

AVALON ENVIRONMENTAL CONSULTANTS

PHASE II SUBSURFACE GROUNDWATER ASSESSMENT PERFORMED AT 1187 SOLANO AVENUE ALBANY, CALIFORNIA 94706 PROJECT NUMBER: 0420-458-3

PREPARED FOR THE SOLANO GROUP BERKELEY, CALIFORNIA MAY 4, 2005



AVALON ENVIRONMENTAL CONSULTANTS

ALAMEDA CALIFORNIA 510 521 2441 510 521 2607 FAX

PHASE II
SUBSURFACE GROUNDWATER ASSESSMENT
PERFORMED AT
1187 SOLANO AVENUE
ALBANY, CALIFORNIA 94706

PROJECT NUMBER: 0420-458-3

PREPARED FOR
THE SOLANO GROUP
BERKELEY, CALIFORNIA

MAY 4, 2005

PREPARED BY

Trevor D Santochil

Certified Engineering Geolog

REVIEWED BY:

Mohammad Navid, Project Manager

TABLE OF CONTENTS

SEC ₁	<u>ION</u>	<u>PAGE</u>						
1.0	EXECUTIVE SUMMARY .							
2.0	INTRODUCTION							
	2.1 Purpose	VE SUMMARY JCTION pose thodology L SITE INFORMATION Location History born Fire Insurance Maps meda County Tax Assessor's Records ial Photographs lding Permit Records Directories Dogy/Hydrology LY OF PHASE II FIELD OPERATIONS ity Clearance Boring and Sampling Procedures						
	2.2 Methodology							
3.0	GENERAL SITE INFORMA	TION						
	3.1 Site Location							
	3.2 Site History							
	Sanborn Fire Insurance	Maps3						
	Alameda County Tax A	ssessor's Records						
	Aerial Photographs							
	<u> </u>							
	.							
	3.3 Geology/Hydrology							
4.0	SUMMARY OF PHASE II FIELD OPERATIONS							
	4.1 Utility Clearance							
	4.2 Soil Boring and Sampli	ng Procedures						
5.0	PHASE II FIELD INVESTIGATION RESULTS							
	5.2 Laboratory Analytical S	oil Results9						
	5.3 Laboratory Analytical (Froundwater Results11						
	5.4 Previous Laboratory Ar	alytical Results (Inside Dry Cleaner Suite) 11						
6.0	FINDINGS							
7.0	CONCLUSIONS							
8.0	RECOMMENDATIONS							
9.0	ASSESSMENT LIMITATIO	NS						
10.0	CONFIGER CERTIFICATION							

APPENDICES	
	Boring Logs
	Permits
	Scope of Work and Review Letters
Appendix V	Laboratory Analytical Results (This Investigation)
Appendix VI	Laboratory Analytical Results (11/10/04 Investigation)
Appendix VII	Health and Safety Plan

1.0 EXECUTIVE SUMMARY

Avalon Environmental Consultants, Inc. (Avalon), conducted a Phase II Subsurface Groundwater Assessment (SGA) at the request of the Solano Group. The assessment was performed surrounding Albany 1-Hour Cleaners located at 1187 Solano Avenue, City of Albany, County of Alameda, California (Subject Property) on April 20, and 21, 2005.

The subject property consists of a retail building which contains a dry cleaning facility with an onsite dry-cleaning machine. Avalon performed a Phase II Subsurface Site Assessment (SSA) at the subject property in November, 2004. The Phase II SSA identified elevated levels of Tetrachlorethene (PCE) in the soil beneath the concrete slab of the dry cleaning unit ranging from 8.4 to 1,100 parts per billion (ppb.) Groundwater was not encountered at a depth of twenty feet below ground surface (bgs.) 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 upon the findings of Avalon's investigation, a groundwater investigation was recommended.

Five borings were advanced surrounding the subject property to a depth between 35 and 40 feet bgs. The purpose of the investigation was to determine if the groundwater beneath the subject property has been impacted by PCE from a release identified in the Avalon's, November, 2004, Phase II SSA.

Five grab groundwater samples were collected and analyzed. All groundwater samples were non detect for volatile organic compounds (VOCs.) Based on the above info, the groundwater at the subject property does not appear to have been impacted by the release at the dry-cleaning facility located at 1187 Solano Avenue. Soils at the subject property appear to have been impacted, however, residual levels in soil appear to be limited to 10 feet bgs and do not appear to be a threat to groundwater.

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

- No further investigation is warranted at this time.
- This report should be submitted to the Alameda County Health Care Services (ACEH) for their review with a request for regulatory closure.

2.0 INTRODUCTION

This report presents the results of the Phase II Subsurface Groundwater Assessment (Phase II SGA) conducted by Avalon at 1187 Solano Avenue, City of Albany, County of Alameda, California on April 20 and 21, 2005. (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 and revisions submitted to the Solano Group and Alameda County Health Care Services (ACEH) dated January 19, 2005, March 29, 2005, and April 11, 2005, (See Appendix IV, Scope of Work.)

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

2.1 Purpose

The purpose of this investigation is to determine if groundwater beneath the subject property has been impacted by a release of PCE.

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.

Permits were obtained by the County of Alameda Department of Public Works and the City of Albany Department of Public Works. One of the borings, GPA-5, was located on Solano Avenue in a public right of way and therefore a city encroachment permit was required, Appendix III.

A total of five borings were placed surrounding the subject property structure. The location of borings are shown in Appendix I, Maps. One boring was placed in an upgradient direction and the remaining four borings were placed in downgradient locations. Borings were advanced to groundwater, which was encountered at a depth of approximately 30 feet bgs. Soils were described for the entire section as continuous coring methods were used. 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 shopping center located on the north side of Solano Avenue in the City of Albany, California. Albany 1-Hour Cleaners, one of the suites, 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. Borings were placed surrounding the suite located at 1187 Solano Avenue (Appendix I).

3.2 Site History

The subject property consists of a shopping center with the address range of 1161-1191 Solano Avenue. A dry cleaning operation in one of the suits located at 1187 Solano Avenue has been in operation since 1986. There was no prior dry cleaning operation at the subject property. The approximate location(s) of the former dry cleaning machine and approximate layout have not changed since 1986 other than possible location of the dry cleaning machine itself, which was either at the location of the current machine or slightly further north. These two locations are shown in the attached map in Appendix I. Information documenting the site history of this tenant space and other tenant spaces within this building are included in the following site history.

The site history of the subject property was reviewed through Sanborn Fire Insurance Maps, County of Alameda Tax Assessor's records, aerial photographs, City of Albany Building permit records and city directories.

Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were reviewed for the subject property and the adjacent properties. The review revealed the following information:

- 1929- The subject property is depicted as vacant land. The surrounding properties to the north and west consist of residential buildings. The properties to the south and east are not depicted on this map.
- 1950- The subject property has been developed with stores at 1161-1163 Solano Avenue, an office at 1171 Solano Avenue, doctors' offices at 1181 Solano Avenue and the Albany Post Office at 1191 Solano Avenue. 1183-1187 Solano Avenue is depicted as vacant land. The surrounding properties are unchanged from the previous map.
- 1970- The subject property is unchanged from the previous map with the exception of the subject property at 1183-87 Solano Avenue which has been developed with stores. The surrounding properties are unchanged from the previous map.
- 1981- The subject property and the adjacent properties are unchanged from the previous map.

No areas of environmental concern was noted during the Sanborn map review.

Alameda County Tax Assessor's Records

According to the County of Alameda Tax Assessor's records, the subject property building at 1191 Solano Avenue was originally developed in 1936 and the subject property building at 1183 Solano Avenue was originally developed in 1952. Information on the other subject property buildings were not available.

Aerial Photographs

Aerial photographs were reviewed for the subject property and the adjacent properties. The review revealed the following information:

- 1936- The subject property appears to be mostly vacant land with a retail building at the southeast corner of the site. The surrounding properties to the north, east and west consist of residential buildings. The property to the south is vacant land.
- 1968- The subject property has been developed with retail buildings along Solano Avenue. The surrounding properties are unchanged from the previous photograph with the exception of the property to the south which has been developed with retail buildings.
- 1977- The subject property and the surrounding properties are unchanged from the previous photograph.
- 1993- The subject property and the adjacent properties are unchanged from the previous photograph.
- 2004- The subject property and the adjacent properties are unchanged from the previous photograph.

No areas of environmental concern was noted during the aerial photograph review.

Building Permit Records

Building permits were reviewed for the subject property. The review revealed the following information:

1954- A building permit was issued on April 5, 1954, to remodel a garage into an office at 1171 Solano Avenue.

- 1972- A building permit was issued on October 20, 1972, for an awning at 1183 Solano Avenue. The owner is listed as Sam's Pharmacy.
- 1975- A building permit was issued on January 29, 1975, for sign at 1171 Solano Avenue. The owner is listed as Linda Green "Esoteric Hair Care."
- 1980- A building permit was issued on April 21, 1980, for alterations at 1161 Solano Avenue. The owner is listed as Linda Green.
- 1981- A building permit was issued on January 7, 1981, for a sign at 1183 Solano Avenue. The owner is listed as Linda Green "Hot Rods Salon."
- 1983- A building permit was issued on November 13, 1983, to replace windows at 1187 Solano Avenue. The owner is listed as R.J. McMahon.
- 1984- A building permit was issued on June 17, 1984, to remodel a garage into an office at 1171b Solano Avenue. The owner is listed as Albany Partners.
- 1985- A building permit was issued on November 11, 1985, for alterations at 1187 Solano Avenue. The owner is listed as Albany Partners.
- 1986- A building permit was issued on April 17, 1986, for the installation of a Boiler at a dry cleaners at 1187 Solano Avenue. The owner is listed as Albany Partners.
- 1987- A building permit was issued on January 21, 1987, for sign at 1171 Solano Avenue for tax services.

Based on the building permit review, it appears that a dry-cleaners has been operating on the subject property since 1986.

City Directories

City directories were reviewed for the subject property. The review of city directories revealed the following information:

1964- Listing for:

1163- An office.

1171- Woodmen of the World.

1181- T. McMahon M.D.

1183- Sam's Pharmacy & Lawrence Laboratories.

1185- O'Conner & Walls

1972- Listing for:

- 1161- Lykken Builders Hardware.
- 1171- Lyle Goforth.
- 1181- T. McMahon M.D.
- 1183- Sam's Pharmacy & Lawrence Laboratories.
- 1191- U.S. Post Office.

1975- Listing for:

- 1161- Lykken Builders Hardware.
- 1171- Lyle Goforth.
- 1181- T. McMahon M.D.
- 1183- Sam's Pharmacy.
- 1191- U.S. Post Office.

1979- Listing for:

- 1161- Lykken Builders Hardware.
- 1171- Esoteric Hair Care
- 1181- T. McMahon M.D.
- 1183- Sam's Pharmacy.
- 1191- U.S. Post Office.

1984- Listing for:

- 1161- Hod Rods & Co.
- 1171- Willa Young.
- 1181- T. McMahon M.D.
- 1183- Sam's Pharmacy.
- 1191- U.S. Post Office.

1990- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Paris Nail Care.
- 1171- Tek Pe Engineers.
- 1181- Medical offices
- 1183- Fitlab, Inc.
- 1185- Albanys Gateway Travel & Stimac Associates, Inc.
- 1187- Albany One-Hour Cleaners.

1994- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Paris Nail Care.
- 1171- Tek Pe Engineers.
- 1181- Albany Medical Group.
- 1183- Fitlab, Inc.
- 1185- Albanys Gateway Travel & Stimac Associates, Inc.

1187- Albany One-Hour Cleaners

1191- U.S. Post Office.

1998- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Paris Nail Care.
- 1171- Foothill Securities, Inc.
- 1181- Albany Medical Group.
- 1183- Fitlab, Inc.
- 1185- Solano Copy Center
- 1187- Albany One-Hour Cleaners

2004- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Albany Nail Salon.
- 1171- No listing.
- 1181- Albany Medical Group.
- 1183- I Son Orthodontics
- 1185- Solano Copy Center
- 1187- Albany One-Hour Cleaners

Based on the city directory review, it appears that a dry-cleaners has been located on the subject property from at least 1990 to 2004.

3.3 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.

Soils- Continuous coring methods were used during drilling. Soils consisted predominantly of medium-light, to light brown, silty clay. A thin six inch to one foot silty gravel layer is located at a depth between 30 and 31 feet bgs.

Hydrology - A thin water baring zone was encountered at a depth between 30 and 31 feet bgs. Most borings took between one and two hours to generate sufficient water to sample. Depth to water measurements indicated that the groundwater was under pressure and top of water was detected at a depth of approximately 26 feet bgs.

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 & Engineering (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.

Groundwater was sampled using a hydropunch device. Sterile PVC tubing is lowered down the hole and groundwater was pumped to the surface. Three VOA vials of water were collected from each boring.

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 between 35 and 37 feet bgs. Continuous coring methods were used during drilling. Soils consisted predominantly of medium-light, to light brown, silty clay. A thin six inch to one foot silty gravel layer is located at a depth between 30 and 31 feet bgs. This layer was water bearing and drilling was terminated approximately five feet below that zone and sampled.

5.2 Laboratory Analytical Soil 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 V.

TABLE I ANALYTICAL SOIL SAMPLE RESULTS					
SAMPLE DATE EPA METHOD 8260 Analyte NUMBER COLLECTED (ppb)					
GPA-1@10'	April 20, 2005	7.1 ppb (PCE)	PCE		
GPA-1@20'	April 20, 2005	ND	ALL VOCs		
GPA-1@30'	April 20, 2005	ND	ALL VOCs		
GPA-2@10'	April 20, 2005	6.6 ppb (PCE)	PCE		
GPA-2@20'	April 20, 2005	ND	ALL VOCs		

TABLE I ANALYTICAL SOIL SAMPLE RESULTS SAMPLE DATE EPA METHOD 8260 Analyte NUMBER COLLECTED: (ppb) GPA-2@201 April 20, 2005 ND ALL VOCs GPA-3@10' April 20, 2005 ND ALL VOCs GPA-3@201 April 20, 2005 ND ALL VOCs GPA-3@30' April 20, 2005 ND ALL VOCs April 20, 2005 GPA-4@10' 310 ppb (PCE) **PCE** GPA-4@20' April 20, 2005 ND ALL VOCs GPA-4@30' April 20, 2005 ND ALL VOCs GPA-5@10' April 21, 2005 12 ppb (PCE) PCE GPA-5@20' April 21, 2005 ALL VOCs ND ND GPA-5@30' April 21, 2005 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 four of the five borings at a depth of ten feet bgs. The levels of PCE encountered range from 6.6 to 310 ppb. The highest detection of PCE, 310 ppb, was encountered in GPA-4 at the rear of the dry cleaning shop at a depth of 10 feet bgs. No Trichloroethene (TCE) was detected in any of the samples collected. All soil samples below 10' bgs were non detect to a depth of 30 feet bgs.

5.3 Laboratory Analytical Groundwater Results

The groundwater 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 V.

TABLE I ANALYTICAL GROUNDWATER SAMPLE RESULTS						
SAMPLE NUMBER	DATE COLLECTED	EPA METHOD 8260 (ppb)	Analyte			
GPA-1	April 20, 2005	ND	ALL VOCs			
GPA-2	April 20, 2005	ND	ALL VOCs			
GPA-3	April 20, 2005	ND	ALL VOCs			
GPA-4	April 20, 2005	ND	ALL VOCs			
GPA-5	April 21, 2005	ND	ALL VOCs			

Note

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

Detection Limits:

DETECTION LEVEL FOR GROUNDWATER

Halogenated Volatile Compounds Method 8260 (8010 List) =1.0 ppb

All groundwater samples collected were analyzed for VOCs by EPA Method 8260. No VOCs were detected in the groundwater in any of the five borings drilled. Based upon the laboratory results, it does not appear that the subject property groundwater has been impacted by the dry-cleaning facility.

5.4 Previous Laboratory Analytical Results (Inside Dry Cleaner Unit) 11/10/04 Investigation

Soil samples were reported in an Avalon Environmental Phase II SSA dated November 10, 2004. The soil samples were analyzed for VOCs by EPA Method 8260. The following samples were collected using a limited access geoprobe device. Groundwater was not encountered to a depth of 20 feet bgs.

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

TABLE I ANALYTICAL SOIL SAMPLE RESULTS 11/10/04 INVESTIGATION

SAMPLE NUMBER	DATE COLLECTED	ЕРА МЕТНОО 8260 (ррb)	Analyte
GP-1@5'	11/ 2/ 04	1,100 and 5.9	PCE and TCE
GP-1@10'	11/ 2/ 04	9.1	PCE
GP-1@15'	11/ 2/ 04	8.4	PCE
GP-2@5'	11/ 2/ 04	190 and 2.2	PCE and TCE
GP-2@10'	11/ 2/ 04	26	PCE
GP-2@15'	11/2/04	ND	ALL VOCs
GP-2@20'	11/ 2/ 04	ND	ALL VOCs
GP-3@5'	11/2/04	470	PCE
GP-3@10'	11/2/04	690	PCE
GP-3@15'	11/2/04	ND	ALL VOCs
GP-3@20'	11/2/04	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

As stated in Avalon Environmental Consultant's Phase II SSA dated November 10, 2004, PCE was detected in all borings at depths of five and ten feet bgs. The levels of PCE encountered ranged 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. Maps showing the location of these borings is included in Appendix I.

6.0 FINDINGS

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

• PCE was detected in the ten foot samples in four of the five borings. Levels range from 6.6 to 310 ppb. Soil samples collected from 20 to 30 feet bgs and groundwater samples collected from all borings were non detect for VOCs.

7.0 CONCLUSIONS

Based on the above findings, Avalon concludes the following:

• The groundwater at the subject property does not appear to have been impacted by the release at the dry-cleaning facility located at 1187 Solano Avenue. Soils at the subject property appear to have been impacted, however, residual levels in soil appear to be limited to the 10 feet bgs and do not appear to be a threat to groundwater.

8.0 RECOMMENDATIONS

Based on the above conclusion, Avalon recommends the following:

- This report be submitted to the Alameda County Health Care Services (ACEH) with a request for closure.
- No further investigation is warranted at this time.

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

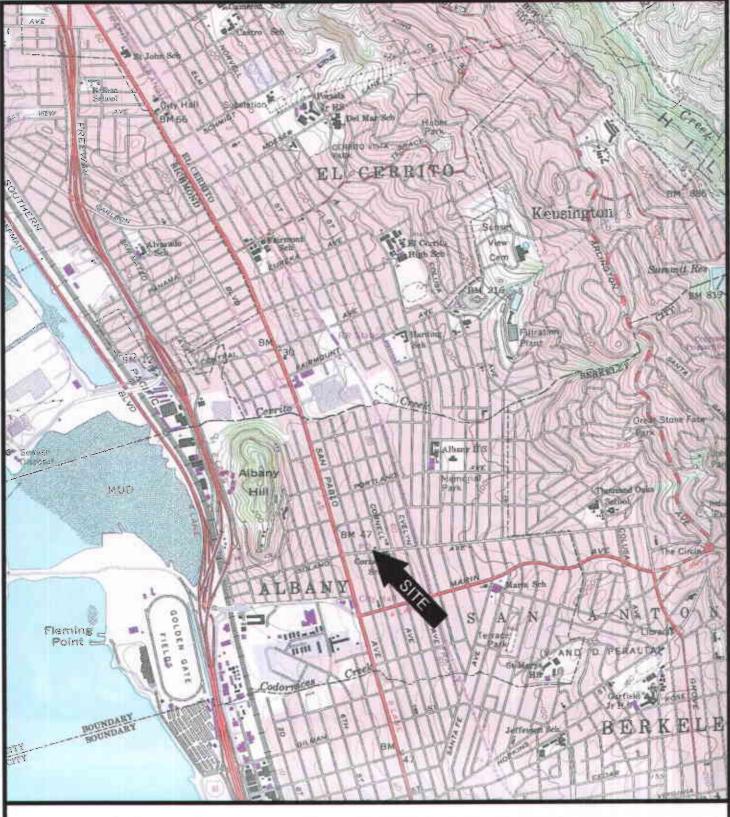
Avalon Environmental Consultants has no present or contemplated future ownership interest or financial interest in the real estate that is the subject of this Phase II Subsurface Groundwater Assessment; and, Avalon Environmental Consultants has no personal interest with respect to the subject matter 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.

APPENDICES



APPENDIX I

MAPS



TOPOGRAPHY AND SITE LOCATION MAP

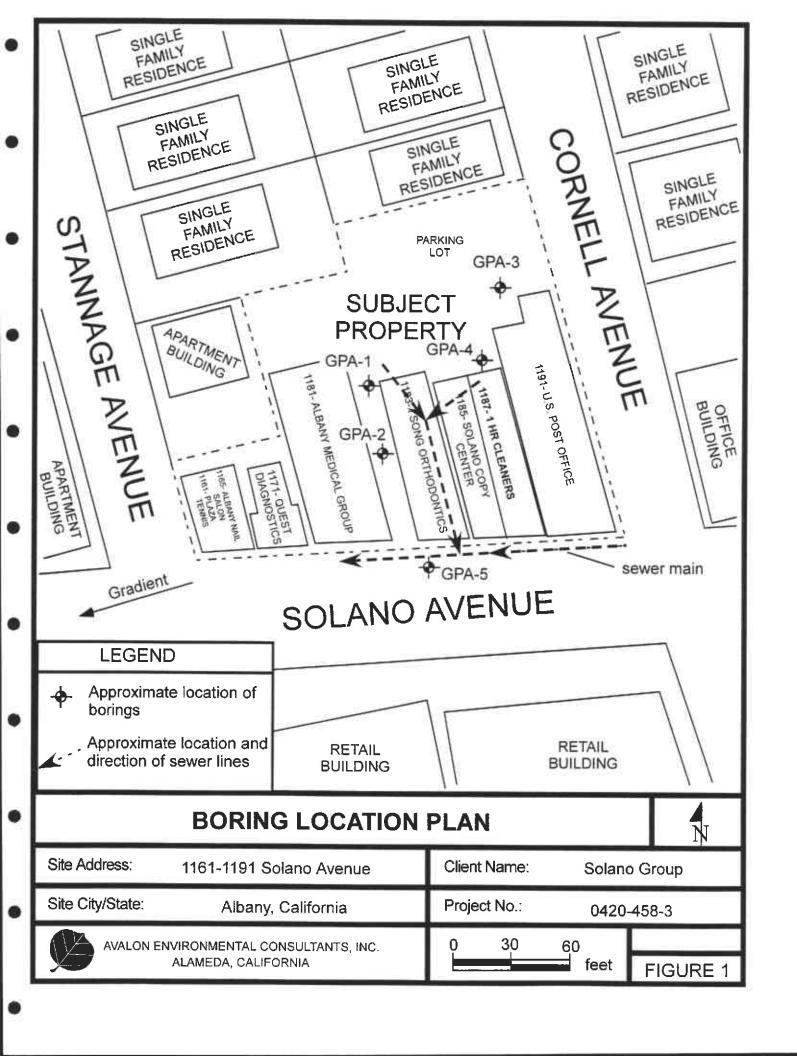


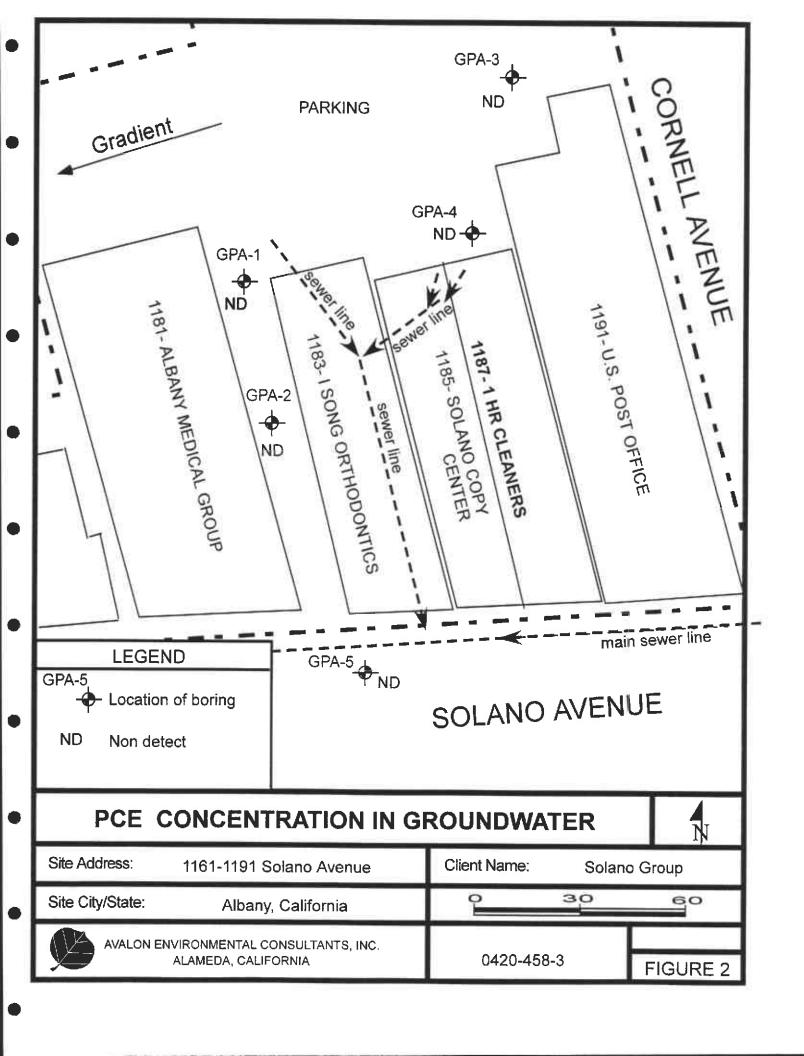
AVALON ENVIRONMENTAL CONSULTANTS
ALAMEDA, CALIFORNIA

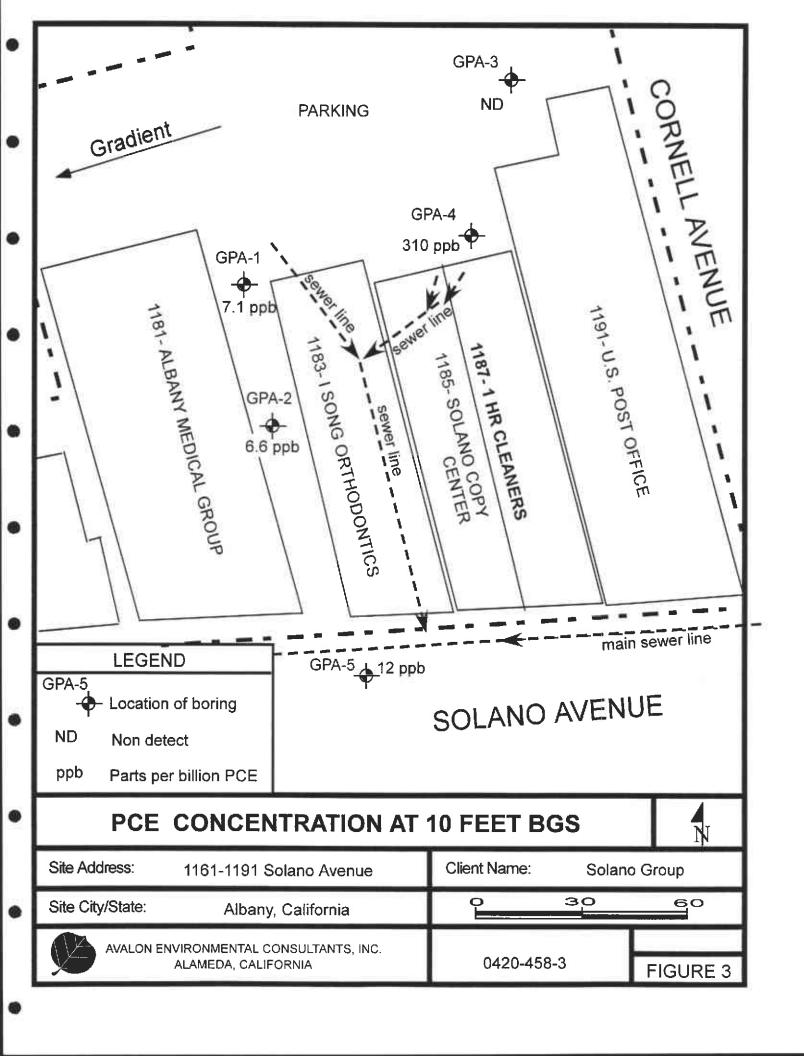
Source:

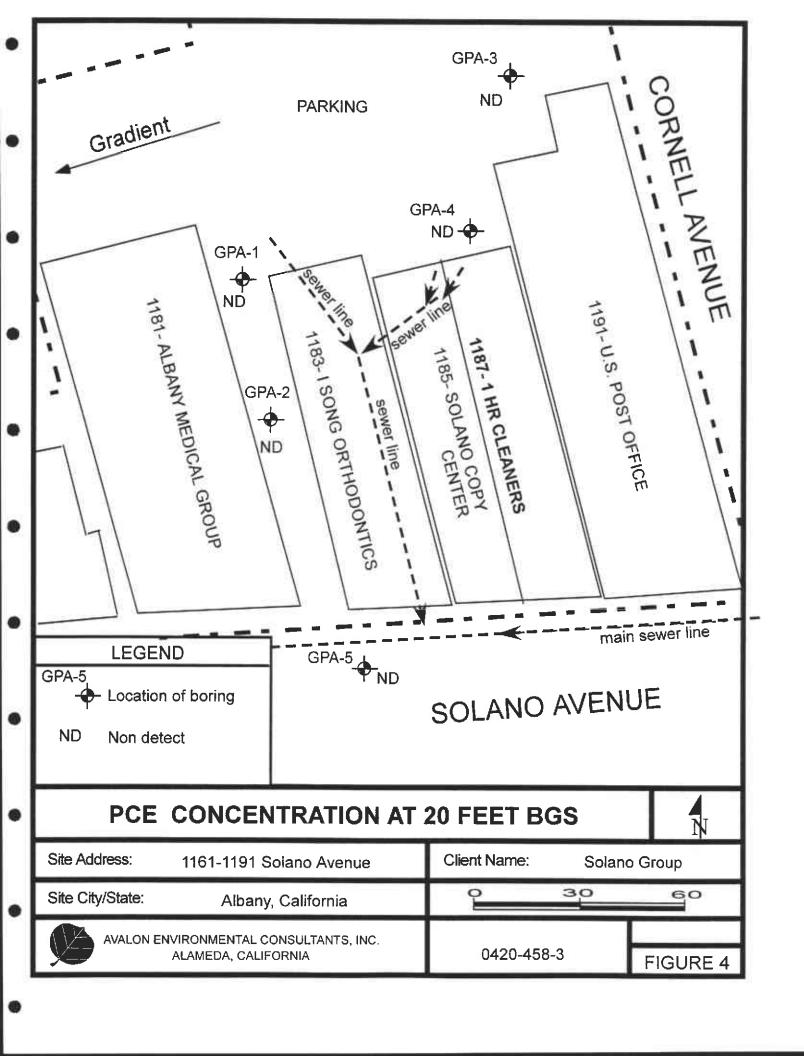
U.S.G.S., 7.5 Minute Series Topographic Maps, Richmond Quad, California 1959, 1980

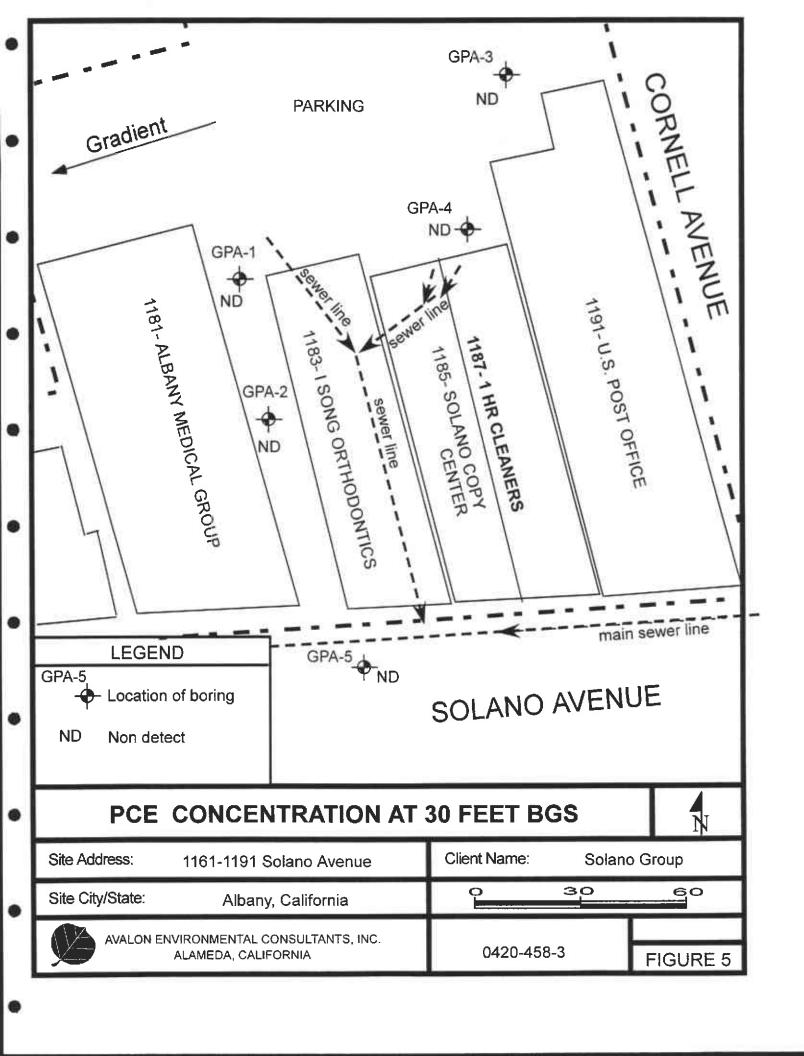


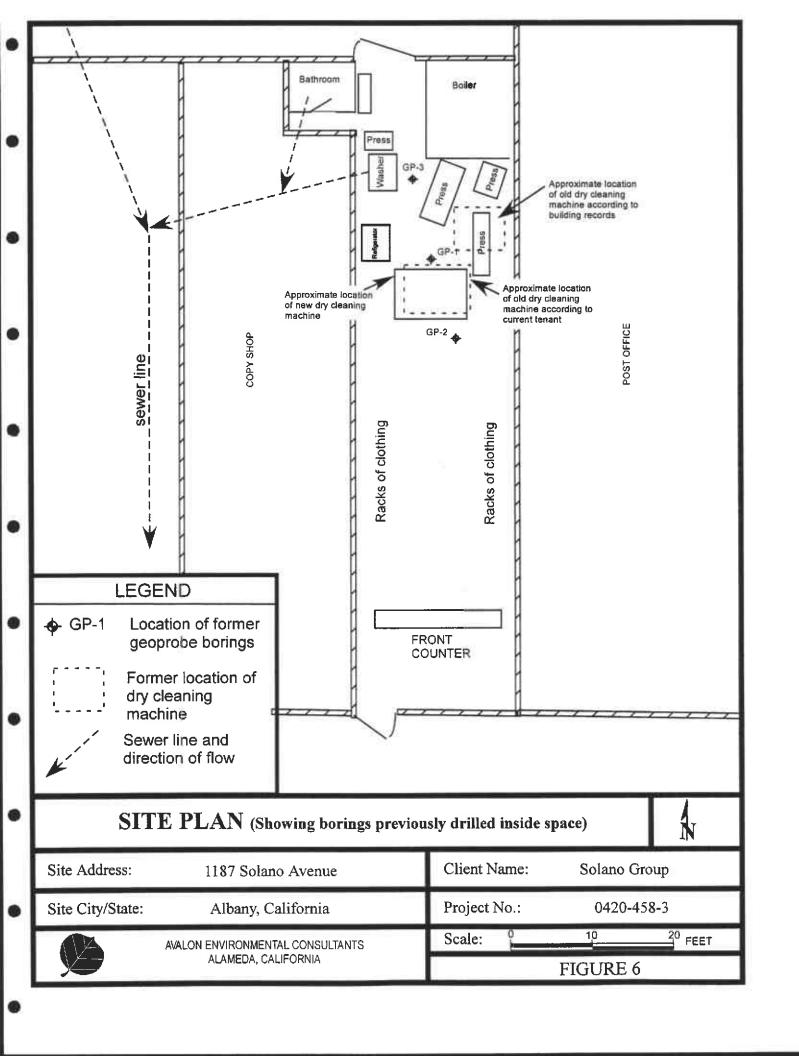


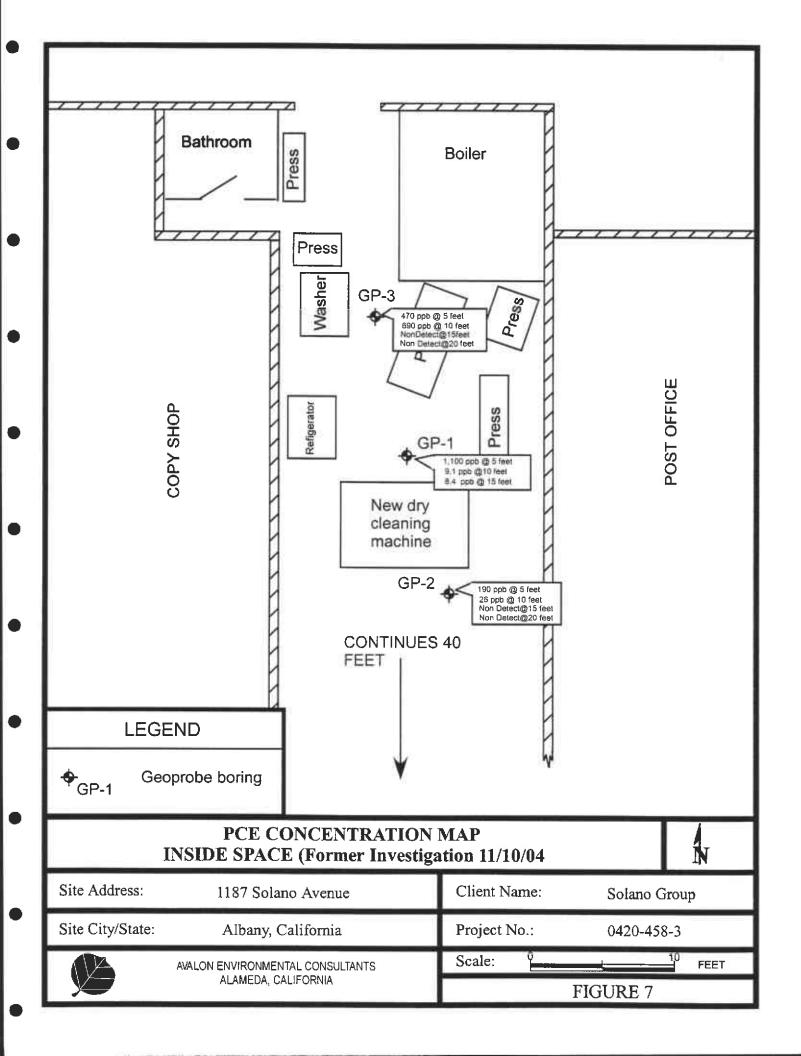












APPENDIX II

BORING LOGS

		131 North	NMENTAL CON Tustin Ave, Suite IN, CALIFORNIA		BORING NO. GPA-	-1		
CLIEN	T: The S	olano (Group		SITE: 1187 Solano Avenue, Alb	SITE: 1187 Solano Avenue, Albany, California		
PROJE	CT NO.: 0 2	120-45	3-3		SURFACE ELEVATION:			
		pril 20,			INITIAL WATER LEVEL:			
			Seoprobe		FINAL WATER LEVEL:			
DRILL	ING CONTR	ACTOR:	Kehoe Drill	ing	TOTAL DEPTH: 35 Feet			
GEOL	OGISTS:	Trevor S	antochi		LOGGED BY Trevor Santochi			
DEPTH (FRET)	SAMPLE NO.	ELOWs/ET	PID (ppm) PROFILE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS		
10.0	GPA-1@10 fee	0.00	PROFILE	5	Dark brown silty clay, dense, most Light brown silty clay, dense, most Light brown silty clay, dense, moist. Light brown, mottled with greenish brown, silty clay, dense, moist. Light brown silty clay, dense, moist. Light brown silty clay, dense, moist. Light brown, mottled with greenish brown, silty clay, dense, moist. Light brown silty clay, dense, moist. Light brown silty clay, dense, moist. Light brown, mottled with medium dark brown, silty clay, dense, moist. Light brown, mottled with dark brown, silty clay, dense, moist. Light brown, mottled with dark brown, silty clay, dense, moist. Light brown, mottled with dark brown, silty clay, dense, moist. Light brown, mottled with medium dark brown, silty clay, dense, moist.	continuous core		
30.0	GPA-1@ 30 fee	0.00		प्रस्तर	Silty clay with silt and angular cobbles between 30.5 and 31.0 feet. Loose, moist.	continuous core		

131 No	RONMENTAL CONSULTANTS orth Tustin Ave, Suite 213 JSTIN, CALIFORNIA	GPA-1			
LIENT: The Solan	o Group	SITE: 1187 Solano Avenue, Alba	SITE: 1187 Solano Avenue, Albany, California		
ROJECT NO.: 0420-		SURFACE ELEVATION:			
	20, 2005	INITIAL WATER LEVEL:			
METHOD/EQUIPMENT:		FINAL WATER LEVEL:			
Control of the Contro	R: Kehoe Drilling	TOTAL DEPTH: 35 Feet			
	or Santochi	LOGGED BY Trevor Santochi			
(FEET) SAMPLE NO. BLOWSET	PROFILE COG CITY COG CITY COG CITY COG CITY COG CITY COG CITY CITY CITY CITY CITY CITY CITY CITY	GEOLOGIC DESCRIPTION	REMARKS		
50.0		Light brown silty clay, dense, moist. Groundwater sampled by hydropunch. TOTAL DEPTH 35 FEET TREVOR 0. SANTOCH SECOLOGIST Exp. MACHINE EXP. MACHI			

Q ²	AVALOR	131 N	/IRONMENTAL CON North Tustin Ave, Suite : TUSTIN, CALIFORNIA		BORING NO. GPA-	-2
CLIEN	T: The S	olai	no Group		SITE: 1187 Solano Avenue, Alb	any, California
PROJE	CT NO.: 0	420	-458-3		SURFACE ELEVATION:	
DRILL	.DATE: 🖊	\pril	20, 2005		INITIAL WATER LEVEL:	
METH	OD/EQUIP	MENT	Geoprobe		FINAL WATER LEVEL:	
DRILL	ING CONT	RACT	OR: Kehoe Drilli	ng	TOTAL DEPTH: 35 Feet	
GEOL	OGISTS:	Trev	or Santochi		LOGGED BY Trevor Santochi	
HTGGT)	SAMPLE NO.	13/5ACTE	PID (ppm) PROFILE	GRAPHIC LOG	GEOLOGIC DESCRIPTION	REMARKS
					Concrete	One inch concrete
-					Dark brown silty clay, dense, moist.	TO TO
					U . 1	IR D. SAMFOCHE
1 4					Light brown silty clay, dense, moist	CERTIFIED INTINUOUS
1 1					Light brown silty day, dense, mo	060100897e
10.0	-		0.00 *		Light brown, mottled with green, silty clay, dense, moist.	
-	GPA-2@10 fee				Light brown, mottled with green, silty clay, dense, moist.	
13					Light brown silty clay, dense, moist.	continuous core
1 -	-				Light brown silty day, dense, moist.	
1 1					Light brown silty clay, dense, moist.	
20.0	- X		0.00		Light brown, mottled with medium dark brown, silty clay, dense, moist.	continuous
	GPA-2@ 20 fer				Light brown, mottled with dark brown, silty clay, dense, moist.	core
					Light brown, mottled with dark brown, silty clay, dense, moist.	
-					Light brown silty day, dense, moist.	continuous core
30.0			0.00	eacea	Silty clay with silt and angular cobbles between 31.0 and 31.5 feet. Loose, moist.	COIG

131 N	/IRONMENTAL CONSULTANTS lorth Tustin Ave, Suite 213 FUSTIN, CALIFORNIA	GPA-2 SITE: 1187 Solano Avenue, Albany, California		
PROJECT NO.: 0420		SURFACE ELEVATION:	arry, Odinorria	
DRILL DATE: April		INITIAL WATER LEVEL:		
METHOD/EQUIPMENT		FINAL WATER LEVEL:		
	OR: Kehoe Drilling	TOTAL DEPTH: 35 Feet		
	or Santochi	LOGGED BY Trevor Santochi		
DEPTH (FEET) SAMPLE NO. BICTUSTE	PID (ppm) PROFILE PROFILE	GEOLOGIC DESCRIPTION	REMARKS	
50.0		Medium light brown silty clay, dense, moist. Groundwater sampled by hydropunch. TOTAL DEPTH 35 FEET	SENGR B. SANTOCHI No. 1591 CERTIFIED BNGINEERING GEOLOGIST EXP. 1112410	

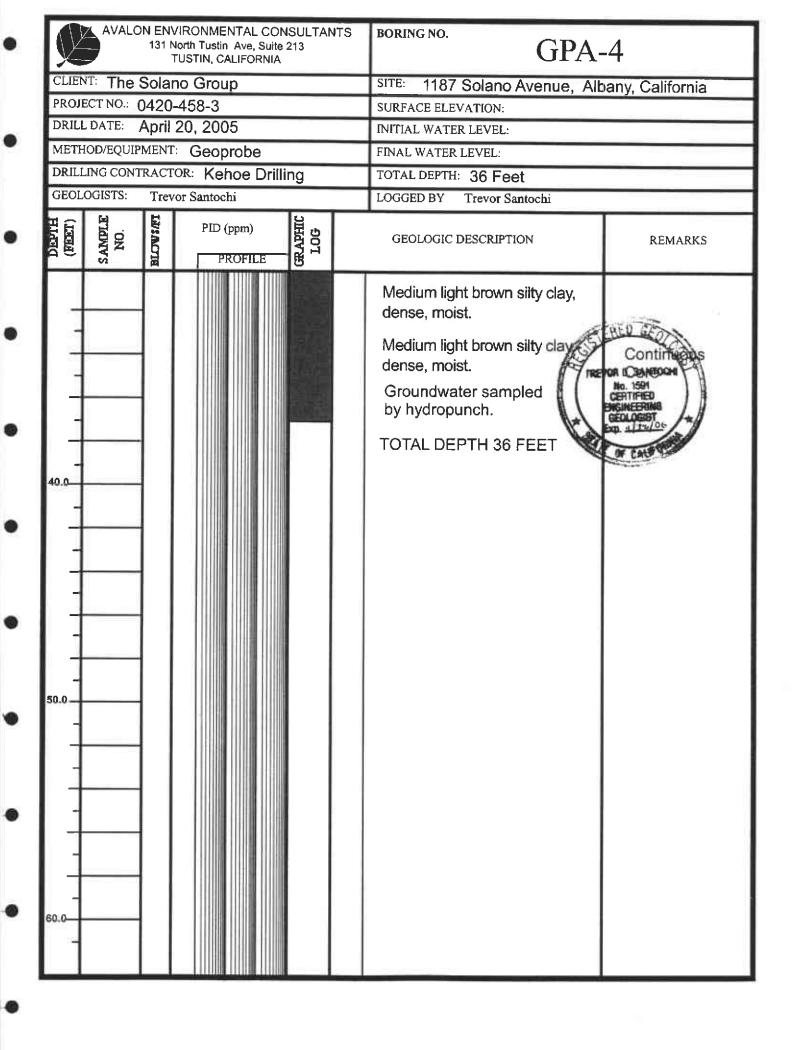
•

AVALON ENVIRONMENTAL CONSULTANTS 131 North Tustin Ave, Suite 213 TUSTIN, CALIFORNIA	BORING NO. GPA	-3
CLIENT: The Solano Group	SITE: 1187 Solano Avenue, Alb	any, California
PROJECT NO.: 0420-458-3	SURFACE ELEVATION:	
DRILL DATE: April 20, 2005	INITIAL WATER LEVEL:	
METHOD/EQUIPMENT: Geoprobe	FINAL WATER LEVEL:	
DRILLING CONTRACTOR: Kehoe Drilling	TOTAL DEPTH: 37 Feet	
GEOLOGISTS: Trevor Santochi	LOGGED BY Trevor Santochi	
(FEECT) SAMPLE NO. NO. LOG LOG LOG PAGE AND	GEOLOGIC DESCRIPTION	REMARKS
	Asphalt	One inch Asphalt
_	Dark brown silty day, dense, moist.	
-	Dark brown silty clay, dense, mount	IOR D. SANTOSM
	Dark brown silty clay, dense, moi	CERTIFIED TITLLOUIS ENGINEERING EEOLOSISTO EOO. 1431/44
- D	Light brown, mottled with green, sill clay, dense, moist.	Or Ents William
10.0 - 0.00 s GPA-3@10 fee	Light brown, mottled with brown and green, silty clay, dense, moist.	continuous
	Light brown silty clay, dense, moist.	core
	Light brown silty clay, dense, moist.	
	Light brown silty clay, dense, moist.	
20.0	Light brown, mottled with medium dark brown, silty day, dense, moist.	
GPA-3@ 20 fee	Light brown, mottled with dark brownish green, silty clay, dense, moist.	continuous core
	Light brown, mottled with dark brown, silty clay, dense, moist.	
- ,	Light brown silty clay, dense, moist.	continuous core
30.0 O O O O O O O O O O O O O O O O O O	Silty clay with silt and angular cobbles between 31.5 and 31.75 feet. Loose, moist.	

ത

<u>Y</u>		131 No TU	RONMENTAL CONSULTAN orth Tustin Ave, Suite 213 JSTIN, CALIFORNIA	BORING NO. GPA-3		
			o Group	SITE: 1187 Solano Avenue, Albany, California		
	ECT NO.: (SURFACE ELEVATION:		
			0, 2005	INITIAL WATER LEVEL:		
METH	IOD/EQUIP	MENT:	Geoprobe	FINAL WATER LEVEL:		
			R: Kehoe Drilling	TOTAL DEPTH: 37 Feet		
GEOL	OGISTS:		r Santochi	LOGGED BY Trevor Santochi		
(FEET)	SAMPLE NO.	BLOWART	PROFILE CB PROFILE	GEOLOGIC DESCRIPTION REMARKS		
10.0				Medium light brown silty clay, dense, moist. Medium light brown silty clay, dense, moist. Groundwater sampled by hydropunch. TOTAL DEPTH 37 FEET Sept. Mark 1987.		

2	13	NVIRONMENTAL CONSULT 1 North Tustin Ave, Suite 213 TUSTIN, CALIFORNIA	GPA-4
		ano Group	SITE: 1187 Solano Avenue, Albany, California
31	ECT NO.: 042		SURFACE ELEVATION:
		ril 20, 2005	INITIAL WATER LEVEL:
		NT: Geoprobe	FINAL WATER LEVEL:
DRILL	ING CONTRA	CTOR: Kehoe Drilling	TOTAL DEPTH: 36 Feet
GEOL	OGISTS: Tr	evor Santochi	LOGGED BY Trevor Santochi
DEPTH (FEET)	SAMPLE NO. BLOWA/FT	PROFILE PROFILE	GEOLOGIC DESCRIPTION REMARKS
			Asphalt One inch asphalt
-			Dark brown silty clay, dense, moist
1			Dark brown silty clay, dense, mgist
=			Light brown silty clay, dense, most
10.0		0.00	Light brown, mottled with green, silty clay, dense, moist.
-1	GPA-4@10 fee		Light brown silty clay, dense, moist.
1			Light brown, mottled with brown and green, silty clay, dense, moist.
7			Light brown silty clay, dense, moist.
20.0		0.00	Light brown, mottled with dark brownish green, silty clay, dense, moist. continuous core
1			Light brown, mottled with dark brown, silty clay, dense, moist.
-			Light brown silty clay, dense, moist.
0.0	- X	0.00	continuous core Silty day with silt and angular cobbles
G	PA-4@ 30 fei	3888	between 31.0 and 31.50 feet. Loose, moist.



AVALON ENVIRONMENTAL CONSULTANTS 131 North Tustin Ave, Suite 213 TUSTIN, CALIFORNIA			BORING NO. GPA-5			
CLIENT: The Solano Group			SITE: 1187 Solano Avenue, Alt	oany, California		
PROJECT NO.:			SURFACE ELEVATION:			
DRILL DATE:		1, 2005	INITIAL WATER LEVEL:	INITIAL WATER LEVEL:		
METHOD/EQU			FINAL WATER LEVEL:	FINAL WATER LEVEL:		
DRILLING CON	TRACTOR	≀: Kehoe Drilling	TOTAL DEPTH: 35 Feet			
GEOLOGISTS:	Trevor	Santochi	LOGGED BY Trevor Santochi	LOGGED BY Trevor Santochi		
DEPTH (FEET) SAMPLE NO.	ELOWS/RT	PID (ppm) DIHAV BOT PROFILE	GEOLOGIC DESCRIPTION	REMARKS		
-	11		Asphalt	Three inches asphalt, two inches		
‡	4		Dark brown silty clay, dense, moist.	base		
			Dark brown silty clay, dense, moist	COOMOUGH		
-			Light brown, mottled with gree clay, dense, moist.	continuous n. saysoper		
			Light brown silty clay, dense,	EU DOUBT		
10.0 - GPA-5@10.5	0.0	o •	Light brown silty clay, dense, moist.	or cars Car		
			Light brown silty clay, dense, moist.	continuous		
-			Light brown, mottled with brown and dark green, silty clay, dense, moist.	core		
20.0			Light brown, mottled with dark brownish green, silty clay, dense, moist.			
GPA-5@ 20 f	4		Light brown silty clay, dense, moist.	continuous core		
	+		Light brown silty clay, dense, moist.			
<u> </u>	$\left\{ \right. \right\}$		Light brown silty clay, dense, moist.			
			Light brown, mottled with dark brown and green, silty clay, dense, moist.	continuous core		
30.0 GPA-5@ 30 f	0.0	, 1634343 4	Silty clay with silt and angular cobbles between 31.5 and 32.00 feet. Loose, moist.			

131 N	/IRONMENTAL CONSULTANTS forth Tustin Ave, Suite 213 TUSTIN, CALIFORNIA	BORING NO. GPA-5			
CLIENT: The Solar		SITE: 1187 Solano Avenue, Albany, California			
PROJECT NO.: 0420-		SURFACE ELEVATION:	SURFACE ELEVATION:		
	21, 2005	INITIAL WATER LEVEL:			
METHOD/EQUIPMENT		FINAL WATER LEVEL:			
	OR: Kehoe Drilling	TOTAL DEPTH: 35 Feet			
	or Santochi	LOGGED BY Trevor Santochi			
SAMPLE NO.	PID (ppm) PROFILE PROFILE	GEOLOGIC DESCRIPTION	REMARKS		
50.0		Medium light brown silty clay, dense, moist. Medium light brown silty clay dense, moist. Groundwater sampled by hydropunch. TOTAL DEPTH 35 FEET	COPE DE SANTOON NO. 1584 CERTIFIED NGINESHING GEOLOGIST NP. 1120/00		

APPENDIX III

PERMITS





ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION 199 ELMHURST ST. IIAYWARD CA. 94544-1395 PHONE (510) 670-6633 James Vao

FAX (516) 7R2-1939 WWW.zcfcwed.org
APPLICANTS: PLRASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS
DESTRUCTION OF WELLS OVER 45 PEET REQUIRES A SEPARATE PERMIT APPLICATION

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT 1187 Solemo Avenue	WOS-0427
	PERMIT NUMBER
Albany, CA 94709	WELL NUMBER
	APN
	PERMIT CONDITIONS
	Circled Permit Requirements Apply
CLIENT	Citation vesting tredentaments with A
Name Solano Grove (Tony Kershaw)	A. GENERAL
Address PO Box 9026 Phone 510-524-8122	I. A permit application should be submitted so as to
City Berkely, CA Zip 94709	arrive at the ACPWA office five days prior to
	proposed starting date.
APPLICANT	2. Submit to ACPWA within 60 days after completion of
Name TREUOR SANTOCHI CEG. 1591	permitted original Department of Woter Resources-
Avalon Fax510-521-2607	Well Completion Report.
Alldrew 131 N. Tustin Dure Phone 510 - 521 - 244 1	3. Permit is void if project not begun within 90 days of
City TUSTIN, CA ZIP 92790	approval date
	B. WATER SUPPLY WELLS
TYPE OF PROJECT	1. Minimum surface seal thickness is two inches of
	coment grout placed by tromie.
Well Construction Geotechnical Investination Cathodic Protection General	2. Minimum sent depth is 50 feet for municipal and
Water Supply Contemporation — 4 bocom as	Industrial wells or 20 feet for demostic and irrigation
Water Supply Contamination 4 borings Monitoring Well Destruction	wells unless a leaser depth is specially approved. C. GROUNDWATER MONITORING WELLS
removing removation	INCLUDING PIEZOMETERS
PROPOSED WATER SUPPLY WELL USE	1. Minimum surface seal thickness is two inches of
New Domestic Replacement Domestic	coment grout placed by framic.
Municipal Integration	2, Minimum acul depth for monitoring wells in the
Industrial Other NONE	maximum depth proceduable or 20 feet.
	D. GEOTECHNICAL/CONTAMINATION
DRILLING METHOD:	Backfill bore hole by trainie with cement grout or cement
Mud Rotary Air Rotary Auger	growt/sand mixture. Upper two-three feet replaced in kind -
Cable Other	Or Will Controlled Cities
	E. CATRODIC
DRILLER'S NAME Kehoe Testing	Fill hole anode zone with concrete placed by tremie
DRULLER'S LICENSE NO. 786163	P. WELL DESTRUCTION
DIGETER 2 LICENSE NO. 19019	Send a roup of work site. A separate permit is required
	for wells deeper than 45 feet.
WELL PROJECTS	G. STREET CONDITIONS — 3 4 7
Driff Hole Diameterin. Muximum	NOTE: One application must be submitted for each well or well
Casing Diameterin. Depth ft.	destruction. Multiple beeings on one application are acceptable
Surface Seat Depthft. Owner's Well Number	for geotechnical and contamination investigations.
	tan Bannen
GEOTECHNICAL/CONTAMINATION PROJECTS	
Number of Borings 4 Maximum	
Flole Diameter 1 in Dopth 40 tt.	
STARTING DATE 4/20/05	1 117
COMPLETION DATE 4/20/05	11100
COMPLETION DATE	APPROVED AVE
,	APPROVED DATE 4-11-05
I hereby agree to comply with all partirements of this permit and Alameda County Ordinary	
	/ V I/
APPLICANT'S SIGNATURE DATE 4//	105 / N
PLEASE PRINT NAME TREVOR SANTOCHT Roy 5-1.	1-04

THE TT LOOP THOM CO. OF THE HOLDIN



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD, CA. 94544-1395
PHONE (510) 670-6633 James Yoo FAX (510) 782-1939

PERMIT NO. W05-0429

WATER RESOURCES SECTION
GROUNDWATER PROTECTION ORDINANCE
Dostraction of Wells (Less than 45 feet in depth)

Destruction Requirements: PRESSURE GROUTING # 1

- Remove any casing(s) and annular seal to 3-5 feet below finished grade of original ground, whichever is the lower elevation. If well(s) are obstructed, then drill out to original depth.
- Destroy well by grouting neat coment with a tremie pipe or pressure grouting (25 psi for 5min.) to the bottom of the
 well and by filling with neat coment to three (3-5) feet below surface grade. Allow the sealing material to spill over
 the top of the casing to fill any annular space between easing and soil.
- After the seal has set, backfill the remaining hole with concrete or compacted material to match existing conditions.
- 4. Drilling permits are valid from the start date to the completion date. Permits can be extended by a phone call, but drilling permit applications will not be extended beyond 90 days from the approved start date. Permit is valid from April 20 to April 20, 2005.
- 5. Permitte, permittee's, contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statues regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on-or off site storm sewers, dry wells, or waterways or be allowed to move off the property where wok is being completed.
- Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this
 permit application. This permit may be voided if it contains incorrect information.
- 7. Drilling Permit(s) can be voided/ canceled only in writing. It is the applicants responsibilities to notify Alameda County Public Works Agency, Water Resources Section in writing for an extension or to cancel the drilling permit application. No drilling permit application(s) shall be extended beyond ninety (90) days from the original start date. Applicants may not enteed a drilling permit application after the completion date of the permit issued has passed.
- 8. Compliance with the above well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including: permit number and site map.
- 9. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, hability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.
- Applicant shall contact George Bolton for a inspection time at 510-670-5594 at least five (5) working days
 prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to
 drilling.



City of Albany

1000 SAN PABLO AVENUE . ALBANY, CALIFORNIA 94706-2295

COMMUNITY DEVELOPMENT DEPARTMENT

CITY ADMINISTRATOR

PH (510) 528-5710 FAX (510) 528-5797

CITY ATTORNEY

PH. (510) 524-9205 FAX (510) 526-9190

CITY CLERK

PH. (510) 528-5720 FAX (510) 528-5797

CITY COUNCIL

PH (510) 528-5720 FAX (510) 528-5797

COMMUNITY DEVELOPMENT

• Building

Planning

· Environmental Resources PH. (510) 528-5760

FAX (510) 524-9359

Maintanance

- Public Works PH (510) 524-9543

FAX (510) 524-9722

FINANCE & ADMINSTRATIVE SERVICES &

CITY TREASURER

PH. (510) 528-5730 FAX (\$10) 528-2743

FIRE & EMERGENCY MEDICAL SERVICES

PH. (510) 528-5771

FAX (510) 528-5774

PERSONNEL

PH (510) 528-5714

FAX (510) 528-5797

PH (510) \$25-7300

FAX (510) 528-5774

RECREATION & COMMUNITY SERVICES

1249 Marin Avenue

PH (510) 524 9293 FAX (510) 528-8914

- Friendsig Club/Chriddare

Program Memorial Park PH (510) 524-0135

Senior Center

PH; (510) 524-9122

FAX (510) 524-8940 · Teen Center/Misdle School Park

PH. (510) 525-0576

FAX TRANSMITTAL

DATE:

April 14, 2005

TO: Trevor Santochi

COMPANY OR AGENCY: Avalon Environmental

DEPARTMENT: Tustin office

FAX #: (714) 836-6642

PAGES: 13

(Incl. Cover Sheet)

MESSAGE:

Approved Encroachment Permit for 1183 Solano Ave. geo-

probe boring

FROM: John Erlich

PHONE: (510) 528-5758

FAX: (510) 524-9359

E-MAIL: jerlich@albanyca.org

Original to follow by mail:

X YES

NO

Mar 31 05 05:23p



City of Albany



ENCROACHMENT PERMIT
PERMANENT OR TEMPORARY CONSTRUCTION WITHIN CITY RIGHT OF WAY PERMIT NO. 05-072

NAME	ADDRESS	Phone No. Norma/Emergency	Business Lic. No. Workers Comp. No.
revor Santoch	Alameda, CA - 941 Shorepoint Count Suite FIZ	510-521-2441	1443997-04
ony Kershaw.	P.O. Box 9026 Berkeley CA.	Mess seem recently	
ngineer / Architect			
Contractor Kehve Testin	15 15571 Industry Lane	714-901-7270	1555520-04
	TYPE OF WORK	_	
Sidewalk Utility Co.		wer her <u>street</u> -	Street Tr ee ー <u>>0(こ B</u> DL(ル(
C== 1 === 1	DESCRIPTION OF WORK		
SEE ATTAC	<u> </u>		
No refund after 120	REQUIRED CONDITIONS accordance with the attached standard condition days or work begins, 70% of fee refundable with	nin 120 days provided r	no work has begun.
2. No refund after 120 3. Permanent structure 4. CALL USA 1-800-22 5. Call for Final Inspec	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2800 before excavating, etion and Sign-Off 48 hr. in advance at [] (510)	nin 120 days provided r). 528-5760 (510) 524	-9543.
2. No refund after 120 3. Permanent structure 4. CALL USA 1-800-22 5. Call for Final Inspec	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, etion and Sign-Off 48 hr. in advance at [] (510) may be imposed following City review and prior to	nin 120 days provided r). 528-5760 (510) 524	-9543.
2. No refund after 120 3. Permanent structure 4. CALL USA 1-800-22 5. Call for Final Inspec 6. Special Conditions Applicant's Signature	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating etion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the condition of the conditi	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	-9543.
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Purple Conditions	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, stion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the condition of the conditions	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	-9543.
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Pursual Conditions Total construction of the Conditions New construction of the Conditions In Law story seal back	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, stion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the conditions of the conditions	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	-9543.
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Funda Conditions Total construction of the	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, etion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the condition of the condit	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	-9543.
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Person Fee Campai Total construction of the Leu story seal fact Minimum fee page 200 Total Fee due (100)34	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, etion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the condition of the condit	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	-9543.
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Purple Conditions New construction of the Leu sterry seal for	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, etion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the condition of the condit	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	-9543.
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Person Fee Campai Total construction of the Leu story seal fact Minimum fee page 200 Total Fee due (100)34	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, etion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior to the condition of the condit	nin 120 days provided r). 528-5760 (510) 524 to issuance of this perm Date:	9543 11/05- 4/14/05
2 No refund after 120 3 Permanent structure 4 CALL USA 1-800-22 5 Call for Final Inspec 6 Special Conditions Applicant's Signature Permit Fee Campail Total conditions of 59 In-Lieu struction of 59 In-Lieu structure fee per school	accordance with the attached standard condition days or work begins, 70% of fee refundable with es require City Council approval (City Code 14-2 27-2600 before excavating, etion and Sign-Off 48 hr. in advance at (510) may be imposed following City review and prior living the standard of the standard o	nin 120 days provided r). 528-5760 (510) 524 o issuance of this pern	9543 11/05- 4/14/05



ENVIRONMENTAL PROTECTION STATEMENT OF RESPONSIBILITY FOR DISCHARGES & DAMAGE

I. PURPOSE

This statement is to provide notice to property owners, contractors, and others of the responsibility for compliance with Albany Municipal Code (AMC) as it relates to protection of public trees and waterways.

Public Trees. Damage to street trees or other trees located on public property is considered damage to public property. Damage to trees includes, but is not limited to cutting any amount of trees roots, appling or tearing of branches, and peeling, tearing or scarring of tree bank. Damage may cause death and/or a dangerous condition by destabilizing the tree. Restoring a tree to its pre-damaged state can take years. Therefore, preventing damage to trees is a priority to the City of Albany.

Waterways: The City's storm water runoff system conveys rain water directly to the San Francisco Bay through a network of surface flows, underground pipes, and creek channels. Materials discharged to a sidewalk, street gutter. storm drain or creek can cause creeks and the Bay to become polluted. Any material other than rain water is considered an illicit discharge under the Federal Clean Water Act. Examples of illicit discharges include: concrete wash water, studeo wash water, paint wash water, chemicals, and runoff from stockpiled materials such as dirt aggregate, soil products, and other construction materials.

II. RESPONSIBILITY FOR DAMAGE TO PUBLIC TREES AND/OR ILLICIT DISCHARGES TO WATERWAYS

Public Trees: Pursuant to Albany Municipal Code Section 14-1.2., it is unlawful to cause damage to public property When a public tree is damaged the cost of the damage and the value of the tree will be calculated by a certified arborist in accordance with International Society of Arboriculture Standards. Because valuable resources such as time, energy and money are invested in trees over many years, the calculated value of a tree can be high. The party damaging the tree is liable for all costs associated with the loss of the tree and the repair or replacement of the tree

Waterways: Pursuant to Albany Municipal Code Section 15.4, it is unlawful to discharge materials (liquid or solid) to a sidewalk, street, gutter, storm drain or creek. An illicit discharge is defined as "any discharge to the City storm drain system that is not composed entirely of storm water...". The contractor and/or property owner is responsible for all fines and costs associated with the illicit discharge.

III. CERTIFICATION OF COMPLIANCE

I understand that as the applicant I am responsible for any damage to public trees and or all illicit discharges resulting from this project and that I am responsible for all fees and fines as a result or non-compliance.

Trevor Santochi for J. Anthony Kershaw. 4/1/05
Property Owner or Permittee

Avalon Env. Consultants Inc.

4/1/05 Date

Business Name & Contractor's Authorized Representative

Location or Title of Project: SOIC BURING 1183 Solans Auc.

For more information, contact the Community Development & Environmental Resources Department at (510) 528-5750

City of Albany

SPECIAL PROVISIONS FOR ENCROACHMENT PERMIT FOR PERMANENT IMPROVEMENT IN CITY RIGHT-OF-WAY

AC A71

Permit # 05~0 (2
Location: 1183 Solano Avenue
This APPLICATION MUST BE ACCOMPANIED by the DATA and PLANS indicated below:
Description of Job
APPROVED Construction Plans and/or Documents
An Engineer's Estimate of the value of all public improvements and utility services within the public right-of-way
A Soils Report prepared by a Registered Civil Engineer. Others: Specify
ALL FEES SHALL BE PAID AND DEPOSITS MADE PRIOR TO THE ISSUANCE OF THIS PERMIT: except Utility
Companies Utility Companies will be invoiced.
STANDARDS/SPECIFICATION:
The following conditions and provisions of the Albany Municipal Code apply to this permit. All work shall be in accordance with City Standard Specifications and Drawings.
accordance with City Statitude Specifications and Ordinings.
COMMENCEMENT OF WORK
The permittee shall begin the work or use authorized by a permit issued pursuant to this chapter within ninety (90) days from the date of issuance unless a different period is stated in the permit, or an extension of time is granted by
the Director of Community Development & Environmental Resources. If the work or use is not begun accordingly
the permit shall become void.
INSPECTION
is appeared inspection producers and requirements shall be as established by the Director of Community
Development & Environmental Resources. Unless specifically exempted by the City Code, no encroachment work shall take place without inspection by the Director of Community Development & Environmental Resources or
his/has sutherized meent. Idensetions by the City must be requested at least TWENT 1-FOUR (24) HOURS
(excluding weekends) IN ADVANCE of the work to be performed. No work shall be performed on weekends without
PRIOR AUTHORIZATION of the Director of Community Development & Environmental Resources.
DISPLAY OF PERMIT
The state of this parmit at the site of the work or in the can or a venicle when movement or a
public street is involved. The permit shall be shown to any authorized representative of the Director of Community Development & Environmental Resources or Law Enforcement Officer on demand.
ACCEPTANCE OF PERMIT BY APPLICANT Acceptance by the applicant of the permit shall be conclusive evidence of the resonableness of the terms imposed
Acceptance by the applicant of the permit shall be conclusive experies of the shall constitute a waiver of any right to legislative determination thereof.
NON-ASSIGNMENT OF PERMIT
NON-ASSIGNMENT OF PERMIT Permits shall be issued only to the person making application and may not be assigned to another person by the permittee. If any permittee assigns his permit to another, the permit will be revoked.
CHANGES IN PERMIT AND WORK
CHANGES IN PERMIT AND WORK No changes may be made in the location, dimensions, character, or duration of the encroachment or use as grante by the permit except upon written authorization of the Director of Community Development & Environmental
by the permit except upon written authorization of the Official of Community Community

Resources.



EXCAVATION OF PAVED STREETS

No excavations shall be permitted within the paved area of the public streets unless the applicant can prove to the satisfaction of the Director of Community Development & Environmental Resources that the following conditions exist:

- 1. Boring of the utility is not feasible; and
- 2. No reasonable alternative utility alignment is available outside the paved street area; and
- 3. The cut area and an adjacent area shall be resurfaced as approved by the Director of Community Development & Environmental Resources. The limits of resurfacing shall be as determined by the Director of community Development & Environmental Resources to insure the excavating area blends visually with the surrounding area. The applicant shall be responsible for the replacement of any and all obliterated or removed pavement markers or striping.

REVOCATION OF PERMIT

This encroachment permit may be revoked at any time at the option of the Director of Community Development & Environmental Resources, whenever:

- 1. It appears that continuing allowance of the permitted work, whether because of changed conditions or otherwise, interferes with full, adequate or safe public use of the right-of-way involved; or
- 2. The permittee fails to comply with or violates any city ordinance, city standard, safety regulations, or any condition of the issuance of the permit.

Upon revocation of the permit, the premittee shall immediately restore the public right-of-way to a condition as required by the Director of Community Development & Environmental Resources. If the restoration is not completed within the time specified by the Director of Community Development & Environmental Resources, the City may take any and all necessary action so required to restore the right-of-way. Any and all costs incurred by the City will be deducted from any deposits posted by the permittee and if necessary recovered by legal action.

HOURS OF WORK

No work shall commence prior to 8:00 AM and no work shall be conducted after 6:00 PM Monday through Saturday and before 10:00 AM or after 6:00 PM on Sunday and Holidays.

COMPLETION OF WORK

The permittee must complete the work or use authorized by a permit issued pursuant to this chapter within the time specified in the permit. If at any time the Director of Community Development & Environmental Resources finds that the detay in the prosecution or completion of the work or use authorized is due to tack of diligence on the part of the permittee, the permit may be revoked.

PERMITTEE LIABILITY

The permittee shall agree to hold the City, its officers, and employees harmless from any and all liability, claims, suits or actions for any and all damages alleged to have been suffered by any person or property by reason of the permittee's installation, operation, maintenance or removal of the encroachment.

BY MY SIGNATURE HEREUNDER, I state that I have read and understand the above conditions and agree to comply therewith. I hereby attest that I am either the owner of the property or duly authorized agent of the applicant Date: 4/1/01 APPLICANT'S SIGNATURE

NAME (print): Trevor Santochi COMPANY: Avalon Env. Consultants, Inc

ANFORMANIERCROSCHIOGO



131 NORTH TUSTIN AVENUE • SUITE 213 • TUSTIN, CALIFORNIA 92780 Til. (714) 836-6632 • Fax: (714) 836-6642 941 Shorepoint Court • State F121 • Alameda, California 94504 Tel: (510) 521-2441 • Fax: (510) 521-2607

CITY OF ALBANY

APR 0 4 2005

COMMUNITY DEVELOPMENT DEPARTMENT

April 1, 2005

Mr. John Erlich City of Albany Community Development Department 1000 San Pablo Avenue Albany, California 94706-2295

Subject:

Encroachment Permit for geoprobe soil boring located on Solano Avenue in

Albany.

Dear Mr. Erlich:

Attached is an application for an encroachment permit for a geoprobe boring to be placed in Solano Avenue in front of 1183 Solano Avenue as part of a groundwater investigation. The boring location will be located approximately seven feet south of the northern curb. Approximately three parking spaces will be blocked for a period of approximately one or two hours. At no time will the traffic lane be blocked by our operation. Attached is a plot plan showing the approximate location of the boring. The boring will be approximately one inch in diameter and will be drilled to a depth of forty feet below ground surface (bgs). At the conclusion of drilling, the boring will be backfilled with a neat cement slurry, and capped with approximately nine inches of asphalt patch. Underground Service Alert (USA) will be contacted at least 72 hours prior to drilling.

If you have any questions or comments, please feel free to contact me at 510-521-2441.

Sincerely.

AVALON ENVIRONMENTAL CONSULTANTS, INC.

Trevor Santochi, RG, CEG

President

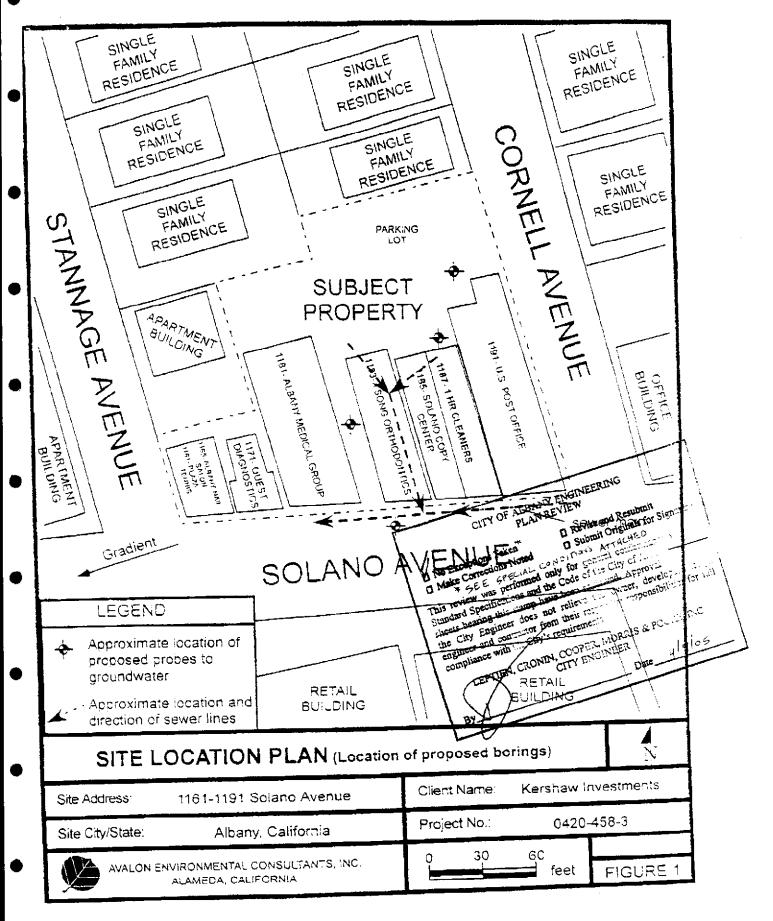
CC: J. Anthony Kershaw, Solano Group.

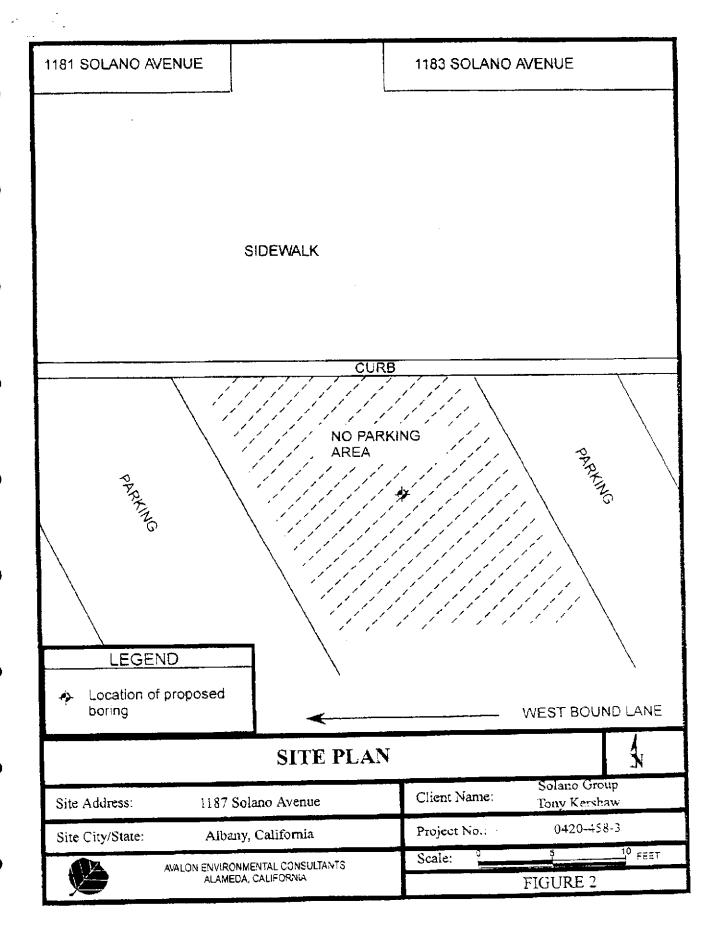
Date: 4/8/05

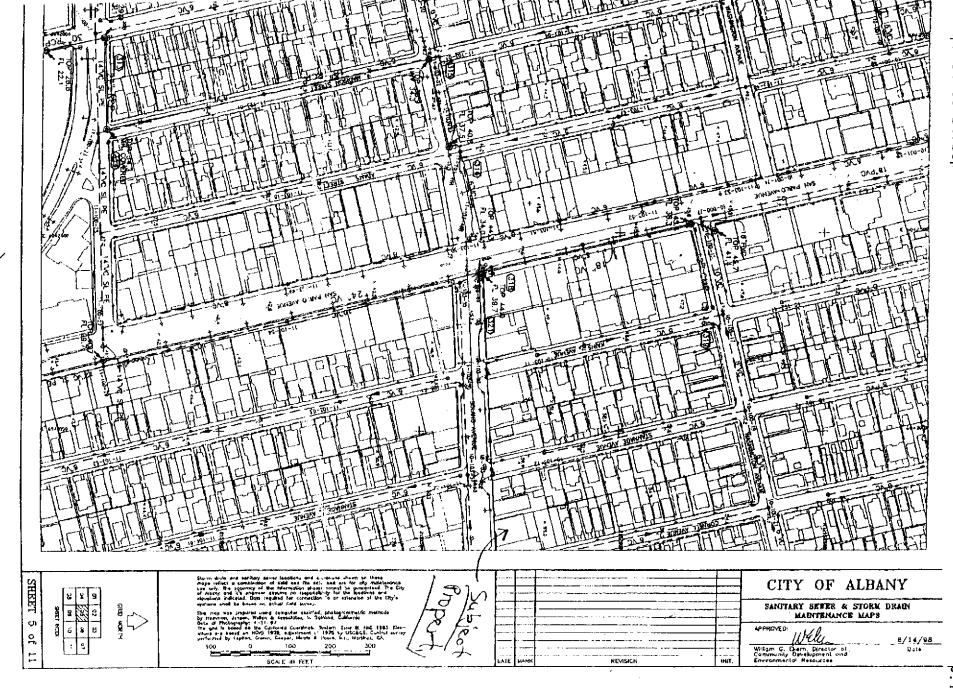
Special Conditions

City of Albany
Encroachment Permit
for
Geoprobe Boring on Solano Avenue

- Provide for traffic control and pedestrian safety and lane closures per the General Provisions of the City and Caltrans Standard Specifications. No open excavations shall be left unsupervised. All excavations shall be back filled or covered at the end of the working day.
- 2. Post for no parking in advance per City requirements.
- 3. Notify USA prior to excavating.
- 4. Conform to the requirements of the City's monument preservation plan. Any survey monument encountered shall be referenced and preserved or restored per State law.
- 5. Conform to City Standard Details for Sidewalk Repairs, Sidewalk shall be removed to the nearest joint.
- 6. Do not install conduits longitudinally within 5 feet of existing sanitary sewers. Crossings should be at right angles if possible. Provide a minimum of 6 inches vertical clearance to existing sanitary sewers.
- 7. Pavement Replacement shall conform to the City's Standard Specifications and Detail.
- 8. Attention is directed to City Sanitary Sewer and Storm Drain Maintenance Maps at this location (attached).
- 9. Provide a minimum of 2.5 feet of cover to finished pavement in right of way.
- Contact the City's Public Works Inspector, A.J. Silva at 510 559 4271 to schedule inspection a minimum of 48 hours in advance of excavating.
- 11. The boring must be backfilled with cement and capped with asphalt patch



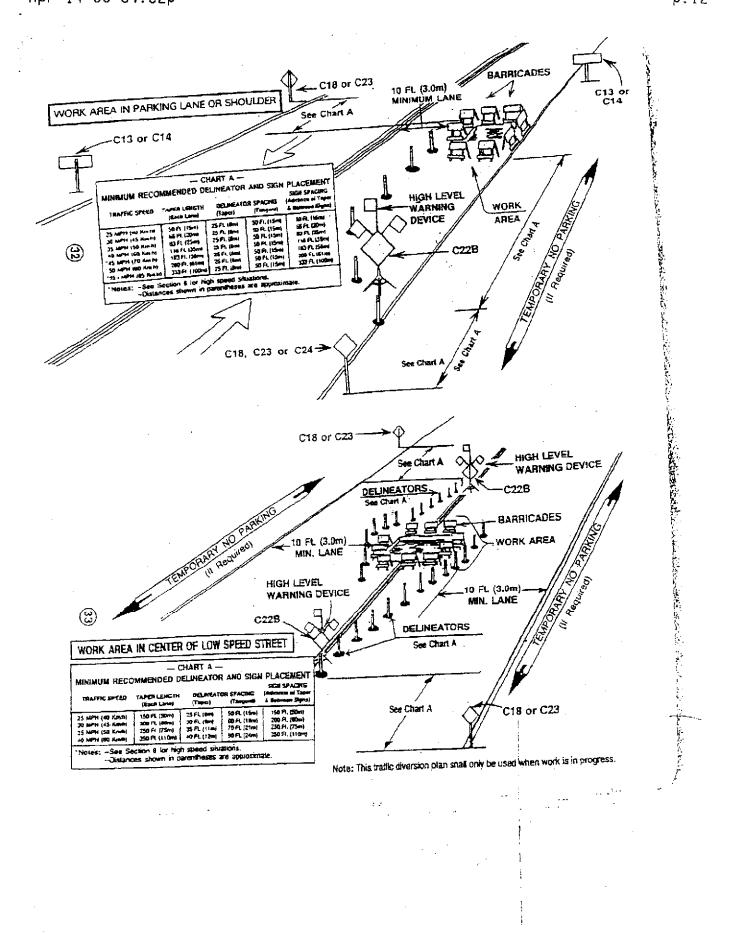




. .

_

•



April 14, 2005

Receipt #..: 29486

Amount Paid

04605 GF SPEC INSPECTION

127.00

Cmt: ENCROACHMENT PERMIT/1183 SOLANO AVE.

Check # Cl	neck Amount	Cash	Amt Tendered	Total Paid	Change
002661	127.00	.00	127.00	127.00	.00
002001				=========	#==#==#==#=

Paid By .: TREVOR D. SANTOCHI (sw)

APPENDIX IV

SCOPE OF WORK AND REVIEW LETTERS

131 NORTH TUSTIN AVENUE • SUITE 213 • TUSTIN, CALIFORNIA 92780 TEL: (714) 836-6632 • FAX: (714) 836-6642 941 SHOREPOINT COURT * SUITE F121 * ALAMEDA, CALIFORNIA 94504 Tel: (510) 521-2441 * Fan: (510) 521-2607

January 19, 2005

Mr. Robert Schultz Alameda County Environmental Health Department 1131 Harbor Bay Parkway Alameda, California 94502-6577

Subject:

Work Plan for Groundwater Assessment at 1 Hour Cleaners located at 1187

Solano Avenue, Albany, California 94709.

Dear Mr. Schultz:

Pursuant to request of Mr Tony Kershaw, Avalon Environmental Consultants, Inc. (Avalon), is pleased to present this work plan to perform a Phase II Environmental Groundwater Assessment at the above referenced dry cleaning facility. This dry cleaning facility has been located on the subject property since approximately 1986. Avalon performed a Phase II Environmental Site Assessment at the subject property in November 2004. The Assessment identified elevated levels of Tetrachlorethene (PCE) in the soil beneath the concrete slab of the dry cleaning unit ranging from 8.4 to 1,100 parts per billion. Based upon the findings of Avalon's investigation, a groundwater investigation was recommended.

Avalon's investigation will consist of subsurface sampling with four geoprobe borings to a depth of forty feet below ground surface (bgs). The assessment will be conducted using a truck mounted geoprobe device. This device, similar to a drill rig, is a pointed probe which pushes through the soil rather than drilling. The geoprobe generates no soil cuttings and therefore, saves in the expense and liability of soil disposal. A temporary well using one inch PVC tubing will be used to collect groundwater samples, if groundwater is encountered. The PVC tubing will be solid with five feet of perforated tubing at the bottom of the forty foot hole.

The geoprobe will be advanced in four locations to a depth of 40 feet bgs. The borings will be located on the north and west sides of the dry cleaners for accessability and downgradient orientation based upon regional topography. If groundwater is not encountered, other drilling methods such as hollow stem augur will be used and a new workplan will be prepared.

OBJECTIVE

The objective of this investigation is to determine if the groundwater at the subject property has been impacted by a release of PCE from a dry cleaning facility located at 1187 Solano Avenue in Albany. California.

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 Groundwater 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 Public Works Department will be obtained as required by law.

Subsurface Testing

Four geoprobe borings will be advanced to a depth of 40 feet bgs. The geoprobe will be advanced in four locations to a depth of 40 feet bgs. The borings will be located on the north and west sides of the dry cleaners for accessability and downgradient orientation based upon regional topography. Soil samples will be collected using acetate liners and continuous core methods will be used. The continuous core will be used to comply with Alameda County requirements to fully identify any potential water bearing zones. Select soil and all groundwater samples will be delivered under chain of custody to a certified laboratory and analyzed for Volatile Organic Compounds by EPA Method 8260. A Photo Ionization Detector (PID) will be used to field screen the samples. Select samples will be 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, groundwater samples will be collected from each boring.

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 report of findings, conclusions and recommendations will be prepared.

1187 Solano Avenue Page 2 January 19, 2005

Soil samples will be collected using acetate liners and continuous core methods will be used. The continuous core will be used to comply with Alameda County requirements to fully identify any potential water bearing zones. Select soil and all groundwater samples will be delivered under chain of custody to a certified laboratory and analyzed for Volatile Organic Compounds by EPA Method 8260.

At the conclusion of sample collection and analysis, a draft report of findings and conclusions will be prepared and delivered to Washington Mutual Bank, Alameda County Environmental Health Department and the Solano Group.

Should you have any questions or require further information, please feel free to contact Mohammed Navid or myself at (510) 521-2441.

Sincerely,

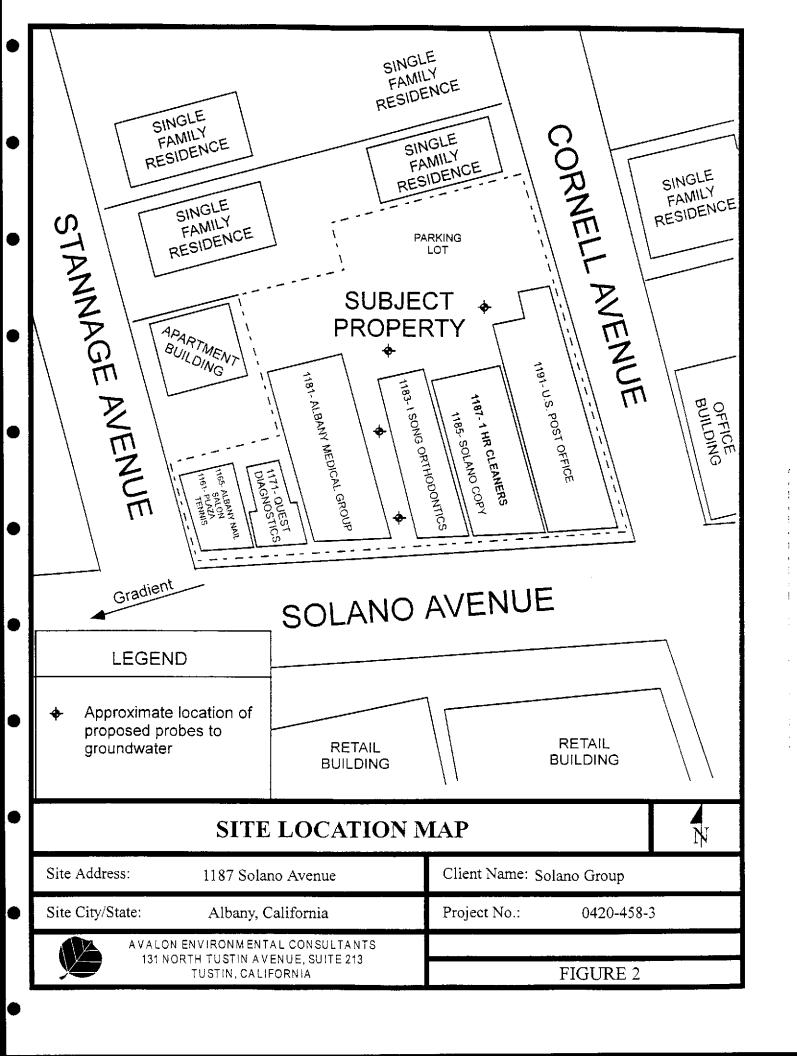
AVALON ENVIRONMENTAL CONSULTANTS, INC.

Trevor Santochi, RG, CEG

President

CC: Jim Walker, Washington Mutual

Mohammed Navid, Avalon Environmental Consultants, Inc.





AGENCY

DAVID J. KEARS, Agency Director



March 10, 2005

Tony Kershaw Kershaw Investments P.O. Box 9026 Berkeley, California 94709 RECEIVED MAR 1 5 2005

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (540) 567-6700 FAX (510) 337-9335

Subject:

Toxics Case No. RO0002857, Albany 1-Hour Cleaners, Dry Cleaning Facility at

1187 Solano Ave., Albany, California

Dear Mr. Kershaw:

Alameda County Environmental Health (ACEH) has reviewed your January 19, 2005, Work Plan for Groundwater Assessment and the November 10, 2004, Phase II Subsurface Site Assessment for the above-referenced site. As part of a property transaction screening evaluation performed by Avalon Environmental Consultants, Inc., up to 1.1 mg/kg tetrachloroethene (PCE) and 0.0059 mg/kg trichloroethene (TCE) were detected in soil beneath a dry cleaning facility. Your workplan proposes offsite sampling to evaluate the potential for groundwater impact. ACEH requests that you modify your workplan, present additional information regarding the conditions of the release, and, if necessary, propose additional sampling to fully characterize the contamination. Please revise your workplan and submit an addendum which addresses the technical comments below. This request is made in the interest of minimizing the number of iterations of field work to be performed, and to thereby reduce both the time period and costs for the case to progress to closure.

TECHNICAL COMMENTS

Groundwater Investigation

Avalon proposes 4 soil borings continuously cored to 40 ft bgs in the parking lot and driveway near the facility. Avalon anticipates the depth-to-water beneath the site to be 40 ft. There is no distance scale provided for the workplan figure showing the proposed boring locations. Accordingly, it is not clear whether or not the figure is a scaled drawing, and we are not able to evaluate the appropriateness of either the number of proposed borings or the proposed locations. If it is not possible to drill to groundwater inside the dry cleaner space, we recommend that you consider installing borings immediately adjacent to the rear building entry. Also, depending on your findings in response to Comment #2, below, a boring may be necessary near the sewer lateral where it exits the building. As part of your revised workplan, we recommend that you present additional information regarding the likely groundwater flow direction at the site.

2. Operational History and Historical Layout

Your Phase II report states that the dry cleaning equipment was located in the northern portion of the building. Please include a map with your revised workplan that indicates the historical locations of all equipment using PCE and showing all historical PCE storage locations. The map should also include the locations of sewer laterals. Based on our March 10, 2005, telephone conversation, we understand that the building has been occupied by a dry cleaning facility for approximately the past 20 years, and that the dry cleaning equipment was recently upgraded.

Please confirm the operational history and historical layout of your facility in the revised workplan requested below.

3. Soil Vapor Assessment

If significant groundwater contamination is detected, a soil vapor assessment may be necessary to evaluate any potential risks to human health via the indoor air exposure pathway. Analysis of soil vapor from beneath the area where most PCE handling and storage historically occurred would also help evaluate the significance of the release. Please refer to the January 28, 2003, DTSC/RWQCB-LAR Advisory — Active Soil Gas Investigations and the December 15, 2004, DTSC Guidance For The Evaluation And Mitigation Of Subsurface Vapor Intrusion To Indoor Air should you find that this potential concern needs to be addressed.

4. Delineation of Soil Contamination

Depending on the results of your evaluation of historical layout and operational history, additional soil sampling may be necessary. Prior to issuing case closure or cleanup certification, we require that you define the likely vertical and horizontal extent of contamination. As part of your workplan, we recommend that you determine whether or not additional soil sampling is necessary to define the extent of PCE and TCE in soil and whether or not further assessment based on the site history is necessary.

REPORT REQUEST

Please submit your Soil and Groundwater Investigation Report, which addresses the comments above by **June 7**, **2005**. Any extension in the above deadline must be confirmed in writing by ACEH staff.

Professional Certification and Conclusions/Recommendations

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this case meet this requirement.

Please call me at (510) 567-6719 with any questions regarding this case.

Sincerely,

Robert W. Schultz, P.G.

Robert W. Salu

Hazardous Materials Specialist

cc: Trevor Santochi, Avalon Environmental Consultants, Inc., 131 North Tustin Ave., Ste.

213, Tustin, CA 92780 Donna Drogos, ACEH

Robert W. Schultz, ACEH

131 NORTH TUSTIN AVENUE • SUITE 213 • TUSTIN, CALIFORNIA 92780 TEL: (714) 836-6632 • FAX: (714) 836-6642

9-61 Shorepoint Court * Suite F121 * Alameda, Careornia 9 (50)

Tel: (510) 521-2441 * Fax: (510) 521-2607

March 29, 2005

Mr. Robert Schultz Alameda County Environmental Health Department 1131 Harbor Bay Parkway Alameda, California 94502-6577

Subject:

Revised Work Plan for Groundwater Assessment at 1 Hour Cleaners located at

1187 Solano Avenue, Albany, California 94709.

Dear Mr. Schultz:

Pursuant to your request, Avalon Environmental Consultants, Inc. (Avalon), has revised this work plan to perform a Phase II Environmental Groundwater Assessment at the above referenced dry cleaning facility based upon the Alameda County Environmental Health Department (ACEHD) review letter dated March 10, 2005. Avalon performed a Phase II Environmental Site Assessment at the subject property in November 2004. The Assessment identified elevated levels of Tetrachlorethene (PCE) in the soil beneath the concrete slab of the dry cleaning unit ranging from 8.4 to 1,100 parts per billion. Based upon the findings of Avalon's investigation, a groundwater investigation was recommended.

OPERATIONAL HISTORY AND HISTORICAL LAYOUT

The dry-cleaning facility is known as "One Hour Albany Cleaners" and is located on the subject property at 1187 Solano Avenue. The store consists of concrete floors with vinyl floor tiles in the front portion of the store. The flooring in the areas containing the dry-cleaning machine, laundry machines and other equipment consist of bare concrete. Avalon did not observe an epoxy coating on the concrete. In addition, Avalon did not observe any floor drains in the store.

The dry-cleaning facility utilizes a Realstar Model KM503 machine. The dry-cleaning machine was installed in April of 2004 when the current proprietor began occupying the store. The machine is located near the center of the store and is equipped with a Floor Guard®, steel secondary containment tray, which is located beneath the entire machine. No evidence of spills or leaks were noted around the machine.

1187 Solano Avenue (Revised) Page 2 March 29, 2005

Prior to the installation of the new dry-cleaning machine, an older dry-cleaning machine was used on the subject property. According to the current tenant the old dry cleaning machine was located in the same location as the existing new machine. According to a sketched plot plan reviewed at the City of Albany Building Department, the old dry-cleaning machine was located closer to the rear of the subject property building near the boiler. This sketch plot plan was part of the permit to install a boiler at the subject property in 1986 and is approximate. The approximate locations of both are shown on attached figure 3.

GROUNDWATER INVESTIGATION

Avalon's investigation will consist of subsurface sampling with four geoprobe borings to a depth of forty feet below ground surface (bgs). The assessment will be conducted using a truck mounted geoprobe device. This device, similar to a drill rig, is a pointed probe which pushes through the soil rather than drilling. The geoprobe generates no soil cuttings and therefore, saves in the expense and liability of soil disposal. A temporary well using one inch PVC tubing will be used to collect groundwater samples, if groundwater is encountered. The PVC tubing will be solid with five feet of perforated tubing at the bottom of the forty foot hole.

The geoprobe will be advanced in four locations to a depth of 40 feet bgs. The location of these geoprobe borings have been relocated based upon the ACEHD review letter. The borings will be located on the north and west and south sides of the dry cleaners for accessability, downgradient orientation based upon regional topography and location of sewer laterals. The attached figure 2 shows the location of the proposed borings. One boring will be located north of the adjacent post office to determine up gradient conditions, one boring will be located as close to the rear of the dry cleaning facility as possible, one boring will be advanced in a downgradient position west of the subject property and one boring will be placed on Salano Avenue near the sewer clean out located downstream from the dry cleaning facility.

The limited access geoprobe rig used in the previous investigation was unable to advance deeper than 20 feet bgs, therefore, testing for groundwater using a limited access drill rig to obtain groundwater information inside the dry cleaning structure was not possible.

Soil samples will be collected using acetate liners and continuous core methods will be used. The continuous core will be used to comply with Alameda County requirements to fully identify any potential water bearing zones. Select soil and all groundwater samples will be delivered under chain of custody to a certified laboratory and analyzed for Volatile Organic Compounds by EPA Method 8260.

At the conclusion of sample collection and analysis, a draft report of findings and conclusions will be prepared and delivered to Washington Mutual Bank, Alameda County Environmental Health Department and the Solano Group.

1187 Solano Avenue (Revised) Page 3 March 29, 2005

Should you have any questions or require further information, please feel free to contact Mohammad Navid or myself at (510) 521-2441.

Sincerely,

AVALON ENVIRONMENTAL CONSULTANTS, INC.

Trevor Santochi, RG, CEG

President

11/20/06

CC: Jim Walker, Washington Mutual

Mohammad Navid, Avalon Environmental Consultants, Inc.

J. Anthony Kershaw, Solano Group.

OBJECTIVE

The objective of this investigation is to determine if the groundwater at the subject property has been impacted by a release of PCE from a dry cleaning facility located at 1187 Solano Avenue in Albany, California.

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 Groundwater 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 Public Works Department, and the City of Albany Public Works Department will be obtained as required by law.

Subsurface Testing

The geoprobe will be advanced in four locations to a depth of 40 feet bgs. The borings will be located on the north, west, and south sides of the dry cleaners for accessability, downgradient orientation based upon regional topography, and location of sewer lines. Soil samples will be collected using acetate liners and continuous core methods will be used. The continuous core will be used to comply with Alameda County requirements to fully identify any potential water bearing zones. Select soil and all groundwater samples will be delivered under chain of custody to a certified laboratory and analyzed for Volatile Organic Compounds by EPA Method 8260. A Photo Ionization Detector (PID) will be used to field screen the samples. Select samples will be 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, groundwater samples will be collected from each boring.

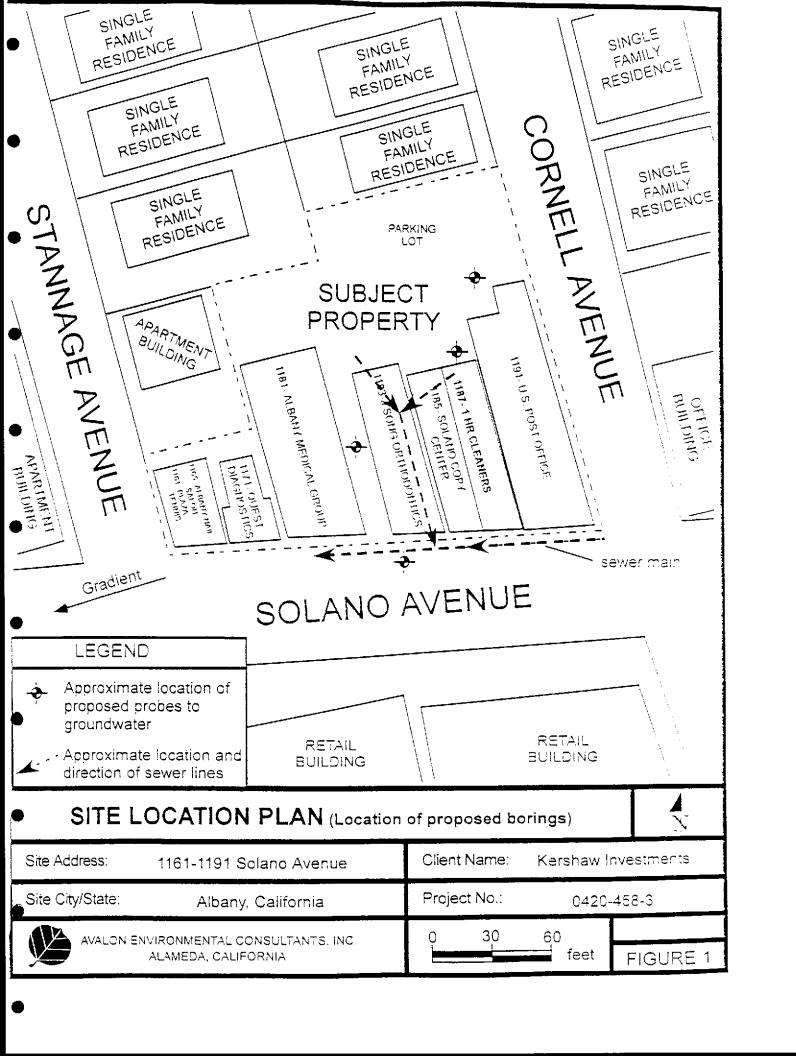
Analytical Testing

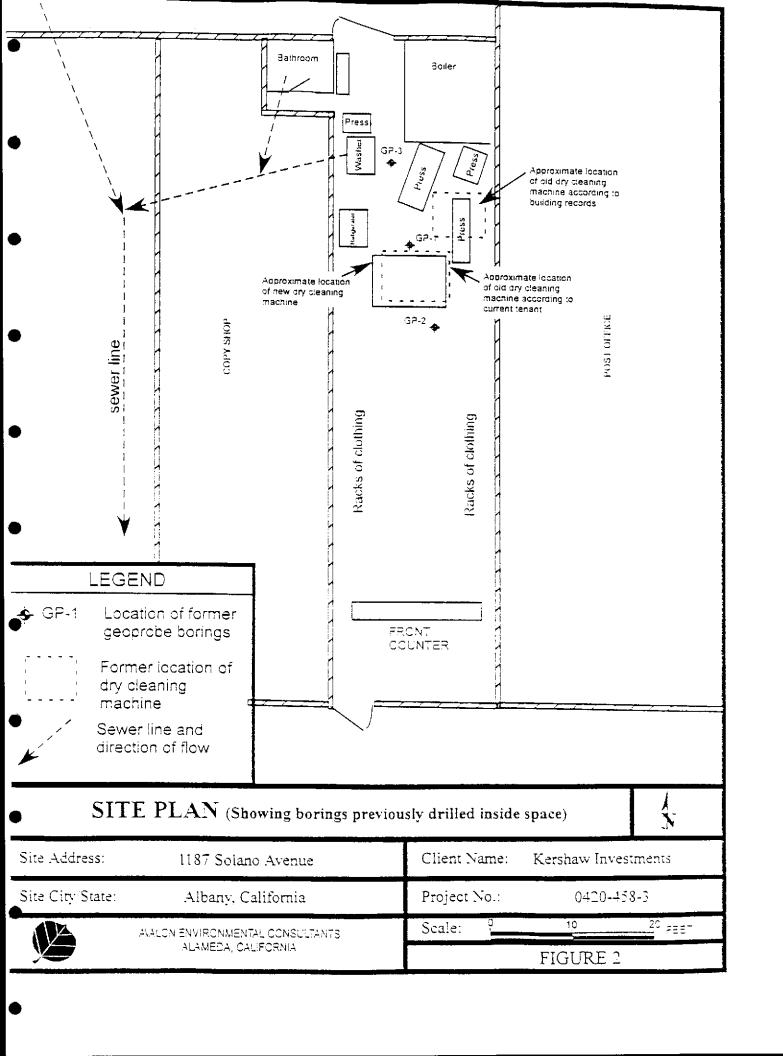
The soil samples and grab groundwater samples will be analyzed for Volatile Organic Compounds by EPA method 8260. Samples will be delivered to a certified laboratory under chain-of-custody.

1187 Solano Avenue (Revised) Page 5 March 29, 2005

Assessment Report

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





ALAMEDA COUNTY

HEALTH CARE SERVICES

AGENCY



DAVID J. KEARS, Agency Director

April 6, 2005

Tony Kershaw Kershaw Investments P.O. Box 9026 Berkeley, California 94709 **ENVIRONMENTAL HEALTH SERVICES**

ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

Subject:

Toxics Case No. RO0002857, Albany 1-Hour Cleaners, Dry Cleaning Facility at

1187 Solano Ave., Albany, California

Dear Mr. Kershaw:

Alameda County Environmental Health (ACEH) has reviewed your March 29, 2005, *Revised Work Plan for Groundwater Assessment* and the case file for the above-referenced site. We concur with your workplan provided the following conditions are met:

- 1. The final report will include summary figures and cumulative data tables presenting all current and historical sampling locations and analytical data. At a minimum, two tables will be included in the report, one for soil and one for groundwater, that present all data for the site including sample identification, sampling dates, sample depths, depth to water measurement, analytical results, etc. A scaled boring log will be prepared for each boring advanced during the investigation. The final investigation report will include recommendations for any necessary corrective action to progress this case towards regulatory closure.
- 2. Technical comments Nos. 1 and 2, below, will be addressed prior to drilling.
- 3. As required by 23 CCR 3890 through 3895, all analytical data, monitoring well locations and top-of-casing elevations will be uploaded to the State Geotracker database. Confirmation will be submitted to ACEH in the report requested below.
- 4. 72-hr advance written notification (email preferred) will be provided to ACEH prior to field sampling activities.

Please implement the proposed investigation and submit technical reports following the schedule below. In addition, we request that you address the following technical comments in your report.

TECHNICAL COMMENTS

1. Groundwater Investigation

No additional evaluation of the likely groundwater flow direction at the site was presented in the revised workplan. An additional groundwater sampling locations appear necessary west of the site. We recommend including a boring in the location shown on the attached figure.

2. Operational History and Historical Layout

No discussion of site use prior to 1986 was provided in the revised workplan. The presence or absence of dry cleaning operations prior to 1986 needs to be confirmed. If dry cleaning was performed at the site prior to 1986, the site layout needs to be shown.

REPORT REQUEST

Please submit your *Groundwater Assessment Report*, which addresses the comments above, by **July 7, 2005**. Any extension in the above deadline must be confirmed in writing by ACEH staff.

Professional Certification and Conclusions/Recommendations

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this case meet this requirement.

Please call me at (510) 567-6719 with any questions regarding this case.

Sincerely,

Robert W. Schultz, P.G.

Hazardous Materials Specialist

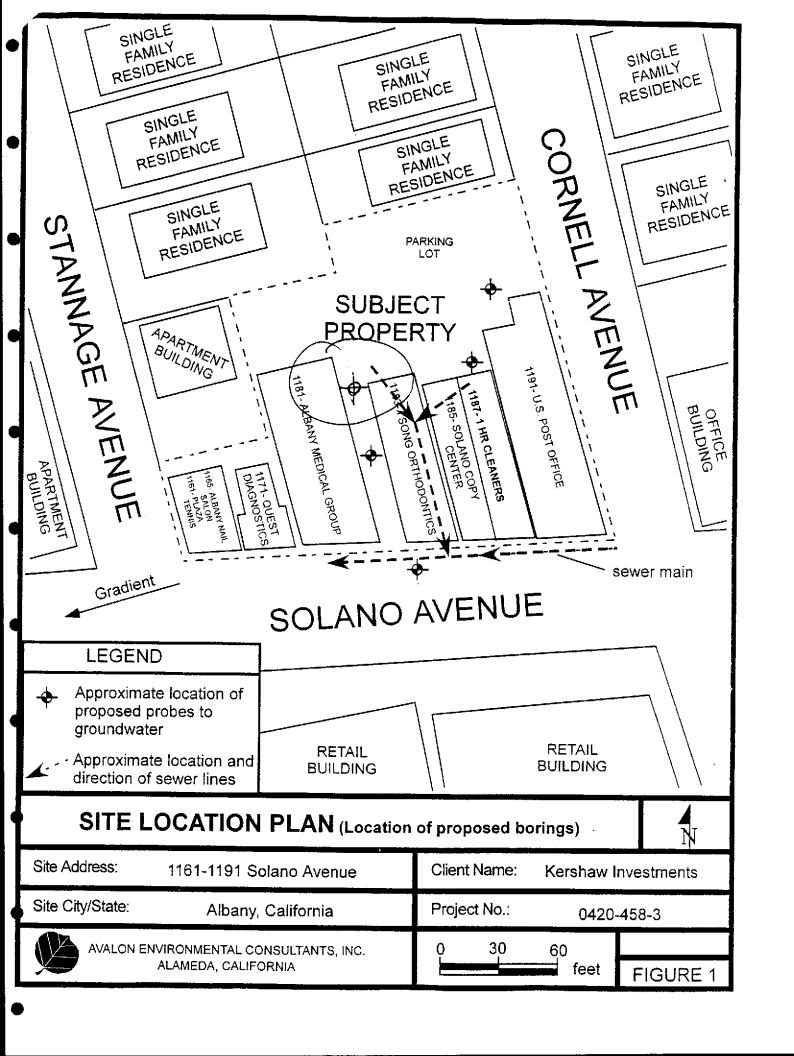
CC:

Trevor Santochi, Avalon Environmental Consultants, Inc., 131 North Tustin Ave., Ste.

213, Tustin, CA 92780 Donna Drogos, ACEH

File, ACEH

attachment: site location plan



131 NORTH TUSTIN AVENUE • SUITE 213 • TUSTIN, CALIFORNIA 92780 Teli (714) 836-6632 • Fax: (714) 836-6642

941 SHOREPOINT COURT • SUITE F121 • ALAMEDA, CALIFORNIA 94501 Tell (510) 521-2441 • Fax: (510) 521-260

April 11, 2005

Mr. Robert Schultz Alameda County Environmental Health Department 1131 Harbor Bay Parkway Alameda, California 94502-6577

Subject:

Response to Work Plan Review Letter dated April 6, 2005, Toxics Case No. RO0002857, Groundwater Assessment at 1 Hour Cleaners located at 1187 Solano Avenue, Albany, California 94709.

Dear Mr. Schultz:

Pursuant to your request, Avalon Environmental Consultants, Inc. (Avalon), is addressing items number 1, and 2 of your review letter dated April 6, 2005.

Your review letter requested an additional groundwater sampling location and additional operational history and historical layout at the subject property.

SITE HISTORY

The dry cleaning operation at 1187 Solano Avenue in Albany has been in operation since 1986. There was no prior dry cleaning operation at the subject property. The approximate location(s) of the former dry cleaning machine and approximate layout have not changed since 1986 other than possible location of the dry cleaning machine itself which was either at the location of the current machine or slightly further north and these two locations are shown in the attached Figure 2. Information documenting the site history of this tenant space and other tenant spaces within this building are included in the following site history:

The site history of the subject property was reviewed through Sanborn Fire Insurance Maps. County of Alameda Tax Assessor's records, aerial photographs, City of Albany Building permit records and city directories.

Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were reviewed for the subject property and the adjacent properties. The review revealed the following information:

- 1929- The subject property is depicted as vacant land. The surrounding properties to the north and west consist of residential buildings. The properties to the south and east are not depicted on this map.
- 1950- The subject property has been developed with stores at 1161-1163 Solano Avenue, an office at 1171 Solano Avenue, doctors' offices at 1181 Solano Avenue and the Albany Post Office at 1191 Solano Avenue. 1183-1187 Solano Avenue is depicted as vacant land. The surrounding properties are unchanged from the previous map.
- 1970- The subject property is unchanged from the previous map with the exception of the subject property at 1183-87 Solano Avenue which has been developed with stores. The surrounding properties are unchanged from the previous map.
- 1981- The subject property and the adjacent properties are unchanged from the previous map.

No areas of environmental concern was noted during the Sanborn map review.

Alameda County Tax Assessor's Records

According to the County of Alameda Tax Assessor's records, the subject property building at 1191 Solano Avenue was originally developed in 1936 and the subject property building at 1183 Solano Avenue was originally developed in 1952. Information on the other subject property buildings were not available.

Aerial Photographs

Aerial photographs were reviewed for the subject property and the adjacent properties. The review revealed the following information:

- 1936- The subject property appears to be mostly vacant land with a retail building at the southeast corner of the site. The surrounding properties to the north, east and west consist of residential buildings. The property to the south is vacant land.
- 1968- The subject property has been developed with retail buildings along Solano Avenue. The surrounding properties are unchanged from the previous

- photograph with the exception of the property to the south which has been developed with retail buildings.
- 1977- The subject property and the surrounding properties are unchanged from the previous photograph.
- 1993- The subject property and the adjacent properties are unchanged from the previous photograph.
- 2004- The subject property and the adjacent properties are unchanged from the previous photograph.

No areas of environmental concern was noted during the aerial photograph review.

Building Permit Records

Building permits were reviewed for the subject property. The review revealed the following information:

- 1954- A building permit was issued on April 5, 1954, to remodel a garage into an office at 1171 Solano Avenue.
- 1972- A building permit was issued on October 20, 1972, for an awning at 1183 Solano Avenue. The owner is listed as Sam's Pharmacy.
- 1975- A building permit was issued on January 29, 1975, for sign at 1171 Solano Avenue. The owner is listed as Linda Green "Esoteric Hair Care."
- 1980- A building permit was issued on April 21, 1980, for alterations at 1161 Solano Avenue. The owner is listed as Linda Green.
- 1981- A building permit was issued on January 7, 1981, for a sign at 1183 Solano Avenue. The owner is listed as Linda Green "Hot Rods Salon."
- 1983- A building permit was issued on November 13, 1983, to replace windows at 1187 Solano Avenue. The owner is listed as R.J. McMahon.
- 1984- A building permit was issued on June 17, 1984, to remodel a garage into an office at 1171b Solano Avenue. The owner is listed as Albany Partners.
- 1985- A building permit was issued on November 11, 1985, for alterations at 1187 Solano Avenue. The owner is listed as Albany Partners.
- 1986- A building permit was issued on April 17, 1986, for the installation of a Boiler at a dry cleaners at 1187 Solano Avenue. The owner is listed as Albany Partners.

1987- A building permit was issued on January 21, 1987, for sign at 1171 Solano Avenue for tax services.

Based on the building permit review, it appears that a dry-cleaners has been operating on the subject property since 1986.

City Directories

City directories were reviewed for the subject property. The review of city directories revealed the following information:

```
1964- Listing for:
             1163- An office.
             1171- Woodmen of the World.
             1181- T. McMahon M.D.
             1183- Sam's Pharmacy & Lawrence Laboratories.
             1185- O'Conner & Walls
1972- Listing for:
             1161- Lykken Builders Hardware.
             1171- Lyle Goforth.
             1181- T. McMahon M.D.
             1183- Sam's Pharmacy & Lawrence Laboratories.
             1191- U.S. Post Office.
1975- Listing for:
             1161- Lykken Builders Hardware.
             1171- Lyle Goforth.
             1181- T. McMahon M.D.
             1183- Sam's Pharmacy.
             1191- U.S. Post Office.
1979- Listing for:
             1161- Lykken Builders Hardware.
             1171- Esoteric Hair Care
             1181- T. McMahon M.D.
             1183- Sam's Pharmacy.
             1191- U.S. Post Office.
1984- Listing for:
             1161- Hod Rods & Co.
```

1171- Willa Young.1181- T. McMahon M.D.1183- Sam's Pharmacy.1191- U.S. Post Office.

1990- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Paris Nail Care.
- 1171- Tek Pe Engineers.
- 1181- Medical offices
- 1183- Fitlab, Inc.
- 1185- Albanys Gateway Travel & Stimac Associates, Inc.
- 1187- Albany One-Hour Cleaners.

1994- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Paris Nail Care.
- 1171- Tek Pe Engineers.
- 1181- Albany Medical Group.
- 1183- Fitlab, Inc.
- 1185- Albanys Gateway Travel & Stimac Associates, Inc.
- 1187- Albany One-Hour Cleaners
- 1191- U.S. Post Office.

1998- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Paris Nail Care.
- 1171- Foothill Securities, Inc.
- 1181- Albany Medical Group.
- 1183- Fitlab, Inc.
- 1185- Solano Copy Center
- 1187- Albany One-Hour Cleaners

2004- Listing for:

- 1161- Plaza Tennis & Sports
- 1165- Albany Nail Salon.
- 1171- No listing.
- 1181- Albany Medical Group.
- 1183- I Son Orthodontics
- 1185- Solano Copy Center
- 1187- Albany One-Hour Cleaners

Based on the city directory review, it appears that a dry-cleaners has been located on the subject property from at least 1990 to 2004.

ADDITIONAL LOCATION AND GRADIENT LOCATION

Avalon has revised Figure 1, site location map, to include an additional boring located to the northwest. Avalon has not been able to supply any additional information relative to the groundwater gradient, however, surface topography suggests a southwestern gradient direction.

Should you have any questions or require further information, please feel free to contact Mohammad Navid or myself at (510) 521-2441.

Sincerely,

AVALON ENVIRONMENTAL CONSULTANTS, INC.

PREVOR D. SAMPOISE

CETTRED EGENCIMEERIN

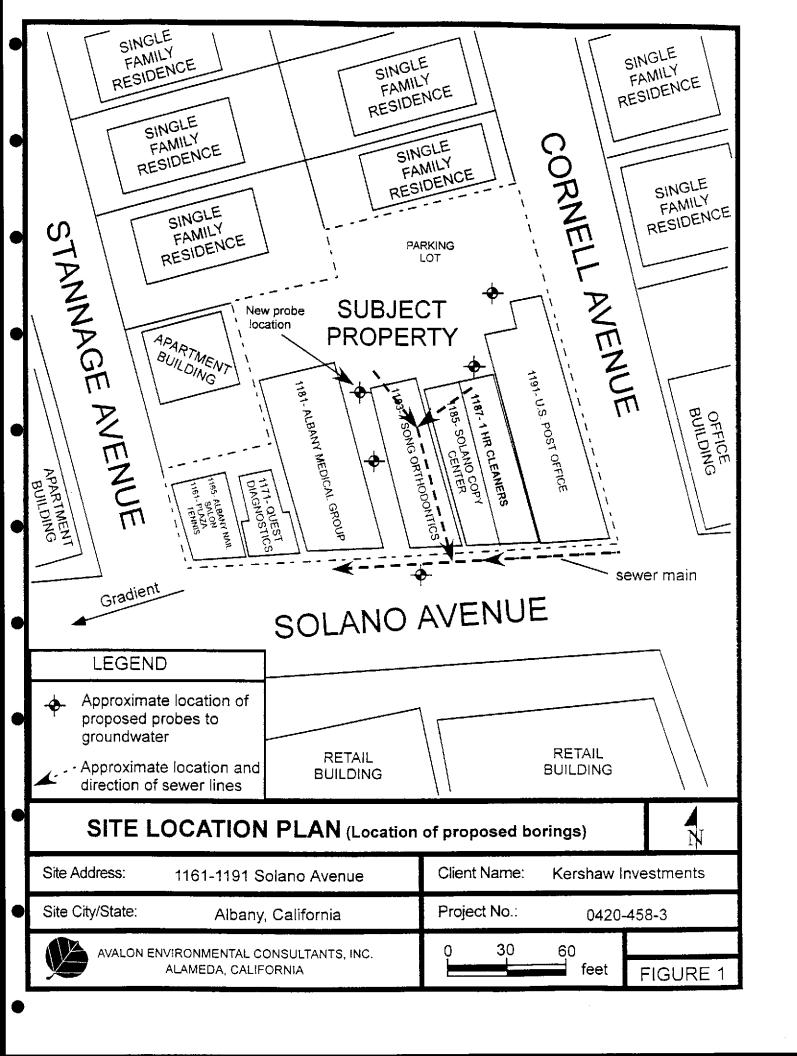
Trevor Santochi, RO President

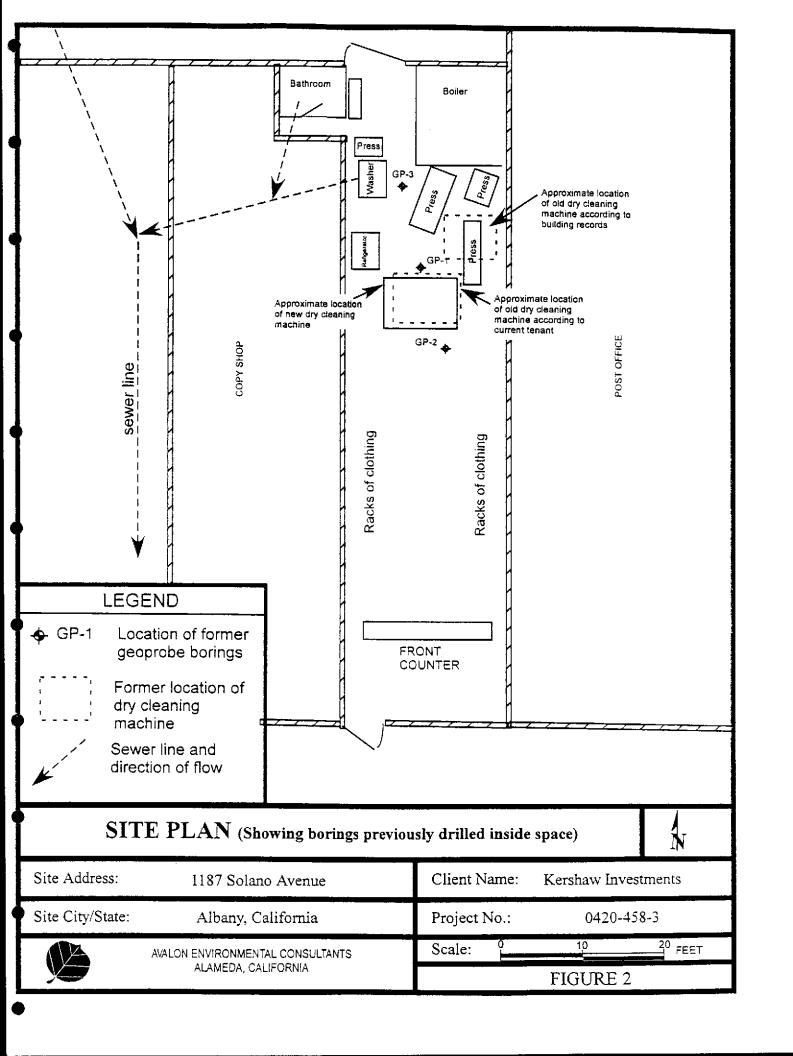
CC:

J. Anthony Kershaw, Solano Group.

Jim Walker, Washington Mutual

Mohammad Navid, Avalon Environmental Consultants, Inc.





APPENDIX V

$\underline{\textbf{LABORATORY ANALYTICAL RESULTS (THIS INVESTIGATION})}$

25 April 2005

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 04/21/05 10:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dennis Dorning

Project Manager



SunStar Laboratories, Inc.

25 April 2005

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 04/21/05 10:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dennis Dorning

Project Manager

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

Chain of Custody Record

T500477

Client: Avalon Address: 131 N. To Phone: (214) 836- Project Manager:	ENV. 6632	.Fax: (΄) ['	1) 836-	<u>66</u> 42	- - - -		T	Pro Col	ject lecto	Nar or:	ne:_ T ≟	S0 S4	LA	to c	<u>Au</u>	17.	Clien	طب at Pro	FR S	1420	2-	_ -3
Sample ID	Date Sampled	Time	Sample Type	Container Type	8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	3015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metais				Laboratory ID #		Comme	nte/Propins	servative	Total # of containers
GPA-18.10'	4/20/05		Soi -	ALIVAR	Ϊ́χ	₩		<u> </u>	<u></u>	<u> </u>	ω.	<u></u>	ш.			1	01		COITING	111371 163	servative	
GPA-1020'	-/-/		1		X												02					1
GPA-IC30' GPA-I			<u> </u>	₩	X	ļ											03				71	
GPA-1			WATER		X				I						Ţ		04			-		3
GPA-2010'			Sui	ACITATE	X												05					1
GPA-2020' GPA-2030'			<u> </u>		$ \mathbf{x} $	<u> </u>			\Box							T	06					
GPA-28 30'				<u> </u>	X_											7	07		•			
GPA-2 GPA-3 e 10' GPA-3 e 20'			WATER	VOA (3)	X												08				·····	3
GPA -3 C 10'			SOLL	Acitate	\mathbf{X}												09					1
60A - 3P 20'			1	L	ľ											1	10					-11
6PA - 3 P 30'			7	V	$\overline{\mathbf{x}}$											1	11					-17
6CA - 3			WATER	VOAI3)	7												12				·	3
GPA -4@10'	1		Soir	ACITAR	ľΖ											T	13					- 1
GPA -4020	l IV		1	BRASS	X												14				 	Ti
6PA-4 @ 30	V		V	RRASS	V						\neg					1	15					-
Relinquished by: (signature)	7 Date / To 9/2005 Date / To		Received by	y: (signature) (M) (y: (signature)	[L	b/0	Date	17: 24:	me (*)		7 721	in of	To	otal # o	of cont	ainers	21			Note	S	
Relinquished by: (signature)	Date / Ti	me	Received by	y: (signalure)		7	Date	7 Ti	ne Z	7	~)		Se	als int	act? Ø	N/NA						
650	10:00 A1		1 42	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$	1		41	21	10	5						n/ c 6 0						
Relinquished by (signature)	Date / Ti		Received b	y: (signature)			Dale	37 Ti	ne			C.C. 19	ou g	254 60		مرين						
and dec. on house											Tun	raro	und	time:						~		

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

Chain of Custody Record

T500477

Client: Avalor E Address: 131 N. Tu Phone: 714-836-4 Project Manager:	istin A	Fax: (7	14)836	-6642	- -			Dat Pro Col Bat	e: ject lecto ch #	Mar Dr:	/2 ne:_ .	20 80 Sa	/ (an	100 20	A	<u>و</u> (`	(C	Pag Con Clier EDF	e: 2 ers) at Project #:	- # <u>04</u>	Of	Z 458 -	- - <u>3</u>
Sample ID GPA – Y	Date Sampled	Time	Sample Type WATER	Container Type	X 8260	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals					Caboratory ID #	Con	nments/	'Preserv	vative	▼ Total # of containers
Relinanished by: (signature)			1 1	y (signature) Mulus y (signature)	4		Date Date Valor	27 Ti	ime	('01	J*)	Singer	y Cus Se	tody eals π	seal ntacl	s Y/l ? (0 f	iners VAQA V/NA V600			١	Notes		
Relinquished by (signature)	Date / T		Received b	y: (signature)		Pic.l	Date	e/1.					Ī				/(i)d	. =					

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

ANALYTICAL REPORT FOR SAMPLES

				···
Sample ID	Laboratory (D	Matrix	Date Sampled	Date Received
GPA-1@10'	T500477-01	Soil	04/20/05 00:00	04/21/05 10:00
GPA-1@20'	T500477-02	Soil	04/20/05 00:00	04/21/05 10:00
GPA-1@30'	T500477-03	Soil	04/20/05 00:00	04/21/05 10:00
GPA-1	T500477-04	Soil	04/20/05 00:00	04/21/05 10:00
GPA-2@10'	T500477-05	Soil	04/20/05 00:00	04/21/05 10:00
GPA-2@20'	T500477-06	Soil	04/20/05 00:00	04/21/05 10:00
GPA-2@30'	T500477-07	Soil	04/20/05 00:00	04/21/05 10:00
GPA-2	T500477-08	Soil	04/20/05 00:00	04/21/05 10:00
GPA-3@10'	T500477-09	Soil	04/20/05 00:00	04/21/05 10:00
GPA-3@20'	T500477-10	Soil	04/20/05 00:00	04/21/05 10:00
GPA-3@30'	T500477-11	Soil	04/20/05 00:00	04/21/05 10:00
GPA-3	T500477-12	Soil	04/20/05 00:00	04/21/05 10:00
GPA-4@10'	T500477-13	Soil	04/20/05 00:00	04/21/05 10:00
GPA-4@20'	T500477-14	Soil	04/20/05 00:00	04/21/05 10:00
GPA-4@30'	T500477-15	Soil	04/20/05 00:00	04/21/05 10:00
GPA-4	T500477-16	Soil	04/20/05 00:00	04/21/05 10:00

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-1@10' T500477-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ies, Inc.			÷		
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	п	н	n	п		н	
Carbon tetrachloride	ND	2.0	11	**	"	10	17	п	
Chlorobenzene	ND	2.0	TF	н	1f	"	n	0	
Chloroethane	ND	2.0	"	п	"	п	19	"	
Chloroform	ND	2.0	11	11	14	11	**	"	
Chloromethane	ND	2.0	н	18	n	н	n	ır	
Dibromochloromethane	ND	2.0	ч	17	II .	10	"	4	
Dibromomethane	ND	2.0	17		ď	n	H	**	
1,2-Dichlorobenzene	ND	2.0	н	н	10	II	31	"	
1,3-Dichlorobenzene	ND	2.0	0	n .	"	**	0	"	
1,4-Dichlorobenzene	ND	2.0	п	14	*	*	п	и	
1.1-Dichloroethane	ND	2.0	If	n	D	10	II .	"	
1,2-Dichloroethane	ND	2.0	17	r y	ıl	*	11	н	
I,I-Dichloroethene	ND	2.0	**	n	10	п	н	n	
cis-1,2-Dichloroethene	ND	2.0	19	n n	**	a	1+		
trans-1,2-Dichloroethene	ND	2.0	и	10	re	t₹	n	11	
1,2-Dichloropropane	ND	2.0	10	н	u u	Ч	ıt	ri .	
cis-1,3-Dichloropropene	ND	2.0	17	19	n.	н	10		
trans-1,3-Dichloropropene	ND	2.0	*1	n	и	II	u	,,	
Methylene chloride	ND	2.0	н	u	н	. 11	11	"	
Styrene	ND	2.0	H	н	14	"	n	ч	
1,1,2,2-Tetrachloroethane	ND	2.0	•	ч	11	1*	ш	et.	
Tetrachloroethene	7.1	2.0	П	11	Œ	11	17	IF.	
1,1,2-Trichloroethane	ND	2.0	4	11	1+	II	ч	-11	
1,1,1-Trichloroethane	ND	2.0	"	**	11	14	11	Н	
Trichloroethene	ND	2.0	и	11	n	11	u		
Vinyl chloride	ND	2.0	11	H		11	11		
Surrogate: Toluene-d8		102 %	85.	8-113		"	"	"	
Surrogate: 4-Bromofluorobenzene		107 %	73.	5-115	#	п	v	n n	
Surrogate: Dibromofluoromethane		106 %	79	9-126	"	#	"	"	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-1@20' T500477-02 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	l	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2,0	11	н	н	•	и	11	
Carbon tetrachloride	ND	2.0	n	r#	n	19	10	ц	
Chlorobenzene	ND	2.0	19	"	"	"	It	н	
Chloroethane	ND	2.0	19	4	n	н	i e	Н	
Chloroform	ND	2.0	н	11	n	v	ie.	ч	
Chloromethane	ND	2.0	rt	œ	ij	U	ir.	щ	
Dibromochloromethane	ND	2.0	19	16	n		10	II+	
Dibromomethane	ND	2.0	"	"			•	н	
1,2-Dichlorobenzene	ND	2.0	11	ч	п	D	If	н	
1,3-Dichlorobenzene	ND	2.0	1)	11	п	U	++	н	
1,4-Dichlorobenzene	ND	2.0	19	ч	n n	H	**	и	
1,1-Dichloroethane	ND	2.0	11	11	н	,,	ır	11	
1,2-Dichloroethane	ND	2.0	**	ц		"	11	11	
I,1-Dichloroethene	ND	2.0	11	и	п	4	и	ц	
cis-1,2-Dichloroethene	ND	2.0	17	u	ti	,,	11	11	
trans-1,2-Dichloroethene	ND	2.0	**	"	**	17	и	11	
1,2-Dichloropropane	ND	2.0	19	n-	n .	H	11	ч	
cis-1,3-Dichloropropene	ND	2.0	19	18		21	19	41	
trans-1,3-Dichloropropene	ND	2.0	49	18	n	t)		41	
Methylene chloride	ND	2.0	11	17	n	"			
Styrene	ND	2.0	17	17		**	17		
1,1,2,2-Tetrachloroethane	ND	2.0	n	HF.	ч	11	lf.	or .	
Tetrachloroethene	ND	2.0	17	10	п	"	u u	•	
1,1,2-Trichloroethane	ND	2.0	e	10	п	0	If		
l,l,l-Trichloroethane	ND	2.0	17	*	II	н	18	· ·	
Trichloroethene	ND	2.0	n	**	n	11	"	0	
Vinyl chloride	ND	2.0	n	н	n	н	11	и	
Surrogate: Toluene-d8		97.6 %	85.8	-113	"	"	0	"	
Surrogate: 4-Bromofluorobenzene		107 %	73.5	-115	n	"	"	"	
Surrogate: Dibromofluoromethane		113 %	79-	126	и	"	u	и	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-1@30' T500477-03 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L							
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	10	11	II	10	n	IT.	
Carbon tetrachloride	ND	2.0	4	14	0	**	"	и	
Chlorobenzene	ND	2.0		**	14	17	11	10	
Chloroethane	ND	2.0	"	17	"	"	11	u .	
Chloroform	ND	2.0	r•	17	19	н	**	•	
Chloromethane	ND	2.0	11	11	I+	+	**	11	
Dibromochloromethane	ND	2.0	19	11	10	**	и	**	
Dibromomethane	ND	2.0	13	1f	14	17	16	••	
1,2-Dichlorobenzene	ND	2.0	IJ	n	18	19	11	s †	
1,3-Dichlorobenzene	ND	2.0	19	"	a		if	**	
I,4-Dichlorobenzene	ND	2.0	**	•	41	11	**	: व	
1,1-Dichloroethane	ND	2.0	10	•	q	4		и	
1,2-Dichloroethane	ND	2.0	11	18		u	p	и	
1,1-Dichloroethene	ND	2.0	19	0	н	п	n	м	
cis-1,2-Dichloroethene	ND	2.0	11	11	ш	u	10	и	
trans-1,2-Dichloroethene	ND	2.0	u	ц	11	н	11	11	
1,2-Dichloropropane	ND	2.0	и	u	ш	н	-11	п	
cis-1,3-Dichloropropene	ND	2.0	11	u	ıı		ir.	и	
trans-1,3-Dichloropropene	ND	2.0	ч	u u	п	н	11	21	
Methylene chloride	ND	2.0	4	u u	n	n	и	**	
Styrene	ND	2.0	n	u	н	"	ц		
1,1,2,2-Tetrachloroethane	ND	2.0	ч	0	н	n	ij	**	
Tetrachioroethene	ND	2.0	н	u	**	"	a	9	
1,1,2-Trichloroethane	ND	2.0	н	п	14	n	ď	ч	
l,1,1-Trichloroethane	ND	2.0	н	U	"	"	II .		
Trichloroethene	ND	2.0		u	н	n	п		
Vinyl chloride	ND	2.0	п	п	н	н	a	ū	
Surrogate: Toluene-d8	***	98.6 %	85.8	-113	"	"	0	"	
Surrogate: 4-Bromofluorobenzene		109 %	73.5	-115	"	"	n	"	
Surrogate: Dibromofluoromethane		106 %	79-	126	"	"	"	a	

SunStar Laboratories, Inc.

Avalon Environmental

Project: Solano Dry Cleaners

131 N. Tustin #213 Tustin CA, 92780

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-1 T500477-04 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	1.0	ug/l	1	5042103	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	1.0	11	11	11	1)		н	
Carbon tetrachloride	ND	0.50	"	п	п	н	и	II.	
Chlorobenzene	ND	1.0	н	II .	н	**			
Chloroethane	ND	1.0	n	11	**	10	n	п	
Chloroform	ND	1.0	н	n n	r e	18	"	9	
Chioromethane	ND	1.0	н	n	17	11	11	n .	
Dibromochloromethane	ND	1.0	19	"	н	đ	U	17	
Dibromomethane	ND	1.0	18	"	44	u	1)	**	
1,2-Dichlorobenzene	ND	1.0	18	n	19	н	**	27	
1.3-Dichlorobenzene	ND	1.0	"	н	11	"	19	**	
1,4-Dichlorobenzene	ND	1.0	н	**	"	17	17	**	
1,1-Dichloroethane	ND	1.0	н	н	н	10	н	**	
1,2-Dichloroethane	ND	0.50	0	14	*	t +	16	14	
1.1-Dichloroethene	ND	1.0	1•	17	**	18	18	и	
cis-1,2-Dichloroethene	ND	1.0	17	17	10	11	ij	п	
trans-1,2-Dichloroethene	ND	1.0	u	"	"	u	**		
1,2-Dichloropropane	ND	1.0	n	17	н	n	1)	11	
cis-1,3-Dichloropropene	ND	0.50	1•	ır	17	18	11	**	
trans-1,3-Dichloropropene	ND	0.50	a	v	q	ч	"	н	
Methylene chloride	ND	1.0	ø	q	11	η	11		
Styrene	ND	1.0	"	•	"	a	н	н	
1,1,2,2-Tetrachloroethane	ND	1.0	ч	4	11	u	9	ч	
Tetrachloroethene	ND	1.0		17	11	q		:4	
1,1,2-Trichloroethane	ND	1.0	п	,,	u	ч	,,	и	
1,1,1-Trichloroethane	ND	1.0	n.	н	п	η	"	11	
Trichloroethene	ND	1.0	"	"	u	11	**	**	
Vinyl chloride	ND	0.50	а		u		11	ч	
Surrogate: Toluene-d8		106 %	87.6	-115	"	"	"	4	
Surrogate: 4-Bromofluorobenzene		97.8 %	80-	112	п	"	n	a	
Surrogate: Dibromofluoromethane		116 %	78. <i>6</i>	-122	n	п	u	а	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-2@10' T500477-05 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	11	11*	**	a	п	4	
Carbon tetrachloride	ND	2.0	11	н	н	1†	ıı.	9	
Chlorobenzene	ND	2.0	н	н	н	"	**	14	
Chloroethane	ND	2.0	н	ji .	u	u	n	le .	
Chloroform	ND	2.0	н	u	ч	"	"	"	
Chloromethane	ND	2.0	п	41	12	d.	#4	"	
Dibromochloromethane	ND	2.0	17	16	*	u	n	tt	
Dibromomethane	ND	2.0	19	17	18	**	"	и	
1,2-Dichlorobenzene	ND	2.0	п	u	19	*	II	14	
1,3-Dichlorobenzene	ND	2.0	27	14	n	•	II	91	
1,4-Dichlorobenzene	ND	2.0	0	н	и	10	11	ч	
1,1-Dichloroethane	ND	2.0	n	n	п	n	i t		
1,2-Dichloroethane	ND	2.0	п	0	а	11	11	"	
1,1-Dichloroethene	ND	2.0	и	п	**	íi .	**	4	
cis-1,2-Dichloroethene	ND	2.0	**	19	"	11	• .	и	
trans-1,2-Dichloroethene	ND	2.0	17	17	"	11	"	и	
1,2-Dichloropropane	ND	2.0	n	ч	19	н	n	· P	
cis-1,3-Dichloropropene	ND	2.0	**	t+	.,	18	ч		
trans-1,3-Dichloropropene	ND	2.0	п	14	11	+	и	11	
Methylene chloride	ND	2.0	н	n n	q	n	If	11	
Styrene	ND	2.0	п	11	18	п	11	"	
1,1,2,2-Tetrachloroethane	ND	2.0	п	ч	1 f	tr	11	31	
Tetrachloroethene	6.6	2.0	17	r+	18	18	"	и	
1,1,2-Trichloroethane	ND	2.0	"	y	10	n	II.	••	
1,1,1-Trichloroethane	ND	2.0	"	d r	*	ч	11	11	
Trichloroethene	ND	2.0	D	n	U		и	0	
Vinyl chloride	ND	2.0	н	11	u		19		
Surrogate: Toluene-d8		100 %	85.	3-113	77	"	"	"	
Surrogate: 4-Bromofluorobenzene		109 %	73	5-11 5	#	"	#	n	
Surrogate: Dibromofluoromethane		104 %	79	-126	•	it	n	и	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:34

GPA-2@20' T500477-06 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA Meth	od 8260B		_						
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	я	44	11	1f		D	
Carbon tetrachloride	ND	2.0	10	ч	10	"	н	14	
Chlorobenzene	ND	2.0	**		,	11	**	u .	
Chloroethane	ND	2.0		19	11	ıı	u	11	
Chloroform	ND	2.0	a	3 r	II .	**	16	u	
Chloromethane	ND	2.0	II.	1#	ij	19	"	o o	
Dibromochloromethane	ND	2.0	н	u	•	n	"	**	
Dibromomethane	ND	2.0	10	"	"	**	**	17	
1,2-Dichlorobenzene	ND	2.0	n	п	19	я	17	9	
1,3-Dichlorobenzene	ND	2.0	1+	n		11	4	14	
1,4-Dichlorobenzene	ND	2.0	10	ır	и	D		n.	
l,1-Dichloroethane	ND	2.0	н	н	11	17	41		
1,2-Dichloroethane	ND	2.0	"	11	"	и		p	
1,1-Dichloroethene	ND	2.0	0	**	19	,,	n	•	
cis-1.2-Dichloroethene	ND	2.0	и	,,	и	ш	"	it.	
trans-1,2-Dichloroethene	ND	2.0	u.	"	i#	11	l i	4	
1,2-Dichloropropane	ND	2.0	ч		u	"	**	15	
cis-1,3-Dichloropropene	ND	2.0	а		a	"	**	н	
trans-1,3-Dichloropropene	ND	2.0	н	H	ij	II.	п	141	
Methylene chloride	ND	2.0	н	11	**	μ	"	"	
Styrene	ND	2.0	D	п	1*	1)	ų	•	
1,1,2,2-Tetrachloroethane	ND	2.0	**	ш	ii,	12	9	"	
Tetrachloroethene	ND	2.0	19	11	17	п	14		
1,1,2-Trichloroethane	ND	2.0	18	10	19	11	n .	12	
1,1,1-Trichloroethane	ND	2.0	H.	17	u	"	"	*1	
Trichloroethene	ND	2.0	n	rr .	и	17	ч	u.	
Vinyl chloride	ND	2.0	н	19	n	**	ч	of.	
Surrogate: Toluene-d8		98.8 %	85.8-	113	"	11	"	и.	
Surrogate: 4-Bromofluorobenzene		107 %	73.5-	115	"	u	a	,,	
Surrogate: Dibromofluoromethane		104 %	79-1	26	u	и	•,	"	

SunStar Laboratories, Inc.

7:12

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-2@30' T500477-07 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Ртерагеd_	Analvzed	Method	Note
		SunStar La	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	l	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	н	19	n	u	ч	"	
Carbon tetrachloride	ND	2.0	п	H	II	er	r r	n	
Chlorobenzene	ND	2.0	"	"		ir	19	"	
Chloroethane	ND	2.0	u	u	"	19	н	U	
Chloroform	ND	2.0	и	"	u	HT	11	и	
Chloromethane	ND	2.0	17	•	u	10	"	"	
Dibromochloromethane	ND	2.0	10	10	a	н	11	п	
Dibromomethane	ND	2.0	•	10	ч	**	н	ч	
I,2-Dichlorobenzene	ND	2.0	19	H	ч	n	n	ч	
1,3-Dichlorobenzene	ND	2.0	19	n	11	n	п	11	
1,4-Dichlorobenzene	ND	2.0	n	н	H	u		и	
1.1-Dichloroethane	ND	2.0	r#		*	u	ч		
1,2-Dichloroethane	ND	2.0	**		17	tl.	и	11	
l,l-Dichloroethene	ND	2.0	11	ч	er	16	i+	11	
cis-1,2-Dichloroethene	ND	2.0	9	п	14	10	te		
trans-1,2-Dichloroethene	ND	2.0	19	11	ц	110	iŧ	16	
1,2-Dichloropropane	ND	2.0	U	11	19	78	n	н	
cis-1,3-Dichloropropene	ND	2.0	п	10	н	11		**	
trans-1,3-Dichloropropene	ND	2.0	п	1*	н	п	11	n	
Methylene chloride	ND	2.0	n	n	н	ч	**	••	
Styrene	ND	2.0	ır			H	"	14	
1,1,2,2-Tetrachloroethane	ND	2.0	11	ır	a	11	ŋ	и	
Tetrachioroethene	ND	2.0	19	14	и	u	ņ	n	
1,1,2-Trichloroethane	ND	2.0	r)	u	14		ч	"	
1,1,1-Trichloroethane	ND	2.0	**	n	r e	a	ď	n .	
Trichloroethene	ND	2.0	**	11	11	17	10	и	
Vinyl chloride	ND	2.0	19	h	ų	**	п	it .	
Surrogate: Toluene-d8		97.0 %	85.8	-113	"	"	14	,,	
Surrogate: 4-Bromofluorobenzene		102 %		-115	"	"	"	"	
Surrogate: Dibromofluoromethane		108 %	79-	126	"	"	u	**	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners Number: 0420-458-3

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-2 T500477-08 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note:
		SunStar L	aboratoi	ries, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	1.0	ug/l	1	5042103	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	1.0	19	*	"	n	n	10	
Carbon tetrachloride	ND	0.50	11	n	u	н	10	ıŢ	
Chlorobenzene	ND	1.0	ır	u		**	18	11	
Chloroethane	ND	1.0	10	п	11		ч	п	
Chloroform	ND	1.0	11	u	u	"	11	11	
Chloromethane	ND	1.0	п	п	п	i)	и	п	
Dibromochloromethane	ND	1.0	n	п	н	19		п	
Dibromomethane	ND	1.0	и	ıı .	н	*	II .	ıı .	
1,2-Dichlorobenzene	ND	1.0	и	н	16	18	"	1)	
1,3-Dichlorobenzene	ND	1.0	11	"	16	u	н	n	
1,4-Dichlorobenzene	ND	1.0	"	n	u	п	11	P	
1.1-Dichloroethane	ND	1.0	п	н	ij	п	19	17	
1,2-Dichloroethane	ND	0.50	19	14	"			17	
I,1-Dichloroethene	ND	1.0	14	10	17	"	19	н	
cis-1,2-Dichloroethene	ND	1.0	4	14	**	"	10	14	
trans-1,2-Dichloroethene	ND	1.0	a	17	11	11	"	**	
1,2-Dichloropropane	ND	1.0	п	ij	11	н	**	••	
cis-1,3-Dichloropropene	ND	0.50	4	"	**	11	**	9	
trans-1,3-Dichloropropene	ND	0.50	10	19	11	If	н	17	
Methylene chloride	ND	1.0	•	rı	(I	11	a	••	
Styrene	ND	1.0	ri	"	u	"	"	••	
I.1,2,2-Tetrachioroethane	ND	1.0	10	P	п	I†	**	q	
Tetrachloroethene	ND	1.0	10	*	q	1*	"	"	
1,1,2-Trichloroethane	ND	1.0	17	19	n	:•	rţ	Ч	
1,1.1-Trichloroethane	ND	1.0	18	**	и	"	17	4	
Trichloroethene	ND	1.0	u	17	u u	"	п	п	
Vinyl chloride	ND	0.50	α	u	п	u	п	n .	
Surrogate: Toluene-d8		114 %	87.6	-115	"	(1	11	4	···
Surrogate: 4-Bromofluorobenzene		96.5 %	80-		n	"	μ	9	
Surrogate: Dibromofluoromethane		114 %	78.6	-122	n	"	4	и	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:34

GPA-3@10' T500477-09 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EP.	A Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	н	16	H#	11	11	"	
Carbon tetrachloride	ND	2.0	19	11	11	14	ø		
Chlorobenzene	ND	2.0	IP.	1)	п	11	u,	0	
Chloroethane	ND	2.0	п	+	n	IJ	н	11	
Chloroform	ND	2.0	11	н	10	"	**	a a	
Chloromethane	ND	2.0	"	•	"	u	19	***	
Dibromochloromethane	ND	2.0	19	n	u	*	ч	11	
Dibromomethane	ND	2.0	11	11	n .	11	II.	п	
1,2-Dichlorobenzene	ND	2.0	11	,,	n	IJ	н	11	
1,3-Dichlorobenzene	ND	2.0	n	v	**	,,	**	н	
1.4-Dichlorobenzene	ND	2.0	17		16	н	u	ај	
1,1-Dichloroethane	ND	2.0	**	u	1♥	11	п	II.	
1,2-Dichloroethane	ND	2.0	19		ų	1+	a	11	
1,1-Dichloroethene	ND	2.0	ч	"	a	ч	a	n	
cis-1,2-Dichloroethene	ND	2.0	п	10	"		н	,,	
trans-1,2-Dichloroethene	ND	2.0	D.	14	10	"	11	и	
1.2-Dichloropropane	ND	2.0	**	10	19	If	el	**	
cis-1.3-Dichloropropene	ND	2.0	ш	a a	17	41	.,	*1	
trans-1,3-Dichloropropene	ND	2.0	40	11	u	**	п	ч	
Methylene chloride	ND	2.0	ď	н		и	u u		
Styrene	ND	2.0	"	14	"	q	U		
1,1,2,2-Tetrachloroethane	ND	2.0	н	10	n	u.	n	,,	
Tetrachloroethene	ND	2.0	**	"	14		**	п	
1,1,2-Trichloroethane	ND	2.0	**	1 e	n	"	и	11	
1,1,1-Trichloroethane	ND	2.0	*1	o o	r*			**	
Trichloroethene	ND	2.0	19	II .	10	.,			
Vinyl chloride	ND	2.0	"	и	и	11	16	"	
Surrogate: Toluene-d8		96.0 %	85.8-	113	"	"	n n	п	
Surrogaie: 4-Bromofluorobenzene		112 %	73.5-	115		n	"	n	
Surrogate: Dibromofluoromethane		107 %	79-I	26	"	"	n	••	

SunStar Laboratories, Inc.

2:12

Avalon Environmental

131 N. Tustin #213 Tustin CA, 92780 Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-3@20' T500477-10 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	2.0	ſŦ	n	**	ıı	н	u	
Carbon tetrachloride	ND	2.0	11	n	Ħ	ч	n	11	
Chlorobenzene	ND	2.0	17	п	10	II .	"	Į†	
Chloroethane	ND	2.0	n.	ii	**	n .	п	н	
Chloroform	ND	2.0	"	n n	t é	п	n	1¢	
Chloromethane	ND	2.0	**	п	"		ıı .	**	
Dibromochloromethane	ND	2.0	**	ш	il	u	u	σ	
Dibromomethane	ND	2.0	**		**	11	"	•	
1,2-Dichlorobenzene	ND	2.0	40	п	tf	"	и	17	
1,3-Dichlorobenzene	ND	2.0	19	п	11	u	ч	II.	
1,4-Dichlorobenzene	ND	2.0	+1	u	11	**	"	n.	
1.1-Dichloroethane	ND	2.0	11	п	9		ч	n .	
1,2-Dichloroethane	ND	2.0	н	11	**	и	u	и	
1,1-Dichloroethene	ND	2.0	n	ч	18	н	ď	H	
cis-1,2-Dichloroethene	ND	2.0	н	11	77	17	и	11*	
trans-1,2-Dichloroethene	ND	2.0	11	11	4	te	11	14	
1,2-Dichloropropane	ND	2.0	а	u	17	18	11	H+	
cis-1,3-Dichloropropene	ND	2.0	4	10	"	"	+	**	
trans-1,3-Dichloropropene	ND	2.0	п	н	"	11	н	D.	
Methylene chloride	ND	2.0	н	*	n	,,	rı .	D.	
Styrene	ND	2.0	11	**	**	"	"	"	
1,1,2,2-Tetrachloroethane	ND	2.0	ıı.	:r	n .	н	ø	u	
Tetrachloroethene	ND	2.0	н	ır	a	**	14	и	
1,1,2-Trichloroethane	ND	2.0	**	10	u	b	14		
1.1,1-Trichloroethane	ND	2.0	16	18	ч	ii.	If	10	
Trichloroethene	ND	2.0	17	**	**		**	м	
Vinyl chloride	ND	2.0	11	н	14	u	"	0	
Surrogate: Toluene-d8		99.2 %	85.8	-113	"	"	0	и	
Surrogate: 4-Bromojluorobenzene		111 %		-115	"	"	"	"	
Surrogate: Dibromofluoromethane		107 %	<i>79-</i>	126	#	n	n	**	

SunStar Laboratories, Inc.

Avalon Environmental

131 N. Tustin #213 Tustin CA, 92780 Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-3@30' T500477-11 (Soil)

Analyte	Result	Reporting <u>Limit</u>	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/22/05	EPA 8260B	
Bromomethane	ND	2.0	11	II.	19	u	п	"	
Carbon tetrachloride	ND	2.0	ít.	n	19	n	u		
Chlorobenzene	ND	2.0	II.	n	10	u	"	n	
Chloroethane	ND	2.0	п	n	u	u	n	n	
Chloroform	ND	2.0	11	н	п	u	n	H	
Chloromethane	ND	2.0	"	14	ч	u	u.	rr .	
Dibromochloromethane	ND	2.0	ii	н	ч	u	n	11	
Dibromomethane	ND	2.0	11	n	u	ч	**	ri	
1,2-Dichlorobenzene	ND	2.0	11	11	a	a	n	**	
1.3-Dichlorobenzene	ND	2.0	ч	"	u	o o	n	**	
1,4-Dichlorobenzene	ND	2.0	и	н	10	n	,,	"	
l,I-Dichloroethane	ND	2.0	п	n	ч	ü	n	19	
1,2-Dichloroethane	ND	2.0	п	n	11	u	"	"	
1,1-Dichloroethene	ND	2.0	11	"	q	n	n	>1	
cis-1,2-Dichloroethene	ND	2.0	u	11	41	II	n	н	
trans-1,2-Dichloroethene	ND	2.0	4	**	**	u	n	**	
1,2-Dichloropropane	ND	2.0	п	p	41	a	n	11	
cis-1,3-Dichloropropene	ND	2.0	11	"	"		n	п	
trans-1,3-Dichloropropene	ND	2.0	и	"	u	u	"	11	
Methylene chloride	ND	2.0	ц	n	u	ч	n	11	
Styrene	ND	2.0	11	17	11	u	**	**	
1.1.2.2-Tetrachloroethane	ND	2.0	ıı	"	u	и	"	10	
Tetrachloroethene	ND	2.0	"	"	11	ч		••	
1,1,2-Trichloroethane	ND	2.0	u	"	ч	п		••	
1,1,1-Trichloroethane	ND	2.0	11	п	(I	a	"	58	
Trichloroethene	ND	2.0	ч	n	14	10	n	•	
Vinyl chloride	ND	2.0	ч	и	18	14	q	41	
Surrogate: Toluene-d8		98.8 %	85.8	-113	и	"	"	"	
Surrogate: 4-Bromojluorobenzene		111 %	73.5	-115	**	"	н		
Surrogate: Dibromofluoromethane		114 %	79-	126	u	n	"	0	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:34

GPA-3 T500477-12 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.				-	
Volatile Organic Compounds by EP	A Method 8260B								
Bromodichloromethane	ND	1.0	ug/l	1	5042103	04/21/05	04/21/05	EPA 8260B	
Bromomethane	ND	1.0	17	"	n	10	11	"	
Carbon tetrachloride	ND	0.50	u	*	**	a	н	H	
Chlorobenzene	ND	1.0	n	"	н	18	**	ıt	
Chloroethane	ND	1.0	†₹	**	78	a	н	**	
Chloroform	ND	1.0	n	10	11	1)	₩.	и	
Chloromethane	ND	1.0	r•	п	п		п	п	
Dibromochloromethane	ND	0.1	п	ч	н	11	п	u .	
Dibromomethane	ND	1.0	n	10	10	*	"	•	
1,2-Dichlorobenzene	ND	1.0	п	4	n	ч	ч	u.	
1,3-Dichlorobenzene	ND	1.0	10	10	17		19	••	
1,4-Dichlorobenzene	ND	1.0	••	"	ч		ч	и	
1.1-Dichloroethane	ND	1.0	17	и	п	**	a	11	
1.2-Dichloroethane	ND	0.50	"	"	"		,,	n	
1,1-Dichloroethene	ND	1.0	п	19	1+	n	н	71	
cis-1,2-Dichloroethene	ND	1.0	н	n	11	16	и	H	
trans-1,2-Dichloroethene	ND	1.0	10		19	n	•		
1.2-Dichloropropane	ND	1.0		ч	a	и	Щ	11	
cis-1,3-Dichloropropene	ND	0.50	17			10	и	а	
trans-1,3-Dichloropropene	ND	0.50	11	ŋ	ш	ir.	п	4	
Methylene chloride	ND	1.0	п	"	н		.,	••	
Styrene	ND	1.0	41	••		19	11	N	
1,1.2.2-Tetrachloroethane	ND	1.0	n	9	**	н	n	n	
Tetrachloroethene	ND	1.0	**	10	**	"	1*	· ·	
1,1,2-Trichloroethane	ND	1.0	п	ıı	11	"	11	ir.	
1,1,1-Trichloroethane	ND	1.0	17	ıı	ıı	n	a	11	
Trichloroethene	ND	1.0	**		"	н	ıı.	11	
Vinyl chloride	ND	0.50	п	n	11	1+	n	*1	
Surrogate: Toluene-d8		115 %	87.6-	115	"	"	"	11	
Surrogate: 4-Bromofluorobenzene		97.5 %	80-1		"	tt	"	4	
Surrogate: Dibromofluoromethane		117%	78.6-	122	11	и	u	14	

SunStar Laboratories, Inc.

12-12-

Avalon Environmental

131 N. Tustin #213 Tustin CA, 92780 Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-4@10' T500477-13 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar La	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042105	04/21/05	04/22/05	EPA 3260B	
Bromomethane	ND	2.0	19	n	11	"	19		
Carbon tetrachloride	ND	2.0	11	11	11	н	"		
Chlorobenzene	ND	2.0	n	**	II .	n	a	п	
Chloroethane	ND	2.0	49	19	ıı .	u	10	н	
Chloroform	ND	2.0	н	н	11	п	17	11	
Chioromethane	ND	2.0	п	н	4	11	Ħ	"	
Dibromochloromethane	ND	2.0	n	n	**	TF.	n	11	
Dibromomethane	ND	2.0	ч	п	**	11	ij		
1,2-Dichlorobenzene	ND	2.0	п	11		19	и	11	
1,3-Dichlorobenzene	ND	2.0	ч	11	i r	н	и	14	
1,4-Dichlorobenzene	ND	2.0	17		"	**	1+	,,	
1.1-Dichloroethane	ND	2.0	н	14	n	**	п	*1	
1.2-Dichloroethane	ND	2.0	**	I+	а	n	44	4	
1,1-Dichloroethene	ND	2.0	**	**	n n	"	10	11	
cis-1,2-Dichloroethene	ND	2.0	11	н	ч	II		0	
trans-1,2-Dichloroethene	ND	2.0	и	n n	"	11	п	ч	
1,2-Dichloropropane	ND	2.0	и		"	11	II .	**	
cis-1,3-Dichloropropene	ND	2.0	11	а	rŧ	щ	II	ч	
trans-1,3-Dichloropropene	ND	2.0	"	18	н		44	**	
Methylene chloride	ND	2.0	19	"	10	ir	01	**	
Styrene	ND	2.0	rt .	ч	п	rr	я	D	
1,1,2,2-Tetrachloroethane	ND	2.0	14	"	n	"	16	"	
Tetrachloroethene	310	2.0	9	ŋ	11	u	H	"	
1.1.2-Trichloroethane	ND	2.0	н	ч	rŧ	a	o o	11	
1.1.1-Trichloroethane	ND	2.0	н	u	"	10	ч	н	
Trichloroethene	ND	2.0	ц	**	17	**	a a	41	
Vinyl chloride	ND	2.0	**	**		16	"		
Surrogate: Toiuene-d8		96.3 %	85.8	8-113	"	"	7.0		
Surrogate: 4-Bromojluorobenzene		114 %	73.5	5- <i>115</i>	"	o	*	••	
Surrogate: Dibromofluoromethane		112 %	79-	-126	n	"	**	••	

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.

Dennis Dorning, Project Manager

Avaion Environmental

Project: Solano Dry Cleaners

131 N. Tustin #213 Tustin CA, 92780

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-4@20' T500477-14 (Soil)

Volatile Organic Compounds by EPA Method 8260			ies, Inc.					
Volatile Organic Compounds by EPA Method 8260								
	2.0							
Bromodichloromethane ND		ug/kg	1	5042105	04/21/05	04/22/05	EPA 8260B	
Bromomethane ND	2.0	**	"	10	u	n		
Carbon tetrachloride ND	2.0	17	н	10	**	n	u	
Chlorobenzene ND	2.0	17	14	18	10	11	"	
Chloroethane ND	2.0	1*	r•	17	ti .	#	,,	
Chloroform ND	2.0	**	0	ıı.	н	10	**	
Chloromethane ND	2.0	11	10	10	11	19	**	
Dibromochloromethane ND	2.0	14	r.	11	п	н	н	
Dibromomethane ND	2.0	11	11	u	**	10	14	
1.2-Dichlorobenzene ND	2.0	**	o	et e	10	1 f	**	
1,3-Dichlorobenzene ND	2.0	н	ii	u	H	i e	n	
1.4-Dichtorobenzene ND	2.0	"	•	u	**	1+		
1,1-Dichloroethane ND	2.0	п	ч	и	**	18	17	
1,2-Dichloroethane ND	2.0	п	ır	ur	н	10	n	
1,1-Dichloroethene ND	2.0	11	u	a	n	ji .	u .	
cis-1,2-Dichloroethene ND	2.0	н	a	ч	н	a	0	
trans-1,2-Dichloroethene ND	2.0	19	u	11	"	110	Ħ	
1,2-Dichloropropane ND	2.0	11	11-	If	*	le:	u ·	
cis-1,3-Dichloropropene ND	2.0	U	18	10	n	1+	••	
trans-1,3-Dichloropropene ND	2.0	11	и	10	**	1+	**	
Methylene chloride ND	2.0	1f) r	T*	п	H	**	
Styrene ND	2.0	19	"	TŦ		1†		
1,1,2,2-Tetrachioroethane ND	2.0	**	78	19		11	**	
Tetrachloroethene ND	2.0	**	14	10	u ·	n	••	
1,1,2-Trichloroethane ND	2.0	"	10	t)	ч	D	11	
1,1,1-Trichloroethane ND	2.0	**	1#	н	18	11	"	
Trichloroethene ND	2.0	17	1+	n	1.	"	••	
Vinyl chloride ND	2.0	47	H)1	19	н	"	
Surrogate: Toluene-d8	101 %	85.8	-113	"	"	"	,	
Surrogate: 4-Bromofluorobenzene	112 %	73.5	-115	"	"	"	**	
Surrogate: Dibromosluoromethane	109 %	79-	126	"	,,	"	ii .	

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-4@30' T500477-15 (Soil)

Anaivte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	I	5042105	04/21/05	04/22/05	EPA 8260B	···
Bromomethane	ND	2.0	11		11	10	u		
Carbon tetrachloride	ND	2.0	11	**	II .	a	11	et.	
Chlorobenzene	ND	2.0	II.	"	и	н	"	11	
Chloroethane	ND	2.0	п	19	10	"	**		
Chloroform	ND	2.0	11	lr.	It	11	10	u	
Chloromethane	ND	2.0	**		11	ıı .	•	19	
Dibromochloromethane	ND	2.0	**	II .	10	1)	10	a.	
Dibromomethane	ND	2.0	11	н	u	n	п	H	
1,2-Dichlorobenzene	ND	2.0	11		ц	H	9	н	
1,3-Dichlorobenzene	ND	2.0	47	IT	п	It.	n	и	
l,4-Dichlorobenzene	ND	2.0	ıŗ	"	n	"	"	a	
1.1-Dichloroethane	ND	2.0	п	19	п	*	"	U	
1,2-Dichloroethane	ND	2.0	п	**	н	rŧ	n,	ш	
1.1-Dichloroethene	ND	2.0	**	ir.	**	11	ч	,,	
cis-1,2-Dichloroethene	ND	2.0	il.	41	14	ч	14	er e	
trans-1,2-Dichloroethene	ND	2.0	1†		**		10	14	
1,2-Dichloropropane	ND	2.0	17	11	"	и	11	ч	
cis-1,3-Dichloropropene	ND	2.0	n	n	11	н	и	31	
trans-1,3-Dichloropropene	ND	2.0	19	10	a	,	u	**	
Methylene chloride	ND	2.0	14	16	u	10	п	4.6	
Styrene	ND	2.0	11	16	u	10	,,	ш	
1,1,2.2-Tetrachloroethane	ND	2.0	"	и	n .	**		n.	
Tetrachloroethene	ND	2.0	п	н	и	.,	n	14	
1,1,2-Trichloroethane	ND	2.0	11	10	•	0	"	31	
1,1.1-Trichloroethane	ND	2.0	11	*			H*	a a	
Trichloroethene	ND	2.0	"	ч	n	18	1 e	ч	
Vinyl chloride	ND	2.0	14	ч	U	**	ir.	••	
Surrogate: Toluene-d8		102 %	85.8-	113	ıı	п	"	"	
Surrogate: 4-Bromojluorobenzene		106 %	73.5-	115	"	"	"	••	
Surrogate: Dibromofluoromethane		115 %	79-1	126	u	"	a	"	

SunStar Laboratories, Inc.

2.12

Avaton Environmental 131 N. Tustin #213

Tustin CA, 92780

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

GPA-4 T500477-16 (Soil)

ı	Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
			SunStar L	aborator	ies, Inc.					
	Volatile Organic Compounds by EPA	Method 8260B								
	Bromodichloromethane	ND	1.0	ug/l	1	5042103	04/21/05	04/21/05	EPA 8260B	
	Bromomethane	ND	1.0	rt .	н	n .	n n	19	u .	
	Carbon tetrachloride	ND	0.50	II	79	11	n	10	и	
	Chlorobenzene	ND	0.1	п	17	"	11	i+	**	
	Chloroethane	ND	1.0)1	40	II .	н	i ė	н	
	Chloroform	ND	1.0	н	19	n	11	18	11	
	Chloromethane	ND	1.0	п	"	0	H	**	14	
	Dibromochloromethane	ND	1.0	п	11	II .	н	lf.	11	
1	Dibromomethane	ND	1.0	н	10	**	**	u	"	
•	1,2-Dichlorobenzene	ND	1.0	н	11	19	11	u	a	
	1,3-Dichlorobenzene	ND	1.0	н	ц	19	ų	п		
	1,4-Dichlorobenzene	ND	1.0	0	п	11	11	п	н	
	1,1-Dichloroethane	ND	1.0	н	ŋ	IF.	н	d	n	
	1.2-Dichloroethane	ND	0.50	19	ч	er er	17	li .	"	
)	1,1-Dichloroethene	ND	1.0	19	II.	ır	и	ii .		
	cis-1,2-Dichloroethene	ИD	1.0	47	11	11	ıı			
	trans-1,2-Dichloroethene	ND	1.0	4)	u		13			
	1,2-Dichloropropane	ND	1.0	19	u	18	n	11	u	
	cis-1,3-Dichloropropene	ND	0.50	0	ч	10	**	n n	u .	
	trans-1,3-Dichloropropene	ND	0.50	17	п	11	н	п	:1	
)	Methylene chloride	ND	1.0	"	u	u	n	п	"	
	Styrene	ND	1.0	14	**	10		u		
	1,1,2,2-Tetrachloroethane	ND	1.0	11	n	18	n	п	n.	
	Tetrachloroethene	ND	1.0	"	n	0	n	п	"	
	1,1,2-Trichloroethane	ND	1.0	0	11	10	11	п	ч	
	1,1,1-Trichloroethane	ND	1.0	19	и	19	M	II	16	
,	Trichloroethene	ND	1.0	н	"	r•	18	a	"	
	Vinyl chloride	ND	0.50	"	u	"	TE	11	11	
	Surrogate: Toluene-d8		113 %	87.6	-115	"	"	"	"	
	Surragate: 4-Bromofluorobenzene		95.2 %	80-	112	"	"	"	"	
	Surrogate: Dibromofluoromethane		120 %	78.6	-122	H	78	n	н	

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.

Dennis Dorning, Project Manager

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:34

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042103 - EPA 5030 GCMS		<u> </u>	·							
Blank (5042103-BLK1)				Prepared .	& Analyze	d: 04/21/	 05		· · ·	
Bromodichloromethane	ND	1.0	ug/l							
Bromomethane	ND	1.0	"							
Carbon tetrachloride	ND	0.50	н							
Chlorobenzene	ND	1.0	r ¢							
Chloroethane	NĎ	1.0	11							
Chloroform	ND	1.0								
Chloromethane	ND	1.0	1f							
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	11							
1,3-Dichlorobenzene	ND	1.0	н							
I,4-Dichlorobenzene	ND	1.0	4							
I,1-Dichloroethane	ND	1.0	"							
1,2-Dichloroethane	ND	0,50	1+							
I.I-Dichloroethene	ND	1.0	16							
cis-1,2-Dichloroethene	ND	1.0	ч							
trans-1,2-Dichloroethene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
cis-1,3-Dichloropropene	ND	0.50	н							
rans-1,3-Dichloropropene	ND	0.50	11							
Methylene chloride	ND	1.0								
Styrene	ND	1.0	**							
1,1,2,2-Tetrachloroethane	ND	1.0	4							
l'etrachloroethene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	q							
1,1,1-Trichloroethane	ND	1.0	"							
Frichloroethene	ND	1.0	n							
Vinyl chloride	ND	0.50	"							
Surrogate: Toluene-d8	45.5		"	40.0		114	87.6-115		-	
Surrogate: 4-Bromofluorobenzene	39.8		"	40.0		99.3	80-112			
Surrogate: Dibromofluoromethane	<i>47.1</i>		#	40.0		118	78.6-132			

SunStar Laboratories, Inc.

12:12

Avalon Environmental

131 N. Tustin #213 Tustin CA, 92780 Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:34

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042103 - EPA 5030 GCMS										
LCS (5042103-BS1)				Prepared	& Analyze	d: 04/21/	05			
Chlorobenzene	84.0	1.0	ug/l	100		84.0	75-125			
l,l-Dichloroethene	113	1.0	•	100		113	75-125			
Trichloroethene	113	1.0	11	100		113	75-125			
Surrogate: Toluene-d8	40.6		n	40.0		102	87.6-115		·	
Surrogate: 4-Bromofluorobenzene	39.9		n	40.0		99.8	80-112			
Surrogate: Dibromofluoromethane	47.4		it	40.0		118	78.6-122			
Matrix Spike (5042103-MS1)	So	urce: T50047	79-01	Prenated a	& Analyze	-d- 04/21/0	ns			
Chlorobenzene	92.9	1.0	ug/l	100	ND	92.9	75-125			
1.1-Dichloroethene	118	1.0	ug.	100	ND	118	75-125			
Trichloroethene	81.6	1.0	"	100	ND	81.6	75-125			
Surrogate: Toluene-d8	43.7			40.0		109	87.6-115			
Surrogate: 10tuene-uo Surrogate: 4-Bromofluorobenzene	43.7 40.6		,,	40.0		109	80-112			
Surrogate: Dibromofluoromethane	44.2		,,	40.0		110	78.6-122			
Surroguie. Bioromojiaoromemane	77.2			40.0		110	70.0-122			
Matrix Spike Dup (5042103-MSD1)	So	urce: T50047	79-01	Prepared a	& Analyze	d: 04/21/0	05			
Chlorobenzene	89.5	1.0	ug/l	100	ND	89.5	75-125	3.73	20	
1,1-Dichloroethene	119	1.0	"	100	ND	119	75-125	0.844	20	
Trichloroethene	79.4	1.0	•)	100	ND	79.4	75-125	2.73	20	
Surrogate: Toluene-d8	45.3		"	40.0		113	87.6-115			
Surrogate: 4-Bromojluorobenzene	39.5		"	40.0		98.3	80-112			
Surrogate: Dibromofluoromethane	46.2		"	40.0		116	78.6-122			
Batch 5042105 - EPA 5030 GCMS										
Blank (5042105-BLK1)				Prepared o	& Analyze	ed: 04/21/0	05	,		
Bromodichloromethane	ND	2.0	ug/kg		, . .		•			
Bromomethane	ND	2.0	-95							
Carbon tetrachloride	ND	2.0	н							
Chlorobenzene	ND	2.0	n							
Chloroethane	ND	2.0	"							
Chloroform	ND	2.0	"							
Chloromethane	ND	2.0	"							
Dibromochloromethane	ND	2.0	"							
Dibromomethane	ND	2.0	11							
1,2-Dichlorobenzene	ND	2.0	ч							
1,3-Dichlorobenzene	ND	2.0	"							
1,4-Dichlorobenzene	ND	2.0	"							
1,1-Dichloroethane	ND	2.0	"							
1,2-Dichloroethane	ND	2.0	n n							
1,1-Dichloroethene	ND	2.0								

SunStar Laboratories, Inc.

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:34

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042105 - EPA 5030 GCMS										<u> </u>
Blank (5042105-BLK1)				Prepared	& Analyz	ed: 04/21	/05			
cis-1,2-Dichloroethene	ND	2.0	ug/kg							
trans-1,2-Dichloroethene	ND	2.0	"							
1,2-Dichloropropane	ND	2.0	п							
cis-1,3-Dichloropropene	ND	2.0	n							
trans-1,3-Dichloropropene	ND	2.0								
Methylene chloride	ND	2.0	16							
Styrene	מא	2.0	н							
1,1,2,2-Tetrachloroethane	ND	2.0	н							
Tetrachloroethene	ND	2.0	16							
I,1,2-Trichloroethane	ND	2.0	Œ							
I.l,1-Trichloroethane	ND	2.0	н							
Trichloroethene	ND	2.0	п							
Vinyl chloride	ND	2.0	п							
Surrogate: Toluene-d8	97.4		"	100		97,4	85.8-113			
Surrogate: 4-Bromofluorobenzene	107		**	100		107	73.5-115			
Surrogate: Dibromofluoromethane	102		**	100		102	79-126			
LCS (5042105-BS1)				Prepared:	04/21/05	Analyzeo	i: 04/22/05			
Chlorobenzene	238	2.0	ug/kg	250		95.2	75-125			
I,1-Dichloroethene	253	2.0	"	250		101	75-125			
Trichloroethene	244	2.0	"	250		97.6	75-125			
Surrogate: Toluene-d8	103		"	100	•	103	85.8-113			
Surrogate: 4-Bromofluorobenzene	106		"	100		106	73.5-115			
Surrogate: Dibromofluoromethane	111		"	100		111	79-126			
Matrix Spike (5042105-MS1)	So	urce: T50047	7-01	Prepared:	04/21/05	Analyzed	i: 04/22/05			
Chlorobenzene	90.0	2.0	ug/kg	250	ND	36.0	75-125			QM-0
1,1-Dichloroethene	31.6	2.0	"	250	ND	12.6	75-125			QM-0
Trichloroethene	52.4	2.0	19	250	ND	21.0	75-125			QM-0
Surrogate: Toluene-d8	99.9		и	100		99.9	85.8-113		-	•
Surrogate: 4-Bromofluorobenzene	112		u	100		112	73.5-115			
Surrogate: Dibromofluoromethane	116		"	100		116	79-126			

SunStar Laboratories, Inc.

2.12

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25:05 17:34

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042105 - EPA 5030 GCMS						· · · · ·				
Matrix Spike Dup (5042105-MSD1)	Sour	rce: T50047	7-01	Prepared:	04/21/05	Analyzed	1: 04/22/05			
Chiorobenzene	211	2.0	ug/kg	250	ND	84.4	75-125	80.4	20	
1,1-Dichloroethene	220	2.0	19	250	ND	88.0	75-125	150	20	
Trichloroethene	206	2.0	**	250	ND	82.4	75-125	119	20	
Surrogate: Toluene-d8	102		"	100		102	85.8-113			
Surrogate: 4-Bromofluorobenzene	113		n	100		113	73.5-115			
Surrogate: Dibromofluoromethane	118		н	100		118	79-126			

SunStar Laboratories, Inc.

12:12

Project: Solano Dry Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:34

Notes and Definitions

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS

recovery.

DET Analyte DETECTED

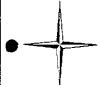
ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

SunStar Laboratories, Inc.



SunStar Laboratories, Inc.

25 April 2005

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

Enclosed are the results of analyses for samples received by the laboratory on 04/22/05 11:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Dennis Dorning

Project Manager

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

Chain of Custody Record

1500483

Client: Avalon Address: 13 L N. T Phone: 714 - 836 Project Manager: TK	Ewu 6632 Evor	_Fax: _7[& Pa U.T	4-836 OCHT	66Y -	 -	Ţ	T	Da Pro Co Bai	te:_ oject llect tch #	4/ Nar or: !:	ne:	1/05	<i>و</i> و ماد سم		دلر	And	_ Pag _ (C _ Clien _ EDF	e: <i>ease</i> Project	#: O42	or <u>l</u>	
Sample ID GPA-50101 GPA-50201 GPA-50301	Date Sampled	Time AM	Sample Type	Container Type	XX	8260 + OXY	8260 BTEX, OXY only	8270	8021 BTEX	8015M (gasoline)	8015M (diesel)	8015M Ext./Carbon Chain	6010/7000 Title 22 Metals				CC C C C C C C C C C	Com	ments/Pr	eservative	Total # of containers
GPA-5	V		NATER	VOAS	X												04				
Relinquished by: (signature) Kelinquished by: (signature) (3 5 3 4 72. Relinquished by: (signature)			<u> </u>					22 17	A ne	2)	Cha Re Tuer	in of	Toll Custo Sea ed go	tal# ody suls into	eals Y act? M anditio	ainers /N(NA /N/NA n/(old	172		Not	les	

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:26

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
GPA-5@10'	T500488-01	Soil	04/21/05 00:00	04/22/05 11:30
GPA-5@20'	T500488-02	Soil	04/21/05 00:00	04/22/05 11:30
GPA-5@30'	T500488-03	Soil	04/21/05 00:00	04/22/05 11:30
GPA-5	T500488-04	Water	04/21/05 00:00	04/22/05 11:30

SunStar Laboratories, Inc.

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:26

GPA-5@10' T500488-01 (Soil)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Meth <u>od</u>	Notes
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	A Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	I	5042208	04/22/05	04/22/05	EPA 8260B	
Carbon tetrachloride	ND	2.0		"	н	H	"	•	
Chlorobenzene	ND	2.0	н	10	10	ıt	9	**	
Chloroethane	ND	2.0	17	r t	19	11	н	**	
Chlorofo rm	ND	2.0	н	a	10	11	**	**	
Chloromethane	ND	2.0	17	0	ч	ti.	*	16	
Dibromochloromethane	ND	2.0	10	18	11	u	17	16	
Dibromomethane	ND	2.0	•	v	u	u	10	11	
1,2-Dichlorobenzene	ND	2.0	10	17	u	a	16	ur.	
I,3-Dichlorobenzene	ND	2.0	**	U	a		**	u .	
1,4-Dichlorobenzene	ND	2.0	41	и	11	IJ	18	и	
1,1-Dichloroethane	ND	2.0	ır	"	u	U	18	и	
1,2-Dichloroethane	ND	2.0	It	"	u	ıı .	11	ч	
l,l-Dichloroethene	ND	2.0	u	n	II.	"	11	а	
cis-1,2-Dichloroethene	ND	2.0	r r	10	u	п	u	11	
trans-1,2-Dichloroethene	ND	2.0	Ħ	и	n	υ	u	я	
1,2-Dichloropropane	ИD	2.0	п	**	11	n	a a	11	
cis-1,3-Dichloropropene	ND	2.0	"	**	0	w	o o	11	
trans-1,3-Dichloropropene	ДИ	2.0	п	16	ij	"	11	11	
Methylene chloride	ND	2.0	п	1#	n		n n	и	
Styrene	ND	2.0	п	18	U	19	ч	11	
1,1,2,2-Tetrachloroethane	ND	2.0	п	и	"	"	н	п	
Tetrachloroethene	12	2.0	"	18	"	"	n n	и	
1,1,2-Trichloroethane	ND	2.0	11	u	n	n	n	11	
1,1,1-Trichloroethane	ND	2.0	"	tt.	11	p	ч	ч	
Trichloroethene	ND	2.0	4	п	н	n	п	16	
Vinyl chloride	ND	2.0	и	п	11	11	п	Ŋ	
Surrogaie: Toluene-d8		111 %	85.8	-113	"		"	**	
Surrogate: 4-Bromotluorobenzene		97.2 %	73.5·	-115	n	"	d	"	
Surrogate: Dibromofluoromethane		120 %	79-	126	n	"	"	и	

SunStar Laboratories, Inc.

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:26

GPA-5@20' T500488-02 (Soil)

Analyte	Result	Reporting <u>Limit</u>	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042208	04/22/05	04/25/05	EPA 8260B	
Carbon tetrachloride	ND	2.0	re .	re	u	a a	"	"	
Chlorobenzene	ND	2.0	17	"	u	a	ıı	**	
Chloroethane	ND	2.0	п	4	n	u	н	н	
Chloroform	ND	2.0	14	16	"	п	н	п	
Chloromethane	ND	2.0	17	17	"	n	10	ji	
Dibromochloromethane	ND	2.0	я	10	**	n	19	и	
Dibromomethane	ND	2.0	ıı	19	**	r#	**	ıı	
1,2-Dichlorobenzene	ND	2.0	н	"	n	18	**	"	
1,3-Dichlorobenzene	ND	2.0	"	u	19	:1	H	11	
1,4-Dichlorobenzene	ND	2.0	"	IJ	1*	*	rr	"	
l,I-Dichloroethane	ND	2.0	**	11	16	**	11	H	
I,2-Dichloroethane	ND	2.0	14		и	10	11	н	
1,1-Dichloroethene	ND	2.0	11	10	ч	11	ч	16	
cis-1.2-Dichloroethene	ND	2.0	:1	19	n	u	ıı	11	
trans-1,2-Dichloroethene	ND	2.0	"	ч	п	11	n	**	
1,2-Dichloropropane	ND	2.0	(4	4	п	U	11	75	
cis-1,3-Dichloropropene	ND	2.0	11	H*	н	"	n	15	
rans-1,3-Dichloropropene	ND	2.0	11	10	**	*	11	и	
Methylene chloride	ND	2.0	ц	16	**	n	HE	ŋ	
Styrene	ND	2.0	п	u	•	*	"	n	
1,1,2,2-Tetrachloroethane	ND	2.0	п	a	11	i t	ij	ч	
l'etrachloroethene	ND	2.0	п	u	0	17	"	п	
1,1,2-Trichloroethane	ND	2.0	н	"	13	**	*	D	
1,1,1-Trichloroethane	ND	2.0	н	u	19	11	1ª	u .	
Trichloroethene	ND	2.0	н	u	17	4	*	n	
Vinyl chloride	ND	2.0	n	п	10	*	14	n	
Surrogate: Toluene-d8		97.4 %	85.8-	113	"	ı	n	,,	
Surrogate: 4-Bromofluorobenzene		98.7 %	73.5-	115	tr.	*	"	"	
Surrogate: Dibromofluoromethane		111 %	79-1	26	n	ir	a	u	

SunStar Laboratories, Inc.

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:26

GPA-5@30' T500488-03 (Soil)

Analyte	Result	Reporting Limit	<u>U</u> nits	Dilution	Batch	Prepared	Analvzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	2.0	ug/kg	1	5042208	04/22/05	04/22/05	EPA 3260B	
Carbon tetrachloride	ND	2.0	10	n	18	11	19		
Chlorobenzene	ND	2.0	D	и	n	u		0	
Chloroethane	ND	2.0	n		u	IJ	•	N .	
Chloroform	ND	2.0	(1	10	11	n	11	ч	
Chloromethane	ND	2.0	R	н	10	10		ч	
Dibromochloromethane	ND	2.0	11	10	(F	9		п	
Dibromomethane	ND	2.0	n .	u	н		"	,,	
1,2-Dichlorobenzene	ND	2.0	"		**		19	**	
1,3-Dichlorobenzene	ND	2.0	n	п	+	11	16	17	
1,4-Dichlorobenzene	ND	2.0	11	п	11	u	n		
l, l-Dichloroethane	ND	2.0	**	н	ч	п	n	9	
1,2-Dichloroethane	ND	2.0	н	+	ų	D	r+	п	
I.I-Dichloroethene	ND	2.0	19	10	11	*	11	а	
cis-1,2-Dichloroethene	ND	2.0	11	"	н	10	ч	ш	
rans-1,2-Dichloroethene	ND	2.0	п	If.	•	"	4	"	
1,2-Dichloropropane	ND	2.0	u	ч		н	11	u,	
cis-1,3-Dichloropropene	ND	2.0	ч	q	r a	Iŧ	11	"	
rans-1,3-Dichloropropene	ND	2.0	п	"	17	п	*	••	
Methylene chloride	ND	2.0	11		11	4	u	ii.	
Styrene	ND	2.0	ų	"	ч	"	,,	ч	
,1,2,2-Tetrachloroethane	ND	2.0	n	10	11	ti	19	41	
[etrachloroethene	ND	2.0	ď	11	п	n	я	ч	
,1,2-Trichloroethane	ND	2.0	11	**	11	,,	11	н	
.1.1-Trichloroethane	ND	2.0	st	"	1+	16	п	ч	
Frichloroethene	ND	2.0	16	10	et .	15	п	11	
/inyl chloride	ND	2.0	n	41	"	11	"	п	
Surrogate: Toluene-d8		111%	85.8-	113	11	n	"	"	
Surrogate: 4-Bromofluorobenzene		96.6 %	73.5-		"	tt.	"	0	
Surrogate: Dibromofluoromethane		121 %	79-1	26	"	n	"	"	

SunStar Laboratories, Inc.

2.2

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi Reported: 04/25/05 17:26

GPA-5 T500488-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analvzed	Method	Notes
		SunStar L	aborato	ries, Inc.					
Volatile Organic Compounds by EPA	Method 8260B								
Bromodichloromethane	ND	1.0	ug/l	L	5042209	04/22/05	04/22/05	EPA 8260B	
Carbon tetrachloride	ND	0.50	19	11	и	tt.	ц	11	
Chlorobenzene	ND	1.0	м	17	u	u	u	11	
Chloroethane	ND	1.0	14	14	u	ıı		11	
Chloroform	ND	1.0	19	**	u	u	ŋ	11	
Chloromethane	ND	1.0	17	"	п	п	н	11	
Dibromochloromethane	ND	1.0	10	n	н	11	n	IJ	
Dibromomethane	ND	1.0	4	10	n .	11	"	n	
1,2-Dichlorobenzene	ND	1.0	п	10	n	n	11	n	
1,3-Dichlorobenzene	ND	1.0	"	"	n	"	II.	**	
1,4-Dichlorobenzene	ND	1.0	+1	ч	"	n	vi	0	
1,1-Dichloroethane	ND	1.0	H	i.	*	н	ч	be .	
1.2-Dichloroethane	ND	0.50	14	ч		н	4	m	
l,l-Dichloroethene	ND	1.0	н	11	**	н	**	17	
cis-1.2-Dichloroethene	ND	1.0	n	ıi	н	**	u	P*	
trans-1,2-Dichloroethene	ND	1.0	19	и	**	₹•	•	**	
1,2-Dichloropropane	ND	1.0	10	ц	19	19	9	и	
cis-1.3-Dichloropropene	ND	0.50	1‡	п	19	10	14	n.	
trans-1,3-Dichloropropene	ND	0.50	"	ū	11	11	18	10	
Methylene chloride	ND	1.0	41	ij	ч	11	ıt	a	
Styrene	ND	1.0	ч	11	**	18	и	17	
1,1,2,2-Tetrachloroethane	ND	1.0	11	ų	4	ч	н	•	
Tetrachloroethene	ND	1.0	11	п	*1	и	15	••	
1.1.2-Trichloroethane	ND	1.0	и	n n	11	38	16		
1,1,1-Trichloroethane	ND	1.0	п	n	n	11	15	47	
Trichloroethene	ND	1.0	11	"	U	11	10	**	
Vinyl chloride	ND	0.50			HI.	"	и	"	
Surrogate: Toluene-18		114%	87.6	-115	"	"	ii .	o.	
Surrogate: 4-Bromojluorobenzene		97.0 %	80-	112	u	n	"	"	
Surrogate: Dibromofluoromethane		118 %	78.6	-122	н	ti	"	"	

SunStar Laboratories, Inc.

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25:05 17:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042208 - EPA 5030 GCMS										
Blank (5042208-BLK1)				Prepared a	& Analyze	:d: 04/22/	05			
Bromodichloromethane	ND	2.0	ug/kg							
Carbon tetrachloride	ND	2.0	H							
Chlorobenzene	ND	2.0	19							
Chloroethane	ND	2.0	u							
Chloroform	ND	2.0	ч							
Chloromethane	ND	2.0	п							
Dibromochloromethane	ND	2.0	н							
Dibromomethane	ND	2.0	n							
1,2-Dichlorobenzene	ND	2.0	"							
1,3-Dichlorobenzene	ND	2.0	17							
I,4-Dichlorobenzene	ND	2.0	4							
I,1-Dichloroethane	ND	2.0	11							
1,2-Dichloroethane	ND	2.0	a							
I,1-Dichloroethene	ND	2.0	1+							
cis-1,2-Dichloroethene	ND	2.0	21							
trans-1,2-Dichloroethene	ND	2.0	11							
1,2-Dichloropropane	ND	2.0	91							
cis-1,3-Dichloropropene	ND	2.0	II .							
trans-1,3-Dichloropropene	ND	2.0	n							
Methylene chloride	ND	2.0	n							
Styrene	ND	2.0	++							
1,1,2,2-Tetrachloroethane	ND	2.0	H							
Tetrachloroethene	ND	2.0	10							
1,1,2-Trichloroethane	ND	2.0	18							
I,I,I-Trichloroethane	ND	2.0	u							
Frichloroethene	ND	2.0	**							
Vinyl chloride	ND	2.0	**							
Surrogate: Toluene-d8	112		a	100	-	112	85.8-113			
Surrogate: 4-Bromofluorobenzene	97.3		17	100		97.3	73.5-115			
Surrogate: Dibromofluoromethane	116		**	100		116	79-126			

SunStar Laboratories, Inc.

12:12

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042208 - EPA 5030 GCMS										,
LCS (5042208-BS1)				Prepared	& Analyze	ed: 04/22/	05			
Chlorobenzene	233	2.0	ug/kg	250	•	93.2	75-125			
1,1-Dichloroethene	258	2.0	tr	250		103	75-125			
Trichloroethene	237	2.0	ч	250		94.8	75-125			
Surrogate: Toluene-d8	111		0	100		111	85.8-113			
Surrogate: 4-Bromofluorobenzene	97.4		"	100		97.4	73.5-115			
Surrogate: Dibromofluoromethane	122		"	100		122	79-126			
Matrix Spike (5042208-MS1)	So	urce: T50048	8-01	Prepared	& Analyze	·d· 04/22/	05			
Chlorobenzene	211	2.0	ug/kg	250	ND	84.4	75-125			·
1.1-Dichloroethene	234	2.0	"	250	ND	93.6	75-125			
Trichloroethene	286	2.0	n	250	ND	114	75-125			
Surrogate: Toluene-d8	112		,,	100		112	85.8-113			
Surrogate: 4-Bromofluorobenzene	100		"	100		100	73.5-115			
Surrogate: Dibromofluoromethane	119		ıŧ	100		119	79-126			
•										
Matrix Spike Dup (5042208-MSD1)		urce: T50048			& Analyze					
Chlorobenzene	222	2.0	ug/kg "	250	ND	88.8	75-125	5.08	20	
I,1-Dichloroethene Frichloroethene	229	2.0	.,	250	ND	91.6	75-125	2.16	20	
	247	2.0		250	ND	98.8	75-125	14.6	20	
Surrogate: Toluene-d8	102		"	100		102	85.8-113			
Surrogate: 4-Bromofluorobenzene	104		"	100		104	73.5-115			
Surrogate: Dibromofluoromethane	118		"	100		118	79-126			
Batch 5042209 - EPA 5030 GCMS										
Blank (5042209-BLK1)				Prepared a	& Analyze	ed: 04/22/	05			
Bromodichloromethane	ND	1.0	ug/l							
Carbon tetrachloride	ND	0.50	11							
Chlorobenzene	ND	1.0	10							
Chloroethane	ND	1.0	16							
Chloroform	ND	1.0	19							
Chloromethane	ND	1.0	10							
Dibromochloromethane	ND	1.0	10							
Dibromomethane	ND	1.0	15							
1,2-Dichlorobenzene	ND	1.0	10							
,3-Dichlorobenzene	ND	1.0	If							
1,4-Dichlorobenzene	ND	1.0	I ę							
1,1-Dichloroethane	ND	1.0	It							
1,2-Dichloroethane	ND	0.50	1F							
1,1-Dichloroethene	ND	1.0	11							
cis-1,2-Dichloroethene	ND	1.0	11							

SunStar Laboratories, Inc.

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042209 - EPA 5030 GCMS										
Blank (5042209-BLK1)				Prepared .	& Analyze	d: 04/22/	05			· · · · · · · · · · · · · · · · · · ·
trans-1,2-Dichloroethene	ND	1.0	ug/l							
1,2-Dichloropropane	ND	1.0	н.							
cis-1,3-Dichloropropene	ND	0.50	**							
trans-1,3-Dichloropropene	ND	0.50	10							
Methylene chloride	ND	1.0	17							
Styrene	ND	1.0	a							
l,1,2,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	1.0	и							
1,1,2-Trichloroethane	ND	1.0	n							
1,1,1-Trichloroethane	ND	1.0	"							
Trichloroethene	ND	1.0	"				*			
Vinyl chloride	ND	0.50	14							
Surrogate: Toluene-d8	44.5		"	40.0		111	87.6-115			
Surrogate: 4-Bromofluorobenzene	39.3		*	40.0		98.2	80-112			
Surrogate: Dibromofluoromethane	48.9		"	40.0		122	78.6-122			
LCS (5042209-BS1)				Prepared (& Anaivze	d: 04/22/	05			
Chlorobenzene	91.8	1.0	ug/l	100		91.8	75-125			
I,I-Dichloroethene	105	1.0	,,	100		105	75-125			
Trichloroethene	80.2	1.0	*	100		80.2	75-125			
Surrogate: Toluene-d8	45.5		"	40.0		114	87.6-115			
Surrogate: 4-Bromofluorobenzene	38.7		"	40.0		96.8	80-112			
Surrogaie: Dibromofluoromethane	48.5		"	40.0		121	78.6-122			
Matrix Spike (5042209-MS1)	So	urce: T50048	8-04	Prepared 4	& Analyze	ed: 04/22/	05			
Chlorobenzene	91.5	1.0	ug/]	100	ND	91.5	75-125			
l,1-Dichloroethene	110	1.0		100	ND	110	75-125			
Trichloroethene	79.0	1.0	п	100	ND	79.0	75-125		\ 	
Surrogate: Toluene-d8	45.6		н	40.0		114	87.6-115			
Surrogate: 4-Bromofluorobenzene	38.4		"	40.0		96.0	80-112			
Surrogate: Dibromofluoromethane	46.3		"	40.0		116	78.6-132			

SunStar Laboratories, Inc.

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:26

Volatile Organic Compounds by EPA Method 8260B - Quality Control SunStar Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5042209 - EPA 5030 GCMS									Z.III.	.1014.5
Matrix Spike Dup (5042209-MSD1)	Sou	rce: T50048	88-04	Prepared	& Analyze	d: 04/22/	05			
Chlorobenzene	87.3	1.0	ug/1	100	ND	87.3	75-125	4.70	20	
1,1-Dichloroethene	109	1.0	"	100	ND	109	75-125	0.913	20	
Trichloroethene	79.7	1.0	II .	100	ND	79.7	75-125	0.882	20	
Surrogate: Toluene-d8	45.2		"	40.0		113	87.6-115			
Surrogate: 4-Bromofluorobenzene	35.9		"	40.0		89.8	80+112			
Surrogate: Dibromofluoromethane	46.9		*	40.0		117	78.6-122			

SunStar Laboratories, Inc.

2:16

Project: Solano Ave Cleaners

Project Number: 0420-458-3 Project Manager: Trevor Santochi

Reported: 04/25/05 17:26

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.

12:12

APPENDIX VI

LABORATORY ANALYTICAL RESULTS (11/10/04 INVESTIGATION)



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

Chain of Custody Record

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

Client: Avalon	ENV.							Dat	e:	\prod	2	10	۷(F	Page:		<u> </u>	Of		
Address: 13 \ N. Tu Phone: (7(4) 836-6 Project Manager: T. S	stin su	wti z	213					Pro	ject	≀ Nan	ne:_	S	ماه	w	-رر	$\mathcal{D}_{\mathbf{r}}$	` '	C	Lea	ne	<u> </u>		
Phone: (714) 836-6	ر د ک ک	Fax: P.3	6-66	42				Col	lecto	or: =	Τ-	. 5	GA	A	\mathcal{L}	· ~	' c	lient l	Projec	t #:	-		
Project Manager:	San Local	10 1			-			Bate	ch #	. 7	ru	01	24	3		.	 E	DF #:					
	2000-011-0	~~			<i>-</i>	·—···				'mmere'		·····											
					L,							ain	als										
Sample ID	Date Sampled	Time	Sample Type	Container Type	8260/8010 CIS	8260 + OXY	8260 BTEX, OXY only	1270	8021 BTEX	8015M (gasoline)	8015M (diesel)	1015M Ext./Carbon Chain	6010/7000 Title 22 Metals					Laboratory ID #	Co	ommeni	ls/Prese	ervative	Total # of containers
GP-105' GP-1010' GP-1015' GP-205' GP-2015' GP-2015' GP-2015' GP-205'	11/2/04	7:45	5016	Acitale	X	<u> </u>	<u> </u>	ω		<u></u>		<u> </u>					c	=					
GP-1810'	177	5:00	\		X												C						
GP-1015'		8:15			X												0	3					
GP-2051		9:10			X												0	4				<u></u>	
GP-ZR10'	1_/	9:20			X													7					
GP-28151		9:35			$\boldsymbol{\lambda}$									l				6					
GP -2@ 20'		10:00			X)7					
GP - 3 C 5'		10:45			X												_/(8					
GP-3010' GP-3015' GP-3020'		10: 20	11_		X.												2	21					
GP - 3@ 151	1.6	10:30	<u> </u>	1	X													0					
60-30 201	<u> </u>	10.45	JV	<u> </u>	×												1	(
					′								l										
	<u> </u>		<u> </u>											1									
		<u> </u>			<u> </u>																		
3														l									
Relinquished by: (signature)	Date / Ti	ime 12:on fa	Received b	y: (signature) y: (signature)	/	11.	Date 2 Z	e / Ti	me /2.	-ig	Ch:	ain of				ntaine Y/N/Ŋ	7 F	>			Notes	3	
Refinquished by: (signature)	11/2/6 y Date / Ti	me	Received h	v (signature)		# .	ムレ Date	e / Ti	me	-	JIR					Y/N/N							
GSD 110504 8	3:00		XRox	// 03e y: (signature)	94	B	100	2			R					1719719 tioj3/ 9 6	_	12					
Relinquished by: (signature)	Date / T					·			me							AM				· <u> </u>	····		····
Sample disposal Instructions: D	icporal @ \$2.00 a	aach	Polium	to client		Dick	un								_								

Project: Solano Dry Cleaners

Project Number: [none]

Project Manager: Trevor Santochi

Reported: 11/04/04 15:23

ANALYTICAL REPORT FOR SAMPLES

GP-1@5	T401293-01			
	1401253-01	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.

< DS

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
	-	SunStar L	aborator	-		•			
Halogenated Volatile Compounds (8	010 List) by EPA								
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 3260B	
Bromomethane	ND	2.0	M	"	11	**	ч		
Carbon tetrachloride	ND	2.0	n	*	14	*	ч	и	
Chlorobenzene	ND	2.0	n	"	11	#	n n		
Chloroethane	ND	2.0	п	н	**	r#	a a	11	
Chloroform	ND	2.0	n	n	ÞŢ	18	u	11	
Chloromethane	ND	2.0	н	Ħ	n	11	п	11	
Dibromochloromethane	ND	2.0	**	19	16	"	п	ч	
Dibromomethane	ИD	2.0	1+	16	11	ŋ		· ·	
1,2-Dichlorobenzene	ND	2.0	**	ч	11	"			
1,3-Dichlorobenzene	ND	2.0	19	19	It	11	11		
I,4-Dichlorobenzene	ND	2.0	19	ц	и	11	n	11	
1,1-Dichloroethane	ND	2.0	D	**	It	4			
1,2-Dichloroethane	ND	2.0	H	71	H	ч	11	а	
1,1-Dichloroethene	ND	2.0	n	10	HT	"		ч	
cis-1,2-Dichloroethene	ND	2.0	17	16	11	"	.,		
trans-1.2-Dichloroethene	ND	2.0	rt	1 y	п	Ą		ч	
1,2-Dichloropropane	ND	2.0	н	11	и	.,	n	4	
cis-1,3-Dichloropropene	ND	2.0	11	ii .	ü	ri .	п		
trans-1,3-Dichloropropene	ND	2.0	ч	ii .	ij	17	"	а	
Methylene chloride	ND	2.0	"	"	u	**	"	9	
Styrene	ND	2.0	u	**	n	rt	n n	4	
1,1,2,2-Tetrachloroethane	ND	2.0	н	n	**	и	Ħ	,,	
Tetrachloroethene	1100	2.0	н	**	н	q	ш	•	
1,1,2-Trichloroethane	ND	2.0	н	н	ц	ц	n	"	
1.1,1-Trichloroethane	ND	2.0	n	"	и			"	
Trichloroethene	5.9	2.0	n	vi vi	u	11	•	,,	
Vinyl chloride	ND	2.0	n	q	а	a	a .	15	
Surrogate: Toluene-d8		105 %	81-	117	u	,,	"	•	
Surrogate: 4-Bromofluorobenzene		95.7 %	74-	121	ø	"	a	"	
Surrogate: Dibromofluoromethane		120 %	81-	125	"	"	n	· ·	

SunStar Laboratories, Inc.

< DD

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8	010 List) by EPA	8260							
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	n	ц	**	п	n	n	
Carbon tetrachloride	ND	2.0	"	rt	18	q	"	n	
Chlorobenzene	ND	2.0	11	**	**	q	0	"	
Chloroethane	ND	2.0	н	**	d	a	ij	2)	
Chloroform	ND	2.0	14	"	а	11	и		
Chloromethane	ИD	2.0	н	•	10	10	n	u .	
Dibromochloromethane	ND	2.0	11	**	te	11	ū	а	
Dibromomethane	ND	2.0	11	0	10	и	11	14	
1,2-Dichlorobenzene	ND	2.0	10	n	19	н	11	ч	
1,3-Dichlorobenzene	ND	2.0	11	ц	17	+1	ч	н	
1,4-Dichlorobenzene	ND	2.0	10	11	**	rt	ч	и	
1,1-Dichloroethane	ND	2.0	H	и	H	τŧ	11	n	
1,2-Dichloroethane	ND	2.0	11	n .	**	++	II	н	
1,1-Dichloroethene	ND	2.0	n	++	0	Ħ	11	н	
cis-1,2-Dichloroethene	ND	2.0	n	19	"	"	17	n	
trans-1,2-Dichloroethene	ND	2.0	n	н	•	"	11	••	
1,2-Dichloropropane	ND	2.0	0	H	0	**	if	4	
cis-1.3-Dichloropropene	ND	2.0	11	18	н	H	11	.,	
trans-1,3-Dichloropropene	ND	2.0	17	и	11	11	ц	4	
Methylene chloride	ND	2.0	D.	ш	17	i t	11	4	
Styrene	ND	2.0	I+	ч	"	11	11	*4	
1,1,2,2-Tetrachloroethane	ND	2.0	D		**	11	11	н	
Tetrachloroethene	9.1	2.0	0	ir	11	1*	41	н	
1,1,2-Trichloroethane	ND	2.0	14	10	"	I†	n	rr	
1,1,1-Trichloroethane	ND	2.0	IT	I †	**	Н	n	9	
Trichloroethene	ДN	2.0	**	ч		"	11	16	
Vinyl chloride	ND	2.0	11	и	**	rt	11	1	
Surrogate: Toluene-48		104 %	8 <i>i</i> -	117	**	п	и	а	
Surrogate: 4-Bromofluorobenzene		90.2 %	74-	121	"	,,		27	
Surrogate: Dibromofluoromethane		114%	81-	125	"	"	"	"	

SunStar Laboratories, Inc.

(D)

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8	010 List) by EPA	8260							
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/03/04	EPA 8260B	.,
Bromomethane	ND	2.0	н	н	11	a	a	**	
Carbon tetrachloride	ND	2.0	п	п	ч	"	11	i.	
Chlorobenzene	ND	2.0	п	11	11	11	14	19	
Chloroethane	ND	2.0	п	ij	11	IT	**	11	
Chloroform	ND	2.0	n	u	М	"	,	"	
Chloromethane	ND	2.0	a	ц	**	*		**	
Dibromochloromethane	ND	2.0	u	ú	**	n	a a	t)	
Dibromomethane	ND	2.0	11	19	• 7	"	u u	"	
1,2-Dichlorobenzene	ND	2.0	11	rr	19	11	и	n	
1,3-Dichlorobenzene	ND	2.0	19	rt	"	11	**	a	
1,4-Dichlorobenzene	ND	2.0	11	n	it	If	n	u	
1,1-Dichloroethane	ND	2.0	11	¥	19	"	n	н	
1,2-Dichloroethane	ND	2.0	**	11	**	,,	u u	ч	
1,1-Dichloroethene	ND	2.0	17	rt	n	n	ų	•	
cis-1,2-Dichloroethene	ND	2.0	Ħ		п	ч	ч	v	
trans-1,2-Dichloroethene	ND	2.0	14	"	u	ч	n		
1,2-Dichloropropane	ND	2.0	"		п	ч	и	ч	
cis-1,3-Dichloropropene	ND	2.0	н	"	ч	11	H	н	
trans-1,3-Dichloropropene	ND	2.0	и	"	и	н	"	"	
Methylene chloride	ND	2.0	n		11	н	ii	**	
Styrene	ND	2.0	н	.,	u	п	ø	•	
1,1,2,2-Tetrachloroethane	ND	2.0	и	n	a a	-1		**	
Tetrachloroethene	8.4	2.0	n	9	q	"	ч	р	
1.1.2-Trichloroethane	ND	2.0	п			27	и		
1,1,1-Trichloroethane	ND	2.0	п		**	a	Ħ	-1	
Trichloroethene	ND	2.0	п	4	**	n .	**	н	
Vinyl chloride	ND	2.0	ч	а	17	"	**	11	
Surrogate: Toluene-d8		107 %	81-	117	"	#	"	н	
Surrogate: 4-Bromofluorobenzene		96.6 %	74-	121	ď	,,	**	ii .	
Surrogate: Dibromofluoromethane		120 %	81-	125	"	••	"	"	

SunStar Laboratories, Inc.

< 1555

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8	010 List) by EP	A 8260							
Bromodichloromethane	ND	2.0	ug/kg	I	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	n	ij	ii .	11	ii	if	
Carbon tetrachloride	ND	2.0	n	n	18	19	ij.	19	
Chlorobenzene	ND	2.0	11	u	11		**	п	
Chloroethane	ND	2.0	н	п	1f	***	li .	11	
Chloroform	ND	2.0	11	q	40	4	III	4	
Chloromethane	ND	2.0	и	u	10	"	it	п	
Dibromochloromethane	ND	2.0	n	11	н	41	и	**	
Dibromomethane	ND	2.0	11	ıı .	19	41	u	ч	
1,2-Dichlorobenzene	ND	2.0	и	11	H	4	iŧ	7	
1,3-Dichlorobenzene	ND	2.0	n	q	i t	4	U	4	
1,4-Dichlorobenzene	ND	2.0	н				u u	н	
1,1-Dichloroethane	ND	2.0	n	n	16	ч	11	n	
1,2-Dichloroethane	ND	2.0	n	q	16	•	1*	•1	
1,1-Dichloroethene	ND	2.0	n	4	и	"	и		
cis-1,2-Dichloroethene	ND	2.0	н		11	1)	IF.	н	
trans-1,2-Dichloroethene	ND	2.0	п	u	TP	я	14	*1	
1,2-Dichloropropane	ND	2.0	n	q	1+	q	ц	**	
cis-1,3-Dichloropropene	ДN	2.0	n	a	et.	9	u	rt	
trans-1,3-Dichloropropene	ND	2.0	H	4	19	•	17	0	
Methylene chloride	ND	2.0	n	4	**	n	41	ท	
Styrene	ND	2.0	n		**	"	n .	11	
1,1,2,2-Tetrachloroethane	ND	2.0	19	n		.,	¥	0	
Tetrachloroethene	190	2.0	"	n	9	n	11	d	
1,1,2-Trichloroethane	ND	2.0	19	.,	9	0		*1	
1,1,1-Trichloroethane	ND	2.0	19	a	**	q	u	"	
Trichloroethene	2.2	2.0	н	ч	18	11	H	**	
Vinyl chloride	ND	2.0	n	4	1+	4	"	15	
Surrogate: Toluene-d8		105 %	81-	117	er.	"	"	4	
Surrogate: 4-Bromofluorobenzene		98.2 %	74-	121	ır	"	,,	21	
Surrogase: Dibromofluoromethane		118 %	81-	125	**	"	"	v	

SunStar Laboratories, Inc.

< 155

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8010 List) by EPA	8260							
Bromodichloromethane	ND	2.0	ug/kg	I	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0	"	11	**	11	11.00.9	"	
Carbon tetrachloride	ND	2.0	**		11	n	n	*1	
Chlorobenzene	ND	2.0	**	10	н	"	н	и	
Chloroethane	ND	2.0	19	**	п	ır	a	11	
Chloroform	ND	2.0	u	re	14	n	14	"	
Chloromethane	ND	2.0	и	44	•	**	11	н	
Dibromochloromethane	ND	2.0	H	п	14	ц	n	u .	
Dibromomethane	ND	2.0	11	"	а	,,	,,	n	
1,2-Dichlorobenzene	ND	2.0	н	и	11	**	ч	н	
1.3-Dichlorobenzene	ND	2.0	19	ų	17	į¢.	4	а	
1,4-Dichlorobenzene	ND	2.0	"	17	**	",	м	"	
I.1-Dichloroethane	ND	2.0	ч	11	14	ц	41	n	
1,2-Dichloroethane	ND	2.0	ij	ii .	**	11	o	н	
1.1-Dichloroethene	ND	2.0	11	"	а	11	,,	4	
cis-1,2-Dichloroethene	ND	2.0	19	**	ч	n	**	9	
trans-1,2-Dichloroethene	ND	2.0	ч	1+	п	11	17		
1,2-Dichloropropane	ND	2.0	19	•	ıı	n	•		
cis-1,3-Dichloropropene	ND	2.0	ч	I e	,,	ij	rt	11	
trans-1,3-Dichloropropene	ND	2.0	"	11	.,	**	и	4	
Methylene chloride	ND	2.0	"	и	**	"		**	
Styrene	ND	2.0	n	•	re-	ч	н	11	
1.1.2,2-Tetrachloroethane	ND	2.0	4*	**	"	"	,,		
Tetrachloroethene	26	2.0	"	ų		II.	н	,,	
1.1,2-Trichloroethane	ND	2.0	18	**	н		.,		
I,1,1-Trichloroethane	ND	2.0	и	**	**	м		a	
Trichloroethene	ND	2.0	п	11	11	и	11		
Vinyl chloride	ND	2.0	"	"	**		"	"	
Surrogate: Toluene-d8		109 %	81-1	17	"	"	"	it	
Surrogate: 4-Bromofluorobenzene		92.3 %	74-1		'n	<i>n</i>	<i>n</i>	**	
Surrogate: Dibromofluoromethane		113 %	81-1		"	"	"	н	

SunStar Laboratories, Inc.

< 155

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8	010 List) by EPA	8260							
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	ч	"	н	"	q	10	
Carbon tetrachloride	ND	2.0	н	н	н	11	н	ч	
Chlorobenzene	ND	2.0	"	"	"	11	ч	n	
Chloroethane	ND	2.0	"	11	"	**	т	п	
Chloroform	ND	2.0	11	n		rr	н	n	
Chloromethane	ND	2.0	**	"	"	17	**	**	
Dibromochloromethane	ND	2.0	**	п	ч	0	**	4	
Dibromomethane	ND	2.0	1+	u	ч	"	"	••	
1,2-Dichlorobenzene	ND	2.0	0	и	18	0	"		
1,3-Dichlorobenzene	ND	2.0	11	и	16	n	ч	4	
1,4-Dichlorobenzene	ND	2.0	"	11	и	п	17	n	
1,1-Dichloroethane	ND	2.0	*1	н	19	ч	n		
1,2-Dichloroethane	ND	2.0	**	47	:1	10	н	•	
1,1-Dichloroethene	ND	2.0	**	**	11	**	"	"	
cis-1,2-Dichloroethene	ND	2.0	0	it	**	Ħ	ŋ	"	
trans-1,2-Dichloroethene	ND	2.0	"	11	n	"	ч	.,	
1,2-Dichloropropane	ND	2.0	"	**	**	"	**	н	
cis-1,3-Dichloropropene	ND	2.0	9	11	"	а	11	-1	
trans-1,3-Dichloropropene	ND	2.0	**	"	"	11	н	a	
Methylene chloride	ND	2.0	**	**		ч	н	4	
Styrene	ND	2.0	н	**	n	ч	**		
1,1,2,2-Tetrachloroethane	ND	2.0	"	H	"	n	rt	4	
Tetrachloroethene	ND	2.0	•	14	n	**	**	-12	
1,1,2-Trichloroethane	ND	2.0	11	"	"	16	et	,	
1,1,1-Trichloroethane	ND	2.0	"	"		10	"	•	
Trichloroethene	ND	2.0	н	н	я	17	ų	•	
Vinyl chloride	ND	2.0	"			n		le .	
Surrogate: Toluene-d8		103 %	81-	117	,,	"	и	"	
Surrogate: 4-Bromofluorobenzene		92.6 %	. 4-	121	n	,,	11	•	
Surrogate: Dibromofluoromethane		114 %	81-	125	"	"	**		

SunStar Laboratories, Inc.

< 155 ·

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8010 List) by EPA	A 8260							
Bromodichloromethane	ND	2.0	ug/kg	Į.	4110314	11/03/04	11/03/04	EPA 8260B	
Bromomethane	ND	2.0		,	11	"		,	
Carbon tetrachloride	ND	2.0	н	*	11	n	H	. 4	
Chlorobenzene	ND	2.0	11	**	щ	+	14		
Chloroethane	ND	2.0	++		u	11	**	**	
Chloroform	ND	2.0	**		п	Ħ	п		
Chloromethane	ND	2.0	1†	44	u	17	4	,,	
Dibromochloromethane	ND	2.0	10	n		ч	"	n	
Dibromomethane	ND	2.0	49	ч	ŋ	"	•	**	
1,2-Dichlorobenzene	ND	2.0	11	•	.,	"	19	**	
1,3-Dichlorobenzene	ND	2.0	и	**	n	"	1)	н	
I,4-Dichlorobenzene	ND	2.0	4	19		,,	IT.	и	
1,1-Dichloroethane	ND	2,0	**		.,	11	ц	п	
1,2-Dichloroethane	ND	2.0	if	10	**	17	и	и	
1,1-Dichloroethene	ND	2.0	14	ч	**	ч	п	a.	
cis-1,2-Dichloroethene	ND	2.0	**	4	10	14	ч	ч	
trans-1,2-Dichloroethene	ND	2.0	10	a	и	11	n	11	
1,2-Dichloropropane	ND	2.0	ų	**	· ·	11	a	4	
cis-1,3-Dichloropropene	ND	2.0		"	11	"			
trans-1,3-Dichloropropene	ND	2.0	q	e e	**	u	"	**	
Methylene chloride	ND	2.0	•	17	и	"	.,	**	
Styrene	ND	2.0	D.	**	п	*	(*	ч	
1,1,2,2-Tetrachloroethane	ND	2.0	14	10-	q	*	i t	"1	
Tetrachloroethene	ND	2.0	*1	11	п	и	ч		
1,1.2-Trichloroethane	ND	2.0		••	ŋ	19	u u	n	
l,l,l-Trichloroethane	ND	2.0		.,			.,	••	
Trichloroethene	ND	2.0	n	**		**	•	ir	
Vinyl chloride	DN	2.0	н	ч	"	**	**	"1	
Surrogate: Toluene-d8		105 %	81-1	117	10	п	17	,1	
Surrogate: 4-Bromofluorobenzene		95.2 %	7 4- ,	121	"	"	12	"	
Surrogate: Dibromofluoromethane		115 %	81-1	125	"	a	,e	4	

SunStar Laboratories, Inc.

< 155

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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8010 Li	ist) by EP#	A 8260							
Bromodichloromethane	ND	2.0	ug/kg	I	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	н	q	41*	п	a	ч	
Carbon tetrachloride	ND	2.0	п	u	п	H	9	ч	
Chlorobenzene	ND	2.0	н	ч	u	"	"	n .	
Chloroethane	ND	2.0	f 1	11	q	11	11	и	
Chloroform	ND	2.0	u	u	41	ij	"	4	
Chloromethane	ND	2.0	n	q	11	"	**	ч	
Dibromochloromethane	ND	2.0	D	α	11	**	n	п	
Dibromomethane	ИD	2.0	19	п	n	"	**	11	
1,2-Dichlorobenzene	ND	2.0	п	"	u	19	щ	ч	
I,3-Dichlorobenzene	ND	2.0	ij		ij	11	щ	ij	
1,4-Dichlorobenzene	ND	2.0	14	n .	ıı.	"	и	"	
1,1-Dichloroethane	ND	2.0		u	0	н	ч	ч	
1,2-Dichloroethane	ND	2.0	11	n n	a	•	H	ч	
1,1-Dichloroethene	ND	2.0	и	"	ч	**	4	4	
cis-1,2-Dichloroethene	ND	2.0	14		11	ŋ	ш	ч	
trans-1,2-Dichloroethene	ND	2.0	11		U	**	n _k	1)	
1.2-Dichloropropane	ND	2.0	17		"	n	I T	11	
cis-1.3-Dichloropropene	ND	2.0	ч	н	n	i#	if	ч	
trans-1.3-Dichloropropene	ND	2.0	"	**	"	14	и		
Methylene chloride	ND	2.0	и	10	11	u .	ч	0	
Styrene	ND	2.0	п	n	"	n	u	•	
1,1,2,2-Tetrachloroethane	ND	2.0	"	17	14	"	"		
Tetrachloroethene	470	2.0	n	11	n .	•	n n	,,	
1,1,2-Trichloroethane	ND	2.0	9	•	•		n	**	
1,1,1-Trichloroethane	ND	2.0	10	**	•	4	**	"	
Trichloroethene	ND	2.0	**	19	н	ч	n	11	
Vinyl chloride	ND	2.0	**	н	н		1.	н	
Surrogate: Toluene-d8		106 %	81-	117	"	u	11	7	
Surrogate: 4-Bromojluorobenzene		94.0 %	74-	121	"		"	n	
Surrogate: Dibromofluoromethane		120 %	81-	125	"	"	16	"	

SunStar Laboratories, Inc.

< DB

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@10 T401293-09 (Sail)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8	010 List) by EPA	A 8260							
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	а	n n	er er	11	11	**	
Carbon tetrachloride	ND	2.0	**	n	11	13	rr	"	
Chlorobenzene	ND	2.0	a	п	ш	11	**	n	
Chloroethane	ND	2.0	**	ч	11	10	17	"	
Chloroform	ND	2.0	14	ij	11	n	Ð	11	
Chloromethane	ND	2.0	17		re .	"	"	"	
Dibromochloromethane	ND	2.0	17	q	re	"			
Dibromomethane	ND	2.0	n	11	**	21	d	ri .	
1,2-Dichlorobenzene	ND	2.0	17	u	**	4	"	11	
1,3-Dichlorobenzene	ND	2.0	n	11	+	tf.	n	of .	
1,4-Dichlorobenzene	ND	2.0	"	11	29	q	п	п	
1,1-Dichloroethane	ND	2.0	11	п	**	ч		•	
1,2-Dichloroethane	ND	2.0	11	*	21	11	it	if	
1,1-Dichloroethene	ND	2.0	п	н	я	16	11	14	
cis-1,2-Dichloroethene	ND	2.0	"	1+	4	H	11	4	
trans-1,2-Dichloroethene	ND	2.0	*1	ч	и	If	ii .	п	
1,2-Dichloropropane	ND	2.0	**	10		"	11	~	
cis-1,3-Dichloropropene	ND	2.0	"	10	11	**	11	:1	
trans-1,3-Dichloropropene	ND	2.0	н	н	я		ii ii	a	
Methylene chloride	ND	2.0	*1	и	16	17			
Styrene	ND	2.0	n	н	11	н	4	**	
1,1.2,2-Tetrachloroethane	ND	2.0	17	Ħ	11	•		•	
Tetrachloroethene	690	2.0	"	17	11	**	и	9	
1,1,2-Trichloroethane	ND	2.0	**	**	н	n	16	•	
1,1,1-Trichloroethane	ND	2.0	"	•	16	"		.,	
Trichloroethene	ND	2.0	**	••	1 e	"	"		
Vinyl chloride	ND	2.0	**1	9	re				
Surrogate: Toluene-d8		104 %	31-	417	18	"	"	·/	
Surrogate: 4-Bromofluorobenzene		96.7 %	74-	121	"	U		9	
Surrogate: Dibromofluoromethane		115 %	81-	125	"	"	<i>11</i>		

SunStar Laboratories, Inc.



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
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds	(8010 List) by EPA	8260							
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	L1/04/04	EPA 8260B	
Bromomethane	ND	2.0	**	n n	"	ц	Ф	n	
Carbon tetrachloride	ND	2.0	**	u	n	H	ч	41	
Chlorobenzene	ND	2.0	19	11		n	Щ	ч	
Chloroethane	ND	2.0	19	п	ш	H	И	п	
Chloroform	ND	2.0	н	н	n	n	ц	19	
Chloromethane	ND	2.0	н	17	и	"	*1	"	
Dibromochloromethane	ND	2.0	н	I t	11	"	н	ц	
Dibromomethane	ND	2.0	**	п	"	n	H	15	
1,2-Dichlorobenzene	ND	2.0	"	"	п	11	н	**	
1,3-Dichlorobenzene	ND	2.0	11	r+	и	ıl	н	9	
1,4-Dichlorobenzene	ND	2.0	n		и	u	7	4	
1,1-Dichloroethane	ND	2.0	4	પ	ч	41	ч	"	
1.2-Dichloroethane	ND	2.0	п	11	rt	н	ii .	B	
I.I-Dichloroethene	ND	2.0	н	,,	"	44	**		
cis-1,2-Dichloroethene	ND	2.0	11	n	"	11	0	н	
trans-1,2-Dichloroethene	ND	2.0	11	"	4	+	11	"	
1,2-Dichloropropane	ND	2.0	17	n	••	11	"	••	
cis-1,3-Dichloropropene	ND	2.0	*7	11	11	**	11		
trans-1,3-Dichloropropene	ND	2.0	1†	11	11	"	"	.,	
Methylene chloride	ND	2.0	11		**	*	**	"	
Styrene	ND	2.0	19	"	u u	**	4	"	
1.1.2.2-Tetrachloroethane	ND	2.0	11	"		"	"	"	
Tetrachloroethene	ND	2.0	41	n	"	н	"	•1	
1.1,2-Trichloroethane	ND	2.0	19	1)	4	19	п	.,	
1,1.1-Trichloroethane	ND	2.0	10	**		"	"	"	
Trichloroethene	ND	2.0	19		и	"	п	и	
Vinyl chloride	ND	2.0	17	0	**	0	u	н	
Surrogate: Toluene-d8		102 %	31-	-117	н	,,	"	"	
Surrogate: 4-Bromojluorobenzene		95.8 %	74-	-121	er	**	4	ij	
Surrogate: Dibromofluoromethane		119 %	81-	-125	"	"	"	n	

SunStar Laboratories, Inc.

< 13B

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 <u>Limit</u>	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
		SunStar L	aborator	ies, Inc.					
Halogenated Volatile Compounds (8	010 List) by EPA	8260							
Bromodichloromethane	ND	2.0	ug/kg	1	4110314	11/03/04	11/04/04	EPA 8260B	
Bromomethane	ND	2.0	н	"	19	41	19	11	
Carbon tetrachloride	ND	2.0	н	17	"	ш	н	ď	
Chlorobenzene	ND	2.0	"	"	11	u	11	n.	
Chloroethane	ND	2.0	п	"	11	16	u	11	
Chloroform	ND	2.0	·r		11	40	16	и	
Chloromethane	ND	2.0	и	19	4	ш		"	
Dibromochloromethane	ND	2.0	11	**	+1	16	a	ч	
Dibromomethane	ND	2.0	11	19	•	44	4	n	
1,2-Dichlorobenzene	ND	2.0	,,		16	ц		0	
1,3-Dichlorobenzene	ND	2.0	н	9	10	00	и	п	
I,4-Dichlorobenzene	ND	2.0	4	"	ıę	ч	17	11	
1,1-Dichloroethane	ND	2.0	19	· ·	"	r#·	**	н	
1.2-Dichloroethane	ND	2.0	47	п	r †	**	H	**	
1,1-Dichloroethene	ND	2.0	47	"	**	•	"	4	
cis-1,2-Dichloroethene	ND	2.0	ij.	н	**	1)	n	-11	
trans-1,2-Dichloroethene	ND	2.0	n	ч	.,		"	11	
1,2-Dichloropropane	ND	2.0	11	It	"	ц	"		
cis-1,3-Dichloropropene	ND	2.0	11	н	.,	и	4	0	
trans-1,3-Dichloropropene	ND	2.0	11	**		H	ч	н	
Methylene chioride	ND	2.0	"	"		0			
Styrene	ND	2.0	"	н	4	11	11	D.	
1.1,2,2-Tetrachloroethane	ND	2.0	н	"	4	**	11	n	
Tetrachloroethene	ND	2.0	н	n	"	n	ч	,,	
1,1,2-Trichloroethane	ND	2.0	н	"	11	n	и	n	
l,l,l-Trichloroethane	ND	2.0	ч	,,	4	"	и	"	
Trichloroethene	ND	2.0	"	n	11	"	ч	"	
Vinyl chloride	ND	2.0	"	"			и	"	
Surrogate: Toluene-d8		106 %	31-	117	11	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.2 %	74-	121	n	"	n	•	
Surrogate: Dibromofluoromethane		120 %	81-	125	"	"	10	"	

SunStar Laboratories, Inc.

(D)

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 Resuit	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4110314 - EPA 5030 GCMS										
Blank (4110314-BLK1)				Prepared	& Analyze	d: 11/03/0)4			
Bromodichloromethane	ND	2.0	ug/kg	• • • • • • • • • • • • • • • • • • • •						
Bromomethane	ND	2.0	"							
Carbon tetrachloride	ND	2.0	1)							
Chlorobenzene	ND	2.0	"							
Chloroethane	ND	2.0	n							
Chloroform	ND	2,0	n							
Chloromethane	ND	2.0	n							
Dibromochloromethane	ND	2.0	H							
Dibromomethane	ND	2.0	14							
1.2-Dichlorobenzene	ND	2.0	и							
1,3-Dichlorobenzene	ND	2.0								
1,4-Dichlorobenzene	ИD	2.0	11							
1,1-Dichloroethane	ИЙ	2.0	а							
1,2-Dichloroethane	ND	2.0	17							
t,I-Dichloroethene	ND	2.0	71							
ris-1,2-Dichloroethene	ND	2.0	n							
rans-1,2-Dichloroethene	ND	2.0	H							
1,2-Dichloropropane	ND	2.0	н							
cis-1,3-Dichloropropene	ND	2.0								
rans-1,3-Dichloropropene	ND	2.0	11							
Methylene chloride	ND	2.0								
Styrene	ND	2.0	4							
1,1.2,2-Tetrachloroethane	ND	2.0								
l'etrachloroethene	ND	2.0	**							
1.1,2-Trichloroethane	ИŊ	2.0	"							
1.1.1-Trichloroethane	ND	2.0	"							
Trichloroethene	ND	2.0	rt							
Vinyl chloride	ND	2.0								
Surrogate: Toluene-d8	104		10	100		104	81-117			
Surrogate: 4-Bromofluorobenzene	93.0		"	100		93.0	74-121			
Surrogate: Dibromofluoromethane	114		•	100		114	81-125			

SunStar Laboratories, Inc.

(D)

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.

Апајуте	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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	u	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		0	100		123	81-125			
Matrix Spike (4110314-MS1)	So	urce: T40129	93-01	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)	So	urce: T40129	93-01	Prepared:	11/03/04	Analyzed	: 11/04/04			
Chlorobenzene	210	2.0	ug/kg	250	ND	84.0	75-125	6.45	20	
I,I-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		H	81-117			
Surrogate: 4-Bromofluorobenzene	109		"	100		109	74-121			
Surrogate: Dibromofluoromethane	122		"	100		122	81-125			

SunStar Laboratories, Inc.

< 155

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.

(ISB

APPENDIX VII

HEALTH AND SAFETY PLAN



Site Safety and Health Plan

for

Phase II Groundwater Investigation

at

1187 Solano Avenue

Albany, California 94709

TABLE OF CONTENTS

1.0	PURPOSE	l
2.0	OBJECTIVE	1
3.0	GENERAL SITE INFORMATION	2
4.0	SCOPE OF WORK 4.1 Description of Work to be Performed	
5.0	PROJECT ORGANIZATION 5.1 Project Staffing/Chain of Command 5.2 Organization and Responsibilities	2
6.0	HAZARD EVALUATION	
7.0	GENERAL SAFETY REQUIREMENTS 7.1 Control of Work Area 7.2 Drill Rig Safety Guidelines 7.3 General Heavy Equipment Operation Safety Guidelines 7.4 Decontamination/Cleaning Activities Safety Guidelines 7.5 Sampling Activities Safety Guidelines	8 8 .10
8.0	PERSONAL PROTECTIVE EQUIPMENT (PPE) 8.1 Level D Protection 8.2 Level C Protection 8.2.1 Criteria for Upgrading to Level C 8.3 Additional Protective Equipment 8.4 Personal Protective Equipment Restrictions 8.5 Selection Criteria for Coveralls	. 12 . 13 . 13 . 14
9.0	AIR MONITORING 9.1 Tasks Performed Within a Confined Space 9.2 Stopping Work 9.3 Air Sampling Protocol 9.4 Equipment Calibration and Maintenance 9.5 Documentation	. 16 . 17 . 18
10.0	CHEMICALS OF CONCERN	. 19
11.0	SPILL CONTAINMENT	. 20
12.0	WORKER DECONTAMINATION	. 20
13.0	JOB SITE HAZARDS	. 21

	13.1 13.2 13.3 13.4 13.5 13.6 13.7 13.8 13.9	Slippery Surfaces 21 Organic Vapors 21 Flammable Vapors 21 Oxygen Enriched/Deprived Atmospheres 22 Noise 22 Surface and Equipment Contamination 22 Exposure - Heat Stress 22 Exposure - Cold Stress 23 Falling Objects 24
	13.10	Vehicular Traffic
	13.11	Monitoring Well Activities and Groundwater Sampling
	13.12	Sample Preservation and Safety Procedures
	13.13	Cleaning Equipment
14.0	EMER	GENCY COMMUNICATION
	14.1	Fire
	14.2	Injury/Illness
	14.3	Emergency Procedures
	14.4	Air Releases
	14.5	Weather
	14.6	Work Site Access
	14.7	Emergency Equipment
	14.8	Carbon Treatment
	14.9	Drilling Notification Procedures
	14.10	Electrical Equipment and Ground-Fault Circuit Interrupters29
	14.11	Damage to a Utility
	14.12	General Health
	14.13	MSDS Information (When Available)
	*****	THE AND GUIDEN DEALERS THE STATE STATES
15.0		TH AND SAFETY REQUIREMENTS
	15.1	Medical Surveillance
	15.2	Training Requirements
	15.3	Respiratory Fit Testing

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:

April 20, 2005

PROPOSED DURATION: Two days

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

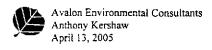
General Topography:

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 five geoprobe borings to a depth of forty feet below ground surface (bgs). Sampling soil every five feet and water at depth. Work to be performed surrounding the dry cleaners at 1187 Solano Avenue.

Emergency Response: No

5.0 PROJECT ORGANIZATION

5.1 Project Staffing/Chain of Command

<u>Titles</u>	<u>Names</u>	(Phone #/Pager)
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

Chemicals of Concern:

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.

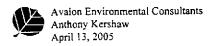
Potential Safety Hazards:

Wet or slippery surfaces

Surface debris (broken glass, sharp objects)

Noise in excessive levels

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:

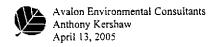
Setting up physical barriers to exclude unnecessary personnel from the area and posting appropriate signage.

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

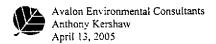
- When opening drums, check first for pressure. Loosen the retaining ring partway and lift lid gently. After insuring that no residual pressure is present, finish removing retaining ring.
- The need for sampling is often the result of "lack of knowledge" of the material, implying a somewhat unknown situation. 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:
 - \geq 2 ppm above background, sustained for five minutes.
 - \geq 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 of wet mud (mud loose enough to splash or splatter.) Examples: Wet drilling, handling water samples, decontaminating vehicles.

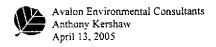
Note: Vinyl rain suits may be substituted for polyethylene coated TyvekTM provided decontamination procedures, approved by the HSO are implemented before use.

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 airpurifying 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. <u>All</u> 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 <u>any</u> 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 \leq 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 sills. 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 grossiy 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 O_2/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 (SLB) 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.

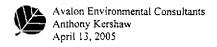
13.6 Surface and Equipment Contamination

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 warn 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 indicted, 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 fire station is located one mile west of the job site. Take Solano west to San Pablo....Turn left...proceed to Buchanan and turn left. The fire station is on the corner of Buchanan and Marin Avenue

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 nonsudden 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 <u>must not</u> 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.

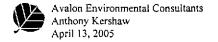
14.5 Weather

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 liverfunction 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 tailgate 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

HEALTH AND SAFETY PLAN REVIEW/TAILGATE SAFETY MEETING

By signing below, I certify that I have reviewed the Site Specific Health and Safety Plan, and that I agree to abide by all requirements of the Plan, including all PPE requirements. I understand that if I have any questions I should discuss them with my Supervisor, or contact the Health and Safety Department. I further understand that I have the "Right to Refuse" unsafe work, subject to the conditions of the company policy. By signing below, I also hereby certify that I am free of drug and/or alcohol impairment, have attended the Tailgate Safety Meeting for this specific project, and in all ways prepared for work.

Print Name	Sign Name	<u>Date</u>	
			·
		-	
			
			
			1.1.1.

APPENDIX B

FIRE STATION LOCATION MAP



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

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 week 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)

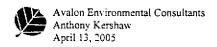
The lowest temperature at which the vapor of a combustible liquid can be made to ignite momentarily in air.

APPENDIX D

MSDS INFORMATION

APPENDIX E

ACCIDENT/INJURY FORM

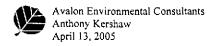


ACCIDENT/INCIDENT/NEAR MISS REPORT

Employee's Name:		D.O.B	/	/
			/	/
		SS#		
ob Title:	Supervisor's Name			
	Office			
Location:			· ·	
Location at Time of Incid	ent:			
	Date/Time of			
Incident:				
	-			
D	escription: Describe clearly how the accide	nt occurred:		
	-			
	_			
Was	Incident: Physical			
	Chemical			
	Part(s) of body			
affected:	•			
Exposure:Dermal	Inhalation	Ingestion		
		v _		
	Witnesses: 1)			
	2)			
	Conditions/acts contributing to the			
incident:	·			
	-			

Did the injured go to a doctor?	When?	
Where?		
		
Did the injured go to a hospital	!?When?	
Where?		
	Signatures:	
E	EmployeeReporting Manager H&S Manager	

APPENDIX F SITE MONITORING FORM



SITE MONITORING LOG

Site Name	Technician		
Address	Equipment		
Avalon Job No.	Calibration Gas		
Date	Weather		
DAILY SAI	ETY INSPECTION LIST		
() Work Area Barriers in Place	() Hard Hats		
() Warning Signs Posted	() Steel Toed Boots		
() Safety Cones in Place	() Protective Eyewear		
() Traffic Blocked From Work Area	() Gloves		
() Utilities Identified	() Hand Tool Inspection for Condition		
() Tailgate Safety Meeting	() Safe Distance Between Workers		
() Respiratory Protection (If necessary)	() Safe Lifting Practices		

AIR MONITORING RECORD

TIME OF READING	LOCATION	ACTIVITY	READING/COMMENTS (ppm)
		<u> </u>	

TIME OF READING	LOCATION	ACTIVITY	READING/COMMENTS (ppm)