December 03, 2013

Teena Le Hazardous Materials Specialist ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502 Phone (510) 567-6772 <u>teena.le@acgov.org</u> <u>FAX (510) 337-9335</u>

## RECEIVED

By Alameda County Environmental Health at 11:37 am, Dec 27, 2013

SUBJECT:

RESPONSIBLE PARTY PERJURY STATEMENT FOR ALAMEDA COUNTY FTP WEBSITE TECHNICAL REPORT SUBMITTAL REQUIREMENT FOR REPORTING OF Well Abandonment Workplan for the former Kawahara Nursery, 16550 Ashland Ave., San Lorenzo, CA

To Alameda County Environmental Health,

"I declare under penalty of perjury that the information and/or recommendations contained in the technical document designated above is true and correct to the best of my knowledge."

John Kawahara

Kawahara Nursery, Inc.

-689 Burnett Ave.

Morgan Hill, CA 95037

PHONE: (408) 640-4289

JKawahara@KawaharaNurseries.com

## Franklin J. Goldman, CHG

**Environmental Forensics & Hydrogeological Consulting** 

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December 09, 2013

Teena Le Hazardous Materials Specialist ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502 Phone (510) 567-6772 teena.le@acgov.org FAX (510) 337-9335

SUBJECT: Workplan for Groundwater Monitor Well Abandonment

FOR THE FORMER Kawahara Nursery, 16550 Ashland Ave., San Lorenzo, CA

Ms. Le,

According to the State Water Resources Control Board Order WQ 2013-00XX-UST, II. FINDINGS, it states, ".....notification has been provided to all entities that are required to receive notice of the proposed case closure, a 60-day comment period has been provided to notified parties, and any comments received have been considered by the Board in determining that the case should be closed." The Board Order goes on to say in Section III that the Fund Claimant, Dave Kawahara must, "1. Properly destroy monitoring wells..." (See Attachment 1 for Board Order).

The following is a technical workplan report which outlines the proposed procedures for abandoning the remaining groundwater monitor wells onsite. The four (4) groundwater monitor wells are designated as MW-3, MW-4, MW-5 and MW-6.

A well permit application will be submitted to the Alameda County Public Works Agency along with well location maps and well construction details (See Figure 1 for map of well locations) & (See Attachment 2 for Well Construction Details).

The groundwater monitor wells are proposed to be overdrilled out to the top of the screen and sand pack, after pressure grouting, to assure that the underlying earth materials are sealed from surface infiltration.

The four (4), two inch diameter PVC casing wells will be abandoned, as required by County permit requirements, by a C-57 licensed drilling contractor and observed by a State Certified Hydrogeologist. The following summarizes the activities to be completed.

CERTIFIED HYDROGEOLOGIST

Kindest Regards,

Franklin J. Goldman

Principal Hydrogeologist #466

#### REPORT OF WELL ABANDONMENT PROCEDURES TO BE COMPLETED

After receiving well abandonment permits from the Alameda County Public Works Agency (ACPWA) and after notifying the ACPWA grout inspector, and prior to drilling, underground service alert will be notified after marking the site in white paint for the drilling locations.

Prior to drilling, the health and safety plan along with a hospital route map will be available on site and will be discussed in a health and safety meeting prior to drilling activities.

The activities performed by the C-57 licensed driller will be observed and documented by a State Certified Hydrogeologist.

A hollow-stem auger will be used to drill out the four, two (2) inch diameter casing groundwater monitor wells MW-3, MW-4, MW-5, and MW-6.

These wells will be pressure grouted through the casing, after which, the well materials outside the casing, will be drilled out down to the top of the sand pack. The top two to three feet of casing will be cut off and the remaining annular space between the casing and the borehole will be tremmied from the bottom up with grout.

Prior to drilling and or pressure grouting and or tremmie grouting in the open hole, the depth to groundwater will be sounded to verify that the water levels in the wells are consistent with past gaugings. The total length of each well's casing will also be measured in the well to verify that there are no obstructions that could interfere with grouting or pressure grouting. All casing lengths will be verified to be the same as what was recorded during their original construction.

Prior to operations, each well box will be broken out and the associated grout will be removed to a depth of approximately three to five feet bgs to sufficiently expose the top of the casing.

A Type I/II cement grout will then be mixed, at the surface, in a 55 gallon drum with a mechanical mixer using 6 gallons of water per 94 pounds of cement.

Grouting will be performed through the casing by initially inserting a 1/2" diameter tremmie pipe to the inside of the bottom of the two or four inch diameter casings to make sure there are no obstructions.

Grout will then be pumped into the inside of the casing until the casing, associated annular space, sand pack, and formation can no longer accept any more grout.

Next, a two inch diameter threaded coupling will be attached to the top of the casing to fit the nozzle for the pressure gauge and pump onto the 2 inch diameter casing to inject air into the inside of the casing on top of the liquid grout in an effort to drive the grout further into the sand pack and formation at a sustained pressure of 25 psi for 5 minutes. After the coupling is removed, the depth to the top of the grout will be tagged.

When more grout is necessary to fill up the hole, grout will be added to the top of the existing grout and the coupling with the pressure gauge and pump will be reattached to inject air into the casing again at 25 psi for 5 minutes until the grout has been fully injected into the sand pack and formation.

This process will be repeated until all the grout that can be accommodated at 25 psi for 5 minutes has been injected into the casing to the extent that the hole is completely filled with grout.

Each casing will then be cut off to a depth of between 2 ½ and 3 feet bgs prior to complete the hole to the surface with grout.

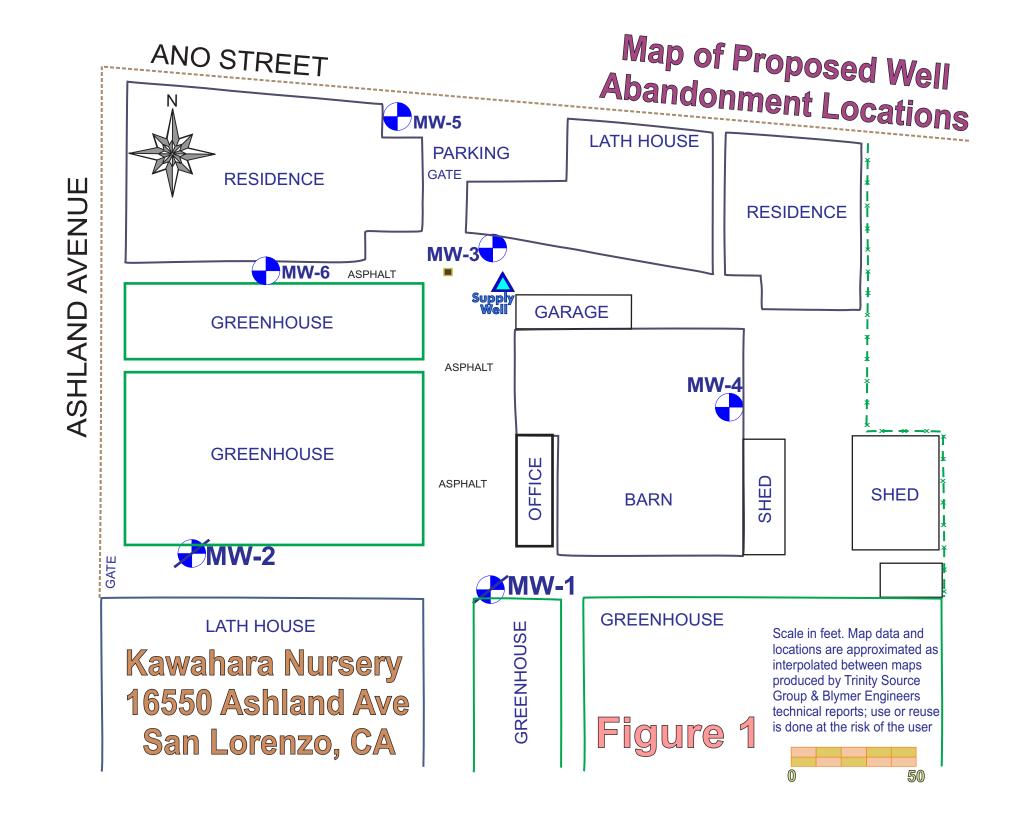
The grout will then be left to settle, after which time, each abandoned borehole will be sealed at the surface with an AC or concrete surface cover to match the surrounding parking area or concrete slab.

The wells that will be drilled out to the top of the sand pack, the hollow stem auger will be used to drill around the outside of the casing after pressure grouting is completed. The remaining open borehole will be tremmied with grout from the top of the grout that was pressure grouted to the surface.

The well materials generated during abandonment activities will be left onsite as no hydrocarbon contamination is expected.

#### **LIMITATIONS**

This report has been prepared in accordance with generally accepted environmental, geological and engineering practices. No warranty, either expressed or implied, is made as to the professional advice presented herein. The analyses, conclusions and recommendations contained in this report are based upon site conditions as they existed at the time of the investigation and they are subject to change. The conclusions presented in this report are professional opinions based solely upon visual observations of the site and vicinity, and interpretation of available information as described in this report. Franklin J. Goldman, recognizes that the limited scope of services performed in execution of this investigation may not be appropriate to satisfy the needs, or requirements of other state agencies, or of other users. Any use or reuse of this document or its findings, conclusions or recommendations presented herein, is done so at the sole risk of the said user. Note this technical report supersedes any and all previous drafts provided to the client for review.



# **Attachment 1**

**Board Order** 

### **DRAFT**

# STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

#### ORDER WQ 2013-00XX - UST

## In the Matter of Underground Storage Tank Case Closure

Pursuant to Health and Safety Code Section 25299.39.2 and the Low Threat Underground Storage Tank Case Closure Policy

## BY THE EXECUTIVE DIRECTOR1:

Pursuant to Health and Safety Code section 25299.39.2, the Manager of the Underground Storage Tank Cleanup Fund (Fund) recommends closure of the underground storage tank (UST) case at the site listed below.<sup>2</sup> The name of the Fund claimant, the Fund claim number, the site name and the applicable site address are as follows:

Dave Kawahara Claim No. 9201 Kawahara Nursery 16550 Ashland Avenue, San Lorenzo

Alameda County Environmental Health Department

## I. STATUTORY AND PROCEDURAL BACKGROUND

Section 25299.39.2 directs the Fund manager to review the case history of claims that have been active for five years or more (five-year review), unless there is an objection from the UST owner or operator. This section further authorizes the Fund Manager to make recommendations to the State Water Resources Control Board (State Water Board) for closure of a five-year-review case if the UST owner or operator approves. In response to a recommendation by the Fund Manager, the State Water Board, or in certain cases the State Water Board Executive Director, may close a case or require the closure of a UST case. Closure of a UST case is appropriate where the corrective action ensures the protection of human health, safety, and the environment and where the corrective action is consistent with:

<sup>&</sup>lt;sup>1</sup> State Water Board Resolution No. 2012-0061 delegates to the Executive Director the authority to close or require the closure of any UST case if the case meets the criteria found in the State Water Board's Low Threat Underground Storage Tank Case Closure Policy adopted by State Water Board Resolution No. 2012-0016.

<sup>&</sup>lt;sup>2</sup> Unless otherwise noted, all references are to the Health and Safety Code.

- 1) Chapter 6.7 of Division 20 of the Health and Safety Code and implementing regulations;
- 2) Any applicable waste discharge requirements or other orders issued pursuant to Division 7 of the Water Code; 3) All applicable state policies for water quality control; and 4) All applicable water quality control plans.

The Fund Manager has completed a five-year review of the UST case identified above, and recommends that this case be closed. The recommendation is based upon the facts and circumstances of this particular UST case. A UST Case Closure Review Summary Report has been prepared for the case identified above and the bases for determining compliance with the Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closures (Low-Threat Closure Policy or Policy) are explained in the Case Closure Review Summary Report.

## A. Low-Threat Closure Policy

In State Water Board Resolution No. 2012-0016, the State Water Board adopted the Low Threat Closure Policy. The Policy became effective on August 17, 2012. The Policy establishes consistent statewide case closure criteria for certain low-threat petroleum UST sites. In the absence of unique attributes or site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria in the Low-Threat Closure Policy pose a low threat to human health, safety and the environment and are appropriate for closure under Health and Safety Code section 25296.10. The Policy provides that if a regulatory agency determines that a case meets the general and media-specific criteria of the Policy, then the regulatory agency shall notify responsible parties and other specified interested persons that the case is eligible for case closure. Unless the regulatory agency revises its determination based on comments received on the proposed case closure, the Policy provides that the agency shall issue a closure letter as specified in Health and Safety Code section 25296.10. The closure letter may only be issued after the expiration of the 60-day comment period, proper destruction or maintenance of monitoring wells or borings, and removal of waste associated with investigation and remediation of the site.

Health and Safety Code section 25299.57, subdivision (I)(1) provides that claims for reimbursement of corrective action costs that are received by the Fund more than 365 days after the date of a closure letter or a Letter of Commitment, whichever occurs later, shall not be reimbursed unless specified conditions are satisfied. A Letter of Commitment has already been issued on the claim subject to this order and the respective Fund claimant, so the 365-day timeframe for the submittal of claims for corrective action costs will start upon the issuance of the closure letter.

#### II. FINDINGS

Based upon the UST Case Closure Review Summary Report prepared for the case attached hereto, the State Water Board finds that corrective action taken to address the unauthorized release of petroleum at the UST release site identified as:

Claim No. 9201 Kawahara Nursery

ensures protection of human health, safety and the environment and is consistent with Chapter 6.7 of Division 20 of the Health and Safety Code and implementing regulations, the Low-Threat Closure Policy and other water quality control policies and applicable water quality control plans.

Pursuant to the Low-Threat Closure Policy, notification has been provided to all entities that are required to receive notice of the proposed case closure, a 60-day comment period has been provided to notified parties, and any comments received have been considered by the Board in determining that the case should be closed.

Pursuant to section 21080.5 of the Public Resources Code, environmental impacts associated with the adoption of this Order were analyzed in the substitute environmental document (SED) the State Water Board approved on May 1, 2012. The SED concludes that all environmental effects of adopting and implementing the Low threat Closure Policy are less than significant, and environmental impacts as a result of complying with the Policy are no different from the impacts that are reasonably foreseen as a result of the Policy itself. A Notice of Decision was filed August 17, 2012. No new environmental impacts or any additional reasonably foreseeable impacts beyond those that were not addressed in the SED will result from adopting this Order.

The UST case identified above may be the subject of orders issued by the Regional Water Quality Control Water Board (Regional Water Board) pursuant to Division 7 of the Water Code. Any orders that have been issued by the Regional Water Board pursuant to Division 7 of the Water Code, or directives issued by a Local Oversight Program agency for this case should be rescinded to the extent they are inconsistent with this Order.

#### III. ORDER

#### IT IS THEREFORE ORDERED that:

- A. The UST case identified in Section II of this Order, meeting the general and mediaspecific criteria established in the Low-Threat Closure Policy, be closed in accordance with the following conditions and after the following actions are complete. Prior to the issuance of a closure letter, the Fund claimant is ordered to:
  - 1. Properly destroy monitoring wells and borings unless the owner of real property on which the well or boring is located certifies that the wells or borings will be maintained in accordance with local or state requirements;
  - 2. Properly remove from the site and manage all waste piles, drums, debris, and other investigation and remediation derived materials in accordance with local or state requirements; and
  - 3. Within six months of the date of this Order, submit documentation to the regulatory agency overseeing the UST case identified in Section II of this Order that the tasks in subparagraphs (1) and (2) have been completed.
- B. The tasks in subparagraphs (1) and (2) of paragraph (A) are ordered pursuant to Health and Safety Code section 25296.10 and failure to comply with these requirements may result in the imposition of civil penalties pursuant to Health and Safety Code section 25299, subdivision (d)(1). Penalties may be imposed administratively by the State Water Board or Regional Water Board.
- C. Within 30 days of receipt of proper documentation from the Fund claimant that requirements in subparagraphs (1) and (2) of paragraph (A) are complete, the regulatory agency that is responsible for oversight of the UST case identified in Section II of this Order shall notify the State Water Board that the tasks have been satisfactorily completed.
- D. Within 30 days of notification from the regulatory agency that the tasks are complete pursuant to paragraph (C), the Deputy Director of the Division of Financial Assistance shall issue a closure letter consistent with Health and Safety Code section 25296.10,

subdivision (g) and upload the closure letter and UST Case Closure Review Summary Report to GeoTracker.

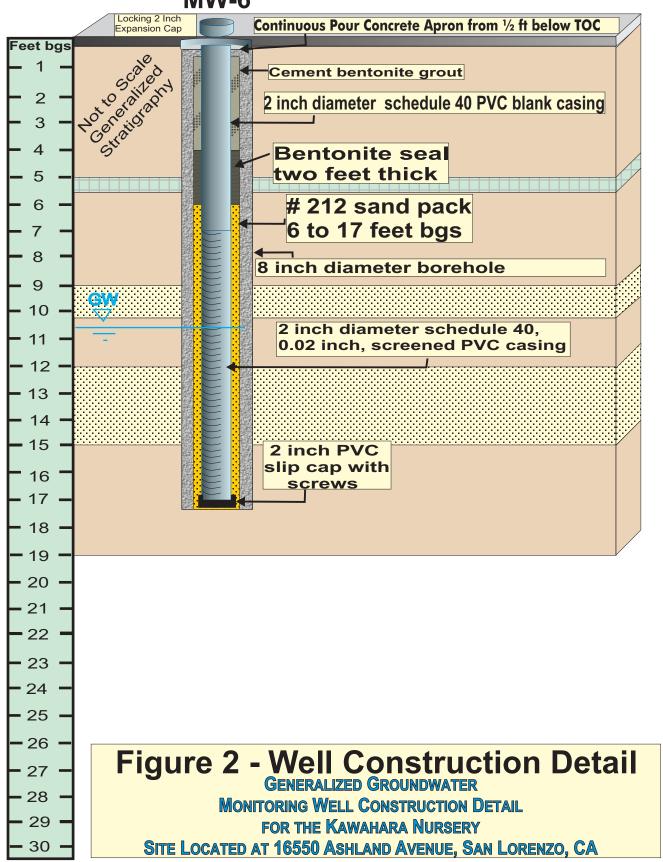
- E. As specified in Health and Safety Code section 25299.39.2, subdivision (a) (2), corrective action costs incurred after a recommendation of closure shall be limited to \$10,000 per year unless the Board or its delegated representative agrees that corrective action in excess of that amount is necessary to meet closure requirements, or additional corrective actions are necessary pursuant to section 25296.10, subdivisions (a) and (b). Pursuant to section 25299.57, subdivision (I) (1), and except in specified circumstances, all claims for reimbursement of corrective action costs must be received by the Fund within 365 days of issuance of the closure letter in order for the costs to be considered.
- F. Any Regional Water Board or Local Oversight Program Agency directive or order that directs corrective action or other action inconsistent with case closure for the UST case identified in Section II is rescinded, but only to the extent the Regional Water Board order or Local Oversight Program Agency directive is inconsistent with this Order.

Executive Director	  Date

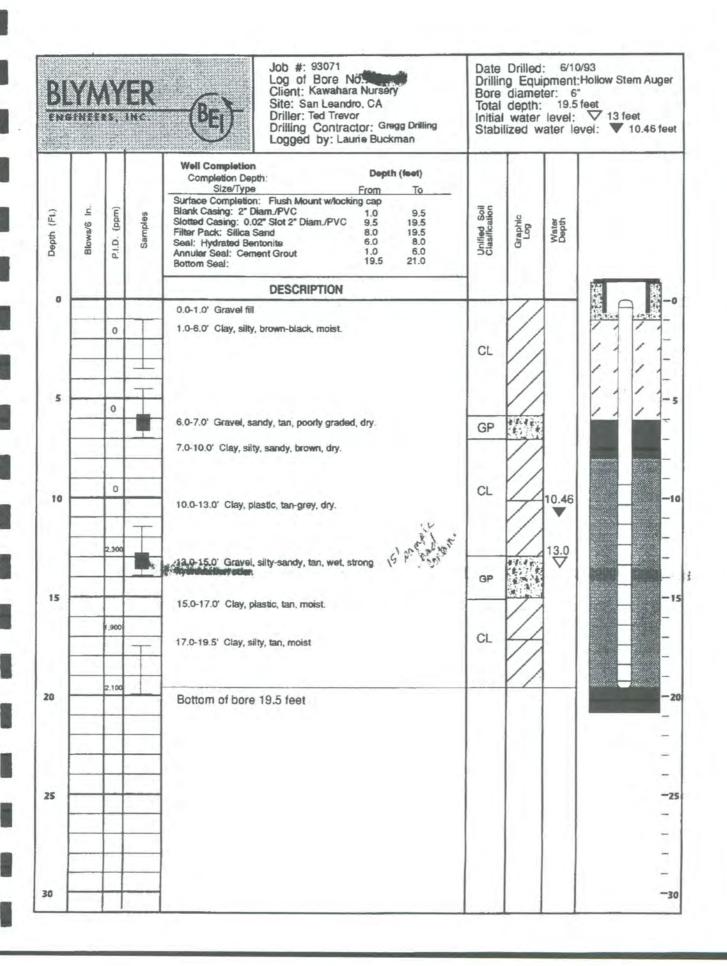
# **Attachment 2**

**Well Construction Details** 

**MW-6** 



DRILL COMPANY: Clear Hea	art SURFACE ELEVATION:				LOGGED BY: Frank Goldman			
DEPTH TO GROUNDWATER:	BORING DIAMETER: 8"				DRILLING METHOD: HCA			
LITHOLOGIC DESCRIPTION		SAMPLE	TIME	DEPTH in feet bgs	WATER	WERLS TON CONSTRETAL	USCS	
Silty clay, dark brown			×	0 ppm 12:05 pm	- 1 - - 2 - - 3 - - 4 - - 5 -			CL
rootlets, no odor. San Groundwater in well casing 10.55' at 2:00 pm 10.52' at 2:45 pm Groundwater in augers at 10.70' at 12:45 pm GW	mple rur le run 9		×	0 ppm 0 ppm 12:10 pm 0 ppm	- 7 - - 7 - - 8 - - 9 -			
Silty clay with sand, ol to stiff, moist; faint hy Groundwater 1st encountered at 15.65' at 10:00 am Strong hyd Sam					-12 -13 - -14 - -15 - -16 -			CL/SM
		on odor. n 17-18 ½'		0 ppm  12:20 pm 0 ppm	-17- -18-			
End at 18 ½ Monitor well constructed 7' bland 1' sand over TOC, 2' bentonite, 4'	c pvc, 10' (		5		-19- -20-			
BORING NO. MW-6, DATE: 09 18 12	Kawahara Nursery Site Located at 16550 Ashland Avenue, San Lorenzo, CA							



BORE & WELL CONSTRUCTION LOG: Page 1 of 1 Job No.: 94015 Drilling Company: Gregg Drilling BLYMYER ENGINEERS, INC. Orller: Ted Clent Kawahara Nursery Orlling Equipment: SIMCO/Hollow Stem Rotary Site: 18550 Ashland Avenue San Lorenzo, CA Sample Nethod: Brass Lined Split-spoon Date Orlled: 10/31/94 Bore Clameter: 8 in. Logged By: L. Buckman Total Depth: 20.5 ft. Well Completion Depth: 20.25 ft. Initial Water Depth: Y 18.5 ft. Depths in feet Component Size/Type Stabilized Water Depth: \$ 12.34 1t. From To Cored/Analyzed Surface Completion: Flush Traffic Rated Vault with Locking Cap Surface Seat Asphalt/Cement Annular Seal: Grout Unified Soil Classification 1.00 11.00 (mdd) (ft.) Ċ Seat Hydrated Bentonite 11.00 13.00 Blows/8 Sand Pack: #2-12 Sand Bottom Seal: PVC Cap 13.00 20.50 Depth Graphic P.I.D. 20.00 20.25 Water Blank Casing: 2" Diam. PVC 50 15.00 Log Screened Casing: 0.02" Slot-2" Diam. PVC 15.00 LITHOLOGIC DESCRIPTION 0 ASPHALT-gravel FILL Black silty CLAY, with sand; dry; odorless 0 0 0.3 0 5 5 Brown sandy CLAY, with gravel; dry; odoriess 0 0.2 Brown silty SAND, with <2% clay; moist; odorless 0 SM 0.2 Brown silty CLAY, with <2% gravel; moist; organic; 0 10 odorless 10 CL 0 0 SM Brown silty SAND, with gravel; medium grained; 12.34 CL poorly graded; wet; odoriess 0 SM Brown silty CLAY, with <2% gravel; moist; organic; 0.3 Brown silty SAND, <2% clay; fine grained; poorly 0 15 graded; moist; iron-stained; odorless -15 CI 0 Brown silty CLAY; moist; iron-stained; odorless gray; very moist; odorless 0 Ò 18.5 O Gray silty SAND, with <2% clay and <2% gravel: fine to medium grained; poorty graded; wet; \_\_ 20 20 Gray silty CLAY; very moist; iron-stained; odorless, Bore terminated at 20.5 ft. 25 25

BORE & WELL CONSTRUCTION LOG: Page 1 of 1 Orlling Campany: Gregg Drilling Jab Na.: 94015 BLYMYER ENGINEERS, INC. Orller: Ted Clent Kawahara Nursery Site: 18550 Ashland Avenue Orilling Equipment: SIMCO/Hollow Stem Rotary Sample Method: Brass Lined Spllt-spoon San Lorenzo, CA Bore Diameter: 8 In. Date Drilled: 10/31/94 Lagged By: L. Buckman Total Depth: 20.5 ft. Well Completion Depth: 20.25 ft. Initial Water Depth: \$ 20 ft. Depths in feet Component Size/Type Stabilized Water Depth: \$ 10.42 ft. From To nple Intervals Cored Cored/Analyzed Surface Completion: Flush Traffic Rated Vault with Locking Cap Surface Seal: Asphalt/Cement Annular Seal: Grout 00 1.00 Classification (mdd) 1.00 11.00 Unified Soil (11.) ċ Seat Hydrated Bentonite 13.00 11.00 Blows/8 Sand Pack: #2-12 Sand 13.00 20.50 Depth Bottom Seal: PVC Cap 20.00 20.25 Water P.I.D. Blank Casing: 2" Dlam. PVC 15.00 Screened Casing: 0.02" Slot-2" Diam. PVC 15.00 LITHOLOGIC DESCRIPTION 0 A ASPHALT-gravel FILL Brown silty CLAY, with sand and <2% gravel; dry; 0 odorless Ú Ò CL 0 5 5 0 0 <2% gravel; slightly moist; iron-stained; odorless 0 SM Tan silty SAND; fine grained; poorly graded; dry; odorless 0 10 10 Tan silty CLAY; slightly malst; iron-stained: Y CL 10,42 adarless 0 SM Tan silty SAND, with gravel; fine grained; poorly 0 graded: wet: odorless Gray silty CLAY, moist; odorless 0 tan; moist; odorless; iron-stained 0 15 -15 gray; very maist: adorless '- tan gray; with <1% sand; very moist; iron-stained; 0 adorless 0 tan gray; with <2% gravel; wet; iron-stained: odorless 0 Tan gray silty SAND, with <2% gravel; medium 0 grained; poorly graded; wet; odorless SM unitinium mining 0 20 -20 0 Bore terminated at 20.5 ft. 25 25