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WRITER'S DIRECT DIAL NUMBER

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01

November 29, 1990

Avis Rent A Car System, Inc.
- Oakland Airport Remediation

Ms. Cynthia Chapman
Department of Environmental Health
Hazardous Materials Program
80 Swan Way, Room 200
Oakland, California 94621

Dear Ms. Chapman:

Enclosed is a copy of the Quarterly Monitoring Report, dated November 26, 1990, regarding the Avis Rent A Car Service Center at the Oakland International Airport Facility.

Very sincerely yours,

Beth Hamilton

Beth L. Hamilton

Enc.

cc: Mr. Karl Westermann, w/enc.
Mr. Lester Feldman, RWQCB w/enc.
Ms. Michele Heffes, Port of Oakland w/enc.

10537128

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

November 26, 1990

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.

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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 September, 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 future monitoring activity at the site 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 September 26, 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 September 26, 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 wells MW-1 and MW-2. Well MW-3 was pumped dry after removal of approximately 3 casing volumes (4.5 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	22.5	7.3	18,000
MW-2	22.0	7.2	3,400
MW-3	22.0	7.7	21,000

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 and 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 8270)

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 samples collected from wells MW-2 and MW-3. TPH as gasoline, toluene, ethylbenzene, and total xylenes were detected at 0.66, 0.004, 0.028 and 0.046 mg/L, respectively, in the ground-water sample collected from Well MW-1. The PNA compound naphthalene was detected at a concentration of 0.016 mg/L in the sample from well MW-1.

The concentrations of constituents detected in the sample collected from well MW-1 on September 26, 1990 were generally an order of magnitude lower than the concentrations reported for the sample collected from this well on May 23, 1990 (Table 1). Benzene and 2-methylnaphthalene, reported at concentrations of 0.65 and 0.033 mg/L, respectively, in the May 23, 1990 sample from well MW-1, were not detected in the sample collected on September 26, 1990.

3.0 EVALUATION OF LATERAL HYDRAULIC GRADIENT

MFG measured the depth to ground water in wells MW-1, MW-2 and MW-3 on September 26, 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 September 26, 1990 was constructed using these data and is shown in Figure 4. The potentiometric surface contours illustrate that the lateral hydraulic gradient on September 26, 1990 was to the southeast, with an approximate magnitude of .004, or about 22 feet per mile. A potentiometric surface map of the shallow ground water on May 23, 1990 (Figure 3) indicates that the lateral hydraulic gradient was to the south-southeast at that time.

TABLE 1

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)	2-METHYL-NAPHTHALENE (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
	MW-1	26-Sep-90	0.66	ND [0.0025]	0.004	0.028	0.046	0.016	ND
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-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

NOTES:

[1] Constituents in the EPA Method 8270 analysis 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.

2QTRTAB1.OAK

TABLE 2

SUMMARY OF WATER LEVEL DATA FOR GROUND-WATER MONITORING WELLS

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

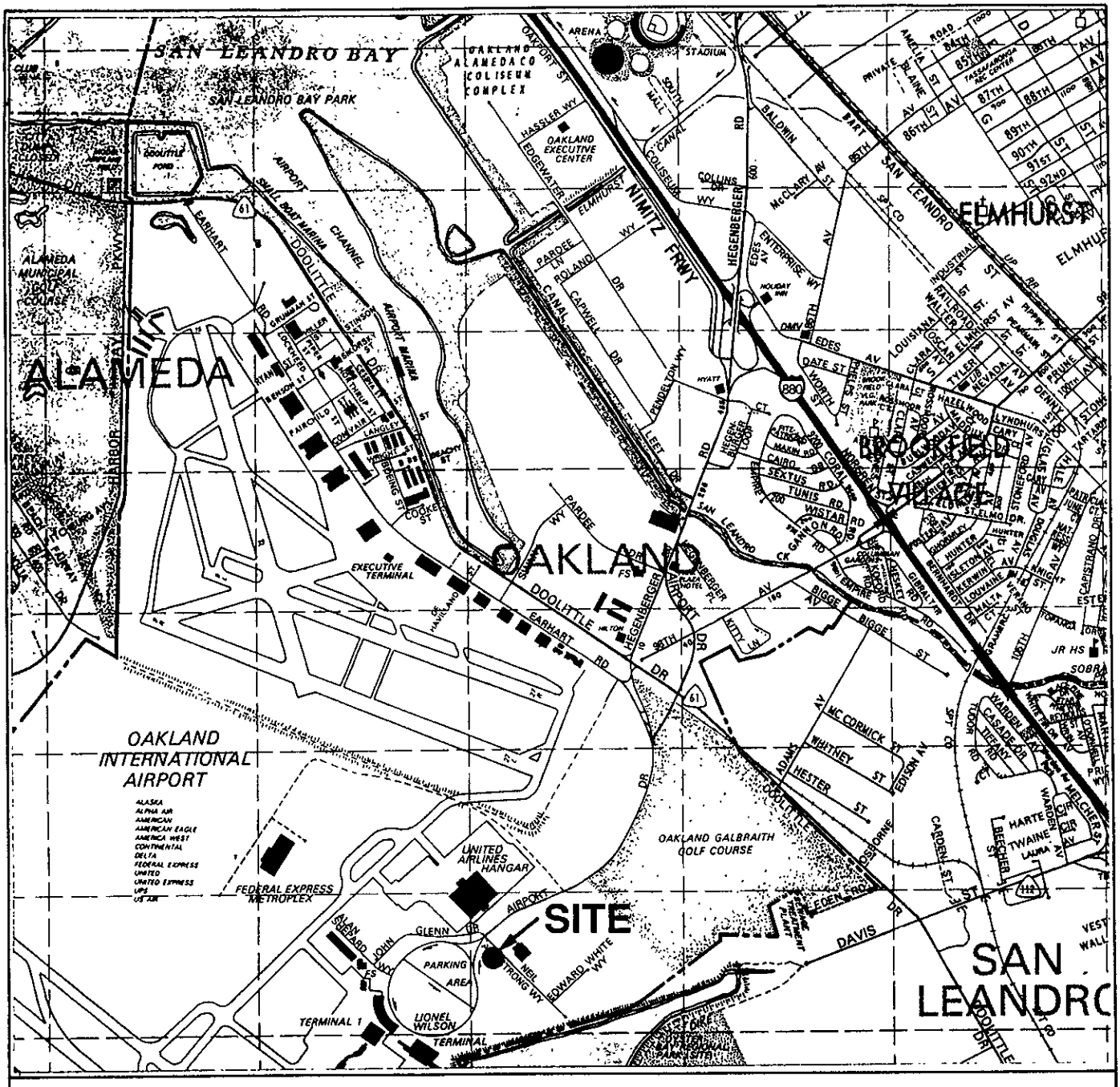
WELL	MEASUREMENT DATE	DEPTH TO WATER (ft BMP[1])	MEASURING POINT ELEVATION[2] (ft NGVD[3])	WATER LEVEL ELEVATION (ft NGVD)
MW-1	23-May-90	5.62	3.34	-2.28
	26-Sep-90	6.29	3.34	-2.95
MW-2	23-May-90	6.13	4.25	-1.88
	26-Sep-90	6.62	4.25	-2.37
MW-3	23-May-90	6.77	3.98	-2.79
	26-Sep-90	7.28	3.98	-3.30

NOTES:

[1] BMP = Below Measuring Point

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

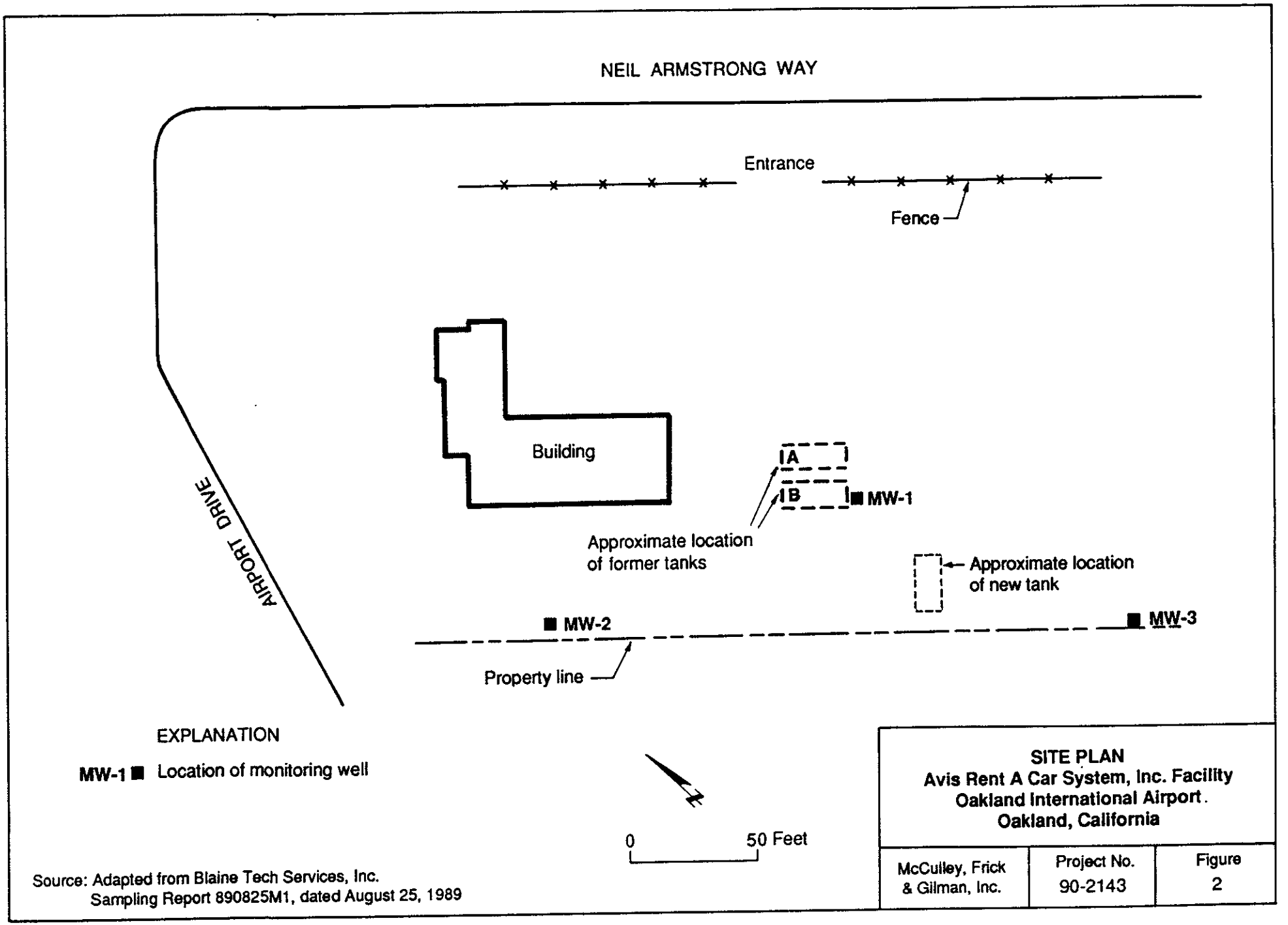
[3] National Geodetic Vertical Datum of 1929



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

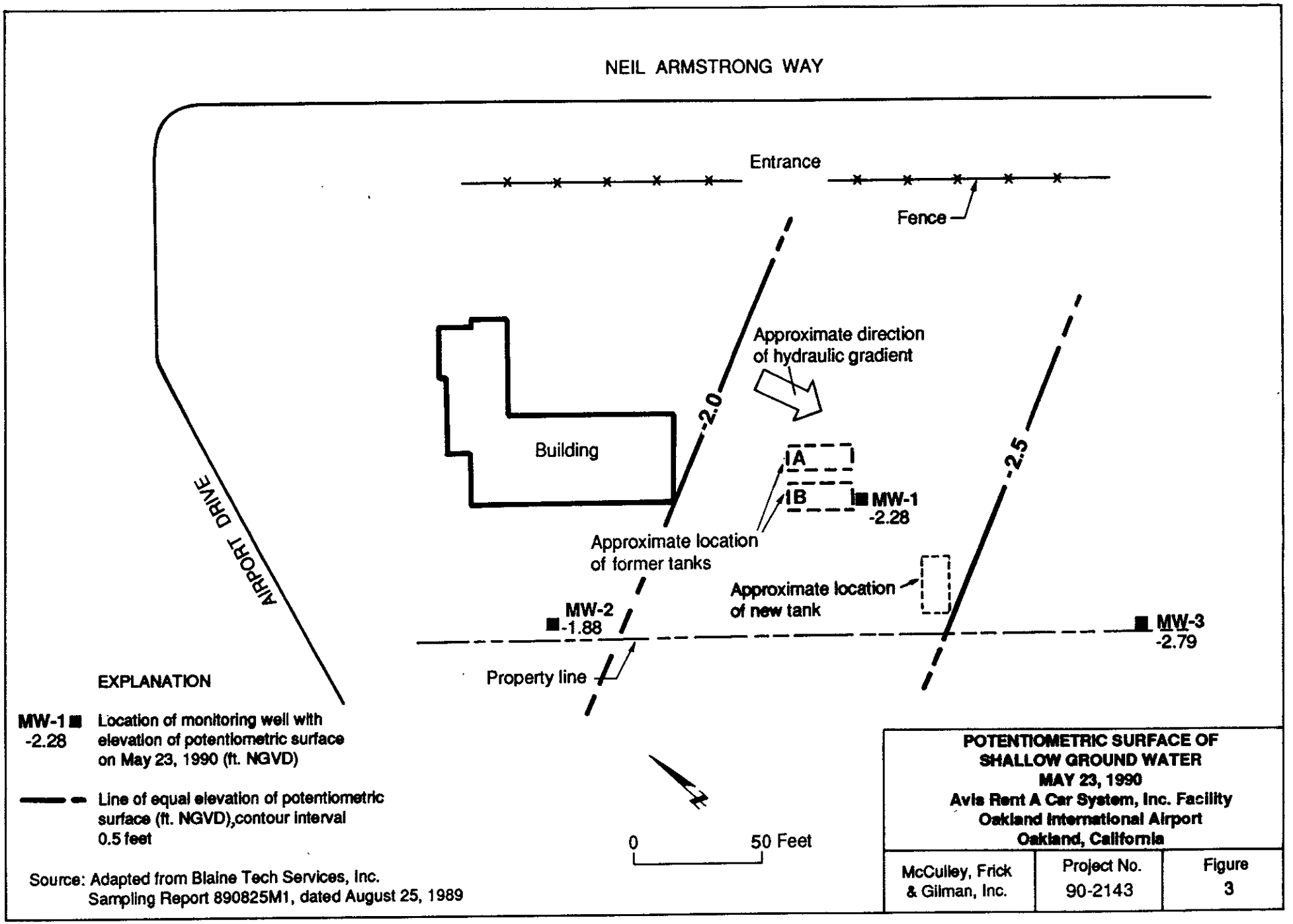
McCulley, Frick & Gilman, Inc.	Project No. 90-2143	Figure 1

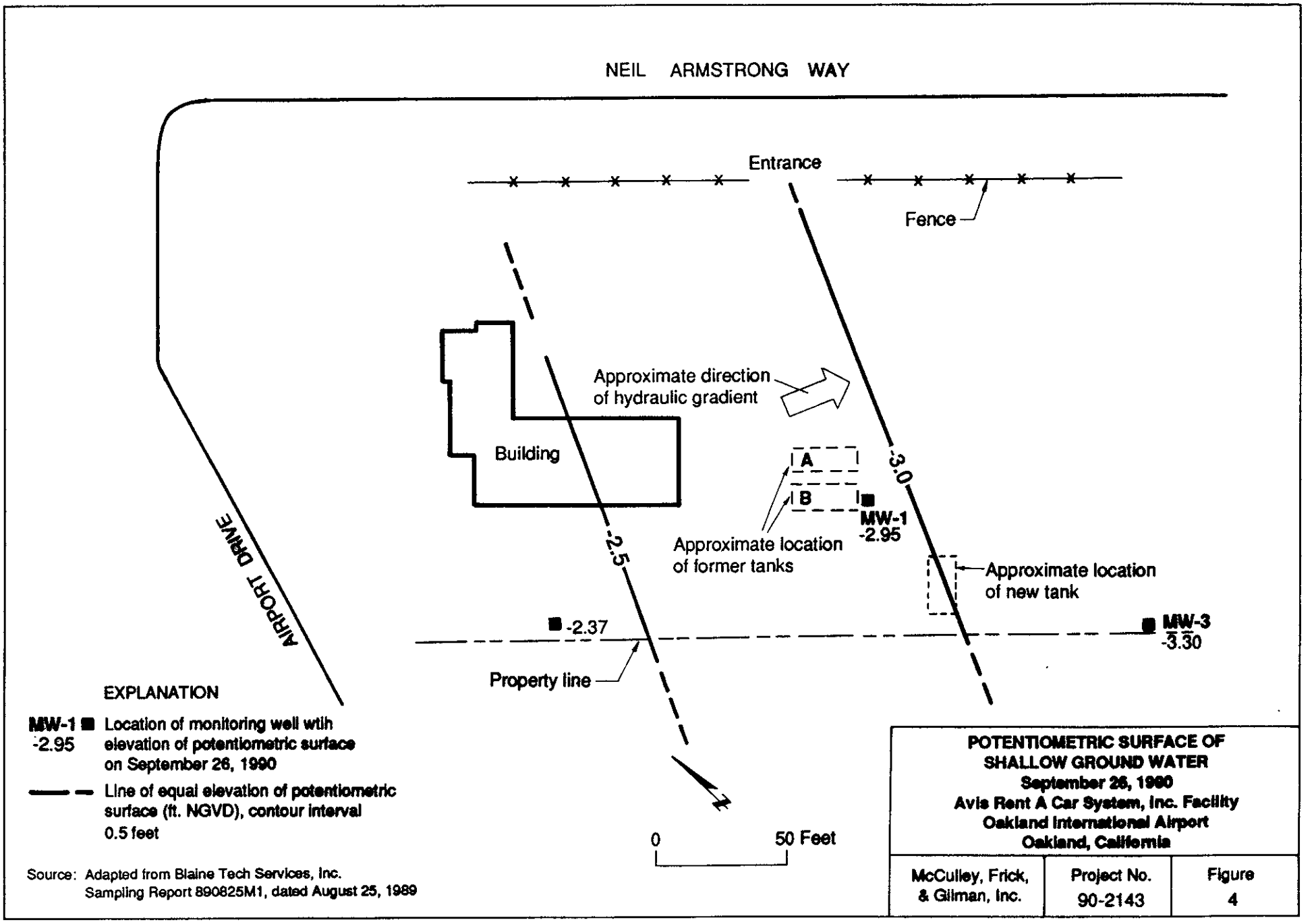


Source: Adapted from Blaine Tech Services, Inc.
Sampling Report 890825M1, dated August 25, 1989

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
Approximate direction of hydraulic gradient
-2.0
-2.5
Building
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
AIRPORT DRIVE
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


NEIL ARMSTRONG WAY
Entrance
Fence
Approximate direction of hydraulic gradient
Building
A
B
MW-1
-2.95
Approximate location of former tanks
Approximate location of new tank
-3.0
-2.5
AIRPORT DRIVE
-2.37
MW-3
-3.30
Property line
0
50 Feet
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

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

RECEIVED
OCT 15 1990
M, F & G, INC.

REPORT

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

Workorder # : 9009278
Date Received : 09/27/90
Project ID : 90-2143
Purchase Order: N/A

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

ANAMETRIX ID	CLIENT SAMPLE ID
9009278- 1	MW-1
9009278- 2	MW-2
9009278- 3	MW-3
9009278- 4	TRIP BLANK

This report is paginated for your convenience and ease of review. It contains 11 pages excluding the cover letter. The report is organized into sections. Each section contains all analytical results and quality assurance data related to a specific group or section within Anametrix. The Report Summary that precedes each section will help you determine which group at Anametrix generated the data. The Report Summary will contain the signatures of the department supervisor and a chemist, both of whom reviewed the analytical data. Please refer all questions to the department supervisor that signed the form.

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.

Burt Sutherland
Laboratory Director

10-12-90
Date

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

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

Workorder # : 9009278
Date Received : 09/27/90
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
9009278- 1	MW-1	H2O	09/26/90	TPHg/BTEX
9009278- 2	MW-2	H2O	09/26/90	TPHg/BTEX
9009278- 3	MW-3	H2O	09/26/90	TPHg/BTEX
9009278- 4	TRIP BLANK	H2O	09/26/90	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

RECEIVED
OCT 15 1990
M, F & G, INC.

Workorder # : 9009278
Date Received : 09/27/90
Project ID : 90-2143
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Cheryl Balmer 10/11/90
Department Supervisor Date

Chemist 10-11-90
Date

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

Anametrix W.O.#: 9009278
Matrix : WATER
Date Sampled : 09/26/90

Project Number : 90-2143
Date Released : 10/11/90

COMPOUNDS	Reporting Limit (ug/L)	Sample I.D.# MW-1 -01	Sample I.D.# MW-2 -02	Sample I.D.# MW-3 -03	Sample I.D.# TRIP BLANK -04	Sample I.D.# 12B1010A BLANK
Benzene	0.5	ND	ND	ND	ND	ND
Toluene	0.5	4	ND	ND	ND	ND
Ethylbenzene	0.5	28	ND	ND	ND	ND
Total Xylenes	0.5	46	ND	ND	ND	ND
TPH as Gasoline	50	660	ND	ND	ND	ND
% Surrogate Rec.		131%	62%	79%	92%	59%
Instrument #		HP12	HP12	HP12	HP12	HP12
Date Analyzed		10/10/90	10/10/90	10/10/90	10/10/90	10/10/90
RLMF		5	1	1	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.

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

Analyst 10.12.90 Date

Supervisor Cheryl Balmer 10/12/90 Date

ANAMETRIX REPORT DESCRIPTION
GCMS

Organic Analysis Data Sheets (OADS)

OADS forms contain tabulated results for target compounds. The OADS are grouped by method and, within each method, organized sequentially in order of increasing Anametrix ID number.

Tentatively Identified Compounds (TICs)

TIC forms contain tabulated results for non-target compounds detected in GC/MS analyses. TICs must be requested at the time samples are submitted at Anametrix. TIC forms immediately follow the OADS form for each sample. If TICs are requested but not found, then TIC forms will not be included with the report.

Surrogate Recovery Summary (SRS)

SRS forms contain quality assurance data. An SRS form will be printed for each method, if the method requires surrogate compounds. They will list surrogate percent recoveries for all samples and any method blanks. Any surrogate recovery outside the established limits will be flagged with an "*", and the total number of surrogates outside the limits will be listed in the column labelled "Total Out".

Matrix Spike Recovery Form (MSR)

MSR forms contain quality assurance data. They summarize percent recovery and relative percent difference information for matrix spikes and matrix spike duplicates. This information is a statement of both accuracy and precision. Any percent recovery or relative percent difference outside established limits will be flagged with an "*", and the total number outside the limits will be listed at the bottom of the page. Not all reports will contain an MSR form.

Qualifiers

Anametrix uses several data qualifiers (Q) in it's report forms. These qualifiers give additional information on the compounds reported. They should help a data reviewer to verify the integrity of the analytical results. The following is a list of qualifiers and their meanings:

- U - Indicates that the compound was analyzed for, but was not detected at or above the specified reporting limit.
- B - Indicates that the compound was detected in the associated method blank.
- J - Indicates that the compound was detected at an amount below the specified reporting limit. Consequently, the amount should be considered an approximate value. Tentatively identified compounds will always have a "J" qualifier because they are not included in the instrument calibration.
- E - Indicates that the amount reported exceeded the linear range of the instrument calibration.
- D - Indicates that the compound was detected in an analysis performed at a secondary dilution.
- A - Indicates that the tentatively identified compound is a suspected aldol condensation product. This is common in EPA Method 8270 soil analyses.

Absence of a qualifier indicates that the compound was detected at a concentration at or above the specified reporting limit.

REPORTING CONVENTIONS

- Due to a size limitation in our data processing step, only the first eight (8) characters of your project ID and sample ID will be printed on the report forms. However, the report cover letter and report summary pages display up to twenty (20) characters of your project and sample IDs.
- Amounts reported are gross values, i.e., not corrected for method blank contamination.

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

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

RECEIVED
OCT 15 1990
M, F & G, INC.

Workorder # : 9009278
Date Received : 09/27/90
Project ID : 90-2143
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9009278- 1	MW-1	H2O	09/26/90	625
9009278- 2	MW-2	H2O	09/26/90	625
9009278- 3	MW-3	H2O	09/26/90	625

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

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

RECEIVED
OCT 15 1990
M, F & G, INC.

Workorder # : 9009278
Date Received : 09/27/90
Project ID : 90-2143
Purchase Order: N/A
Department : GCMS
Sub-Department: GCMS

QA/QC SUMMARY :

- Internal standard areas were outside established limits in the EPA method 625 analysis of sample MW-2.
- Only polynuclear aromatic hydrocarbons are being reported per client request.

Paul Howan 10-8-90
Department Supervisor Date

Laura Marsh 10.8.90
Chemist Date

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID : 90-2143
Sample ID : MW-1
Matrix : WATER
Date Sampled : 9/26/90
Date Extracted :10/ 1/90
Amount Extracted : 1000.0 mL
Date Analyzed :10/ 4/90
Instrument ID : F2

Anametrix ID : 9009278-01
Analyst : JM
Supervisor : PG

Dilution Factor : 1.00
Conc. Units : ug/L

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
91-20-3	NAPHTHALENE	10.	16.	
91-57-6	2-METHYLNAPHTHALENE	10.	ND	U
91-58-7	2-CHLORONAPHTHALENE	10.	ND	U
208-96-8	ACENAPHTHYLENE	10.	ND	U
83-32-9	ACENAPHTHENE	10.	ND	U
132-64-9	DIBENZOFURAN	10.	ND	U
86-73-7	FLUORENE	10.	ND	U
85-01-8	PHENANTHRENE	10.	ND	U
120-12-7	ANTHRACENE	10.	ND	U
206-44-0	FLUORANTHENE	10.	ND	U
129-00-0	PYRENE	10.	ND	U
56-55-3	BENZO(A)ANTHRACENE	10.	ND	U
218-01-9	CHRYSENE	10.	ND	U
205-99-2	BENZO(B)FLUOROANTHENE	10.	ND	U
207-08-9	BENZO(K)FLUOROANTHENE	10.	ND	U
50-32-8	BENZO(A)PYRENE	10.	ND	U
193-39-5	INDENO(1,2,3-CD)PYRENE	10.	ND	U
53-70-3	DIBENZ[A,H]ANTHRACENE	10.	ND	U
191-24-2	BENZO(G,H,I)PERYLENE	10.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID : 90-2143
Sample ID : MW-2
Matrix : WATER
Date Sampled : 9/26/90
Date Extracted :10/ 1/90
Amount Extracted : 1000.0 mL
Date Analyzed :10/ 4/90
Instrument ID : F2

Anametrix ID : 9009278-02
Analyst : WH
Supervisor : PG

Dilution Factor : 1.00
Conc. Units : ug/L

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
91-20-3	NAPHTHALENE	10.	ND	U
91-57-6	2-METHYLNAPHTHALENE	10.	ND	U
91-58-7	2-CHLORONAPHTHALENE	10.	ND	U
208-96-8	ACENAPHTHYLENE	10.	ND	U
83-32-9	ACENAPHTHENE	10.	ND	U
132-64-9	DIBENZOFURAN	10.	ND	U
86-73-7	FLUORENE	10.	ND	U
85-01-8	PHENANTHRENE	10.	ND	U
120-12-7	ANTHRACENE	10.	ND	U
206-44-0	FLUORANTHENE	10.	ND	U
129-00-0	PYRENE	10.	ND	U
56-55-3	BENZO(A)ANTHRACENE	10.	ND	U
218-01-9	CHRYSENE	10.	ND	U
205-99-2	BENZO(B)FLUOROANTHENE	10.	ND	U
207-08-9	BENZO(K)FLUOROANTHENE	10.	ND	U
50-32-8	BENZO(A)PYRENE	10.	ND	U
193-39-5	INDENO(1,2,3-CD)PYRENE	10.	ND	U
53-70-3	DIBENZ[A,H]ANTHRACENE	10.	ND	U
191-24-2	BENZO(G,H,I)PERYLENE	10.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID : 90-2143
Sample ID : MW-3
Matrix : WATER
Date Sampled : 9/26/90
Date Extracted :10/ 1/90
Amount Extracted : 1000.0 mL
Date Analyzed :10/ 4/90
Instrument ID : F2

Anametrix ID : 9009278-03
Analyst : UH
Supervisor : PG

Dilution Factor : 1.00
Conc. Units : ug/L

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
91-20-3	NAPHTHALENE	10.	ND	U
91-57-6	2-METHYLNAPHTHALENE	10.	ND	U
91-58-7	2-CHLORONAPHTHALENE	10.	ND	U
208-96-8	ACENAPHTHYLENE	10.	ND	U
83-32-9	ACENAPHTHENE	10.	ND	U
132-64-9	DIBENZOFURAN	10.	ND	U
86-73-7	FLUORENE	10.	ND	U
85-01-8	PHENANTHRENE	10.	ND	U
120-12-7	ANTHRACENE	10.	ND	U
206-44-0	FLUORANTHENE	10.	ND	U
129-00-0	PYRENE	10.	ND	U
56-55-3	BENZO(A)ANTHRACENE	10.	ND	U
218-01-9	CHRYSENE	10.	ND	U
205-99-2	BENZO(B)FLUOROANTHENE	10.	ND	U
207-08-9	BENZO(K)FLUOROANTHENE	10.	ND	U
50-32-8	BENZO(A)PYRENE	10.	ND	U
193-39-5	INDENO(1,2,3-CD)PYRENE	10.	ND	U
53-70-3	DIBENZ[A,H]ANTHRACENE	10.	ND	U
191-24-2	BENZO(G,H,I)PERYLENE	10.	ND	U

ORGANIC ANALYSIS DATA SHEET -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID :
Sample ID : BLANK
Matrix : WATER
Date Sampled : 0/ 0/ 0
Date Extracted :10/ 1/90
Amount Extracted : 1000.0 mL
Date Analyzed :10/ 3/90
Instrument ID : F2

Anametrix ID : 2CB1001C02
Analyst : UH
Supervisor : PG

Dilution Factor : 1.00
Conc. Units : ug/L

CAS NO.	COMPOUND NAME	REPORTING LIMIT	AMOUNT DETECTED	Q
91-20-3	NAPHTHALENE	10.	ND	U
91-57-6	2-METHYLNAPHTHALENE	10.	ND	U
91-58-7	2-CHLORONAPHTHALENE	10.	ND	U
208-96-8	ACENAPHTHYLENE	10.	ND	U
83-32-9	ACENAPHTHENE	10.	ND	U
132-64-9	DIBENZOFURAN	10.	ND	U
86-73-7	FLUORENE	10.	ND	U
85-01-8	PHENANTHRENE	10.	ND	U
120-12-7	ANTHRACENE	10.	ND	U
206-44-0	FLUORANTHENE	10.	ND	U
129-00-0	PYRENE	10.	ND	U
56-55-3	BENZO(A)ANTHRACENE	10.	ND	U
218-01-9	CHRYSENE	10.	ND	U
205-99-2	BENZO(B)FLUOROANTHENE	10.	ND	U
207-08-9	BENZO(K)FLUOROANTHENE	10.	ND	U
50-32-8	BENZO(A)PYRENE	10.	ND	U
193-39-5	INDENO(1,2,3-CD)PYRENE	10.	ND	U
53-70-3	DIBENZ[A,H]ANTHRACENE	10.	ND	U
191-24-2	BENZO(G,H,I)PERYLENE	10.	ND	U

SURROGATE RECOVERY SUMMARY -- EPA METHOD 625/8270
ANAMETRIX, INC. (408)432-8192

Project ID : 90-2143
Matrix : WATER

Anametrix ID : 9009278
Analyst : UM
Supervisor : PG

	SAMPLE ID	SU1	SU2	SU3	SU4	SU5	SU6	TOTAL OUT
1	BLANK	31	29	19	11	12	27	0
2	MW-1	30	27	35	21	26	45	0
3	MW-2	35	27	33	18	25	44	0
4	MW-3	33	28	36	22	28	47	0
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

	QC LIMITS
SU1 = NITROBENZENE-D5	(20-105)
SU2 = 2-FLUOROBIPHENYL	(26-110)
SU3 = TERPHENYL-D14	(16-131)
SU4 = PHENOL-D5	(10- 62)
SU5 = 2-FLUOROPHENOL	(11-70)
SU6 = 2,4,6-TRIBROMOPHENOL	(26-154)

* Values outside of Anametrix QC limits

9009278

CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

NO.

McCULLEY, FRICK & GILMAN, INC.

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

RECEIVED
OCT 15 1990
M, F & G, INC.

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

(2) 10/12
9-27 16:50

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

PROJECT No.: 90-2143.4 PROJECT NAME: Avis - Oakland AP PAGE: 1 OF: 1
SAMPLER (Signature): DATE: 9/26/90
METHOD OF SHIPMENT: Courier CARRIER/ WAYBILL NO. DESTINATION: Accumetrix
SPECIAL INSTRUCTIONS/HAZARDS:

SAMPLES

ANALYSIS REQUEST

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.	Methods EPA 601/8010	Methods EPA 602/8020	Methods EPA 624/8240	Methods EPA 625/8270	Methods TPH as Gasoline	Methods TPH as Diesel	Methods BTEX	Methods DHA using EPA 625	Handling HOLD	Handling RUSH	Handling STANDARD	REMARKS (Special handling procedures, specific analytical methods, observations, etc.)
01	MW-1	9/26	1450	AQ	X			X			40	G	3					X		X				X	
	MW-1	9/26	1450					X			1000	G	2								X			X	
02	MW-2	9/26	1110		X			X			40	G	3					X		X				X	
	MW-2	9/26	1110					X			1000	G	2								X			X	
03	MW-3	9/26	1330		X			X			40	G	3					X		X				X	
	MW-3	9/26	1330					X			1000	G	2								X			X	
04	Trip blank	9/26	—	↓	X			X			40	G	2					X		X				X	

TOTAL NUMBER OF CONTAINERS 18

LABORATORY COMMENTS/ CONDITION OF SAMPLES

RELINQUISHED BY: SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
	Toby Dao	MFG	9-27-90	10:25
	Benny S. Carrizosa	Accumetrix	9-27-90	1405

RECEIVED BY: SIGNATURE	PRINTED NAME	COMPANY
	Benny S. Carrizosa	Accumetrix
	Norma Sylva	10/27/90 1405 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