QUARTERLY GROUND-WATER MONITORING REPORT

Avis Rent A Car System, Inc.
Oakland International Airport Facility
Oakland, California

Prepared for

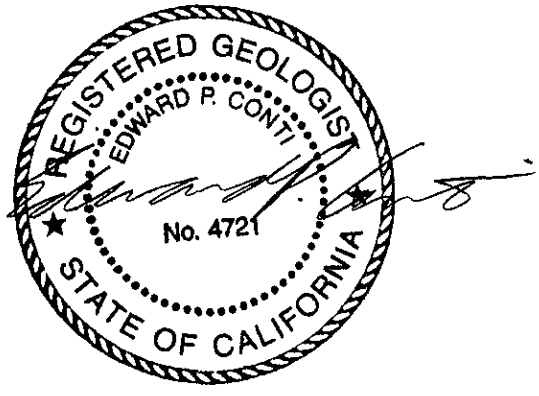
Avis Rent A Car System, Inc.
900 Old Country Road
Garden City, New York 11530

January 14, 1991

McCULLEY, FRICK & GILMAN, INC.
Consulting Hydrologists and Geologists

PROFESSIONAL CERTIFICATION

This report has been prepared by McCulley, Frick & Gilman, Inc. under the professional supervision of Edward P. Conti. The findings, recommendations, specifications and/or professional opinions presented in this report have been prepared in accordance with generally accepted professional hydrogeologic practice, and within the scope of the project. There is no other warranty, either express or implied.



Edward P. Conti
RG No. 4721
Project Geologist
McCULLEY, FRICK & GILMAN, INC.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

QUARTERLY GROUND-WATER MONITORING REPORT

AVIS RENT A CAR SYSTEM, INC.
OAKLAND INTERNATIONAL AIRPORT FACILITY
OAKLAND, CALIFORNIA

1.0 INTRODUCTION

This report presents the methods and results of the December, 1990 ground-water monitoring event conducted at the Avis Rent A Car System, Inc. (Avis) facility at Oakland International Airport, Neil Armstrong Way, Oakland, California. The site location is illustrated in Figure 1. The monitoring program was conducted by McCulley, Frick & Gilman, Inc. (MFG) on behalf of Avis.

The ground-water monitoring was performed in accordance with the monitoring program outlined in Section 8.0 of the "Soil and Ground-Water Investigation Report", dated September 19, 1990.

The monitoring program conducted at the Avis Facility consisted of the following tasks:

(1) Measurement of water levels in monitoring wells MW-1, MW-2 and MW-3 ; and

(2) Collection and chemical analysis of ground-water samples from monitoring wells MW-1, MW-2 and MW-3.

The monitoring well locations are illustrated in Figure 2. The methods and results of the ground-water monitoring program and recommendations for remedial action are described below.

2.0 GROUND-WATER SAMPLING AND ANALYSIS

2.1 FIELD METHODS

The methods used to measure the water levels and collect ground-water samples from monitoring wells MW-1, MW-2 and MW-3 are described below.

2.1.1 Water Level Measurement

MFG measured the water levels in monitoring wells MW-1, MW-2 and MW-3 on December 17, 1990 using a weighted, graduated steel tape. Evaluation of the water level data is discussed in Section 3.0 of this report. Following water level measurement, MFG checked for the presence of a light immiscible layer (free product) or sheen using a clear, acrylic bailer. No free product or sheen was observed in the three wells.

2.1.2 Ground-Water Sampling

MFG collected ground-water samples from monitoring wells MW-1, MW-2 and MW-3 on December 17, 1990. Prior to collecting a sample, each well was purged using a positive displacement hand pump or bailer. Approximately 5 casing volumes (7.5 gallons) were removed from well MW-1, and approximately 4 casing volumes (6 gallons) were removed from well MW-2. Well MW-3 was pumped dry after removal of approximately 2 casing volumes (3 gallons). The temperature, pH and specific conductance of the water were monitored during purging and were found to be relatively stable.

After purging, the ground-water samples were collected using a Teflon^{TR} bailer. One bailer volume collected from each well was used to measure the temperature, pH and specific conductance of the sample. The field measured values of these parameters were as follows:

Sample	Temperature (°C)	pH	Specific Conductance (micromhos/cm at 25°C)
MW-1	20.0	7.4	4,900
MW-2	19.0	7.2	3,900
MW-3	19.0	7.8	29,000

The following samples were subsequently collected from each well and placed in containers supplied by the laboratory:

A. Total Volatile Petroleum Hydrocarbons (TPH) as Gasoline and Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX): three, 40-milliliter (ml) glass vials closed with a screw cap with a Teflon^{TR}-lined septum, containing hydrochloric acid placed in the vials by the laboratory for sample preservation;

B. Polynuclear Aromatic Hydrocarbons (PNA's): two, one-liter amber glass bottles with Teflon^{TR}-lined lids.

After filling, the ground-water sample containers were placed in an ice-cooled, insulated chest for transport to the laboratory for analysis. A chain-of-custody record was completed for the samples and accompanied the samples until receipt by the laboratory.

All equipment used in purging the wells was washed in an Alconox detergent-water solution and rinsed with tap water both before and after use in each well. All equipment used in sampling the wells was washed in an Alconox detergent-water solution, rinsed with tap water, and then rinsed with deionized water both before and after use in each well.

2.2 ANALYTICAL METHODS AND RESULTS

The ground-water samples were analyzed by Anametrix Inc. (Anametrix) laboratory of San Jose, California. The following analyses were performed by Anametrix:

A. TPH as Gasoline (EPA method 5030/modified EPA method 8015)

B. BTEX (EPA method 8020)

C. PNA's (EPA method 8310)

The laboratory results are summarized in Table 1. The laboratory report and chain-of-custody record are included in Appendix A. All measured chemical constituents were below their respective laboratory method reporting limits in the ground-water samples collected from wells MW-2 and MW-3. TPH as gasoline, benzene, ethylbenzene, and total xylenes were detected at 1.6, 0.19, 0.063 and 0.027 mg/L, respectively, in the sample collected from well MW-1. The PNA compounds naphthalene and acenaphthene were also detected in the sample from well MW-1 at concentrations of 0.039 and 0.023 mg/L, respectively.

3.0 EVALUATION OF LATERAL HYDRAULIC GRADIENT

MFG measured the depth to ground water in wells MW-1, MW-2 and MW-3 on December 17, 1990 (Table 2). The depth to water in the wells ranged from approximately 6 to 7 feet below the ground surface. The elevations of the water surface in the wells were calculated using the depth to water measurements and the measuring point (north side, top of casing) elevations of the wells. A potentiometric surface map of the shallow ground water on December 17, 1990 was constructed using these data and is shown in Figure 5. The potentiometric surface contours illustrate that the direction of the lateral hydraulic gradient on December 17, 1990 was south-southeast, with an approximate magnitude of .004, or about 21 feet per mile.

A potentiometric surface map of the shallow ground water constructed using the previous quarterly water level measurements (September 26, 1990; Figure 4) indicates that the direction of the lateral hydraulic gradient was southeast at that time. A potentiometric surface map of the shallow ground water constructed using the first quarterly water level measurements (May 23, 1990; Figure 3) indicates that the direction of the lateral hydraulic gradient was south-southeast at that time, similar to the December 17, 1990 gradient direction.

4.0 RECOMMENDATIONS

MFG recommends that the remedial and ground-water monitoring program proceed in accordance with the steps outlined in Section 8.0 of the"Soil and Ground-water Investigation Report," dated September 19, 1990. The remedial program proposed for the site consists of excavation of soils in the vicinity of monitoring well MW-1, removal and disposal of ground water entering the excavation, and treatment of the excavated soils using the bioremediation system currently operating at the site. The proposed soil excavation and ground-water removal will require the destruction and replacement of well MW-1. In accordance with the letter from Cynthia Chapman of the Alameda County Department of Environmental Health, Hazardous Materials Program, to Beth Hamilton of Pillsbury, Madison & Sutro, dated October 31, 1990, the monitoring well proposed as a replacement for well MW-1 will be installed on the downgradient side of the proposed excavation.

TABLE 1 (Page 1 of 2)

SUMMARY OF CHEMICAL ANALYSES OF GROUND-WATER SAMPLES[1]

Avis Rent A Car System, Inc.
Oakland International Airport Facility
Oakland, California

WELL NO.	SAMPLE NO.	DATE SAMPLED	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	OTHER POLYNUCLEAR AROMATIC HYDROCARBONS (mg/L)
		Reporting Limit:	0.05	0.0005	0.0005	0.0005	0.0005	0.01	0.01
MW-1	MW-1	23-May-90	12	0.65	0.05	ND[2] [0.05][3]	2.2	0.25	0.033[4]
	MW-1	26-Sep-90	0.66	ND [0.0025]	0.004	0.028	0.046	0.016	ND
	MW-1	17-Dec-90	1.6	0.19	ND [0.005]	0.063	0.027	0.039	0.023[5]
MW-2	MW-2	23-May-90	ND	ND	ND	ND	ND	ND	ND
	MW-2	26-Sep-90	ND	ND	ND	ND	ND	ND	ND
	MW-2	17-Dec-90	ND	ND	ND	ND	ND	ND	ND

TABLE 1 (Page 2 of 2)

SUMMARY OF CHEMICAL ANALYSES OF GROUND-WATER SAMPLES[1]

Avis Rent A Car System, Inc.
Oakland International Airport Facility
Oakland, California

WELL NO.	SAMPLE NO.	DATE SAMPLED	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYLBENZENE (mg/L)	TOTAL XYLENES (mg/L)	NAPHTHALENE (mg/L)	OTHER POLYNUCLEAR AROMATIC HYDROCARBONS (mg/L)
		Reporting Limit:	0.05	0.0005	0.0005	0.0005	0.0005	0.01	0.01
MW-3	MW-3	23-May-90	ND	ND	ND	ND	ND	ND	ND
	MW-3	26-Sep-90	ND	ND	ND	ND	ND	ND	ND
	MW-3	17-Dec-90	ND	ND	ND	ND	ND	ND	ND

NOTES:

[1] Constituents in the EPA Method 8270 or 8310 analyses (PNA's) which are not listed were not detected in ground-water samples.

[2] ND = Not Detected at or above the reporting limit indicated at top of column.

[3] [ ] Indicates reporting limit other than that indicated at top of column.

[4] The PNA compound 2-methyl-naphthalene was detected at a concentration of 0.033 mg/L.

[5] The PNA compound acenaphthene was detected at a concentration of 0.023 mg/L.

TABLE 2

SUMMARY OF WATER LEVEL DATA FOR GROUND-WATER MONITORING WELLS

Avis Rent A Car System, Inc.
Oakland International Airport Facility
Oakland, California

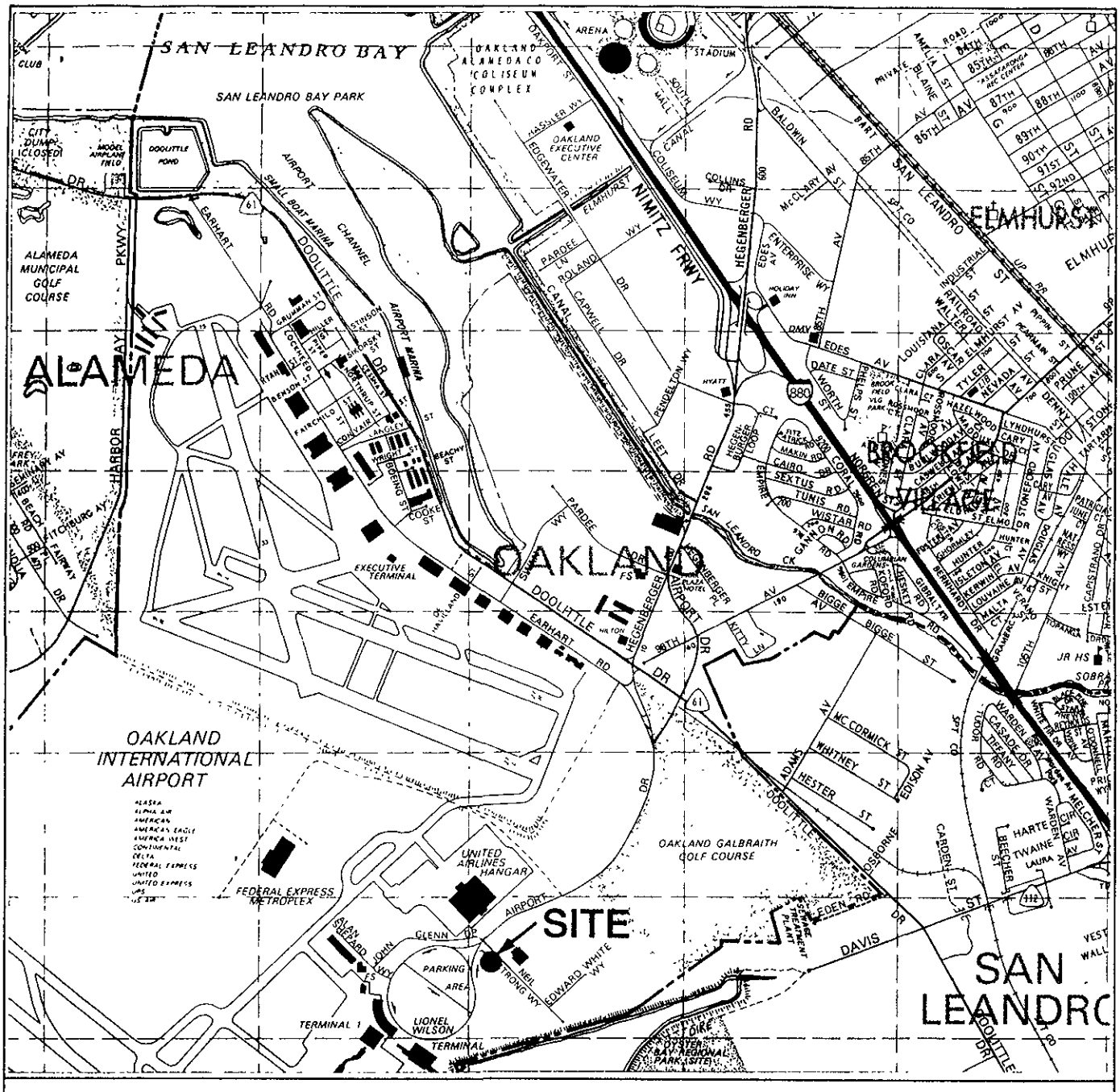
WELL	MEASUREMENT DATE	DEPTH TO WATER (ft BMP[1])	MEASURING POINT ELEVATION[2] (ft NGVD[3])	WATER LEVEL ELEVATION (ft NGVD)
MW-1	23-May-90	5.62	3.34	-2.28
	26-Sep-90	6.29	3.34	-2.95
	17-Dec-90	5.92	3.34	-2.58
MW-2	23-May-90	6.13	4.25	-1.88
	26-Sep-90	6.62	4.25	-2.37
	17-Dec-90	6.40	4.25	-2.15
MW-3	23-May-90	6.77	3.98	-2.79
	26-Sep-90	7.28	3.98	-3.30
	17-Dec-90	7.05	3.98	-3.07

NOTES:

[1] BMP = Below Measuring Point

[2] Measuring Point is north side of top of PVC well casing

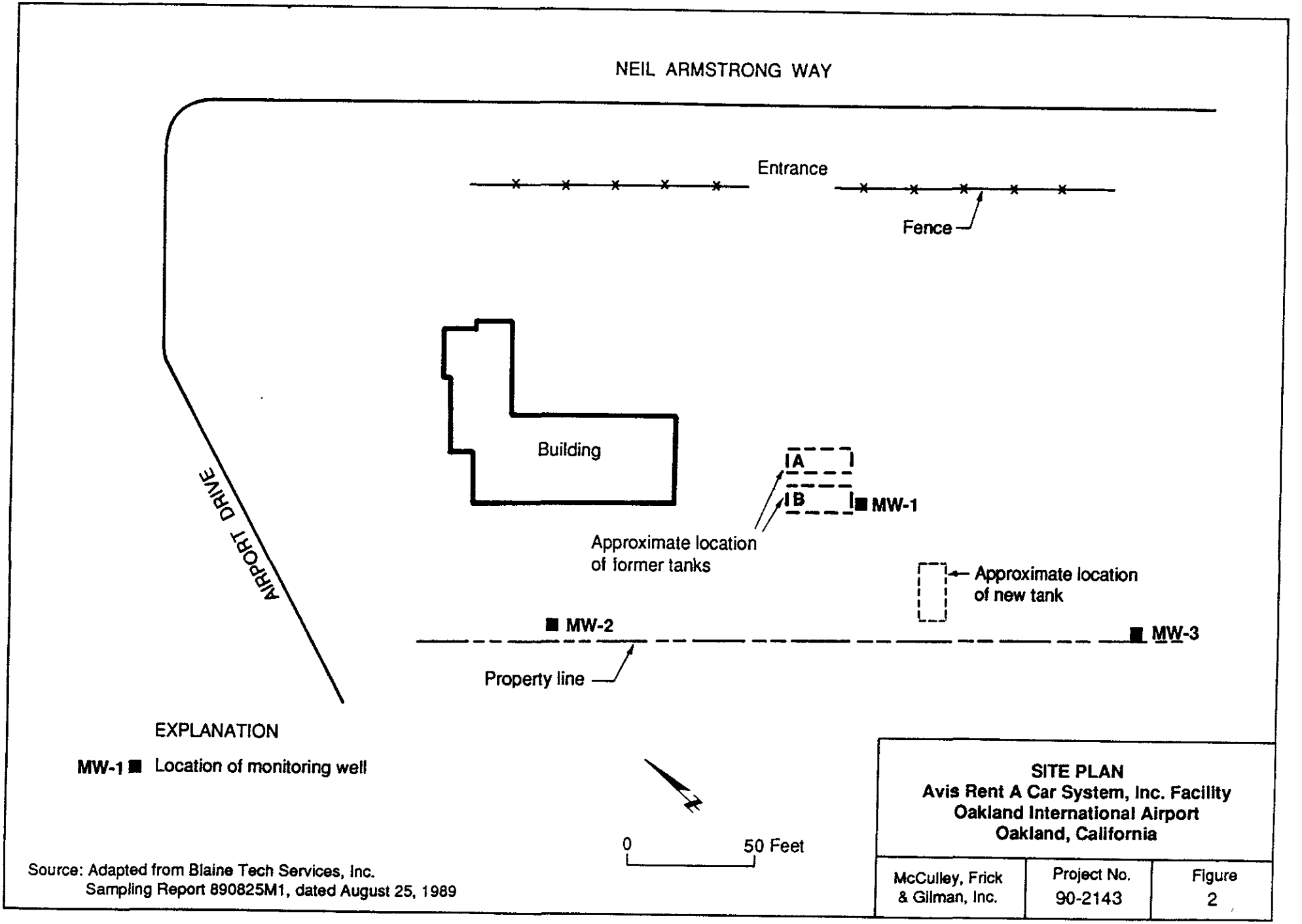
[3] National Geodetic Vertical Datum of 1929



Source: The Thomas Guide,
Alameda and Santa Clara Counties Street Guide and Directory,
1989 Edition

LOCATION MAP
Avis Rent A Car System, Inc. Facility
Oakland International Airport
Oakland, California

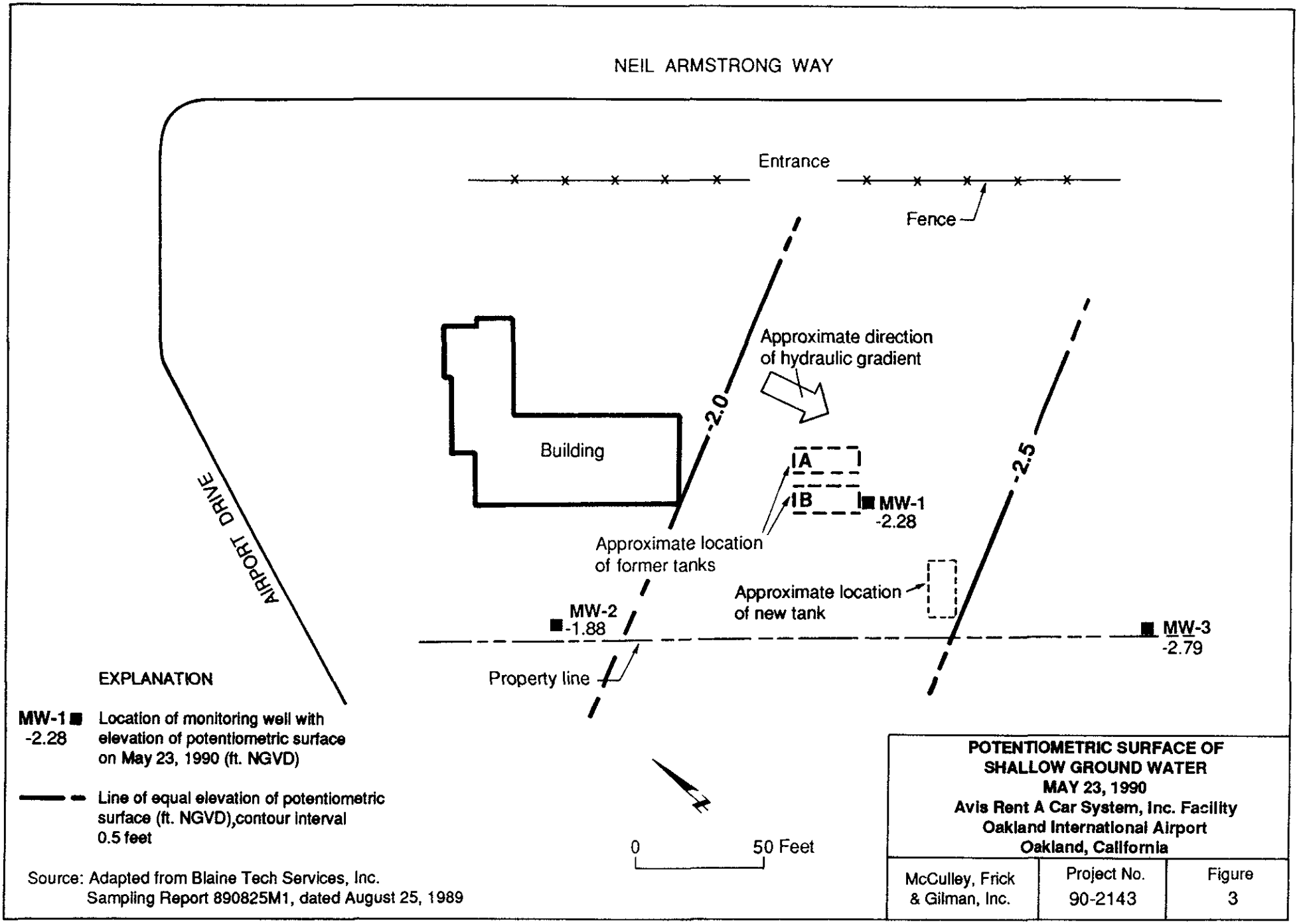
McCulley, Frick & Gilman, Inc.	Project No. 90-2143	Figure 1

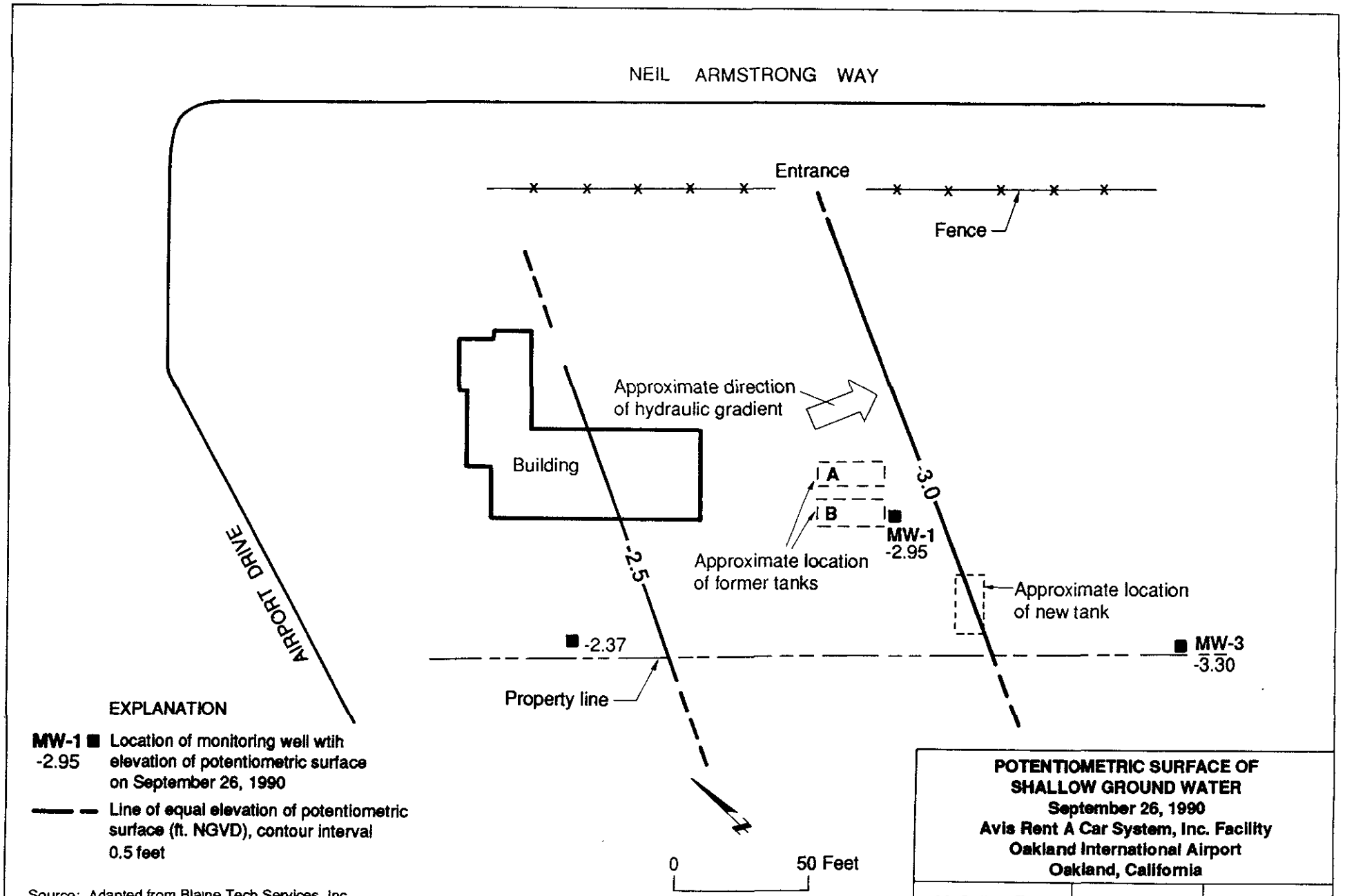


Source: Adapted from Blaine Tech Services, Inc.
Sampling Report 890825M1, dated August 25, 1989

SITE PLAN
Avis Rent A Car System, Inc. Facility
Oakland International Airport
Oakland, California

McCulley, Frick & Gilman, Inc.	Project No. 90-2143	Figure 2


NEIL ARMSTRONG WAY
Entrance
Fence
AIRPORT DRIVE
Building
Approximate direction of hydraulic gradient
-2.0
-2.5
A
B
MW-1
-2.28
Approximate location of former tanks
Approximate location of new tank
MW-2
-1.88
MW-3
-2.79
Property line
EXPLANATION
MW-1 -2.28 Location of monitoring well with elevation of potentiometric surface on May 23, 1990 (ft. NGVD)
Line of equal elevation of potentiometric surface (ft. NGVD),contour interval 0.5 feet
0
50 Feet
Source: Adapted from Blaine Tech Services, Inc. Sampling Report 890825M1, dated August 25, 1989
POTENTIOMETRIC SURFACE OF SHALLOW GROUND WATER
MAY 23, 1990
Avis Rent A Car System, Inc. Facility
Oakland International Airport
Oakland, California
McCulley, Frick & Gilman, Inc.
Project No. 90-2143
Figure 3



EXPLANATION

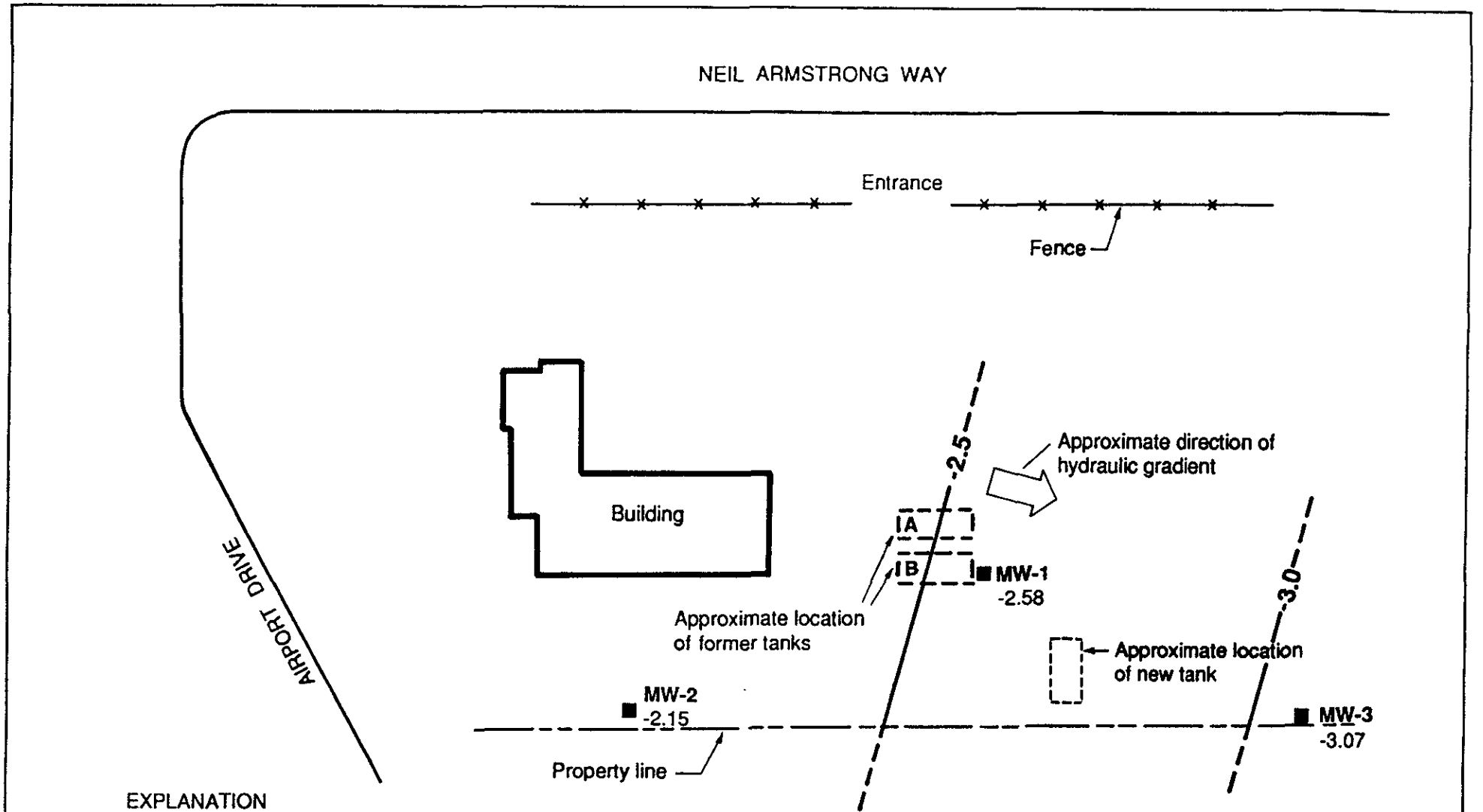
MW-1 ■ -2.95 Location of monitoring well wtih elevation of potentiometric surface on September 26, 1990

Line of equal elevation of potentiometric surface (ft. NGVD), contour interval 0.5 feet

Source: Adapted from Blaine Tech Services, Inc. Sampling Report 890825M1, dated August 25, 1989

POTENTIOMETRIC SURFACE OF SHALLOW GROUND WATER
September 26, 1990
Avis Rent A Car System, Inc. Facility
Oakland International Airport
Oakland, California

McCulley, Frick, & Gilman, Inc.	Project No. 90-2143	Figure 4



Source: Adapted from Blaine Tech Services, Inc.
Sampling Report 890825M1, dated August 25, 1989

POTENTIOMETRIC SURFACE OF SHALLOW GROUND WATER DECEMBER 17, 1990
Avis Rent a Car System, Inc. Facility
Oakland International Airport
Oakland, California

McCulley, Frick & Gilman, Inc.	Project No. 90-2143	Figure 5

APPENDIX A

Laboratory Report for Ground-Water Samples
and
Chain-of-Custody Record

ANAMETRIX INC
Environmental & Analytical Chemistry
1961 Concourse Drive, Suite E, San Jose, CA 95131
(408) 432-8192 · Fax (408) 432-8198

REPORT

MR. YOHJI ONO
McCULLEY, FRICK & GILMAN, INC.
5 THIRD STREET, SUITE 916
SAN FRANCISCO, CA 94103

Workorder # : 9012191
Date Received : 12/18/90
Project ID : 90-2143
Purchase Order: N/A

The following samples were received at Anametrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9012191- 1	MW-2
9012191- 2	MW-3
9012191- 3	MW-1
9012191- 4	TRIP BLANK

This report consists of 9 pages not including the cover letter, and is organized in sections according to the specific Anametrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anametrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anametrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

for
Burt Sutherland
Laboratory Director

1-7-91
Date

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. YOHJI ONO
McCULLEY, FRICK & GILMAN, INC.
5 THIRD STREET, SUITE 916
SAN FRANCISCO, CA 94103

RECEIVED
JAN - 9 1990
M, F & G, INC.

Workorder # : 9012191
Date Received : 12/18/90
Project ID : 90-2143
Purchase Order: N/A
Department : GC
Sub-Department: PEST

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9012191- 1	MW-2	H2O	12/17/90	8310
9012191- 2	MW-3	H2O	12/17/90	8310
9012191- 3	MW-1	H2O	12/17/90	8310

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. YOHJI ONO
McCULLEY, FRICK & GILMAN, INC.
5 THIRD STREET, SUITE 916
SAN FRANCISCO, CA 94103

RECEIVED
JAN - 9 1991
M, F & G, INC.

Workorder # : 9012191
Date Received : 12/18/90
Project ID : 90-2143
Purchase Order: N/A
Department : GC
Sub-Department: PEST

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Stratos Dimas 1-7-91
Department Supervisor Date

Abhijeet Hardas. 1-7-91
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 610/8310
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 90-2143 MW-2
Matrix : WATER
Date sampled : 12/17/90
Date ext. : 12/21/90
Date analyzed: 01/04/91
Dilut. factor: NONE

Anametrix I.D. : 9012191-01
Analyst : FH
Supervisor : SD
Date released : 01/07/91
Volume ext. : 1000 ml
Instrument ID : HP17

CAS #	Compound Name	Reporting Limit (ug/L)	Amount Found (ug/L)
91-20-3	* Naphthalene	10	ND
208-96-8	* Acenaphthylene	10	ND
83-32-9	* Acenaphthene	10	ND
86-73-7	* Fluorene	10	ND
85-01-8	* Phenanthrene	5	ND
120-12-7	* Anthracene	5	ND
206-44-0	* Fluoranthene	5	ND
129-00-0	* Pyrene	5	ND
56-55-3	* Bnz(a)Anthracene	5	ND
218-01-9	* Chrysene	5	ND
205-99-2	* Bnz(b)Fluoranthene	5	ND
207-08-9	* Bnz(k)Fluoranthene	5	ND
50-32-8	* Bnz(a)Pyrene	5	ND
53-70-3	* DiBnz(ah)Anthracene	5	ND
191-24-2	* Bnz(g,h,i)Perylene	5	ND
193-39-5	* Indeno(123cd)Pyrene	5	ND
	% Surrogate Recovery	15-120%	93%

ND : Not detected at or above the practical quantitation limit for the method.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 610/8310
ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: 90-2143 MW-3	Anametrix I.D.	: 9012191-02
Matrix	: WATER	Analyst	: FH
Date sampled	: 12/17/90	Supervisor	: SP
Date ext.	: 12/21/90	Date released	: 01/07/91
Date analyzed:	01/04/91	Volume ext.	: 1000 ml
Dilut. factor:	NONE	Instrument ID	: HP17

RECEIVED
JAN - 9 1991
M, F & G, INC.

CAS #	Compound Name	Reporting Limit (ug/L)	Amount Found (ug/L)
91-20-3	* Naphthalene	10	ND
208-96-8	* Acenaphthylene	10	ND
83-32-9	* Acenaphthene	10	ND
86-73-7	* Fluorene	10	ND
85-01-8	* Phenanthrene	5	ND
120-12-7	* Anthracene	5	ND
206-44-0	* Fluoranthene	5	ND
129-00-0	* Pyrene	5	ND
56-55-3	* Bnz(a)Anthracene	5	ND
218-01-9	* Chrysene	5	ND
205-99-2	* Bnz(b)Fluoranthene	5	ND
207-08-9	* Bnz(k)Fluoranthene	5	ND
50-32-8	* Bnz(a)Pyrene	5	ND
53-70-3	* DiBnz(ah)Anthracene	5	ND
191-24-2	* Bnz(g,h,i)Perylene	5	ND
193-39-5	* Indeno(123cd)Pyrene	5	ND
	% Surrogate Recovery	15-120%	96%

ND : Not detected at or above the practical quantitation limit for the method.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 610/8310
ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 90-2143 MW-1
Matrix : WATER
Date sampled : 12/17/90
Date ext. : 12/21/90
Date analyzed: 01/04/91
Dilut. factor: NONE

Anametrix I.D. : 9012191-03
Analyst : FH
Supervisor : SD
Date released : 01/07/91
Volume ext. : 1000 ml
Instrument ID : HP17

CAS #	Compound Name	Reporting Limit (ug/L)	Amount Found (ug/L)
91-20-3	* Naphthalene	10	39
208-96-8	* Acenaphthylene	10	ND
83-32-9	* Acenaphthene	10	23
86-73-7	* Fluorene	10	ND
85-01-8	* Phenanthrene	5	ND
120-12-7	* Anthracene	5	ND
206-44-0	* Fluoranthene	5	ND
129-00-0	* Pyrene	5	ND
56-55-3	* Bnz(a)Anthracene	5	ND
218-01-9	* Chrysene	5	ND
205-99-2	* Bnz(b)Fluoranthene	5	ND
207-08-9	* Bnz(k)Fluoranthene	5	ND
50-32-8	* Bnz(a)Pyrene	5	ND
53-70-3	* DiBnz(ah)Anthracene	5	ND
191-24-2	* Bnz(g,h,i)Perylene	5	ND
193-39-5	* Indeno(123cd)Pyrene	5	ND
	% Surrogate Recovery	15-120%	91%

ND : Not detected at or above the practical quantitation limit for the method.

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 610/8310
ANAMETRIX, INC. (408) 432-8192

Sample I.D.	: METHOD BLANK	Anametrix I.D.	: PWBL122190
Matrix	: WATER	Analyst	: FH
Date sampled	: N/A	Supervisor	: SD
Date ext.	: 12/21/90	Date released	: 01/07/91
Date analyzed	: 01/04/91	Volume ext.	: 1000 ml
Dilut. factor	: NONE	Instrument ID	: HP17

RECEIVED
JAN - 9 1991
M, F & G, INC.

CAS #	Compound Name	Reporting Limit (ug/L)	Amount Found (ug/L)
91-20-3	* Naphthalene	10	ND
208-96-8	* Acenaphthylene	10	ND
83-32-9	* Acenaphthene	10	ND
86-73-7	* Fluorene	10	ND
85-01-8	* Phenanthrene	5	ND
120-12-7	* Anthracene	5	ND
206-44-0	* Fluoranthene	5	ND
129-00-0	* Pyrene	5	ND
56-55-3	* Bnz(a)Anthracene	5	ND
218-01-9	* Chrysene	5	ND
205-99-2	* Bnz(b)Fluoranthene	5	ND
207-08-9	* Bnz(k)Fluoranthene	5	ND
50-32-8	* Bnz(a)Pyrene	5	ND
53-70-3	* DiBnz(ah)Anthracene	5	ND
191-24-2	* Bnz(g,h,i)Perylene	5	ND
193-39-5	* Indeno(123cd)Pyrene	5	ND
	% Surrogate Recovery	15-120%	96%

ND : Not detected at or above the practical quantitation limit for the method.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. YOHJI ONO
McCULLEY, FRICK & GILMAN, INC.
5 THIRD STREET, SUITE 916
SAN FRANCISCO, CA 94103

RECEIVED
JAN - 9 1991
M, F & G, INC.

Workorder # : 9012191
Date Received : 12/18/90
Project ID : 90-2143
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9012191- 1	MW-2	H2O	12/17/90	TPHg/BTEX
9012191- 2	MW-3	H2O	12/17/90	TPHg/BTEX
9012191- 3	MW-1	H2O	12/17/90	TPHg/BTEX
9012191- 4	TRIP BLANK	H2O	12/17/90	TPHg/BTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MR. YOHJI ONO
McCULLEY, FRICK & GILMAN, INC.
5 THIRD STREET, SUITE 916
SAN FRANCISCO, CA 94103

Workorder # : 9012191
Date Received : 12/18/90
Project ID : 90-2143
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems for these samples.

Cheryl Balmes 1-7-91
Department Supervisor Date

Gerald Voigt 1-7-91
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anametrix W.O.: 9012191
Matrix : WATER
Date Sampled : 12/17/90

RECEIVED
JAN - 9 1991
M, F & G, INC.

Project Number : 90-2143
Date Released : 01/07/91

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# MW-2 -01	Sample I.D.# MW-3 -02	Sample I.D.# MW-1 -03	Sample I.D.# TRIP BLANK -04	Sample I.D.# 04B1226A BLANK
Benzene	0.5	ND	ND	190	ND	ND
Toluene	0.5	ND	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	63	ND	ND
Total Xylenes	0.5	ND	ND	27	ND	ND
TPH as Gasoline	50	ND	ND	1600	ND	ND
% Surrogate Recovery		106%	97%	109%	122%	87%
Instrument I.D.		HP4	HP4	HP4	HP4	HP4
Date Analyzed		12/26/90	12/26/90	12/26/90	12/26/90	12/26/90
RLMF		1	1	10	1	1

ND - Not detected at or above the practical quantitation limit for the method.
TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GCFID using EPA Method 5030.
BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA 8020.
RLMF - Reporting Limit Multiplication Factor.
Anametrix control limits for surrogate recovery are 50-150%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Gareth Voigt 1-7-91
Analyst Date

Cheryl Baemer 1-7-91
Supervisor Date

CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

NO. 901291

McCULLEY, FRICK & GILMAN, INC.

RECEIVED
JAN - 9 1990
M, F & G, INC

☐ 3300 Arapahoe Ave., Suite 218
Boulder, CO 80303
TEL: (303) 447-1823
FAX: (303) 447-1836

☐ 5818 Balcones Dr., Suite 202
Austin, TX 78731
TEL: (512) 371-1667
FAX: (512) 454-4126

☒ 5 Third St., Suite 916
San Francisco, CA 94103
TEL: (415) 495-7110
FAX: (415) 495-7107

PROJECT No.: 90-2143 PROJECT NAME: Avia - Oakland Intl Airport PAGE: 1 OF: 1
SAMPLER (Signature): DATE: 12/17/90
METHOD OF SHIPMENT: 24 hr courier CARRIER/ WAYBILL NO. — DESTINATION: Anametrix SJ
SPECIAL INSTRUCTIONS/HAZARDS:

SAMPLES

Anametrix Lab No.	Sample Identification	Sample Collection DATE	Sample Collection TIME	Matrix*	Preservation HCL	Preservation HNO_3	Preservation H_2SO_4	Preservation COLD	Preservation NONE	Preservation OTHER	Containers* VOL. (ml)	Containers* TYPE*	Containers* No.
1	MW-2	12/17	1010	AQ	X			X			40	G	3
	MW-2	"	1010					X			1000	G	2
2	MW-3	"	1200		X			X			40	G	3
	MW-3	"	1200					X			1000	G	2
3	MW-1	"	1355		X			X			40	G	3
	MW-1	"	1355					X			1000	G	2
4	Trip blank	"	—	↓	X			X			40	G	3

TOTAL NUMBER OF CONTAINERS 18

ANALYSIS REQUEST

Methods EPA 601/8010	EPA 602/8020	EPA 624/8240	EPA 625/8270	TPH as Gasoline	TPH as Diesel	BTEX	EPA 3510 (PAHs)	Handling HOLD	RUSH	STANDARD	REMARKS
				X		X				X	Cold, no bubbles, preserved, proper container
							X			X	Cold, proper container
				X		X				X	Cold, no bubbles, preserved, proper container
							X			X	Cold, proper container
				X		X				X	Cold, no bubbles, preserved, proper container
							X			X	Cold, proper container
				X		X				X	Cold, no bubbles, preserved, proper container

LABORATORY COMMENTS/ CONDITION OF SAMPLES

RELINQUISHED BY:

SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
Yoki Ono	Yoki Ono	MFG	12/18	1010
Bonnie S. Carrillo	Bonnie S. Carrillo	Anametrix	12/18/90	1220

RECEIVED BY:

SIGNATURE	PRINTED NAME	COMPANY
Bonnie S. Carrillo	Bonnie S. Carrillo	12-18-90 1010 Anametrix
	Norma Sylva	Anamy 12/18/90 1220 LABORATORY

*KEY: Matrix AQ-aqueous NA-nonaqueous SO-soil SL-sludge P-petroleum A-air OT-other Containers P-plastic G-glass T-teflon B-brass OT-other

DISTRIBUTION: PINK Field Copy YELLOW Laboratory Copy WHITE Return to Originator