

ALCO
HAZMAT
54 MAY -4 PM 2:52

GROUNDWATER MONITORING AND SAMPLING REPORT

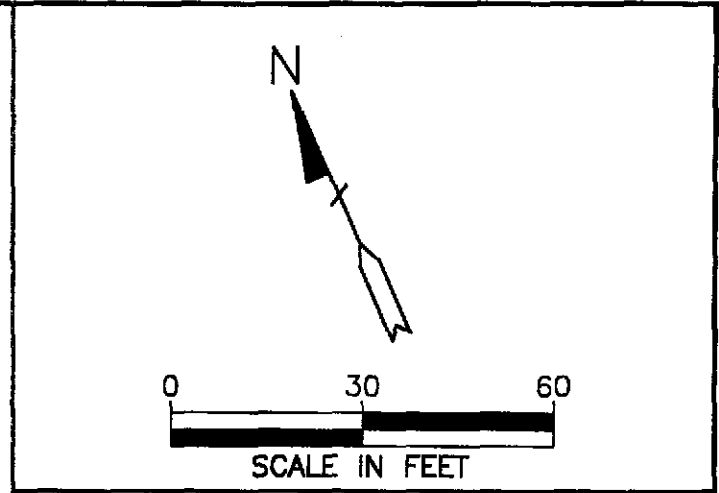
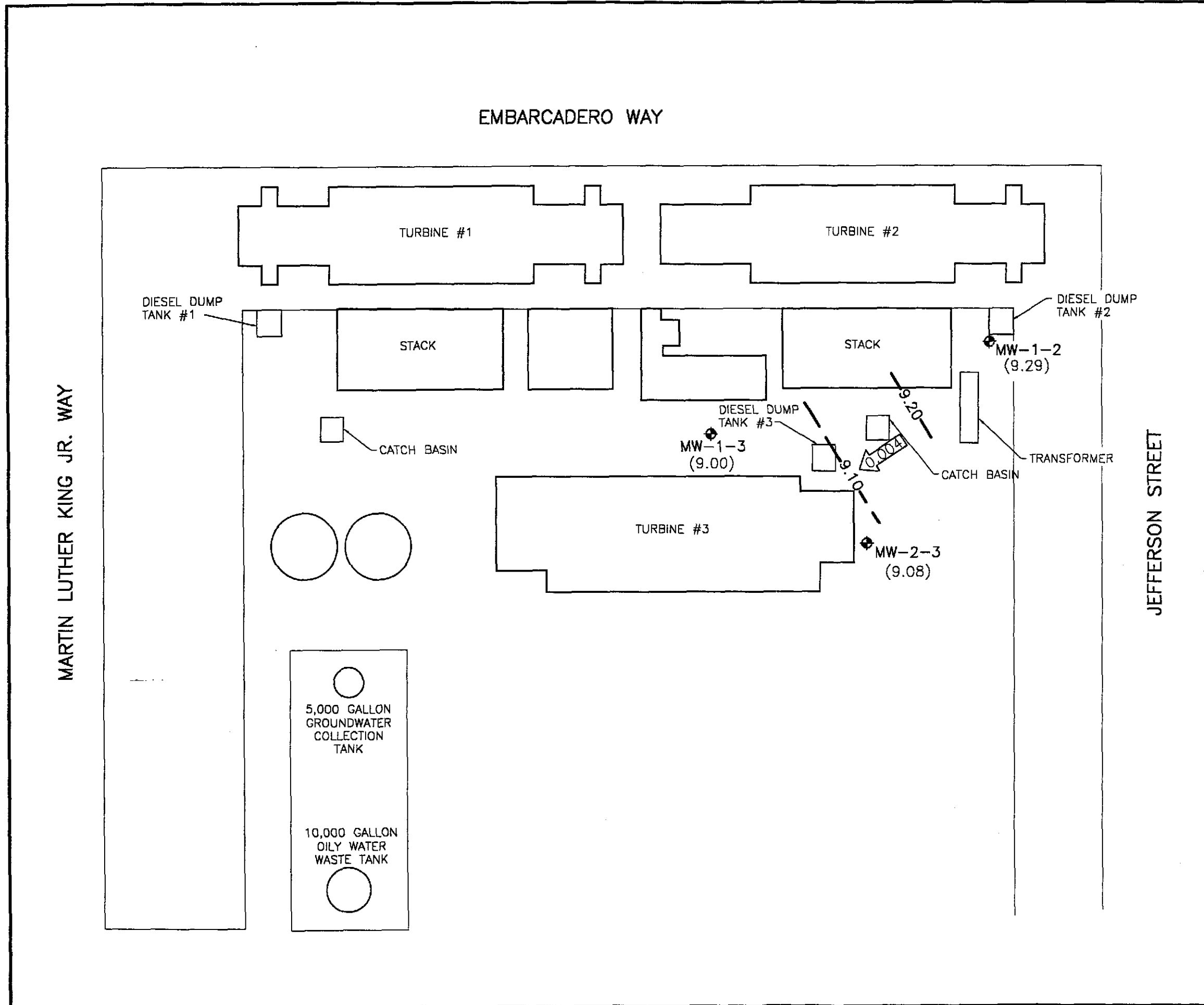
Pacific Gas and Electric Company
Oakland Power Plant
50 Martin Luther King, Jr. Way
Oakland, California

*April
94*

PG&E Project No. 0530-EC
Alisto Project No. 10-179

April 1994





LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (9.29) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 9.20 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL - 0.10 FOOT)
- ← 0.004 ← CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 2
POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP
APRIL 11, 1994
 PACIFIC GAS AND ELECTRIC COMPANY
 OAKLAND POWER PLANT
 50 MARTIN LUTHER KING JR. WAY
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-179

10179B-02-01-001

GROUNDWATER MONITORING AND SAMPLING REPORT

**Pacific Gas and Electric Company
Oakland Power Plant
50 Martin Luther King, Jr. Way
Oakland, California**

**PG&E Project No. 0530-EC
Alisto Project No. 10-179-01-003**

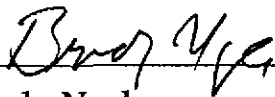
Prepared for:

**Pacific Gas and Electric Company
3400 Crow Canyon Road
San Ramon, California**

Prepared by:

**Alisto Engineering Group
1777 Oakland Boulevard, Suite 200
Walnut Creek, California**

April 28, 1994



**Brady Nagle
Project Manager**



**Al Sevilla, P.E.
Principal**



GROUNDWATER MONITORING AND SAMPLING REPORT

Pacific Gas and Electric Company
Oakland Power Plant
50 Martin Luther King, Jr. Way
Oakland, California

TESA Project No. 0530-EC
Alisto Project No. 10-179-01-003

April 28, 1994

INTRODUCTION

This report presents the results and findings of the April 11 and 20, 1994 groundwater monitoring and sampling conducted by Alisto Engineering Group at Pacific Gas and Electric Company's Oakland Power Plant, 50 Martin Luther King Jr. Way, Oakland, California. A site vicinity map is shown in Figure 1.

FIELD PROCEDURES

Field activities were performed in accordance with the procedures and guidelines of the Alameda County Health Care Services Agency and the California Regional Water Quality Control Board, San Francisco Bay Region.

Before purging and sampling, the groundwater level in each well was measured from a permanent mark on top of the casing to the nearest 0.01 foot using an electronic sounder. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevation in each well. The survey data and groundwater elevation measurements collected to date are presented in Table 1. The field procedures for groundwater monitoring well sampling are presented in Appendix A.

SAMPLING AND ANALYTICAL RESULTS

The results of monitoring and laboratory analysis of the groundwater samples for this and previous quarters are summarized in Table 1. The potentiometric groundwater elevations as interpreted from the results of this monitoring event are shown in Figures 2 and 3. The results of groundwater analysis are shown in Figure 4. The field procedures for chain of custody documentation, laboratory reports, and chain of custody records are presented in Appendix B.



SUMMARY OF FINDINGS

The findings of the April 11 and 20, 1994 groundwater monitoring and sampling event are summarized as follows:

- Free product was not observed in any of the groundwater monitoring wells.
- Groundwater elevation data collected on April 11, 1994 indicate a gradient of 0.004 foot per foot in a southwest direction, and groundwater elevation data collected on April 20, 1994 indicate a gradient of 0.003 foot per foot in a northwest direction.
- Total petroleum hydrocarbons as diesel (TPH-D) were not detected above the reported detection limit in the samples collected from wells MW-1-3 or MW-2-3. TPH-D was detected at a concentration of 600 parts per billion in the sample collected from MW-1-2.
- Benzene, toluene, ethylbenzene, and total xylenes analysis detected only total xylenes at a concentration of 0.5 ppb in the groundwater sample collected from well MW-1-3.



TABLE 1 - SUMMARY OF RESULTS OF GROUNDWATER SAMPLING
 PACIFIC GAS AND ELECTRIC COMPANY'S OAKLAND POWER PLANT
 50 MARTIN LUTHER KING, JR. WAY, OAKLAND, CALIFORNIA

ALISTO PROJECT NUMBER 10-179

WELL ID	DATE OF SAMPLING/ MONITORING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	GROUNDWATER ELEVATION (Feet)	TPH-D (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	LAB
MW-1-2	06/22/93	13.95	5.05	8.90	1500	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-2	09/22/93	13.95	5.91	8.04	240	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
QC-1 (c)	09/22/93	---	---	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-2	12/28/93	13.95	4.77	9.18	200	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
QC-1 (c)	12/28/93	---	---	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-2	04/11/94	13.95	4.66	9.29	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
QC-1 (c)	04/11/94	---	---	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-2	04/20/94	13.95	4.86	9.09	600	---	---	---	---	CHR
MW-1-3	06/22/93	14.01	5.15	8.86	160	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-3	09/22/93	14.01	5.57	8.44	430	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-3	12/28/93	14.01	5.13	8.88	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-1-3	04/11/94	14.01	5.01	9.00	---	ND<0.5	ND<0.5	ND<0.5	0.50	CHR
MW-1-3	04/20/94	14.01	5.09	8.92	ND<50	---	---	---	---	CHR
MW-2-3	06/22/93	13.91	5.00	8.91	560 (f)	3.1	ND<0.5	ND<0.5	ND<0.5	CHR
MW-2-3	09/22/93	13.91	5.50	8.41	460	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-2-3	12/28/93	13.91	4.74	9.17	ND<50 (d)	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-2-3	04/11/94	13.91	4.62	9.29	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
MW-2-3	04/20/94	13.91	4.83	9.08	ND<50	---	---	---	---	CHR
QC-2 (e)	06/22/93	---	---	---	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
QC-2 (e)	09/22/93	---	---	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
QC-2 (e)	12/28/93	---	---	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR
QC-2 (e)	04/11/94	---	---	---	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	CHR

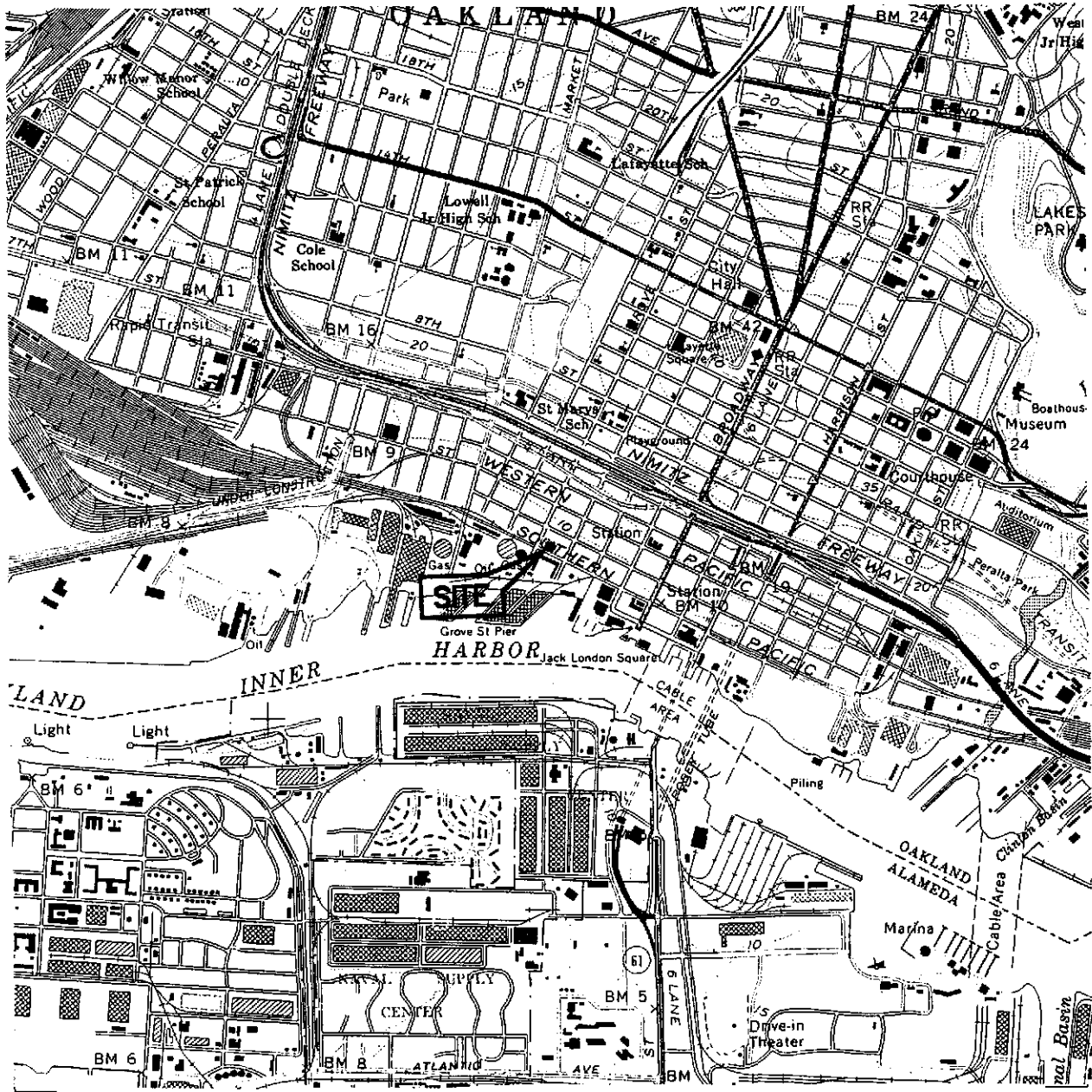
ABBREVIATIONS:

TPH-D Total petroleum hydrocarbons as diesel
 B Benzene
 T Toluene
 E Ethylbenzene
 X Total xylenes
 ppb Parts per billion
 --- Not analyzed/applicable
 ND Not detected at or above reported detection limit
 CHR Chromalab, Inc.

NOTES:

- (a) Top of casing elevations surveyed relative to mean sea level.
- (b) Groundwater elevations in feet above mean sea level.
- (c) Blind duplicate.
- (d) Motor oil at a concentration of 2.9 mg/l detected in sample.
- (e) Travel blank.

(f) 3.1 mg/L motor oil



SOURCE:
 USGS MAP, OAKLAND WEST QUADRANGLE,
 CALIFORNIA, 7.5 MINUTE SERIES, 1959.
 PHOTOREVISED 1980.

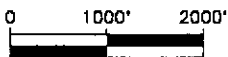


FIGURE 1
SITE VICINITY MAP

PACIFIC GAS AND ELECTRIC
 OAKLAND POWER PLANT
 50 MARTIN LUTHER KING JR. WAY
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-179

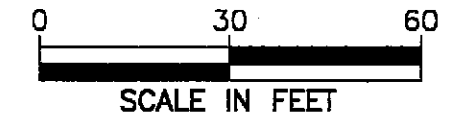
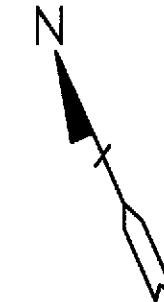
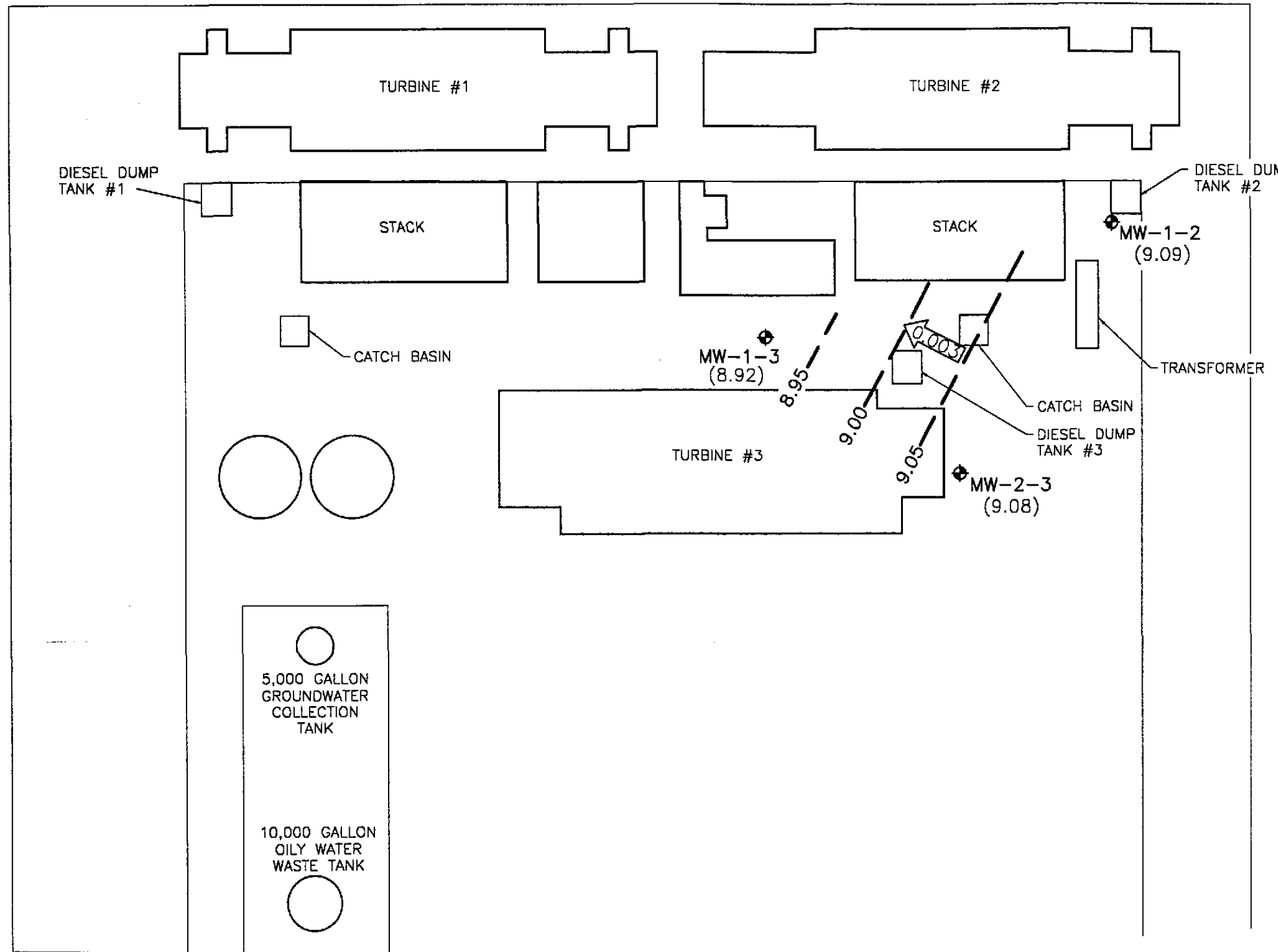


ALISTO ENGINEERING GROUP
 WALNUT CREEK, CALIFORNIA

EMBARCADERO WAY

MARTIN LUTHER KING JR. WAY

JEFFERSON STREET



LEGEND

- ◆ GROUNDWATER MONITORING WELL
- (9.09) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL
- 9.05 - GROUNDWATER ELEVATION CONTOUR IN FEET ABOVE MEAN SEA LEVEL (CONTOUR INTERVAL-0.05 FOOT)
- ← 0.0031 ← CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT

FIGURE 3

POTENTIOMETRIC GROUNDWATER ELEVATION CONTOUR MAP

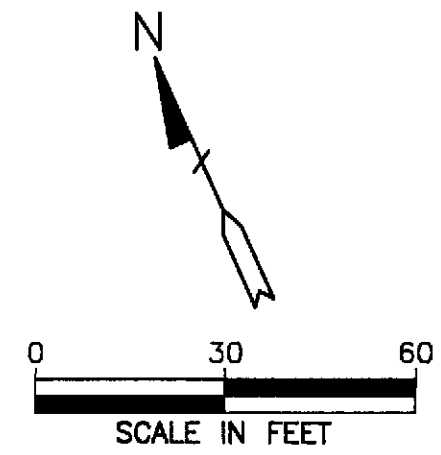
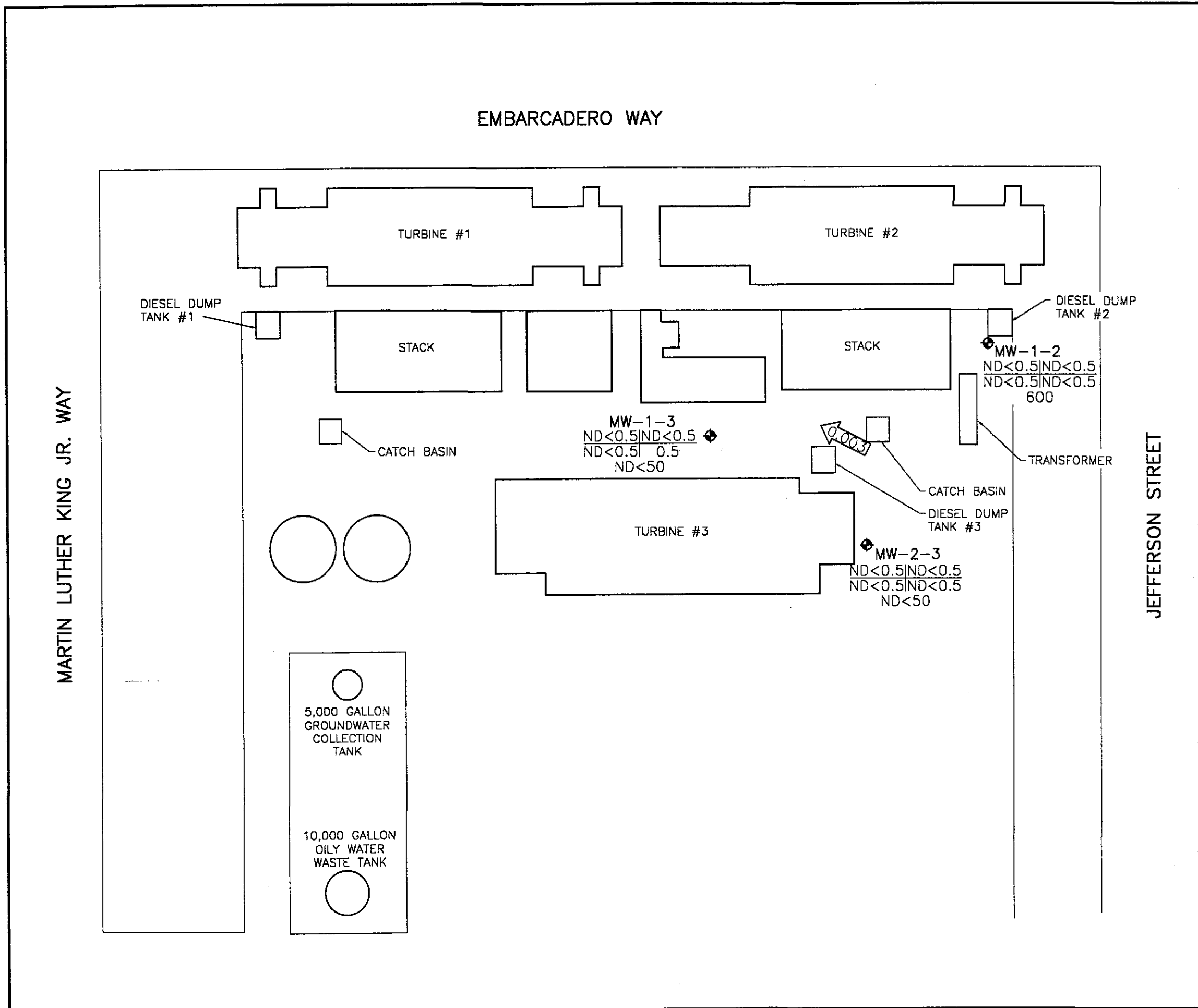
APRIL 20, 1994

PACIFIC GAS AND ELECTRIC COMPANY
OAKLAND POWER PLANT
50 MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

PROJECT NO. 10-179



10170ALJWG 4-27-94 RW 1 of 30



LEGEND

◆	GROUNDWATER MONITORING WELL
B T	CONCENTRATION OF CONSTITUENTS IN PARTS PER BILLION
E X	
TPH-D	TOTAL PETROLEUM HYDROCARBONS AS DIESEL
B	
T	BENZENE
E	TOLUENE
X	ETHYLBENZENE
TPH-D	TOTAL XYLENES
ND	NOT DETECTED ABOVE REPORTED DETECTION LIMIT
← 0.003	CALCULATED GROUNDWATER GRADIENT DIRECTION AND MAGNITUDE IN FOOT PER FOOT AS MEASURED ON APRIL 20, 1994

FIGURE 4
**CONCENTRATIONS OF PETROLEUM
 HYDROCARBONS IN GROUNDWATER**
APRIL 11 AND 20, 1994
 PACIFIC GAS AND ELECTRIC COMPANY
 OAKLAND POWER PLANT
 50 MARTIN LUTHER KING JR. WAY
 OAKLAND, CALIFORNIA
 PROJECT NO. 10-179

APPENDIX A

**FIELD PROCEDURES FOR
GROUNDWATER MONITORING WELL SAMPLING
AND WATER SAMPLING FIELD SURVEY FORMS**

**FIELD PROCEDURES
FOR
GROUNDWATER MONITORING WELL SAMPLING**

Groundwater Level Measurement

Before commencing groundwater sampling activities, the groundwater level in each well was measured from the marked survey reference point at the top of the well casing. Groundwater in each well was monitored for free product or sheen. The depth to groundwater was measured to an accuracy of 0.01 foot from the top of the polyvinyl chloride well casing using an electronic sounder.

Groundwater Monitoring Well Sampling

To ensure that the groundwater sample was representative of the aquifer, the wells were purged of 3 well casing volumes before sample collection unless the monitoring well would not produce sufficient groundwater. This purging was accomplished using a clean bailer or pump.

The groundwater samples were collected using a disposable bailer, and then carefully transferred into laboratory-supplied containers. Care was taken to avoid turbulence when transferring the water samples, and all volatile analysis vials were filled so that no air bubbles were trapped. The sampling technician wore nitrile gloves at all times during purging and well sampling. The samples were clearly labeled with the well number, site identification, date and time of sample collection, and sampler's initials, and transported in an iced cooler maintained at 4 degrees Centigrade to a California-certified laboratory following proper preservation and chain of custody protocol.

ALISTO ENGINEERING GROUP GROUNDWATER MONITORING

Client: **PGE**
 Alisto Project No: **10-17A-01-003**
 Service Station No: **OAKLAND**

Date: **4-11-94**
 Field Personnel: **DJB**
 Site Address: **50 MLK JR WAY
 OAKLAND**

FIELD ACTIVITY:

QUALITY CONTROL SAMPLES:

Groundwater Monitoring
 XGroundwater Sampling
 Well Development

MW1-2QC-1 Sample Duplicate (Well ID)
 QC-2 Trip Blank
 QC-3 Rinsate Blank

Well ID	Well Diam	Order Measured/ Sampled	Total Depth	Depth to Water	Depth to Product	Product Thick-ness	Comments
MW2-3	4	1/1	13.30	4.62			
MW1-2	4	3/3	13.62	4.66			QC-1
MW1-3	4	2/2	7.24	5.01			

Notes:

ALISTO ENGINEERING GROUP

Groundwater Development and Sampling Form

Client: PGE
 Alisto Project No: 10-179-01-003
 Service Station No:

Date: 4-11-94
 Field Personnel: DJB
 Address: MLK JR BLVD.
OAKLAND
 Product Bailing

Well ID: MW2-3 Field Activity: Well Development Well Sampling

Casing Diameter:

- 2 Inch (0.16 Gal/foot)
- 3 Inch (0.37 Gal/foot)
- 4 Inch (0.65 Gal/foot)
- 4.5 Inch (0.83 Gal/foot)
- 6 Inch (1.47 Gal/foot)

Purge Method:

- Pump (dispos. Poly Tubing)
- Disposable Bailers
- Other
- 1.66 PVC Standard Bailer
- 3.50 PVC Standard Bailer

Well Data:

- Depth to Product
- Product Thickness
- 13.36 Depth to Water
- 4.62

Sampling Method:

- Disposable Bailer
- Pump

Decontamination Method:

- Triple Rinse (Liquinox)
- Steam Cleaned

MW-2-3

Calculated Purge Volume

$$\frac{13.30}{\text{Total Depth of Well}} - \frac{4.62}{\text{Depth to Water}} = \frac{8.68}{\text{Water Column}} \text{ ft} \times \frac{.65}{\text{Conversion Factor}} \text{ Gal/Ft} = \frac{5.64}{\text{Casing Vol}} \text{ Gal} \times \frac{3}{\text{Vols to Purge}} = \frac{16.9}{\text{Total Volume}}$$

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos/cm)	Purge Vol (Gal)	Comments/Turbidity	Analysis Required	Container Type	Preserv
1250	68.7	6.98	1.83	3	193.5 NTU's	<input checked="" type="checkbox"/> TPH-G/BTEX	VOA	HCL
1253	67.8	7.02	1.89	6	191.7 NTU's	<input checked="" type="checkbox"/> TPH-Diesel	Amber Liter	Solvent Rinsed
1256	67.8	7.08	2.00	10	181.3 NTU's	EPA 601	VOA	
						TOG 55208F	Amber Liter	H ₂ SO ₄

Purged dry @ 10 gallons. Allow recharge then sampled.

ALISTO ENGINEERING GROUP GROUNDWATER MONITORING

Client: **PGE**
 Alisto Project No: **10-179-01-003**
 Service Station No: **OAKLAND**

Date: **4-20-94**
 Field Personnel: **DJBind**
 Site Address: **MLK**

FIELD ACTIVITY:

Groundwater Monitoring
 Groundwater Sampling
 Well Development

QUALITY CONTROL SAMPLES:

QC-1 Sample Duplicate (Well ID)
 QC-2 Trip Blank
 QC-3 Rinsate Blank

Well ID	Well Diam	Order Measured/ Sampled	Total Depth	Depth to Water	Depth to Product	Product Thick-ness	Comments
MW23	4"	1/1	13.30	4.83			MW-2-3
MW1-2	4"	2/2	13.62	4.86			MW-1-2
MW1-3	4"	3/3	7.24	5.09			MW-1-3

TIME
 SAMPLED
 1310
 1345
 1414

Notes:

ALISTO ENGINEERING GROUP

Groundwater Development and Sampling Form

Client: PG&E
 Alisto Project No: 10-179-01-003
 Service Station No: OAKLAND

Date: 4-20-94
 Field Personnel: DOBIRCH
 Address: 50 MLK

Well ID: 2-3 Field Activity: Well Development Well Sampling Product Bailing

Casing Diameter:

- 2 Inch (0.16 Gal/foot)
- 3 Inch (0.37 Gal/foot)
- 4 Inch (0.65 Gal/foot)
- 4.5 Inch (0.83 Gal/foot)
- 6 Inch (1.47 Gal/foot)

Purge Method:

- Pump (dispos. Poly Tubing)
- Disposable Bailers
- Other
- 1.66 PVC Standard Bailer
- 3.50 PVC Standard Bailer

Well Data:

- Depth to Product
- Product Thickness
- 4.33 Depth to Water

Sampling Method:

- Disposable Bailer
- Pump

Decontamination Method:

- Triple Rinse (Liquinox)
- Steam Cleaned

MW-2-3

Calculated Purge Volume

$$\frac{13.30}{4.83} = 2.75 \text{ ft} \times 0.65 \text{ Gal/Ft} = 1.79 \text{ Gal} \times 3 = 5.37 \text{ Gal} \times 3 = 16.11 \text{ Total Volume}$$

Total Depth of Well Depth to Water Water Column Conversion Factor Casing Vol Vols to Purge Total Volume

Well Development/Sampling Parameters

Time	Temp °F	pH	Cond. (umhos/cm)	Purge Vol (Gal)	Comments/Turbidity	Analysis Required	Container Type	Preserv
1300	3	6.97	1.79	3	175.1 NTU's	TPH-G/BTEX	VOA	HCL
1305	6	6.95	1.84	6	165.2	<input checked="" type="checkbox"/> TPH-Diesel	Amber Liter	Solvent Rinsed
1310	9	6.94	1.89	9	163.2	EPA 601	VOA	
						TOC 5520BF	Amber Liter	H ₂ SO ₄

Purged dry at 9 gallons. Allowed recharge air to sampling.

APPENDIX B

**FIELD PROCEDURES FOR CHAIN OF CUSTODY DOCUMENTATION,
LABORATORY REPORTS, AND CHAIN OF CUSTODY RECORDS**

**FIELD PROCEDURES
FOR
CHAIN OF CUSTODY DOCUMENTATION**

The samples collected were handled in accordance with the California Department of Health Services guidelines. Each sample was labeled in the field, and immediately stored in coolers and preserved with blue ice for transport to a state-certified laboratory for analysis.

The official chain of custody record accompanied the samples, and included the site and sample identification, date and time of collection, analysis requested, and the name and signature of the sampling technician. When transferring possession of the samples, the transferee signed and dated the chain of custody record.

CHROMALAB, INC.

Environmental Services (SDB)

April 22, 1994

ChromaLab File#: 9404144

ALISTO ENGINEERING GROUP INC

Atten: Bill Howell

Project: PGE-MLK-OAKLAND

Project#: 10-179-01-003

Received: April 13, 1994

re: 5 samples for BTEX analysis.

Matrix: WATER

Sampled on: April 11, 1994

Method: EPA 602

Analyzed on: April 15, 1994

Run#: 2670

Lab #	SAMPLE ID	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
48906	MW2-3	N.D.	N.D.	N.D.	N.D.
48907	MW1-2	N.D.	N.D.	N.D.	N.D.
48908	MW1-3	N.D.	N.D.	N.D.	0.50

Matrix: WATER

Sampled on: April 11, 1994

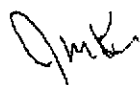
Method: EPA 602


Analyzed on: April 21, 1994

Run#: 2713

Lab #	SAMPLE ID	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)
48909	QC-1	N.D.	N.D.	N.D.	N.D.
48910	QC-2	N.D.	N.D.	N.D.	N.D.
DETECTION LIMITS		0.5	0.5	0.5	0.5
BLANK		N.D.	N.D.	N.D.	N.D.
BLANK SPIKE RECOVERY(%)		102	114	102	111

ChromaLab, Inc.


 Jack Kelly
 Chemist


 Eric Tam
 Laboratory Director

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

15968

Chain of Custody

DATE 4-13-94 PAGE 1 OF 1

PROJ MGR <u>BILL HOWELL</u>				ANALYSIS REPORT														NUMBER OF CONTAINERS								
COMPANY <u>ALISTO ENGINEERING</u>				TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (EPA 5030, 8015) TPH - Gasoline (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)		TOTAL LEAD	EXTRACTION (TCLP, STLC)						
ADDRESS <u>1772 OAKLAND BLVD WALNUT CREEK</u>				SAMPLERS (SIGNATURE) <u>[Signature]</u>		(PHONE NO.) <u>510 295 1650</u>																				
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																						
MW 2-3	4/11/94		W	Hcp	X	X																	4			
MW 1-2	↓		↓	↓	X	X																	4			
MW 1-3		X			X																				4	
QC-1		X			X																					3
QC-2		X			X																					1

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1.			RELINQUISHED BY 2.			RELINQUISHED BY 3.					
PROJECT NAME: <u>10-179-01-003</u>		TOTAL NO. OF CONTAINERS: <u>16</u>		HEAD SPACE REC'D GOOD CONDITION/COLD CONFORMS TO RECORD				[Signature] (TIME) SAU BIRCH (DATE) ALISTO 4-13-94 (COMPANY)			(SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)			(SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)					
PROJECT NUMBER: <u>PGE-MLK-OAKLAND</u>		P.O. # <u>0530-EC</u>						TAT			RECEIVED BY 1.			RECEIVED BY 2.			RECEIVED BY (LABORATORY) 3.		
STANDARD 5-DAY		24 48 72 OTHER						SPECIAL INSTRUCTIONS/COMMENTS: <u>0530-EC</u>			(SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)			(SIGNATURE) (TIME) (PRINTED NAME) (DATE) (COMPANY)			(SIGNATURE) (TIME) (PRINTED NAME) (DATE) (LAB)		

CHROMALAB, INC.

Environmental Services (SDB)

April 25, 1994

ChromaLab File No.: 9404241

ALISTO ENGINEERING GROUP INC

Attn: Bill Howell

RE: Three water samples for Diesel analysis

Project Name: PGE-MLK-OAKLAND

Project Number: 10-179-01-003

Date Sampled: April 20, 1994

Date Submitted: April 20, 1994

Date Extracted: April 22, 1994

Date Analyzed: April 25, 1994

RESULTS:

<u>Sample I.D.</u>	<u>Diesel (ug/L)</u>
--------------------	----------------------

MW-1-2

600

MW-1-3

N.D.

MW-2-3

N.D.

BLANK

N.D.

BLANK SPIKE RECOVERY

84%

DETECTION LIMIT

50

METHOD OF ANALYSIS

3510/8015

ChromaLab, Inc.

Alex Tam
Analytical ChemistEric Tam
Laboratory Director

CHROMALAB, INC.

DOHS 1094

2239 Omega Road, #1 • San Ramon, California 94583
510/831-1788 • Facsimile 510/831-8798

Chain of Custody

DATE 4-20-94 PAGE 1 OF 1

16880

PROJ. MGR. <u>BILL HOWELL</u> COMPANY <u>ALISTO ENGINEERING</u> ADDRESS <u>1777 OAKLAND BLVD.</u> <u>WALNUT CREEK</u>					ANALYSIS REPORT															NUMBER OF CONTAINERS	
SAMPLERS (SIGNATURE) <u>[Signature]</u> (PHONE NO.) <u>510 295 1650</u>					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (5030, 8015) w/BTEX (EPA 602, 8020)	TPH - Diesel (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTEX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD		EXTRACTION (ICLP, STLC)
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																	
MW-2-3	4/20/94	1310	W	None			X														1
MW-1-2	↓	1345	W	None			X														1
MW-1-3	↓	1414	W	None			X														1
PROJECT INFORMATION					SAMPLE RECEIPT					RELINQUISHED BY 1.			RELINQUISHED BY 2.			RELINQUISHED BY 3.					
PROJECT NAME: <u>PGE-MLK-OAKLAND</u>					TOTAL NO. OF CONTAINERS <u>3</u>					[Signature] (TIME) <u>1545</u>			[Signature] (TIME) <u>1750</u>			[Signature] (TIME) <u>11:00</u>					
PROJECT NUMBER: <u>10-179-01-003</u>					HEAD SPACE					[Signature] (DATE) <u>4-20-94</u>			[Signature] (DATE) <u>4/20/94</u>			[Signature] (DATE) <u>4/20</u>					
P.O. # <u>0530-EC</u>					REC'D GOOD CONDITION/COLD					[Signature] (COMPANY) <u>ALISTO</u>			[Signature] (COMPANY) <u>ALISTO</u>			[Signature] (COMPANY) <u>CHROMALAB</u>					
CONFORMS TO RECORD					TAT					RECEIVED BY 1.			RECEIVED BY 2.			RECEIVED BY (LABORATORY) 3.					
STANDARD 5-DAY					24 48 72 OTHER					[Signature] (TIME) <u>1545</u>			[Signature] (TIME) <u>1750</u>			[Signature] (TIME) <u>11:00</u>					
SPECIAL INSTRUCTIONS/COMMENTS:										[Signature] (DATE) <u>4/20/94</u>			[Signature] (DATE) <u>4/20/94</u>			[Signature] (DATE) <u>4/20</u>					
										[Signature] (COMPANY) <u>ALISTO</u>			[Signature] (COMPANY) <u>ALISTO</u>			[Signature] (COMPANY) <u>CHROMALAB</u>					