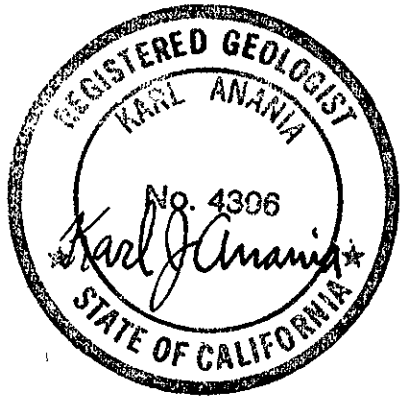
SECOND QUARTERLY MONITORING REPORT
CARNATION OAKLAND DAIRIES
OAKLAND, ALAMEDA COUNTY, CALIFORNIA

AGE PROJECT NO. 004-88-059

NOVEMBER 2, 1989



ENVIRONMENTAL **AGE** ENERGY MINERALS

ANANIA GEOLOGIC ENGINEERING

11-6-89
K.C.

November 2, 1989

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

RE: Transmittal of Second Quarterly Monitoring Report

AGE Project No. 004-88-059

Dear Ms. Chesick;

Enclosed is the Second Quarterly Monitoring Report for the Oakland Carnation Facility. Groundwater analytical results for the August 29, 1989 sampling event and groundwater elevation meaurements of August 29 and October 2, 1989 are included.

If you should have any questions, please do not hesitate to call.

Sincerely,

Christopher M. Nielson-Cerquone

C.M. Nielson-Cerquone
Project Manager

cc: Mr. Howard Shmuckler, Carnation
Mr. Jim Person, Carnation
Mr. Lester Feldman, RWQCB

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

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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

SECOND QUARTERLY MONITORING REPORT
CARNATION OAKLAND DAIRIES
OAKLAND, ALAMEDA COUNTY, CALIFORNIA

November 2, 1989

AGE Project No. 004-88-059

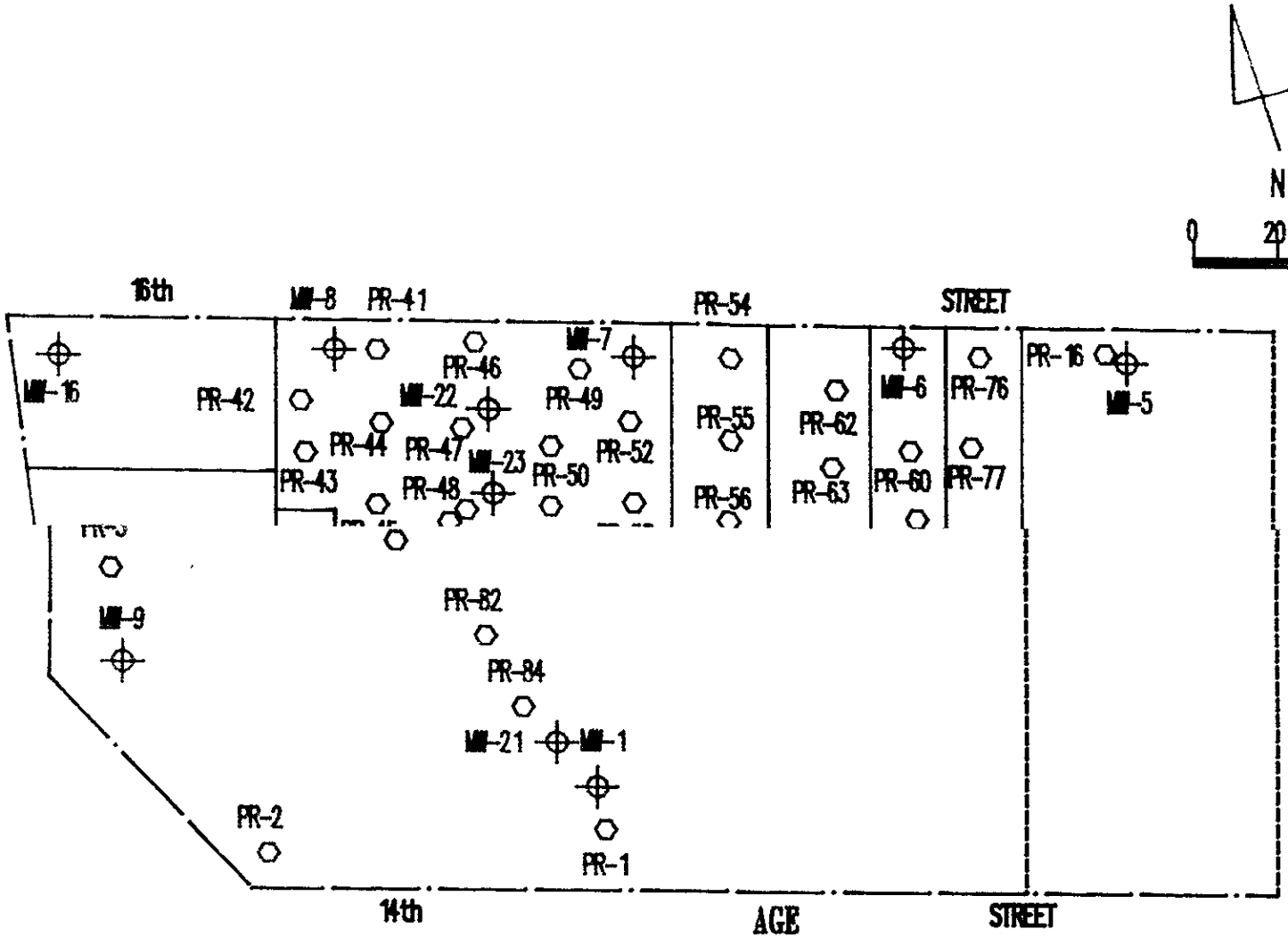
1.0 INTRODUCTION

Carnation's Corporate Counsel, Howard R. Shmuckler, authorized Anania Geologic Engineering (AGE) to prepare quarterly monitoring reports for the Carnation Oakland Dairy Facility (Facility). On a quarterly basis, groundwater samples are collected from existing on-site monitoring wells to evaluate the migration of soluble hydrocarbon constituents originating from an underground fuel tank release. Monthly groundwater elevations are also presented in the quarterly monitoring reports. This report addresses the results of the second quarter sampling event performed on August 29, 1989 and the groundwater elevation measurements from August 29 and October 2, 1989. Previous sampling results were presented in the Preliminary Site Characterization Report, dated April 3, 1989 and the Summary Report from April through July, 1989, dated October 13, 1989. A third quarter monitoring report will be submitted in January 1990 with the groundwater elevation measurements from November and December 1989 and the results for the December 1989, sampling event.

2.0 GROUNDWATER SAMPLING

Prior to sampling each monitoring well, the depth to goundwater is measured and the mean sea level groundwater elevation is determined. Groundwater samples were collected from on-site monitoring wells MW-1, MW-2, MW-4 through MW-6, MW-9 through MW-16, and MW-21. The locations of the on-site monitoring wells are shown on Figure 1. Samples were collected from the monitoring wells that did not have gasoline floating on the groundwater following standard sampling procedures. Monitoring wells MW-3, MW-7, and MW-8 were not sampled. A duplicate sample was obtained from monitoring well MW-5 to check laboratory accuracy and consistency. Groundwater samples were delivered by AGE personnel to American Environmental Laboratories in Sacramento under Chain of Custody procedures.

Groundwater samples collected from monitoring wells MW-1, MW-2, MW-4, MW-6, MW-9, MW-11, MW-12, MW-14, and MW-21 were analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylenes (BTEX), total lead, and PCBs by EPA methods modified 8015,



ANANIA GEOLOGIC ENGINEERING

TITLE: MONITORING WELL AND PRODUCT RECOVERY WELL LOCATIONS		
PROJECT NAME: CARNATION/OAKLAND		PROJECT NO: 004-88-059
SITE LOCATION: 1310 14th ST. AT POPLAR OAKLAND, CA.		
DATE: 10-26-89	DRAWING NO.: 059-030	SCALE: 1" = 40'

FIGURE 1

8020, 6010, and 8080 respectively. Groundwater samples collected from monitoring wells MW-5, MW-10, MW-13, MW-15, and MW-16 were also analyzed for volatile and semi-volatile organics and total oil and grease by EPA methods 8240 and 8270 and DHS method 503 A.

To collect a representative sample of the groundwater rather than stagnant water in the well, three volumes are purged from each well before sampling. The temperature, conductivity and pH of the water is measured three times per well volume to verify that the stagnant water in the well has been removed. When the temperature or pH has stabilized to within ±0.1 units and the conductivity readings are within 10% of the previous two measurements, a groundwater sample is collected. The purged water is barreled on site until analytical results verify that the water is clean or contaminated. Clean water is discharged to the storm drain and contaminated water is stored in the 8,000 gallon aboveground tank for appropriate disposal.

3.0 RESULTS

Tables 1 and 2 present the TPH, BTEX, total lead, PCBs, and total oil and grease analytical results for the second quarter groundwater sampling event. Tabulated results for 8240 and 8270 analyses are not shown because volatile and semi-volatile constituents were not detected. The reported benzene concentration of 7.7 parts per billion (ppb) in MW-6 is above the California Department of Health Services (DOHS) action level for benzene of 0.7 ppb. Laboratory reports indicated the total lead concentrations were below the California Primary Maximum Concentration Level of 0.05 parts per million (ppm) in all of the monitoring wells sampled. Reported total lead concentrations were fairly uniform across the site. Results from samples collected in background wells such as MW-1 and MW-11 had total lead concentrations similar to those in the vicinity of the gasoline plume (MW-5 and MW-16). In fact, monitoring well MW-6, contaminated with benzene, had a total lead concentration less than the other monitoring wells that were sampled. Laboratory reports and Chain of Custody forms are included in Appendix A.

Table 3 presents the groundwater elevations of on-site monitoring wells since April, 1989. Groundwater gradient contours for August 29 and October 2, 1989 are shown on Figures 2 and Figure 3 respectively.

Table 1: Groundwater Analytical Results
EPA Method Modified 8015 - Total Petroleum Hydrocarbons
8020 - BTEX, 6010 - Total Lead

Sample Number	Location	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH-Gasoline	TPH-Diesel	Total Lead
	Limit of Detection	0.5 µg/l	0.5 µg/l	0.5 µg/l	1 µg/l	0.05 mg/l	0.2 mg/l	5 µg/l
1582	MW-1	ND	ND	ND	ND	ND	ND	31
1584	MW-1 Dupe	ND	ND	ND	ND	ND	ND	44
1581	MW-21	ND	ND	ND	ND	ND	ND	ND
1583	MW-9	ND	ND	ND	ND	ND	ND	18
1585	MW-10	NA	NA	NA	NA	ND	ND	22
1586	MW-4	ND	ND	ND	ND	ND	ND	34
1587	MW-15	NA	ND	ND	ND	ND	ND	24
1588	MW-14	ND	ND	ND	ND	ND	ND	18
1589	MW-16	ND	ND	ND	ND	ND	ND	38
1590	MW-11	ND	ND	ND	ND	ND	ND	37
1592	MW-12	ND	ND	ND	ND	ND	ND	22
1593	MW-2	ND	ND	ND	ND	ND	ND	9
1594	MW-5	NA	NA	NA	NA	ND	ND	38
1595	MW-5 Dupe	NA	NA	NA	NA	ND	ND	38
1596	MW-6	7.7	ND	ND	ND	ND	ND	13
1597	MW-13	ND	ND	ND	ND	ND	ND	47

ND - Not Detected
NA - Not Applicable

Table 2: Groundwater Analytical Results
EPA Method 608 - PCB
EPA Method 9070 - Total Oil and Grease

Sample Number	Location	PCB Content	Total Oil and Grease
	Limit of Detection	1 µg/l	5 µg/l
1582	MW-1	ND	NA
1584	MW-1 Dupe	ND	NA
1581	MW-21	ND	NA
1583	MW-9	ND	NA
1585	MW-10	ND	NA
1586	MW-4	ND	NA
1587	MW-15	ND	ND
1588	MW-14	ND	NA
1589	MW-16	ND	ND
1590	MW-11	ND	NA
1592	MW-12	ND	NA
1593	MW-2	ND	NA
1594	MW-5	ND	ND
1595	MW-Dupe	ND	ND
1596	MW-6	ND	NA
1597	MW-13	ND	ND

ND - Not Detected
NA - Not Applicable

TABLE 3
GROUNDWATER ELEVATIONS
CARNATION OAKLAND DAIRY FACILITY

ANANIA GEOLOGIC ENGINEERING

	MONITORING WELL NUMBER									
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10
TOC Elevation	16.49	15.11	14.3	14.42	14.41	14.12	14.29	14.2	14.96	15.73
April 25, 1989	5.55	6.36	****	6.29	6.16	6.07	****	****	6.4	6.41
June 7, 1989	5.89	5.57	****	5.57	5.41	****	****	****	5.68	5.69
July 5, 1989	5.54	5.26	4.22	5.37	5.06	****	****	****	----	5.28
July 31, 1989	5.28	----	4.75	4.92	4.82	4.89	****	****	----	5.08
August 29, 1989	5.06	4.81	****	4.76	4.61	****	****	****	4.9	4.88
October 2, 1989	4.88	4.64	4.51	4.59	4.44	4.37	****	****	4.76	4.72

	MONITORING WELL NUMBER									
	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20
TOC Elevation	14.55	15.28	14.85	14.1	14.17	14.11	16.48	16.11	16.29	16.39
April 25, 1989	6.45	6.45	6.38	----	6.13	5.89	++++	++++	++++	++++
June 7, 1989	5.7	5.68	5.61	5.36	5.44	5.21	6.15	5.96	5.94	5.98
July 5, 1989	3.72	5.28	5.3	4.82	5.09	4.83	----	5.71	----	5.59
July 31, 1989	5.07	5.14	5.02	4.68	4.73	4.59	5.47	5.36	6.54	5.31
August 29, 1989	4.88	4.85	4.76	4.48	4.57	4.33	====	====	====	====
October 2, 1989	4.71	4.68	----	4.4	4.45	4.23	5.98	4.91	4.49	4.89

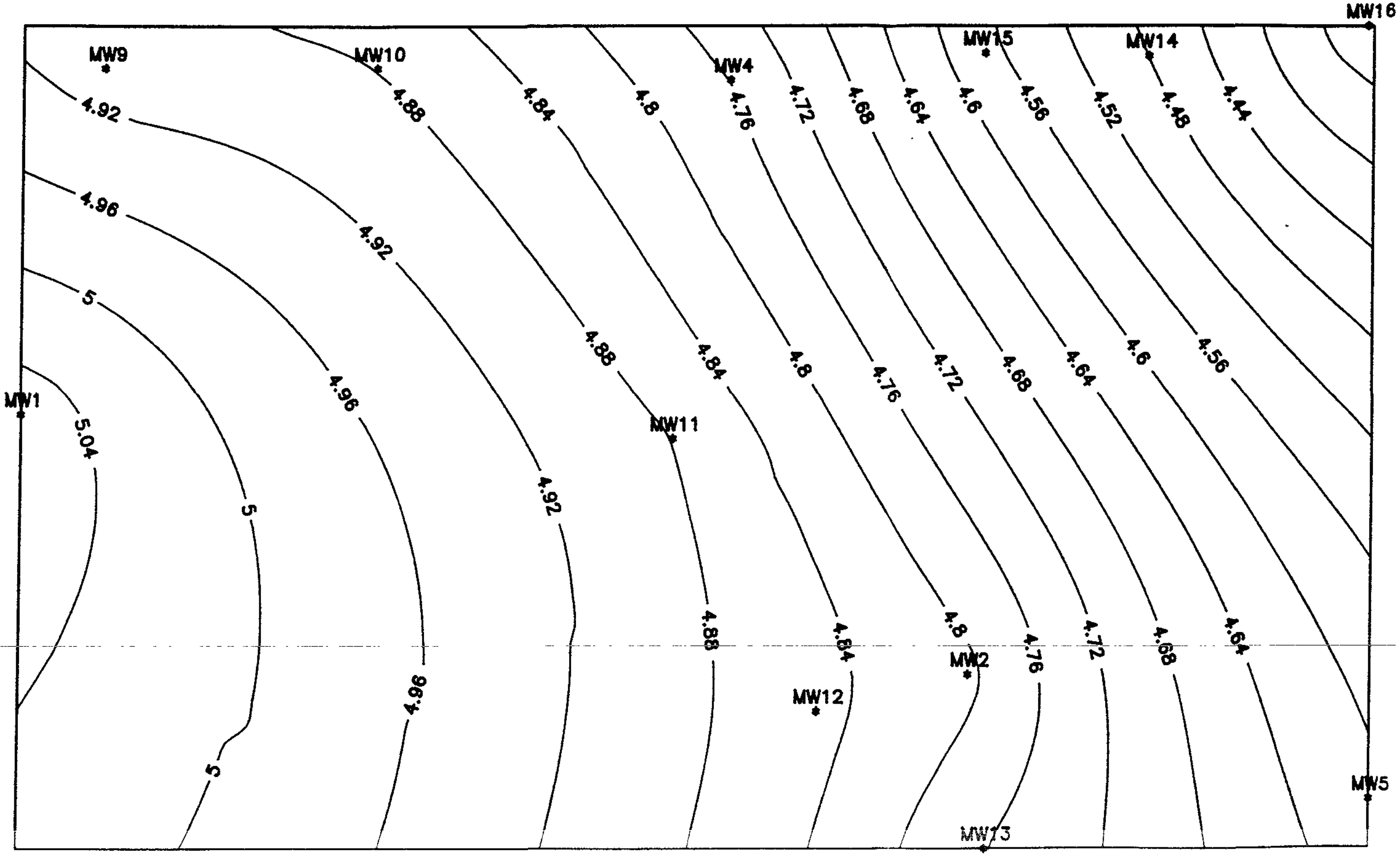
**** not measured beacuse well contains free product.

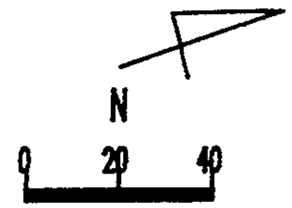
---- not accessible.

++++ not installed.

FIGURE 2

GROUNDWATER ELEVATIONS (AUGUST 29, 1989)





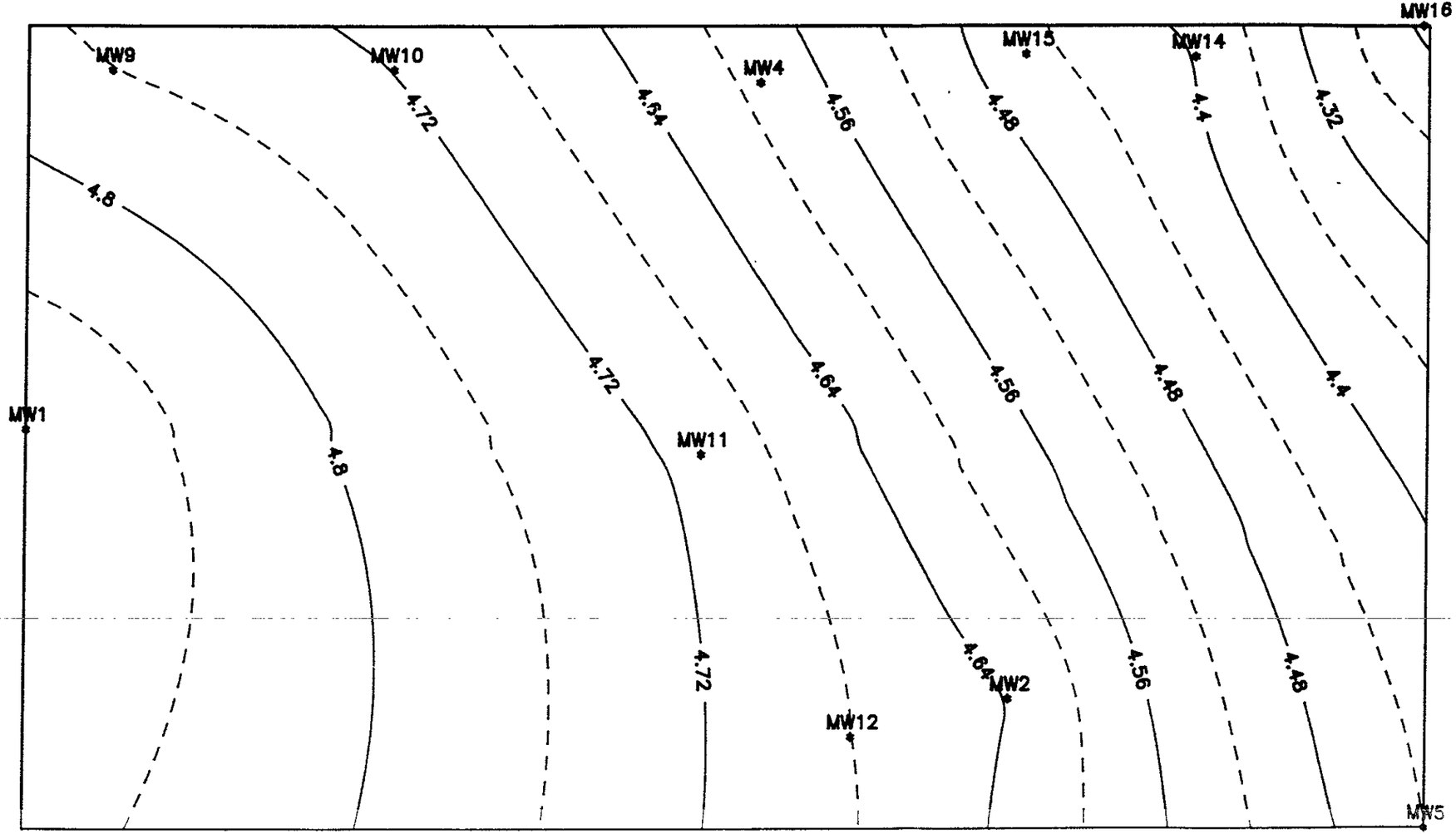
SCALE 1 inch = 40 FEET

AGE
ANANIA GEOLOGIC ENGINEERING

TITLE:	GROUNDWATER ELEVATION (AUGUST 29, 1989)		
PROJECT NAME:	CARNATION OAKLAND	PROJECT NO.:	[illegible]
SITE LOCATION:	[illegible] AT POPLAR, OAKLAND, CA.		
DATE: 11-[illegible]-89	DRAWING NO.: [illegible]	SCALE:	1" = 40'

FIGURE 3

GROUNDWATER ELEVATIONS (OCTOBER 2, 1989)



N

0 20 40

SCALE 1 inch = 40 FEET

AGE
ANANIA GEOLOGIC ENGINEERING

TITLE:	GROUNDWATER ELEVATIONS (OCTOBER 2, 1989)		
PROJECT NAME:	CARNATION/MAGLAND	PROJECT #:	004-89-003
SITE LOCATION:	510 14th ST. AT POPLAR CARLSBAD, CA.		
DATE:	11-2-89	DRAWING NO.:	
		SCALE:	1" = 40'

4.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater analytical results show that the soluble contaminant plume at the Oakland Facility has not spread since the previous groundwater sampling event on June 7, 1989. Current remedial actions performed by AGE are not distending the free product nor the soluble hydrocarbon plume. Groundwater in the vicinity of monitoring well MW-6 is contaminated with benzene and will require remedial action. AGE anticipated remediating groundwater in the vicinity of MW-6 because it previously contained a film of gasoline floating on the groundwater.

Groundwater analytical results show that regional groundwater in this area of Oakland may have background lead levels as high as 0.03 to 0.05 ppm. All of the lead detected in the groundwater may not have originated from the underground tank release of gasoline. Future established groundwater cleanup goals should address the widespread background lead level at this facility.

Subsequent groundwater sampling will continue to provide information on the migration of the free product and soluble hydrocarbon constituents as well as monitor the remediation and background lead levels. The next quarterly sampling event is scheduled for late December 1989.

Groundwater elevations have continued to decrease throughout August, September and November of 1989. Groundwater continues to flow in a north to northwest direction across the site with a gradient between 0.0015 and 0.002. Subsequent groundwater elevation measurements will provide information on the gradient and direction of groundwater at the Oakland Facility.

5.0 REMARKS AND SIGNATURES

This quarterly monitoring report was prepared in accordance with current industry standards and practice. The work described herein has been and will be performed under the supervision of a California Registered Geologist.

Prepared by:

Christopher M. Nielson-Cerquone — 11/2/89

C.M. Nielson-Cerquone
Project Manager

Approved by:

Karl J. Anania — 11/2/89

Karl J. Anania
California Registered Geologist No. 4297

REGISTERED GEOLOGIST
KARL ANANIA
4306
STATE OF CALIFORNIA

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

09/15/89

Anania Geological Eng.
11330 Sunrise Park Dr. Ste. C
Rancho Cordova, CA 95742

Attn: K. Anania

Re: Project: Anania Geological Eng.
AEMC Lab Reference No.: L3708 Job No.: 793708
Date Samples Received: 08/30/89
No. Samples Received: 10 Water samples
6 Soil samples

These samples were received by AEMC in a chilled state, intact, and accompanied by chain-of-custody documentation.

The above referenced samples were analyzed as follows:

No. of Samples	Analysis
16	TPH gas & diesel
11	BTXE
12	PCBs
16	Lead
5	Volatile Organics
5	Semi-volatile Organics
11	Oil & Grease

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

Michael Grey — for GH

George Hampton
Laboratory Director

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Total Petroleum Hydrocarbons/BTXE

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-59
Date Samples Received: 8/30/89
Date Analysis Completed: 9/13/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Matrix: Water
Sample Location:

AEMC I.D.: L3708

Client	Sample I.D. AEMC	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Xylenes, total (ug/L)	TPH as Gasoline (mg/L)	TPH as Diesel (mg/L)
1587 MW-15	L3708-1	NA	NA	NA	NA	ND	ND(0.3)
1588 MW-14	L3708-2	ND	ND	ND	ND	ND	ND
1589 MW-16	L3708-3	NA	NA	NA	NA	ND	ND
1590 MW-11	L3708-4	ND	ND	ND	ND	ND	ND
1592 MW-12	L3708-5	ND	ND	ND	ND	ND	ND
1593 MW-2	L3708-6	ND	ND	ND	ND	ND	ND
1594 MW-5	L3708-7	NA	NA	NA	NA	ND	ND
1595 MW-5 dup	L3708-8	NA	NA	NA	NA	ND	ND
1596 MW-6	L3708-9	7.7	ND	ND	ND	ND	ND
1597 MW-13	L3708-10	NA	NA	NA	NA	ND	ND(0.5)
REPORTING LIMIT*		0.5	0.5	0.5	1	0.05	0.2

*Unless otherwise indicated in parentheses

ND = Not Detected at or above indicated Reporting Limit.
NA = Not Applicable; analysis not requested.

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ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Total Petroleum Hydrocarbons/BTXE

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-59
Date Samples Received: 8/30/89
Date Analysis Completed: 9/13/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Matrix: Water
Sample Location:

AEMC I.D.: L3708

Sample I.D. Client	Sample I.D. AEMC	Benzene (Recovery)	Toluene (Recovery)	Ethyl-benzene (Recovery)	Xylenes, total (Recovery)	TPH as Gasoline (Recovery)	TPH as Diesel (Recovery)
Batch 4405 M Spike	L3708-MS	89%	95%	97%	91%	--	--
Batch 4405 M Spike D	L3708-MSD	76%	82%	83%	78%	--	--
Batch 4425 M Spike	L3708-MS	--	--	--	--	--	88%
Batch 4425 M Spike D	L3708-MSD	--	--	--	--	--	75%

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: PCBs

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/14/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Matrix: Water
Sample Location:

AEMC I.D.: L3708

AEMC I.D.	Sample I.D.	PCB Content ug/L	Reporting Limit ug/L	Aroclor
L3708-1	1587 MW-15	ND	1	NA
L3708-2	1588 MW-14	ND	1	NA
L3708-3	1589 MW-16	ND	1	NA
L3708-4	1590 MW-11	ND	1	NA
L3708-5	1592 MW-12	ND	1	NA
L3708-6	1593 MW-9	ND	1	NA
L3708-7	1594 MW-5	ND	1	NA
L3708-8	1595 MW-5 dup	ND	1	NA
L3708-9	1596 MW-6	ND	1	NA
L3708-10	1597 MW-13	ND	1	NA

ND - Not Detected at or above indicated Reporting Limit.
NA - Not Applicable

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: PCBs

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/14/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Matrix: Water
Sample Location:

AEMC I.D.: L3708

AEMC I.D.	Sample I.D.	PCB Content Recovery	Aroclor
L3708-MS	Batch 4426 M Spike	100% 92%	1260 1242
L3708-MSD	Batch 4426 M Spike D	105% 101%	1260 1242

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ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Lead, TTLC, EPA Method 7420

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/07/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Matrix: Water
Sample Location:

AEMC I.D.: L3708

AEMC I.D.	Client I.D.	Results (ug/L)	Reporting Limit (ug/L)
L3708-1	1587 MW-15	24	5.0
L3708-2	1588 MW-14	18	5.0
L3708-3	1589 MW-16	38	5.0
L3708-4	1590 MW-11	37	5.0
L3708-5	1592 MW-12	22	5.0
L3708-6	1593 MW-2	9	5.0
L3708-7	1594 MW-5	38	5.0
L3708-8	1595 MW-5 dupe	38	5.0
L3708-9	1596 MW-6	13	5.0
L3708-10	1597 MW-13	47	5.0

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ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Lead, TTLC, EPA Method 7420

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/07/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: Batch 4414
Sample Location:

AEMC I.D.: L3708
Matrix: Water

COMPOUND	% Recovery M Spike	% Recovery M Spike D
Pb (Lead)	94%	93%

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ANALYTICAL SERVICES

ANALYSIS REPORT: Purgeable Organic Compounds, EPA Method 624

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 8/31/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1587, MW-15
Sample Location:

AEMC I.D.: L3708-1
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl vinyl ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	10
Xylenes, total	----	ND	10

ND = Not Detected at or above indicated Reporting Limit

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Purgeable Organic Compounds, EPA Method 624

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 8/31/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1594, MW-5
Sample Location:

AEMC I.D.: L3708-7
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl vinyl ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	10
Xylenes, total	----	ND	10

ND = Not Detected at or above indicated Reporting Limit

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Purgeable Organic Compounds, EPA Method 624

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 8/31/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1595 Water Lab
Sample Location:

AEMC I.D.: L3708-8
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl vinyl ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	10
Xylenes, total	----	ND	10

ND = Not Detected at or above indicated Reporting Limit

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Purgeable Organic Compounds, EPA Method 624

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 8/31/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1589, MW-10
Sample Location:

AEMC I.D.: L3708-3
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl vinyl ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	10
Xylenes, total	----	ND	10

ND = Not Detected at or above indicated Reporting Limit

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Purgeable Organic Compounds, EPA Method 624

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 8/31/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1597, MW-13
Sample Location:

AEMC I.D.: L3708-10
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl vinyl ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	10
Xylenes, total	----	ND	10

ND = Not Detected at or above indicated Reporting Limit

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1587, MW-15
Sample Location:

AEMC I.D.: L3708-1
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables (cont.), EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1587, MW-15
Sample Location:

AEMC I.D.: L3708-1
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	ND	10
N-Nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected at or above indicated Reporting Limit

11955 White Rock Road Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Acid Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1587 / MW-15
Sample Location:

AEMC I.D.: L3708-1
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzoic Acid	65-85-0	ND	50
4-Chloro-3-methylphenol	59-50-7	ND	20
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1589, MW-16
Sample Location:

AEMC I.D.: L3708-3
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10

ND - Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables (cont.), EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1589 MW-16
Sample Location:

AEMC I.D.: L3708-3
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	ND	10
N-Nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Acid Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1589, MW-16
Sample Location:

AEMC I.D.: L3708-3
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzoic Acid	65-85-0	ND	50
4-Chloro-3-methylphenol	59-50-7	ND	20
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1594, MW-5
Sample Location:

AEMC I.D.: L3708-7
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables (cont.), EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1594, MW-5
Sample Location:

AEMC I.D.: L3708-7
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	ND	10
N-Nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected at or above indicated Reporting Limit

1255 White Rock Road Rancho Cordova California 95670 (916)985-4444

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Acid Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1594) MW-5
Sample Location:

AEMC I.D.: L3708-7
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzoic Acid	65-85-0	ND	50
4-Chloro-3-methylphenol	59-50-7	ND	20
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1595, MW-5, dupl
Sample Location:

AEMC I.D.: L3708-8
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10

ND - Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables (cont.), EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1595, MW-5 dupe
Sample Location:

AEMC I.D.: L3708-8
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	ND	10
N-Nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Acid Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1595, MW-5 dupe
Sample Location:

AEMC I.D.: L3708-8
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzoic Acid	65-85-0	ND	50
4-Chloro-3-methylphenol	59-50-7	ND	20
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1597 / MW-13
Sample Location:

AEMC I.D.: L3708-10
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables (cont.), EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1597, MW-17
Sample Location:

AEMC I.D.: L3708-10
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	ND	10
N-Nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND = Not Detected at or above indicated Reporting Limit

11065 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Acid Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Client Sample I.D.: 1597 MW-13
Sample Location:

AEMC I.D.: L3708-10
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzoic Acid	65-85-0	ND	50
4-Chloro-3-methylphenol	59-50-7	ND	20
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Oil & Grease, EPA Method 9070

CLIENT: Anania Geologic Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/30/89
Date Analysis Completed: 9/07/89

AEMC Contact: M. Jaeger
Job No.: 793708
SMR Log No.: 1138

Matrix: Water
Sample Location:

AEMC I.D.: L3708

AEMC I.D.	Client I.D.		Results (ug/L)	Reporting Limit (ug/L)
L3708-1	1587	MW-15	ND	5
L3708-3	1589	MW-16	ND	5
L3708-7	1594	MW-5	ND	5
L3708-8	1595	MW-5, dupl	ND	5
L3708-10	1597	MW-13	ND	5

ND - Not Detected at or above indicated Reporting Limit.

ANANIA GEOLOGIC ENGINEERING

AGE № 11

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

P.O. NO.	SAMPLERS: (signature)
	John Russell

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SAMPLE TYPE: SOIL GRAB	SAMPLE TYPE: WATER	ANALYSES: TPH-gas and diesel M8015	BTEX-8020	TTLC-lead	8080 PCB	8240	8270	total oil and grease 503A	REMARKS
	8/29/89	9:55	1587	8			X	X		X	X	X	X	X	
	8/29/89	10:30	1588	6			X	X	X	X	X				
	8/29/89	12:00	1589	8			X	X		X	X	X	X	X	
	8/29/89	13:30	1590	6			X	X	X	X	X				
	8/29/89	15:00	1592	6			X	X	X	X	X				
	8/29/89	16:00	1593	6			X	X	X	X	X				
	8/29/89	16:45	1594	8			X	X		X	X	X	X	X	
	8/29/89	16:55	1595	8			X	X		X	X	X	X	X	
	8/30/89	9:00	1596	6			X	X	X	X	X				
	8/30/89	10:15	1597	8			X	X		X	X	X	X	X	

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
John Russell	8/30/89 / 15:30	Mike Wortel
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS: Standard turnaround time

SEND RESULTS TO: AGE
ATTN: Karl Anania
11330 Sunrise Park Dr, Suite
Rancho Cordova, CA
95742

PHONE NO. (916) ~~451-0921~~ 631-0154

CHAIN OF CUSTODY

White- AGE Yellow – LAB Copy Pink- File

ANANIA GEOLOGIC ENGINEERING

AGE Nº 1137

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

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SOIL GRAB	WATER	ANALYSES: TPH-gas & diesel M8015	BTEX - 8020	TTLC - Lead	8080 - PCB ✓				REMARKS
	8/29/89	13:45	1591	6			X	X	X	X	X				
	8/30/89	11:20	1598	6			X	X	X	X	X				

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
John Russell	8/30/89 15:xx	Mike Westdal
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)

REMARKS:
5 day RUSH

SEND RESULTS TO: AGE
ATTN: Karl Anania and Jim Wallace
11330 Sunrise Park Dr. Suite C
Rancho Cordova, CA
95742
PHONE NO. (916) ~~851-8324~~

CHAIN OF CUSTODY

631-0159

White- AGE Yellow – LAB Copy Pink- File

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

RECEIVED SEP 14 1989

09/14/89

Anania Geological Eng.
11330 Sunrise Park Dr. Ste. C
Rancho Cordova, CA 95742

Attn: K. Anania

Re: Project: Anania Geological Eng.
AEMC Lab Reference No.: L3702 Job No.: 793702
Date Samples Received: 08/29/89
No. Samples Received: 6 Water samples

These samples were received by AEMC in a chilled state, intact, and accompanied by chain-of-custody documentation.

The above referenced samples were analyzed as follows:

No. of Samples	Analysis
6	TPH gas & diesel
5	BTXE
6	PCBs
6	Total Lead
1	Volatile Organics
1	Semi-volatile Organics
1	Oil & Grease

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

George Hampton

George Hampton (SS)
Laboratory Director

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

RECEIVED SEP 1 4 1989

ANALYSIS REPORT: Total Petroleum Hydrocarbons/BTXE

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/6/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Matrix: Water
Sample Location:

AEMC I.D.: L3702

Sample I.D. Client	Sample I.D. AEMC	Benzene (ug/L)	Toluene (ug/L)	Ethyl-benzene (ug/L)	Xylenes, total (ug/L)	TPH as Gasoline (mg/L)	TPH as Diesel (mg/L)
1582 MW-1	L3702-1	ND	ND	ND	ND	ND	ND
1584 MW-1 Dupe	L3702-2	ND	ND	ND	ND	ND	ND
1581 MW-21	L3702-3	ND	ND	ND	ND	ND	ND
1583 MW-9	L3702-4	ND	ND	ND	ND	ND	ND
1585 MW-10	L3702-5	NA	NA	NA	NA	ND	ND
1586 MW-4	L3702-6	ND	ND	ND	ND	ND	ND
REPORTING LIMIT*		0.5	0.5	0.5	1	0.05	0.2

*Unless otherwise indicated in parentheses

ND - Not Detected at or above indicated Reporting Limit.

RECEIVED SEP 1 4 1989

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Total Petroleum Hydrocarbons/BTXE

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/6/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Matrix: Water
Sample Location:

AEMC I.D.: L3702

Sample I.D. Client	AEMC	Benzene (Recovery)	Toluene (Recovery)	Ethyl-benzene (Recovery)	Xylenes, total (Recovery)	TPH as Gasoline (Recovery)	TPH as Diesel (Recovery)
Batch 4408 M Spike	L3702-MS	98%	101%	108%	105%	--	--
Batch 4408 M Spike D	L3702-MSD	100%	102%	106%	109%	--	--
REPORTING LIMIT*		0.5	0.5	0.5	1	0.05	0.2

*Unless otherwise indicated in parentheses

ND = Not Detected at or above indicated Reporting Limit.

RECEIVED SEP 14 1989

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: PCBs by EPA Method 608

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/8/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

AEMC I.D.: L3702

Matrix: Water
Sample Location:

AEMC I.D.	Sample I.D.	PCB Content ug/L	Reporting Limit ug/L	Aroclor
L3702-1	1582	ND	1	N/A
L3702-2	1584	ND	1	N/A
L3702-3	1581	ND	1	N/A
L3702-4	1583	ND	1	N/A
L3702-5	1585	ND	1	N/A
L3702-6	1586	ND	1	N/A

ND - Not Detected at or above indicated Reporting Limit.

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AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: PCBs by EPA Method 608

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/8/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Matrix: Water
Sample Location:

AEMC I.D.: L3702

AEMC I.D.	Sample I.D.	PCB Content Recovery	Reporting Limit ug/L	Aroclor
L3702-MS	Batch 4383 M Spike	99%	1	1242
L3702-MSD	Batch 4383 M Spike D	102%	1	1242

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Lead, TTLC, EPA Method 7420

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/08/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Matrix: Water
Sample Location:

AEMC I.D.: L3702

AEMC I.D.	Client I.D.	Results (ug/L)	Reporting Limit (ug/L)
L3702-1	1582	31	5.0
L3702-2	1584	44	5.0
L3702-3	1581	ND	5.0
L3702-4	1583	18	5.0
L3702-5	1585	22	5.0
L3702-6	1586	34	5.0

ND - Not Detected at or above indicated Reporting Limit.

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Lead, TTLC, EPA Method 7420

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/08/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Client Sample I.D.: Batch 4418
Sample Location:

AEMC I.D.: L3702

COMPOUND	% Recovery M Spike	% Recovery M Spike D
Lead	99%	94%

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AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Purgeable Organic Compounds, EPA Method 624

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 8/31/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Client Sample I.D.: 1585
Sample Location:

AEMC I.D.: L3702-5
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acetone	67-64-1	ND	100
Benzene	71-43-2	ND	5
Bromodichloromethane	75-27-4	ND	5
Bromoform	75-25-2	ND	5
Bromomethane	74-83-9	ND	10
2-Butanone	78-93-3	ND	100
Carbon disulfide	75-15-0	ND	5
Carbon tetrachloride	56-23-5	ND	5
Chlorobenzene	108-90-7	ND	5
Chloroethane	75-00-3	ND	10
2-Chloroethyl vinyl ether	110-75-8	ND	10
Chloroform	67-66-3	ND	5
Chloromethane	74-87-3	ND	10
Dibromochloromethane	124-48-1	ND	5
1,1-Dichloroethane	75-34-3	ND	5
1,2-Dichloroethane	107-06-2	ND	5
1,1-Dichloroethene	75-35-4	ND	5
1,2-Dichloroethene, total	540-59-0	ND	5
1,2-Dichloropropane	78-87-5	ND	5
cis-1,3-Dichloropropene	10061-01-5	ND	5
trans-1,3-Dichloropropene	10061-02-6	ND	5
Ethylbenzene	100-41-4	ND	5
2-Hexanone	591-78-6	ND	50
Methylene chloride	75-09-2	ND	5
4-Methyl-2-pentanone	108-10-1	ND	50
Styrene	100-42-5	ND	5
1,1,2,2-Tetrachloroethane	79-34-5	ND	5
Tetrachloroethene	127-18-4	ND	5
Toluene	108-88-3	ND	5
1,1,1-Trichloroethane	71-55-6	ND	5
1,1,2-Trichloroethane	79-00-5	ND	5
Trichloroethene	79-01-6	ND	5
Vinyl acetate	108-05-4	ND	50
Vinyl chloride	75-01-4	ND	10
Xylenes, total	----	ND	10

ND = Not Detected at or above indicated Reporting Limit

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Base/Neutral Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Client Sample I.D.: 1585
Sample Location:

AEMC I.D.: L3702-5
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Acenaphthene	83-32-9	ND	10
Acenaphthylene	208-96-8	ND	10
Anthracene	120-12-7	ND	10
Benzo(a)anthracene	56-55-3	ND	10
Benzo(b)fluoranthene	205-99-2	ND	10
Benzo(k)fluoranthene	207-08-9	ND	10
Benzo(g,h,i)perylene	191-24-2	ND	10
Benzo(a)pyrene	50-32-8	ND	10
Benzyl alcohol	100-51-6	ND	20
Bis(2-chloroethoxy)methane	111-91-1	ND	10
Bis(2-chloroethyl)ether	111-44-4	ND	10
Bis(2-chloroisopropyl)ether	108-60-1	ND	10
Bis(2-ethylhexyl)phthalate	117-81-7	ND	10
4-Bromophenyl phenyl ether	101-55-3	ND	10
Butylbenzyl phthalate	85-68-7	ND	10
4-Chloroaniline	106-47-8	ND	20
2-Chloronaphthalene	91-58-7	ND	10
4-Chlorophenyl phenyl ether	7005-72-3	ND	10
Chrysene	218-01-9	ND	10
Dibenzo(a,h)anthracene	53-70-3	ND	10
Dibenzofuran	132-64-9	ND	10
Di-n-butylphthalate	84-74-2	ND	10
1,2-Dichlorobenzene	95-50-1	ND	10
1,3-Dichlorobenzene	541-73-1	ND	10
1,4-Dichlorobenzene	106-46-7	ND	10
3,3'-Dichlorobenzidine	91-94-1	ND	20
Diethylphthalate	84-66-2	ND	10
Dimethylphthalate	131-11-3	ND	10
2,4-Dinitrotoluene	121-14-2	ND	10
2,6-Dinitrotoluene	606-20-2	ND	10
Di-n-octylphthalate	117-84-0	ND	10
Fluoranthene	206-44-0	ND	10
Fluorene	86-73-7	ND	10
Hexachlorobenzene	118-74-1	ND	10
Hexachlorobutadiene	87-68-3	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

ANALYSIS REPORT: Base/Neutral Extractables (cont.), EPA Method 8270

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Client Sample I.D.: 1585
Sample Location:

AEMC I.D.: L3702-5
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Hexachlorocyclopentadiene	77-47-4	ND	10
Hexachloroethane	67-72-1	ND	10
Indeno(1,2,3-c,d)pyrene	193-39-5	ND	10
Isophorone	78-59-1	ND	10
2-Methylnaphthalene	91-57-6	ND	10
Naphthalene	91-20-3	ND	10
2-Nitroaniline	88-74-4	ND	50
3-Nitroaniline	99-09-2	ND	50
4-Nitroaniline	100-01-6	ND	50
Nitrobenzene	98-95-3	ND	10
N-Nitrosodiphenylamine	86-30-6	ND	10
N-Nitroso-di-n-propylamine	621-64-7	ND	10
Phenanthrene	85-01-8	ND	10
Pyrene	129-00-0	ND	10
1,2,4-Trichlorobenzene	120-82-1	ND	10

ND - Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-6666

RECEIVED SEP 1 4 1989

AMERICAN
ENVIRONMENTAL MANAGEMENT CORP.
ANALYTICAL SERVICES

ANALYSIS REPORT: Acid Extractables, EPA Method 625

CLIENT: Anania Geological Eng.
11330 Sunrise Park Dr., Ste. C
Rancho Cordova, CA 95742

P.O/Contract No.:
Contact: K. Anania
Phone:

Project: 004-88-059
Date Samples Received: 8/29/89
Date Analysis Completed: 9/12/89

AEMC Contact: M. Jaeger
Job No.: 793702
SMR Log No.: 1134

Client Sample I.D.: 1585
Sample Location:

AEMC I.D.: L3702-5
Matrix: Water

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzoic Acid	65-85-0	ND	50
4-Chloro-3-methylphenol	59-50-7	ND	20
2-Chlorophenol	95-57-8	ND	10
2,4-Dichlorophenol	120-83-2	ND	10
2,4-Dimethylphenol	105-67-9	ND	10
2,4-Dinitrophenol	51-28-5	ND	50
2-Methyl-4,6-dinitrophenol	534-52-1	ND	50
2-Methylphenol	95-48-7	ND	10
4-Methylphenol	106-44-5	ND	10
2-Nitrophenol	88-75-5	ND	10
4-Nitrophenol	100-02-7	ND	50
Pentachlorophenol	87-86-5	ND	50
Phenol	108-95-2	ND	10
2,4,5-Trichlorophenol	95-95-4	ND	10
2,4,6-Trichlorophenol	88-06-2	ND	10

ND = Not Detected at or above indicated Reporting Limit

11855 White Rock Road, Rancho Cordova, California 95670 / (916) 985-8666

ANANIA GEOLOGIC ENGINEERING

AGE Nº 1134

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

LAB LOG NO.	DATE	TIME	SAMPLE I.D.	NO. OF CONTAINERS	SAMPLE TYPE: SOIL COMP	SOIL GRAB	WATER	TPH gas and diesel - M8015	BTEX 8020	8080-PCB	Total lead	8240 - Extended	8270	625 Conc Total oil and grease 503A	REMARKS
	8/28/89	13:00	1582	6			X	X	X	X	X				
	8/28/89	13:00	1584	6			X	X	X	X	X				
	8/28/89	15:30	1581	6			X	X	X	X	X				
	8/28/89	16:30	1583	6			X	X	X	X	X				
	8/28/89	17:30	1585	8			X	X		X	X	X	X	X	
	8/28/89	18:30	1586	6			X	X	X	X	X				1 VOA Broken

RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
John Russell	8/29/89 08:15	
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
	8/29 12??	
RELINQUISHED BY: (signature)	DATE/TIME	RECEIVED BY: (signature)
	8-29-89/3:20	Mike Wendel

REMARKS: Normal turnaround time (2 week)

SEND RESULTS TO: AGE
ATTN: Karl Anania
11330 Sunrise Park Dr, Suite C
Rancho Cordova, CA 95742
PHONE NO. (916) 631-0154

CHAIN OF CUSTODY

White - AGE Yellow - LAB Copy Pink - File