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AVALON ENVIRONMENTAL CONSULTANTS

**PHASE II
SUBSURFACE SITE ASSESSMENT
PERFORMED AT
ALBANY 1-HOUR CLEANERS
1187 SOLANO AVENUE
ALBANY, CALIFORNIA 94709
PROJECT NUMBER: 0420-458-2**

**PREPARED FOR
THE SOLANO GROUP
BERKELEY, CALIFORNIA
NOVEMBER 10, 2004**



AVALON ENVIRONMENTAL CONSULTANTS

941 SHORE POINT COURT, SUITE F121

ALAMEDA, CALIFORNIA 94501

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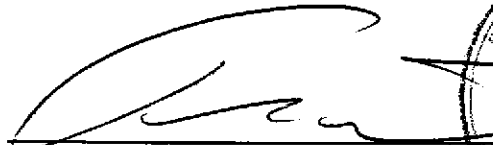
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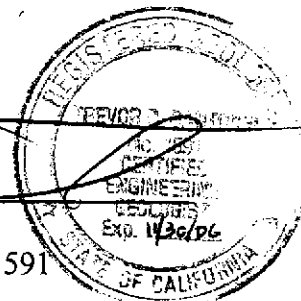
THE SOLANO GROUP

BERKELEY, CALIFORNIA

NOVEMBER 10, 2004

PREPARED BY:


Trevor D Santochi,
Certified Engineering Geologist 1591



REVIEWED BY:



Mohammad Navid,
Project Manager

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1.0 EXECUTIVE SUMMARY

Avalon Environmental Consultants, Inc. (Avalon), conducted a Phase II Subsurface Site Assessment (SSA) at the request of the Solano Group. The assessment was performed at Albany 1-Hour Cleaners located at 1187 Solano Avenue, City of Albany, County of Alameda, California (Subject Property) on November 2, 2004.

The subject property consists of a retail building which contains a dry cleaning facility with an onsite dry-cleaning machine.

The purpose of this investigation is to determine if a release of volatile organic compounds (VOCs) has occurred from the onsite dry-cleaning operation.

Three borings were advanced on the north and south sides of the existing dry-cleaning machine using a limited access geoprobe. A former dry cleaning machine was also located in this area which was replaced by the existing dry-cleaning machine approximately six month ago. The soil borings were advanced to a depth of twenty feet below ground surface (bgs) or until refusal was met. Groundwater was not encountered in any of the borings. Soil samples were collected at five foot intervals beginning at five feet bgs.

All soil samples collected were analyzed for VOCs by EPA Method 8260. Tetrachloroethylene (PCE) was detected in seven of the eleven soil samples collected and ranged from 8.4 to 1,100 parts per billion (ppb.) Based upon the laboratory results and levels encountered, it appears that the subject property has been impacted by the dry-cleaning facility.

The San Francisco Bay Regional Water Quality Control Board's publication "Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater" dated February 4, 2004, indicates that soil impacts of PCE exceeding 250 ppb require additional investigation.

Based on the information gathered during this investigation, Avalon recommends the following:

- Additional subsurface sampling be performed to determine if groundwater has been impacted.
- This report be submitted to the Alameda County Department of Environmental Health for their review.

2.0 INTRODUCTION

This report presents the results of the Phase II Subsurface Site Assessment (Phase II SSA) conducted by Avalon at 1187 Solano Avenue, City of Albany, County of Alameda, California on November 2, 2004. (Figure 1, Topography and Site Location Map, Appendix I).

All field activities were performed under permit from the Alameda County Department of Public Works in accordance with the Scope of Work submitted to the Solano Group on October 21, 2004 with the exception that three as opposed to four borings were advanced at the subject site due to access constrains, (See Appendix II, Scope of Work and permits.)

This report briefly reviews the field methodology and presents the analytical laboratory results of the soil samples collected. Health and safety guidelines were observed in conducting all field activities in accordance with the Site-Specific Health and Safety Plan (Appendix III).

2.1 Purpose

The purpose of this investigation is to determine if a release of VOCs has occurred from the onsite dry-cleaning operation.

2.2 Methodology

As required by law, Underground Service Alert (USA) was contacted to check the proposed boring locations for conflict with public utilities, such as gas or electrical lines.

A total of three borings were placed on the north side of the subject property structure. The north side of the structure contains the current dry cleaning machine and formerly housed the old dry cleaning machine, removed approximately six months ago. Due to access limitations, three as opposed to four borings were placed in this area. Soil samples were collected at five foot intervals beginning at five feet bgs. Groundwater was not encountered during this investigation. All samples were analyzed for VOCs by EPA Modified 8260.

The soil samples were delivered under chain of custody to SunStar Laboratories in Tustin, California for analysis.



3.0 GENERAL SITE INFORMATION

3.1 Site Location

The subject property consists of a retail building located on the north side of Solano Avenue in the City of Albany, California. Albany 1-Hour Cleaners is located at 1187 Solano Avenue. The current and former dry-cleaning machines were located in the northern portion of the tenant space. A rear parking lot is located north of the subject property building.

3.2 Geology/Hydrology

Geology- The subject property is located in the flat lowlands of the southeastern part of the San Francisco Bay Region. The alluvial deposits underlying the site area originated from drainage that was sourced from the east and west and flowed into the area of the San Francisco bay. Near the bay these deposits interfinger with fine grained deposits of silt and clay.

Hydrology - Based upon the ground surface elevation groundwater is estimated to be at a depth of 40 feet bgs. Surface topography suggests a gradient direction to the west toward San Francisco Bay located one half mile from the subject property.

A topography and site location map is provided in Appendix I.

4.0 SUMMARY OF PHASE II FIELD OPERATIONS

4.1 Utility Clearance

As required by law, Underground Service Alert was contacted in order to provide clearance of the boring locations from any possible underground utility lines which might exist in the vicinity of the proposed borings.

4.2 Soil Boring and Sampling Procedures

Prior to the start of the drilling operations, a tailgate Health and Safety meeting was conducted by the Project Manager to discuss potential health and safety risks and the appropriate precautions required to reduce such risks. All field personnel present signed the Attendance List in the Health and Safety Plan acknowledging that a Health and Safety meeting was held.

The boring locations are shown on Figure 2 (Appendix I). Kehoe Testing (Kehoe) performed the drilling and sampling under the supervision of an Avalon Geologist. Kehoe used a Geoprobe system to advance the soil borings and to obtain samples.



The Geoprobe is a hydraulically-powered coring mechanism. The Geoprobe system of coring consists of a conical piston tip and cutting shoe mounted on a 1-inch outside diameter hollow probe rod. The probe rods are lined with three feet of 0.96 inch diameter acetate liners (tubes) in which soil samples are collected. The probe rod assembly is literally "pushed" into the soil by the hydraulically-powered machine. When the probe tip encounters resistance to the "push" due to rocks or compacted material, penetration is achieved by driving with a percussion hammer until the desired sampling point is reached. A piston stop-pin at the trailing end of the sampler is removed by means of extension rods after the sampler is driven to the desired depth. This enables the piston tip to retract into the sample tube as it is displaced by the soil sample being taken. The tool string is then pulled out and the sample liners extracted.

Soil samples were collected by an Avalon Project Manager under the direction of a State of California Registered Geologist and stored on ice.

All coring tools, screens and sample liners were decontaminated before and after coring each borehole to prevent cross contamination between boreholes using the following procedure:

- Solids were removed from the coring and sampling equipment with a brush and washed in an Alconox-water solution.
- Rinsing with tap water.
- Rinsing with distilled water.

Soil samples were delivered by courier, with proper Chain of Custody, to SunStar Laboratories, Inc., located in Tustin, California.

5.0 PHASE II FIELD INVESTIGATION RESULTS

5.1 Soils Encountered Beneath the Subject Property

The geoprobe borings were advanced to a maximum depth of twenty feet bgs. One of the borings, GP-1, encountered swelling clays at a depth of fifteen feet bgs and was discontinued due to refusal at a depth of 17 feet bgs. The soils encountered consisted of gravelly and silty clays. The clays encountered were very expansive. The soils were very moist and soft to a depth of three feet bgs. No groundwater was encountered in the borings.



5.2 Laboratory Analytical Results

The soil samples were analyzed for VOCs by EPA Method 8260.

Detailed laboratory results, Quality Assurance/Quality Control (QA/QC) documentation and Chain of Custody records are presented in Appendix IV.

TABLE I ANALYTICAL SOIL SAMPLE RESULTS			
SAMPLE NUMBER	SAMPLE TYPE	EPA METHOD 8260 (ppb)	Analyte
GP-1@5'	SOIL	1,100 and 5.9	PCE and TCE
GP-1@10'	SOIL	9.1	PCE
GP-1@15'	SOIL	8.4	PCE
GP-2@5'	SOIL	190 and 2.2	PCE and TCE
GP-2@10'	SOIL	26	PCE
GP-2@15'	SOIL	ND	ALL VOCs
GP-2@20'	SOIL	ND	ALL VOCs
GP-3@5'	SOIL	470	PCE
GP-3@10'	SOIL	690	PCE
GP-3@15'	SOIL	ND	ALL VOCs
GP-3@20'	SOIL	ND	ALL VOCs

Note N.D. = Not Detected at Method Detection Limits
ppb = Parts Per Billion

Detection Limits: DETECTION LEVEL FOR SOIL
Halogenated Volatile Compounds Method 8260 (8010 List) =2.0 ppb

All soil samples collected were analyzed for VOCs by EPA Method 8260. PCE was detected in all borings at depths of five and ten feet bgs. The levels of PCE encountered range from 8.4 to 1,100 ppb. The highest detection of PCE was encountered in GP-1 at a depth of five feet bgs. Trichloroethene (TCE) was detected in two of the borings, GP-1 and GP-2, at a depth of five feet bgs. The levels of TCE ranged from 2.2 to 5.9 ppb. Based upon the laboratory results, it appears that the subject property has been impacted by the dry-cleaning facility.

6.0 FINDINGS

The results of the Limited Phase II SSA indicate the following:

- PCE was detected in all three borings at levels ranging from 8.4 to 1,100 ppb. According to the San Francisco Bay, Regional Water Quality Control Board's publication "Screening for Environmental Concerns at sites with Contaminated Soil and Groundwater" dated February 4, 2004, soil impacts of PCE exceeding 250 ppb require additional investigation.

7.0 CONCLUSIONS

Based on the above findings, Avalon concludes the following:

- The subject property has been impacted by the dry-cleaning facility and further investigation will likely be required by regulatory agencies.

8.0 RECOMMENDATIONS

Based on the above conclusion, Avalon recommends the following:

- This report be submitted to the Alameda County Department of Environmental Health for their review.
- Additional subsurface sampling should be performed to determine if groundwater has been impacted.

9.0 ASSESSMENT LIMITATIONS

The scope of this report is limited to the matters expressly covered. This report is prepared for the sole benefit of the Solano Group and Washington Mutual Bank. This report may not be relied upon by any other person or entity without the written authorization of Avalon Environmental Consultants Inc.

In preparing this report, Avalon Environmental Consultants, Inc. has relied on information derived from secondary sources and personal interviews. Except as set forth in this report, Avalon has made no independent investigation as to the accuracy and completeness of the information derived from secondary sources of personal interviews, and has assumed that such information is accurate and complete.

It should be recognized that the definition and evaluation of geologic and hydrologic conditions, as well as the assessment of chemical fate and movement in these conditions is a difficult and inexact science. Judgments leading to conclusions are generally made with incomplete knowledge of the subsurface conditions present. More extensive studies may be



performed to reduce these inherent uncertainties. No warranty, expressed or implied, is made.

All recommendations, findings, and conclusions stated in this report are based upon facts and circumstances as they existed at the time that this report was prepared (e.g./federal, state and local laws, rules, regulations, market conditions, energy costs, wage rates, political climate, and other matters that Avalon deemed relevant). A change in any fact or circumstance upon which this report is based may adversely affect the recommendations, findings and conclusions expressed in this report.

10.0 CONFLICT CERTIFICATION

Avalon Environmental Consultants has no present or contemplated future ownership interest or financial interest in the real estate that is the subject of this Phase II Environmental Site Assessment; and, Avalon Environmental Consultants has no personal interest with respect to the subject matter of the Phase II Environmental Site Assessment or the parties involved and Avalon Environmental Consultants has no relationship with the property or the owners thereof which would prevent an independent analysis of the environmental or other conditions of the property.



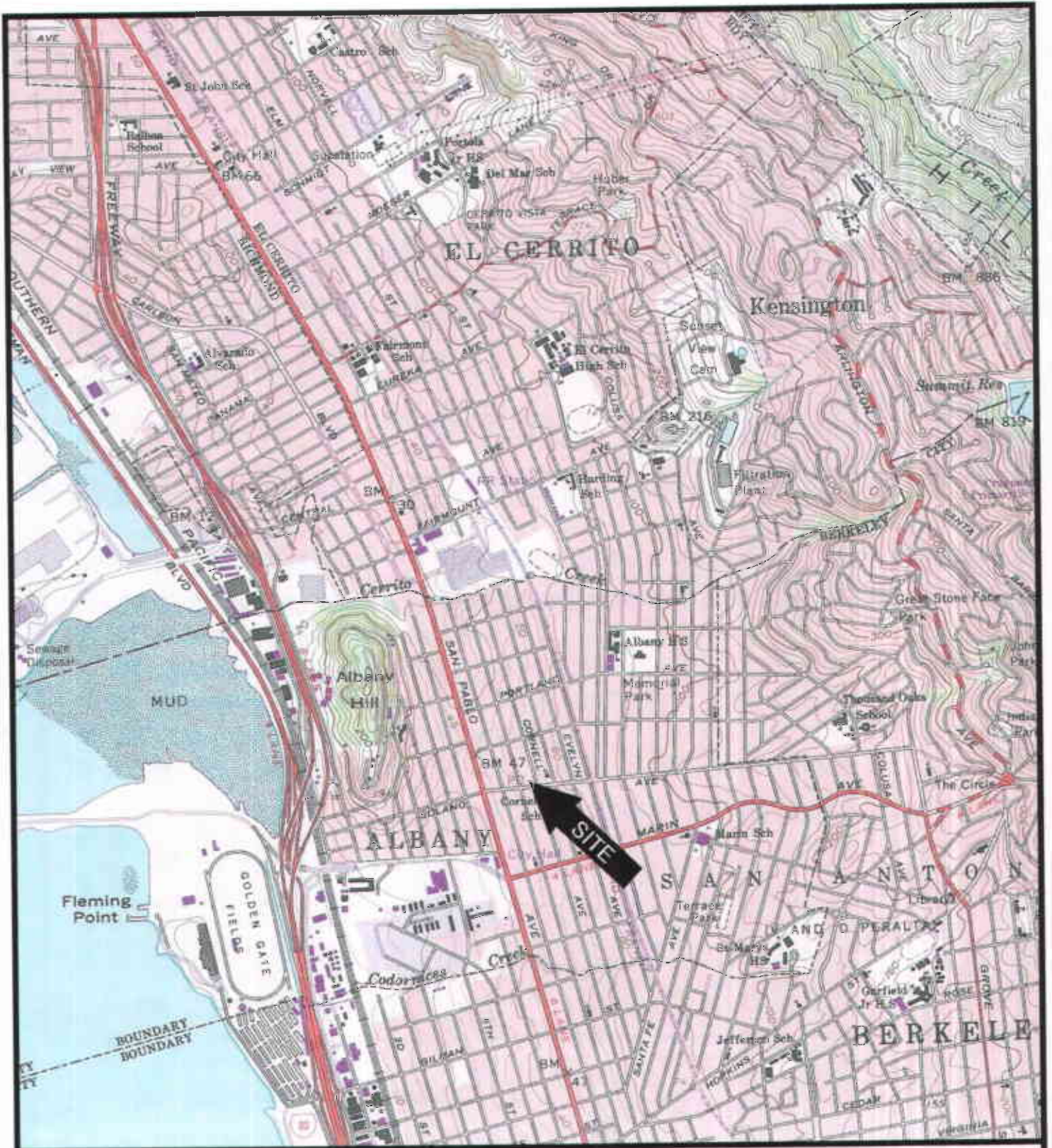
APPENDIX I

MAPS



Avalon Environmental Consultants
The Solano Group
November 10, 2004

Project #0420-458-2
1187 Solano Avalon
Albany, California



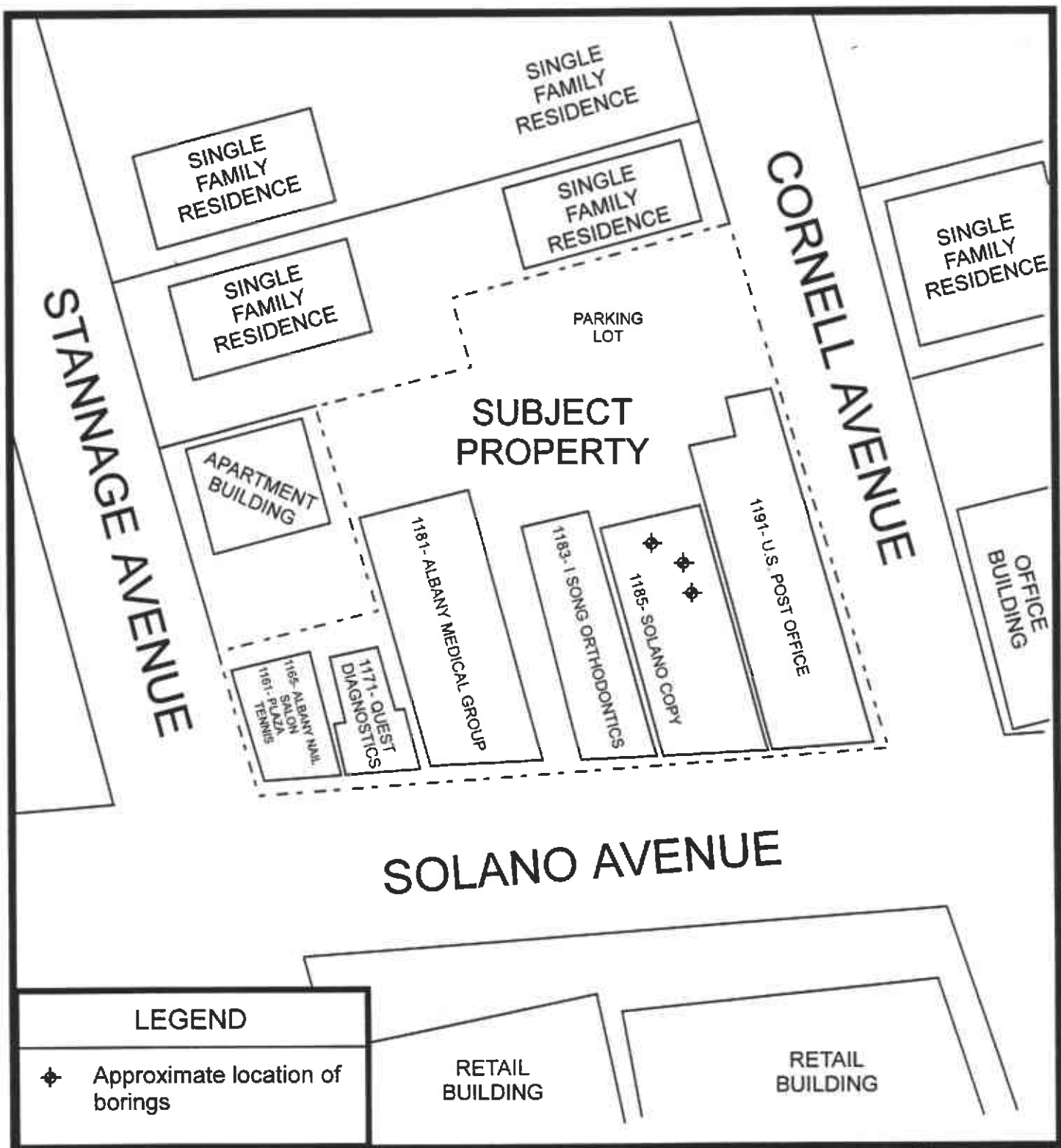
TOPOGRAPHY AND SITE LOCATION MAP



AVALON ENVIRONMENTAL CONSULTANTS
ALAMEDA, CALIFORNIA

Source:
U.S.G.S., 7.5 Minute Series Topographic
Maps, Richmond, California
1959, 1980






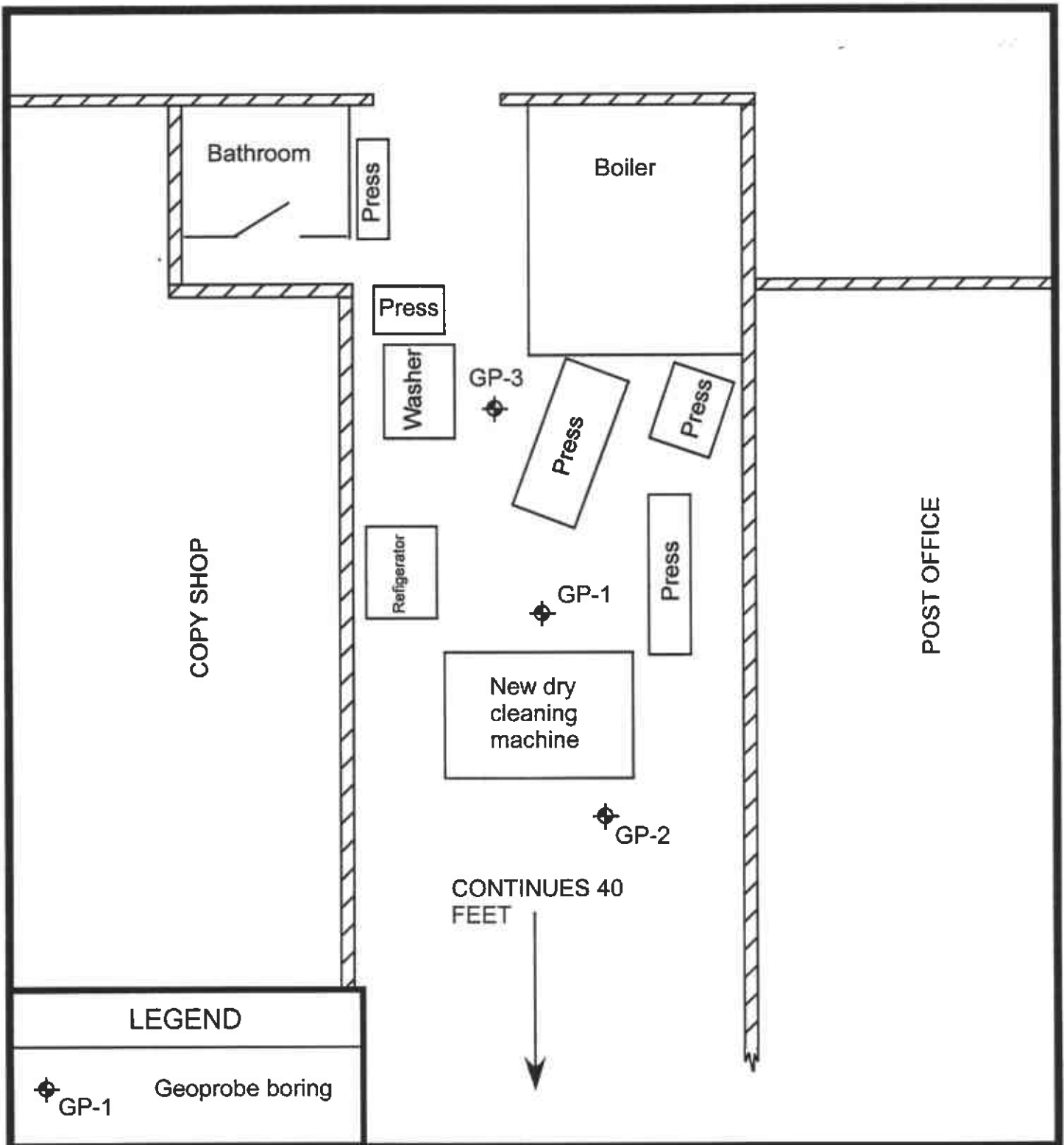
LEGEND	
◆	Approximate location of borings

SOLANO AVENUE

SITE LOCATION MAP



Site Address:	1187 Solano Avenue	Client Name:	Solano Group
Site City/State:	Albany, California	Project No.:	0420-458-2
 AVALON ENVIRONMENTAL CONSULTANTS ALAMEDA, CALIFORNIA		FIGURE 2	





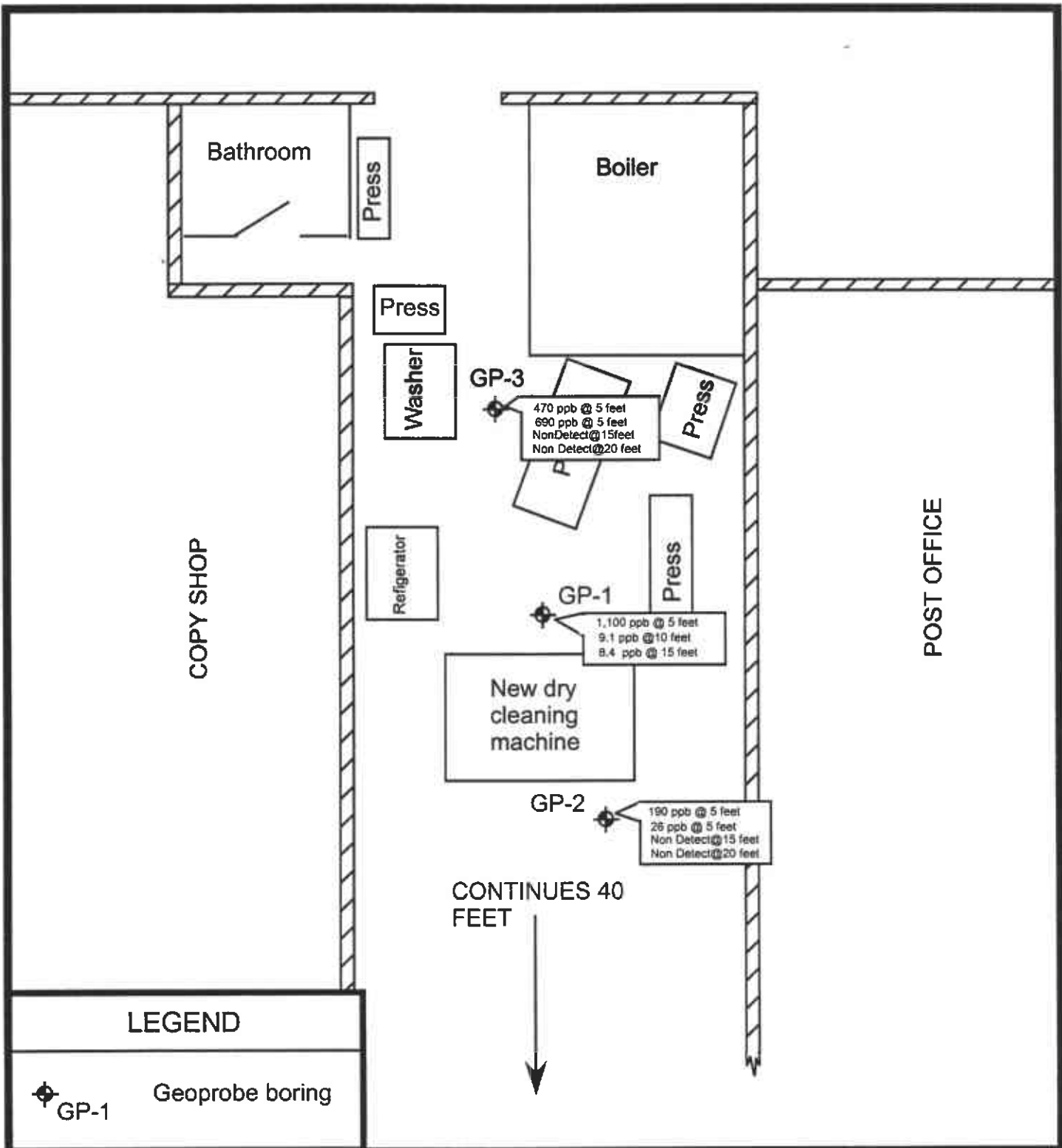
LEGEND

◆ GP-1 Geoprobe boring

BORING LOCATION MAP



Site Address:	1187 Solano Avenue	Client Name:	Solano Group
Site City/State:	Albany, California	Project No.:	0420-458-2
 AVALON ENVIRONMENTAL CONSULTANTS ALAMEDA, CALIFORNIA	Scale:		 FEET
	FIGURE 3		



LEGEND

⊕ GP-1 Geoprobe boring

PCE CONCENTRATION MAP



Site Address: 1187 Solano Avenue

Client Name: Solano Group

Site City/State: Albany, California

Project No.: 0420-458-2



AVALON ENVIRONMENTAL CONSULTANTS
ALAMEDA, CALIFORNIA

Scale: 0 10 FEET

FIGURE 4

APPENDIX II

SCOPE OF WORK
AND PERMITS



Avalon Environmental Consultants
The Solano Group
November 10, 2004

Project #0420-458-2
1187 Solano Avalon
Albany, California

OBJECTIVE

The objective of this investigation is to determine if the subject property has been impacted by its use as a dry cleaning facility.

SCOPE OF WORK

Site Safety and Health Plan:

Prior to subsurface testing, as required by law, a Site Safety and Health Plan will be prepared to insure workers and sub-contractors are aware of the risks and safety procedures associated with this Phase II Environmental Site Assessment.

Underground Service Alert and Permitting

As required by law, Underground Service Alert (USA) will be contacted to check the proposed probe locations for conflict with public utilities, such as gas or electrical lines. Permits from Alameda County Department of Environmental Health and the City of Albany Public Works department will be obtained, if required.

Subsurface Testing

Four geoprobe borings will be advanced to a depth of 20 feet bgs. Three of the geoprobe borings will be located inside the tenant space and one will be located outside. A Photo Ionization Detector (PID) will be used to field screen the samples. During the probing, samples will be collected at five, ten, and twenty foot depths. Select samples will be visually analyzed, field screened, described, and logged into a chain-of-custody form. All samples will be shipped under chain-of-custody to a certified laboratory for analysis. Four soil samples from each boring will be analyzed. Additionally, grab groundwater samples will be collected from each boring if encountered.

Analytical Testing

The soil samples and grab groundwater samples will be analyzed for volatile Organic Compounds by EPA method 8260. Samples will be delivered to a certified laboratory under chain-of-custody.

Assessment Report

At the conclusion of sample collection and analysis, a draft report of findings and conclusions will be prepared.



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-6633 James Yeo
FAX (510) 782-1239

www.acfwed.org
APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE
PERMIT NUMBER 104-1102

LOCATION OF PROJECT 1187 Solano Avenue
Albany CA 94709

WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

CLIENT Name Solano Group (Tony Kershaw)
Address PO Box 9026 Phone 510-524-8122
City Berkeley Zip 94709

- 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 Trevor Santochi CEG 1541
Alameda Environmental Fax 714-838-6612
Address 131 N. Jackson Ave (13) Phone 714-838-6632
City Justin CA 92780 Zip 92780

- 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.

TYPE OF PROJECT
Well Construction Geotechnical Investigation
Cathodic Protection General
Water Supply Contamination - SOIL BORINGS
Monitoring Well Destruction

- 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 NONE

- D. GEOTECHNICAL/CONTAMINATION
- 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 Air Rotary Auger
Cable Other Geoprobe

- E. CATHODIC
Fill hole anode zone with concrete placed by tremie.
- F. WELL DESTRUCTION
Send a stop of work site. A separate permit is required for wells deeper than 35 feet.

DRILLER'S NAME Kohar Testing & Engineering, Inc.
DRILLER'S LICENSE NO. 786.163

- G. SPECIAL CONDITIONS BA1
- NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

WELL PROJECTS
Drill Hole Diameter _____ in. Maximum _____
Casing Diameter _____ in. Depth _____ ft
Surface Seal Depth _____ ft. Owner's Well Number _____

GEOTECHNICAL/CONTAMINATION PROJECTS
Number of Borings 4 Maximum _____
Hole Diameter 1.5 in. Depth 25 ft

STARTING DATE will call within 5 days
COMPLETION DATE ONE DAY (FINISH SAME DAY) NOV 2, 2004

APPROVED _____ DATE _____

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-08
APPLICANT'S SIGNATURE _____ DATE 10/26/04
PLEASE PRINT NAME Trevor Santochi CEG 1541
Rev. 5-11-04

10-28-04

APPENDIX III
HEALTH AND SAFETY PLAN



Avalon Environmental Consultants
The Solano Group
November 10, 2004

Project #0420-458-2
1187 Solano Avalon
Albany, California



Site Safety and Health Plan

for

Phase II Subsurface Site Investigation

at

1187 Solano Avenue

Albany, California 94709

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**Avalon Environmental Consultants
SITE SAFETY AND HEALTH PLAN**

CLIENT: Anthony Kershaw

SITE ADDRESS: 1187 Solano Avenue

CLIENT CONTACT: Tony Kershaw **PHONE:** (510) 524-8122

PROPOSED START DATE: 11/2/04 **PROPOSED DURATION:** One Day

PROJECT SUPERVISOR: Trevor Santochi

1.0 PURPOSE

The purpose of the site Health and Safety Plan (HASP) is to provide Avalon Environmental Consultants' (Avalon) field personnel and subcontractors with an understanding of the potential chemical and physical hazards that exist or may arise while the tasks of this project are being performed.

This HASP describes the procedures to be followed in order to reduce employee exposure to potential health hazards which may be present at the project site. The emergency response procedures necessary to respond to such hazards are also described within this HASP.

2.0 OBJECTIVE

The primary objective is to ensure the well-being of all field personnel and the community surrounding this site. In order to accomplish this, project staff and approved subcontractors shall acknowledge and adhere to the policies and procedures established herein. Accordingly, all personnel assigned to this project shall read this site Health and Safety Plan and sign the Acknowledgment Statement (Appendix A) to certify that they have read, understood and agreed to abide by its provisions.

All subcontractors employed directly by Avalon are responsible for compliance with the requirements of this HASP and shall assure compliance with this HASP by all their officers, agents, employees and subcontractors. Avalon personnel have the authority to stop work performed by the subcontractors at this site if any work is not performed in accordance with the requirements of this HASP.

3.0 GENERAL SITE INFORMATION

General Site Description: Retail store/dry cleaner

General Topography: Level concrete covered ground

Is the site posted with warning signs: Yes No



Is the site presently secured from trespass: Yes No

If yes, describe:

4.0 SCOPE OF WORK

4.1 Description of Work to be Performed

Advance four geoprobe borings to a depth of twenty feet below ground surface (bgs). Sampling soil every five feet. Work to be performed in the rear of the store. (See Workplan)

Emergency Response: No

5.0 PROJECT ORGANIZATION

5.1 Project Staffing/Chain of Command

<u>Titles</u>	<u>Names</u>	<u>(Phone #/Pager)</u>
Project Manager/FSS	Trevor Santochi	(714) 836-6632

<u>Crew Size</u>	<u>No</u>
Project Managers/FSS:	1
Equipment Operators:	2
Technicians:	0
Laborers:	0

5.2 Organization and Responsibilities

Avalon will oversee all phases of the project. The following management structure will be instituted for the purpose of successfully and safely completing this project.

Project Manager:

The Project Manager will be responsible for implementing the project and obtaining necessary personnel or resources for the completion of the project. Specific duties will include:

- Coordinating the activities of all subcontractors, to include informing them of the required Personal Protective Equipment (PPE) and ensuring their signature acknowledging this site Health and Safety Plan.

- Selecting a Field Safety Supervisor (FSS) and field personnel for the work to be undertaken on site.
- Ensuring that the tasks assigned are being completed as planned and on schedule.
- Providing authority and resources to ensure that the FSS is able to implement and manage safety procedures.
- Preparing reports and recommendations about the project to clients and affected project personnel.
- Ensuring that persons allowed to enter the site (i.e., EPA, contractors, state officials, visitors) are made aware of the potential hazards associated with the substances known or suspected to be on site and are knowledgeable as to the location and contents of the on-site copy of the specific site safety plan.
- Ensuring that the FSS is aware of all of the provisions of this site safety plan and is instructing all personnel on site about the safety practices and emergency procedures defined in the plan.
- Ensuring that the FSS is making an effort to monitor site safety and has designated a Field Team Leader to assist with the responsibility when necessary.

Field Safety Supervisor (FSS):

The Field Safety Supervisor (FSS) shall be responsible for the implementation of the site safety plan on site. Specific duties will include:

- Evaluating health risk potential for each site activity and establishing action levels to adjust protective requirements.
- Implementing heat and cold stress monitoring and protective measures.
- Providing site specific health and safety information.
- Conducting periodic site inspections to ensure compliance with the HASP.
- Directing/instructing on-site personnel regarding appropriate actions and monitoring procedures throughout the project. The FSS will be available on-site during all work activities.
- Monitoring the compliance of field personnel for the routine and proper use of the PPE that has been designated for each task.



- Routinely inspecting PPE and clothing to ensure that it is in good condition and is being stored and maintained properly.
- Stopping work on the site or changing work assignments or procedures if any operation threatens the health and safety of workers or the public.
- Monitoring personnel who enter and exit the site and all controlled access points.
- Reporting any signs of fatigue, work-related stress or chemical exposures to the Project Manager and/or Health and Safety Manager.
- Dismissing field personnel from the site if their actions or negligence endangers themselves, co-workers or the public and reporting the same to the Project Manager and Health and Safety Manager.
- Reporting any accidents or violations of the site safety plan to the Project Manager and documenting the same in the project records.
- Evaluating weather and chemical hazard information and making recommendations to the Project Manager about any modifications to workplans or personnel protection levels in order to maintain personnel safety.
- Approving all field personnel working on site, taking into consideration their level of safety training, their physical capacity and their eligibility to wear the protective equipment necessary for their assigned tasks (i.e., Respirator Fit Testing Results.)
- Overseeing the air monitoring procedures as they are carried out by the site personnel for compliance with all company health and safety policies.
- Knowledge of emergency procedures, evacuation routes and the telephone numbers of the ambulance, local hospital, poison control center, fire and police departments.
- Ensuring that all project-related personnel have signed the personnel agreement and acknowledgments form contained in this site safety plan.
- Coordinating upgrading and downgrading PPE with the Project Manager, as necessary, due to changes in exposure levels, monitoring results, weather and other site conditions.
- Performing air monitoring with approved instruments in accordance with requirements stated in this Health and Safety Plan.



Other Project Field Staff:

Responsibilities include:

- Adherence to this HASP during all field activities.
- Communicating its requirements to subcontractors and ensuring their compliance.
- Informing the FSS and the project manager of any health or safety related questions or issues that arise in the course of the field work.

Subcontractors:

Responsibilities include:

- Adherence to this HASP during all field activities or to more stringent requirements imposed by their own guidelines.
- Submission of documentation for training, medical surveillance and respirator fit testing requirements to the FSS prior to initiation of on-site activities.

6.0 HAZARD EVALUATION

The process of collecting subsurface samples by drilling, coring or trenching involves potential exposure to environmental contaminants. Potential chemical contaminants include volatile organic hydrocarbons (VOCs).

Physical hazards will be involved in the operation of equipment used for the collection of subsurface samples. Equipment that may be used on the job site may include drill rigs, steam cleaners, pressure washers, drum dollies, backhoes, compressors and other equipment.

Potential hazards also include encountering buried utilities such as gas, electrical, sewer, water, telephone and cable television lines during drilling or trenching operations. Similarly, striking a buried container of hazardous materials can result in very high contaminant exposure and/or fire and explosion hazards.

6.1 Contaminant/Waste Characteristics:

General Forms: Solid Liquid Gas/Vapor



Chemicals of Concern:

- ☒ VOC ☒ Chlorinated Hydrocarbons

Hazard Determination: Low

Primary Hazard:

Inhalation of contaminated dust and/or vapors are the primary hazards to drill site personnel. However, ingestions of contaminated food/drink is also possible if personnel do not adequately decontaminate before these activities.

First Aid:

Ingestion: Give water if patient is conscious. Call Poison Control - follow instructions. Administer CPR if necessary. Seek medical attention.

Inhalation: Remove person from contaminated environment. Administer CPR if necessary. Seek medical attention,.

Skin Contact: Brush off dry material, remove contaminated clothing. Wash skin with soap and water. Seek medical attention if irritation develops.

Eye Contact: Flush eyes and surrounding tissue with water for 15 minutes. Seek medical attention.

*** Exposure Symptoms:** Headache, dizziness, nausea, drowsiness, irritation of eyes, nose, throat, breathing difficulties.

Report incident to Project Manger and Health and Safety Manager after emergency procedures have been implemented.

Potential Safety Hazards:

- ☒ Wet or slippery surfaces
- ☒ Surface debris (broken glass, sharp objects)
- ☒ Noise in excessive levels
- ☒ Hoses, tools, etc. lying on ground
- ☒ Cuts and bruises

Other Hazards Present on Site: None



Overall Site Hazard Summary: LOW

7.0 GENERAL SAFETY REQUIREMENTS

All personnel involved in subsurface investigations shall read and thoroughly understand this safety plan prior to entering and/or working on the site.

No project personnel may be allowed on the site without the prior knowledge and consent of the designated field safety supervisor and project manager.

There will be no on-site activities conducted without sufficient backup personnel. At a minimum, two persons must be present during on-site activities. Visual, voice or radio communication will be maintained at all times.

There will be no eating, drinking, application of cosmetics or smoking on the site.

Project personnel shall bring to the attention of the designated FSS any unsafe condition or practice associated with on-site project-related activities.

All boring, excavation, heavy equipment operation and general construction activities shall be performed in compliance with 29 CFR 1926.

All project personnel who are required to wear purifying or air supplied respirators must first meet the training and medical requirements of 29 CFR 1910.120 and 20 CFR 1910.134.

No contact lenses may be worn within 20 feet of drilling activity ("hot zone").

7.1 Control of Work Area

Prior to the start of work the work area shall be controlled to reduce the possibility of injury to workers or pedestrians. Control of the area will be accomplished by, but not limited to, the following:

Setting up physical barriers to exclude unnecessary personnel from the area and posting appropriate signage.

Establish the working zones (Exclusion Zone, Support Zone and Clean Zone) within the work site.

Minimize the number of personnel and equipment in the work area consistent with effective operations.

Establish control points to regulate access to work zones.

Prior to the start of work each shift, the FSS shall conduct an inspection of the



devices used to control the work area. (See Appendix F, Site monitoring Log.)

7.2 Drill Rig Safety Guidelines

Drill rig maintenance and safety is the responsibility of the drilling operator. The following information is provided as general guidelines for safe practices on the site:

- No food or beverage will be consumed or stored in the operational area.
- The route of travel before moving the drill rig off-road should be inspected. Rocks, trees, erosion, power lines and uneven surfaces should be noted.
- No passengers shall be permitted in the cab while moving the drill rig into rough or sloped terrain.
- Multiple drive power trains (when available) on rig vehicle shall be mobilized for off-road travel.
- Travel directly up or down grade on slopes is preferred.
- Changes in grade shall be approached squarely to avoid shifting loads or unexpected weighting.
- A spotter (person at grade) to provide guidance when vertical and lateral clearance is questionable shall be utilized.
- Use hand brakes and chock rig wheels when grades are steep.
- Rig mast shall be lowered when traveling off-road.
- All loads to rig shall be secured prior to off-road mobilization.
- Locate and treat overhead electrical lines as if they were energized.
- Utility agencies shall be contacted to de-activate overhead service in areas that interfere with drilling operations. Utilities shall be handled only by utility personnel.
- Utility agencies shall be contacted to survey, mark and flag locations of buried utility lines.
- Allow at least 20 feet clearance between rig mast and overhead utility lines. Prevent rig contact with utility lines.
- Stabilize and level each work site prior to drill rig setup.



- Maintain orderly housekeeping on and around the drill rig.
- Store tools, materials and supplies to allow safe handling by drill crew members. Proper storage on racks or sills will prevent spreading, rolling or sliding.
- Storage of tools, materials or supplies within or on the drill rig derrick during transportation shall be avoided.
- Store gasoline only in containers specifically designed or approved for such use.
- Wear eye protection when chipping, chiseling or breaking material that presents a risk of flying objects.
- Wear appropriate respiratory protection when performing dusty work. (i.e. concrete cutting, mixing cement etc.)
- Inspect wire, rope, hoisting hardware, swivels, hooks, bearings, sheaves, guides, rollers, clutches, brakes for the following: abrasions, breaks, wear, fatigue, corrosion, jamming and kinking.
- Suspension of loads when hoist is unattended should be avoided.
- Hoisting loads directly over field personnel shall not be permitted.
- Restrict hoisting operations during unfavorable environmental conditions such as rain or high winds.
- Maintain safe distance from hoisting equipment (e.g., wire rope, hooks, pinch points) when slack is reduced.
- Responsibilities of driller, geologists, field crew, etc. during drilling operations shall be established before work activities are initiated.
- Hand auger the first five feet in all borings.
- Begin auger borings slowly with the drive engine operating at low RPMs.
- Restrict contact with power coupling or auger during rotation.
- Prevent placing hands or feet under auger during rotation.
- Prevent placing hands or feet under auger sections during hoisting over hard surfaces.



- Avoid the removal of soil/cuttings with hands or feet.
- Cleaning shall occur when drill rig is in neutral and the augers are not rotating.

7.3 General Heavy Equipment Operation Safety Guidelines

Hazards/Controls

- (1) The use of heavy equipment produces noise levels in excess of regulatory limits. During any activities involving the use of heavy equipment, ear plugs or ear muffs providing at least 25 NRR of protection must be worn.
- (2) Since verbal communication is impossible, standardized/recognized hand signals must be used and should be reviewed by all personnel prior to job startup.
- (3) It is the responsibility of all personnel to keep well back from operating equipment, since the equipment operator may have limited visibility.
- (4) Prior to the use of cranes, verify that a current certification is available and perform an appropriate load test.
- (5) Crane operations should be performed using tag lines and sufficient number of "chokers".
- (6) Heat stress is a hazard, especially where PPE is required. Use work-rest regimens and maintain hydration.

Other Requirements

Only personnel that have been trained and certified in the use of heavy equipment may operate said equipment. Each piece of equipment must be trained on separately. Personnel involved in other specialized tasks must be appropriately trained prior to performing them.

7.4 Decontamination/Cleaning Activities Safety Guidelines

Hazards/Controls

- The fact that decontamination or cleaning activities are taking place implies that chemical contamination is present and must be protected against. In addition, the cleaning agents may be irritating, or worse, and protective measures must be implemented.



- Proper lockout/tagout procedures must be employed to prevent injury. Electrical circuits require special attention.
- Significant amounts of decontamination work must be in restricted work areas and from ladders, etc. Slips, trips and falls cause serious injury and good housekeeping is very important.
- Heat stress is a hazard, especially where PPE is required. Use work-rest regimens and maintain hydration.

Other Requirements

All decontamination operations that involve confined spaces, supplied air, etc., also require the task specific training.

7.5 Sampling Activities Safety Guidelines

Hazards/Controls

- When opening drums, check first for pressure. Loosen the retaining ring part-way and lift lid gently. After insuring that no residual pressure is present, finish removing retaining ring.
- The need for sampling is often the result of "lack of knowledge" of the material, implying a somewhat unknown situation. PPE requirements and handling procedures must address this.
- Some sampling activities require use of special sampling equipment. Persons using this equipment should be trained prior to performing sampling.
- There is a concern of punctures and cuts. Special protective equipment will be required.
- Heat stress is a hazard, especially where PPE is required. Use work-rest regimens and maintain hydration.

8.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

Based on information gathered during prior investigations, the appropriate starting level of PPE for this project is Level D.

8.1 Level D Protection

The minimum ensemble (Level D) for work zone and decontamination work is as follows:



- Hard Hat
- Steel toe safety shoes or boots
- Safety Glasses
- Hearing Protection (if necessary)

Note: Contaminants are anticipated in some, if not most, areas of subsurface work; should evidence of contamination become apparent, then protective gloves, including a latex liner and chemical resistant outer gloves and Tyvek™ coverall will be required (see selection criteria below). In addition, latex over-boots (disposable) or reusable chemically resistant over-boots or steel toe over the sock rubber boots will be necessary. Provisions for decontamination must be established at any exclusion zone where non-disposable outer boots are to be worn.

For operations which require work gloves to protect the hands from abrasion, sharp edges, etc., leather (or equivalent) work gloves may be worn OVER chemical resistant gloves. Such gloves will be dedicated to exclusion zone work, but must be assumed to be chemically contaminated once put into service.

Upgrades of additional equipment may be mandated by the FSS based upon conditions or activities. Substitutions other than those described in this section are permissible only upon approval by the FSS.

8.2 Level C Protection

Consists of the addition of the following respiratory protection to the Level D ensemble (Section 8.1):

- Full face air purifying respirators with combination HEPA/organic vapor/acid cartridges.
- Eyeglass inserts **MUST** be provided for those employees who require prescription eyewear.

8.2.1 Criteria for Upgrading to Level C

The presence of any one of the following conditions shall be sufficient to require Level C PPE.

- Verified detection of combustible gas levels in the breathing zone using the combustible gas meter. The detection of methane is likely to be an indication of the presence of other contaminants.



- "Verified" organic vapor levels in the breathing zone, as measured by PID:
 - ≥ 2 ppm above background, sustained for five minutes.
 - ≥ 5 ppm above background, sustained for one minute.
- The detection of readings above background at the borehole/pit shall be noted in the sampling log as evidence of environmental contamination, but only breathing zone PID measurements shall be used for establishing respiratory protection criteria.
- Visible dust release (for example, during drill or when jack hammering concrete). Alternate NIOSH-approved dust respirators may be substituted for full face air purifying respirators with specific approval by the FSS.
- The detection of chemical odors arising from boreholes.
- Once Level C protection is initiated, it will continue to be worn until the triggering condition returns to background levels.
- The term "verified" is used to indicate measurements that are confirmed by one or more of the following:
 - (1) Detection of the contaminant using more than one instrument (i.e., verification by detector tubes, OVA, etc.)
 - (2) Repeatable measurements - for example, if the PID indicates a reading above background, the meter should be moved upwind of the operation. If the reading falls and rises again upon returning the instrument to the original location, the initial measurement may be considered "verified".
 - (3) If the meter response is not attributable to the borehole or excavated material, the meter should be checked for drift. If circumstances suggest a vapor source not related to the sampling process, the FSS should be immediately contacted for evaluation.

8.3 Additional Protective Equipment

American National Standard Institute (ANSI) approved safety glasses with side shields shall be required during chip-producing operations, such as drilling/jackhammering through concrete.



Splash-proof chemical goggles shall be mandated by the FSS for operations presenting splash or splatter potential, such as vehicle decontamination or wet drilling operations.

(Full face respirators preclude the need for other forms of eye protection.)

Hearing protection: Employees will be offered a choice of ear muffs or disposable ear plugs for use around high noise levels. The FSS shall base decisions as to what conditions require the use of hearing protection on the criteria set forth in Section 13.5.

8.4 Personal Protective Equipment Restrictions

Contact lenses will not be permitted in any exclusion zone.

Personnel who may be required to don respiratory protection shall be required to report to work clean shaven every day (in situations requiring face-to-facepiece seal.)

Personnel may only wear Level C respirator models for which the result of a previous fit test are on file with the FSS.

8.5 Selection Criteria for Coveralls

Uncoated Tyvek™ coveralls may be utilized for dry work.

Polyethylene-coated Tyvek™ coveralls shall be utilized for work which presents the potential for contact with contaminated liquids or wet mud (mud loose enough to splash or splatter.) Examples: Wet drilling, handling water samples, decontaminating vehicles.

Note: Vinyl rain suits may be substituted for polyethylene coated Tyvek™ provided decontamination procedures, approved by the HSO are implemented before use.

Saranex™ coveralls are to be worn during any VOC sampling and whenever indicated by the FSS.

9.0 AIR MONITORING

Air monitoring is conducted to identify and quantify airborne levels of hazardous substances, to determine appropriate levels of respiratory protection and to warn of the potential for Immediately Dangerous to Life and Health (IDLH), toxic or flammable atmospheric conditions.

The greatest potential hazards to safety and health at this site are:



1. Exposure to chemical vapors - through inhalation.
2. Exposure to chemical contamination - through skin contact and ingestion.

Ongoing air monitoring during project tasks will provide data to ensure that vapor concentrations are within acceptable ranges and will provide adequate selection criteria for respiratory and dermal protection. A Photo Ionization Detector (PID) shall be utilized for monitoring with a 1 part per million (ppm) detection limit.

- If PID readings taken in the breathing zone exceed 100 ppm, a NIOSH approved air-purifying respirator with organic vapor cartridges must be worn by all site workers within any area where monitoring results exceed 100 ppm.
- If PID readings taken in the breathing zone exceed 750 ppm, Level B protection will be required. Personnel must leave site immediately and contact FSS or Health & Safety Manager for further instructions.
- Respirator cartridges will be changed once per day as a minimum. This can be accomplished at the end of the work day during respirator decontamination. If odor breakthrough is detected while wearing the respirator or breathing becomes difficult, change cartridges immediately.

9.1 Tasks Performed Within a Confined Space

- Mechanical injuries and chemical injuries are possible when working in confined spaces. To minimize potential for these injuries, effective lockout/tagout and blocking/blinding procedures must be employed.
- Hazardous atmospheres may exist or develop within confined spaces. It is important to identify these atmospheres and to proceed to eliminate the condition and/or protect against it. Monitoring shall include oxygen, LEL and toxic contaminant readings. Regulatory limits for work conditions are:

19.5-23%	Oxygen
< 10%	LEL
< 100ppm	Toxic Contaminants

Varying conditions will dictate PPE particulars. Monitoring will occur prior to entry and at specified intervals during entry. (Entry into IDLH atmospheres require HLR with egress or SCBA and the use of buddy team procedures.)

- Safe work practices and emergency rescue require specific equipment for confined space entries. All entry personnel will wear harnesses, lifelines and lanyards. (Exceptions by written variance from Health and Safety only.) Entry through top manways/openings require the use of an emergency



extraction device.

- The minimum number of personnel for any entry is three (3). Depending on work tasks, more personnel may be required. The standby/rescue/ holewatch person must be dressed to the same level of protection, and in the same chemical protective clothing as the entry person(s). If the job is operating "under air", the rescue attendant must be supplied by a separate air source (2 pack of bottles or SCBA.)
- Physical apparatus and materials are common within confined spaces and can cause injury and/or may damage chemical protective clothing. Such structures indicate special PPE requirements and a cautious approach.
- All hazards must be identified and controls discussed with work team.
- Entries from elevated work surfaces have the same hazards and controls are the same as for any elevated work surface. Any other hazardous operations that occur within the confined spaces will be controlled, in most cases, in the same fashion as if the hazardous operation occurred outside the confined space.
- Heat stress is a hazard, especially where PPE is required. Use work-rest regimens and maintain hydration.

Other Requirements

Only personnel that have been trained and certified in Confined Space operations will be allowed to participate in these operations.

If the entry is done "under air", Supplied Air requirements must be adhered to as well.

9.2 Stopping Work

Criteria for stopping work and evacuating personnel from the work zone are listed below. Once work is stopped due to a reason listed below, operations, work practices and protective strategies will be re-evaluated and modified, if necessary, through consultation with the FSS prior to resuming activity.

The detection of combustible gas levels in excess of 25% (LEL) at the borehole or pit.

- "Verified" organic vapor levels of ≤ 50 ppm via the PID in the breathing zone.



- The detection of gaseous contaminants that cannot be removed by the Level C respirator at levels above 50% of the OSHA PEL as measured at the breathing zone via detector tubes. Example: H₂S, HCN, mercury vapor. EXCEPTION: Carbon monoxide - see below.
- Carbon monoxide (CO) levels in excess of the following levels (measurements via detector tubes may be used for the following determinations):
 - a) In excess of 50 ppm for periods exceeding 15 minutes (breathing zone).
 - b) In excess of 15 ppm for 30 minutes (breathing zone).

9.3 Air Sampling Protocol

Previous environmental investigations indicate the possibility of volatile organic compounds, such as tetrachloroethene (PCE). In the event air monitoring with a combination oxygen/combustible gas meter becomes appropriate, alarms shall be set at 19.5% oxygen, 25% LEL. The meter is to be set up with an extension probe or a length of Tygon tubing to allow sample to be drawn immediately adjacent to borehole.

- The following air/physical monitoring shall be conducted when the exclusion zones are occupied. When more than one exclusion zone exists at the same time (not anticipated), spot readings at all occupied exclusion areas shall be performed on a rotating basis.
- PID readings: Organic vapor monitoring shall be performed at the breathing zone and boreholes every 10 feet of drilling. Results shall be logged on the Site Monitoring Log located in Appendix F.
- Personal sampling for: Organic vapors may be required at the discretion of the FSS.

9.4 Equipment Calibration and Maintenance

Oxygen/Combustible gas meters shall be calibrated daily against a cylinder of calibration gas of a suitable concentration, such as 25% LEL.

The PID shall be calibrated daily against isobutylene span gas and "zeroed" against organic-free zero air. Background levels measured at the site shall be noted daily, and used daily, as a baseline for detecting excursions during monitoring.

All instruments shall be charged and maintained as specified in their respective



instrument manuals. This will be the responsibility of the FSS.

9.5 Documentation

The Site Monitoring Log (Appendix F) shall be used to document all air monitoring data. This log shall be used to record the following:

- Instrument calibrations
- Work zones established each day - list location and activity for each.
- Breathing zone and borehole readings.
 - type of instrument/reading
 - location
 - time of measurement
 - activity
 - actions taken in response to elevated levels
- Any unusual occurrences (injuries, incidents of non-compliance with HASP, instrument alarms sounding, etc.) or safety concerns.
- Upgrades/downgrades in PPE. The duration of use of Level C equipment shall be noted.
- Weather conditions each day (temperature, wind and precipitation) are sufficient.

10.0 CHEMICALS OF CONCERN

Health Effects

Potential health effects from a chemical exposure are dependent on several exposure factors such as: toxicity of substances, duration of exposure, concentration during exposure and the overall health of the person exposed.

The chemicals commonly at this site are: Volatile organic compounds. The following is a health analysis of these chemicals.

Additional information (When Available) of these chemicals can be found in the Material Safety Data Sheet located in Appendix D.

Volatile Organic Componds

Tetrachloroethylene (also known as perchloroethene or "PERC") is a synthetic chemical. It



is a colorless, nonflammable and stable liquid at room temperature. Although it is liquid at room temperature, it tends to evaporate into the air producing an ether-like odor that may be detected at low concentrations. However, after a short period of time the odor may become inconspicuous, thereby becoming an unreliable warning signal.

Volatile organic compounds (VOCs) can enter the body through inhalation, ingestion and skin contact. Health effects include Eye and respiratory tract irritation, headaches, dizziness, visual disorders, and memory impairment are among the immediate symptoms that some people have experienced soon after exposure to some organics. Many organic compounds are known to cause cancer in animals; some are suspected of causing, or are known to cause, cancer in humans

11.0 SPILL CONTAINMENT

The activities anticipated in the course of this project do not present likely scenarios for hazardous material spills. Sampling and decontamination media such as *hexane, acetone and nitric acid* will be handled in small containers.

Plastic sheeting surrounding boreholes shall be sized to contain the volume of spoil/water anticipated to be unearthed. Where significant quantities of potentially contaminated water will be handled, the sheeting will be bermed to prevent the flow of liquids to surrounding areas.

A supply of sorbents will be kept on-site sufficient to contain the contents of the largest single portable container of hazardous material (hexane, gasoline, acetone, etc.) The PPE present for field work is suitable for clean-up of spills of this nature.

12.0 WORKER DECONTAMINATION

Decontamination is required each time persons leave a work zone and there is reason to suspect soil contamination. Decontamination for this type of work relies heavily on the use of disposable PPE.

When personnel move between active work zones, minimal decontamination will be required. The Level D exclusion zone ensemble may be left on EXCEPT:

- Latex overboots shall be removed upon exiting any exclusion zone.
ALTERNATIVE: Overboots may be washed in soap solution in a wash tub.
- Non-disposable rubber boots shall be washed in soap solution in a wash tub EACH TIME wearer leaves exclusion zone.
- Personnel who have removed or decontaminated boots, but who are wearing Level D exclusion zone PPE, must proceed on foot directly to the next exclusion zone.



When personnel are leaving a work area for any destination outside of a work zone, the following procedures shall be in effect:

- All duct tape is removed and discarded in designated disposal bag.
- Latex overboots are removed and discarded in designated disposal bag. (ALTERNATIVE: Non-disposable rubber boots shall be washed in soap solution in wash tub.)
- Outer gloves are removed and discarded in designated disposal bag.
- Coveralls are removed and discarded in designated disposal bag.
- Inner gloves are removed and discarded in designated disposal bag.
- Personnel shall proceed to nearest hand/face washing facilities before consuming food, beverages or tobacco products.
- If only light contact with excavation materials has occurred, latex overboots, coveralls and outer gloves may be set aside and reused during the next work period after a break.

NOTE: It is anticipated that all disposable components of the Level D ensemble will be used for a maximum of 4-5 hours before being discarded, since they will be discarded at lunch and at the end of the work day. Items that become torn or grossly contaminated will be replaced as needed.

13.0 JOB SITE HAZARDS

The following hazards may be encountered in this:

13.1 Slippery Surfaces

All employees must wear American National Standards Institute (ANSI)-approved work boots with steel toe protection. Skid proof soles are highly recommended.

13.2 Organic Vapors

The inhalation of volatile organic vapors during all operations can pose a potential health hazard. Hazard reduction procedures include monitoring the ambient air with a PID and/or FID and use of Personal Protective Equipment indicated on Table II. Workers should stand upwind of the source of contamination whenever possible. If ambient air levels in the breathing zone exceed 100 ppm, full face respirators equipped with organic vapor cartridges must be worn.



13.3 Flammable Vapors

Presence of flammable vapors can pose a potential fire hazard and health hazard. Hazard reduction procedures include monitoring the ambient air with an O₂/LEL meter. If the LEL reading exceeds 20%, leave the site immediately and contact the Fire Department.

13.4 Oxygen Enriched/Deprived Atmospheres

Atmospheres that contain a level of oxygen greater than 23% pose an extreme fire hazard (the usual ambient oxygen level is approximately 20.5%). All personnel encountering atmospheres that contain a level of Oxygen greater than 23% must evacuate the site immediately and must notify the Fire Department.

13.5 Noise

When exposure to sound levels in the field personnel's ear ("A") scale, slow response) is likely to be in excess of 90 Db for greater than 5 minutes or 85 Db for greater than 30 minutes, noise protection shall be worn. Thus, a sound level meter shall be present if these levels are likely to occur.

It is anticipated that work within ten (10) feet of a drill rig will be 85 Db or greater. Sound level meter (SLM) readings will be performed whenever obvious noise sources call for measurements. The SLM readings will be used to determine the need for mandatory hearing protection. Once specific operations/tools are documented as producing noise levels that require hearing protection, the FSS may enforce the use of hearing protection whenever the operation takes place. ANSI-approved hearing protection must be worn during noise operations such as drilling.

13.6 Surface and Equipment Contamination

Contact with contaminated surfaces, or surfaces suspected of being contaminated, should be avoided. This includes walking through, kneeling or placing equipment in puddles, mud, discolored surfaces, or on drums and other containers. Eating, smoking, drinking and/or the application of cosmetics is prohibited on this site in the immediate work area. This reduces the likelihood of contamination by ingestion.

13.7 Exposure - Heat Stress

Since climatic changes cannot be avoided, work schedules will be adjusted to provide time intervals for intake of juices, juice products and water in an area free from contamination and in quantity appropriate for fluid replacement.

Heat stress may occur even in moderate temperature areas and may present any or all of the following:



- Heat Rash: Result of continuous exposure to heat, humid air and chafing clothes. Heat rash is uncomfortable and decreases the ability to tolerate heat.
- Heat Cramps: Result of the inadequate replacement of body electrolytes lost through perspiration. Signs include severe spasms and pain in the extremities and abdomen.
- Heat Exhaustion: Result of increased stress on the vital organs of the body in the effort to meet the body's cooling demands. Signs include the following: shallow breathing; pale, cool moist skin; profuse sweating; dizziness.
- Heat Stroke: Result of overworked cooling system. Heat stroke is the most serious form of heat stress. Body surfaces must be cooled and medical help must be obtained immediately to prevent severe injury and/or death. Signs include the following: red, hot dry skin; absence of perspiration; nausea; dizziness and confusion; strong, rapid pulse. This can lead to coma and death.

Heat Stress Prevention

- A. Replace body fluids (water and electrolytes) lost through perspiration. Solutions may include a 0.1% salt and water solution or commercial mixes such as Gatorade and Squench.
- B. Administer cooling devices to aid the natural body ventilation. Cooling occurs through evaporation of perspiration and limited body contact with heat-absorbing protective clothing. Utilize fans and air conditioners to assist in evaporation. Long, cotton underwear is suggested to absorb perspiration and limit any contact with heat-absorbing protective clothing (i.e., coated Tyvek™ suits).
- C. Provide hose-down mobile shower facilities to cool protective clothing and reduce body temperature.
- D. Conduct non-emergency response activities in the early morning or evening during very hot weather.
- E. Provide shelter against heat and direct sunlight to protect personnel.
- F. Rotate workers wearing protective clothing during hot weather.

13.8 Exposure - Cold Stress

Work schedules will be adjusted to provide sufficient rest periods in a heated area for



warming up during operations conducted in cold weather. Also thermal protective clothing such as wind and/or moisture resistant outerwear is recommended to be worn.

If work is performed continuously in the cold at or below -7°C (20°F), including wind chill temperature, heated warming shelters (tents, cabins, company vehicles, rest rooms, etc.) shall be made available nearby and the worker should be encouraged to use these shelters at regular intervals, the frequency depending on the severity of the environmental exposure. The onset of heavy shivering, frostnip, the feeling of excessive fatigue, drowsiness, irritability or euphoria are indications for immediate return to the shelter. When entering the heated shelter, the outer layer of clothing shall be removed and the remainder of the clothing loosened to permit sweat evaporation. A change of dry work clothing shall be provided as necessary to prevent worker from returning to their work with wet clothing. Dehydration, or the loss of body fluids, occurs in the cold environment and may increase the susceptibility of the worker to cold injury due to a significant change in blood flow to the extremities. Warm sweet drinks and soup should be provided at the work site to provide caloric intake and fluid volume. The intake of coffee should be limited. (Adapted from TLV's and Biological Exposure Indices 1988-1989; ACGI.)

13.9 Falling Objects

Hard hats must be worn by all personnel whenever construction-type activity is taking place. (i.e., drilling, excavation, trenching)

13.10 Vehicular Traffic

All employees will be required to wear a fluorescent safety vest at all times while on site. In addition, the following safety equipment procedures must be adhered to.

<u>Task</u>	<u>Traffic Safety Equipment</u>
Drilling	A

Safety Equipment Key:

A = Cones and barricades required - tapes and flags are recommended but optional.

13.11 Monitoring Well Activities and Groundwater Sampling

Skin and eye contact with contaminated groundwater and/or soil may occur during these tasks. Nitrile butyl rubber or neoprene gloves and approved safety goggles should be worn when contact with contaminated substance and/or splash is possible.



13.12 Sample Preservation and Safety Procedures

When hydrochloric acid is used, skin and eye contact can occur. This hazard can be reduced with the use of Nitrile butyl rubber or neoprene gloves and the use of safety goggles.

Skin and eye contact with contaminated soil and/or groundwater may occur during sampling. Nitrile-butyl or neoprene gloves and approved safety glasses should be worn during sampling activities.

13.13 Cleaning Equipment

Skin and eye contact with methanol, Alconox or other cleaning substances can occur while cleaning equipment. This hazard can be reduced with the use of Nitrile butyl rubber or neoprene gloves and the use of safety goggles.

14.0 EMERGENCY COMMUNICATION

Work areas (exclusion zones) will generally be staged within short walking distances of each other so that personnel in one area may quickly and directly summon assistance from other work areas.

The telephone will be the primary means of communicating with sources of assistance not in the immediate work area. The FSS shall have a cellular phone on-site for use in an emergencies. It will be the responsibility of the FSS as Project Field Staff to familiarize themselves with the locations of telephones that will be accessible during emergencies.

The on-site personnel must also be able to accurately describe their work location(s) accurately to authorities in the event of an emergency requiring outside assistance.

14.1 Fire

A dry chemical fire extinguisher will be carried with each drill rig for use against small fires.

Only Factory Mutual (FM) approved fire safety cans will be used to transport and store flammable liquids. All gasoline and diesel-driven engines requiring refueling must be shut down and allowed to cool before filing. Smoking is not allowed during any operations within the work area in which petroleum products or solvents in free-floating, dissolved or vapor forms, or other flammable liquids may be present.

No open flame or spark is allowed in any area containing petroleum products or other flammable liquids.



14.2 Injury/Illness

The severity of on-site injury/illness will be assessed by on-site personnel. A first-aid kit will be available for minor injuries.

Conditions requiring medical treatment will be handled as follows:

- **Minor Injury/Illness:** Person will be assisted with decontamination and available on-site treatment will be rendered. If treatment by a physician is indicated, the person will be transported by car to the nearest emergency medical facility by project field staff.
- **Major Injuries/Illness:** If condition requires ambulance, emergency medical treatment will be summoned by dialing "911". If decontamination (could consist of cutting/tearing off contaminated protective clothing) can be performed without risking further injury or resulting in lost time, this shall be conducted while awaiting assistance in addition to whatever first aid may be rendered. It is anticipated the work on this project will not involve extremely hazardous contaminants. Medical personnel will be informed of the nature of potential contaminants on the victim by the FSS.
- The nearest hospital is Cedar Sinai Medical Center located at 8700 Beverly Boulevard - approximately 10 miles northeast of the job site. The hospital is on the south side of Beverly Boulevard. The telephone number is (310) 855-5000.

14.3 Emergency Procedures

Emergency Telephone Numbers:

Telephone located at: Jobsite cellular # (714) 287-5760

Ambulance/Fire/Police:	911
Poison Control:	(800) 777-6476
National Response Center:	(800) 424-8802
U.S. EPA (24-Hour Hotline):	(800) 424-9346
State Regulatory Agency:	(805) 549-3699
Client:	(510) 524-8122
Contact Person:	Tony Kershaw

Encountering Hazardous Situations (requiring evacuation)

In the event of an emergency, (i.e. fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water at the facility) the team member that observes this condition shall give



an emergency alarm. The emergency alarm signal will be three horn blasts on the horn located in the site vehicle.

Actions to be taken will be dictated by the emergency. All appropriate local emergency response agencies shall be notified immediately. The police, fire department, emergency response teams and ambulance may be reached via telephone by dialing "911".

The nearest hospital and additional emergency contacts are listed on the previous page (Section 1.0).

Personnel encountering a hazardous situation shall instruct others on site to evacuate the vicinity immediately and call the Field Safety Supervisor and the Project Manager for instructions.

The site must not be re-entered until backup help, monitoring equipment and personal protective equipment is on hand.

14.4 Air Releases

The degree of releases of airborne contaminants that constitutes an emergency shall be determined by the FSS if circumstances permit. In general, it is unlikely that subsurface sampling operations will result in air releases of significance outside the exclusion zone. Evidence of the spread of subsurface contaminants outside the exclusion zone (as detected by instruments) will require cessation of operations and capping of the borehole.

In the event of air release of contamination that can not be immediately controlled, field personnel will withdraw to an uncontaminated area and prevent non-project personnel from entering the area.

14.5 Weather

Severe weather shall serve as a basis to ease or suspend outdoor field operations. Examples include snow, high winds, temperature extremes and rain. Determinations of what conditions will require shutdown or postponement of operation shall be made through consultation between the Project Manager, FSS and Field Staff.

14.6 Work Site Access

Access within a five-foot radius of any on-site operation is prohibited to all but Avalon authorized field personnel and subcontractors.



14.7 Emergency Equipment

Vehicles used for site work will be equipped with a first aid kit and safety equipment including:

- fluorescent cones
- flags (as needed)
- barricades (as needed)
- fire extinguisher (dry chemical ABC-type extinguisher)
- flashlight
- water, suitable for drinking
- appropriate emergency bandage material

14.8 Carbon Treatment

If this site involves the use of a Carbon Treatment System, then the following information will apply:

The Carbon Treatment System is equipped with an emergency shut-off. The system will shut off automatically when the non-methane TPH vapor concentrations in the intermediate line reach 5% of the Lower Explosive Limit (LEL) for gasoline as recorded by the system monitors.

The suggested equipment for decontamination and spill response procedures includes:

- wash tubs (3)
- plastic sheets
- trash bags
- scrub brushes
- detergent
- sorbent booms (as applicable)

The carbon system is a closed system where no chemicals are used. The potential for a spill is minimal; thus, spill containment is not addressed in this Site Safety Plan.

14.9 Drilling Notification Procedures

A Dig-Alert authorization number must be obtained prior to drilling.

During the drilling operation, two persons (one designed as "driller" and the other as "helper") must be present at all times. The helper (whether Avalon personnel or subcontractors) must be instructed as to the location of the emergency shut-off switch. Every attempt must be made to keep unauthorized personnel from entering the work area. If this is not possible, the operation should be shut down until the area



is cleared. The area where the operation is taking place shall be cordoned off with a barricade. The FSS or the PM has the authority and the responsibility to shut down the drilling operations whenever a hazardous situation is deemed present.

The mast of the drilling rig must maintain a minimum clearance of 20 feet from any overhead electrical cables. All drilling operations will cease immediately during hazardous weather conditions such as high winds, heavy rain, lightening and snow.

Hard hats shall be worn at all times. Hearing protection shall be worn during noisy operations.

If product is encountered during the drilling operation, all work must stop in order for employees to upgrade personal protective equipment to Level C. A full-face respirator should be worn in order to prevent the inhalation of vapors and to provide face and eye protection from splashes. Coated tyvek suits, gloves and overboots should be worn to prevent skin contact with the soil.

Air monitoring must be performed in the work area to document breathing-zone concentrations. If air monitoring results indicate concentrations greater than 700 ppm, then Level B respiratory protection will be implemented.

Respirator cartridges must be changed at the end of a work period or if "breakthrough" occurs. If employees experience continuous cartridge "breakthrough", then the employee's work procedures and the level of respiratory protection must be re-evaluated by the Site Safety Officer and the Health and Safety Manager in order to determine the necessity of upgrading to Level B respiratory protection.

14.10 Electrical Equipment and Ground-Fault Circuit Interrupters

All electrical equipment and power cables in and around wells or structures suspected of containing chemical contamination must be intrinsically safe and equipped with a three-wire ground lead, rated explosion-proof for hazardous atmospheres. In accordance with OSHA 29 CFR 1926.404, approved ground fault circuit interrupters (GFCI) must be used for all 120 volt, single phase, 15 and 20 ampere receptacle outlets on the site which are in use by employees. Receptacles on the ends of extension cords are not part of the permanent wiring and therefore, must be protected by GFCI's whether or not the extension cord is plugged into permanent wiring.

The GFCI is a fast-acting circuit breaker which senses small imbalances in the circuit caused by current leakage to ground and, in a fraction of a second, shuts off the electricity. However, the GFCI will not protect the employee from line-to-line contact hazards (such as a person holding two "hot" wires or a hot and neutral wire in each hand.) The GFCI does provide protection against the most common form of electrical shock hazard - the ground fault. It also provides protection against fires,



overheating and destruction of insulation on wiring.

GFCI's can be used successfully to reduce electrical hazards on construction sites. Tripping of GFCI's - interruption of current flow - is sometimes caused by wet connectors and tools. It is good practice to limit exposure of connectors and tools to excessive moisture by using watertight or sealable connectors. Providing more GFCI's or shorter circuits can prevent tripping caused by the cumulative leakage from several tools or by leakages from extremely long circuits. (Adapted from OSHA 307; Ground-Fault Protection on Construction sites, 1987.)

14.11 Damage to a Utility

In the event an underground utility (gas, electric, sewer, water, phone, etc.) is struck in the course of subsurface drilling, the local utility shall be notified as soon as possible after any fire or injuries are addressed as listed above.

14.12 General Health

Medicine and alcohol can increase the effects of exposure to toxic chemicals. Unless specifically approved by a qualified physician, prescription drugs should not be taken by personnel assigned to operations where the potential for absorption, inhalation or ingestion of toxic substances exists.

Drinking alcoholic beverages is prohibited. Drinking alcoholic beverages and driving is prohibited at any time. Driving at excessive speeds is always prohibited.

Skin abrasions must be thoroughly protected to prevent chemicals from penetrating the abrasion. It is recommended that contact lenses not be worn by persons working on the site.

14.13 MSDS Information (When Available)

Material Safety Data Sheets (MSDS) on chemical substances encountered at the site shall be made available to all persons (including subcontractors) working at the site. These MSDS's shall be enclosed within this site safety plan in Appendix D. For emergency situations not specifically addressed by this site safety plan, refer to MSDS recommendations for action information.

15.0 HEALTH AND SAFETY REQUIREMENTS

15.1 Medical Surveillance

All subcontractor personnel and visitors who intend to enter the exclusion zones or decontamination areas shall participate in a medical surveillance program that meets the requirements of 29 CFR 1910.120.



All on-site personnel are included in the corporate medical monitoring program and receive physical examination on an annual basis.

Additional medical monitoring may be required if exposure or potential exposures are identified by the FSS for which such monitoring is deemed necessary. The content of this monitoring will be determined by the FSS and consulting physician.

The petrochemicals typical of these facilities can affect specific organ systems producing characteristic health effects. The medical evaluation will, therefore, focus on the liver, kidney, nervous system, blood systems, skin and lung functions. Laboratory testing will include complete blood count and applicable kidney and liver-function tests. Other tests include skin examination.

15.2 Training Requirements

All personnel (including subcontractors) whose work requires entry into exclusion zones, decontamination areas or otherwise present potential exposure to health or safety hazards associated with this project, shall meet the training requirements set forth in 29 CFR 1910.120, the OSHA Hazardous Waste Operations and Emergency Response Standard.

Personnel shall not be permitted to participate in or supervise activities in the exclusion or decontamination zones until they have completed the specified training. Written documentation of the completion of training (e.g., copies of course certificate) must be submitted to the FSS prior to entry into work areas.

Specifically, such personnel must complete:

- 40 hours of off-site instruction on the health and safety topics prescribed in 29 CFR 1910.120.
- 8 hours of refresher training within the past 12 months
- Site specific training
- Prior to the initiation of sampling activities, all personnel shall attend a tail-gate safety meeting conducted by the FSS. The training shall address the following:
 1. The content of this HASP, with emphasis on the hazards specific to this site, work rules, standard operating procedures, PPE requirements and decontamination.
 2. Site emergency procedures.



15.3 Respiratory Fit Testing

All personnel (including subcontractors) whose work requires entry into exclusion zones, decontamination areas or otherwise present potential exposure to health or safety hazards associated with this project, shall meet the respiratory protection requirements set forth in the HASP. All personnel shall have a current fit testing certificate for each type of respiratory protection equipment used.



APPENDIX A

**HEALTH AND SAFETY PLAN REVIEW/TAILGATE
HEALTH AND SAFETY MEETING**



Avalon Environmental Consultants
Anthony Kershaw
October 28, 2004

Project Number 0420-458-1
1187 Solano Avenue
Albany, California

APPENDIX B
FIRE STATION LOCATION MAP



Avalon Environmental Consultants
Anthony Kershaw
October 28, 2004

Project Number 0420-458-1
1187 Solano Avenue
Albany, California



FIRE STATION LOCATION MAP



AVALON ENVIRONMENTAL CONSULTANTS
 131 NORTH TUSTIN AVENUE, SUITE 213
 TUSTIN, CALIFORNIA 92780

Source: Thomas Guide
 Project: 1187 Solano Avenue

APPENDIX C

DEFINITION OF HAZARD EVALUATION GUIDELINES



Avalon Environmental Consultants
Anthony Kershaw
October 28, 2004

Project Number 0420-458-1
1187 Solano Avenue
Albany, California

DEFINITION OF HAZARD EVALUATION GUIDELINES

Hazard: Airborne Contaminants

Guideline

Explanation

Threshold Limit Value
Time-Weighted Average
(TLV-TWA)

The time-weighted average concentration for a normal 8-hour work day and a 40-hour work week, to which nearly all workers may be repeatedly exposed without adverse effect.

Permissible Exposure Limit
(PEL)

Time-weighted average concentrations similar to (and in many cases derived from) the Threshold Limit Values.

Immediately Dangerous to Life
and Health (IDLH)

"IDLH" or "Immediately dangerous to life or health" means any atmospheric condition that poses an immediate threat to life, or which is likely to result in acute or immediate severe health effects. This includes oxygen deficiency conditions.

Hazard: Explosion

Guideline

Explanation

Lower Explosive Limit

The minimum concentration of (LEL) vapor in air below which propagation of a flame will not occur in the presence of an ignition source.

Upper Explosive Limit (UEL)

The maximum concentration of vapor in the air above which propagation of a flame will not occur in the presence of an ignition source.

Hazard: Fire

Guideline

Explanation

Flash Point (flash p)

The lowest temperature at which the vapor of a combustible liquid can be made to ignite momentarily in air.



APPENDIX D
MSDS INFORMATION



No onsite MSDS information available.



Avalon Environmental Consultants
Anthony Kershaw
October 28, 2004

Project Number 0420-458-1
1187 Solano Avenue
Albany, California

APPENDIX E
ACCIDENT/INJURY FORM



ACCIDENT/INCIDENT/NEAR MISS REPORT

Employee's Name: _____ D.O.B. ____/____/____

Address: _____ D.O.H. ____/____/____

SS# _____ - _____ - _____

Job Title: _____ Supervisor's Name _____

Office _____

Location: _____

Location at Time of Incident: _____

Date/Time of _____

Incident: _____

Description: Describe clearly how the accident occurred:

Was Incident: Physical _____

Chemical _____

Part(s) of body _____

affected: _____

Exposure: Dermal _____ Inhalation _____ Ingestion _____

Witnesses: 1) _____

2) _____

Conditions/acts contributing to this

incident: _____

Explain specifically the corrective action you have taken to prevent a recurrence:

Did the injured go to a doctor? _____ When? _____
Where? _____

Did the injured go to a hospital? _____ When? _____
Where? _____

Signatures:

Employee Reporting Manager H&S Manager
/ / / / / / /



**APPENDIX F
SITE MONITORING FORM**



Avalon Environmental Consultants
Anthony Kershaw
October 28, 2004

Project Number 0420-458-1
1187 Solano Avenue
Albany, California

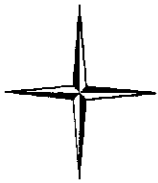
APPENDIX IV

LABORATORY ANALYTICAL RESULTS



Avalon Environmental Consultants
The Solano Group
November 10, 2004

Project #0420-458-2
1187 Solano Avalon
Albany, California



SunStar Laboratories, Inc.

04 November 2004

Trevor Santochi
Avalon Environmental
131 N. Tustin #213
Tustin, CA 92780
RE: Solano Dry Cleaners

Enclosed are the results of analyses for samples received by the laboratory on 11/03/04 08:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ben Beauchaine
Laboratory Supervisor

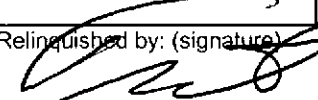
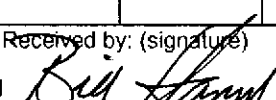
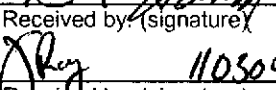
SunStar Laboratories, Inc.
 3002 Dow Ave., Ste. 212
 Tustin, CA 92780
 714-505-4010

Chain of Custody Record

Client: Avalon Env.
 Address: 131 N. Tustin suite 213
 Phone: (714) 836-6632 Fax: 836-6642
 Project Manager: T. Santochi

Date: 11/2/04 Page: 1 Of 1
 Project Name: Solano Dry Cleaners
 Collector: T. Santochi Client Project #:
 Batch #: T401293 EDF #:

Sample ID	Date Sampled	Time	Sample Type	Container Type	8260 / 8010 LIST	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals	Laboratory ID #	Comments/Preservative	Total # of containers
GP-1@5'	11/2/04	7:45	SOIL	Acetate	X									09		
GP-1@10'		8:00			X									02		
GP-1@15'		8:15			X									03		
GP-2@5'		9:10			X									04		
GP-2@10'		9:20			X									05		
GP-2@15'		9:35			X									06		
GP-2@20'		10:00			X									07		
GP-2@5'		10:05			X									08		
GP-3@10'		10:20			X									04		
GP-3@15'		10:30			X									10		
GP-3@20'		10:45			X									11		

Relinquished by: (signature) 	Date / Time: <u>11/2/04 12:00 PM</u>	Received by: (signature) 	Date / Time: <u>11/2/04 12:00</u>	Total # of containers	<u>15</u>	Notes
Relinquished by: (signature) <u>GSD 110304</u>	Date / Time: <u>8:00</u>	Received by: (signature) 	Date / Time: <u>110304 8:00</u>	Chain of Custody seals Y/N/NA		
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time	Seals intact? Y/N/NA		
Relinquished by: (signature)	Date / Time	Received by: (signature)	Date / Time	Received good condition/gold	<u>42</u>	
Sample disposal Instructions: Disposal @ \$2.00 each _____ Return to client _____ Pickup _____				Turn around time: <u>STANDARD</u>		

Avalon Environmental
131 N. Tustin #213
Tustin CA, 92780

Project: Solano Dry Cleaners
Project Number: [none]
Project Manager: Trevor Santochi

Reported:
11/04/04 15:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GP-1@5	T401293-01	Soil	11/02/04 07:45	11/03/04 08:00
GP-1@10	T401293-02	Soil	11/02/04 08:00	11/03/04 08:00
GP-1@15	T401293-03	Soil	11/02/04 08:15	11/03/04 08:00
GP-2@5	T401293-04	Soil	11/02/04 09:10	11/03/04 08:00
GP-2@10	T401293-05	Soil	11/02/04 09:20	11/03/04 08:00
GP-2@15	T401293-06	Soil	11/02/04 09:35	11/03/04 08:00
GP-2@20	T401293-07	Soil	11/02/04 10:00	11/03/04 08:00
GP-3@5	T401293-08	Soil	11/02/04 10:15	11/03/04 08:00
GP-3@10	T401293-09	Soil	11/02/04 10:20	11/03/04 08:00
GP-3@15	T401293-10	Soil	11/02/04 10:30	11/03/04 08:00
GP-3@20	T401293-11	Soil	11/02/04 10:45	11/03/04 08:00

SunStar Laboratories, Inc.



Ben Beauchaine, Laboratory Supervisor

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-1@5
T401293-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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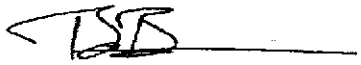
SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	1100	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	5.9	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	

Surrogate: Toluene-d8	105 %	81-117	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	95.7 %	74-121	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane	120 %	81-125	"	"	"	"	"	"	

SunStar Laboratories, Inc.



Ben Beauchaine, Laboratory Supervisor

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Avalon Environmental 131 N. Tustin #213 Tustin CA, 92780	Project: Solano Dry Cleaners Project Number: [none] Project Manager: Trevor Santochi	Reported: 11/04/04 15:23
--	--	-----------------------------

GP-1@10
T401293-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	"
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	"
Chlorobenzene	ND	2.0	"	"	"	"	"	"	"
Chloroethane	ND	2.0	"	"	"	"	"	"	"
Chloroform	ND	2.0	"	"	"	"	"	"	"
Chloromethane	ND	2.0	"	"	"	"	"	"	"
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	"
Dibromomethane	ND	2.0	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	"
Methylene chloride	ND	2.0	"	"	"	"	"	"	"
Styrene	ND	2.0	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	"
Tetrachloroethene	9.1	2.0	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	"
Trichloroethene	ND	2.0	"	"	"	"	"	"	"
Vinyl chloride	ND	2.0	"	"	"	"	"	"	"
Surrogate: Toluene-d8		104 %		81-117	"	"	"	"	"
Surrogate: 4-Bromofluorobenzene		90.2 %		74-121	"	"	"	"	"
Surrogate: Dibromofluoromethane		114 %		81-125	"	"	"	"	"

SunStar Laboratories, Inc.



Ben Beauchaine, Laboratory Supervisor

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-1@15
T401293-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

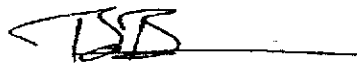
Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	8.4	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	

Surrogate: Toluene-d8	107 %	81-117	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene	96.6 %	74-121	"	"	"	"	"	"	
Surrogate: Dibromofluoromethane	120 %	81-125	"	"	"	"	"	"	

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-2@5
T401293-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	190	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	2.2	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		105 %		81-117	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		98.2 %		74-121	"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		118 %		81-125	"	"	"	"	

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-2@10
T401293-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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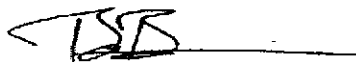
SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	26	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		109 %		81-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.3 %		74-121	"	"	"	"	
Surrogate: Dibromofluoromethane		113 %		81-125	"	"	"	"	

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-2@15
T401293-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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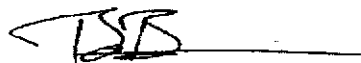
SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		103 %		81-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		92.6 %		74-121	"	"	"	"	
Surrogate: Dibromofluoromethane		114 %		81-125	"	"	"	"	

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
131 N. Tustin #213
Tustin CA, 92780

Project: Solano Dry Cleaners
Project Number: [none]
Project Manager: Trevor Santochi

Reported:
11/04/04 15:23

GP-2@20
T401293-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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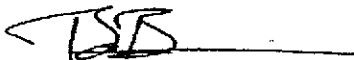
SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		105 %		81-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.2 %		74-121	"	"	"	"	
Surrogate: Dibromofluoromethane		115 %		81-125	"	"	"	"	

SunStar Laboratories, Inc.

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
131 N. Tustin #213
Tustin CA, 92780

Project: Solano Dry Cleaners
Project Number: [none]
Project Manager: Trevor Santochi

Reported:
11/04/04 15:23

GP-3@5
T401293-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	470	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		106 %		81-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		94.0 %		74-121	"	"	"	"	
Surrogate: Dibromofluoromethane		120 %		81-125	"	"	"	"	

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental 131 N. Tustin #213 Tustin CA, 92780	Project: Solano Dry Cleaners Project Number: [none] Project Manager: Trevor Santochi	Reported: 11/04/04 15:23
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GP-3@10
T401293-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	690	2.0	"	"	"	"	"	"	
1,1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	

Surrogate: Toluene-d8	104 %	81-117	"	"	"	"
Surrogate: 4-Bromofluorobenzene	96.7 %	74-121	"	"	"	"
Surrogate: Dibromofluoromethane	115 %	81-125	"	"	"	"

SunStar Laboratories, Inc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-3@15
T401293-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	
Chlorobenzene	ND	2.0	"	"	"	"	"	"	
Chloroethane	ND	2.0	"	"	"	"	"	"	
Chloroform	ND	2.0	"	"	"	"	"	"	
Chloromethane	ND	2.0	"	"	"	"	"	"	
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	
Dibromomethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	
Methylene chloride	ND	2.0	"	"	"	"	"	"	
Styrene	ND	2.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	
Trichloroethene	ND	2.0	"	"	"	"	"	"	
Vinyl chloride	ND	2.0	"	"	"	"	"	"	
Surrogate: Toluene-d8		102 %		81-117	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.8 %		74-121	"	"	"	"	
Surrogate: Dibromofluoromethane		119 %		81-125	"	"	"	"	

SunStar Laboratories, Inc.

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

GP-3@20
T401293-11 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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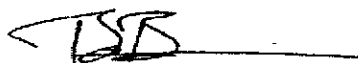
SunStar Laboratories, Inc.

Halogenated Volatile Compounds (8010 List) by EPA 8260

Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	"	"	"	"	"	"	"
Carbon tetrachloride	ND	2.0	"	"	"	"	"	"	"
Chlorobenzene	ND	2.0	"	"	"	"	"	"	"
Chloroethane	ND	2.0	"	"	"	"	"	"	"
Chloroform	ND	2.0	"	"	"	"	"	"	"
Chloromethane	ND	2.0	"	"	"	"	"	"	"
Dibromochloromethane	ND	2.0	"	"	"	"	"	"	"
Dibromomethane	ND	2.0	"	"	"	"	"	"	"
1,2-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	"
1,3-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	"
1,4-Dichlorobenzene	ND	2.0	"	"	"	"	"	"	"
1,1-Dichloroethane	ND	2.0	"	"	"	"	"	"	"
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	"
1,1-Dichloroethene	ND	2.0	"	"	"	"	"	"	"
cis-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	"
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	"
1,2-Dichloropropane	ND	2.0	"	"	"	"	"	"	"
cis-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	"
trans-1,3-Dichloropropene	ND	2.0	"	"	"	"	"	"	"
Methylene chloride	ND	2.0	"	"	"	"	"	"	"
Styrene	ND	2.0	"	"	"	"	"	"	"
1,1,2,2-Tetrachloroethane	ND	2.0	"	"	"	"	"	"	"
Tetrachloroethene	ND	2.0	"	"	"	"	"	"	"
1,1,2-Trichloroethane	ND	2.0	"	"	"	"	"	"	"
1,1,1-Trichloroethane	ND	2.0	"	"	"	"	"	"	"
Trichloroethene	ND	2.0	"	"	"	"	"	"	"
Vinyl chloride	ND	2.0	"	"	"	"	"	"	"
Surrogate: Toluene-d8		106 %	81-117		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	74-121		"	"	"	"	
Surrogate: Dibromofluoromethane		120 %	81-125		"	"	"	"	

SunStar Laboratories, Inc.

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

Halogenated Volatile Compounds (8010 List) by EPA 8260 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4110314 - EPA 5030 GCMS

Blank (4110314-BLK1)

Prepared & Analyzed: 11/03/04

Bromodichloromethane	ND	2.0	ug/kg							
Bromomethane	ND	2.0	"							
Carbon tetrachloride	ND	2.0	"							
Chlorobenzene	ND	2.0	"							
Chloroethane	ND	2.0	"							
Chloroform	ND	2.0	"							
Chloromethane	ND	2.0	"							
Dibromochloromethane	ND	2.0	"							
Dibromomethane	ND	2.0	"							
1,2-Dichlorobenzene	ND	2.0	"							
1,3-Dichlorobenzene	ND	2.0	"							
1,4-Dichlorobenzene	ND	2.0	"							
1,1-Dichloroethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	"							
1,1-Dichloroethene	ND	2.0	"							
cis-1,2-Dichloroethene	ND	2.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,2-Dichloropropane	ND	2.0	"							
cis-1,3-Dichloropropene	ND	2.0	"							
trans-1,3-Dichloropropene	ND	2.0	"							
Methylene chloride	ND	2.0	"							
Styrene	ND	2.0	"							
1,1,2,2-Tetrachloroethane	ND	2.0	"							
Tetrachloroethene	ND	2.0	"							
1,1,2-Trichloroethane	ND	2.0	"							
1,1,1-Trichloroethane	ND	2.0	"							
Trichloroethene	ND	2.0	"							
Vinyl chloride	ND	2.0	"							
Surrogate: Toluene-d8	104		"	100		104	81-117			
Surrogate: 4-Bromofluorobenzene	93.0		"	100		93.0	74-121			
Surrogate: Dibromofluoromethane	114		"	100		114	81-125			

SunStar Laboratories, Inc.



Ben Beauchaine, Laboratory Supervisor

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Avalon Environmental
 131 N. Tustin #213
 Tustin CA, 92780

Project: Solano Dry Cleaners
 Project Number: [none]
 Project Manager: Trevor Santochi

Reported:
 11/04/04 15:23

Halogenated Volatile Compounds (8010 List) by EPA 8260 - Quality Control
SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4110314 - EPA 5030 GCMS

LCS (4110314-BS1)

Prepared: 11/03/04 Analyzed: 11/04/04

Chlorobenzene	203	2.0	ug/kg	250		81.2	75-125			
1,1-Dichloroethene	256	2.0	"	250		102	15-125			
Trichloroethene	230	2.0	"	250		92.0	75-125			
Surrogate: Toluene-d8	109		"	100		109	81-117			
Surrogate: 4-Bromofluorobenzene	96.2		"	100		96.2	74-121			
Surrogate: Dibromofluoromethane	123		"	100		123	81-125			

Matrix Spike (4110314-MS1)

Source: T401293-01

Prepared: 11/03/04 Analyzed: 11/04/04

Chlorobenzene	224	2.0	ug/kg	250	ND	89.6	75-125			
1,1-Dichloroethene	241	2.0	"	250	ND	96.4	75-125			
Trichloroethene	256	2.0	"	250	5.9	100	75-125			
Surrogate: Toluene-d8	107		"	100		107	81-117			
Surrogate: 4-Bromofluorobenzene	97.6		"	100		97.6	74-121			
Surrogate: Dibromofluoromethane	117		"	100		117	81-125			

Matrix Spike Dup (4110314-MSD1)

Source: T401293-01

Prepared: 11/03/04 Analyzed: 11/04/04

Chlorobenzene	210	2.0	ug/kg	250	ND	84.0	75-125	6.45	20	
1,1-Dichloroethene	258	2.0	"	250	ND	103	75-125	6.81	20	
Trichloroethene	254	2.0	"	250	5.9	99.2	75-125	0.784	20	
Surrogate: Toluene-d8	111		"	100		111	81-117			
Surrogate: 4-Bromofluorobenzene	109		"	100		109	74-121			
Surrogate: Dibromofluoromethane	122		"	100		122	81-125			

SunStar Laboratories, Inc.

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Ben Beauchaine, Laboratory Supervisor

Avalon Environmental
131 N. Tustin #213
Tustin CA, 92780

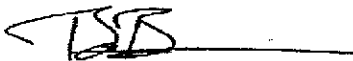
Project: Solano Dry Cleaners
Project Number: [none]
Project Manager: Trevor Santochi

Reported:
11/04/04 15:23

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference

SunStar Laboratories, Inc.



Ben Beauchaine, Laboratory Supervisor

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

APPENDIX V

BORING LOGS



Avalon Environmental Consultants
The Solano Group
November 10, 2004

Project #0420-458-2
1187 Solano Avalon
Albany, California

APPENDIX V
BORING LOGS



AVALON ENVIRONMENTAL CONSULTANTS
131 NORTH TUSTIN AVENUE, SUITE 213
TUSTIN, CALIFORNIA

BORING NO.

GP-1

CLIENT:	Solano Group	SITE:	1187 Solano Avenue, Albany, California
PROJECT NO.:	0420-458-2	SURFACE ELEVATION:	~40 ft. above msl
DRILL DATE:	November 2, 2004	INITIAL WATER LEVEL:	N/A
METHOD/EQUIPMENT:	Geoprobe	FINAL WATER LEVEL:	N/A
DRILLING CONTRACTOR:	Kehoe Testing & Engineering	TOTAL DEPTH:	17 Feet
GEOLOGISTS:	Trevor Santochi	LOGGED BY	Trevor Santochi

DEPTH (FEET)	SAMPLE NO.	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
5.0	GP-1@ 5'	0.0		ML Medium-Brown, Moderately Plastic Clayey gravel, moist, dense.	No Odor
10.0	GP-1@ 10'	0.0		ML Medium-Brown, Moderately Plastic Clayey gravel, moist, dense.	No Odor
15.0	GP-1@ 15'	0.0		ML Medium yellowish - Brown, Clayey Silt, streaks of green clay. Moist, dense, expansive	No Odor
20.0				Refusal at 17 feet bgs.	
25.0					
30.0					





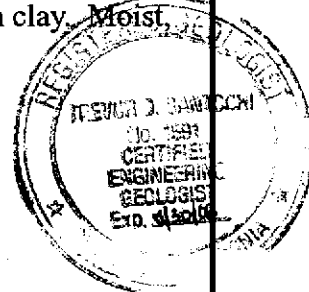
AVALON ENVIRONMENTAL CONSULTANTS
131 NORTH TUSTIN AVENUE, SUITE 213
TUSTIN, CALIFORNIA

BORING NO.

GP-2

CLIENT:	Solano Group	SITE:	1187 Solano Avenue, Albany, California
PROJECT NO.:	0420-458-2	SURFACE ELEVATION:	-40 ft. above msl
DRILL DATE:	November 2, 2004	INITIAL WATER LEVEL:	N/A
METHOD/EQUIPMENT:	Geoprobe	FINAL WATER LEVEL:	N/A
DRILLING CONTRACTOR:	Kehoe Testing & Engineering	TOTAL DEPTH:	20 Feet
GEOLOGISTS:	Trevor Santochi	LOGGED BY	Trevor Santochi

DEPTH (FEET)	SAMPLE NO.	PID (ppm)	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
5.0	GP-2@ 5'	0.0		ML Medium-Brown, Moderately Plastic Clayey gravel, moist, dense.	No Odor
10.0	GP-2@ 10'	0.0		ML Medium-Brown, Moderately Plastic Clayey gravel, moist, dense.	No Odor
15.0	GP-2@ 15'	0.0		ML Medium yellowish - Brown, Clayey Silt, streaks of green clay. Moist, dense, expansive	No Odor
20.0	GP-2@ 20'	0.0		ML Medium yellowish - Brown, Clayey Silt, streaks of green clay. Moist, dense, expansive	No Odor
25.0					
30.0					





AVALON ENVIRONMENTAL CONSULTANTS
131 NORTH TUSTIN AVENUE, SUITE 213
TUSTIN, CALIFORNIA

BORING NO.

GP-3

CLIENT:	Solano Group	SITE:	1187 Solano Avenue, Albany, California
PROJECT NO.:	0420-458-2	SURFACE ELEVATION:	~40 ft. above msl
DRILL DATE:	November 2, 2004	INITIAL WATER LEVEL:	N/A
METHOD/EQUIPMENT:	Geoprobe	FINAL WATER LEVEL:	N/A
DRILLING CONTRACTOR:	Kehoe Testing & Engineering	TOTAL DEPTH:	20 Feet
GEOLOGISTS:	Trevor Santochi	LOGGED BY	Trevor Santochi

DEPTH (FEET)	SAMPLE NO.	PROFILE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
5.0	GP-3@ 5'	0.0		ML Medium-Brown, Moderately Plastic Clayey gravel, moist, dense.	No Odor
10.0	GP-3@ 10'	0.0		ML Medium-Brown, Moderately Plastic Clayey gravel, moist, dense.	No Odor
15.0	GP-3@ 15'	0.0		ML Light yellowish - Brown, Clayey Silt, streaks of green clay. Moist, dense, expansive	No Odor
20.0	GP-3@ 20'	0.0		ML Light yellowish - Brown, Clayey Silt, streaks of green clay. Moist, dense, expansive	No Odor
25.0					
30.0					

