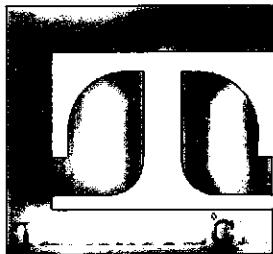


OC 12/6/90



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

90 DEC -6 AM12:04

December 4, 1990
Project 4454/3

Mr. Hugh Murphy
Hayward Fire Department
22300 Hayward Boulevard
Hayward, California 94541

Subject: Definition of the Lateral Extent of
Ground Water Impact from Pesticides
Sunnyside Commons II
Hayward, California

Dear Mr. Murphy:

The following report presents the findings of our recent investigation of the lateral extent of pesticide impact to the shallow ground water beneath Sunnyside Commons II in Hayward (see Figure 1). This study was required to document the absence of a more extensive ground water problem at the site. Our November 7th Work Plan for this investigation describes the procedures involved and was approved by you in our meeting of November 15, 1990.

SUMMARY OF WORK PERFORMED

On November 16, 1990 four exploratory borings (WS-1 through WS-4) were advanced three to five feet into first ground water (~19 feet below grade) in the locations indicated on Figure 1. Drilling was performed by ASE, a C-57 licensed drilling contractor from San Ramon, with onsite professional guidance provided by an experienced environmental geologist from our staff.

Before travelling to the site, the drill rig and all drilling and sampling equipment was thoroughly steam cleaned at the drillers' yard. The rig was inspected upon arrival at the site and verified to be free of significant fluid leaks.

The combination of a 12+ inch diameter auger and hand shovelling were used to start each hole and remove the upper 2+ feet of surface soil. Eight-inch diameter, pre-cleaned hollow-stem augers were then used to open the holes to their final depth. Soil samples were collected for classification purposes at five-foot interval using an 18-inch split-spoon sampler. The split spoonTM soil sampler and drill bit will be thoroughly washed onsite in an AlconoxTM solution then rinsed by potable water before each use.

Our geologist logged the soil conditions encountered using the Unified Soil Classification System with visual-manual procedures (ASTM 2488-84) and prepared an exploration drill hole log for each hole (see Appendix A).

A ground water grab sample was collected from each hole with a discreet Teflon bailer after purging two "hole volumes". The purge water was placed in labelled drums pending the outcome of test results. Each ground water sample was transferred from the bailer into two one-liter amber jars supplied by the testing laboratory. The sample jars were then immediately labelled and iced. A chain-of-custody record was completed to document sample collection, handling and analytical requests (see Appendix B). Our geologist wore a new pair of disposable gloves for each sampling process to minimize the risk of cross-contamination.

A "blank" sample of distilled water was collected from each bailer prior to sampling. These four blanks were refrigerated for potential testing but ultimately not analyzed as their corresponding ground water samples showed no pesticide impact.

Following the collection of ground water samples, the four holes were sealed with a cement/bentonite slurry.

The four ground water samples were submitted to Anametrix, a State certified laboratory in San Jose, and analyzed for organochlorine pesticides by EPA Method 608/8080.

FINDINGS

As expected, first ground water was encountered about 16 feet below grade and stabilized at a slightly higher level (see appended drill hole logs).

The laboratory report for the four ground water grab samples is presented in Appendix B. The results have been incorporated in the cumulative summary table (Table 1). No EPA Method 8080 pesticides were detected in the ground water at locations WS-1 through WS-4.

CONCLUSIONS AND RECOMMENDATIONS

The findings of the investigation described herein - teamed with the prior documentation from DH-1 (Sunnyside Nursery), DH-8 (Laguna Park) and MW-2 - demonstrate that the ground water impact is localized to the former open well (SW-1). No further ground water investigation is recommended.

The three rounds of ground water testing performed to date at MW-3, the well closest to the former open well, indicates a declining concentration of total Endosulfan - from 0.70 parts per billion (ppb) to 0.11 ppb. The trace amount of DDD at MW-4 has not been re-confirmed.



Project 4454/3

December 4, 1990

Based upon the encouraging signs of dissipation/degradation and the 1.75 ppb "safe" drinking water concentration determined by Environmental Risk Sciences (ERS), we recommend continuation of monitoring on a quarterly basis. For each monitoring event the local ground water should be verified and samples from MW-3 and MW-4 should be tested for chlorinated pesticides using EPA Method 608/8080. Monitoring should continue until both wells show no detectable pesticide residues for four consecutive quarters.

If, for some unexpected reason, the Endosulfan (or other EPA 8080 pesticide) residuals rise above drinking water standards, we recommend initiating a "pump and treat" cleanup process utilizing the existing well(s). Extracted ground water can be pumped through activated carbon to remove the pesticides then either discharged to the storm sewer under a RWQCB permit or utilized on-site for dust control or landscape irrigation. In accordance with RWQCB guidelines, post-cleanup monitoring would have to continue for at least four quarters.

We see no technical reason that the public process steps of tentative and final map review/approval, as well as grading and construction permit issuance, cannot proceed simultaneously to the monitoring (or cleanup) work described above.

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.

Prepared by,

TERRATECH, INC.

E.R.L.

Eric R. Lautenbach
CE 42437



cc: Laura Rice, The Plymouth Group
Rich Hiett, Regional Water Quality Control Board
Pam Evans, Alameda County Health Agency



Project 4454/3

December 4, 1990

TABLE 1

CUMULATIVE SUMMARY OF GROUND WATER SAMPLE ANALYSIS RESULTS

SUNNYSIDE COMMONS II
Hayward, California

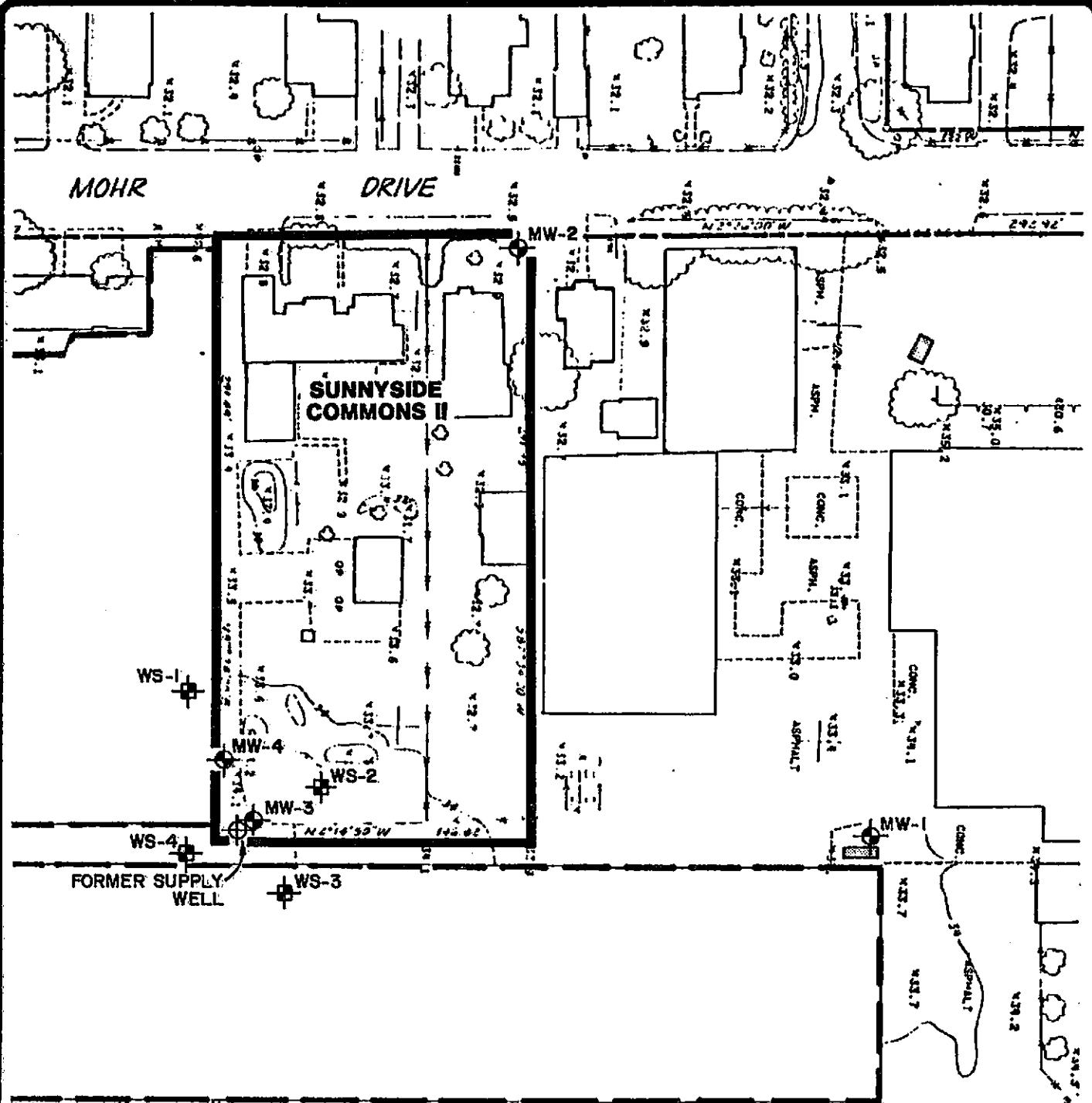
SAMPLE LOCATION	DATE COLLECTED (1990)	DDD (ppb)	ENDOSULFAN I (ppb)	ENDOSULFAN II (ppb)	ENDOSULFAN SULFATE (ppb)	OTHERS * (ppb)
SW-1	1/25	< 0.5	5.0	4.5	5.1	N.D.
MW-2	7/17	< 0.1	< 0.05	< 0.1	< 0.1	N.D.
MW-3	5/18 7/17 10/17	< 0.1 < 0.1 < 0.1	0.37 0.15 0.11	0.17 0.50 < 0.1	0.16 < 0.1 < 0.1	N.D. N.D. N.D.
MW-4	6/11 7/17 10/17	0.14 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	< 0.1 < 0.1 < 0.1	N.D. N.D. N.D.
WS-1	11/16	< 0.1	< 0.1	< 0.1	< 0.1	N.D.
WS-2	11/16	< 0.1	< 0.1	< 0.1	< 0.1	N.D.
WS-3	11/16	< 0.1	< 0.1	< 0.1	< 0.1	N.D.
WS-4	11/16	< 0.1	< 0.1	< 0.1	< 0.1	N.D.

NOTES: * - EPA Method 8080 compounds.

N.D. - Not detected; see laboratory reports for detection limits.



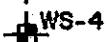
TERRATECH, INC.



LEGEND



Monitoring well location



Ground water grab sample location

0 70
Feet



Dec. 1990

TERRATECH

**SUNNYSIDE COMMONS II
HAYWARD, CALIFORNIA**

**SITE PLAN AND
GROUND WATER SAMPLING LOCATIONS**

**FIGURE
I
PROJECT
4454/3**

APPENDIX A
DRILL HOLE LOGS

EXPLORATION DRILL HOLE LOG							HOLE No. WS-2					
PROJECT SUNNYSIDE COMMONS II			DATE 11-16-90			LOGGED BY SMC						
DRILL RIG Mobile B-61 - Hollow Stem	HOLE DIA. 8"	SAMPLER Std. Pen.										
GROUNDWATER DEPTH INITIAL 16'	FINAL 14.9'	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 (psi)
SILTY SAND WITH GRAVEL; brown, dry; Fill	SM	1										
FAT CLAY WITH SAND; black, dry; 20% fine sand	CH	2										
CLAYEY SAND; brown, damp, medium dense; fine sand	SC	3										
		4										
		5										
		6		30								
		7										
		8										
- ? - ? - ? - ? - ? - ? - ? SANDY LEAN CLAY; brown, damp, stiff; 25% fine sand, minor organics	CL	9										
		10										
		11		12								
SILTY SAND, brown, damp, medium dense; fine sand, ~40% silty fines	SM	12										
		13										
- ? - ? - ? - ? - ? - ? - ? CLAYEY SAND; brown with grey mottles, moist, firm; ~10% fine sand; rootlets wet	CI	14										
		15										
		16		7								
		17										
		18										
		19										
BOTTOM OF BORING @ 19.5'		20										
Ground Water Sampled												
PROJECT	4454/3	TERRATECH				Page 1 of 1						

EXPLORATION DRILL HOLE LOG							HOLE No. WS-3						
PROJECT	SUNNYSIDE COMMONS II		DATE	11-16-90	LOGGED BY	SMC							
DRILL RIG	Mobile B-61 - Hollow Stem	HOLE DIA.	8"	SAMPLER	Std. Pen.								
GROUNDWATER DEPTH INITIAL	16'	FINAL	15.25'	HOLE ELEV.			_____						
DESCRIPTION		SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (lbf)	TORVANE (lbf)	LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
CLAYEY SAND; brown, moist, loose, <u>wet, minor gravel, Fill</u> FAT CLAY; black, moist, stiff, trace fine sand		SC CH	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	/ / / / / / / / / / / / / / / / / /	25 / / / / / / / / / / / / / / / / / /								
brown, very stiff; fine sand <u>brown with black mottles</u> CLAYEY SAND/SANDY CLAY; brown, damp, medium dense, very stiff; 50% fine sand, 50% clay		SC CI	10 11 12 13 14 15 16 17 18 19 20	/ / / / / / / / / / / /	9 / / / / / / / / / / / /								
SANDY LEAN CLAY; brown, damp, stiff; 30% fine sand, 6" lense of silty sand													
grey-brown, brown mottles; rootlets; less sand;													
wet													
BOTTOM OF BORING @ 19.5'													
Ground Water Sampled													
PROJECT	4454/3	TERRATECH							Page 1 of 1				

EXPLORATION DRILL HOLE LOG

HOLE No.

WS-4

PROJECT SUNNYSIDE COMMONS II

DATE 11-16-90

LOGGED BY SMC

DRILL RIG Mobile B-61 - Hollow Stem

HOLE DIA.

8"

SAMPLER

Std. Pen.

GROUNDWATER DEPTH INITIAL

16.5'

FINAL

15.75'

HOLE ELEV.

DESCRIPTION	SOIL TYPE	DEPTH	SAMPLE	BLOWS PER FOOT	POCKET PEN. (lbf)	TORVANE (lbf)	LIQUID LIMIT	WATER CONTENT	PLASTIC LIMIT	DRY DENSITY (pcf)	FAILURE STRAIN (%)	UNCONFINED SHEAR STRENGTH (psf)
6" concrete slab												
CLAYEY SAND WITH GRAVEL; brown, moist; Fill	SC	1										
FAT CLAY; black, damp; very stiff; minor fine sand; organics, bluish sandy stringers	CH	2										
dark brown		3										
CLAY WITH SAND; brown; damp, very stiff, fine sand, black mottles and rootlets; 25% fine sand	CI	4										
		5	/									
		6	/	21								
		7										
sandy		8										
SANDY LEAN CLAY; brown, damp, stiff; 40% fine sand, minor organics and root holes, 3" lense of silty sand	CL	9										
		10	/									
		11	/	7								
		12										
POORLY GRADED SAND WITH SAND; brown, damp; minor coarse grains, sub angular (comes up on cuttings) predom; medium sand	SP	13										
		14										
LEAN CLAY WITH SAND; brown with rust mottles; moist to wet, firm, fine sand; organics	CL	15	/									
		16	/	5								
		17										
		18										
		19										
BOTTOM OF BORING @ 19.5'		20										

Ground Water Sampled

APPENDIX B

ANALYTICAL LABORATORY REPORT

AND

CHAIN-OF-CUSTODY RECORD

M
17.00
TERRATECH90116 R8
10/17P.O. NO. 3343TURNAROUND: 2-week

CHAIN OF CUSTODY RECORD

PROJECT NUMBER: <u>4454/3</u>						Number of Con- tainers	Analysis Required EPA (6NS/88C) (2 specificides)	SAMPLE DEPTH						REMARKS Samples 1-4, CH, not pures.
Station Number	Date 1990	Time	Comp.	Grab	Station Location									
01	WS-1	11-16		X				2 AMBERS	X					
02	WS-2	11-16		X		2 AMBERS	X					"		
03	WS-3	11-16		X		2 AMBERS	X					"		
04	WS-4	11-16		X		2 AMBERS	X					"		
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 (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 11-16-90 4:50pm		Received for Laboratory by: (signature) Terry D. Lautenbach		Date / Time 11-16-90 16:50		Remarks/Shipping Information Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112					

ANAMETRIX INC

Environmental & Analytical Chemistry
1961 Concourse Drive, Suite E, San Jose, CA 95131
(408) 432-8192 • Fax (408) 432-8198

**REPORT**

MR. ERIC LAUTENBACH
TERRATECH, INC. - SAN JOSE
1365 VANDER WAY
SAN JOSE, CA 95112

Workorder # : 9011168
Date Received : 11/16/90
Project ID : 4454/3
Purchase Order: 3343

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9011168- 1	WS-1
9011168- 2	WS-2
9011168- 3	WS-3
9011168- 4	WS-4

This report is paginated for your convenience and ease of review. It contains 7 pages excluding the cover letter. The report is organized into sections. Each section contains all analytical results and quality assurance data related to a specific group or section within Anametrix. The Report Summary that precedes each section will help you determine which group at Anametrix generated the data. The Report Summary will contain the signatures of the department supervisor and a chemist, both of whom reviewed the analytical data. Please refer all questions to the department supervisor that signed the form.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Burt Sutherland
Burt Sutherland
Laboratory Director

12-04-90
Date

REPORT SUMMARY
ANAMETRIX, INC. (408) 432-8192

MR. ERIC LAUTENBACH
TERRATECH, INC. - SAN JOSE
1365 VANDER WAY
SAN JOSE, CA 95112

Workorder # : 9011168
Date Received : 11/16/90
Project ID : 4454/3
Purchase Order: 3343
Department : GC
Sub-Department: PEST

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9011168- 1	WS-1	H2O	11/16/90	8080
9011168- 2	WS-2	H2O	11/16/90	8080
9011168- 3	WS-3	H2O	11/16/90	8080
9011168- 4	WS-4	H2O	11/16/90	8080

REPORT SUMMARY
ANAMETRIX, INC. (408) 432-8192

MR. ERIC LAUTENBACH
TERRATECH, INC. - SAN JOSE
1365 VANDER WAY
SAN JOSE, CA 95112

Workorder # : 9011168
Date Received : 11/16/90
Project ID : 4454/3
Purchase Order: 3343
Department : GC
Sub-Department: PEST

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Susan Danner 12-4-90
Department Supervisor Date

Stephanie N Tran 12-4-90
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 608/8080
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/3 WS-1
 Matrix : WATER
 Date sampled : 11/16/90
 Date ext. : 11/20/90
 Date analyzed: 11/29/90
 Dilution : NONE

Anametrix I.D. : 9011168-01
 Analyst : ST
 Supervisor : SD
 Date released : 12/04/90
 Volume ext. : 750mL
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/l)	Amount Found (ug/l)
319-84-6	alpha-BHC	0.05	ND
319-85-7	beta-BHC	0.05	ND
58-89-9	gamma-BHC (Lindane)	0.05	ND
319-86-8	delta-BHC	0.05	ND
76-44-8	Heptachlor	0.05	ND
309-00-2	Aldrin	0.05	ND
1024-57-3	Heptachlor epoxide	0.05	ND
959-98-8	Endosulfan I	0.05	ND
72-55-9	p,p'-DDE	0.1	ND
60-57-1	Dieldrin	0.1	ND
72-20-8	Endrin	0.1	ND
72-54-8	p,p'-DDD	0.1	ND
33212-65-9	Endosulfan II	0.1	ND
50-29-3	p,p'-DDT	0.1	ND
7421-93-4	Endrin aldehyde	0.1	ND
1031-07-8	Endosulfan sulfate	0.1	ND
72-43-5	p,p'-Methoxychlor	0.1	ND
53494-70-5	Endrin ketone	0.1	ND
12789-03-6	Technical chlordane	0.5	ND
8001-35-2	Toxaphene	1	ND
1104-28-2	Aroclor 1221	0.5	ND
11141-16-5	Aroclor 1232	0.5	ND
53469-21-9	Aroclor 1242	0.5	ND
12672-29-6	Aroclor 1248	0.5	ND
11097-69-1	Aroclor 1254	1	ND
11096-82-5	Aroclor 1260	1	ND
12674-11-2	Aroclor 1016	0.5	ND
Dibutylchlorethane		24-154%	72%

ND : Not detected at or above the practical quantitation limit for the method.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 608/8080
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/3 WS-2
 Matrix : WATER
 Date sampled : 11/16/90
 Date ext. : 11/20/90
 Date analyzed: 11/29/90
 Dilution : NONE

Anametrix I.D. : 9011168-02
 Analyst : ST
 Supervisor : SD
 Date released : 12/04/90
 Volume ext. : 1 LITER
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/l)	Amount Found (ug/l)
319-84-6	alpha-BHC	0.05	ND
319-85-7	beta-BHC	0.05	ND
58-89-9	gamma-BHC (Lindane)	0.05	ND
319-86-8	delta-BHC	0.05	ND
76-44-8	Heptachlor	0.05	ND
309-00-2	Aldrin	0.05	ND
1024-57-3	Heptachlor epoxide	0.05	ND
959-98-8	Endosulfan I	0.05	ND
72-55-9	p,p'-DDE	0.1	ND
60-57-1	Dieldrin	0.1	ND
72-20-8	Endrin	0.1	ND
72-54-8	p,p'-DDD	0.1	ND
33212-65-9	Endosulfan II	0.1	ND
50-29-3	p,p'-DDT	0.1	ND
7421-93-4	Endrin aldehyde	0.1	ND
1031-07-8	Endosulfan sulfate	0.1	ND
72-43-5	p,p'-Methoxychlor	0.1	ND
53494-70-5	Endrin ketone	0.1	ND
12789-03-6	Technical chlordane	0.5	ND
8001-35-2	Toxaphene	1	ND
1104-28-2	Aroclor 1221	0.5	ND
11141-16-5	Aroclor 1232	0.5	ND
53469-21-9	Aroclor 1242	0.5	ND
12672-29-6	Aroclor 1248	0.5	ND
11097-69-1	Aroclor 1254	1	ND
11096-82-5	Aroclor 1260	1	ND
12674-11-2	Aroclor 1016	0.5	ND
Dibutylchlorendate		24-154%	80%

ND : Not detected at or above the practical quantitation limit for the method.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 608/8080
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/3 WS-3
 Matrix : WATER
 Date sampled : 11/16/90
 Date ext. : 11/20/90
 Date analyzed: 11/28/90
 Dilution : NONE

Anametrix I.D. : 9011168-03
 Analyst : ST
 Supervisor : SD
 Date released : 12/04/90
 Volume ext. : 1 LITER
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/l)	Amount Found (ug/l)
319-84-6	alpha-BHC	0.05	ND
319-85-7	beta-BHC	0.05	ND
58-89-9	gamma-BHC (Lindane)	0.05	ND
319-86-8	delta-BHC	0.05	ND
76-44-8	Heptachlor	0.05	ND
309-00-2	Aldrin	0.05	ND
1024-57-3	Heptachlor epoxide	0.05	ND
959-98-8	Endosulfan I	0.05	ND
72-55-9	p,p'-DDE	0.1	ND
60-57-1	Dieldrin	0.1	ND
72-20-8	Endrin	0.1	ND
72-54-8	p,p'-DDD	0.1	ND
33212-65-9	Endosulfan II	0.1	ND
50-29-3	p,p'-DDT	0.1	ND
7421-93-4	Endrin aldehyde	0.1	ND
1031-07-8	Endosulfan sulfate	0.1	ND
72-43-5	p,p'-Methoxychlor	0.1	ND
53494-70-5	Endrin ketone	0.1	ND
12789-03-6	Technical chlordane	0.5	ND
8001-35-2	Toxaphene	1	ND
1104-28-2	Aroclor 1221	0.5	ND
11141-16-5	Aroclor 1232	0.5	ND
53469-21-9	Aroclor 1242	0.5	ND
12672-29-6	Aroclor 1248	0.5	ND
11097-69-1	Aroclor 1254	1	ND
11096-82-5	Aroclor 1260	1	ND
12674-11-2	Aroclor 1016	0.5	ND
Dibutylchlorendate		24-154%	88%

ND : Not detected at or above the practical quantitation limit for the method.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 608/8080
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 4454/3 WS-4
 Matrix : WATER
 Date sampled : 11/16/90
 Date ext. : 11/20/90
 Date analyzed: 11/28/90
 Dilution : NONE

Anametrix I.D. : 9011168-04
 Analyst : *g*
 Supervisor : *SP*
 Date released : 12/04/90
 Volume ext. : 950mL
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/l)	Amount Found (ug/l)
319-84-6	alpha-BHC	0.05	ND
319-85-7	beta-BHC	0.05	ND
58-89-9	gamma-BHC (Lindane)	0.05	ND
319-86-8	delta-BHC	0.05	ND
76-44-8	Heptachlor	0.05	ND
309-00-2	Aldrin	0.05	ND
1024-57-3	Heptachlor epoxide	0.05	ND
959-98-8	Endosulfan I	0.05	ND
72-55-9	p,p'-DDE	0.1	ND
60-57-1	Dieldrin	0.1	ND
72-20-8	Endrin	0.1	ND
72-54-8	p,p'-DDD	0.1	ND
33212-65-9	Endosulfan II	0.1	ND
50-29-3	p,p'-DDT	0.1	ND
7421-93-4	Endrin aldehyde	0.1	ND
1031-07-8	Endosulfan sulfate	0.1	ND
72-43-5	p,p'-Methoxychlor	0.1	ND
53494-70-5	Endrin ketone	0.1	ND
12789-03-6	Technical chlordane	0.5	ND
8001-35-2	Toxaphene	1	ND
1104-28-2	Aroclor 1221	0.5	ND
11141-16-5	Aroclor 1232	0.5	ND
53469-21-9	Aroclor 1242	0.5	ND
12672-29-6	Aroclor 1248	0.5	ND
11097-69-1	Aroclor 1254	1	ND
11096-82-5	Aroclor 1260	1	ND
12674-11-2	Aroclor 1016	0.5	ND
Dibutylchlorendate		24-154%	94%

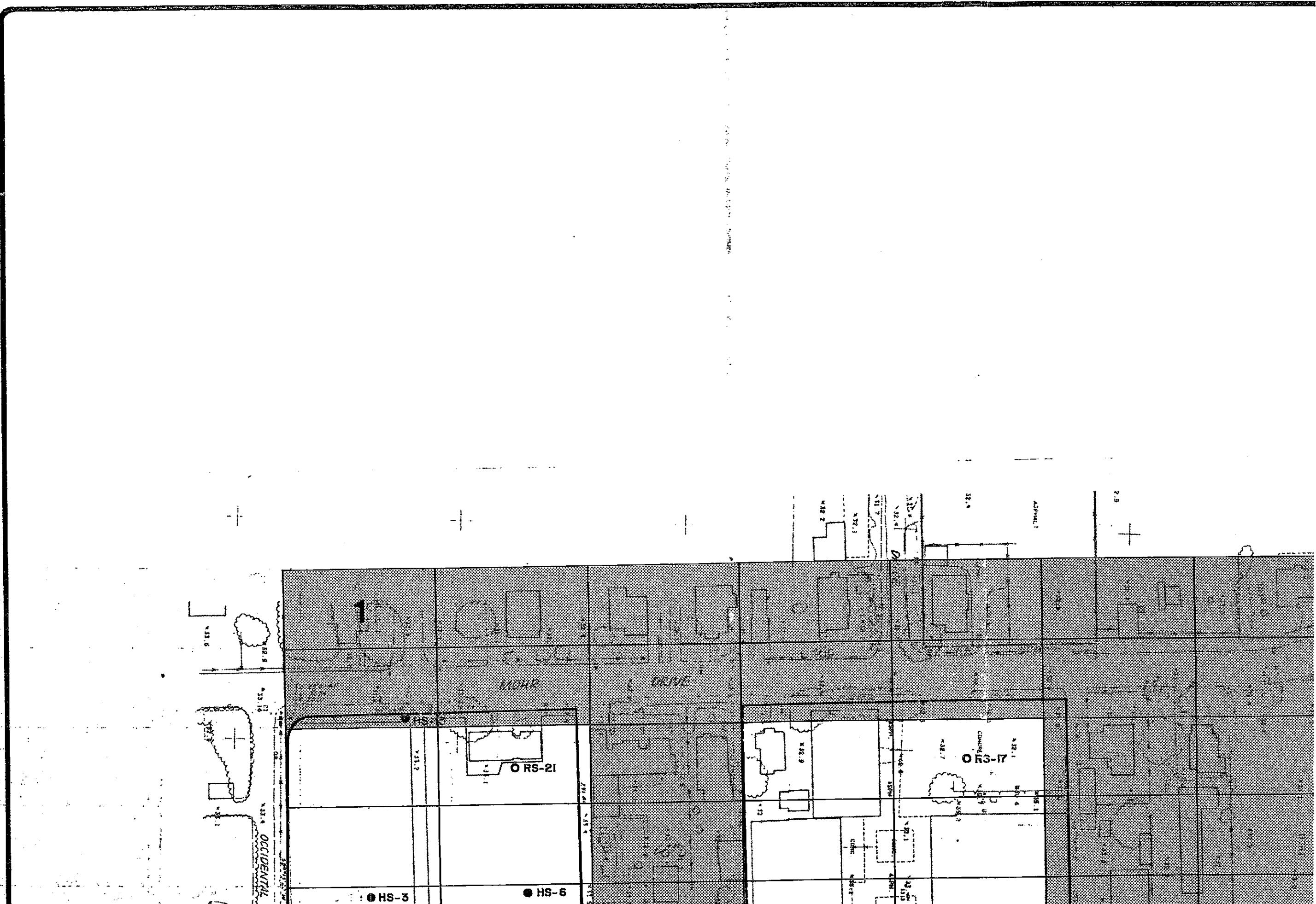
ND : Not detected at or above the practical quantitation limit for the method.

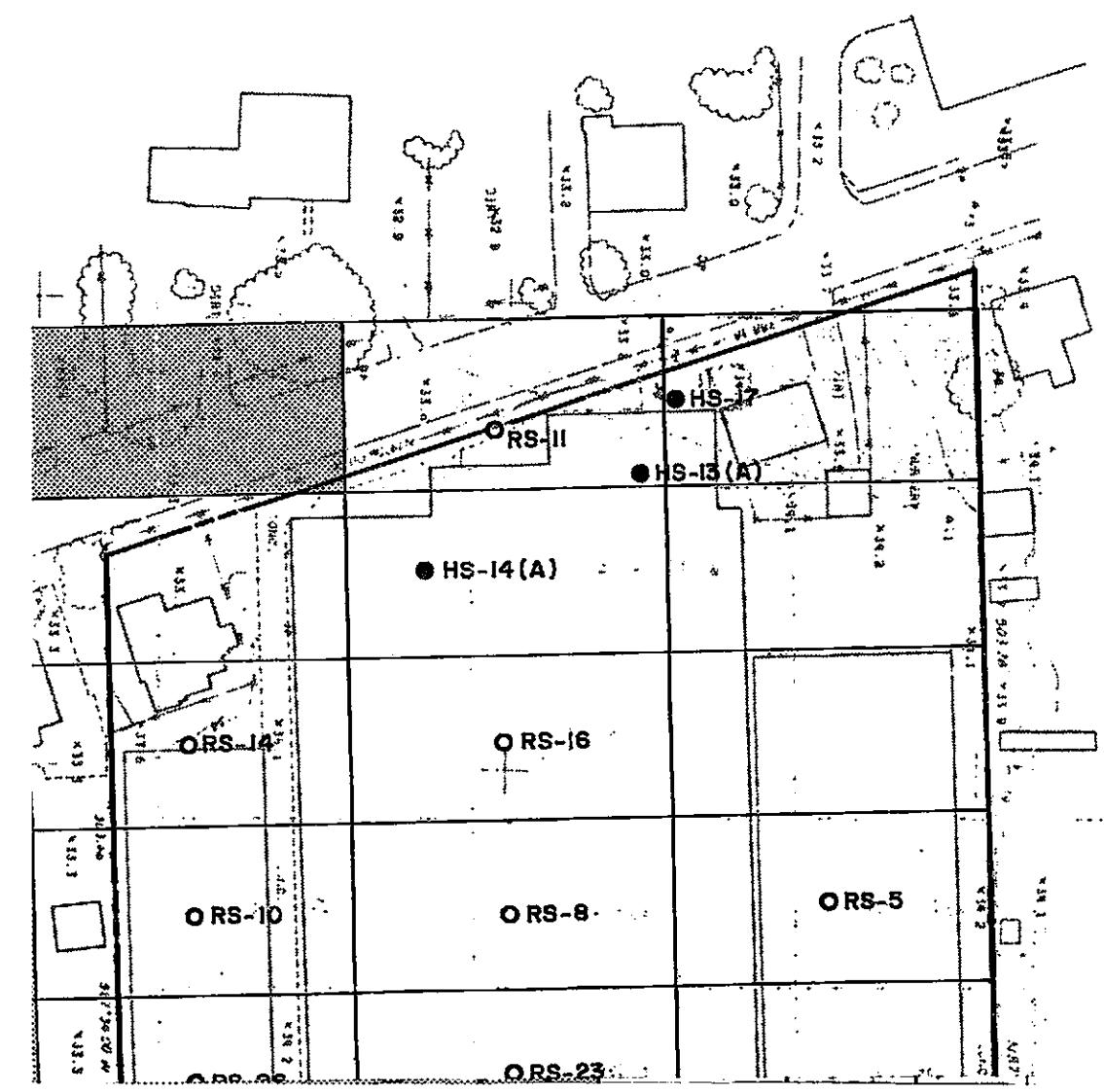
ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 608/8080
ANAMETRIX, INC. (408) 432-8192

Sample I.D. :	METHOD BLANK	Anametrix I.D. :	PWBL112090
Matrix :	WATER	Analyst :	AN
Date sampled :	N/A	Supervisor :	SD
Date ext. :	11/20/90	Date released :	12/04/90
Date analyzed:	11/29/90	Volume ext. :	1 LITER
Dilution :	NONE	Instrument ID :	HP5A

CAS #	Compound Name	Reporting Limit (ug/l)	Amount Found (ug/l)
319-84-6	alpha-BHC	0.05	ND
319-85-7	beta-BHC	0.05	ND
58-89-9	gamma-BHC (Lindane)	0.05	ND
319-86-8	delta-BHC	0.05	ND
76-44-8	Heptachlor	0.05	ND
309-00-2	Aldrin	0.05	ND
1024-57-3	Heptachlor epoxide	0.05	ND
959-98-8	Endosulfan I	0.05	ND
72-55-9	p,p'-DDE	0.1	ND
60-57-1	Dieldrin	0.1	ND
72-20-8	Endrin	0.1	ND
72-54-8	p,p'-DDD	0.1	ND
33212-65-9	Endosulfan II	0.1	ND
50-29-3	p,p'-DDT	0.1	ND
7421-93-4	Endrin aldehyde	0.1	ND
1031-07-8	Endosulfan sulfate	0.1	ND
72-43-5	p,p'-Methoxychlor	0.1	ND
53494-70-5	Endrin ketone	0.1	ND
12789-03-6	Technical chlordane	0.1	ND
8001-35-2	Toxaphene	0.5	ND
1104-28-2	Aroclor 1221	1	ND
11141-16-5	Aroclor 1232	0.5	ND
53469-21-9	Aroclor 1242	0.5	ND
12672-29-6	Aroclor 1248	0.5	ND
11097-69-1	Aroclor 1254	0.5	ND
11096-82-5	Aroclor 1260	1	ND
12674-11-2	Aroclor 1016	0.5	ND
Dibutylchlorendate		24-154%	86%

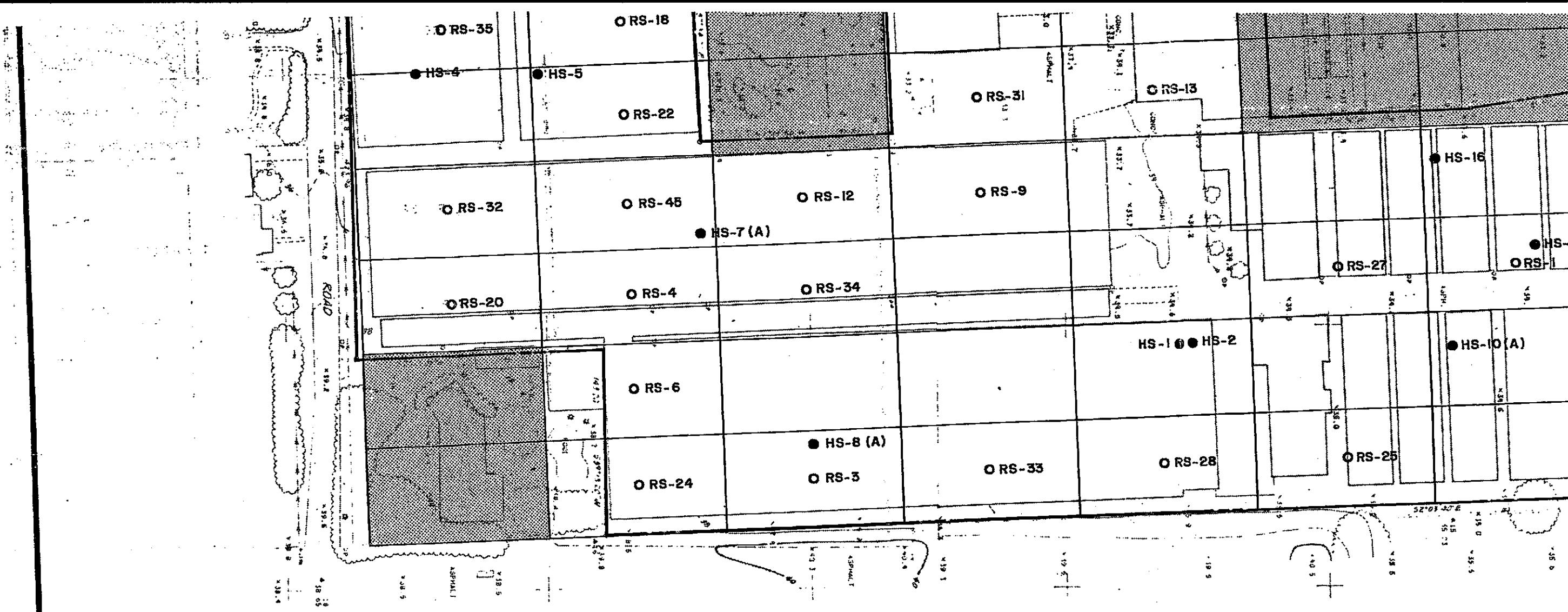
ND : Not detected at or above the practical quantitation limit for the method.



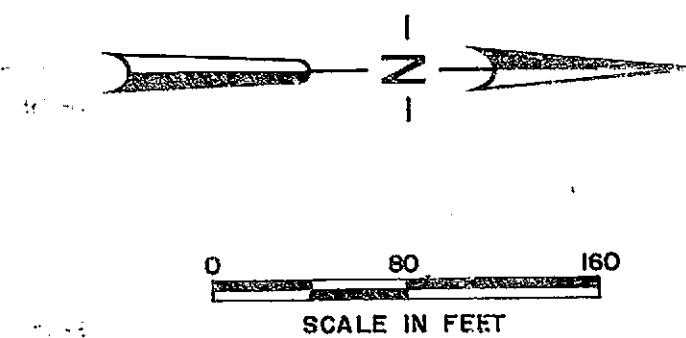
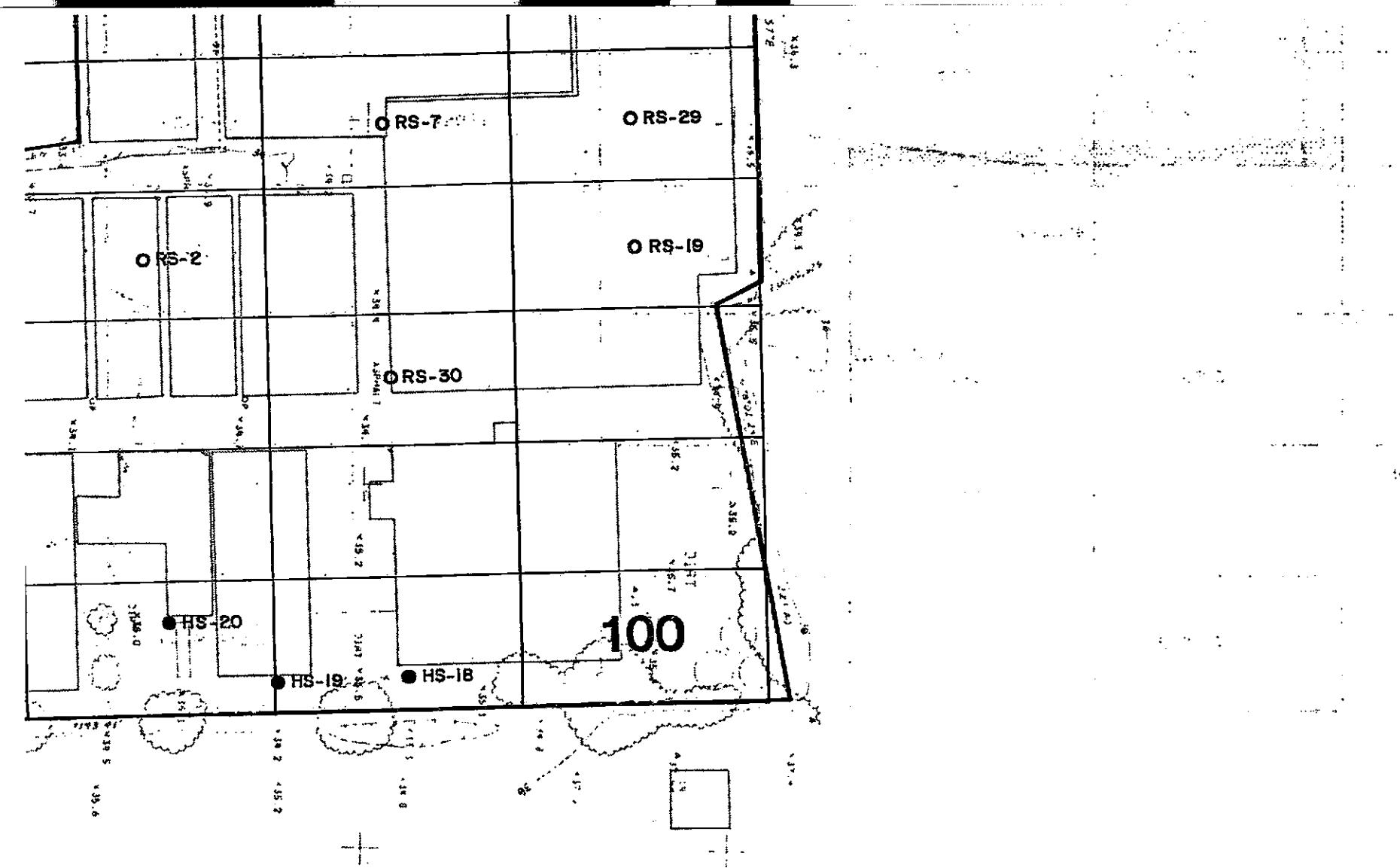


LEGEND

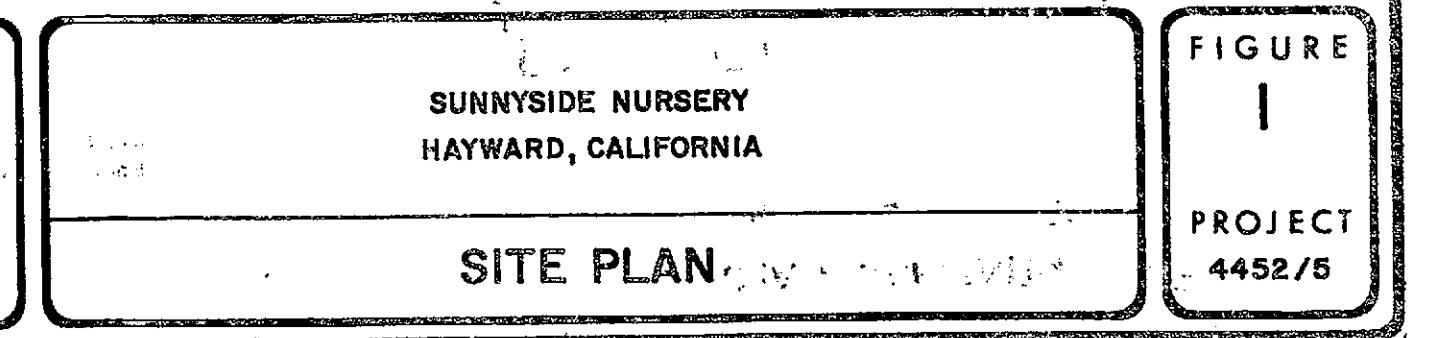
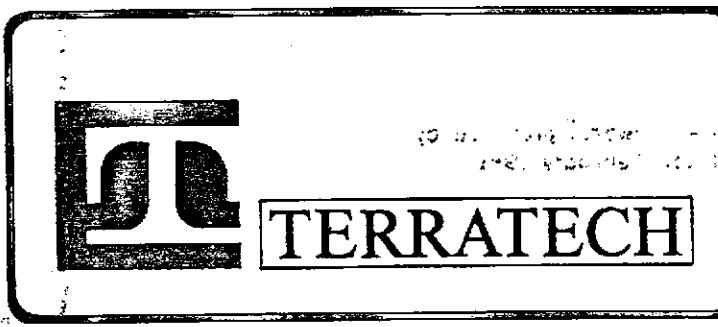
- HS-20 SHALLOW SOIL SAMPLE ("A" DESIGNATES RESAMPLE)
- RS-36 RANDOM SHALLOW SOIL SAMPLE
- PROPERTY BOUNDARY



BASE MAP: "Boundary Topography, Plymouth - Hayward", prepared by
Cannis Consulting Engineers, dated February 1989



DATE	Nov. 1990	DWN BY	AMW	CHKD	ERL	APPR
REVISIONS						
NO.	DATE	DWN	CHKD	APPR		

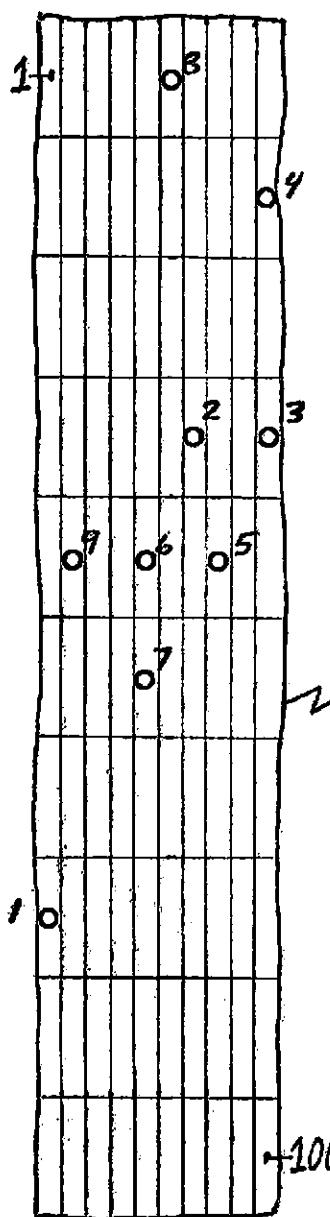


#4454/5

FIGURE 2

Nov. 13, 1990

CHARACTERIZATION OF
SOIL STOCKPILE FROM LAGUNA PARK



<u>CELL #</u>	<u>SAMPLE #</u>	<u>DEPTH</u>
971	SP-1	5.4-6'
737	SP-2	4.2-4.8'
640	SP-3	3.6-4.2'
520	SP-4	3-3.6'
548	SP-5	3-3.6'
145	SP-6	0.6-1.2'
255	SP-7	1.2-1.8'
406	SP-8	2.4-3'
942	SP-9	5.4-6'

APPROX. STOCKPILE SIZE

N
1" ~ 40'

TERRATECH, INC.

SUNNYSIDE NURSERY
HAYWARD, CALIFORNIA