



1365 VANDER WAY

SAN JOSE, CALIFORNIA 95112

(408) 297-6969 or FAX (408) 297-7716

**TO:** Hayward Fire Department  
22300 Foothill Boulevard  
Hayward, California 94541

**DATE:** May 3, 1989

**PROJECT NO.:** 4454

**ATTENTION:** Hugh Murphy

**SUBJECT:** Latest Soil Sample Analysis Results  
Sunnyside Nursery

**We are:**  **Enclosing**  **Reports**  
 **Forwarding**  **Drawings**  
 **Per your request**  **Specifications**  
 **Number of copies**  **Other** Laboratory sample results

**Description:** Summary Table of Individual Soil Sample Results Laboratory Reports

**Comments:** Follow-up sampling and analysis showed no endrin, only endosulfan  
compounds. Verbal from laboratory indicates that no soluble (STLC - WET) amounts  
of 8080 pesticides are present.

**Sent by:**  **First Class Mail**  
 **Special Delivery**  
 **Other:** \_\_\_\_\_

**cc:** Kathy Miura, Plymouth Group  
Janet Nato, California DHS  
Larry Cogan, Ware & Friedenrich

Lisa Sousa  
**Signature of Sender**



TABLE 1

SUMMARY OF INDIVIDUAL SOIL SAMPLE ANALYSIS RESULTS  
FOR AGRICULTURAL CHEMICAL AREASSUNNYSIDE NURSERY  
HAYWARD, CALIFORNIA

(concentrations presented in parts per million)

CONTAMINANT	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)
	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
<b>CHLORINATED PESTICIDES</b>													
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 others (EPA 8080)	< 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
	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



(408) 297-6969  
SAN JOSE OFFICE

**TERRATECH**

CHAIN OF CUSTODY RECORD

SHEET 1 OF 1

PO # 7361  
1 week turnaround

PROJECT NAME: # 4454A					Number of Containers	Analysis Required TTLC Pesticides	REMARKS		
SAMPLERS (signature): <i>Scott Blum</i>									
Station Number	Date 1989	Time	Comp.	Grab	Station Location			DEPTH	
HS-11A	4/11	PM		X		X		4'-10"	
HS-12A				X		X			
HS-13A				X		X			
HS-14A				X		X			
Relinquished by(signature): <i>Blum</i> Company or Agency: Terratech		Date / Time 4/13/89 10:09	Received by(signature): <i>Eric Lautenbach</i> Company or Agency: Terratech		Relinquished by(signature):		Date / Time	Received by (signature):	
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:(signature)		Date / Time	Remarks/Shipping Information			
Company or Agency: TERRATECH, INC.						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

APR 25 1989

RECEIVED

Terratech, Inc.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Geoff Blair

Client Project ID: #4454/1  
Sample Descript: Soil, HS-11A  
Analysis Method: EPA 8080  
Lab Number: 904-1201

Sampled: Apr 11, 1989  
Received: Apr 13, 1989  
Extracted: Apr 17, 1989  
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.
<b>Endosulfan I.....</b>	<b>500.0</b>	<b>5,600</b>
<b>Endosulfan II.....</b>	<b>250.0</b>	<b>18,000</b>
<b>Endosulfan sulfate.....</b>	<b>2,500.0</b>	<b>13,000</b>
Endrin.....	500.0	N.D.
Endrin aldehyde.....	750.0	N.D.
Heptachlor.....	250.0	N.D.
Heptachlor epoxide.....	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.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Geoff Blair

Client Project ID: #4454/1  
Sample Descript: Soil, HS-12A  
Analysis Method: EPA 8080  
Lab Number: 904-1202

Sampled: Apr 11, 1989  
Received: Apr 13, 1989  
Extracted: Apr 19, 1989  
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.
<b>Endosulfan I.....</b>	<b>500.0</b>	<b>6,700</b>
<b>Endosulfan II.....</b>	<b>250.0</b>	<b>13,000</b>
<b>Endosulfan sulfate.....</b>	<b>2,500.0</b>	<b>6,700</b>
Endrin.....	500.0	N.D.
Endrin aldehyde.....	750.0	N.D.
Heptachlor.....	250.0	N.D.
Heptachlor epoxide.....	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.

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Terratech, Inc.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Geoff Blair

Client Project ID: #4454/1  
Sample Descript: Soil, HS-13A  
Analysis Method: EPA 8080  
Lab Number: 904-1203

Sampled: Apr 11, 1989  
Received: Apr 13, 1989  
Extracted: Apr 19, 1989  
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.
<b>Endosulfan I.....</b>	<b>1,000.0</b>	<b>120,000</b>
<b>Endosulfan II.....</b>	<b>500.0</b>	<b>44,000</b>
<b>Endosulfan sulfate.....</b>	<b>5,000.0</b>	<b>3,300</b>
Endrin.....	1,000.0	N.D.
Endrin aldehyde.....	1,500.0	N.D.
Heptachlor.....	500.0	N.D.
Heptachlor epoxide.....	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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Terratech, Inc.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Geoff Blair

Client Project ID: #4454/1  
Sample Descript: Soil, HS-14A  
Analysis Method: EPA 8080  
Lab Number: 904-1204

Sampled: Apr 11, 1989  
Received: Apr 13, 1989  
Extracted: Apr 19, 1989  
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.
<b>Endosulfan I.....</b>	<b>500.0</b>	<b>3,800</b>
<b>Endosulfan II.....</b>	<b>250.0</b>	<b>3,500</b>
<b>Endosulfan sulfate.....</b>	<b>2,500.0</b>	<b>530</b>
Endrin.....	500.0	N.D.
Endrin aldehyde.....	750.0	N.D.
Heptachlor.....	250.0	N.D.
Heptachlor epoxide.....	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.

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Arthur G. Burton  
Laboratory Director



(408) 297-6969  
SAN JOSE OFFICE

**TERRATECH**

CHAIN OF CUSTODY RECORD

PO # 7331

1-WEEK TURNAROUND

PROJECT NAME: # 4454/2						Number of Containers	Analysis Required STLC (WET) PESTICIDES	REMARKS
SAMPLERS (signature): S.R. Lall for Brian Kahl								
Station Number	Date 1989	Time	Comp.	Grab	Station Location			DEPTH
HS-7A	4/14			X	"Central" Greenhouses	1 liner	X	4"-10"
HS-8A	↓			X	" "	↓	X	4"-10"
HS-9A	↓			X	" "	↓	X	4"-10"
HS-10A	↓			X	" "	↓	X	4"-10"

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): S. R. Lall Company or Agency: TERRATECH, INC.	Date / Time 4/10/89 9 <sup>20</sup> am	Received for Laboratory by: (signature) SEQUOIA	Date / Time 4/16/89 9:30 am	Remarks/Shipping Information Send reports to: Eric Lautenbach 1365 VANDER WAY, SAN JOSE 95112	





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Terratech, Inc.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Eric Lautenbach

Client Project ID: 4454/2  
Sample Descript: Soil, HS-7 A,STLC  
Analysis Method: EPA 8080  
Lab Number: 904-1798

Sampled: Apr 14, 1989  
Received: Apr 18, 1989  
Extracted: Apr 26, 1989  
Analyzed: Apr 28, 1989  
Reported: May 12, 1989

## ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/L	Sample Results µg/L
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-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	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 epoxide.....	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.

SEQUOIA ANALYTICAL

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Laboratory Director



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Terratech, Inc.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Eric Lautenbach

Client Project ID: 4454/2  
Sample Descript: Soil, HS-8 A,STLC  
Analysis Method: EPA 8080  
Lab Number: 904-1799

Sampled: Apr 14, 1989  
Received: Apr 18, 1989  
Extracted: Apr 26, 1989  
Analyzed: Apr 28, 1989  
Reported: May 12, 1989

## ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/L	Sample Results µg/L
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-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	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 epoxide.....	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.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Eric Lautenbach

Client Project ID: 4454/2  
Sample Descript: Soil, HS-9 A,STLC  
Analysis Method: EPA 8080  
Lab Number: 904-1800

Sampled: Apr 14, 1989  
Received: Apr 18, 1989  
Extracted: Apr 26, 1989  
Analyzed: Apr 28, 1989  
Reported: May 12, 1989

## ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/L	Sample Results µg/L
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-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	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 epoxide.....	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.

SEQUOIA ANALYTICAL

Arthur G. Burton  
Laboratory Director



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(415) 364-9600 • FAX (415) 364-9233

Terratech, Inc.  
1365 Vander Way  
San Jose, CA 95112  
Attention: Eric Lautenbach

Client Project ID: 4454/2  
Sample Descript: Soil, HS-10 A,STLC  
Analysis Method: EPA 8080  
Lab Number: 904-1801

Sampled: Apr 14, 1989  
Received: Apr 18, 1989  
Extracted: Apr 26, 1989  
Analyzed: May 1, 1989  
Reported: May 12, 1989

## ORGANOCHLORINE PESTICIDES AND PCB'S (EPA 8080)

Analyte	Detection Limit µg/L	Sample Results µg/L
Aldrin.....	5.0	N.D.
alpha-BHC.....	5.0	N.D.
beta-BHC.....	5.0	N.D.
delta-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	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 epoxide.....	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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Arthur G. Burton  
Laboratory Director