UNAUTHORIZED RELEASE REPORT FOR PCB CONTAMINATION AT THE CARNATION DAIRY FACILITY OAKLAND, ALAMEDA COUNTY, CALIFORNIA

SEPTEMBER 12, 1989

AGE Project No. 004-89-093

In order to comply with the request of the Alameda County Health Department (County), AGE has prepared this Unauthorized Release Report. Ms. Mary Scruggs of AGE gave verbal notice to the County on July 21, 1989. This report is prepared as a follow up and written confirmation of the unauthorized release at the Carnation Dairy Facility in Oakland, California.

During the remediation of a previously reported gasoline and diesel release, groundwater samples were collected from five product recovery points to establish preliminary remediation data. Polychlorinated-biphenyls (PCB), identified as arochlor 1254, were detected in the groundwater sample from PR-12 at concentrations of 0.06 mg/l parts per million (ppm). To corrobate the presence of PCB, a free product sample was collected from PR-12 and found to contain 66 ppm of PCB, arochlor 1254. The sample analyses and Chain of Custody forms for these samples are included as Attachment A.

The analytical method used to determine the concentration of PCB is EPA Method 8080. EPA Method 8080 is used to determine whether a matrix contains a hazardous waste within the definition of Section 3001 of the Resource Conservation and Recovery Act (PL 94-580). This method is approved for obtaining data to satisfy the requirements of 40 CFR Part 261, Identification and Listing of Hazardous Waste. Attachement B is a copy of the approved method to evaluate PCB's, which was followed for the enclosed analytical results.

Additional analytical results from the goundwater and free product samples collected from PR-12 have been included in Attachment A. These samples were analyzed for volatile organics (8240), semi-volatile organics (8270), PCB's (8080), total lead, soluble lead, and organic lead. The additional sample ananlysis and Chain of Custody forms for these samples have been included in Attachment A.

AGE has begun additional field investigations to determine the possible lateral extent and impact of the potential PCB contamination on soils and groundwater at the Facility. Groundwater and free product samples will be collected from product

recovery points in the vicinity of PR-12 to determine the lateral extent of possible PCB contamination. This data will also be used to resolve subsequent site safety and decontamination protocols.

Prepared by:

Jim Wallace
Senior Project Manager

Sept 13, 1989
Date

Approved by:

Karl J. Anania
California Registered Geologist No. 4306
Managing Partner

Sept. 13, 1989
Date

AGE
11330 SUNRISE PARK DR., SUITE C • RANCHO CORDOVA, CA 95742
P.O. BOX 161148 • SACRAMENTO, CA 95816 • PHONE (916) 631-0154 FAX (916) 631-0528

August 31, 1989

Katherine Chesick
Alameda County Health Department
80 Swan Way, Room 200
Oakland, California 94621

Re: Groundwater Samples Collected at the Oakland Dairy Facility, 1310 14th Street, Oakland, Alameda County, California

AGE Project No. 004-88-059

Dear Ms. Chesick:

As requested at the June 20, 1989, meeting between the Regional Water Quality Control Board (RWQCB), the Alameda County Health Department, Anania Geologic Engineering (AGE), and Carnation representatives, analytical results for groundwater samples collected at the Oakland Dairy Facility (Facility) are enclosed.

I apologize for the delay in sending the results. If you should have any questions, please do not hesitate to call me at (415) 234-4461.

Sincerely,

Christopher M. Nielson-Cerqueone

Christopher Nielson-Cerquone
Project Manager

cc: Lester Feldman, RWQCB
Jim Person, Carnation Company
Howard Shmuckler, Carnation Company

TRANSMITTAL OF GROUNDWATER SAMPLE RESULTS
OAKLAND CARNATION DAIRIES
1310 14TH STREET
OAKLAND, ALAMEDA COUNTY, CALIFORNIA

August 11, 1989

AGE Project No. 004-88-059

As requested at the June 20, 1989, meeting between the Regional Water Quality Control Board (RWQCB), the Alameda County Health Department, Anania Geologic Engineering (AGE), and Carnation representatives, analytical results for groundwater samples collected at the Oakland Dairy Facility (Facility) are enclosed. Groundwater samples were obtained from product recovery points PR-12, PR-20, PR-22, PR-41, and PR-55 (see enclosed map). The samples were analyzed for volatile hydrocarbons (method 8240), semi-volatile hydrocarbons (method 8270), PCB (method 8080), total lead, soluble lead, organic lead, chemical oxygen demand (COD), dissolved oxygen, and general mineral and physical parameters. A summary of the hydrocarbon and lead constituents detected is presented.

Prepared by:

Christopher Nielson-Cerquone — August 10, 1989.
Christopher Nielson-Cerquone — Date
Project Manager

Approved by:

Karl J. Anania — August 16, 1989
Karl J. Anania — Date
California Registered Geologist No. 4306
Managing Partner

SUMMARY OF DETECTED CONSTITUENTS IN GEOUNDWATER FROM EPA METHODS
8240, 8270, 8080, AND 6010

ANANIA GEOLOGIC ENGINEERING

PARAMETER	PRODUCT RECOVERY POINT PR-12	PR-20	PR-22	PR-41	PR-55
Benzene, ug/l	25000	31000	39000	5700	49000
Toulene, ug/l	43000	33000	39000	16000	51000
Ethylbenzene, ug/l	4100	1000	3400	2400	5100
Total Xylenes, ug/l	14000	9400	18000	14000	18000
Naphthalene, ug/l	30000	9100	3000	650	56000
2-methyl naphthalene, ug/l	30000	9900	1300	400	35000
1,2-dichlorethane, ug/l	ND	1600	2000	ND	1600
Flourene, ug/l	400	ND	ND	12	ND
Phenathrene, ug/l	700	ND	ND	ND	ND
Phenol, ug/l	ND	ND	ND	12	ND
2,4-dimethyl phenol, ug/l	ND	ND	ND	760	ND
Flouranthene, ug/l	ND	ND	ND	14	ND
Benzylbutylphthalate, ug/l	ND	ND	ND	11	ND
Pyrene, ug/l	ND	ND	ND	13	ND
PCB, aroclor 1254, mg/l	0.06	ND	ND	ND	ND
Total Lead, mg/l	2.3	4.6	1.8	0.3	1.7
Soluble Lead, mg/l	0.13	2	1	0.43	0.09
Organic Lead, mg/l	ND	1.34	1.34	ND	ND

PCB Results

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Precision Analytical Laboratory, Inc.

[illegible] RIVERSIDE DRIVE, RICHMOND CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/29/89
Reported: 07/10/89
Job No. #: 70901

Attn: Karl Anania
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 94553

Project: #004-88-059

Polychlorinated Biphenyls
EPA Method 8080
mg/l

Lab ID 70901-6
Client ID #4378

		MDL
PCB	ND<0.002	0.002

Extracted: 06/28/89

QA/QC: Spike Recovery 112 %

MDL: Method detection limit: Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/25/89

RECEIVED AUG 2 8 1989

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE RICHMOND CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/29/89
Reported: 07/10/89
Job No. #: 70900

Attn: Karl Anania
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Polychlorinated Biphenyls
EPA Method 8080
mg/l

Lab ID 70900-7
Client ID #4366

		MDL
Aroclor 1254	0.06	0.002

Extracted: 06/28/89

QA/QC: Spike Recovery 112 %

MDL: Method detection limit: Compound below this level would not be detected.

Surinder Sidhu
Senior Chemist

Revised: 8/25/89

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Precision Analytical Laboratory, Inc.

41361 LAKESIDE DRIVE, RICHMOND CA 94806 PHONE (415) 222-3002 FAX (415) 222 1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/29/89
Reported: 07/10/89
Job No. #: 70902

Attn: Karl Anania
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Polychlorinated Biphenyls
EPA Method 8080
mg/l

Lab ID 70902-6
Client ID #4404

		MDL
PCB	ND<0.002	0.002

Extracted: 06/28/89

QA/QC: Spike Recovery 112 %

MDL: Method detection limit: Compound below this level would not be detected.

Surinder Sidhu

Surinder Sidhu
Senior Chemist

Revised: 8/25/89

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/29/89
Reported: 07/10/89
Job No. #: 70896

Attn: Karl Anania
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Polychlorinated Biphenyls
EPA Method 8080
mg/l

Lab ID	70896-3	
Client ID	#4344	
		MDL
PCB	ND<0.002	0.002

Extracted: 06/28/89

QA/QC: Spike Recovery 112 %

MDL: Method detection limit: Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/25/89

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE RICHMOND CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job No. #: 70899

Attn: Karl Anania
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Polychlorinated Biphenyls
EPA Method 8080
mg/l

Lab ID 70899-6
Client ID #4391

		MDL
PCB	ND<0.002	0.002

Extracted: 06/29/89

QA/QC: Spike Recovery 112 %

MDL: Method detection limit: Compound below this level would not be detected.

Surinder Sidhu
Senior Chemist

Revised: 8/25/89

Semi-Volatile and Volatile Organic Results

AGE
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Clayton Environmental Consultants, Inc.

P.O. Box 9019 • 1252 Quarry Lane • Pleasanton, CA 94566 • (415) 426-2600

July 5, 1989

Mr. Chris Cerquone
ANANIA GEOLOGIC ENGINEERING
P.O. Box 161148
Sacramento, CA 95816

Client Ref. No.: 004-88-059
Lab Batch No.: 8906236
Clayton Project No.: 89062.36
Client Code No: 0636

Dear Mr. Cerquone:

Attached is our analytical laboratory report for the samples received on June 26, 1989. Results were sent to you by facsimile on July 5, 1989. A copy of the Chain of Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be retained at our facility for approximately 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Representative, at (415) 426-2657.

Sincerely,

Ronald H. Peters, CIH
Manager, Laboratory Services

RHP/sam
Attachment

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EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: 4383
Sample Received: 06/26/89
Sample Analyzed: 06/27/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906236-01A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	2000
Bromomethane	74-83-9	ND	800
Vinyl chloride	75-01-4	ND	800
Chloroethane	75-00-3	ND	800
Methylene chloride	75-09-2	ND	2000
Trichlorofluoromethane	75-69-4	ND	600
1,1-dichloroethene	75-35-4	ND	600
1,1-dichloroethane	75-35-3	ND	600
Trans-1,2-dichloroethene	156-60-5	ND	600
Chloroform	67-66-3	ND	600
1,2-dichloroethane	107-06-2	1,600	600
1,1,1-trichloroethane	71-55-6	ND	600
Carbon tetrachloride	56-23-5	ND	600
Bromodichloromethane	75-27-4	ND	600
1,2-dichloropropane	78-87-5	ND	600
Cis-1,3-dichloropropene	10061-01-5	ND	600
Trichloroethene	79-01-6	ND	800
Benzene	71-43-2	49,000	400
Dibromochloromethane	124-48-1	ND	400
1,1,2-trichloroethane	79-00-5	ND	1000
Trans-1,3-dichloropropene	10061-02-6	ND	1000
2-chloroethylvinylether	100-75-8	ND	600
Bromoform	75-25-2	ND	600
1,1,2,2-tetrachloroethane	79-34-5	ND	800
Tetrachloroethene	127-18-4	ND	800
Toluene	108-88-3	51,000	400
Chlorobenzene	108-90-7	ND	600
Ethylbenzene	100-41-4	5,100	600
1,3-dichlorobenzene	541-73-7	ND	600
1,2-dichlorobenzene	95-50-1	ND	600
1,4-dichlorobenzene	106-46-7	ND	600
Freon 113	76-13-1	ND	600
Total Xylenes	1330-20-7	18,000	600
Acetone	67-64-1	ND	4000
2-Butanone	78-93-3	ND	4000
4-Methyl-2-pentanone	108-10-1	ND	4000
2-Hexanone	591-78-6	ND	4000
Vinyl acetate	108-05-4	ND	2000
Carbon disulfide	75-15-0	ND	600
Styrene	100-42-5	ND	600

ND = Not detected at or above limit of detection

EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: 4357
Sample Received: 06/26/89
Sample Analyzed: 06/27/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906236-02A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	2000
Bromomethane	74-83-9	ND	800
Vinyl chloride	75-01-4	ND	800
Chloroethane	75-00-3	ND	800
Methylene chloride	75-09-2	ND	2000
Trichlorofluoromethane	75-69-4	ND	600
1,1-dichloroethene	75-35-4	ND	600
1,1-dichloroethane	75-35-3	ND	600
Trans-1,2-dichloroethene	156-60-5	ND	600
Chloroform	67-66-3	ND	600
1,2-dichloroethane	107-06-2	ND	600
1,1,1-trichloroethane	71-55-6	ND	600
Carbon tetrachloride	56-23-5	ND	600
Bromodichloromethane	75-27-4	ND	600
1,2-dichloropropane	78-87-5	ND	600
Cis-1,3-dichloropropene	10061-01-5	ND	600
Trichloroethene	79-01-6	ND	800
Benzene	71-43-2	25,000	400
Dibromochloromethane	124-48-1	ND	400
1,1,2-trichloroethane	79-00-5	ND	1000
Trans-1,3-dichloropropene	10061-02-6	ND	1000
2-chloroethylvinylether	100-75-8	ND	600
Bromoform	75-25-2	ND	600
1,1,2,2-tetrachloroethane	79-34-5	ND	800
Tetrachloroethene	127-18-4	ND	800
Toluene	108-88-3	43,000	400
Chlorobenzene	108-90-7	ND	600
Ethylbenzene	100-41-4	4,100	600
1,3-dichlorobenzene	541-73-7	ND	600
1,2-dichlorobenzene	95-50-1	ND	600
1,4-dichlorobenzene	106-46-7	ND	600
Freon 113	76-13-1	ND	600
Total Xylenes	1330-20-7	14,000	600
Acetone	67-64-1	ND	4000
2-Butanone	78-93-3	ND	4000
4-Methyl-2-pentanone	108-10-1	ND	4000
2-Hexanone	591-78-6	ND	4000
Vinyl acetate	108-05-4	ND	2000
Carbon disulfide	75-15-0	ND	600
Styrene	100-42-5	ND	600

ND = Not detected at or above limit of detection

EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: 4370
Sample Received: 06/26/89
Sample Analyzed: 06/27/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906236-03A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	2000
Bromomethane	74-83-9	ND	800
Vinyl chloride	75-01-4	ND	800
Chloroethane	75-00-3	ND	800
Methylene chloride	75-09-2	ND	2000
Trichlorofluoromethane	75-69-4	ND	600
1,1-dichloroethene	75-35-4	ND	600
1,1-dichloroethane	75-35-3	ND	600
Trans-1,2-dichloroethene	156-60-5	ND	600
Chloroform	67-66-3	ND	600
1,2-dichloroethane	107-06-2	1,600	600
1,1,1-trichloroethane	71-55-6	ND	600
Carbon tetrachloride	56-23-5	ND	600
Bromodichloromethane	75-27-4	ND	600
1,2-dichloropropane	78-87-5	ND	600
Cis-1,3-dichloropropene	10061-01-5	ND	600
Trichloroethene	79-01-6	ND	800
Benzene	71-43-2	31,000	400
Dibromochloromethane	124-48-1	ND	400
1,1,2-trichloroethane	79-00-5	ND	1000
Trans-1,3-dichloropropene	10061-02-6	ND	1000
2-chloroethylvinylether	100-75-8	ND	600
Bromoform	75-25-2	ND	600
1,1,2,2-tetrachloroethane	79-34-5	ND	800
Tetrachloroethene	127-18-4	ND	800
Toluene	108-88-3	33,000	400
Chlorobenzene	108-90-7	ND	600
Ethylbenzene	100-41-4	1,000	600
1,3-dichlorobenzene	541-73-7	ND	600
1,2-dichlorobenzene	95-50-1	ND	600
1,4-dichlorobenzene	106-46-7	ND	600
Freon 113	76-13-1	ND	600
Total Xylenes	1330-20-7	9,400	600
Acetone	67-64-1	ND	4000
2-Butanone	78-93-3	ND	4000
4-Methyl-2-pentanone	108-10-1	ND	4000
2-Hexanone	591-78-6	ND	4000
Vinyl acetate	108-05-4	ND	2000
Carbon disulfide	75-15-0	ND	600
Styrene	100-42-5	ND	600

ND = Not detected at or above limit of detection

EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: 4396
Sample Received: 06/26/89
Sample Analyzed: 06/27/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906236-04A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	1000
Bromomethane	74-83-9	ND	400
Vinyl chloride	75-01-4	ND	400
Chloroethane	75-00-3	ND	400
Methylene chloride	75-09-2	ND	1000
Trichlorofluoromethane	75-69-4	ND	300
1,1-dichloroethene	75-35-4	ND	300
1,1-dichloroethane	75-35-3	ND	300
Trans-1,2-dichloroethene	156-60-5	ND	300
Chloroform	67-66-3	ND	300
1,2-dichloroethane	107-06-2	ND	300
1,1,1-trichloroethane	71-55-6	ND	300
Carbon tetrachloride	56-23-5	ND	300
Bromodichloromethane	75-27-4	ND	300
1,2-dichloropropane	78-87-5	ND	300
Cis-1,3-dichloropropene	10061-01-5	ND	300
Trichloroethene	79-01-6	ND	400
Benzene	71-43-2	5,700	200
Dibromochloromethane	124-48-1	ND	200
1,1,2-trichloroethane	79-00-5	ND	600
Trans-1,3-dichloropropene	10061-02-6	ND	500
2-chloroethylvinylether	100-75-8	ND	300
Bromoform	75-25-2	ND	300
1,1,2,2-tetrachloroethane	79-34-5	ND	400
Tetrachloroethene	127-18-4	ND	400
Toluene	108-88-3	16,000	200
Chlorobenzene	108-90-7	ND	300
Ethylbenzene	100-41-4	2,400	300
1,3-dichlorobenzene	541-73-7	ND	300
1,2-dichlorobenzene	95-50-1	ND	300
1,4-dichlorobenzene	106-46-7	ND	300
Freon 113	76-13-1	ND	300
Total Xylenes	1330-20-7	14,000	300
Acetone	67-64-1	ND	2000
2-Butanone	78-93-3	ND	2000
4-Methyl-2-pentanone	108-10-1	ND	2000
2-Hexanone	591-78-6	ND	2000
Vinyl acetate	108-05-4	ND	1000
Carbon disulfide	75-15-0	ND	300
Styrene	100-42-5	ND	300

ND = Not detected at or above limit of detection

EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: Method Blank
Sample Received: 06/26/89
Sample Analyzed: 06/27/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906236-09A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	10
Bromomethane	74-83-9	ND	4
Vinyl chloride	75-01-4	ND	4
Chloroethane	75-00-3	ND	4
Methylene chloride	75-09-2	ND	10
Trichlorofluoromethane	75-69-4	ND	3
1,1-dichloroethene	75-35-4	ND	3
1,1-dichloroethane	75-35-3	ND	3
Trans-1,2-dichloroethene	156-60-5	ND	3
Chloroform	67-66-3	ND	3
1,2-dichloroethane	107-06-2	ND	3
1,1,1-trichloroethane	71-55-6	ND	3
Carbon tetrachloride	56-23-5	ND	3
Bromodichloromethane	75-27-4	ND	3
1,2-dichloropropane	78-87-5	ND	3
Cis-1,3-dichloropropene	10061-01-5	ND	3
Trichloroethene	79-01-6	ND	4
Benzene	71-43-2	ND	2
Dibromochloromethane	124-48-1	ND	2
1,1,2-trichloroethane	79-00-5	ND	6
Trans-1,3-dichloropropene	10061-02-6	ND	5
2-chloroethylvinylether	100-75-8	ND	3
Bromoform	75-25-2	ND	3
1,1,2,2-tetrachloroethane	79-34-5	ND	4
Tetrachloroethene	127-18-4	ND	4
Toluene	108-88-3	ND	2
Chlorobenzene	108-90-7	ND	3
Ethylbenzene	100-41-4	ND	3
1,3-dichlorobenzene	541-73-7	ND	3
1,2-dichlorobenzene	95-50-1	ND	3
1,4-dichlorobenzene	106-46-7	ND	3
Freon 113	76-13-1	ND	3
Total Xylenes	1330-20-7	ND	3
Acetone	67-64-1	ND	20
2-Butanone	78-93-3	ND	20
4-Methyl-2-pentanone	108-10-1	ND	20
2-Hexanone	591-78-6	ND	20
Vinyl acetate	108-05-4	ND	10
Carbon disulfide	75-15-0	ND	3
Styrene	100-42-5	ND	3

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: 4402

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/26/89
Sample Extracted: 06/28/89
Sample Analyzed: 06/28/89

Client Ref. No.: 004-88-059

Lab Client Code: 77665

Sample Matrix: WATER

Lab No.: 8906236-05A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	12	5
2-chlorophenol	95-57-8	ND	5
2-methyl phenol	95-48-7	ND	5
4-methyl phenol	106-44-5	ND	5
2-nitrophenol	88-75-5	ND	5
2,4-dimethylphenol	105-67-9	760	5
2,4-dichlorophenol	120-83-2	ND	5
4-chloro-3-methylphenol	59-50-7	ND	5
2,4,5-trichlorophenol	95-95-4	ND	5
2,4,6-trichlorophenol	88-06-2	ND	5
2,4-dinitrophenol	51-28-5	ND	30
4-nitrophenol	100-02-7	ND	30
2-methyl-4,6-dinitrophenol	534-52-1	ND	5
Pentachlorophenol	87-86-5	ND	5
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	30
Bis(2-chloroethyl)ether	111-44-4	ND	5
1,3-dichlorobenzene	541-73-7	ND	5
1,4-dichlorobenzene	106-46-7	ND	5
1,2-dichlorobenzene	95-50-1	ND	5
Bis-(2-chloroisopropyl)ether	108-60-1	ND	5
N-nitrosodi-n-propylamine	621-64-7	ND	5
Hexachloroethane	67-72-1	ND	5
Nitrobenzene	98-95-3	ND	5
Isophorone	78-59-1	ND	5
Bis-(2-chloroethoxy)methane	111-91-1	ND	5
1,2,4-trichlorobenzene	120-82-1	ND	5
Naphthalene	91-20-3	650	5
Hexachlorobutadiene	87-68-3	ND	5
2-chloronaphthalene	91-58-7	ND	5
2-methyl naphthalene	91-57-6	400	5

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: 4402 Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	30
2-nitroaniline	88-74-4	ND	30
3-nitroaniline	99-09-2	ND	30
4-nitroaniline	100-01-6	ND	30
Hexachlorocyclopentadiene	77-47-4	ND	5
Dimethyl phthalate	131-11-3	ND	50
Acenaphthylene	208-96-8	ND	5
Acenaphthene	83-32-9	ND	5
2,4-dinitrotoluene	121-14-2	ND	5
2,6-dinitrotoluene	606-20-2	ND	5
Diethyl phthalate	84-66-2	ND	5
4-chlorophenylphenylether	7005-72-3	ND	5
Fluorene	86-73-7	12	5
N-nitrosodiphenylamine	86-30-6	ND	5
4-bromophenylphenylether	101-55-3	ND	5
Hexachlorobenzene	118-74-1	ND	5
Phenanthrene	85-01-8	ND	5
Anthracene	120-12-7	ND	5
Di-n-butylphthalate	84-74-2	ND	5
Fluoranthene	206-44-2	14	5
Benzidine	92-87-5	ND	150
Pyrene	129-00-0	13	5
Benzylbutylphthalate	85-68-7	11	5
3,3'-dichlorobenzidine	91-94-1	ND	200
Benzo(a)anthracene	56-55-3	ND	5
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	50
Chrysene	218-01-9	ND	10
Di-n-octylphthalate	117-84-0	ND	5
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	5
Benzo(a)pyrene	50-32-8	ND	5
Indeno(1,2,3-cd)pyrene	193-39-5	ND	5
Dibenzo(a,h)anthracene	53-70-3	ND	5
Benzo(ghi)perylene	191-24-2	ND	5

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: 4376

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/26/89
Sample Extracted: 06/29/89
Sample Analyzed: 06/30/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906236-06A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	ND	100
2-chlorophenol	95-57-8	ND	100
2-methyl phenol	95-48-7	ND	100
4-methyl phenol	106-44-5	ND	100
2-nitrophenol	88-75-5	ND	100
2,4-dimethylphenol	105-67-9	ND	100
2,4-dichlorophenol	120-83-2	ND	100
4-chloro-3-methylphenol	59-50-7	ND	100
2,4,5-trichlorophenol	95-95-4	ND	100
2,4,6-trichlorophenol	88-06-2	ND	100
2,4-dinitrophenol	51-28-5	ND	500
4-nitrophenol	100-02-7	ND	500
2-methyl-4,6-dinitrophenol	534-52-1	ND	100
Pentachlorophenol	87-86-5	ND	100
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	500
Bis(2-chloroethyl)ether	111-44-4	ND	100
1,3-dichlorobenzene	541-73-7	ND	100
1,4-dichlorobenzene	106-46-7	ND	100
1,2-dichlorobenzene	95-50-1	ND	100
Bis-(2-chloroisopropyl)ether	108-60-1	ND	100
N-nitrosodi-n-propylamine	621-64-7	ND	100
Hexachloroethane	67-72-1	ND	100
Nitrobenzene	98-95-3	ND	100
Isophorone	78-59-1	ND	100
Bis-(2-chloroethoxy)methane	111-91-1	ND	100
1,2,4-trichlorobenzene	120-82-1	ND	100
Naphthalene	91-20-3	9,100	100
Hexachlorobutadiene	87-68-3	ND	100
2-chloronaphthalene	91-58-7	ND	100
2-methyl naphthalene	91-57-6	9,900	100

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: 4376 Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	500
2-nitroaniline	88-74-4	ND	500
3-nitroaniline	99-09-2	ND	500
4-nitroaniline	100-01-6	ND	500
Hexachlorocyclopentadiene	77-47-4	ND	100
Dimethyl phthalate	131-11-3	ND	1000
Acenaphthylene	208-96-8	ND	100
Acenaphthene	83-32-9	ND	100
2,4-dinitrotoluene	121-14-2	ND	100
2,6-dinitrotoluene	606-20-2	ND	100
Diethyl phthalate	84-66-2	ND	100
4-chlorophenylphenylether	7005-72-3	ND	100
Fluorene	86-73-7	400	100
N-nitrosodiphenylamine	86-30-6	ND	100
4-bromophenylphenylether	101-55-3	ND	100
Hexachlorobenzene	118-74-1	ND	100
Phenanthrene	85-01-8	700	100
Anthracene	120-12-7	ND	100
Di-n-butylphthalate	84-74-2	ND	100
Fluoranthene	206-44-2	ND	100
Benzidine	92-87-5	ND	3000
Pyrene	129-00-0	ND	100
Benzylbutylphthalate	85-68-7	ND	100
3,3'-dichlorobenzidine	91-94-1	ND	4000
Benzo(a)anthracene	56-55-3	ND	100
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	1000
Chrysene	218-01-9	ND	200
Di-n-octylphthalate	117-84-0	ND	100
Benzo(b)fluoranthene	205-99-2	ND	200
Benzo(k)fluoranthene	207-08-9	ND	100
Benzo(a)pyrene	50-32-8	ND	100
Indeno(1,2,3-cd)pyrene	193-39-5	ND	100
Dibenzo(a,h)anthracene	53-70-3	ND	100
Benzo(ghi)perylene	191-24-2	ND	100

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: 4388

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/26/89
Sample Extracted: 06/29/89
Sample Analyzed: 06/30/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906236-07A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	ND	2000
2-chlorophenol	95-57-8	ND	2000
2-methyl phenol	95-48-7	ND	2000
4-methyl phenol	106-44-5	ND	2000
2-nitrophenol	88-75-5	ND	2000
2,4-dimethylphenol	105-67-9	ND	2000
2,4-dichlorophenol	120-83-2	ND	2000
4-chloro-3-methylphenol	59-50-7	ND	2000
2,4,5-trichlorophenol	95-95-4	ND	2000
2,4,6-trichlorophenol	88-06-2	ND	2000
2,4-dinitrophenol	51-28-5	ND	10000
4-nitrophenol	100-02-7	ND	10000
2-methyl-4,6-dinitrophenol	534-52-1	ND	2000
Pentachlorophenol	87-86-5	ND	2000
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	10000
Bis(2-chloroethyl)ether	111-44-4	ND	2000
1,3-dichlorobenzene	541-73-7	ND	2000
1,4-dichlorobenzene	106-46-7	ND	2000
1,2-dichlorobenzene	95-50-1	ND	2000
Bis-(2-chloroisopropyl)ether	108-60-1	ND	2000
N-nitrosodi-n-propylamine	621-64-7	ND	2000
Hexachloroethane	67-72-1	ND	2000
Nitrobenzene	98-95-3	ND	2000
Isophorone	78-59-1	ND	2000
Bis-(2-chloroethoxy)methane	111-91-1	ND	2000
1,2,4-trichlorobenzene	120-82-1	ND	2000
Naphthalene	91-20-3	56,000	2000
Hexachlorobutadiene	87-68-3	ND	2000
2-chloronaphthalene	91-58-7	ND	2000
2-methyl naphthalene	91-57-6	35,000	2000

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: 4388 Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	10000
2-nitroaniline	88-74-4	ND	10000
3-nitroaniline	99-09-2	ND	10000
4-nitroaniline	100-01-6	ND	10000
Hexachlorocyclopentadiene	77-47-4	ND	2000
Dimethyl phthalate	131-11-3	ND	20000
Acenaphthylene	208-96-8	ND	2000
Acenaphthene	83-32-9	ND	2000
2,4-dinitrotoluene	121-14-2	ND	2000
2,6-dinitrotoluene	606-20-2	ND	2000
Diethyl phthalate	84-66-2	ND	2000
4-chlorophenylphenylether	7005-72-3	ND	2000
Fluorene	86-73-7	ND	2000
N-nitrosodiphenylamine	86-30-6	ND	2000
4-bromophenylphenylether	101-55-3	ND	2000
Hexachlorobenzene	118-74-1	ND	2000
Phenanthrene	85-01-8	ND	2000
Anthracene	120-12-7	ND	2000
Di-n-butylphthalate	84-74-2	ND	2000
Fluoranthene	206-44-2	ND	2000
Benzidine	92-87-5	ND	60000
Pyrene	129-00-0	ND	2000
Benzylbutylphthalate	85-68-7	ND	2000
3,3'-dichlorobenzidine	91-94-1	ND	80000
Benzo(a)anthracene	56-55-3	ND	2000
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	20000
Chrysene	218-01-9	ND	4000
Di-n-octylphthalate	117-84-0	ND	2000
Benzo(b)fluoranthene	205-99-2	ND	4000
Benzo(k)fluoranthene	207-08-9	ND	2000
Benzo(a)pyrene	50-32-8	ND	2000
Indeno(1,2,3-cd)pyrene	193-39-5	ND	2000
Dibenzo(a,h)anthracene	53-70-3	ND	2000
Benzo(ghi)perylene	191-24-2	ND	2000

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: 4363

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/26/89
Sample Extracted: 06/29/89
Sample Analyzed: 06/30/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906236-08A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	ND	10000
2-chlorophenol	95-57-8	ND	10000
2-methyl phenol	95-48-7	ND	10000
4-methyl phenol	106-44-5	ND	10000
2-nitrophenol	88-75-5	ND	10000
2,4-dimethylphenol	105-67-9	ND	10000
2,4-dichlorophenol	120-83-2	ND	10000
4-chloro-3-methylphenol	59-50-7	ND	10000
2,4,5-trichlorophenol	95-95-4	ND	10000
2,4,6-trichlorophenol	88-06-2	ND	10000
2,4-dinitrophenol	51-28-5	ND	50000
4-nitrophenol	100-02-7	ND	50000
2-methyl-4,6-dinitrophenol	534-52-1	ND	10000
Pentachlorophenol	87-86-5	ND	10000
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	50000
Bis(2-chloroethyl)ether	111-44-4	ND	10000
1,3-dichlorobenzene	541-73-7	ND	10000
1,4-dichlorobenzene	106-46-7	ND	10000
1,2-dichlorobenzene	95-50-1	ND	10000
Bis-(2-chloroisopropyl)ether	108-60-1	ND	10000
N-nitrosodi-n-propylamine	621-64-7	ND	10000
Hexachloroethane	67-72-1	ND	10000
Nitrobenzene	98-95-3	ND	10000
Isophorone	78-59-1	ND	10000
Bis-(2-chloroethoxy)methane	111-91-1	ND	10000
1,2,4-trichlorobenzene	120-82-1	ND	10000
Naphthalene	91-20-3	30,000	10000
Hexachlorobutadiene	87-68-3	ND	10000
2-chloronaphthalene	91-58-7	ND	10000
2-methyl naphthalene	91-57-6	30,000	10000

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: 4363 Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	50000
2-nitroaniline	88-74-4	ND	50000
3-nitroaniline	99-09-2	ND	50000
4-nitroaniline	100-01-6	ND	50000
Hexachlorocyclopentadiene	77-47-4	ND	10000
Dimethyl phthalate	131-11-3	ND	100000
Acenaphthylene	208-96-8	ND	10000
Acenaphthene	83-32-9	ND	10000
2,4-dinitrotoluene	121-14-2	ND	10000
2,6-dinitrotoluene	606-20-2	ND	10000
Diethyl phthalate	84-66-2	ND	10000
4-chlorophenylphenylether	7005-72-3	ND	10000
Fluorene	86-73-7	ND	10000
N-nitrosodiphenylamine	86-30-6	ND	10000
4-bromophenylphenylether	101-55-3	ND	10000
Hexachlorobenzene	118-74-1	ND	10000
Phenanthrene	85-01-8	10,000	10000
Anthracene	120-12-7	ND	10000
Di-n-butylphthalate	84-74-2	ND	10000
Fluoranthene	206-44-2	ND	10000
Benzidine	92-87-5	ND	300000
Pyrene	129-00-0	ND	10000
Benzylbutylphthalate	85-68-7	ND	10000
3,3'-dichlorobenzidine	91-94-1	ND	400000
Benzo(a)anthracene	56-55-3	ND	10000
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	100000
Chrysene	218-01-9	ND	20000
Di-n-octylphthalate	117-84-0	ND	10000
Benzo(b)fluoranthene	205-99-2	ND	20000
Benzo(k)fluoranthene	207-08-9	ND	10000
Benzo(a)pyrene	50-32-8	ND	10000
Indeno(1,2,3-cd)pyrene	193-39-5	ND	10000
Dibenzo(a,h)anthracene	53-70-3	ND	10000
Benzo(ghi)perylene	191-24-2	ND	10000

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: Method Blank
Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/26/89
Sample Extracted: 06/28/89
Sample Analyzed: 06/28/89
Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER
Lab No.: 8906236-09A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	ND	1
2-chlorophenol	95-57-8	ND	1
2-methyl phenol	95-48-7	ND	1
4-methyl phenol	106-44-5	ND	1
2-nitrophenol	88-75-5	ND	1
2,4-dimethylphenol	105-67-9	ND	1
2,4-dichlorophenol	120-83-2	ND	1
4-chloro-3-methylphenol	59-50-7	ND	1
2,4,5-trichlorophenol	95-95-4	ND	1
2,4,6-trichlorophenol	88-06-2	ND	1
2,4-dinitrophenol	51-28-5	ND	5
4-nitrophenol	100-02-7	ND	5
2-methyl-4,6-dinitrophenol	534-52-1	ND	1
Pentachlorophenol	87-86-5	ND	1
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	5
Bis(2-chloroethyl)ether	111-44-4	ND	1
1,3-dichlorobenzene	541-73-7	ND	1
1,4-dichlorobenzene	106-46-7	ND	1
1,2-dichlorobenzene	95-50-1	ND	1
Bis-(2-chloroisopropyl)ether	108-60-1	ND	1
N-nitrosodi-n-propylamine	621-64-7	ND	1
Hexachloroethane	67-72-1	ND	1
Nitrobenzene	98-95-3	ND	1
Isophorone	78-59-1	ND	1
Bis-(2-chloroethoxy)methane	111-91-1	ND	1
1,2,4-trichlorobenzene	120-82-1	ND	1
Naphthalene	91-20-3	ND	1
Hexachlorobutadiene	87-68-3	ND	1
2-chloronaphthalene	91-58-7	ND	1
2-methyl naphthalene	91-57-6	ND	1

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: Method Blank Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	5
2-nitroaniline	88-74-4	ND	5
3-nitroaniline	99-09-2	ND	5
4-nitroaniline	100-01-6	ND	5
Hexachlorocyclopentadiene	77-47-4	ND	1
Dimethyl phthalate	131-11-3	ND	10
Acenaphthylene	208-96-8	ND	1
Acenaphthene	83-32-9	ND	1
2,4-dinitrotoluene	121-14-2	ND	1
2,6-dinitrotoluene	606-20-2	ND	1
Diethyl phthalate	84-66-2	ND	1
4-chlorophenylphenylether	7005-72-3	ND	1
Fluorene	86-73-7	ND	1
N-nitrosodiphenylamine	86-30-6	ND	1
4-bromophenylphenylether	101-55-3	ND	1
Hexachlorobenzene	118-74-1	ND	1
Phenanthrene	85-01-8	ND	1
Anthracene	120-12-7	ND	1
Di-n-butylphthalate	84-74-2	ND	1
Fluoranthene	206-44-2	ND	1
Benzidine	92-87-5	ND	30
Pyrene	129-00-0	ND	1
Benzylbutylphthalate	85-68-7	ND	1
3,3'-dichlorobenzidine	91-94-1	ND	40
Benzo(a)anthracene	56-55-3	ND	1
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	10
Chrysene	218-01-9	ND	2
Di-n-octylphthalate	117-84-0	ND	1
Benzo(b)fluoranthene	205-99-2	ND	2
Benzo(k)fluoranthene	207-08-9	ND	1
Benzo(a)pyrene	50-32-8	ND	1
Indeno(1,2,3-cd)pyrene	193-39-5	ND	1
Dibenzo(a,h)anthracene	53-70-3	ND	1
Benzo(ghi)perylene	191-24-2	ND	1

ND = Not detected at or above limit of detection

CHAIN OF CUSTODY RECORD

8906236

PROJ. NO. 004-88-059

SAMPLERS (Signature) Chris Cerqueone

PROJECT NAME AND ADDRESS:
Arania Geologic Engineering
2145 Rumrill Blvd., Suite G
San Pablo, CA-94806

ANALYSIS REQUESTED

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS	BTX	VOC-EPA 8240	TOTAL OIL & GREASE	8240	8270
	6/23/89	14.00		X	AGE # 4383, 4384, 4385	01A	01B	01C		X	
	6/23/89	12.30		X.	AGE # 4357, 4358, 4359	02	02	02		X	
	6/23/89	13.15		X	AGE # 4370, 4371, 4372.	03	03	03		X	
	6/23/89	14.45		X	AGE# 4396, 4397, 4398 4403 (NOT 4402)	04	04	04		X	
	6/23/89	14.45		X	AGE # 4202, 4203 Red 4402 (NOT 4202)	05	05				X
	6/23/89	13.15		X	AGE# 4376, 4377	06	06				X
	6/23/89	14.00		X	AGE # 4388, 4389	07	07				X
	6/23/89	12.30		X	AGE# 4363, 4364	08	08				X

REMARKS

5 Day Turnaround.

Also Send Results to:
Mary Scruggs.
11330 Sunrise Park Dr.,
Suite C
Rancho Cordova.
CA-95742

RELINQUISHED BY: (Signature) Sidhu	DATE 6/26/89 TIME 1.0	RECEIVED BY: (Signature) Terry Dalbo	DATE 6-26-89 TIME 1:30pm
RELINQUISHED BY: (Signature)	DATE ---- TIME	RECEIVED BY: (Signature)	DATE ---- TIME
RELINQUISHED BY: (Signature)	DATE ---- TIME	RECEIVED BY: (Signature)	DATE ---- TIME
RELINQUISHED BY: (Signature)	DATE ---- TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE ---- TIME

RECEIVED JUL 07 1989

Clayton Environmental Consultants, Inc.

P.O. Box 9019 • 1252 Quarry Lane • Pleasanton, CA 94566 • (415) 426-2600

cc Karl
Mary
Chris

July 5, 1989

Mr. Chris Cerquone
ANANIA GEOLOGIC ENGINEERING
11330 Sunrise Drive
Rancho Cordova, CA 95742

Client Ref. No.: 004-88-059
Lab Batch No.: 8906220
Clayton Project No.: 89062.20
Client Code No: 0636

Dear Mr. Cerquone:

Attached is our analytical laboratory report for the samples received on June 23, 1989. Results were sent to you by facsimile on June 30, 1989. A copy of the Chain of Custody form acknowledging receipt of these samples is attached.

Please note that any unused portion of the samples will be retained at our facility for approximately 30 days after the date of this report, unless you have requested otherwise.

We appreciate the opportunity to be of assistance to you. If you have any questions, please contact Maryann Gambino, Client Services Representative, at (415) 426-2657.

Sincerely,

Ronald H. Peters, CIH
Manager, Laboratory Services

RHP/sam
Attachment

EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: #4350
Sample Received: 06/23/89
Sample Analyzed: 06/23/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906220-01A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	2000
Bromomethane	74-83-9	ND	800
Vinyl chloride	75-01-4	ND	800
Chloroethane	75-00-3	ND	800
Methylene chloride	75-09-2	ND	2000
Trichlorofluoromethane	75-69-4	ND	600
1,1-dichloroethene	75-35-4	ND	600
1,1-dichloroethane	75-35-3	ND	600
Trans-1,2-dichloroethene	156-60-5	ND	600
Chloroform	67-66-3	ND	600
1,2-dichloroethane	107-06-2	2,000	600
1,1,1-trichloroethane	71-55-6	ND	600
Carbon tetrachloride	56-23-5	ND	600
Bromodichloromethane	75-27-4	ND	600
1,2-dichloropropane	78-87-5	ND	600
Cis-1,3-dichloropropene	10061-01-5	ND	600
Trichloroethene	79-01-6	ND	800
Benzene	71-43-2	39,000	400
Dibromochloromethane	124-48-1	ND	400
1,1,2-trichloroethane	79-00-5	ND	1000
Trans-1,3-dichloropropene	10061-02-6	ND	1000
2-chloroethylvinylether	100-75-8	ND	600
Bromoform	75-25-2	ND	600
1,1,2,2-tetrachloroethane	79-34-5	ND	800
Tetrachloroethene	127-18-4	ND	800
Toluene	108-88-3	39,000	400
Chlorobenzene	108-90-7	ND	600
Ethylbenzene	100-41-4	3,400	600
1,3-dichlorobenzene	541-73-7	ND	600
1,2-dichlorobenzene	95-50-1	ND	600
1,4-dichlorobenzene	106-46-7	ND	600
Freon 113	76-13-1	ND	600
Total Xylenes	1330-20-7	18,000	600
Acetone	67-64-1	ND	4000
2-Butanone	78-93-3	ND	4000
4-Methyl-2-pentanone	108-10-1	ND	4000
2-Hexanone	591-78-6	ND	4000
Vinyl acetate	108-05-4	ND	2000
Carbon disulfide	75-15-0	ND	600
Styrene	100-42-5	ND	600

ND = Not detected at or above limit of detection

EPA METHOD 8240
PURGEABLE ORGANICS
(LOW-LEVEL METHOD)

Sample I.D.: Method Blank
Sample Received: 06/23/89
Sample Analyzed: 06/23/89
Sample Matrix: WATER

Client: ANANIA GEOLOGIC ENGINEERING
Client Ref. No.: 004-88-059
Lab Client Code: 0636
Lab No.: 8906220-07A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
Chloromethane	74-87-3	ND	10
Bromomethane	74-83-9	ND	4
Vinyl chloride	75-01-4	ND	4
Chloroethane	75-00-3	ND	4
Methylene chloride	75-09-2	ND	10
Trichlorofluoromethane	75-69-4	ND	3
1,1-dichloroethene	75-35-4	ND	3
1,1-dichloroethane	75-35-3	ND	3
Trans-1,2-dichloroethene	156-60-5	ND	3
Chloroform	67-66-3	ND	3
1,2-dichloroethane	107-06-2	ND	3
1,1,1-trichloroethane	71-55-6	ND	3
Carbon tetrachloride	56-23-5	ND	3
Bromodichloromethane	75-27-4	ND	3
1,2-dichloropropane	78-87-5	ND	3
Cis-1,3-dichloropropene	10061-01-5	ND	3
Trichloroethene	79-01-6	ND	4
Benzene	71-43-2	ND	2
Dibromochloromethane	124-48-1	ND	2
1,1,2-trichloroethane	79-00-5	ND	6
Trans-1,3-dichloropropene	10061-02-6	ND	5
2-chloroethylvinylether	100-75-8	ND	3
Bromoform	75-25-2	ND	3
1,1,2,2-tetrachloroethane	79-34-5	ND	4
Tetrachloroethene	127-18-4	ND	4
Toluene	108-88-3	ND	2
Chlorobenzene	108-90-7	ND	3
Ethylbenzene	100-41-4	ND	3
1,3-dichlorobenzene	541-73-7	ND	3
1,2-dichlorobenzene	95-50-1	ND	3
1,4-dichlorobenzene	106-46-7	ND	3
Freon 113	76-13-1	ND	3
Total Xylenes	1330-20-7	ND	3
Acetone	67-64-1	ND	20
2-Butanone	78-93-3	ND	20
4-Methyl-2-pentanone	108-10-1	ND	20
2-Hexanone	591-78-6	ND	20
Vinyl acetate	108-05-4	ND	10
Carbon disulfide	75-15-0	ND	3
Styrene	100-42-5	ND	3

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: #4343

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/23/89
Sample Extracted: 06/26/89
Sample Analyzed: 06/27/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906220-04A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	ND	100
2-chlorophenol	95-57-8	ND	100
2-methyl phenol	95-48-7	ND	100
4-methyl phenol	106-44-5	ND	100
2-nitrophenol	88-75-5	ND	100
2,4-dimethylphenol	105-67-9	ND	100
2,4-dichlorophenol	120-83-2	ND	100
4-chloro-3-methylphenol	59-50-7	ND	100
2,4,5-trichlorophenol	95-95-4	ND	100
2,4,6-trichlorophenol	88-06-2	ND	100
2,4-dinitrophenol	51-28-5	ND	500
4-nitrophenol	100-02-7	ND	500
2-methyl-4,6-dinitrophenol	534-52-1	ND	100
Pentachlorophenol	87-86-5	ND	100
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	500
Bis(2-chloroethyl)ether	111-44-4	ND	100
1,3-dichlorobenzene	541-73-7	ND	100
1,4-dichlorobenzene	106-46-7	ND	100
1,2-dichlorobenzene	95-50-1	ND	100
Bis-(2-chloroisopropyl)ether	108-60-1	ND	100
N-nitrosodi-n-propylamine	621-64-7	ND	100
Hexachloroethane	67-72-1	ND	100
Nitrobenzene	98-95-3	ND	100
Isophorone	78-59-1	ND	100
Bis-(2-chloroethoxy)methane	111-91-1	ND	100
1,2,4-trichlorobenzene	120-82-1	ND	100
Naphthalene	91-20-3	3,000	100
Hexachlorobutadiene	87-68-3	ND	100
2-chloronaphthalene	91-58-7	ND	100
2-methyl naphthalene	91-57-6	1,300	100

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: #4343 Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	500
2-nitroaniline	88-74-4	ND	500
3-nitroaniline	99-09-2	ND	500
4-nitroaniline	100-01-6	ND	500
Hexachlorocyclopentadiene	77-47-4	ND	100
Dimethyl phthalate	131-11-3	ND	1,000
Acenaphthylene	208-96-8	ND	100
Acenaphthene	83-32-9	ND	100
2,4-dinitrotoluene	121-14-2	ND	100
2,6-dinitrotoluene	606-20-2	ND	100
Diethyl phthalate	84-66-2	ND	100
4-chlorophenylphenylether	7005-72-3	ND	100
Fluorene	86-73-7	ND	100
N-nitrosodiphenylamine	86-30-6	ND	100
4-bromophenylphenylether	101-55-3	ND	100
Hexachlorobenzene	118-74-1	ND	100
Phenanthrene	85-01-8	ND	100
Anthracene	120-12-7	ND	100
Di-n-butylphthalate	84-74-2	ND	100
Fluoranthene	206-44-2	ND	100
Benzidine	92-87-5	ND	3,000
Pyrene	129-00-0	ND	100
Benzylbutylphthalate	85-68-7	ND	100
3,3'-dichlorobenzidine	91-94-1	ND	4,000
Benzo(a)anthracene	56-55-3	ND	100
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	1,000
Chrysene	218-01-9	ND	200
Di-n-octylphthalate	117-84-0	ND	100
Benzo(b)fluoranthene	205-99-2	ND	200
Benzo(k)fluoranthene	207-08-9	ND	100
Benzo(a)pyrene	50-32-8	ND	100
Indeno(1,2,3-cd)pyrene	193-39-5	ND	100
Dibenzo(a,h)anthracene	53-70-3	ND	100
Benzo(ghi)perylene	191-24-2	ND	100

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES

Sample I.D.: Method Blank

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/23/89
Sample Extracted: 06/26/89
Sample Analyzed: 06/26/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906220-07A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
ACID COMPOUNDS			
Phenol	108-95-2	ND	1
2-chlorophenol	95-57-8	ND	1
2-methyl phenol	95-48-7	ND	1
4-methyl phenol	106-44-5	ND	1
2-nitrophenol	88-75-5	ND	1
2,4-dimethylphenol	105-67-9	ND	1
2,4-dichlorophenol	120-83-2	ND	1
4-chloro-3-methylphenol	59-50-7	ND	1
2,4,5-trichlorophenol	95-95-4	ND	1
2,4,6-trichlorophenol	88-06-2	ND	1
2,4-dinitrophenol	51-28-5	ND	5
4-nitrophenol	100-02-7	ND	5
2-methyl-4,6-dinitrophenol	534-52-1	ND	1
Pentachlorophenol	87-86-5	ND	1
BASE/NEUTRAL COMPOUNDS			
N-nitrosodimethylamine	62-75-9	ND	5
Bis(2-chloroethyl)ether	111-44-4	ND	1
1,3-dichlorobenzene	541-73-7	ND	1
1,4-dichlorobenzene	106-46-7	ND	1
1,2-dichlorobenzene	95-50-1	ND	1
Bis-(2-chloroisopropyl)ether	108-60-1	ND	1
N-nitrosodi-n-propylamine	621-64-7	ND	1
Hexachloroethane	67-72-1	ND	1
Nitrobenzene	98-95-3	ND	1
Isophorone	78-59-1	ND	1
Bis-(2-chloroethoxy)methane	111-91-1	ND	1
1,2,4-trichlorobenzene	120-82-1	ND	1
Naphthalene	91-20-3	ND	1
Hexachlorobutadiene	87-68-3	ND	1
2-chloronaphthalene	91-58-7	ND	1
2-methyl naphthalene	91-57-6	ND	1

ND = Not detected at or above limit of detection

EPA METHOD 8270
ACID & BASE/NEUTRAL EXTRACTABLES
(Cont'd)

Sample I.D.: Method Blank Client: ANANIA GEOLOGIC ENGINEERING

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
BASE/NEUTRAL COMPOUNDS			
4-chloroaniline	106-47-8	ND	5
2-nitroaniline	88-74-4	ND	5
3-nitroaniline	99-09-2	ND	5
4-nitroaniline	100-01-6	ND	5
Hexachlorocyclopentadiene	77-47-4	ND	1
Dimethyl phthalate	131-11-3	ND	10
Acenaphthylene	208-96-8	ND	1
Acenaphthene	83-32-9	ND	1
2,4-dinitrotoluene	121-14-2	ND	1
2,6-dinitrotoluene	606-20-2	ND	1
Diethyl phthalate	84-66-2	ND	1
4-chlorophenylphenylether	7005-72-3	ND	1
Fluorene	86-73-7	ND	1
N-nitrosodiphenylamine	86-30-6	ND	1
4-bromophenylphenylether	101-55-3	ND	1
Hexachlorobenzene	118-74-1	ND	1
Phenanthrene	85-01-8	ND	1
Anthracene	120-12-7	ND	1
Di-n-butylphthalate	84-74-2	ND	1
Fluoranthene	206-44-2	ND	1
Benzidine	92-87-5	ND	30
Pyrene	129-00-0	ND	1
Benzylbutylphthalate	85-68-7	ND	1
3,3'-dichlorobenzidine	91-94-1	ND	40
Benzo(a)anthracene	56-55-3	ND	1
Bis-(2-ethylhexyl)phthalate	117-81-7	ND	10
Chrysene	218-01-9	ND	2
Di-n-octylphthalate	117-84-0	ND	1
Benzo(b)fluoranthene	205-99-2	ND	2
Benzo(k)fluoranthene	207-08-9	ND	1
Benzo(a)pyrene	50-32-8	ND	1
Indeno(1,2,3-cd)pyrene	193-39-5	ND	1
Dibenzo(a,h)anthracene	53-70-3	ND	1
Benzo(ghi)perylene	191-24-2	ND	1

ND = Not detected at or above limit of detection

EPA METHOD 8040
PHENOLS

Sample I.D.: #4345

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/23/89
Sample Extracted:
Sample Analyzed: 06/28/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906220-06A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
2-Chlorophenol	95-57-8	ND	5,000
2-nitrophenol	88-75-5	ND	5,000
Phenol	108-95-2	ND	5,000
2,4-dimethylphenol	105-67-9	ND	5,000
2,4-dichlorophenol	120-83-2	ND	5,000
2,4,6-trichlorophenol	88-06-2	ND	5,000
4-chloro-3-methylphenol	59-50-7	ND	5,000
2,4-dinitrophenol	51-28-5	ND	10,000
2-methyl-4,6-dinitrophenol	534-52-1	ND	10,000
Pentachlorophenol	87-86-5	ND	10,000
4-nitrophenol	100-02-7	ND	10,000

ND = Not detected at or above limit of detection

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EPA METHOD 8040
PHENOLS

Sample I.D.: Method Blank

Client: ANANIA GEOLOGIC ENGINEERING

Sample Received: 06/23/89
Sample Extracted:
Sample Analyzed: 06/28/89

Client Ref. No.: 004-88-059

Lab Client Code: 0636

Sample Matrix: WATER

Lab No.: 8906220-07A

Compound	CAS #	Concentration ug/L	Limit of Detection ug/L
2-Chlorophenol	95-57-8	ND	5
2-nitrophenol	88-75-5	ND	5
Phenol	108-95-2	ND	5
2,4-dimethylphenol	105-67-9	ND	5
2,4-dichlorophenol	120-83-2	ND	5
2,4,6-trichlorophenol	88-06-2	ND	5
4-chloro-3-methylphenol	59-50-7	ND	5
2,4-dinitrophenol	51-28-5	ND	10
2-methyl-4,6-dinitrophenol	534-52-1	ND	10
Pentachlorophenol	87-86-5	ND	10
4-nitrophenol	100-02-7	ND	10

ND = Not detected at or above limit of detection

Total Lead, Soluble Lead, and Organic Lead Results

AGE
11330 SUNRISE PARK DR., SUITE C • RANCHO CORDOVA, CA 95742
P.O. BOX 161148 • SACRAMENTO, CA 95816 • PHONE (916) 631-0154 FAX (916) 631-0528

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/27/89
Reported: 07/10/89
Job #: 70900

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Lead Analysis Method EPA 6010
Prep Method 3010
mg/l

Lab ID	Client ID	Lead	MDL	% SPIKE RECOVERY
70900-2	#4360	2.3	0.044	80

Prepared: 06/26/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job #: 70901

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Lead Analysis Method EPA 6010
Prep Method 3010
mg/l

Lab ID	Client ID	Lead	MDL	% SPIKE RECOVERY
70901-4	#4375	4.6	0.044	80

Prepared: 06/29/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Senior Chemist

Revised: 8/4/89

Precision Analytical Laboratory, Inc.

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/27/89
Reported: 07/10/89
Job #: 70902

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Lead Analysis Method EPA 6010
Prep Method 3010
mg/l

Lab ID	Client ID	Lead	MDL	% SPIKE RECOVERY
70902-4	#4401	0.30	0.044	80

Prepared: 06/26/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/4/89

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job #: 70899

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Lead Analysis Method EPA 6010
Prep Method 3010
mg/l

Lab ID	Client ID	Lead	MDL	% SPIKE RECOVERY
70899-8	#4392	1.7	0.044	80

Prepared: 06/26/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/4/89

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Precision Analytical Laboratory, Inc.
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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/22/89
Reported: 07/05/89
Job #: 70897

cc Karl
Mary
Christ C.

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Lead Analysis Method EPA 6010
Prep Method 3010
mg/l

Lab ID	Client ID	Lead	MDL	% SPIKE RECOVERY
70897-1	#4342	1.8	0.044	80

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu (For)
Jaime Chow
Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job #: 70899

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Analysis Method EPA 6010
STLC
mg/l

Lab ID	Client ID	STLC Lead	MDL	% SPIKE RECOVERY
70899-8	#4392	0.09	0.044	98

Extracted: 06/28/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Senior Chemist

Revised 8/4/89

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job #: 70900

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Analysis Method EPA 6010
STLC
mg/l

Lab ID	Client ID	STLC Lead	MDL	% SPIKE RECOVERY
70900-2	#4360	0.13	0.044	98

Extracted: 06/28/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Senior Chemist

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/28/89
Reported: 07/10/89
Job #: 70901

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Analysis Method EPA 6010
STLC
mg/l

Lab ID	Client ID	STLC Lead	MDL	% SPIKE RECOVERY
70901-4	#4375	2.0	0.044	98

Extracted 06/26/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/4/89

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job #: 70902

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Analysis Method EPA 6010
STLC
mg/l

Lab ID	Client ID	STLC Lead	MDL	% SPIKE RECOVERY
70902-4	#4401	0.43	0.044	98

Extracted: 07/06/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised 8/4/89

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/22/89
Reported: 07/05/89
Job #: 70897

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Analysis Method EPA 6010
STLC
mg/l

Lab ID	Client ID	STLC Lead	MDL	% SPIKE RECOVERY
70897-1	#4342	1.0	0.044	98

MDL: Method detection limit; Compound below this level would not be detected.

Suvindu Pal Sidhu (Fco)
Jaime Chow
Laboratory Director

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/29/89
Reported: 07/10/89
Job #: 70900

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Organic Lead Analysis
DOHS Method
mg/l

Lab ID	Client ID	Organic Lead	MDL	% SPIKE RECOVERY
70900-2	#4360	ND<0.25	0.25	102

Extracted: 06/29/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/29/89
Reported: 07/10/89
Job #: 70901

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Organic Lead Analysis
DOHS Method
mg/l

Lab ID	Client ID	Organic Lead	MDL	% SPIKE RECOVERY
70901-4	#4375	1.34	0.25	102

Extracted: 06/29/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/4/89

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE. RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 06/28/89
Reported: 07/10/89
Job #: 70902

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Organic Lead Analysis
DOHS Method
mg/l

Lab ID	Client ID	Organic Lead	MDL	% SPIKE RECOVERY
70902-4	#4401	<0.25	0.25	102

Extracted: 06/28/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Senior Chemist

Revised: 8/4/89

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

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CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/22/89
Reported: 07/05/89
Job #: 70897

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Organic Lead Analysis
DOHS Method
mg/l

Lab ID	Client ID	Organic Lead	MDL	% SPIKE RECOVERY
70897-1	#4342	1.34	0.25	102

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Pal Sodhi (For)
Jaime Chow
Laboratory Director

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 211

Received: 06/23/89
Analyzed: 07/06/89
Reported: 07/10/89
Job #: 70899

Attn: Mary Scruggs
Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Organic Lead Analysis
DOHS Method
mg/l

Lab ID	Client ID	Organic Lead	MDL	% SPIKE RECOVERY
70899-8	#4392	ND<0.25	0.25	102

Extracted: 06/29/89

MDL: Method detection limit; Compound below this level would not be detected.

Surinder Sidhu
Surinder Sidhu
Senior Chemist

Revised: 8/4/89

General Mineral and General Physical Results

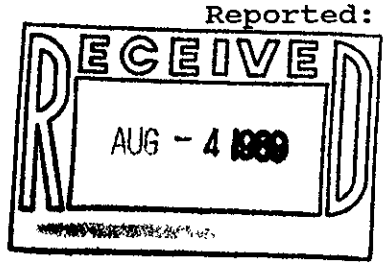
AGE
11330 SUNRISE PARK DR., SUITE C • RANCHO CORDOVA, CA 95742
P.O. BOX 161148 • SACRAMENTO, CA 95816 • PHONE (916) 631-0154 FAX (916) 631-0528

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

REPORT FOR ANALYTICAL RESULTS

Received: 06/26/89
Reported: 07/06/89



Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Brown & Caldwell ID #:	06-540-1	06-540-2	06-540-3
Lab ID #:	70899-7	70900-8	70902-7
Client ID:	(4393,4394)	(4367,4368)	(4405,4406)
ANALYSIS:			
Alkalinity (as CaCO3)			
Carbonate Alk (as CaCO3), mg/L	<1	<1	<1
Bicarbonate Alk (as CaCO3), mg/L	2300	1900	660
Hydroxide Alk (as CaCO3), mg/L	<1	<1	<1
Total Alkalinity (as CaCO3), mg/L	2300	1900	660
Calcium (EDTA), mg/L	380	240	65
Magnesium, mg/L	240	180	68
Chloride, mg/L	90	30	130
Copper, mg/L	<0.08	<0.08	<0.08
Surfactants, mg/L	<2.5	<2.5	<2.5
Iron, mg/L	5.1	4.3	2.8
Manganese, mg/L	24	16	1.3
pH	7.0	6.4	7.3
Potassium, mg/L	33	15	7.8
Sodium, mg/L	960	940	400
Sulfate, mg/L	1200	1000	570
Conductivity, umhos/cm	6950	6180	2650
Filterable Residue (TDS), mg/L	2700	6700	1800
Zinc, mg/L	0.01	<0.01	<0.01
Nitrate (as NO3), mg/L	<0.02	<0.02	<0.1
Nitric Acid Digestion, Date	06.28.89	06.28.89	06.28.89
General Mineral Approval, Date	07.06.89	07.06.89	07.06.89

The following results are from analytical testing performed by Brown & Caldwell. This report was revised 08/03/89 to clarify sample numbers by Precision Analytical Laboratory.

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

Brown & Caldwell/ Anania Geological

Brown & Caldwell ID #:	06-540-1	06-540-2	06-540-3
Lab ID #:	70899-9	70900-9	70902-9
Client ID:	(4395)	(4369)	(4407)
ANALYSIS:			
Color, Pt-Co	67	500	400
Turbidity, NTU	4800	3700	48000
Date Filtered	06.21.89	06.27.89	06.27.89

Brown & Caldwell ID #:	06-540-1	06-540-2	06-540-3
Lab ID #:	70899-3	70900-3	70902-3
Client ID:	(4387)	(4361)	(4400)
ANALYSIS:			
Chemical Oxygen Demand, mg/L	8000	7100	1800

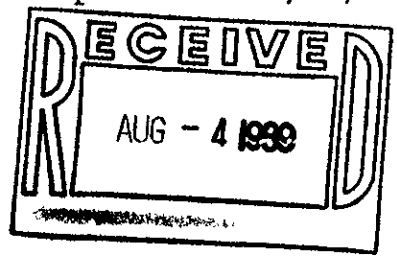
Brown & Caldwell ID #:	06-540-1	06-540-2	06-540-3
Lab ID #:	70899-2	70900-4	70902-2
Client ID:	(4386)	(4362)	(4399)
ANALYSIS:			
Dissolved Oxygen, mg/L	2.0	<1.0	<1.0

Precision Analytical Laboratory, Inc.

4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

REPORT FOR ANALYTICAL RESULTS

Received: 06/26/89
Reported: 07/06/89



Anania Geological Engineering
11330 Sunrise Park Drive, Suite C
Rancho Cordova, CA. 95742

Project: #004-88-059

Brown & Caldwell ID #:	06-540-4	06-540-5
Lab ID #:	70901-8	70896-6
Client ID:	(4380,4381)	(4347,4348)

ANALYSIS:

Alkalinity (as CaCO3)		
Carbonate Alk (as CaCO3), mg/L	<1	<1
Bicarbonate Alk (as CaCO3), mg/L	2500	2000
Hydroxide Alk (as CaCO3), mg/L	<1	<1
Total Alkalinity (as CaCO3), mg/L	2500	2000
Calcium (EDTA), mg/L	340	200
Magnesium, mg/L	150	170
Chloride, mg/L	56	49
Copper, mg/L	<0.08	<0.08
Surfactants, mg/L	<2.5	<2.5
Iron, mg/L	5.9	0.74
Manganese, mg/L	15	12
pH	6.9	6.9
Potassium, mg/L	42	32
Sodium, mg/L	1100	900
Sulfate, mg/L	1600	1300
Conductivity, umhos/cm	8000	6960
Filterable Residue (TDS), mg/L	2400	6200
Zinc, mg/L	<0.01	<0.01
Nitrate (as NO3), mg/L	<0.02	<0.02
Nitric Acid Digestion, Date	06.28.89	06.28.89
General Mineral Approval, Date	07.06.89	07.06.89

The following results are from analytical testing performed by Brown & Caldwell. This report was revised 08/03/89 to clarify sample numbers by Precision Analytical Laboratory.

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (415) 222-3002 FAX (415) 222-1251

Brown & Caldwell/ Anania Geological

Brown & Caldwell ID #:	06-540-4	06-540-5
Lab ID #:	70901-9	70896-5
Client ID:	(4379)	(4346)
ANALYSIS:		
Color, Pt-Co	40	200
Turbidity, NTU	2400	3500
Date Filtered	06.27.89	06.27.89

Brown & Caldwell ID #:	06-540-4	06-540-5
Lab ID #:	70901-2	70896
Client ID:	(4373)	
ANALYSIS:		
Chemical Oxygen Demand, mg/L	3100	N/A

Brown & Caldwell ID #:	06-540-4	06-540-5
Lab ID #:	70901-3	70896-7
Client ID:	(4374)	(4355)
ANALYSIS:		
Dissolved Oxygen, mg/L	<1.0	<1.0

Brown & Caldwell ID #:	06-540-6
Lab ID #:	70897-2
Client ID:	(4354)
ANALYSIS:	
Chemical Oxygen Demand, mg/L	6700

Chain of Custody Forms

AGE
11330 SUNRISE PARK DR., SUITE C • RANCHO CORDOVA, CA 95742
P.O. BOX 161148 • SACRAMENTO, CA 95816 • PHONE (916) 631-0154 FAX (916) 631-0528

ANANIA GEOLOGIC ENGINEERING   Pf-12   AGE № 152

PROJECT NO.	LAB REPORT NO.	P.O. NO.	SAMPLERS: (signature)
004-88-059			Christopher Cerguone

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SOIL GRAB	WATER	8240	Total Lead / Organic Lead / Soluble Lead	COD	Dissolved O2	8270	8080 PCB's	General Mineral	General Physical	REMARKS
✓	6/23/89	1230	# 4357, 4358, 4359	(3) 40 ml voa's			X	X								
✓	6/23/89	1230	4360	(1) liter			X		X							
✓	6/23/89	1230	4361	(1) 500 ml			X			X						5-Day
✓	6/23/89	1230	4362	(1) 500 ml			X				X					Turnaround
✓	6/23/89	1230	4363, 4364	(2) each 1 liter			X					X				
✓	6/23/89	1230	4366	(1) liter			X						X			
✓	6/23/89	1230	4367, 4368	(2) each 1 liter			X							X		
✓	6/23/89	1230	4369	(1) liter			X								X	

5-Day Turnaround

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
Christopher Cerguone	6-23-89 / 1700	[signature]
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS: Send results also to: AGE
Attn: Mary Scrugge
11330 Sunrise Park Dr.
Suite C
Rancho Cordova, CA 95742

SEND RESULTS TO: AGE
ATTN: Chris Cerguone
2145 Rumrill Blvd.
Suite G
~~Ran~~ San Pablo, CA 94806
PHONE NO. ~~(916) 451-0921~~
(415) 234-4461

CHAIN OF CUSTODY

White- AGE   Yellow—LAB Copy   Pink- File

PR-20

ANANIA GEOLOGIC ENGINEERING

AGE Nº 152

PROJECT NO.	LAB REPORT NO.
004-88-059	

P.O. NO.	SAMPLERS: (signature)
	Christopher Cerqueone

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SOIL GRAB	WATER	8240	COD	Dissolved O2	Total Lead & Organic Lead & Soluble Lead	8270	8080 (PCB's)	General Physical	General Mineral	REMARKS
✓	6/23/89	1315	#4370, 4371 4372	(3) 40 ml vods			X	X								
✓	6/23/89	1315	4373	(1) 500 ml			X		X							
✓	6/23/89	1315	4374	(1) 500 ml			X			X						
✓	6/23/89	1315	4375	(1) liter			X				X					5-Day
✓	6/23/89	1315	4376, 4377	(2) each a liter			X					X				Turnaround
✓	6/23/89	1315	4378	(1) liter			X						X			
✓	6/23/89	1315	4379	(1) liter			X							X		
✓	6/23/89	1315	4380, 4381	(2) each liter			X								X	
			5-Day Turnaround													

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
Christopher Cerqueone	6-23-89/1700	
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS: send results also to: AGE
Attn: Mary Scrugge
11330 Sunrise Park Dr.
Suite C
Rancho Cordova, CA 95742

SEND RESULTS TO: ~~GA~~ AGE
ATTN: Chris Cerqueone
2145 Rumrill Blvd.
Suite G
San Pablo, CA 94806
PHONE NO. ~~(916) 451-0921~~ (415) 234-4461

CHAIN OF CUSTODY

White - AGE Yellow - LAB Copy Pink - File

ANANIA GEOLOGIC ENGINEERING

AGE Nº 151

PROJECT NO.	LAB REPORT NO.
004-88-059	

P.O. NO.	SAMPLERS: (signature)
	Chris Cerqueira

PR-22

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SOIL GRAB	WATER	8240	8270	8080 - just PCB's	8040 Phenols	General Mineral	General Physical	Dissolved Oxygen	REMARKS
✓	6/22/89	1445	#4350, 4351 #4352	(3) 40ml voa			X	X							
✓	6/22/89	1445	~~#4342~~ 4349, 4343	(2) liters			X		X						5-Day
✓	6/22/89	1445	#4344	1 liter			X			X					Turnaround
✓	6/22/89	1445	#4345	1 liter			X				X				on Samples
✓	6/22/89	1445	#4346	1 liter			X						X		
✓	6/22/89	1445	#4347, 4348	(2) liters			X					X			
✓	6/22/89	1445	#4355	500ml clear			X							X	

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
Christopher Cerqueira	6-22-89/1645	Anne Lin
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS: also send results to:
Attn: Mary Scruggs
AGE
11330 Sunrise Park Dr. Suite C
Rancho Cordova, CA 95742

SEND RESULTS TO:
ATTN: Chris Cerqueira AGE
2145 Rumrill Blvd. Suite G
San Pablo, CA 94806
PHONE NO. (~~916~~) ~~451-6921~~ 415 234-4461

CHAIN OF CUSTODY

White - AGE Yellow - LAB Copy Pink - File

ANANIA GEOLOGIC ENGINEERING

AGE № 151

PROJECT NO.	LAB REPORT NO.			
004-88-059				
P.O. NO.	SAMPLERS: (signature) Chris Cerquone			

PR-22

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SOIL COMP	SOIL GRAB	WATER	Total Lead	Organic Lead	Soluble Lead	COD				REMARKS
✓	6/22/89	1445	#4342	1 liter			X	X	X	X					
no	6/22/89	1445	#4354	500ml			X				X				5-Day Turnaround on Samples.

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
Chris Cerquone	6-22-89/1640	[signature]
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS: also send results to:
Attn: Mary Scruggs
AGE
11330 Sunrise Park Dr.
Suite C
Rancho Cordova, CA 95742

SEND RESULTS TO:
ATTN: Chris Cerquone
AGE
2145 Rumrill Blvd. Suite G
San Pablo, CA 94806
PHONE NO. (916) 451-0921

CHAIN OF CUSTODY

White-AGE Yellow-LAB Copy Pink-File

ANANIA GEOLOGIC ENGINEERING

PR-41

AGE

PROJECT NO.	LAB REPORT NO.	NO. OF CONTAINERS	SAMPLE TYPE			ANALYSES								
004-88-059			SOIL		WATER	8240	Dissolved O2	COD	Total organic lead, Soluble organic lead	8270	8080 PCB's	General Mineral	General Physical	REMARKS
P.O. NO.	SAMPLERS: (signature) Chris Cerqueira		COMP	GRAB										
LAB LOG NO. / DATE / TIME / SAMPLE I.D.														
✓ 6/23/89 1445 4396, 4397 4398		(3) 40ml VOA's			X	X								
✓ 6/23/89 1445 4399		(1) 500 ml			X		X							
✓ 6/23/89 1445 4400		(1) 500 ml			X			X						5-Day Turnaround
✓ 6/23/89 1445 4401		(1) liter			X				X					
✓ 6/23/89 1445 4402, 4403		(2) 1 liter each			X					X				
✓ 6/23/89 1445 4404		(1) liter			X						X			
✓ 6/23/89 1445 4405, 4406		(2) 1 liter each			X							X		
✓ 6/23/89 1445 4407		(1) liter			X								X	
5-Day Turnaround														

RELINQUISHED BY: (signature) Christopher Cerqueira — DATE/TIME 6/23/89, 1700 — RECEIVED BY: (signature)

RELINQUISHED BY: (signature) — DATE/TIME — RECEIVED BY: (signature)

RELINQUISHED BY: (signature) — DATE/TIME — RECEIVED BY: (signature)

REMARKS: Send Results also to:
AGE
Attn: Mary Scruggs
11320 Sunrise Park Dr.
Suite C
Rancho Cordova, CA 95742

SEND RESULTS TO: ~~Chris Cerqueira~~ AGE
ATTN: Chris Cerqueira
2145 Ramrill Blvd. Ste C
San Pablo, CA 94806
PHONE NO. ~~(916) 451-0921~~ (415) 234-4461

CHAIN OF CUSTODY

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ANANIA GEOLOGIC ENGINEERING

PR-55

AGE Nº 152

PROJECT NO.	LAB REPORT NO.
004-88-059	

P.O. NO.	SAMPLERS: (signature)
	Christopher Cerqueira

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SOIL GRAB	WATER	ANALYSES: 8240	Dissolved Oxygen	COD	6270	8080 (PCB's)	Total Lead / Lead Soluble	Organic Lead / General Mineral	General Physical	REMARKS
ok	✓	6/23/89	1400	4383, 4384, 4385	(3) 40 ml vials			X								
ok	✓	6/23/89	1400	4386	(1) 500ml			X		X						
ok	✓	6/23/89	1400	4387	(1) 500 ml			X			X					5-Day
ok	✓	6/23/89	1400	4388, 4389	(2) each a liter			X				X				Turnaround
ok	✓	6/23/89	1400	4390	(1) liter			X					X			
ok, sanitized	✓	6/23/89	1400	4392	(1) liter			X						X		
ok	✓	6/23/89	1400	4394, 4393	(2) each a liter			X							X	
ok	✓	6/23/89	1400	& 4395	(1) liter			X								X
				5-Day Turnaround.												

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
Christopher Cerqueira	6-23-89/1700	
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS: send results also to:
Attn: Mary Scruggs
AGE
11330 Sunrise Park Dr.
Suite C
Rancho Cordova, CA 95742

SEND RESULTS TO:
ATTN: Chris Cerqueira
AGE
2145 Runnill Blvd. Suite G
San Pablo, CA 94806
PHONE NO. ~~(916) 451-0921~~ (415) 234-4467

CHAIN OF CUSTODY

White - AGE Yellow - LAB Copy Pink - File

CHAIN OF CUSTODY RECORD

PROJ. NO. 041-88-059

SAMPLERS: (Signature) Chris Cervantone

PROJECT NAME AND ADDRESS:
Angnig Geologic Engineering
2145 Rumrill Blvd., Suite 6
San Pablo, Ca - 94806

ANALYSIS REQUESTED

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS	BTX	VOC-EPA 8240	TOTAL OIL & GREASE	8240	8270	REMARKS
	6/23/89	14:0		X	Age # 4383, 4384, 8385					X		5 day Turnaro
	6/23/89	12.30		X	Age # 4357, 4358, 4359					X		-
	6/23/89	13:15		X	Age # 4370, 4371 4372					X		Also Send Result
	6/23/89	14.45		X	Age # 4396, 4397, 4398					X		Mary Scruggs
	6/23/89	14.45		X	Age # 4402, 4403						X	11336 Sunrise Park
	6/23/89	13.15		X	Age # 4376, 4377						X	Suite C
	6/23/89	14.00		X	Age # 4388, 4389						X	Rancho Cordova
	6/23/89	12.30		X	Age # 4363, 4364						X	Ca - 95742.

RELINQUISHED BY: (Signature) c. Sidhu	DATE 6/26/89 TIME 1.00PM	RECEIVED BY: (Signature) Rebecca L Turin Chisholm	DATE 6/26/ TIME 1:3
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE TIME

CHAIN OF CUSTODY RECORD

0000220

PROJ. NO. 4-88-059

SAMPLERS: (Signature) Chris Cerqueira

PROJECT NAME AND ADDRESS:
Anania Geologic Engineering
2145 Rumrill Blvd, Suite G, San Pablo, CA-94806

RECEIVED 1989

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	ANALYSIS REQUESTED: TOTAL PETROLEUM HYDROCARBONS	BTX	VOC-EPA 8240	TOTAL OIL & GREASE	8240	8270	8040 (Phenols)	REMARKS
	6/22/89	14.45		X	#4350, #4351, #4352					X			5 day Turnaround
	6/22/89	14.45		X	#4343, #4349						X		
	6/22/89	14.45		X	#4345							X	

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
Sidhu	DATE 6/23 TIME	Terry Hales	DATE 6-23-89 TIME 2:30pm
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED FOR LABORATORY BY: (Signature)	DATE TIME

6-28-89

CHAIN OF CUSTODY RECORD

...OJ. NO.	SAMPLERS: (Signature)

...OJECT NAME AND ADDRESS: Precision Analytical Lab
4136 Lake Side Drive
Richmond, CA.

ANALYSIS REQUESTED: TOTAL PETROLEUM HYDROCARBONS | BTX | VOC-EPA 8240 | TOTAL OIL & GREASE

...ROSS ...FERENCE ...UMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS	BTX	VOC-EPA 8240	TOTAL OIL & GREASE			REMARKS
...900-9	6/26				1 liter							General Physical
...900-8	6/26				2 liter		Filter Before =					General Mineral
...900-4	6/26				500 ml							Dissolved Oxygen
...900-3	6/26				500 ml.							COD
												7 day turn around

...LINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	DATE 6/26 TIME 1415		DATE TIME
...LINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
...LINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
...LINQUISHED BY: (Signature)	DATE TIME	RECEIVED FOR LABORATORY BY: (Signature) Ulysses J. Bellon	DATE 6/26/89 TIME 1420

CHAIN OF CUSTODY RECORD

PROJ. NO. | SAMPLERS: (Signature)

PROJECT NAME AND ADDRESS: Precision Analytical Lab.
4136 Lakeside Dr.
Richmond

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS	BTX	VOC-EPA 8240	TOTAL OIL & GREASE	REMARKS
70899-9	6/26			✓	1 liter					General Physical
70899-7	6/26			✓	2 liter			Filter Before		General Mineral
70899-3	6/26			✓	500 ml					COD
70899-2	6/26			✓	500 ml					Dissolved Oxygen
										7 days turnaround

ANALYSIS REQUESTED

RELINQUISHED BY: (Signature)	DATE 6/26 TIME 1415	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED FOR LABORATORY BY: (Signature) Ulysses J. Bellon	DATE 6/26/89 TIME 1420

PRECISION LAB 415 822 5290 08/08/89 14:49 003

CHAIN OF CUSTODY RECORD

PROJ. NO. | SAMPLER(S) (Signature)

PROJECT NAME AND ADDRESS:
Precision Analytical
4136 Lakeside Drive
Richmond, CA.

ANALYSIS REQUESTED: TOTAL PETROLEUM HYDROCARBONS; BTX; VOC-EPA 8010; TOTAL OIL & GREASE

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	REMARKS
20902-7	6/26				2 liters	* General minerals general physical COD Dissolved Oxygen
20902-9	6/26				1 liter	Filter Before
20902-3	6/26				500 ml's	
20902-2	6/26				500 ml's	
						Seven day turnaround

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	6/26 1413		
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED FOR LABORATORY BY: (Signature) Ulysses J. Bellon	DATE 6/26/89 TIME 1425

CHAIN OF CUSTODY RECORD

PROJ. NO. | SAMPLERS: (Signature)

PROJECT NAME AND ADDRESS: Precision Analytical Lab.
436 ~~Richmond~~ ~~CA~~, Lakeside Dr
Richmond, CA.

ANALYSIS REQUESTED

CROSS REFERENCE NUMBER	DATE	TIME	SOIL	WATER	STATION LOCATION	TOTAL PETROLEUM HYDROCARBONS	BTX	VOC-EPA 8240	TOTAL OIL & GREASE			REMARKS
70901-9	6/24				1 liter							General Physical
70901-8	6/24				2 liter		Filter Before =					" Mineral
70901-3	6/24				500 ml.							Dissolved O2
70901-2	6/24				500 ml							COD
												7 day turn around

RELINQUISHED BY: (Signature)	DATE / TIME	RECEIVED BY: (Signature)	DATE / TIME
[signature]	DATE 6/26 TIME 14__		DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED BY: (Signature)	DATE TIME
RELINQUISHED BY: (Signature)	DATE TIME	RECEIVED FOR LABORATORY BY: (Signature) Ulysses J. Bellon	DATE 6/26/89 TIME 1426