

May 17, 2000

Ms. Sue Shaffer
Director of Forward Planning
Greystone Homes, Inc.
920 Hillview Court, Suite 280
Milpitas, CA 95035-4500

Cindy Shukani, Sec of Construction

Re: Soil Sampling at 147 Berry Avenue
Hayward, California
Harza Project No.: M174EC

Dear Ms. Shaffer:

Harza Engineering Company recently performed limited soil sampling at the above referenced site. This sampling was performed as a follow-up to previous soil sampling conducted at the site (reference Harza's Phase I Preliminary Site Assessment and Shallow Soil Testing, 9/2/98), to confirm that levels of pesticides previously detected at the site are below residential remediation goals.


On May 11, Harza performed a limited soil sampling investigation in the area of the former nursery buildings. At the time of this investigation, all buildings had been removed and the site had been rough graded. Three, two-point field composite samples were collected at a depth of approximately 6" below ground surface (bgs) for laboratory analysis. The soil samples were submitted under chain of custody control to a state certified laboratory for analysis of organochlorine pesticides using Environmental Protection Agency (EPA) Method 8081. A site map is shown on Figure 1, and a site plan delineating the approximate location of the soil samples is shown in Figure 2.

All laboratory results are below Preliminary Remediation Goals (PRGs) for unrestricted residential use, established by the U.S. EPA (*PRGs, U.S. Environmental Protection Agency, Region IX, October 1, 1999*). A copy of the laboratory analytical report is attached. Based on these results it is our opinion that no site mitigation will be necessary to address historical use of pesticides in the area of the former nursery.

If you need additional information, please do not hesitate to contact me.

Sincerely,

Harza Engineering Company, Inc.



Mark C. Litzau
Regional Manager
Environmental and Regulatory Services

ML:am/encl.

Attachments: Table 1
Figures

M174ecrpt
05/17/00

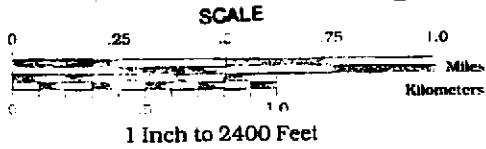
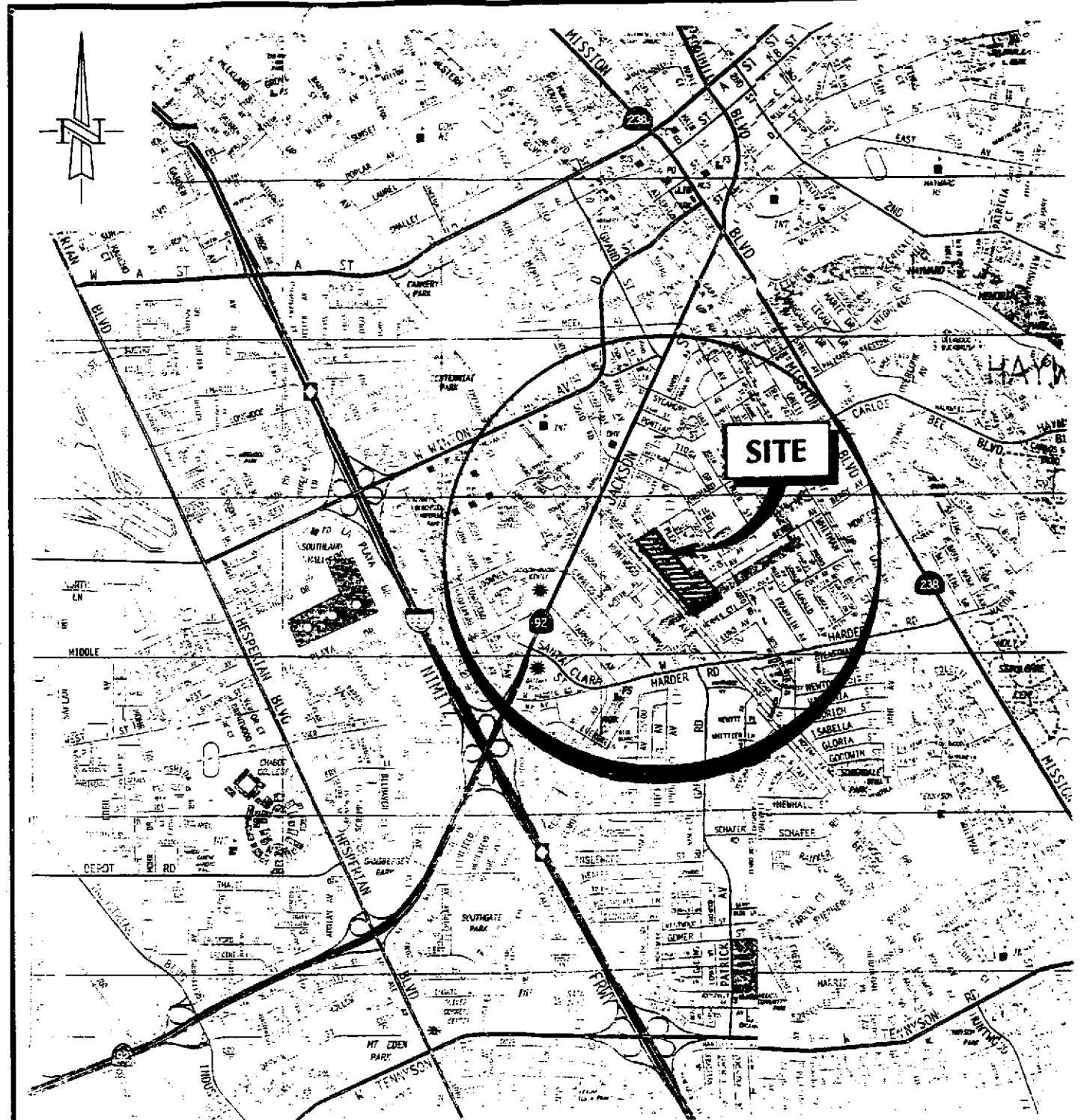
TABLE

Table 1
Summary Soil Quality Analytical Results
Organochlorine Pesticides
147 Berry Avenue, Hayward, California
Sample Date: May 11, 2000
All results shown are in ppm

Sample Identification	4,4'-DDE	4,4'-DDD	4,4'-DDT	Dieldrin	Chlorodane
Composite 1	ND	ND	0.022	ND	ND
Composite 1A	0.032	0.013	0.048	ND	ND
Composite 2	0.023	0.011	0.030	ND	ND

Notes: ND refers to not detected above laboratory reporting limits.

FIGURES



BASE: THE THOMAS GUIDE, ALAMEDA/CONTRA COSTA COUNTIES, 1998

HARZA
 Consulting Engineers and Scientists
 425 Roland Way.
 Oakland, California. 94621
 Tel: (510)568-4001 - Fax:(510)568-2205

DATE	HH
BY	CC
SCALE	AS SHOWN
DATE	11FEB99
PROJECT NO.	M174-EC-01

SITE VICINITY MAP

**ORCHARD AVENUE SITE
 Hayward, California**

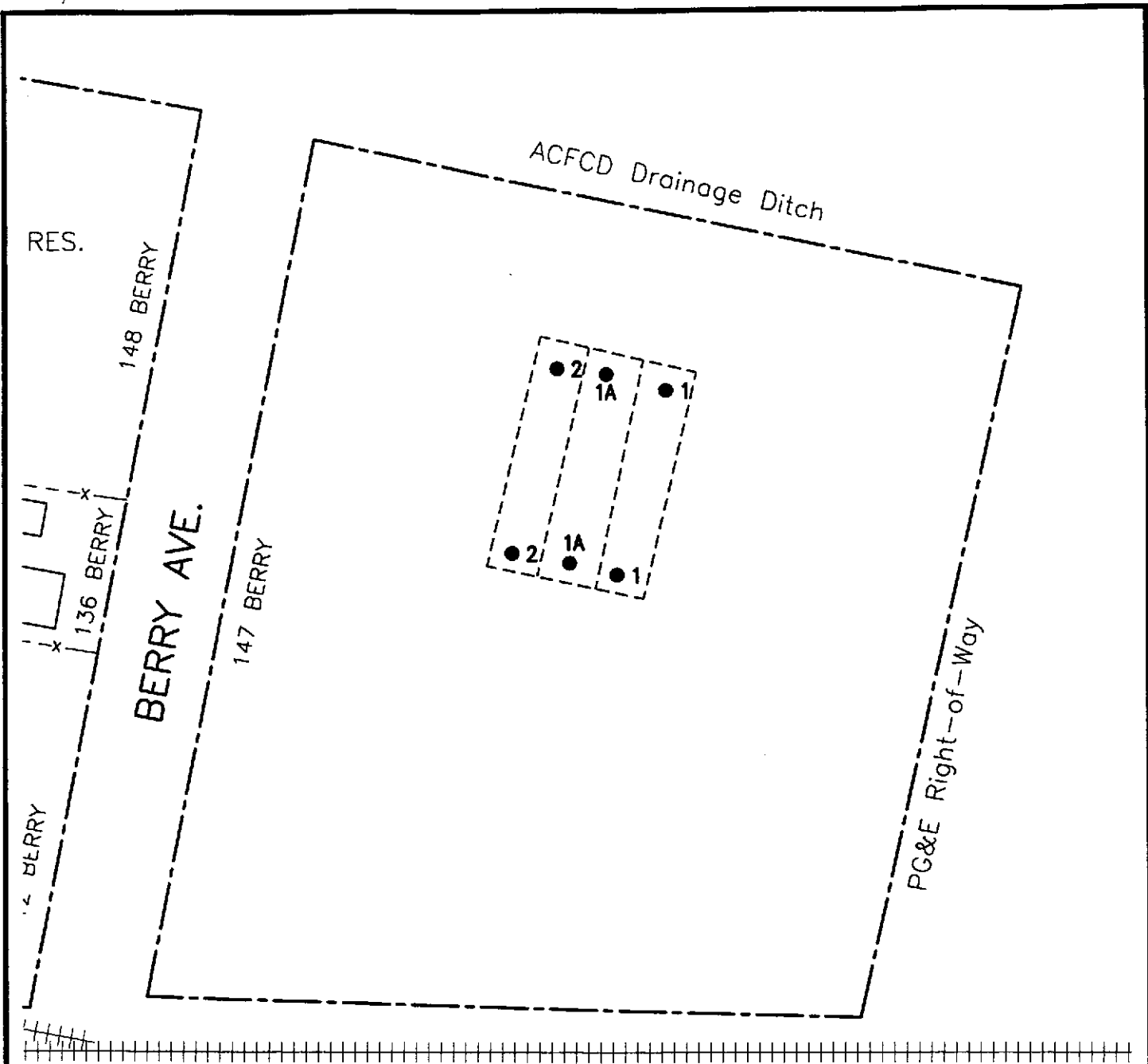
FIGURE

1

PROJECT No.

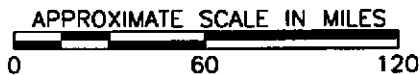
M174-EC

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LEGEND:

- 2 APPROXIMATE LOCATION OF SOIL SAMPLE BY HARZA ENGINEERING COMPANY (05/11/00)



BASE MAP PROVIDED BY: ENVIRONMENTAL RISK INFORMATION & IMAGING SERVICES, Herndon, VA, dated 1996.

HARZA
Engineering Company Inc.
425 Roland Way.
Oakland, California. 94621
Tel:(510)568-4001 Fax:(510)568-2205

DATE: 05/11/00
PROJECT: M174EC-03

SITE PLAN
ORCHARD AVENUE SITE RE-SAMPLING
HAYWARD, CALIFORNIA

FIGURE
2
PROJECT No.
M174-EC

K:\Projects\m174ec\M174EC-03.DWG, 12:14 19MAY00 PLOTTED BY:ORR

LABORATORY RESULTS



May 16, 2000

Mr. Mark Litzau
Harza Consulting Engineers and Scientists
425 Roland Way
Oakland, CA 94621

RE: Meek Orchard/M174EC

Dear Mr. Litzau

Enclosed are the results of the sample(s) submitted to our laboratory on May 11, 2000. All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply to the sample(s) analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Signature of this CAS Analytical Report confirms that pages 2 through 6, following, have been thoroughly reviewed and approved for release.

Columbia Analytical Services is certified for environmental analyses by the California Department of Health Services (certificate number: 2352, expiration: January 31, 2001).

If you have any questions, please call me at (408) 748-9700.

Respectfully submitted,

Columbia Analytical Services, Inc.

A handwritten signature in cursive script that reads 'Bernadette Troncales'.

Bernadette Troncales
Project Chemist

COLUMBIA ANALYTICAL SERVICES, Inc.

Acronyms

AZLA	American Association for Laboratory Accreditation
ASTM	American Society for Testing and Materials
BOD	Biochemical Oxygen Demand
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAM	California Assessment Metals
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
COD	Chemical Oxygen Demand
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank sample
ICP	Inductively Coupled Plasma atomic emission spectrometry
ICV	Initial Calibration Verification sample
J	Estimated concentration. The value is less than the MRL, but greater than or equal to the MDL. If the value is equal to the MRL, the result is actually <MRL before rounding.
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified
MBAS	Methylene Blue Active Substances
MCL	Maximum Contaminant Level. The highest permissible concentration of a substance allowed in drinking water as established by the U. S. EPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl tert-Butyl Ether
NA	Not Applicable
NAN	Not Analyzed
NC	Not Calculated
NCASI	National Council of the paper industry for Air and Stream Improvement
ND	Not Detected at or above the method reporting/detection limit (MRL/MDL)
NIOSH	National Institute for Occupational Safety and Health
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	Standard Methods for the Examination of Water and Wastewater, 18th Ed., 1992
STLC	Solubility Threshold Limit Concentration
SW	Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Ed., 1986 and as amended by Updates I, II, IIA, and IIB.
TCLP	Toxicity Characteristic Leaching Procedure
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
tr	Trace level. The concentration of an analyte that is less than the PQL but greater than or equal to the MDL. If the value is equal to the PQL, the result is actually <PQL before rounding.
TRPH	Total Recoverable Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLc	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:
Project:
Sample Matrix:

HARZA Engineering Company of California
Meek Orchard/M174EC
Soil

Service Request: S2001484
Date Collected: 5/11/00
Date Received: 5/11/00

Organochlorine Pesticides

Sample Name: Soil #1
Lab Code: S2001484-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Alpha-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Gamma-BHC (Lindane)	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Beta-BHC	EPA 3550C	8081	0.03	1	5/12/00	5/15/00	ND	
Heptachlor	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Delta-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Aldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Heptachlor Epoxide	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan I	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDE	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Dieldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDD	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan II	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.022	
4,4'-DDT	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin Aldehyde	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan Sulfate	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Methoxychlor	EPA 3550C	8081	0.02	1	5/12/00	5/15/00	ND	
Toxaphene	EPA 3550C	8081	0.3	1	5/12/00	5/15/00	ND	
Chlordane	EPA 3550C	8081	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1016	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1221	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1232	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1242	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1248	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1254	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1260	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	

Approved By: _____

Date: 05/15/00

10000111000

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:
Project:
Sample Matrix:

HARZA Engineering Company of California
Meek Orchard/M174EC
Soil

Service Request: S2001484
Date Collected: NA
Date Received: NA

Organochlorine Pesticides

Sample Name: Method Blank
Lab Code: S200512-SB1
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Alpha-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Gamma-BHC (Lindane)	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Beta-BHC	EPA 3550C	8081	0.03	1	5/12/00	5/15/00	ND	
Heptachlor	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Delta-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Aldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Heptachlor Epoxide	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan I	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDE	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Dieldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDD	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan II	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDT	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin Aldehyde	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan Sulfate	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Methoxychlor	EPA 3550C	8081	0.02	1	5/12/00	5/15/00	ND	
Toxaphene	EPA 3550C	8081	0.3	1	5/12/00	5/15/00	ND	
Chlordane	EPA 3550C	8081	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1016	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1221	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1232	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1242	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1248	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1254	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1260	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	

Approved By: _____

Date: 05/15/00

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:
Project:
Sample Matrix:

HARZA Engineering Company of California
Meek Orchard/M174EC
Soil

Service Request: S2001485
Date Collected: 5/11/00
Date Received: 5/11/00

Organochlorine Pesticides

Sample Name: Soil #1A
Lab Code: S2001485-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Alpha-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Gamma-BHC (Lindane)	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Beta-BHC	EPA 3550C	8081	0.03	1	5/12/00	5/15/00	ND	
Heptachlor	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Delta-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Aldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Heptachlor Epoxide	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan I	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.032	
4,4'-DDE	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Dieldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.013	
4,4'-DDD	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan II	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.048	
4,4'-DDT	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin Aldehyde	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan Sulfate	EPA 3550C	8081	0.02	1	5/12/00	5/15/00	ND	
Methoxychlor	EPA 3550C	8081	0.3	1	5/12/00	5/15/00	ND	
Toxaphene	EPA 3550C	8081	0.1	1	5/12/00	5/15/00	ND	
Chlordane	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1016	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1221	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1232	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1242	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1248	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1254	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1260	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	

Approved By: _____

Date: 05/16/00

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:
Project:
Sample Matrix:

HARZA Engineering Company of California
Meek Orchard/M174EC
Soil

Service Request: S2001485
Date Collected: NA
Date Received: NA

Organochlorine Pesticides

Sample Name: Method Blank
Lab Code: S200512-SB1
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Alpha-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Gamma-BHC (Lindane)	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Beta-BHC	EPA 3550C	8081	0.03	1	5/12/00	5/15/00	ND	
Heptachlor	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Delta-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Aldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Heptachlor Epoxide	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan I	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDE	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Dieldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDD	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan II	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDT	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin Aldehyde	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan Sulfate	EPA 3550C	8081	0.02	1	5/12/00	5/15/00	ND	
Methoxychlor	EPA 3550C	8081	0.3	1	5/12/00	5/15/00	ND	
Toxaphene	EPA 3550C	8081	0.1	1	5/12/00	5/15/00	ND	
Chlordane	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1016	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1221	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1232	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1242	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1248	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1254	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1260	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	

Approved By: _____

Date: 05/15/00

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COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:
Project:
Sample Matrix:

HARZA Engineering Company of California
Meek Orchard/M174EC
Soil

Service Request: S2001486
Date Collected: 5/11/00
Date Received: 5/11/00

Organochlorine Pesticides

Sample Name: Soil #2
Lab Code: S2001486-001
Test Notes:

Units: mg/Kg (ppm)
Basis: Wet

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Alpha-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Gamma-BHC (Lindane)	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Beta-BHC	EPA 3550C	8081	0.03	1	5/12/00	5/15/00	ND	
Heptachlor	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Delta-BHC	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Aldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Heptachlor Epoxide	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan I	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDE	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.023	
Dieldrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endrin	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDD	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.011	
Endosulfan II	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
4,4'-DDT	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	0.030	
Endrin Aldehyde	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Endosulfan Sulfate	EPA 3550C	8081	0.01	1	5/12/00	5/15/00	ND	
Methoxychlor	EPA 3550C	8081	0.02	1	5/12/00	5/15/00	ND	
Toxaphene	EPA 3550C	8081	0.3	1	5/12/00	5/15/00	ND	
Chlordane	EPA 3550C	8081	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1016	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1221	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1232	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1242	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1248	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1254	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	
Aroclor 1260	EPA 3550C	8082	0.1	1	5/12/00	5/15/00	ND	

Approved By: _____

Date: 05/15/00

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