SECOR
International Incorporated

WORK PLAN FOR
575 PASEO GRANDE
SAN LORENZO, CALIFORNIA

SECOR Job No. 70074-001-03

Prepared For:
David D. Bohannon Organization
Sixty 31st Avenue
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3/22/99

Submitted By:
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March 22, 1999

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1.0 INTRODUCTION

On behalf of David D. Bohannon Organization (DDBO), SECOR International Incorporated (SECOR) has prepared this Work Plan for the property located at 575 Paseo Grande, San Lorenzo, California (Figure 1). The work plan has been prepared in response to a request from Alameda County Health Care Services Agency (the County) in a letter dated December 30, 1998. In that letter, the County requested that:

- Quarterly monitoring and sampling resume immediately.
- The zone of groundwater impact be further delineated, including an investigation of nearby utility trenches as a preferential pathway for groundwater or vapor migration.
- The groundwater flow direction be confirmed by the addition of at least one additional groundwater monitoring well.
- The unpaved portion of the site should be paved or otherwise capped. Note that the unpaved portion of the site was capped with 2 inches of asphalt in January 1999.
- Provide information for three soil samples collected from the site on July 26, 1995, including their location, depth, total threshold limit concentration (TTLC) analytical results, and copies of the signed laboratory reports.

This Work Plan outlines the steps that will be taken to complete the above items and includes the details of the soil samples collected on July 26, 1995.

2.0 SCOPE OF WORK

2.1 Site-Specific Health and Safety Plan

SECOR will update the existing health and safety plan (HASP). The HASP will detail potential physical and chemical hazards that may be encountered while performing work at the site.

2.2 Quarterly Monitoring and Sampling

Subsequent to approval of this work plan, the existing groundwater monitoring wells (MW-1, MW-2, and MW-3) will be monitored and sampled. SECOR will perform four quarters of groundwater monitoring. During each event, SECOR will collect depth-to-water measurements from surveyed casing elevations of each of the three on-site monitoring wells using a water-level indicator graduated to 0.01 foot. The depth-to-water measurements will be converted to a groundwater elevation for each well, then plotted on a map and contoured to produce a potentiometric surface map.

Groundwater samples will be collected from each monitoring well subsequent to purging using a submersible pump and employing a low-flow purge technique. Groundwater samples will be collected using a disposable bailer and placed in laboratory-supplied containers. Samples will be labeled with the sample identification, time and date of collection, and immediately placed on ice in an insulated cooler.

All samples will be logged onto a chain-of-custody manifest and shipped to a state-certified laboratory for analysis. The groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHg) by Environmental Protection Agency (EPA) Method 8015 (modified); benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020; methyl tertiary-butyl ether (MTBE) using EPA Method 8260; and the metals lead and chromium by EPA Method 6010.

SECOR will produce four quarterly groundwater monitoring reports. At a minimum, the reports will include the laboratory analytical data and a potentiometric surface map along with the gradient and flow direction.

2.3 Utility Trench Survey

To identify utilities, Underground Service Alert will be contacted to locate utilities that exist in the streets surrounding the site. If any utility lines are located in the downgradient direction, the appropriate utility companies will be contacted for permission to access any utility vaults to monitor vapors.

2.4 Zone of Groundwater Impact Definition

GORE-SORBER℠ Screening Modules will be proposed to help identify the extent of groundwater impact at the site. The GORE-SORBER℠ Screening Modules are passive sorbent collection devices that are directly inserted into the soil or groundwater. The modules passively collect chemical compounds that are present in the subsurface. After the modules are retrieved, they are thermally extracted, analyzed, and the results are mapped to aid in determining the limits of the impacted groundwater.

The field investigation includes the deployment of a minimum of 10 Gore-Sorber℠ passive soil vapor screening modules. The modules are a proprietary design by W.L. Gore & Associates Inc., that are intended to detect specific vapor analytes in soil and dissolved groundwater plumes. The module consists of three 40 millimeter long by 3 millimeter diameter sorber units encased in a Gore-Tex™ sleeve. The sorber units are then encased in a 4-foot long insertion and retrieval cord constructed of the same material. The sorber unit consists of a granular adsorbent material appropriate for the intended analytes. For this investigation, we have requested that TPHg, BTEX, and MTBE by analyzed. W.L. Gore & Associates Inc., will determine the appropriate sorber material for these analytes. The modules are shipped directly from W.L. Gore & Associates Inc., in sealed shipping vials labeled with a unique identification number.

W.L. Gore & Associates Inc., recommends the modules be set in a ¾- to 1-inch diameter boring to a depth of 3 feet. The borings for the modules will be drilled using a hand held rotary hammer drill. After the pilot hole is completed, modules are inserted into the completed bore holes using a stainless steel insertion rod. The top of each cord is then fastened to a cork, which is tamped flush with the ground surface to assist in the retrieval of the module, and to seal the annulus of the boring. The modules will be left in the ground for approximately two weeks from the time of installation. Proposed Gore-Sorber℠ locations are shown in Figure 2. The off-site sorbers are located in the downgradient groundwater flow direction from the site in order to delineate the extent of potential off-site impacts. The actual locations of the sample points will be determined based on the results of the utility survey and as allowed by site features.

After the modules have been exposed for a period of approximately two weeks, the modules will be retrieved. Retrieval consists of removing the cork, grasping the retrieval cord, and manually pulling the module from each location. The modules are then returned to there designated shipping containers and placed on ice pending transport to the W.L. Gore & Associates Inc., laboratory. The modules will be shipped via overnight delivery to the laboratory. In addition to the exposed modules, trip blanks and temperature control blanks will accompany the modules to the laboratory. Chain-of-custody procedures will be followed at all times.

Once the modules have been removed from the borings, the borings will be backfilled with neat cement grout and resurfaced to match the existing surface cover.

Laboratory analysis will be performed by W.L. Gore & Associates Inc., laboratory in Elkton, Maryland. The proprietary analytical methods used include thermal desorption followed by gas chromatography and mass spectroscopy.

The analytical results are reported in qualitative units for each specific analyte. The data will be presented in tabular as well as graphical forms.

The results of the study will be utilized to identify sites for new monitoring well(s).

2.5 Groundwater Monitor Well Installation

Based on the results of the Gore-Sorber℠ survey, a minimum of one groundwater well will be installed downgradient of the existing wells. The intent of the additional well will be to confirm the downgradient extent of the impacted groundwater previously identified at the site.

2.5.1 Permitting

Prior to beginning the well installation field work, a well permit will be obtained from Alameda County.

2.5.2 Utility Locating

Prior to drilling, a utility locator will be contracted to locate utilities in the vicinity of the proposed drilling location. Additionally, Underground Service Alert USA will be notified at least 48 hours prior to drilling.

2.5.3 Drilling, Soil Sampling and Monitoring Well Installation

A soil boring for the monitoring well will be drilled using a truck-mounted drill rig equipped with 8-inch outside-diameter hollow stem augers. The soil boring will be advanced to approximately 25 feet below ground surface (bgs) or approximately 10 feet below the first-encountered groundwater. A continuous core will be collected from the boring using a 3.5-inch diameter by 5-foot long core barrel. The soil core will be logged in the field by a geologist to produce an accurate lithologic and stratigraphic profile. The soil core will be field screened using a photo-ionization detector (PID) equipped with a 10.2 eV lamp.

Selected soil samples will be retrieved from the sampler and immediately sealed with Teflon™ tape and plastic caps. The soil samples will be labeled with the appropriate bore hole information, time and date of collection, and placed on ice for subsequent transport and analysis at a state-certified analytical laboratory. Chain-of-custody procedures will be followed at all times. A minimum of one soil sample will be selected for analysis of TPHg using EPA Method 8015 (modified), for BTEX by EPA Method 8020, and for MTBE by EPA Method 8260.

The well will be constructed similar to the existing wells using 10 feet of 2-inch diameter, 0.020-inch machine-slotted, Schedule 40 polyvinyl chloride (PVC) well screen placed from the bottom of the bore hole and 2-inch diameter blank PVC casing from the top of the screened interval to within 1-foot of surface grade. An appropriately sized (No. 3 sand) filter pack will be placed in the annular space from completion depth to approximately 2 feet above the screened interval. A sanitary seal consisting of hydrated bentonite slurry followed by cement slurry will be placed on top of the gravel pack to approximately 1-foot bgs. The top of the well will be secured with a locking well cap and the well will be completed at surface grade with a watertight traffic-rated street box set in concrete.

2.5.4 Well Development, Surveying and Groundwater Sampling

Well development will be performed a minimum of 24-hours after placement of the sanitary seal on the new monitoring well(s) to remove fine-grained material from the well screen, filter pack, and formation near the well. Development will be accomplished by alternately surging and pumping or bailing the well. A minimum of three times the volume of water in the well will be removed while the pH, specific conductance, and temperature are monitored. Well development will continue until these parameters stabilize and the groundwater is relatively free of fine sediment.

Subsequent to well development, the existing and new monitoring well(s) will be surveyed by a licensed professional surveyor. The top of the well casing elevation will be measured to within 0.01 feet relative to mean sea level. Survey data will be combined with static depth-to-groundwater data to determine the groundwater flow direction across the site.

Groundwater samples will be collected from the new well(s) and existing wells during the next scheduled quarterly sampling event.

2.5.5 Decontamination Procedures

During all field work, all downhole equipment will be decontaminated either by steam/pressure cleaning or by double-washing with a laboratory grade detergent and rinsing with deionized water. Soil and debris generated during drilling, well development and sampling will be contained in drums pending proper disposal.

2.6 Surface Capping

DDBO placed 2 inches of asphalt over the unpaved portion of the site in January 1999.

2.7 July 26, 1995, Soil Sample Information

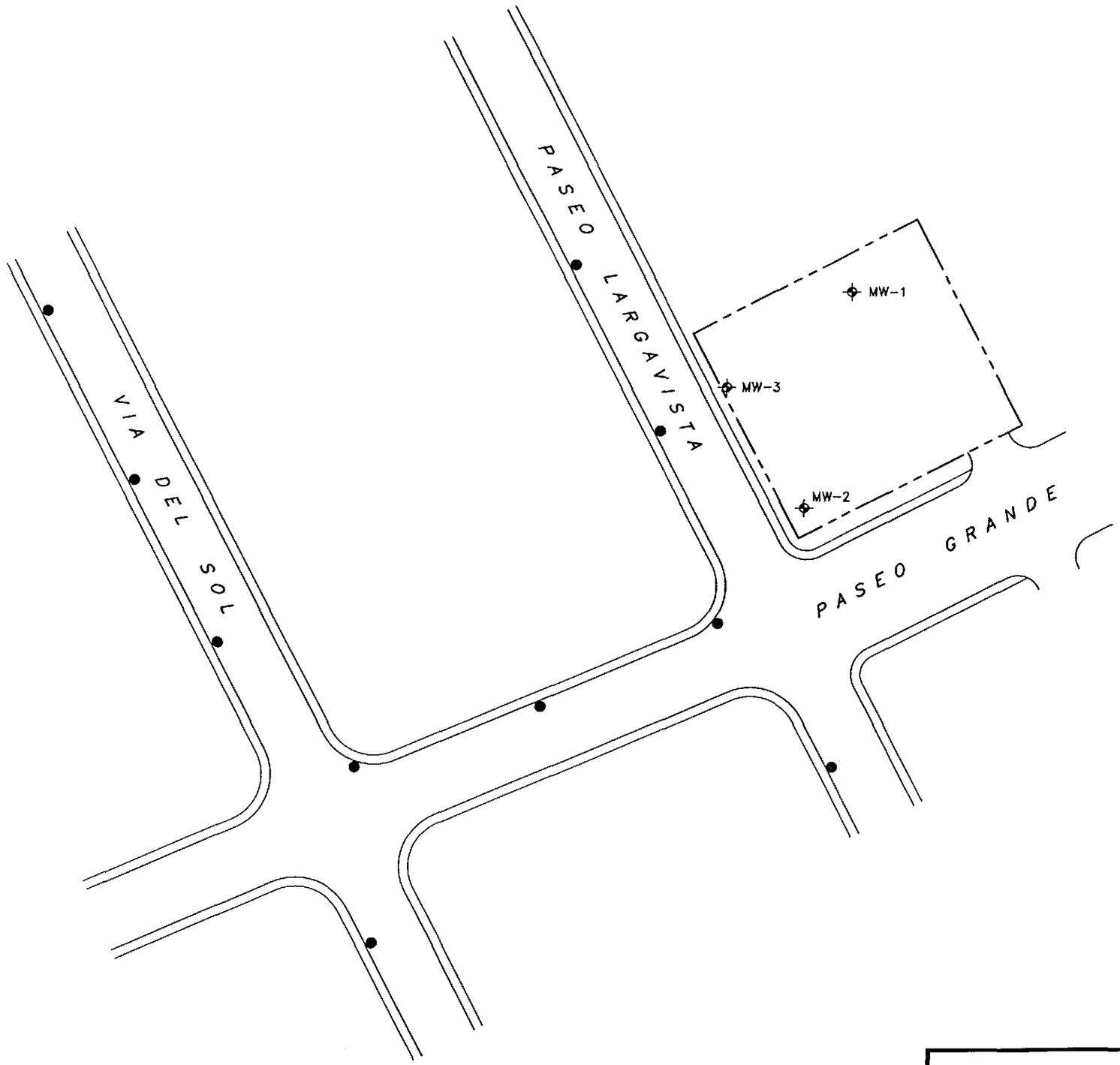
A review of SECOR's files indicates that the soil samples described in the September 14, 1995, work plan were composite samples collected for waste characterization purposes. One 3-point composite was collected from the sump excavation (S-A-7', S-B-5', S-C-4') and one four point composite sample was collected from the underground storage tank (UST) excavation (T-A-3', T-B-2', T-C-4.5', T-D-3'). A background sample was also collected on July 26, 1995, from a planter in the northwest corner of the site (B-1-1.5'). The locations of these samples are shown on the figure included as Appendix A. Copies of the laboratory analytical reports are also included in Appendix A.

3.0 REPORTING

Upon completion of the field work, a report will be prepared detailing the work performed and the results of the investigation. At a minimum, the report will include scaled maps showing the location of the sample points, copies of any permits obtained, copies of all laboratory analytical reports, an updated groundwater contour map, and an interpretation of the results of the information gathered.

SAN LEANDRO AND HAYWARD QUADRANGLE
California
7.5 Minute Series (Topographic)

DRAFTED BY: JLH	CHECKED BY: SM	PROJECT NO. 70074-001	FIGURE 1	*SECOR* 1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE: 06-16-95	REV. DATE:	Bohannon Development Northeast corner of Paseo Grande and Paseo Largavista San Lorenzo, California	Site Location Map	
FILE NAME: slorenz.f01				



LEGEND:

- ● PROPOSED GORE-SORBER LOCATION
- ⊕ MW-1 EXISTING WELL LOCATION
- — — — APPROXIMATE PROPERTY BOUNDARY

N

0 60 120

APPROXIMATE SCALE FEET

REFERENCE: THIS FIGURE IS TAKEN FROM NOLTE AND ASSOCIATES, INC. AND IS INTENDED FOR ILLUSTRATION ONLY.

199902.251351 X:\JOBS\BOHANNON\SITEPLAN

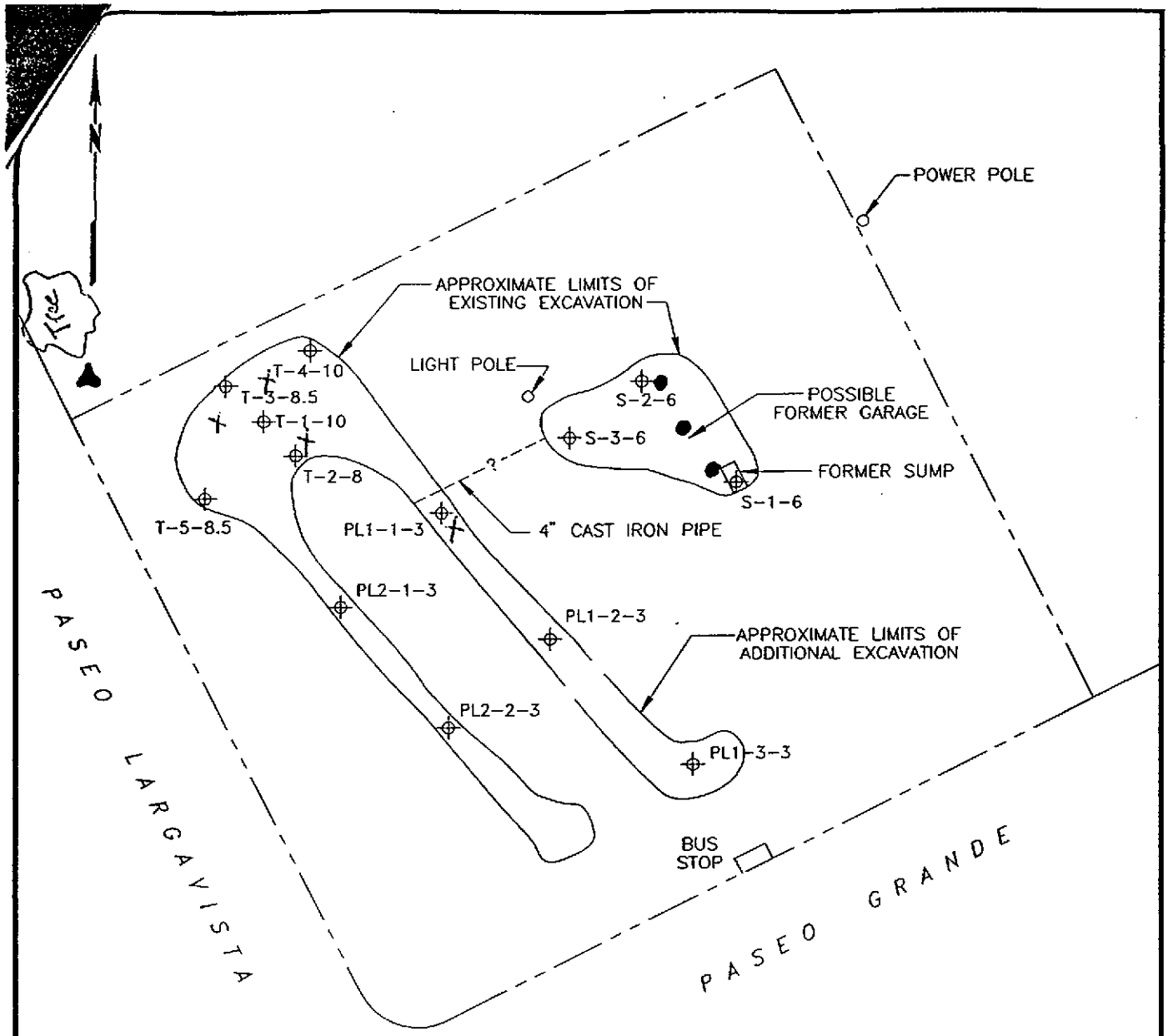
SECOR INTERNATIONAL INCORPORATED	DRAWN CCR APPR NH/GH DATE 25FEB99 JOB NO. 70074-001-03

FIGURE 2
DAVID D. BOHANNON ORGANIZATION
575 PASEO GRANDE
SAN LORENZO, CALIFORNIA

PROPOSED GORE-SORBER LOCATION MAP

APPENDIX A

July 26, 1995, Soil Sample Information



+ Composite points UST Sample

• Composite points Sump Sample

LEGEND:

⊕T-4-10 SOIL SAMPLE LOCATION

PROPERTY LINE

▲ Background sample

0 20 40

SCALE FEET

SECOR INTERNATIONAL INCORPORATED	DRAWN CCR APPR SM DATE 17JUN95 JOB NO. 70074-001-01

FIGURE 2
BOHANNON DEVELOPMENT
SAN LORENZO, CALIFORNIA

SITE PLAN AND SAMPLE LOCATION MAP

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

RECEIVED

SECOR
1390 WILLOW PASS RD, STE. 360
CONCORD, CA 94520

Attn: STEVE McCABE

Date: August 4, 1995

FILE

Laboratory Number : 82130

Project Number/Name : 70074-001-01

This report has been reviewed and

approved for release.

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 3, 1995

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Chronology

Laboratory Number 82130

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
COMP T(A-D)	07/26/95	07/27/95	07/31/95	07/31/95	BG312.05	01
COMP S(A-C)	07/26/95	07/27/95	08/01/95	08/01/95	BH011.05	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
BH011.05-27	72606-25	MS	82135-06	Soil	08/01/95	08/01/95
BH011.05-28	72606-25	MSD	82135-06	Soil	08/01/95	08/01/95
BG312.05-05	Method Blank	MB		Soil	07/31/95	07/31/95
BG312.05-08	95-1629QS	MS	82132-01	Soil	07/31/95	07/31/95
BG312.05-09	95-1629QS	MSD	82132-01	Soil	07/31/95	07/31/95
BH011.05-01	Method Blank	MB		Soil	08/01/95	08/01/95
BH011.05-29	72606-25	MS	82135-06	Soil	08/01/95	08/01/95
BH011.05-30	72606-25	MSD	82135-06	Soil	08/01/95	08/01/95

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Reported on August 3, 1995

Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-01	COMP T(A-D)	Soil	5.0	-
82130-02	COMP S(A-C)	Soil	100.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-01 Conc. mg/kg	RL	82130-02 Conc. mg/kg	RL
Gasoline_Range	52	5	2400	100
Benzene	ND	0.025	ND	0.50
Toluene	ND	0.025	ND	0.50
Ethyl Benzene	0.16	0.025	1.9	0.50
Xylenes	1.1	0.025	15	0.50
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	88		60	

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG312.05-05		BH011.05-01	
	Conc. mg/kg	RL	Conc. mg/kg	RL
Gasoline_Range	ND	1	ND	1
Benzene	ND	0.005	ND	0.005
Toluene	ND	0.005	ND	0.005
Ethyl Benzene	ND	0.005	ND	0.005
Xylenes	ND	0.005	ND	0.005
>> Surrogate Recoveries (%) <<				
Trifluorotoluene (SS)	99		101	

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Gasoline Range Petroleum Hydrocarbons and BTXE
by EPA SW-846 5030/8015M/8020
Gasoline Range quantitated as all compounds from C6-C10

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/kg)				
		BH011.05 27 / 28 - Sample Spiked: 82135 - 06				
Benzene	ND	0.200	0.19/0.20	95/100	65-125	5
Toluene	ND	0.200	0.20/0.20	100/100	65-125	0
Ethyl Benzene	ND	0.200	0.20/0.20	100/100	65-125	0
Xylenes	ND	0.600	0.600/0.60	100/100	65-125	0
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				92/95	50-150	
		For Soil Matrix (mg/kg)				
		BG312.05 08 / 09 - Sample Spiked: 82132 - 01				
Gasoline_Range	ND	3.20	3.5/3.7	109/116	65-135	6
Benzene	ND	0.200	0.19/0.22	95/110	65-135	15
Toluene	ND	0.200	0.19/0.22	95/110	65-135	15
Ethyl Benzene	ND	0.200	0.19/0.22	95/110	65-135	15
Xylenes	ND	0.600	0.57/0.64	95/107	65-135	8
>> Surrogate Recoveries (%) <<						
Trifluorotoluene (SS)				98/100	50-150	
		For Soil Matrix (mg/kg)				
		BH011.05 29 / 30 - Sample Spiked: 82135 - 06				
Gasoline_Range	ND	20	22/21	110/105	65-135	10

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Narrative:

Definitions:

ND	=	Not Detected			
RL	=	Reporting Limit			
NA	=	Not Analysed			
RPD	=	Relative Percent Difference			
ug/L	=	parts per billion (ppb)	ug/kg	=	parts per billion (ppb)
mg/L	=	parts per million (ppm)	mg/kg	=	parts per million (ppm)

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Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 2, 1995

Analysis for CAM 17 Metals
California Administration Code Title 22, Paragraph 66700 & EPA
Methods SW-846 6010 & 7000 Series
Extracted by Method STLC

Chronology

Laboratory Number 82130

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
COMP T(A-D)	07/26/95	07/27/95	08/01/95	08/02/95	BH021.12 BG302.10	01
COMP S(A-C)	07/26/95	07/27/95	08/01/95	08/02/95	BH021.12 BG302.10	02
B-1-1.5	07/26/95	07/27/95	07/30/95	08/02/95	BG302.10	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
BG302.10-02	Method Blank	MB	Soil	07/30/95	08/02/95
BG302.10-03	Laboratory Spike	LS	Soil	07/30/95	08/02/95
BG302.10-04	Laboratory Spike Duplicate	LSD	Soil	07/30/95	08/02/95
BG302.10-05	COMP T(A-D)	MS 82130-01	Soil	07/30/95	08/02/95
BG302.10-06	COMP T(A-D)	MSD 82130-01	Soil	07/30/95	08/02/95
BH021.12-01	Method Blank	MB	Water	08/01/95	08/02/95
BH021.12-02	Laboratory Spike	LS	Water	08/01/95	08/02/95
BH021.12-03	Laboratory Spike Duplicate	LSD	Water	08/01/95	08/02/95

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Project 70074-001-01
Reported on August 2, 1995

Analysis for CAM 17 Metals
California Administration Code Title 22, Paragraph 66700 & EPA
Methods SW-846 6010 & 7000 Series
Extracted by Method STLC

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-01	COMP T(A-D)	Soil	1.0	-
82130-02	COMP S(A-C)	Soil	1.0	-
82130-03	B-1-1.5	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-01 Conc. mg/L	RL	82130-02 Conc. mg/L	RL	82130-03 Conc. mg/L	RL
Mercury (SW-846 7471)	ND	0.006	ND	0.006		
Antimony (SW-846 6010)	ND	0.5	ND	0.5		
Arsenic (SW-846 6010)	ND	0.25	ND	0.25		
Barium (SW-846 6010)	10.5	10	ND	10		
Beryllium (SW-846 6010)	ND	0.025	ND	0.025		
Cadmium (SW-846 6010)	ND	0.025	0.05	0.025		
Chromium (SW-846 6010)	0.09	0.05	0.14	0.05		
Cobalt (SW-846 6010)	1.5	0.05	1.6	0.05		
Copper (SW-846 6010)	0.2	0.1	0.2	0.1		
Lead (SW-846 6010)	0.58	0.25	0.61	0.25	2.0	0.25
Molybdenum (SW-846 6010)	ND	0.1	ND	0.1		
Nickel (SW-846 6010)	1.0	0.1	1.3	0.1		
Selenium (SW-846 6010)	ND	0.5	ND	0.5		
Silver (SW-846 6010)	ND	0.1	ND	0.1		
Thallium (SW-846 6010)	ND	1.0	ND	1.0		
Vanadium (SW-846 6010)	0.29	0.15	0.68	0.15		
Zinc (SW-846 6010)	ND	10	11	10		

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Analysis for CAM 17 Metals
California Administration Code Title 22, Paragraph 66700 & EPA
Methods SW-846 6010 & 7000 Series
Extracted by Method STLC

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG302.10-02		BH021.12-01	
	Conc.	RL	Conc.	RL
	mg/L		ug/L	
Mercury (SW-846 7471)			ND	1
Antimony (SW-846 6010)	ND	.50		
Arsenic (SW-846 6010)	ND	0.25		
Barium (SW-846 6010)	ND	10		
Beryllium (SW-846 6010)	ND	0.025		
Cadmium (SW-846 6010)	ND	0.025		
Chromium (SW-846 6010)	ND	0.05		
Cobalt (SW-846 6010)	ND	0.05		
Copper (SW-846 6010)	ND	0.1		
Lead (SW-846 6010)	ND	0.25		
Molybdenum (SW-846 6010)	ND	0.1		
Nickel (SW-846 6010)	ND	0.1		
Selenium (SW-846 6010)	ND	0.5		
Silver (SW-846 6010)	ND	0.1		
Thallium (SW-846 6010)	ND	1.0		
Vanadium (SW-846 6010)	ND	0.15		
Zinc (SW-846 6010)	ND	10		

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Analysis for CAM 17 Metals
California Administration Code Title 22, Paragraph 66700 & EPA
Methods SW-846 6010 & 7000 Series
Extracted by Method STLC

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/L)						
BG302.10 03 / 04 - Laboratory Control Spikes						
Antimony (SW-846 6010)		5	4.198/4.357	84/87	75-125	4
Arsenic (SW-846 6010)		5	5.288/5.194	106/104	75-125	2
Barium (SW-846 6010)		5	4.572/4.557	91/91	75-125	0
Beryllium (SW-846 6010)		5	4.774/4.709	95/94	75-125	1
Cadmium (SW-846 6010)		5	5.883/5.827	118/117	75-125	1
Chromium (SW-846 6010)		5	4.929/4.769	99/95	75-125	4
Cobalt (SW-846 6010)		5	4.943/4.974	99/99	75-125	0
Copper (SW-846 6010)		5	4.693/4.703	94/94	75-125	0
Lead (SW-846 6010)		5	5.157/5.263	103/105	75-125	2
Molybdenum (SW-846 6010)		5	4.876/4.860	98/97	75-125	1
Nickel (SW-846 6010)		5	5.204/5.134	104/103	75-125	1
Selenium (SW-846 6010)		5	4.671/4.980	93/100	75-125	7
Silver (SW-846 6010)		5	4.582/4.461	92/89	75-125	3
Thallium (SW-846 6010)		5	4.960/4.618	99/92	75-125	7
Vanadium (SW-846 6010)		5	4.445/4.450	89/89	75-125	0
Zinc (SW-846 6010)		5	4.897/5.090	98/102	75-125	4
For Water Matrix (ug/L)						
BH021.12 02 / 03 - Laboratory Control Spikes						
Mercury (SW-846 7471)		5	5.2/5.1	104/102	75-125	2
For Soil Matrix (mg/L)						
BG302.10 05 / 06 - Sample Spiked: 82130 - 01						
Antimony (SW-846 6010)	.4243	5	5.050/5.046	93/92	75-125	1
Arsenic (SW-846 6010)	ND	5	5.380/5.653	108/113	75-125	5
Barium (SW-846 6010)	10.50	5	15.84/15.81	107/106	75-125	1
Beryllium (SW-846 6010)	.0067	5	4.902/4.857	98/97	75-125	1
Cadmium (SW-846 6010)	.0127	5	5.741/5.698	115/114	75-125	1

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Analysis for CAM 17 Metals
California Administration Code Title 22, Paragraph 66700 & EPA
Methods SW-846 6010 & 7000 Series
Extracted by Method STLC

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
Chromium (SW-846 6010)	.0929	5	5.016/5.005	98/98	75-125	0
Cobalt (SW-846 6010)	1.477	5	6.521/6.591	101/102	75-125	1
Copper (SW-846 6010)	.2066	5	4.965/4.873	95/93	75-125	2
Lead (SW-846 6010)	.5823	5	5.251/5.387	93/96	75-125	1
Molybdenum (SW-846 6010)	.0249	5	5.121/5.140	102/102	75-125	0
Nickel (SW-846 6010)	1.023	5	6.176/6.242	103/104	75-125	1
Selenium (SW-846 6010)	ND	5	4.755/5.017	95/100	75-125	5
Silver (SW-846 6010)	.0085	5	4.374/4.434	87/89	75-125	2
Thallium (SW-846 6010)	.1843	5	5.092/4.174	98/80	75-125	20
Vanadium (SW-846 6010)	.2903	5	4.606/4.176	86/78	75-125	10
Zinc (SW-846 6010)	7.034	5	11.81/12.04	96/100	75-125	4

* - Hydrocarbons were found in the range of gasoline, but do not resemble a gasoline fingerprint.

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Attn: STEVE McCABE

Project 70074-001-01
Reported on August 2, 1995

EPA SW-846 Method 6010 and/or 7000 Series Metals

Chronology

Laboratory Number 82130

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
B-1-1.5	07/26/95	07/27/95	08/01/95	08/02/95	BH011.10	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
BH011.10-01	Method Blank	MB	Soil	08/01/95	08/01/95
BH011.10-02	Laboratory Spike	LS	Soil	08/01/95	08/01/95
BH011.10-03	Laboratory Spike Duplicate	LSD	Soil	08/01/95	08/01/95
BH011.10-04	18EX2-01/18EX2-02	MS 82127-01	Soil	08/01/95	08/02/95
BH011.10-05	18EX2-01/18EX2-02	MSD 82127-01	Soil	08/01/95	08/02/95

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EPA SW-846 Method 6010 and/or 7000 Series Metals

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-03	B-1-1.5	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-03 Conc. mg/kg	RL
Lead (SW-846 6010)	18	2

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EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BH011.10-01 Conc. mg/kg	RL
Lead (SW-846 6010)	ND	2

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EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/kg)				
	BH011.10	02 / 03 - Laboratory Control Spikes				
Lead (SW-846 6010)		50	49.77/50.63	100/101	75-125	2
		For Soil Matrix (mg/kg)				
	BH011.10	04 / 05 - Sample Spiked: 82127 - 01				
Lead (SW-846 6010)	3.103	50	49.20/36.1r	92/66	75-125	33

r - MS and/or MSD recoveries were out of control limits. LCS & LCSD recoveries were within acceptable limits.

Definitions:

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RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project 70074-001-01
Reported on August 2, 1995

EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Chronology

Laboratory Number 82130

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
COMP S(A-C)	07/26/95	07/27/95	07/31/95	08/01/95	BG311.24	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
BG311.24-01	Method Blank	MB		Soil	07/31/95	07/31/95
BG311.24-02	Laboratory Spike	LS		Soil	07/31/95	07/31/95
BG311.24-04	18EX2-01/18EX2-02	MS	82127-01	Soil	07/31/95	08/01/95
BG311.24-05	18EX2-01/18EX2-02	MSD	82127-01	Soil	07/31/95	08/01/95

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-02	COMP S(A-C)	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-02 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300
aniline	ND	300
phenol	ND	300
2-chlorophenol	ND	300
1,3-dichlorobenzene	ND	300
1,4-dichlorobenzene	ND	300
1,2-dichlorobenzene	ND	300
benzyl alcohol	ND	300
bis-(2-chloroisopropyl)ether	ND	300
2-methylphenol	ND	300
hexachloroethane	ND	300
n-nitroso-di-n-propylamine	1000	300
4-methylphenol	ND	300
nitrobenzene	ND	300
isophorone	360	300
2-nitrophenol	ND	300
2,4-dimethylphenol	ND	300
bis(2-chloroethoxy)methane	ND	300
2,4-dichlorophenol	ND	300
1,2,4-trichlorobenzene	ND	300
naphthalene	ND	300
benzoic acid	ND	300
4-chloroaniline	ND	300
hexachlorobutadiene	ND	300
4-chloro-3-methylphenol	ND	300
2-methyl-naphthalene	ND	300
hexaclorocyclopentadiene	ND	300
2,4,6-trichlorophenol	ND	300
2,4,5-trichlorophenol	ND	300
2-chloronaphthalene	ND	300
2-nitroaniline	ND	300
acenaphthylene	ND	300

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Project 70074-001-01
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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-02	COMP S(A-C)	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-02 Conc. ug/Kg	RL
dimethylphthlate	ND	300
2,6-dinitrotoluene	ND	300
Acenaphthene	ND	300
3-nitroaniline	ND	300
2,4-dinitrophenol	ND	300
dibenzofuran	ND	300
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	300
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
pentachlorophenol	ND	300
phenanthrene	ND	300
anthracene	ND	300
di-n-butylphthlate	430	300
fluoranthene	ND	300
benzidine	ND	300
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
benzo(b,k)fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-02	COMP S(A-C)	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-02 Conc. ug/Kg	RL
dibenzo[a,h]anthracene	ND	300
Benzo[g,h,i]anthracene	ND	300
>> Surrogate Recoveries (%) <<		
2-fluorophenol	75	
phenol-d5	36	
nitrobenzene-d5	42	
2-fluorobiphenyl	49	
2,4,6-tribromophenol	39	
terphenyl-d14	131	

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG311.24-01 Conc. ug/Kg	RL
bis(2-chloroethyl)ether	ND	300
aniline	ND	300
phenol	ND	300
2-chlorophenol	ND	300
1,3-dichlorobenzene	ND	300
1,4-dichlorobenzene	ND	300
1,2-dichlorobenzene	ND	300
benzyl alcohol	ND	300
bis-(2-chloroisopropyl)ether	ND	300
2-methylphenol	ND	300
hexachloroethane	ND	300
n-nitroso-di-n-propylamine	ND	300
4-methylphenol	ND	300
nitrobenzene	ND	300
isophorone	ND	300
2-nitrophenol	ND	300
2,4-dimethylphenol	ND	300
bis(2-chloroethoxy)methane	ND	300
2,4-dichlorophenol	ND	300
1,2,4-trichlorobenzene	ND	300
naphthalene	ND	300
benzoic acid	ND	300
4-chloroaniline	ND	300
hexachlorobutadiene	ND	300
4-chloro-3-methylphenol	ND	300
2-methyl-naphthalene	ND	300
hexaclorocyclopentadiene	ND	300
2,4,6-trichlorophenol	ND	300
2,4,5-trichlorophenol	ND	300
2-chloronaphthalene	ND	300
2-nitroaniline	ND	300
acenaphthylene	ND	300
dimethylphthlate	ND	300
2,6-dinitrotoluene	ND	300
Acenaphthene	ND	300
3-nitroaniline	ND	300
2,4-dinitrophenol	ND	300
dibenzofuran	ND	300

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG311.24-01 Conc. ug/Kg	RL
2,4-dinitrotoluene	ND	300
4-nitrophenol	ND	300
fluorene	ND	300
4-chlorophenyl-phenylether	ND	300
diethylphthlate	ND	300
4-nitroaniline	ND	300
4,6-dinitro-2-methylphenol	ND	300
n-nitrosodiphenylamine	ND	300
4-bromo-phenyl-phenylether	ND	300
hexachlorobenzene	ND	300
pentachlorophenol	ND	300
phenanthrene	ND	300
anthracene	ND	300
di-n-butylphthlate	ND	300
fluoranthene	ND	300
benzidine	ND	300
pyrene	ND	300
butylbenzylphthlate	ND	300
3.3'-dichlorobenzidine	ND	300
Benzo(a)Anthracene	ND	300
chrysene	ND	300
bis(2-ethylhexyl)phthalate	ND	300
di-n-octylphthalate	ND	300
benzo(b,k)fluoranthene	ND	300
Benzo(a)Pyrene	ND	300
Indeno(1,2,3)Pyrene	ND	300
dibenzo[a,h]anthracene	ND	300
Benzo[g,h,i]anthracene	ND	300

>> Surrogate Recoveries (%) <<	
2-fluorophenol	92
phenol-d5	93
nitrobenzene-d5	119
2-fluorobiphenyl	90
2,4,6-tribromophenol	65
terphenyl-d14	117

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/Kg)						
BG311.24 02 / - Laboratory Control Spikes						
phenol		3300	2650	80	26-90	
2-chlorophenol		3300	2857	87	25-102	
1,4-dichlorobenzene		1650	1554	94	28-104	
n-nitroso-di-n-propylamine		1650	1885	114	41-126	
1,2,4-trichlorobenzene		1650	1516	92	38-107	
4-chloro-3-methylphenol		3300	2587	78	26-103	
Acenaphthene		1650	1813	110	31-137	
2,4-dinitrotoluene		1650	1902	115	28-89	
4-nitrophenol		3300	2528	77	11-114	
pentachlorophenol		3300	2054	62	17-109	
pyrene		1650	1080	65	35-142	
>> Surrogate Recoveries (%) <<						
2-fluorophenol				95	25-121	
phenol-d5				91	24-113	
nitrobenzene-d5				110	23-120	
2-fluorobiphenyl				90	30-115	
2,4,6-tribromophenol				77	19-122	
terphenyl-d14				125	18-137	
For Soil Matrix (ug/Kg)						
BG311.24 04 / 05 - Sample Spiked: 82127 - 01						
phenol	ND	3300	2646/2748	80/83	26-90	4
2-chlorophenol	ND	3300	2878/2953	87/89	25-102	2
1,4-dichlorobenzene	ND	1650	1552/1538	94/93	28-104	1
n-nitroso-di-n-propylamine	ND	1650	1906/1928	116/117	41-126	1
1,2,4-trichlorobenzene	ND	1650	1515/1484	92/90	38-107	2
4-chloro-3-methylphenol	ND	3300	2648/2660	80/81	26-103	1
Acenaphthene	ND	1650	1811/1804	110/109	31-137	1
2,4-dinitrotoluene	ND	1650	1845/1836	112/111	28-89	1
4-nitrophenol	ND	3300	2207/2244	67/68	11-114	1
pentachlorophenol	ND	3300	1902/1913	58/58	17-109	0
pyrene	ND	1650	1405/1415	85/86	35-142	1

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EPA SW-846 Method 8270 Semivolatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
>> Surrogate Recoveries (%) <<						
2-fluorophenol				98/100	25-121	
phenol-d5				93/95	24-113	
nitrobenzene-d5				113/112	23-120	
2-fluorobiphenyl				89/91	30-115	
2,4,6-tribromophenol				73/72	19-122	
terphenyl-d14				75/111.	18-137	

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
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mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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Project 70074-001-01
Reported on August 2, 1995

EPA SW-846 Method 8240 Volatile Organics by GC/MS

Chronology

Laboratory Number 82130

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
COMP S(A-C)	07/26/95	07/27/95	07/29/95	07/29/95	BG281.23	02

QC Samples

QC Batch #	QC Sample ID	Type	Ref.	Matrix	Extract.	Analyzed
BG281.23-01	Method Blank	MB		Soil	07/28/95	07/28/95
BG281.23-02	Laboratory Spike	LS		Soil	07/28/95	07/28/95
BG281.23-04	MW-2-20'	MS	82137-04	Soil	07/28/95	07/28/95
BG281.23-05	MW-2-20'	MSD	82137-04	Soil	07/28/95	07/28/95

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-02	COMP S(A-C)	Soil	4.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-02 Conc. ug/kg	RL
Chloromethane	ND	200
Bromomethane	ND	200
Vinyl Chloride	ND	200
Chloroethane	ND	200
Dichloromethane	ND	200
Acetone	ND	800
Carbon Disulfide	ND	60
Trichlorofluoromethane	ND	60
1,1-Dichloroethene	ND	60
1,1-Dichloroethane	ND	60
t-1,2-Dichloroethene	ND	60
Chloroform	ND	60
1,2-Dichloroethane	ND	20
2-Butanone	ND	400
1,1,1-Trichloroethane	ND	60
Carbon tetrachloride	ND	60
Vinyl Acetate	ND	200
Bromodichloromethane	ND	60
1,2-Dichloropropane	ND	60
c-1,2-Dichloroethene	ND	60
c-1,3-Dichloropropene	ND	60
Trichloroethene	ND	60
Dibromochloromethane	ND	60
1,1,2-Trichloroethane	ND	60
Benzene	ND	20
t-1,3-Dichloropropene	ND	60
Bromoform	ND	60
4-methyl-2-Pentanone	220	200
2-Hexanone	ND	200
Tetrachloroethene	ND	60
1,1,2,2-Tetrachloroethane	ND	60
Toluene	ND	60

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SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 2, 1995

EPA SW-846 Method 8240 Volatile Organics by GC/MS

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-02	COMP S(A-C)	Soil	4.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-02 Conc. ug/kg	RL
Chlorobenzene	ND	60
Ethyl Benzene	ND	60
Styrene	ND	60
Xylenes	ND	60
1,3-Dichlorobenzene	ND	60
1,4-Dichlorobenzene	ND	60
1,2-Dichlorobenzene	ND	60

>> Surrogate Recoveries (%) <<	
1,2-Dichloroethane-d4	96
Toluene-d8	106
Bromofluorobenzene	390i

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG281.23-01 Conc. ug/kg	RL
Chloromethane	ND	50
Bromomethane	ND	50
Vinyl Chloride	ND	50
Chloroethane	ND	50
Dichloromethane	ND	50
Acetone	ND	200
Carbon Disulfide	ND	15
Trichlorofluoromethane	ND	15
1,1-Dichloroethene	ND	15
1,1-Dichloroethane	ND	15
t-1,2-Dichloroethene	ND	15
Chloroform	ND	15
1,2-Dichloroethane	ND	5
2-Butanone	ND	100
1,1,1-Trichloroethane	ND	15
Carbon tetrachloride	ND	15
Vinyl Acetate	ND	50
Bromodichloromethane	ND	15
1,2-Dichloropropane	ND	15
c-1,2-Dichloroethene	ND	15
c-1,3-Dichloropropene	ND	15
Trichloroethene	ND	15
Dibromochloromethane	ND	15
1,1,2-Trichloroethane	ND	15
Benzene	ND	5
t-1,3-Dichloropropene	ND	15
Bromoform	ND	15
4-methyl-2-Pentanone	ND	50
2-Hexanone	ND	50
Tetrachloroethene	ND	15
1,1,2,2-Tetrachloroethane	ND	15
Toluene	ND	15
Chlorobenzene	ND	15
Ethyl Benzene	ND	15
Styrene	ND	15
Xylenes	ND	15
1,3-Dichlorobenzene	ND	15
1,4-Dichlorobenzene	ND	15

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG281.23-01 Conc. ug/kg	RL
1,2-Dichlorobenzene	ND	15
>> Surrogate Recoveries (%) <<		
1,2-Dichloroethane-d4	95	
Toluene-d8	100	
Bromofluorobenzene	86	

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EPA SW-846 Method 8240 Volatile Organics by GC/MS

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (ug/kg) BG281.23 02 / - Laboratory Control Spikes						
1,1-Dichloroethene		200	233	117	59-172	
Trichloroethene		200	167	84	62-137	
Benzene		200	175	88	66-142	
Toluene		200	174	87	59-139	
Chlorobenzene		200	176	88	60-133	
>> Surrogate Recoveries (%) <<						
1,2-Dichloroethane-d4				85	71-126	
Toluene-d8				105	90-115	
Bromofluorobenzene				81	72-103	
For Soil Matrix (ug/kg) BG281.23 04 / 05 - Sample Spiked: 82137 - 04						
1,1-Dichloroethene	ND	200	174/178	87/89	59-172	2
Trichloroethene	ND	200	159/155	80/78	62-137	3
Benzene	ND	200	171/165	86/83	66-142	4
Toluene	ND	200	163/158	82/79	59-139	4
Chlorobenzene	ND	200	167/163	84/82	60-133	2
>> Surrogate Recoveries (%) <<						
1,2-Dichloroethane-d4				93/96	71-126	
Toluene-d8				103/104	90-115	
Bromofluorobenzene				84/87	72-103	

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Narrative:

i - The surrogate recovery was high due to the presence of interfering compounds in the sample.

Definitions:

ND	=	Not Detected			
RL	=	Reporting Limit			
NA	=	Not Analysed			
RPD	=	Relative Percent Difference			
ug/L	=	parts per billion (ppb)	ug/kg	=	parts per billion (ppb)
mg/L	=	parts per million (ppm)	mg/kg	=	parts per million (ppm)

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A member of ESSCON Environmental Support Service Consortium

SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 8, 1995

Analysis for Organic Lead
by DHS LUFT Manual Method

Chronology

Laboratory Number 82130

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
B-1-1.5	07/26/95	07/27/95	07/31/95	08/08/95	BG312.12	03

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
BG312.12-01	Method Blank	MB	Soil	07/31/95	08/08/95
BG312.12-02	Laboratory Spike	LS	Soil	07/31/95	08/08/95
BG312.12-03	Laboratory Spike Duplicate	LSD	Soil	07/31/95	08/08/95
BG312.12-04	72606-25	MS 82135-06	Soil	07/31/95	08/08/95
BG312.12-05	72606-25	MSD 82135-06	Soil	07/31/95	08/08/95

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SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 8, 1995

Analysis for Organic Lead
by DHS LUFT Manual Method

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82130-03	B-1-1.5	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82130-03 Conc. RL mg/Kg
Organic Lead	ND 2

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Seattle, Washington 98108
(206) 763-2993 (fax (206) 763-8429

Analysis for Organic Lead
by DHS LUFT Manual Method

Quality Assurance and Control Data

Laboratory Number: 82130
Method Blank(s)

	BG312.12-01 Conc. mg/Kg	RL
Organic Lead	ND	2

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Analysis for Organic Lead
by DHS LUFT Manual Method

Quality Assurance and Control Data

Laboratory Number: 82130

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
		For Soil Matrix (mg/Kg)				
	BG312.12	02 / 03 - Laboratory Control Spikes				
Organic Lead		2	1.79/1.91	90/96	75-125	6
		For Soil Matrix (mg/Kg)				
	BG312.12	04 / 05 - Sample Spiked: 82135 - 06				
Organic Lead	ND	2	1.63/1.9	82/95	75-125	15

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)

ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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#2023

2

82130 Chain-of Custody Number:

SECOR Chain-of Custody Record

Additional documents are attached, and are a part of this Record.

Field Office: CONCORD

Address: 1390 WILLOW PASS RD.
CONCORD, CA

Job Name: BOHANNON DEVELOPMENT

Location: SAN LORENZO, CA

Project # 70074-001-01 Task #

Project Manager S.M.

Laboratory Superior 229-1526

Turnaround Time Standard

Sampler's Name R. RIVERO

Sampler's Signature

Analysis Request

Sample ID		Date	Time	Matrix	HCID	TPH(g)/BTEX/WTPH-G 8015 (modified)/8020	TPHd/WTPH-D 8015 (modified)	TPH 418.1/WTPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCBs 608/8080	Total Lead & TCLP Pb WET 7421	Priority Pollutant Metals (13)	WET Metals (STLC)	organic Lead	Total Lead	Comments/ Instructions	Number of Containers
B-C-1.5	composite #1	7/26	9:35	SOIL		X										X			COMPOSITE INTO ONE SAMPLE.	1
T-D-3'		"	9:40	"																1
T-A-3'		"	9:20	"																1
T-B-2'		"	9:20	"																1
S-C-4'	composite #2	"	9:15	"		X				X	X	X				X			COMPOSITE INTO ONE SAMPLE.	1
S-A-7'		"	9:55	"																1
S-B-5'		"	9:05	"																1
B-1-1.5		"	10:10	"										X			X			1

Special Instructions/Comments:

Have 2 composite samples as indicated.

Therefore 3 samples to be analyzed.

Relinquished by: SCWN	Received by: D. LOUIE	Sample Receipt
Sign	Sign D. LOUIE	Total no. of containers:
Print R. RIVERO	Print D. LOUIE	Chain of custody seals:
Company SCWN	Company AGRO	Rec'd. in good condition/cold:
Time Date 7/26	Time 313 Date 7/26/95	Conforms to record:
Relinquished by: D. LOUIE	Received by: Steven Arvett	Superior
Sign D. LOUIE	Sign	Client: SECOR
Print D. LOUIE	Print Steven Arvett	Client Contact: STEVE McCABE
Company AGRO	Company Superior Analytical	Client Phone: (510)686-9780
Time 8:00 AM Date 7/27/95	Time 10:27 Date 7/27/95	

SECOR CUSTREC Rev. 1/95

#2023

Date: 7/26/95 Page 1 of 1

Superior Precision Analytical, Inc.
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RECEIVED

SECOR
1390 WILLOW PASS RD, STE. 360
CONCORD, CA 94520

Date: August 17, 1995

Attn: STEVE McCABE

Laboratory Number : 82266

Project Number/Name : 70074-001-01

This report has been reviewed and

approved for release.

Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
A member of ESSCON Environmental Support Service Consortium

SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 16, 1995

EPA SW-846 Method 6010 and/or 7000 Series Metals

Chronology

Laboratory Number 82266

Sample ID	Sampled	Received	Extract.	Analyzed	QC Batch	LAB #
T-A,B,V,D	07/26/95	08/15/95	08/15/95	08/16/95	BH151.10	01

QC Samples

QC Batch #	QC Sample ID	TypeRef.	Matrix	Extract.	Analyzed
BH151.10-01	Method Blank	MB	Soil	08/15/95	08/15/95
BH151.10-02	Laboratory Spike	LS	Soil	08/15/95	08/15/95
BH151.10-03	Laboratory Spike Duplicate	LSD	Soil	08/15/95	08/15/95
BH151.10-04	GK-4-2	MS 82253-03	Soil	08/15/95	08/15/95
BH151.10-05	GK-4-2	MSD 82253-03	Soil	08/15/95	08/15/95

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SECOR
Attn: STEVE McCABE

Project 70074-001-01
Reported on August 16, 1995

EPA SW-846 Method 6010 and/or 7000 Series Metals

LAB ID	Sample ID	Matrix	Dil.Factor	Moisture
82266-01	T-A,B,V,D	Soil	1.0	-

R E S U L T S O F A N A L Y S I S

Compound	82266-01 Conc. mg/kg	RL
Lead (SW-846 6010)	17	2

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EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 82266
Method Blank(s)

	BH151.10-01 Conc. mg/kg	RL
Lead (SW-846 6010)	ND	2

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EPA SW-846 Method 6010 and/or 7000 Series Metals

Quality Assurance and Control Data

Laboratory Number: 82266

Compound	Sample conc.	SPK Level	SPK Result	Recovery %	Limits %	RPD %
For Soil Matrix (mg/kg) BH151.10 02 / 03 - Laboratory Control Spikes						
Lead (SW-846 6010)		50	56.05/58.31	112/117	75-125	4
For Soil Matrix (mg/kg) BH151.10 04 / 05 - Sample Spiked: 82253 - 03						
Lead (SW-846 6010)	679.1	50	697c/414c	36/-530	75-125	-22

c - The Matrix Spike recovery is not meaningful due to the high concentration of the analyte in the sample relative to the spike
r - MS and/or MSD recoveries were out of control limits. LCS & LCSD recoveries were within acceptable limits.

Definitions:
ND = Not Detected
RL = Reporting Limit
NA = Not Analysed
RPD = Relative Percent Difference
ug/L = parts per billion (ppb)
mg/L = parts per million (ppm)
ug/kg = parts per billion (ppb)
mg/kg = parts per million (ppm)

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