

3330 Cameron Park Drive, Ste 550  
Cameron Park, California 95682  
(530) 676-6004 ~ Fax: (530) 676-6005

June 30, 2010  
Project No. 2007-0057-01

Mr. Jerry Wickham, P.G.  
Alameda County Health Care Services  
Department of Environmental Health  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, California 94502  
(via GeoTracker)

Subject: Well Destruction Report  
Former USA Service Station No. 57  
10700 MacArthur Boulevard  
Oakland, California

Dear Mr. Wickham:

Stratus Environmental Inc. (Stratus) has prepared this *Well Destruction Report*, on behalf of Moller Investment Group, Inc. (MIGI), for Former USA Service Station No. 57, located at 10700 MacArthur Boulevard, Oakland, California (see Figures 1 and 2). This report documents the destruction of 13 groundwater monitoring and remediation wells that were formerly located on the subject property. The wells were destroyed in order to facilitate a site remediation project that involves excavation and disposal of petroleum hydrocarbon impacted soil, and because Alameda County Health Care Services Agency (ACHCSA) has indicated that future monitoring and sampling of groundwater at the subject property is not necessary. Information pertaining to the destruction of these 13 wells is discussed in the following subsections of this report.

## WELL DESTRUCTIONS

Prior to initiating work activities, a well destruction permit was obtained from Alameda County Public Works Agency (ACPWA). A copy of this permit is provided in Appendix A. The former well locations are presented in Figure 2. Table 1 summarizes the construction details for each remediation/monitoring well. All work was completed under the direction of a State of California Professional Geologist.

A C-57 licensed drilling contractor (Penecore Drilling of Woodland, C-57 #906899) performed the well destruction activities, in the presence of a Stratus representative, on June 14 and 15, 2010. Eleven of the site wells (S-1, S-2, MW-3, MW-4, MW-5, MW-7,

MW-8, and EX-1 through EX-4) were destroyed by pressure grouting with neat cement. As requested by ACPWA personnel, wells AS-1 and AS-2 were overdrilled. A mobile drilling rig equipped with 8-inch diameter hollow stem augers was used to perform the well overdrilling work. Following overdrilling of wells AS-1 and AS-2, the resulting boreholes were backfilled to surface grade with neat cement.

Following completion of the work, Stratus prepared and submitted California Department of Water Resources (DWR) well destruction notice forms for each well. Copies of these well destruction forms are included in Appendix A.

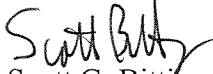
### WASTE MANAGEMENT

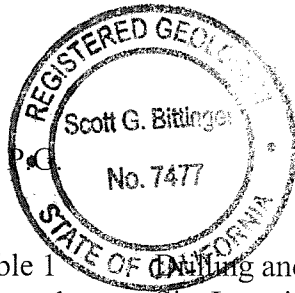
Soil cuttings and wastewater were stored in 55-gallon metal drums and stored onsite pending disposal. Following profiling of the waste, a licensed contractor will be retained to transport the soil and wastewater to licensed facilities for disposal.

If you have any questions or comments concerning this report, please contact Scott Bittinger at (530) 676-2062 or Gowri Kowtha at (530) 676-6001.

Sincerely,

*STRATUS ENVIRONMENTAL, INC.*

  
Scott G. Bittinger, P.E.  
Project Geologist



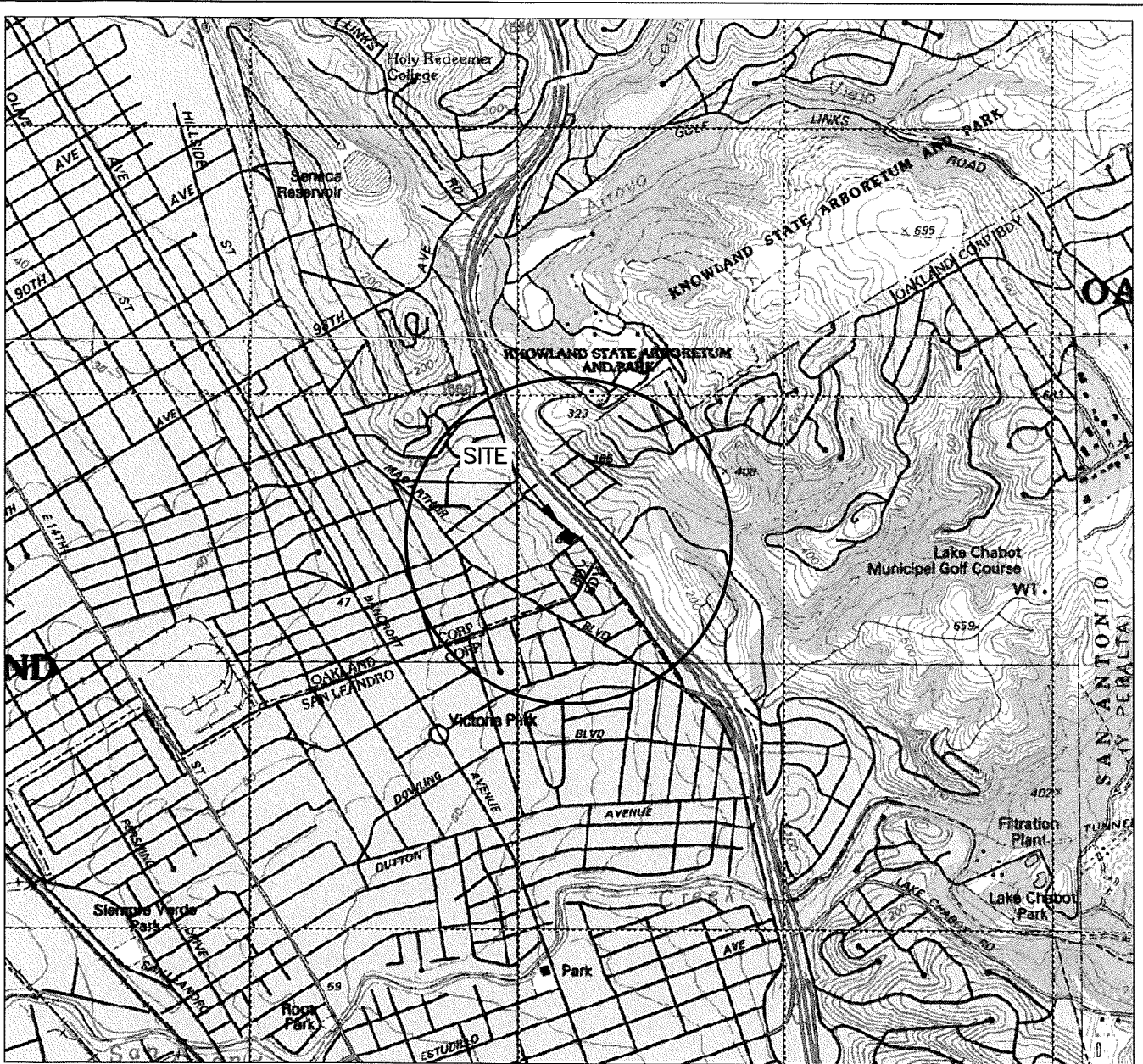
  
Gowri S. Kowtha, P.E.  
Project Manager

Attachments: Table 1 Drilling and Well Construction Summary  
Figure 1 Site Location Map  
Figure 2 Site Plan  
Appendix A Well Destruction Permit and DWR Well Destruction Forms

cc: Mr. Charles Miller, Moller Investment Group, Inc.

**TABLE 1**  
**DRILLING AND WELL CONSTRUCTION SUMMARY**  
Former USA Station #57  
10700 MacArthur Boulevard  
Oakland, California

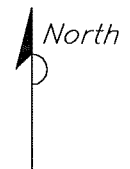
<b>ID</b>	<b>Date</b>	<b>Boring Dia. (inches)</b>	<b>Boring Depth (feet bgs)</b>	<b>Casing Diameter (inches)</b>	<b>Casing Depth (feet bgs)</b>	<b>Slot Size (inches)</b>	<b>Screen Interval (feet bgs)</b>
<b><u>Monitoring Wells</u></b>							
S-1	2/12/87	8	40	3	40	0.02	20 to 40
S-2	2/12/87	8	40	3	40	0.02	20 to 40
MW-3	2/28/95	10	44	4	44	0.02	24 to 44
MW-4	11/20/95	10	40.5	4	40.5	0.02	10 to 40.5
MW-5	11/20/95	10	41	4	40	0.02	10 to 40
MW-7	11/21/95	10	41	4	40	0.02	10 to 40
MW-8	11/21/95	10	35.5	4	35	0.02	10 to 35
<b><u>Extraction Wells</u></b>							
EX-1	10/6/05	10	25	4	25	0.02	5 to 25
EX-2	10/7/05	10	25	4	25	0.02	5 to 25
EX-3	10/6/05	10	25	4	25	0.02	5 to 25
EX-4	10/6/05	10	25	4	25	0.02	5 to 25
<b><u>Air Sparge Wells</u></b>							
AS-1	8/23/07	8	20	1	20	0.02	17.5 to 20
AS-2	8/23/07	8	25	1	20	0.02	17.5 to 20



GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 OAKLAND, CA  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 1980



QUADRANGLE LOCATION



SCALE 1:24,000

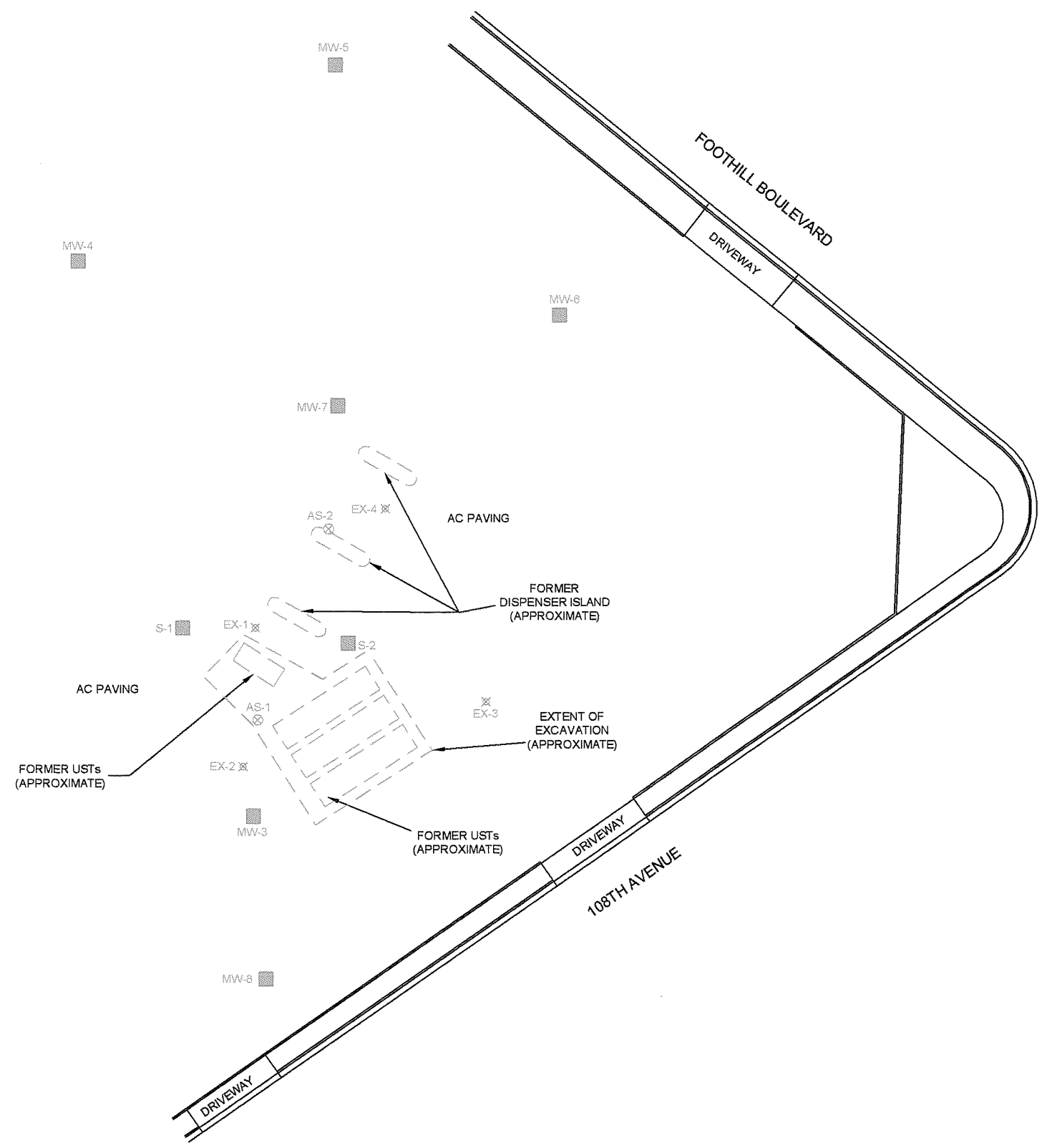
*STRATUS*  
 ENVIRONMENTAL, INC.

FORMER USA SERVICE STATION NO. 57  
 10700 MACARTHUR BOULEVARD  
 OAKLAND, CALIFORNIA  
 SITE LOCATION MAP

FIGURE  
**1**  
 PROJECT NO.  
 2007-0057-01

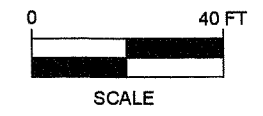


- LEGEND
- MW-6 ABANDONED MONITORING WELL LOCATION
  - ⊗ AS-1 ABANDONED AIR SPARGE WELL LOCATION
  - ⊗ EX-1 ABANDONED EXTRACTION WELL LOCATION



USA57 Well Distribution - JMP  
REV May 25, 2010 USA 57 NSI/stephan

**STRATUS**  
ENVIRONMENTAL, INC.



FORMER USA SERVICE STATION NO. 57  
10700 MACARTHUR BOULEVARD  
OAKLAND, CALIFORNIA

SITE PLAN

FIGURE  
**2**  
PROJECT NO.  
2007-0057-01

**APPENDIX A**

**WELL DESTRUCTION PERMIT AND DWR WELL  
DESTRUCTION FORMS**

# 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: 06/03/2010 By jamesy**

**Permit Numbers: W2010-0379 to W2010-0387**  
**Permits Valid from 06/14/2010 to 06/15/2010**

**Application Id:** 1274219606340  
**Site Location:** 10700 MacArthur Blvd  
**Project Start Date:** 06/14/2010  
**Assigned Inspector:** Contact Vicky Hamlin at (510) 670-5443 or vickyh@acpwa.org

**City of Project Site:**Oakland  
**Completion Date:**06/15/2010

**Applicant:** Stratus Environmental, Inc - Scott Bittinger  
3330 Cameron Park Dr, #550, Cameron Park, CA 95682  
**Property Owner:** MacArthur Blvd Associates  
10700 MacArthur Blvd, Suite 200, Oakland, CA 94605  
**Client:** \*\* same as Property Owner \*\*

**Phone:** 530-676-2062  
**Phone:** 510-562-9500

	<b>Receipt Number: WR2010-0191</b>	<b>Total Due:</b>	\$3309.00
	<b>Payer Name : Moller Investment group, Inc</b>	<b>Total Amount Paid:</b>	\$3309.00
		Paid By: CHECK	<b>PAID IN FULL</b>

**Works Requesting Permits:**

Well Destruction-Monitoring - 7 Wells  
Driller: Penecore Drilling - Lic #: 906899 - Method: press

**Work Total: \$2779.00**

**Specifications**

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth	State Well #	Orig. Permit #	DWR #
W2010-0379	06/03/2010	09/12/2010	MW-3	10.00 in.	4.00 in.	20.00 ft	44.00 ft	2S/3W24	Unknown	NO Records
W2010-0380	06/03/2010	09/12/2010	MW-4	10.00 in.	4.00 in.	10.00 ft	40.50 ft	2S/3W24	Unknown	NO Records
W2010-0381	06/03/2010	09/12/2010	MW-5	10.00 in.	4.00 in.	10.00 ft	40.00 ft	2S/3W24	Unknown	NO Records
W2010-0382	06/03/2010	09/12/2010	MW-7	10.00 in.	4.00 in.	10.00 ft	41.00 ft	2S/3W24	Unknown	NO Records
W2010-0383	06/03/2010	09/12/2010	MW-8	10.00 in.	4.00 in.	10.00 ft	35.50 ft	2S/3W24	Unknown	NO Records
W2010-0384	06/03/2010	09/12/2010	S-1	8.00 in.	3.00 in.	0.00 ft	40.00 ft	2S/3W24	Unknown	NO Records
W2010-0385	06/03/2010	09/12/2010	S-2	8.00 in.	3.00 in.	0.00 ft	40.00 ft	2S/3W24	Unknown	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.



## Alameda County Public Works Agency - Water Resources Well Permit

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 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-Extraction - 4 Wells

Driller: Penecore Drilling - Lic #: 906899 - Method: press

**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 #
W2010-0386	06/03/2010	09/12/2010	EX-1	10.00 in.	4.00 in.	5.00 ft	25.00 ft	2S/3W24	W2005-0944	No Records
W2010-0386	06/03/2010	09/12/2010	EX-2	10.00 in.	4.00 in.	5.00 ft	25.00 ft	2S/3W24	W2005-0945	No Records
W2010-0386	06/03/2010	09/12/2010	EX-3	10.00 in.	4.00 in.	5.00 ft	25.00 ft	2S/3W24	W2005-0946	No Records
W2010-0386	06/03/2010	09/12/2010	EX-4	10.00 in.	4.00 in.	5.00 ft	25.00 ft	2S/3W24	W2005-0947	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



## Alameda County Public Works Agency - Water Resources Well Permit

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. 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 number and site map.
3. Applicant shall submit the copies of the approved encroachment permit to this office within 60 days.
4. 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.
5. Remove the Christy box or similar structure. Pressure Grout with Cement (Less than 30 ft in depth). After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.
6. 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.
7. 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.

Remediation Well Destruction-Injection - 2 Wells

Driller: Penecore Drilling - Lic #: 906899 - Method: press

**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 #
W2010-0387	06/03/2010	09/12/2010	AS-1	8.00 in.	1.00 in.	3.50 ft	20.00 ft	2S/3W24	W2007-0903	0941004
W2010-0387	06/03/2010	09/12/2010	AS-2	8.00 in.	1.00 in.	3.50 ft	25.00 ft	2S/3W24	W2007-0904	0941005

**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. Including 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

## **Alameda County Public Works Agency - Water Resources Well Permit**

prior to drilling.

4. Remove the Christy box or similar structure. Overdrill or clean out to original depth. After the seal has set, backfill the remaining hole with concrete or compacted material to match existing.

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.

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**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  
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(WELL LOGS)

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