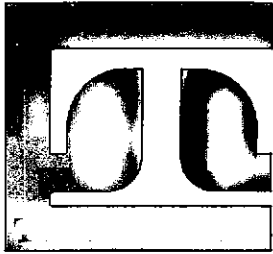


Reviewed 11/16 - discussed w/ H. Murphy -OK



1365 VANDER WAY

SAN JOSE, CALIFORNIA 95112

(408) 297-6969

FAX (408) 297-7716

90 NOV 14 AM 9:18

November 9, 1990  
Project 4454/4

Ms. Pamela Evans  
Alameda County Health Agency  
80 Swan Way, Room 200  
Oakland, California 94621

Subject: Confirmation Test Results  
Laguna Park Lots 5 and 12  
Hayward, California

Dear Ms. Evans:

Pursuant to our meeting of October 22nd, Terratech's letter of October 25th and your response of October 30, 1990 we performed confirmatory soil sampling and testing for the Laguna Park site. This report documents the procedures, locations and findings of this recent work.

The two areas of concern, as determined through verification sampling and testing in June 1990, were the northwestern portion of Lot 5 and the whole of Lot 12 (see Figure 1).

Pursuant to the procedures discussed in EPA Manual SW-846, we subdivided each of these areas into imaginary 10 by 10 grids of equal area cells, numbered sequentially from 1 to 100, east to west, north to south (see Figures 2 and 3). The random number generator in our IBM PC's BASIC programming language was then utilized, using 5 and 12 (the respective lot numbers) as "seed" numbers. For Lot 5 the first three cell numbers generated were 36, 79 and 21. For Lot 12 the first three cell numbers generated were 67, 9 and 81.

We collected the six soil samples from the centers of the above mentioned randomly selected cells on November 5, 1990. Sample collecting, packaging and handling techniques were the same as those described in our June 27, 1990 Closure Report. The iced samples were immediately delivered to Anametrix, a state certified laboratory in San Jose. Anametrix tested the samples for EPA Method 8080 pesticides on a 48-hour turnaround schedule. Our chain of custody record and Anametrix's report are appended.

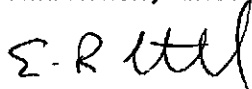
Project 4454/4

November 9, 1990

No detectable amounts of EPA 8080 pesticides were found in the six confirmation samples. It is therefore our conclusion that the Laguna Park site has been remediated sufficiently and residential construction can proceed.

Sincerely,

TERRATECH, INC.



Eric R. Lautenbach  
CE 42437

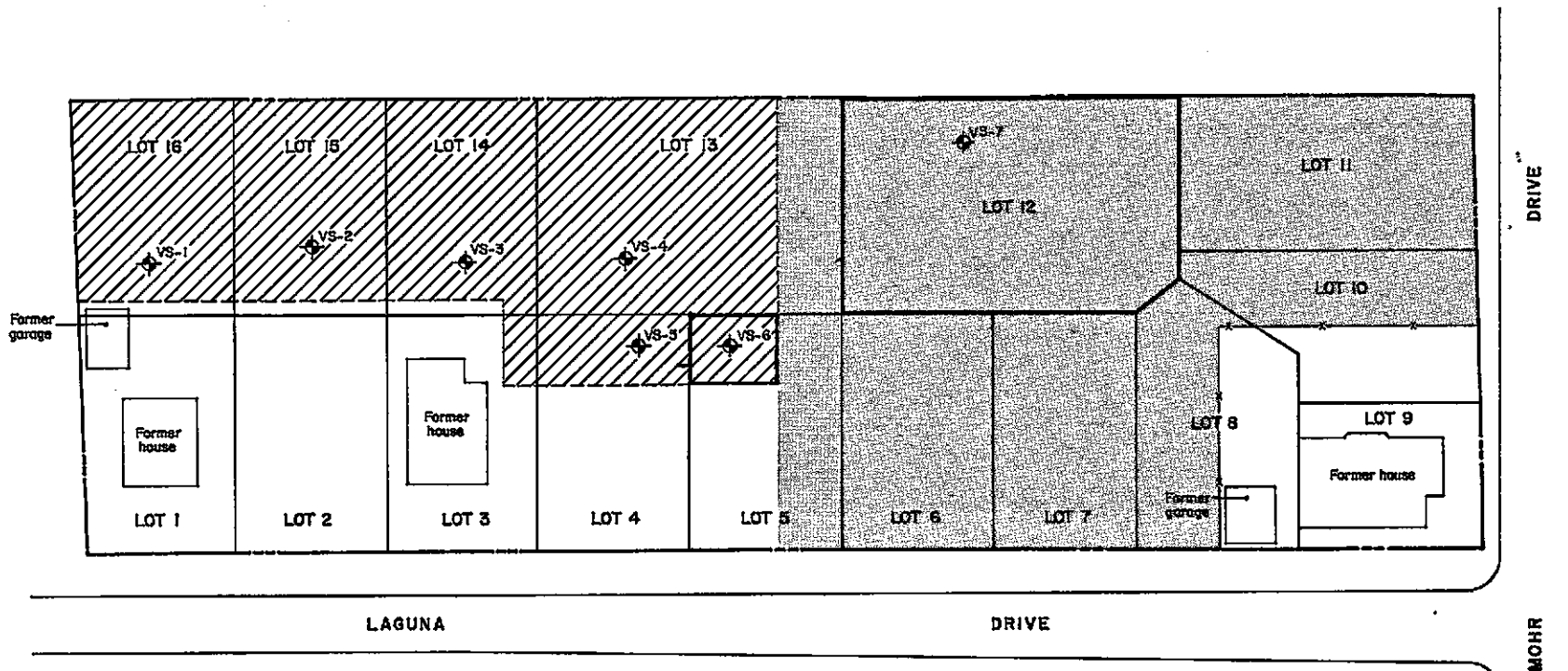


Attachments






cc: Hugh Murphy, Hayward Fire Department  
Rich Hiatt, California Regional Water Quality Control Board  
Laura Rice, The Plymouth Group

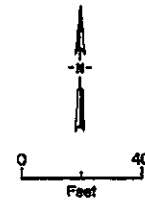


TERRATECH, INC.



**EXPLANATION**

-  Verification soil sample
-  Area of subexcavated soil
-  Area formerly covered with asphalt
-  Property line
-  Fence line



SAN JOSE BLUEPRINT CO  
PRINTED ON JR 302

May 1990

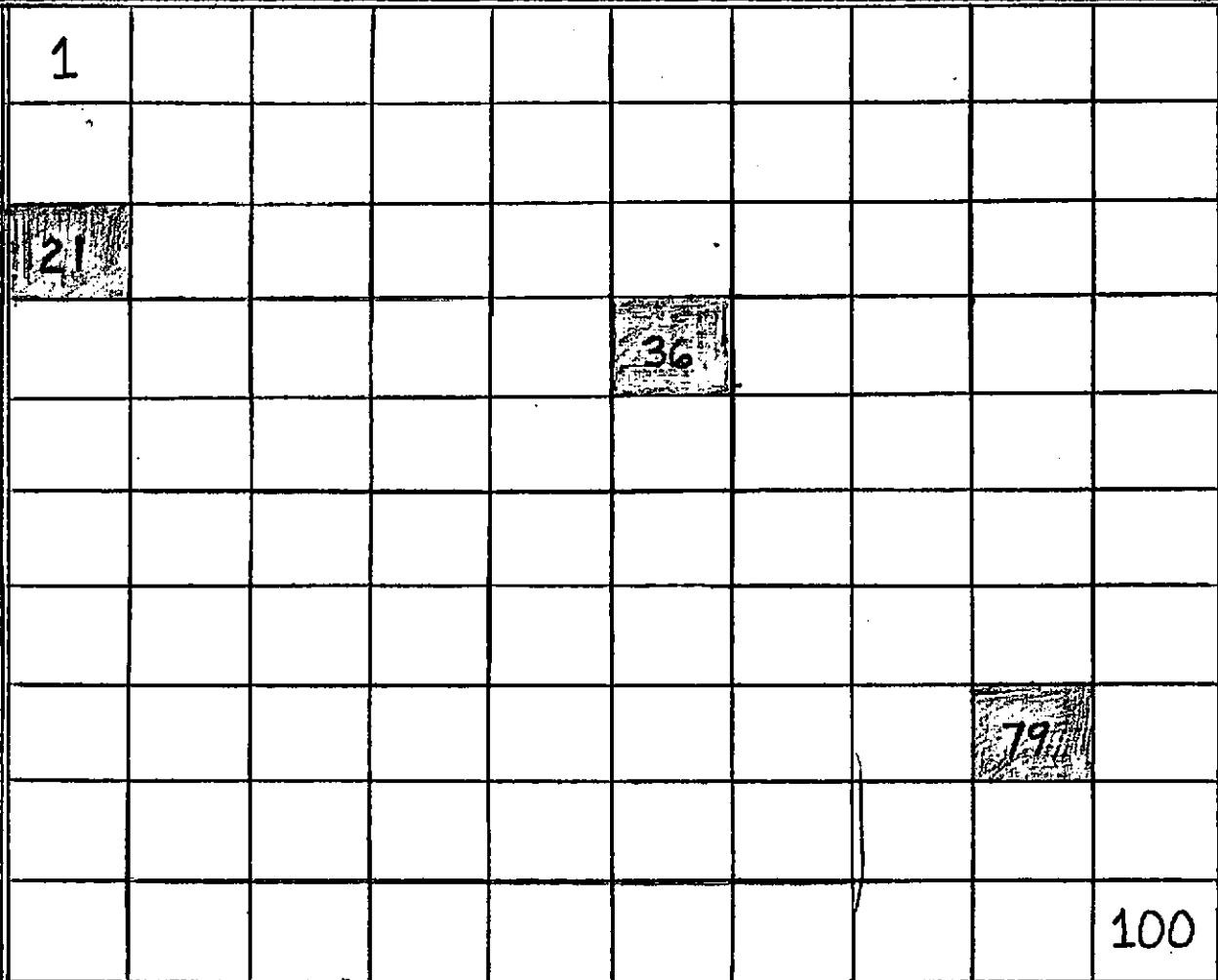
LAGUNA CLOSURE  
SUNNYSIDE NURSERY  
HAYWARD, CALIFORNIA

VERIFICATION SAMPLE AND SUBEXCAVATION LOCATION

FIGURE  
1

PROJECT  
4454/4

LOT 13



IMAGINARY GRID FOR RANDOM SAMPLING POINTS



LOT 4

TERRATECH, INC.  
1"=5'

LAGUNA PARK LOT 5  
HAYWARD, CALIFORNIA

42-381 50 SHEETS 1 SQUARE  
 42-382 100 SHEETS 1 SQUARE  
 42-383 200 SHEETS 1 SQUARE  
 NATIONAL

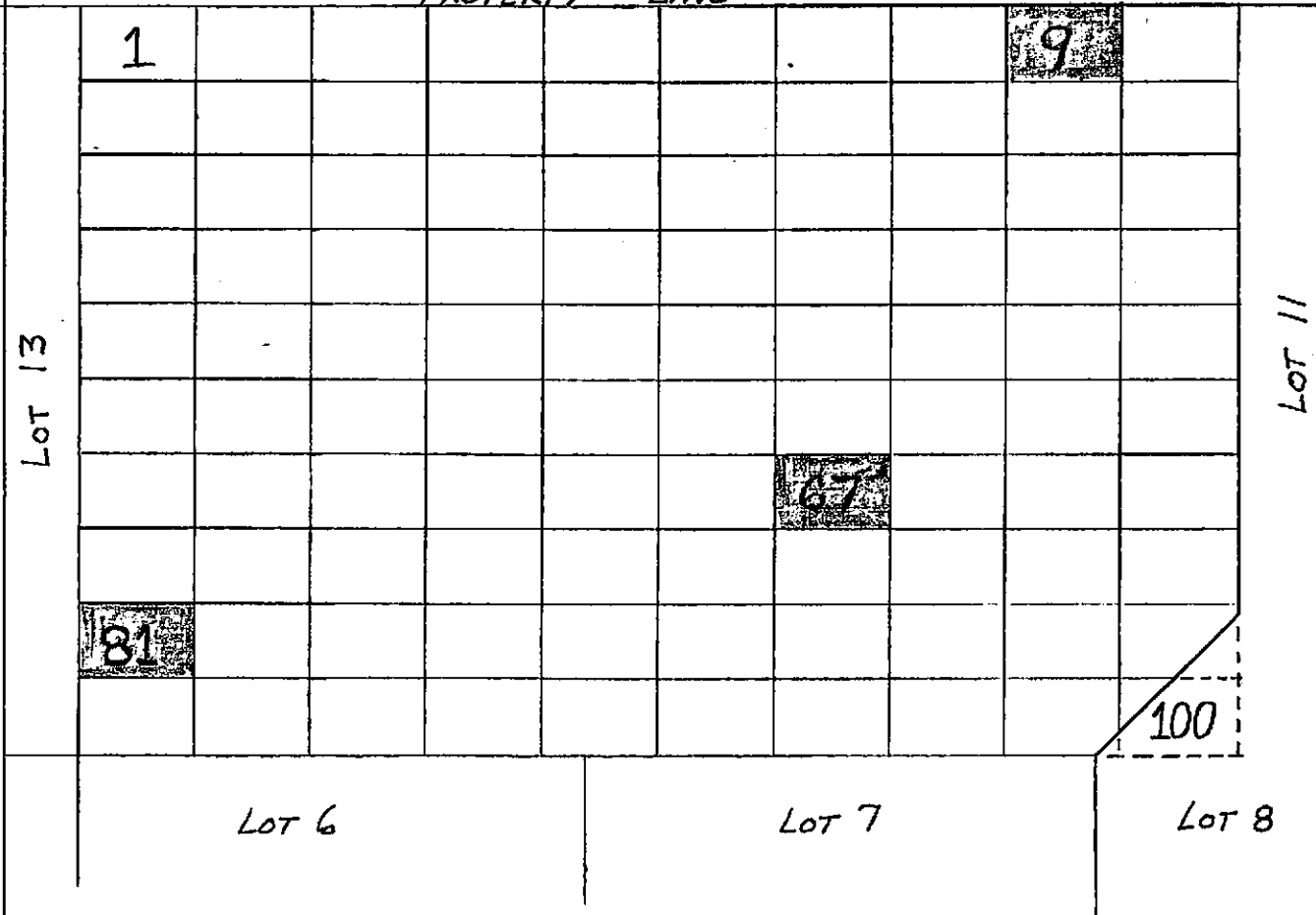
PROJECT 4454/4

FIGURE 3

NOVEMBER 2, 1990

10 SHEETS SQUARE  
100 SHEETS SQUARE  
200 SHEETS SQUARE  
NATIONAL  
U.S.A.

PROPERTY LINE



IMAGINARY GRID FOR RANDOM  
SAMPLING POINTS



TERRATECH, INC.  
1"=20'

LAGUNA PARK LOT 12  
HAYWARD, CALIFORNIA

**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 # : 9011042  
Date Received : 11/05/90  
Project ID : 4454/4  
Purchase Order: 9449

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

ANAMETRIX ID	CLIENT SAMPLE ID
9011042- 1	VS-8
9011042- 2	VS-9
9011042- 3	VS-10
9011042- 4	VS-11
9011042- 5	VS-12
9011042- 6	VS-13

This report is paginated for your convenience and ease of review. It contains 9 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 Anamatrix. The Report Summary that precedes each section will help you determine which group at Anamatrix 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 Anamatrix.

Burt Sutherland  
Laboratory Director

11-09-90

Date

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

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

Workorder # : 9011042  
Date Received : 11/05/90  
Project ID : 4454/4  
Purchase Order: 9449  
Department : GC  
Sub-Department: PEST

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9011042- 1	VS-8	SOIL	11/05/90	8080
9011042- 2	VS-9	SOIL	11/05/90	8080
9011042- 3	VS-10	SOIL	11/05/90	8080
9011042- 4	VS-11	SOIL	11/05/90	8080
9011042- 5	VS-12	SOIL	11/05/90	8080
9011042- 6	VS-13	SOIL	11/05/90	8080

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

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

Workorder # : 9011042  
Date Received : 11/05/90  
Project ID : 4454/4  
Purchase Order: 9449  
Department : GC  
Sub-Department: PEST

QA/QC SUMMARY :

- No QA/QC problems encountered for samples.

Stratos Dimas 11-8-90  
Department Supervisor Date

Stephanie N Tran 11-8-90  
Chemist Date



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

Sample I.D. : 4454/4 VS-8  
 Matrix : SOIL  
 Date sampled : 11/05/90  
 Date ext. : 11/05/90  
 Date analyzed: 11/06/90  
 Dilution : NONE

Anamatrix I.D. : 9011042-01  
 Analyst : *SP*  
 Supervisor : *SP*  
 Date released : 11/08/90  
 Weight ext. : 10 g  
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchlorendate	20-150%	81%

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. : 4454/4 VS-9  
 Matrix : SOIL  
 Date sampled : 11/05/90  
 Date ext. : 11/05/90  
 Date analyzed: 11/06/90  
 Dilution : NONE

Anamatrix I.D. : 9011042-02  
 Analyst : SK  
 Supervisor : SB  
 Date released : 11/08/90  
 Weight ext. : 10 g  
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchlorendate	20-150%	60%

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. : 4454/4 VS-10  
 Matrix : SOIL  
 Date sampled : 11/05/90  
 Date ext. : 11/05/90  
 Date analyzed: 11/06/90  
 Dilution : NONE

Anamatrix I.D. : 9011042-03  
 Analyst : *ea*  
 Supervisor : *SD*  
 Date released : 11/08/90  
 Weight ext. : 10 g  
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchlorendate	20-150%	58%

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. : 4454/4 VS-11  
 Matrix : SOIL  
 Date sampled : 11/05/90  
 Date ext. : 11/05/90  
 Date analyzed: 11/07/90  
 Dilution : NONE

Anamatrix I.D. : 9011042-04  
 Analyst : *ST*  
 Supervisor : *SD*  
 Date released : 11/08/90  
 Weight ext. : 10 g  
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchlorendate	20-150%	74%

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. : 4454/4 VS-12  
 Matrix : SOIL  
 Date sampled : 11/05/90  
 Date ext. : 11/05/90  
 Date analyzed: 11/07/90  
 Dilution : NONE

Anamatrix I.D. : 9011042-05  
 Analyst : *ck*  
 Supervisor : *Sp*  
 Date released : 11/08/90  
 Weight ext. : 10 g  
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchloroendate	20-150%	62%

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. : 4454/4 VS-13  
Matrix : SOIL  
Date sampled : 11/05/90  
Date ext. : 11/05/90  
Date analyzed: 11/07/90  
Dilution : NONE

Anametrix I.D. : 9011042-06  
Analyst : ~~SK~~  
Supervisor : SD  
Date released : 11/08/90  
Weight ext. : 10 g  
Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchlorendate	20-150%	64%

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  
 Matrix : SOIL  
 Date sampled : N/A  
 Date ext. : 11/05/90  
 Date analyzed: 11/07/90  
 Dilution : NONE

Anametrix I.D. : PSBL110590  
 Analyst : *AK*  
 Supervisor : *SD*  
 Date released : 11/08/90  
 Weight ext. : 10 g  
 Instrument ID : HP5A

CAS #	Compound Name	Reporting Limit (ug/Kg)	Amount Found (ug/Kg)
319-84-6	alpha-BHC	8	ND
319-85-7	beta-BHC	8	ND
58-89-9	gamma-BHC (Lindane)	8	ND
319-86-8	delta-BHC	8	ND
76-44-8	Heptachlor	8	ND
309-00-2	Aldrin	8	ND
1024-57-3	Heptachlor epoxide	8	ND
959-98-8	Endosulfan I	8	ND
72-55-9	p,p'-DDE	16	ND
60-57-1	Dieldrin	16	ND
72-20-8	Endrin	16	ND
72-54-8	p,p'-DDD	16	ND
33212-65-9	Endosulfan II	16	ND
50-29-3	p,p'-DDT	16	ND
7421-93-4	Endrin aldehyde	16	ND
1031-07-8	Endosulfan sulfate	16	ND
72-43-5	p,p'-Methoxychlor	80	ND
53494-70-5	Endrin ketone	16	ND
12789-03-6	Technical chlordane	80	ND
8001-35-2	Toxaphene	160	ND
1104-28-2	Aroclor 1221	80	ND
11141-16-5	Aroclor 1232	80	ND
53469-21-9	Aroclor 1242	80	ND
12672-29-6	Aroclor 1248	80	ND
11097-69-1	Aroclor 1254	160	ND
11096-82-5	Aroclor 1260	160	ND
12674-11-2	Aroclor 1016	80	ND
	Dibutylchlorendate	20-150%	96%

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

NS  
1350

9011042

10/18



TERRATECH

CHAIN OF CUSTODY RECORD

P.O. NO. 9449

TURNAROUND: 48-hr

PROJECT NUMBER: <u>4454/4</u>						Number of Containers	Analysts Required <u>EPA 8080 (Pesticides)</u>						REMARKS	SAMPLE DEPTH	
SAMPLERS (signature): <u>Geoff Blain</u>							Station Location								
Station Number	Date	Time	Comp.	Grab											
① VS-8	11/5			X	LOT 5 CELL 36	1 LINER							OK	6"-12" *	
② VS-9				X	LOT 5 CELL 79	↓							OK	6"-12" *	
③ VS-10	↓			X	LOT 5 CELL 21	↓							OK	6"-12" *	
④ VS-11	11/5			X	LOT 12 CELL 67	1 LINER							OK	6"-12"	
⑤ VS-12				X	LOT 12 CELL 9	↓							OK	6"-12"	
⑥ VS-13	↓			X	LOT 12 CELL 81	↓							OK	6"-12"	
												* below subexc'd grade			
Relinquished by(signature):		Date / Time		Received by (signature):		Relinquished by(signature):		Date / Time		Received by (signature):					
Company or Agency: _____		_____		Company or Agency: _____		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: <u>TERRATECH, INC.</u>		<u>11/5/90</u> <u>13:35</u>		<u>Calvin McRivie</u> (signature)		<u>11-5-90</u> <u>13:35</u>		Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112							