ExxonMobil
Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
510 547 8706 Facsimile

Jennifer C. Sedlachek
Project Manager

ExxonMobil

October 18, 2012

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

RE: Former Exxon RAS #70104/1725 Park Street, Alameda, California.

Dear Ms. Jakub:

Attached for your review and comment is ***Well Destruction Report,*** dated August 16, 2012, for the above-referenced site. The report was prepared by Cardno ERI of Petaluma, California, and presents information pertaining to the subject site.

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

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

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: Cardno ERI's ***Well Destruction Report,*** dated August 16, 2012

cc: w/o attachment
Ms. Rebekah A. Westrup, Cardno ERI

Cardno ERI
Shaping the Future

Cardno ERI
License A/C10-611383

601 N McDowell Boulevard
Petaluma, CA 94954
USA

Phone 707 766 2000
Toll-free 800 382 9105
Fax 707 789 0414
www.cardno.com

www.cardnoeri.com

October 18, 2012
Cardno ERI 2506CX.R22

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

SUBJECT **Well Destruction Report**
Former Exxon Service Station 70104
1725 Park Street, Alameda, California

Ms. Sedlachek:

At the request of ExxonMobil Environmental Services (EMES), on behalf of Exxon Mobil Corporation, Cardno ERI prepared this report detailing the destruction of groundwater monitoring wells MW1 through MW9, MW11, MW12, and remediation wells EW1 through EW5, SW1, SM1, VW1, and VW2 at the subject site (Plate 1). In electronic correspondence on August 1, 2012, the Alameda County Health Care Services, Environmental Health Department (the County), notified Cardno ERI, that the case summary report had been forwarded to the California Regional Water Quality Control Board (Regional Board) and that, barring comments opposing closure, well destruction activities were approved to proceed after September 7, 2012 (Appendix A). The purpose of the work was to prepare the site for issuance of a No Further Action letter.

SITE DESCRIPTION

Former Exxon Service Station 70104 is located at 1725 Park Street, on the northwestern corner of the intersection of Eagle Avenue and Park Street, in Oakland, California (Plate 1). The surrounding areas consist of residential and commercial properties. The site is currently an active Valero-branded site features are shown on the Generalized Site Plan (Plate 2).

FIELD ACTIVITIES

Field activities were conducted under the advisement of a State of California professional geologist and in accordance with the Alameda County Public Works (Public Works) and City of Alameda (the City) requirements, a site-specific health and safety plan, and the field protocol for well destruction (Appendix B).

Pre-Field Activities

Prior to field activities, Cardno ERI obtained the required permits for well destruction from Public Works and an encroachment permit from the City to complete activities in the City right-of-way. Copies of the permits are presented in Appendix C. The property owners, the County, Public Works, and the City were notified at least one week prior to the start of work. Underground Service Alert was notified at least 48 hours prior to the start of fieldwork to mark buried utilities. In addition, Cardno ERI contracted with a private utility locating firm.

Well Destruction Activities

Between October 9 through 11, 2012, Cardno ERI observed Woodward Drilling Company (Woodward), of Rio Vista, California, conduct well destruction activities at the site. Ms. Vicky Hamlin, inspector from Public Works, observed well destruction activities. Well construction details and boring logs are presented in Appendix D.

Well destruction activities for wells MW1 through MW9, MW11, MW12, EW1 through EW5, SW1, SM1, VW1, and VW2 were completed as follows:

- Each well was grouted with neat cement grout from total depth to surface.
- The well vault was removed and the area was either capped with concrete or soil was added to match the surrounding surface.

California Department of Water Resources (DWR) well destruction forms (DW-188s) will be completed, signed by the licensed driller, and submitted to the County under separate cover, for submittal to the DWR.

Waste Management Plan

Water generated during well destruction activities was temporarily stored on site. Disposal documentation is included in Appendix E.

CONCLUSIONS

Groundwater monitoring wells MW1 through MW9, MW11, and MW12, and remediation wells EW1 through EW5, SV1, SM1, VW1, and VW2 were destroyed. Waste associated with these activities has been removed from the site.

RECOMMENDATIONS

Cardno ERI recommends that a No Further Action letter be issued for this site.

CONTACT INFORMATION

The responsible party contact is Ms. Jennifer C. Sedlachek, ExxonMobil Environmental Services, 4096 Piedmont Avenue #194, Oakland, California, 94611. The consultant contact is Ms. Rebekah A. Westrup, Cardno ERI, 601 North McDowell Boulevard, Petaluma, California, 94954. The agency contact is Ms. Barbara Jakub, P.G., Alameda County Health Care Services Agency, Department of Environmental Health, 1131 Harbor Bay Parkway, Room 250, Alameda, California, 94502-6577.

LIMITATIONS

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

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

Please contact Ms. Rebekah A. Westrup, Cardno ERI's project manager for this site, at rebekah.westrup@cardno.com or at (707) 766-2000 with any questions regarding this report.

Sincerely,

SCANNED IMAGE

SCANNED IMAGE

PROFESSIONAL GEOLOGIST
DAVID RICHARD DANIELS
No. 8737
EXP. 7/31/13
STATE OF CALIFORNIA

Rebekah A. Westrup
Senior Staff Geologist
for Cardno ERI
707 766 2000
Email: rebekah.westrup@cardno.com

David R. Daniels
P.G. 8737
for Cardno ERI
707 766 2000
Email: david.daniels@cardno.com

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

Mr. Shay Wideman, The Valero Companies, Environmental Liability Management, P.O. Box 696000, San Antonio, Texas, 78269

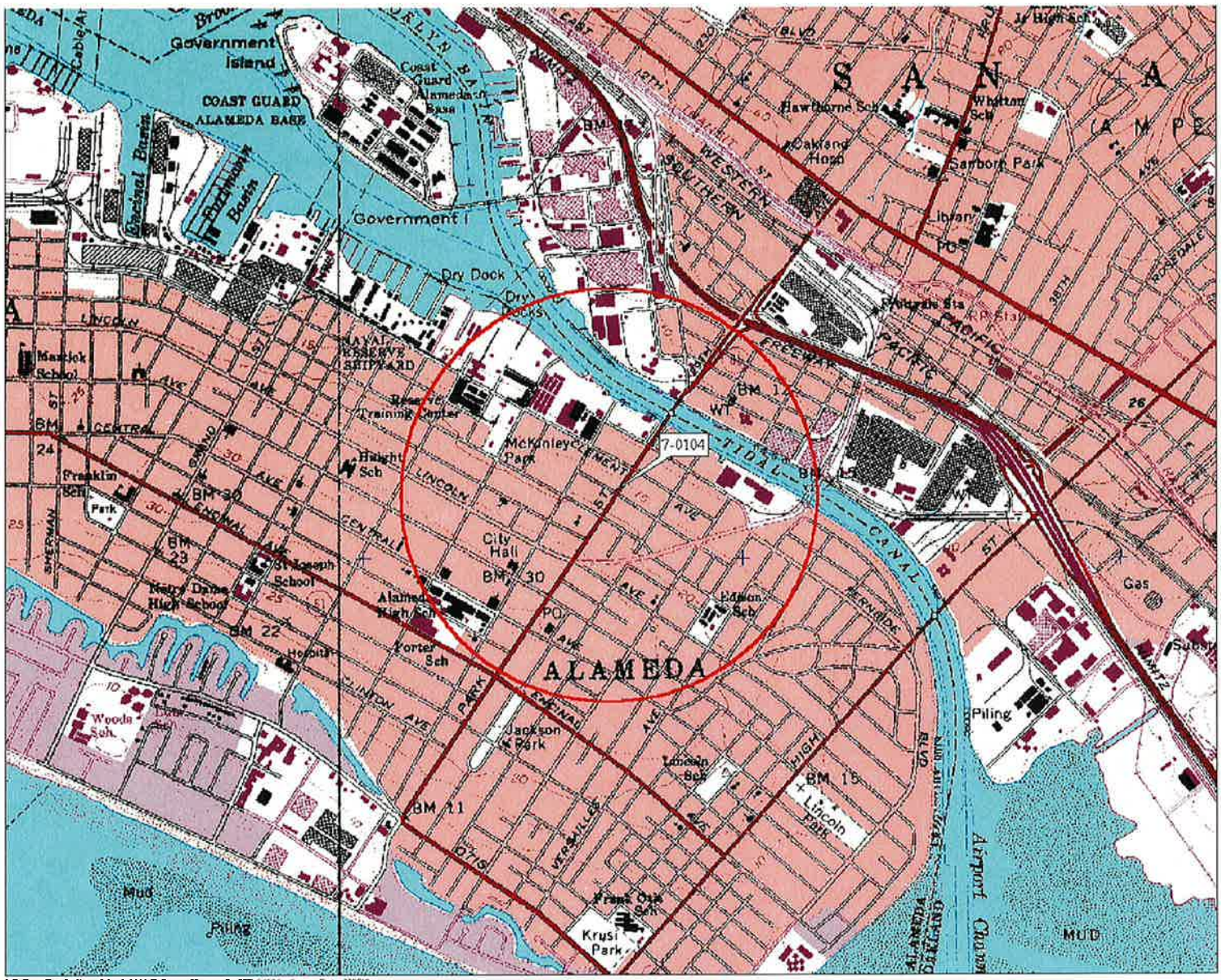
Enclosures:

Acronym List

Plate 1	Site Vicinity Map
Plate 2	Generalized Site Plan
Appendix A	Correspondence
Appendix B	Field Protocol
Appendix C	Permits
Appendix D	Boring Logs and Well Construction Details
Appendix E	Disposal Documentation

ACRONYM LIST

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



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 5280 ft Scale: 1 : 19,200 Detail: 13-0 Datum: WGS84

EXPLANATION

1/2-mile radius circle

APPROXIMATE SCALE

N

0 0.5 1 mile

SOURCE: Modified from a map provided by DeLorme 3-D TopoQuads

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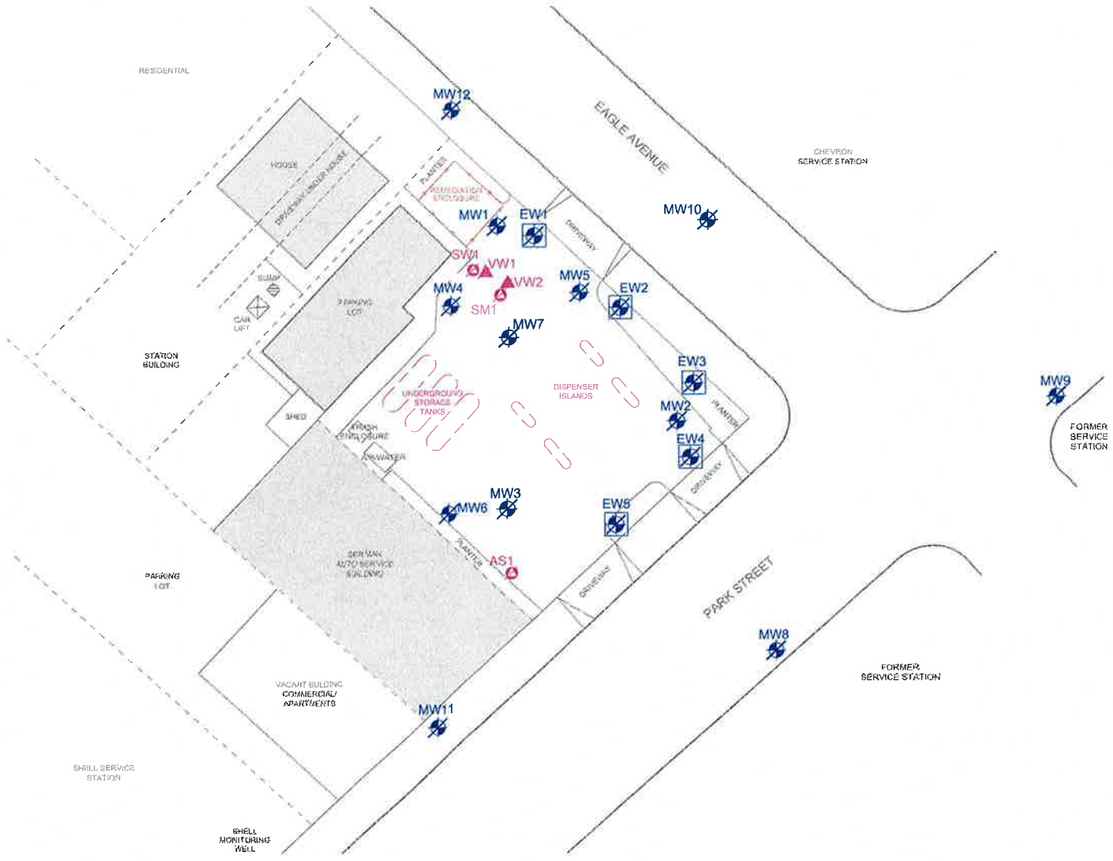
SITE VICINITY MAP

FORMER EXXON SERVICE STATION 70104
1725 Park Street
Alameda, California

PROJECT NO. 2506

PLATE 1



N

APPROXIMATE SCALE

0 50 100 Feet

FN 2506 12 R22 GSP_SP

SOURCE: Modified from a map provided by Delta Environmental Consultants

Cardno ERI
Shaping the Future

GENERALIZED SITE PLAN

FORMER
EXXON SERVICE STATION 70104
1725 Park Street
Alameda, California

EXPLANATION

- MW11 — Destroyed Groundwater Monitoring Well
- VW2 — Destroyed Vapor Extraction Well
- EW5 — Destroyed Recovery Well
- AS1 — Air Sparge

PROJECT NO.
2506

PLATE
2

L:\EXXONMOBIL\ExxonMobil Projects\022506C (70104) Alameda\2506 AutoCad\SPECIALITY MAPS\12 R22\12 R22 GSP SP.dwg, marv.iones

APPENDIX A

CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Director

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

August 1, 2012

Ms. Jennifer Sedlachek
ExxonMobil
4096 Piedmont Ave., #194
Oakland, CA 94611
(Sent via E-mail to:

Fuad Ateyeh
1725 Park St.
Alameda, CA 94501

)

Subject: Monitoring Well Destruction, Public Notification, & Landowner Notification of Case Closure for Fuel Leak Case No. RO0000448 and GeoTracker Global ID T0600100555, Exxon #7-0104, 1725 Park St., Alameda, CA 94501

Dear Ms. Sedlachek and Mr. Ateyeh:

Final approval of a case closure for the underground storage tank investigation at the subject site is almost complete. A case summary report proposing closure has been forwarded to the Regional Water Quality Control Board (RWQCB) for their thirty (30) day review period. Concurrently, public notification and landowner notification of the proposed closure action will be conducted. The RWQCB comment period, public notification and landowner notification on the proposed closure action will all conclude on Tuesday, September 7, 2012. Following the thirty (30) day review period and if no comments opposing closure are received, the monitoring wells installed at the site must be properly destroyed, per California Water Code, prior to issuance of a remedial action completion certificate.

ACEH requests that you address the following technical comments, perform the proposed work, and send us the technical reports requested below. Upon receipt of the requested documents a remedial action completion certificate will be sent to the responsible party.

TECHNICAL COMMENTS

1. **Landowner Notification** – Pursuant to California Health & Safety Code Section 25297.15, the active or primary responsible party for a fuel leak case must inform all current property owners of the site of cleanup actions or requests for closure. Furthermore, ACEH may not consider any cleanup proposals or requests for case closure without assurance that this notification requirement has been met. Additionally, the active or primary responsible party is required to forward to ACEH a complete mailing list of all record fee title holders to the site. At this time, please complete and submit the enclosed List of Landowners Form by the date specified below.

2. **Public Notification** – Pursuant to California Code of Regulations, Title 23, Division 3, Chapter 16, §2728, ACEH requires notification to the public of the proposed case closure for

the site. Therefore, you are required to notify potentially affected stakeholders who live or own property in the area surrounding of the proposed case closure, through the mailing of the enclosed fact sheet. ACEH has prepared the public participation fact sheet which describes the site and previous investigation activities that were conducted and a mailing list of public participants (both of which are enclosed). Please mail the fact sheet to each of the addresses listed in the enclosed List of Recipients and send us your personal certification that the fact sheet has been mailed to them. Public comments on the proposed action will be accepted for a period of thirty days beginning Wednesday, August 8, 2012 through Friday, September 7, 2012. Following the public comment period, the comments received must be addressed and incorporated into a closure report submitted to ACEH for review.

3. **Monitoring Well Destruction** – Following the public comment period, ACEH requests that you contact Alameda County Public Works Agency at (510) 567-6791, obtain the necessary permits, destroy the wells, and electronically upload the monitoring well destruction report to ACEH's FTP server and the State Water Resources Control Board's GeoTracker website by the date requested below. Electronic reporting is described in detail below.

NOTIFICATION OF FIELDWORK ACTIVITIES

Please schedule the fieldwork activities and provide ACEH with at least three (3) business days notification prior to conducting the fieldwork.

TECHNICAL REPORT REQUEST

Please upload technical reports to ACEH's FTP site and to the State Water Resources Control Board's GeoTracker website in accordance with the specified naming convention below.

- **September 7, 2012** – End of 30-day Public Participation Period
- **November 15, 2012** – Monitoring Well Destruction Report
  File to be named: WELL_DCM_R_yyyy_mm_dd

Thank you for your cooperation. Should you have any questions or concerns regarding this correspondence or your case, please call me at (510) 639-1287 or send me an electronic mail message at barbara.jakub@acgov.org.

Sincerely,

Digitally signed by Barbara J. Jakub
DN: cn=Barbara J. Jakub, o, ou,
email=barbara.jakub@acgov.org,
c=US
Date: 2012.08.01 15:21:51 -07'00'

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

Enclosure: List of Landowners Form
Public Participation Fact Sheet
List of Public Participation Property Addresses

Responsible Party(ies) Legal Requirements/Obligations
ACEH Electronic Report Upload (ftp) Instructions

cc: Rebekah Westrup, Environmental Resolutions, Inc., 601 North McDowell Blvd. Petaluma, CA 94954 (*Sent via E-mail to:* rebekah.westrup@cardno.com)
Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa Plaza, Ste. 3341, Oakland, CA 94612-2032 (*Sent via E-mail to:*)
Donna Drogos, ACEH (*Sent via E-mail to:*)
Barbara Jakub, ACEH (*Sent via E-mail to:*)
GeoTracker
File

APPENDIX B

FIELD PROTOCOL

Cardno ERI
Well Destruction Field Protocol

All destruction techniques and methods should be Environmental Protection Agency, American Society of Testing and Materials and appropriate regulatory agency approved methodologies.

Preliminary Activities

Prior to the onset of field activities at the site, Cardno ERI obtains the appropriate permit(s) from the governing agency(s). Advance notification is made as required by the agency(s) prior to the start of work. Cardno ERI marks the borehole locations and contacts the local one call utility locating service at least 48 hours prior to the start of work to mark buried utilities. Borehole locations may also be checked for buried utilities by a private geophysical surveyor. Prior to well destruction, the well borehole is cleared in accordance with the client's procedures. Fieldwork is conducted under the advisement of a registered professional geologist and in accordance with an updated site-specific safety plan prepared for the project, which is available at the job site during field activities.

Overdrilling Well Destruction Procedures

Each well to be destroyed is overdrilled to its respective total depth. The drill rig is equipped with a continuous flight hollow-stem auger of equal or greater size than the original well borehole. After the annular space backfill and casing(s) are removed from each well by overdrilling, the well borehole is backfilled by pumping the agency-specified sealing material through a tremie pipe placed within the augers to the total depth of the borehole. Each well borehole is backfilled from its respective total depth to within approximately 5 feet of surface grade. After the seal hardens, the remaining annular space of each well borehole is backfilled with hydrated bentonite chips to approximately 2 feet below ground surface (bgs) followed by sand to the base of the pavement, or 6 inches below grade if no pavement is present. The destruction of each well is completed to surface grade with material that best matches existing surface conditions and meets local agency requirements.

Pressure Grouting Well Destruction Procedures

Due to the potential close proximity of wells to buried utility lines, subsurface structures or surface structures, wells may be destroyed in place by pressure grouting. Prior to pressure grouting a well, the total depth of the well's casing is measured and compared to the well's original borelog and construction details to verify that obstructions are not present. If present, obstructions that would prevent adequate filling of the well must be removed before pressure grouting. An agency-specified sealing material is then pumped under pressure into the casing of the well. Pressure grouting must be continued until a sufficient amount of sealing material has been emplaced to ensure that the sand filter pack and well casing are filled to within 5 feet of surface grade. The amount of sealing material needed can be calculated using the following equation:

$$\text{Sealant (cubic feet)} = L * (R_b^2 + 2.1 * R_c^2)$$

Where L is the length of casing (feet) to be filled (total length minus 5 feet),
R_b is the radius (feet) of the borehole and
R_c is the radius (feet) of the casing.

After the seal hardens, the well casing is removed to a depth required by client or local agency. The open hole is backfilled with 3 feet of hydrated bentonite chips followed by 1½ feet of sand to approximately 6 inches bgs. The remaining hole is completed with material that best matches existing surface conditions and meets local agency requirements.

Soil Sampling Procedures

If drilling has not been recently conducted at the site, Cardno ERI collects a profile sample from the soil cuttings using a 6-inch long brass sleeve. The brass sleeve is sealed with Teflon™ tape, capped, placed in a cooler chilled to 4° Celsius and transported to a state-certified laboratory under proper chain-of-custody protocol.

Air Monitoring Procedures

Cardno ERI performs a field evaluation for volatile hydrocarbon concentrations in the breathing zone using a calibrated photo-ionization detector or lower explosive level meter.

Waste Treatment and Soil Disposal

Soil cuttings generated from the well destruction are stored on site in labeled, Department of Transportation-approved, 55-gallon drums or other appropriate storage container. The soil is removed from the site and transported under manifest to a client- and regulatory-approved facility for recycling or disposal. Decontamination fluids are stored on site in labeled, regulatory-approved storage containers. Fluids are subsequently transported under manifest to a client- and regulatory-approved facility for disposal or treated with a permitted mobile or fixed-base carbon treatment system.

APPENDIX C

PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/27/2012 By jamesy

Permit Numbers: W2012-0695 to W2012-0706
Permits Valid from 10/10/2012 to 10/19/2012

Application Id: 1348006902019
City of Project Site: Alameda
Site Location: 1725 Park St, Alameda, CA
Project Start Date: 10/10/2012
Completion Date: 10/19/2012
Assigned Inspector: Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

Applicant: Cardno ERI - Rebekah A Westrup
601 N McDowell Blvd, Petaluma, CA 94954
Phone: 707-766-2000

Property Owner: Fuad M Ateyeh
1725 Park St, Alameda, CA 94501
Phone: 510-522-6813

Client: ExxonMobil Corp
4096 Piedmont Ave #194, Oakland, CA 94611
Phone: 510-547-8196

Total Due: $4632.00
Receipt Number: WR2012-0318 **Total Amount Paid:** $4632.00
Payer Name : Envr. Solutions, Inc Paid By: CHECK **PAID IN FULL**

Works Requesting Permits:

Well Destruction-Monitoring - 11 Wells
Driller: Woodward - Lic #: 710079 - Method: hstem

Work Total: $4367.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2012-0695	09/27/2012	01/08/2013	MW11B	8.00 in.	2.00 in.	0.00 ft	20.00 ft	No Records	No Records	No Records
W2012-0696	09/27/2012	01/08/2013	MW12B	8.00 in.	2.00 in.	0.00 ft	20.00 ft	No Records	No Records	No Records
W2012-0697	09/27/2012	01/08/2013	MW1A	12.00 in.	4.00 in.	0.00 ft	21.50 ft	No Records	No Records	No Records
W2012-0698	09/27/2012	01/08/2013	MW2A	10.74 in.	4.00 in.	0.00 ft	16.00 ft	No Records	No Records	No Records
W2012-0699	09/27/2012	01/08/2013	MW3A	10.75 in.	4.00 in.	0.00 ft	14.50 ft	No Records	No Records	No Records
W2012-0700	09/27/2012	01/08/2013	MW4A	10.00 in.	4.00 in.	0.00 ft	19.00 ft	No Records	No Records	No Records
W2012-0701	09/27/2012	01/08/2013	MW5A	10.00 in.	4.00 in.	0.00 ft	19.00 ft	No Records	No Records	No Records
W2012-0702	09/27/2012	01/08/2013	MW6A	10.00 in.	4.00 in.	0.00 ft	19.00 ft	No Records	No Records	No Records
W2012-0703	09/27/2012	01/08/2013	MW7A	11.00 in.	4.00 in.	0.00 ft	19.00 ft	No Records	No Records	No Records
W2012-0704	09/27/2012	01/08/2013	MW8	8.00 in.	2.00 in.	0.00 ft	19.00 ft	No Records	No Records	No Records
W2012-0705	09/27/2012	01/08/2013	MW9	8.00 in.	2.00 in.	0.00 ft	19.00 ft	No Records	No Records	No Records

Specific Work Permit Conditions

1. Drilling Permit(s) can be voided/ cancelled only in writing. It is the applicant's responsibility to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not cancel a drilling permit application after the completion date of the permit issued has passed.

Alameda County Public Works Agency - Water Resources Well Permit

2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well construction or destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

4. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

5. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost and liability in connection with or resulting from the exercise of this Permit including, but not limited to, property damage, personal injury and wrongful death.

6. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

7. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

8. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

9. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

Remediation Well Destruction-Injection - 9 Wells
Driller: Woodward - Lic #: 710079 - Method: hstem **Work Total: $265.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2012-0706	09/27/2012	01/08/2013	EW1A	0.00 in.	4.00 in.	0.00 ft	0.00 ft	No Records	No Records	No Records

Alameda County Public Works Agency - Water Resources Well Permit

W2012-0706	09/27/2012	01/08/2013	EW2A	0.00 in.	0.00 in.	0.00 ft	0.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	EW3A	0.00 in.	4.00 in.	0.00 ft	0.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	EW4A	0.00 in.	0.00 in.	0.00 ft	0.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	EW5A	0.00 in.	4.00 in.	0.00 ft	0.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	SM1	8.00 in.	2.00 in.	0.00 ft	20.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	SW1	8.00 in.	2.00 in.	0.00 ft	20.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	VW1	8.00 in.	2.00 in.	0.00 ft	7.00 ft	No Records	No Records	No Records
W2012-0706	09/27/2012	01/08/2013	VW2	8.00 in.	2.00 in.	0.00 ft	7.00 ft	No Records	No Records	No Records

Specific Work Permit Conditions

1. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Include permit number and site map.

2. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.

3. Applicant shall contact Vicky Hamlin for an inspection time at 510-670-5443 or email to vickyh@acpwa.org at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

4. Remove the Christy box or similar structure.

Destroy well by grouting neat cement with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the well and by filling with neat cement to three (3-5) feet below surface grade. Allow the sealing material to spill over the top of the casing to fill any annular space between casing and soil.

After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.

5. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

6. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

Barry Ng

CITY OF ALAMEDA

2263 SANTA CLARA AVENUE, ROOM 190
ALAMEDA, CA 94501

(510) 747-6800
FAX (510) 865-4053

Encroachment Permit: EN11-0136

Applicant Information

Contractor Information
ENVIRONMENTAL RESOLUTIONS INC
20372 NORTH SEA CIRCLE
LAKE FOREST CA 92630
(949) 340-1020

Owner Information

Project Information
Status: **Issued**
Type: **Encroachment Permit**
Category: **NA**
Sub-Type: **NA**
Parcel Number:
Job Address: **1725 PARK ST**
Work Description: **ENCROACHMENT ~ MONITORING, SAMPLING & MAINTENANCE OF WELLS**

Applied: **11/16/2011**
Finaled:

Issued: **03/05/2012**
Expired:

Valuation: **$1,000.00**

INSPECTIONS

Building:	**(510) 747-6830 (7:30 - 8:30 AM)**	**Electrical:**	**(510) 747-6830 (7:30 - 8:30 AM)**
Plumbing & Mechanical:	**(510) 747-6830 (7:30 - 8:30 AM)**	**Fire:**	**(510) 337-2120**
		Design Review:	**(510) 747-6850**

FEE DESCRIPTION	ACCOUNT CODE	UNITS	FEE AMOUNT	PAID
Filing Fee	481003-37450 (1050)	1	$44.00	$44.00
Technology Fee	481003-33063 (1051)	1	$5.80	$5.80
Engineering - Other Revenue	4210-39900 (1590)	26	$26.20	$26.20
Engineering - Encroachment Temp <1 week	4210-33410 (1584)	1	$72.00	$72.00
Deposit - Public Works	001-22531 (6209)	1000	$1,000.00	$1,000.00
Community Planning Fee	481005-33064 (8765)	1	$3.00	$3.00
		TOTALS:	$1,151.00	$1,151.00

RECEIPT #	PAYMENT METHOD	CHECK #	PAYOR:	RECEIPT DATE	RECEIPT AMOUNT
473937	Check	11999	ENVIRONMENTAL RESOLUTIONS INC	11/16/2011	$1,151.00
Cashier: LFOYE					

Total Payments: $1,151.00

Balance Due: $0.00

X _____

510-747-7930

Version Date: 01/18/2012

Print Date: 3/5/2012

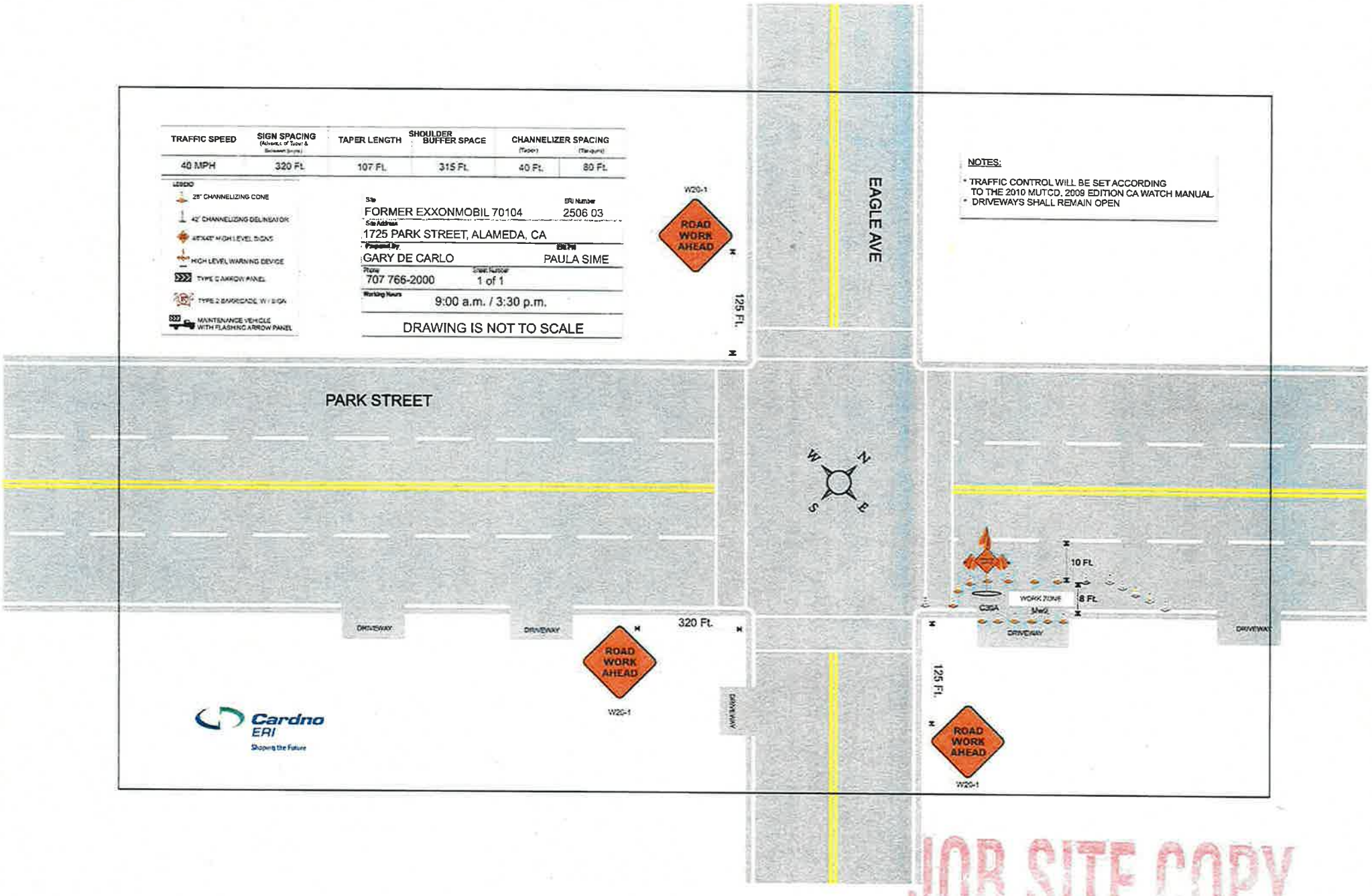
TRAFFIC SPEED	SIGN SPACING (Advance or Taper & Between Signs)	TAPER LENGTH	SHOULDER BUFFER SPACE	CHANNELIZER SPACING (Taper)	(Tangent)
40 MPH	320 Ft.	107 Ft.	315 Ft.	40 Ft.	80 Ft.

LEGEND
- 28" CHANNELIZING CONE
- 42" CHANNELIZING DELINEATOR
- 48"X48" HIGH LEVEL SIGNS
- HIGH LEVEL WARNING DEVICE
- TYPE C ARROW PANEL
- TYPE 3 BARRICADE W / SIGN
- MAINTENANCE VEHICLE WITH FLASHING ARROW PANEL

Site: FORMER EXXONMOBIL 70104
ERI Number: 2506.03
Site Address: 1725 PARK STREET, ALAMEDA, CA
Prepared By: GARY DE CARLO
Site PM: PAULA SIME
Phone: 707 766-2000
Sheet Number: 1 of 1
Working Hours: 9:00 a.m. / 3:30 p.m.

DRAWING IS NOT TO SCALE

NOTES:
- TRAFFIC CONTROL WILL BE SET ACCORDING TO THE 2010 MUTCD, 2009 EDITION CA WATCH MANUAL.
- DRIVEWAYS SHALL REMAIN OPEN



Cardno ERI
Shaping the Future

JOB SITE COPY

EN11-0136

APPENDIX D

BORING LOGS AND WELL CONSTRUCTION DETAILS

Top of SS Casing Elevation_____

Equipment B-53

Elevation_____ Date 5/31/88

Blows/foot	OVA Reading (ppm)	Depth (ft)	Sample
		0	
30	2		
11	1	5	
23	25	10	
31	25	15	
36	35	20	
		25	
		30	
		35	
		40	

GROUND SURFACE

12 IN. DIAMETER BORING
0 to 21 ft
BENTONITE-CEMENT SEAL
0 to 4 ft
4 IN. DIAMETER SCHEDULE 40
PVC WELL CASING
0.5 to 6 ft
BENTONITE PELLET SEAL
4 to 5 ft

4 IN. DIAMETER SCHEDULE 40
SLOTTED WELL SCREEN
(0.020 in slot size)
6 to 21 ft

LONE STAR #3 SAND PACK
5 to 21.5 ft

4 IN. DIAMETER SCHEDULE 40
PVC BLANK SILT TRAP
21.5 to 22 ft
BOTTOM WELL CAP at 21.5 ft
HOLE CLEANED OUT TO
to 21.5 ft

A.C. Pavement
STRONG BROWN SANDY GRAVEL (GP) (7.5YR 5/6)
dense, moist
DARK BROWN SILTY SAND (SM) (10YR 3/3)
medium dense, moist

DARK GRAY CLAYEY SAND (SC) (5Y 4/1)
medium dense, saturated
GRAY SAND (SP) (5Y 5/1)
medium dense, saturated

DARK YELLOWISH BROWN SAND (SP) (10YR 4/6)
medium dense, saturated, trace silt

DARK GRAY SILTY SAND (SM) (5Y 5/1)
medium dense, saturated

DARK GRAY SAND (SP) (5Y 5/1)
medium dense, saturated, with silt
bottom of boring at 22.0 ft

Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail MW-1
Exxon - Alameda
Alameda, California

PLATE
A-1

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	4167.309.02		6/88		

Elevation_____

Equipment B-53

Elevation_____ Date 6/1/88

	Blows/ft	OVA Read (ppm)	Depth	Sample	
GROUND SURFACE			0		
10-3/4 IN. DIAMETER BORING 0 to 16 ft BENTONITE-CEMENT SEAL 0.5 to 2.5 ft	27	0			A.C. Pavement STRONG BROWN SANDY GRAVEL (GP) dense, moist to wet VERY DARK GRAY SAND (SP) (5Y 3/1) medium dense, wet, fine-grained
4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING 0.5 to 4 ft BENTONITE PELLET SEAL 2.5 to 3.5 ft 4 IN. DIAMETER SCHEDULE 40 SLOTTED WELL SCREEN (0.020 in slot size) 4 to 15 ft	21	700	5		MOTTLED DARK GRAY AND DARK YELLOWISH BROWN SILTY SAND (SM) (5Y 4/1; 10YR 4/6) medium dense, moist ▽ decrease in silt
LONE STAR #3 SAND PACK 3.5 to 16 ft	36	400	10		OLIVE GRAY SAND (SP) (5Y 5/2) medium dense, saturated, medium-grained
4 IN. DIAMETER SCHEDULE 40 PVC BLANK SILT TRAP 15.5 to 16 ft	10	400	15		BROWN SAND (SP) medium dense, saturated, fine- to medium-grained, trace silt OLIVE SILTY SAND (SM) (10YR 4/3) loose, saturated, fine- to medium-grained bottom of boring at 16.0 ft
BOTTOM WELL CAP at 16 ft HOLE CLEANED OUT TO to 16 ft			20		
			25		
			30		
			35		
			40		

Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail HMA-2

Exxon - Alameda
Alameda, California

PLATE **A-2**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	4167,309.02		6/88		

Top of SS Casing Elevation_____

GROUND SURFACE

Equipment B-53

Elevation_____ Date 6/1/88

Blows/foot	OVA Reading (ppm)	Depth (ft)	Sample
41	0.6	0	
16	400	5	
6		10	
28	40	15	
		20	
		25	
		30	
		35	
		40	

10-3/4 IN. DIAMETER BORING
0 to 15.5 ft
BENTONITE-CEMENT SEAL
0.5 to 2.5 ft
4 IN. DIAMETER SCHEDULE 40
PVC WELL CASING
0.5 to 4 ft
BENTONITE PELLET SEAL
2.5 to 3.5 ft
4 IN. DIAMETER SCHEDULE 40
SLOTTED WELL SCREEN
(0.020 in slot size)
4 to 14.5 ft
LONE STAR #3 SAND PACK
3.5 to 14 ft

4 IN. DIAMETER SCHEDULE 40
PVC BLANK SILT TRAP
14.5 to 15.5 ft
BOTTOM WELL CAP at 14.5 ft
HOLE CLEANED OUT TO
to 14.5 ft

A.C. Pavement
STRONG BROWN SANDY GRAVEL (GP) (7.5YR 5/6)
dense, moist
DARK GRAY SAND (SP) (5Y 3/1)
medium dense, moist, fine- to
medium-grained, trace silt
becoming finer grained at 4 ft

color change to DARK GRAY (5Y 4/1)
at 5.0 ft

▽ becomes wet at 7.0 ft

GRAY SAND (SP) (5Y 5/1)
loose, wet

OLIVE BROWN SILTY SAND (SM) (2.5Y 4/4)
medium dense, saturated, medium-grained

bottom of boring at 16.0 ft

Harding Lawson Associates
Engineers and Geoscientists

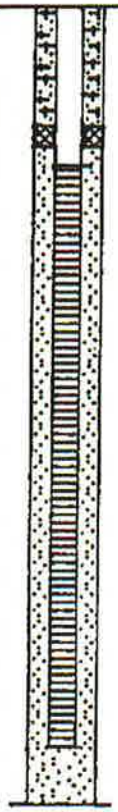
Log of Boring and Well Completion Detail MW-9
Exxon - Alameda
Alameda, California

PLATE
A-3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	4167,309.02		6/88		

Elevation_____ Date_____

GROUND SURFACE



10 IN. DIAMETER BORING
0 to 20.5 ft
4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 below ground to 4.0 ft
BENTONITE-CEMENT SEAL
0 to 3.0 ft
BENTONITE PELLET SEAL
3.0 to 3.5 ft

LONESTAR #3 SANDPACK
3.5 to 20.5 ft

4 IN. DIAMETER WELL SCREEN
(0.020 in. slot size)
4.0 to 19.0 ft

BOTTOM WELL CAP to 19.0 ft

BOREHOLE CLEANED OUT
to 19.0 ft
BOTTOM OF BOREHOLE 20.5 ft

Depth	Sample	Blows	OVA	
0				ASPHALT GRAVEL (GW) (fill) strong petroleum odor
				DARK GRAYISH BROWN SILTY SAND (SM) 2.5Y 4/2 loose, moist, very strong petroleum odor
5		10	50	GREEN CLAYEY SAND (SC) loose, moist, medium-grained
10		22	60	GREEN SAND WITH MINOR SILT (SP) medium dense, saturated, poorly graded, medium-grained, petroleum odor
				3" gravel layer at 14.0 ft
15		8	0	YELLOWISH BROWN SILTY SAND (SM) 10YR 5/6 loose, saturated, medium-grained YELLOWISH BROWN SANDY SILT (ML) 10YR 5/6 medium stiff, saturated
				GREEN SILTY SAND (SM) medium dense, saturated, medium-grained, with minor plant fragments
20		20	0	bottom of boring at 20.5 ft converted to monitoring well MW-4.
25				
30				
35				
40				

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail B4/MW4

Exxon - Alameda
Alameda, California

A-4

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	4167,309.02		2/89		

Top of PVC Casing Elevation ft

GROUND SURFACE

10 IN. DIAMETER BORING
0 to 20.5 ft
4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 below ground to 4.0 ft
BENTONITE-CEMENT SEAL
0.5 to 3.0 ft
BENTONITE PELLET SEAL
3.0 to 3.5 ft

LONESTAR #3 SANDPACK
3.5 to 20.5 ft

4 IN. DIAMETER WELL SCREEN
(0.020 in. slot size)
4.0 to 19.0 ft

BOTTOM WELL CAP to 19.0 ft

BOREHOLE CLEANED OUT to 19.0 ft
BOTTOM OF BOREHOLE 20.5 ft

Depth (ft)	Sample	Blows/foot	OVA (ppm)	
0				ASPHALT FILL BLACK SILTY SAND (SM) 10YR 2/1 damp, strong petroleum odor DARK GRAY SAND (SP) 5Y 4/1 moist
5		11	100	GREEN CLAYEY SILTY SAND (SM) medium dense, damp, angular, medium-grained sand strong petroleum odor
10		22	50	GREEN SAND (SP) medium dense, saturated, subangular medium-grained, with minor silt, petroleum odor
15		26		1" gravelly layer at 14.0 ft YELLOWISH BROWN SILTY SAND (SM) 10YR 5/4 medium dense, saturated, high percentage of silt
20		25	0	color change to green bottom of boring at 20.5 ft converted to monitoring well MW-5
25				
30				
35				
40				

Equipment CME-75

Elevation Date

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail B5/MW5 (1 of 1)

Exxon - Alameda

Alameda, California

A-5

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	4167,309.02		2/89		

Top of PVC Casing Elevation ft

GROUND SURFACE

10 IN. DIAMETER BORING
0 to 20.5 ft
4 IN. DIAMETER SCHEDULE 40 PVC WELL CASING
0.5 below ground to 4.0 ft
BENTONITE-CEMENT SEAL
0.5 to 3.0 ft
BENTONITE PELLET SEAL
3.0 to 3.5 ft

LONESTAR #3 SANDPACK
3.5 to 20.5 ft

4 IN. DIAMETER WELL SCREEN
(0.020 in. slot size)
4.0 to 19.0 ft

BOTTOM WELL CAP to 19.0 ft

BOREHOLE CLEANED OUT to 19.0 ft
BOTTOM OF BOREHOLE 20.5 ft

Blows/foot	OVA (ppm)	Depth (ft)	Sample
5	100	5	
17	600	10	
11	0	15	
15	0	20	

Equipment CME-75

Elevation Date

ASPHALT
BLACK SILTY CLAY WITH GRAVEL (CL) (fill)
strong petroleum odor

GREEN TO GREENISH DARK GRAY SILTY SAND (SM) loose, moist, medium-grained, subangular, very strong petroleum odor

GREEN SAND (SP) medium dense, saturated, medium-grained

1" gravel layer at 14.0 ft
YELLOWISH BROWN SANDY SILT (ML) 10YR 5/6 stiff, saturated, 25% sand

increase in sand content
YELLOWISH BROWN SILTY SAND (SM) 10YR 5/6 medium dense, saturated, medium-grained

bottom of boring at 20.5 ft
converted to monitoring well MW-6

HLA Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail B6/MW6

Exxon - Alameda
Alameda, California

A-6

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	4167,309.02	MS	2/89		

Top of PVC Casing Elevation 17.12 ft MSL

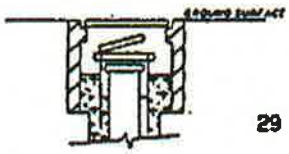
GROUND SURFACE

11" DIA. BOREHOLE
0 to 19.5 ft
BENTONITE-CEMENT GROUT
0 to 3 ft
4" DIA. SCHEDULE 40 PVC
BLANK CASING
0 to 4 ft
BENTONITE PELLET SEAL
3 to 3.5 ft
LONESTAR #3 SAND PACK
3.5 to 19.5 ft

4" DIA. SCHEDULE 40 PVC
WELL SCREEN
(0.020" slot size)
4 to 19 ft

BOTTOM WELL CAP at 19 ft

Well Top Detail
Not to Scale



Equipment B-53 Hol. Stem Auger

Elevation 17.50 ft MSL Date 1/4/90

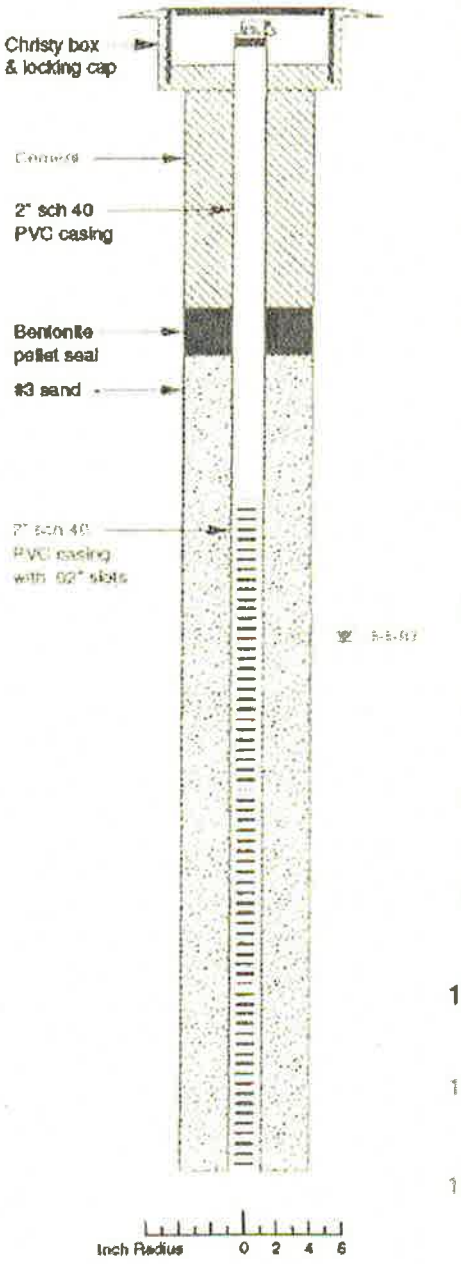
Depth (ft)	Sample	Blows/ft	OVA (ppm)	
0				ASPHALT GRAYISH BROWN PEA GRAVEL
			2	VERY DARK GRAYISH BROWN SILTY SAND (SM) 2.5Y 3/2 medium dense, moist, strong petroleum odor, fine- to coarse-grained sand
5			>1000	
		11	>1000	
				▼ water level on 1/4/90 color change to very dark gray (2.5Y 3/0), with decreasing silt at 10 ft
10		10	>1000	
				color change to light olive-brown (2.5Y 5/4), increasing silt content at 15 ft
15		6	40	
				decreasing silt at 17.5 ft
20				DARK GREENISH GRAY SANDY CLAY (CL) 5G 4/1 stiff, wet
		26	20	OLIVE-YELLOW SILTY SAND AND SANDY SILT (SM/ML) dense, wet
25				LIGHT OLIVE-BROWN SAND WITH SILT (SW) 2.5Y 5/6 dense, wet, no petroleum odor
		29	5	
30				color change to olive-gray (5Y 4/2) at 31 ft
		35	0	slower drilling at 33 ft OLIVE-GRAY SILTY SAND (SM) 5Y 4/2 dense, wet
35				
		44	0	slower drilling at 38 ft DARK GREENISH GRAY CLAYEY SAND (SC) 5GY 4/1 dense, wet
40				bottom of boring at 40 ft

Harding Lawson Associates
Engineering and Environmental Services

Log of Boring and Well Completion Detail MW-7
Exxon Station #7-0104
Alameda, California

PLATE **A-7**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
	4167.309.02		2/90	



Measured Depth (Feet)	Blow Counts	PID (ppmv)	GRAPHIC LOG	DESCRIPTION
0				Asphalt
				Base rock, gravel
1				
				Silty SAND (SM), fine- to medium-grained; light orange; moist
2				
3				Silty SAND with clay (SM), fine- to medium-grained; tan and orange; moist
4				
5	8	1.0		
	9	1.5		
6	11			Silty SAND with clay (SM); same as above; gray-green; medium dense
7				
8				Silty SAND (SM); same as above; brown; wet
9				
10	11			Silty SAND (SM); orange-brown; wet; dense
	20			
11	20			
12				

continues

EXPLANATION

- Recovered drill sample
- Sample sealed for chemical analysis
- Sieve sample
- Grab sample
- Core sample
- est K — Estimated permeability (hydraulic conductivity)
- NR — No recovery
- Water level during drilling
- Water level in completed well

CONTACTS:

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational

Logged by:	David DeMent, Jennifer Chase
Project Mgr:	Gary Pischke
Dates Drilled:	5/5/93
Drilling Company:	PC Exploration
Drilling Method:	8" Hollow Stem Auger
Driller:	Frank
Well Head Completion:	Christy box and locking cap
Type of Sampler:	2½" split spoon
TD (Total Depth):	21.5 feet

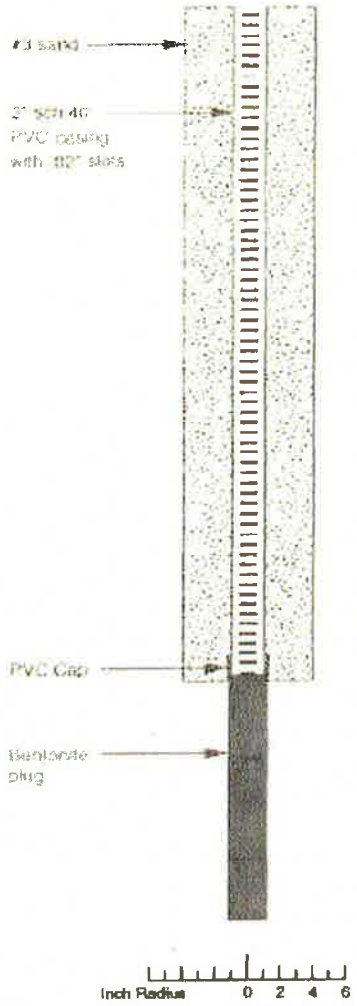
RESNA

PROJECT NO. 170077.05 5/93

BORING LOG—Boring B-8 (Monitoring Well MW-8)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

BORING **B-8**



Measured Depth (Feet)	Blow Counts	PID (ppmv)	GRAPHIC LOG	DESCRIPTION
12				Silty SAND (SM); same as above
13				
14				
15	7			Sandy SILT with clay (ML); fine-grained sand; light gray with orange-brown mottling; moist; very stiff
	10			
16	16			
17				
18				
19				
20	7			Silty SAND with clay (SM), fine-grained; brown with orange mottling; moist; medium dense
	9			
21	11			TD @ 21.5 ft.
22				
23				
24				
25				
26				

EXPLANATION

- Recovered drill sample
- Sample sealed for chemical analysis
- Sieve sample
- Grab sample
- Core sample

est K — Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary

NR — No recovery

- Water level during drilling
- Water level in completed well

CONTACTS:

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational

RESNA

PROJECT NO. 170077.05

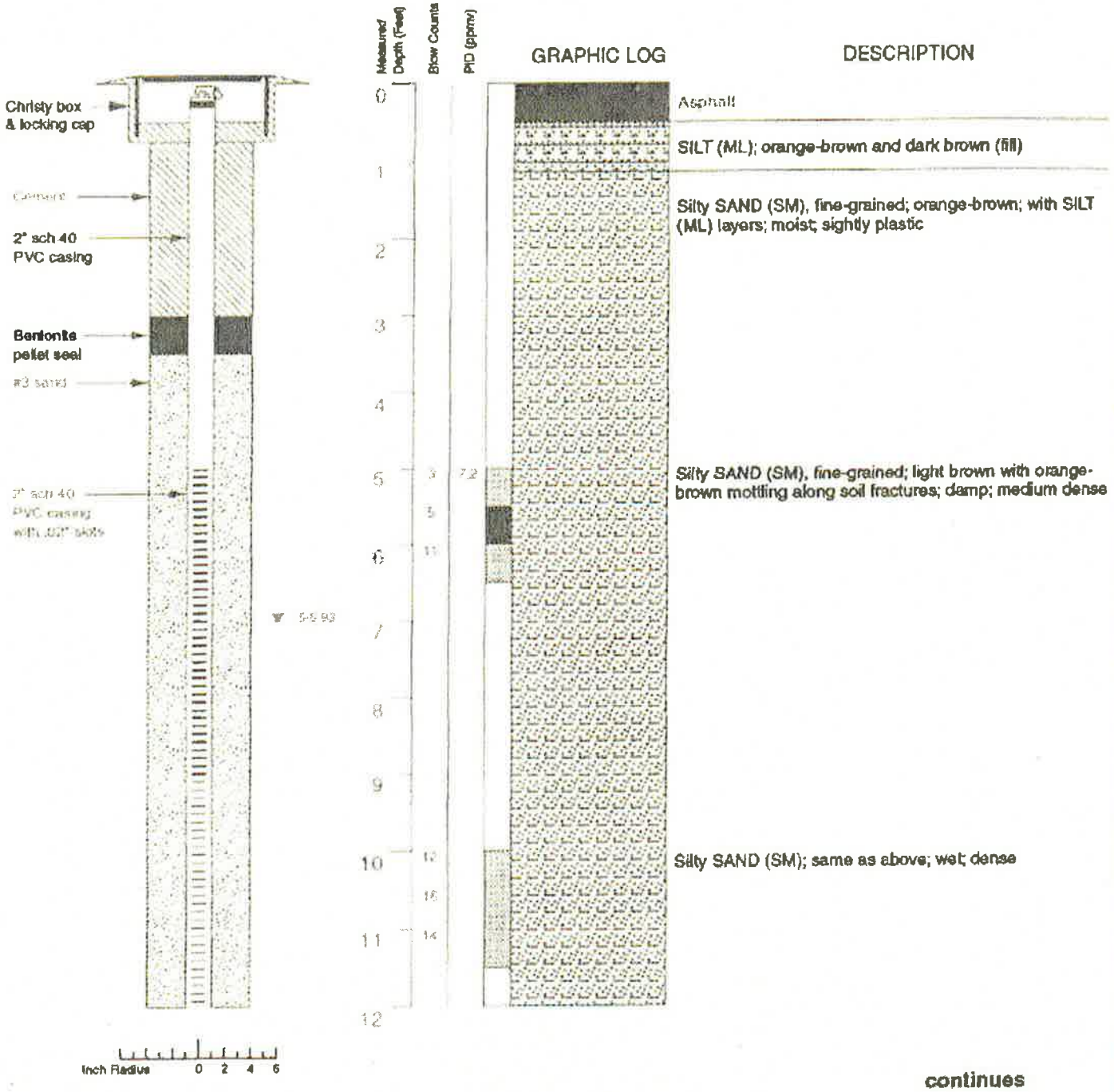
5/93

BORING LOG—Boring B-8 (Monitoring Well MW-8)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

BORING

B-8



continues

Logged by:	David DeMent, Jennifer Chase
Project Mgr:	Gary Pischke
Dates Drilled:	5/5/93
Drilling Company:	PC Exploration
Drilling Method:	8" Hollow Stem Auger
Driller:	Frank
Well Head Completion:	Christy box and locking cap
Type of Sampler:	2½" split spoon
TD (Total Depth):	19.0 feet

EXPLANATION

- Recovered drill sample
- Sample sealed for chemical analysis
- Sieve sample
- Grab sample
- Core sample
- est K — Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
- NR — No recovery
- Water level during drilling
- Water level in completed well

CONTACTS:

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational

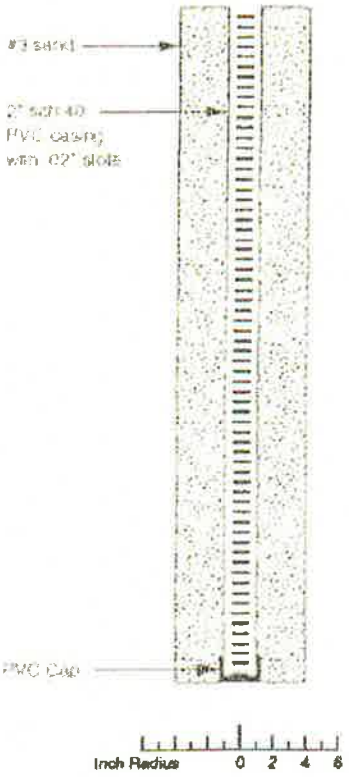
RESNA

PROJECT NO. 170077.05 5/93

BORING LOG—Boring B-9 (Monitoring Well MW-9)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

BORING **B-9**



Measured Depth (Feet)	Blow Counts	PID (ppmv)	GRAPHIC LOG	DESCRIPTION
12				Silty SAND (SM), fine grained; light brown with orange-brown mottling along soil fractures, wet; dense
13				
14				
15	5			
	9			Clayey SILT (ML) with trace sand; gray with orange-brown mottling; wet; low to medium plasticity; stiff
16	5			
17				Silty SAND (SM), fine grained; light brown with orange-brown mottling along fractures, wet; dense
	5			
18	6			Silty SAND/Sandy SILT (SM/ML); gray; wet; medium dense
	10			
19				TD @ 19.0 ft
20				
21				
22				
23				
24				
25				
26				

EXPLANATION

- Recovered drill sample
- Sample sealed for chemical analysis
- Sieve sample
- Grab sample
- Core sample
- est K — Estimated permeability (hydraulic conductivity) 1K = primary 2K = secondary
- NR — No recovery
- Water level during drilling
- Water level in completed well

CONTACTS:

- Solid where certain
- Dotted where approximate
- Dashed where uncertain
- Hachured where gradational

RESNA

PROJECT NO. 170077.05 5/93

BORING LOG—Boring B-9 (Monitoring Well MW-9)

Exxon Service Station No. 7-0104
1725 Park Street
Alameda, California

BORING **B-9**

PROJECT NAME/LOCATION:	Project Number	D094-832	Boring Number	MW-11
Exxon Service Station No. 7-0104 1725 Park Street Alameda, CA	Contractor	Turner Explorations	Drilling Method	8" HSA
	Driller	Jarrod Kump	Drilling Rig	Mobile B-34
	Start	12:30 p.m. 08/23/95	Completed	2:35 p.m. 08/23/95
Landowner:	Surface Elev.	—	Logged By	Mike Berrington

Sample Type	Sample No.	Blow Count	Sample Interval (ft)	Sample Recovery (in.)	Depth Scale 1" = 4"	Descriptions of Materials and Conditions	Observations Instrument: Units: hNu ppm	Comments
					0	3" CONCRETE		
					1	POORLY GRADED SAND; fine grained sand; tan to light brown, moist, medium dense (SP)		
					2			
					3			
					4			
CAM	MW-11-6.5	11 10 13	5.0-6.5	18	5	CLAYEY SAND; fine grained sand; light brown, moist to wet, medium dense (SC)	43	
					6			
					7	SANDY LEAN CLAY; fine grained sand; low to medium plasticity clay; olive to blue green, moist, very stiff (CL)		
					8			
					9			First water at ~9 ft.
CAM	MW-11-11.5	24 42 50 for 5"	10.0-11.5	18	10	POORLY GRADED SAND; fine grained sand; olive, wet, very dense (SP)	166	
					11			
					12			
					13			
					14			
CAM	MW-11-15.5	50 for 6"	15.0-15.5	6	15	CLAYEY SAND/SANDY LEAN CLAY; fine grained sand; light brown to tan, moist to wet, very dense (SC/CL)	60	
					16			
CAM	MW-11-17.5	28 41 32 for 5"	17.0-18.0	12	17	SILT; olive gray, moist, hard (ML)	13	
					18	Total drilled depth at 17 ft.		
					19			
					20			
					21			
					22			
					23			

BOREHOLE WATER LEVEL DATA			
Date	08/23/95		
Time	4:50 p.m.		
GWL	7.30		
Casing Depth	17 ft.		

Delta Environmental Consultants, Inc.

Sheet 1 of 1

Rev. October 19, 1995

PROJECT NAME/LOCATION:	Project Number	D094-832	Boring Number	MW-12
Exxon Service Station No. 7-0104 1725 Park Street Alameda, CA	Contractor	Turner Explorations	Drilling Method	8" HSA
	Driller	Jarrod Kump	Drilling Rig	Mobile B-34
	Start	9:30 a.m. 08/23/95	Completed	10:20 a.m. 08/23/95
Landowner:	Surface Elev.	---	Logged By	Mike Berrington

Sample Type	Sample No.	Blow Count	Sample Interval (ft)	Sample Recovery (in.)	Depth Scale 1" = 4'	Descriptions of Materials and Conditions	Observations Instrument: Units:	Observations ppm	Comments
					0	3" CONCRETE			
					1	POORLY GRADED SAND WITH SILT; fine grained sand; dark brown, moist (SP-SM)			
					2				
					3	POORLY GRADED SAND; fine grained sand; tan, moist (SP)			
					4				
CAM	MW-12-6.5	8 16 25	5.0-6.5	18	5	CLAYEY SAND/SANDY LEAN CLAY; fine grained sand; low to medium plasticity clay; pale olive brown, moist, dense (SC/CL)		0	
					6				
					7				
					8				First water at ~8 ft.
					9				
CAM	MW-12-10.5	28 49 50 for 2"	10.0-11.5	12	10	POORLY GRADED SAND WITH SILT; fine grained sand; tan to light brown, moist to wet, very dense (SP-SM)		2	
					11				
					12				
					13				
					14				
CAM	MW-12-16	10 18 28	15.0-16.5	18	15	SANDY LEAN CLAY; very fine grained sand; bluish-green, low plasticity, moist, hard (CL)		2	
					16				
					17	Total drilled depth at 15 ft.			
					18				
					19				
					20				
					21				
					22				
					23				

BOREHOLE WATER LEVEL DATA			
Date	08/23/95		
Time	4:40 p.m.		
GWL	7.30		
Casing Depth	15 ft.		

Delta Environmental Consultants, Inc.

Sheet 1 of 1

Rev. October 19, 1995

Total depth of boring:	20-1/2 feet	Casing diameter:	2 inches
Diameter of boring:	8 inches	Casing material:	Sch 40 PVC
Date drilled:	11-10-93	Slot size:	0.10-inch
Drilling Company:	Exploration Geoservices	Sand size:	Pea gravel
Driller:	Dave Yeager	Screen interval	17-1/2 feet to 20 feet
Drilling method:	Hollow-Stem Auger	Filter Gallagher	Bentonite Backfill

Signature of Registered Professional:

Registration No.: RG 5023 State CA

Depth	Sample No.	Blows/6"	P.I.D.	USCS Code	Description	Well Const.
				SW	Asphalt (2 inches).	
2				SP	Sand with gravel, fine grained sand, fine gravel (up to 3/4" in diameter), dark brown, damp, loose; hydrocarbon odor.	
4	S-5	4 7 13	20.4		Sand, fine grained sand, gray, damp, medium dense; strong hydrocarbon odor.	
8	S-9	12 15 16	17.3		Moist, dense; hydrocarbon odor.	
10	S-11	16 22 36	27.3	▽	Color change to light orange-brown at 11 feet. Wet, very dense; no hydrocarbon odor.	
14	S-14.5	13 17 22	3.8		Dense.	
18	S-19.5	13 19 25	4.1		Gray	
20					Total Depth = 20-1/2 feet.	
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 170077.06

LOG OF BORING B-11/SW-1
Exxon Service Station 7-0104
1725 Park Street
Alameda, California

PLATE
D-2

Total depth of boring:	7 feet	Casing diameter:	2 inches
Diameter of boring:	8 inches	Casing material:	Sch 40 PVC
Date drilled:	11-10-93	Slot size:	0.020-inch
Drilling Company:	Exploration Geoservices	Sand size:	No. 3 Sand
Driller:	Dave Yeager	Screen Interval:	4-1/2 feet to 7 feet
Drilling method:	Hollow-Stem Auger	Field Geologist:	Jeanne Buckthal

Signature of Registered Professional: [signature]

Registration No.: RG 5023 State CA

Depth	Sample No.	Blows	P.I.D	USCS Code	Description	Well Const.
2				SW	Asphalt (3 inches).	
				SP	Sand with gravel, fine-grained sand, fine gravel (up to 3/4" in diameter), dark brown, damp, loose; hydrocarbon odor: fill.	
4	S-5	8 13	20.4		Sand, fine-grained sand, gray, damp, medium dense; strong hydrocarbon odor.	
6						
8					Total Depth = 7 feet.	
10						
12						
14						
16						
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 170077.06

LOG OF BORING B-12/VW-1
Exxon Service Station 7-0104
1725 Park Street
Alameda, California

PLATE
D-3

Total depth of boring:	20-1/2 feet	Casing diameter:	2 inches
Diameter of boring:	8 inches	Casing material:	Sch 40 PVC
Date drilled:	11-10-93	Slot size:	0.10-inch
Drilling Company:	Exploration Geoservices	Sand size:	Pea gravel
Driller:	Dave Yeager	Screen interval	17-1/2 feet to 20 feet
Drilling method:	Hollow-Stem Auger	Mix: Bentonite	Cement Backfill

Signature of Registered Professional:

Registration No.: RG 5023 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
2				GW	Asphalt (3 inches).	
					Sandy gravel, fine gravel (up to 3/4" in diameter), fine- to medium-grained sand, gray-brown, damp, loose; hydrocarbon odor: fill.	
4				SP-SM	Sand with silt, fine-grained sand, greenish-gray, damp, medium dense; hydrocarbon odor.	
6	S-5	8 7 8	69.5			
	S-7	6 8 10	127		Decreasing silt content, moist.	
8						
10	S-10	9 14 17	488	SP	Sand, fine-grained sand, greenish-gray, wet, dense; hydrocarbon odor.	
					Color change to light orange-brown at 11 feet.	
12	S-12.5	16 22 21	9,1		No hydrocarbon odor.	
14						
16	S-15.5	10 17 21	4.8	SP-SM	Sand with silt, fine-grained sand, orange-brown, wet, dense; no hydrocarbon odor.	
18						
20	S-20	9 13 18	4.8		Gray.	
					Total Depth = 20-1/2 feet.	
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 170077.06

LOG OF BORING B-13/SM-1
Exxon Service Station 7-0104
1725 Park Street
Alameda, California

PLATE
D-4

Total depth of boring:	7 feet	Casing diameter:	2 inches
Diameter of boring:	8 inches	Casing material:	Sch 40 PVC
Date drilled:	11-10-93	Slot size:	0.020-inch
Drilling Company:	Exploration Geoservices	Sand size:	No. 3 Sand
Driller:	Dave Yeager	Screen Interval:	4-1/2 feet to 7 feet
Drilling method:	Hollow-Stem Auger	Field Geologist:	Jeanne Boutwell

Signature of Registered Professional:

Registration No.: RG 5023 State: CA

Depth	Sample No.	Blows	P.I.D.	USCS Code	Description	Well Const.
2				GW	Asphalt (3 inches).	
4				SP-SM	Sandy gravel, fine gravel (up to 3/4" in diameter), fine- to medium-grained sand, gray-brown, damp, loose; hydrocarbon odor: fill.	
6	S-5	8 7 8 6	69.5		Sand with silt, fine-grained sand, greenish-gray, damp, medium dense; hydrocarbon odor.	
	S-7	6 8 10	127		Decreasing silt content, moist.	
8					Total Depth = 7-1/2 feet.	
10						
12						
14						
16						
18						
20						
22						
24						
26						
28						
30						
32						
34						
36						
38						
40						

RESNA
Working to Restore Nature

PROJECT: 170077.06

LOG OF BORING B-14/VW-2
Exxon Service Station 7-0104
1725 Park Street
Alameda, California

PLATE
D-5

APPENDIX E

DISPOSAL DOCUMENTATION

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. ERI 2506

2. Page 1 of 1

3. Generator's Name and Mailing Address
EMAIL 70104
1725 PARK ST
ALAMEDA, CA

4. Generator's Phone ( )

CARDNO ERI

5. Transporter 1 Company Name
CARDNO ERI

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
INSTRAT, INC.
1105 C AIRPORT RD.
RIO VISTA, CA 94571

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone (707) 374-3834

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZ MONITORING WELL WATER	01	POLY	30	GAL
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above
CLEAR, NO ODOR/SOLID

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name	Signature	Date Month	Day	Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year
Drew Hazen	Drew Hazen	10	12	12

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name	Signature	Date Month	Day	Year
MICHAEL WHITEHEAD	Michael Whitehead	10	12	12