

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94612
PHONE (510) 286-5668
FAX (510) 286-5639
TTY (800) 735-2929



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Be energy efficient!*

RECEIVED

8:46 am, Jul 28, 2011

Alameda County
Environmental Health

July 22, 2011

Ms. Barbara Jakub
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Pky.
Alameda, CA 94502

TO WHOM IT MAY CONCERN:

Attached for your review is the Well Destruction Activities Report (June 2011) for the Former Caltrans Maintenance Station, 1112 29th Avenue, Oakland, California. This report was prepared for California Department of Transportation (Caltrans) by Stantec Consulting Corporation.

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

If you have any questions, please don't hesitate to contact me or Stantec Project Manager Gary Messerotes at 408.356.6124 extension 252.

Sincerely,

A handwritten signature in black ink that reads "Ray Boyer".

Ray Boyer, P.E.
District Branch Chief - Hazardous Waste
Office of Environmental Engineering
Division of Environmental Planning & Engineering Caltrans - District 04
Office: (510) 286-5668
ray_boyer@dot.ca.gov

cc: Mr. Gary Messerotes, Stantec – Los Gatos



**Well Destruction Activities
Caltrans South Oakland
Maintenance Station
1112 29th Ave Oakland, CA**

Client: California Department of
Transportation, District 4

June 20, 2011

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1.0 INTRODUCTION

On behalf of California Department of Transportation (Caltrans), Stantec Consulting Corporation (Stantec) was retained to: conduct, provide oversight, and document the destruction of four groundwater monitoring wells (MW-1 through MW-4) at the South Oakland Maintenance Station at 1112 29th Avenue, Oakland, California (the Site).

Field activities were conducted between May 16 and May 25, 2011. Gregg Drilling and Testing Inc. (Gregg), of Martinez, California, was subcontracted to perform the well destruction activities. The field activities were conducted in accordance with the *Work Plan to Decommission Groundwater Monitoring Wells*, dated October 20, 2009 by Shaw Environmental, Inc. (Shaw); and permit requirements from the Alameda County Public Works Agency (ACPWA).

The scope of work performed for this project included:

- Preparation of a Site-specific Health and Safety Plan
- Clearance of subsurface utilities
- Obtainment of permits from the ACPWA **Appendix A**
- Destruction of four groundwater monitoring wells (MW-1 through MW-4)
- Disposal of soil and construction debris
- Preparation of this report

A Site Location Map is provided as **Figure 1**. A Site Plan showing the location of the former groundwater monitoring wells is presented on **Figure 2**. Selected photographs of well destruction activities are shown in **Appendix B**.

2.0 WELL DESTRUCTION ACTIVITIES AND OBSERVATIONS

One 4,000-gallon underground storage tank (UST) and one 2,000-gallon UST were removed from the Site in March 1997. Several Site investigations were subsequently performed to characterize the extent of impact to soil and groundwater. As part of the Site investigations, four groundwater monitoring wells were installed (**Figure 2**). Total depth of the groundwater monitoring wells varied from 20 to 25 feet below ground surface (bgs). Groundwater monitoring performed on the wells between 2000 and 2005 indicated depth to water varied from about 7.5 to 10.5 feet bgs.

Based on the results of the Site investigation work and a comparison of Site conditions relative to criteria in the *Oakland Urban Land Redevelopment Program: Guidance Document*, Geocon Environmental submitted a request for low-risk case closure to the Alameda County Environmental Health Department (ACEHD) in 2006. Additional supporting documentation, including a landowner notification certification, well survey data, and a case closure summary form, were subsequently submitted to ACEHD in support of the request for case closure (Shaw, *Work Plan*, 2009).

2.1 PRELIMINARY FIELD ACTIVITIES

Stantec prepared a Site-specific Health and Safety Plan to include the well destruction scope of work.

On May 16, 2011, Stantec conducted a subsurface utility clearance. The utility clearance included notifying Underground Service Alert (USA) of the proposed work a minimum of 48 hours prior to initiating the field investigation, and overseeing a private utility locating company (Cruz Brothers) to confirm the absence of underground utilities within the well destruction areas.

Stantec obtained the necessary permits from the ACPWA for the destruction of the groundwater monitoring wells and retained the services of Gregg to perform the well destruction activities. Additionally, Stantec notified the ACPWA a minimum of 48 hours prior to initiating well destruction activities.

2.2 WELL DESTRUCTION ACTIVITIES

On May 24, 2011, Gregg performed air-knifing activities around the groundwater monitoring wells in preparation for well destruction via the drill-out method. To verify that the wells were unobstructed, Stantec measured the total depth of each well (determined to be between 20 to 25 feet bgs) prior to their destruction.

On May 25, 2011, Gregg destroyed the groundwater monitoring wells using the drill-out method approved by the ACPWA. A Stantec staff geologist, under the direction of a California Professional Geologist, supervised all field activities. Each well was over drilled to the total depth of the well, and the corresponding lengths of casing removed for disposal. Portland neat cement

was used to grout each borehole and an asphalt patch was used to match the surrounding surface conditions. Mr. Steve Miller, inspector with the ACPWA, witnessed the grouting activities of the well destruction.

Following the completion of field activities, Stantec submitted Department of Water Resources (DWR) Well Completion Report (Form 188) for the destroyed wells to the ACPWA and the DWR. Copies of the DWR Well Completion Reports are provided in **Appendix C**.

2.3 WASTE DISPOSAL

Stantec submitted the ACEHD closure letter to Integrated Wastestream Management, Inc. (IWM) of San Jose, California for the purpose of profiling soil cuttings and construction debris generated during the well destruction activities. Stantec coordinated with IWM for the disposal of four 55-gallon drums of soil cuttings and debris and one 55-gallon drum of cement/grout generated during the well destructions for disposal as non-hazardous waste to an appropriate facility.

3.0 STANDARD LIMITATIONS

This report was prepared in accordance with the scope of work outlined in Stantec's proposal and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the Site. It was prepared for the exclusive use of Caltrans, for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Stantec. To the extent that this report is based on information provided to Stantec by third parties, Stantec may have made efforts to verify this third party information, but Stantec cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the Site existing at the time of the field investigation. No other warranties, expressed or implied are made by Stantec.

Prepared by:



Alicia Falk,
Project Scientist

Reviewed by:



Gary P. Messerotes, P.G.
Project Manager

All information, conclusions, and recommendations provided by Stantec in this document regarding the Site have been prepared under the supervision of and reviewed by the Licensed Professional whose signature appears below:

Licensed Approver:

Name: Gary P. Messerotes

Date: 6/20/11

Signature:



Stamp:



FIGURES

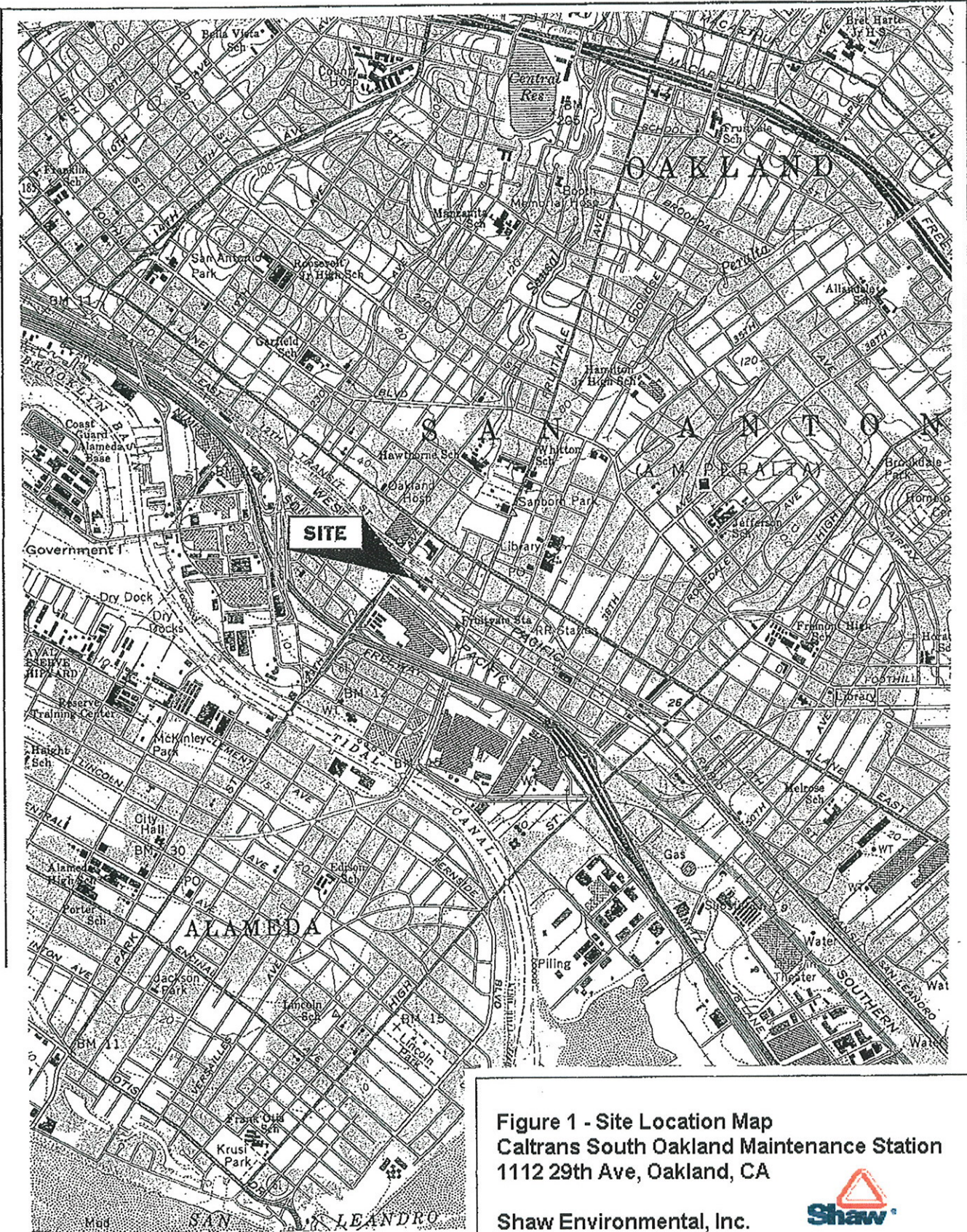
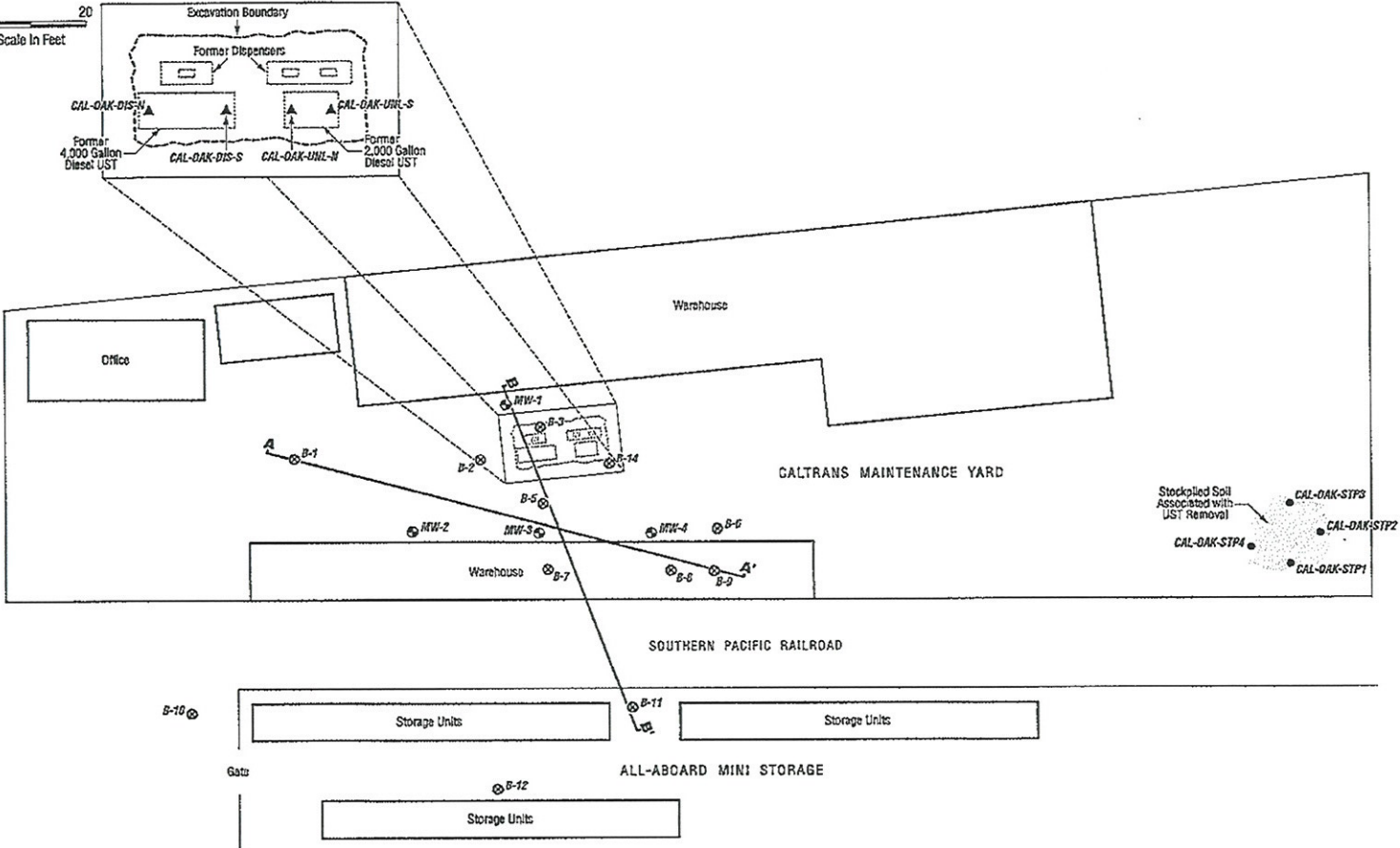
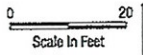


Figure 1 - Site Location Map
Caltrans South Oakland Maintenance Station
1112 29th Ave, Oakland, CA

Shaw Environmental, Inc.



Source: Geocon, June 2006



- LEGEND:**
- MW-1 ⊕ Approximate Monitoring Well Location
 - B-1 ⊕ Approximate Temporary Boring Location
 - CAL-DAK-DIS-N ▲ Approximate Excavation Sample Location
 - CAL-DAK-STP1 ⊕ Approximate Stockpile Sample Location
 - A—A Cross-Section Location (See Figures 3 and 4)

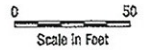


Figure 2 - Site Plan
 Caltrans South Oakland Maintenance Station
 1112 29th Avenue, Oakland, CA

Shaw Environmental, Inc.



Source: Geocon, June 2006

APPENDIX A
WELL DESTRUCTION 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: 05/11/2011 By jamesy

Permit Numbers: W2011-0317 to W2011-0320
Permits Valid from 05/23/2011 to 05/27/2011

Application Id: 1304098887561
Site Location: Caltrans South Oakland Maintenance Station

City of Project Site:Oakland

Project Start Date: 05/23/2011
Assigned Inspector: Contact Steve Miller at (510) 670-5517 or stevem@acpwa.org

Completion Date:05/27/2011

Applicant: Stantec - Gary Messerotes
15575 Los Gatos Blvd, Building C, Los Gatos, CA 95032

Phone: 408-356-6124

Property Owner: Ray Boyer-Caltrans

Phone: 510-286-5668

Client: 111 Grand ave, Mail Station, 8C P.O. Box 23660, Oakland, CA 94623
** same as Property Owner **

	Total Due:	\$1588.00
Receipt Number:	Total Amount Paid:	\$0.00
	Payment Type: EXMPT	PAYMENT EXEMPT

Works Requesting Permits:

Well Destruction-Monitoring - 4 Wells

Driller: Gregg Drilling - Lic #: 485165 - Method: over

Work Total: \$1588.00

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2011-0317	05/11/2011	08/21/2011	MW1	8.00 in.	2.00 in.	2.00 ft	25.00 ft	2S/3W7B	W00-292	No Records
W2011-0318	05/11/2011	08/21/2011	MW2	8.00 in.	2.00 in.	2.00 ft	20.00 ft	2S/3W7B	W00-293	No Records
W2011-0319	05/11/2011	08/21/2011	MW3	8.00 in.	2.00 in.	2.00 ft	20.00 ft	2S/3W7B	W00-294	No Records
W2011-0320	05/11/2011	08/21/2011	MW4	8.00 in.	2.00 in.	2.00 ft	25.00 ft	2S/3W7B	W00-295	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.

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. Including permit

Alameda County Public Works Agency - Water Resources Well 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 Steve Miller for an inspection time at (510) 670-5517 or email to stevem@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 overdrilling & Tremie Grouting with Cement. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
 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.
-

SOIL BORING LOG

BORING NO:	B11MW1	
SHEET	1	OF 2
PROJECT NAME:	CALTRANS SOUTH OAKLAND	
PROJECT NUMBER:	0G019	DATE: 6/8/00
DRILLING COMPANY:	V&W	
DRILLING METHOD:	HSA	
BORING DIAMETER:	8 INCHES	DEPTH:
GROUNDWATER LEVELS		
DATE	COMMENTS	DEPTH BGS
6/8/00	INITIAL GROUNDWATER	-15 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
1					Silty Sandy Gravel: Well graded fine to coarse gravel with fine to coarse sand and silt, mottled dark brown to black, damp.	0	GM	4 inches Asphalt Slight diesel odor, no OVM response
2								
3								
4								
5	B1-5.0			6	Clayey Sand: Poorly graded fine sand with clay, brown, damp.		SC	
6				8				
				16				
7								
8								
9								
10	B1-10.0			6	Clayey Sand: As above	0		
11				14				
				17				
12								
13								
14								
15	B1-15.0			4	Sandy Clay: Poorly graded fine sand with clay, brown, damp			Approximate first water by void contents.
16				4	with saturated voids and channels.			
				8				
17								
18								
19								
20	B1-20.0			8	Gravelly Sandy Clay: Clay with well graded fine to coarse		GC	

Reviewed By: _____ LOGGED BY: CHRIS MERRITT

SOIL BORING LOG

BORING NO:	B1\MW1		
SHEET	2	OF	2
PROJECT NAME:	CALTRANS SOUTH OAKLAND		
PROJECT NUMBER:	0G019	DATE:	6/8/00
DRILLING COMPANY:	V&W		
DRILLING METHOD:	HSA		
BORING DIAMETER:	8 INCHES	DEPTH:	25 FEET
GROUNDWATER LEVELS			
DATE	COMMENTS	DEPTH BGS	
6/8/00	INITIAL GROUNDWATER	~15 FEET	

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
1				11	gravel and poorly graded fine sand, light tan, damp.		GC	
				18				
2								
3								
4								
25	B1-25.0			8	Sandy Clay: Clay with poorly graded fine sand, brown, damp.		CL	
6				15				
				25				
7								
8								Total depth 25 feet + sample.
9								Screen 25-5 feet.
30								Sand 25-3 feet.
1								Chips 3-2 feet
2								Grout\Box 2-0 feet
3								
4								
35								
6								
7								
8								
9								
40								

Reviewed By:

LOGGED BY: CHRIS MERRITT

SOIL BORING LOG

BORING NO:	B2\MW2		
SHEET	1	OF	1
PROJECT NAME:	CALTRANS SOUTH OAKLAND		
PROJECT NUMBER:	0G019	DATE:	6/8/00
NORTHINGS:	EASTINGS:		
DRILLING COMPANY:	V&W		
DRILLING METHOD:	HSA		
BORING DIAMETER:	8 INCHES	DEPTH:	20 FEET
GROUNDWATER LEVELS			
DATE	COMMENTS	DEPTH BGS	
6/8/00	INITIAL WATER	13 FEET	

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
0								4 inches asphalt.
0-6					Silty Sandy Gravel: Well graded fine to coarse gravel with fine to coarse sand and silt, mottled dark brown to black, damp.	0	GM	
6-12	B2-5.0		6		Clayey Sand: Poorly graded fine sand with clay, brown, damp.		SC	Trace fine gravel.
			7					
			12					
12-17	B2-10.0		9		Clayey Silty Sand: Poorly graded fine sand with silt and clay, mottled brown, damp.		SM	
			14					
			17					
17-18			8		Clay: Brown, damp.			
			14					
			18					
18-20								First water.
								Lost sampler, overdrilled to 20 feet.
								Total depth 20 feet.
								Screened 20-5 feet.
								Sand 20-3 feet.
								Chips 3-2 feet
								Grout\Box 2-0 feet.

LOGGED BY: CHRIS MERRITT

OIL BORING LOG

BORING NO: B3-MW3
 SHEET 1 OF 1

PROJECT NAME: CALTRANS SOUTH OAKLAND
 PROJECT NUMBER: 0G019 DATE: 6/8/00
 NORTHINGS: EASTINGS:
 DRILLING COMPANY: V&W
 DRILLING METHOD: HSA
 BORING DIAMETER: 8 INCHES DEPTH: 20 FEET

GROUNDWATER LEVELS

DATE	COMMENTS	DEPTH BGS
6/8/00	INITIAL WATER	13 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
0								4 inches asphalt.
2					Silty Sandy Gravel: Well graded fine to coarse gravel with fine to coarse sand and silt, mottled dark brown to black, damp.	0	GM	
5								
6				6	Clayey Sand: Poorly graded fine sand with clay, brown, damp.	0	SC	Trace fine gravel.
7				7				
12				12				
9								
10				9	Sandy Clay: Clay with poorly graded fine sand, brown, damp.		CL	
12				12				
12				12				
15								First water
10				10	Sandy Clay: As above , light gray			
16				16				
18				18				
15								
9				9				
15				15				
25				25				
								Total depth 20 feet + sample. Screened 20-5 feet. Sand 20-3 feet. Chips 3-2 feet. GroutBox 2-0 feet.

LOGGED BY: CHRIS MERRITT

OIL BORING LOG

BORING NO: B41MW4		
SHEET 1	OF 2	
PROJECT NAME: CALTRANS SOUTH OAKLAND		
PROJECT NUMBER: 0G019	DATE: 6/8/00	
DRILLING COMPANY: V&W		
DRILLING METHOD: HSA		
BORING DIAMETER: 8 INCHES	DEPTH: 25 FEET	
GROUNDWATER LEVELS		
DATE	COMMENTS	DEPTH BGS
6/8/00	INITIAL WATER	12.5 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
1					Silty Sandy Gravel: Well graded fine to coarse gravel with fine to coarse sand and silt, mottled dark brown to black, damp.	0	GM	4 inches Asphalt
2								
3								
4								
5	B4-5.0			6	Clayey Sand: Poorly graded fine sand with clay, brown, damp.	0	SC	
6				8				
7				16				
8								
9								
10	B4-10.0			6	Clayey Sand: As above	0		
11				14				
12				17				
13								First water.
14								
15	B4-15.0			10	Sandy Gravel: Well graded fine to coarse gravel with poorly		GW	2-3 inch zone
16				12	graded medium sand, brown, wet.			
17				15	Sand: Poorly graded medium sand, brown, wet.		SP	
18								
19								
20	B4-20.0			9	Clay: Light tan, wet.		CL	

Reviewed By: _____ LOGGED BY: CHRIS MERRITT

SOIL BORING LOG

BORING NO: B41MW4
 SHEET 2 OF 2

PROJECT NAME: CALTRANS SOUTH OAKLAND
 PROJECT NUMBER: 0G019 DATE: 6/8/00
 DRILLING COMPANY: V&W
 DRILLING METHOD: HSA
 BORING DIAMETER: 8 INCHES DEPTH: 25 FEET
 GROUNDWATER LEVELS
 DATE: 6/8/00 COMMENTS: INITIAL WATER DEPTH BGS: 12.5 FEET

DEPTH (FEET)	SAMPLE NO.	RECOVERY (IN)	SAMPLE INTERVAL	BLOW COUNT	DESCRIPTION	PID (PPM)	USCS	REMARKS
6				6	Clay: Light tan, wet.		CL	
10				10				
8	B4-25.0			8	Sandy Clay: Clay with poorly graded fine sand, brown, damp.		CL	
12				12				
21				21				
								Total depth 25 feet + sample. Screen 25-5 feet. Sand 25-3 feet. Chips 3-2 feet GroutBox 2-0 feet

Reviewed By: _____ LOGGED BY: CHRIS MERRITT

APPENDIX B
SELECTED PHOTOGRAPHS

**STANTEC CONSULTING CORPORATION
PHOTOGRAPHIC RECORD**

Client: Caltrans

Job Number: 185702384

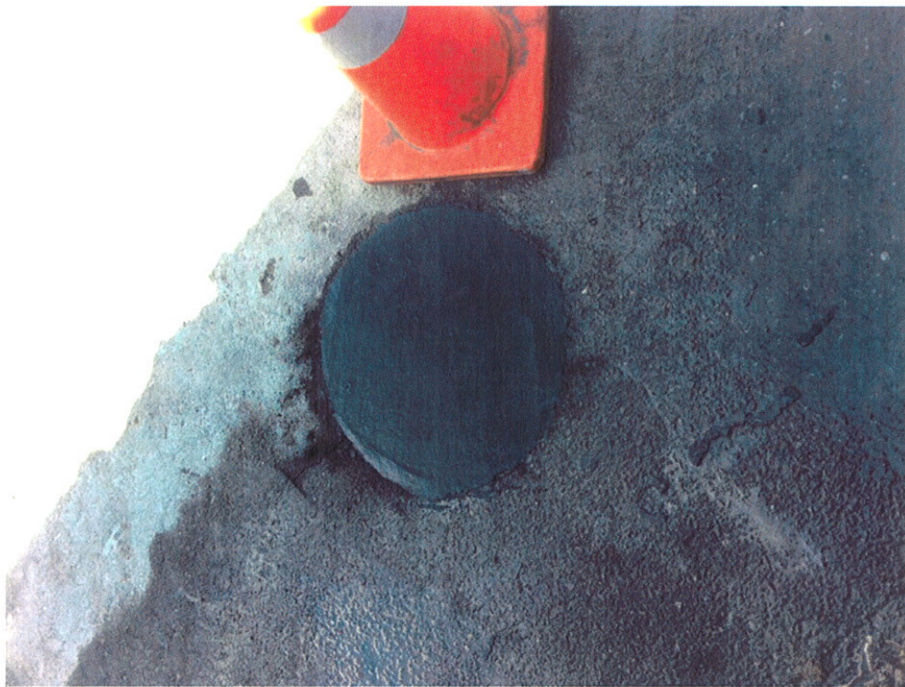
Site Name: 1112 29th Ave Oakland, California

PHOTO No. 1



View of MW-1 after destruction and seal.

PHOTO No. 2



View of MW-2 after destruction and seal.

**STANTEC CONSULTING CORPORATION
PHOTOGRAPHIC RECORD**

Client: Caltrans

Job Number: 185702384

Site Name: 1112 29th Ave Oakland, California

PHOTO No. 3



View of MW-3 after destruction and seal.

PHOTO No. 4



View of MW-4 after destruction and seal.

APPENDIX C
DWR WELL COMPLETION REPORTS

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED

CONFIDENTIAL

**STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)**

REMOVED

CONFIDENTIAL

STATE OF CALIFORNIA DWR
WELL COMPLETION REPORT
(WELL LOGS)

REMOVED