Park
Environmental

92 DEC 21 PM 2:03

December 15, 1992

3779

Ms. Jennifer Eberle
Hazardous Materials Division
Department of Environmental Health
80 Swan Way, Room 200
Oakland, CA 94621

RE: QUARTERLY GROUNDWATER MONITORING REPORT
CARNATION COMPANY
1310 14TH STREET
OAKLAND, CALIFORNIA

Dear Ms. Eberle:

Park Environmental Corporation (Park) is pleased to provide this Quarterly Groundwater Monitoring Report on behalf of Nestle USA, Inc. The report documents the work performed as part of the 4th quarter sampling event for the Carnation Company at the above referenced site.

The monitoring wells sampled for chemical analysis were the same wells sampled during the most recent prior quarterly events. The wells and analyses performed were consistent with those events, as documented in the earlier quarterly reports. The reductions in number of wells sampled and the analyses performed are discussed in numerous earlier quarterly reports.

Depths to groundwater and presence of free product were monitored in a total of 64 monitoring wells during this time period. The direction of groundwater flow and the distribution of the free product plume are consistent with prior monitoring.

Park anticipates making our recommendations for future quarterly groundwater and free product monitoring to Nestle early in January 1993. We will be submitting that recommendation for agency approval shortly thereafter.

Copies of the vapor treatability testing performed will be forwarded to you under separate cover. This will include sampling protocols employed and analytical test results.

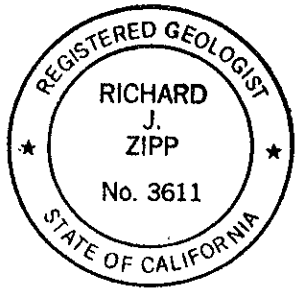
2140 Professional Drive ⁂ Suite 130 ⁂ Roseville, CA 95661 **TEL:916-782-8980** 1-800-753-7401 FAX 916-784-7496

Please contact **Park's** Roseville office at (916) 784-7400 if you have any questions concerning this submittal.

Sincerely,

PARK ENVIRONMENTAL CORPORATION

Richard J. Zipp, R.G., C.E.G.
Principal Hydrogeologist



RJZ:mjm

cc: Mr. Walter Carey
Nestle USA, Inc.
100 Manhattanville Road
Purchase, NY 10577

Mr. Richard Hiett
California RWQCB
2101 Webster Street
Suite 500
Oakland, CA 94612

QUARTERLY GROUNDWATER MONITORING REPORT

CARNATION DAIRY FACILITY
1310 14TH STREET
OAKLAND, CALIFORNIA

PRESENTED TO:

ALAMEDA COUNTY HEALTH AGENCY

ON BEHALF OF:

NESTLE USA, INC.
100 MANHATTANVILLE ROAD
PURCHASE, NEW YORK

PREPARED BY:
PARK ENVIRONMENTAL CORPORATION

DECEMBER 12, 1992

B:1137J1.RPT

TABLE OF CONTENTS

1.0 INTRODUCTION

Nestle USA, Inc., (Nestle) has retained **PARK ENVIRONMENTAL CORPORATION (Park)** to provide environmental services at its Carnation Company facility in Oakland, California. A site location map and plot plan are included as Figures 1 and 2 in Appendix A. Nestle has authorized **Park** to prepare this Quarterly Groundwater Monitoring Report, which includes brief groundwater sampling methodology and findings sections.

The Alameda County Health Agency (ACHA) is the lead environmental agency. This work was requested by Ms. Susan Hugo and Ms. Jennifer Eberle with the ACHA in accordance with the meeting between ACHA, Mr. Richard Hiett of the California Regional Water Quality Control Board, Mr. Walter Carey with Nestle, USA, and Mr. Richard Zipp with **Park**, on September 17, 1992. This site is referenced by the ACHA as 1310 14th Street.

1.1 Scope of Services

- Measure water and free product levels in 64 monitoring wells;
- Calculate groundwater flow direction in the vicinity of the free product plume and in the vicinity of the property boundaries;
- Purge and sample eight monitoring wells not containing free product;
- Analyze eight groundwater samples (MW-3, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-32) for benzene, toluene, ethylbenzene, and xylenes (BTEX) and two samples for chlorinated volatile organic compounds using EPA Methods 8020 and 601, respectively; and
- Prepare this Quarterly Monitoring Report documenting the findings.

We agreed to analyze: "up to 9 mws for VOCs". *ALL mws w/out FP will be analyzed for TPH-g+d, BTEX. as per 5-91 wp.

mw 26
mw 32

2.0 GROUNDWATER MONITORING WELL SAMPLING METHODOLOGY

2.1 Groundwater Measurements

Prior to obtaining depth to groundwater measurements in the sampled wells, the wells were checked for the presence of free product utilizing a new disposable bailer for each well. Depth to groundwater measurements in the sampled wells and unsampled wells were made using a YSI model 3000 T-L-C Meter or MMC Interface Probe. The depths were measured from both the top of the well box fill ring and the top of the well casing. Groundwater elevations were calculated from the top of the well casings. Results of these measurements are included in Table 1 in Appendix B.

2.2 Monitoring Well Purging

Each monitoring well was purged with a submersible pump until at least three well volumes of water had been removed. All of the wells which were purged and sampled were constructed of 4-inch diameter PVC well casing. All purging and sampling equipment was washed in Alconox solution and rinsed in distilled water prior to each usage to reduce the potential for cross contamination between wells.

As groundwater is removed from the wells, pH, temperature and conductivity is monitored and recorded on a field data sheet. These field documents are kept in a permanent project file. Data obtained during the purging of the wells is presented in Table I following:

TABLE I
GROUNDWATER PURGING DATA
OCTOBER 20, 1992

WELL NUMBER	TOTAL GALLONS REMOVED	pH	SPECIFIC CONDUCTANCE x1000	TEMPERATURE IN FAHRENHEIT
MW-3	5	6.75	0.82	72.3
	10	6.65	0.89	71.5
	15	6.6	0.82	71.1
	20	6.9	0.81	71.0
	30	6.6	0.80	70.8
	40	6.6	0.79	70.8
MW-25	5	7.75	0.99	70.2
	8	7.75	0.97	70.1
	15	7.0	1.00	70.0
MW-26	5	7.4	0.71	70.9
	15	7.2	0.82	69.7
	20	7.0	0.85	69.0
	30	6.9	0.91	69.0
	35	6.9	0.91	68.4
MW-27	5	8.4	0.55	69.7
	10	8.35	0.31	69.6
	20	8.0	0.27	69.4
	30	7.8	0.28	69.5
	36	7.6	0.27	69.9
MW-28	5	7.95	0.31	73.6
	10	7.9	0.27	71.9
	20	7.8	0.27	70.9
	30	7.6	0.24	70.3
	38	7.6	0.23	70.3
MW-29	5	7.95	0.28	69.8
	10	7.85	0.27	70.0
	20	7.7	0.25	70.0
	30	7.7	0.24	70.1
	35	7.75	0.23	70.1
MW-30	5	7.0	0.56	70.0
	10	6.8	0.54	68.8
	20	6.9	0.55	68.0
	30	6.7	0.61	68.0

The wells were allowed to stand for a period of time to regain equilibrium prior to sampling. Groundwater purged from the wells was placed in DOT-approved 55 gallon drums. Once the drums are evaluated by chemical analysis, the drum contents will be disposed of using proper methods and protocol.

2.3 Groundwater Analyses

what about TPH-g+d?

Analyses of the groundwater were performed by a California certified laboratory in accordance with State guidelines and EPA protocols. Groundwater samples from eight monitoring wells were analyzed for BTEX using EPA method 8020. The eight wells sampled were MW-3, MW-25, MW-26, MW-27,MW-28, MW-29, MW-30 and MW-32. In addition, groundwater from monitoring wells MW-26 and MW-32 was analyzed for chlorinated volatile hydrocarbons using EPA method 601.

2.4 Groundwater Sampling

Proper sample collection and handling are essential to assure the quality of the data obtained from the given sample. Each groundwater sample therefore was collected using a new sterile disposable bailer. The sampled water was placed in sterile 40 milliliter glass containers. The sample containers were filled with water to the top to expel air space and were sealed with teflon-lined caps. Water sample containers were labeled with the name of the sampler, the date, the job number, the preservative, and an identifying well number to Sierra Laboratories, in Anaheim, California. Full chain of custody protocol was followed during sample handling and delivery.

3.0 FINDINGS

3.1 Groundwater Conditions

3.1.1 Groundwater Flow Direction and Hydraulic Gradient

Groundwater monitoring wells containing free product were not used for the calculations of groundwater flow direction or hydraulic gradient. Groundwater measurements taken by **Park** on October 19, 1992 indicate that groundwater flow beneath the site is to the north. The hydraulic gradient was calculated to be approximately 0.0016 or 0.16 feet per 100 feet below the site. Figure 3 in Appendix A shows graphically the groundwater flow direction.

potentiometric map?

3.1.2 Occurrence of Free Product

Free product was identified in 27 of the 63 wells monitored for this investigation. Product thickness in the wells ranged from a sheen to 2.8 feet in MW-22. Free product thicknesses are presented on Table I in ~~Section 2.1~~ and shown graphically on Figure 4 in Appendix A. Free product was not observed in any of the wells off-site (MW-25 through MW-29).

App. B

not true

3.1.3 Results of Laboratory Analyses

Laboratory test results of groundwater samples collected on October 20, 1992 for this investigation are summarized in Table II, in Appendix B.
Laboratory reports and chain of custody documents are included in Appendix C.

not there

4.0 LIMITATIONS

The site assessment services performed by **Park** were performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions.

The statements and conclusions presented in this report are based on present conditions and past written and/or oral information provided by regulatory agencies or Nestle, USA. **Park** will not be responsible for any use by or interpretation or subsequent damages by ant third party. Conditional changes may occur through time by natural or man-made processes on this or adjacent properties. Additional changes may occur in legislative standards which may or may not be applicable to this report. These changes beyond **Park's** control may render this report invalid partially or wholly.

5.0 SIGNATURES

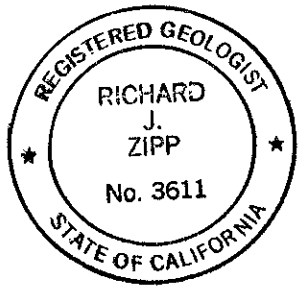
This report was prepared by:

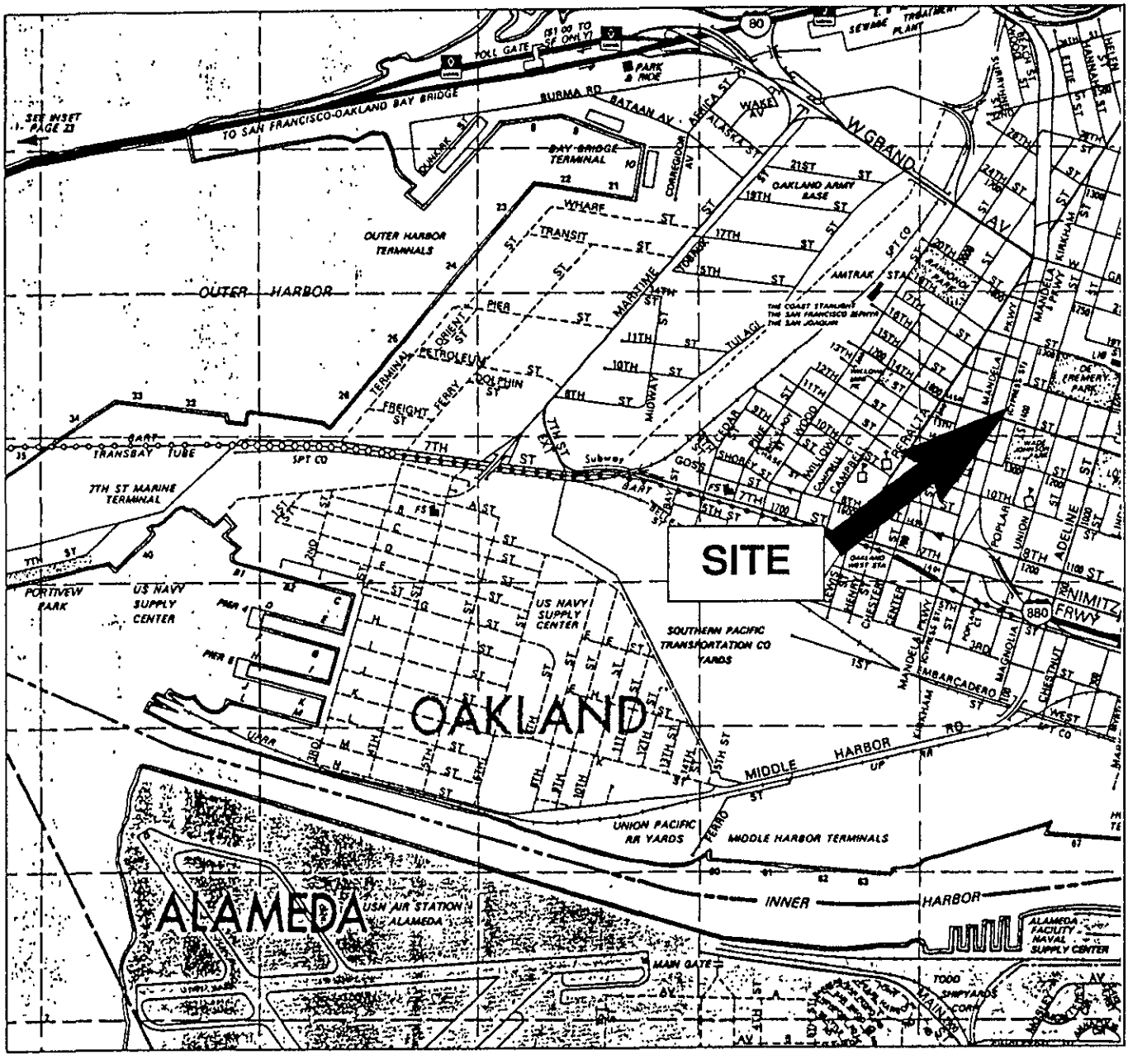
Peter Frank
Project Geologist

This report was reviewed for technical content by:

Richard J. Zipp, R.G., C.E.G.
Principal Hydrogeologist

PF:kj





REFERENCE 1992, ALEMEDA COUNTY, THOMAS GUIDE MAP, PAGE 7

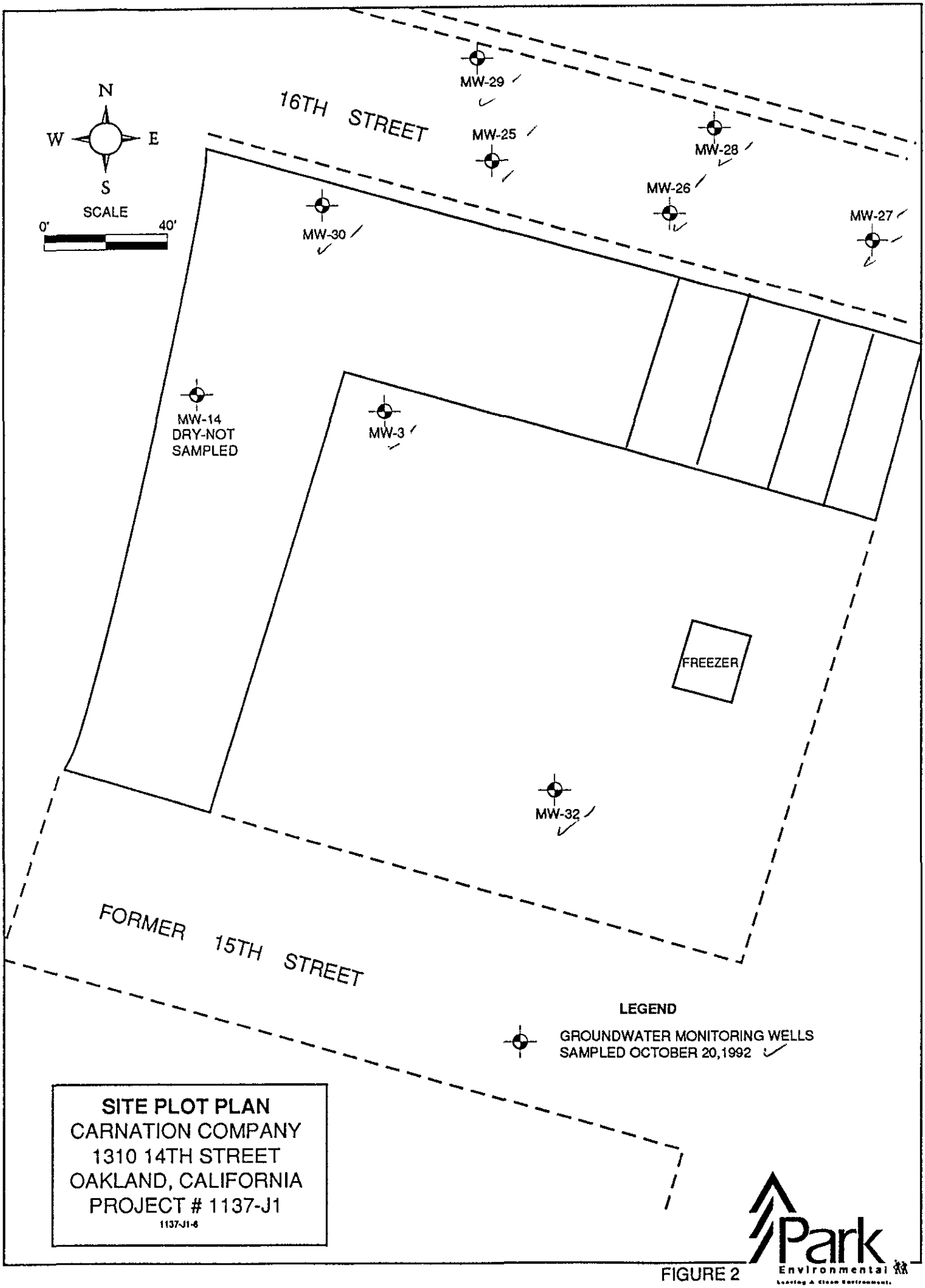
N
W E
S

SCALE: 1 INCH
EQUALS 2,2 00 FEET

SITE LOCATION MAP
CARNATION COMPANY
1310 14TH STREET
OAKLAND, CALIFORNIA
PROJECT # 1137

FIGURE 1

Park Environmental



SITE PLOT PLAN
CARNATION COMPANY
1310 14TH STREET
OAKLAND, CALIFORNIA
PROJECT # 1137-J1
1137-J1-6

FIGURE 2

Park Environmental

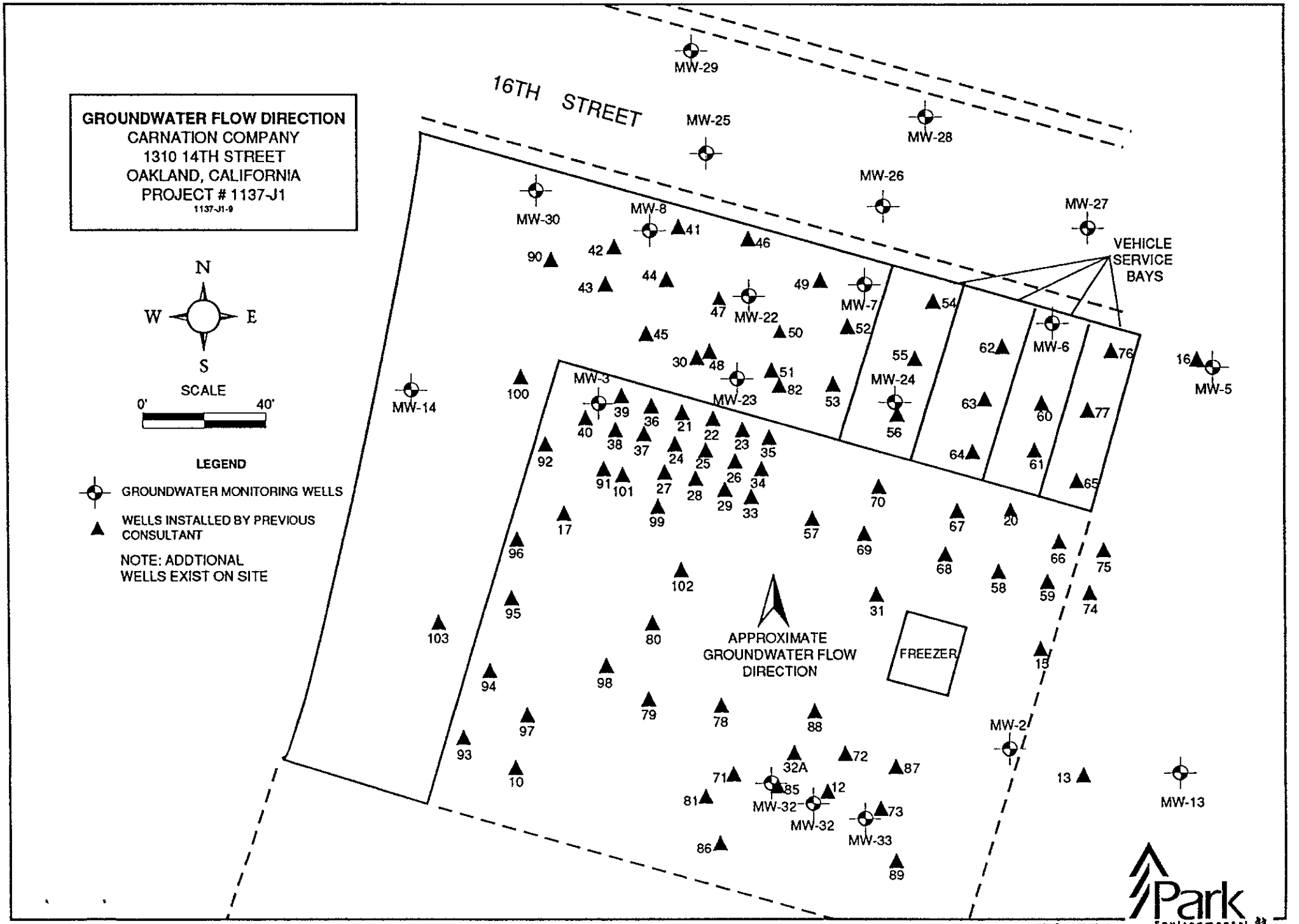


FIGURE 3

Park Environmental
Leaving A Clean Environment

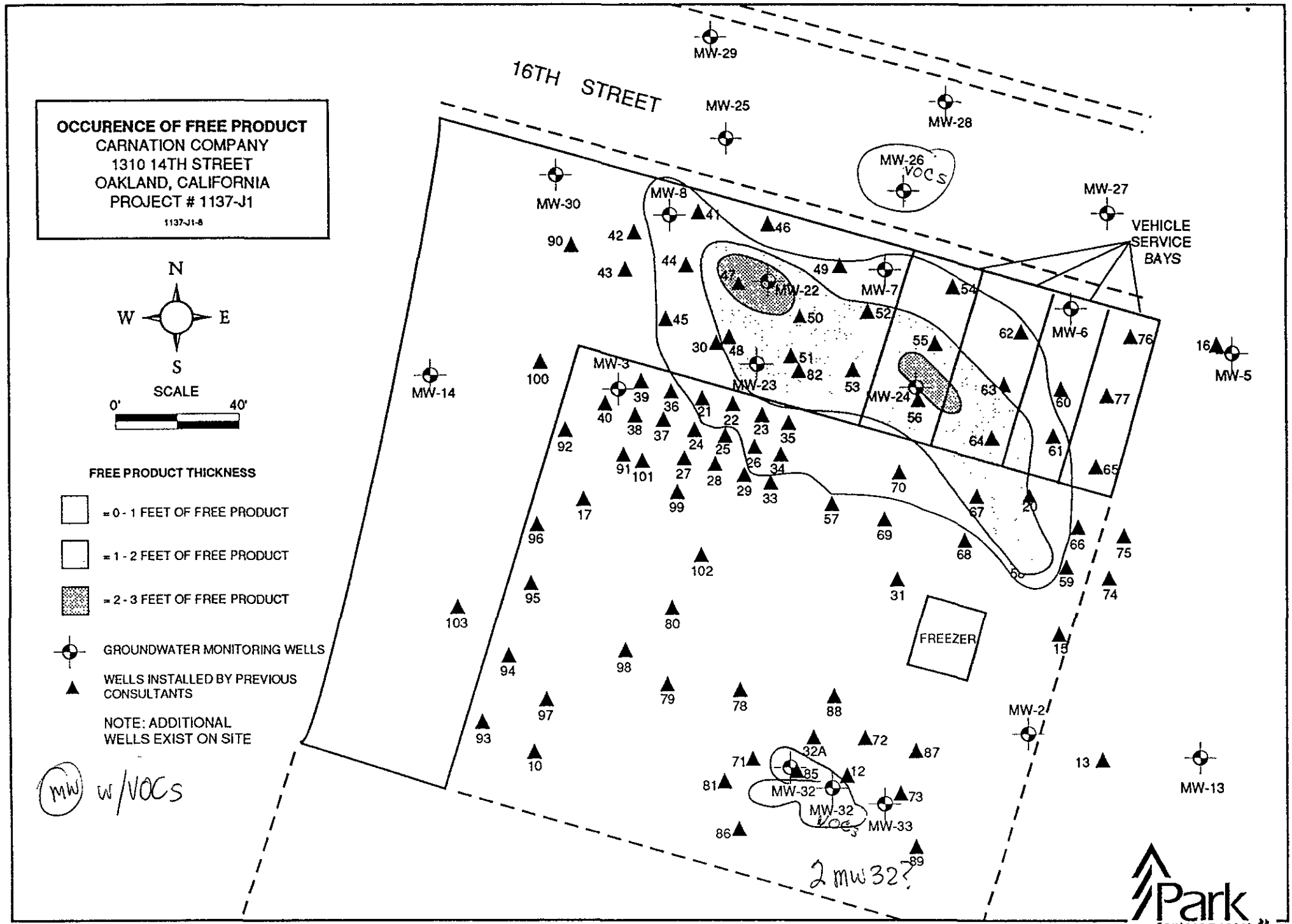


FIGURE 4

Park Environmental
Leaving A Clean Environment

TABLE I

GROUNDWATER MEASUREMENTS
OCTOBER 19, 1992

Well No.	Depth to Product (FT) (TOC)	Depth to Water (FT) (TOC)	Casing Elevation (FT)	Product Thickness (FT)	Well Diameter (IN)	GWE (FT)
MW-1	-	12.60	16.49	-	4	3.89
MW-3*	-	10.23	14.30	-	4	4.07
MW-4	-	No Water	14.42	-	4	-
MW-5	-	10.39	14.41	-	4	4.02
MW-6	-	10.13	14.12	-	2	3.99
MW-7	10.17	10.84	14.29	0.67	4	-
MW-8	10.17	10.63	14.20	0.46	-	-
MW-10	-	11.25	15.73	-	4	4.48
MW-13	-	10.62	14.85	-	4	4.23
MW-14	-	No Water	14.10	-	-	-
MW-22	9.97	12.77	14.44	2.80	2	-
MW-24	10.20	12.24	14.67	2.04	2	-
MW-25*	-	8.93	12.86	-	4	3.93
MW-26*	-	8.77	12.71	-	4	3.94
MW-27*	-	10.06	14.04	-	4	3.98
MW-28*	-	9.53	13.45	-	4	3.92
MW-29*	-	8.75	12.60	-	4	3.85
MW-30*	-	10.61	14.54	-	4	3.93
MW-32*	-	10.53	14.76	-	4	4.23
PR-10	-	10.06	-	-	2	-
PR-20	9.79	10.65	14.36	0.86	2	-
PR-21	10.10	11.04	14.37	0.94	2	-
PR-22	10.05	10.75	14.43	0.70	2	-

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TABLE I (continued)
GROUNDWATER PURGING DATA
OCTOBER 20, 1992

Well No.	Depth to Product (FT) (TOC)	Depth to Water (FT) (TOC)	Casing Elevation (FT)	Product Thickness (FT)	Well Diameter (IN)	GWE (FT)
PR-23	9.85	10.56	14.47	0.71	2	-
PR-26	10.01	10.81	14.38	0.80	2	-
PR-27	-	10.16	-	-	2	-
PR-28	-	10.02	-	-	2	-
PR-33	-	10.01	14.36	-	2	4.35
PR-34	10.10	10.80	14.49	0.70	2	-
PR-35	10.11	10.71	14.55	0.60	2	-
PR-38	-	10.50	14.47	-	2	3.97
PR-41	10.51	11.19	-	0.68	2	-
PR-43	-	10.70	-	-	-	-
PR-44	10.50	11.12	-	0.62	2	-
PR-45	10.41	10.70	-	0.29	2	-
PR-46	-	10.61	-	-	2	-
PR-47	10.07	12.52	-	2.45	2	-
PR-48	10.30	11.50	-	1.20	2	-
PR-49	-	10.56	-	-	2	-
PR-50	10.03	11.68	-	1.60	2	-
PR-52	10.23	11.52	-	1.29	2	-
PR-53	10.02	11.31	-	1.29	2	-
PR-54	10.04	10.83	-	0.79	2	-
PR-55	9.97	11.83	-	1.86	2	-
PR-56	10.12	11.29	-	1.17	2	-
PR-57	-	9.81	-	-	2	-
PR-58	9.92	11.02	-	1.10	2	-
PR-59	-	9.96	-	-	2	-

TABLE I (continued)
GROUNDWATER PURGING DATA
OCTOBER 20, 1992

Well No.	Depth to Product (FT) (TOC)	Depth to Water (FT) (TOC)	Casing Elevation (FT)	Product Thickness (FT)	Well Diameter (IN)	GWE (FT)
PR-60	-	10.64	-	-	2	-
PR-61	10.44	10.78	-	0.34	2	-
PR-62	10.37	10.89	-	0.52	2	-
PR-64	10.14	11.65	-	1.51	2	-
PR-65	-	10.55	-	SHEEN	2	-
PR-66	-	10.05	-	-	2	-
PR-68	-	10.22	-	-	2	-
PR-69	-	9.93	-	-	2	-
PR-70	10.08	10.37	-	0.29	2	-
PR-74	-	10.30	-	-	2	-
PR-75	-	10.36	-	-	2	-
PR-76	-	10.58	-	-	2	-
PR-77	-	10.11	-	-	2	-
V-89	-	9.70	-	-	4	-
V-90	-	9.70	-	-	4	-

TOC - Top of Casing
GWE - Groundwater Elevation
* - Groundwater Samples Obtained for this Investigation

KEY TO TABLE II

ug/l	-	Micrograms per Liter
ND	-	Not Detected at Detection Limit Stated
N/A	-	Not Analyzed
TPH	-	Total Petroleum Hydrocarbons
BTEX	-	Benzene, Toluene, Ethylbenzene, Total Xylenes
AGE	-	ANANIA GEOLOGIC ENGINEERING
HLA	-	HARDING LAWSON ASSOCIATES
PARK	-	PARK ENVIRONMENTAL CORPORATION

Note: Analytical test results provided in tables were obtained directly form sampler final reports.

SIERRA LABORATORIES

Date: October 28,1992

Park Environmental Corporation
2140 Professional Drive, Suite 130
Roseville, California 95661
Attention: Mr. Peter Frank

Client Project Number:	1137-J1
Client Project Name:	N/A
Date Sampled:	October-20-92
Date Samples Received:	October-20-92
Sierra Project Number:	SP-338-92

Enclosed with this letter is the report on the chemo-physical analysis of samples from the project references shown above.

The samples were received by Sierra in a chilled state, intact, and with the chain of custody record attached.

Note that N.D. means not detected at the appropriate reporting limit. The reporting limit is adjusted to reflect the dilution factor of the sample. The reporting limit is expressed in such cases in parentheses to the right of reported value. The detection limit for values without such a designation appears to the right of or at the bottom of the same page.

Reviewed

Approved

1525 ENDEAVOR PLACE
SUITE D
ANAHEIM, CA 92801

TEL: 714.758.9988
FAX: 714.758.9692

Park Environmental Corporation	Sierra Client No.	10000-92	Date Sampled:	.10/20/92
2140 Professional Drive, Suite 130	Sierra Project No.	SP-338-92	Date Received:	.10/20/92
Roseville, California 95661	Client Project No.	1137-J1	Date Prepared:	.10/27/92
	Client Project:	N/A	Date Analyzed:	.10/27/92

Sample Preparation: EPA Method 5030
Sample Analysis: EPA 8010 (Halogenated Volatiles) Report Date: .10/28/92

Sample Type: Liquid
Sample I.D. MW-32

Compound	Sample Result (µg/L)	Method Detection Limit (µg/L)
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	1
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene (1,1-DCE)	ND	1
Methylene chloride	ND	1
trans-1,2-Dichloroethene (t-1,2-DCE)	ND	1
1,1-Dichloroethane (1,1-DCA)	ND	1
cis-1,2-Dichloroethene (c-1,2-DCE)	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane (1,1,1-TCA)	ND	1
Carbon tetrachloride	ND	1
1,2-Dichloroethane (1,2-DCA)	2.5	1
Trichloroethene (TCE)	ND	1
1,2-Dichloropropane (1,2-DCP)	ND	1
Bromodichloromethane	ND	1
2-Chloroethylvinyl ether	ND	1
cis-1,3-Dichloropropene	ND	1
trans-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane (1,1,2-TCA)	ND	1
Tetrachloroethene (PCE)	ND	1
Dibromochloromethane	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

Park Environmental Corporation	Sierra Client No.	10000-92	Date Sampled:	10/20/92
2140 Professional Drive, Suite 130	Sierra Project No.	SP-338-92	Date Received:	10/20/92
Roseville, California 95661	Client Project No.	1137-J1	Date Prepared:	10/27/92
	Client Project:	N/A	Date Analyzed:	10/27/92

Sample Preparation: EPA Method 5030
Sample Analysis: EPA 8010 (Halogenated Volatiles) Report Date: 10/28/92

Sample Type: Liquid
Sample I.D. MW-26

Compound	Sample Result (µg/L)	Method Detection Limit (µg/L)
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	1
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene (1,1-DCE)	ND	1
Methylene chloride	ND	1
trans-1,2-Dichloroethene (t-1,2-DCE)	ND	1
1,1-Dichloroethane (1,1-DCA)	ND	1
cis-1,2-Dichloroethene (c-1,2-DCE)	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane (1,1,1-TCA)	ND	1
Carbon tetrachloride	ND	1
1,2-Dichloroethane (1,2-DCA)	73	1
Trichloroethene (TCE)	1.9	1
1,2-Dichloropropane (1,2-DCP)	ND	1
Bromodichloromethane	ND	1
2-Chloroethylvinyl ether	ND	1
cis-1,3-Dichloropropene	ND	1
trans-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane (1,1,2-TCA)	ND	1
Tetrachloroethene (PCE)	ND	1
Dibromochloromethane	ND	1
Chlorobenzene	ND	1
Bromoform	ND	1
1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)	ND	1
1,3-Dichlorobenzene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1

Park Environmental Corporation	Sierra Client No.	10000-92	Date Sampled:	.10/20/92
2140 Professional Drive, Suite 130	Sierra Project No.	SP-338-92	Date Received:	.10/20/92
Roseville, California 95661	Client Project No.	1137-J1	Date Prepared:	.10/25/92
	Client Project:	N/A	Date Analyzed:	.10/25/92
Sample Preparation:	EPA Method 5030			
Sample Analysis:	EPA Method 8020 (BTEX)		Report Date:	.10/28/92

Sample Type: Liquid

Client Sample I.D.	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes, Total µg/L
MW-32	5.1	ND	ND	ND
MW-3	ND	ND	ND	ND
MW-30	ND	ND	ND	ND
MW-27	ND	1.5	ND	ND
MW-26	3700	1600	280	900
MW-28	ND	ND	ND	ND
MW-25	28	100	19	110
MW-29	ND	3.5	ND	2.9
Equip Blank	ND	ND	ND	ND

	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	Xylenes, Total µg/L
Detection Limit:	1	1	1	1

Park Environmental Corporation	Sierra Client No.	10000-92	Date Sampled:	10/20/92
2140 Professional Drive, Suite 130	Sierra Project No.	SP-338-92	Date Received:	10/20/92
Roseville, California 95661	Client Project No.	1137-J1	Date Prepared:	10/27/92
	Client Project:	N/A	Date Analyzed:	10/27/92

Sample Preparation: EPA Method 5030
Sample Analysis: EPA 8010 (Halogenated Volatiles) Report Date: 10/28/92

Matrix/Spike Duplicate Report

Sample Type: Liquid

	1,1-DCE (Range)	1,1,1-TCA (Range)	TCE (Range)	Chlorobenzene (Range)
Matrix Spike Recovery (%)	74 (28-167)	118 (41-138)	95 (35-146)	108 (38-150)
Matrix Spike Duplicate Recovery (%)	68 (28-167)	119 (41-138)	98 (35-146)	102 (38-150)
Relative Per-cent Difference	8 (0-30)	1 (0-30)	3 (0-30)	6 (0-30)

Quality Control Reference Number: G002-102792(L)G2B0007-068-065

Park Environmental Corporation	Sierra Client No. 10000-92	Date Sampled:	.10/20/92
2140 Professional Drive, Suite 130	Sierra Project No. SP-338-92	Date Received:	.10/20/92
Roseville, California 95661	Client Project No. 1137-J1	Date Prepared:	.10/25/92
	Client Project: N/A	Date Analyzed:	.10/25/92
Sample Preparation: EPA Method 5030			
Sample Analysis: EPA 8020 (BTEX)		Report Date:	.10/28/92

Matrix/Spike Duplicate Report

Sample Type: Liquid

	Benzene (Range)	Toluene (Range)	Ethylbenzene (Range)	Xylenes, Total (Range)
Matrix Spike Recovery (%)	90 (39-150)	93 (46-148)	94 (32-160)	96 (37-154)
Matrix Spike Duplicate Recovery (%)	89 (39-150)	95 (46-148)	94 (32-160)	96 (37-154)
Relative Per-cent Difference	1 (0-30)	2 (0-30)	0 (0-30)	0 (0-30)

Quality Control Reference Number: G002-102592(L)g2a0012-171-172

Park Environmental Corporation
2140 Professional Drive, Suite 130
Roseville, California 95661

Sierra Client No.	10000-92	Date Sampled:	.10/20/92
Sierra Project No.	SP-338-92	Date Received:	.10/20/92
Client Project No.	1137-J1	Date Prepared:	.10/25-10/27/92
Client Project:	N/A	Date Analyzed:	.10/25-10/27/92
		Report Date:	.10/28/92

Surrogate Summary Report

Client Sample I.D.	Analysis Type	Per-cent Recovery S1	(Range)
MW-32	EPA 8010 (Halogenated Volatiles)	112	(30-160)
MW-26	EPA 8010 (Halogenated Volatiles)	110	(30-160)
MW-32	EPA 8020 (BTEX)	65	(50-130)
MW-3	EPA 8020 (BTEX)	64	(50-130)
MW-30	EPA 8020 (BTEX)	97	(50-130)
MW-27	EPA 8020 (BTEX)	99	(50-130)
MW-26	EPA 8020 (BTEX)	68	(50-130)
MW-28	EPA 8020 (BTEX)	95	(50-130)
MW-25	EPA 8020 (BTEX)	68	(50-130)
MW-29	EPA 8020 (BTEX)	98	(50-130)
Equip Blank	EPA 8020 (BTEX)	97	(50-130)

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Roseville, California 95661

Sierra Client No.	10000-92	Date Sampled:	.10/20/92
Sierra Project No.	SP-338-92	Date Received:	.10/20/92
Client Project No.	1137-J1	Date Prepared:	.10/25-10/27/92
Client Project:	N/A	Date Analyzed:	.10/25-10/27/92
		Report Date:	.10/28/92

Laboratory Control Sample Report

Compound	Analysis Type	Per-cent Recovery %	Range
1,1-Dichloroethene	EPA 8010 (Halogenated Volatiles)	66	(28-167)
1,1,1-Trichloroethane	EPA 8010 (Halogenated Volatiles)	115	(41-138)
Chlorobenzene	EPA 8010 (Halogenated Volatiles)	106	(38-150)
Trichloroethene (TCE)	EPA 8010 (Halogenated Volatiles)	94	(35-146)
	Quality Control Reference Number:	G002-102792(L)G2B0007-066	

Compound	Analysis Type	Per-cent Recovery %	Range
Benzene	EPA 8020 (BTEX)	101	(28-167)
Toluene	EPA 8020 (BTEX)	97	(41-138)
Ethylbenzene	EPA 8020 (BTEX)	102	(38-150)
Xylenes (Total)	EPA 8020 (BTEX)	99	(35-146)
	Quality Control Reference Number:	G002-102592(L)G2A0012-170	

SP-338-92

SIERRA LABORATORIES
Sierra Laboratories, Inc.
1525 Endeavor Place
Suite D
Anaheim, CA 92801

714 - 758-9988
FAX: 714 - 758-9692

CHAIN OF CUSTODY RECORD

Date: 10-20-92 Page 1 of 1

Client: PARK ENV. CORP
Address: 2140 Professional Dr Suite 130 Roseville CA 95661
Client Tel. No.: 916 782 8980
Client Proj. Mgr.: P. Frank

Client Proj. Name:
Client Proj. No.: 1137J1

For Client Use:
Turn around requested:
___ Immediate Attention
___ Rush 24-48 hours
___ Rush 72-96 hours
___ Mobile Lab
X Normal

Analyses Requested

Client Sample No.	Date	Time	Sample Matrix: Liquid	Sample Matrix: Solid	Preservatives: Yes	Preservatives: No	Container: Type	No. of Containers	EPA 9010		EPA 8020					Remarks
MW-32	10-20		X		X		GLASS	4	X		X					
MW-3	↓		↓		↓		↓	2			X					
MW-30								2			X					
MW-27								2			X					
MW-26								4	X		X					
MW-28								2			X					
MW-25								2			X					
MW-29								2			X					
Equip Blank								2			X					

Sampler's Signature: Peter Frank			Received by:	Date	Time
Relinquished by: Peter Frank	Date: 10-20	Time: 115	Received by: Rebecca Arnold	Date: 10-20	Time: 1:30
Relinquished by:	Date	Time	Received at Laboratory by:	Date	Time

22 Total No. of Containers

The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analysis specified above under Sierra's Terms and Conditions, unless otherwise agreed upon in writing between Sierra and Client.

Total No. of Containers Recd.: 22

Special Instructions:

FOR LABORATORY USE ONLY — Condition samples received:
✓ Chilled
✓ Intact
N/A Appropriate Preservatives
✓ Appropriate Sample Container
✓ Properly Labeled
___ Other