



**POLYMATRIX**  
ASSOCIATES

**ATTN: SUSAN HUGO**

*Bruce King - 8831 fax  
(510) 577-8869 fax*

3056 CASTRO VALLEY BLVD., SUITE 183  
CASTRO VALLEY, CALIFORNIA 94546  
510/582-1641

February 26, 1996

*Why wasn't MW-5 sampled?*

Mr. Bruce King  
Environmental Administrator  
AC Transit  
10626 East 14th Street  
Oakland, CA 94603

Subject: Self-Monitoring Report  
Groundwater Monitoring Well  
AC Transit  
1177 45th Street  
Emeryville, California  
PMA No. 2020

Dear Mr. King:

On February 08, 1996 PolyMatrix Associates sampled two monitoring wells located at the above address. This report contains the results of sample collection and analysis performed February 08, 1996. Included in this report is a brief explanation of the field activities performed to produce physical and chemical data.

Sample collection: Two groundwater wells identified as MW-1 and MW-4 (figure 1) were purged and sampled for total petroleum hydrocarbon as gasoline, diesel and BTX&E.

Groundwater samples were obtained by purging the well a minimum of four bore volumes. The groundwater wells were developed by the use of a PVC bailer. Hydrogen ion (pH), conductivity, and temperature were monitored throughout the purging process. A representative groundwater sample was retrieved following the recharge of the eighty percent of the original groundwater well volume. Samples were collected with a bottom delivery teflon bailer and stored into VOA's, labeled, recorded on chain-of-custody forms, and placed on crushed ice (4'C) for transportation to the laboratory.

Field readings recorded during the purging process are on file at our office and are available at your request.

**ATTN: SUSAN HUGO**

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**Equipment Decontamination:** All equipment used during the elevation readings, purging, and sample collection was decontaminated prior to field collection. The decontamination process consisted of: a TSP rinse, high pressure steam rinse, and ending with a de-ionized water rinse.

**Containment of Bailings:** Groundwater retrieved during the purging of the monitoring well is stored in fifty-five gallon barrels. The groundwater bailings shall be stored not more than ninety days and shall be handled as determined by the results of the analysis.

**Analysis:** The analyses performed on the groundwater samples collected was performed by AEN of Pleasant Hill, CA. Analytical results are located in the attached report dated 02/23/96 log numbers 9602111.

If you should have any questions regarding this report, please feel free to call upon me at your convenience.

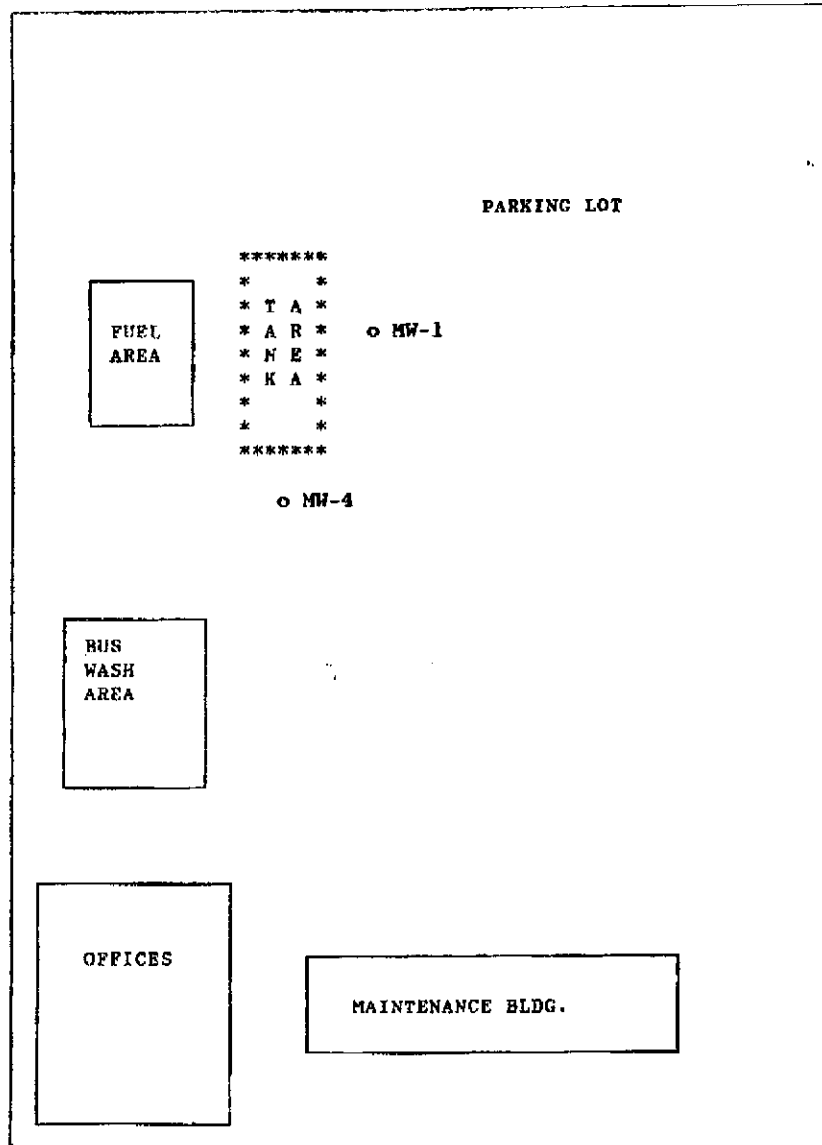
Sincerely,  
PolyMatrix Associates

  
Fred Davis

Attachments: Laboratory Results

FIGURE 1

SAN PABLO AVENUE



Monitoring Well ID	Depth in Feet (Water Surface to Casing)
MW-1	5.440
MW-4	3.490
MW-5	5.260

# American Environmental Network

## Certificate of Analysis

DOHS Certification: 1172

AIHA Accreditation: 11134

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POLYMATRIX ASSOCIATES  
191 HARDER ROAD, SUITE 25  
HAYWARD, CA 94544

ATTN: FRED DAVIS  
CLIENT PROJ. ID: AC TRANSIT  
CLIENT PROJ. NAME: EMERYVILLE

REPORT DATE: 02/23/96

DATE(S) SAMPLED: 02/08/96

DATE RECEIVED: 02/08/96

AEN WORK ORDER: 9602111


### PROJECT SUMMARY:

On February 8, 1996, this laboratory received 2 water sample(s).

Client requested sample(s) be analyzed for organic parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.

  
Larry Klein  
Laboratory Director

3440 Vincent Road • Pleasant Hill, CA 94523 • (510) 930-9090 • FAX (510) 930-0256

*Analytical Services for the Environment*

POLYMATRIX ASSOCIATES

SAMPLE ID: MW-1  
 AEN LAB NO: 9602111-01  
 AEN WORK ORDER: 9602111  
 CLIENT PROJ. ID: AC TRANSIT

DATE SAMPLED: 02/08/96  
 DATE RECEIVED: 02/08/96  
 REPORT DATE: 02/23/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	02/14/96
Toluene	108-88-3	ND	0.5	ug/L	02/14/96
Ethylbenzene	100-41-4	ND	0.5	ug/L	02/14/96
Xylenes, Total	1330-20-7	ND	2	ug/L	02/14/96
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	02/14/96
#Extraction for TPH	EPA 3510	-		Extrn Date	02/13/96
TPH as Diesel	GC-FID	ND	0.05	mg/L	02/14/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

POLYMATRIX ASSOCIATES

SAMPLE ID: MW-4  
 AEN LAB NO: 9602111-02  
 AEN WORK ORDER: 9602111  
 CLIENT PROJ. ID: AC TRANSIT

DATE SAMPLED: 02/08/96  
 DATE RECEIVED: 02/08/96  
 REPORT DATE: 02/23/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	3.9 *	0.5 ug/L		02/14/96
Toluene	108-88-3	0.9 *	0.5 ug/L		02/14/96
Ethylbenzene	100-41-4	2.1 *	0.5 ug/L		02/14/96
Xylenes, Total	1330-20-7	3.4 *	2 ug/L		02/14/96
Purgeable HCs as Gasoline	5030/GCFID	0.2 *	0.05 mg/L		02/14/96
#Extraction for TPH	EPA 3510	-		Extrn Date	02/13/96
TPH as Diesel	GC-FID	0.94 *	0.05 mg/L		02/14/96

ND = Not detected at or above the reporting limit  
 \* = Value at or above reporting limit

AEN (CALIFORNIA)  
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9602111

CLIENT PROJECT ID: AC TRANSIT

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA

METHOD: EPA 3510 GCFID

AEN JOB NO: 9602111  
 DATE EXTRACTED: 02/13/96  
 INSTRUMENT: C  
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
02/14/96	MW-1	01	92
02/14/96	MW-4	02	98
QC Limits:			59-118

DATE EXTRACTED: 02/12/96  
 DATE ANALYZED: 02/12/96  
 SAMPLE SPIKED: 9601257-05  
 INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	4.18	90	2	58-107	15

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.



QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9602111  
 INSTRUMENT: H  
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery Fluorobenzene
02/14/96	MW-1	01	97
02/14/96	MW-4	02	95
QC Limits:			70-130

DATE ANALYZED: 02/19/96  
 SAMPLE SPIKED: 9602185-03  
 INSTRUMENT: H

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	39.1	93	13	85-109	17
Toluene	104	97	15	87-111	16
Hydrocarbons as Gasoline	1000	113	3	66-117	19

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

\*\*\* END OF REPORT \*\*\*

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FAX NO. 510 577 8831

INVENTORY-CONTROL

FEB-27-96 TUE 9:44 AM



**POLYMATRIX ASSOCIATES**

140

R-3, S-2  
R-1, S-B

191 HARDER ROAD, SUITE 25  
HAYWARD, CALIFORNIA 94544  
510/582-1641

9602111

Proj. No.		Project Name				No. of Containers	TPH-D: Pres. 22ml TPH-G/ST+LE				Remarks
AC Transit - Emeryville CA		Samplers: (Signature) Fred Deere (Fred Davis)									
Sta. No.	Date	Time	Comp.	Grab	Station Location	2-Ambers	3-UOTs				
1A-E MW-1	2/8/96			X	1177 45th St. Emeryville, CA	X	X				
2A-E MW-4	"			X	↓	"	"				Cool ground water samples to 4'C w/ crushed ice.
											Ambers 10/5
Relinquished by: (Signature)			Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)
Fred Deere			2/8/96 1303								
Relinquished by: (Signature)			Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)
Relinquished by: (Signature)			Date / Time		Received for Laboratory by: (Signature)			Date / Time		Remarks:	
					Lou L. Pruitt			2/8/96 1303			

Chain of Custody Record

