

RECEIVED

9:49 am, Dec 11, 2008

Alameda County
Environmental Health



ENVIRONMENTAL ENGINEERING, INC.
6620 Owens Drive, Suite A • Pleasanton, CA 94588
TEL (925)734-6400 • FAX (925)734-6401

December 9, 2008

Mr. Steven Plunkett
Alameda County
Department of Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California, 94502

Subject: Fuel Leak Case No. RO0000317-5725 Thornhill Drive, Oakland, CA

Dear Mr. Plunkett:

SOMA's "Groundwater Monitoring Well Decommissioning Report" for the subject site has been uploaded to the State's GeoTracker Database and Alameda County FTP site for your review.

Thank you for your time in reviewing our report. If you have any questions or comments, please call me at (925) 734-6400.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mansour Sepehr', written over a horizontal line.

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

Enclosure

cc: Mr. Mo Mashhoon w/report enclosure



**Groundwater Monitoring Well
Decommissioning Report**

**5725 Thornhill Drive
Oakland, California**

December 9, 2008

Project 2832

Prepared for

**Mr. Mohammad Mashhoon
Mash Petroleum, Inc.
1721 Jefferson Street
Oakland, California**

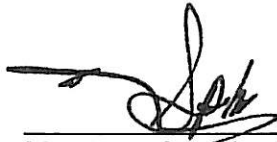


ENVIRONMENTAL ENGINEERING, INC.

6620 Owens Drive Suite A Pleasanton CA 94588 Ph: 925.734.6400 F: 925.734-6401 www.somaenv.com

CERTIFICATION

SOMA Environmental Engineering, Inc. has prepared this report on behalf of Mr. Mohammad Mashhoon, owner of the property located at 5725 Thornhill Drive, Oakland, California. This report details SOMA's monitoring well decommissioning, conducted in response to requirements in Alameda County Public Works Agency, Environmental Health Services correspondence dated October 14, 2008, which granted case closure pending completion of decommissioning of groundwater monitoring wells and other specified tasks.



Mansour Sepehr, PhD, PE
Principal Hydrogeologist

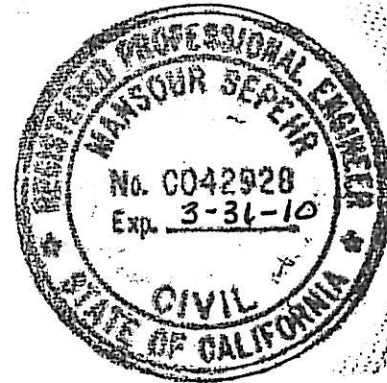


TABLE OF CONTENTS

CERTIFICATION	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	ii
LIST OF APPENDICES	ii
1. INTRODUCTION	1
2. SCOPE OF WORK	1
3. PERMIT ACQUISITION, HEALTH AND SAFETY PLAN, SUBSURFACE UTILITY CLEARANCE	1
4. MONITORING WELL DECOMMISSIONING	2
5. SIDEWALK RESTORATION	3
6. DISPOSAL OF ALL WASTES STORED ON-SITE	3
7. CONCLUSIONS	3

LIST OF FIGURES

Figure 1: Site Vicinity Map

Figure 2: Site Map Showing Locations of Monitoring Wells Destroyed

LIST OF APPENDICES

Appendix A: Previous Environmental Assessment and Remediation Background

Appendix B: Drilling, Encroachment, and Obstruction Permits

Appendix C: Boring Log/Well Construction Details

Appendix D: Hazardous Waste Manifest

1. INTRODUCTION

SOMA Environmental Engineering, Inc. (SOMA) has prepared this report on behalf of Mr. Mo Mashhoon, owner of the property located at 5725 Thornhill Drive, Oakland, California (APN 048G-4720-007-00, Figure 1). The site is bordered on the northwest by residential property, on the northeast by commercial property, on the southwest by private property, and on the southeast by Thornhill Drive. A summary of previous environmental assessment and remediation background is included in Appendix A.

This report details SOMA's monitoring well decommissioning activities on November 21st and December 1st, 2008, in response to requirements in October 14, 2008 correspondence from Alameda County Public Works Department (ACPWD), Environmental Health Services, which granted case closure pending completion of tasks outlined in the above-referenced workplan.

2. SCOPE OF WORK

Per the ACPWD-EHS correspondence, all existing groundwater monitoring wells were destroyed in compliance with California Well Standards. All equipment related to environmental work at the site was removed. Wastes generated during the destruction process or previous investigations were properly disposed of and the site was cleared of all things related to present and historical environmental investigations and/or remedial activities.

The following tasks were performed to implement the scope of work:

- Task 1: Acquire Permits, Prepare Site Health and Safety Plan
- Task 2 Decommission Existing Monitoring Wells
- Task 4: Dispose of all Wastes Stored On-site
- Task 5: Prepare Report

3. PERMIT ACQUISITION, HEALTH AND SAFETY PLAN, SUBSURFACE UTILITY CLEARANCE

Prior to initiating field activities, SOMA obtained well permits from the Alameda County Department of Public Works (ACDPW) (permit number W2008-0814 through W2008-0818). Permits are included in Appendix B. ACDPW was given required 72-hour notice in advance of drilling on November 14, 2008 and grouting inspection was scheduled on November 17, 2008. Excavation and Obstruction Permits were acquired from the City of Oakland, Office of Planning and Building Department, to decommission SOMA-4 and SOMA-5 (Permit Number X0802126, OB080882, and OB080961). These permits were obtained

under the existing Minor Encroachment Permit issued by the City of Oakland, Office of Planning and building Department (Permit ENMI07246). On November 18th and 21st, 2008, site inspections were scheduled with the City of Oakland.

After completion of well decommissioning and sidewalk restoration activities for SOMA-4 and SOMA-5, SOMA applied for a rescission of the minor encroachment permit. The required letter requesting rescission, photo documentation of well removal and sidewalk restoration, letter from ACDPW granting approval to stop monitoring, the final monitoring report, and an as-build drawing of well locations was submitted along with the required fee to Dominic Ma, Engineering Services Supervisor for the City of Oakland. The minor encroachment permit rescission is currently pending.

Before conducting the field activities, a site-specific health and safety plan (HASP) was prepared by SOMA. The HASP is a requirement of the Occupational Safety and Health Administration (OSHA), "Hazardous Waste Operation and Emergency Response" guidelines (29 CFR 1910.120) and the California Occupational Safety and Health Administration (Cal/OSHA) "Hazardous Waste Operation and Emergency Response" guidelines (CCR Title 8, section 5192). The HASP is designed to address safety provisions during field activities and protect the field crew from physical and chemical hazards resulting from drilling and sampling. It establishes personnel responsibilities, general safe work practices, field procedures, personal protective equipment standards, decontamination procedures, and emergency action plans. Field staff and contractors reviewed and signed the HASP prior to beginning field operations.

On November 11, 2008, prior to well installation activities, SOMA's field crew visited the site and marked proposed well locations, using chalk-based white paint. Underground Service Alert (USA) clearance verifying that drilling areas were clear of underground utilities was obtained November 11, 2008 (Ticket 579246).

4. MONITORING WELL DECOMMISSIONING

On November 21, 2008, SOMA's field geologist oversaw decommissioning of SOMA-1, SOMA-2, SOMA-3, SOMA-4, and SOMA-5 by Gregg Drilling & Testing, Inc. (Gregg) in accordance with California Well Standards. As per the obstruction permit requirements, SOMA retained Flash Safety, a private traffic control company, to assist with parking lane closures during the well decommissioning activities in the sidewalk area.

The three on-site wells, SOMA-1, SOMA-2, and SOMA-3, were decommissioned by pressure grouting. Type I/II cement grout was tremmied into each well, followed by application of 25 psi pressure maintained for five minutes. Once each well was pressure grouted, the well box was removed and the location was

completed to grade with a neat cement and bentonite mixture. The top of each location was finished with concrete to match the existing grade.

Per ACDPW-EHS requirements, the two off-site wells (SOMA-4 and SOMA-5), located in the sidewalk area north of Thornhill Drive, were completely removed. Gregg overdrilled SOMA-4 to 20 feet and SOMA-5 to 15 feet. The well casing and all annular materials were removed, and the boring was then tremmie grouted using Type I/II cement grout. The location was then completed to grade with a neat cement and bentonite mixture.

5. SIDEWALK RESTORATION

On December 1, 2008, Golden Gate Tank Removal restored the sidewalk area in front of the Montclair Presbyterian Church in accordance with the City of Oakland specifications. The impacted sidewalk squares (2.5 X 2.5 ft², each) were removed and fresh concrete laid. Once the concrete was set, the surface was finished to match existing sidewalk surfaces.

6. DISPOSAL OF ALL WASTES STORED ON-SITE

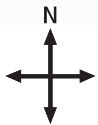
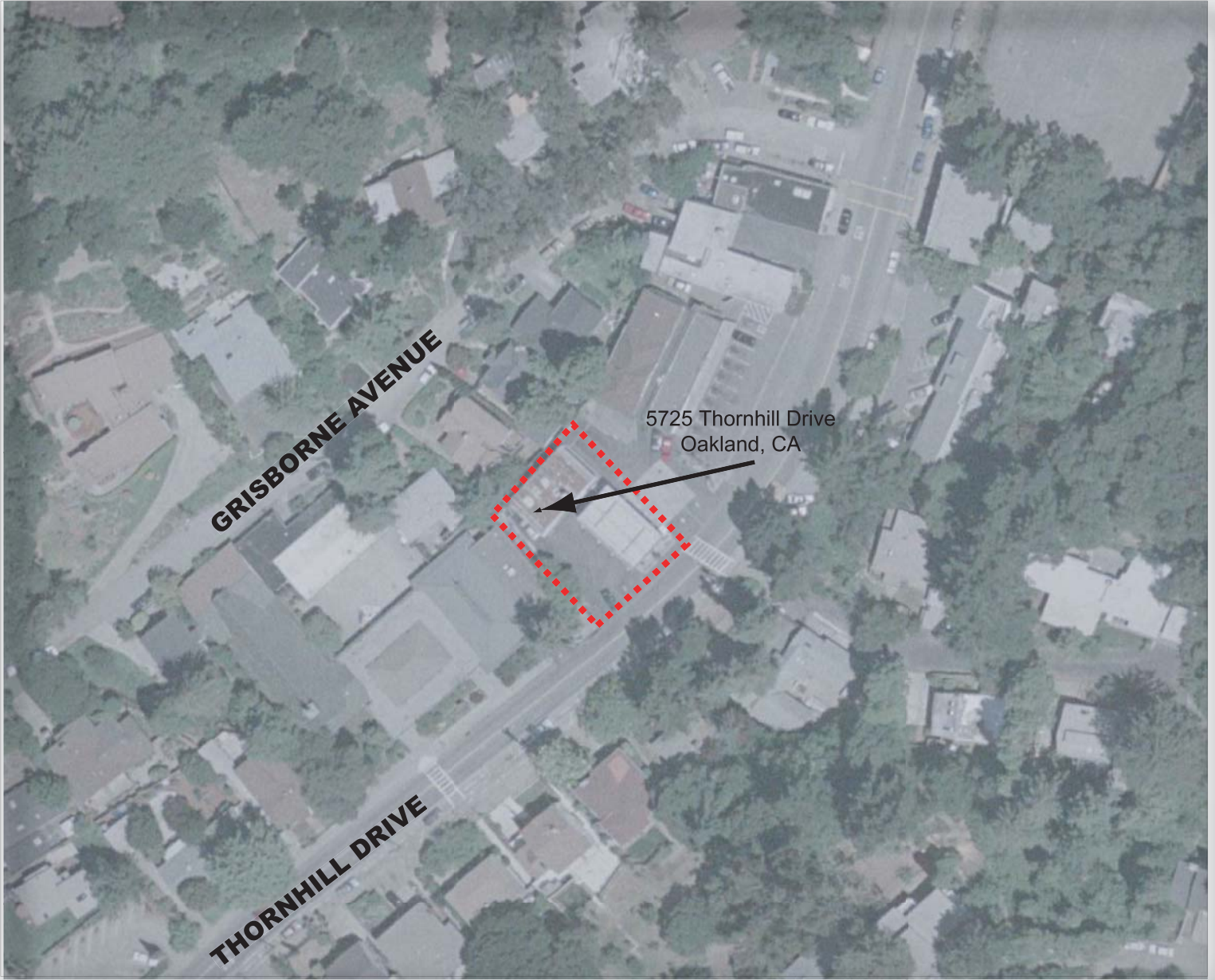
On December 5, 2008, the 55-gallon drums of non-hazardous liquid and solid (well construction material, 2 drums) waste were transported from the site to a licensed disposal facility. Waste manifest is included in Appendix D. This represented the last equipment or waste stored on-site by SOMA Environmental Engineering.

7. CONCLUSIONS

All existing groundwater monitoring wells have been decommissioned in accordance with California Well Standards. All wastes generated during the destruction process or previous investigations have been removed from the site and properly disposed of in accordance with ACPWD condition for approval of case closure.

Therefore, SOMA recommends that moving forward with granting case closure for this site.

FIGURES



approximate scale in feet
0 100 200

Figure 1: Site vicinity map.





RESIDENTIAL AREA

GRISBOURNE AVE

RESIDENTIAL AREA

STATION BUILDING

COMMERCIAL AREA

CHURCH PROPERTY

CHURCH PROPERTY

RESIDENTIAL AREA

flow direction
TEMESCAL (Kohler) CREEK

66" CULVERT

SOMA-5

BH-C

CPT-6

SOMA-4

HP-10

THORNHILL DRIVE

RESIDENTIAL AREA

CPT-7

BH-E

TEMESCAL CREEK underground

66" x 54" Culvert

RESIDENTIAL AREA

Former Waste Oil Tank

PUMP CANOPY

UST PIT

USB-1

- ✕ Well Destroyed 11/21/2008
- ▲ GROUNDWATER MONITORING WELL (September 2007)
- TRENCH SAMPLING BOREHOLE (September 2007)
- CPT/MIP/GS BOREHOLE (May 2005)
- ⊙ CPT/MIP/GS BOREHOLE WITH ADJACENT CALIBRATION BORING (May 2005)
- ▲ MONITORING WELL (May 2005)
- ▲ MONITORING WELL
- ⊕ SOMA SOIL BORING
- ⊕ AQUA SCIENCE SOIL BORING
- ⊗ LOCATION NOT DRILLED DUE TO SUBSURFACE OBSTRUCTION
- - - SEWER CONDUIT
- - - STORM (CULVERT) CONDUIT

approximate scale in feet

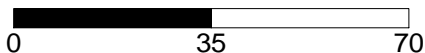


Figure 2: Site Map Showing the Locations of destroyed groundwater monitoring well



APPENDIX A

PREVIOUS ENVIRONMENTAL ASSESSMENT AND REMEDICATION BACKGROUND

November 1998: Penn Environmental (Penn) removed a 550-gallon steel underground waste oil tank (WOT). Soil samples collected from the WOT excavation contained up to 1,100,000 µg/kg of total petroleum hydrocarbons as gasoline (TPH-g), 2,700,000 µg/kg of total petroleum hydrocarbons as diesel (TPH-d), and 4,200,000 µg/kg of total petroleum hydrocarbons as motor oil (TPH-mo).

February 4, 1999: Penn over-excavated the contaminated soil surrounding the former WOT. Aqua Science Engineers, Inc. (ASE) collected confirmation soil samples from two sidewalls of the excavation. The only compound detected in one of these two soil samples was methyl tertiary-butyl ether (MtBE) at 40 µg/kg.

July 1999: ASE drilled borehole BH-A in the vicinity of the former WOT.

September 6, 2000: ASE drilled soil boreholes BH-B and BH-C.

October 23, 2000: ASE drilled soil boreholes BH-D and BH-E. ASE also collected water samples from Temescal Creek. No hydrocarbons were detected in the samples collected.

March 2004: On March 1 and 2, SOMA oversaw advancement of nine temporary well boreholes (HP-1 through HP-7, HP-9 and HP-10) by Gregg Drilling & Testing (Gregg). Proposed hydropunch HP-8, which was to be installed in the street, was not drilled due to traffic hazards. Three on-site wells were decommissioned and three additional wells (SOMA-1 to SOMA-3) were installed.

Results of the March 2004 investigation and details of well installations are presented in SOMA's report entitled "Soil and Groundwater Investigation and Monitoring Well Installation Report at 5725 Thornhill Drive, Oakland, California," dated April 16, 2004.

April 25, 2005: SOMA conducted a sensitive receptor survey to identify any water bodies or domestic, irrigation or water supply wells within a quarter-mile radius of the site. Based on State Department of Water Resources and Alameda County Public Works Agency records, no drinking water, domestic or irrigation wells were within a quarter-mile radius.

May 2005: CPT/MIP boreholes were advanced under SOMA's supervision (CPT-1 through CPT-5 and CPT-7 through CPT-11). CPT-6 could not be drilled due to physical constraints and obstruction of local traffic. Ten boreholes, designated GS-1 through GS-5 and GS-7 through GS-11, were advanced at their corresponding CPT borehole locations. Monitoring well SOMA-4 was also installed.

Results of the May 2005 site investigation and well installation are presented in SOMA's report entitled "Additional Soil and Groundwater Investigation and Monitoring Well Installation Report at 5725 Thornhill Drive, Oakland, California," dated June 13, 2005.

September 2007: On September 21, 2007, SOMA observed drilling and installation of the 2-inch-diameter groundwater monitoring well SOMA-5 by Gregg, Inc., using a combination of hollow-stem auger and direct push technology (DPT) drilling techniques. The monitoring well boring was drilled 8 inches in diameter to a depth of 15 feet below ground surface (bgs). Also on September 21, SOMA drilled and sampled one borehole, USB-1. This borehole was located immediately adjacent to the sewer main on the south side of Thornhill Drive.

Results of the September 2007 site investigation and well installation are presented in SOMA's report entitled "Further Site Investigation for Updating Site Conceptual Model and Site Closure Request" dated October 15, 2007.

APPENDIX B

Well, Encroachment, and Obstruction 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: 10/24/2008 By jamesy

Permit Numbers: W2008-0814 to W2008-0818
Permits Valid from 11/21/2008 to 11/21/2008

Application Id: 1224870414853
Site Location: 5725 Thornhill Dr, Oakland, CA
Project Start Date: 11/21/2008
Requested Inspection: 11/21/2008
Scheduled Inspection: 11/21/2008 at 1:00 PM (Contact your inspector, Vicky Hamlin at (510) 670-5443, to confirm.)

City of Project Site:Oakland

Completion Date:11/21/2008

Applicant: SOMA ENVIRONMENTAL ENGINEERING -
Erica Fisher
6620 Owens Dr #A, Pleasanton, CA 94588

Property Owner: Mo Mashoon
428 13th St, 10th Flr., Oakland, CA 94612

Client: ** same as Property Owner **

Phone: 925-734-6400

Phone: 510-891-9988

	Total Due:	\$1725.00
Receipt Number: WR2008-0386	Total Amount Paid:	\$1725.00
Payer Name : SOMA ENVIRONMENTAL	Paid By: CHECK	PAID IN FULL

Works Requesting Permits:

Well Destruction-Monitoring - 5 Wells
Driller: Gregg Drilling - Lic #: 485165 - Method: other

Work Total: \$1725.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2008-0814	10/24/2008	02/19/2009	SOMA-1	8.00 in.	4.00 in.	8.00 ft	28.00 ft	N/A	W04-0179	No Record
W2008-0815	10/24/2008	02/19/2009	SOMA-2	8.00 in.	4.00 in.	8.00 ft	28.00 ft	N/A	W04-0180	No Record
W2008-0816	10/24/2008	02/19/2009	SOMA-3	8.00 in.	4.00 in.	12.00 ft	28.00 ft	N/A	W04-0181	No Record
W2008-0817	10/24/2008	02/19/2009	SOMA-4	8.00 in.	4.00 in.	8.00 ft	20.00 ft	N/A	W05-0461	No Record
W2008-0818	10/24/2008	02/19/2009	SOMA-5	8.00 in.	4.00 in.	6.00 ft	15.00 ft	N/A	W2007-0891	0937741

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.

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

CITY OF OAKLAND • Community and Economic Development Agency
250 Frank H. Ogawa Plaza, 2nd Floor, Oakland, CA 94612 • Phone (510) 238-3443 • Fax (510) 238-2263

Applications for which no permit is issued within 180 days shall expire by limitation. No refund after 180 days when expired.

Appl# X0802126 Job Site 5725 THORNHILL DR Parcel# 048G-7420-007-00

Descr to allow removal of monitoring wells in Thornhill Dr Permit Issued 10/22/08
(SOMA-4) & (SOMA-5)

Work Type EXCAVATION-PRIVATE P

USA # Util Co. Job # Acctg#:
Util Fund #:

Applicant Phone# Lic# --License Classes--

Owner MASH PETROLEUM INC

Contractor GREGG DRILLING & TESTING, INC. X (925)313-5800 485165 C57

Arch/Engr

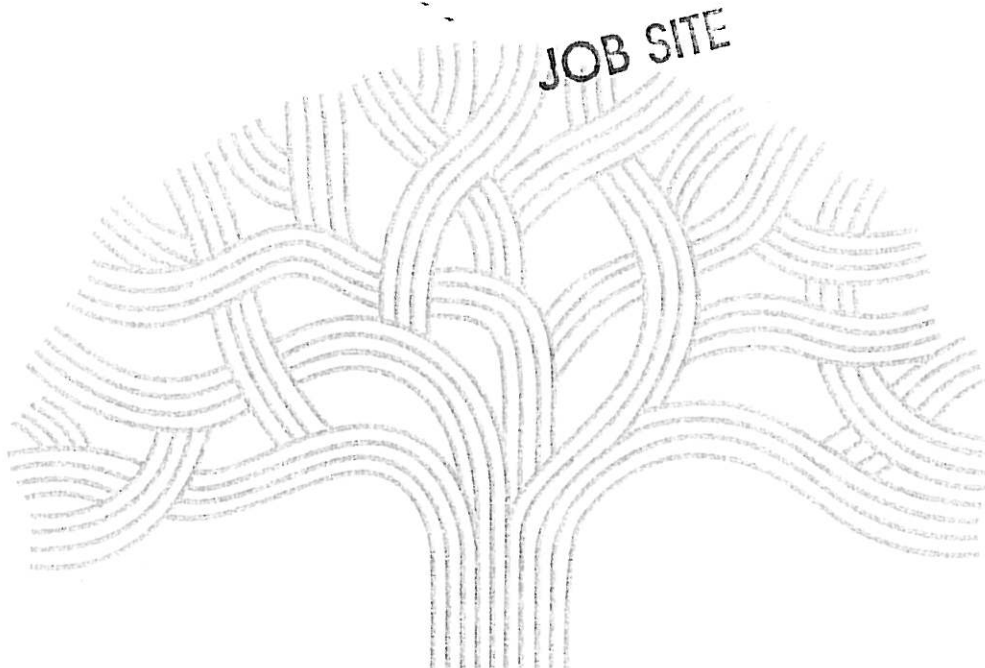
Agent

Applic Addr 950 HOWE RD, MARTINEZ, CA., 94553

\$419.99 TOTAL FEES PAID AT ISSUANCE

\$66.00	Applic	\$300.00	Permit
\$.00	Process	\$34.77	Rec Mgmt
\$.00	Gen Plan	\$.00	Invstg
\$.00	Other	\$19.22	Tech Enh

DIST: ADDRESS:



CITY OF OAKLAND

Date: 10/22/08 Amt Paid: \$644.98
By: DLF Register 002 Receipt# 121853



EXCAVATION PERMIT

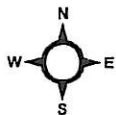
TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL
ENGINEERING

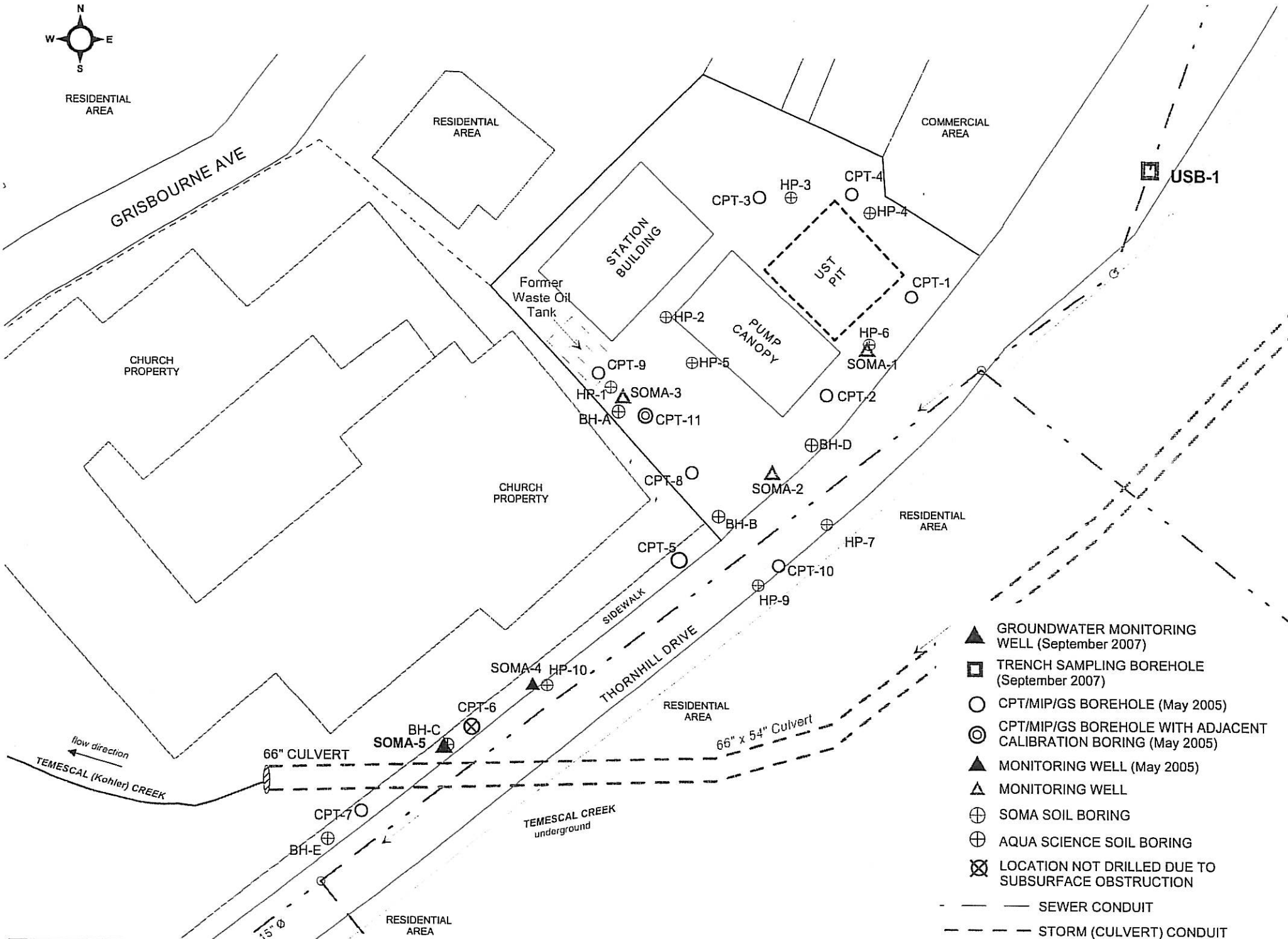
PAGE 2 of 2

Permit valid for 90 days from date of issuance.

PERMIT NUMBER X 0 8 0 2 1 2 4		SITE ADDRESS/LOCATION * 5725 Thornhill Drive, Oakland, CA	
APPROX. START DATE Nov 20, 2008	APPROX. END DATE NOV 20, 2008	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number) 925-734-6400	
CONTRACTOR'S LICENSE # AND CLASS C-57# 485165 Gregg		CITY BUSINESS TAX # 585033	
ATTENTION: 1- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1-800-642-2444, Underground Service Alert (USA) # <u>579246</u> 2- 48 hours prior to starting work, you MUST CALL (510) 238-3651 to schedule an inspection. 3- 48 hours prior to re-paving, a compaction certificate is required (waived for approved slurry backfill).			
OWNER/BUILDER I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500): <input type="checkbox"/> I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale). <input type="checkbox"/> I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code). <input type="checkbox"/> I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law). <input type="checkbox"/> I am exempt under Sec. _____, B&PC for this reason _____			
WORKER'S COMPENSATION <input type="checkbox"/> I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code). Policy # _____ Company Name _____ <input type="checkbox"/> I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).			
NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.			
I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.			
Signature of Permittee <i>Eucasthio</i>		Date Oct 20, 2008	
<input checked="" type="checkbox"/> Agent for <input type="checkbox"/> Contractor <input type="checkbox"/> Owner			
DATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV. 1 - JAN. 1) <input type="checkbox"/> YES <input type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ISSUED BY <i>[Signature]</i>		DATE ISSUED 10.22.08	



RESIDENTIAL AREA



- ▲ GROUNDWATER MONITORING WELL (September 2007)
- ◻ TRENCH SAMPLING BOREHOLE (September 2007)
- CPT/MIP/GS BOREHOLE (May 2005)
- ⊙ CPT/MIP/GS BOREHOLE WITH ADJACENT CALIBRATION BORING (May 2005)
- ▲ MONITORING WELL (May 2005)
- △ MONITORING WELL
- ⊕ SOMA SOIL BORING
- ⊕ AQUA SCIENCE SOIL BORING
- ⊗ LOCATION NOT DRILLED DUE TO SUBSURFACE OBSTRUCTION
- SEWER CONDUIT
- - - STORM (CULVERT) CONDUIT

approximate scale in feet

Site Map Showing the Locations of existing groundwater monitoring well





GREGG DRILLING & TESTING, INC.

SPECIALIZING IN ENVIRONMENTAL, GEOTECHNICAL AND IN-SITU TESTING

October 20, 2008

City of Oakland
250 Frank H Ogawa Plaza
Oakland, CA 94612

To Whom It May Concern:

Please allow Ms. Erica Fisker of Soma Environmental Engineering, Inc., to sign the permits for the drilling services to be performed in the City of Oakland. For your reference our C-57 license # is 485165 and our City of Oakland business license # is 585033

If you have any questions or need any other information regarding this please contact me at (925) 313-5800.

Sincerely,
GREGG DRILLING & TESTING, INC.

A handwritten signature in cursive script that reads "Christopher Pruner". The signature is written in black ink and is positioned above the printed name and title.

Christopher Pruner
Operations Manager

Applications for which no permit is issued within 180 days shall expire by limitation. No refund after 180 days when expired.

Appl# OB080882 Job Site 5725 THORNHILL DR Parcel# 048G-7420-007-00

blocking of sidewalk for removal of monitoring wells parking Permit Issued 10/22/08
lane as well no traffic lane

5725 THORNHILL DRIVE

Nbr of days: 1
Effective: 11/21/08

Linear feet: 200
Expiration: 11/21/08

SHORT TERM NON-METERED

	Applcmt	Phone#	Lic#	--License Classes--
Owner	MASH PETROLEUM INC			
Contractor	GREGG DRILLING & TESTING, INC.	X (925) 313-5800	485165	C57
Arch/Engr				
Agent				
Applic Addr	950 HOWE RD, MARTINEZ, CA., 94553			

\$224.91 TOTAL FEES PAID AT ISSUANCE
\$66.00 Applic \$130.00 Permit
\$.00 Process \$18.62 Rec Mgmt
\$.00 Gen Plan \$.00 Invstg
\$1.00 Other \$10.29 Tech Enh

JOB SITE

ADDRESS:

DIST:

TCP needs to be approved by Transportation Services every 30 days or whenever deviated from the previously approved plan.

Applicant: *Ernesto*

10/22/08

Issued by: *[Signature]*

10-22-08

CITY OF OAKLAND

APPENDIX C

Boring Log/Well Construction Details

Boring Location:

Project: 2832

Date Drilled: 3/12/04

Site Location: 5725 Thornhill Dr
Oakland CA

Casing Elevation: 576.72

Drilling Method: HSA

Depth to 1st Groundwater: 12 ft

See Site Map.

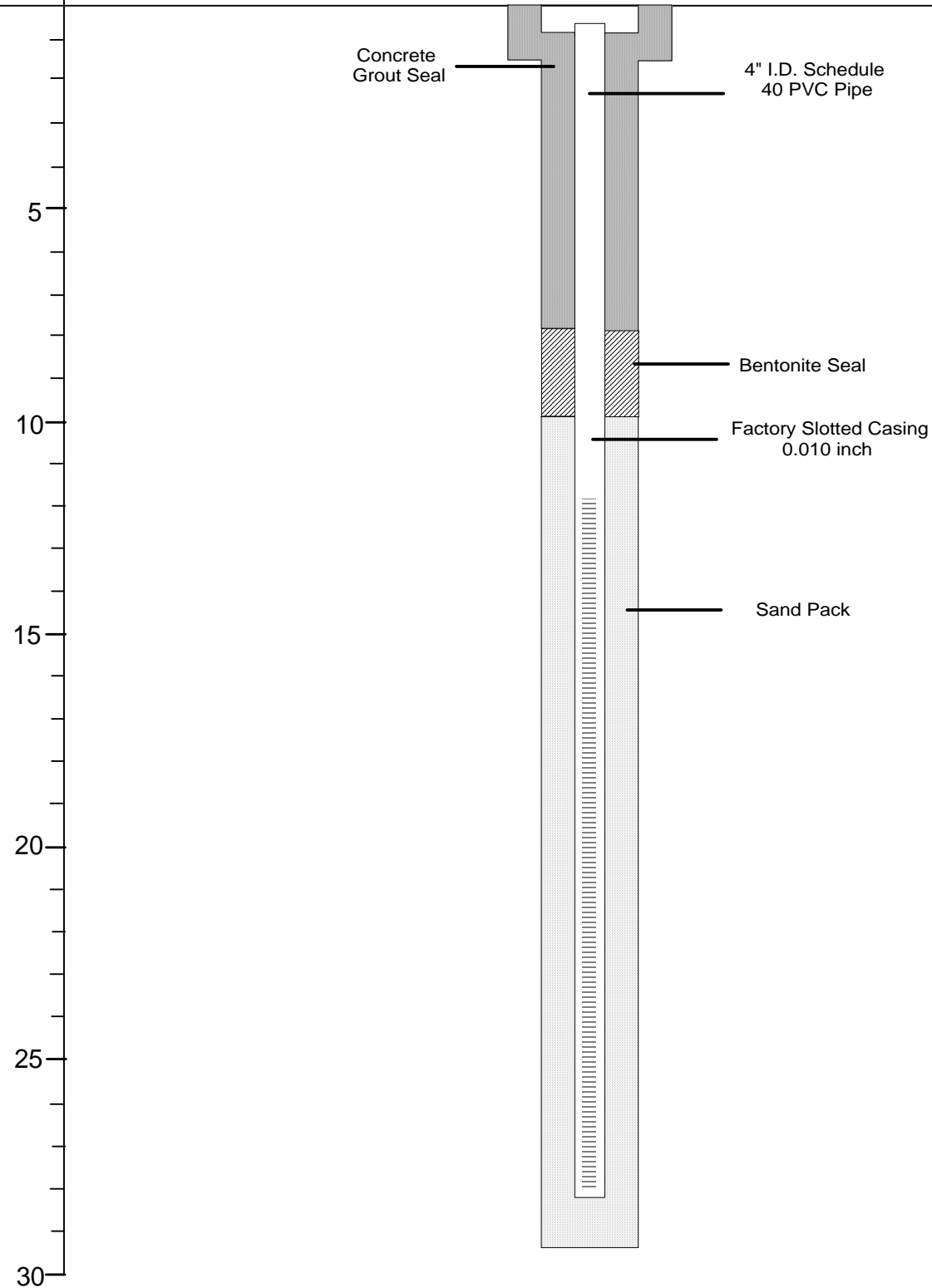
Driller: Woodward

Approved By: M Sepehr

Logged By: E Jennings

DEPTH

MONITORING WELL CONSTRUCTION DIAGRAM



Boring Location:

Project: 2832

Date Drilled: 3/12/04

Site Location: 5725 Thornhill Dr
Oakland CA

Casing Elevation: 575.73

Drilling Method: HSA

Depth to 1st Groundwater: 12 ft

See Site Map.

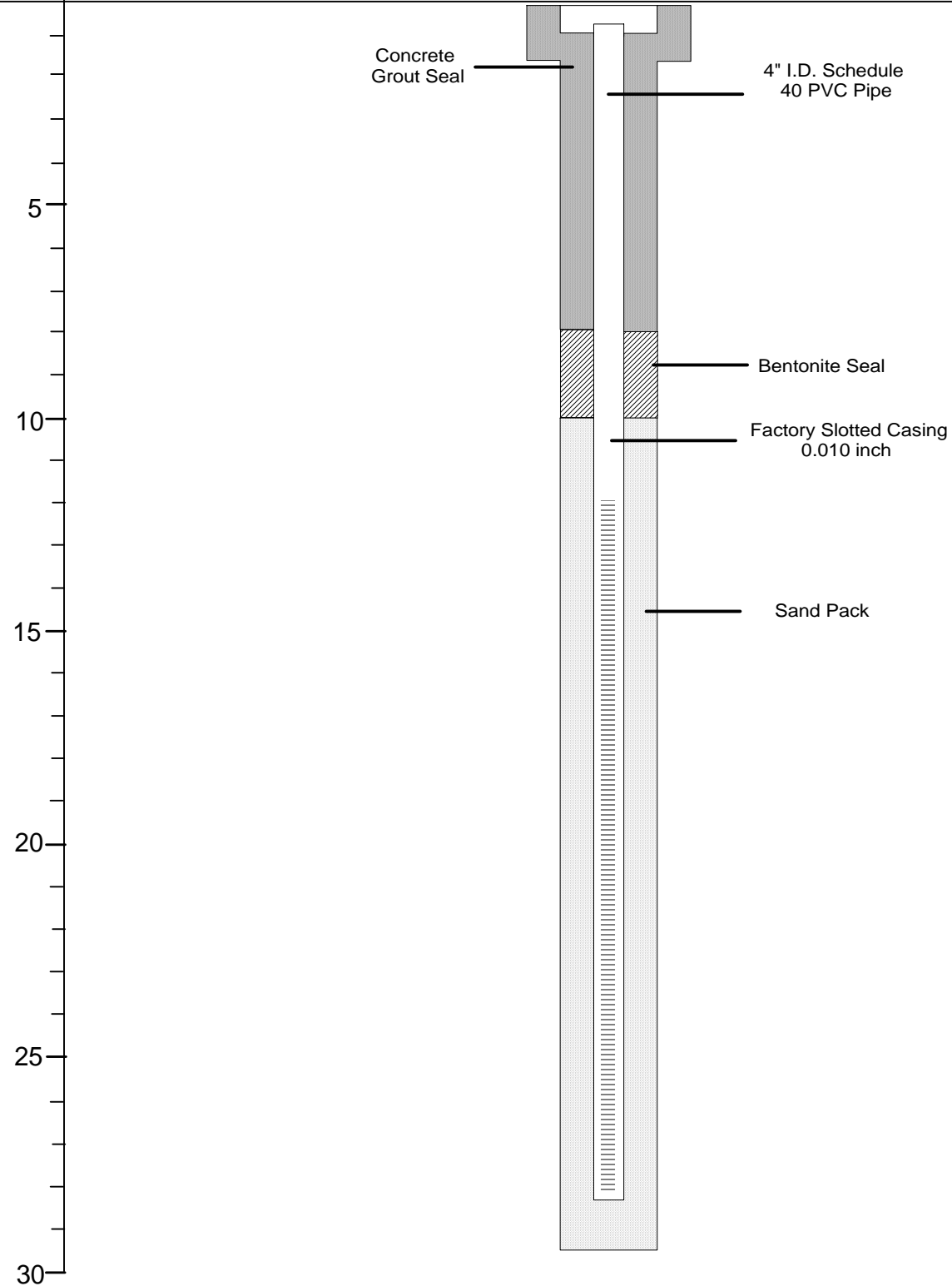
Driller: Woodward

Approved By: M Sepehr

Logged By: E Jennings

DEPTH

MONITORING WELL CONSTRUCTION DIAGRAM



Boring Location:

Project: 2832

Date Drilled: 3/12/04

Site Location: 5725 Thornhill Dr
Oakland CA

Casing Elevation: 576.29

Drilling Method: HSA

Depth to 1st Groundwater: 10 ft

See Site Map.

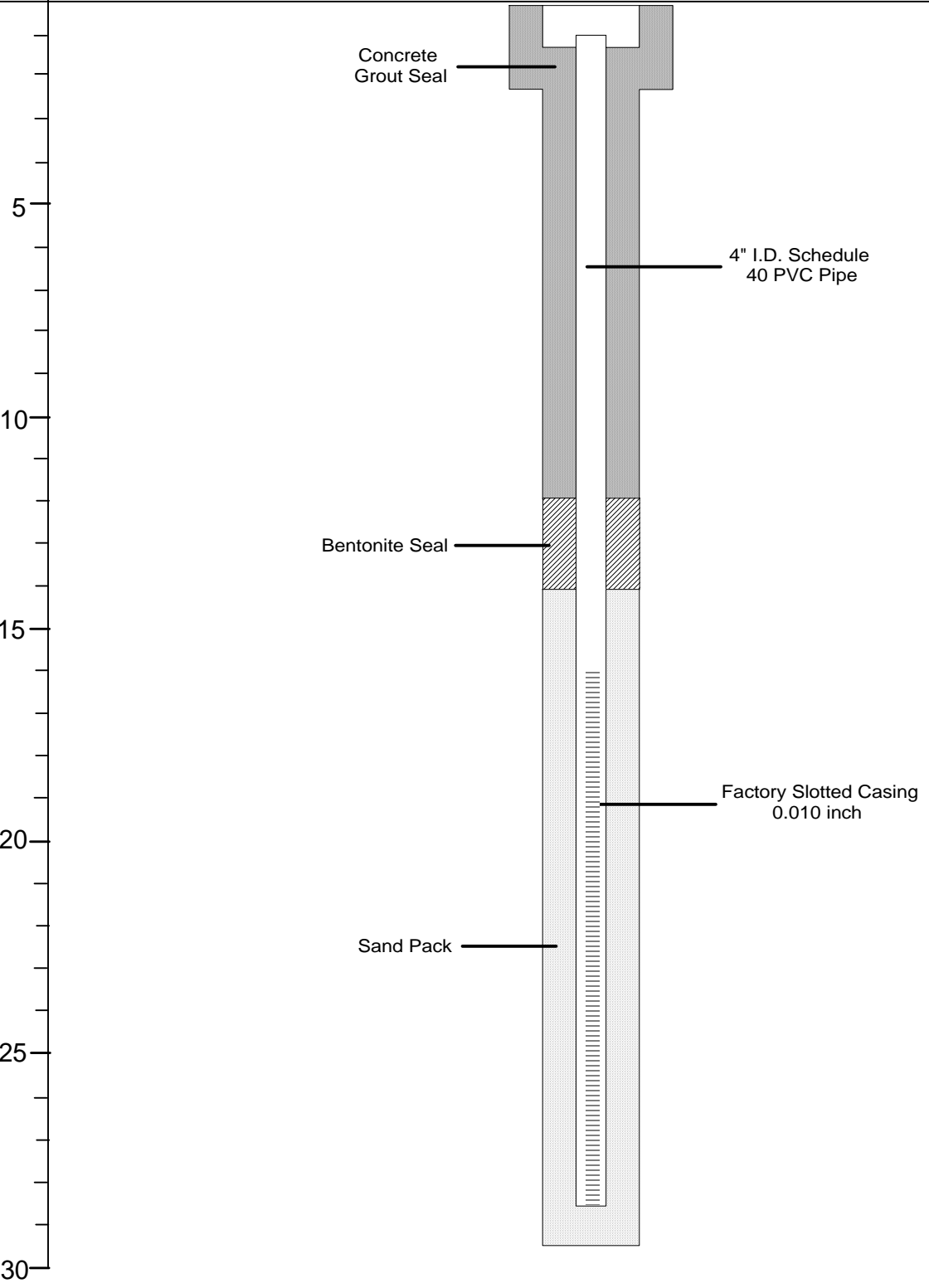
Driller: Woodward

Approved By: M Sepehr

Logged By: E Jennings

DEPTH

MONITORING WELL CONSTRUCTION DIAGRAM



PROJECT: 2832

DATE DRILLED: 5/27/05

SITE LOCATION: 5725 Thornhill Drive,
Oakland, CA

CASING ELEVATION: NA

DRILLER: Gregg Drilling & Testing

DEPTH TO GW: 12' bgs

DRILLING METHOD: HSA

T.O.C. TO SCREEN: 12'

BORING DIAMETER: 8"

SCREEN LENGTH: 8'

LOGGED BY: E. Jennings

APPROVED BY: M. Sepehr, Ph. D., P.E.

PID, ppm	DEPTH	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	SPLIT SPOON CORE	SAMPLED	GW LEVEL	BLOWCOUNTS	WELL DIAGRAM
	0			4" Asphalt over 4" baserock					
	5		CL	SILTY CLAY: Brown, moist, soft, moderate plasticity; Low estimated permeability (LEK). No petroleum hydrocarbon (PHC) odor.					
	10		SM	(At 10') 6" GRAVELLY SAND/SANDY GRAVEL lens: Saturated. SILTY SAND: Gray brown, very moist to saturated; HEK. Moderate to strong PHC odor.	X			3 3 3	Bentonite Seal 2" Schedule 40 PVC Pipe Cement Grout
	15		CL	SILTY CLAY with some Sand: Grayish brown mottled reddish brown, very moist, soft, slight plasticity; MEK. No PHC odor. (At 13') 4" GRAVEL lens: very moist (@ 13').			▼	4 4 4 4 5 6	2 1/2" Sand Pack Slotted Casing 0.010 inch
	20		CL	SILTY CLAY WITH SOME SAND AND GRAVEL: Brown, saturated, soft, loose subrounded-subangular gravel to 1"; HEK. No PHC odor.				7 11 20	
	20			TOTAL DEPTH 20' BGS					

NOTES: Hard brittle siltstone encountered at 20' below ground surface (bgs).
TOTAL DEPTH 20' BGS

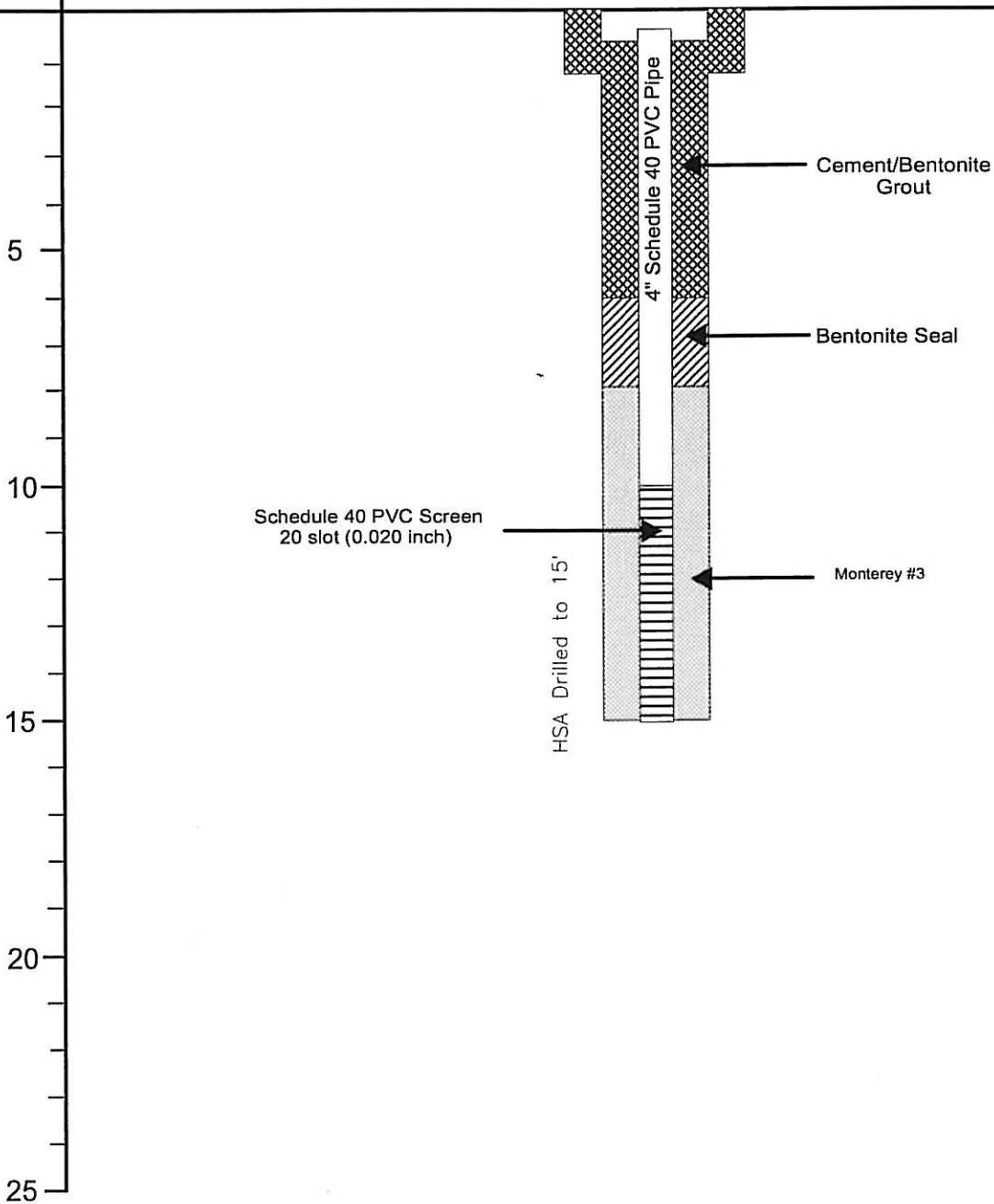
X - Soil Sample Collected

Boring Location:
See Site Map.

Project: 2832
Site Location: 5725 Thornhill Drive
Oakland, CA
Drilling Method: Hollow Stem Auger (HSA)

DEPTH

WELL CONSTRUCTION
DETAILS



APPENDIX D

Hazardous Waste Manifest

↑ NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of 1	3. Emergency Response Phone NRCES 510-749-1390	4. Waste Tracking Number 39113-08					
	5. Generator's Name and Mailing Address MASH PETROLEUM, INC. 1721 JEFFERSON STREET OAKLAND CA 94612 Generator's Phone: 510 891-9888		Generator's Site Address (if different than mailing address) MASH PETROLEUM, INC. 6725 THORNHILL DR. OAKLAND CA 94611						
6. Transporter 1 Company Name NRC ENVIRONMENTAL SERVICES INC.			U.S. EPA ID Number CAR009030114						
7. Transporter 2 Company Name			U.S. EPA ID Number						
8. Designated Facility Name and Site Address Crosby & Overton, Inc. 1630 W. 17th Street Long Beach CA 90813 Facility's Phone: 562 432-5445			U.S. EPA ID Number CAD028409019						
↑ GENERATOR	9. Waste Shipping Name and Description		10. Containers		11. Total Quantity	12. Unit Wt./Vol.			
			No.	Type					
	1. NON-HAZARDOUS WASTE SOLID (SOIL CUTTINGS) (PROFILE # 51644)		2	DM/1000				P	NONE
	2.								
	3.								
4.									
13. Special Handling Instructions and Additional Information WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT JOB# / PO#: 39013 CONSULTANT: SOMA ENVIRONMENTAL 6620 OWENS DRIVE, SUITE A, PLEASANTON, CA.									
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.									
Generator's/Officer's Printed/Typed Name <i>Elizabeth Hightower for Soma</i>					Signature <i>E. Hightower</i>		Month 12	Day 15	Year 08
↑ TRANSPORTER	15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____								
	16. Transporter Acknowledgment of Receipt of Materials								
Transporter 1 Printed/Typed Name <i>Gary Smith</i>					Signature <i>Gary Smith</i>		Month 12	Day 09	Year 08
Transporter 2 Printed/Typed Name					Signature		Month	Day	Year
↑ DESIGNATED FACILITY	17. Discrepancy								
	17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection								
	17b. Alternate Facility (or Generator)				Manifest Reference Number:				U.S. EPA ID Number
Facility's Phone:									
17c. Signature of Alternate Facility (or Generator)							Month	Day	Year
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a									
Printed/Typed Name					Signature		Month	Day	Year