to evaluate the effectiveness of the remediation system that operated on-site between 1997 and 2004. The letter also requested an evaluation of on-site monitoring well construction, including a proposal for the construction of new, more-appropriately screened monitoring wells. This work plan includes brief discussions on the Site background and previous investigations, regional and Site geology and hydrogeology, the proposed scope of work, and completion schedule.

2.0 SITE BACKGROUND

The Site is an active ARCO-brand gasoline retail station that consists of a station building, four underground storage tanks (USTs), and four pump dispensers on two dispenser islands. The Site is located on the southeast corner of Marin and San Pablo Avenues in Albany, California (Drawing 1). The land use in the immediate vicinity of the Site is mixed commercial and residential. The Site is predominantly covered with concrete and asphalt.

On 9 August 1989, Applied GeoSystems (AGS) performed a limited environmental site assessment at the Site. A total of five soil borings (B-1 through B-5) were advanced to a maximum depth of 20.5 feet below ground surface (bgs) near the vicinity of the existing gasoline USTs to evaluate potential hydrocarbon contamination within the soil prior to the removal and replacement of the USTs. During drilling, first ground water was typically logged at occurring between 17 to 18 feet below ground surface (ft bgs). A total of fifteen soil samples were collected during this assessment and analyzed for total petroleum hydrocarbons as gasoline (TPHg), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). A summary of soil analytical results obtained during this investigation is provided in Appendix B. Soil boring logs are provided in Appendix C.

On 27 June 1991, RESNA observed the installation of two soil borings (B-6 and B-7) to depths of 18 and 19.5 ft bgs in the area of the new proposed UST complex to evaluate potential hydrocarbon contamination. During drilling, first ground water was logged at occurring at 18 and 19.5 ft bgs, respectively. Nine soil samples were collected from the borings and submitted for laboratory analysis of TPHg and BTEX. The locations of these borings and a summary of laboratory analytical data are provided in Appendix B. Soil boring logs are provided in Appendix C.

On 1 through 3 July 1991, RESNA observed the excavation and removal of four gasoline USTs. Following removal, several of the tanks were reported to have visible holes present. The excavation reached a total depth of approximately 12 ft bgs. Ground water was encountered in a

small area within the excavation of tank pit T4 at this depth. Soil samples were collected from native soil at depths between 12 and 13 ft bgs beneath each tank. Approximately 350 cubic yards were reportedly removed from the UST complex during excavation and removal activities. Laboratory analytical data and sample locations are provided in Appendix B.

On 19 July 1991, RESNA observed the excavation and removal of the product lines and dispensers at the Site. A total of 19 soil samples were collected from beneath the product lines and dispensers to depths up to 2.5 ft bgs. Soil samples were analyzed for TPHg and BTEX. A summary of laboratory analytical data and sample locations are presented in Appendix B.

On 14-16 October 1991, RESNA observed the advancement of four soil borings (B-8 through B-11), which were converted into ground-water monitoring wells RW-1, MW-1, MW-2, and MW-3, respectively. These first monitoring wells were installed to further evaluate the presence and extent of gasoline hydrocarbons in soil and ground water at the Site and to collect hydrologic data necessary for evaluation of aquifer characteristics. A total of 27 soil samples were collected during boring advancement. Prior to well construction, first ground water was initially encountered during drilling between approximately 19 to 23.5 ft bgs. Well RW-1 was constructed with a screened interval from approximately 11 to 26 ft bgs. Well MW-1 was constructed with a screened interval from approximately 15 to 30 ft bgs. Well MW-2 was constructed with a screened interval from approximately 20 to 29 ft bgs. Lastly, well MW-3 was constructed with a screened interval from approximately 12.5 to 32.5 ft bgs. Following well construction and development, ground water reportedly stabilized between approximately 11 to 11.5 ft bgs in the constructed wells. A summary of soil and ground-water laboratory analytical data and boring locations are provided in Appendix B. Soil boring and well construction logs are provided in Appendix C.

On 7 November 1991, RESNA conducted a step-drawdown test at well RW-1 to determine the optimum pumping rate for an aquifer pump test. An 18-hour pump test and six hour recovery test were then conducted on 14-15 November 1991. RW-1 was utilized as the pumping well and wells MW-1, MW-2, and MW-3 were used as observation wells.

On 19-21 August 1992, RESNA observed the advancement of eight soil borings (B-12 through B-19), six of which (B-14 through B-19) were converted into four-inch soil vapor extraction wells VW-1 through VW-6, respectively. First however, borings B-12 and B-13 were advanced to an approximate total depth of 21.5 ft bgs next to the former waste oil tank to evaluate the extent of waste oil hydrocarbons in the soil in the immediate vicinity of the former waste oil tank pit. Borings B-14 through B-19 were drilled to total approximate depths between 15.5 and 18.5 ft bgs. During drilling of borings B-16 (VW-3) and B-19 (VW-6) ground water was encountered at approximately 10 and 13 ft bgs, respectively. Well VW-1, VW-2, and VW-4 were constructed with screened intervals from approximately 5 to 17 ft bgs. Well VW-5 was constructed with a screened interval from approximately 4.5 to 14.5 ft bgs. Due to the encountered ground water, wells VW-3 and VW-6 were constructed with screened intervals between 4.5 to 9.5 and 5 to 12.5 ft bgs, respectively. A total of 37 soil samples were collected at five foot intervals or less to the total depth drilled within each boring during the investigation. Boring locations and soil analytical data are provided in Appendix B. Soil boring and well construction logs are provided in Appendix C.

On 25 August 1992, RESNA performed a one day soil vapor extraction test to collect specific site data and evaluate the feasibility of soil vapor extraction (SVE) as a soil remediation alternative. According to RESNA, the results obtained during this test indicated that SVE was a viable remediation technology based on observed flow rates, concentrations, and the radius of influence.

On 24-25 November 1992, RESNA observed the advancement of two on-site (B-20 and B-21) and one off-site (B-22) soil borings. Borings B-20 and B-21 were converted into on-site ground-water monitoring wells MW-4 and MW-5 in the southern portion of the Site. Boring B-22 was converted into off-site ground-water monitoring well MW-6 on the western side of San Pablo Avenue. The soil borings and monitoring wells were installed to further investigate the presence and extent of gasoline hydrocarbons in soil and ground water in the southern portion of the Site and in the down-gradient vicinity of the Site. A total of 19 soil samples were collected during this investigation. During drilling, first ground water was initially encountered between 13 to 14 ft bgs but later stabilized between 11.5 to 13.5 ft bgs. Monitoring wells were constructed with screened intervals between approximately 8 to 25.5 ft bgs. Soil and ground-water analytical data along with boring and well locations are provided in Appendix B. Soil boring and well construction logs are provided in Appendix C.

On 14-16 June 1993, RESNA observed the advancement of five soil borings (B-23 through B-27). Borings B-23, B-24, and B-25 were converted into soil vapor extraction wells (VW-7, VW-8, and VW-9) and borings B-26 and B-27 were converted into combination air sparge/soil vapor extraction wells (AS-1 and AS-2). Soil vapor extraction wells VW-7, VW-8, and VW-9 were constructed with screened intervals between approximately 6 to 15 ft bgs. Air sparge wells AS-1 and AS-2 were each constructed with sparge well screened intervals between approximately 29 to 31 ft bgs, with soil vapor extraction screen intervals between 5 to 15 ft bgs. A total of seventeen soil samples were submitted to the laboratory for analysis. Soil boring/well locations and analytical data are provided in Appendix B. Soil boring and well construction logs are provided in Appendix C.

On 25-26 August 1993, RESNA performed an air sparge/soil vapor extraction (AS/SVE) pilot test at the Site to evaluate the feasibility of utilizing air sparging to mobilize and remove gasoline hydrocarbons from ground water beneath the Site. Well AS-1 was used as the injection point while well AS-2 was utilized as a vapor extraction well. Bubble propagation was reportedly observed up to 20 feet from the sparge well.

In November 1993, construction of a remediation system on-site was completed. The system included both a ground-water extraction system (GWE) and AS/SVE system. A total of nine vapor extraction wells (VW-1 through VW-9), one ground-water extraction (RW-1), and two air sparge wells (AS-1 and AS-2) were utilized for operation of the remediation system. Initial startup of the AS/SVE system took place in December 1993. According to historic reports, the GWE system was not operated on-site. The AS/SVE system operated intermittently through February 2004, at which time it was shutdown due to minimal influent concentrations. Reportedly, approximately 3,967 pounds of TPHg and 258 pounds of benzene were removed from on-site soils during the operation of the AS/SVE system.

Ground-water monitoring has occurred on-site since October 1991. Historic ground-water data including elevations and concentrations are presented in Appendix B.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

According to the *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report* (California Regional Water Quality Control Board – San Francisco Bay Region/SFRWQCB, June 1999), the Site is located within the northwestern portion of the Berkeley Sub-Area in the East Bay Plain of the San Francisco Basin. The Berkeley Sub-Area contains a series of alluvial fans deposited on a west sloping bedrock surface. The alluvial deposits range from 10 to 300 feet deep, averaging 100 to 200 feet deep. According to this document, there is no historical evidence that ground-water supplies are sufficient for municipal use (primarily due to low recharge rates) and that there are no reported clay units that function as major aquitards. However, in the Berkeley Sub-Area the first encountered ground water is frequently reported as being semi-confined, particularly in West Berkeley.

Throughout most of the Alameda County portion of the East Bay Plain, from Hayward north to Albany, water level contours show that the general direction of ground water flow is from east to west or from the Hayward Fault to the San Francisco Bay. Ground-water flow direction generally correlates to topography. Flow direction and velocity are also influenced by buried stream channels that typically are oriented in an east-west direction. The nearest surface water drainage is Cordornices Creek, located approximately 1,100 feet south of the Site. The overall general flow direction of Cordornices Creek is from east to west.

The Site elevation is approximately 42 feet above mean sea level. The water table fluctuates seasonally and over time with recorded static depths to water in monitor wells at the Site ranging between a historic minimum depth below ground surface (bgs) of 5.69 ft (MW-3 on 2/01/2000) and maximum of 20.61 feet bgs (RW-1 on 11/08/1991). Historically, depth-to-water measurements have typically ranged between approximately 7.0 and 12.0 feet bgs (See Appendix B). Ground-water flow direction during the fourth quarter 2008 monitoring event on 24 November 2008 was to the west at a gradient of 0.02 ft/ft, typical according to the monitoring record. Historic ground-water flow directions and gradients for the Site are summarized in Appendix B.

According to the *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, the majority of East Bay Plain Cities (except the City of Hayward) do not have "any plans to develop local ground-water resources for drinking water purposes, because of existing or potential saltwater intrusion, contamination, or poor or limited quantity." The SFRWQCB's basin plan denotes existing beneficial uses of municipal and domestic supply (MUN), industrial process supply (PROC), industrial service supply (IND), and agricultural supply (AGR) for the East Bay Plain ground-water basin.

Geologic data derived from on-site borings generally indicates a fine-grained silty and gravelly clay to silty and gravelly sand layer between approximately one and ten feet bgs. A coarser-grained clayey to silty sand and sandy gravel water-bearing zone underlies the sand and clay layer between approximately eight and 15 feet bgs. A clayey to gravelly sand layer is present between approximately 15 and 30 feet bgs. Silty clays were observed in several borings beyond

30 feet bgs. Soil boring and well construction logs are provided in Appendix C. Copies of geologic cross-sections for the Site are also provided in Appendix D.

4.0 PROPOSED SCOPE OF WORK

4.1 Proposed Well Installation Locations

As referenced in the ACEH letter, the well screen intervals of several groundwater monitoring wells associated with the Site appear to be submerged. Specifically, submerged screen intervals are predominantly consistent in wells RW-1 and MW-1 through MW-3. Submerged well screen intervals were also mentioned to occasionally be observed in wells MW-4 through MW-6. However, historic depth to ground-water measurements collected at the Site show that the screen intervals have not been submerged since 20 February 1998 in well MW-4 (6.78 feet) and 16 February 1999 in well MW-5 (8.35 feet). The screened interval within well MW-6 has not been submerged since it was initially installed according to historic depth to ground-water measurements. The screened interval of well RW-1 has been submerged by a minimum of 0.04 feet and a maximum of 1.80 feet since November 2003. Due to these minor values and the fact that purging of the well during sampling activities should reduce the depth to water below the screened interval, it is not proposed to install a replacement well for RW-1. However, the significant submergence of the screened intervals in wells MW-1 through MW-3 warrants their replacement in the monitoring /sampling schedule with new wells in order to confidently obtain more representative ground-water concentrations from these areas. The proposed monitoring well locations are shown on Drawing 2.

4.2 Preliminary Activities, Local Permitting and Notification

Prior to initiating field activities, Stratus will obtain the necessary well permits from Alameda County; prepare a site health and safety plan (HASP) for the proposed work; clear the Site for subsurface utilities; and provide 72-hour advance written notification to ACEH (email preferred to paresh.khatri@acgov.org) and BAI (email tvenus@broadbentinc.com or mobile phone 530-588-5887) prior to the start of field activities. The utility clearance will include notifying Underground Service Alert (USA) of the pending work a minimum of 48 hours prior to initiating the field investigation, and securing the services of a private utility locating company to confirm the absence of underground utilities at each boring location. Boreholes will be physically cleared to five feet bgs using hand auger or air knife methods.

The Site-specific HASP will be prepared for use by personnel implementing the work plan. The HASP will address the proposed boring and monitoring well installations. A copy of the HASP will be available on-site during work. The subcontractor(s) performing field activities will be provided with a copy of the HASP prior to initiating work. A safety tailgate meeting will also be conducted daily to review the Site hazards and drilling work scope.

4.3 Proposed Soil Borings

At the request of ACEH, the purpose of the proposed soil investigation is to characterize residual hydrocarbon contamination within soils following operation of the soil vapor extraction remediation system on-site. Site soil conditions have been previously characterized in numerous site investigations, as described in the Site Background section. Specifically, the ACEH letter

references elevated total petroleum hydrocarbon concentrations observed in sample S-10-B16, which was collected during a soil investigation conducted by RESNA in August 1992, and elevated benzene concentrations observed in sample S-1-PL4, which was collected by RESNA during product line removal activities in July 1991. Analytical results and a site map depicting the boring locations from these investigations are provided in Appendix B.

BAI proposes advancing three borings to evaluate potential, residual petroleum hydrocarbon impacts to soil. Boring B-28 is proposed in the general vicinity of sample S-10-B16 and well MW-1, approximately 15 feet west-southwest of well MW-1 and five feet east of well VW-3 (S-10-B16 sample location). Boring B-29 is proposed in the general vicinity of sample S-1-PL4, approximately five feet east-southeast of well MW-2 and five feet northwest of the eastern dispenser islands. Boring B-30 is proposed in the general vicinity of existing well MW-3 in order to install supplemental well MW-9. Soil samples are not planned to be collected during the advancement of boring B-30. The proposed boring locations are shown in Drawing 2. The actual locations may be required to vary due to the potential presence of underground utility conflicts.

A Stratus field geologist will observe a California-licensed drilling company advance the soil borings using a hollow-stem auger drilling rig to a total approximate depth of 20 feet bgs. Depth to ground water will be measured in wells MW-1 (near B-28), MW-2 (near B-29), and MW-3 (near B-30) prior to drilling activities to establish baseline depths to water. The most recent ground-water monitoring event (Fourth Quarter 2008) indicated depth to water measurements of 10.55 feet in well MW-1, 10.70 feet in well MW-2, and 10.80 feet in well MW-3. Soils will be classified according to the Unified Soil Classification System (USCS), and will be examined using visual and manual methods for parameters including odor, staining, color, grain size, and moisture content. Soil samples will be collected at 1.5-foot intervals, beginning at a depth of five feet bgs following borehole clearance, until ground water is encountered (anticipated to be 5.0, 6.5, 8, and possibly 9.5 and 11 ft bgs, depending upon the encountered depth of ground water). The soil samples will be submitted to the laboratory for chemical analysis.

The samples will be submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove), a California State-certified environmental laboratory. The soil samples will be analyzed for the following: Gasoline Range Organics (GRO, C6-12) by EPA Method 8015B; Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX), tert-Amyl methyl ether (TAME), tert-Butyl alcohol (TBA), Di-isopropyl ether (DIPE), 1,2-Dibromomethane (EDB), 1,2-Dichloroethane (1,2-DCA), Ethanol, Ethyl tert-butyl ether (ETBE), and MTBE by EPA Method 8260.

Investigation-derived residuals will be temporarily stored on-site in 55-gallon drums, pending characterization for proper disposal. Stratus will coordinate the transportation and disposal of surplus soils and liquids to the appropriate California-regulated facilities.

4.4 Monitoring Well Construction

The wells will be constructed of threaded 4-inch diameter, Schedule 40 poly-vinyl chloride (PVC) and screened with 0.010-inch machine-cut slots. Proposed monitoring wells MW-7, MW-8 and MW-9 will contain screened intervals from six feet bgs to 20 feet bgs, the total depth of each well. A filter pack consisting of No.2/12 sand will be installed from total depth to two

feet above the top of the well screen, which will be overlain by three feet of bentonite, and bentonite-cement grout to the surface. A traffic-rated locking vault will be installed to protect the well head.

4.5 Monitoring Well Development and Sampling

At least 48 hours after well installation the new wells will be developed. The well development process will consist of surging and bailing the well to remove fine-grained sediments from the well and sand filter pack. A minimum of three and a maximum of ten wetted casing volumes of ground water will be removed until water quality parameters have stabilized. Periodic measurements of the water quality parameters pH, temperature, conductivity, and turbidity will be recorded during the development to establish baseline values for ground water. Purge water generated during development activities will be handled according to BP protocols and procedures.

After well development, the monitoring wells will be surveyed. A California-licensed Professional Land Surveyor will be scheduled to survey the well heads for top of casing elevation with respect to mean sea level, and for lateral position using northings and eastings per NAD'88. Survey information will be uploaded to GeoTracker.

The wells will be sampled no sooner than 48 hours after well development. The sampling procedure for the wells consists of first measuring the water level and depth to bottom, and checking for the presence of separate phase hydrocarbons (free product) using an electronic oil-water interface probe. If the well does not contain free product, it will be purged of approximately three wetted casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. During purging, temperature, pH, and electrical conductivity will be monitored to document that these parameters have stabilized prior to collecting samples. After purging, water levels will be allowed to partially (at least 80%) recover. Ground-water samples will be collected using a dedicated disposable bailer, placed into appropriate Environmental Protection Agency (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to the laboratory. Sample labels will include sample name, sampling time and date, analytical methods, and sampler's initials. If the well contains free product, it will not be sampled and free product will be removed according to California Code of Regulations, Title 23, Division 3, Chapter 16, Section 2655, UST Regulations.

Ground-water samples will be analyzed for the following: GRO by EPA Method 8015B; for BTEX, MTBE, ETBE, TAME, DIPE, 1,2-DCA, EDB, TBA, and Ethanol using EPA Method 8260B.

4.6 Well Installation Report

Upon completion of field activities and receipt of the certified field data package (including copies of permits, field data sheets, boring logs, and the laboratory analytical report with chain-of-custody documentation), BAI will prepare a Soil and Ground-Water Investigation Report. The report will document the results of the investigation, field activities, copies of required permit(s), copies of field notes, soil boring and well construction logs, laboratory analytical reports with copies of chain-of-custody records, discussion of findings, conclusions and

recommendations. Deviations from the work plan or data inconsistencies will be discussed in the report.

5.0 PROPOSED SCHEDULE

The schedule for the above-noted work shall proceed as follows:

- Implement Soil and Ground-Water Investigation – Upon approval of this work plan and obtaining the necessary permits.
- Submittal of Soil and Ground-Water Investigation Report – Within 60 days after completion of fieldwork.

Semi-annual ground-water monitoring will continue as scheduled. Proposed monitoring wells MW-7, MW-8, and MW-9 will be assimilated into the sampling schedule following the completion of installation activities. It is presently proposed to discontinue monitoring/sampling existing wells MW-1, MW-2 and MW-3.

6.0 CLOSURE

The findings presented in this document are based upon: observation of field personnel from previous consultants, the points investigated, and results of laboratory tests performed by various laboratories. Our services were performed in accordance with the generally accepted standard of practice at the time this document was written. No other warranty, expressed on implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

7.0 REFERENCES

ACEH, 7 November 2008. *Fuel Leak Case No. RO0000100, ARCO #2035, 1001 San Pablo Avenue, Albany, CA.* Submitted to Mr. Paul Supple for Atlantic Richfield, by Mr. Paresh Khatri.

Applied GeoSystems, 24 January 1990. *Report Limited Environmental Site Assessment, ARCO Station #2035, 1001 San Pablo Avenue, CA.*

Emcon Associates, 20 December 1994. *Third Quarter 1994 Ground-Water Monitoring Program Results, ACRO Station 2035, 1001 San Pablo Avenue, CA.*

Regional Water Quality Control Board, San Francisco Bay Region, Groundwater Committee, June 1999. *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report, Alameda and Contra Costa Counties, CA.*

RESNA, 11 September 1991. *Underground Gasoline-Storage Tank Removal and Replacement, ARCO Station #2035, 1001 San Pablo Avenue, CA.*

RESNA, 6 March 1991. *Subsurface Environmental Investigation and Pump Test, ARCO Station #2035, 1001 San Pablo Avenue, Albany, CA.*

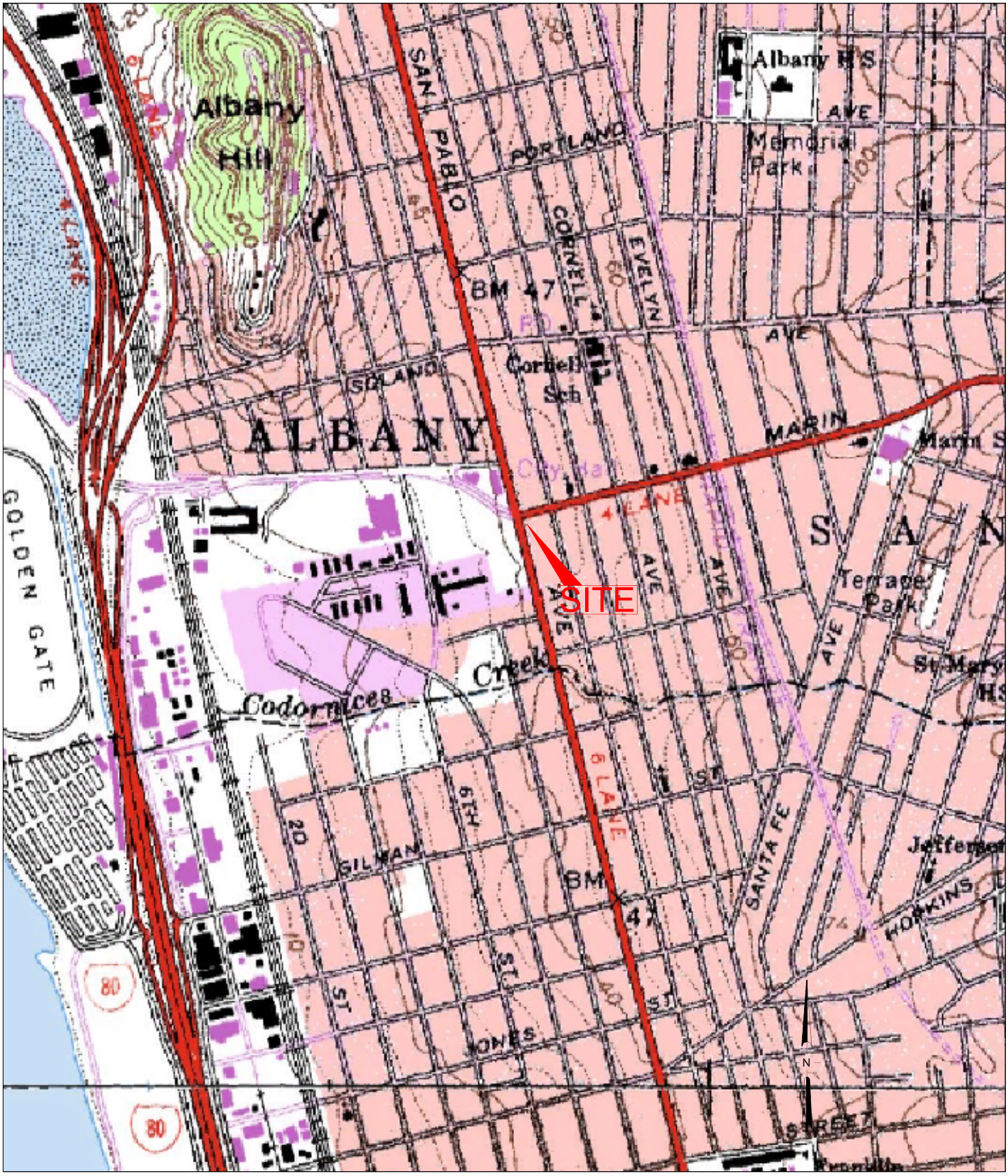
RESNA, 30 November 1992. *Additional Subsurface Environmental Investigation and Vapor Extraction Test, ARCO Station #2035, 1001 San Pablo Avenue, Albany, CA.*

RESNA, 3 March 1993. *Remedial Action Plan and Interim Soil and Ground-Water Remediation, ARCO Station #2035, 1001 San Pablo Avenue, Albany, CA.*

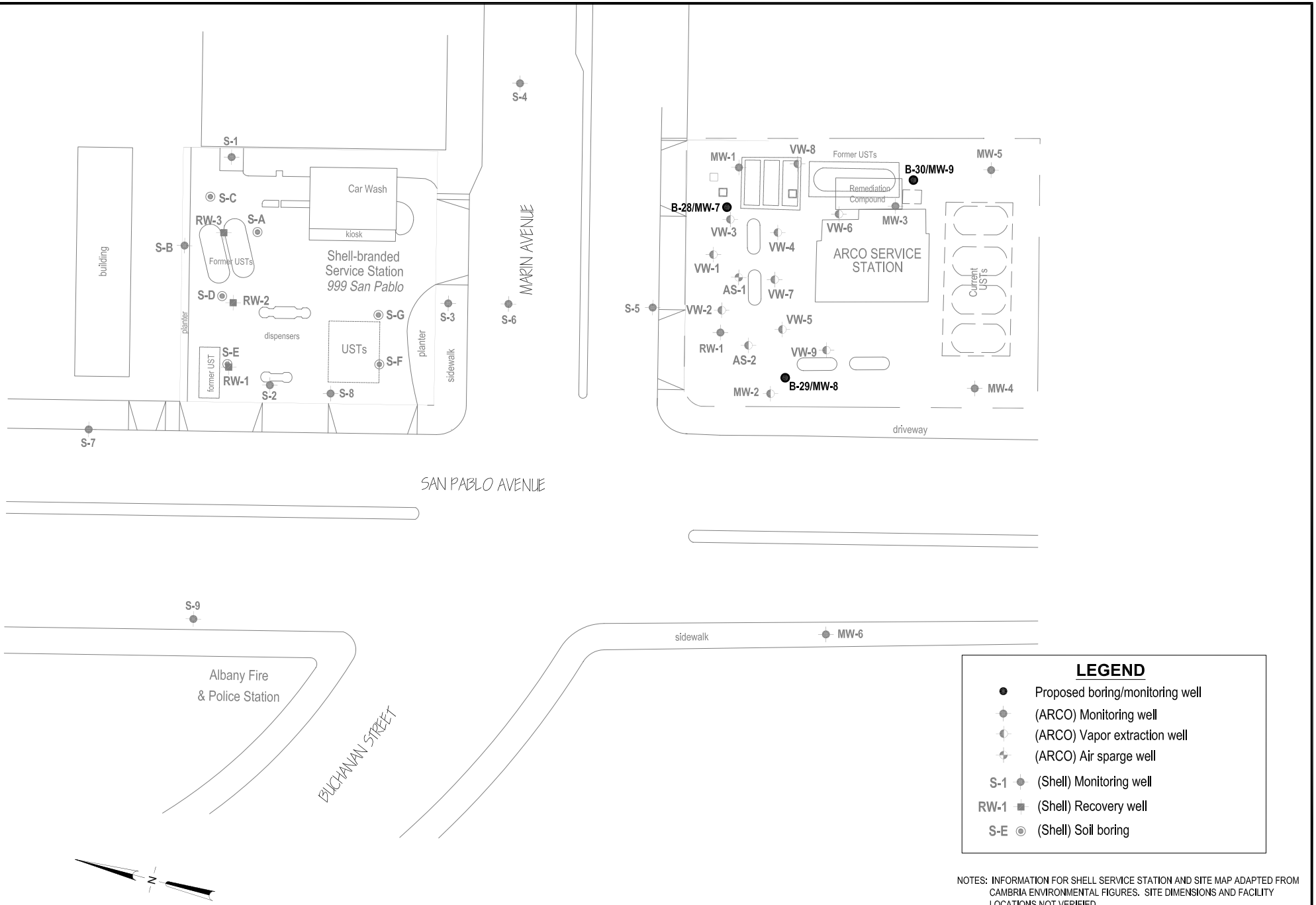
RESNA, 30 April 1993. *Additional On-Site and Initial Off-Site Subsurface Investigation, ARCO Station #2035, 1001 San Pablo Avenue, Albany, CA.*

RESNA, 13 April 1994. *Report of Findings Air Sparge Pilot Test, ARCO Station #2035, 1001 San Pablo Avenue, Albany, CA.*

URS Corporation, 27 July 2004. *First Semi-Annual 2004 Ground-Water Monitoring & Remediation System Operation & Maintenance Report, ARCO Station #2035, 1001 San Pablo Avenue, Albany, CA.*



BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL 1324 Mangrove Ave. Suite 212, Chico, California Project No.: 06-08-602 Date: 12/17/08	Former BP Service Station #2035 1001 San Pablo Avenue Albany, California	Site Vicinity Map	Drawing 1



NOTES: INFORMATION FOR SHELL SERVICE STATION AND SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL FIGURES. SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

0 50 100 SCALE (ft)	BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL 1324 Mangrove Ave. Suite 212, Chico, California Project No.: 06-08-610 Date: 12/30/08	ARCO Service Station #2035 1001 San Pablo Avenue Albany, California	Site Plan with Proposed Boring and Monitoring Well Locations Drawing 2

APPENDIX A.

RECENT REGULATORY 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

November 7, 2008

Paul Supple
Atlantic Richfield Company
(A BP Affiliated Company)
P.O. Box 1257
San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000100 and GeoTracker Global ID T0600100081, ARCO #02035, 1001 San Pablo Avenue, Albany, CA 94706

Dear Mr. Supple:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the recently submitted document entitled, "Second Quarter 2008 Semi-Annual Ground-Water Monitoring Report," dated July 25, 2008, which was prepared by Broadbent and Associates, Inc. (BAI) and the document entitled, "Remediation Treatment Modification Proposal," prepared by URS Corporation. According to URS, a Soil Vapor Extraction (SVE) treatment system operated at the site from 1997 to 2004. System influent concentrations have been primarily non-detect in 2004 and the treatment system operation ceased. URS subsequently proposed that natural attenuation monitoring be performed at the site.

According to BAI, the groundwater analytical results collected on May 6, 2008 detected TPH-g, and benzene at 7,400 µg/L and 320 µg/L, respectively, in a groundwater sample collected from an off-site groundwater monitoring well S-5, installed by GeoStategies, Inc. for the Shell station located at 999 San Pablo Avenue. Groundwater sample analytical results from the onsite wells detected significantly lower concentrations of hydrocarbons. Atlantic Richfield Corporation is currently waiting for ACEH to respond to URS's proposal.

ACEH requests that you address the following technical comments, perform the proposed work, and send us the technical work plans and reports described below.

TECHNICAL COMMENTS

1. **Confirmation Soil Sampling** – As mentioned above, a SVE system operated at the site from 1997 to 2004 to remediate free product that was detected from 1991 to 1993. Prior to system startup, concentrations of TPH-g and benzene in soil were detected as high as 4,300 mg/kg (in soil sample S-10-B16) and 36 mg/kg benzene (in soil sample S-1-PL4), respectively. Although URS reported that approximately 3,967.3 lbs of TPH-g and 257.5 lbs of benzene were removed from the site, the concentrations of residual hydrocarbons in soil appears unknown at the site. Please propose a scope of work to address the above-mentioned concerns and submit a work plan due by the date specified below.

2. **Groundwater Monitoring Wells and Hydrogeologic Setting** – Several groundwater monitoring wells at the site appear to have submerged well screened intervals. This appears especially evident in monitoring wells RW-1 and MW-1 through MW-3 (see Table 1 below). Monitoring well screens for wells MW-4 through MW-6 may be submerged occasionally based on the depth to groundwater measurements collected at the site, which have ranged from approximately 7 feet to 13 feet bgs.

Table 1: Monitoring Well Construction Details

Boring ID	MW ID	Screened Interval (ft, bgs)	Boring TD (ft, bgs)	Depth to GW (ft, bgs)
B-8	RW-1	11 to 26	29	7.36 to 13.11
B-9	MW-1	15 to 30	31.5	7.36 to 13.11
B-10	MW-2	20 to 29	33	7.36 to 13.11
B-11	MW-3	12.5 to 32.5	34.5	7.36 to 13.11
B-14	VW-1	5 to 17	18.5	7.36 to 13.11
B-15	VW-2	5 to 17	17.5	7.36 to 13.11
B-16	VW-3	4.5 to 9.5	15.5	7.36 to 13.11
B-17	VW-4	5 to 17	18.5	7.36 to 13.11
B-18	VW-5	4.5 to 14.5	16.5	7.36 to 13.11
B-19	VW-6	5 to 12.5	16.5	7.36 to 13.11
B-20	MW-4	8.5 to 25.5	29	7.36 to 13.11
B-21	MW-5	8.5 to 25	26.5	7.36 to 13.11
B-22	MW-6	8 to 25	26.5	7.36 to 13.11
B-23	VW-7	6 to 15	15.5	7.36 to 13.11
B-24	VW-8	6 to 15	15.5	7.36 to 13.11
B-25	VW-9	6 to 15	15.5	7.36 to 13.11
S-5	S-5	6 to 16	20.5	7.36 to 13.11

Since groundwater elevation is above the screened interval for several site groundwater monitoring wells and petroleum hydrocarbons have a specific gravity that is lower than water (therefore, float on water); concentrations of contaminants detected may not be representative of actual site conditions. Therefore, the monitoring wells appear to be incorrectly constructed, which may affect the contaminant concentrations detected in groundwater. Please evaluate and discuss the effect that groundwater elevations rising above monitoring well screens have on hydrocarbon concentrations for each monitoring well at the site. Please note that the Shell monitoring well S-5, which appears to be constructed with an appropriate screened interval from 6 to 16 feet bgs has detected the highest concentrations of hydrocarbons at the site and free product was detected at the subject site from 1991 to 1993 in RW-1. Please address the above-mentioned concerns and include your analysis in the subsurface investigation report requested below. Also please construct the proposed monitoring wells so that accurate groundwater concentrations, indicative of actual site conditions can be collected.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule and complete the fieldwork activities by the date specified below and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork, including routine groundwater sampling.

TECHNICAL REPORT REQUEST

Please submit technical reports to ACEH (Attention: Paresh Khatri), according to the following schedule:

- **January 5, 2009** – Soil and Water Investigation Work Plan
- **January 30, 2009** – Semi-annual Monitoring Report (4th Quarter 2008)
- **July 30, 2009** – Semi-annual Monitoring Report (2nd Quarter 2009)

These reports are 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) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Paresh C. Khatri
Hazardous Materials Specialist

Donna L. Drogos, PE
Supervising Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Tom Venus, Broadbent & Associates, Inc., 1324 Mangrove Ave., Ste 212, Chico, CA 95926
Donna Drogos, ACEH
Paresh Khatri, 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

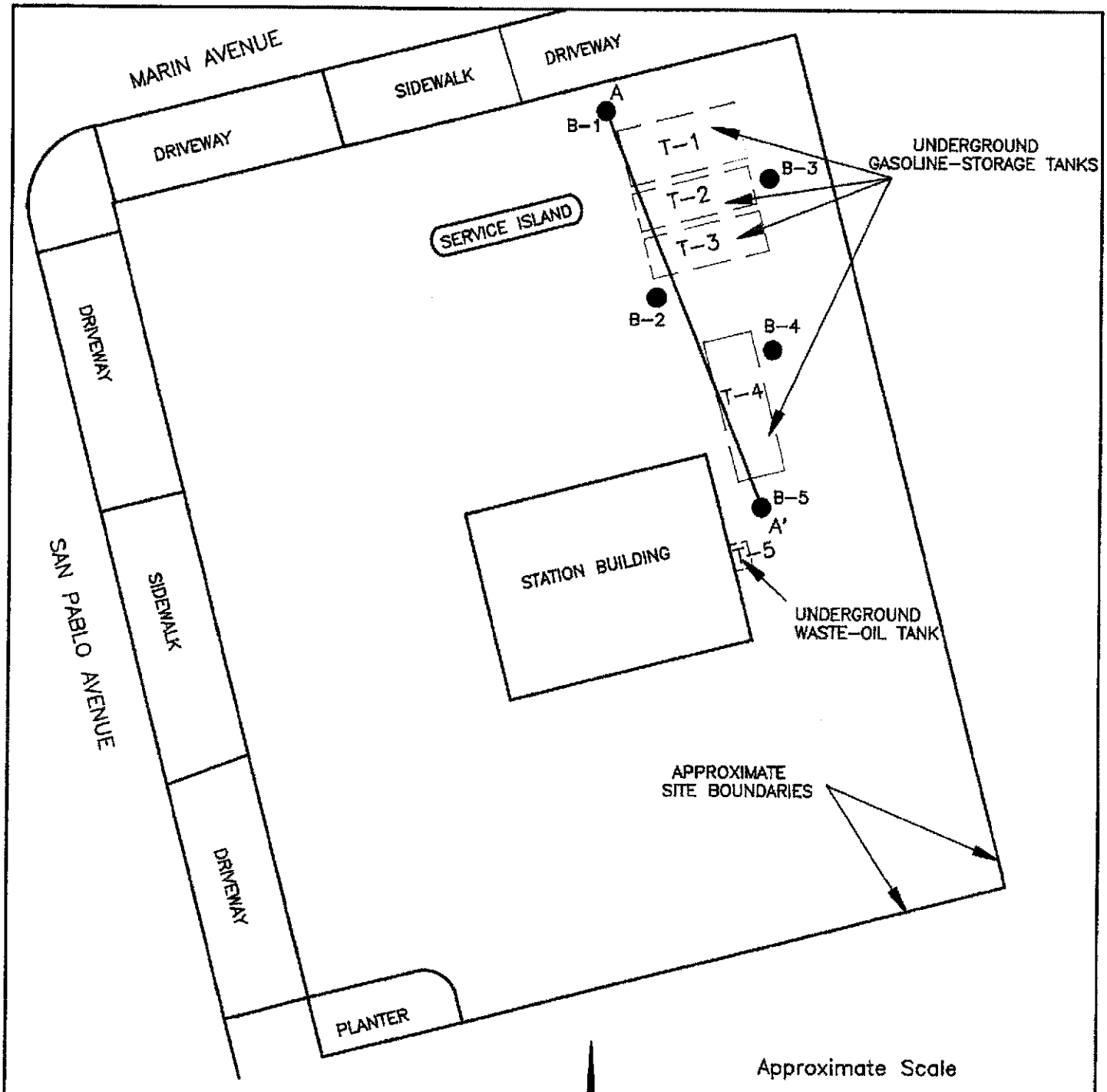
1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention 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.

HISTORIC SOIL AND GROUND-WATER DATA



Applied GeoSystems

PROJECT NO. 69036-1

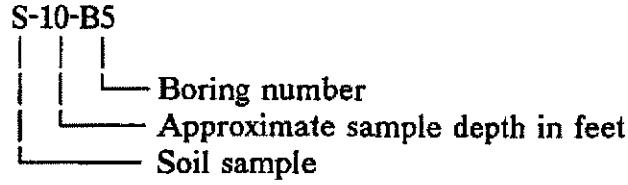
GENERALIZED SITE PLAN
ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

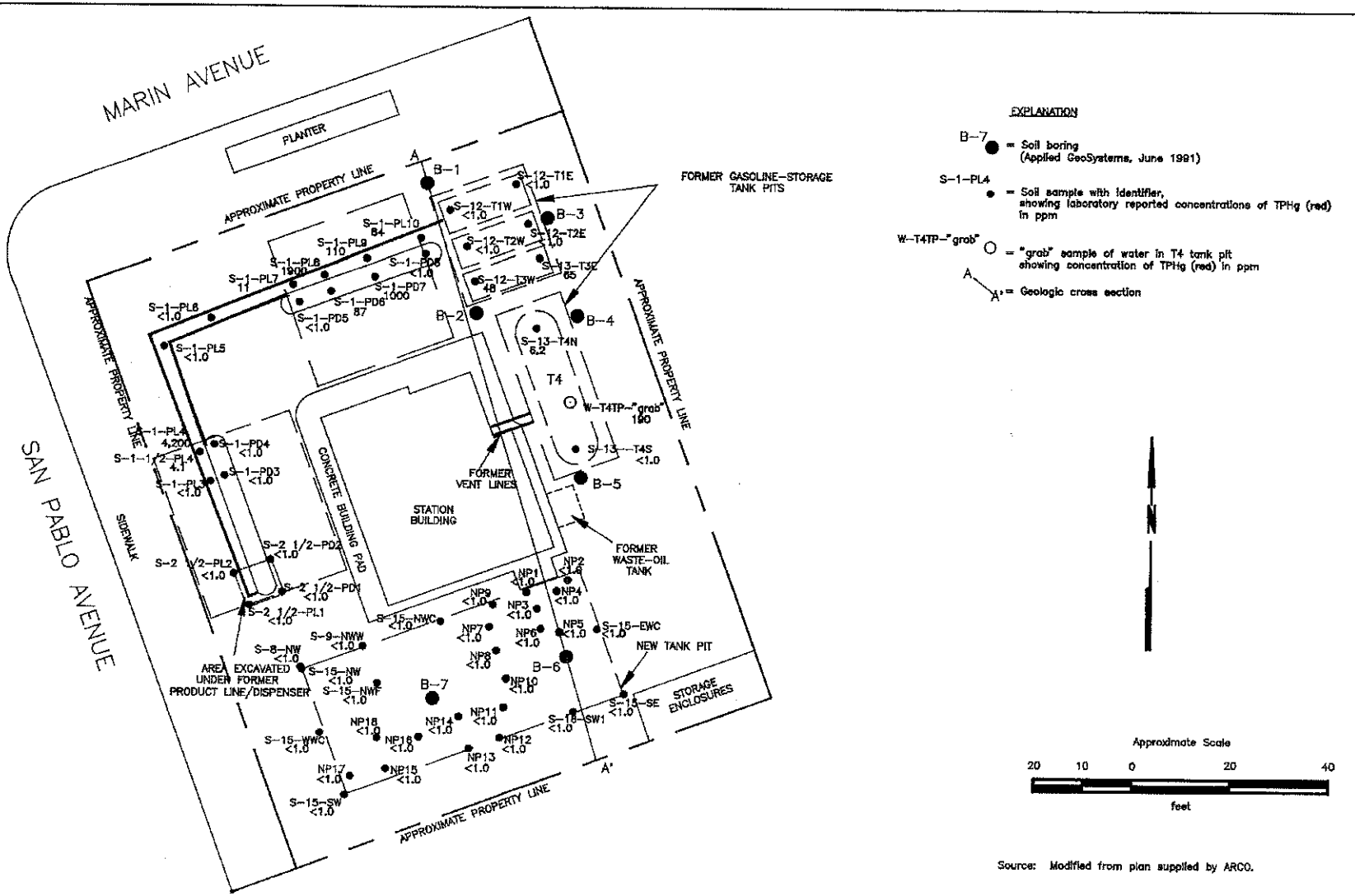
PLATE
P - 2

TABLE 1
RESULTS OF LABORATORY ANALYSIS OF SOIL SAMPLES
ARCO Station No. 2035
Southeast Corner of Marin and San Pablo Avenues
Albany, California

Sample Identifier	TPHg	B	T	E	X
S-10-B1	1,900	<4	15	8	53
S-15-B1	<1	<.005	.006	<.005	<.005
S-19-1/2-B1	<1	<.005	<.005	<.005	<.005
S-10-B2	51	1.9	.35	.81	4.0
S-14-1/2-B2	<1	.063	<.005	<.005	<.005
S-20-B2	<1	.039	.044	.007	.041
S-10-B3	75	3.1	8.2	1.8	11.0
S-14-1/2-B3	<1	.21	<.025	<.025	.039
S-20-B3	<1	<.005	<.005	<.005	<.005
S-10-B4	2,400	33	140	40	220
S-15-B4	520	<1	6.9	6.2	6.3
S-19-B4	<1	<.005	.007	<.005	<.005
S-9-1/2-B5	<1	.007	.006	<.005	<.005
S-15-B5	<1	<.005	.006	<.005	<.005
S-20-B5	<1	<.005	<.005	<.005	<.005

Results in milligrams per kilogram (mg/kg), or parts per million (ppm).
TPHg: Total petroleum hydrocarbons as gasoline
B:benzene T:toluene E:ethylbenzene X:total xylene isomers
<: indicates less than the reported limit.
Sample identification:





Source: Modified from plan supplied by ARCO.

Applied GeoSystems

PROJECT 69036.03

SOIL SAMPLING
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
3

TABLE 1
LABORATORY ANALYSIS OF NEW TANK PIT SOIL SAMPLES
ARCO Station 2035
Albany, California
(Page 1 of 2)

Sample ID	B	T	E	X	TPHg
June 25, 1991					
S-5½-B6	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-10½-B6	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15½-B6	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-17-B6	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-5½-B7	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-10½-B7	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15½-B7	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-17-B7	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-18½-B7	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
July 8, 1991					
S-15-EWC	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15-SE	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-16-SW1	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15-SW	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15-NWC	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15-WWC	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15-NWF	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-9-NWW	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-8-NW	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-15-NW	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
July 9, 1991					
S-0709-NP1(10')	0.025	0.027	0.0060	0.024	<1.0
S-0709-NP2(14')	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-0709-NP3(10')	<0.0050	0.0050	<0.0050	0.018	<1.0
S-0709-NP4(15)	0.0050	0.0050	<0.0050	<0.0050	<1.0
S-0709-NP5(5')	0.012	0.013	<0.0050	0.0080	<1.0
S-0709-NP6(15')	0.017	0.021	0.014	0.056	<1.0
S-0709-NP7(3')	0.0060	0.0060	<0.0050	<0.0050	<1.0
S-0709-NP8(14')	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-0709-NP9(9')	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-0709-NP10(10')	0.0090	0.0060	<0.0050	<0.0050	<1.0

See notes on page 2 of 2.

TABLE 1
LABORATORY ANALYSIS OF NEW TANK PIT SOIL SAMPLES
ARCO Station 2035
Albany, California
(Page 2 of 2)

Sample ID	B	T	E	X	TPHg
S-0709-NP11(8')	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-0709-NP12(14')	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-0709-NP13(2')	<0.0050	<0.0050	<0.0050	<0.0050	<1.0
S-0709-NP14(6')	<0.0050	<0.0050	0.0050	0.0080	<1.0
S-0709-NP15(5')	<0.0060	<0.0050	<0.0050	0.0060	<1.0
S-0709-NP16(16')	<0.0050	<0.0050	0.0050	0.0080	<1.0
S-0709-NP17(10')	<0.0050	<0.0050	0.0050	0.0080	<1.0
S-0709-NP18(11')	<0.0050	<0.0050	0.0050	0.0080	<1.0

Results in parts per million (ppm).
<: Less than the indicated laboratory detection limit.
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes
TPHg: Total petroleum hydrocarbons as gasoline
TPHg with BTEX distinction measured by EPA Methods 5030/8015/8020)

Sample Identification:

Soil Borings:

S-5½-B6
- Boring number
- Depth of sample
- Soil sample

Excavation Samples:

S-0709-NP1(10')
- New tank pit consecutive number (sample depth)
- Date of sample
- Soil sample

Sidewall and Floor Samples:

S-15-EWC
- Location identifier
- Depth of sample
- Soil sample

TABLE 2
LABORATORY ANALYSIS OF FORMER GASOLINE TANK PIT SOIL SAMPLES
ARCO Station 2035
Albany, California

Sample ID	B	T	E	X	TPHg	TOG	VOC	Pb
July 3, 1991								
S-12-T1W	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	NA	NA	NA
S-12-T1E	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	NA	NA	NA
S-12-T2W	0.031	<0.0050	0.0080	<0.0050	<1.0	NA	NA	NA
S-12-T2E	0.019	<0.0050	<0.0050	<0.0050	<1.0	NA	NA	NA
S-12-T3W	1.2	2.4	1.0	3.8	48	NA	NA	<0.05
S-12-T3E	0.2	0.51	0.97	3.9	65	NA	NA	<0.05
S-13-T4N	0.45	0.039	0.18	0.33	6.2	NA	NA	NA
S-13-T4S	0.061 (0.160)	0.034	0.0080	0.15 (0.430)	<1.0	<30	ND	NA

Results in parts per million (ppm). NA: Not analyzed.
<: Less than the indicated laboratory detection limit
ND: Less than laboratory limit for each compound, except benzene and total xylenes
( ): Indicates results measured by EPA Method 8240
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes
TPHg: Total petroleum hydrocarbons as gasoline
(TPHg with BTEX distinction measured by EPA Methods 5030/8015/8020)
TOG: Total oil and grease (measured by Standard Method 5520 E and F)
VOC: Volatile organic compounds (measured by EPA Method 8240)
Pb: Organic lead (measured by California LUFT Manual Method, 12/87)

Sample Identification: S-12-T1W

- Tank number and locator
- Depth of sample
- Soil sample

TABLE 3
LABORATORY ANALYSIS OF PRODUCT-LINE
AND PRODUCT-DISPENSER SOIL SAMPLES
ARCO Station 2035
Albany, California

Sample ID	B	T	E	X	TPHg
July 19, 1991					
S-2½-PL1	<0.005	<0.005	<0.005	<0.005	<1.0
S-2½-PL2	<0.005	<0.005	<0.005	<0.005	<1.0
S-1-PL3	0.005	0.02	0.016	0.12	1.7
S-1-PL4	36	320	100	640	4,200
S-1-PL5	<0.005	<0.005	<0.005	<0.005	<1.0
S-1-PL6	<0.005	<0.005	<0.005	<0.005	<1.0
S-1-PL7	0.10	0.37	0.16	1.2	11
S-1-PL8	3.6	28	29	200	1,900
S-1-PL9	0.2	0.78	0.36	3.1	110
S-1-PL10	0.09	0.43	0.72	2.8	84
S-2½-PD1	<0.005	<0.005	<0.005	<0.005	<1.0
S-2½-PD2	<0.005	<0.005	<0.005	<0.005	<1.0
S-1-PD3	<0.005	<0.005	<0.005	<0.005	<1.0
S-1-PD4	<0.005	<0.005	<0.005	12	330
S-1-PD5	<0.005	<0.005	<0.005	<0.005	<1.0
S-1-PD6	0.13	0.28	0.48	3.8	87
S-1-PD7	0.35	2.1	1.1	47	1,000
S-1-PD8	<0.005	<0.005	<0.005	<0.005	<1.0
August 9, 1991					
S-1½-PL4	0.21	0.040	0.15	0.12	4.1

Results in parts per million (ppm).
<: Less than the laboratory detection limit.
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes
BTEX: Measured by EPA Method .
TPHg: Total petroleum hydrocarbons as gasoline (measured by EPA Method).

Sample Identification: S-1½-PL1

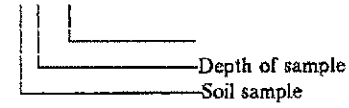


TABLE 4
LABORATORY ANALYSIS OF COMPOSITE SOIL SAMPLES
ARCO Station 2035
Albany, California

Sample ID	B	T	E	X	TPHg	Pb
July 7, 1991						
S-0709-SP(A-D)	0.16	0.76	0.051	7.8	200	NA
July 22, 1991						
S-0722-1(a-d)	<0.0050	<0.0050	<0.0050	<0.0050	78	NA
S-0722-2(a-d)	0.05	0.1	0.05	0.34	81	NA
July 23, 1991						
S-0723-3(a-d)	0.032	0.035	0.045	0.17	130	NA
S-0723-4(a-d)	<0.0050	<0.0050	<0.0050	0.054	31	<0.05
July 25, 1991						
S-0725-3(a-d)	0.0080	0.0080	0.011	0.049	31	NA
S-0725-5(a-d)	<0.0050	0.0070	<0.0050	0.010	47	NA
S-0725-6(a-d)	0.0080	0.018	0.029	0.10	49	NA
S-0725-7(a-d)	0.013	0.018	0.032	0.22	65	NA

Results in parts per million (ppm). NA: Not analyzed.
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes
BTEX: Measured by EPA Method .
TPHg: Total petroleum hydrocarbons as gasoline (measured by EPA Method).
Pb: Organic lead (measured by California LUFT Manual, 12/87).

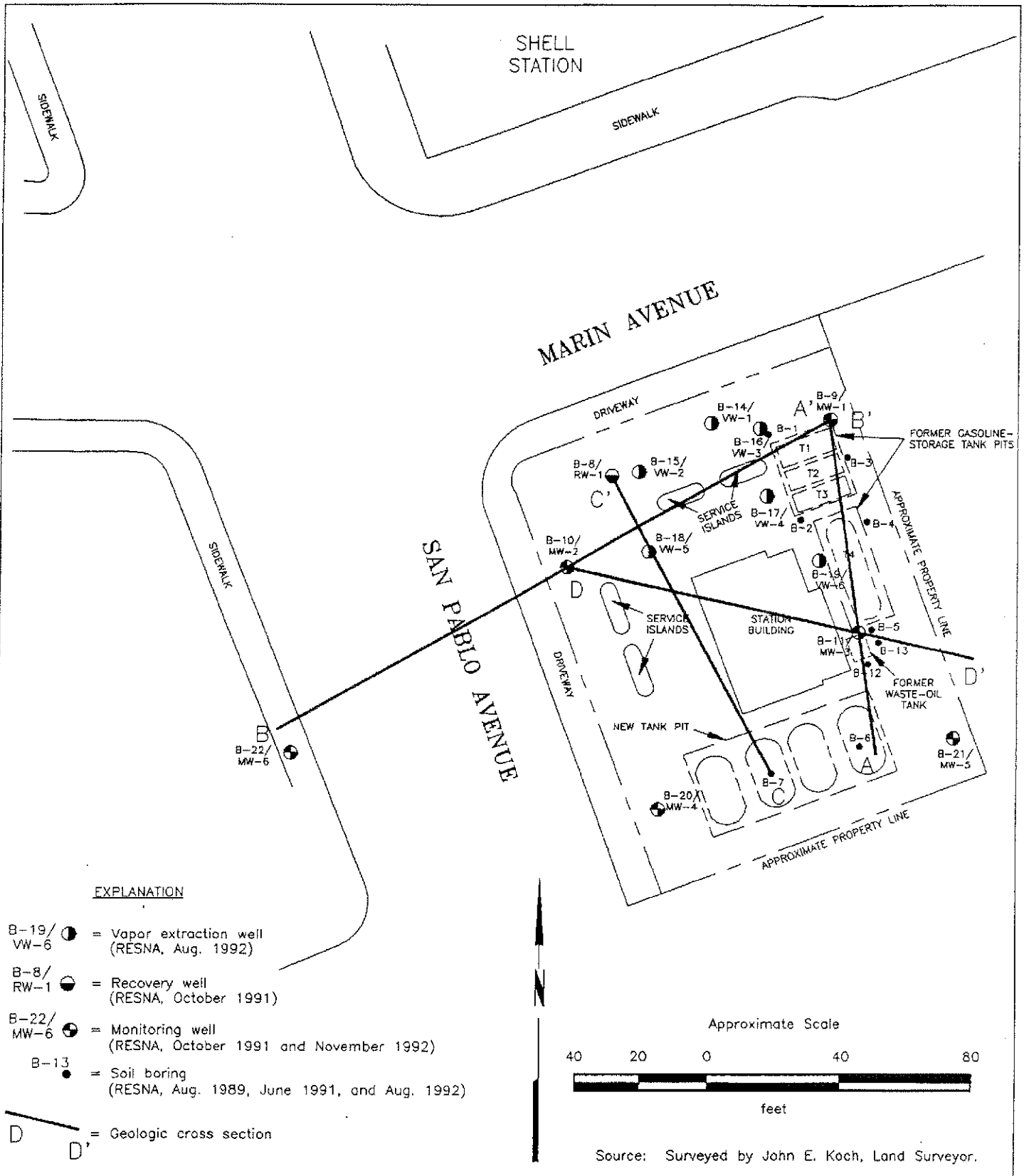
Sample Identification:

TABLE 6
RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES
ARCO Station 2035
Albany, California
October 1991

Date Sample ID	TPHg	B	T	E	X	TPHd	TOG	VOC	Cd	Cr	Pb	Ni	Z
S-6-B8	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-11-B8	35	1.2	1.7	0.42	2.0	NA	NA	NA	NA	NA	NA	NA	NA
S-16-B8	3.0	0.45	0.13	0.11	0.47	NA	NA	NA	NA	NA	NA	NA	NA
*S-30-B8	240	3.6	5.0	4.1	16	NA	NA	NA	NA	NA	NA	NA	NA
S-6-B9	25	0.60	0.58	0.44	1.8	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B9	13	0.74	0.72	0.18	0.95	NA	NA	NA	NA	NA	NA	NA	NA
S-16-B9	<1.0	0.015	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-31-B9	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-13-B10	4.0	0.13	0.15	0.041	0.16	NA	NA	NA	NA	NA	NA	NA	NA
S-20½-B10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-30½-B10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-6-B11	<1.0	0.010	<0.0050	<0.0050	<0.0050	3.9	80	ND	<0.50	49	7.7	97	41
S-11-B11	110	<0.0050	<0.0050	<0.0050	0.27	71	43	ND	<0.50	80	5.8	77	69
S-16-B11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	57	ND	<0.50	33	7.5	25	45
S-21-B11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	74	ND	<0.50	39	7.2	32	56

Results in parts per million (ppm).
TPHg: Total petroleum hydrocarbons as gasoline by EPA method 5030/8015/8020.
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes isomers
BTEX: Analyzed by EPA method 5030/8015/8020.
TPHd: Total Petroleum Hydrocarbons as diesel by EPA method 3350/8015.
TOG: Total oil and grease by Standard method 5520 E&F.
VOC: Volatile organic compounds by EPA method 5030/8010.
Cd: Cadmium by EPA method 6010.
Cr: Chromium by EPA method 6010.
Ni: Nickel by EPA method 6010.
Zn: Zinc by EPA method 6010.
Pb: Lead by EPA method 7421.
NA: Not analyzed.
<: Results reported below the laboratory detection limit.
ND: All 29 compounds tested were nondetectable. Detection limits varied for different compounds.
*: Sample collected from the saturated zone, analyzed for site characterization purposes only.

Sample Identification: S-21-B11
- Boring number
- Depth in feet
- Soil Sample



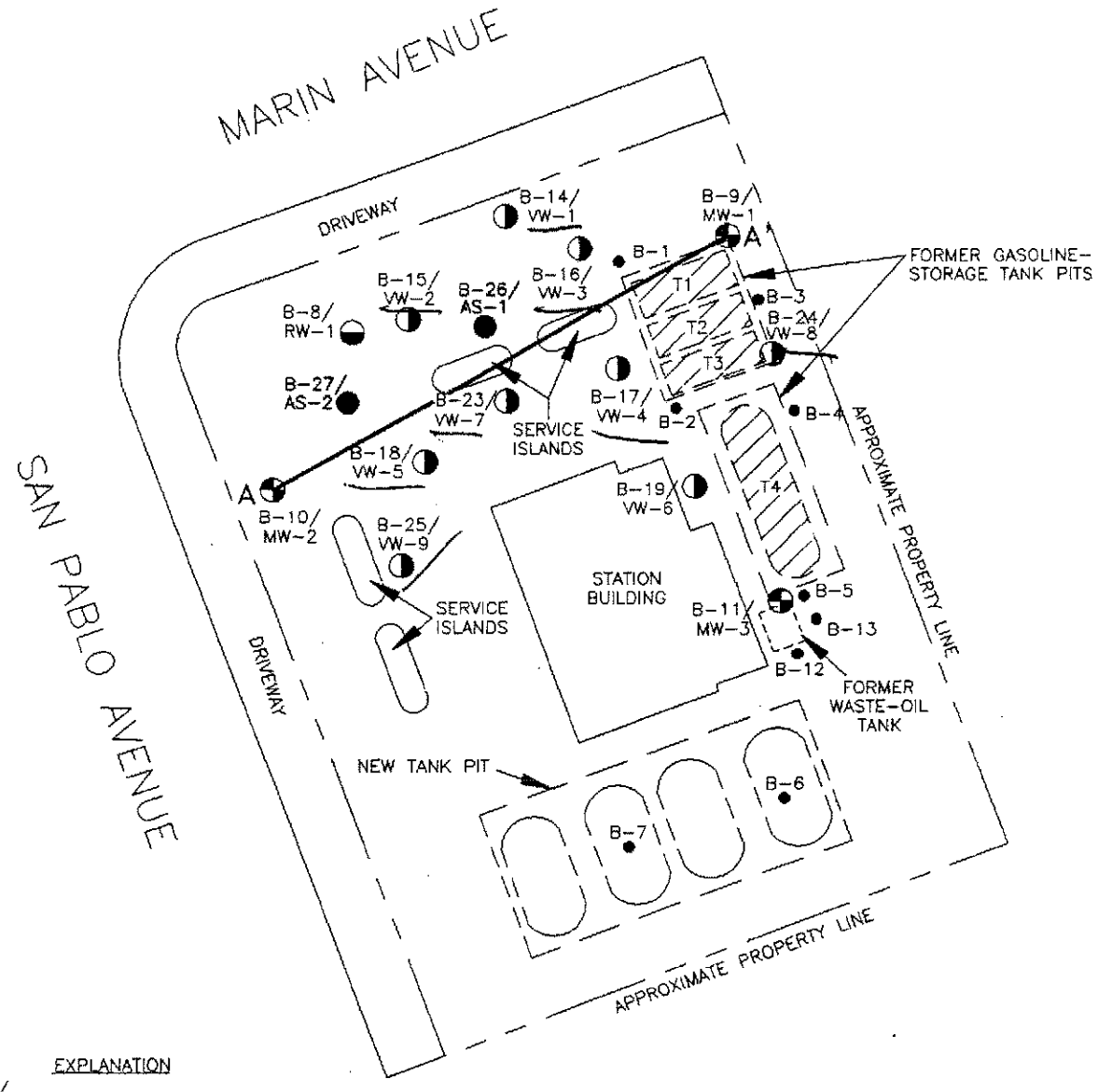
Source: Surveyed by John E. Koch, Land Surveyor.

RESNA
Working to Restore Nature

PROJECT 69036.07 Drawn: 3/5/J 690367SP

GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
3



EXPLANATION

B-19/ VW-6 = Boring/vapor extraction well (RESNA, August 1992 and June 1993)

B-8/ RW-1 = Boring/recovery well (Exceltech, October 1991)

B-11/ MW-3 = Boring/monitoring well (Exceltech, October 1991)

AS-2 = Air sparge well (RESNA, June 1993)

B-13 = Soil boring (RESNA, August 1989, June 1991, and August 1992)

A — A' = Geologic cross section

Approximate Scale

30 15 0 30 60

feet

Source: Surveyed by John E. Koch, Land Surveyor. Dated October 29, 1991.

RESNA Working to Restore Nature

PROJECT 69036.10

GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 2

RESNA
Working to Restore Nature

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES
ARCO Station 2035
Albany, California
(Page 1 of 4)

Date Sample ID	TPHg	B	T	E	X	TPHd	VOC,PCB, TOG and SVOC	Cd	Cr	Pb	Ni	Zn
August 1989												
S-10-B1	1,900	<4	15	8	53	NA	NA	NA	NA	NA	NA	NA
S-15-B1	<1.0	<0.005	0.006	0.006	<0.005	NA	NA	NA	NA	NA	NA	NA
S-19½-B1	<1.0	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
S-10-B2	51	1.9	0.35	0.81	4.0	NA	NA	NA	NA	NA	NA	NA
S-14½-B2	<1.0	0.063	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
S-20-B2	<1.0	0.039	0.044	0.007	0.041	NA	NA	NA	NA	NA	NA	NA
S-10-B3	75	3.1	8.2	1.8	11.0	NA	NA	NA	NA	NA	NA	NA
S-14½-B3	<1.0	0.21	<0.025	<0.025	0.039	NA	NA	NA	NA	NA	NA	NA
S-20-B3	<1.0	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
S-10-B4	2,400	33	140	40	220	NA	NA	NA	NA	NA	NA	NA
S-15-B4	520	<1.0	6.9	6.2	6.3	NA	NA	NA	NA	NA	NA	NA
S-19-B4	<1.0	<0.005	0.007	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
S-9½-B5	<1.0	0.007	0.006	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
S-15-B5	<1.0	<0.005	0.006	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
S-20-B5	<1.0	<0.005	<0.005	<0.005	<0.005	NA	NA	NA	NA	NA	NA	NA
June 1991												
S-5½-B6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-10½-B6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-15½-B6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-17-B6	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-5½-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-10½-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-15½-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-17-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-18½-B7	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
October 1991												
S-6-B8	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-11-B8	35	1.2	1.7	0.42	2.0	NA	NA	NA	NA	NA	NA	NA
S-16-B8	3.0	0.45	0.13	0.11	0.47	NA	NA	NA	NA	NA	NA	NA
S-30-B8	240	3.6	5.0	4.1	16	NA	NA	NA	NA	NA	NA	NA
S-6-B9	25	0.60	0.58	0.44	1.8	NA	NA	NA	NA	NA	NA	NA
S-10½-B9	13	0.74	0.72	0.18	0.95	NA	NA	NA	NA	NA	NA	NA
S-16-B9	<1.0	0.015	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-31-B9	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA

See notes on Page 4 of 4

RESNA
Working to Restore Nature

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES
ARCO Station 2035
Albany, California
(Page 2 of 4)

Date Sample ID	TPHg	B	T	E	X	TPHd	VOC,PCB, TOG and SVOC	Cd	Cr	Pb	Ni	Zn
October 1991 cont.												
S-5½-B10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-13-B10	4.0	0.13	0.15	0.041	0.16	NA	NA	NA	NA	NA	NA	NA
S-20½-B10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-30½-B10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA
S-6-B11	<1.0	0.010	<0.0050	<0.0050	<0.0050	3.9	80	ND[b]	<0.50	49	7.7	97	41
S-11-B11	110	<0.0050	<0.0050	<0.0050	0.27	71	43	ND[b]	<0.50	80	5.8	77	69
S-16-B11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	57	ND[b]	<0.50	33	7.5	25	45
S-21-B11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	74	ND[b]	<0.50	39	7.2	32	56
August 1992												
S-4½-B12	10	<0.0050	<0.0050	0.0070	0.050	45[e]	250	ND	<0.50	59	<5.0	58	40
S-9-B12	9.1	<0.0050	<0.0050	0.0060	0.082	250[e]	100	ND	<0.50	42	<5.0	46	37
S-14½-B12	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<50	ND	<0.50	49	7.4	49	69
S-4½-B13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<50	ND	<0.50	68	<5.0	65	43
S-7½-B13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	1.1[e]	1,800	ND[d]	<0.50	51	<5.0	81	46
S-17½-B13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<1.0	<50	ND	<0.50	43	5.6	51	69
S-5½-B14	430	4.0	16	7.3	42	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B14	1,300	20	82	31	170	NA	NA	NA	NA	NA	NA	NA	NA
S-15½-B14	<1.0	0.012	0.034	0.011	0.055	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B15	47	0.22	0.56	0.76	4.3	NA	NA	NA	NA	NA	NA	NA	NA
S-10-B15	310	3.8	15	7.1	37	NA	NA	NA	NA	NA	NA	NA	NA
S-13½-B15	110	1.5	4.3	2.1	12	NA	NA	NA	NA	NA	NA	NA	NA
S-4½-B16	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-10-B16	4,300	21	110	51	580	NA	NA	NA	NA	NA	NA	NA	NA
S-14½-B16	<1.0	0.010	0.032	0.018	0.18	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B17	1.4	0.045	0.0080	<0.0050	0.028	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B17	1,100	16	71	27	140	NA	NA	NA	NA	NA	NA	NA	NA
S-15½-B17	27	2.1	0.40	0.75	1.3	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B18	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B18	380	4.8	21	8.7	46	NA	NA	NA	NA	NA	NA	NA	NA
S-15½-B18	2.6	0.78	0.48	0.059	0.29	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B19	<1.0	0.017	0.0090	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B19	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-15½-B19	<1.0	0.15	0.012	0.029	0.032	NA	NA	NA	NA	NA	NA	NA	NA

See notes on Page 4 of 4

RESNA
Working to Restore Nature

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES
ARCO Station 2035
Albany, California
(Page 3 of 4)

Date Sample ID	TPHg	B	T	E	X	TPHd	TOG	VOC,PCB, and SVOC	Cd	Cr	Pb	Ni	Zn
August 1992 cont.													
S-0821-SPAD	550	2.6	9.5	5.4	47	NA	NA	NA	NA	NA	NA	NA	NA
November 1992													
S-5½-B20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-9½-B20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-28-B20	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B21	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B21	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-26-B21	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B22	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-11½-B22	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-26-B22	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-1125/SPA-D	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
June 1993													
S-5-B23	20	0.22	0.45	0.20	0.76	NA	NA	NA	NA	NA	NA	NA	NA
S-10-B23	490	4.9	19	8.3	50	NA	NA	NA	NA	NA	NA	NA	NA
S-15-B23	<1.0	0.33	0.012	0.014	0.014	NA	NA	NA	NA	NA	NA	NA	NA
S-6-B24	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-10½-B24	310	3.8	15	6.6	38	NA	NA	NA	NA	NA	NA	NA	NA
S-14½-B24	<1.0	0.014	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-5½-B25	630	1.7	0.40	13	36	NA	NA	NA	NA	NA	NA	NA	NA
S-9½-B25	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-15-B25	<1.0	0.017	0.022	<0.0050	0.014	NA	NA	NA	NA	NA	NA	NA	NA
S-5-B26	1,600	7.7	45	28	170	NA	NA	NA	NA	NA	NA	NA	NA
S-15-B26	<1.0	0.18	0.019	0.015	0.047	NA	NA	NA	NA	NA	NA	NA	NA
S-31-B26	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-7½-B27	690	7.4	25	13	64	NA	NA	NA	NA	NA	NA	NA	NA
S-12-B27	660	8.8	33	14	76	NA	NA	NA	NA	NA	NA	NA	NA
S-16½-B27	<1.0	0.061	0.040	0.0090	0.040	NA	NA	NA	NA	NA	NA	NA	NA
S-19½-B27	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA
S-31-B27	<1.0	<0.0050	0.0070	<0.0050	<0.0050	NA	NA	NA	NA	NA	NA	NA	NA

See notes on Page 4 of 4

RESNA
Working to Restore Nature

TABLE 1
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF SOIL SAMPLES
ARCO Station 2035
Albany, California
(Page 4 of 4)

Results for TPHg, BTEX, TPHd, TOG and metals in parts per million (ppm); and for VOC, PCB and SVOC in parts per billion (ppb).
TPHg: Total petroleum hydrocarbons as gasoline by EPA method 5030/8015/8020.
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes isomers; BTEX analyzed by EPA method 5030/8015/8020.
TPHd: Total Petroleum Hydrocarbons as diesel by EPA method 3550/8015.
TOG: Total oil and grease by Standard method 5520 E&F.
VOC: Volatile organic compounds by EPA method 8240.
PCB: Polychlorinated biphenyls by EPA method 8080.
SVOC: Semi-volatile organic compounds by EPA method 8270.
Cd: Cadmium by EPA method 6010.
Cr: Chromium by EPA method 6010.
Ni: Nickel by EPA method 6010.
Zn: Zinc by EPA method 6010.
Pb: Lead by EPA method 6010.
NA: Not analyzed.
<: Results reported below the laboratory detection limit.
ND: All compounds tested were nondetectable. Detection limits varied for different compounds.
[1]: Sample collected from the saturated zone, analyzed for site characterization purposes only.
[2]: Only VOCs tested.
[3]: Identified as a non-diesel mixture. The mixture in B-12 contained C9-C14 plus > C16 and > C17. The mixture in B-13 was > C17.
[4]: All compounds tested were nondetectable except ethylbenzene.

Sample Identification:

S-26-B22
- S — Soil Sample
- 26 — Depth in feet
- B22 — Boring number

S-1125-SP2AD
- S — Soil Sample
- 1125 — Date sampled
- SP — Soil pile
- 2AD — Composite sample

TABLE 5
LABORATORY ANALYSIS OF WATER "GRAB" SAMPLE FROM T4 TANK PIT
ARCO Station 2035
Albany, California

Sample ID	B	T	E	X	TPHg
"Grab"	27,000	41,000	4,100	28,000	190,000

Results in parts per billion (ppb).
<: Less than the laboratory detection limit.
B: benzene, T: toluene, E: ethylbenzene, X: total xylenes
TPHg: Total petroleum hydrocarbons as gasoline
(TPHg with BTEX distinction measured by EPA Methods 5030/8015/8020)

Table 3
Historical Groundwater Analytical Data
Petroleum Hydrocarbons and Their Constituents
1994 - Present*

ARCO Service Station 2035
1001 San Pablo Avenue, Albany, California

Date: 12-22-03

Well Designation	Water Sample Field Date	TPHG LUFT Method	Benzene EPA 8020	Toluene EPA 8020	Ethylbenzene EPA 8020	Total Xylenes EPA 8020	MTBE EPA 8020	MTBE EPA 8240	Oil and Grease SM 5520B&F	Oil and Grease SM 5520C	Oil and Grease SM 5520F	TRPH EPA 418.1	TPHD LUFT Method
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-1	01-31-90	<50	13	<0.5	0.5	0.6	- -	- -	- -	- -	- -	- -	- -
MW-1	04-25-90	990	280	3.5	18	14	- -	- -	- -	- -	- -	- -	- -
MW-1	07-28-90	760	280	<2.5	7.1	<2.5	- -	- -	- -	- -	- -	- -	- -
MW-1	11-14-90	570	150	7.3	<2.5	30	- -	- -	- -	- -	- -	- -	- -
MW-1	03-23-91	8800	3600	<50	62	99	- -	- -	- -	- -	- -	- -	- -
MW-1	05-23-91	4800	2000	<20	52	<20	- -	- -	- -	- -	- -	- -	- -
MW-1	08-21-91	780	310	<2.5	12	<2.5	14	- -	- -	- -	- -	- -	- -
MW-1	11-08-91	58	14	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-1	02-26-92	2700	930	12	18	32	51	- -	- -	- -	- -	- -	- -
MW-1	04-21-92	2700	1000	<10	22	<10	<60	- -	- -	- -	- -	- -	- -
MW-2	01-31-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-2	04-25-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-2	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-2	11-14-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-2	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-2	05-23-91	Not sampled: not scheduled for chemical analysis											
MW-2	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	<3	- -	- -	- -	- -	- -	- -
MW-2	11-08-91	Not sampled: not scheduled for chemical analysis											
MW-2	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<3	- -	- -	- -	- -	- -	- -
MW-2	04-21-92	Not sampled: not scheduled for chemical analysis											
MW-3	01-31-90	<50	1.9	<0.5	2.1	<0.5	- -	- -	- -	<500	<500	- -	- -
MW-3	04-25-90	<50	1.1	<0.5	2.4	0.9	- -	- -	- -	- -	- -	<600	- -
MW-3	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	600	- -
MW-3	11-14-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	<500	- -
MW-3	03-23-91	51	0.8	<0.5	2.4	<0.5	- -	- -	- -	- -	- -	<500	- -
MW-3	05-23-91	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	<500	- -
MW-3	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	79	- -	- -	- -	- -	<500	- -
MW-3	11-08-91	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	600	- -
MW-3	02-26-92	120	3.6	<0.5	2.2	3.7	90	- -	- -	- -	- -	<0.5	- -
MW-3	04-21-92	<50	<0.5	<0.5	<0.5	<0.5	90	- -	- -	- -	- -	- -	- -
MW-4	01-31-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-4	04-25-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-4	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-4	11-14-90	220	12	19	0.9	39	- -	- -	- -	- -	- -	- -	- -
MW-4	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-4	05-23-91	<50	<0.5	<0.5	<0.5	<0.5	- -	- -	- -	- -	- -	- -	- -
MW-4	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	99	- -	- -	- -	- -	- -	- -
MW-4	11-08-91	<50	<0.5	<0.5	<0.5	<0.5	- -	89	- -	- -	- -	- -	- -
MW-4	02-26-92	<50	0.8	<0.5	<0.5	<0.5	<3	- -	- -	- -	- -	- -	- -
MW-4	04-21-92	Not sampled: not scheduled for chemical analysis											

Table 3
Historical Groundwater Analytical Data
Petroleum Hydrocarbons and Their Constituents
1994 - Present*

ARCO Service Station 2035
1001 San Pablo Avenue, Albany, California

Date: 12-22-03

Well Designation	Water Sample Field Date	TPHG LUFT Method	Benzene EPA 8020	Toluene EPA 8020	Ethylbenzene EPA 8020	Total Xylenes EPA 8020	MTBE EPA 8020	MTBE EPA 8240	Oil and Grease SM 5520B&F	Oil and Grease SM 5520C	Oil and Grease SM 5520F	TRPH EPA 418.1	TPHD LUFT Method
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
MW-5	01-31-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-5	04-25-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-5	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-5	11-14-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-5	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-5	05-23-91	Not sampled: not scheduled for chemical analysis											
MW-5	08-21-91	Not sampled: not scheduled for chemical analysis											
MW-5	11-08-91	Not sampled: not scheduled for chemical analysis											
MW-5	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	--	--	--
MW-5	04-21-92	Not sampled: not scheduled for chemical analysis											
MW-6	01-31-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-6	04-25-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-6	07-28-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-6	11-14-90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-6	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--
MW-6	05-23-91	Not sampled: not scheduled for chemical analysis											
MW-6	08-21-91	Not sampled: not scheduled for chemical analysis											
MW-6	11-08-91	Not sampled: not scheduled for chemical analysis											
MW-6	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--	--	--	--
MW-6	04-21-92	Not sampled: not scheduled for chemical analysis											
RW-1	01-31-90	Not sampled: well connected to the remediation system											
RW-1	04-25-90	Not sampled: well contained floating product											
RW-1	07-28-90	Not sampled: well contained floating product											
RW-1	11-14-90	Not sampled: well contained floating product											
RW-1	03-23-91	11000	560	660	150	1700	--	--	--	--	--	--	--
RW-1	05-23-91	Not sampled: well contained floating product											
RW-1	08-21-91	Not sampled: well contained floating product											
RW-1	11-08-91	1600	79	46	13	240	--	--	--	--	--	--	--
RW-1	02-26-92	210	44	7.5	2.5	24	29	--	--	--	--	--	--
RW-1	04-21-92	36000	7400	3700	560	3400	<300	--	--	--	--	--	--

TPHG: total petroleum hydrocarbons as gasoline, California DHS LUFT Method
µg/L: micrograms per liter
EPA: United States Environmental Protection Agency
MTBE: Methyl-tert-butyl ether
SM: standard method
TRPH: total recoverable petroleum hydrocarbons
TPHD: total petroleum hydrocarbons as diesel, California DHS LUFT Method
-- : not analyzed
*: For previous historical analytical data please refer to *Fourth Quarter 1999 Groundwater Monitoring Program Results and Remediation Performance Evaluation Report, ARCO Service Station 2035, Albany, California*, (ERAUS, March 23, 1999).

esj/h:\2035\2035mdb.xls\Table 3:mi
20805-123.003

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-1	41.41	6.21	0.00	35.20	03-23-91	8,800	3,600	<50	62	99	--	--	--	--
MW-1	41.41	9.37	0.00	32.04	05-23-91	4,800	2,000	<20	52	<20	--	--	--	--
MW-1	41.41	10.30	0.00	31.11	08-21-91	780	310	<2.5	12	<2.5	14	--	--	--
MW-1	41.41	12.25	0.00	29.16	11-08-91	58	14	<0.5	<0.5	<0.5	--	--	--	--
MW-1	41.41	9.08	0.00	32.33	02-26-92	2,700	930	12	18	32	51	--	--	--
MW-1	41.41	9.11	0.00	32.30	04-21-92	2,700	1,000	<10	22	<10	<60	--	--	--
MW-1	41.41	10.37	0.00	31.04	08-14-92	300	52	<0.5	0.9	<0.5	22	--	--	--
MW-1	41.41	8.79	0.00	32.62	12-09-92	270	63	0.7	<0.5	1	25	--	--	--
MW-1	41.41	9.80	0.00	31.61	03-26-93	1,500	610	<5	15	7	56	--	--	--
MW-1	41.41	9.65	0.00	31.76	05-21-93	110	6	<0.5	<0.5	0.7	10	--	--	--
MW-1	41.41	10.22	0.00	31.19	09-03-93	180	40	<0.5	1.2	0.5	26	--	--	--
MW-1	41.41	10.68	0.00	30.73	11-02-93	83	8	<0.5	<0.5	<0.5	13	--	--	--
MW-1	41.41	6.92	0.00	34.49	02-19-94	1,800	540	7	27	31	46	--	--	--
MW-1	41.41	9.28	0.00	32.13	05-17-94	4,500	1,300	20	57	20	<60	--	--	--
MW-1	41.41	10.05	0.00	31.36	08-20-94	530	110	<5	<5	<5	400	--	--	--
MW-1	41.41	10.42	0.00	30.99	10-19-94	66	9.1	<0.5	<0.5	<0.5	8	--	--	--
MW-1	41.41	8.10	0.00	33.31	02-15-95	1,200	390	<5	<5	6	45	--	--	--
MW-1	41.41	9.53	0.00	31.88	05-23-95	1,300	600	3	13	3	26	--	--	--
MW-1	41.41	10.03	0.00	31.38	08-23-95	100	21	1.3	<0.5	<0.5	8	--	0.55	P
MW-1	41.41	9.80	0.00	31.61	11-15-95	99	10	0.6	<0.5	<1	7	--	2.1	P
MW-1	41.41	8.82	0.00	32.59	02-01-96	400	93	1.6	3.6	3.7	19	--	1.0	P
DUP 1	--	--	--	--	06-20-96	416	88.4	<2.50	4.61	1.56	<5.00	--	--	--
MW-1	41.41	9.60	0.00	31.81	06-20-96	444	100	<2.50	4.15	<2.50	15.9	--	1.7	P
MW-1	41.41	9.50	0.00	31.91	11-05-96	73.2	17.8	<0.500	<0.500	<0.500	7.80	--	1.04	P
MW-1	41.41	9.28	0.00	32.13	05-03-97	714	392	<5.00	<5.00	<5.00	26.1	--	--	P
MW-1	41.41	10.50	0.00	30.91	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	0.59	P
DUP 1	--	--	--	--	10-02-97	<50	<0.50	<0.50	<0.50	0.52	<2.5	--	--	--

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-2	40.38	6.96	0.00	33.42	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-2	40.38	10.02	0.00	30.36	05-23-91	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	40.38	10.87	0.00	29.51	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-2	40.38	13.12	0.00	27.26	11-08-91	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	40.38	10.25	0.00	30.13	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-2	40.38	9.98	0.00	30.40	04-21-92	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	40.38	11.10	0.00	29.28	08-14-92	<50	<0.5	<0.5	<0.5	<0.5	4	--	--	--
MW-2	40.38	10.00	0.00	30.38	12-09-92	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	40.38	10.38	0.00	30.00	03-26-93	<50	<0.5	<0.5	<0.5	<0.5	12	--	--	--
MW-2	40.38	10.65	0.00	29.73	05-21-93	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	40.38	10.87	0.00	29.51	09-03-93	<50	<0.5	<0.5	<0.5	<0.5	19	--	--	--
MW-2	40.38	11.25	0.00	29.13	11-02-93	<50	<0.5	<0.5	<0.5	<0.5	18	--	--	--
MW-2	40.38	7.69	0.00	32.69	02-19-94	<50	0.5	<0.5	<0.5	<0.5	12	--	--	--
MW-2	40.38	9.88	0.00	30.50	05-17-94	<50	<0.5	<0.5	<0.5	<0.5	10	--	--	--
MW-2	40.38	10.62	0.00	29.76	08-20-94	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	--
MW-2	40.38	11.00	0.00	29.38	10-19-94	<50	<0.5	<0.5	<0.5	<0.5	31	--	--	--
MW-2	40.38	9.04	0.00	31.34	02-15-95	<50	<0.5	<0.5	<0.5	<0.5	13	--	--	--
MW-2	40.38	9.90	0.00	30.48	05-23-95	<50	0.6	<0.5	<0.5	<0.5	47	--	--	--
MW-2	40.38	10.60	0.00	29.78	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	20	--	0.88	P
MW-2	40.38	10.45	0.00	29.93	11-15-95	<50	<0.5	<0.5	<0.5	<1	<3	--	2.5	P
MW-2	40.38	9.49	0.00	30.89	02-01-96	<50	<0.5	<0.5	<0.5	<1	59	--	1.0	P
MW-2	40.38	10.30	0.00	30.08	06-20-96	<50.0	<0.500	<0.500	<0.500	<0.500	4.17	--	1.5	P
MW-2	40.38	10.19	0.00	30.19	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	30.6	--	1.27	P
MW-2	40.38	10.15	0.00	30.23	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	32.7	--	--	P
DUP	--	--	--	--	05-03-97	<50.0	<0.500	<0.500	<0.500	1.18	31.5	--	--	--
MW-2	40.38	10.97	0.00	29.41	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	0.63	P

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-3	41.44	7.29	0.00	34.15	03-23-91	51	0.8	<0.5	2.4	<0.5	--	--	--	--
MW-3	41.44	9.53	0.00	31.91	05-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-3	41.44	11.19	0.00	30.25	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	79	--	--	--
MW-3	41.44	12.77	0.00	28.67	11-08-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-3	41.44	9.41	0.00	32.03	02-26-92	120	3.6	<0.5	2.2	3.7	90	--	--	--
MW-3	41.44	9.63	0.00	31.81	04-21-92	<50	<0.5	<0.5	<0.5	<0.5	90	--	--	--
MW-3	41.44	11.12	0.00	30.32	08-14-92	<50	<0.5	<0.5	<0.5	<0.5	54	--	--	--
MW-3	41.44	10.34	0.00	31.10	12-09-92	71	<0.5	<0.5	<0.5	<0.5	130	--	--	--
MW-3	41.44	10.28	0.00	31.16	03-26-93	<100	<1	<1	<1	<1	170	--	--	--
MW-3	41.44	10.40	0.00	31.04	05-21-93	<100	<1	<1	<1	<1	95	--	--	--
MW-3	41.44	10.75	0.00	30.69	09-03-93	<50	<0.5	<0.5	<0.5	<0.5	37	--	--	--
MW-3	41.44	11.44	0.00	30.00	11-02-93	<200	<2	<2	<2	<2	130	--	--	--
MW-3	41.44	7.48	0.00	33.96	02-19-94	<200	<2	5	<2	8	140	--	--	--
MW-3	41.44	9.87	0.00	31.57	05-17-94	<100	<1	<1	<1	<1	150	--	--	--
MW-3	41.44	10.72	0.00	30.72	08-20-94	<200	<2	<2	<2	<2	210	--	--	--
MW-3	41.44	11.30	0.00	30.14	10-19-94	<200	<2	<2	<2	<2	270	--	--	--
MW-3	41.44	8.60	0.00	32.84	02-15-95	<500	<5	<5	<5	<5	700	--	--	--
MW-3	41.44	9.87	0.00	31.57	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	150	140	--	--
MW-3	41.44	10.83	0.00	30.61	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	54	71	0.41	P
MW-3	41.44	10.54	0.00	30.90	11-15-95	100	<0.5	3.3	<0.5	<1	500	--	6.2	P
MW-3	41.44	5.69	0.00	35.75	02-01-96	18,000	1,000	45	1,500	940	100	--	2.12	P
MW-3	41.44	9.99	0.00	31.45	06-20-96	90.9	1.52	<0.500	<0.500	<0.500	187	--	2.6	P
MW-3	41.44	10.15	0.00	31.29	11-05-96	138	2.37	<0.500	<0.500	<0.500	216	--	0.47	P
MW-3	41.44	10.17	0.00	31.27	05-03-97	316	15.7	1.14	<0.500	<0.500	178	--	--	P
MW-3	41.44	10.99	0.00	30.45	10-02-97	120	<0.50	<0.50	<0.50	<0.50	120	--	0.47	P

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-4	40.33	5.92	0.00	34.41	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-4	40.33	9.23	0.00	31.10	05-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-4	40.33	10.61	0.00	29.72	08-21-91	<50	<0.5	<0.5	<0.5	<0.5	99	--	--	--
MW-4	40.33	11.97	0.00	28.36	11-08-91	<50	<0.5	<0.5	<0.5	<0.5	--	89	--	--
MW-4	40.33	8.84	0.00	31.49	02-26-92	<50	0.8	<0.5	<0.5	<0.5	<3	--	--	--
MW-4	40.33	9.15	0.00	31.18	04-21-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	40.33	10.35	0.00	29.98	08-14-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	40.33	8.70	0.00	31.63	12-09-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	40.33	9.75	0.00	30.58	03-26-93	<5,000	<50	<50	<50	<50	4,200	--	--	--
MW-4	40.33	9.91	0.00	30.42	05-21-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	40.33	10.25	0.00	30.08	09-03-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	40.33	10.79	0.00	29.54	11-02-93	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-4	40.33	6.78	0.00	33.55	02-19-94	<2,000	<20	<20	<20	<20	3,300	--	--	--
MW-4	40.33	9.26	0.00	31.07	05-17-94	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-4	40.33	10.10	0.00	30.23	08-20-94	<50	<0.5	<0.5	<0.5	<0.5	9	--	--	--
MW-4	40.33	10.43	0.00	29.90	10-19-94	<50	<0.5	<0.5	<0.5	<0.5	17	--	--	--
MW-4	40.33	8.56	0.00	31.77	02-15-95	<500	<5	<5	<5	<5	400	--	--	--
MW-4	40.33	9.52	0.00	30.81	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	10	7.6	--	--
MW-4	40.33	9.99	0.00	30.34	08-23-95	<2,500	<25	<25	<25	<25	1,200	1,300	0.84	NP
MW-4	40.33	9.80	0.00	30.53	11-15-95	<50	<0.5	<0.5	<0.5	<1	<3	--	0.0	NP
MW-4	40.33	9.11	0.00	31.22	02-01-96	<50	<0.5	<0.5	<0.5	<1	1,200	--	1.0	NP
MW-4	40.33	9.60	0.00	30.73	06-20-96	<50.0	<0.500	<0.500	<0.500	<0.500	60.5	--	1.3	NP
MW-4	40.33	9.53	0.00	30.80	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	14.0	--	0.71	NP
MW-4	40.33	9.21	0.00	31.12	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	83.6	--	--	NP
MW-4	40.33	10.74	0.00	29.59	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	260	--	0.59	NP

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-5	41.84	6.23	0.00	35.61	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-5	41.84	9.61	0.00	32.23	05-23-91	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	11.12	0.00	30.72	08-21-91	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	12.52	0.00	29.32	11-08-91	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	9.52	0.00	32.32	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	41.84	9.44	0.00	32.40	04-21-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	10.83	0.00	31.01	08-14-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	9.20	0.00	32.64	12-09-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	10.10	0.00	31.74	03-26-93	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	41.84	10.28	0.00	31.56	05-21-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	10.73	0.00	31.11	09-03-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	11.23	0.00	30.61	11-02-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	6.67	0.00	35.17	02-19-94	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	41.84	9.61	0.00	32.23	05-17-94	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	10.58	0.00	31.26	08-20-94	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	10.66	0.00	31.18	10-19-94	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	41.84	8.35	0.00	33.49	02-15-95	Not sampled							--	--
MW-5	41.84	9.95	0.00	31.89	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	41.84	10.51	0.00	31.33	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	0.79	NP
MW-5	41.84	10.37	0.00	31.47	11-15-95	Not sampled: well sampled annually, during the second quarter							--	--
MW-5	41.84	9.35	0.00	32.49	02-01-96	<50	<0.5	<0.5	<0.5	<1	<3	--	1.0	NP
MW-5	41.84	10.03	0.00	31.81	06-20-96	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	3.1	NP
MW-5	41.84	9.89	0.00	31.95	11-05-96	Not sampled: well sampled annually, during the second quarter							--	--
MW-5	41.84	9.42	0.00	32.42	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--	NP
MW-5	41.84	10.55	0.00	31.29	10-02-97	Not sampled: well sampled annually, during the second quarter							--	--

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-6	40.13	9.03	0.00	31.10	03-23-91	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-6	40.13	12.45	0.00	27.68	05-23-91	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	13.32	0.00	26.81	08-21-91	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	14.13	0.00	26.00	11-08-91	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	11.86	0.00	28.27	02-26-92	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-6	40.13	12.35	0.00	27.78	04-21-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	13.18	0.00	26.95	08-14-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	11.94	0.00	28.19	12-09-92	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	13.10	0.00	27.03	03-26-93	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-6	40.13	13.00	0.00	27.13	05-21-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	13.30	0.00	26.83	09-03-93	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	40.13	13.42	0.00	26.71	11-02-93	<50	<0.5	<0.5	<0.5	<0.5	19	--	--	--
MW-6	40.13	10.57	0.00	29.56	02-19-94	<100	<1	<1	<1	<1	95	--	--	--
MW-6	40.13	12.64	0.00	27.49	05-17-94	<100	<1	<1	<1	<1	180	--	--	--
MW-6	40.13	13.13	0.00	27.00	08-20-94	<100	<1	<1	<1	<1	180	--	--	--
MW-6	40.13	13.48	0.00	26.65	10-19-94	<100	<1	<1	<1	<1	180	--	--	--
MW-6	40.13	11.92	0.00	28.21	02-15-95	<200	<2	<2	<2	<2	200	--	--	--
MW-6	40.13	12.80	0.00	27.33	05-23-95	<50	<0.5	<0.5	<0.5	<0.5	120	--	--	--
MW-6	40.13	13.03	0.00	27.10	08-23-95	<50	<0.5	<0.5	<0.5	<0.5	44	--	0.46	NP
MW-6	40.13	12.70	0.00	27.43	11-15-95	<50	<0.5	<0.5	<0.5	<1	17	17	0.0	NP
MW-6	40.13	8.61	0.00	31.52	02-01-96	<50	<0.5	<0.5	<0.5	<1	6	--	1.0	NP
MW-6	40.13	12.88	0.00	27.25	06-20-96	<50.0	<0.500	<0.500	<0.500	<0.500	2.57	--	2.8	NP
MW-6	40.13	12.74	0.00	27.39	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	3.77	--	1.51	NP
DUP	--	--	--	--	11-05-96	<50.0	<0.500	<0.500	<0.500	<0.500	4.03	--	--	--
MW-6	40.13	11.29	0.00	28.84	05-03-97	<50.0	<0.500	<0.500	<0.500	<0.500	10.5	12.3	--	NP
MW-6	40.13	11.35	0.00	28.78	10-02-97	<50	<0.50	<0.50	<0.50	<0.50	5.8	4.8	0.61	NP

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
RW-1	40.33	9.32	0.01	31.02	03-23-91	11,000	560	660	150	1,700	--	--	--	--
RW-1	40.33	9.75	0.03	30.60	05-23-91	Not sampled: well contained floating product								
RW-1	40.33	10.86	0.02	29.48	08-21-91	Not sampled: well contained floating product							--	--
RW-1	40.33	20.61	0.00	19.72	11-08-91	1,600	79	46	13	240	--	--	--	--
RW-1	40.33	16.56	0.00	23.77	02-26-92	210	44	7.5	2.5	24	29	--	--	--
RW-1	40.33	9.65	0.00	30.68	04-21-92	36,000	7,400	3,700	580	3,400	<300	--	--	--
RW-1	40.33	10.60	0.00	29.73	08-14-92	1,800	31	38	15	150	<30	--	--	--
RW-1	40.33	8.72	0.00	31.61	12-09-92	25,000	1,900	1,000	330	3,200	<100	--	--	--
RW-1	40.33	10.33	0.00	30.00	03-26-93	7,200	1,900	59	95	240	480	--	--	--
RW-1	40.33	10.10	0.00	30.23	05-21-93	3,000	630	84	45	340	<60	--	--	--
RW-1	40.33	10.42	0.00	29.91	09-03-93	7,100	120	55	14	160	<60	--	--	--
RW-1	40.33	9.10	0.00	31.23	11-02-93	<200	14	19	3	19	140	--	--	--
RW-1	40.33	7.49	0.00	32.84	02-19-94	3,800	1,000	85	64	220	950	--	--	--
RW-1	40.33	8.90	0.00	31.43	05-17-94	<200	45	<2	2	4	220	--	--	--
RW-1	40.33	11.06	0.00	29.27	08-20-94	480	200	<2	<2	30	180	--	--	--
RW-1	40.33	11.12	0.00	29.21	10-19-94	110	36	2.9	<0.5	4.1	5	--	--	--
RW-1	40.33	7.70	0.00	32.63	02-16-95	250	61	2	2	19	94	--	--	--
RW-1	40.33	11.12	0.00	29.21	05-23-95	4,500	2,000	7	<2	180	35	--	--	--
RW-1	40.33	10.15	0.00	30.18	08-23-95	2,600	1,100	6.3	2.3	17	39	--	0.52	NP
RW-1	40.33	9.95	0.00	30.38	11-15-95	1,200	2,600	16	86	41	140	--	1.4	P
RW-1	40.33	11.88	0.00	28.45	02-01-96	11,000	980	230	200	1,400	38	--	1.0	NP
RW-1	40.33	9.83	0.00	30.50	06-20-96	899	278	<2.50	8.70	8.46	61.1	--	1.3	NP
RW-1	40.33	8.45	0.00	31.88	11-05-96	156,000	3,260	28,800	4,570	25,700	26,200	--	0.63	P
RW-1	40.33	8.57	0.00	31.76	05-03-97	244,000	8,420	56,000	5,660	36,200	23,400	11,000	--	P
RW-1	40.33	9.13	0.00	31.20	10-02-97	120,000	2,500	33,000	3,800	21,000	3,300	--	0.38	P

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
S-5	--	--	--	--	05-30-97	310,000	3,000	11,000	4,000	34,000	<2,500	--	--	--
S-5	--	10.00	--	--	10-02-97	70,000	1,800	7,800	1,400	20,000	<120	--	0.25	NP

TOC: top of casing

ft-MSL: elevation in feet, relative to mean sea level

TPH: total petroleum hydrocarbons as gasoline, California DHS LUFT Method

BTEX: benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 11/16/99).

MTBE: Methyl tert-butyl ether

µg/L: micrograms per liter

mg/L: milligrams per liter

-- : not analyzed or not applicable

< denotes concentration not present at or above laboratory detection limit stated to the right.

[1] = Computed by adding correction factor to groundwater elevation. Correction factor = free product thickness times 0.73 (approximate specific gravity of gasoline).

*: EPA method 8020 prior to 11/16/99

**: For previous historical groundwater elevation and analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report, ARCO Service Station 2035, Albany, California*, (EMCON, March 25, 1996).

DUP: duplicate sample

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-1	03-24-95	41.41	6.21	0.00	35.20	03-24-95	8,800	3,600	<50	62	99	--	--	--	--
MW-1	05-24-95	41.41	9.37	0.00	32.04	05-24-95	4,800	2,000	<20	52	<20	--	--	--	--
MW-1	08-22-95	41.41	10.30	0.00	31.11	08-22-95	780	310	<2.5	12	<2.5	14	--	--	--
MW-1	11-09-95	41.41	12.25	0.00	29.16	11-09-95	58	14	<0.5	<0.5	<0.5	--	--	--	--
MW-1	02-27-96	41.41	9.08	0.00	32.33	02-27-96	2,700	930	12	18	32	51	--	--	--
MW-1	04-22-96	41.41	9.11	0.00	32.30	04-22-96	2,700	1,000	<10	22	<10	<60	--	--	--
MW-1	08-15-96	41.41	10.37	0.00	31.04	08-15-96	300	52	<0.5	0.9	<0.5	22	--	--	--
MW-1	12-10-96	41.41	8.79	0.00	32.62	12-10-96	270	63	0.7	<0.5	1	25	--	--	--
MW-1	03-27-97	41.41	9.80	0.00	31.61	03-27-97	1,500	610	<5	15	7	56	--	--	--
MW-1	05-22-97	41.41	9.65	0.00	31.76	05-22-97	110	6	<0.5	<0.5	0.7	10	--	--	--
MW-1	09-04-97	41.41	10.22	0.00	31.19	09-04-97	180	40	<0.5	1.2	0.5	26	--	--	--
MW-1	11-03-97	41.41	10.68	0.00	30.73	11-03-97	83	8	<0.5	<0.5	<0.5	13	--	--	--
MW-1	02-20-98	41.41	6.92	0.00	34.49	02-20-98	1,800	540	7	27	31	46	--	--	--
MW-1	05-18-98	41.41	9.28	0.00	32.13	05-18-98	4,500	1,300	20	57	20	<60	--	--	--
MW-1	08-20-98	41.41	10.05	0.00	31.36	08-21-98	530	110	<5	<5	<5	400	--	--	--
MW-1	10-20-98	41.41	10.42	0.00	30.99	10-20-98	66	9.1	<0.5	<0.5	<0.5	8	--	--	--
MW-1	02-16-99	41.41	8.10	0.00	33.31	02-16-99	1,200	390	<5	<5	6	45	--	--	--
MW-1	05-24-99	41.41	9.53	0.00	31.88	05-24-99	1,300	600	3	13	3	26	--	--	--
MW-1	08-24-99	41.41	10.03	0.00	31.38	08-24-99	100	21	1.3	<0.5	<0.5	8	--	0.55	P
MW-1	11-16-99	41.41	9.80	0.00	31.61	11-16-99	99	10	0.6	<0.5	<1	7	--	2.1	P
MW-1	02-01-00	41.41	8.82	0.00	32.59	02-02-00	400	93	1.6	3.6	3.7	19	--	1.0	P
DUP 1	06-21-00	--	--	--	--	06-21-00	416	88.4	<2.50	4.61	1.56	<5.00	--	--	--
MW-1	06-21-00	41.41	9.60	0.00	31.81	06-21-00	444	100	<2.50	4.15	<2.50	15.9	--	1.7	P
MW-1	11-06-00	41.41	9.50	0.00	31.91	11-06-00	73.2	17.8	<0.500	<0.500	<0.500	7.80	--	1.04	P
MW-1	05-04-01	41.41	9.28	0.00	32.13	05-04-01	714	392	<5.00	<5.00	<5.00	26.1	--	--	P
MW-1	**10-03-01**	**41.41**	**10.50**	**0.00**	**30.91**	**10-03-01**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	**--**	**0.59**	**P**
DUP 1	**10-03-01**	**--**	**--**	**--**	**--**	**10-03-01**	**<50**	**<0.50**	**<0.50**	**<0.50**	**0.52**	**<2.5**	**--**	**--**	**--**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-2	03-24-95	40.38	6.96	0.00	33.42	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-2	05-24-95	40.38	10.02	0.00	30.36	05-24-95	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	08-22-95	40.38	10.87	0.00	29.51	08-22-95	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-2	11-09-95	40.38	13.12	0.00	27.26	11-09-95	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	02-27-96	40.38	10.25	0.00	30.13	02-27-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-2	04-22-96	40.38	9.98	0.00	30.40	04-22-96	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	08-15-96	40.38	11.10	0.00	29.28	08-15-96	<50	<0.5	<0.5	<0.5	<0.5	4	--	--	--
MW-2	12-10-96	40.38	10.00	0.00	30.38	12-10-96	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	03-27-97	40.38	10.38	0.00	30.00	03-27-97	<50	<0.5	<0.5	<0.5	<0.5	12	--	--	--
MW-2	05-22-97	40.38	10.65	0.00	29.73	05-22-97	Not sampled: well sampled semi-annually, during the first and third quarters								
MW-2	09-04-97	40.38	10.87	0.00	29.51	09-04-97	<50	<0.5	<0.5	<0.5	<0.5	19	--	--	--
MW-2	11-03-97	40.38	11.25	0.00	29.13	11-03-97	<50	<0.5	<0.5	<0.5	<0.5	18	--	--	--
MW-2	02-20-98	40.38	7.69	0.00	32.69	02-20-98	<50	0.5	<0.5	<0.5	<0.5	12	--	--	--
MW-2	05-18-98	40.38	9.88	0.00	30.50	05-18-98	<50	<0.5	<0.5	<0.5	<0.5	10	--	--	--
MW-2	08-20-98	40.38	10.62	0.00	29.76	08-21-98	<50	<0.5	<0.5	<0.5	<0.5	3	--	--	--
MW-2	10-20-98	40.38	11.00	0.00	29.38	10-20-98	<50	<0.5	<0.5	<0.5	<0.5	31	--	--	--
MW-2	02-16-99	40.38	9.04	0.00	31.34	02-16-99	<50	<0.5	<0.5	<0.5	<0.5	13	--	--	--
MW-2	05-24-99	40.38	9.90	0.00	30.48	05-24-99	<50	0.6	<0.5	<0.5	<0.5	47	--	--	--
MW-2	08-24-99	40.38	10.60	0.00	29.78	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	20	--	0.88	P
MW-2	11-16-99	40.38	10.45	0.00	29.93	11-16-99	<50	<0.5	<0.5	<0.5	<1	<3	--	2.5	P
MW-2	02-01-00	40.38	9.49	0.00	30.89	02-02-00	<50	<0.5	<0.5	<0.5	<1	59	--	1.0	P
MW-2	06-21-00	40.38	10.30	0.00	30.08	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	4.17	--	1.5	P
MW-2	11-06-00	40.38	10.19	0.00	30.19	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	30.6	--	1.27	P
MW-2	05-04-01	40.38	10.15	0.00	30.23	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	32.7	--	--	P
DUP	05-04-01	--	--	--	--	05-04-01	<50.0	<0.500	<0.500	<0.500	1.18	31.5	--	--	--
MW-2	**10-03-01**	**40.38**	**10.97**	**0.00**	**29.41**	**10-03-01**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.5**	--	**0.63**	**P**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-3	03-24-95	41.44	7.29	0.00	34.15	03-24-95	51	0.8	<0.5	2.4	<0.5	--	--	--	--
MW-3	05-24-95	41.44	9.53	0.00	31.91	05-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-3	08-22-95	41.44	11.19	0.00	30.25	08-22-95	<50	<0.5	<0.5	<0.5	<0.5	79	--	--	--
MW-3	11-09-95	41.44	12.77	0.00	28.67	11-09-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-3	02-27-96	41.44	9.41	0.00	32.03	02-27-96	120	3.6	<0.5	2.2	3.7	90	--	--	--
MW-3	04-22-96	41.44	9.63	0.00	31.81	04-22-96	<50	<0.5	<0.5	<0.5	<0.5	90	--	--	--
MW-3	08-15-96	41.44	11.12	0.00	30.32	08-15-96	<50	<0.5	<0.5	<0.5	<0.5	54	--	--	--
MW-3	12-10-96	41.44	10.34	0.00	31.10	12-10-96	71	<0.5	<0.5	<0.5	<0.5	130	--	--	--
MW-3	03-27-97	41.44	10.28	0.00	31.16	03-27-97	<100	<1	<1	<1	<1	170	--	--	--
MW-3	05-22-97	41.44	10.40	0.00	31.04	05-22-97	<100	<1	<1	<1	<1	95	--	--	--
MW-3	09-04-97	41.44	10.75	0.00	30.69	09-04-97	<50	<0.5	<0.5	<0.5	<0.5	37	--	--	--
MW-3	11-03-97	41.44	11.44	0.00	30.00	11-03-97	<200	<2	<2	<2	<2	130	--	--	--
MW-3	02-20-98	41.44	7.48	0.00	33.96	02-20-98	<200	<2	5	<2	8	140	--	--	--
MW-3	05-18-98	41.44	9.87	0.00	31.57	05-18-98	<100	<1	<1	<1	<1	150	--	--	--
MW-3	08-20-98	41.44	10.72	0.00	30.72	08-21-98	<200	<2	<2	<2	<2	210	--	--	--
MW-3	10-20-98	41.44	11.30	0.00	30.14	10-20-98	<200	<2	<2	<2	<2	270	--	--	--
MW-3	02-16-99	41.44	8.60	0.00	32.84	02-16-99	<500	<5	<5	<5	<5	700	--	--	--
MW-3	05-24-99	41.44	9.87	0.00	31.57	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	150	140	--	--
MW-3	08-24-99	41.44	10.83	0.00	30.61	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	54	71	0.41	P
MW-3	11-16-99	41.44	10.54	0.00	30.90	11-16-99	100	<0.5	3.3	<0.5	<1	500	--	6.2	P
MW-3	02-01-00	41.44	5.69	0.00	35.75	02-02-00	18,000	1,000	45	1,500	940	100	--	2.12	P
MW-3	06-21-00	41.44	9.99	0.00	31.45	06-21-00	90.9	1.52	<0.500	<0.500	<0.500	187	--	2.6	P
MW-3	11-06-00	41.44	10.15	0.00	31.29	11-06-00	138	2.37	<0.500	<0.500	<0.500	216	--	0.47	P
MW-3	05-04-01	41.44	10.17	0.00	31.27	05-04-01	316	15.7	1.14	<0.500	<0.500	178	--	--	P
MW-3	**10-03-01**	**41.44**	**10.99**	**0.00**	**30.45**	**10-03-01**	**120**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**120**	**--**	**0.47**	**P**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-4	03-24-95	40.33	5.92	0.00	34.41	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-4	05-24-95	40.33	9.23	0.00	31.10	05-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-4	08-22-95	40.33	10.61	0.00	29.72	08-22-95	<50	<0.5	<0.5	<0.5	<0.5	99	--	--	--
MW-4	11-09-95	40.33	11.97	0.00	28.36	11-09-95	<50	<0.5	<0.5	<0.5	<0.5	--	89	--	--
MW-4	02-27-96	40.33	8.84	0.00	31.49	02-27-96	<50	0.8	<0.5	<0.5	<0.5	<3	--	--	--
MW-4	04-22-96	40.33	9.15	0.00	31.18	04-22-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	08-15-96	40.33	10.35	0.00	29.98	08-15-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	12-10-96	40.33	8.70	0.00	31.63	12-10-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	03-27-97	40.33	9.75	0.00	30.58	03-27-97	<5,000	<50	<50	<50	<50	4,200	--	--	--
MW-4	05-22-97	40.33	9.91	0.00	30.42	05-22-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	09-04-97	40.33	10.25	0.00	30.08	09-04-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-4	11-03-97	40.33	10.79	0.00	29.54	11-03-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-4	02-20-98	40.33	6.78	0.00	33.55	02-20-98	<2,000	<20	<20	<20	<20	3,300	--	--	--
MW-4	05-18-98	40.33	9.26	0.00	31.07	05-18-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-4	08-20-98	40.33	10.10	0.00	30.23	08-21-98	<50	<0.5	<0.5	<0.5	<0.5	9	--	--	--
MW-4	10-20-98	40.33	10.43	0.00	29.90	10-20-98	<50	<0.5	<0.5	<0.5	<0.5	17	--	--	--
MW-4	02-16-99	40.33	8.56	0.00	31.77	02-16-99	<500	<5	<5	<5	<5	400	--	--	--
MW-4	05-24-99	40.33	9.52	0.00	30.81	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	10	7.6	--	--
MW-4	08-24-99	40.33	9.99	0.00	30.34	08-24-99	<2,500	<25	<25	<25	<25	1,200	1,300	0.84	NP
MW-4	11-16-99	40.33	9.80	0.00	30.53	11-16-99	<50	<0.5	<0.5	<0.5	<1	<3	--	0.0	NP
MW-4	02-01-00	40.33	9.11	0.00	31.22	02-02-00	<50	<0.5	<0.5	<0.5	<1	1,200	--	1.0	NP
MW-4	06-21-00	40.33	9.60	0.00	30.73	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	60.5	--	1.3	NP
MW-4	11-06-00	40.33	9.53	0.00	30.80	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	14.0	--	0.71	NP
MW-4	05-04-01	40.33	9.21	0.00	31.12	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	83.6	--	--	NP
MW-4	**10-03-01**	**40.33**	**10.74**	**0.00**	**29.59**	**10-03-01**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**260**	**--**	**0.59**	**NP**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-5	03-24-95	41.84	6.23	0.00	35.61	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-5	05-24-95	41.84	9.61	0.00	32.23	05-24-95	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	08-22-95	41.84	11.12	0.00	30.72	08-22-95	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	11-09-95	41.84	12.52	0.00	29.32	11-09-95	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	02-27-96	41.84	9.52	0.00	32.32	02-27-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	04-22-96	41.84	9.44	0.00	32.40	04-22-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	08-15-96	41.84	10.83	0.00	31.01	08-15-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	12-10-96	41.84	9.20	0.00	32.64	12-10-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	03-27-97	41.84	10.10	0.00	31.74	03-27-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	05-22-97	41.84	10.28	0.00	31.56	05-22-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	09-04-97	41.84	10.73	0.00	31.11	09-04-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	11-03-97	41.84	11.23	0.00	30.61	11-03-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	02-20-98	41.84	6.67	0.00	35.17	02-20-98	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	05-18-98	41.84	9.61	0.00	32.23	05-18-98	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	08-20-98	41.84	10.58	0.00	31.26	08-21-98	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	10-20-98	41.84	10.66	0.00	31.18	10-20-98	Not sampled: well sampled annually, during the first quarter							--	--
MW-5	02-16-99	41.84	8.35	0.00	33.49	02-16-99	Not sampled							--	--
MW-5	05-24-99	41.84	9.95	0.00	31.89	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-5	08-24-99	41.84	10.51	0.00	31.33	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	<3	--	0.79	NP
MW-5	11-16-99	41.84	10.37	0.00	31.47	11-16-99	Not sampled: well sampled annually, during the second quarter							--	--
MW-5	02-01-00	41.84	9.35	0.00	32.49	02-02-00	<50	<0.5	<0.5	<0.5	<1	<3	--	1.0	NP
MW-5	06-21-00	41.84	10.03	0.00	31.81	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	3.1	NP
MW-5	11-06-00	41.84	9.89	0.00	31.95	11-06-00	Not sampled: well sampled annually, during the second quarter							--	--
MW-5	05-04-01	41.84	9.42	0.00	32.42	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	--	--	NP
MW-5	**10-03-01**	**41.84**	**10.55**	**0.00**	**31.29**	**10-03-01**	**Not sampled: well sampled annually, during the second quarter**							--	--

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
MW-6	03-24-95	40.13	9.03	0.00	31.10	03-24-95	<50	<0.5	<0.5	<0.5	<0.5	--	--	--	--
MW-6	05-24-95	40.13	12.45	0.00	27.68	05-24-95	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	08-22-95	40.13	13.32	0.00	26.81	08-22-95	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	11-09-95	40.13	14.13	0.00	26.00	11-09-95	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	02-27-96	40.13	11.86	0.00	28.27	02-27-96	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-6	04-22-96	40.13	12.35	0.00	27.78	04-22-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	08-15-96	40.13	13.18	0.00	26.95	08-15-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	12-10-96	40.13	11.94	0.00	28.19	12-10-96	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	03-27-97	40.13	13.10	0.00	27.03	03-27-97	<50	<0.5	<0.5	<0.5	<0.5	<3	--	--	--
MW-6	05-22-97	40.13	13.00	0.00	27.13	05-22-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	09-04-97	40.13	13.30	0.00	26.83	09-04-97	Not sampled: well sampled annually, during the first quarter							--	--
MW-6	11-03-97	40.13	13.42	0.00	26.71	11-03-97	<50	<0.5	<0.5	<0.5	<0.5	19	--	--	--
MW-6	02-20-98	40.13	10.57	0.00	29.56	02-20-98	<100	<1	<1	<1	<1	95	--	--	--
MW-6	05-18-98	40.13	12.64	0.00	27.49	05-18-98	<100	<1	<1	<1	<1	180	--	--	--
MW-6	08-20-98	40.13	13.13	0.00	27.00	08-21-98	<100	<1	<1	<1	<1	180	--	--	--
MW-6	10-20-98	40.13	13.48	0.00	26.65	10-20-98	<100	<1	<1	<1	<1	180	--	--	--
MW-6	02-16-99	40.13	11.92	0.00	28.21	02-16-99	<200	<2	<2	<2	<2	200	--	--	--
MW-6	05-24-99	40.13	12.80	0.00	27.33	05-24-99	<50	<0.5	<0.5	<0.5	<0.5	120	--	--	--
MW-6	08-24-99	40.13	13.03	0.00	27.10	08-24-99	<50	<0.5	<0.5	<0.5	<0.5	44	--	0.46	NP
MW-6	11-16-99	40.13	12.70	0.00	27.43	11-16-99	<50	<0.5	<0.5	<0.5	<1	17	17	0.0	NP
MW-6	02-01-00	40.13	8.61	0.00	31.52	02-02-00	<50	<0.5	<0.5	<0.5	<1	6	--	1.0	NP
MW-6	06-21-00	40.13	12.88	0.00	27.25	06-21-00	<50.0	<0.500	<0.500	<0.500	<0.500	2.57	--	2.8	NP
MW-6	11-06-00	40.13	12.74	0.00	27.39	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	3.77	--	1.51	NP
DUP	11-06-00	--	--	--	--	11-06-00	<50.0	<0.500	<0.500	<0.500	<0.500	4.03	--	--	--
MW-6	05-04-01	40.13	11.29	0.00	28.84	05-04-01	<50.0	<0.500	<0.500	<0.500	<0.500	10.5	12.3	--	NP
MW-6	**10-03-01**	**40.13**	**11.35**	**0.00**	**28.78**	**10-03-01**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**5.8**	**4.8**	**0.61**	**NP**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)
RW-1	03-24-95	40.33	9.32	0.01	31.02	03-24-95	11,000	560	660	150	1,700	--	--	--	--
RW-1	05-24-95	40.33	9.75	0.03	30.60	05-24-95	Not sampled: well contained floating product							--	--
RW-1	08-22-95	40.33	10.86	0.02	29.48	08-22-95	Not sampled: well contained floating product							--	--
RW-1	11-09-95	40.33	20.61	0.00	19.72	11-09-95	1,600	79	46	13	240	--	--	--	--
RW-1	02-27-96	40.33	16.56	0.00	23.77	02-27-96	210	44	7.5	2.5	24	29	--	--	--
RW-1	04-22-96	40.33	9.65	0.00	30.68	04-22-96	36,000	7,400	3,700	580	3,400	<300	--	--	--
RW-1	08-15-96	40.33	10.60	0.00	29.73	08-15-96	1,800	31	38	15	150	<30	--	--	--
RW-1	12-10-96	40.33	8.72	0.00	31.61	12-10-96	25,000	1,900	1,000	330	3,200	<100	--	--	--
RW-1	03-27-97	40.33	10.33	0.00	30.00	03-27-97	7,200	1,900	59	95	240	480	--	--	--
RW-1	05-22-97	40.33	10.10	0.00	30.23	05-22-97	3,000	630	84	45	340	<60	--	--	--
RW-1	09-04-97	40.33	10.42	0.00	29.91	09-04-97	7,100	120	55	14	160	<60	--	--	--
RW-1	11-03-97	40.33	9.10	0.00	31.23	11-03-97	<200	14	19	3	19	140	--	--	--
RW-1	02-20-98	40.33	7.49	0.00	32.84	02-20-98	3,800	1,000	85	64	220	950	--	--	--
RW-1	05-18-98	40.33	8.90	0.00	31.43	05-18-98	<200	45	<2	2	4	220	--	--	--
RW-1	08-20-98	40.33	11.06	0.00	29.27	08-21-98	480	200	<2	<2	30	180	--	--	--
RW-1	10-20-98	40.33	11.12	0.00	29.21	10-20-98	110	36	2.9	<0.5	4.1	5	--	--	--
RW-1	02-16-99	40.33	7.70	0.00	32.63	02-17-99	250	61	2	2	19	94	--	--	--
RW-1	05-24-99	40.33	11.12	0.00	29.21	05-24-99	4,500	2,000	7	<2	180	35	--	--	--
RW-1	08-24-99	40.33	10.15	0.00	30.18	08-24-99	2,600	1,100	6.3	2.3	17	39	--	0.52	NP
RW-1	11-16-99	40.33	9.95	0.00	30.38	11-16-99	1,200	2,600	16	86	41	140	--	1.4	P
RW-1	02-01-00	40.33	11.88	0.00	28.45	02-02-00	11,000	980	230	200	1,400	38	--	1.0	NP
RW-1	06-21-00	40.33	9.83	0.00	30.50	06-21-00	899	278	<2.50	8.70	8.46	61.1	--	1.3	NP
RW-1	11-06-00	40.33	8.45	0.00	31.88	11-06-00	156,000	3,260	28,800	4,570	25,700	26,200	--	0.63	P
RW-1	05-04-01	40.33	8.57	0.00	31.76	05-04-01	244,000	8,420	56,000	5,660	36,200	23,400	11,000	--	P
RW-1	**10-03-01**	**40.33**	**9.13**	**0.00**	**31.20**	**10-03-01**	**120,000**	**2,500**	**33,000**	**3,800**	**21,000**	**3,300**	**--**	**0.38**	**P**
S-5	05-31-01	--	--	--	--	05-31-01	310,000	3,000	11,000	4,000	34,000	<2,500	--	--	--
S-5	**10-03-01**	**--**	**10.00**	**--**	**--**	**10-03-01**	**70,000**	**1,800**	**7,800**	**1,400**	**20,000**	**<120**	**--**	**0.25**	**NP**

Table 1
Groundwater Monitoring Data

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Well Number	Date Gauged	TOC Elevation (ft-MSL)	Depth to Water (feet)	FP Thickness (feet)	Groundwater Elevation [1] (ft-MSL)	Date Sampled	TPHg (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8021B* (µg/L)	MTBE 8240/8260 (µg/L)	Dissolved Oxygen (mg/L)	Purged/ Not Purged (P/NP)

TOC: top of casing

ft-MSL: elevation in feet, relative to mean sea level

TPH: total petroleum hydrocarbons as gasoline, California DHS LUFT Method

BTEX: benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 11/16/99).

MTBE: Methyl tert-butyl ether

µg/L: micrograms per liter

mg/L: milligrams per liter

- -: not analyzed or not applicable

<: denotes concentration not present at or above laboratory detection limit stated to the right.

[1] = Computed by adding correction factor to groundwater elevation. Correction factor = free product thickness times 0.73 (approximate specific gravity of gasoline).

*: EPA method 8020 prior to 11/16/99

**: For previous historical groundwater elevation and analytical data please refer to *Fourth Quarter 1995 Groundwater Monitoring Program Results and Remediation System Performance Evaluation Report, ARCO Service Station 2035, Albany, California*, (EMCON, March 25, 1996).

DUP: duplicate sample

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station No. 2035
1001 San Pablo Avenue, Albany, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
03-24-95	Northwest	0.037
05-24-95	West-Northwest	0.013
08-22-95	Southwest	0.012
11-09-95	West-Southwest	0.01
02-27-96	Southwest	0.009
04-22-96	West-Southwest	0.014
08-15-96	Southwest	0.011
12-10-96	West-Southwest	0.023
03-27-97	West-Southwest	0.026
05-22-97	West-Southwest	0.024
09-04-97	West	0.019
11-03-97	Southwest	0.038
02-20-98	West	0.031
05-18-98	West	0.02
08-20-98	West	0.02
10-20-98	West	0.02
02-16-99	West	0.03
05-24-99	West-Southwest	0.03
08-24-99	West-Southwest	0.01
11-16-99	West-Southwest	0.02
02-01-00	Northwest	0.08
06-21-00	West	0.023
11-06-00	West	0.018
05-04-01	West-Southwest	0.015
10-03-01	**Southwest**	**0.013**

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1															
4/11/2002	P	41.41	10.73	--	30.68	800	360	<5.0	<5.0	<5.0	<50	--	--	--	
11/27/2002	P	41.41	10.22	--	31.19	<50	<0.50	<0.50	<0.50	<0.50	1.7	1.1	--	--	
6/3/2003	--	41.41	9.14	--	32.27	1,700	430	<5.0	24	11	8.6	1.7	--	--	
11/13/2003	P	43.55	10.17	--	33.38	<50	<0.50	<0.50	<0.50	<0.50	0.95	2.3	SEQM	6.5	a
05/12/2004	P	43.55	9.28	--	34.27	120	7.2	<0.50	<0.50	<0.50	3.0	1.6	SEQM	6.0	
12/01/2004	P	43.55	9.16	--	34.39	<50	0.94	<0.50	<0.50	1.1	2.4	5.2	SEQM	6.6	
05/02/2005	P	43.55	8.58	--	34.97	1,300	390	<5.0	12	6.4	8.8	2.8	SEQM	6.5	
11/16/2005	P	43.55	9.50	--	34.05	<50	<0.50	<0.50	<0.50	0.54	0.92	1.7	SEQM	6.4	
5/31/2006	P	43.55	7.36	--	36.19	850	200	<2.5	5.4	<2.5	4.0	2.4	SEQM	6.5	
12/6/2006	P	43.55	9.91	--	33.64	<50	0.52	<0.50	<0.50	<0.50	0.72	4.50	TAMC	6.99	
5/15/2007	P	43.55	9.65	--	33.90	67	6.6	<0.50	<0.50	<0.50	1.8	2.43	TAMC	6.96	
11/29/2007	P	43.55	9.11	--	34.44	<50	<0.50	<0.50	<0.50	<0.50	0.98	4.51	TAMC	6.81	
5/6/2008	**P**	**43.55**	**8.25**	**--**	**35.30**	**890**	**140**	**0.53**	**5.4**	**5.8**	**<0.50**	**1.89**	**CEL**	**6.61**	
MW-2															
4/11/2002	P	40.38	11.05	--	29.33	<50	<0.50	<0.50	<0.50	<0.50	24	--	--	--	
11/27/2002	P	40.38	10.51	--	29.87	<50	<0.50	<0.50	<0.50	<0.50	5.4	2.6	--	--	
6/3/2003	--	40.38	9.78	--	30.60	<50	<0.50	<0.50	<0.50	<0.50	23	1.7	--	--	
11/13/2003	P	42.52	10.69	--	31.83	<50	<0.50	<0.50	<0.50	<0.50	9.5	2.3	SEQM	6.5	a
05/12/2004	P	42.52	10.34	--	32.18	<250	<2.5	<2.5	<2.5	<2.5	27	2.2	SEQM	6.6	
12/01/2004	P	42.52	10.28	--	32.24	<50	<0.50	<0.50	<0.50	0.70	17	3.9	SEQM	6.6	
05/02/2005	P	42.52	9.50	--	33.02	<50	<0.50	<0.50	<0.50	<0.50	25	3.1	SEQM	6.6	
11/16/2005	P	42.52	10.50	--	32.02	<50	<0.50	<0.50	<0.50	0.50	7.6	2.8	SEQM	6.4	
5/31/2006	P	42.52	10.03	--	32.49	<50	<0.50	<0.50	<0.50	<0.50	24	2.0	SEQM	6.6	
12/6/2006	P	42.52	10.28	--	32.24	<50	<0.50	<0.50	<0.50	<0.50	1.6	3.72	TAMC	6.91	
5/15/2007	P	42.52	10.00	--	32.52	<50	<0.50	<0.50	<0.50	<0.50	44	2.90	TAMC	6.69	
11/29/2007	P	42.52	10.13	--	32.39	<50	<0.50	<0.50	<0.50	<0.50	1.9	4.83	TAMC	6.89	
5/6/2008	**P**	**42.52**	**9.55**	**--**	**32.97**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**35**	**1.88**	**CEL**	**6.62**	
MW-3															
4/11/2002	P	41.44	11.05	--	30.39	250	9.4	<0.50	<0.50	<0.50	120	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
11/27/2002	P	41.44	10.49	--	30.95	<100	<1.0	<1.0	<1.0	2.5	56	2.2	--	--	
6/3/2003	--	41.44	9.44	--	32.00	130	<0.50	<0.50	<0.50	<0.50	47	4.1	--	--	
11/13/2003	P	43.62	10.68	--	32.94	53	<0.50	<0.50	<0.50	<0.50	36	3.8	SEQM	6.8	a
05/12/2004	P	43.62	9.95	--	33.67	65	<0.50	<0.50	<0.50	<0.50	39	4.2	SEQM	6.9	
12/01/2004	P	43.62	10.32	--	33.30	140	<0.50	<0.50	<0.50	<0.50	37	4.3	SEQM	6.9	
05/02/2005	P	43.62	9.12	--	34.50	140	<0.50	<0.50	<0.50	<0.50	23	3.1	SEQM	6.7	
11/16/2005	P	43.62	10.58	--	33.04	<50	<0.50	<0.50	<0.50	<0.50	32	4.1	SEQM	6.5	
5/31/2006	P	43.62	9.41	--	34.21	<50	<0.50	<0.50	<0.50	<0.50	20	4.3	SEQM	6.8	
12/6/2006	P	43.62	10.25	--	33.37	<50	<0.50	<0.50	<0.50	<0.50	20	2.71	TAMC	7.00	
5/15/2007	P	43.62	9.70	--	33.92	<50	<0.50	<0.50	<0.50	<0.50	40	5.89	TAMC	7.07	
11/29/2007	P	43.62	10.08	--	33.54	90	<0.50	<0.50	<0.50	<0.50	35	4.74	TAMC	6.61	
5/6/2008	**P**	**43.62**	**10.02**	**--**	**33.60**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**14**	**2.05**	**CEL**	**6.61**	
MW-4															
4/11/2002	NP	40.33	10.81	--	29.52	<50	<0.50	<0.50	<0.50	<0.50	11	--	--	--	
11/27/2002	NP	40.33	10.09	--	30.24	<50	<0.50	<0.50	<0.50	<0.50	6.5	1.8	--	--	
6/3/2003	--	40.33	8.62	--	31.71	<250	<2.5	<2.5	<2.5	<2.5	120	1.1	--	--	
11/13/2003	NP	42.48	9.98	--	32.50	<50	<0.50	<0.50	<0.50	<0.50	20	1.3	SEQM	6.2	a
05/12/2004	P	42.48	9.48	--	33.00	<250	<2.5	<2.5	<2.5	<2.5	79	2.9	SEQM	6.6	
12/01/2004	NP	42.48	9.60	--	32.88	<50	<0.50	<0.50	<0.50	<0.50	1.8	1.9	SEQM	6.7	
05/02/2005	NP	42.48	8.67	--	33.81	<50	<0.50	<0.50	<0.50	<0.50	11	2.8	SEQM	6.6	
11/16/2005	NP	42.48	10.00	--	32.48	<50	<0.50	<0.50	<0.50	<0.50	0.93	1.7	SEQM	6.3	
5/31/2006	NP	42.48	8.52	--	33.96	<50	<0.50	<0.50	<0.50	<0.50	2.4	1.0	SEQM	7.0	
12/6/2006	NP	42.48	9.90	--	32.58	<50	<0.50	<0.50	<0.50	<0.50	7.8	0.85	TAMC	7.10	
5/15/2007	NP	42.48	9.18	--	33.30	<50	<0.50	<0.50	<0.50	<0.50	2.2	1.37	TAMC	6.85	
11/29/2007	NP	42.48	9.10	--	33.38	<50	<0.50	<0.50	<0.50	<0.50	9.1	1.81	TAMC	7.14	
5/6/2008	**P**	**42.48**	**9.40**	**--**	**33.08**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**10**	**2.61**	**CEL**	**6.91**	
MW-5															
4/11/2002	NP	41.84	10.63	--	31.21	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	
11/27/2002	NP	41.84	10.65	--	31.19	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-5 Cont.															
6/3/2003	--	41.84	8.92	--	32.92	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	--	--	
11/13/2003	NP	44.03	10.58	--	33.45	<50	<0.50	<0.50	<0.50	<0.50	0.79	1.4	SEQM	5.7	a
05/12/2004	--	44.03	9.95	--	34.08	--	--	--	--	--	--	--	--	--	
12/01/2004	NP	44.03	10.05	--	33.98	<50	<0.50	<0.50	<0.50	<0.50	0.55	1.8	SEQM	6.3	
05/02/2005	--	44.03	8.75	--	35.28	--	--	--	--	--	--	--	--	--	
11/16/2005	NP	44.03	10.37	--	33.66	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	SEQM	6.2	
5/31/2006	--	44.03	9.07	--	34.96	--	--	--	--	--	--	--	--	--	
12/6/2006	NP	44.03	10.25	--	33.78	<50	<0.50	<0.50	<0.50	<0.50	0.99	1.24	TAMC	6.88	
5/15/2007	--	44.03	9.51	--	34.52	--	--	--	--	--	--	--	--	--	
11/29/2007	NP	44.03	9.95	--	34.08	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.93	TAMC	6.98	
5/6/2008	--	**44.03**	**9.67**	--	**34.36**	--	--	--	--	--	--	--	--	--	
MW-6															
4/11/2002	NP	40.13	11.42	--	28.71	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--	--	
11/27/2002	NP	40.13	13.11	--	27.02	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	--	--	
6/3/2003	--	40.13	12.48	--	27.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	--	--	
11/13/2003	NP	42.26	13.11	--	29.15	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	SEQM	6.8	a
05/12/2004	--	42.26	12.68	--	29.58	--	--	--	--	--	--	--	--	--	
12/01/2004	NP	42.26	12.68	--	29.58	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.7	SEQM	7.3	
05/02/2005	--	42.26	12.25	--	30.01	--	--	--	--	--	--	--	--	--	
11/16/2005	NP	42.26	12.98	--	29.28	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	SEQM	6.7	
5/31/2006	--	42.26	12.35	--	29.91	--	--	--	--	--	--	--	--	--	
12/6/2006	NP	42.26	12.98	--	29.28	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.24	TAMC	6.86	
5/15/2007	--	42.26	12.55	--	29.71	--	--	--	--	--	--	--	--	--	
11/29/2007	NP	42.26	12.75	--	29.51	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	TAMC	6.93	
5/6/2008	--	**42.26**	**12.91**	--	**29.35**	--	--	--	--	--	--	--	--	--	
RW-1															
4/11/2002	P	40.33	9.20	--	31.13	15,000	750	2,000	380	2,000	1,500	--	--	--	
11/27/2002	P	40.33	10.31	--	30.02	<2,500	720	<25	<25	<25	<25	1.8	--	--	
6/3/2003	--	40.33	9.54	--	30.79	470	78	0.97	4.3	9	48	1.4	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
RW-1 Cont.															
11/13/2003	P	42.35	10.35	--	32.00	130	29	<0.50	<0.50	<0.50	44	1.3	SEQM	6.6	a
05/12/2004	P	42.35	9.80	--	32.55	<250	66	<2.5	<2.5	<2.5	<2.5	1.9	SEQM	6.9	
09/02/2004	--	42.35	10.42	--	31.93	--	--	--	--	--	--	--	--	--	
10/07/2004	--	42.35	10.36	--	31.99	--	--	--	--	--	--	--	--	--	
11/04/2004	--	42.35	9.93	--	32.42	--	--	--	--	--	--	--	--	--	
12/01/2004	P	42.35	10.02	--	32.33	<250	96	<2.5	<2.5	<2.5	16	1.8	SEQM	6.7	
05/02/2005	P	42.35	9.20	--	33.15	230	100	<1.0	<1.0	<1.0	50	2.5	SEQM	6.6	
11/16/2005	P	42.35	10.96	--	31.39	<100	28	<1.0	<1.0	<1.0	32	1.0	SEQM	6.5	
5/31/2006	P	42.35	9.34	--	33.01	320	32	<0.50	<0.50	<0.50	28	1.3	SEQM	6.8	
12/6/2006	P	42.35	10.10	--	32.25	50	27	<0.50	<0.50	<0.50	19	1.49	TAMC	7.54	
5/15/2007	P	42.35	9.42	--	32.93	280	32	<0.50	<0.50	<0.50	18	2.61	TAMC	7.10	
11/29/2007	P	42.35	9.75	--	32.60	<50	14	<0.50	<0.50	<0.50	18	4.86	TAMC	8.14	
5/6/2008	**P**	**42.35**	**9.71**	**--**	**32.64**	**610**	**110**	**<2.5**	**<2.5**	**<2.5**	**2.6**	**2.48**	**CEL**	**6.95**	
S-5															
4/11/2002	P	40.33	10.17	--	30.16	30,000	390	1,400	410	7,400	<500	--	--	--	
11/27/2002	P	40.33	9.77	--	30.56	55,000	1,300	450	1,400	13,000	<50	4.3	--	--	
6/3/2003	--	40.33	9.12	--	31.21	--	--	--	--	--	--	1.4	--	--	
6/3/2003	--	40.33	9.03	--	31.30	44,000	680	260	1,100	9,900	<25	1.9	--	--	
11/13/2003	P	41.83	9.12	--	32.71	31,000	520	120	690	5,900	<50	1.4	SEQM	6.5	a
05/12/2004	P	41.83	9.95	--	31.88	28,000	760	79	910	5,000	<50	1.9	SEQM	6.6	
12/01/2004	P	41.83	9.61	--	32.22	26,000	1,500	64	1,400	4,000	<25	--	SEQM	6.5	b
05/02/2005	P	41.83	8.80	--	33.03	13,000	700	18	260	1,300	<5.0	1.8	SEQM	6.4	
11/16/2005	P	41.83	9.80	--	32.03	15,000	1,400	25	570	850	<5.0	1.1	SEQM	6.3	
5/31/2006	P	41.83	8.89	--	32.94	9,800	170	<5.0	490	390	<5.0	1.4	SEQM	6.6	
12/6/2006	P	41.83	9.65	--	32.18	16,000	1,100	<25	1,700	970	<25	1.23	TAMC	6.95	
5/15/2007	P	41.83	8.89	--	32.94	10,000	140	<5.0	340	310	<5.0	3.63	TAMC	7.10	
11/29/2007	P	41.83	9.48	--	32.35	13,000	770	8.6	500	360	<2.5	5.42	TAMC	7.28	c (Benzene)
5/6/2008	**P**	**41.83**	**9.30**	**--**	**32.53**	**7,400**	**320**	**2.8**	**580**	**130**	**<0.50**	**3.37**	**CEL**	**6.88**	

ABBREVIATIONS & SYMBOLS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
ft bgs = Feet below ground surface
ft MSL = Feet above mean sea level
BTEX = Benzene, toluene, ethylbenzene and xylenes
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
GRO = Gasoline range organics, range C4-C12
GWE = Groundwater elevation measured in ft MSL
mg/L = Milligrams per liter
MTBE = Methyl tert butyl ether
NP = Not purged before sampling
P = Purged before sampling
TOC = Top of casing measured in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline, analyzed using EPA Method 8015, Modified
µg/L = Micrograms per liter
SEQ/SEQM = Sequoia Analytical/Sequoia Morgan Hill Laboratories

FOOTNOTES:
a = Site resurveyed by URS on 10/15/03 to NAVD '88
b = Sheen in well
c = Sample taken from VOA vial with air bubble >6mm

NOTES:
No sampling occurs at this site during the first and third quarters of each calendar year.

TPH-g analyzed using EPA Method 8015, Modified and BTEX and MTBE by EPA method 8260B.

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g 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.

Values for DO and pH were obtained through field measurements.

Note: 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 2. Summary of Fuel Additives Analytical Data

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1									
6/3/2003	<1000	<200	8.6	<5.0	<5.0	<5.0	<5.0	<5.0	
11/13/2003	<100	<20	0.95	<0.50	<0.50	<0.50	--	--	
05/12/2004	<100	<20	3.0	<0.50	<0.50	<0.50	<0.50	<0.50	
12/01/2004	<100	<20	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	
05/02/2005	<1,000	220	8.8	<5.0	<5.0	<5.0	<5.0	<5.0	
11/16/2005	<100	<20	0.92	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/31/2006	<1,500	<100	4.0	<2.5	<2.5	<2.5	<2.5	<2.5	a
12/6/2006	<300	<20	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	
5/15/2007	<300	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
11/29/2007	<300	<20	0.98	<0.50	<0.50	<0.50	<0.50	<0.50	
5/6/2008	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-2									
6/3/2003	<100	<20	23	<0.50	<0.50	<0.50	0.94	<0.50	
11/13/2003	<100	<20	9.5	<0.50	<0.50	<0.50	--	--	
05/12/2004	<500	<100	27	<2.5	<2.5	<2.5	<2.5	<2.5	
12/01/2004	<100	<20	17	<0.50	<0.50	<0.50	0.74	<0.50	
05/02/2005	<100	75	25	<0.50	<0.50	<0.50	<0.50	<0.50	
11/16/2005	<100	<20	7.6	<0.50	<0.50	<0.50	0.79	<0.50	a
5/31/2006	<300	<20	24	<0.50	<0.50	<0.50	0.66	<0.50	a
12/6/2006	<300	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/15/2007	<300	<20	44	<0.50	<0.50	<0.50	1.2	<0.50	
11/29/2007	<300	<20	1.9	<0.50	<0.50	<0.50	<0.50	<0.50	
5/6/2008	**<300**	**<10**	**35**	**<0.50**	**<0.50**	**<0.50**	**0.93**	**<0.50**	
MW-3									
6/3/2003	<100	<20	47	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2003	<100	<20	36	<0.50	<0.50	<0.50	--	--	
05/12/2004	<100	<20	39	<0.50	<0.50	<0.50	<0.50	<0.50	
12/01/2004	<100	<20	37	<0.50	<0.50	<0.50	<0.50	<0.50	
05/02/2005	<100	<20	23	<0.50	<0.50	<0.50	<0.50	<0.50	
11/16/2005	<100	<20	32	<0.50	<0.50	<0.50	<0.50	<0.50	a

Table 2. Summary of Fuel Additives Analytical Data

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
5/31/2006	<300	<20	20	<0.50	<0.50	<0.50	<0.50	<0.50	a
12/6/2006	<300	<20	20	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/15/2007	<300	<20	40	<0.50	<0.50	<0.50	<0.50	<0.50	
11/29/2007	<300	<20	35	<0.50	<0.50	<0.50	<0.50	<0.50	
5/6/2008	**<300**	**<10**	**14**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-4									
6/3/2003	<500	<100	120	<2.5	<2.5	<2.5	<2.5	<2.5	
11/13/2003	<100	<20	20	<0.50	<0.50	<0.50	--	--	
05/12/2004	<500	<100	79	<2.5	<2.5	<2.5	<2.5	<2.5	
12/01/2004	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	
05/02/2005	<100	75	11	<0.50	<0.50	<0.50	<0.50	<0.50	
11/16/2005	<100	<20	0.93	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/31/2006	<300	<20	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	a
12/6/2006	<300	<20	7.8	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/15/2007	<300	<20	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	
11/29/2007	<300	<20	9.1	<0.50	<0.50	<0.50	<0.50	<0.50	
5/6/2008	**<300**	**<10**	**10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-5									
6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2003	<100	<20	0.79	<0.50	<0.50	<0.50	--	--	
12/01/2004	<100	<20	0.55	<0.50	<0.50	<0.50	<0.50	<0.50	
11/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
12/6/2006	<300	<20	0.99	<0.50	<0.50	<0.50	<0.50	<0.50	a
11/29/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-6									
6/3/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
12/01/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
11/16/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
12/6/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a

Table 2. Summary of Fuel Additives Analytical Data

Station #2035, 1001 San Pablo Ave., Albany, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-6 Cont.									
11/29/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
RW-1									
6/3/2003	<100	22	48	<0.50	<0.50	<0.50	<0.50	<0.50	
11/13/2003	<100	<20	44	<0.50	<0.50	<0.50	--	--	
05/12/2004	<500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
12/01/2004	<500	<100	16	<2.5	<2.5	<2.5	<2.5	<2.5	
05/02/2005	<200	<40	50	<1.0	<1.0	<1.0	<1.0	<1.0	
11/16/2005	<200	<40	32	<1.0	<1.0	<1.0	<1.0	<1.0	a
5/31/2006	<300	<20	28	<0.50	<0.50	<0.50	<0.50	<0.50	a
12/6/2006	<300	<20	19	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/15/2007	<300	<20	18	<0.50	<0.50	<0.50	<0.50	<0.50	
11/29/2007	<300	<20	18	<0.50	<0.50	<0.50	<0.50	<0.50	
5/6/2008	**<1,500**	**<50**	**2.6**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	
S-5									
6/3/2003	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
11/13/2003	<10,000	<2,000	<50	<50	<50	<50	--	--	
05/12/2004	<10,000	<2,000	<50	<50	<50	<50	<50	<50	
12/01/2004	<5,000	<1,000	<25	<25	<25	<25	<25	<25	
05/02/2005	<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
11/16/2005	<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	a
5/31/2006	<3,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	a
12/6/2006	<15,000	<1,000	<25	<25	<25	<25	<25	<25	a
5/15/2007	<3,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
11/29/2007	<1,500	<100	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	
5/6/2008	**<300**	**<10**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	

ABBREVIATIONS & SYMBOLS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above the laboratory reporting limit
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl tert-butyl ether
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = Micrograms per Liter

FOOTNOTE:
a = Calibration verification for ethanol was within method limits but outside contract limits.

NOTES:
All volatile organic compounds analyzed using EPA Method 8260B.

Note: 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. Historical Ground-Water Flow Direction and Gradient

Station #2035, 1001 San Pablo Ave., Albany, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
4/11/2002	Southwest	0.012
11/27/2002	West	0.021
6/3/2003	West	0.024
11/13/2003	West (offsite Northwest)	0.015
5/12/2004	West	0.020
12/1/2004	West	0.030
5/2/2005	West	0.02
11/16/2005	West	0.03
5/31/2006	West	0.04
12/6/2006	West	0.01
5/15/2007	West	0.02
11/29/2007	West	0.02
5/6/2008	**West**	**0.007**

NOTES:
Site resurveyed by URS on 10/15/03 by datum NAVD '88.

Note: 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.

APPENDIX C.

SOIL BORING AND MONITORING WELL CONSTRUCTION LOGS

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION
Coarse-grained soils	Gravel and gravelly soils	GW	Well-graded gravels of gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	Sand and sandy soils	SW	Well-graded sand of gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures

MAJOR DIVISIONS		LTR	DESCRIPTION
Fine-grained soils	Silts and clays LL<50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	Silts and clays LL>50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils. Elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silts
Highly organic soils		PT	Peat and other highly organic soils

Depth through which sampler is driven

Relatively undisturbed sample

No sample recovered

Static water level observed in well

Initial water level observed in boring

S-10 Sample number

Sand pack

Bentonite annular seal

Neat cement annular seal

Caved native soil

Blank PVC

Machine-slotted PVC

P.I.D. Photoionization detector

BLOWS REPRESENT THE NUMBER OF BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH EACH 6 INCHES OF AN 18-INCH PENETRATION.

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL. LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY.

Applied GeoSystems

PROJECT NO. 69036-1

UNIFIED SOIL CLASSIFICATION SYSTEM AND SYMBOL KEY
ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

PLATE
P - 3

Total depth of boring: 20 feet **Diameter of boring:** 8 inches **Date drilled:** 8-9-89

Casing diameter: N/A **Length:** N/A **Slot size:** N/A

Screen diameter: N/A **Length:** N/A **Material type:** N/A

Drilling Company: Exploration Geoservices **Driller:** Mike & Kurt

Method Used: Hollow-Stem Auger **Field Geologist:** Steve Bittman

Signature of Registered Professional:

Registration No.: **State:** CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0						
					Asphalt (6 inches) over baserock (6 inches).	
		12		CH	Silty clay with occasional sand, brown, black and orange mottled, damp, hard, high plasticity, noticeable odor.	
2	S-2	21	20			
		21				
4		16				
		35		CL	Gravelly clay with pebbles, brown, damp, hard, low plasticity, noticeable odor.	
	S-5	50	30			
6						
				GW	Sandy gravel with clay gravel, brown, moist, very dense, obvious odor.	
8						
		21				
		35				
10	S-10	42	400			
		22				
		34				
12	S-11.5	47	50			
		24				
	S-13	38	2	CH	Silty clay, slightly sand, light gray, orange and brown mottled, damp, hard, high plasticity, noticeable odor.	
14		50				
		12				
	S-15	16	0		Interbed with orange brown sandy silt, moist, hard, high plasticity.	
		21				
16					▽	
				GM	Silty gravel with pebbles, orange-brown, wet, very dense, noticeable odor.	
18						
		25				
	S-19.5	50	12			
20					Total Depth = 20 feet.	

Applied GeoSystems

PROJECT NO. 69036-1

LOG OF BORING B - 1

ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

PLATE

P - 4

Total depth of boring: 20–1/2 feet **Diameter of boring:** 8 inches **Date drilled:** 8–9–89

Casing diameter: N/A **Length:** N/A **Slot size:** N/A

Screen diameter: N/A **Length:** N/A **Material type:** N/A

Drilling Company: Exploration Geoservices **Driller:** Mike & Kurt

Method Used: Hollow–Stem Auger **Field Geologist:** Steve Bittman

Signature of Registered Professional: _____

Registration No.: _____ **State:** CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0						
					Asphalt (6 inches) over baserock (6 inches).	
2	S–2	8, 15, 23	2	CH	Silty clay, brown, blue and green mottled, moist, hard, high plasticity, noticeable odor.	
4				CL	Gravelly clay with clayey sand interbed, brown, black mottled, damp, very dense, noticeable odor.	
6	S–5	10, 25, 36	175			
8				GW	Sandy gravel with clay, brown and gray, moist, very dense, obvious odor.	
10	S–10	15, 36, 40	450			
12						
14	S–14.5	25, 50	25	CL	Sandy clay with silty gravel, gray, brown mottled, damp, hard, low plasticity, noticeable odor.	
16						
18				GW	Silty gravel with sand, brown and gray, wet, very dense, noticeable odor.	
20	S–20	27, 50	5			
					Total Depth = 20–1/2 feet.	

Applied GeoSystems

PROJECT NO. 69036-1

LOG OF BORING B - 2

ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

PLATE

P - 5

Total depth of boring: 20–1/2 feet **Diameter of boring:** 8 inches **Date drilled:** 8–9–89

Casing diameter: N/A **Length:** N/A **Slot size:** N/A

Screen diameter: N/A **Length:** N/A **Material type:** N/A

Drilling Company: Exploration Geoservices **Driller:** Mike & Kurt

Method Used: Hollow–Stem Auger **Field Geologist:** Steve Bittman

Signature of Registered Professional:

Registration No.: **State:** CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0						
					Asphalt (6 inches) over baserock (6 inches).	
2	S–2	9 15 18	8	CH	Silty clay with occasional small gravel, brown, gray mottled, damp, high plasticity, very stiff, noticeable odor.	
4		12 19		CL	Gravelly clay, brown, black mottled, damp, low plasticity, very stiff, noticeable odor.	
6	S–5	23	25			
8				SC	Clayey sand with gravel, gray, brown mottled, very dense, obvious odor.	
10	S–10	10 15 45	480			
12						
14	S–14.5	44 50	75	CL	Sandy clay, brown, gray mottled, damp, hard, medium plasticity, noticeable odor.	
16					▽	
18				GM	Silty gravel, brown, wet, very dense.	
20	S–20	35 50	.3			
					Total Depth = 20–1/2 feet.	

Applied GeoSystems

PROJECT NO. 69036-1

LOG OF BORING B - 3

ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

PLATE

P - 6

Total depth of boring: 19-1/2 feet **Diameter of boring:** 8 inches **Date drilled:** 8-9-89

Casing diameter: N/A **Length:** N/A **Slot size:** N/A

Screen diameter: N/A **Length:** N/A **Material type:** N/A

Drilling Company: Exploration Geoservices **Driller:** Mike & Kurt

Method Used: Hollow-Stem Auger **Field Geologist:** Steve Bittman

Signature of Registered Professional: _____

Registration No.: _____ **State:** CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0						
					Asphalt (6 inches) over baserock (6 inches).	
2	S-2	5, 10, 12	40	CH	Silty clay, gray, damp, high plasticity, very stiff, noticeable odor.	
4				CL	Gravelly clay, brown, damp, hard, medium plasticity, noticeable odor.	
6	S-5	10, 26, 8	100			
8						
10	S-10	11, 27, 39	540			
12						
14				SM	Silty sand with gravel, brown and gray, damp, hard, low plasticity, obvious odor.	
16	S-15	25, 45, 50	511			
18				SW	Gravelly sand with silt, brown, wet, very dense.	
20	S-19	50	1		Total Depth = 19-1/2 feet.	

Applied GeoSystems

PROJECT NO. 69036-1

LOG OF BORING B - 4

ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

PLATE

P - 7

Total depth of boring: 20–1/2 feet **Diameter of boring:** 8 inches **Date drilled:** 8–9–89

Casing diameter: N/A **Length:** N/A **Slot size:** N/A

Screen diameter: N/A **Length:** N/A **Material type:** N/A

Drilling Company: Exploration Geoservices **Driller:** Mike & Kurt

Method Used: Hollow–Stem Auger **Field Geologist:** Steve Bittman

Signature of Registered Professional:

Registration No.: **State:** CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt (6 inches) over baserock (6 inches).	
0				CH	Silty clay with some sand, gray–brown, moist, high plasticity, very stiff, noticeable odor.	
2	S–2	8 12 15	1			
4		13 45		CL	Gravelly clay with sand, yellow brown, damp, hard, low plasticity, noticeable odor.	
6	S–5	50	15			
8						
10	S–9.5	30 50	5	GW	Sandy gravel, clayey, yellow brown, moist, very dense, noticeable odor.	
12						
14		36 36		SC	Clayey sand with gravel, yellow brown, damp, very dense.	
16	S–15	43	0			
18						
20		30 40		CH	Silty clay, gray and brown, moist, hard, high plasticity.	
	S–20	50	0			
					Total Depth = 20–1/2 feet.	

Applied GeoSystems

PROJECT NO. 69036-1

LOG OF BORING B - 5

ARCO Service Station No. 2035
Marin and San Pablo Avenues
Albany, California

PLATE

P - 8

Depth of boring: 18 feet Diameter of boring: 8 inches Date drilled: 6-25-91

Well depth: NA Material type: NA Casing diameter: NA

Screen interval: NA Slot size: NA

Drilling Company: Exceltech Driller: Gene & Richard

Method Used: Hollow-Stem Auger Field Geologist: Joel Coffman

Signature of Registered Professional: _____

Registration No.: _____ State: _____

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0						
					Asphalt.	
				SM	Silty sand, brown, dry, loose: fill.	
2				CL	Sandy clay, green-brown, dry to damp, medium plasticity, soft.	
4						
	S-5.5	14 23 30	0		Brown, low plasticity, stiff.	
6						
8						
10	S-10.5	11 12 22	0		Color change to green-brown.	
12						
14						
	S-15.5	12 15 33	0			
16	S-17	30 48 50	0	SC	Clayey sand, brown, moist, medium dense.	
				▽	Wet.	
18					Total Depth = 18 feet.	
20						

Applied GeoSystems

PROJECT: 69036.03

LOG OF BORING B-6

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE

B2

Depth of boring: 19-1/2 feet Diameter of boring: 8 inches Date drilled: 6-25-91

Well depth: NA Material type: NA Casing diameter: NA

Screen interval: NA Slot size: NA

Drilling Company: Exceltech Driller: Gene & Richard

Method Used: Hollow-Stem Auger Field Geologist: Joel Coffman

Signature of Registered Professional: _____

Registration No.: _____ State: _____

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt.	
				SM	Silty sand, brown, dry, loose: fill.	
2				CL	Sandy clay, dark brown, dry, medium plasticity, medium plasticity, soft.	
					Old concrete slab, possible part of old foundation.	
4				CL	Sandy clay, brown, dry to damp, low plasticity, very stiff.	
	S-5.5	30 40 30	0			
6						
8				GC	Clayey gravel, brown-gray, damp, dense.	
10	S-10.5	22 22 30	6.8	SC	Clayey sand, brown, damp, dense.	
12						
14				CL	Sandy clay, brown-olive, damp, low to medium plasticity, stiff.	
	S-15.5	11 11 18	0			
16	S-17	20 24 25	1.7			
18	S-18.5	25 40 50	0			
				SC ▽	Clayey sand, brown, damp, dense. Wet	
20					Total Depth = 18 feet.	

Applied GeoSystems

PROJECT: 69036.03

LOG OF BORING B-7

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE B3

Depth of boring: 30-1/2 feet Diameter of boring: 13 inches Date drilled: 10/15/91

Well depth: 29 feet Material type: Sch 80 PVC Casing diameter: 6 inches

Screen interval: 11 to 26 feet Slot size: 0.020-inch

Drilling Company: Exceltech Drilling Driller: Dan and Kenny

Method Used: Hollow-Stem Auger Field Geologist: Rob Campbell

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Paved area.	
0					Asphalt (3 inches) and baserock (9 inches).	
2				CH	Silty clay, black, moist, high plasticity; obvious product odor, abundant organics.	
4					PID alarm at 4 feet.	
6	S-6	7 15 20	5681	CL	Silty clay, dark gray mottled with green, moist, medium plasticity, hard; obvious product odor.	
8					Gradational color change from gray to brown.	
10	S-11	11 11 11	*	ML	(10/29/91) Gravelly silt, brown mottled with green, damp, low plasticity, very stiff; obvious product odor. Large caliche clasts.	
14						
16	S-16	15 21 28	*	SC	Clayey sand with some gravel, brown mottled with orange damp, dense; noticeable product odor.	
18					Encountered water at 19 feet (10/15/91).	
20	S-21	19 32 45	0	SM	Increasing sand. Silty sand with gravel, brown, damp, very dense.	
					(Section continues downward)	

*Hydrocarbon vapors overloaded OVM.

RESNA

PROJECT: 69036.02

LOG OF BORING B-8/RW-1

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 5

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
22				SM	Silty sand with gravel, brown, damp, very dense.	
24						
26	S-26	11 18 25	10			
28				CL	Silty clay, gray with brown streaks, damp to moist, medium, plasticity, hard; noticeable product odor.	
30	S-30	30 50	0	SM	Silty sand with gravel, brown, damp to wet, very dense, no odor.	
32					Total depth = 30-1/2 feet.	
34						
36						
38						
40						
42						
44						
46						
48						
50						

RESNA

PROJECT 69036.02

LOG OF BORING B-8/RW-1
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 6

Depth of boring: 31-1/2 feet Diameter of boring: 13 inches Date drilled: 10/14/91

Well depth: 30 feet Material type: Sch 40 PVC Casing diameter: 4 inches

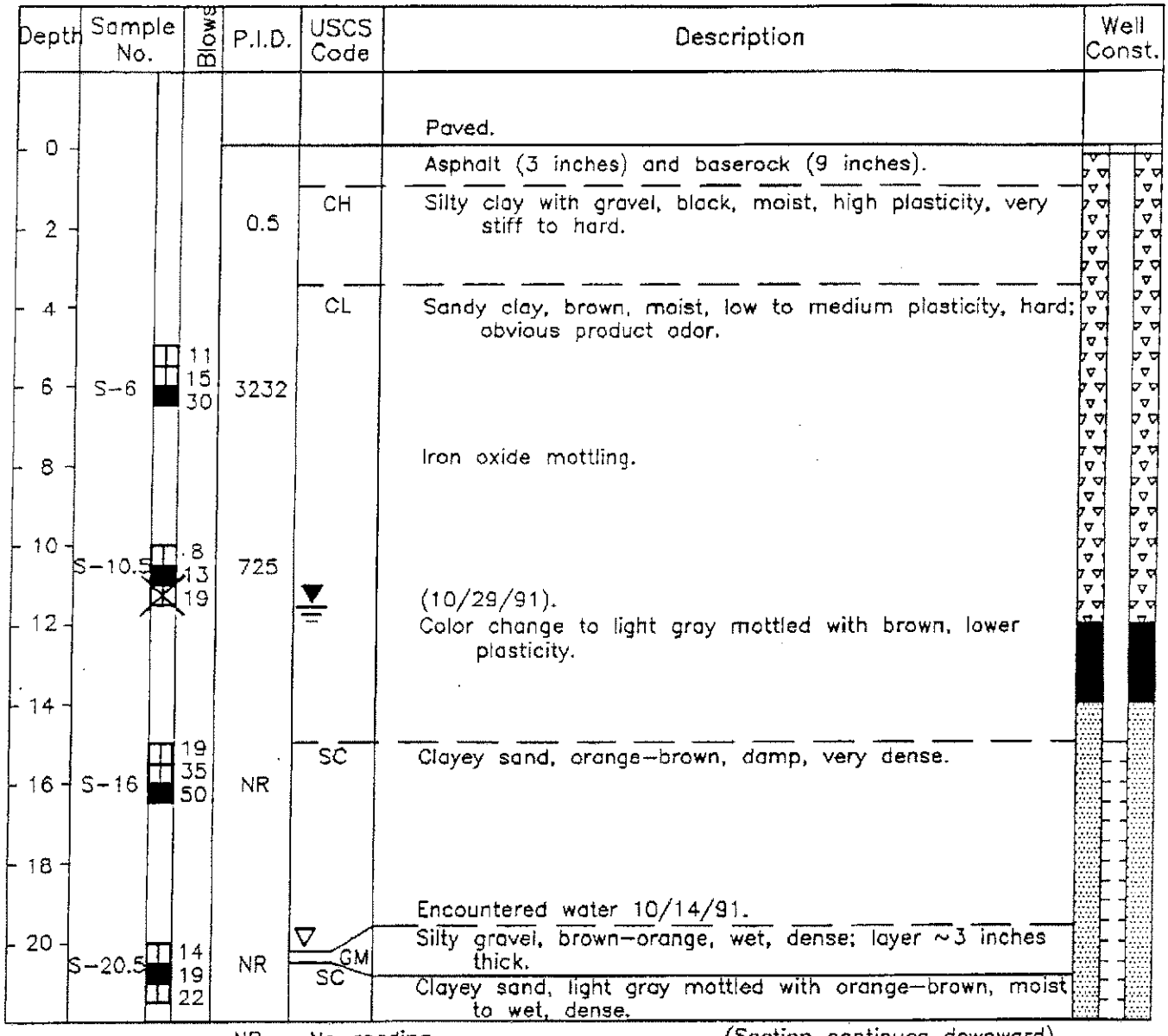
Screen interval: 15 to 30 feet Slot size: 0.020-inch

Drilling Company: Exceltech Drilling Driller: Don and Kenny

Method Used: Hollow-Stem Auger Field Geologist: Rob Campbell

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA



NR = No reading.

(Section continues downward)

RESNA	LOG OF BORING B-9/MW-1 ARCO Station 2035 1001 San Pablo Avenue Albany, California	PLATE 7
PROJECT: 69036.02		

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
22				SC	Clayey sand, light gray mottled with orange-brown, moist to wet, dense.	
24						
26	S-26	19 35 40	NR		Alternating seams of wet and moist.	
28						
					Smoother drilling at 29 feet.	
30	S-31	9 12 19	NR	CL	Silty clay, gray, damp, medium plasticity, very stiff.	
32					Total depth = 31-1/2 feet.	
					NR = No reading.	
34						
36						
38						
40						
42						
44						
46						
48						
50						

RESNA

PROJECT 69036.02

LOG OF BORING B-9/MW-1
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 8

Depth of boring: 33 feet Diameter of boring: 10 inches Date drilled: 10/16/91

Well depth: 29 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 20 to 29 feet Slot size: 0.020-inch

Drilling Company: Exceltech Drilling Driller: Don and Kenny

Method Used: Hollow-Stem Auger Field Geologist: Steve Strausz

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt surface.	
0					Asphalt (2 inches) and baserock (6 inches).	
				CL	Silty clay, dark brown, damp, medium plasticity, stiff.	
2					Color change to lighter gray at 3 feet.	
4					Very stiff.	
	S-5.5	18 23 26	11.8			
6				GM	Silty gravel with minor clay, fine gravel, dark blue-gray, damp, very dense; noticeable product odor.	
8				CL	Smooth drilling at 8 feet. Sandy clay, gray, damp to moist, medium plasticity, hard; minor fine gravel; noticeable product odor.	
10	S-10.5	9 13 19	73.4	▼	(10/29/91).	
12					Rougher drilling at 12 feet.	
	S-13	11 26 30	274	GP	Sandy gravel with clay, brown, moist, dense; obvious product odor.	
14				SC	Clayey sand, gray, moist, very dense.	
	S-15.5	7 11 12	31.9	ML	Clayey silt, light brown, very moist, medium plasticity, very stiff; noticeable product odor.	
16						
18						
20	S-20.5	8 12 17	2.3	▽	Encountered water 10/16/91.	
				SM	Silty sand, fine-grained, light gray, wet, dense.	

(Section continues downward)

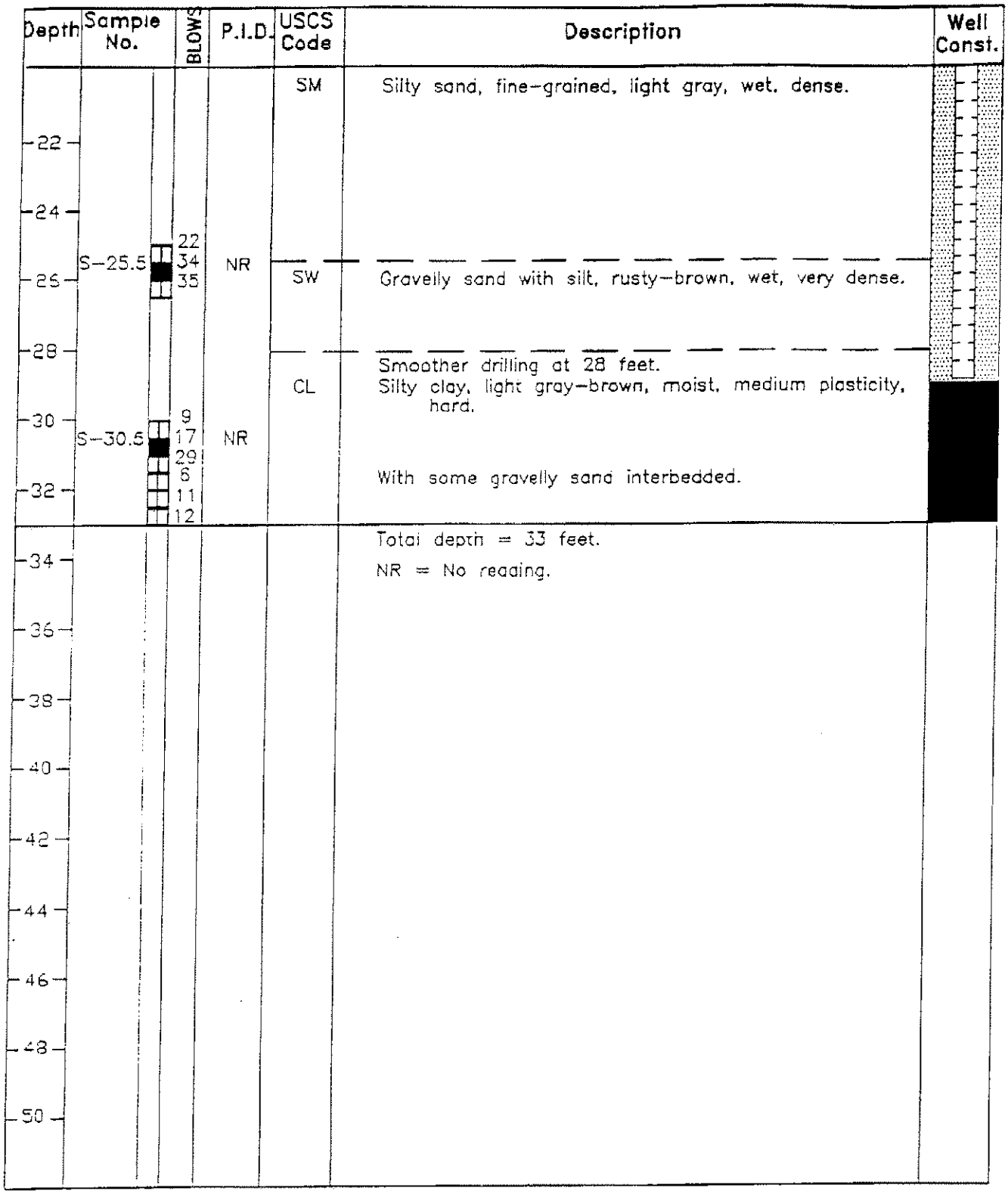
RESNA

PROJECT: 69036.02

LOG OF BORING B-10/MW-2

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 9



RESNA

PROJECT 69036.02

LOG OF BORING B-10/MW-2
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
10

Depth of boring: 34-1/2 feet Diameter of boring: 10 inches Date drilled: 10/16/91

Well depth: 32-1/2 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 12-1/2 to 32-1/2 feet Slot size: 0.020-inch

Drilling Company: Exceltech Drilling Driller: Don and Kenny

Method Used: Hollow-Stem Auger Field Geologist: Rob Campbell

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt surface.	
0					Asphalt (3 inches) and baserock (9 inches).	
2				CH	Silty clay, black, moist, high plasticity, stiff to very stiff; noticeable product odor.	
4						
6	S-6	5 13 14	NR	CL	Silty clay with some gravel, brown with green mottling, moist, low to medium plasticity, very stiff; noticeable product odor.	
8						
10	S-11	6 8 10	NR		(10/29/92).	
12				ML	Clayey silt with medium-grained sand, brown with green mottling, moist, medium plasticity, very stiff, noticeable product odor.	
14						
16	S-16	6 8 10	NR	SC	Clayey sand, gray with orange mottling, damp, medium dense, noticeable product odor.	
18						
20	S-21	8 11 23	NR		(Section continues downward)	

NR = No reading.

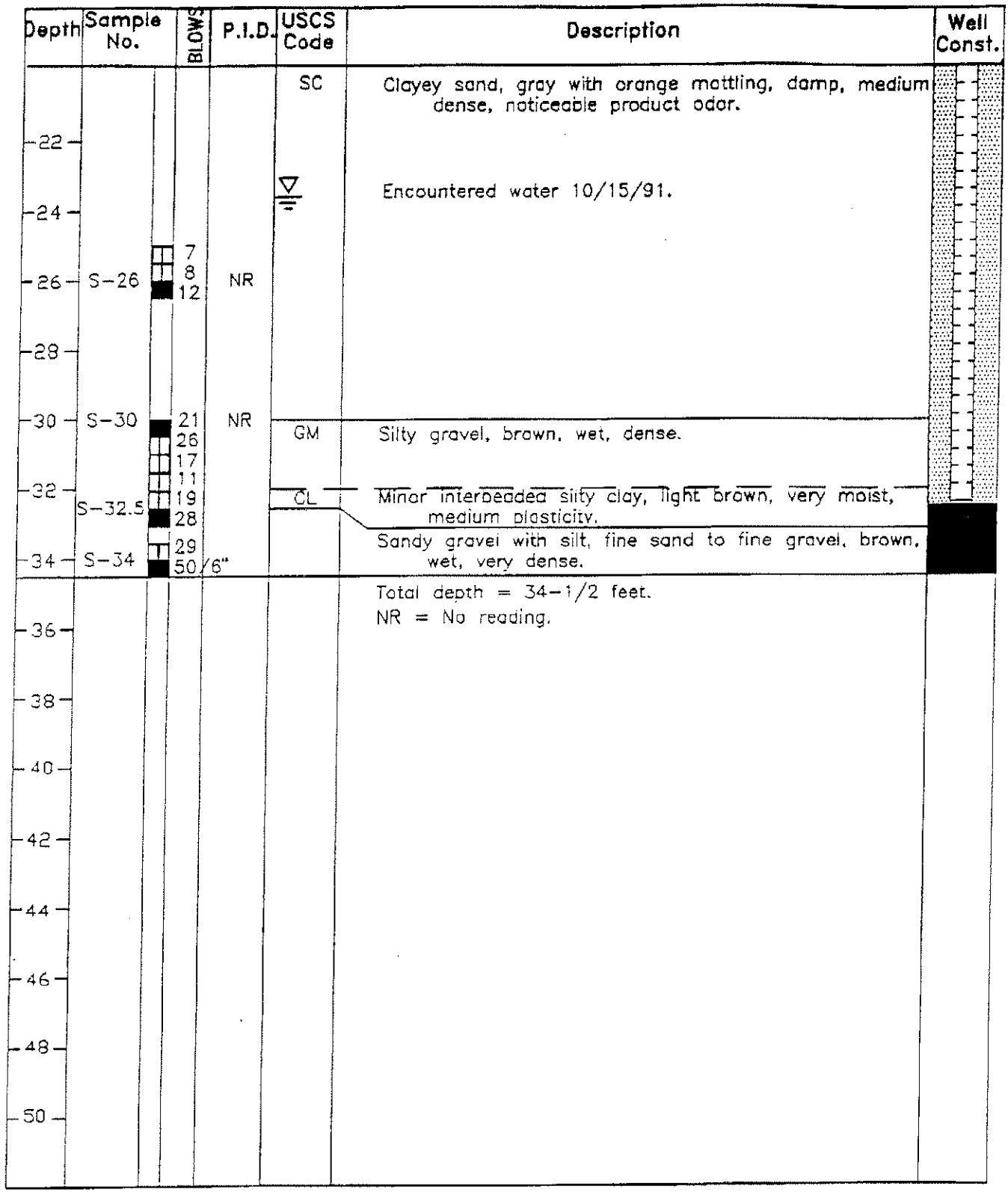
RESNA

PROJECT: 69036.02

LOG OF BORING B-11/MW-3

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 11



RESNA

PROJECT 69036.02

LOG OF BORING B-11/MW-3
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
12

Depth of boring: 21-1/2 feet Diameter of boring: 8 inches Date drilled: 08/20/92

Well depth: N/A Material type: N/A Casing diameter: N/A

Screen interval: N/A Slot size: N/A

Drilling Company: Bayland Drilling Driller: Frank and John

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt-covered surface.	
0					Asphalt (4 inches).	
				GP	Sandy gravel, gray, damp, dense: baserock.	
				CL	Sandy clay, dark brown, damp, medium plasticity, stiff.	
2					Color change to brown.	
4	S-4.5	5 10 15	7.3			
				GC	Clayey gravel with sand, brown, damp, medium dense.	
6				CL	Sandy clay with fine gravel, brown, damp, medium plasticity, very stiff.	
	S-7.5	11 12 13	44			
8				GC	Clayey gravel with sand, gray, damp, medium dense; product odor.	
	S-9	4 5 10	86			
10						
12				SC	Clayey sand with gravel, fine-grained sand, light gray with orange mottling, moist, medium dense.	
14	S-14.5	7 11 13	4			
16						
				ML	Sandy silt, orange-brown, moist, low plasticity, stiff.	
18	S-19	3 6 10	0			
20					Increasing sand, moist.	
	S-20.5	8 10 16	0	▽ SC	Clayey sand with gravel, olive-orange, very moist, medium dense.	
					Total depth = 21-1/2 feet.	

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-12

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 4

Depth of boring: 21-1/2 feet Diameter of boring: 8 inches Date drilled: 08/19/92

Well depth: N/A Material type: N/A Casing diameter: N/A

Screen interval: N/A Slot size: N/A

Drilling Company: Bayland Drilling Driller: Frank and Robert

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional

Registration No. RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt-covered surface.	
					Asphalt (4 inches).	
				GP	Sandy gravel, gray, damp, dense: baserock.	
2				CH	Sandy clay, dark brown, damp, high plasticity, soft.	
				CL	Silty clay, brown, damp, medium plasticity, stiff.	
4	S-4.5	2 7 17	0			
				GC	Clayey gravel with sand, brown, damp, medium dense; noticeable product odor.	
6				CL	Sandy clay, brown, damp, medium plasticity, stiff; noticeable product odor.	
	S-7.5	5 10 14	47			
8	S-9	7 9 11	17	GC	Clayey gravel with sand, brown mottled gray, damp, medium dense.	
10						
12				SC	Clayey sand with gravel, fine-grained sand, light gray with orange mottling, dense.	
14	S-14.5	6 14 18	0			
16						
	S-17.5	11 20 21	0			
18					With sandy silt lenses.	
	S-19	4 6 10	0			
	S-20	14 17 19	0		Increasing gravel.	
20					Decreasing clay, wet.	
					Total depth = 21-1/2 feet.	

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-13
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 5

Depth of boring: 18-1/2 feet Diameter of boring: 10 inches Date drilled: 08/20/92

Well depth: 17 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 5 to 17 feet Slot size: 0.100-inch

Drilling Company: Bayland Drilling Driller: Frank and John

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Concrete.	
0					Concrete (7 inches).	
				GP	Sandy gravel, gray, damp, dense; baserock.	
				CH	Silty clay, dark brown, damp, high plasticity, soft; product odor.	
2			146			
				CL	Sandy clay, trace fine gravel, brown, damp, medium plasticity, very stiff; product odor.	
4						
	S-5.5	5 8 9	709			
6						
8						
				SC	Clayey sand with gravel, fine- to coarse-grained sand, dark gray, damp, loose; obvious product odor.	
10	S-10.5	5 5 5	576			
				CL	Gravelly clay with sand, brown mottled gray, moist, low plasticity, stiff; product odor.	
12						
14						
				SC/ML	Clayey sand, fine-grained, with clayey silt lenses, light gray mottled orange, moist, medium dense; noticeable product odor.	
	S-15.5	2 4 8	59			
16						
	S-17.5	7 24 26	12		With gravel, less clay, orange-brown.	
18						
					Total Depth = 18-1/2 feet.	
20						

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-14/VW-1

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 6

Depth of boring: 17-1/2 feet Diameter of boring: 10 inches Date drilled: 08/19/92

Well depth: 17 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 5 to 17 feet Slot size: 0.100-inch

Drilling Company: Bayland Drilling Driller: Frank and Robert

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt-covered surface.	
					Asphalt (4 inches).	
				GP	Sandy gravel, brown, damp, dense: baserock.	
2				CL/CH	Silty clay, black, damp, medium to high plasticity, stiff; product odor.	
4				CL	Silty clay with sand and fine gravel, brown mottled gray, damp, medium plasticity, very stiff; product odor.	
6	S-5.5	4 8 12	364			
8	S-8.5	8 10 12	522	SC	Clayey sand, fine- to coarse-grained, grayish-brown, moist, medium dense; product odor.	
10	S-10	5 7 11	726	ML	Gravelly silt with sand, brown, moist, low plasticity, very stiff; obvious product odor.	
12	S-12	5 20 14			Color change to brown mottled orange, damp.	
14	S-13.5	7 11 20	610	SC/ML	Clayey sand, fine-grained, with sandy silt lenses, greenish brown, moist, dense; product odor.	
	S-15	7 19	65			
16		20 11 19 24	94		Increasing sand, grayish-brown.	
18					Total depth = 17-1/2 feet.	
20						

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-15/VW-2

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 7

Depth of boring: 15-1/2 feet Diameter of boring: 10 inches Date drilled: 08/19/92

Well depth: 9-1/2 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 4-1/2 to 9-1/2 feet Slot size: 0.100-inch

Drilling Company: Bayland Drilling Driller: Frank and Robert

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt-covered surface.	
					Asphalt (4 inches).	
				GP	Sandy gravel, gray, damp, dense: baserock.	
2				CL	Sandy clay, brown, moist, medium plasticity, very soft; product odor.	
4	S-4.5	1 1 1	74			
6						
8					▼	
10	S-10	1 1 2	142	▽SM	Silty sand, fine-grained, dark gray, wet, very loose; product odor.	
12					Some gravel.	
14	S-14.5	2 3 4	7.7	CL	Silty clay with sand, light gray mottled orange, damp to moist, low plasticity, firm.	
16					Total depth = 15-1/2 feet.	
18						
20						

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-16/VW-3
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 8

Depth of boring: 18-1/2 feet Diameter of boring: 10 inches Date drilled: 08/20/92

Well depth: 17 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 5 to 17 feet Slot size: 0.100-inch

Drilling Company: Bayland Drilling Driller: Frank and John

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Concrete.	
0					Concrete (7 inches).	
				GP	Sandy gravel, brown, damp, dense; baserock.	
2				CH	Silty clay, dark brown, damp, high plasticity, firm.	
4				CL	Sandy clay, brown, damp, medium plasticity, very stiff; obvious product odor.	
6	S-5.5	5 10 14	592		Increasing sand, with fine gravel, grayish-brown.	
8						
10	S-10.5	5 6 6	854	SC	Clayey sand, fine-grained, gray, damp to moist, medium dense; product odor.	
12				CL	Gravelly clay with sand, brown mottled gray, moist, low plasticity, stiff; product odor.	
14				SC/ML	Clayey sand, fine-grained, with clayey silt lenses, light gray mottled orange, moist, medium dense; noticeable product odor.	
16	S-15.5	6 8 10	80			
	S-17.5	1 18 30	225		Less clay, with gravel, orange-brown.	
18					Total depth = 18-1/2 feet.	
20						

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-17/VW-4
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 9

Depth of boring: 16-1/2 feet Diameter of boring: 10 inches Date drilled: 08/21/92

Well depth: 14-1/2 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 4-1/2 to 14-1/2 feet Slot size: 0.100-inch

Drilling Company: Bayland Drilling Driller: Frank and John

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt-covered surface.	
0					Asphalt (4 inches).	
				GP	Sandy gravel, gray, damp, dense: baserock.	
2				CL/CH	Silty clay, dark brown, damp, medium to high plasticity, firm.	
4				CL	Sandy clay, brown, damp, medium plasticity, stiff.	
	S-5.5	7 12 12	39	GC	Clayey gravel with sand, grayish-brown, damp, medium dense.	
6						
8						
10					Increasing sand.	
	S-10.5	12 10 8	143			
12				CL	Gravelly clay with sand, grayish-brown, damp to moist, low plasticity, very stiff; product odor.	
14						
	S-15.5	18 12 18	896	SC	Clayey sand with gravel, fine-grained sand, light gray mottled orange, moist, medium dense; product odor.	
16					Total depth = 16-1/2 feet.	
18						
20						

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-18/VW-5
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 10

Depth of boring: 16-1/2 feet Diameter of boring: 10 inches Date drilled: 08/21/92

Well depth: 12-1/2 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 5 to 12-1/2 feet Slot size: 0.100-inch

Drilling Company: Bayland Drilling Driller: Frank and John

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: RCE 044600 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Asphalt-covered surface.	
					Asphalt (4 inches).	
				GP	Sandy gravel, gray, damp, dense: baserock.	
2				CL/CH	Silty clay, black, damp, medium to high plasticity, stiff; product odor.	
4				CL	Silty clay, brownish-gray, moist, medium plasticity, very stiff; noticeable product odor.	
					Color change to brown.	
6	S-5.5	6 12 21	43	GC	Clayey gravel with sand, grayish-brown, moist, dense; noticeable product odor.	
8				CL	Silty clay, trace fine gravel, brown, damp, medium plasticity, stiff.	
10	S-10.5	3 6 9	0		With clayey sand lenses.	
12					▽	
14				SC/CL	Clayey sand, fine-grained, with sandy clay lenses, brown, wet, medium dense.	
16	S-15.5	3 5 8	56			
					Total depth = 16-1/2 feet.	
18						
20						

RESNA
Working to Restore Nature

PROJECT 69036.05

LOG OF BORING B-19/VW-6

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 11

Depth of boring: 29 feet Diameter of boring: 10 inches Date drilled: 11/24/92

Well depth: 25-1/2 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 8-1/2 to 25-1/2 feet Filter pack: #3 Sand Slot size: 0.020-inch

Drilling Company: Bayland Drilling Driller: John and Tom

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt-covered surface.	
0				GC	Asphalt (4 inches).	
					Clayey gravel, brown, damp, dense: baserock.	
2				ML	Sandy silt with clay, dark brown, damp, low plasticity, stiff.	
4				CL	Sandy clay, brown, damp, medium plasticity, very stiff.	
6	S-5.5	5 8 11	0	SC	Clayey sand, fine- to medium-grained, trace fine gravel, brown, damp, medium dense.	
8						
10	S-9.5	11 12 14	0		Increasing gravel.	
	S-11	3 8 8	0	GC	Clayey gravel with sand, brown mottled orange and black, moist, medium dense.	
12					▼	
14					▽	
				SP≡SC	Gravelly sand with clay, medium- to coarse-grained sand, brown, very moist to wet, medium dense.	
16	S-15.5	5 8 10	0			
18	S-18.5	6 9 10	0	SM/ML	Silty sand, fine-grained, light gray mottled orange, wet, medium dense, interbedded with sandy silt and clay, light gray mottled orange, moist to wet, low plasticity, very stiff.	
20						

(Section continues downward)

RESNA
Working to Restore Nature

PROJECT 69036.07

LOG OF BORING B-20/MW-4
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 5

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
22				SM/ML	Silty sand, fine-grained, light gray mottled orange, wet, medium dense; interbedded with sandy silt and clay, light gray mottled orange, moist to wet, low plasticity, very stiff.	
24	S-24.5	10 11 12	0		Increasing silt, moist.	
26	S-26.5	8 15	0	ML	Clayey silt, light gray mottled orange, damp, low plasticity, very stiff.	
28	S-28	25 10 25 50/6"	0	SP	Gravelly sand, fine- to medium-grained sand, orange-brown, damp, dense.	
30					Total depth = 29 feet.	
32						
34						
36						
38						
40						
42						
44						
46						
48						
50						

RESNA
Working to Restore Nature

PROJECT 69036.07

LOG OF BORING B-20/MW-4
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
6

Depth of boring: 26-1/2 feet Diameter of boring: 10 inches Date drilled: 11/24/92

Well depth: 25 feet Material type: Sch 40 PVC Casing diameter: 4 inches

Screen interval: 8-1/2 to 25 feet Filter pack: #3 Sand Slot size: 0.020-inch

Drilling Company: Bayland Drilling Driller: John and Tom

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Asphalt-covered surface.	
0				GP	Asphalt (4 inches).	
					Sandy gravel, gray, damp, dense: baserock.	
2				CL	Sandy clay, dark brown, damp, medium plasticity, stiff.	
					Color change to brown.	
4						
6	S-5.5	4 6 9	0			
				GC	Clayey gravel with sand, brown with black and orange mottling, damp, medium dense.	
8						
10	S-10.5	9 10 14	0			
12						
				SP=SC	Gravelly sand with clay, fine- to medium-grained sand, orange-brown, very moist to wet, medium dense.	
14						
16	S-15.5	6 9 11	0			
18						
20	S-20.5	15 25 30	0			

(Section continues downward)

RESNA
Working to Restore Nature

PROJECT 69036.07

LOG OF BORING B-21/MW-5

ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 7

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
22				SP–SC	Gravelly sand with clay, fine– to medium–grained sand, orange–brown, very moist to wet, medium dense.	
24				SM/ML	Silty sand, fine–grained, light gray mottled orange, moist, medium dense; interbedded with sandy silt and clay, light gray mottled orange, damp, low plasticity, very stiff.	
26	S–26	8 11 12	0	ML	Clayey silt, light gray mottled orange, damp, low plasticity, very stiff.	
					Total depth = 26–1/2 feet.	
28						
30						
32						
34						
36						
38						
40						
42						
44						
46						
48						
50						

RESNA
Working to Restore Nature

PROJECT 69036.07

LOG OF BORING B–21/MW–5
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
8

Depth of boring: 26-1/2 feet Diameter of boring: 8 inches Date drilled: 11/25/92

Well depth: 25 feet Material type: Sch 40 PVC Casing diameter: 2 inches

Screen interval: 8 to 25 feet Filter pack: #3 Sand Slot size: 0.020-inch

Drilling Company: Bayland Drilling Driller: John and Tom

Method Used: Hollow-Stem Auger Field Geologist: Barbara Sieminski

Signature of Registered Professional:

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
					Concrete surface.	
0				GP	Concrete (2 inches).	
				ML	Sandy gravel, grayish-brown, damp, dense: baserock.	
2				CL	Sandy silt, dark brown, damp, low plasticity, stiff; with roots.	
					Sandy clay, brown, damp, medium plasticity, very stiff; with roots.	
4						
6	S-5.5	8 10 15	0			
8				SP-SC	Gravelly sand with clay, fine- to medium-grained sand, brown, damp, medium dense.	
10	S-9.5	8 15 11	0			
		10		SC	Clayey sand, fine-grained, light brown, damp, medium dense.	
12	S-11.5	15 14	0			
				GC	Clayey gravel with sand, brown mottled orange, moist, medium dense.	
14				SP	Gravelly sand, medium-grained sand, brown, wet, medium dense.	
	S-15.5	6 7 9	0			
16				SM/ML	Silty sand, fine-grained, light gray mottled orange, wet, medium dense; interbedded with sandy silt and clay, light gray mottled orange, moist to wet, low plasticity, stiff.	
18						
20	S-20.5	8 10 14	0			

(Section continues downward)

RESNA
Working to Restore Nature

PROJECT 69036.07

LOG OF BORING B-22/MW-6
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 9

Depth	Sample No.	BLOWS	P.I.D.	USCS Code	Description	Well Const.
22				SM/ML	Silty sand, fine-grained, light gray mottled orange, wet, medium dense; interbedded with sandy silt sand clay, light gray mottled orange, moist to wet, low plasticity, stiff. With gravel.	
24						
26	S-26	5 6 7	0	ML	Clayey silt, light gray mottled orange, damp to moist, low plasticity, stiff.	
					Total depth = 26-1/2 feet.	
28						
30						
32						
34						
36						
38						
40						
42						
44						
46						
48						
50						

RESNA
Working to Restore Nature

PROJECT 69036.07

LOG OF BORING B-22/MW-6
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
10

Total depth of boring: 15-1/2 feet
Diameter of boring: 10 inches
Date drilled: 6-16-93
Drilling Company: Exploration Geoservices
Driller: Dave and Dennis
Drilling method: Hollow-Stem Auger

Casing diameter: 4 inches
Casing material: Sch 40 PVC
Slot size: 0.10-inch
Sand size: 3/8" pea gravel
Screen Interval: 6 feet to 15 feet
Field Geologist: Erin McLucas

Signature of Registered Professional: _____

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0				CL	Concrete (7 inches).	
2					Silty clay, black, damp, medium plasticity, stiff.	
4				SC	Clayey sand, trace gravel, tan, damp, dense; abundant black rootlets.	
6	S-5					
8				GP	Sandy gravel, tan to orange, damp, very dense.	
10	S-10			GC	Clayey gravel, olive, damp, very dense.	
12						
14				CL	Sandy clay with silt, light gray to olive with orange mottling, damp, medium plasticity, hard; tan rootlets.	
16	S-15				Total Depth = 15-1/2 feet.	
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 69036.10

LOG OF BORING B-23/VW-7
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
A-2

Total depth of boring:	15-1/2 feet	Casing diameter:	4 inches
Diameter of boring:	10 inches	Casing material:	Sch 40 PVC
Date drilled:	6-15-93	Slot size:	0.10-inch
Drilling Company:	Exploration Geoservices	Sand size:	3/8" pea gravel
Driller:	John and Dennis	Screen interval:	6 feet to 15 feet
Drilling method:	Hollow-Stem Auger	Field Geologist:	Erin McLucas

Signature of Registered Professional: _____

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
				GP	Asphalt (4 inches).	
2				CL	Sandy gravel, brown, damp, dense.	
					Silty clay, dark brown to black, damp, medium plasticity, stiff.	
4				GC	Clayey gravel, fine, orange-brown, damp, very dense.	
6	S-6	14 50/ 6				
8						
10	S-10.5	10 14 30				
12				CL	Silty clay, gray with orange mottling, damp, medium plasticity, hard. With sand.	
14	S-15	13 48 40		GC	Clayey gravel, orange-brown, damp, very dense.	
16					Total Depth = 15 feet.	
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 69036.10

LOG OF BORING B-24/VW-8
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
A-3

Total depth of boring:	15-1/2 feet	Casing diameter:	4 inches
Diameter of boring:	10 inches	Casing material:	Sch 40 PVC
Date drilled:	6-21-93	Slot size:	0.10-inch
Drilling Company:	Exploration Geoservices	Sand size:	3/8" pea gravel
Driller:	John and Dennis	Screen Interval:	6 feet to 15 feet
Drilling method:	Hollow-Stem Auger	Field Geologist:	Erin McLucas

Signature of Registered Professional: _____

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Concrete (6-1/2 inches).	
2				CL	Silty clay, dark brown to black, damp, medium plasticity, stiff.	
4				GP	Sandy to clayey gravel, fine grained, brown, damp, very dense.	
6	S-5.5					
8				CL	Silty clay, light gray to blue, damp, medium plasticity, hard.	
10	S-9.5			GP-GC	Sandy to clayey gravel, fine grained, brown to olive, damp, very dense.	
12						
14				CL	Silty clay, light gray to olive with orange and black mottling, damp, medium plasticity, hard.	
	S-15					
16					Total Depth = 15-1/2 feet.	
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 69036.10

LOG OF BORING B-25/VW-9
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
A-4

Total depth of boring:	32-1/2 feet	Casing diameter:	2 inches
Diameter of boring:	12 inches	Casing material:	Sch 40 PVC
Date drilled:	6-16-93	Slot size:	0.10-inch/0.020-inch
Drilling Company:	Exploration Geoservices	Sand size:	3/8" Pea gravel/No. 3 Sand
Driller:	Dave and Dennis	Screen Interval:	5 to 15 feet/29 to 31 feet
Drilling method:	Hollow-Stem Auger	Field Geologist:	Erin McLucas

Signature of Registered Professional: _____

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0					Concrete (7 inches).	
2				CL	Silty clay, black, damp, medium plasticity, stiff.	
4					Tan to olive.	
6	S-5			GP	Sandy gravel, orange-brown, damp, very dense.	
8				GP-GC	With clay.	
10	S-10			CL	Silty clay with fine sand, light gray, damp, medium plasticity, hard.	
12						
14				CL	Sandy clay, light gray with brown mottling, damp, medium plasticity, hard.	
16	S-15			GP-GC	Sandy gravel with clay, orange-brown, damp, very dense.	
18				▽		
20	S-19				Wet.	
22				SM	Silty sand, fine to medium grained, tan to olive with orange mottling, wet, very dense.	
24						
26	S-25			GP/GC	Sandy to clayey gravel, orange-brown, wet, very dense.	
28						
30						
32	S-31			CL	Silty clay, gray with orange mottling, damp, medium plasticity, hard.	
34					Total Depth = 32-1/2 feet.	
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 69036.10

LOG OF BORING B-26/AS-1
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
A-5

Total depth of boring:	32 feet	Casing diameter:	2 inches
Diameter of boring:	12 inches	Casing material:	Sch 40 PVC
Date drilled:	6-16-93	Slot size:	0.10-inch/0.020-inch
Drilling Company:	Exploration Geoservices	Sand size:	3/8" Pea gravel/No. 3 Sand
Driller:	John and Dennis	Screen Interval:	5 to 15 feet/29-1/2 to 31-1/2 feet
Drilling method:	Hollow-Stem Auger	Field Geologist:	Erin McLucas

Signature of Registered Professional: _____

Registration No.: CEG 1463 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
0				GP/GW	Asphalt (4 inches).	
2				GP/GW	Sandy gravel, medium brown, damp, dense; baserock.	
4				CL	Silty clay, brown to black, damp, medium plasticity, stiff.	
6	S-5	21, 40, 35		CL	Brown to olive, trace sand and gravel, hard.	
8	S-7.5	21, 48, 37		SM	Silty sand with gravel, brown to olive, damp, very dense.	
10	S-10	10, 18, 20		SP	Gravelly sand, coarse grained, gray to olive, damp, very dense.	
12	S-12	11, 15, 24		SP	Sand, fine grained with gravel, brown to gray and olive, dense.	
14	S-15	9, 18, 24		GP	Sandy gravel, brown to olive damp, dense.	
16	S-16.5	10, 11, 16		SM	Silty sand, olive with orange mottling, damp, dense.	
18		13, 35, 50/6		GP	Sandy gravel, orange brown, damp to wet; with product.	
20	S-19.5	22, 50, 50/4		CL	Silty clay, light gray to olive with orange mottling, damp, medium plasticity, very stiff.	
22		20, 31, 50/4		GP	Sandy gravel, orange-brown, damp, very dense.	
24		22, 50/6			Trace silty clay.	
26	S-25	3, 50/5			Moist.	
28		24, 50/3			Wet.	
30		28, 30, 50/4				
32	S-31	31, 50/4				
34		26, 50/6				
36		31, 50/4				
38		50/6		CL	Silty clay, trace fine-grained sand, gray with orange mottling, damp, medium plasticity, hard.	
40		27, 50/6			Total Depth = 32 feet.	

RESNA
Working to Restore Nature

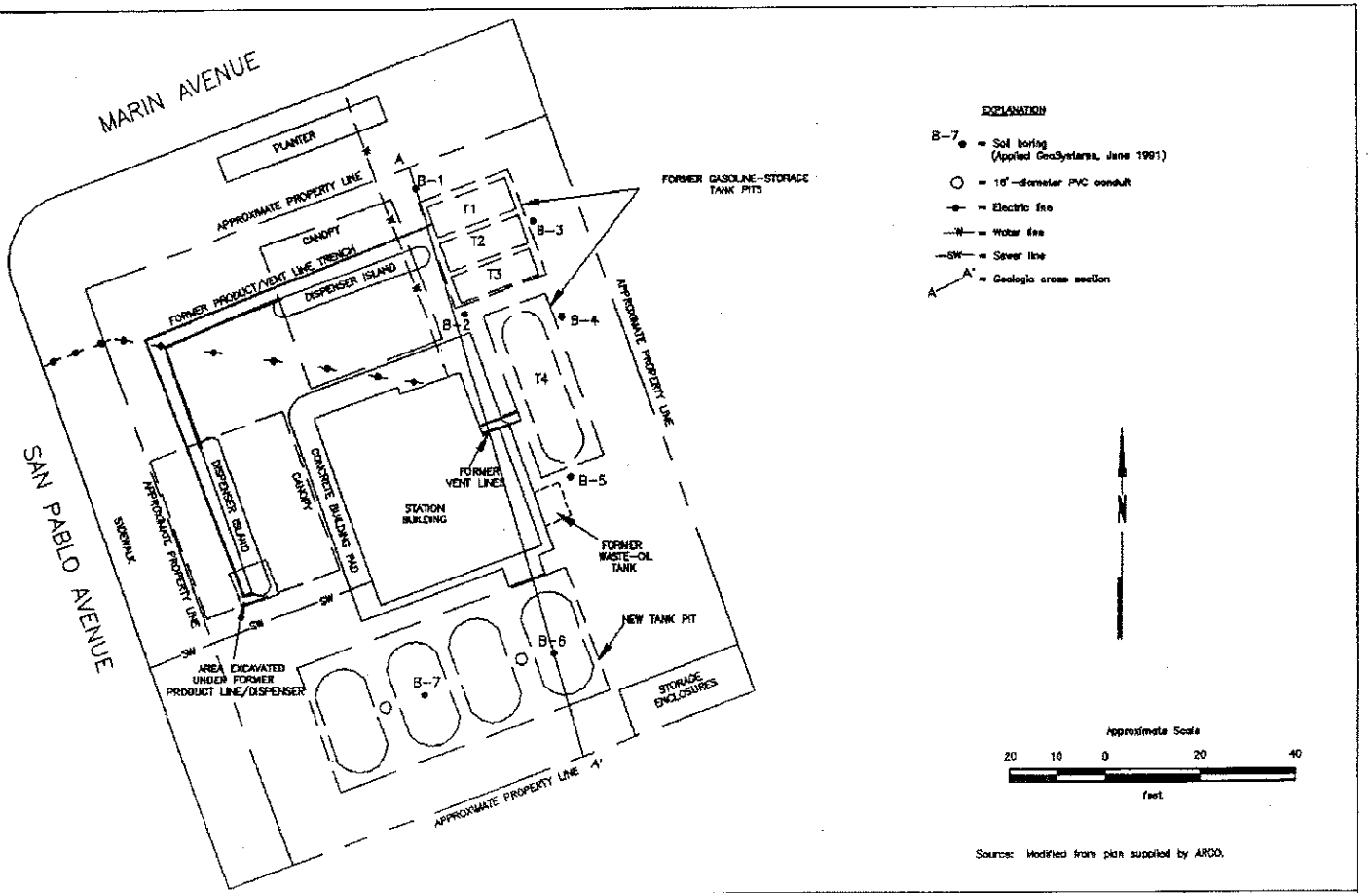
PROJECT: 69036.10

LOG OF BORING B-27/AS-2
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
A-6

APPENDIX D.

GEOLOGIC CROSS-SECTIONS

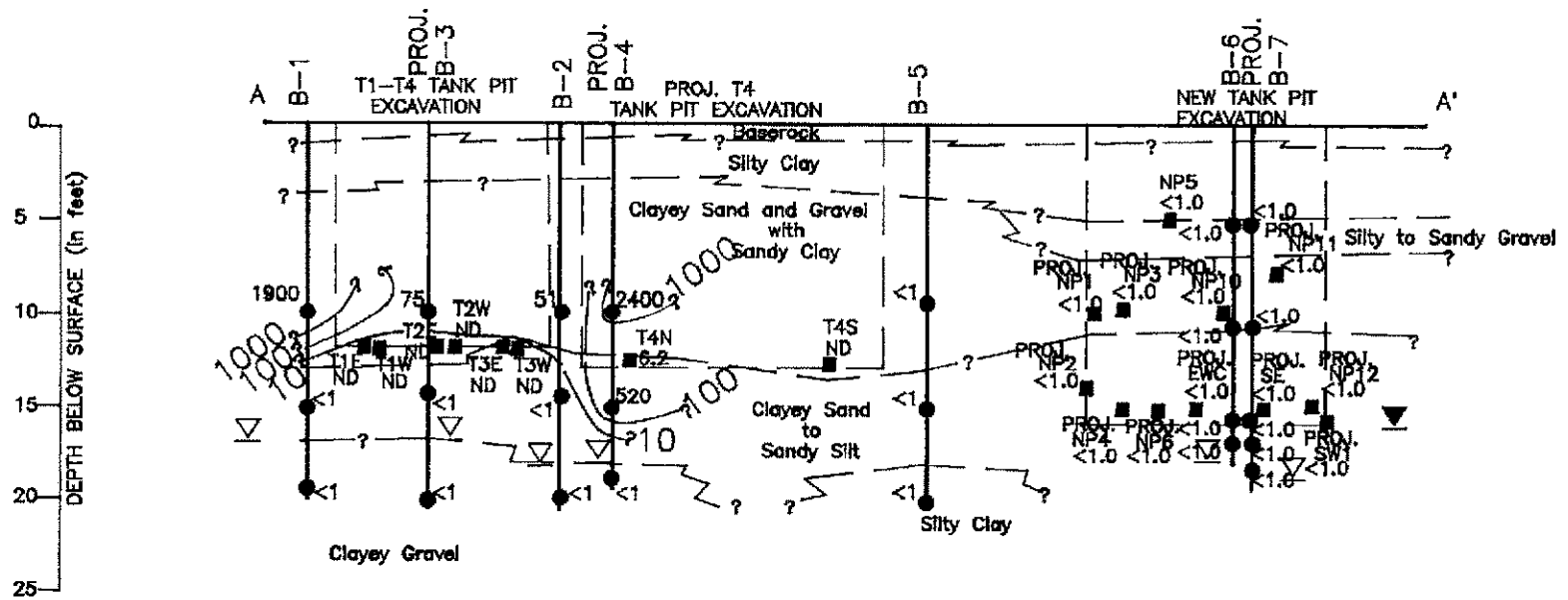


Applied GeoSystems

PROJECT 69036.03

GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
2



EXPLANATION

1000 = Line of equal concentration of TPHg in parts per million

75 = Laboratory analyzed excavation soil sample showing concentration of TPHg in parts per million

2400 = Laboratory analyzed soil sample showing concentration of TPHg in parts per million

= Boring

= Initial water level in boring on 8/89, 6/91

= Static water level in new tank pit on 7-10-91

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

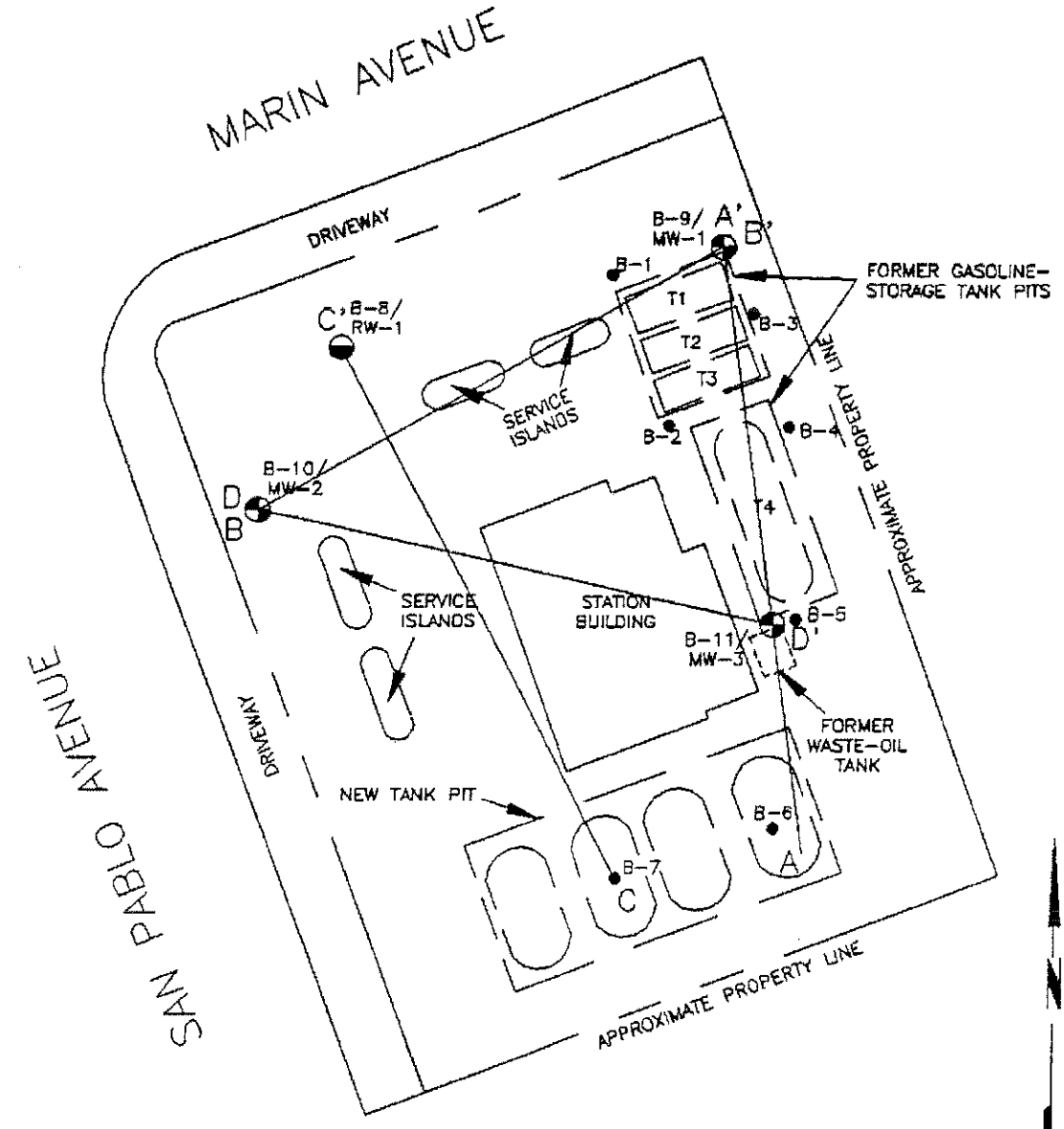
feet

PLATE 4

GEOLOGIC CROSS SECTION A-A'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

Applied GeoSystems

PROJECT 69036.03



EXPLANATION

RW-1 = Recovery well (Exceltech, October 1991)

MW-3 = Monitoring well (Exceltech, October 1991)

B-5 = Soil boring (RESNA, August 1989 and June 1991)

D — D' = Geologic cross sections

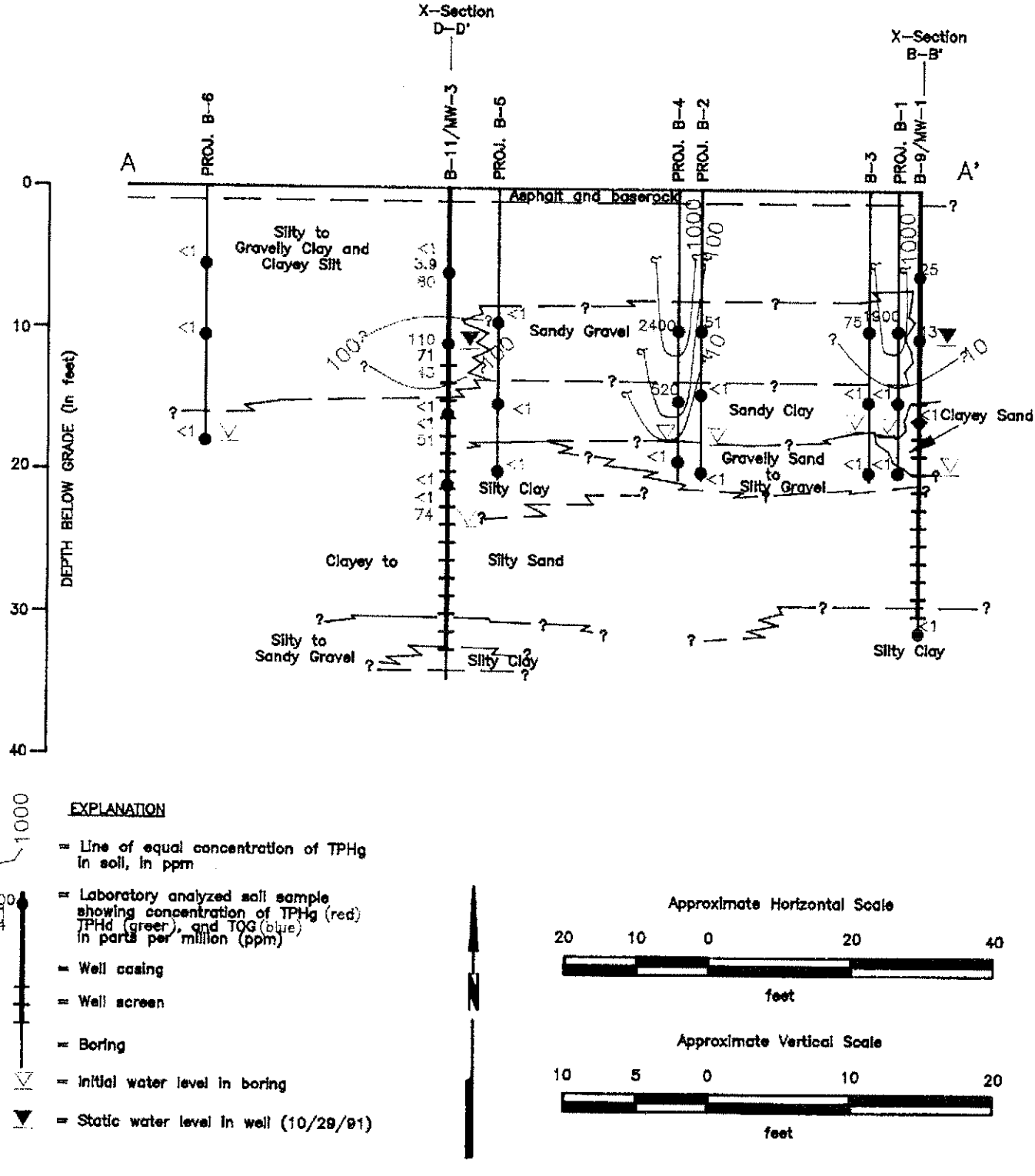
Approximate Scale

30 15 0 30 60

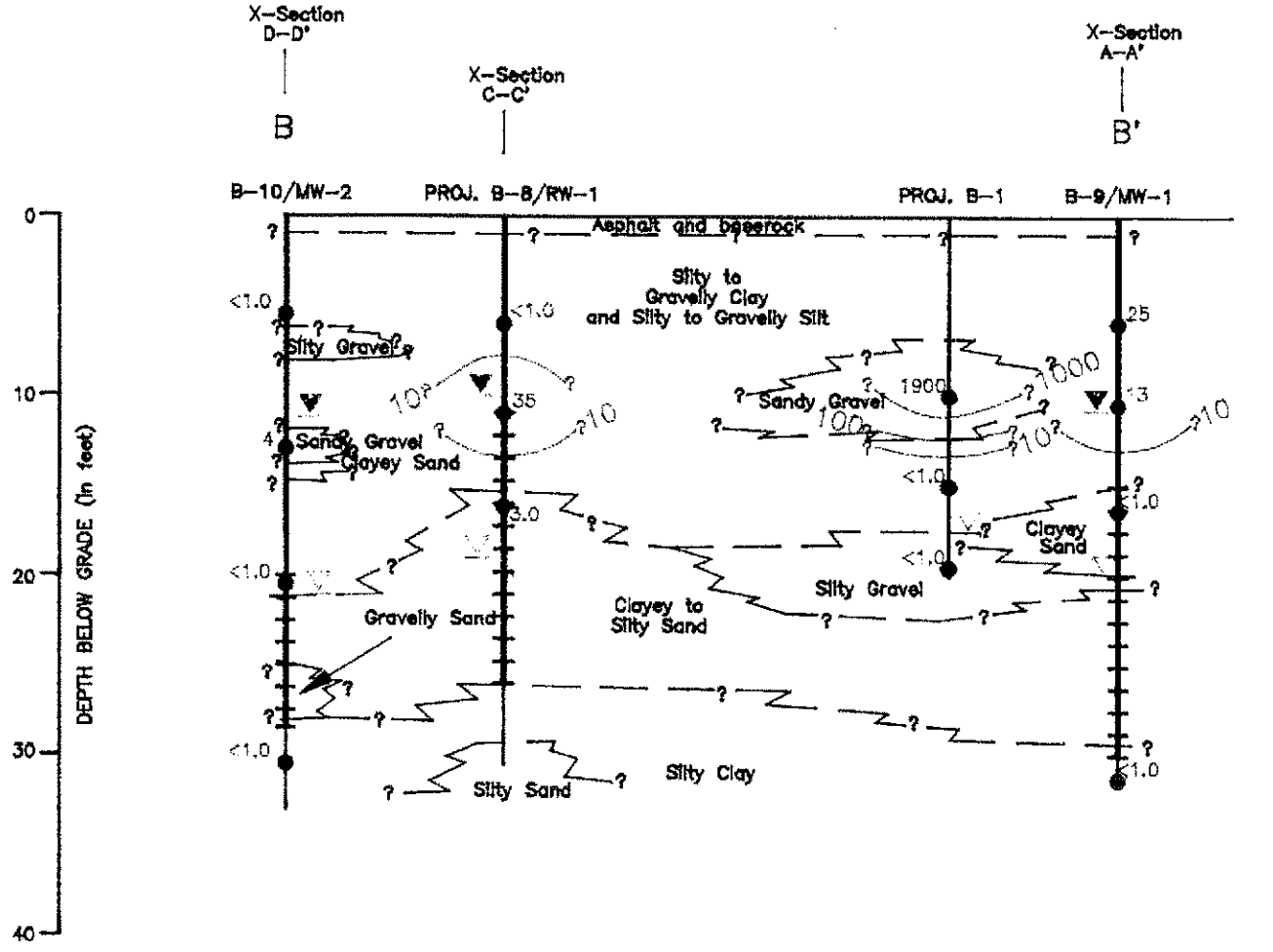
feet

Source: Surveyed by John E. Koch, Land Surveyor.

RESNA	**GENERALIZED SITE PLAN** **ARCO Station 2035** **1001 San Pablo Avenue** **Albany, California**	**PLATE** **2**
PROJECT **69036.02**		



RESNA	**GEOLOGIC CROSS SECTION A-A'** **ARCO Station 2035** **1001 San Pablo Avenue** **Albany, California**	**PLATE** **13**
PROJECT 69036.02		



EXPLANATION

- 1000 = Line of equal concentration of TPHg in soil, in ppm
- 1900 = Laboratory analyzed soil sample showing concentration of TPHg in parts per million (ppm)
- = Well casing
- = Well screen
- = Boring
- = Initial water level in boring
- = Static water level in well (10/29/91)

N

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

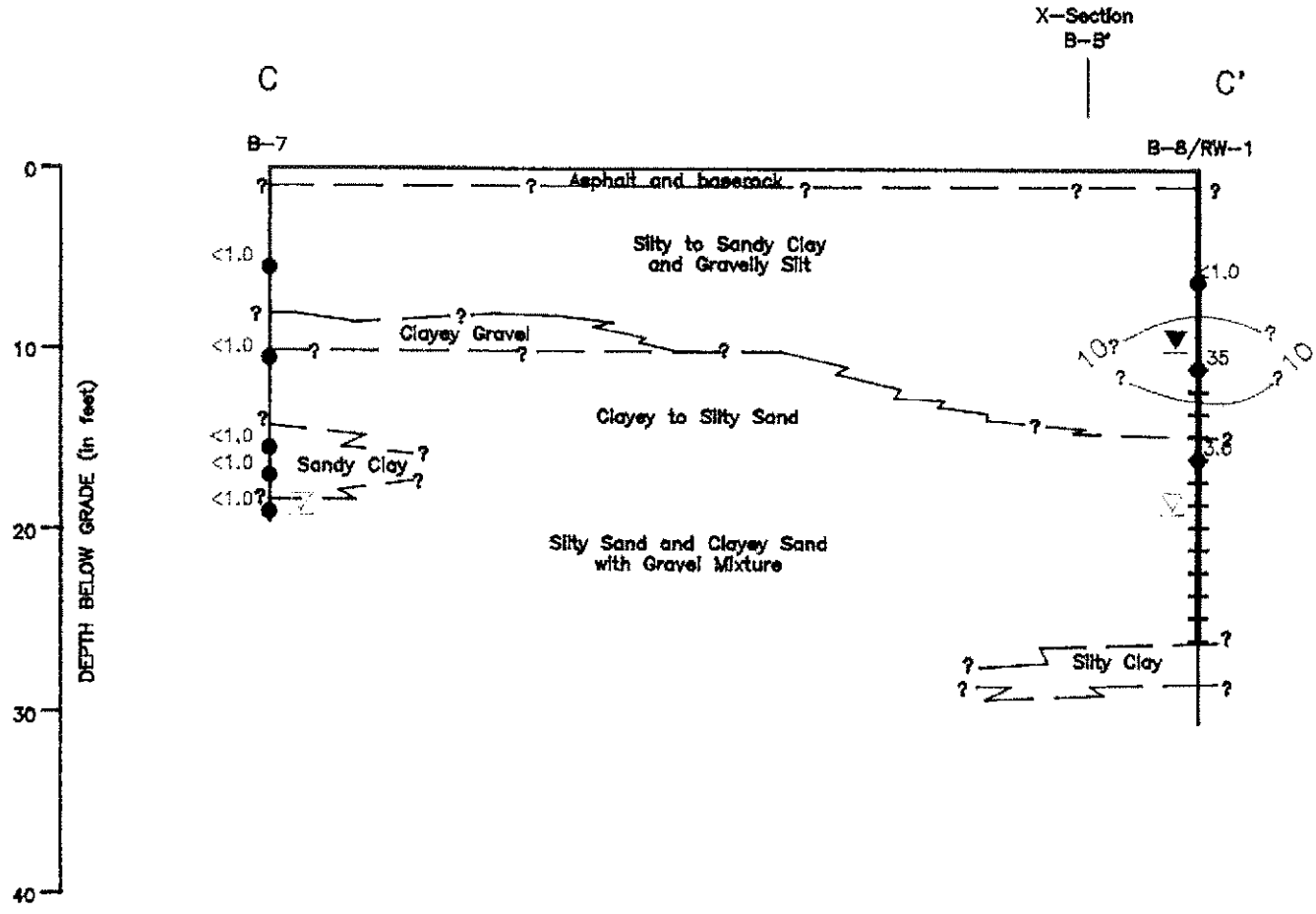
feet

RESNA

PROJECT 69036.02

GEOLOGIC CROSS SECTION B-B'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 14



EXPLANATION

10 — = Line of equal concentration of TPHg in soil, in ppm

240 — = Laboratory analyzed soil sample showing concentration of TPHg in parts per million (ppm)

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (10/29/91)

N

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

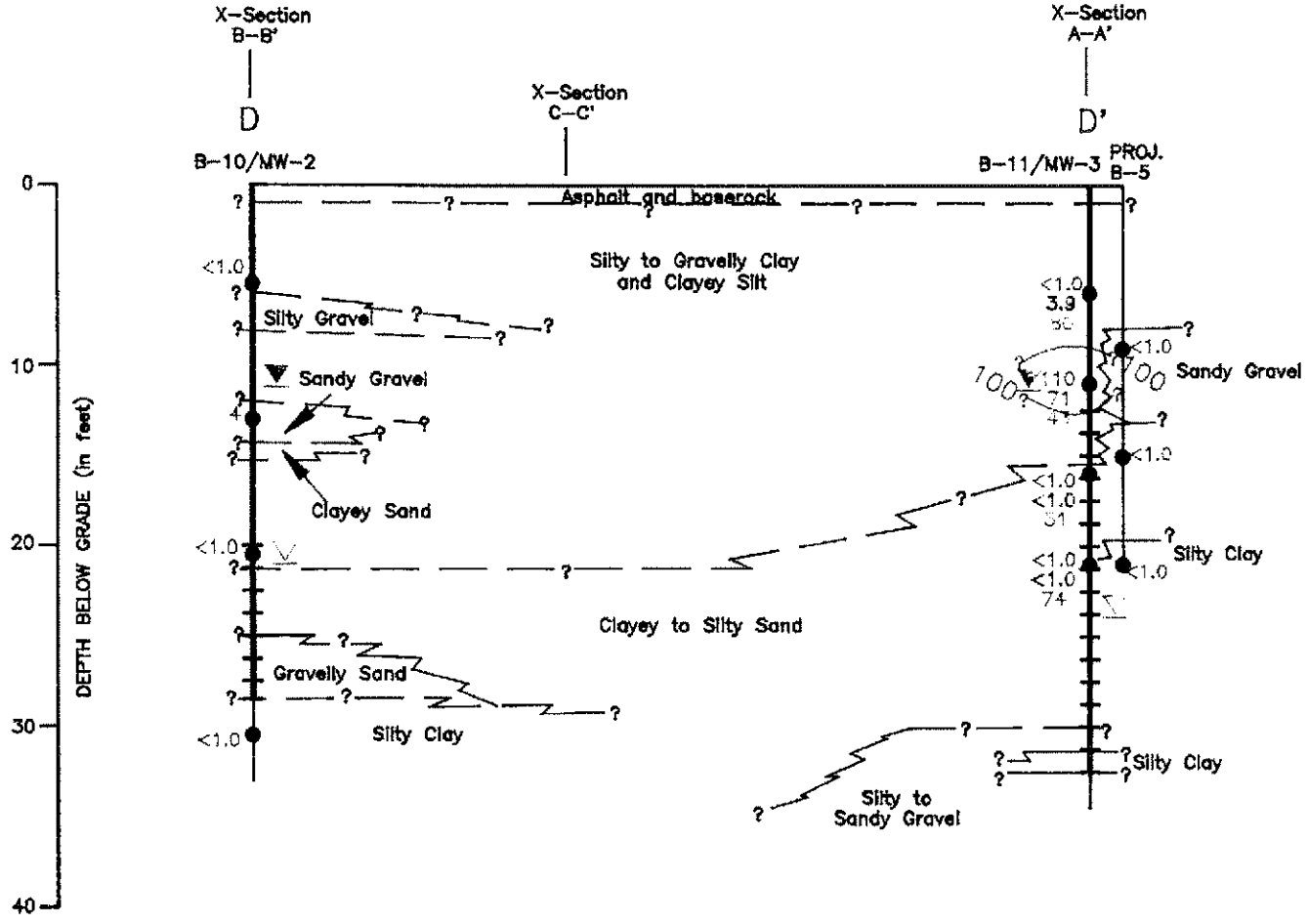
feet

RESNA

PROJECT 69036.02

GEOLOGIC CROSS SECTION C-C'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 15



EXPLANATION

100 = Line of equal concentration of TPHg in soil, in ppm

110 / 71 / 80 = Laboratory analyzed soil sample showing concentration of TPHg (red), TPHd (green), and TOG (blue) in parts per million (ppm)

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (10/29/91)

N

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

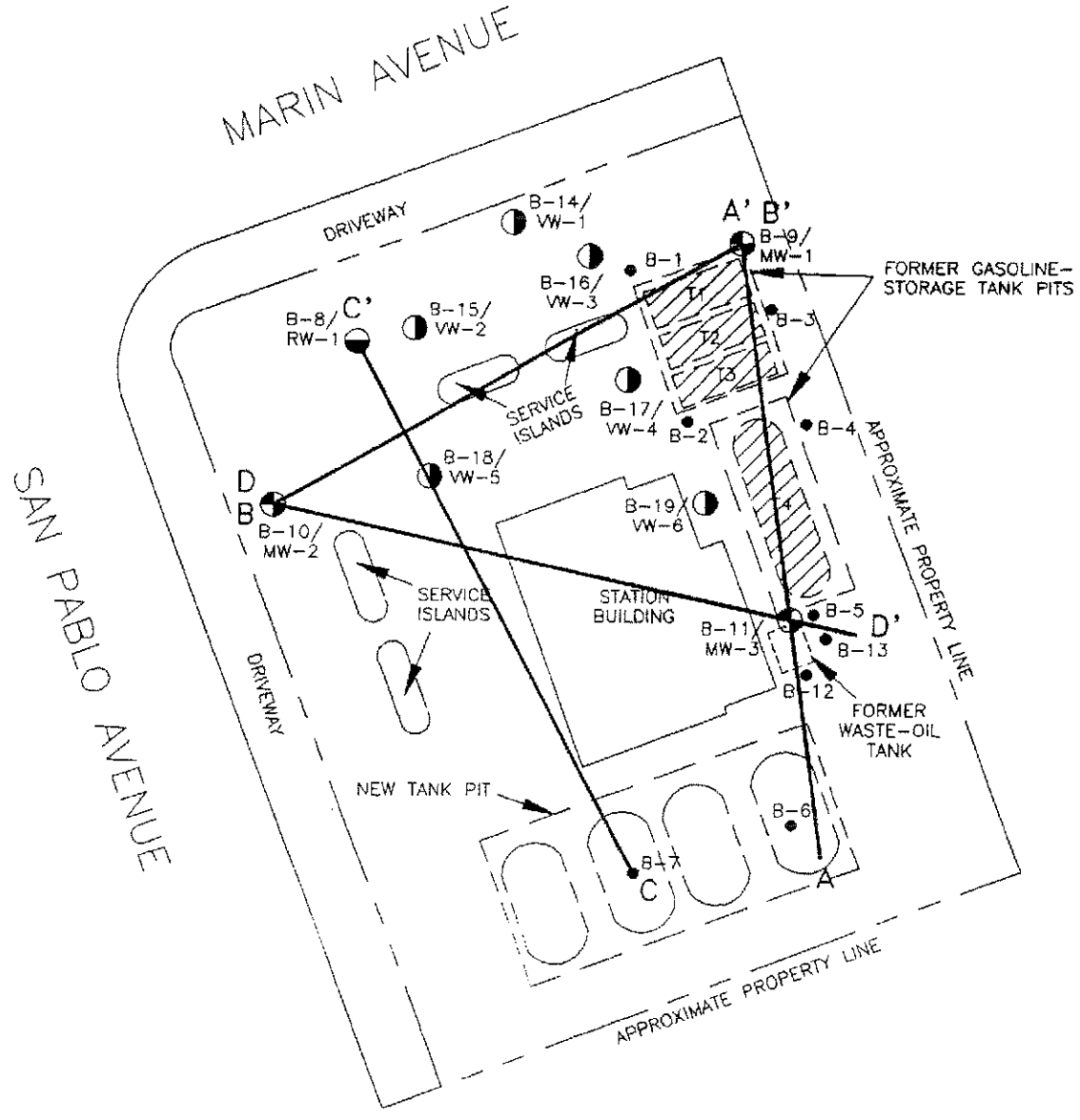
feet

RESNA

PROJECT 69036.02

GEOLOGIC CROSS SECTION D-D'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 16



EXPLANATION

B-19/ VW-6 = Boring/vapor extraction well (RESNA, August 1992)

B-8/ RW-1 = Boring/recovery well (Exceltech, October 1991)

B-11/ MW-3 = Boring/monitoring well (Exceltech, October 1991)

B-13 = Soil boring (RESNA, August 1989 and June 1991)

D — D' = Geologic cross section

Approximate Scale

30 15 0 30 60

feet

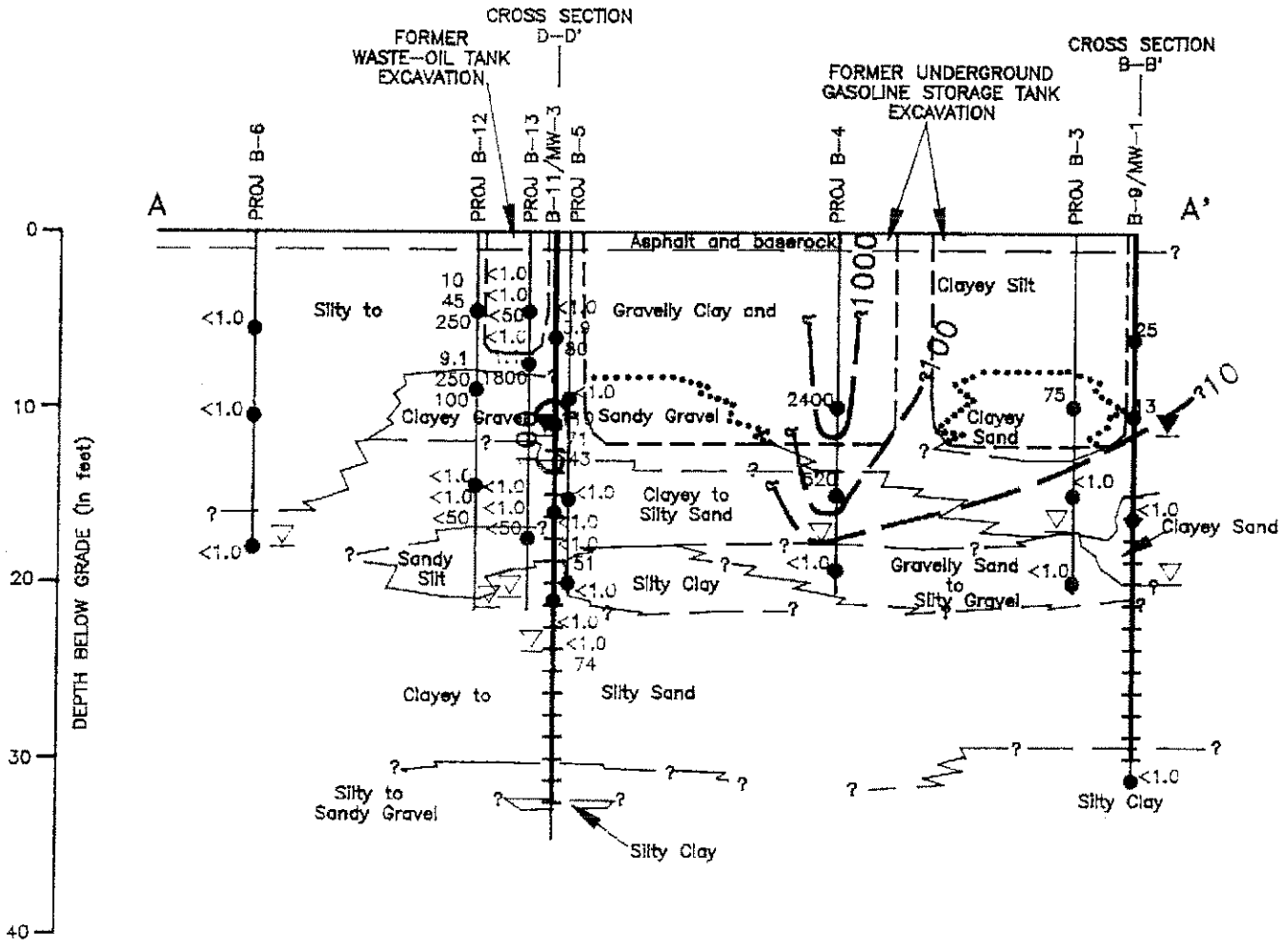
Source: Surveyed by John E. Koch, Land Surveyor.

RESNA
Working to Restore Nature

PROJECT 69036.05

GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
2



EXPLANATION

1000 = Line of equal concentration of TPHg in soil in parts per million (ppm)

2400 / 250 / 1800 = Laboratory analyzed soil sample showing concentration of TPHg (red), TPHd (green), and TOG (blue) in ppm

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (09/08/92)

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

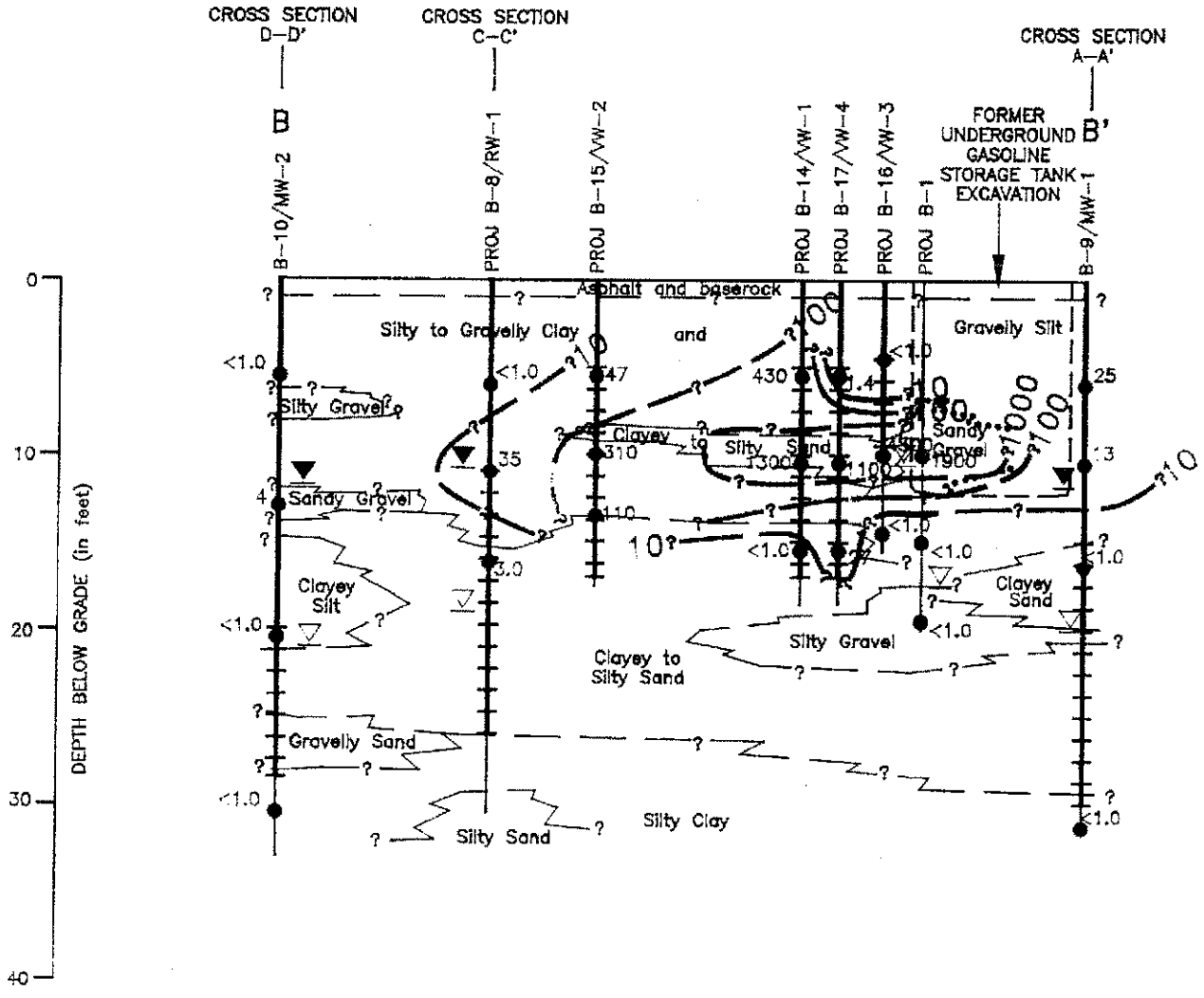
feet

RESNA
Working to Restore Nature

PROJECT 69036.05

GEOLOGIC CROSS SECTION A-A'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 12



EXPLANATION

1000 = Line of equal concentration of TPHg in soil in parts per million (ppm)

4300 = Laboratory analyzed soil sample showing concentration of TPHg in ppm

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (09/08/92)

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

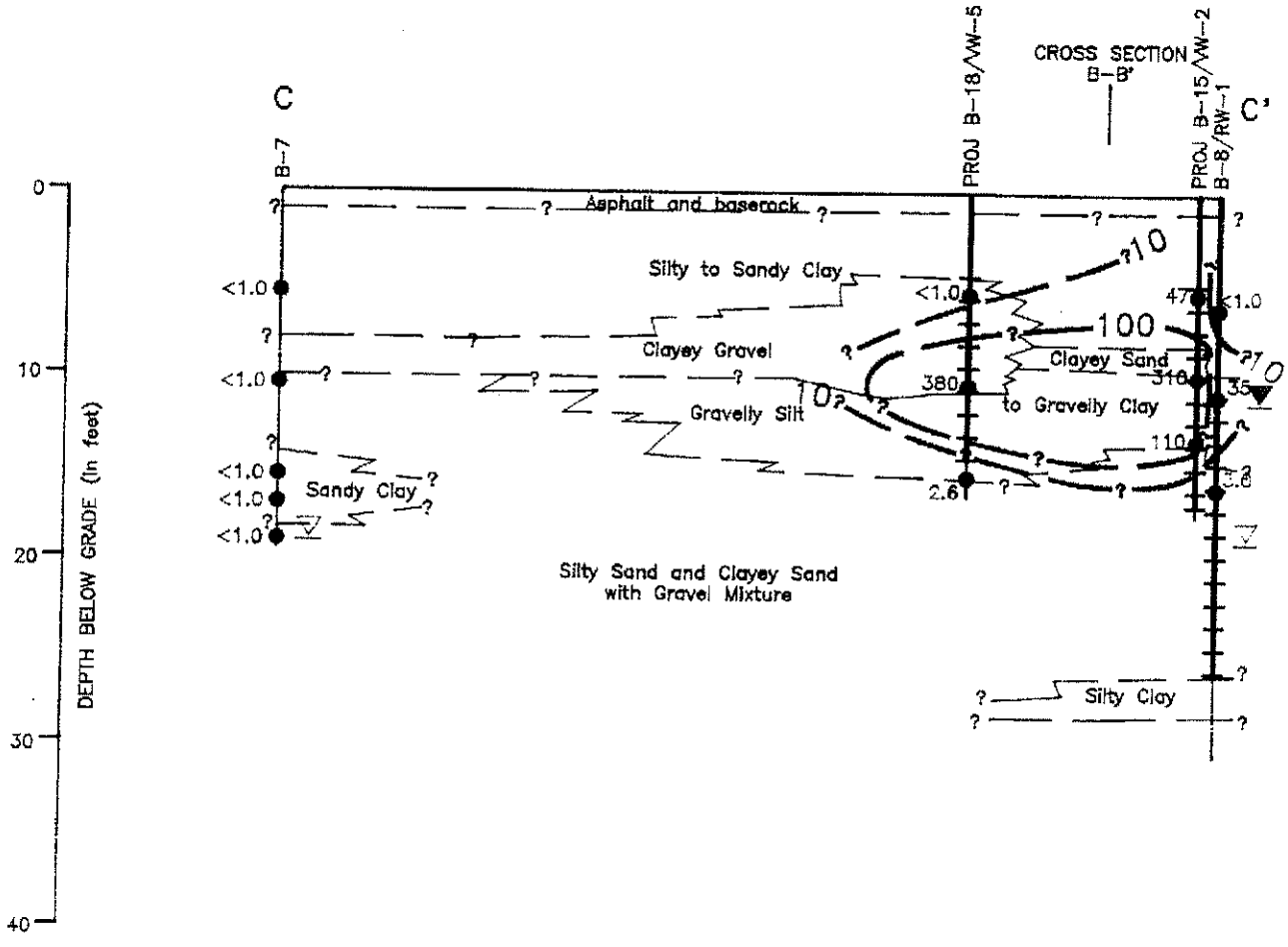
feet

RESNA
Working to Restore Nature

PROJECT 69036.05

GEOLOGIC CROSS SECTION B-B'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 13



EXPLANATION

100 = Line of equal concentration of TPHg in soil in parts per million (ppm)

380 = Laboratory analyzed soil sample showing concentration of TPHg in ppm

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (09/08/92)

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

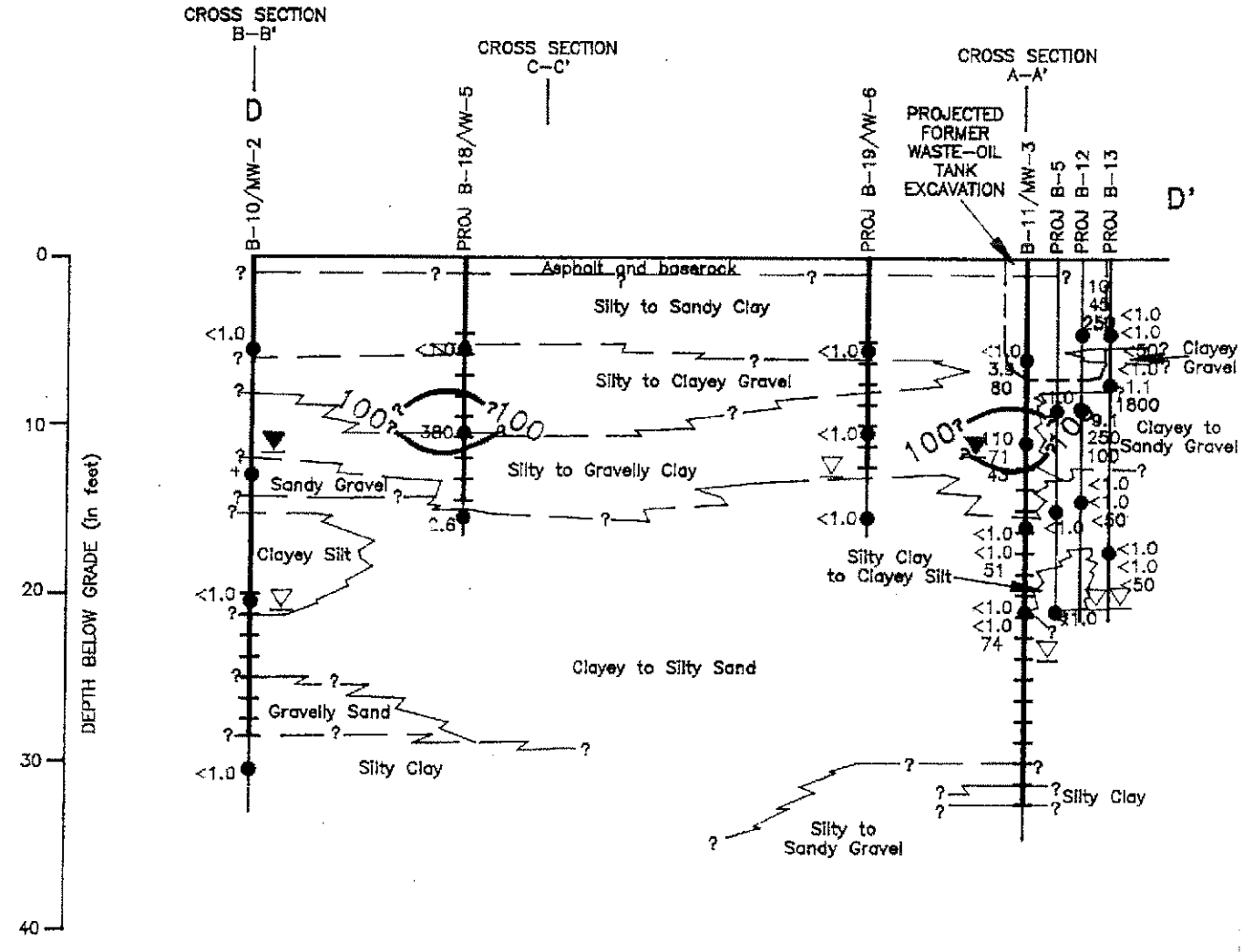
feet

RESNA
Working to Restore Nature

PROJECT 69036.05

GEOLOGIC CROSS SECTION C-C'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
14



EXPLANATION

100 = Line of equal concentration of TPHg in soil in parts per million (ppm)

380 / 250 / 1800 = Laboratory analyzed soil sample showing concentration of TPHg (red), TPHd (green), and TOG (blue) in ppm

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (09/08/92)

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

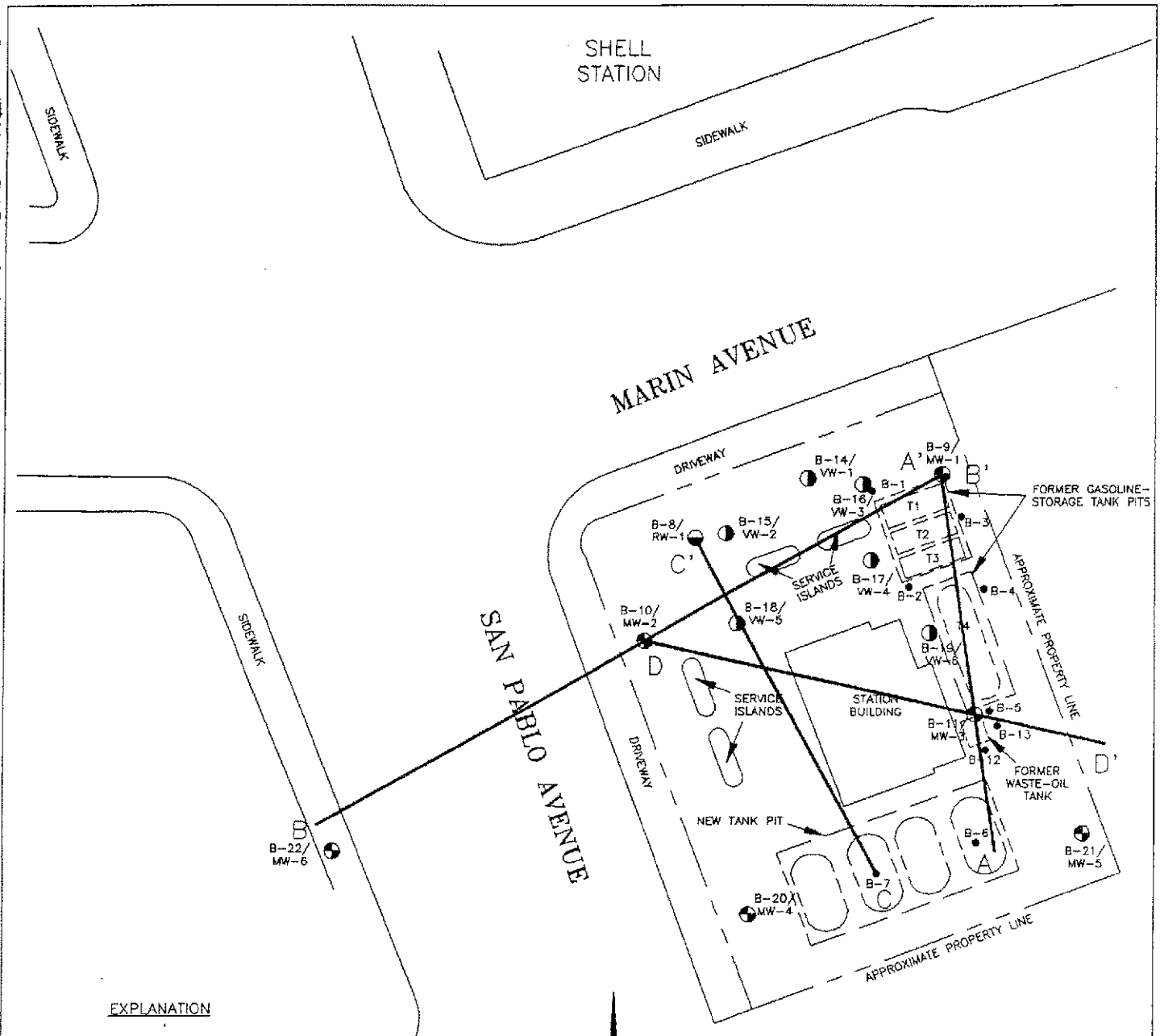
feet

RESNA
Working to Restore Nature

PROJECT 69036.05

GEOLOGIC CROSS SECTION D-D'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 15



EXPLANATION

B-19/ VW-6 = Vapor extraction well (RESNA, Aug. 1992)

B-8/ RW-1 = Recovery well (RESNA, October 1991)

B-22/ MW-6 = Monitoring well (RESNA, October 1991 and November 1992)

B-13 = Soil boring (RESNA, Aug. 1989, June 1991, and Aug. 1992)

D D' = Geologic cross section

N

Approximate Scale

40 20 0 40 80

feet

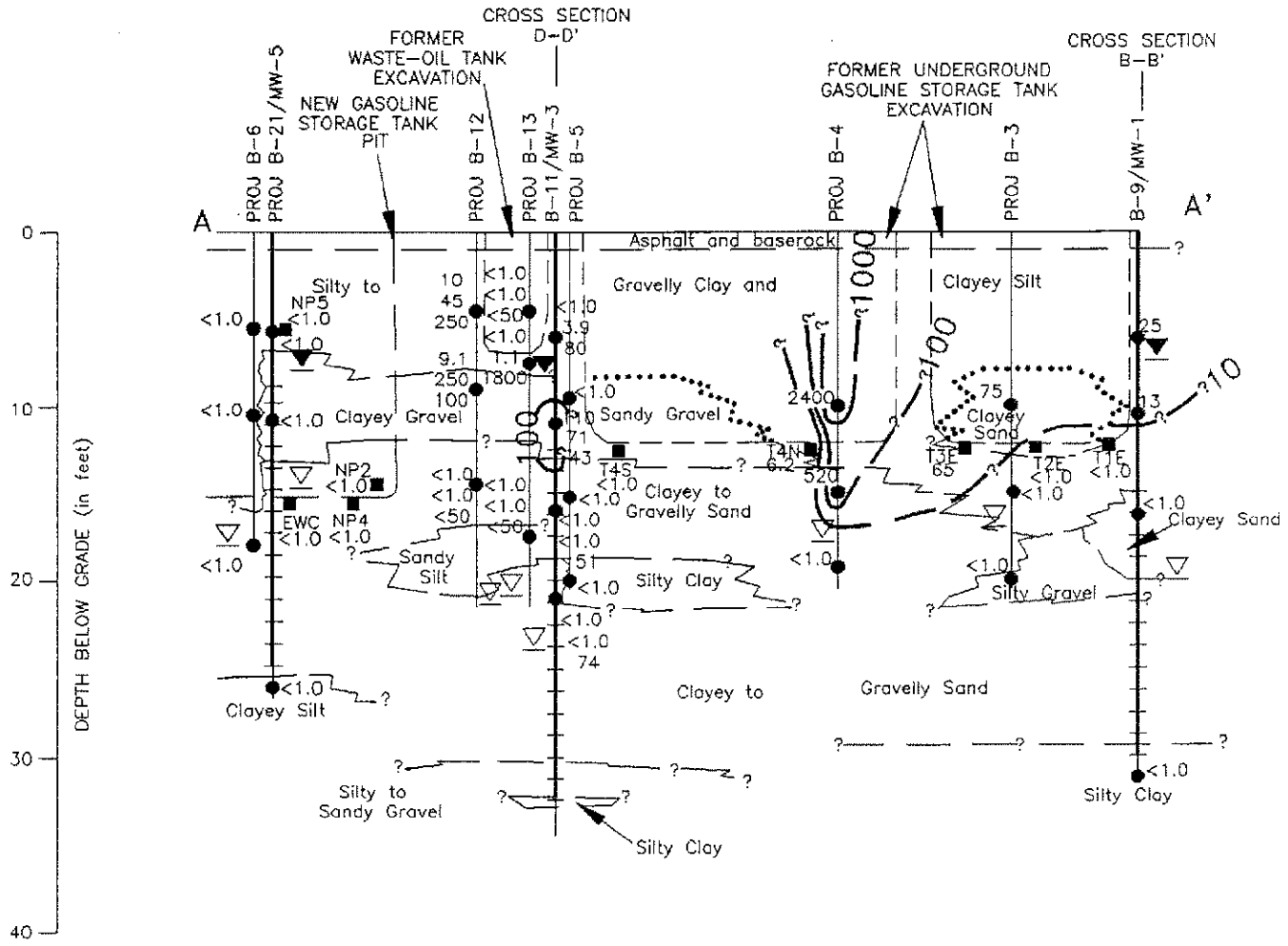
Source: Surveyed by John E. Koch, Land Surveyor.

RESNA
Working to Restore Nature

PROJECT 69036.07 Drawn: 3/5/J 690367SP

GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
3



EXPLANATION

1000 = Line of equal concentration of TPHg in soil in parts per million (ppm)

2400 / 250 / 1800 = Laboratory analyzed soil sample showing concentration of TPHg (red), TPHd (green), and TOG (blue) in ppm

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (02/22/93)

T3E 65 = Projected tank pit soil sample showing concentration of TPHg in ppm

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

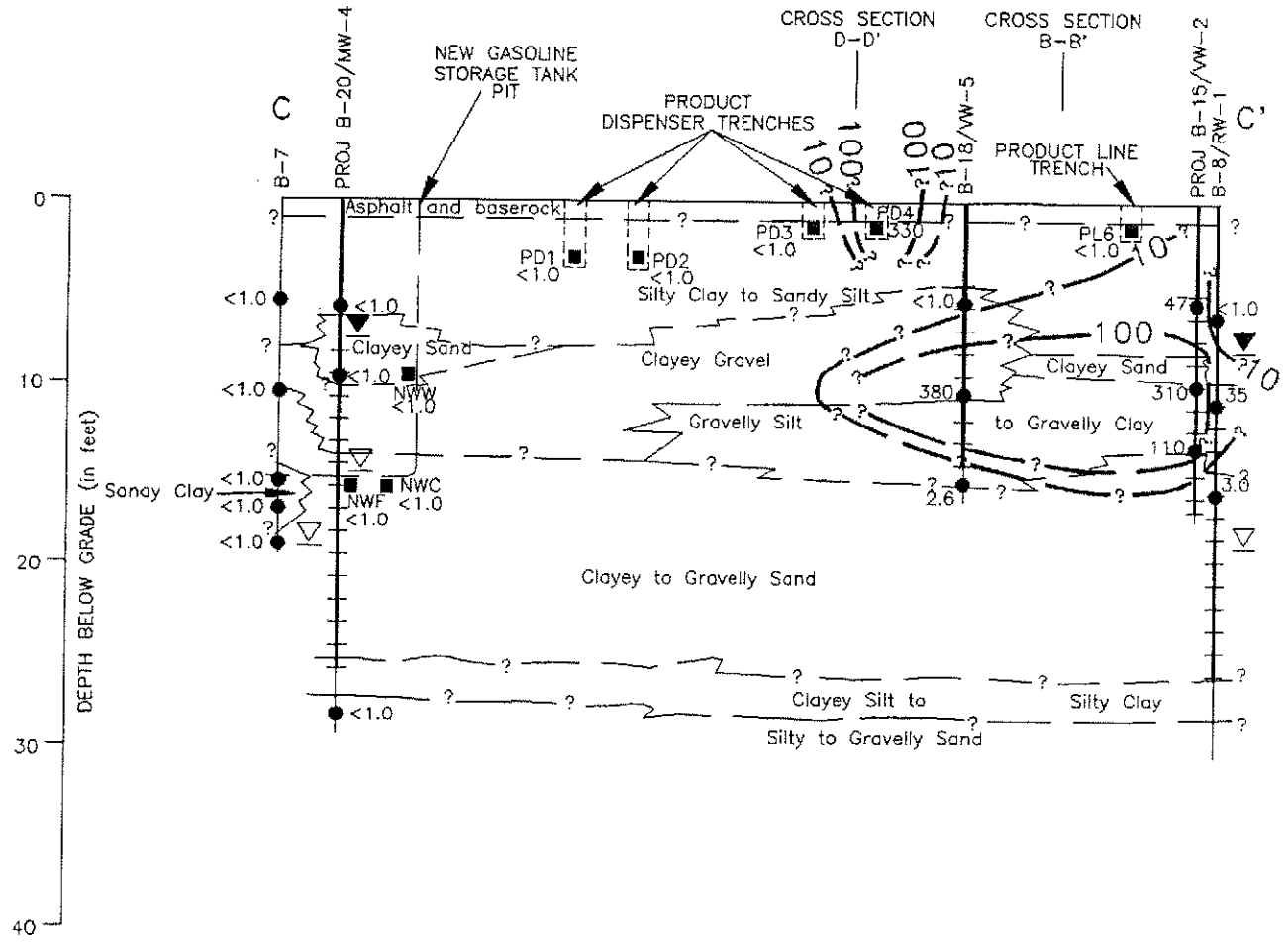
feet

RESNA
Working to Restore Nature

PROJECT 69036.07

GEOLOGIC CROSS SECTION A-A'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
11



EXPLANATION

100 = Line of equal concentration of TPHg in soil in parts per million (ppm)

380 = Laboratory analyzed soil sample showing concentration of TPHg in ppm

= Well casing

= Well screen

= Boring

▽ = Initial water level in boring

▼ = Static water level in well (02/22/92)

NWF <1.0 ■ = Projected tankpit, product dispencer or product line soil sample showing concentration of TPHg in ppm

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

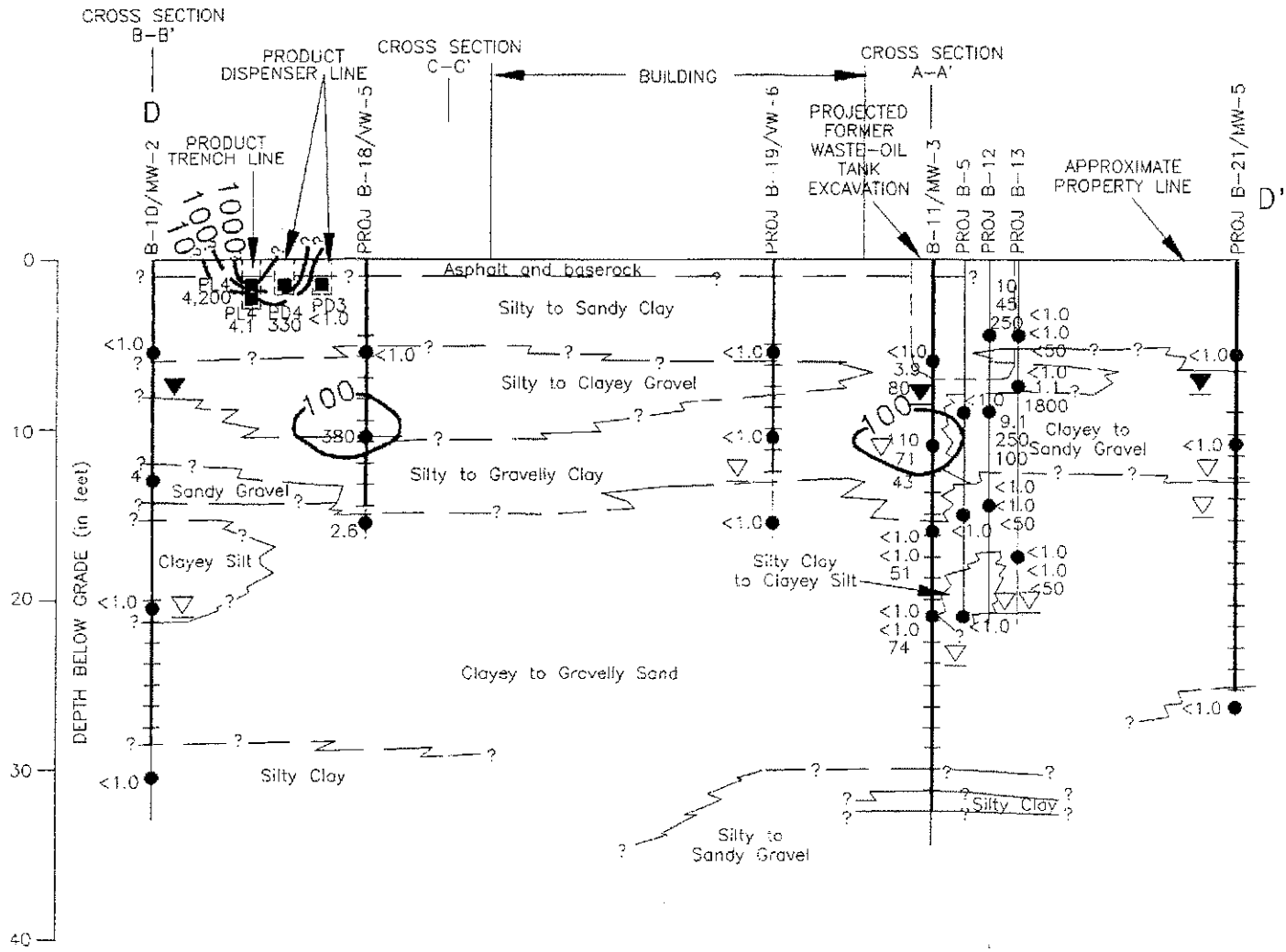
feet

RESNA
Working to Restore Nature

PROJECT 69036.07

GEOLOGIC CROSS SECTION C-C'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 13



EXPLANATION

1,000 = Line of equal concentration of TPHg in soil in parts per million (ppm)

380 / 250 / 1800 = Laboratory analyzed soil sample showing concentration of TPHg (red), TPHd (green), and TOG (blue) in ppm

= Well casing

= Well screen

= Boring

= Initial water level in boring

= Static water level in well (02/22/93)

PL4 4,200 = Projected product line or product dispenser soil sample showing concentration of TPHg in ppm

Approximate Horizontal Scale

20 10 0 20 40

feet

Approximate Vertical Scale

10 5 0 10 20

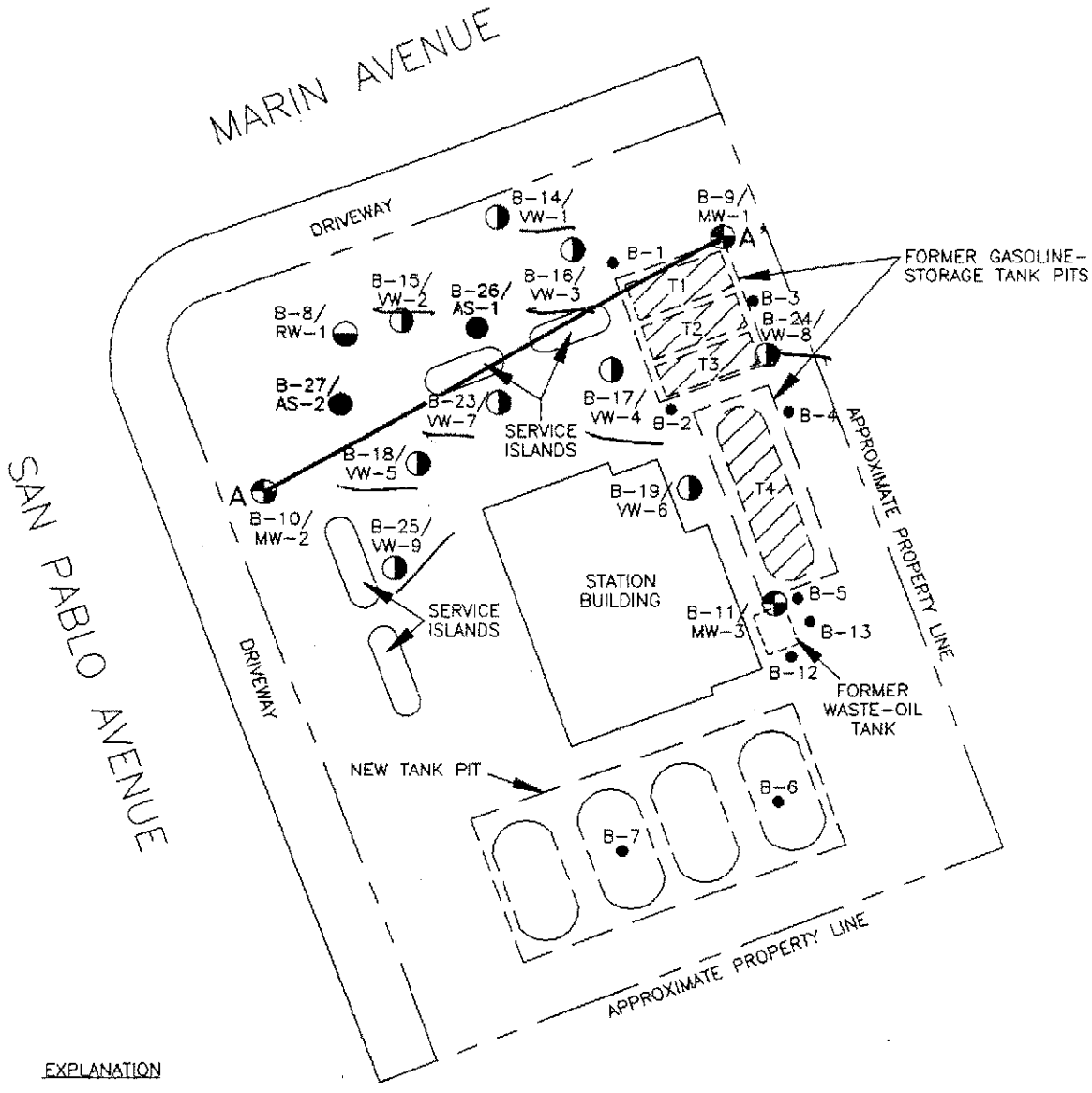
feet

RESNA
Working to Restore Nature

PROJECT 69036.07

GEOLOGIC CROSS SECTION D-D'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 14



EXPLANATION

B-19/ VW-6 = Boring/vapor extraction well (RESNA, August 1992 and June 1993)

B-8/ RW-1 = Boring/recovery well (Exceltech, October 1991)

B-11/ MW-3 = Boring/monitoring well (Exceltech, October 1991)

AS-2 = Air sparge well (RESNA, June 1993)

B-13 = Soil boring (RESNA, August 1989, June 1991, and August 1992)

A — A' = Geologic cross section

Approximate Scale

30 15 0 30 60

feet

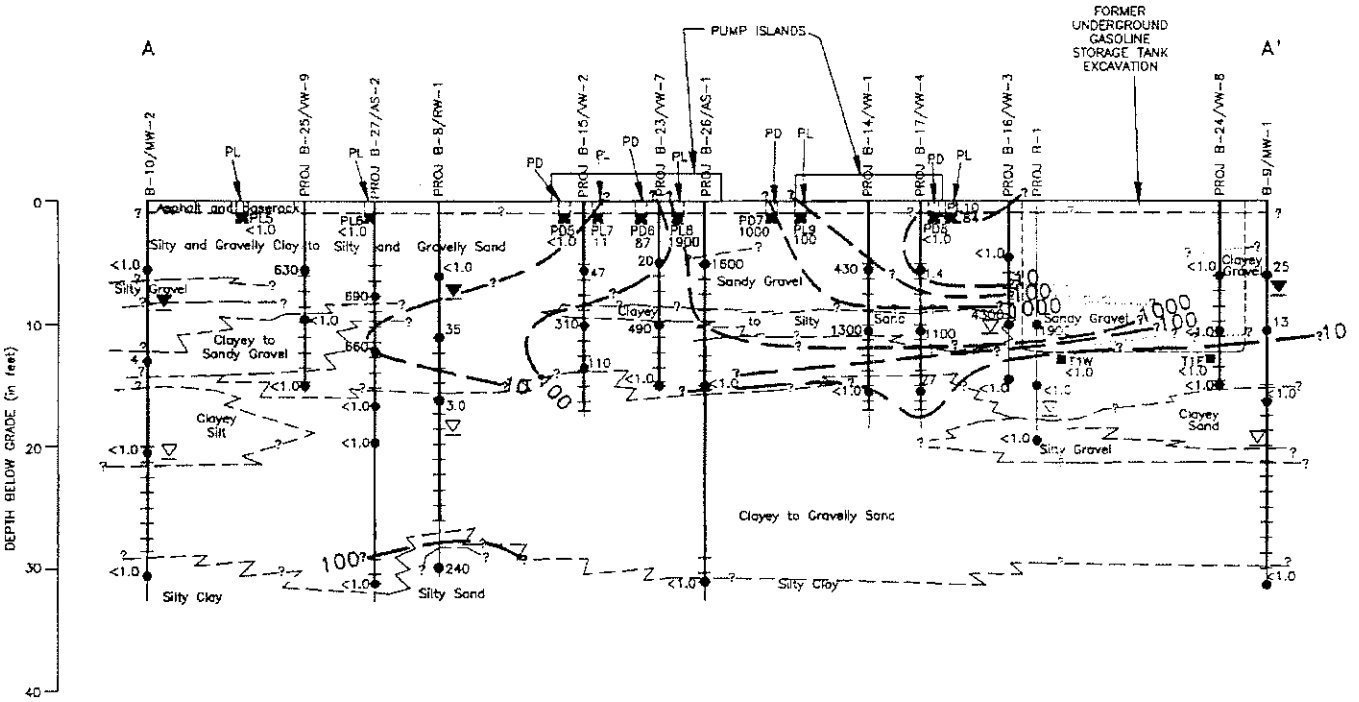
Source: Surveyed by John E. Koch, Land Surveyor. Dated October 29, 1991.

RESNA Working to Restore Nature

PROJECT 69036.10

GENERALIZED SITE PLAN
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE 2



EXPLANATION

1000 = Line of equal concentration of TPHg in soil in parts per million (ppm)

4300 = Laboratory analyzed soil sample showing concentration of TPHg in ppm

= Well casing

= Well screen

= Boring

▽ = Initial water level in boring

PL8 ■ 1,900 = Projected tank pit, product line, or product dispenser soil sample showing concentrations of TPHg in ppm (See plate 1A for sample locations)

PL = Product line trench

PD = Product dispenser trench

Approximate Horizontal Scale

10 5 0 10 20

feet

Approximate Vertical Scale

10 5 0 10 20

feet

RESNA
Working to Restore Nature

PROJECT 69036.10

GEOLOGIC CROSS SECTION A-A'
ARCO Station 2035
1001 San Pablo Avenue
Albany, California

PLATE
3