PHASE I
ENVIRONMENTAL/TOXICS INVESTIGATION
SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA
2/89
PROJECT 4454

FOR

THE PLYMOUTH GROUP
2047 OLD MIDDLEFIELD WAY
MOUNTAIN VIEW, CALIFORNIA 94043

BY

TERRATECH, INC.
1365 VANDER WAY
SAN JOSE, CALIFORNIA 95112

FEBRUARY 1989

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PHASE I
ENVIRONMENTAL/TOXICS INVESTIGATION
SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

INTRODUCTION

This report summarizes the work performed for and the findings, conclusions and recommendations of Terratech's Phase I environmental/toxics investigation of the Sunnyside Nursery. The property is located off of Mohr Avenue in Hayward (see Figure 1).

The objective of this investigation was to provide information on potential hazardous/toxic conditions of the soil and ground water. Followup studies are currently being performed to further investigate possibly contaminated soil(s) identified in the initial (Phase I) environmental investigation.

NOTE: In addition to our subsurface investigation, Terratech retained the services of Robert Gils and Associates (Certified industrial hygiensts from Emeryville) to provide an assessment of hazardous substances within the existing building materials, particularly the potential for asbestos in the boiler rooms and pipe insulation. The results of this study are presented in the RGA report, dated February 8, 1989.

SUMMARY OF WORK PERFORMED

The following work was performed for this investigation:

1. Contracted a professional locator to determine orientations of underground tanks and clear locations of subsurface exploration.

2. Drilled one exploratory boring adjacent to each of the two underground fuel tanks. DH-1 was sited near the gasoline tank and DH-2 was sited near the diesel tank (see Figure 1). A CME 55 drill rig with eight-inch diameter hollow-stem augers (operated by West Tek Drilling, a licensed drilling company from San Jose) was used. Augers and sampling equipment was cleaned prior to use to avoid the introduction of contamination.

   Soil samples were collected at 5-foot vertical intervals. The recovered liners of soil were sealed with foil and taped end caps, labeled and iced immediately upon their retrieval. The holes were advanced about five feet into first ground water. A temporary monitoring well casing was installed in each boring and a water sample was collected. These samples were similarly iced.

   The temporary casings were removed and the drill holes were backfilled with concrete after completion of sampling activities.

Terratech's environmental geologist supervised the drilling and prepared exploration drill hole logs to describe the types and depths of soils encountered, along with any notes on indications of contamination (see Appendix A). The Unified Soil Classification System with visual-manual procedures (ASTM D 2488-84) was used.

3. Had Sequoia Analytical (a Certified laboratory in Redwood City) analyze two soil samples and the ground water sample from DH-1 for for total petroleum hydrocarbons (TPH) as gasoline with dinstinction/quantification of the gasoline components - benzene, toluene, ethylbenzene, and xylenes (BTEX). Two soil samples and the ground water sample from DH-2 were analyzed for TPH as diesel.

   Due to its centralized location on the property, the ground water from DH-2 was also analyzed for EPA Priority Pollutant volatile organics and the herbicides and pesticides covered under U.S. Drinking Water Standards.

4. Collected 24 near-surface soil samples (HS-1 thru HS-24) from a depth of 4 to 10 inches below ground surface in the locations shown in Figure 1.

   Two samples were collected from the pesticide storage building (HS-1 and HS-2); twelve samples from the greenhouses (HS-3 thru HS-14); three samples from the earthen drainage ditches (HS-15 thru HS-17); three samples from the boiler fuel tank and maintenance shop area (HS-18 thru HS-20); and four samples from the debris dumping yard off of Laguna Drive (HS-21 thru HS-24).

   The soil samples were collected by driving pre-cleaned two-inch diameter brass liners into the bottoms of hand-dug access holes. A concrete coring service was used to provide sampling access in areas of floor slabs. Immediately upon retrieval, the liners were sealed with foil and taped end caps, labeled and iced. Sampling equipment was cleaned prior to use to avoid introduction (or spread) of contamination.

5. Had Sequoia Analytical analyze selected soil samples and soil composites from the HS-1 through HS-24 group for chlorinated pesticides (EPA 8080), volatile organics (EPA 8240), oil and grease, and ICP metals scan. The chain-of-custody records in Appendix B present the specifics of the testing program.

6. Evaluated the information collected and prepared this report.

FINDINGS

Subsurface Conditions

As part of our concurrent geotechnical investigation, five additonal exploratory borings were advanced to provide a wider view of subsurface conditions. All borings ranged in depth from 21 to 32.5 feet. The surface soils, to a depth of about four feet, consist of dark brown to black SANDY CLAY. Below the dark surface clay, layers of interbedded brown SANDY CLAY, CLAY and CLAYEY SAND were encountered to the bottom of all borings except DH-5. Boring DH-5 encountered WELL GRADED SAND with clay and gravel to its 31 foot maximum depth. The drill hole logs are presented in Appendix A.

Ground water was first encountered in the seven borings at depths ranging from about 11 to 16 feet below the ground surface. The piezometric level of the water table appears to be about 11 to 12.5 feet below the ground surface the shallow ground water appeaars to be locally confined.

Soil Contamination

Surface soils around the maintenance shop area were noticeably stained from spillages of petroleum hydrocarbon based products. Upon examination, surface soils in most of the greenhouses and earthen drainage ditches had a noticable pesticide odor. No odors or discolorations were noticed during the drilling, sampling and handling of soils from the seven borings.

Tables 1, 2 and 3 summarize the results of the soil sample analyses.

Agricultural Chemical Areas

Table 1 covers the sampling and analysis that was performed to check near-surface soil contamination by agricultural chemicals. Chemicals that are being used are stored in the central room where HS-1 and HS-2 were collected. Chemical spraying of the plants is done by hand using a wand fed by a portable (trailer-mounted) tank and compressor. Excess water from sprinkling operations drains into the on-site drainage system (earthen and lined ditches, piping and subgrade concrete-lined settling tank) with ultimate discharge to the storm sewer. Old plants, plant containers and other assorted debris from the nursery are dumped the yard area of the Laguna Avenue parcel where HS-21 through HS-24 were collected.

The laboratory analyses revealed detectable levels of pesticides covered under the EPA's Priority Pollutant list in all samples (individuals and composites). The predominate group of pesticides found were the Endosulfan compounds. Fortunately, the Endosulfan pesticides have been found to be significantly less toxic than the other detected - Dieldrin, DDT and Endrin. California does not include Endosulfan in its Title 22 toxicity (TTLC and STLC) regulations.

The "Eastern Greenhouses" composite was the only sample found to exceed California toxicity threshold limimts - 1.3 parts per million (ppm) of Endrin found versus a threshold limit of 0.2 ppm. A trace amount of Diedrin was found beneath the pesticide storage room and a somewhat elevated level of DDT (including one of its degradation products - DDE) was found in the "Central Greenhouses" composite.

No abnormally high concentrations of metals were found in the three composite samples tested. Metals are often used in compounds for agricultural chemicals. No detectable amounts of EPA Priority Pollutant volatile organics were found in the two composite samples tested. These types of substances are often additives in pesticide mixture formulations.

NOTE: Sequoia is presently analyzing the individual samples of the "Eastern Greenhouses" composite to determine which sample(s) contains the Endrin and at what concentration(s).

Shop and Boiler Room Area

Table 2 covers the sampling and analysis that was performed to check near-surface soil contamination in the maintenance shop and boiler room areas in the northeastern portion of the main property. Measured concentrations of total oil and grease were found to range from 40 to 380 ppm. Remediation can be required for concentrations over 100 ppm. No volatile organics (solvent compounds) were detected.

Underground Fuel Tank Areas

Table 3 covers the sampling and analysis that was performed to check for soil contamination adjacent to the two underground fuel tanks. Both tanks are in service. The gasoline tank is near the entrance of the nursery, off of Mohr. The diesel tank is in the central area of the main property. The DH-1 soil samples showed no contamination. A slight amount of diesel was detected in the DH-2 sample from 9.5-10 feet. The amount of diesel detected, 3.3 ppm, is well below the typical worst case "action level" of 100 ppm used by regulators.

Ground Water Contamination

No unusual odors were noticed from the ground water during purging and sampling activities.

Table 3 summarizes the laboratory results of the ground water analyses. No total petroleum hydrocarbons as gasoline and benzene, toluene, ethylbenzene and xylenes were detected in the DH-1 sample. Trace amounts of TPH as diesel - 8.8 parts per billion (ppb), methylene chloride - 51 ppb, and 1,1,1-trichloroethane (TCA) - 2.1 ppb were detected in DH-2 sample. Methylene chloride is a common laboratory contaminant. TCA is a common degreaser and solvent.

CONCLUSIONS

1. Overall, there does not appear to be a significant presence of hazardous/toxic contamination in the soils and shallow ground water of this site.

2. Other than those soils which may contain toxic levels of Endrin, we do not foresee a need for expensive remediation work with regard to pesticide contaminated soils. NOTE: Once we have the individual Endrin test results, we will prepare a supplemental comment letter on this issue.

3. There may be a need to remediate some of the petroleum hydrocarbon contaminated soils in the maintenance shop and boiler room area. It is our opinion that this can be done as part of the demolition work at a minimal extra cost.

4. We found no evidence of leakage from the gasoline tank. There does appears to have be a trace amount of leakage from the diesel tank or its associated piping (or surface spillage), but nothing significant. The tank closures should be a straightforward job.

RECOMMENDATIONS

As part of the pre-development activities, we recommend that the following items be performed:

1. All left-over agricultural chemicals (if any) should be properly manifested and disposed of.

2. The two underground fuel tanks should be excavated and disposed of in accordance with local regulations (Hayward Fire Department or Alameda County Department of Environmental Health). As part of the tank removal process, soil samples will need to be collected from directly beneath the locations of the tanks and analyzed for contamination.

3. All demolition, site preparation and grading work should be observed by TERRATECH to verfify that the conditions encountered do not differ significantly from those on which this report is based. These observations can be incorporated with the geotechnical field control work.

LIMITATIONS

This report and the work associated with it have been provided in accordance with the general principles and practices currently employed in the environmental consulting profession. This is in lieu of all other warranties, express or implied.

Subsurface exploration of any site is necessarily confined to selected locations and conditions may vary somewhat between and around these locations. Should varied conditions come to light during project development, additional exploration, sampling and testing may be required.

Any person concerned with this project who observes conditions or features of the site or its surrounding areas which are different from those described in this report, should report them immediately to this office for evaluation.

Report prepared by

TERRATECH, INC.

E.R. Lautenbach

Eric R. Lautenbach
CE 42437

1365 VANDER WAY SAN JOSE, CALIFORNIA 95112 (408) 297-6969 or FAX (408) 297-7716

February 22, 1989
Project 4454

Ms. Kathy Miura
The Plymouth Group
2047 Old Middlefield Way
Mountain View, California 94043

Subject: Supplemental Test Results
Phase I Environmental/Toxics Investigation
Sunnyside Nursery
Hayward, California

Dear Ms. Miura:

Attached are supplemental test results from our Phase I environmental/ toxics investigation of the Sunnyside Nursery in Hayward, California.

The supplemental analyses were requested of the laboratory when an elevated level of the pesticide Endrin was found in the "Eastern Greenhouses" soil composite (see Terratech report, Project 4454, Phase I Environmental/Toxics Investigation, Sunnyside Nursery....., dated February 1989). Specifically, we had Sequoia analyze the four individual soil samples which made up this composite for chlorinated pesticides (EPA Method 8080).

The retests found no detectable amounts of Endrin in any of the four samples. The detection limit for Endrin was 0.1 ppm. The only pesticide in the 8080 group to be detected was Endosulfan sulfate. The levels of Endosulfan sulfate ranged from < 0.5 ppm (HS-14) to 2.0 ppm (HS-12).

Based on the agreement of these supplemental findings with eight of the nine initial analyses, it is our conclusion that there does not appear to be a pesticide contamination problem in the near-surface soils of the Sunnyside Nursery.

Sincerely,

TERRATECH, INC.

E. R Lautenbach

Eric R. Lautenbach
CE 42437

Attachments

7891 WESTWOOD DR., SUITE101 GILROY, CA 95020 (408) 842-0236 FAX (408) 842-7314
225-K CANNERY ROW MONTEREY, CA 93940 (408) 372-3716 FAX (408) 372-7481

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454, #5	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, HS-11	Received: Relogged 2/9
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted: Feb 14, 1989
Attention: Geoff Blair	Lab Number:	902-0819	Analyzed: Feb 15, 1989
			Reported: Feb 16, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	N.D.
Endosulfan II	50.0	N.D.
Endosulfan sulfate	500.0	N.D.
Endrin	100.0	1,600
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Arthur G. Burton
Laboratory Director

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Terratech, Inc.	Client Project ID:	#4454, #5	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, HS-12	Received: Relogged 2/9
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted: Feb 14, 1989
Attention: Geoff Blair	Lab Number:	902-0820	Analyzed: Feb 15, 1989
			Reported: Feb 16, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	N.D.
Endosulfan II	50.0	N.D.
Endosulfan sulfate	500.0	2,000
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Terratech, Inc.	Client Project ID:	#4454, #5	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, HS-13	Received:	Relogged 2/9
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Feb 14, 1989
Attention: Geoff Blair	Lab Number:	902-0821	Analyzed:	Feb 15, 1989
			Reported:	Feb 16, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	N.D.
Endosulfan II	50.0	N.D.
Endosulfan sulfate	500.0	1,800
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Terratech, Inc.	Client Project ID:	#4454, #5	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, HS-14	Received:	Relogged 2/9
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Feb 14, 1989
Attention: Geoff Blair	Lab Number:	902-0822	Analyzed:	Feb 15, 1989
			Reported:	Feb 16, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	N.D.
Endosulfan II	50.0	N.D.
Endosulfan sulfate	500.0	N.D.
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Arthur G. Burton
Laboratory Director

TABLE 1

SUMMARY OF INDIVIDUAL SOIL SAMPLE ANALYSIS RESULTS
FOR AGRICULTURAL CHEMICAL AREAS

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

(concentrations presented in parts per million)

	PESTICIDE SHED		GREENHOUSES								EARTHEN DITCHES		
	(HS-1)	(HS-2)	(HS-11)	(HS-11A)	(HS-12)	(HS-12A)	(HS-13)	(HS-13A)	(HS-14)	(HS-14A)	(HS-15)	(HS-16)	(HS-17)
CONTAMINANT	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth	4"-10" Depth
CHLORINATED PESTICIDES													
Dieldrin	0.041	< 0.005	< 0.05	< 0.25	< 0.05	< 0.25	< 0.05	< 0.5	< 0.05	< 0.25	< 0.05	< 0.005	< 0.05
p,p'-DDD	< 0.01	< 0.01	< 0.1	< 0.5	< 0.1	< 0.5	< 0.1	< 1.0	< 0.1	< 0.5	< 0.1	< 0.01	< 0.1
p,p'-DDE	< 0.005	< 0.005	< 0.05	< 0.25	< 0.05	< 0.25	< 0.05	< 0.5	< 0.05	< 0.25	< 0.05	0.057	< 0.05
p,p'-DDT	< 0.01	< 0.01	< 0.1	< 0.5	< 0.1	< 0.5	< 0.1	< 1.0	< 0.1	< 0.5	< 0.1	0.084	< 0.1
Endrin	< 0.01	< 0.01	< 0.1	< 0.5	< 0.1	< 0.5	< 0.1	< 1.0	< 0.1	< 0.5	< 0.1	0.15	< 0.1
Endosulfan I	< 0.01	0.30	< 0.1	5.6	< 0.1	6.7	< 0.1	120	< 0.1	3.8	8.1	0.44	0.94
Endosulfan II	< 0.005	0.77	< 0.05	18	< 0.05	13	< 0.05	44	< 0.05	3.5	2.0	< 0.005	5.4
Endosulfan sulfate	< 0.05	< 0.05	1.5	13	2.0	6.7	1.8	3.3	< 0.5	0.53	1.3	0.043	1.0
others (EPA 8080)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

NOTES: N.D. - None Detected

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Terratech, Inc.	Client Project ID:	#4454/1	Sampled:	Apr 11, 1989
1365 Vander Way	Sample Descript:	Soil, HS-11A	Received:	Apr 13, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Apr 17, 1989
Attention: Geoff Blair	Lab Number:	904-1201	Analyzed:	Apr 20, 1989
			Reported:	Apr 23, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin	250.0	N.D.
alpha-BHC	250.0	N.D.
beta-BHC	250.0	N.D.
delta-BHC	500.0	N.D.
gamma-BHC (Lindane)	250.0	N.D.
Chlordane	2,500.0	N.D.
4,4'-DDD	500.0	N.D.
4,4'-DDE	250.0	N.D.
4,4'-DDT	500.0	N.D.
Dieldrin	250.0	N.D.
Endosulfan I	500.0	5,600
Endosulfan II	250.0	18,000
Endosulfan sulfate	2,500.0	13,000
Endrin	500.0	N.D.
Endrin aldehyde	750.0	N.D.
Heptachlor	250.0	N.D.
Heptachlor expoxide	250.0	N.D.
Methoxychlor	7,500.0	N.D.
Toxaphene	8,750.0	N.D.
PCB-1016	2,500.0	N.D.
PCB-1221	2,500.0	N.D.
PCB-1232	2,500.0	N.D.
PCB-1242	2,500.0	N.D.
PCB-1248	2,500.0	N.D.
PCB-1254	2,500.0	N.D.
PCB-1260	2,500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

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Terratech, Inc.	Client Project ID:	#4454/1	Sampled:	Apr 11, 1989
1365 Vander Way	Sample Descript:	Soil, HS-12A	Received:	Apr 13, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Apr 19, 1989
Attention: Geoff Blair	Lab Number:	904-1202	Analyzed:	Apr 20, 1989
			Reported:	Apr 23, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin	250.0	N.D.
alpha-BHC	250.0	N.D.
beta-BHC	250.0	N.D.
delta-BHC	500.0	N.D.
gamma-BHC (Lindane)	250.0	N.D.
Chlordane	2,500.0	N.D.
4,4'-DDD	500.0	N.D.
4,4'-DDE	250.0	N.D.
4,4'-DDT	500.0	N.D.
Dieldrin	250.0	N.D.
Endosulfan I	500.0	6,700
Endosulfan II	250.0	13,000
Endosulfan sulfate	2,500.0	6,700
Endrin	500.0	N.D.
Endrin aldehyde	750.0	N.D.
Heptachlor	250.0	N.D.
Heptachlor expoxide	250.0	N.D.
Methoxychlor	7,500.0	N.D.
Toxaphene	8,750.0	N.D.
PCB-1016	2,500.0	N.D.
PCB-1221	2,500.0	N.D.
PCB-1232	2,500.0	N.D.
PCB-1242	2,500.0	N.D.
PCB-1248	2,500.0	N.D.
PCB-1254	2,500.0	N.D.
PCB-1260	2,500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454/1	Sampled:	Apr 11, 1989
1365 Vander Way	Sample Descript:	Soil, HS-13A	Received:	Apr 13, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Apr 19, 1989
Attention: Geoff Blair	Lab Number:	904-1203	Analyzed:	Apr 20, 1989
			Reported:	Apr 23, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin	500.0	N.D.
alpha-BHC	500.0	N.D.
beta-BHC	500.0	N.D.
delta-BHC	1,000.0	N.D.
gamma-BHC (Lindane)	500.0	N.D.
Chlordane	5,000.0	N.D.
4,4'-DDD	1,000.0	N.D.
4,4'-DDE	500.0	N.D.
4,4'-DDT	1,000.0	N.D.
Dieldrin	500.0	N.D.
Endosulfan I	1,000.0	120,000
Endosulfan II	500.0	44,000
Endosulfan sulfate	5,000.0	3,300
Endrin	1,000.0	N.D.
Endrin aldehyde	1,500.0	N.D.
Heptachlor	500.0	N.D.
Heptachlor expoxide	500.0	N.D.
Methoxychlor	15,000.0	N.D.
Toxaphene	17,500.0	N.D.
PCB-1016	5,000.0	N.D.
PCB-1221	5,000.0	N.D.
PCB-1232	5,000.0	N.D.
PCB-1242	5,000.0	N.D.
PCB-1248	5,000.0	N.D.
PCB-1254	5,000.0	N.D.
PCB-1260	5,000.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Arthur G. Burton
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(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454/1	Sampled:	Apr 11, 1989
1365 Vander Way	Sample Descript:	Soil, HS-14A	Received:	Apr 13, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Apr 19, 1989
Attention: Geoff Blair	Lab Number:	904-1204	Analyzed:	Apr 20, 1989
			Reported:	Apr 23, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Aldrin	250.0	N.D.
alpha-BHC	250.0	N.D.
beta-BHC	250.0	N.D.
delta-BHC	500.0	N.D.
gamma-BHC (Lindane)	250.0	N.D.
Chlordane	2,500.0	N.D.
4,4'-DDD	500.0	N.D.
4,4'-DDE	250.0	N.D.
4,4'-DDT	500.0	N.D.
Dieldrin	250.0	N.D.
Endosulfan I	500.0	3,800
Endosulfan II	250.0	3,500
Endosulfan sulfate	2,500.0	530
Endrin	500.0	N.D.
Endrin aldehyde	750.0	N.D.
Heptachlor	250.0	N.D.
Heptachlor expoxide	250.0	N.D.
Methoxychlor	7,500.0	N.D.
Toxaphene	8,750.0	N.D.
PCB-1016	2,500.0	N.D.
PCB-1221	2,500.0	N.D.
PCB-1232	2,500.0	N.D.
PCB-1242	2,500.0	N.D.
PCB-1248	2,500.0	N.D.
PCB-1254	2,500.0	N.D.
PCB-1260	2,500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

TABLE 1

SUMMARY OF SOIL SAMPLE ANALYSIS RESULTS
FOR AGRICULTURAL CHEMICAL AREAS

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

(samples collected on 1/25/89)
(concentrations presented in parts per million)

CONTAMINANT	PESTICIDE STORAGE SOUTH (HS-1) 4"-10" Depth	PESTICIDE STORAGE NORTH (HS-2) 4"-10" Depth	NORTHERN GREENHOUSES (HS-3 + 4 + 5 + 6) 4"-10" Depth	CENTRAL GREENHOUSES (HS-7 + 8 + 9 + 10) 4"-10" Depth	EASTERN GREENHOUSES (HS-11 + 12 + 13 + 14) 4"-10" Depth	EARTHEN DITCHES SOUTH (HS-15) 4"-10" Depth	EARTHEN DITCHES CENTRAL (HS-16) 4"-10" Depth	EARTHEN DITCHES NORTH (HS-17) 4"-10" Depth	LAGUNA AVE. YARD (HS-21 + 22 + 23 + 24) 4"-10" Depth	DETECTION LIMITS	STATE Toxic Level (1)
CHLORINATED PESTICIDES											
Dieldrin	0.041	< 0.005	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.05	< 0.05	(varies)	8.0
p,p'-DDE	< 0.005	< 0.005	0.050	0.21	< 0.05	< 0.05	0.057	< 0.05	0.13	(varies)	1.0 (2)
p,p'-DDT	< 0.01	< 0.01	< 0.1	0.64	< 0.1	< 0.1	0.084	< 0.1	< 0.1	(varies)	1.0 (2)
Endrin	< 0.01	< 0.01	< 0.1	< 0.1	1.3	< 0.1	0.15	< 0.1	< 0.1	(varies)	0.2
Endosulfan I	< 0.01	0.30	1.2	0.78	3.0	8.1	0.44	0.94	4.0	(varies)	--
Endosulfan II	< 0.005	0.77	3.3	3.5	12.	2.0	< 0.005	5.4	11.	(varies)	--
Endosulfan sulfate	< 0.05	< 0.05	0.52	0.52	1.3	1.3	0.043	1.0	1.1	(varies)	--
others (EPA 8080)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	(varies)	(various)
METALS - ICP Scan (3)	(4)	(4)	--	--	--	(4)	(4)	(4)	(4)	(various)	(various)
VOLATILE ORGANICS (5) (EPA 8240)	N.D.	N.D.	--	--	--	--	--	--	N.D.	0.1-0.5	--

NOTES: N.D. - None Detected
(1) - TTLC: Total Threshold Limit Concentration - California Administrative Code, Title 22, Section 66699.
(2) - Sum of DDT+DDE+DDD
(3) - Analysis performed on three composite samples - HS-1 + HS-2, HS-15 + HS-16 + HS-17, and HS-21 + HS-22 + HS-23 + HS-24.
(4) - Concentrations of all metals found to be within common range for naturally occuring in soil
See laboratory reports for specific concentrations.

TABLE 2

SUMMARY OF SOIL SAMPLE ANALYSIS RESULTS
FOR BOILER ROOM AND SHOP AREAS

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

(samples collected on 1/25/89)
(concentrations presented in parts per million)

CONTAMINANT	NORTH (HS-18) 4"-10" Depth	EAST (HS-19) 4"-10" Depth	SOUTH (HS-20) 4"-10" Depth	DETECTION LIMITS
TOTAL OIL AND GREASE	60	380	40	30
VOLATILE ORGANICS * (EPA 8240)	N.D.	N.D.	N.D.	0.1-0.5

NOTES: N.D. - None Detected
* - Composite of HS-18 + HS-19 + HS-20

TABLE 3

SUMMARY OF SOIL SAMPLE ANALYSIS RESULTS
FOR UNDERGROUND FUEL TANK AREAS

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

(samples collected on 1/25/89)
(concentrations presented in parts per million)

CONTAMINANT	GASOLINE TANK (DH-1) 5.5'-6' Depth	GASOLINE TANK (DH-1) 9.5'-10' Depth	DIESEL TANK (DH-2) 5.5'-6' Depth	DIESEL TANK (DH-2) 9.5'-10' Depth	DETECTION LIMITS
TOTAL PETROLEUM HYDROCARBONS (as gasoline)	N.D.	N.D.	—	—	1.0
BENZENE	N.D.	N.D.	—	—	0.05
TOLUENE	N.D.	N.D.	—	—	0.1
ETHYLBENZENE	N.D.	N.D.	—	—	0.1
XYLENES	N.D.	N.D.	—	—	0.1
TOTAL PETROLEUM HYDROCARBONS (as diesel)	—	—	N.D.	3.3	1.0

NOTE: N.D. - None Detected

TABLE 4

SUMMARY OF GROUND WATER ANALYSIS RESULTS

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

(samples collected on 1/25/89)
(concentrations presented in parts per billion)

CONTAMINANT	SAMPLE LOCATION DH-1	SAMPLE LOCATION DH-2	DETECTION LIMITS
TOTAL PETROLEUM HYDROCARBONS AS GASOLINE OR DIESEL	N.D.	8.8	50
BENZENE	N.D.	N.D.	0.5
TOLUENE	N.D.	N.D.	0.5
ETHYLBENZENE	N.D.	N.D.	0.5
XYLENES	N.D.	N.D.	0.5
VOLATILE ORGANICS			
Methylene Chloride	--	51.0	2
1,1,1-TCA	--	2.1	2
others (EPA 624)	--	N.D.	(various)
DRINKING WATER ORGANICS	--	N.D.	(various)

NOTE: N.D. - None Detected

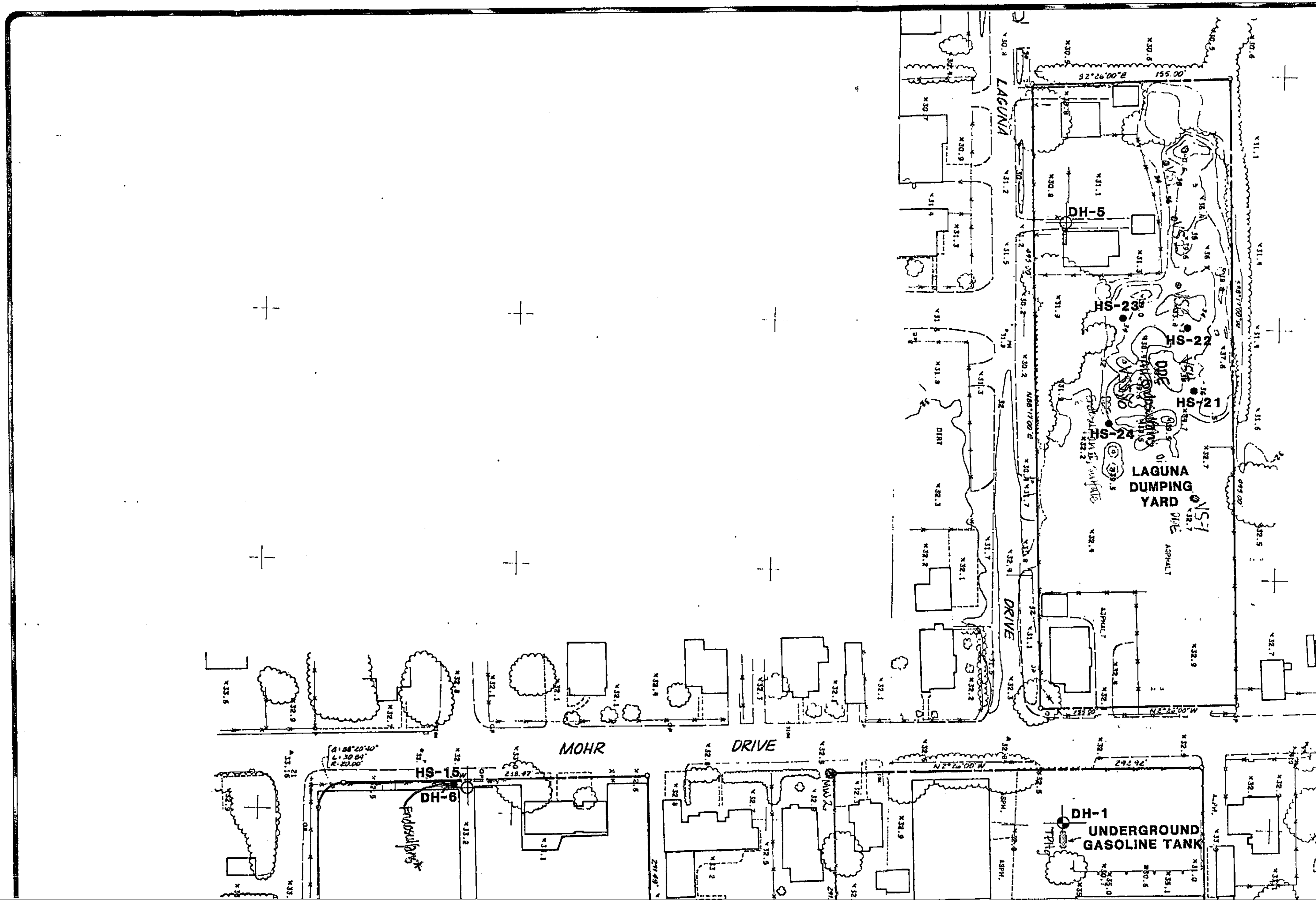
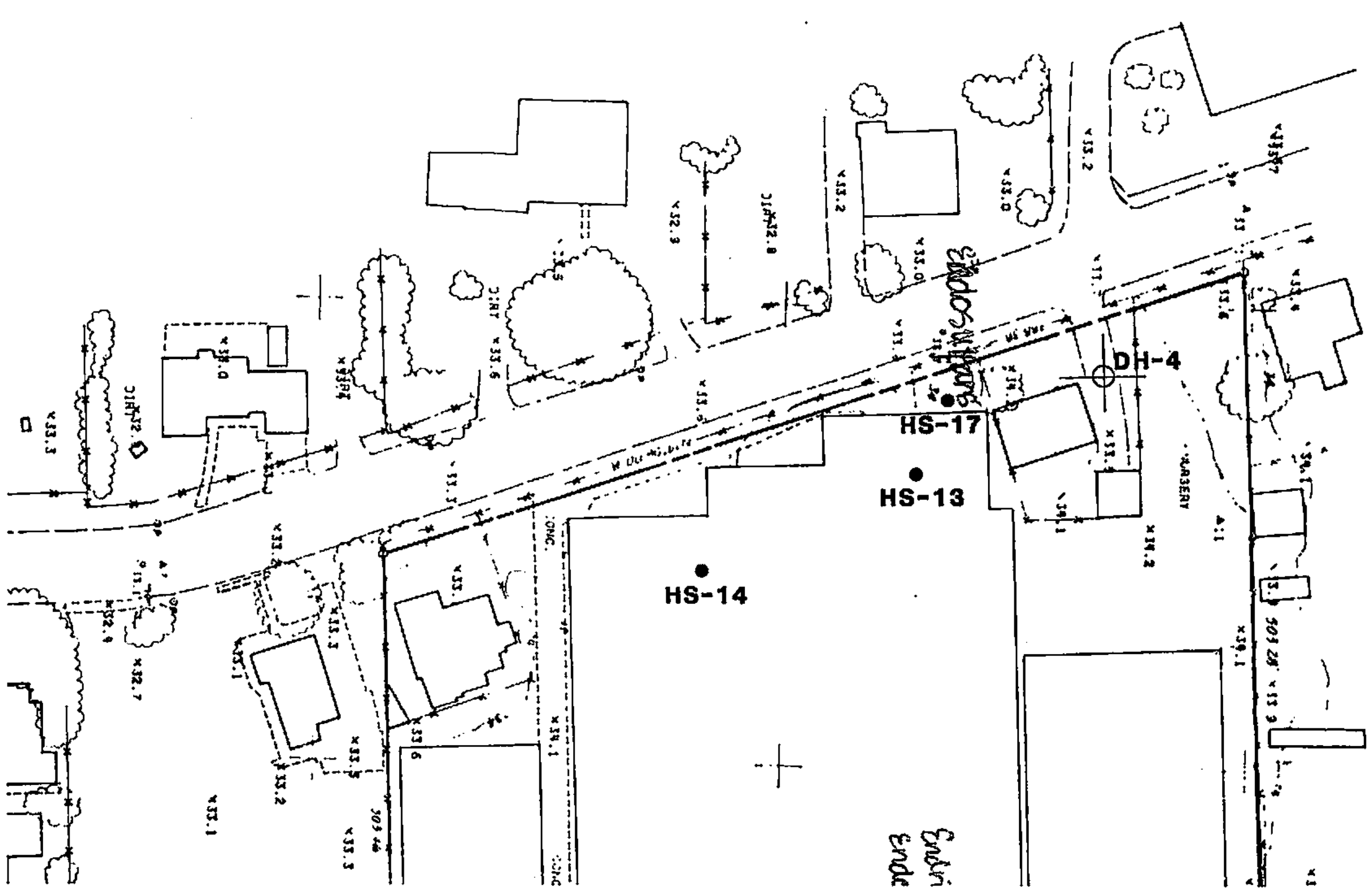

LAGUNA
DRIVE
MOHR
DRIVE
DH-5
HS-23
HS-22
HS-21
HS-24
LAGUNA
DUMPING
YARD
DIRT
ASPHALT
HS-15
DH-6
MW-2
DH-1
UNDERGROUND
GASOLINE TANK

FIGURE 1



1-25-90
SW1

1-25-89 Sampling - Surface Soils
HS-1
HS-2
HS-3,4,5,6
HS-7,8,9,10
HS-11,12,13,14
HS-15
HS-16
HS-17
HS-21,22,23,24

1-25-90 GW Analysis
DH-2

1-25-90 UST Stockpiles Sampling
S-6a → d
TPHg (35 ppm)
TPHd (200ppm)
S-5a-d

2-21-90 - GW Analysis from MW-1
Ø

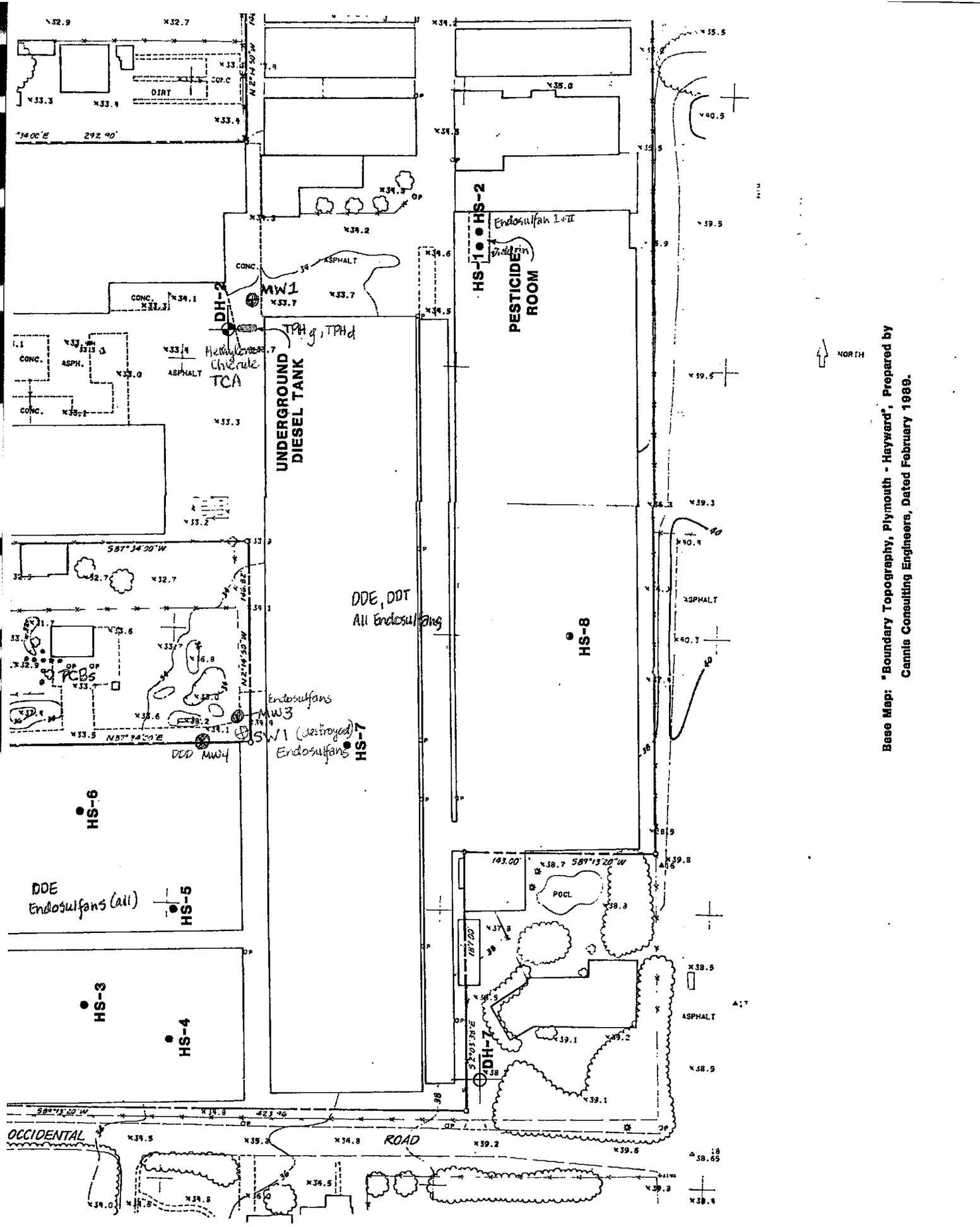
5-90 - MW1 Ø
4-16-90 - Chlorinated Pesticides
5-3-90 Soil Sampling Commons II PCBs
5-18-90 - MW3
5-90 - MW4

LEGEND

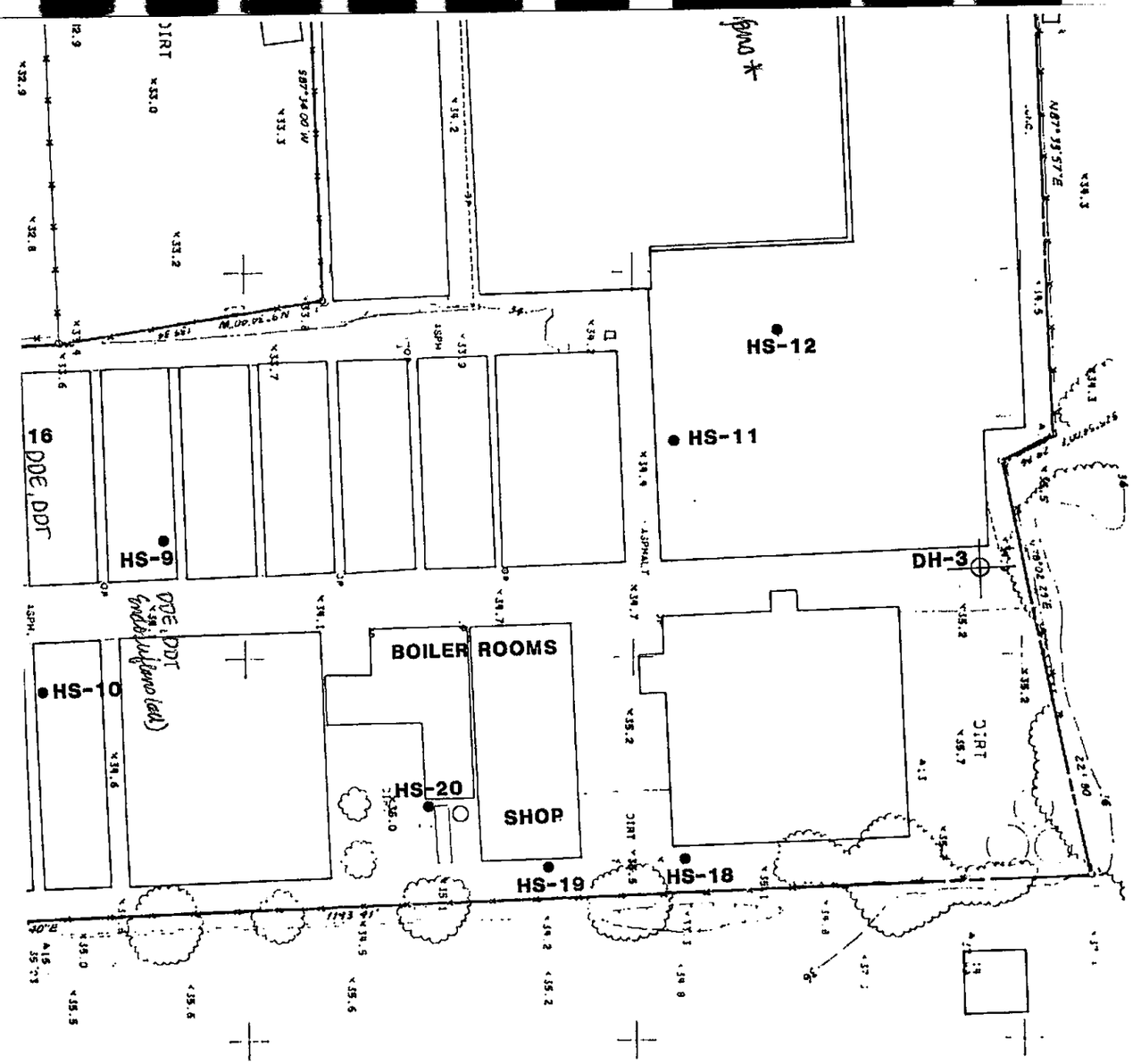
DH-2 EXPLORATION DRILL HOLE (ENVIRONMENTAL)

DH-7 EXPLORATION DRILL HOLE (GEOTECHNICAL)

• HS-24 SHALLOW SOIL SAMPLE



Base Map: "Boundary Topography, Plymouth - Hayward", Prepared by Cannis Consulting Engineers, Dated February 1989.



DATE 2-89	DWN BY BMK	CHKD ERL	APPR

REVISIONS

NO.	DATE	DWN	CHKD	APPR	

TERRATECH

SITE PLAN

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA

FIGURE 1

PROJECT 4454

APPENDIX A

EXPLORATION DRILL HOLE LOGS

EXPLORATION DRILL HOLE LOG

HOLE No. 1

PROJECT: SUNNYSIDE COMMONS | DATE: 1/25/89 | LOGGED BY: BMK

DRILL RIG: CME 55; Hollow Stem | HOLE DIA.: 8" | SAMPLER: X=Modified Calif. (2" I.D.)

GROUNDWATER DEPTH INITIAL: 12.0' | FINAL: 11.5' | HOLE ELEV.: ___

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
Existing Asphalt Pavement													
SANDY CLAY; black, damp, very stiff; moderate plasticity; alluvium.	CI	1											
		2											
		3											
		4											
SANDY CLAY; brown, damp, very stiff; sand fraction fine grained; alluvium.	CI	5	X	20									
		6	X										
		7	X										
SANDY LEAN CLAY; grey, damp, stiff; sand fraction fine grained; alluvium.	CL	8											
		9											
		10	X										
CLAYEY SAND; grey, moist, firm; alluvium.	SC	11	X	8			▼		21		103		
		12					▽						
		13											
		14											
CLAY with sand; brown, moist, stiff; alluvium.	CI	15	X	10					31		94		
		16	X										
		17	X										
		18											
		19											
		20	X										

EXPLORATION DRILL HOLE LOG

HOLE No. 1

PROJECT **SUNNYSIDE COMMONS** DATE **1/25/89** LOGGED BY **BMK**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA **8"** SAMPLER **X=Modified Calif. (2" I.D.)**

GROUNDWATER DEPTH INITIAL **12.0'** FINAL **11.5'** HOLE ELEV. ___

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAY with sand; brown, moist, firm; alluvium.	CI	21	X X	8					31		92	10	950
BOTTOM OF BORING @ 21 FEET		22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40											

EXPLORATION DRILL HOLE LOG

HOLE No. 2

PROJECT **SUNNYSIDE COMMONS** DATE **1/25/89** LOGGED BY **BMK**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA. **8"** SAMPLER **X=Modified Calif. (2" I.D.)**

GROUNDWATER DEPTH INITIAL **16'** FINAL **12'** HOLE ELEV. **---**

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
Existing Asphalt Pavement													
FAT CLAY; black, damp, stiff; alluvium.	CH	1 2 3 4											
SANDY CLAY; brown, moist, very stiff; sand fraction fine grained; alluvium.	CI	5 6 7 8 9	X X X	17					16		115		
Becoming firm, minor gravel at 11 feet.		10 11 12 13 14	X X X	7			▼		17		113		
CLAY with sand; brown, very moist, stiff; sand fraction fine grained; only trace sand below 15 feet; alluvium.	CI	15 16 17 18 19 20	X X X	9			▽		28		97		

BOTTOM OF BORING @ 20 FEET

EXPLORATION DRILL HOLE LOG

HOLE No. 3

PROJECT **SUNNYSIDE COMMONS** DATE **1/26/89** LOGGED BY **KMS**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA. **8"** SAMPLER **X=Modified Calif. (2" I.D.) *=Standard Pen (SPT)**

GROUNDWATER DEPTH INITIAL **13'** FINAL **12.5'** HOLE ELEV. ——

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
Existing Concrete Slab													
SANDY CLAY; blackish brown, moist, stiff; alluvium.	CL	1	X										
			X	15				35	14	15	107		
		2	X										
			X										
		3	X	31					17		113		
			X										
		4	X										
SANDY CLAY; brown, moist, hard; alluvium.	CL		X	40	4.5+				16		116		
		5	X										
		6											
		7											
		8											
		9											
Very stiff.		10	X										
			X	28					18		111	7	4780
		11	X										
		12											
		13					▼						
		14											
		15	X										
			X										
Soft.		16	X	4					26		99	8	650
		17											
		18											
			*										
		19	*										
			*	4					35				
		20											

EXPLORATION DRILL HOLE LOG

HOLE No. 3

PROJECT: SUNNYSIDE COMMONS | DATE: 1/26/89 | LOGGED BY: KMS

DRILL RIG: CME 55; Hollow Stem | HOLE DIA.: 8" | SAMPLER: X=Modified Calif. (2" I.D.) *=Standard Pen (SPT)

GROUNDWATER DEPTH INITIAL: 13' | FINAL: 12.5' | HOLE ELEV.: ——

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
SANDY CLAY; brown, moist, soft; alluvium.	CI	21											
		22											
CLAY with sand; brown, moist, stiff; alluvium.	CI	23											
		24											
		25	X	0	0.3				29		95	10	2090
		26	X										
		27	X										
		28											
		29											
		30	X										
		31	X	12	1.3				17		110		
CLAYEY SAND; brown, wet, medium dense; sand fraction medium grained; alluvium.	SC	32	X										
			*										
			*	17					18				
			*										
BOTTOM OF BORING @ 32.5 FEET		33											
		34											
		35											
		36											
		37											
		38											
		39											
		40											

EXPLORATION DRILL HOLE LOG

HOLE No. 4

PROJECT: SUNNYSIDE COMMONS | DATE: 1/26/89 | LOGGED BY: KMS

DRILL RIG: CME 55; Hollow Stem | HOLE DIA.: 8" | SAMPLER: X=Modified Calif. (2" I.D.)

GROUNDWATER DEPTH INITIAL: 12.5' | FINAL: 12.5' | HOLE ELEV.: ____

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAYEY SAND with gravel; orange, damp, medium dense; road base for abandoned driveway; fill.	SC	1											
		2											
FAT CLAY; black, moist, firm to stiff; alluvium.	CH	3											
		4											
CLAY; brown, moist, very stiff; alluvium.	CL	5	X	18	3.0				21		107		
			X										
		6	X										
		7											
		8											
		9											
CLAYEY SAND with silt; brown, moist, firm; alluvium.	SC	10	X										
			X	8					22		98		
		11	X										
		12					▼						
CLAY with sand; brown, moist, stiff; alluvium.	CL	13											
		14											
		15	X										
			X	10					28		97		
		16	X										
		17											
		18											
		19											
		20	X										

EXPLORATION DRILL HOLE LOG

HOLE No. 4

PROJECT SUNNYSIDE COMMONS DATE 1/26/89 LOGGED BY KMS

DRILL RIG CME 55; Hollow Stem HOLE DIA 8" SAMPLER X=Modified Calif. (2" I.D.)

GROUNDWATER DEPTH INITIAL 12.5' FINAL 12.5' HOLE ELEV ___

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAY with sand; brown, moist, stiff; alluvium.	CL	21	X X	14	2.3				21		108		
BOTTOM OF BORING @ 21 FEET		22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40											

EXPLORATION DRILL HOLE LOG

HOLE No. 5

PROJECT **SUNNYSIDE COMMONS** DATE **1/26/89** LOGGED BY **KMS**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA. **8"** SAMPLER **X=Modified Calif. (2" I.D.)**

GROUNDWATER DEPTH INITIAL **11'** FINAL **11'** HOLE ELEV. ——

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
6" Surface Gravel; fill.	GP												
FAY CLAY with sand; black, moist, hard; alluvium.	CH	1	X	25	4.5+			51	18	16	106	5	15700
		2	X										
		3	X	31	4.5+				19		108		
CLAY with sand; dark brown, moist, very stiff; alluvium.	CI	4	X	23	4.5+				16		113		
		5	X										
		6	X	19	3.5				21		105		
		7	X										
		8	X										
		9											
Stiff.		10	X	7					22		102		
		11	X				▼						
		12											
		13											
CLAY; brown, moist, stiff; alluvium.		14											
		15	X	10					31		93		
		16	X										
		17											
CLAY with sand; brown, moist, stiff; alluvium.		18											
		19											
		20	X										

EXPLORATION DRILL HOLE LOG

HOLE No. 5

PROJECT **SUNNYSIDE COMMONS** DATE **1/26/89** LOGGED BY **KMS**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA **8"** SAMPLER **X=Modified Calif. (2" I.D.)**

GROUNDWATER DEPTH INITIAL **11'** FINAL **11'** HOLE ELEV ---

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAY with sand; brown, moist, stiff; alluvium.	CI	21	X	10	1.6				30		94		
		22	X										
		23											
		24											
		25											
CLAY; brown, moist, stiff; alluvium.	CI	26	X	10	0.8				26		99		
		27	X										
SAND with clay and gravel; brown, wet, dense; poorly graded.	SP	28											
		29											
		30	X	59					8		135		
		31	X										
BOTTOM OF BORING @ 31 FEET		32											
		33											
		34											
		35											
		36											
		37											
		38											
		39											
		40											

EXPLORATION DRILL HOLE LOG

HOLE No. 6

PROJECT **SUNNYSIDE COMMONS** DATE **1/26/89** LOGGED BY **KMS**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA. **8"** SAMPLER **X=Modified Calif. (2" I.D.)**

GROUNDWATER DEPTH INITIAL **12.5'** FINAL **12.5'** HOLE ELEV **——**

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAY; black, moist, very stiff; alluvium.	CI	1	X										
		2	X	21	2.5			43	23	17	102		
		3	X										
		4											
CLAY with sand; brown, moist, very stiff; alluvium.	CI	5		20	3.3				20		108		
		6											
		7											
		8											
		9											
Stiff.		10		9	3.3				19		109		
Very sandy at 11 feet.		11											
		12					▼						
		13											
		14											
Firm.		15		5	0.8				29		95	10	1350
		16											
		17											
		18											
		19											
		20											

EXPLORATION DRILL HOLE LOG

HOLE No. 6

PROJECT **SUNNYSIDE COMMONS** DATE **1/26/89** LOGGED BY **KMS**

DRILL RIG **CME 55; Hollow Stem** HOLE DIA **8"** SAMPLER **X=Modified Calif. (2" I.D.)**

GROUNDWATER DEPTH INITIAL **12.5'** FINAL **12.5'** HOLE ELEV. ___

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAY with sand; brown, moist, stiff; alluvium.	CI	21	X X	10	1								
BOTTOM OF BORING @ 21 FEET		22											
		23											
		24											
		25											
		26											
		27											
		28											
		29											
		30											
		31											
		32											
		33											
		34											
		35											
		36											
		37											
		38											
		39											
		40											

EXPLORATION DRILL HOLE LOG

HOLE No. 7

PROJECT: SUNNYSIDE COMMONS | DATE: 1/26/89 | LOGGED BY: KMS

DRILL RIG: CME 55; Hollow Stem | HOLE DIA.: 8" | SAMPLER: X=Modified Calif. (2" I.D.)

GROUNDWATER DEPTH INITIAL: 12' | FINAL: 12' | HOLE ELEV.: ----

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (tsf)	TORVANE (tsf)	LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
Existing Asphalt Pavement												
CLAY with sand; black, moist, firm; alluvium.	CL	1	X	19	0.8			21		106	10	1810
		2	X									
		3	X									
		4										
SANDY CLAY; brown, moist, stiff; alluvium.	CL	5	X	15	3.3			18		112		
		6	X									
		7	X									
		8										
		9										
		10	X	15	2.5			16		110		
		11	X									
		12				▼						
		13										
		14										
CLAYEY SAND; brown, moist, medium dense; sand fraction fine grained; alluvium.	SC	15	X	11	2			17		104		
		16	X									
		16	X									
CLAY; brown, moist, firm; alluvium.	CL	17										
		18										
		19										
		20	X									

EXPLORATION DRILL HOLE LOG

HOLE No. 7

PROJECT: SUNNYSIDE COMMONS | DATE: 1/26/89 | LOGGED BY: KMS

DRILL RIG: CME 55; Hollow Stem | HOLE DIA: 8" | SAMPLER: X=Modified Calif. (2" I.D.)

GROUNDWATER DEPTH INITIAL: 12' | FINAL: 12' | HOLE ELEV.: ___

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN (tsf)	TORVANE (tsf)		LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAY; brown, moist, firm; alluvium.	CI	21	X X	6									
BOTTOM OF BORING @ 21 FEET		22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40											

APPENDIX B

CHAIN-OF-CUSTODY RECORDS
AND
ANALYTICAL LABORATORY REPORTS

(408) 297-6969
SAN JOSE OFFICE
TERRATECH

CHAIN OF CUSTODY RECORD

3-Day Turnaround *

PROJECT NAME: #4454

SAMPLERS (signature): Geoff Blair

Analysis Required: EPA 8080; ICP metals (Scan); EPA 8240; ~~Oil and Grease (413.1)~~

REMARKS: SOIL

Station Number	Date 1989	Time	Comp.	Grab	Station Location	Number of Containers	EPA 8080	ICP metals (Scan)	EPA 8240	~~Oil and Grease (413.1)~~				REMARKS	DEPTH
HS-1	1/25	PM			Pesticide Storage Bldg.	1 Brass Liner	X	X	X					semi-composite	4"-10"
HS-2	↓	AM			Pesticide Storage Bldg	↓	X	X	X					semi-composite	↓
HS-3	↓	PM			Greenhouses - South	↓	X							Composite	↓
HS-4	↓	↓			" "	↓	X							Composite	↓
HS-5	↓	↓			" "	↓	X							Composite	↓
HS-6	↓	↓			" "	↓	X							Composite	↓
HS-7	↓	↓			Greenhouses - Central	↓	X							Composite	↓
HS-8	↓	↓			" "	↓	X							Composite	↓
HS-9	↓	↓			" "	↓	X							Composite	↓
HS-10	↓	↓			" "	↓	X							Composite	↓

Relinquished by (signature) / Company or Agency	Date / Time	Received by (signature) / Company or Agency	Relinquished by (signature) / Company or Agency	Date / Time	Received by (signature) / Company or Agency
B. Kahl / Terratech	1-26-89 1104	[signature] / Sequoia Lab	Company or Agency:		Company or Agency:
Relinquished by (signature): / Company or Agency:	Date / Time	Received by (signature): / Company or Agency:	Relinquished by: / Company or Agency:	Date / Time	Received by (signature): / Company or Agency:
Relinquished by (signature): / Company or Agency: TERRATECH, INC.	Date / Time	Received for Laboratory by: (signature)	Date / Time	Remarks/Shipping Information	Send reports to: Eric Lautenbach, 1365 VANDER WAY, SAN JOSE 95112

* NEED REPORTS (HARD COPY) BY 5PM WEDNESDAY (2/1/89)

(408) 297-6969
SAN JOSE OFFICE
TERRATECH

CHAIN OF CUSTODY RECORD

3-Day Turnaround.

PROJECT NAME: # 4454

SAMPLERS (signature): Geoff Blair

Station Number	Date 1989	Time	Comp.	Grab	Station Location	Number of Containers	Analysis Required: EPA 8080	ICP METALS (SCAN)	EPA 8240	OIL & GREASE (413.1)	REMARKS	DEPTH
HS-11	1/25	PM			Greenhouses – North	1 Brass Liner	X	X			SOIL	
HS-12					" "						composite	4"–10"
HS-13					" "							
HS-14					" "							
HS-15					Earthen Ditches – South		X	X			semi-composite	
HS-16					" " – Central		X	X				
HS-17					– North		X	X				
HS-18					Shop Area				X		semi-composite	
HS-19					" "				X			
HS-20					" "				X			

Relinquished by(signature): B. Blair Company or Agency: Terratech	Date / Time 1-26-89 11:04	Received by (signature): Hillary Harris Company or Agency: Sequoia Lab	Relinquished by(signature): Company or Agency:	Date / Time	Received by (signature): Company or Agency:
Relinquished by(signature): Company or Agency:	Date / Time	Received by (signature): Company or Agency:	Relinquished by: Company or Agency:	Date / Time	Received by (signature): Company or Agency:
Relinquished by(signature): Company or Agency: TERRATECH, INC.	Date / Time	Received for Laboratory by: (signature)	Date / Time	Remarks/Shipping Information: Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112	

(408) 297-6969
SAN JOSE OFFICE
TERRATECH

CHAIN OF CUSTODY RECORD

3-DAY TURNAROUND

PROJECT NAME: #4454

SAMPLERS (signature): Geoff Blair

Station Number	Date 1989	Time	Comp.	Grab	Station Location	Number of Containers	EPA 8080	ICP Metals (Scan)	EPA 8240	TPH as gasoline	TPH as diesel	REMARKS	DEPTH
HS-21	1/25	PM		X	LAGUNA YARD	1 Brass Liner	X	X	X			SOIL Composite	4"-10"
HS-22	"	"		X	" "	"							
HS-23	"	"		X	" "	"							
HS-24	"	"		X	" "	"							
DH-1	1/25	PM		X	West of Gasoline Tank	1 LINER			X			individual	5½-6'
DH-1	1/25	PM		X	" " " "	1 LINER			X			"	9½-10'
DH-2	1/25	PM		X	West of Diesel Tank	1 LINER				X		"	4½-5'
DH-2	1/25	PM		X	" " " "	1 LINER				X		"	9½-10'

Relinquished by(signature):	Date / Time	Received by (signature):	Relinquished by(signature):	Date / Time	Received by (signature):
Company or Agency: Terratech	1-26-89 1104	Company or Agency: Segnora Lab	Company or Agency:		Company or Agency:
Relinquished by(signature):	Date / Time	Received by (signature):	Relinquished by:	Date / Time	Received by (signature):
Company or Agency:		Company or Agency:	Company or Agency:		Company or Agency:
Relinquished by(signature):	Date / Time	Received for Laboratory by:	Date / Time	Remarks/Shipping Information	
Company or Agency: TERRATECH, INC.		(signature)		Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112	

(408) 297-6969
SAN JOSE OFFICE
TERRATECH

CHAIN OF CUSTODY RECORD

3-DAY TURNAROUND

PROJECT NAME: #4454

SAMPLERS (signature): E.R. Ltl for Brian Kahl

Station Number	Date 1989	Time	Comp.	Grab	Station Location	Number of Containers	TPH as gasoline w/ BTEX	TPH as diesel	EPA 624	Drinking Water Organics	REMARKS	DEPTH
DH-1	1/25	2pm		X	West of Gasoline Tank	4 VOA's	X				(WATER)	12' ±
DH-2	1/25	4pm		X	West of Diesel Tank	4 VOA's		X				12' ±
						3 AMBERS			X	X		12' ±

Relinquished by(signature):	Date / Time	Received by (signature):	Relinquished by(signature):	Date / Time	Received by (signature):
B. Kahl	1-26-89	Company or Agency: Sequoia Lab	Company or Agency:		Company or Agency:
Company or Agency: Terratech	11:04				
Relinquished by(signature):	Date / Time	Received by (signature):	Relinquished by:	Date / Time	Received by (signature):
Company or Agency:		Company or Agency:	Company or Agency:		Company or Agency:
Relinquished by(signature):	Date / Time	Received for Laboratory by:	Date / Time	Remarks/Shipping Information	
Company or Agency: TERRATECH, INC.		(signature)		Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112	

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

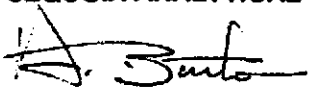
Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-1, H5-2 Composite	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 6010	Analyzed: Jan 27, 1989
Attention: Eric Lautenbach	Lab Number:	901-2687	Reported: Feb 3, 1989

SEMI-QUANTITATIVE ICP METALS SCAN

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Aluminum	5.0	10,000
Antimony	5.0	N.D.
Arsenic	10.0	N.D.
Barium	0.2	10
Beryllium	0.1	0.19
Cadmium	0.1	0.1
Calcium	0.2	10
Chromium	0.05	10
Cobalt	0.5	10
Copper	0.1	100
Iron	0.1	10,000
Lead	5.0	N.D.
Magnesium	0.2	100
Manganese	0.1	1,000
Molybdenum	0.5	1.0
Nickel	0.5	10
Selenium	5.0	10
Silver	0.1	1.0
Sodium	5.0	1,000
Thallium	5.0	N.D.
Tin	5.0	10,000
Vanadium	0.5	100
Zinc	0.1	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL



Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-15, H5-16, H5-17,	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 6010 Composite	Analyzed:	Jan 27, 1989
Attention: Eric Lautenbach	Lab Number:	901-2706	Reported:	Feb 3, 1989

SEMI-QUANTITATIVE ICP METALS SCAN

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Aluminum	5.0	100,000
Antimony	5.0	N.D.
Arsenic	10.0	10
Barium	0.2	100
Beryllium	0.1	0.1
Cadmium	0.1	0.1
Calcium	0.2	100
Chromium	0.05	10
Cobalt	0.5	10
Copper	0.1	10
Iron	0.1	1,000
Lead	5.0	10
Magnesium	0.2	10
Manganese	0.1	100
Molybdenum	0.5	10
Nickel	0.5	10
Selenium	5.0	N.D.
Silver	0.1	0.1
Sodium	5.0	100
Thallium	5.0	N.D.
Tin	5.0	1,000
Vanadium	0.5	10
Zinc	0.1	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-21, H5-22, H5-23, H5-24,	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 6010 Composite	Analyzed:	Jan 27, 1989
Attention: Eric Lautenbach	Lab Number:	901-2692	Reported:	Feb 3, 1989

SEMI-QUANTITATIVE ICP METALS SCAN

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Aluminum	5.0	10,000
Antimony	5.0	N.D.
Arsenic	10.0	N.D.
Barium	0.2	100
Beryllium	0.1	0.1
Cadmium	0.1	0.1
Calcium	0.2	10
Chromium	0.05	10
Cobalt	0.5	1.0
Copper	0.1	10
Iron	0.1	10,000
Lead	5.0	10
Magnesium	0.2	10
Manganese	0.1	100
Molybdenum	0.5	N.D.
Nickel	0.5	10
Selenium	5.0	N.D.
Silver	0.1	0.1
Sodium	5.0	100
Thallium	5.0	N.D.
Tin	5.0	1,000
Vanadium	0.5	10
Zinc	0.1	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-1, H5-2 Composite	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8240	Analyzed: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2687	Reported: Feb 3, 1989

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Acetone	500.0	N.D.
Benzene	100.0	N.D.
Bromodichloromethane	100.0	N.D.
Bromoform	100.0	N.D.
Bromomethane	100.0	N.D.
2-Butanone	500.0	N.D.
Carbon disulfide	100.0	N.D.
Carbon tetrachloride	100.0	N.D.
Chlorobenzene	100.0	N.D.
Chlorodibromomethane	100.0	N.D.
Chloroethane	100.0	N.D.
2-Chloroethyl vinyl ether	500.0	N.D.
Chloroform	100.0	N.D.
Chloromethane	100.0	N.D.
1,1-Dichloroethane	100.0	N.D.
1,2-Dichloroethane	100.0	N.D.
1,1-Dichloroethene	100.0	N.D.
Total 1,2-Dichloroethene	100.0	N.D.
1,2-Dichloropropane	100.0	N.D.
cis 1,3-Dichloropropene	100.0	N.D.
trans 1,3-Dichloropropene	100.0	N.D.
Ethylbenzene	100.0	N.D.
2-Hexanone	500.0	N.D.
Methylene chloride	100.0	N.D.
4-Methyl-2-pentanone	500.0	N.D.
Styrene	100.0	N.D.
1,1,2,2-Tetrachloroethane	100.0	N.D.
Tetrachloroethene	100.0	N.D.
Toluene	100.0	N.D.
1,1,1-Trichloroethane	100.0	N.D.
1,1,2-Trichloroethane	100.0	N.D.
Trichloroethene	100.0	N.D.
Trichlorofluoromethane	100.0	N.D.
Vinyl acetate	100.0	N.D.
Vinyl chloride	100.0	N.D.
Total Xylenes	100.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-21, H5-22, H5-23, H5-24,	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8240 Composite	Analyzed: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2692	Reported: Feb 3, 1989

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Acetone	500.0	N.D.
Benzene	100.0	N.D.
Bromodichloromethane	100.0	N.D.
Bromoform	100.0	N.D.
Bromomethane	100.0	N.D.
2-Butanone	500.0	N.D.
Carbon disulfide	100.0	N.D.
Carbon tetrachloride	100.0	N.D.
Chlorobenzene	100.0	N.D.
Chlorodibromomethane	100.0	N.D.
Chloroethane	100.0	N.D.
2-Chloroethyl vinyl ether	500.0	N.D.
Chloroform	100.0	N.D.
Chloromethane	100.0	N.D.
1,1-Dichloroethane	100.0	N.D.
1,2-Dichloroethane	100.0	N.D.
1,1-Dichloroethene	100.0	N.D.
Total 1,2-Dichloroethene	100.0	N.D.
1,2-Dichloropropane	100.0	N.D.
cis 1,3-Dichloropropene	100.0	N.D.
trans 1,3-Dichloropropene	100.0	N.D.
Ethylbenzene	100.0	N.D.
2-Hexanone	500.0	N.D.
Methylene chloride	100.0	N.D.
4-Methyl-2-pentanone	500.0	N.D.
Styrene	100.0	N.D.
1,1,2,2-Tetrachloroethane	100.0	N.D.
Tetrachloroethene	100.0	N.D.
Toluene	100.0	N.D.
1,1,1-Trichloroethane	100.0	N.D.
1,1,2-Trichloroethane	100.0	N.D.
Trichloroethene	100.0	N.D.
Trichlorofluoromethane	100.0	N.D.
Vinyl acetate	100.0	N.D.
Vinyl chloride	100.0	N.D.
Total Xylenes	100.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Matrix Descript:	Soil	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 413.1 (Gravimetric)	Extracted: Jan 27, 1989
Attention: Eric Lautenbach	First Sample #:	901-2707	Analyzed: Jan 27, 1989
			Reported: Feb 3, 1989

TOTAL RECOVERABLE OIL & GREASE

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
901-2707	H5-18	60

Detection Limits:	**30.0**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Matrix Descript:	Soil	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 413.1 (Gravimetric)	Extracted: Jan 27, 1989
Attention: Eric Lautenbach	First Sample #:	9012707-A	Analyzed: Jan 27, 1989
			Reported: Feb 3, 1989

TOTAL RECOVERABLE OIL & GREASE

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
9012707-A	H5-19	380

Detection Limits:	**30.0**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Matrix Descript:	Soil	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 413.1 (Gravimetric)	Extracted: Jan 27, 1989
Attention: Eric Lautenbach	First Sample #:	9012707-B	Analyzed: Jan 27, 1989
			Reported: Feb 3, 1989

TOTAL RECOVERABLE OIL & GREASE

Sample Number	Sample Description	Oil & Grease mg/kg (ppm)
9012707-B	H5-20	40

Detection Limits:	**30.0**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-18, H5-19, H5-20 Composite	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8240	Analyzed:	Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2707	Reported:	Feb 3, 1989

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Acetone	500.0	N.D.
Benzene	100.0	N.D.
Bromodichloromethane	100.0	N.D.
Bromoform	100.0	N.D.
Bromomethane	100.0	N.D.
2-Butanone	500.0	N.D.
Carbon disulfide	100.0	N.D.
Carbon tetrachloride	100.0	N.D.
Chlorobenzene	100.0	N.D.
Chlorodibromomethane	100.0	N.D.
Chloroethane	100.0	N.D.
2-Chloroethyl vinyl ether	500.0	N.D.
Chloroform	100.0	N.D.
Chloromethane	100.0	N.D.
1,1-Dichloroethane	100.0	N.D.
1,2-Dichloroethane	100.0	N.D.
1,1-Dichloroethene	100.0	N.D.
Total 1,2-Dichloroethene	100.0	N.D.
1,2-Dichloropropane	100.0	N.D.
cis 1,3-Dichloropropene	100.0	N.D.
trans 1,3-Dichloropropene	100.0	N.D.
Ethylbenzene	100.0	N.D.
2-Hexanone	500.0	N.D.
Methylene chloride	100.0	N.D.
4-Methyl-2-pentanone	500.0	N.D.
Styrene	100.0	N.D.
1,1,2,2-Tetrachloroethane	100.0	N.D.
Tetrachloroethene	100.0	N.D.
Toluene	100.0	N.D.
1,1,1-Trichloroethane	100.0	N.D.
1,1,2-Trichloroethane	100.0	N.D.
Trichloroethene	100.0	N.D.
Trichlorofluoromethane	100.0	N.D.
Vinyl acetate	100.0	N.D.
Vinyl chloride	100.0	N.D.
Total Xylenes	100.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Arthur G. Burton
Laboratory Director

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Matrix Descript:	Soil	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 5030 or 3810/8015/8020	Analyzed: Jan 31, 1989
Attention: Eric Lautenbach	First Sample #:	901-2693	Reported: Feb 3, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
901-2693	DH-1 @ 5 1/2-6'	N.D.	N.D.	N.D.	N.D.	N.D.
901-2694	DH-1 @ 9 1/2-10'	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**1.0**	**0.05**	**0.1**	**0.1**	**0.1**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Matrix Descript:	Soil	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 3550/8015	Analyzed: Feb 1, 1989
Attention: Eric Lautenbach	First Sample #:	901-2695	Reported: Feb 3, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons mg/kg (ppm)
901-2695	DH-2 @ 4 1/2-5'	N.D.
901-2696	DH-2 @ 9 1/2-10'	3.3

Detection Limits:	**1.0**

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript.:	Water, DH-1	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 5030/ 8015/8020	Analyzed: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2709	Reported: Feb 3, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit ug/L (ppb)	Sample Results ug/L (ppb)
Low to Medium Boiling Point Hydrocarbons	50.0	N.D.
Benzene	0.5	N.D.
Toluene	0.5	N.D.
Ethyl Benzene	0.5	N.D.
Xylenes	0.5	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

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Laboratory Director

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Matrix Descript:	Water, DH-2	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 3510/8015	Analyzed: Jan 31, 1989
Attention: Eric Lautenbach	First Sample #:	901-2710	Reported: Feb 3, 1989

TOTAL PETROLEUM FUEL HYDROCARBONS (EPA 8015)

Sample Number	Sample Description	High B.P. Hydrocarbons ug/L (ppb)
901-2710	DH-2	8.8

Detection Limits:	50.0

High Boiling Point Hydrocarbons are quantitated against a diesel fuel standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

TITLE 22 CHEMICAL ANALYSES

Date of Report: 2/3/89	Lab Sample ID Number: 9012710
Laboratory Name: Sequoia Analytical	Signature/Lab Director:
Name of Sampler: -	Sampler Employed By: -

Date/Time Sample Collected	Date/Time Sample Received at Lab.	Were Holding Times Observed?
1/25/89	1/26/89 11:04AM	Yes

System Name	System Number
Terratech	

Description of Sampling Point: Hosebib Near Well

Name/Number of Sample Source	Station Number
-	

Date and Time of Sample (YYMMDDTTTT)	Water Type (G/S)	User ID	Submitted to SWQIS By
0 1 0 1 2 5 - - - -	G		

MCL	Reporting Units	Constituent	TT	Storet Code	Analyses Results
		Analyzing Agency (Laboratory)		28	
	mg/L	Total Hardness (as CaCO3)		900	
	mg/L	Calcium (Ca)		916	
	mg/L	Magnesium (Mg)		927	
	mg/L	Sodium (Na)		929	
	mg/L	Potassium (K)		937	
Total Cations	meq/L	Value:			

MCL	Reporting Units	Constituent	TT	Storet Code	Analyses Results
	mg/L	Total Alkalinity (as CaCO3)		410	
	mg/L	Hydroxide (OH)		71830	
	mg/L	Carbonate (CO3)		445	
	mg/L	Bicarbonate (HCO3)		440	
*	mg/L +	Sulfate (SO4)		945	
*	mg/L +	Chloride (Cl)		940	
45	mg/L	Nitrate (NO3)		71850	
1.4–2.4	mg/L	Fluoride (F) Temp. Depend.		951	
Total Anions	meq/L	Value:			

MCL	Reporting Units	Constituent	TT	Storet Code	Analyses Results
	Std Units	pH (Laboratory)		403	
**	umho/cm +	Specific Conductance (E.C.)		95	
***	mg/L +	Total Filterable Residue at 180° C (TDS)		70300	
	UNITS	Apparent Color (Unfiltered)		81	
	TON	Odor Threshold at 60° C		86	
	NTU	Lab Turbidity		82079	
0.5	mg/L +	MBAS		38260	

* 250–500–600 ** 900–1600–2200 *** 500–1000–1500

SYSTEM NAME AND NUMBER Terratech 9012710

* THE FOLLOWING CONSTITUENTS ARE REPORTED IN UG/L *

MCL	Reporting Units	Constituent	T/T	Storet Code	Analyses Results
50	ug/L	Arsenic (As)		1002	
1000	ug/L	Barium (Ba)		1007	
10	ug/L	Cadmium (Cd)		1027	
50	ug/L	Chromium (Total Cr)		1034	
1000	ug/L+	Copper (Cu)		1042	
300	ug/L+	Iron (Fe)		1045	
50	ug/L	Lead (Pb)		1051	
50	ug/L+	Manganese (Mn)		1055	
2	ug/L	Mercury (Hg)		71900	
10	ug/L	Selenium (Se)		1147	
50	ug/L	Silver (Ag)		1077	
5000	ug/L	Zinc (Zn)		1092	

ORGANIC CHEMICALS

0.2	ug/L	Endrin		39390 <	0.0001
4	ug/L	Lindane		39340	<0.0004
100	ug/L	Methoxychlor		39480	<0.001
5	ug/L	Toxaphene		39400	<0.005
100	ug/L	2, 4–D		39730	<0.1
10	ug/L	2, 4, 5–TP Silvex		39045	<0.01
		Date ORGANIC Analyses Completed		73672	YYMMDD

ADDITIONAL ANALYSES

NTU	Field Turbidity		82078	
C	Source Temperature		10	
	Langelier Index Source Temp.		71814	
	Langelier Index at 60° C		71813	
Std. Units	Field pH		00400	
	Aggressiveness Index		82383	
mg/L	Silica		00955	
mg/L	Phosphate		00650	
mg/L	Iodide		71865	
	Sodium Absorption Ratio		00931	
	Asbestos		81855	

+ Indicates Secondary Drinking Water Standards

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Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Water, DH-2	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8240	Analyzed:	Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2710	Reported:	Feb 3, 1989

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit ug/L	Sample Results ug/L
Acetone	10.0	N.D.
Benzene	2.0	N.D.
Bromodichloromethane	2.0	N.D.
Bromoform	2.0	N.D.
Bromomethane	2.0	N.D.
2-Butanone	10.0	N.D.
Carbon disulfide	2.0	N.D.
Carbon tetrachloride	2.0	N.D.
Chlorobenzene	2.0	N.D.
Chlorodibromomethane	2.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethyl vinyl ether	10.0	N.D.
Chloroform	2.0	N.D.
Chloromethane	2.0	N.D.
1,1-Dichloroethane	2.0	N.D.
1,2-Dichloroethane	2.0	N.D.
1,1-Dichloroethene	2.0	N.D.
Total 1,2-Dichloroethene	2.0	N.D.
1,2-Dichloropropane	2.0	N.D.
cis 1,3-Dichloropropene	2.0	N.D.
trans 1,3-Dichloropropene	2.0	N.D.
Ethylbenzene	2.0	N.D.
2-Hexanone	10.0	N.D.
Methylene chloride	2.0	51
4-Methyl-2-pentanone	10.0	N.D.
Styrene	2.0	N.D.
1,1,2,2-Tetrachloroethane	2.0	N.D.
Tetrachloroethene	2.0	N.D.
Toluene	2.0	N.D.
1,1,1-Trichloroethane	2.0	2.1
1,1,2-Trichloroethane	2.0	N.D.
Trichloroethene	2.0	N.D.
Trichlorofluoromethane	2.0	N.D.
Vinyl acetate	2.0	N.D.
Vinyl chloride	2.0	N.D.
Total Xylenes	2.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-1	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2687	Analyzed: Jan 31, 1989
			Reported: Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	5.0	N.D.
alpha-BHC	5.0	N.D.
beta-BHC	5.0	N.D.
sigma-BHC	10.0	N.D.
gamma-BHC (Lindane)	5.0	N.D.
Chlordane	50.0	N.D.
4,4'-DDD	10.0	N.D.
4,4'-DDE	5.0	N.D.
4,4'-DDT	10.0	N.D.
Dieldrin	5.0	41
Endosulfan I	10.0	N.D.
Endosulfan II	5.0	N.D.
Endosulfan sulfate	50.0	N.D.
Endrin	10.0	N.D.
Endrin aldehyde	15.0	N.D.
Heptachlor	5.0	N.D.
Heptachlor expoxide	5.0	N.D.
Methoxychlor	150.0	N.D.
Toxaphene	175.0	N.D.
PCB-1016	50.0	N.D.
PCB-1221	50.0	N.D.
PCB-1232	50.0	N.D.
PCB-1242	50.0	N.D.
PCB-1248	50.0	N.D.
PCB-1254	50.0	N.D.
PCB-1260	50.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-2	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	9012687-A	Analyzed:	Feb 1, 1989
			Reported:	Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	5.0	N.D.
alpha-BHC	5.0	N.D.
beta-BHC	5.0	N.D.
sigma-BHC	10.0	N.D.
gamma-BHC (Lindane)	5.0	N.D.
Chlordane	50.0	N.D.
4,4'-DDD	10.0	N.D.
4,4'-DDE	5.0	N.D.
4,4'-DDT	10.0	N.D.
Dieldrin	5.0	N.D.
Endosulfan I	10.0	300
Endosulfan II	5.0	770
Endosulfan sulfate	50.0	N.D.
Endrin	10.0	N.D.
Endrin aldehyde	15.0	N.D.
Heptachlor	5.0	N.D.
Heptachlor expoxide	5.0	N.D.
Methoxychlor	150.0	N.D.
Toxaphene	175.0	N.D.
PCB-1016	50.0	N.D.
PCB-1221	50.0	N.D.
PCB-1232	50.0	N.D.
PCB-1242	50.0	N.D.
PCB-1248	50.0	N.D.
PCB-1254	50.0	N.D.
PCB-1260	50.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-3, H5-4, H5-5, H5-6 Composite	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2688	Analyzed: Feb 1, 1989
			Reported: Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	50
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	1,200
Endosulfan II	50.0	3,300
Endosulfan sulfate	500.0	520
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-7, H5-8, H5-9, H5-10 Composite	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2689	Analyzed: Feb 1, 1989
			Reported: Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	210
4,4'-DDT	100.0	640
Dieldrin	50.0	N.D.
Endosulfan I	100.0	780
Endosulfan II	50.0	3,500
Endosulfan sulfate	600.0	520
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-11, H5-12, H5-13, H5-14,	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080 Composite	Extracted: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2705	Analyzed: Feb 2, 1989
			Reported: Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	3,000
Endosulfan II	50.0	12,000
Endosulfan sulfate	600.0	1,300
Endrin	100.0	1,300
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-15	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2706	Analyzed:	Feb 2, 1989
			Reported:	Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	5.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	8,100
Endosulfan II	50.0	2,000
Endosulfan sulfate	500.0	1,300
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Arthur G. Burton
Laboratory Director

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Terratech, Inc.	Client Project ID:	#4454	Sampled:	Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-16	Received:	Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted:	Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	9012706-A	Analyzed:	Feb 2, 1989
			Reported:	Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	5.0	N.D.
alpha-BHC	5.0	N.D.
beta-BHC	5.0	N.D.
sigma-BHC	10.0	N.D.
gamma-BHC (Lindane)	5.0	N.D.
Chlordane	50.0	N.D.
4,4'-DDD	10.0	N.D.
4,4'-DDE	5.0	57
4,4'-DDT	10.0	84
Dieldrin	5.0	N.D.
Endosulfan I	10.0	440
Endosulfan II	5.0	N.D.
Endosulfan sulfate	50.0	43
Endrin	10.0	150
Endrin aldehyde	15.0	N.D.
Heptachlor	5.0	N.D.
Heptachlor expoxide	5.0	N.D.
Methoxychlor	150.0	N.D.
Toxaphene	175.0	N.D.
PCB-1016	50.0	N.D.
PCB-1221	50.0	N.D.
PCB-1232	50.0	N.D.
PCB-1242	50.0	N.D.
PCB-1248	50.0	N.D.
PCB-1254	50.0	N.D.
PCB-1260	50.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Laboratory Director

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-17	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080	Extracted: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	9012706-B	Analyzed: Feb 2, 1989
			Reported: Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	N.D.
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	940
Endosulfan II	50.0	5,400
Endosulfan sulfate	500.0	1,000
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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Terratech, Inc.	Client Project ID:	#4454	Sampled: Jan 25, 1989
1365 Vander Way	Sample Descript:	Soil, H5-21, H5-22, H5-23, H5-24,	Received: Jan 26, 1989
San Jose, CA 95112	Analysis Method:	EPA 8080 Composite	Extracted: Jan 30, 1989
Attention: Eric Lautenbach	Lab Number:	901-2692	Analyzed: Feb 1, 1989
			Reported: Feb 3, 1989

ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit ug/kg	Sample Results ug/kg
Aldrin	50.0	N.D.
alpha-BHC	50.0	N.D.
beta-BHC	50.0	N.D.
sigma-BHC	100.0	N.D.
gamma-BHC (Lindane)	50.0	N.D.
Chlordane	500.0	N.D.
4,4'-DDD	100.0	N.D.
4,4'-DDE	50.0	130
4,4'-DDT	100.0	N.D.
Dieldrin	50.0	N.D.
Endosulfan I	100.0	4,000
Endosulfan II	50.0	11,000
Endosulfan sulfate	500.0	1,100
Endrin	100.0	N.D.
Endrin aldehyde	150.0	N.D.
Heptachlor	50.0	N.D.
Heptachlor expoxide	50.0	N.D.
Methoxychlor	1,500.0	N.D.
Toxaphene	1,750.0	N.D.
PCB-1016	500.0	N.D.
PCB-1221	500.0	N.D.
PCB-1232	500.0	N.D.
PCB-1242	500.0	N.D.
PCB-1248	500.0	N.D.
PCB-1254	500.0	N.D.
PCB-1260	500.0	N.D.

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

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