MFG, Inc
a Tetra Tech Company
180 Howard Street, Suite 200
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consulting
scientists and
engineers

October 17, 2001
MFG Project No. 030062.2

Mr. Barney Chan
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway
Alameda, California 94502

Subject: Quarterly Groundwater Monitoring Report, Third Quarter 2001
Hertz Facility, 1 Airport Drive, Oakland, California
StID # 2260

Dear Mr. Chan:

Enclosed is one copy of the subject report prepared by MFG, Inc. MFG has been authorized to transmit this document to you on behalf of The Hertz Corporation.

Please contact either of the undersigned at (415) 495-7110 if you require further information.

Sincerely yours,

MFG, INC.

Jennifer Tancke
Staff Geologist

Christopher B. White, C.HG.
Project Hydrogeologist

Enclosure

cc: Roland Costanzo, The Hertz Corporation
Dale Klettke, Port of Oakland

J:\030062\Task-02\2001Q3\Report.doc

QUARTERLY GROUNDWATER MONITORING REPORT THIRD QUARTER 2001

HERTZ RENT A CAR FACILITY 1 AIRPORT DRIVE OAKLAND, CALIFORNIA

October 17, 2001

Prepared for:

THE HERTZ CORPORATION

225 Brae Boulevard
Park Ridge, New Jersey 07656

Prepared by:

MFG, INC.
consulting scientists and engineers

180 Howard Street, Suite 200
San Francisco, California 94105
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MFG Project No. 030062.2

PROFESSIONAL CERTIFICATION

This report has been prepared by MFG, Inc. under the professional supervision of Christopher B. White. The findings, recommendations, specifications and/or professional opinions presented in this report have been prepared in accordance with generally accepted professional hydrogeologic and environmental consulting practice, and within the scope of the project. There is no other warranty, either express or implied.

Christopher B. White
C.HG. No. HG 95
Project Hydrogeologist
MFG, INC.

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1.0 INTRODUCTION

This report summarizes the groundwater monitoring conducted by MFG, Inc., in July 2001, at The Hertz Corporation (Hertz) facility located at 1 Airport Drive in Oakland, California (hereinafter the "Site") (Figure 1). The Site includes the adjoining Port of Oakland property to the south and west of the Hertz facility. The layout of the Site, including the location of the groundwater monitoring wells, is shown on Figure 2.

The groundwater monitoring at the Site was conducted in accordance with MFG's *Implementation of ORC Injection Work Plan*, dated September 20, 2000 (MFG, 2000). Implementation of the proposed groundwater monitoring program was requested by the ACHCSA in the letter from Mr. Barney Chan to Hertz, dated December 5, 2000 (ACHCSA, 2000). The methods and results of the previous quarterly groundwater monitoring events conducted by MFG in January 2001 and April 2001 are discussed in the quarterly groundwater monitoring reports dated April 4, 2001 and August 1, 2001 (MFG, 2001a and 2001b). A description on the ORC injection activities conducted in May 2001 is included in the *Quarterly Groundwater Monitoring Report, Second Quarter 2001*, dated August 1, 2001 (MFG, 2001b).

This Quarterly Groundwater Monitoring Report is organized as follows: Section 2.0 describes the field methods and results of the groundwater sampling program. Section 3.0 presents an evaluation of the lateral hydraulic gradient in the shallow groundwater-bearing zone at the Site. Disposal of investigation-derived waste is discussed in Section 4.0. References cited in this report are listed in Section 5.0.

2.0 GROUNDWATER SAMPLING AND CHEMICAL ANALYSIS

2.1 Field Methods

The methods used to measure groundwater levels from monitoring wells MW-1 through MW-9 and collect groundwater samples from monitoring wells MW-1, MW-4, MW-5 and MW-6 are described below.

2.1.1 Water Level Measurement

Groundwater levels were measured in monitoring wells MW-1 through MW-9 on July 31, 2001, using an electronic water level indicator. These data are presented in Table 1.

2.1.2 Groundwater Sampling

Groundwater samples were collected from monitoring wells MW-1, MW-4, MW-5 and MW-6 on July 31, 2001. Prior to sample collection, each well was purged using a clean disposable Teflon® bailer. Approximately 4.0, 3.0, 3.0 and 3.0 casing volumes (approximately 7.2, 1.8, 3.3 and 3.3 gallons) of groundwater were removed from monitoring wells MW-1, MW-4, MW-5 and MW-6, respectively, during the purging process. Dissolved oxygen was measured in wells MW-2, MW-3, MW-7, MW-8 and MW-9 using a YSI Model 55 dissolved oxygen meter following groundwater level measurements in each well and in wells MW-1, MW-4, MW-5 and MW-6 prior to sample collection. The dissolved oxygen levels measured in wells MW-2, MW-3, MW-7, MW-8 and MW-9 were 0.6, 0.4, 0.3, 1.2, and 0.8 milligrams per liter (mg/L), respectively. The temperature, pH, specific conductance and oxidation-reduction potential of the water were monitored using a Myron L Ultrameter 6P water quality meter following field calibration. Monitoring wells MW-4 and MW-5 were purged almost dry and allowed to recover before sampling. The water levels in monitoring wells MW-4 and MW-5 both recovered to 80 percent of their original levels. The field measurements for wells MW-1 and MW-6 were relatively stable (within 10 percent for specific conductance, 0.05 pH units, and 1°C) at the end of purging. The field-measured values of these parameters at the end of purging were as follows:

Well	Temperature (°C)	pH	Specific Conductance (µmhos/cm at field temp)	Oxidation-Reduction Potential (mVolts)	Dissolved Oxygen (mg/L)
MW-1	23	7.9	940	-220	1.6
MW-4	21	7.3	2,200	-200	2.0
MW-5	24	8.2	420	-170	0.9
MW-6	24	7.6	2,000	-260	0.4

very little GW movement

After purging, a groundwater sample was collected from near the top of the water column in each well. The groundwater samples were placed in five, laboratory supplied, 40-milliliter (ml) glass vials with hydrochloric acid for sample preservation and screw caps with Teflon®-lined septa; one laboratory supplied 1-liter plastic bottle; and one laboratory supplied, 1,000-ml amber bottle containing hydrochloric acid for sample preservation. After filling, the groundwater 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. A copy of the chain-of-custody record is included in Appendix A.

Reusable sampling equipment used in purging and sampling the monitoring wells was washed in a laboratory-grade detergent (Liquinox®) and water solution and triple rinsed with distilled water prior to use in each well and at the completion of sampling. The water generated during purging and sampling of the monitoring wells was placed into a 55-gallon drum for temporary storage at the Site (Section 4.0).

2.2 Analytical Methods and Results

The groundwater samples were submitted for chemical analysis to Southern Petroleum Laboratories of Houston, Texas, an analytical laboratory certified by the California Department of Health Services (DHS). The groundwater samples were analyzed for:

- Total purgeable petroleum hydrocarbons (TPPH) as gasoline (EPA Method 8015, extraction by EPA Method 5030);
- Benzene, toluene, ethylbenzene, total xylenes (BTEX) and fuel oxygenates (EPA Method 8260, extraction by EPA Method 5030);

- Nitrate (EPA Method 353.2);
- Sulfate (EPA Method 375.4); and
- Ferrous Iron (EPA Method 3500-FeD).

TPPH as gasoline and BTEX were not detected in the groundwater samples collected from wells MW-1 and MW-5 at concentrations above the laboratory reporting limits. TPPH as gasoline, benzene, toluene, ethylbenzene and total xylenes were detected in the groundwater sample collected from monitoring well MW-4 at concentrations of 4.9, 0.970, 0.250, 0.290 and 0.620 mg/L, respectively. Ethylbenzene was detected in the groundwater sample collected from monitoring well MW-6 at a concentration of 0.005 mg/L. The groundwater samples collected from monitoring wells MW-4 and MW-6 contained methyl tertiary-butyl ether (MTBE) at concentrations of 0.300 and 0.180 mg/L, respectively.

Sulfate was detected in the groundwater samples collected from monitoring wells MW-1, MW-4, MW-5 and MW-6 at concentrations of 56, 66.5, 26 and 103 mg/L, respectively. Nitrate was detected in the groundwater sample collected from monitoring well MW-1 at a concentration of 2.84 mg/L. Ferrous iron was detected in the samples collected from monitoring wells MW-4, MW-5 and MW-6 at concentrations of 2.4, 0.41 and 3.7 mg/L, respectively.

A summary of laboratory analytical results for the groundwater samples is shown in Table 2. Copies of the laboratory reports are included in Appendix A.

3.0 EVALUATION OF LATERAL HYDRAULIC GRADIENT

Groundwater levels were measured in monitoring wells MW-1 through MW-9 prior to groundwater sampling on July 31, 2001. Groundwater level elevations were calculated using the depth-to-water measurements and the MP elevations of the wells (Table 1). The water level elevations in the wells ranged from 1.64 to 4.79 feet NGVD.

The potentiometric surface of the shallow groundwater at the Site on July 31, 2001 is shown in Figure 3. The potentiometric surface contours illustrate that the lateral hydraulic gradient on that date was to the southwest with an approximate magnitude of 0.019 foot per foot.

4.0 DISPOSAL OF INVESTIGATION-DERIVED WASTE

Monitoring well purge water and sampling equipment wash water were placed in 55-gallon drums with non-hazardous labels. The drums will be temporarily stored at the Site and will be disposed of following completion of the next quarterly groundwater sampling event.

5.0 REFERENCES

Alemeda County Health Care Services Agency (ACHCSA), 2000, *Letter to The Hertz Corporation – Subject: Subsurface Investigation for Hertz Facility, 1 Airport Dr., Oakland, CA 94621*: December 5.

MFG, Inc., 2000, *Implementation of ORC Injection Work Plan, Hertz Facility, 1 Airport Drive, Oakland, California, StID # 2260*: September 20.

MFG, Inc., 2001a, *Quarterly Groundwater Monitoring Report, First Quarter 2001, Hertz Rent A Car Facility, 1 Airport Drive, Oakland, California*: April 4.

MFG, Inc., 2001b, *Quarterly Groundwater Monitoring Report, Second Quarter 2001, Hertz Rent A Car Facility, 1 Airport Drive, Oakland, California*: August 1.

TABLES

TABLE 1
WATER LEVEL DATA FOR GROUNDWATER MONITORING WELLS

1 Airport Drive
Oakland, California

WELL ID	MEASURING POINT ELEVATION (ft NGVD)	MEASUREMENT DATE	DEPTH TO WATER (ft BMP)	WATER LEVEL ELEVATION (ft NGVD)
MW-1	7.45	04-Jan-01	4.22	3.23
		19-Apr-01	3.52	3.93
		31-Jul-01	3.96	3.49
MW-2	8.09	04-Jan-01	3.56	4.53
		19-Apr-01	2.83	5.26
		31-Jul-01	3.30	4.79
MW-3	7.66	04-Jan-01	3.99	3.67
		19-Apr-01	3.13	4.53
		31-Jul-01	3.68	3.98
MW-4	7.11	04-Jan-01	4.61	2.50
		19-Apr-01	4.00	3.11
		31-Jul-01	4.54	2.57
MW-5	7.76	04-Jan-01	3.93	3.83
		19-Apr-01	3.28	4.48
		31-Jul-01	3.81	3.95
MW-6	7.17	04-Jan-01	4.60	2.57
		19-Apr-01	3.69	3.48
		31-Jul-01	4.29	2.88
MW-7	6.93	04-Jan-01	4.82	2.11
		19-Apr-01	3.76	3.17
		31-Jul-01	4.38	2.55
MW-8	6.75	31-Jul-01	4.70	2.05
MW-9	6.55	04-Jan-01	5.20	1.35
		19-Apr-01	4.27	2.28
		31-Jul-01	4.91	1.64

Notes:

BMP	Below Measuring Point. Measuring Point is at top of well casing.
NGVD	National Geodetic Vertical Datum of 1929.

TABLE 2

CHEMICAL ANALYSES OF GROUNDWATER SAMPLES FOR TPPH, BTEX, FUEL OXYGENATES AND NATURAL ATTENUATION PARAMETERS

1 Airport Drive
Oakland, California

WELL ID	SAMPLE ID	DATE SAMPLED	TPPH AS GASOLINE (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL-BENZENE (mg/L)	TOTAL XYLENES (mg/L)	MTBE (mg/L)	TBA (mg/L)	Sulfate (mg/L)	Nitrate (mg/L as N)	Ferrous Iron (mg/L)
MW-1	MW-1	04-Jan-01	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	85.0	1.92	<0.1
	MW-1	19-Apr-01	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	58.0	2.52	<0.1
	MW-1	31-Jul-01	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	56	2.84	<0.1
MW-4	MW-4	04-Jan-01	6.9	1.300	0.180	0.790	0.560	0.200	<0.5	25.0	<0.1	2.2
	MW-4	19-Apr-01	26	3.400	0.340	1.100	1.430	0.510	<0.5	3.0	<0.1	3.9
	MW-4	31-Jul-01	4.9	0.970	0.250	0.290	0.620	0.300	<0.5	66.5	<0.1	2.4
MW-5	MW-5	04-Jan-01	<0.05	<0.005	<0.005	<0.005	<0.005	0.010	<0.5	45.6	<0.1	2.0
	MW-5	19-Apr-01	<0.05	<0.005	<0.005	<0.005	<0.005	0.005	<0.5	15.8	<0.1	0.21
	MW-5	31-Jul-01	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.5	26	<0.1	0.41
MW-6	MW-6	04-Jan-01	<0.05	<0.005	<0.005	<0.005	<0.005	0.500	<0.5	165	<0.1	3.8
	MW-6	19-Apr-01	<0.05	<0.005	<0.005	<0.005	<0.005	0.077	<0.5	132	<0.1	2.7
	MW-6	31-Jul-01	<0.05	<0.005	<0.005	0.005	<0.005	0.180	<0.5	103	<0.1	3.7

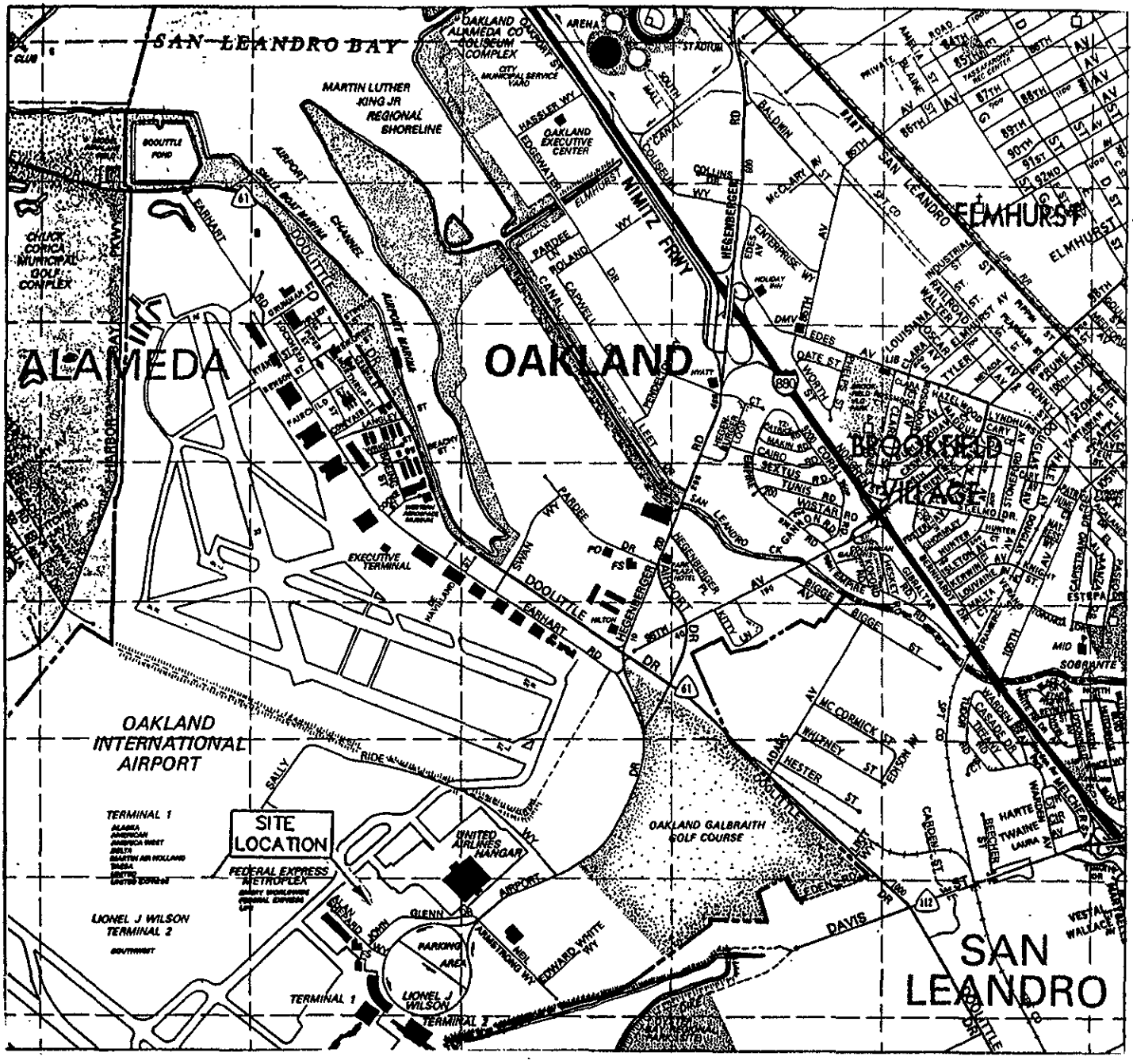
5/01 after injections

Notes:

TPPH	Total purgeable petroleum hydrocarbons. Analyzed using modified EPA Method 8015M and quantified against a gasoline standard.
BTEX	Benzene, toluene, ethylbenzene and total xylenes. Analyzed using EPA Method 8260B.
MTBE	Methyl tertiary butyl ether. Analyzed using EPA Method 8260B.
TBA	Tertiary butyl alcohol. Analyzed using EPA Method 8260B.
Sulfate	Analyzed using EPA Method 375.4.
Nitrate	Analyzed using EPA Method 353.2.
Ferrous Iron	Analyzed using EPA Method 3500-FeD.
mg/L	Milligrams per liter.
<0.5	Not detected at or above the laboratory reporting limit indicated.

FIGURES

J:\030082\TASK-03\FIGURES\LOCATION.DWG PLOT SCALE 1:1



SOURCE: THE THOMAS GUIDE
ALAMEDA/CONTRA COSTA COUNTIES
1995 EDITION

0 2,200 FEET
APPROXIMATE SCALE

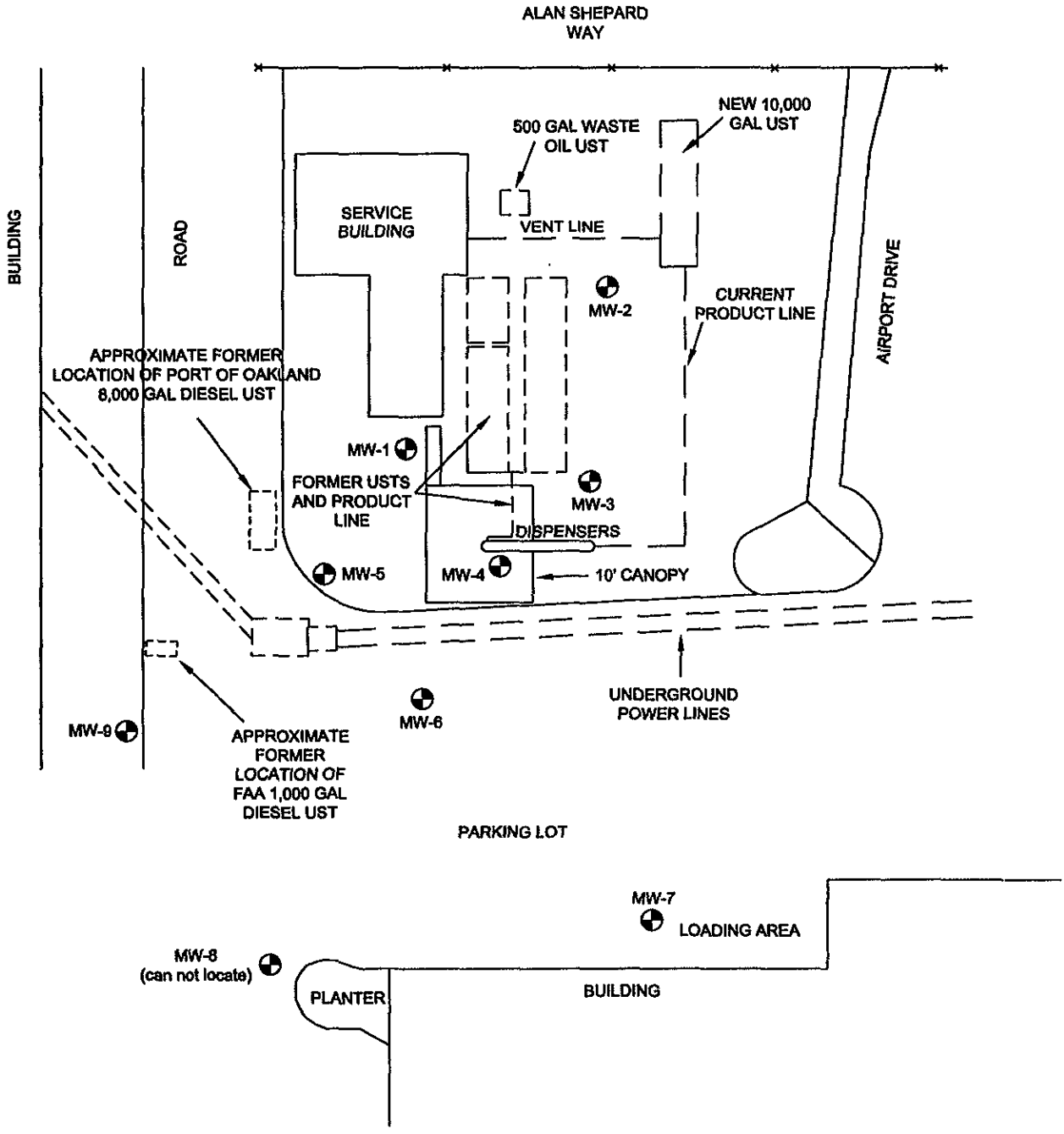
SITE LOCATION MAP

Hertz Service Center
1 Airport Drive
Oakland, California

PROJECT NO. 030082	BY: N. JOHNSON	FIGURE
DATE: 3/21/01	CHECKED: CBW	1

MFG, Inc.
consulting scientists and engineers

J:\030062\TASK-02\FIGURES\FIGURE2.DWG PLOT SCALE: 1:1



EXPLANATION

GROUNDWATER MONITORING WELL

FENCELINE

0 40 FEET

APPROXIMATE SCALE

SITE PLAN BASED ON MAP BY ESE, INC. JANUARY 4, 1994

SITE PLAN

Hertz Service Center
1 Airport Drive
Oakland, California

PROJECT NO. 030062	BY: G. STEPPEN	FIGURE
DATE: 07/27/01	CHECKED: CBW	2

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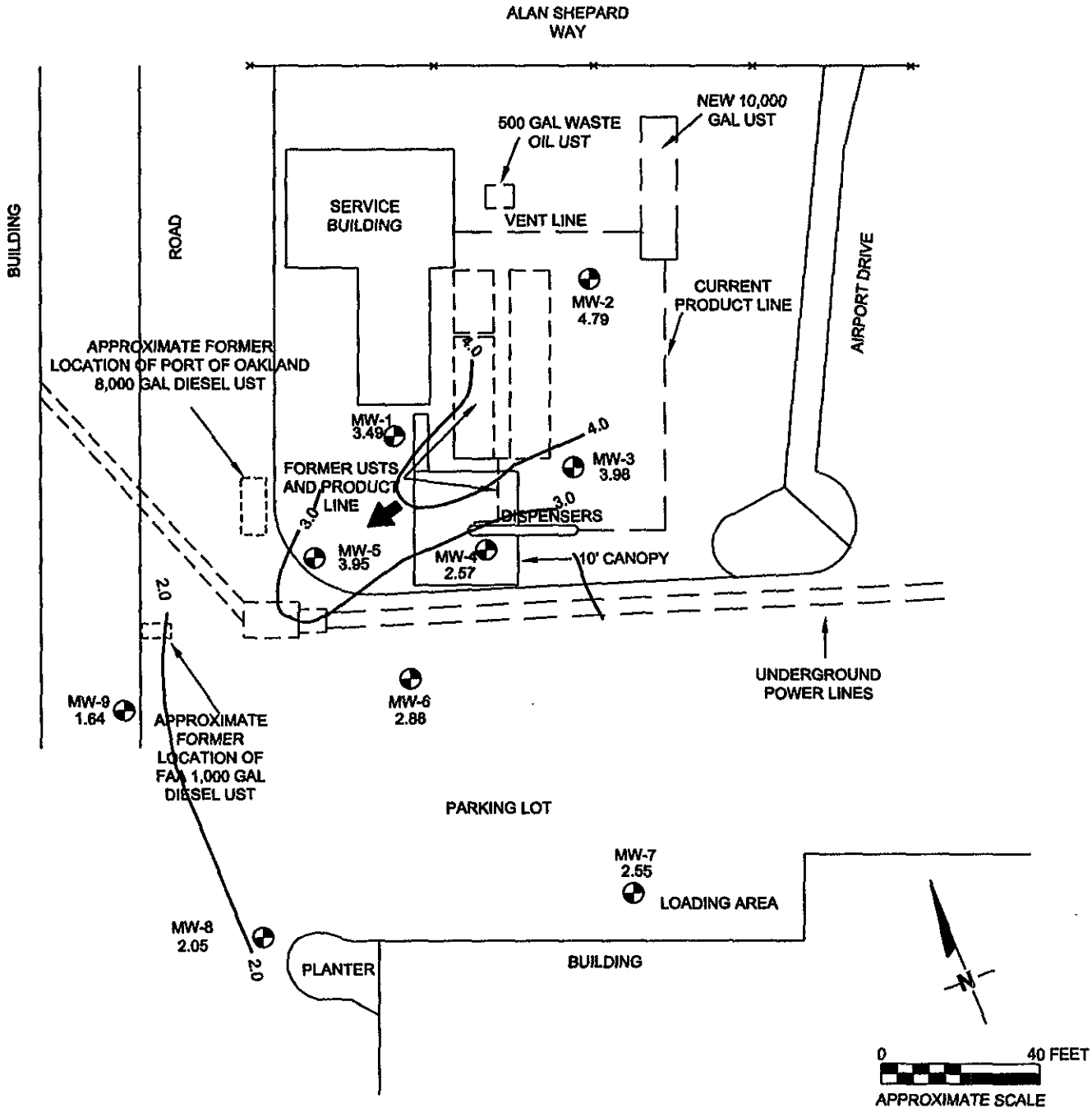
consulting scientists and engineers

J:\030062\TASK-02\2001Q3\FIGURES\FIGURE3.DWG PLOT SCALE: 1:1



EXPLANATION

2.50 — LOCATION AND DESIGNATION OF MONITORING WELL WITH ELEVATION OF POTENTIOMETRIC SURFACE *(FEET NGVD)*

APPROXIMATE LINE OF EQUAL ELEVATION OF POTENTIOMETRIC *SURFACE (FEET NGVD)*. CONTOUR INTERVAL IS ONE FOOT.

APPROXIMATE DIRECTION OF GROUNDWATER FLOW

SOURCE: SITE PLAN BASED ON MAP BY ESE, INC. JANUARY 4, 1994

POTENTIOMETRIC SURFACE OF SHALLOW GROUNDWATER
July 31, 2001

Hertz Service Center
1 Airport Drive
Oakland, California

PROJECT NO. 030062	BY: G. STEPPEN	FIGURE
DATE: 10/08/01	CHECKED:	3

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APPENDIX A

Laboratory Reports and Chain-of-Custody Records for Groundwater Samples Submitted for Analysis

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

McCulley, Frick & Gilman, Inc.

Certificate of Analysis Number:

01080008

Report To:		Project Name:	Hertz-Oakland 030062(2)
McCulley, Frick & Gilman, Inc. Chris White 71 Stevenson Street, Suite 1450 San Francisco CA 94105- ph: (415) 495-7110 fax: (415) 495-7107		Site:	Oakland, CA
		Site Address:	
		PO Number:	
		State:	California
		State Cert. No.:	1903
		Date Reported:	8/9/01

This Report Contains A Total Of 18 Pages

Excluding This Page

And

Chain Of Custody

8/9/01
Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Case Narrative for:

McCulley, Frick & Gilman, Inc.

Certificate of Analysis Number:

01080008

Report To:		Project Name:	Hertz-Oakland 030062(2)
McCulley, Frick & Gilman, Inc.		Site:	Oakland, CA
Chris White		Site Address:	
71 Stevenson Street, Suite 1450			
San Francisco		PO Number:	
CA		State:	California
94105-		State Cert. No.:	1903
ph: (415) 495-7110	fax: (415) 495-7107	Date Reported:	8/9/01

Your samples were received outside the method holding time for Ferrous Iron by *Standard Methods* M3500-Fe D. Per previous projects, SPL continued with the analysis requested.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West
Senior Project Manager

RECEIVED
AUG 15 2001
MFG, Inc.

8/9/01
Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

McCulley, Frick & Gilman, Inc.

Certificate of Analysis Number:

01080008

Report To: McCulley, Frick & Gilman, Inc.
Chris White
71 Stevenson Street, Suite 1450

San Francisco
CA
94105-
ph: (415) 495-7110 fax: (415) 495-7107

Fax To: McCulley, Frick & Gilman, Inc.
Chris White fax : (415) 495-7107

Project Name: Hertz-Oakland 030062(2)
Site: Oakland, CA
Site Address:

PO Number:
State: California
State Cert. No.: 1903
Date Reported: 8/9/01

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
ip Blank 7/26/01	01080008-01	Water	7/31/01	8/1/01 10:00:00 AM	41778	☐
W-1	01080008-02	Water	7/31/01 11:45:00 AM	8/1/01 10:00:00 AM	41778	☐
MW-5	01080008-03	Water	7/31/01 12:30:00 PM	8/1/01 10:00:00 AM	41778	☐
MW-4	01080008-04	Water	7/31/01 1:00:00 PM	8/1/01 10:00:00 AM	41780	☐
W-6	01080008-05	Water	7/31/01 2:55:00 PM	8/1/01 10:00:00 AM	41780	☐

Sonia West
Senior Project Manager

8/9/01
Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID: Trip Blank 7/26/01 **Collected:** 7/31/01 **SPL Sample ID:** 01080008-01

Site: Oakland, CA

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: ug/L**		
Benzene	ND		5	1		08/04/01 0:31	JC	778129
Diisopropyl ether	ND		10	1		08/04/01 0:31	JC	778129
Ethylbenzene	ND		5	1		08/04/01 0:31	JC	778129
Methyl tert-butyl ether	ND		5	1		08/04/01 0:31	JC	778129
t-Butyl alcohol	ND		500	1		08/04/01 0:31	JC	778129
tert-Amyl methyl ether	ND		10	1		08/04/01 0:31	JC	778129
tert-Butyl ethyl ether	ND		10	1		08/04/01 0:31	JC	778129
Toluene	ND		5	1		08/04/01 0:31	JC	778129
Xylenes,Total	ND		5	1		08/04/01 0:31	JC	778129
Surr: 1,2-Dichloroethane-d4	110	%	62-119	1		08/04/01 0:31	JC	778129
Surr: 4-Bromofluorobenzene	102	%	78-123	1		08/04/01 0:31	JC	778129
Surr: Toluene-d8	104	%	74-122	1		08/04/01 0:31	JC	778129

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID: MW-1 **Collected:** 7/31/01 11:45:00 **SPL Sample ID:** 01080008-02

Site: Oakland, CA

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: mg/L**		
Gasoline Range Organics	ND		0.05		1		08/03/01 13:01	DL	777852
Surr: 1,4-Difluorobenzene	107	%	62-144		1		08/03/01 13:01	DL	777852
Surr: 4-Bromofluorobenzene	96.3	%	44-153		1		08/03/01 13:01	DL	777852
IRON, FERROUS				**MCL**	**M3500-FE D**		**Units: mg/L**		
Iron, Ferrous	ND		0.10		1		08/01/01 11:30	SN	776504
NITRATE NITROGEN (AS N), TOTAL				**MCL**	**E353.2**		**Units: mg/L**		
Nitrogen,Nitrate (As N)	2.84		0.100		1		08/01/01 12:39	CV	778363
SULFATE, TOTAL				**MCL**	**E375.4**		**Units: mg/L**		
Sulfate	56		5.00		5		08/06/01 17:00	SN	778399
VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**		**Units: ug/L**		
Benzene	ND		5		1		08/04/01 0:58	JC	778130
Diisopropyl ether	ND		10		1		08/04/01 0:58	JC	778130
Ethylbenzene	ND		5		1		08/04/01 0:58	JC	778130
Methyl tert-butyl ether	ND		5		1		08/04/01 0:58	JC	778130
t-Butyl alcohol	ND		500		1		08/04/01 0:58	JC	778130
tert-Amyl methyl ether	ND		10		1		08/04/01 0:58	JC	778130
tert-Butyl ethyl ether	ND		10		1		08/04/01 0:58	JC	778130
Toluene	ND		5		1		08/04/01 0:58	JC	778130
Xylenes,Total	ND		5		1		08/04/01 0:58	JC	778130
Surr: 1,2-Dichloroethane-d4	102	%	62-119		1		08/04/01 0:58	JC	778130
Surr: 4-Bromofluorobenzene	104	%	78-123		1		08/04/01 0:58	JC	778130
Surr: Toluene-d8	106	%	74-122		1		08/04/01 0:58	JC	778130

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

8/9/01 8:12:11 AM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID: MW-5 **Collected:** 7/31/01 12:30:00 **SPL Sample ID:** 01080008-03

Site: Oakland, CA

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: mg/L**		
Gasoline Range Organics	ND		0.05		1		08/03/01 13:26	DL	777853
Surr: 1,4-Difluorobenzene	108	%	62-144		1		08/03/01 13:26	DL	777853
Surr: 4-Bromofluorobenzene	99.3	%	44-153		1		08/03/01 13:26	DL	777853
IRON, FERROUS				**MCL**	**M3500-FE D**		**Units: mg/L**		
Iron, Ferrous	0.41		0.10		1		08/01/01 11:30	SN	776507
NITRATE NITROGEN (AS N), TOTAL				**MCL**	**E353.2**		**Units: mg/L**		
Nitrogen,Nitrate (As N)	ND		0.100		1		08/01/01 12:39	CV	778366
SULFATE, TOTAL				**MCL**	**E375.4**		**Units: mg/L**		
Sulfate	26		2.50		2.5		08/06/01 17:00	SN	778402
VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**		**Units: ug/L**		
Benzene	ND		5		1		08/04/01 1:24	JC	778131
Diisopropyl ether	ND		10		1		08/04/01 1:24	JC	778131
Ethylbenzene	ND		5		1		08/04/01 1:24	JC	778131
Methyl tert-butyl ether	ND		5		1		08/04/01 1:24	JC	778131
t-Butyl alcohol	ND		500		1		08/04/01 1:24	JC	778131
tert-Amyl methyl ether	ND		10		1		08/04/01 1:24	JC	778131
tert-Butyl ethyl ether	ND		10		1		08/04/01 1:24	JC	778131
Toluene	ND		5		1		08/04/01 1:24	JC	778131
Xylenes,Total	ND		5		1		08/04/01 1:24	JC	778131
Surr: 1,2-Dichloroethane-d4	108	%	62-119		1		08/04/01 1:24	JC	778131
Surr: 4-Bromofluorobenzene	104	%	78-123		1		08/04/01 1:24	JC	778131
Surr: Toluene-d8	102	%	74-122		1		08/04/01 1:24	JC	778131

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID: MW-4 **Collected:** 7/31/01 1:00:00 **SPL Sample ID:** 01080008-04

Site: Oakland, CA

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: mg/L**		
Gasoline Range Organics	4.9		0.5		10		08/03/01 15:28	DL	777866
Surr: 1,4-Difluorobenzene	112	%	62-144		10		08/03/01 15:28	DL	777866
Surr: 4-Bromofluorobenzene	104	%	44-153		10		08/03/01 15:28	DL	777866
IRON, FERROUS				**MCL**	**M3500-FE D**		**Units: mg/L**		
Iron, Ferrous	2.4		0.10		1		08/01/01 11:30	SN	776508
NITRATE NITROGEN (AS N), TOTAL				**MCL**	**E353.2**		**Units: mg/L**		
Nitrogen,Nitrate (As N)	ND		0.100		1		08/01/01 12:39	CV	778367
SULFATE, TOTAL				**MCL**	**E375.4**		**Units: mg/L**		
Sulfate	66.5		5.00		5		08/06/01 17:00	SN	778403
VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**		**Units: ug/L**		
Benzene	970		50		10		08/05/01 11:41	JC	778155
Diisopropyl ether	ND		10		1		08/04/01 1:50	JC	778132
Ethylbenzene	290		50		10		08/05/01 11:41	JC	778155
Methyl tert-butyl ether	300		50		10		08/05/01 11:41	JC	778155
t-Butyl alcohol	ND		500		1		08/04/01 1:50	JC	778132
tert-Amyl methyl ether	ND		10		1		08/04/01 1:50	JC	778132
tert-Butyl ethyl ether	ND		10		1		08/04/01 1:50	JC	778132
Toluene	250		50		10		08/05/01 11:41	JC	778155
Xylenes,Total	620		50		10		08/05/01 11:41	JC	778155
Surr: 1,2-Dichloroethane-d4	108	%	62-119		1		08/04/01 1:50	JC	778132
Surr: 1,2-Dichloroethane-d4	106	%	62-119		10		08/05/01 11:41	JC	778155
Surr: 4-Bromofluorobenzene	104	%	78-123		1		08/04/01 1:50	JC	778132
Surr: 4-Bromofluorobenzene	102	%	78-123		10		08/05/01 11:41	JC	778155
Surr: Toluene-d8	110	%	74-122		10		08/05/01 11:41	JC	778155
Surr: Toluene-d8	104	%	74-122		1		08/04/01 1:50	JC	778132

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID: MW-6 **Collected:** 7/31/01 2:55:00 **SPL Sample ID:** 01080008-05

Site: Oakland, CA

Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**		**Units: mg/L**		
Gasoline Range Organics	ND		0.05		1		08/03/01 14:15	DL	777854
Surr: 1,4-Difluorobenzene	107	%	62-144		1		08/03/01 14:15	DL	777854
Surr: 4-Bromofluorobenzene	102	%	44-153		1		08/03/01 14:15	DL	777854
IRON, FERROUS				**MCL**	**M3500-FE D**		**Units: mg/L**		
Iron, Ferrous	3.7		0.20		2		08/01/01 11:30	SN	776509
NITRATE NITROGEN (AS N), TOTAL				**MCL**	**E353.2**		**Units: mg/L**		
Nitrogen,Nitrate (As N)	ND		0.100		1		08/01/01 12:39	CV	778368
SULFATE, TOTAL				**MCL**	**E375.4**		**Units: mg/L**		
Sulfate	103		10.0		10		08/06/01 17:00	SN	778404
VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**		**Units: ug/L**		
Benzene	ND		5		1		08/04/01 2:16	JC	778133
Diisopropyl ether	ND		10		1		08/04/01 2:16	JC	778133
Ethylbenzene	5		5		1		08/04/01 2:16	JC	778133
Methyl tert-butyl ether	180		50		10		08/03/01 9:29	JC	777989
t-Butyl alcohol	ND		500		1		08/04/01 2:16	JC	778133
tert-Amyl methyl ether	ND		10		1		08/04/01 2:16	JC	778133
tert-Butyl ethyl ether	ND		10		1		08/04/01 2:16	JC	778133
Toluene	ND		5		1		08/04/01 2:16	JC	778133
Xylenes,Total	ND		5		1		08/04/01 2:16	JC	778133
Surr: 1,2-Dichloroethane-d4	106	%	62-119		1		08/04/01 2:16	JC	778133
Surr: 1,2-Dichloroethane-d4	104	%	62-119		10		08/03/01 9:29	JC	777989
Surr: 4-Bromofluorobenzene	102	%	78-123		10		08/03/01 9:29	JC	777989
Surr: 4-Bromofluorobenzene	102	%	78-123		1		08/04/01 2:16	JC	778133
Surr: Toluene-d8	102	%	74-122		10		08/03/01 9:29	JC	777989
Surr: Toluene-d8	104	%	74-122		1		08/04/01 2:16	JC	778133

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01080008
Lab Batch ID: R40747

Method Blank

RunID: VARE_010803B-777847 Units: mg/L
Analysis Date: 08/03/2001 3:18 Analyst: DL

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	107.3	62-144
Surr: 4-Bromofluorobenzene	102.7	44-153

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-02A	MW-1
01080008-03A	MW-5
01080008-04A	MW-4
01080008-05A	MW-6

Laboratory Control Sample (LCS)

RunID: VARE_010803B-777846 Units: mg/L
Analysis Date: 08/03/2001 2:54 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.99	99	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01071114-04
RunID: VARE_010803B-777848 Units: mg/L
Analysis Date: 08/03/2001 3:42 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	0.055	0.9	0.91	95.5	0.9	0.87	90.5	5.33	36	36	160

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

8/9/01 8:12:31 AM

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01080008
Lab Batch ID: R40768

Method Blank

RunID: M_010803A-777987 Units: ug/L
Analysis Date: 08/03/2001 8:37 Analyst: JC

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-05B	MW-6

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	5.0
Surr: 1,2-Dichloroethane-d4	106.0	62-119
Surr: 4-Bromofluorobenzene	100.0	78-123
Surr: Toluene-d8	102.0	74-122

Laboratory Control Sample (LCS)

RunID: M_010803A-777986 Units: ug/L
Analysis Date: 08/03/2001 7:45 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50	55	110	61	145
Benzene	50	55	110	76	127
Chlorobenzene	50	50	100	75	130
Toluene	50	53	106	76	125
Trichloroethene	50	49	98	71	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01080008-05
RunID: M_010803A-777990 Units: ug/L
Analysis Date: 08/03/2001 9:55 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethene	ND	500	550	110	500	560	112	2	14	38	172
Benzene	ND	500	560	112	500	550	110	2	11	66	134
Chlorobenzene	ND	500	490	98	500	500	100	2	13	67	115
Toluene	ND	500	530	106	500	540	108	2	13	59	125
Trichloroethene	ND	500	500	100	500	480	96	4	14	61	134

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01080008
Lab Batch ID: R40769

Method Blank

RunID: M_010803B-778125 Units: ug/L
Analysis Date: 08/03/2001 22:47 Analyst: JC

Analyte	Result	Rep Limit
Benzene	ND	5.0
Diisopropyl ether	ND	10
Ethylbenzene	ND	5.0
Methyl tert-butyl ether	ND	5.0
t-Butyl alcohol	ND	500
tert-Amyl methyl ether	ND	10
tert-Butyl ethyl ether	ND	10
Toluene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	108.0	62-119
Surr: 4-Bromofluorobenzene	102.0	78-123
Surr: Toluene-d8	104.0	74-122

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-01A	Trip Blank 7/26/01
01080008-02B	MW-1
01080008-03B	MW-5
01080008-04B	MW-4
01080008-05B	MW-6

Laboratory Control Sample (LCS)

RunID: M_010803B-778124 Units: ug/L
Analysis Date: 08/03/2001 21:29 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50	59	118	61	145
Benzene	50	62	124	76	127
Chlorobenzene	50	52	104	75	130
Toluene	50	58	116	76	125
Trichloroethene	50	59	118	71	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01071021-06
RunID: M_010803B-778127 Units: ug/L
Analysis Date: 08/03/2001 23:39 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethene	ND	2500	2000	80	2500	2100	84	5	14	38	172
Benzene	ND	2500	2900	116	2500	2900	116	0	11	66	134
Chlorobenzene	ND	2500	2500	100	2500	2500	100	0	13	67	115

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01080008
Lab Batch ID: R40769

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01071021-06
RunID: M_010803B-778127 Units: ug/L
Analysis Date: 08/03/2001 23:39 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	2500	2700	108	2500	2700	108	0	13	59	125
Trichloroethene	ND	2500	2500	100	2500	2500	100	0	14	61	134

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Volatile Organics by Method 8260B
Method: SW8260B
WorkOrder: 01080008
Lab Batch ID: R40775

Method Blank

RunID: M_010805A-778150 Units: ug/L
Analysis Date: 08/05/2001 9:29 Analyst: JC

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-04B	MW-4

Analyte	Result	Rep Limit
Benzene	ND	5.0
Ethylbenzene	ND	5.0
Methyl tert-butyl ether	ND	5.0
Toluene	ND	5.0
Xylenes,Total	ND	5.0
Surr: 1,2-Dichloroethane-d4	104.0	62-119
Surr: 4-Bromofluorobenzene	102.0	78-123
Surr: Toluene-d8	106.0	74-122

Laboratory Control Sample (LCS)

RunID: M_010805A-778149 Units: ug/L
Analysis Date: 08/05/2001 8:36 Analyst: JC

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50	51	102	61	145
Benzene	50	55	110	76	127
Chlorobenzene	50	52	104	75	130
Toluene	50	55	110	76	125
Trichloroethene	50	48	96	71	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01071021-21
RunID: M_010805A-778159 Units: ug/L
Analysis Date: 08/05/2001 13:25 Analyst: JC

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethene	ND	2500	2600	104	2500	2700	108	4	14	38	172
Benzene	ND	2500	2900	116	2500	2800	112	4	11	66	134
Chlorobenzene	ND	2500	2500	100	2500	2500	100	0	13	67	115
Toluene	ND	2500	2800	112	2500	2800	112	0	13	59	125
Trichloroethene	ND	2500	2400	96	2500	2300	92	4	14	61	134

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Iron, Ferrous
Method: M3500-Fe D
WorkOrder: 01080008
Lab Batch ID: R40683

Method Blank

RunID: WET_010801T-776502 Units: mg/L
Analysis Date: 08/01/2001 11:30 Analyst: SN

Analyte	Result	Rep Limit
Iron, Ferrous	ND	0.10

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-02D	MW-1
01080008-03D	MW-5
01080008-04D	MW-4
01080008-05D	MW-6

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01080008-02
RunID: WET_010801T-776505 Units: mg/L
Analysis Date: 08/01/2001 11:30 Analyst: SN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Iron, Ferrous	ND	1	1	100	1	0.99	98.9	1.35	20	80	120

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
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Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Nitrate Nitrogen (as N), Total
Method: E353.2
WorkOrder: 01080008
Lab Batch ID: R40783

Method Blank

RunID: WET_010801Z-778360 Units: mg/L
Analysis Date: 08/01/2001 12:39 Analyst: CV

Analyte	Result	Rep Limit
Nitrogen,Nitrate (As N)	ND	0.10

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-02C	MW-1
01080008-03C	MW-5
01080008-04C	MW-4
01080008-05C	MW-6

Laboratory Control Sample (LCS)

RunID: WET_010801Z-778362 Units: mg/L
Analysis Date: 08/01/2001 12:39 Analyst: CV

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Nitrogen,Nitrate (As N)	5	4.89	98	80	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01080008-02
RunID: WET_010801Z-778364 Units: mg/L
Analysis Date: 08/01/2001 12:39 Analyst: CV

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Nitrogen,Nitrate (As N)	2.8	5	7.75	98.2	5	7.81	99.3	1.05	20	80	120

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Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

McCulley, Frick & Gilman, Inc.

Hertz-Oakland 030062(2)

Analysis: Sulfate, Total
Method: E375.4
WorkOrder: 01080008
Lab Batch ID: R40785

Method Blank

RunID: WET_010806C-778396 Units: mg/L
Analysis Date: 08/06/2001 17:00 Analyst: SN

Analyte	Result	Rep Limit
Sulfate	ND	1.0

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01080008-02C	MW-1
01080008-03C	MW-5
01080008-04C	MW-4
01080008-05C	MW-6

Laboratory Control Sample (LCS)

RunID: WET_010806C-778398 Units: mg/L
Analysis Date: 08/06/2001 17:00 Analyst: SN

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Sulfate	15	15.5	103	85	115

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01080008-02
RunID: WET_010806C-778400 Units: mg/L
Analysis Date: 08/06/2001 17:00 Analyst: SN

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Sulfate	56	25	77	84.0	25	77	84.0	0	20	80	119

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	01080008	Received By:	DS
Date and Time Received:	8/1/01 10:00:00 AM	Carrier name:	FedEx
Temperature:	2	Chilled by:	Water Ice

1.	Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present	☐
2.	Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present	☑
3.	Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present	☑
4.	Chain of custody present?	Yes ☑	No ☐		
5.	Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
6.	Chain of custody agrees with sample labels?	Yes ☑	No ☐		
7.	Samples in proper container/bottle?	Yes ☑	No ☐		
8.	Sample containers intact?	Yes ☑	No ☐		
9.	Sufficient sample volume for indicated test?	Yes ☑	No ☐		
10.	All samples received within holding time? All samples received for Ferrous Iron were received expired.	Yes ☐	No ☑		
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
12.	Water - VOA vials have zero headspace?	Yes ☑	No ☐	Not Applicable	☐
13.	Water - pH acceptable upon receipt?	Yes ☑	No ☐	Not Applicable	☐

SPL Representative: West, Sonia
Contact Date & Time: 8/1/01 11:30:00 AM
Client Name Contacted: Steve Smith

Non Conformance Issues:

Client Instructions: Per previous projects the laboratory continued with the analyses.

RECEIVED
AUG 1 5 2001
MFG, Inc.

8/9/01 8:13:07 AM

CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

MFG, INC.

COC No. 41778

☐ Arcata Office
1165 G Street, Suite E
Arcata, CA 95521-5817
Tel: (707) 826-8430
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59807-7158
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71 Stevenson Street
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Fax: (714) 973-3097

☐ Seattle Office
19203 36th Avenue
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐ _____

PROJECT NO: 030062(2) PROJECT NAME: Hertz-Oakland PAGE: 1 OF: 2

SAMPLER (Signature): [signature] PROJECT MANAGER: Chris White DATE: 7/31/01

METHOD OF SHIPMENT: Fed Ex CARRIER/WAYBILL NO: 826403437375 DESTINATION: SPL-Houston

RECEIVED AUG 15 2001 MFG Inc.

SAMPLES													ANALYSIS REQUEST							
	Sample			Preservation					Containers				Constituents/Method				Handling			Remarks
Field Sample Identification	DATE	TIME	Matrix*	HCl	HNO_3	H_2SO_4	COLD	FILTRATION*	VOLUME (ml/oz)	TYPE*	NO.		TPHg 8015m	BTEX + (8260) Fuel Oxy	Nitrate/ Sulfate	Ferrous Iron	HOLD	RUSH	STANDARD	
Trip Blank			AQ				X	U	40	G	2			X					X	
Temp Blank								U		P	1									
MW-1	7/31/01	1145		X				U	40	G	5		X	X						
								U	500	P	1				X					**RUSH**
				X				U	1000	G	1					X				
MW-5		1230		X				U	40	G	5		X	X						
								U	500	P	1				X					
				X			✓	U	1000	G	1					X			✓	
																				Please Record
									TOTAL NUMBER OF CONTAINERS		17		LABORATORY COMMENTS/CONDITION OF SAMPLES							Cooler Temp: 2°

RELINQUISHED BY:					RECIEVED BY:		
SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME	SIGNATURE	PRINTED NAME	COMPANY
[signature]	Jennifer Tancke	MFG	7/31/01	1700	—	—	Fed Ex
[signature]	D'Anna Stelly	SPL	8/1/01	10:00			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 Filtration: F - filtered U - unfiltered

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CHAIN-OF-CUSTODY RECORD AND REQUEST FOR ANALYSIS

MFG, INC.

COC No. 41780

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☐ Seattle Office
19203 36th Avenue
Suite 101
Lynnwood, WA 98036-5707
Tel: (425) 921-4000
Fax: (425) 921-4040

☐

PROJECT NO: 030062(2) PROJECT NAME: Hertz - Oakland PAGE: 2 OF: 2

SAMPLER (Signature): [signature] PROJECT MANAGER: Chris White DATE: 7/31/01

METHOD OF SHIPMENT: FedEx CARRIER/WAYBILL NO: 826403437375 DESTINATION: SPL - Houston

RECEIVED AUG 1 5 2001

MFG, Inc.

SAMPLES

Field Sample Identification	Sample DATE	Sample TIME	Sample Matrix*	Preservation HCl	Preservation HNO_3	Preservation H_2SO_4	Preservation COLD	FILTRATION*	Containers VOLUME (mL/oz)	Containers TYPE*	Containers NO.
MW-4	7/31/01	1300	AQ	X			X	U	40	G	5
								U	500	P	1
				X				U	1000	G	1
MW-6		1455		X				U	40	G	5
								U	500	P	1
				X				U	1000	G	1

TOTAL NUMBER OF CONTAINERS 14

ANALYSIS REQUEST

Constituents/Method	Handling HOLD	Handling RUSH	Handling STANDARD	Remarks
TPH-g 8015m			X	
BTEX + (8260) Fuel Oxy				
Nitrate/Sulfate				
Ferrous Iron				
CH_4 C_2H_6 C_2H_4				

LABORATORY COMMENTS/CONDITION OF SAMPLES Cooler Temp: 2°

RELINQUISHED BY:

SIGNATURE	PRINTED NAME	COMPANY	DATE	TIME
[signature]	Jennifer Tancke	MFG	7/31/01	1700

RECIEVED BY:

SIGNATURE	PRINTED NAME	COMPANY
—	—	FedEx
DAnna Stelly	DAnna Stelly	LABORATORY SPL 8/1/01 10:00

*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 Filtration: F - filtered U - unfiltered

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