



June 19, 1998

Mrs. Mary Petsas
16035 East 14th Street
San Leandro, CA 94578

Re: Well Destruction, 16035 East 14th Street, San Leandro, CA 94578

Dear Mrs. Petsas:

Tank Protect Engineering of Northern California, Inc. (TPE) is pleased to submit this letter report concerning the well destruction for the above mentioned subject site. Monitoring well installation is summarized and the well destruction is discussed in detail.

Background

On April 16, 1993, TPE and P.C. Exploration Inc. [(PC) C57 drilling license number 265556], drilled 3 soil borings for the construction of groundwater monitoring wells MW-1, MW-2, and MW-3. Soil borings for the groundwater monitoring wells were drilled to a depth of about 15.0 feet, 18.0 feet, and 17.0 feet, respectively, and converted to a monitoring well by installing a 2-inch diameter polyvinyl chloride (PVC) casing and 0.010-inch machine-slotted screen. Screen was placed from a depth of about 4 feet and extended to a depth of about 17 feet (see attached boring logs). Boring logs and well construction details are presented in TPE's August 13, 1993 PRELIMINARY SITE ASSESSMENT REPORT, MRS. MARY PETSAS, 16035 EAST 14TH STREET, SAN LEANDRO, CA 94578.

Well Destruction

Site closure was granted in a November 25, 1997 letter from the Alameda Health Care Services Agency (ACHCSA) recommending that the monitoring wells be decommissioned after monitoring activities were completed (see attached letter).

Before commencing destruction activities, TPE obtained a well destruction permit [(number 98WR219), see attached] from the Alameda County Public Works Agency.

On June 8, 1998, TPE and PC destroyed monitoring well MW-1, MW-2, and MW-3, by pressure grouting to 140 pounds per square inch (psi) with a tremie pipe. The wells were grouted from a total depth of about 15.0 feet, 18.0 feet, and 17.0 feet, respectively, to the surface using a neat portland cement grout.

Vault Box Destruction

During well destruction activities, all vault boxes were sealed with neat portland cement grout. The top of each vault box was sealed with concrete.

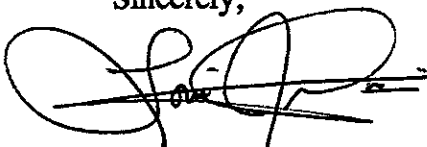
An additional copy of this letter report is included for your delivery to:

Mr. Scott O. Seery, CHMM
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

TPE recommends that this letter report be submitted with a cover letter from your office, and signed by an authorized representative.

If you have any questions, please call TPE at (510) 429-8088.

Sincerely,

A handwritten signature in black ink, appearing to read "Louis Travis III", written over a horizontal line.

Louis Travis III
Project Engineer

LOG OF EXPLORATORY BORING

PROJECT NUMBER 218

BORING NO. MW-1

PROJECT NAME 16035 East 14th Avenue, San Leandro, CA

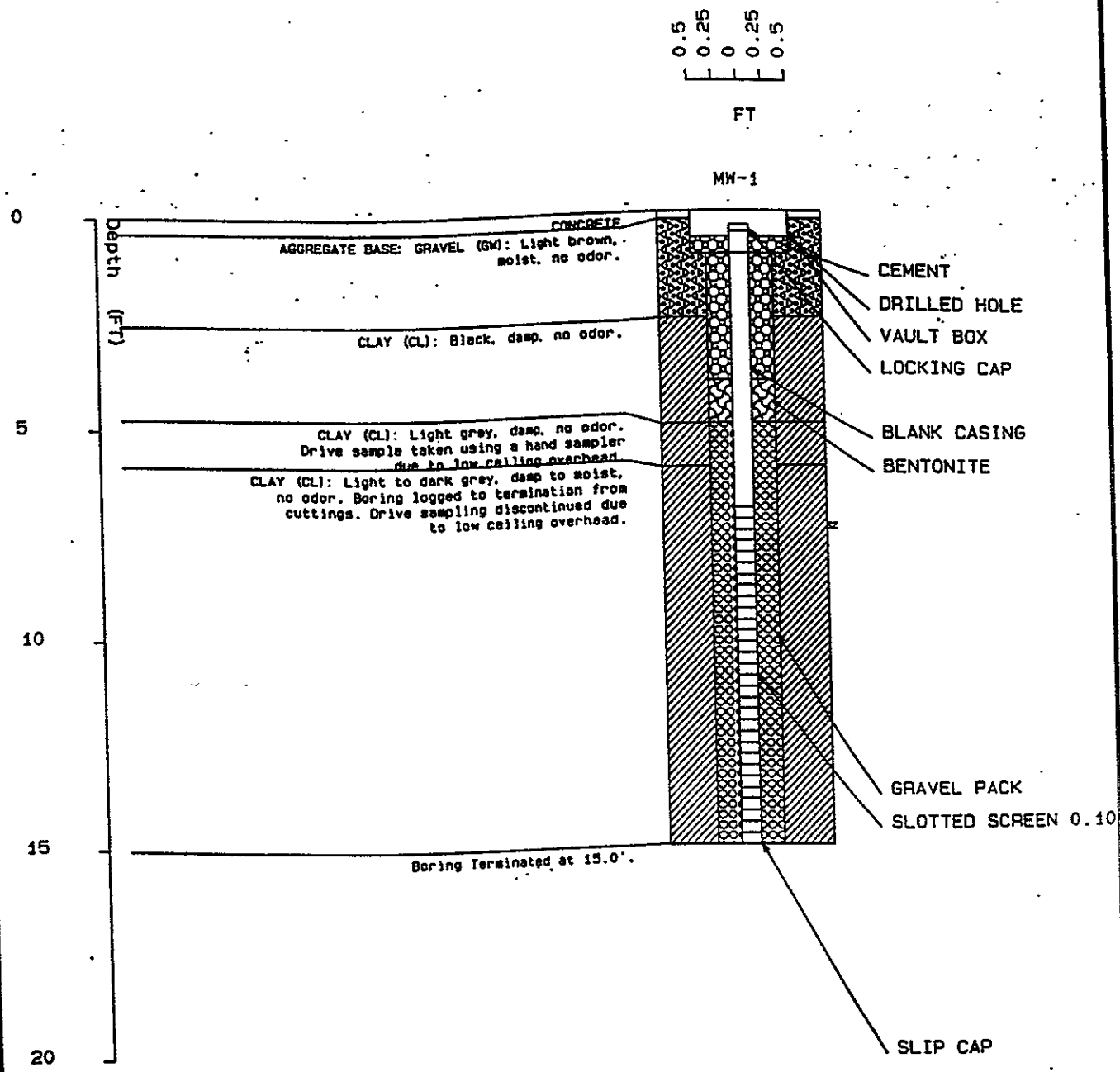
BY LNH

DATE 04-16-93

SURFACE ELEV. 33 FT

RECOVERY (FT/FT)	OVA (PPM)	PENETRA- TION (BLDWS/FT)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
				1			CONCRETE
				2			AGGREGATE BASE: GRAVEL (GW): Light brown, moist, no odor.
				3			CLAY (CL): Black, damp, no odor.
				4			
.5/.5	--			5	■		CLAY (CL): Light grey, damp, no odor. Drive sample taken using a hand sampler due to low ceiling overhead.
				6			
				7			CLAY (CL): Light to dark grey, damp to moist, no odor. Boring logged to termination from cuttings. Driller reports water at 7.5'.
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			Boring terminated at 15.0'.

REMARKS: Boring drilled with continuous-flight, hollow-stem, 8.0-inch O.D. augers. Boring logged from cuttings and one sample collected using a slide hammer core.



LEGEND

GW
 CL
 Static Water Level
 ASPHALT

WELL ID : MW-1

16035 East 14th Avenue, San Leandro, CA

TANK PROTECT ENGINEERING

Figure :

LOG OF EXPLORATORY BORING

PROJECT NUMBER 218

BORING NO. MW-2

PROJECT NAME 16035 East 14th Avenue, San Leandro, CA

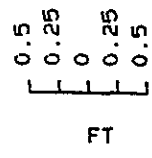
BY LNH

DATE 04-16-93

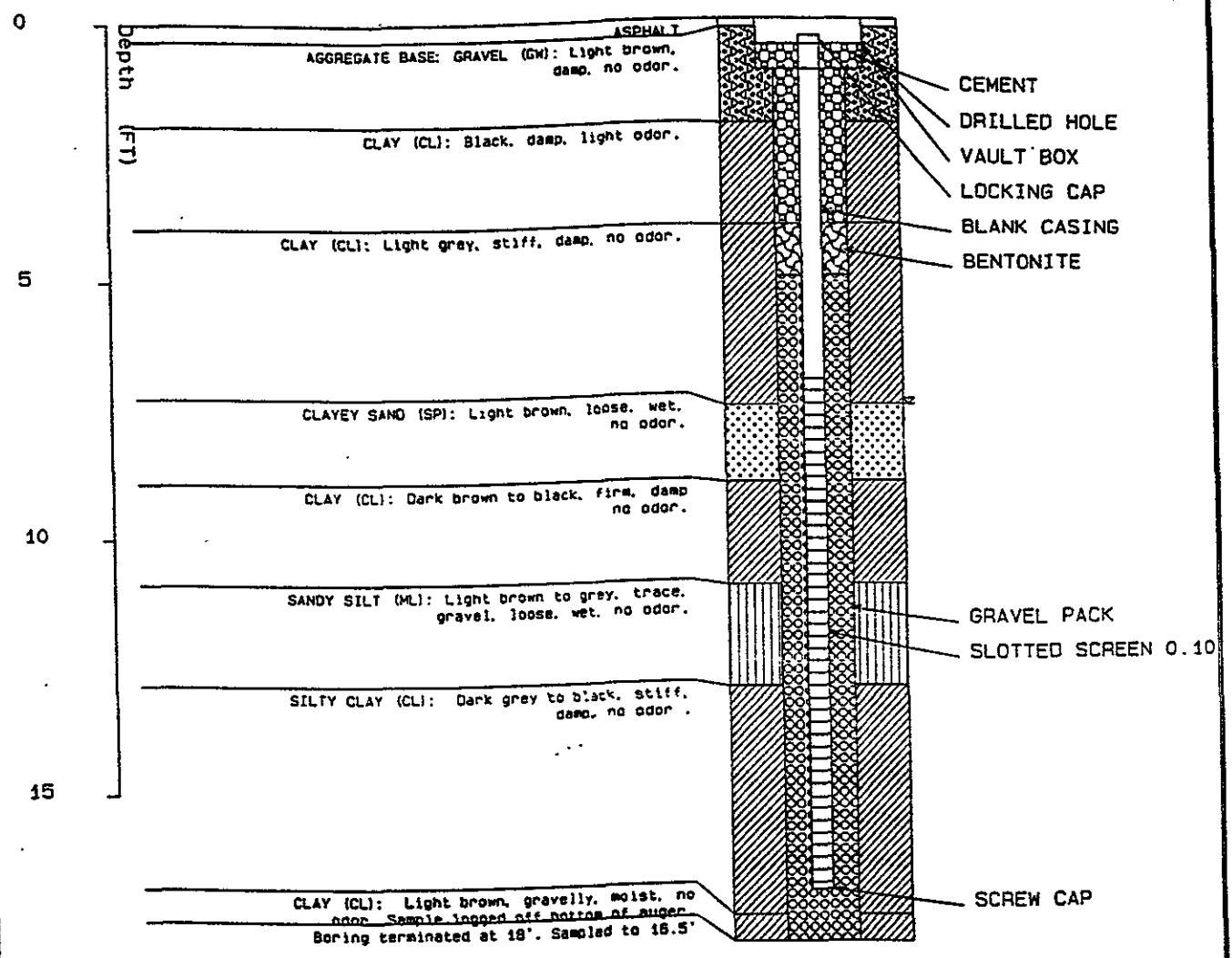
SURFACE ELEV. 32 FT

RECOVERY (FT/FT)	QVA (PPM)	PENETRA- TION (BLOWS/FT)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
				1			ASPHALT
				2			AGGREGATE BASE: GRAVEL (GW): Light brown, damp, no odor.
				3			CLAY (CL): Black, damp, light odor.
				4			CLAY (CL): Light grey, stiff, damp, no odor.
1.5/1.5	20	13		5			
				6			
				7			
1.17/1.5		8		8			CLAYEY SAND (SP): Light brown, loose, wet, no odor.
				9			CLAY (CL): Dark brown to black, firm, damp no odor.
0.83/1.5		8		10			
				11			SANDY SILT (ML): Light brown to grey, trace gravel, loose, wet, no odor.
0.5/1.5	8.0	4		12			
1.5/1.5		9		13			SILTY CLAY (CL): Dark grey to black, stiff, damp, no odor.
1.5/1.5	2.0	11		14			CLAY (CL): Light brown, gravelly, moist, no odor. Sample logged off bottom of auger.
				15			
				16			
1.5/1.5		10		17			
				18			Boring terminated at 18'. Sampled to 16.5'

REMARKS: Boring drilled with continuous-flight, hollow-stem, 8-inch O.D. augers. Samples collected in a 2.0-inch I.D. California sampler.



MW-2



LEGEND

Static Water Level

GW

SP

ML

CL

ASPHALT

WELL ID : MW-2

16035 East 14th Ave. San Leandro, CA.

TANK PROTECT ENGINEERING

Figure :

LOG OF EXPLORATORY BORING

PROJECT NUMBER 218

BORING NO. MW-3

PROJECT NAME 16035 East 14th Avenue, San Leandro, CA

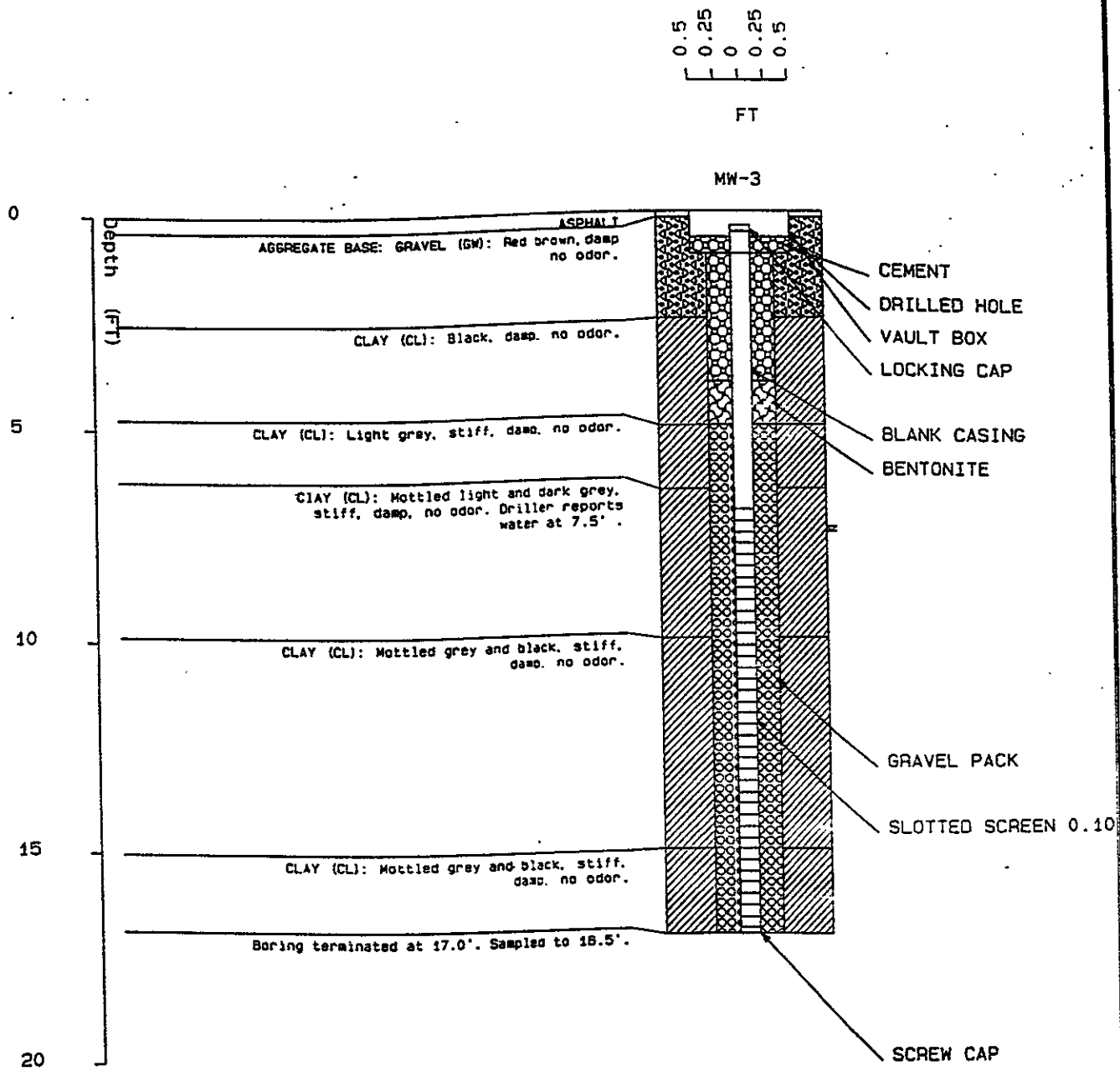
BY LNH

DATE 04-16-93

SURFACE ELEV. 33 FT

RECOVERY (FT/FT)	OVA (PPM)	PENETRA- TION (BLOWS/FT)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHO- GRAPHIC COLUMN	DESCRIPTION
				1			ASPHALT
				2			AGGREGATE BASE: GRAVEL (GW): Red brown, damp no odor.
				3			CLAY (CL): Black, damp, no odor.
				4			
1.42/1.5	14.0	15.0		5			CLAY (CL): Light grey, stiff, damp, no odor.
				6			CLAY (CL): Mottled light and dark grey, stiff, damp, no odor. Driller reports water at 7.5'.
				7			
				8			
				9			
1.5/1.5	--	15.0		10			CLAY (CL): Mottled grey and black, stiff, damp, no odor.
				11			
				12			
				13			
				14			
1.5/1.5	--	12		15			CLAY (CL): Mottled grey and black, stiff, damp, no odor.
				16			
				17			Boring terminated at 17.0'. Sampled to 16.5'
				18			
				19			
				20			

REMARKS: Boring drilled with continuous-flight, hollow-stem, 8-inch O.D. augers. Samples collected in a 2.0-inch I.D. California sampler.



LEGEND



GW

Static Water Level



CL



ASPHALT

WELL ID : Mw-3

16035 East 14th Ave. San Leandro, CA

Part 18 - Inland Fax Transmittal Memo 7872
 No. of Pages 2 Date 5.28.97
 To LOUI'S TANK PROTECT
 From MARY PETSAS
 Company
 Location
 Fax # 50429 8089
 Telephone # 276 2928
 Original Destination Delivery Return Call for pickup
 AS PER YOUR REQUEST - HOPE THESE LETTERS ARE ONES YOU NEED.
 MARY

ALAMEDA COUNTY
HEALTH CARE SERVICES
 AGENCY
 DAVID J. KEARS, Agency Director



ENVIRONMENTAL HEALTH SERVICES
 ENVIRONMENTAL PROTECTION (LOP)
 1134 Harbor Bay Parkway, Suite 250
 Alameda, CA 94502-6577
 (510) 567-6700
 FAX (510) 337-9335

STID 4147
 November 23, 1997

Jerry and Mary Petsas
 16518 Toledo Street
 San Leandro, CA 94578

RE: 16035 EAST 14TH STREET, SAN LEANDRO

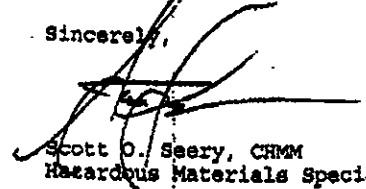
Dear Mr. and Mrs. Petsas:

The Alameda County Environmental Health Department, Environmental Protection Division, has received concurrence from the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), for final closure of the underground storage tank investigation at the referenced site.

Prior to the issuance of a "Remedial Action Completion Certificate" by this office, however, the monitoring wells at the site must be properly destroyed should you have no further use for them. Well destruction is performed under permit issued by Alameda County Public Works Agency (ACPWA). You should contact Andreas Godfrey of the ACPWA (510/670-5575) to secure well destruction permits.

Please advise me if the wells will be destroyed, and when well destruction has been completed, as appropriate. I may be reached 510/567-6700.

Sincerely,


 Scott O. Seery, CHMM
 Hazardous Materials Specialist

cc: Mee Ling Tung, Agency Director
 Kevin Graves, RWQCB
 Andreas Godfrey, ACPWA



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
 931 TURNER COURT, SUITE 300, HAYWARD, CA 94545-1661
 PHONE (510) 678-5678 ANDREAS GODFREY FAX (510) 678-5262
 (510) 678-5244 ALVIN KAN

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT _____
16035 E. 14th Street
San Leandro, CA 94578

California Coordinates Source _____ ft. Accuracy ± _____ ft.
 CCN _____ ft. CCE _____ ft.
 APN _____

CLIENT
 Name Mrs. Mary Batsas
 Address 16518 Toledo Street Phone (510) 276-2828
 City San Leandro, CA Zip 94578

APPLICANT
 Name Tark Protect Engineering of Northern California, Inc. Fax (510) 429-8089
 Address 2821 Whipple Road Phone (510) 429-8088
 City Union City, CA Zip 94587-1233

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S LICENSE NO. CS7 265556

WELL PROJECTS

Drill Hole Diameter	<u>2</u> in.	Maximum	
Casing Diameter	_____ in.	Depth	<u>20</u> ft.
Surface Seal Depth	_____ ft.	Number	<u>3</u>

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft.

ESTIMATED STARTING DATE 06/10/98
 ESTIMATED COMPLETION DATE 06/10/98

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 6/1/98

FOR OFFICE USE

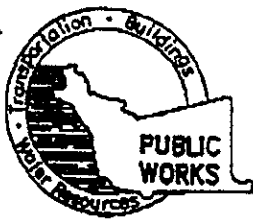
PERMIT NUMBER 98WR219
 WELL NUMBER _____
 APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

- (A) GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**
 Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tamped cement grout shall be used in place of compacted cuttings.
- E. CATHODIC**
 Fill hole above anode zone with concrete placed by tremie.
- (F) WELL DESTRUCTION**
 See attached.
- G. SPECIAL CONDITIONS**

APPROVED [Signature] DATE 6/1/98



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

951 TURNER COURT, SUITE 300, HAYWARD, CA 94545-2651

PHONE (510) 670-5575 ANDREAS GODFREY FAX (510) 670-5262
(510) 670-5248 ALVIN KAN

WATER RESOURCES SECTION GROUNDWATER PROTECTION ORDINANCE For Pressure Grouting of Monitoring Well

16035 E 14TH ST

SAN LEANDRO

PERMIT NO. 98WR219

Destruction Requirements:

1. Clean out all bridged or poorly compacted materials to the bottom of the well.
2. Pressure grout the casing to 2 feet below finished grade or original ground, whichever is the lower elevation.
3. Remove casing, seal and gravel pack to 2 feet below finished grade or original ground, whichever is the lower elevation.
4. After the seal has set, backfill the remaining hole with compacted material.