

RW - 2437



3164 Gold Camp Drive  
Suite 200  
Rancho Cordova, CA 95670-6021  
U.S.A.  
916/638-2085  
FAX: 916/638-8385

August 1, 2002

AUG 06 2002

Ms. Eva Chu  
Alameda County Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

Subject: *Monitoring Well Destruction Report*  
Former Chevron No. 210-208  
6006 International Boulevard  
Oakland, California  
Delta Project No. DG20-208

Dear Ms. Chu:

Delta Environmental Consultants, Inc. (Delta) has been authorized by Chevron Products Company (Chevron) to prepare a report summarizing well destruction activities at the subject site. The location of the site is presented in Figure 1 and a site map illustrating former and current site features are shown on Figure 2. This report summarizes the activities conducted on July 17, 2002. Well destruction activities were performed under Alameda County Public Works Agency (ACPWA) permit numbers W02-0714 through W02-0716. Copies of the well destruction permits are included in Enclosure A.

### **Well Destruction**

On July 17, 2002, Vironex Environmental Field Services (C57 #705927) destroyed monitoring wells TC-1 through TC-3 by pressure grouting with neat cement in accordance with ACPWA requirements. Prior to destruction, the total depth and depth to groundwater in each well was measured. The wells were backfilled to within 12-inches of surface grade with neat cement grout mixed in accordance with ACPWA requirements. Following backfilling, the above-grade ("stove pipe") well boxes were removed. The surface was completed with native soil to match the adjacent ground surface. Monitoring well construction details for former monitoring wells TC-1 through TC-3 are included in Enclosure B.

### **Remarks/Signatures**

The interpretations contained in this document represent our professional opinions and are based, in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeological and engineering practices at this time and location. Other than this, no warranty is implied or intended.

Ms. Eva Chu  
Alameda County Health Department  
August 1, 2002  
Page 2

If you have any questions regarding this project, please contact me at (916) 536-2616.

Sincerely,

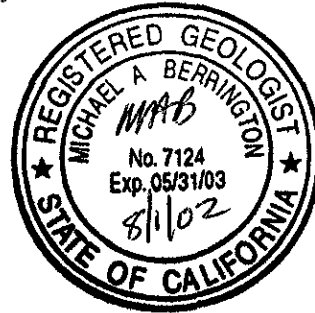
**DELTA ENVIRONMENTAL CONSULTANTS, INC.**

*Brett A. Bardsley*

Brett A. Bardsley  
Staff Geologist

*Michael A. Berrington*

Michael A. Berrington, R.G.  
Project Manager  
California Registered Geologist No. 7124



BAB (LRP004.210208)  
Enclosures

cc: Ms. Karen Streich, Chevron Products Company  
Mr. James Coles, Resources for Community Development, 2131 University Avenue, Suite 224,  
Berkeley, CA 94707  
Mr. Liu-Mei Chen, 13710 41<sup>st</sup> Avenue N, Seattle, WA 98125



R3W

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



QUADRANGLE LOCATION

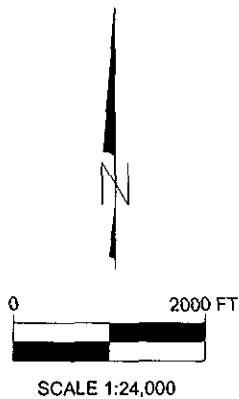


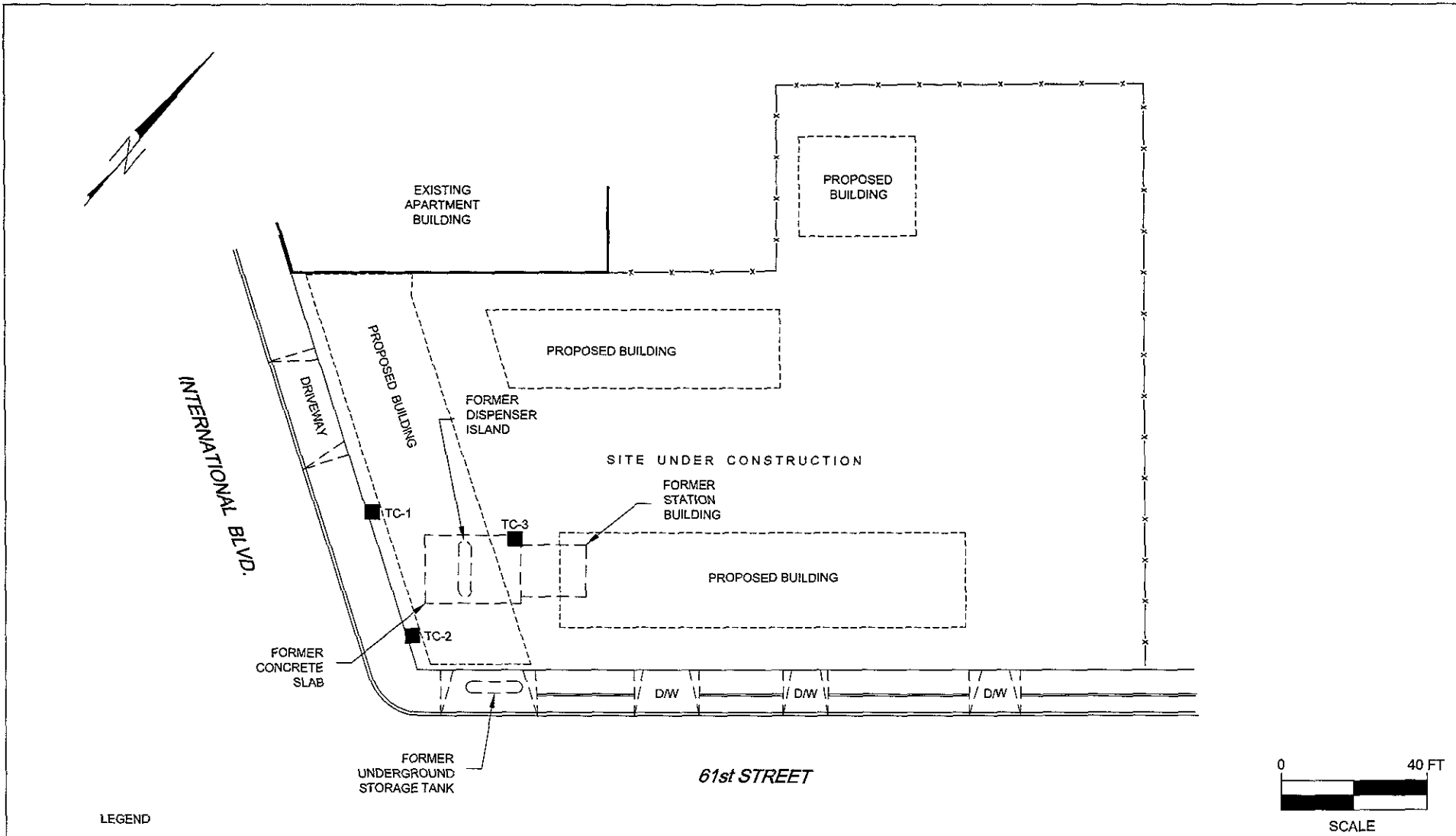
FIGURE 1

SITE LOCATION MAP

FORMER CHEVRON SERVICE STATION NO. 21-0208  
 6006 INTERNATIONAL BOULEVARD  
 OAKLAND, CALIFORNIA

PROJECT NO. DG20-208	DRAWN BY M.L. 4/5/02
FILE NO DG21208A	PREPARED BY MAB
REVISION NO. 1	REVIEWED BY





LEGEND

■ TC-1 DESTROYED MONITORING WELL LOCATION

FIGURE 2  
SITE MAP

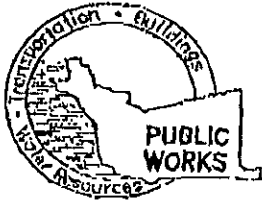
FORMER CHERVON SERVICE STATION NO. 21-0208  
6006 INTERNATIONAL BOULEVARD  
OAKLAND, CALIFORNIA

PROJECT NO. DG20-208	DRAWN BY M.L. 8/1/02
FILE NO. DG20208B	PREPARED BY MAB
REVISION NO 2	REVIEWED BY



**ENCLOSURE A**

Drilling Permits



# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**  
399 ELMHURST ST. HAYWARD CA. 94544-1395  
PHONE (510) 670-5551  
FAX (510)782-1939

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT  
Former Chevron Service Station No. 310209  
6006 International Boulevard  
Oakland, California

PERMIT NUMBER W02-0714  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

CLIENT  
Name Chevron Products Company  
Address P.O. Box 6006 Phone (925) 942-1599  
City San Ramon Zip 94593

PERMIT CONDITIONS  
Circled Permit Requirements Apply

APPLICANT  
Name Delta Environmental Consultants  
3166 Fold Camp Dr. # 200 Fax (916) 638-2385  
Address \_\_\_\_\_ Phone (916) 639-2100  
City Rancho Cordova Zip 95670

**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 original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

**TYPE OF PROJECT**

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

**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.

**PROPOSED WATER SUPPLY WELL USE**

New Domestic	Replacement Domestic
Municipal	Irrigation
Industrial	Other _____

**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.

**DRILLING METHOD:**

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

**D. GEOTECHNICAL**

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

DRILLER'S NAME VIRONEX

**E. CATHODIC**

Fill hole anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO. C57 705927

**F. WELL DESTRUCTION - Pressure Grout**

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

**WELL PROJECTS**

Drill Hole Diameter <u>3.25"</u> in.	Maximum
Casing Diameter <u>.75"</u> in.	Depth <u>20</u> ft.
Surface Seal Depth <u>4</u> ft.	Owner's Well Number <u>TC-1</u>

**G. SPECIAL CONDITIONS**

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

**GEOTECHNICAL PROJECTS**

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

ESTIMATED STARTING DATE 7/26/02

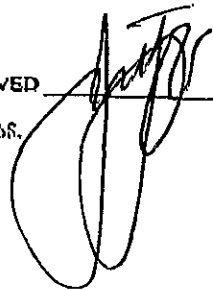
ESTIMATED COMPLETION DATE 7/26/02

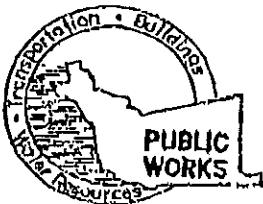
APPROVED \_\_\_\_\_ DATE 7-23-02

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

APPLICANT'S SIGNATURE Brett Bardsley DATE 7/22/02

LEASE PRINT NAME Brett Bardsley 7/22/02 Rev. 5-13-00





# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**  
399 ELMHURST ST. HAYWARD CA. 94544-1395  
PHONE (510) 678-3354  
FAX (510) 782-1939

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

**LOCATION OF PROJECT**

Former Chevron Service Station No. 21-0209  
6006 International Boulevard  
Oakland, California

PERMIT NUMBER W02-0715  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

**CLIENT**

Name Chevron Products Company  
Address P.O. Box 6004 Phone (925) 942-1589  
City San Ramon Zip 94583

**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 original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date.

**APPLICANT**

Name Delta Environmental Consultants  
Address 3164 Gold Camp Dr. #200 Phone (916) 639-2164  
City Rancho Cordova Zip 95670

**D. 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.

**TYPE OF PROJECT**

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

**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.

**PROPOSED WATER SUPPLY WELL USE**

New Domestic	Replacement Domestic
Municipal	Irrigation
Industrial	Other _____

**D. GEOTECHNICAL**

Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

**DRILLING METHOD:**

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

**E. CATHODIC**

Fill hole anode zone with concrete placed by tremie.

DRILLER'S NAME Vironex

DRILLER'S LICENSE NO. C572705927

- F. WELL DESTRUCTION - Pressure Seal  
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

**WELL PROJECTS**

Drill Hole Diameter <u>3.25</u> in.	Maximum Depth <u>20</u> ft.	Owner's Well Number <u>Tc-2</u>
Casing Diameter <u>2.75</u> in.		
Surface Seal Depth <u>4</u> ft.		

**G. SPECIAL CONDITIONS**

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

**GEOTECHNICAL PROJECTS**

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

ESTIMATED STARTING DATE 7/26/02

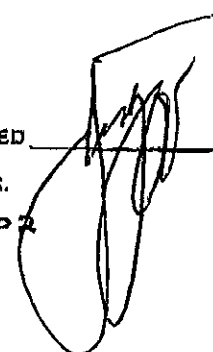
ESTIMATED COMPLETION DATE 7/26/02

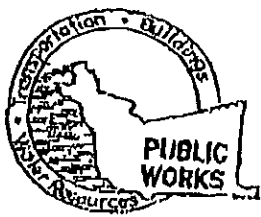
APPROVED \_\_\_\_\_ DATE 7-23-02

hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-68.

APPLICANT'S SIGNATURE Brett Bardsley DATE 7/22/02

LEASE PRINT NAME Brett Bardsley Rev. 5-13-00





# ALAMEDA COUNTY PUBLIC WORKS AGENCY

**WATER RESOURCES SECTION**  
399 ELMHURST ST. HAYWARD CA. 94544-1395  
PHONE (510) 670-5354  
FAX (510) 782-1939

## DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT  
Former Chevron Service Station No. 21-0209  
6006 International Boulevard  
Oakland, California

PERMIT NUMBER W02-0716  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

CLIENT  
Name Chevron Products Company  
Address P.O. Box 6004 Phone (925) 842-1599  
City San Ramon Zip 94583

PERMIT CONDITIONS  
Classified Permit Requirements Apply

APPLICANT  
Name Delta Environmental Consultants Fax (716) 639-9345  
Address 3144 Field Camp Dr. # 200 Phone (416) 439-2164  
City Rancho Cordova Zip 95670

- 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 original Department of Water Resources-Well Completion Report.
1. Permit is void if project not begun within 90 days of approval date

**TYPE OF PROJECT**

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

- B. WATER SUPPLY WELLS**
1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
  2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

**PROPOSED WATER SUPPLY WELL USE**

New Domestic	Replacement Domestic
Municipal	Litigation
Industrial	Other

- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
  2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

**DRILLING METHOD:**

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

- D. GEOTECHNICAL**
- Backfill hole by trowel with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

DRILLER'S NAME Vironex  
DRILLER'S LICENSE NO. CS72 705927

- E. CATHODIC**
- Fill hole anode zone with concrete placed by trowel.
- F. WELL DESTRUCTION - Pressure Star**
- Send a map of work site. A separate permit is required for wells deeper than 45 feet.

**WELL PROJECTS**

Drill Hole Diameter <u>3.25</u> in.	Maximum Depth <u>20</u> ft.
Casing Diameter <u>1.75</u> in.	Owner's Well Number <u>TC-3</u>
Surface Seal Depth <u>4</u> ft.	

- G. SPECIAL CONDITIONS**

**GEOTECHNICAL PROJECTS**

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

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

ESTIMATED STARTING DATE 7/26/02  
ESTIMATED COMPLETION DATE 7/26/02

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

APPROVED \_\_\_\_\_ DATE 7-23-02

APPLICANT'S SIGNATURE Brett Bardsley DATE 7/22/02  
BASE PRINT NAME Brett Bardsley 7/22/02



**ENCLOSURE B**

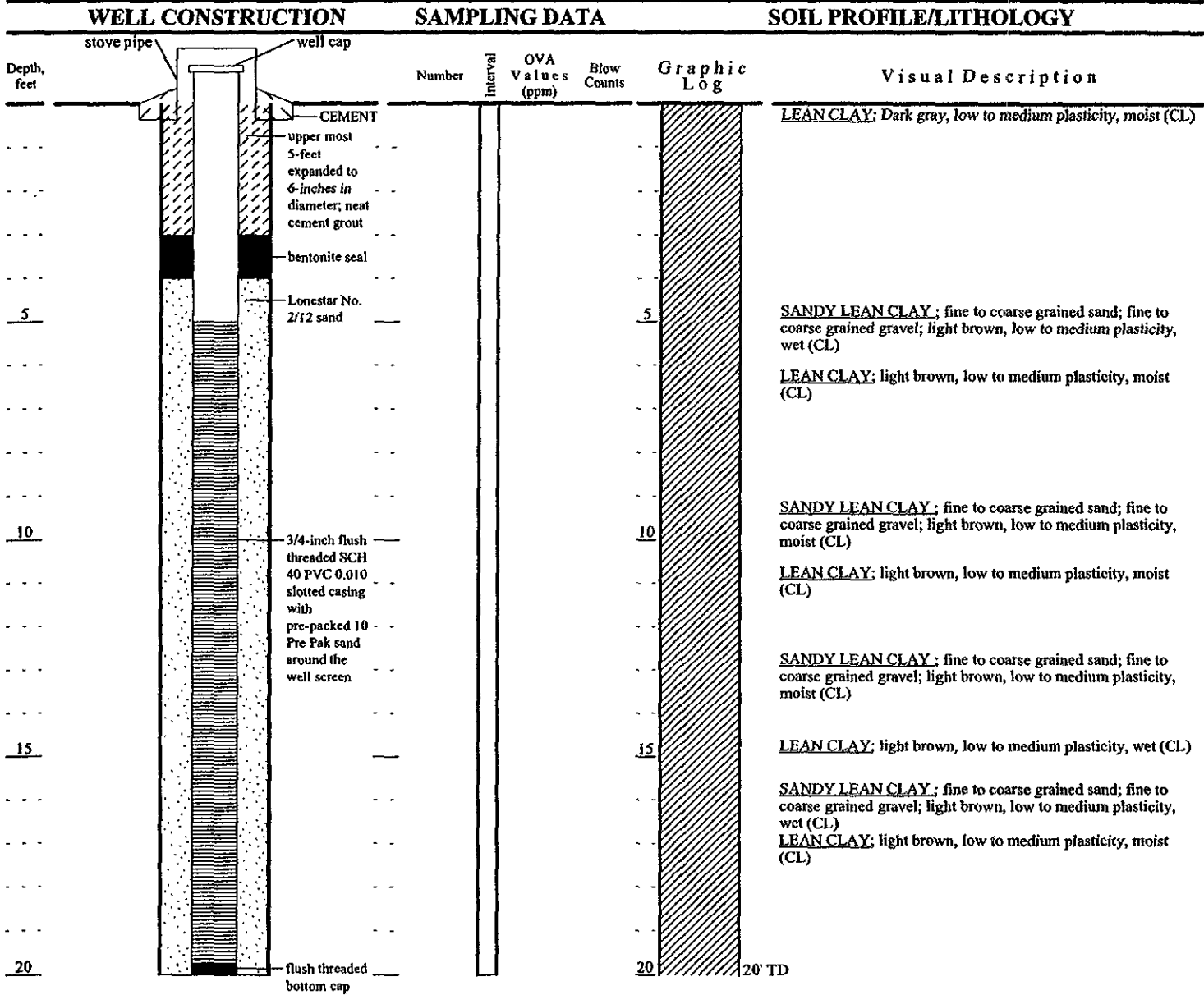
Boring Logs/Well Construction Details for Monitoring Wells TC-1 through TC-3



**Delta**  
Environmental  
Consultants, Inc.

Street Address  
**6006 International Boulevard**  
City & State  
**Oakland, California**  
Delta Project #  
**DG20-208**

Project ID  
**Chevron Station No. 21-0208**  
Surface Elev.  
**18.60'**  
Well / Boring ID  
**TC-1**  
Casing Elev.  
**22.26'**  
Total Depth  
**20'**

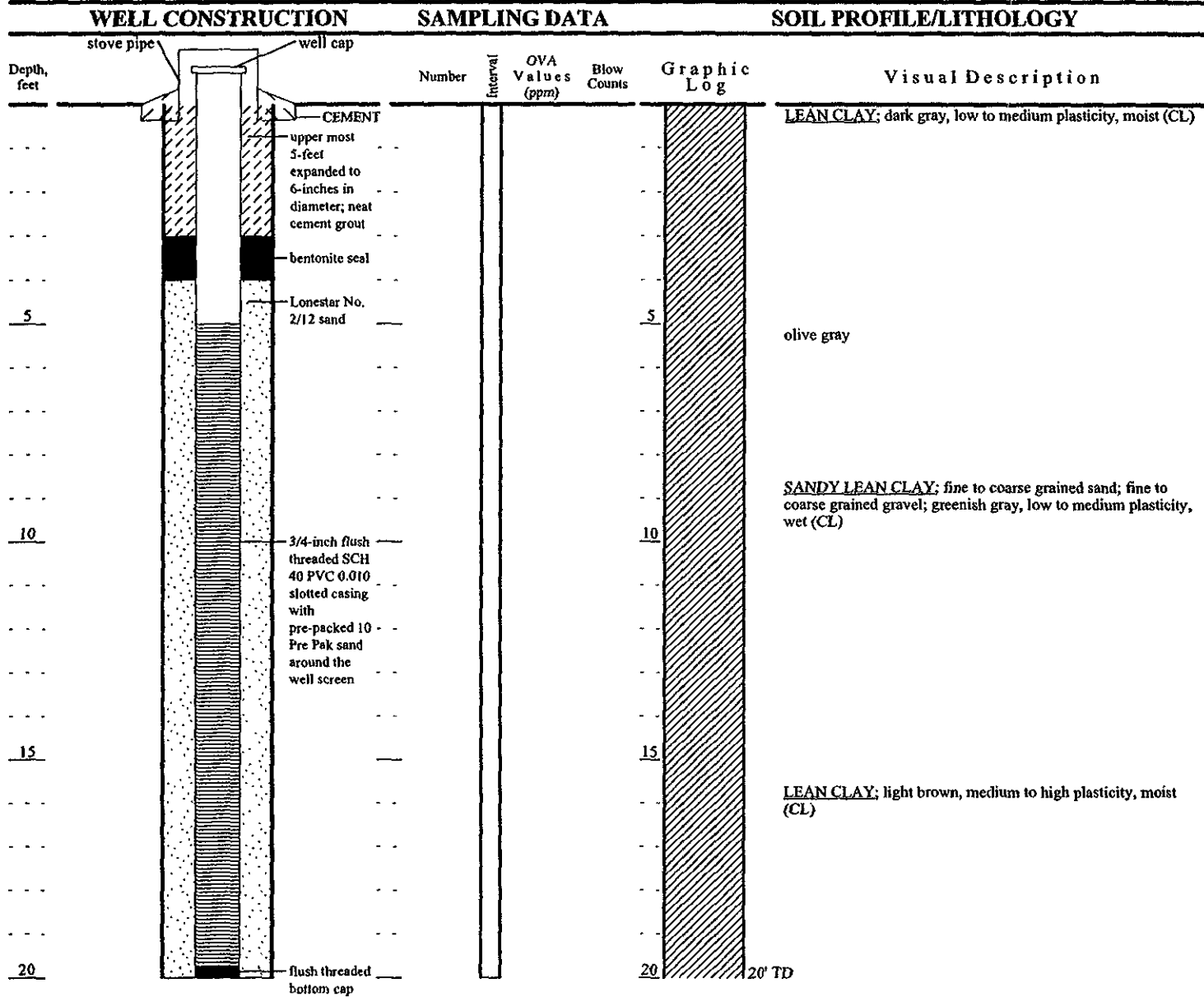


Dates and Times	Logger	Sampling Method & Diameter	Permitting Agency
Start 2/23/02 0915	Brett A. Bardsley Drilling Company & Driller Vironex, Mike Martin	Continuous Core Bore Hole Diameter 3.25-inches	Alameda County Public Works Agency Permit # W02-0210
Total Depth 2/23/02 0940	Drillers C-57H 705927	Diameter, Type & Slot Size of Casing 3/4-inch SCH 40 PVC/0.010 slot	
Completion or backfill 2/23/02 1000	Drilling Equipment and method Geoprobe Model 6600 DT, direct push		



**Delta**  
Environmental  
Consultants, Inc.

Street Address <b>6006 International Boulevard</b>	Project ID <b>Chevron Station No. 21-0208</b>	
City & State <b>Oakland, California</b>	Surface Elev. <b>18.40'</b>	Well / Boring ID <b>TC-2</b>
Delta Project # <b>DG20-208</b>	Casing Elev. <b>21.77'</b>	Total Depth <b>20'</b>

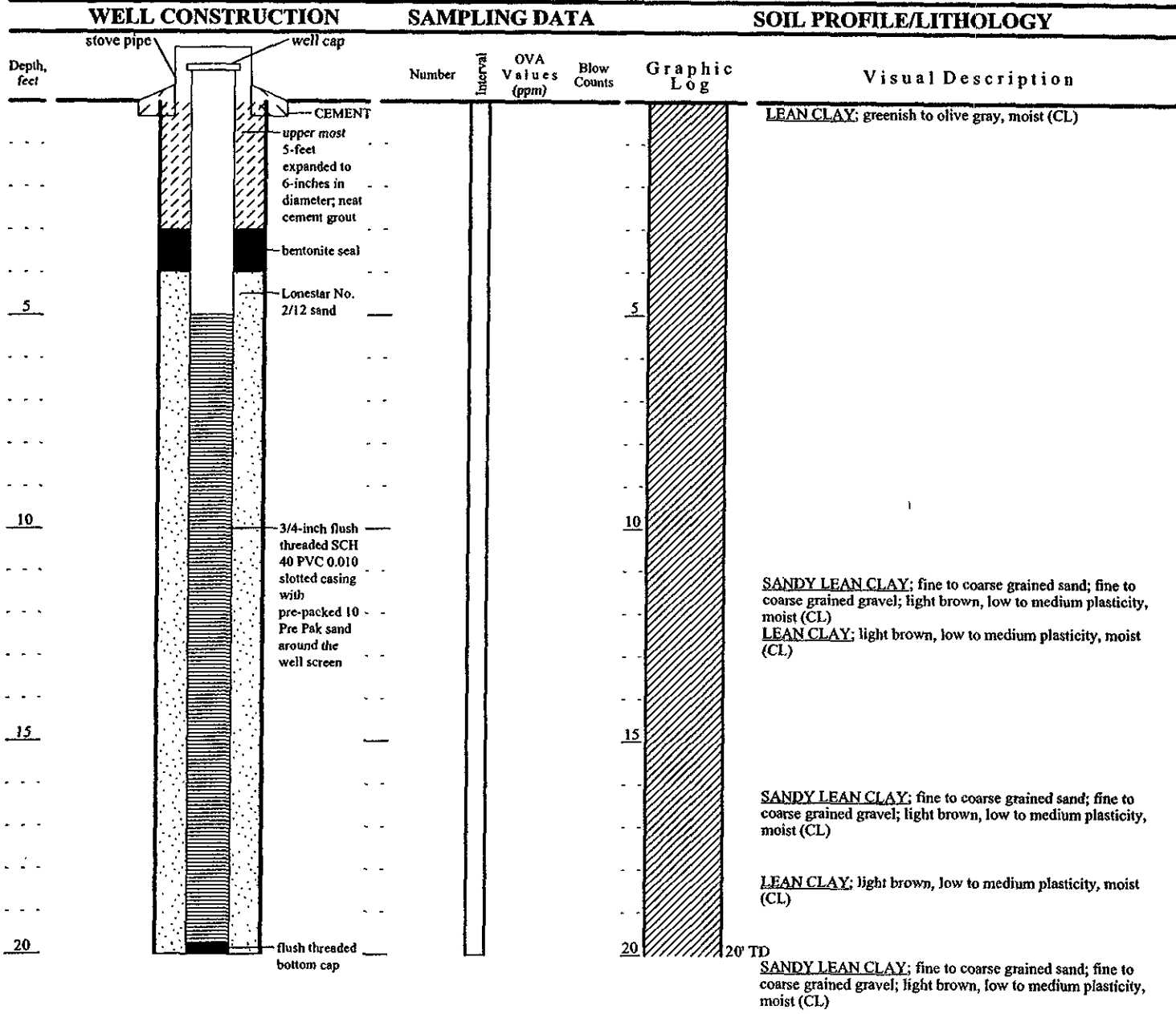


Dates and Times	Logger <b>Brett A. Bardsley</b>	Sampling Method & Diameter <b>Continuous Core</b>	Permitting Agency <b>Alameda County Public Works Agency</b>
Start <b>2/23/02 0815</b>	Drilling Company & Driller <b>Vironex, Mike Martin</b>	Bore Hole Diameter <b>3.25-inches</b>	Permit # <b>W02-0211</b>
Total Depth <b>2/23/02 0850</b>	Drillers C-57# <b>705927</b>	Diameter, Type & Slot Size of Casing <b>3/4-inch SCH 40 PVC/0.010 slot</b>	
Completion or backfill <b>2/23/02 0915</b>	Drilling Equipment and method <b>Geoprobe Model 6600 DT, direct push</b>		



**Delta**  
Environmental  
Consultants, Inc.

Street Address <b>6006 International Boulevard</b>		Project ID <b>Chevron Station No. 21-0208</b>	
City & State <b>Oakland, California</b>		Surface Elev. <b>19.30'</b>	Well / Boring ID <b>TC-3</b>
Delta Project # <b>DG20-208</b>		Casing Elev. <b>21.74'</b>	Total Depth <b>20'</b>



Dates and Times	Logger <b>Brett A. Bardsley</b>	Sampling Method & Diameter <b>Continuous Core</b>	Permitting Agency <b>Alameda County Public Works Agency</b>
Start <b>2/23/02 1000</b>	Drilling Company & Driller <b>Vironex, Mike Martin</b>	Bore Hole Diameter <b>3.25-inches</b>	Permit # <b>W02-0212</b>
Total Depth <b>2/23/02 1025</b>	Drillers C-57# <b>705927</b>	Diameter, Type & Slot Size of Casing <b>3/4-inch SCH 40 PVC/0.010 slot</b>	
Completion or backfill <b>2/23/02 1100</b>	Drilling Equipment and method <b>Geoprobe Model 6600 DT, direct push</b>		

Paul

830 - they will be here in ten to fifteen minutes

~~7.76~~ 7.76 9:00 9:10 TC-2  
8.60 9:05 2:10 TC-1