

Alameda County  
MAY 25 2005  
Environmental Health

6723 Towpath Road, Box 66  
Syracuse, NY 13214-0066

May 17, 2005

Ref. No. 17366-208

Mr. Robert W. Schultz, R.G.  
Hazardous Materials Specialist  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, California 94502

Dear Mr. Schultz:

**Re:** Site Assessment Work Plan  
Saturn of Pleasanton  
4340 Rosewood Blvd.  
Pleasanton, California

Enclosed, please find the Site Assessment Work Plan for the Saturn of Pleasanton site in Pleasanton, California.

I declare, under penalty of perjury, that based on my inquiry of those individuals responsible for obtaining the information contained in the attached report, the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge in accordance with the California Business and Professions Code (Sections 6735, 6835, and 7835.1).

Questions on the information contained herein can be directed to either Ms. Jennifer Quigley at (517) 316-2397 or Mr. Robert Siegfried at (209) 983-6810.

Yours truly,

ENCORE ENVIRONMENTAL CONSRTIUM, LLC

Robert T. Siegfried, R.G., C.E.G.

JQ/2/Lan.

cc: Val Schuster  
Deena VanCamp  
Jennifer Quigley  
Martha Darnton



ENCORE ENVIRONMENTAL CONSORTIUM, LLC  
APR 26 2005  
ALAMEDA COUNTY

**SITE ASSESSMENT WORK PLAN  
SATURN OF PLEASANTON  
4340 ROSEWOOD BOULEVARD  
PLEASANTON, CALIFORNIA**

**PREPARED FOR:**

**SATURN RETAIL OF SOUTH CAROLINA, LLC**

**ENCORE ENVIRONMENTAL CONSORTIUM, LLC**

**DATE: April 26, 2005**



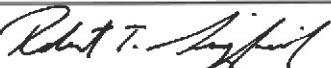
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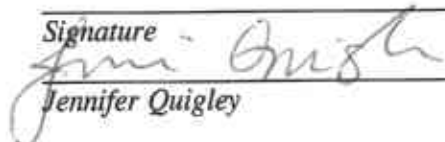
**SATURN RETAIL OF SOUTH CAROLINA, LLC**

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**DATE: April 26, 2005**

*Signature*   
\_\_\_\_\_  
*Robert Siegfried, RG 3848, CEG 1647*

*Author*

*Signature*   
\_\_\_\_\_  
*Jennifer Quigley*

*Senior Reviewer*



## TABLE OF CONTENTS

	<u>Page</u>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 PURPOSE .....	1
1.2 SITE LOCATION .....	1
1.3 WORK PLAN ORGANIZATION .....	1
<b>2.0 SITE BACKGROUND.....</b>	<b>2</b>
2.1 SITE HISTORY .....	2
2.2 SUMMARY OF REMEDIAL ACTIVITIES .....	2
<b>3.0 SITE SETTING.....</b>	<b>5</b>
3.1 TOPOGRAPHY AND LAND USE .....	5
3.2 GEOLOGY .....	5
3.3 HYDROGEOLOGY .....	5
3.4 CURRENT SITE ENVIRONMENTAL CONDITIONS .....	5
<b>4.0 SAMPLING AND ANALYSIS PLAN.....</b>	<b>7</b>
4.1 CHEMICALS OF CONCERN.....	7
4.2 CERTIFIED LABORATORY AND CHAIN OF CUSTODY PROCEDURES .....	7
4.3 SAMPLING PROCEDURES AND SAMPLE MANAGEMENT .....	7
4.3.1 SOIL PROCEDURES AND MANAGEMENT.....	7
4.3.2 GROUNDWATER VAS PROCEDURES.....	8
4.3.3 QUALITY ASSURANCE/QUALITY CONTROL.....	8
4.3.4 DECONTAMINATION PROCEDURES.....	8
4.3.5 METHOD DETECTION LIMITS AND PRESERVATION PROTOCOLS .....	9
4.3.6 FIELD SCREENING INSTRUMENTS AND CALIBRATION PROTOCOLS .....	9
<b>5.0 SITE ASSESSMENT SCOPE OF WORK.....</b>	<b>10</b>
5.1 SITE ACCESS AND NOTIFICATION.....	10
5.2 SOIL BORING INVESTIGATION WITH VERTICAL AQUIFER SAMPLING (VAS).....	10
5.3 SAMPLE ANALYSIS AND VALIDATION.....	11
5.4 REPORTING .....	11
6.0 SCHEDULE.....	12

## **LIST OF APPENDICES**

### **APPENDIX A – FIGURES**

Figure 1 – Site Location

Figure 2 – Site Plan

Figure 3 – Proposed Soil Boring and VAS Locations

Figure 4 – Historical Groundwater VOC Concentrations

### **APPENDIX B – Stratigraphic Boring Logs**

### **APPENDIX C – TCL VOC Method Detection Limits**

## **1.0 INTRODUCTION**

Encore Environmental Consortium, LLC (EEC) has prepared this Site Assessment Work Plan (Work Plan) on behalf of Saturn Retail of South Carolina, LLC (Saturn) for the Saturn of Pleasanton site located in Pleasanton, California (Site). The Site Assessment Work Plan describes investigation tasks designed to obtain information to adequately determine impacts to the Site soil and groundwater due to Site operations.

### **1.1 PURPOSE**

The purpose of this Site Assessment Work Plan is to present the protocols to be used to complete the proposed additional investigation activities. The work plan will include:

- A subsurface investigation, including vertical aquifer sampling (VAS), to further delineate the extent of volatile organic compound (VOC) impact at the Site to the south of the oil-water separator (OWS).
- Vertical soil profiling in the vicinity of the OWS to the groundwater table.

### **1.2 SITE LOCATION**

The Site is located at 4340 Rosewood Boulevard in Pleasanton, California, as presented in Figure 1. Figure 2 presents a Site Plan. The Site is located in a mixed commercial and residential area, northwest of downtown Pleasanton. The parcel is comprised of approximately 1.9 acres of land

### **1.3 WORK PLAN ORGANIZATION**

The remainder of this Site Assessment Work Plan is organized as follows:

Section 2.0 – describes the Site background, history, and past remedial investigations and actions.

Section 3.0 – describes Site setting, including area demographics, Site geology, and hydrogeology, and current Site conditions.

Section 4.0 – presents the sampling and analysis plan for the Site activities.

Section 5.0 – presents the proposed investigation scope of work.

Section 6.0 – presents the proposed schedule for the Site Assessment Work Plan implementation.

## 2.0 SITE BACKGROUND

### 2.1 SITE HISTORY

The Site is located in a mixed commercial and residential area, northwest of downtown Pleasanton, California. The Site is currently an active automobile dealership, service shop, automobile detailing area, and employee parking lot.

The entire Saturn of Pleasanton dealership encompasses three separate parcels, designated as Parcels A, B, and C. The parcel which the Work Plan will be initiated on is Parcel A, located at 4340 Rosewood Drive, which consists of approximately 1.9 acres containing the Saturn dealership/repair building and asphalt parking areas.

### 2.2 SUMMARY OF REMEDIAL ACTIVITIES

Previous investigations and/or remedial activities conducted at the Site include the following:

- Phase I-II Hybrid Environmental Site Assessment (HEA) report prepared by EEC and dated December 5, 2002;
- Oil/Water Separator Removal and Replacement report prepared by EEC and dated September 17, 2003; and
- Summary of Preliminary Groundwater Investigation Activities prepared by EEC and dated October 10, 2003.

#### Phase I-II HEA

The Phase I-II HEA was conducted in general accordance with ASTM Standard E1527-00 for Phase I ESA for the Site by EEC in November 2002. The due diligence activities consisted of an agency file review, interviews with Site personnel, and a Site walkthrough. As a part of the Phase I portion of the due diligence activities, the OWS was identified as a recognized environmental condition (REC).

Based on the results of the Phase I ESA portion of the Phase I-II HEA, Phase II ESA subsurface investigation activities were conducted by EEC on December 2, 2002. To investigate the OWS, one soil boring, DP-11, was installed adjacent to the unit to approximately 28 feet bgs. One grab groundwater sample was collected from the soil boring annulus for analysis for Target Compound List (TCL) volatile organic compounds (VOCs) and total petroleum hydrocarbons gasoline range organics (TPH GRO). Based on the analytical results, benzene, cis-1,2-dichloroethene (cis-1,2-DCE), and trichloroethene (TCE) were detected in the groundwater sample at concentrations of 6.3 µg/L, 17 µg/L, and 120 µg/L, respectively, which are above the California Maximum Contaminant Level (MCLs) of 1.0 µg/L, 6.0 µg/L, and 5.0 µg/L, respectively. Ethylbenzene, xylenes, 1,1-dichloroethene (1,1-DCE), trans-1,2-DCE, and tetrachloroethene (PCE) were detected in the groundwater sample at concentrations above the laboratory detection limits, but below the applicable California MCLs. TPH GRO was detected in the groundwater sample at a concentration of 330 µg/L; however, there is no MCL criterion promulgated in the State of California for TPH-GRO.

#### OWS Removal and Replacement

Based on the elevated concentrations of VOCs and TPH GRO in the vicinity of the OWS, EEC recommended that the OWS be removed and replaced. A summary of the OWS removal and replacement activities was submitted to the Livermore-Pleasanton Fire Department and the Alameda County

Department of Environmental Health (ACDEH), and dated February 10, 2003. OWS removal and replacement activities were conducted between July 7, 2003 and July 31, 2003.

Prior to the initiation of the OWS removal and replacement activities, approximately 1,800 gallons of wastewater present in the OWS was removed, characterized, and disposed. Approximately 60 cubic yards of impacted soil from the OWS excavation were transported off-Site between August 7, 2003 and August 11, 2003 for off-Site landfill disposal as non-hazardous waste.

During the removal and replacement activities, 15 soil samples (BW-1, BE-2, WW-3, EW-4, SW-5, NW-6, EW-7, NW-8, BW-9, BE-10, NW-11, WW-12, EW-13, and SW-14) were collected from the OWS excavation. Sample BW-9 was divided into two samples from the same area, resulting in a total of 15 soil samples.

Three rounds of soil samples were collected from the OWS excavation and submitted for laboratory analysis on a 24 hour turnaround time (TAT) for parameters requested by the Livermore Pleasanton Fire Department (LPPD) and the ACDEH. Groundwater was not encountered during the Phase IV activities.

Soil samples collected during rounds 1 and 2 were analyzed for VOCs, TPH DRO, and TPH GRO. Soil samples collected during round 3 were analyzed for VOCs, semi-volatile organic compounds (SVOCs), selected metals (cadmium, chromium, copper, lead, nickel, and zinc), and total oil and grease (TOG).

Based on the analytical results, of the constituents detected during the first round of sampling, only cis-1,2-DCE, detected at concentrations ranging from 0.28 milligrams per kilogram (mg/kg) to 2.4 mg/kg from samples BW-1, EW-4, SW-5, and NW-6, exceeded the San Francisco Regional Water Quality Control Board (RWQCB) Risk Based Screening Level (RBSL) criterion of 0.19 mg/kg. No constituents were detected in soil above the applicable RWQCB RBSL for soil samples EW-7 or NW-8 during the second round of sampling. Of the VOC constituents detected during the third round of sampling, only cis-1,2-DCE, detected at a concentration 0.87 mg/kg and acetone, detected at a concentration of 0.55 mg/kg from sample BW-9 exceeded the applicable RWQCB RBSL criteria. Chromium was also detected in all the round three samples at concentrations ranging from 31 mg/kg to 37 mg/kg, exceeding the most stringent RWQCB RBSL criterion of 13 mg/kg.

Based on the review of the analytical results for the sampling rounds by the ACDEH, verbal approval to install the new OWS was provided to EEC on July 25, 2003, and written approval to install the new OWS was provided to EEC on July 28, 2003.

Installation of one concrete OWS by a licensed contractor was performed following written agency approval. Restoration of the Site including the replacement of asphalt, repainting of parking spaces affected by the Phase IV activities, removal of excavated soils for off-Site disposal, and minor repairs to an area of damaged stucco material.

#### Summary of Preliminary Groundwater Investigation Activities

A Summary of Preliminary Groundwater Investigations Activities letter, dated October 10, 2003, was submitted to the Zone 7 Flood Control District of California.

Due to the nature of the VOCs detected in the groundwater in the vicinity of the OWS during previous investigations, a preliminary subsurface investigation was conducted at the Site in May 2003. A total of eight soil borings (SP-1 through SP-8) were advanced utilizing direct push techniques to depths of approximately 26 to 32 feet bgs in the vicinity of the OWS to further define the horizontal extent of VOCs in groundwater. A total of eight groundwater samples were collected from the borings through a 0.75-inch inside diameter stainless steel screen by advancing an expandable drive point into each direct



push boring. Groundwater was induced to the surface using new, dedicated, teflon tubing fitted with a small check valve. Groundwater samples were collected for analysis of TCL VOCs. Soil borings SP-1 through SP-4 were advanced on May 13, 2002 and soil borings SP-5 through SP-8 were advanced on May 28, 2003 based on the analytical results of groundwater samples collected from SP-1 through SP-4.

Based on analytical results, cis-1,2-DCE was detected in the groundwater samples collected from SP-1 and SP-3 at concentrations of 47  $\mu\text{g/L}$  and 9  $\mu\text{g/L}$ , respectively, which are above the MCL of 6.0  $\mu\text{g/L}$ . TCE was detected in the groundwater samples collected from SP-1, SP-3, and SP-8 at concentrations of 26  $\mu\text{g/L}$ , 15  $\mu\text{g/L}$ , and 38  $\mu\text{g/L}$ , respectively, which are above the MCL of 5.0  $\mu\text{g/L}$ . MTBE was detected in the groundwater samples collected from SP-1 and SP-3 at concentrations of 62  $\mu\text{g/L}$  and 29  $\mu\text{g/L}$ , respectively, which are above the MCL of 13  $\mu\text{g/L}$ .

The summary of preliminary groundwater investigation activities conducted by EEC concluded that the horizontal extent of the VOC contamination in shallow groundwater at concentrations above the MCLs had been delineated to the north, west, and east of the OWS. The horizontal extent of TCE contamination in shallow groundwater at concentrations above the MCLs had not been delineated to the south of the OWS.

### 3.0 SITE SETTING

#### 3.1 TOPOGRAPHY AND LAND USE

The Site is relatively flat and is located in a mixed commercial and residential area, northwest of downtown Pleasanton, California. The Site is currently an active automobile dealership and employee parking lot.

#### 3.2 GEOLOGY

The Site is located within the Livermore-Alameda Valley situated within the Coastal Ranges of Central California. The Livermore-Alameda Valley contains Quaternary Alluvial deposits. The deposits typically consist of crudely interbedded clayey silt, silty clay, and clayey sands intercalated with sand and gravel lenses. Information regarding the geologic conditions at the Site was collected during EEC's Preliminary Groundwater Investigation (PGWI) activities. Stratigraphic logs for the boreholes installed during the PGWI are presented in Appendix B.

The Site is underlain by light brown clayey silt and brown silty clay with occasional sandy stringers. The upper clayey silt/silty clay is underlain by dark brown saturated plastic clay. A predominant sand layer is present at approximately 24 to 28 feet bgs, which supplied groundwater to the individual soil borings. While static groundwater levels were not reached while the borings were open, static groundwater is estimated to be present at approximately 14 feet bgs.

#### 3.3 HYDROGEOLOGY

There are no surface water bodies at the Site. The nearest surface water body is the Tassajara Creek, located approximately 200 feet west of the Site. Based on data collected during previous due diligence activities, the depth to shallow groundwater at the Site is 26 feet bgs. Based on available information, regional shallow groundwater flow varies, but would be anticipated to be to the southwest in the vicinity of the Site.

As indicated above, depth to static groundwater is estimated at approximately 14 feet bgs. This depth is consistent with information collected by the Zone 7 Water Agency (Zone 7), which oversees groundwater management within the Livermore-Alameda Valley groundwater basin. The Zone 7 Semi-Annual Groundwater Gradient Map indicates that the upper aquifer groundwater flow at the Site is to the south at 0.013 ft/ft. Zone 7 indicates that several Municipal Supply Wells (receptors) are located approximately one mile south of the Site; however, no receptors are located within a half-mile radius of the Site. In addition, a private supply well is shown approximately 300 feet west of the Site.

#### 3.4 CURRENT SITE ENVIRONMENTAL CONDITIONS

The source of the impacts to the Site groundwater was determined to be the OWS located east of the service area outside of the building.

The horizontal extent of the VOC contamination in the vicinity of the OWS is delineated to the north, west, and east. The horizontal extent of TCE contamination in the vicinity of the OWS is not delineated to the south. The vertical extent of the VOC contamination has not been determined at the Site. Free

product has not been historically observed at the Site. Historical groundwater VOC concentrations are provided on Figure 4.

As referenced in Section 2.2 of this Work Plan, benzene, TCE, cis-1,2-DCE, and MTBE were detected above comparable regulatory criteria in groundwater samples collected from soil borings advanced in the vicinity of the OWS. Cis-1,2-DCE and chromium were detected above comparable regulatory criteria in soil samples collected from the OWS excavation during removal and replacement activities.

Chemicals that may have drained to the oil-water separator include car wash chemicals from car washing activities and washwater from the service area floors containing diluted/dissolved concentrations of vehicle fluids.

To the best of EEC's knowledge, there have been no known release to the OWS. Based upon review of available information to date and the Site inspection conducted during the Phase I-II HEA, it is EEC's opinion that the source of the VOC contamination in shallow groundwater is from the OWS.

## 4.0 SAMPLING AND ANALYSIS PLAN

The Sampling and Analysis Plan (SAP) for the Site Assessment Work Plan activities is presented below.

### 4.1 CHEMICALS OF CONCERN

As referenced in Section 2.2 of this Work Plan, benzene, TCE, cis-1,2-DCE, and MTBE were detected above comparable regulatory criteria in groundwater samples collected from soil borings advanced in the vicinity of the OWS. Cis-1,2-DCE and chromium were detected above comparable regulatory criteria in soil samples collected from the OWS excavation during removal and replacement activities.

### 4.2 CERTIFIED LABORATORY AND CHAIN OF CUSTODY PROCEDURES

Severn Trent Laboratories, Inc. located in North Canton, Ohio will serve as the certified laboratory. Chain-of-custody (COC) procedures will follow regulatory agency guidelines for site-specific sampling plans and will include, at a minimum:

- Site name;
- Signature of sampler;
- Date and time of sample collection;
- Sample identification numbers;
- Number of containers in sample set;
- Description of sample and containers; and,
- Name and signature of persons, and the companies or agencies they represent, who are involved in the chain of possession.

### 4.3 SAMPLING PROCEDURES AND SAMPLE MANAGEMENT

#### 4.3.1 SOIL PROCEDURES AND MANAGEMENT

Soil samples will be obtained using a Geoprobe® direct push drill rig with dual tubes. A minimum of one soil sample will be collected at every five-foot interval until groundwater is encountered. Discrete soil samples will be collected at other intervals, if warranted by field observation or screening with a photoionization detector (PID), to more accurately define the extent of impact to groundwater. Soil samples will not be collected below the water table.

Of the soil samples collected from each boring, only those samples exhibiting the greatest evidence of impact based on field observations or screening with a PID and the first sample beneath the impacted interval exhibiting no evidence of impact will be submitted for laboratory analysis. In the event that none of the soil samples exhibit evidence of impact, the soil sample collected immediately above the water table will be submitted for laboratory analysis. One soil sample per boring, for a total of two soil samples will be submitted for laboratory analysis.

The soil samples will be analyzed for TCL VOCs by USEPA Method 8260.

Soil samples will be submitted to the laboratory in segments removed from the plastic Macrocore® liners utilized by the Geoprobe® drill rig, sealed with plastic sheets and end caps, then appropriately labeled with a unique sample identification number, the sampler's initials, the sample date, the sample time, and the requested laboratory analysis. The sample containers will be placed on ice for preservation during delivery to the laboratory using the chain-of-custody procedures in Section 4.2.

#### **4.3.2 GROUNDWATER VAS PROCEDURES**

Discrete water samples will be collected utilizing hydropunch techniques at 10-foot intervals beginning at the water table and continuing to the terminus of the soil boring at the confining layer or a total depth of 75 feet bgs, whichever is encountered first, as directed by EEC personnel. Approximately 12 groundwater samples will be collected, based on the groundwater elevation, for laboratory analysis.

The discrete water samples will be analyzed for TCL VOCs by USEPA Method 8260M.

The water samples will be appropriately labeled with a unique sample identification number, the sampler's initials, the sample date, the sample time, and the requested laboratory analysis. The sample containers will be placed on ice for preservation during delivery to the laboratory using the chain-of-custody procedures in Section 4.2.

#### **4.3.3 QUALITY ASSURANCE/QUALITY CONTROL**

During the advancement of the Geoprobe® borings, sample collection, and field analysis, a Quality Assurance/Quality Control (QA/QC) program will be employed. The QA/QC procedures will include, but are not limited to, the following:

- Cleaning of drilling equipment prior to use at each boring location;
- Decontamination of sampling equipment prior to each sampling event;
- Proper calibration of field equipment;
- Chain of custody protocol for laboratory analysis to ensure sample integrity; and
- Documentation of field procedures.

#### **4.3.4 DECONTAMINATION PROCEDURES**

Prior to sampling, all non-disposable sampling equipment will be washed in an Alconox solution then rinsed with distilled water. Nitrile gloves and plastic bags will be disposed of between sampling intervals to prevent cross contamination of samples.

#### **4.3.5 METHOD DETECTION LIMITS AND PRESERVATION PROTOCOLS**

The TCL VOC method detection limits (MDLs) will vary depending on sample specific preparation factors. The TCL VOC MDLs are presented in Appendix C. The resulting MDL when each sample is analyzed will be utilized for reporting purposes. As described above, samples will be preserved on ice then sent to the laboratory utilizing either a same day courier or an overnight delivery service, such as Federal Express, etc.

#### **4.3.6 FIELD SCREENING INSTRUMENTS AND CALIBRATION PROTOCOLS**

A portion of each recovered soil sample will be placed into a zip-lock plastic bag, sealed, and allowed to equilibrate to the ambient air temperature. A photoionization detector (PID) will be utilized to measure and record the organic vapor concentration in the headspace of each bag. The PID will be calibrated with 100 parts per million (ppm) isobutylene gas prior to the sampling activities.

## 5.0 SITE ASSESSMENT SCOPE OF WORK

The following sections describe the proposed investigation activities, which form the Site Assessment Work Plan. The field activities will be conducted in accordance with a Site-specific Health and Safety Plan (HASP), which will be developed prior to implementation of investigation activities.

### 5.1 SITE ACCESS AND NOTIFICATION

Access to the Site will be confirmed through Saturn and Saturn of Pleasanton.

Mobilization to the Site to complete the Site Assessment Work Plan Tasks will commence upon the acceptance of the work plan by the ACDEH.

### 5.2 SOIL BORING INVESTIGATION WITH VERTICAL AQUIFER SAMPLING (VAS)

A subsurface investigation will be conducted to determine the horizontal and vertical extent of the VOC contamination in soil and groundwater in the vicinity of the OWS. The horizontal extent of VOC contamination in groundwater is not delineated to the south of the OWS and the vertical extent of VOC contamination in soil has not been delineated; therefore, soil borings, including VAS, will be advanced to determine the extent of contamination.

One soil boring (SB-9) will be advanced at the location of DP-11, in the vicinity of the OWS utilizing direct push Geoprobe® techniques in order to determine the Site-specific geology of the Site and determine the intervals and locations of the VAS samples. The soil boring will be advanced to a maximum depth of 75 feet bgs. Soil samples will be collected continuously using 4-foot long macrocore samplers and logged to determine the stratigraphy in the area of the OWS.

Two soil borings will be installed, including soil sampling and VAS, at the Site utilizing direct push Geoprobe® techniques. One soil boring with VAS (SB-VAS-1) will be advanced within the known area of TCE contamination (DP-11) and one soil boring with VAS (SB-VAS-2) will be advanced to the south of the OWS location. Soil borings shall be advanced at the designated locations using a Geoprobe® equipped with hydropunch capabilities to collect the VAS samples. Soil samples will be collected at 4-foot intervals utilizing a 4-foot long macrocore sampler.

Discrete groundwater samples will be collected utilizing the hydropunch method. Once the well point is advanced to the desired depth for groundwater sample collection, the outer casing will be retracted to expose a stainless steel screen through which the groundwater sample will be collected. Discrete groundwater samples will be collected from each soil boring at 10-foot intervals beginning at the water table, dependent upon stratigraphic conditions determined during the installation of SB-9. If the stratigraphy indicates that the type of formation encountered will not yield sufficient groundwater to support sample collection (i.e., tight clays or silts), then a sample will be collected at the next appropriate interval, at the discretion of a California certified geologist. VAS samples will be collected in laboratory approved and provided containers and shipped to the laboratory for TCL VOC analysis.

Soil borings will be advanced to a depth of approximately 75 feet bgs, as determined by EEC personnel. Concrete coring of approximately four-inch thick concrete will be performed, as necessary. Concrete will be patched after completion of drilling activities. Soil samples will be collected continuously using 4-foot long macrocore samplers at each location.

Soil cuttings will be screened with an 11.7 eV bulb PID and examined for visual/olfactory indication of contamination. All soil cuttings will be containerized in DOT approved 55-gallon drums and labeled for future characterization.

### **5.3 SAMPLE ANALYSIS AND VALIDATION**

Grab groundwater samples collected during the investigation activities from the VAS will be submitted for laboratory analysis for TCL VOCs on a standard two-week turn around time (TAT).

Validation of analytical data will be performed by EEC's QA Officer utilizing the "U.S. EPA Contract Laboratory Program National Function Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999 and "U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA-540/R-94-013, February 1994 (CLP National Functional Guidelines). The specific data qualifiers used will be as presented and defined in the CLP National Functional Guidelines. Validation will be performed by trained EEC chemists at the direction of the EEC QA officer.

### **5.4 REPORTING**

Once data have been received and validated, as appropriate, EEC will prepare a Site Assessment Investigation Report. The Site Assessment Investigation Report will present a compilation and evaluation of the data collected during the Site Assessment activities and previous investigations, and present Saturn's proposed future activities for the Site.

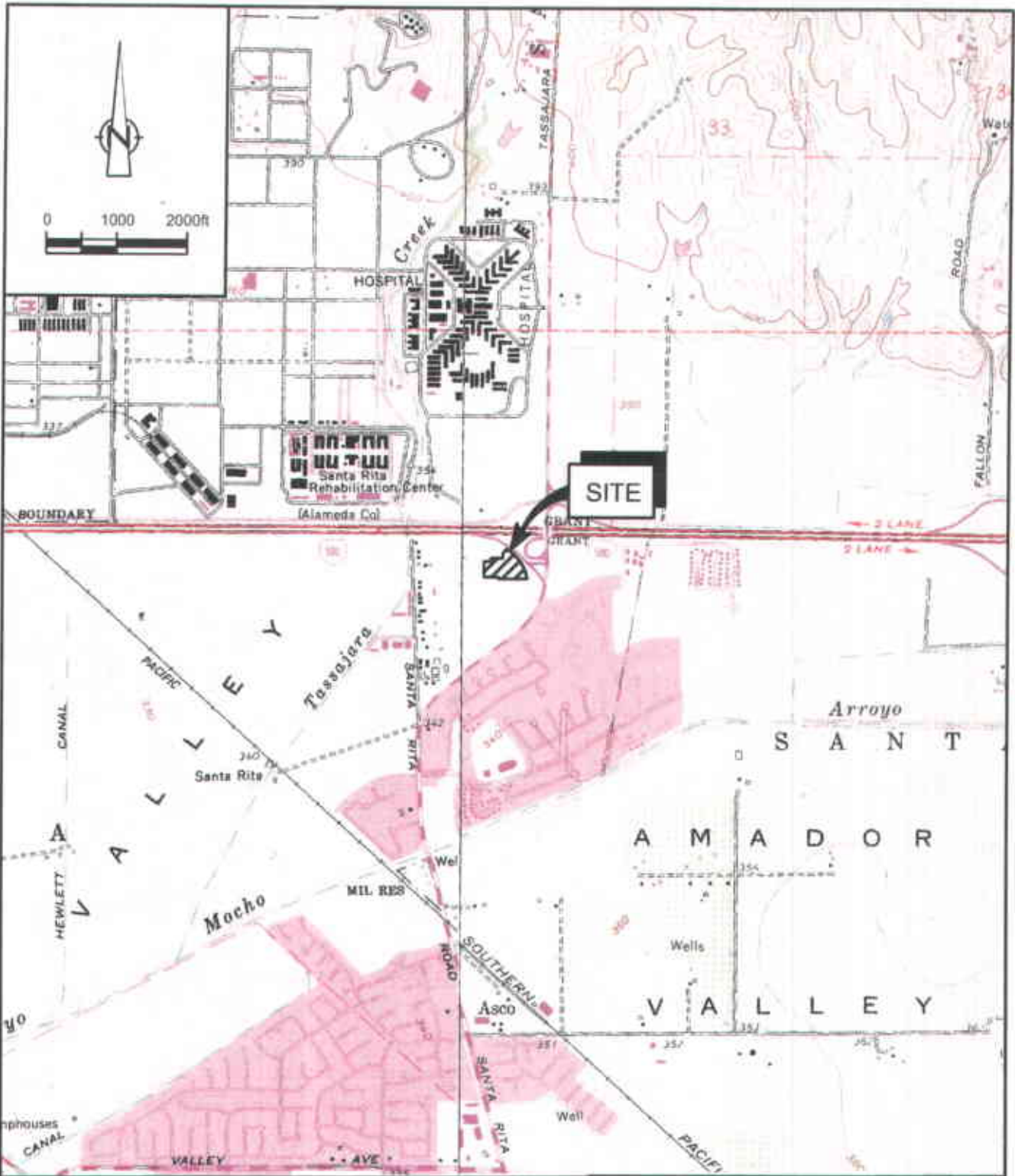
### **5.5 ADDITIONAL INVESTIGATIVE ACTIVITIES**

If, based on the results of the subsurface investigation discussed above, concentrations of VOCs in groundwater and/or soil are determined to be above the applicable criteria, additional soil borings and/or VAS will be advanced at the Site. The proposed locations will be provided to the ACEHD and upon receipt of approval to proceed at those locations, the work will proceed in accordance with the protocol provided above.



## 6.0 SCHEDULE

Site Assessment Investigation activities will be scheduled following approval of Work Plan by the ACDEH.



SOURCE: USGS QUADRANGLE MAP,  
LIVERMORE AND DUBLIN, CALIFORNIA

SATURN OF PLEASANTON  
4340 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA

SITE LOCATION

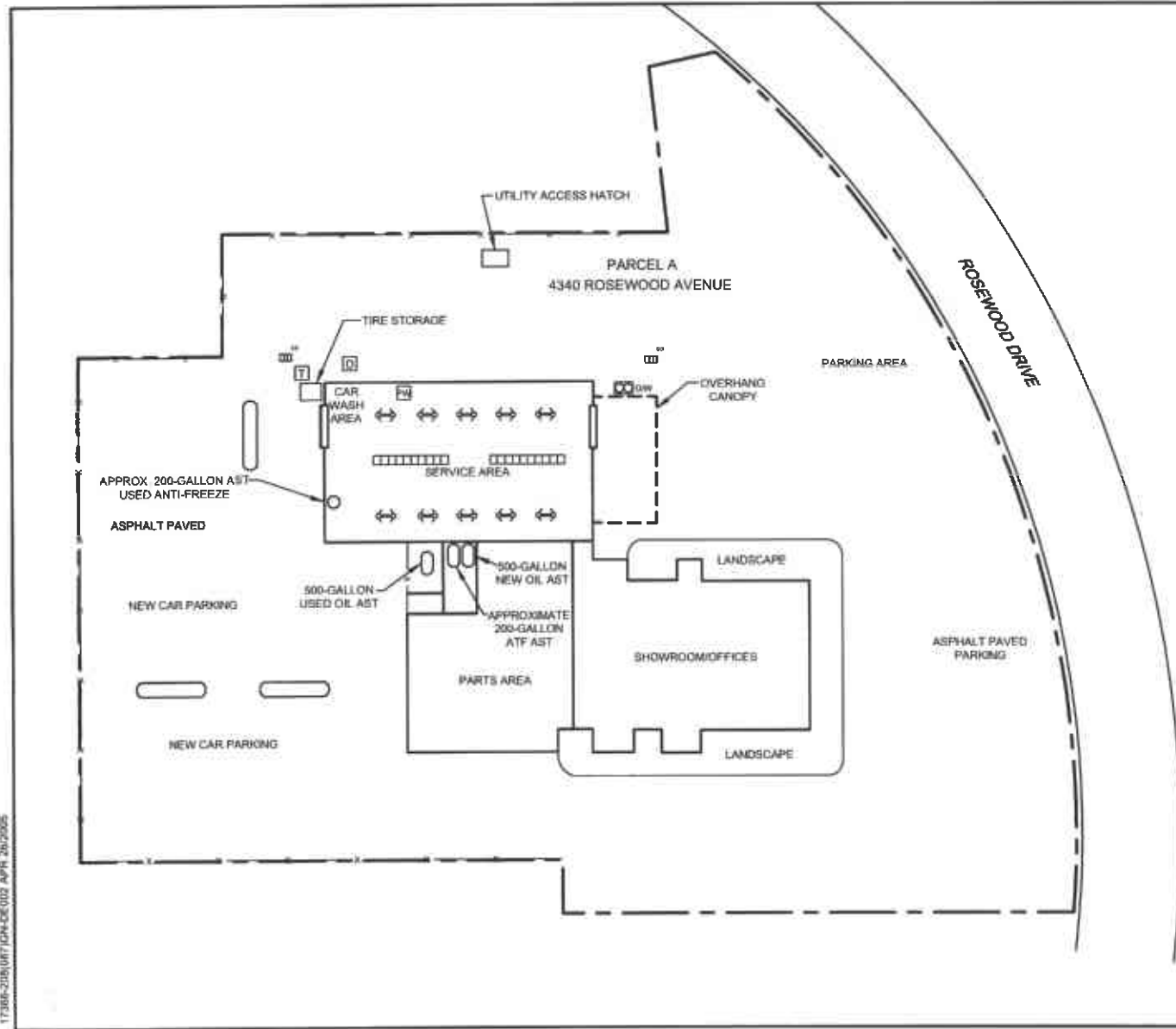


SCALE: 1"=2000'

DECEMBER 2004

FIGURE 1

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NOT TO SCALE

**LEGEND**

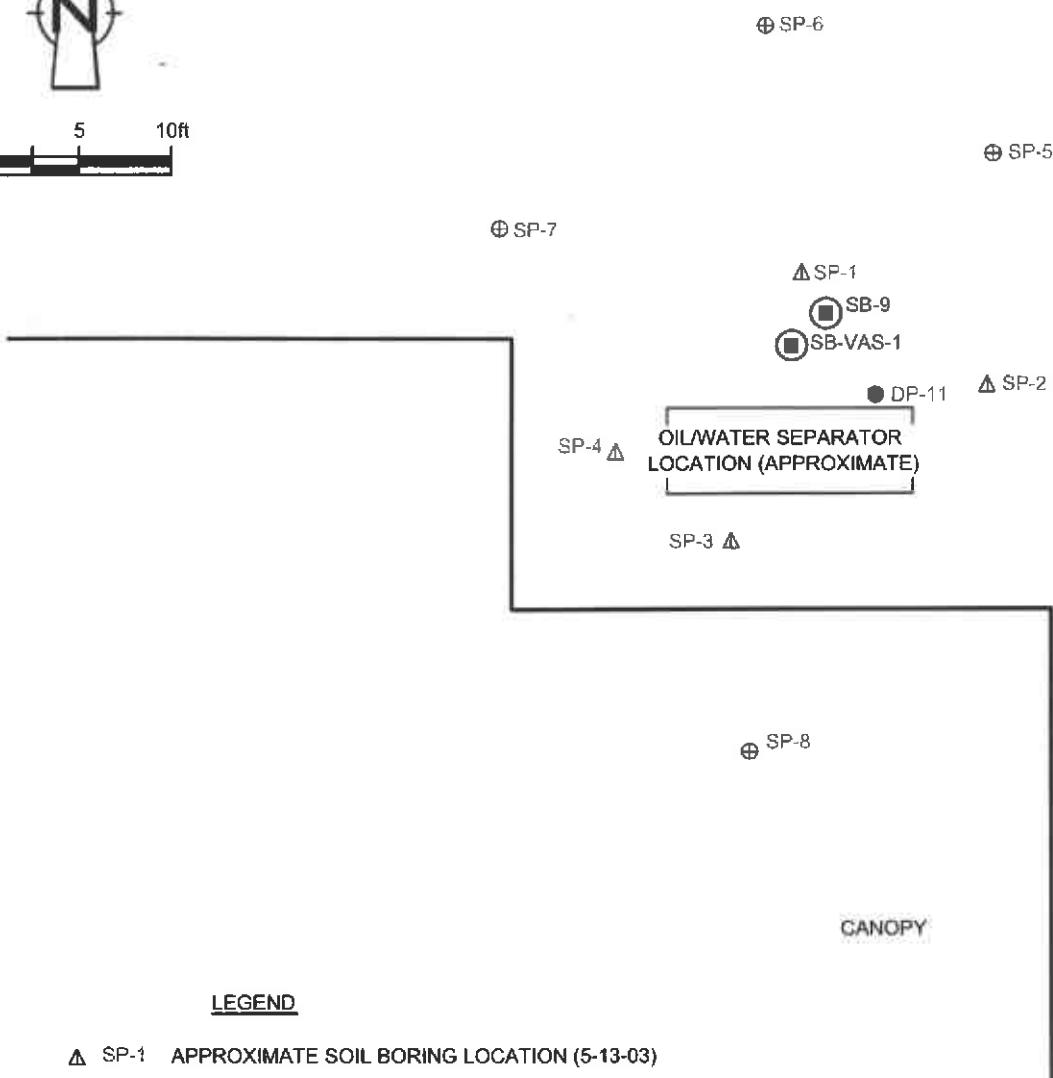
- PROPERTY BOUNDARY
- x - FENCE
- ↔ IN-GROUND DOUBLE-PISTON HYDRAULIC HOIST
- ↔ ALIGNMENT MACHING
- SD STORM DRAIN
- OW OIL/WATER SEPARATOR
- ▬ TRENCH DRAIN
- ▭ OVERHEAD DOOR
- D DGMPSTER
- T PAD-MOUNTED TRANSFORMER
- AST ABOVEGROUND STORAGE TANK (AST)
- PW PARTS WASHER

SATURNI OF PLEASANTON  
4090 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA

**SITE PLAN**

17386-218(07)04-0002 APR 26/2005

DECEMBER 2014  
REVISED



**LEGEND**

- △ SP-1 APPROXIMATE SOIL BORING LOCATION (5-13-03)
- DP-11 APPROXIMATE SOIL BORING LOCATION (12-2-02)
- ⊕ SP-5 APPROXIMATE SOIL BORING LOCATION (5-28-03)
- ⊙ SB-VAS-1 PROPOSED SOIL BORING LOCATION

⊙ SB-VAS-2

SATURN OF PLEASANTON  
4340 ROSEWOOD DRIVE  
PLEASANTON, CALIFORNIA

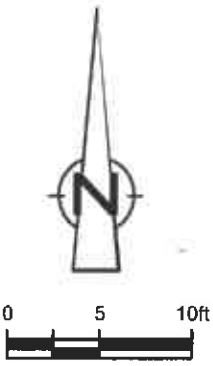
**PROPOSED SOIL BORING AND  
VAS LOCATIONS**

SCALE: 1" = 10'

JANUARY, 2005

17366-208(067)GN-DE005 MAY 17/2005

FIGURE 3



SP-6	5/28/2003
BENZENE	ND(1.0)
1,2-DCE	1.2
TCE	2.5
MTBE	3.0J

SP-5	5/28/2003
BENZENE	ND(1.0)
1,2-DCE	0.53
TCE	0.63J
MTBE	0.75J

SP-7	5/28/2003
BENZENE	ND(1.0)
1,2-DCE	2.2
TCE	1.3
MTBE	12

SP-1	5/13/2003
BENZENE	ND(2.0)
1,2-DCE	<b>47</b>
TCE	<b>28</b>
MTBE	<b>62</b>

DP-11	12/2/2002
BENZENE	<b>6.3</b>
1,2-DCE	<b>17</b>
TCE	<b>120</b>
MTBE	ND(2.0)

FORMER OIL/WATER SEPARATOR LOCATION (APPROXIMATE)

SP-4	5/13/2003
BENZENE	ND(1.0)
1,2-DCE	2.5
TCE	4.7
MTBE	8.4

SP-2	5/13/2003
BENZENE	ND(1.0)
1,2-DCE	4.1
TCE	3.6
MTBE	8.2

SP-3	5/13/2003
BENZENE	ND(1.0)
1,2-DCE	<b>9</b>
TCE	<b>16</b>
MTBE	<b>29</b>

SP-8	5/28/2003
BENZENE	ND(1.4)
1,2-DCE	3.4
TCE	<b>38</b>
MTBE	4.9J

**LEGEND**

- ▲ SP-1 APPROXIMATE SOIL BORING LOCATION (5-13-03)
- DP-11 APPROXIMATE SOIL BORING LOCATION (12-2-02)
- ⊕ SP-5 APPROXIMATE SOIL BORING LOCATION (5-28-03)

1,2 DCE = CIS-1,2-DICHLOROETHENE  
 TCE = TRICHLOROETHENE  
 MTBE = METHYL TERT BUTYL ETHER

**MAXIMUM CONTAMINANT LEVELS (MCLs)**

BENZENE	1
CIS-1,2-DICHLOROETHENE (CIS-1,2-DCE)	6
TRICHLOROETHENE (TCE)	5
METHYL TERT BUTYL ETHER (MTBE)	13

**NOTE:**

ALL CONCENTRATIONS IN MICROGRAMS PER LITER (UG/L)

J - LABORATORY ESTIMATED VALUE

**BOLD** VALUES INDICATE AN EXCEEDANCE OF THE RESPECTIVE MCL VALUE

SATURN OF PLEASANTON  
 4340 ROSEWOOD DRIVE  
 PLEASANTON, CALIFORNIA

HISTORICAL GROUNDWATER VOC CONCENTRATIONS

SCALE: 1" = 10'

SEPTEMBER, 2003

17366-208(087)GN-DE006 APR. 26/2005

FIGURE 4

# STRATIGRAPHY LOG (OVERBURDEN)

PAGE 1 OF 1

PROJECT NAME Saturn of Pleasanton  
 PROJECT NUMBER 17965-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200'  
 WEATHER (A.M.) Cool  
 (P.M.) \_\_\_\_\_

HOLE DESIGNATION DP-1  
 DATE/TIME STARTED 12-2-02 / 0730  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Direct Push  
 CRA SUPERVISOR B. Siegfried

STRATIGRAPHIC INTERVALS (DEPTHS IN ft/m BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS									
FROM	TO	DEPTH	DESCRIPTION	SAMPLE #	SAMPLING METHOD	PENETRATION RECORD SPLIT SPOON BLOWS (RECORD N-VALUES & RECOVERIES)				SAMPLE RECOVERY LENGTH	P I D / F I D (ppm)	C H E M I C A L A N A L Y S I S	G R A I N S I Z E
						6"	6"	6"	6"				
0	1		Concrete / gravel base	1	C.C.					2 3/8	ND		
1	2.0		ML/CL - Clayey silt/silty clay, firm, gray-brown, damp	2						67	ND		
7.0	10.0		CL - Clay, stiff, brown, moderate plasticity, moist	3						112	ND	X	
10.0	12.0		CH - Clay, very stiff, dark brown, plastic, moist										

**ORDER OF DESCRIPTORS:**  
 SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT),  
 SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY,  
 GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR,  
 MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS  
 NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE  
 SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).

NOTES AND COMMENTS: DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER \_\_\_\_\_ TOPSOIL THICKNESS \_\_\_\_\_  
 WATER LEVEL IN OPEN BOREHOLE ON COMPLETION \_\_\_\_\_ AFTER \_\_\_\_\_ HOURS \_\_\_\_\_ No Odors or Visual Staining  
 COMPLETION DETAILS: Seal shut with Portland Cement grout C.C. = Continuous Core

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.









### STRATIGRAPHY LOG (OVERBURDEN)

PROJECT NAME Saturn of Pleasanton  
 PROJECT NUMBER 17365-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200'  
 WEATHER (A.M.) Cool  
 (P.M.) \_\_\_\_\_

HOLE DESIGNATION DP-5  
 DATE/TIME STARTED 12-2-02 / 0925  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Direct Push  
 CRA SUPERVISOR B. Siegfried

STRATIGRAPHIC INTERVALS (DEPTHS IN FT/M BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS										
F R O M	A T	T O	ORDER OF DESCRIPTORS: SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT), SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY, GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR, MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).	S A M P L E #	S A M P L E T H I C K N E S S	PENETRATION RECORD SPLIT SPOON BLOWS (RECORD N-VALUES & RECOVERIES)				S A M P L E R E V A L	P I D / F I D  (ppm)	C H E M I C A L	A N A L Y S I S	G R A I N S I Z E
						6"	8"	6"	6"					
0		1	Concrete/gravel base	1	C.C.					2-3'	ND			
1		5.5	ML-Clayey Silts, stiff, dark gray-brown, damp	2						6-7'	ND			
5.5		6.0	SP-Sand, brown, fine grained	3						11.5-12'	ND	X		
6.0		10.0	CL-Clay, stiff, moderately plastic, brown, moist											
10.0		12.0	CH-Clay, very stiff, dark brown, plastic, moist											

NOTES AND COMMENTS

DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER \_\_\_\_\_  
 WATER LEVEL IN OPEN BOREHOLE ON COMPLETION \_\_\_\_\_ AFTER \_\_\_\_\_ HOURS  
 COMPLETION DETAILS: Seal shut with Portland cement tremie TOPSOIL THICKNESS No Odors or Visual staining  
C.C. = Continuous Core

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.

# STRATIGRAPHY LOG (OVERBURDEN)

PROJECT NAME Saturn of Pleasanton  
 PROJECT NUMBER 17365-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200'  
 WEATHER (A.M.) Mild  
 (P.M.) \_\_\_\_\_

BOLE DESIGNATION DP-C  
 DATE/TIME STARTED 12-2-02 / 7020  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Direct Push  
 CRA SUPERVISOR B. Siegfried

STRATIGRAPHIC INTERVALS (DEPTHS IN ft/m BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS										
F R O M	A T	T O	ORDER OF DESCRIPTORS: SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT), SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY, GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR, MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).	S A M P L E #	S A M P L E L I N G D	PENETRATION RECORD SPLIT SPOON BLOWS (RECORD N-VALUES & RECOVERIES)				S I N T E R V A L	P I D / F I D	C H E M I C A L	A N A L Y S I S	G R A I N S I Z E
						6"	6"	6"	6"					
0		1	Concrete/gravel base	1	C.C.					3-5	ND			
1		6.2	CL-Silty Clay, firm, dark gray-brown, moist	2						6.5-7.5	ND			
6.2		6.7	SP-Sand, brown fine grained	3						11.5-12	ND	X		
6.7		10.0	CL-Clay, stiff, brown, moderately plastic, moist											
10.0		12.0	OH-Clay - very stiff, dark brown plastic, moist		v									

NOTES AND COMMENTS: \_\_\_\_\_

DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER \_\_\_\_\_

WATER LEVEL IN OPEN BOREHOLE ON COMPLETION \_\_\_\_\_ AFTER \_\_\_\_\_ HOURS \_\_\_\_\_

COMPLETION DETAILS: Seal Shut with Portland Cement tremie TOPSOIL THICKNESS \_\_\_\_\_

No Odors or Visual Staining  
C.C. = Continuous Core

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.

1)GN-WA023 SEP 13/99 (SP-17) REVISION 3

# STRATIGRAPHY LOG (OVERBURDEN)

PROJECT NAME Saturn of Pleasanton  
 PROJECT NUMBER 17865-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200'  
 WEATHER (A.M.) Mild  
 (P.M.) \_\_\_\_\_

HOLE DESIGNATION DP-7  
 DATE/TIME STARTED 12-2-02/1045  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Pilot Push  
 CRA SUPERVISOR B. Siegfried

STRATIGRAPHIC INTERVALS (DEPTHS IN ft/m BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS										
F R O M	A T	T O	ORDER OF DESCRIPTORS: SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT), SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY, GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR, MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).	S A M P L E #	S A M P L E I N T E R V A L	PENETRATION RECORD SPLIT SPOON BLOWS (RECORDED N-VALUES & RECOVERIES)				S A M P L E I N T E R V A L	P I D / F I D  (ppm)	C H E M I C A L	A N A L Y S I S	G R A I N S I Z E
						6"	6"	6"	6"					
0		1	Concrete / gravel base	1	C.C.					2.5'	ND			
1		4.5	ML-Clayey Silt, firm, gray-brown, damp	2						6.5	ND			
4.5		6.7	ML-Silt, compact, brown, moist	3						11.2	7.2	X		
6.7		10.0	ML-Clayey Silt, stiff, dark brown, moist											
10.0		12.0	CH-Clay, very stiff, dark brown/black, plastic, moist											

NOTES AND COMMENTS

DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER \_\_\_\_\_ TOPSOIL THICKNESS \_\_\_\_\_  
 WATER LEVEL IN OPEN BOREHOLE ON COMPLETION \_\_\_\_\_ AFTER \_\_\_\_\_ HOURS \_\_\_\_\_  
 COMPLETION DETAILS: Seal Shut with Portland Cement tremie. No Odors or Visual staining  
C.C. = Continuous Core

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.

12/03/2002 14:22 12099836168 PAGE 08



# STRATIGRAPHY LOG (OVERBURDEN)

PROJECT NAME Saturn of Pleasanton  
 PROJECT NUMBER 17365-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200'  
 WEATHER (A.M.) \_\_\_\_\_  
 (P.M.) Warming

HOLE DESIGNATION DP-9  
 DATE/TIME STARTED 12-2-02/1232  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Direct Push  
 CRA SUPERVISOR B. Siegfried

STRATIGRAPHIC INTERVALS (DEPTHS IN ft/m BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS										
F R O M	A T	T O	ORDER OF DESCRIPTORS: SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT), SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY, GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR, MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).	S A M P L E #	S A M P L E T H I C K N E S S	PENETRATION RECORD SPLIT SPOON BLOWS (RECORD N-VALUES & RECOVERIES)				S A M P L E I N T E R V A L	P I D / P I D  (ppm)	C H E M I C A L	A N A L Y S I S	G R A I N S I Z E
						8"	6"	4"	2"					
0		1	Concrete / gravel base	1	C.C.					2-3	7.1			
1		6.2	ML-Clayey Silt, firm to stiff, gray-brown, damp to moist	2						67.5	159	X		
6.2		6.7	SP-Sand - brown, moist	3						1172	ND			
6.7		10.0	ML-Clayey Silt, stiff, moist											
10.0		12.0	CH - Clay, very stiff, dark brown/black, plastic, moist											

NOTES AND COMMENTS

DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER \_\_\_\_\_ TOPSOIL THICKNESS \_\_\_\_\_  
 WATER LEVEL IN OPEN BOREHOLE ON COMPLETION \_\_\_\_\_ AFTER \_\_\_\_\_ HOURS \_\_\_\_\_  
 COMPLETION DETAILS: Seal shut with Portland Cement Tremie No Odors or Visual Staining  
C.C. = Continuous Core

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.

# STRATIGRAPHY LOG (OVERBURDEN)

PROJECT NAME Sutton of Pleasanton  
 PROJECT NUMBER 17365-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200'  
 WEATHER (A.M.) \_\_\_\_\_  
 (P.M.) Warming

HOLE DESIGNATION DP-10  
 DATE/TIME STARTED 12-2-02 / 1210  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Direct Push  
 CRA SUPERVISOR \_\_\_\_\_

STRATIGRAPHIC INTERVALS (DEPTHS IN ft/m BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS										
P R O M	A T	T O	ORDER OF DESCRIPTORS: SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT), SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY, GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR, MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS  NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).	S A M P L E #	S A M P L E I N G D	PENETRATION RECORD SPLIT SPOON BLOWS (RECORD N-VALUES & RECOVERIES)				S A M P L E I N T E R V A L	P I D / F I D  (ppm)	C H E M I C A L	A N A L Y S I S	G R A I N S I Z E
						8"	6"	6"	6"					
0		1	Concrete/gravel base	1	C.C.					2.5-3.0	NP			
1		6.0	ML-Clayey Silt, firm to stiff, gray brown, damp to moist	2						6.5	6.9			
3.0		6.5	SP-Sand, brown, moist	3						11-12	7.4	X		
6.5		12.0	ML-Clayey Silt, stiff, moist											
10.0		12.0	CH-Clay, very stiff, dark brown/black, plastic, moist											

NOTES AND COMMENTS

DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER \_\_\_\_\_  
 WATER LEVEL IN OPEN BOREHOLE ON COMPLETION \_\_\_\_\_ AFTER \_\_\_\_\_ HOURS \_\_\_\_\_  
 COMPLETION DETAILS: Seal shut with Portland Cement Tremie TOPSOIL THICKNESS No Odors or Visual Staining  
C.C. = Continuous Core

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.

### STRATIGRAPHY LOG (OVERBURDEN)

PAGE 1 OF 1

PROJECT NAME Saturn of Pleasanton  
 PROJECT NUMBER 17365-30  
 CLIENT ENCORE  
 LOCATION Pleasanton, CA

DRILLING CONTRACTOR ECA  
 DRILLER \_\_\_\_\_  
 SURFACE ELEVATION 200  
 WEATHER (A.M.) \_\_\_\_\_  
 (P.M.) Warming

HOLE DESIGNATION DP-11  
 DATE/TIME STARTED 12-2-02/1300  
 DATE/TIME COMPLETED 12-2-02  
 DRILLING METHOD Direct Push  
 CRA SUPERVISOR B. Siegfried

STRATIGRAPHIC INTERVALS (DEPTHS IN ft/m BGS)			SAMPLE DESCRIPTION	SAMPLE DETAILS									
F R O M	A T	T O	ORDER OF DESCRIPTORS: SOIL TYPE SYMBOL(S) - MAIN COMPONENT(S), (NATURE OF DEPOSIT), SECONDARY COMPONENTS, RELATIVE DENSITY/CONSISTENCY, GRAIN SIZE/PLASTICITY, GRADATION/STRUCTURE, COLOUR, MOISTURE CONTENT, SUPPLEMENTARY DESCRIPTORS <small>NOTE: PLASTICITY DETERMINATION REQUIRES THE ADDITION OF MOISTURE IF THE SAMPLE IS TOO DRY TO ROLL (INDICATE IF MOISTURE WAS ADDED OR NOT).</small>	S A M P L E #	S A M P L E I N D I C A T O R	PENETRATION RECORD SPLIT SPOON BLOWS (RECORD N-VALUES & RECOVERIES)				S A M P L E I N T E R V A L L	P I D / F I D  (ppm)	C H E M I C A L  A N A L Y S I S	G R A I N S I Z E
						0"	3"	6"	9"				
0		1	Asphalt/gravel base	1	C.C.					2.5-3.0	ND		
1		3	ML-Clayey Silt, firm, gray-brown, damp	2						5.5-6	15.8		
3		4.8	SM-Silty Sand, compact, brown, fine grained, moist	3						6.5-7	88.7		
4.8		8.0	CL-Clay, soft, dark brown, moist	4						13-13.5	17.2		
8.0		12.5	CL-Clay, stiff, black, moist, strong organic/septic odor	5						17-17.5	15.0		
12.5		13.2	SP-Sand, loose, brown, wet (flowing)	6						22-23	ND		
13.2		26.0	CH-Clay, Very stiff to hard, black, high plasticity, moist										
26.0		28.0	SM-Silty sand, compact, gray, fine grained, wet										
			Groundwater sample collected for VOC & TPH-g analysis										

NOTES AND COMMENTS

DEPTH OF BOREHOLE CAVING \_\_\_\_\_ DEPTH OF FIRST GROUNDWATER ENCOUNTER 26.0 TOPSOIL THICKNESS \_\_\_\_\_  
 WATER LEVEL IN OPEN BOREHOLE ON COMPLETION 23.0 AFTER \_\_\_\_\_ HOURS 2 minutes C.C. = Continuous Core  
 COMPLETION DETAILS: Seal shut with Portland Cement Tremie

NOTE: FOR EACH SPLIT-SPOON SAMPLE, RECORD BLOW COUNTS, N-VALUE, SAMPLE RECOVERY LENGTH, AND SAMPLE INTERVAL.

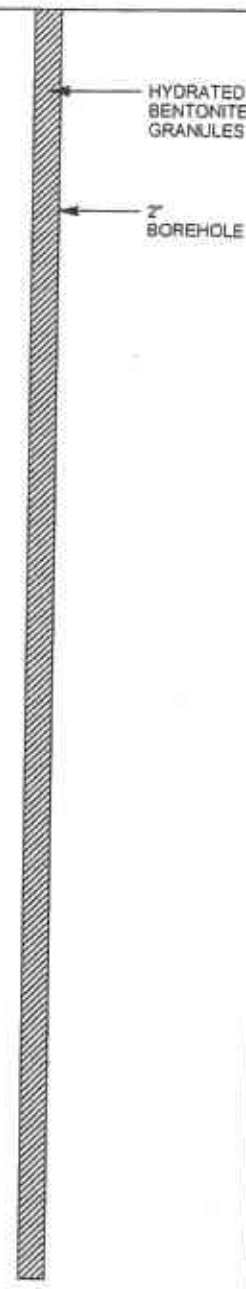




# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-1  
 DATE COMPLETED: May 13, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (%)	"N" VALUE	PID (ppm)
2	ML-CLAYEY SILT, stiff, light brown, damp			1GP				ND
4				2GP				ND
6				3GP				ND
8	CL-SILTY CLAY, stiff, brown, damp to moist  - becoming black at 14.0ft BGS	8.00		4GP				ND
10				5GP				ND
12				6GP				ND
14				7GP				ND
16				8GP				ND
18	CH-CLAY, hard, dark brown, moist to wet	18.00		9GP				ND
20				10GP				ND
22				11GP				ND
24				12GP				ND
26				13GP				ND
28	SP-SILTY SAND, loose, wet (flowing), fine to medium grained - highly plastic at 28.0ft BGS	25.00		14GP				ND
30				15GP				ND
32	CH-CLAY, hard, dark brown, moist to wet	30.00		16GP				ND
34	END OF BOREHOLE @ 32.0ft BGS	32.00						

**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

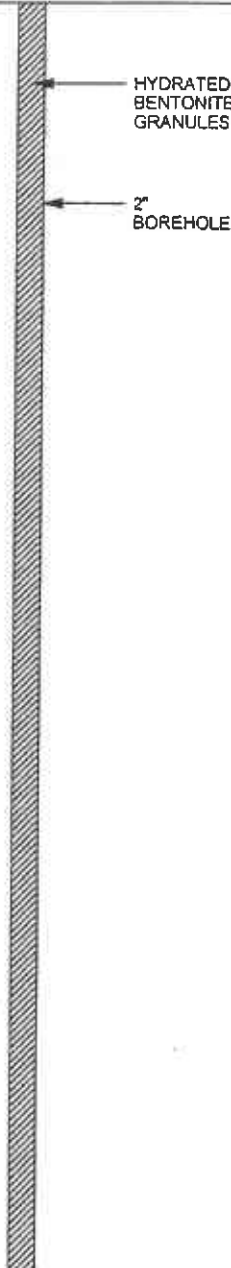
CHEMICAL ANALYSIS

OVERBURDEN LOG: 17366-30.GPJ CRA CORP GDT 9/25/03

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-2  
 DATE COMPLETED: May 13, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (%)	"N" VALUE	PID (ppm)
2	ML-CLAYEY SILT, stiff, light brown, damp			1GP				ND
4				2GP				ND
6				3GP				ND
8	CL-SILTY CLAY, stiff, brown, damp to moist	8.00		4GP				ND
10				5GP				ND
12	- becoming black at 14.0ft BGS			6GP				ND
14				7GP				ND
16	CH-CLAY, hard, dark brown, moist to wet	18.00		8GP				ND
18								
20								
22								
24								
26								
28	SP-SILTY SAND, loose, wet (flowing), fine to medium grained - highly plastic at 28.0ft BGS	28.00						
30	CH-CLAY, hard, dark brown, moist to wet	30.00						ND
32	END OF BOREHOLE @ 32.0ft BGS	32.00						
34								

OVERBURDEN LOG 17366-30 GP1 CRA CORP GDT 9/25/03

**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-3  
 DATE COMPLETED: May 13, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (%)	TN VALUE	PID (ppm)
2	ML-CLAYEY SILT, stiff, light brown, damp			1GP				ND
4				2GP				ND
6				3GP				ND
8	CL-SILTY CLAY, stiff, brown, damp to moist  - becoming black at 14.0ft BGS	8.00		4GP				ND
10				5GP				ND
12				6GP				ND
14				7GP				ND
16				8GP				ND
18	CH-CLAY, hard, dark brown, moist to wet	18.00		9GP				ND
20				10GP				ND
22				11GP				ND
24				12GP				ND
26				13GP				ND
28	SP-SILTY SAND, loose, wet (flowing), fine to medium grained - highly plastic at 28.0ft BGS	28.00		14GP				ND
30	CH-CLAY, hard, dark brown, moist to wet	30.00		15GP				ND
32	END OF BOREHOLE @ 32.0ft BGS	32.00						ND
34								ND

OVERBURDEN LOG - 17366-30.GPJ CRA CORP.GDT 9/25/03

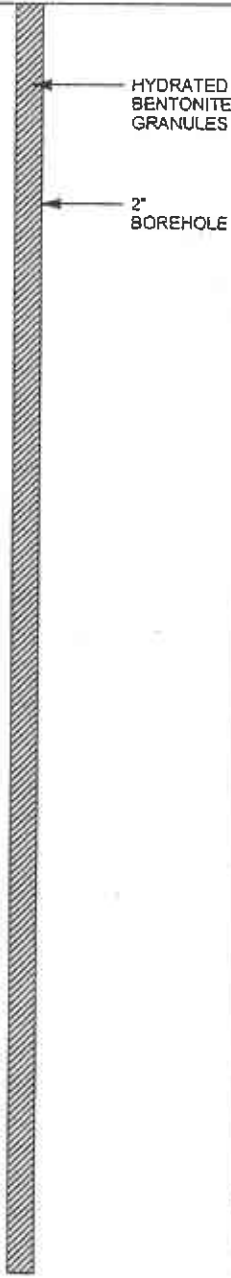
**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-4  
 DATE COMPLETED: May 13, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC. (%)	"N" VALUE	PID (ppm)
2	ML-CLAYEY SILT, stiff, light brown, damp			1GP				ND
4				2GP				ND
6				3GP				ND
8	CL-SILTY CLAY, stiff, brown, damp to moist	8.00		4GP				ND
10				5GP				ND
12				6GP				ND
14	- becoming black at 14.0ft BGS			7GP				ND
16				8GP				ND
18	CH-CLAY, hard, dark brown, moist to wet	18.00		9GP				ND
20				10GP				ND
22				11GP				ND
24				12GP				ND
26				13GP				ND
28	SP-SILTY SAND, loose, wet (flowing), fine to medium grained - highly plastic at 28.0ft BGS	28.00		14GP				ND
30	CH-CLAY, hard, dark brown, moist to wet	30.00		15GP				ND
32	END OF BOREHOLE @ 32.0ft BGS	32.00						
34								

OVERBURDEN LOG: 17366-30.GPJ CRA\_CORP.GDT 9/25/03

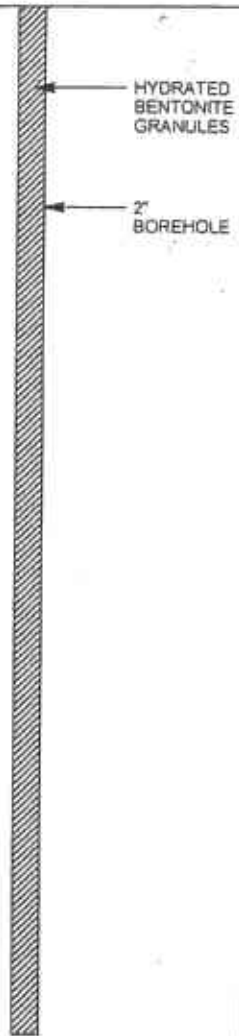
**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-5  
 DATE COMPLETED: May 28, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (%)	"N" VALUE	PID (ppm)
2	ML-CLAYEY SILT, stiff, light brown, dry		 <p style="text-align: center;">2" BOREHOLE</p>					
2.60	SP-SAND, compact, light brown, fine grained, dry	3.20		1GP				ND
4	ML-CLAYEY SILT, stiff, light brown, damp							
5.00	SP-SAND, compact, light brown, fine grained, dry	5.60		2GP				ND
6	ML-CLAYEY SILT, stiff, brown, moist							
8								
8.50	CH-CLAY, stiff, dark brown, plastic, moist			3GP				ND
10								
12								
14				4GP				ND
16	- becoming black and highly plastic at 15.0ft BGS							
18			5GP				ND	
20								
22	- becoming dark brown at 21.0ft BGS		6GP				ND	
24								
24.50	SM-SILTY SAND, compact, light brown, wet	24.50	7GP				ND	
26	END OF BOREHOLE @ 26.0ft BGS	26.00						
28								
30								
32								
34								

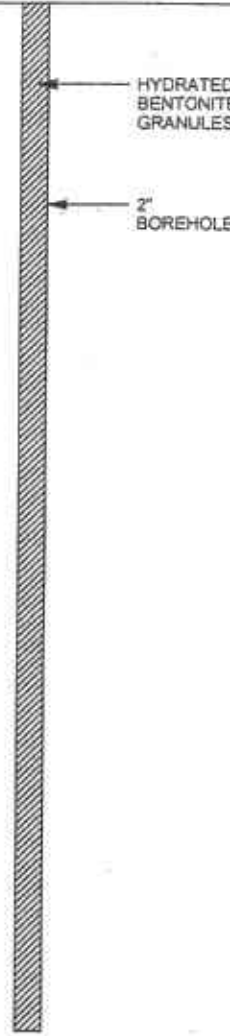
**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE  
 WATER FOUND  $\nabla$   
 CHEMICAL ANALYSIS  $\bigcirc$

OVERBURDEN LOG: 17366-30.GPJ CNA CORP. 5/25/03

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-6  
 DATE COMPLETED: May 28, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE				
				NUMBER	INTERVAL	REC (%)	"N" VALUE	PID (ppm)
2	CL-SILTY CLAY, stiff, light brown, damp			1GP				ND
4	SM-SILTY SAND, compact, light brown, dry	3.40						
	ML/CL-SILT, firm, brown, moist and clay, stiff to hard, dark brown	4.00	2" BOREHOLE	2GP				ND
6				3GP				ND
8								
10				4GP				ND
12								
14								
16				5GP				ND
18								
20								
22				6GP				ND
24			▽					
	SP-SAND, compact, brown, fine to medium grained, wet	24.20		7GP				ND
	CH-CLAY, hard, brown, plastic, saturated	25.00						
26	END OF BOREHOLE @ 26.0ft BGS	26.00						
28								
30								
32								
34								

**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE  
 WATER FOUND ▽  
 CHEMICAL ANALYSIS ○

OVERBURDEN LOG: 17366-30.GPJ CRA\_CORP.GDT: 9/25/03

# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-7  
 DATE COMPLETED: May 28, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B. SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE					
				NUMBER	INTERVAL	REC (%)	"N" VALUE	PID (ppm)	
2	ML-SANDY SILT, compact, light brown, dry		<p style="text-align: center;">HYDRATED BENTONITE GRANULES</p> <p style="text-align: center;">2" BOREHOLE</p>	1GP				ND	
4	SM-SILTY SAND, compact, light brown, fine grained, dry	3.70							
5	ML-SILT, firm, brown, moist	5.00							
5.5	SM-SILTY SAND, compact, light brown, moist	5.50							
6	ML-CLAYEY SILT, stiff, brown, moist	6.00			2GP				ND
8	CH-CLAY, stiff, dark brown, plastic, moist	8.50			3GP				ND
10									
12									
14	- becoming blacker, hard at 13.8ft BGS			4GP				ND	
16									
18									
20									
22	- becoming dark brown at 22.0ft BGS			5GP				ND	
24									
26									
26.70	SM-SILTY SAND, compact, brown, fine grained, wet	26.70							
27.50	CH-CLAY, hard, brown, saturated	27.50		6GP				ND	
28									
29.00	END OF BOREHOLE @ 29.0ft BGS	29.00		7GP				ND	
30									
32									
34									

OVERBURDEN LOG 17366-30 GPJ CRA\_CORP.GDT 9/25/03

**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE  
 WATER FOUND ∇



# STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: SATURN OF PLEASANTON  
 PROJECT NUMBER: 17366-30  
 CLIENT: EEC  
 LOCATION: PLEASANTON, CALIFORNIA

HOLE DESIGNATION: SP-8  
 DATE COMPLETED: May 28, 2003  
 DRILLING METHOD: GEOPROBE  
 FIELD PERSONNEL: B SIEGFRIED

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE INSTALLATION	SAMPLE					
				NUMBER	INTERVAL	REC (%)	"N" VALUE	PID (ppm)	
2	ML-SANDY SILT, compact, light brown, dry		<p style="text-align: center;">HYDRATED BENTONITE GRANULES</p> <p style="text-align: center;">2" BOREHOLE</p>	1GP				ND	
4	SM-SILTY SAND, loose, light brown, dry	3.50							
	ML-CLAYEY SILT, stiff, brown, moist	4.30			2GP				ND
10	CH-CLAY, stiff, brown to dark brown, plastic, moist	9.00		3GP				ND	
14	- becoming blacker, highly plastic at 14.0ft BGS			4GP				ND	
18				5GP				ND	
22	- becoming dark brown at 22.0ft BGS			6GP				ND	
24				7GP				ND	
26	SM-SILTY SAND, compact, brown, fine grained, wet	26.00							
27	CH-CLAY, stiff to hard, dark brown, saturated	27.00		8GP				ND	
29	END OF BOREHOLE @ 29.0ft BGS	29.00							

OVERBURDEN LOG: 17366-30.GPJ, CRA, CORP GDT 9/25/03

**NOTES:** MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE  
 WATER FOUND  $\nabla$

**APPENDIX C**

**TCL VOC Method Detection Limits**

## APPENDIX C

TCL VOC WATER REPORT LIMITS AND MDLs  
SATURN OF PLEASANTON  
4340 ROSEWOOD BOULEVARD  
PLEASANTON, CALIFORNIA

#	Compound	RL	Units	MDL	Units
11	Acetone	10	ug/L	0.74	ug/L
196	Benzene	1	ug/L	0.22	ug/L
323	Bromodichloromethane	1	ug/L	0.14	ug/L
340	Bromoform	1	ug/L	0.17	ug/L
343	Bromomethane	1	ug/L	0.36	ug/L
372	2-Butanone	10	ug/L	0.39	ug/L
459	Carbon disulfide	1	ug/L	0.28	ug/L
463	Carbon tetrachloride	1	ug/L	0.19	ug/L
521	Chlorobenzene	1	ug/L	0.2	ug/L
535	Dibromochloromethane	1	ug/L	0.19	ug/L
550	Chloroethane	1	ug/L	0.24	ug/L
569	Chloroform	1	ug/L	0.16	ug/L
574	Chloromethane	1	ug/L	0.14	ug/L
669	Cyclohexane	1	ug/L	0.12	ug/L
539	1,2-Dibromo-3-chloropropane	2	ug/L	0.28	ug/L
870	1,2-Dibromoethane	1	ug/L	0.24	ug/L
904	1,2-Dichlorobenzene	1	ug/L	0.2	ug/L
907	1,3-Dichlorobenzene	1	ug/L	0.18	ug/L
910	1,4-Dichlorobenzene	1	ug/L	0.22	ug/L
924	Dichlorodifluoromethane	1	ug/L	0.25	ug/L
933	1,1-Dichloroethane	1	ug/L	0.21	ug/L
936	1,2-Dichloroethane	1	ug/L	0.16	ug/L
948	cis-1,2-Dichloroethene	1	ug/L	0.21	ug/L
950	trans-1,2-Dichloroethene	1	ug/L	0.16	ug/L
943	1,1-Dichloroethene	1	ug/L	0.18	ug/L
986	1,2-Dichloropropane	1	ug/L	0.15	ug/L
998	cis-1,3-Dichloropropene	1	ug/L	0.12	ug/L
1000	trans-1,3-Dichloropropene	1	ug/L	0.17	ug/L
1332	Ethylbenzene	1	ug/L	0.19	ug/L
1515	2-Hexanone	10	ug/L	0.35	ug/L
1578	Isopropylbenzene	1	ug/L	0.15	ug/L
1774	Methyl acetate	10	ug/L	0.52	ug/L
1799	Methylcyclohexane	1	ug/L	0.5	ug/L
1811	Methylene chloride	1	ug/L	0.19	ug/L
1845	4-Methyl-2-pentanone	10	ug/L	0.32	ug/L
2772	Methyl tert-butyl ether	5	ug/L	0.18	ug/L
2355	Styrene	1	ug/L	0.13	ug/L
2439	1,1,2,2-Tetrachloroethane	1	ug/L	0.22	ug/L
2445	Tetrachloroethene	1	ug/L	0.19	ug/L
2489	Toluene	1	ug/L	0.17	ug/L
2515	1,2,4-Trichlorobenzene	1	ug/L	0.19	ug/L
2518	1,1,1-Trichloroethane	1	ug/L	0.21	ug/L
2522	1,1,2-Trichloroethane	1	ug/L	0.22	ug/L
2525	Trichloroethene	1	ug/L	0.28	ug/L
1428	Trichlorofluoromethane	1	ug/L	0.16	ug/L
2566	1,1,2-Trichloro-1,2,2-trifluoroethane	1	ug/L	0.26	ug/L
2613	Vinyl chloride	1	ug/L	0.21	ug/L
2627	Xylenes (total)	2	ug/L	0.44	ug/L