Report of Quarterly Sampling and Analysis
Nestle USA, Inc.
Former Carnation Dairy Facility
1310 14th Street
Oakland, California

Prepared for

Nestle USA, Inc.

Prepared by

EA Engineering, Science, and Technology

February 1996

60966.01

NESTLÉ USA, INC.

800 NORTH BRAND BLVD
GLENDALE, CA 91203
ENVIRONMENTAL STRATEGY/PLANNING

February 23, 1996

Department of Environmental Health
UST Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Attn.: Jennifer Eberle

Ref.: Fourth Quarter 1995, Groundwater Monitoring Report
Nestlé Food Company (Former Carnation Dairy Facility)
1310 14th Street, Oakland, CA 94607

Dear Ms. Eberle:

Enclosed is the Fourth Quarter 1995, Groundwater Monitoring Report for the above referenced facility. Per our plans that we discussed during our meeting, NAPL recovery tests on 18 wells have been completed. We will forward you a report with an action plan as soon as we complete the review of the data gathered during the test.

Should you have any questions, please contact me at (818) 549-5948.

With Regards,

Binayak P. Acharya
Senior Environmental Engineer

cc: Celeste Miller - 15 W/O
Mark Litzau - EA Engineering W/O

Oakland/gw4.1995

60966.01

Report of Quarterly Sampling and Analysis
Nestle USA, Inc.
Former Carnation Dairy Facility
1310 14th Street
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Prepared for

Nestle USA, Inc.
800 North Brand Boulevard
Glendale, California 91203

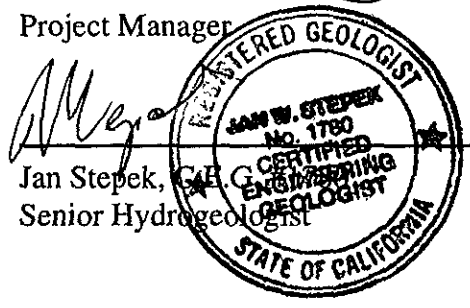
Prepared by

EA Engineering, Science, and Technology
3468 Mt. Diablo Boulevard, Suite B-100
Lafayette, California 94549
(510) 283-7077

2-21-96

Mark C. Litzau
Project Manager

Date



21 Feb. 1996

Jan Stepek, C.E.G.
Senior Hydrogeologist

Date

February 1996

SITE CONTACTS

Site Address:	1310 14th Street Oakland, California
Nestle USA, Inc. Contact:	Binayak Acharya Nestle USA, Inc. 800 North Brand Boulevard Glendale, California 91203 (818) 549-5948
Consultant to Nestle USA, Inc.:	EA Engineering, Science, and Technology 3468 Mt. Diablo Boulevard, Suite B-100 Lafayette, California 94549 (510) 283-7077
EA Project Manager:	Mark C. Litzau
Regulatory Oversight:	Jennifer Eberle Alameda County Health Agency Division of Environmental Protection 1131 Harbor Bay Parkway, 2nd Floor Alameda, California 94502 (510) 567-6700

1. INTRODUCTION

Nestle USA, Inc. (Nestle) has retained EA Engineering, Science, and Technology (EA) to provide environmental services for the former Carnation facility at 1310 14th Street, Oakland, California. A site location map is shown in Figure 1. EA has prepared this report of quarterly groundwater sampling and analysis for the fourth quarter of 1995. This report contains a summary of groundwater monitoring and sampling procedures, and analytical results.

On 6 December 1995, groundwater in all vapor extraction, groundwater extraction, and groundwater monitoring wells was gauged and monitored for non-aqueous phase liquid (NAPL) with an optical oil/water interface probe. A NAPL recharge test was conducted on all wells where NAPL was detected.

On 12 December 1995, 10 groundwater monitoring wells (MW-2, MW-3, MW-6, MW-25 through MW-30, and MW-32) were gauged and monitored for NAPL with an optical oil/water interface probe, and groundwater samples were collected from the wells. All samples were analyzed for petroleum hydrocarbons, and the samples from two wells (MW-26, MW-32) were also analyzed for halogenated volatile organics (HVOCs).

2. PROCEDURES

2.1 Gauging of NAPL/NAPL Recharge Test

The wells were gauged with an interface probe capable of distinguishing between NAPL and groundwater to determine the thickness of NAPL. After gauging, a NAPL recharge test was performed by the following method. A semi-rigid tube was inserted into the well at the estimated NAPL level. The NAPL was purged with a peristaltic pump, and the volume was registered. After the initial NAPL removal, the well was gauged periodically to determine if NAPL recharged the well. NAPL was temporarily stored in 55-gallon drums with secondary containment to await proper disposal.

2.2 Purging and Sampling

Prior to sampling, at least three well casing volumes of water were removed from each well using a vacuum truck and dedicated 2-inch PVC pipe. Field parameters of temperature, pH, and electrical conductance of the purged water were recorded approximately every well casing volume as each well was purged. When the field parameters were stable (less than 10 percent change from the previous reading for temperature and electrical conductance), purging was stopped. Groundwater samples were collected from each well with factory-cleaned disposable polyethylene bailers. The samples were poured into 40-ml glass VOA vials and 1-liter glass amber jars and placed in an ice-filled cooler. A laboratory-prepared trip blank and a

field-prepared sampling equipment rinse blank were stored and transported in the cooler with the samples. All samples were handled and transported under chain of custody.

The samples were submitted to Nestle Quality Assurance Laboratory (NQAL), where they were analyzed for gasoline-range organics (GRO) and diesel-range organics (DRO) by the California DOHS method found in the LUFT Field Manual, October 1989. Samples were also analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 602. Groundwater samples collected from MW-26 and MW-32 were also analyzed for HVOCs by EPA Method 8010.

3. RESULTS

3.1 NAPL Monitoring

On 6 December, a total of 128 wells (Figure 2) were gauged to monitor for the presence of NAPL. A total of 18 groundwater monitoring, vapor extraction, and/or groundwater extraction wells contained NAPL. NAPL was removed when the thickness was greater than 0.05 feet in these wells. NAPL was subsequently removed from 14 wells. The wells were allowed to recharge over a 5-day period. NAPL recovered to its original thickness in 6 of the 14 wells, with E-5 having the greatest thickness of NAPL (1.5 feet). NAPL measurements are included in Tables 1 and 2.

3.1 Depth-to-Groundwater Measurements

On 12 December 1995, the depth to groundwater was measured in selected monitoring wells. The depth to groundwater ranged from 7.99 feet (MW-26) to 10.23 feet (MW-2) below ground surface (bgs). Groundwater elevations have generally decreased approximately 0.70 feet since groundwater measurements were taken on 22 September 1995 (Table 1). A groundwater elevation contour map for 12 December 1995 is shown in Figure 3. Field documentation is provided in Appendix A.

3.2 Analyses

Laboratory test results for GRO, DRO, BTEX, and HVOC analyses of groundwater samples collected on 12 December 1995, as well as the results of previous quarterly sampling events since March 1993, are summarized in Table 3. The laboratory analytical report for 12 December is included in Appendix B.

The concentration of benzene in groundwater samples is shown in Figure 4. Benzene was detected in groundwater samples collected from MW-3 (330 ug/L), MW-26 (13,000 ug/L), and MW-32 (230 ug/L). The concentrations of benzene in MW-3 and MW-32 have decreased since the September 1995 sampling event. Benzene has increased in MW-26 since September 1995.

The concentration of GRO in groundwater samples is shown in Figure 5. GRO concentrations were detected in MW-3 (700 ug/L), MW-26 (25,000 ug/L), and MW-32 (500 ug/L). The concentrations of GRO in MW-3 and MW-32 have decreased since the September 1995 sampling event. GRO has increased in MW-26 since September 1995.

HVOCs were detected in MW-32 and MW-26. 1,2-Dichloroethane was detected in MW-32, at a concentration of 28 ug/L. 1,2-Dichloroethane and 1,1-Dichloroethane were detected in MW-26, at concentrations of 180 ug/L and 1.4 ug/L, respectively.

Figures

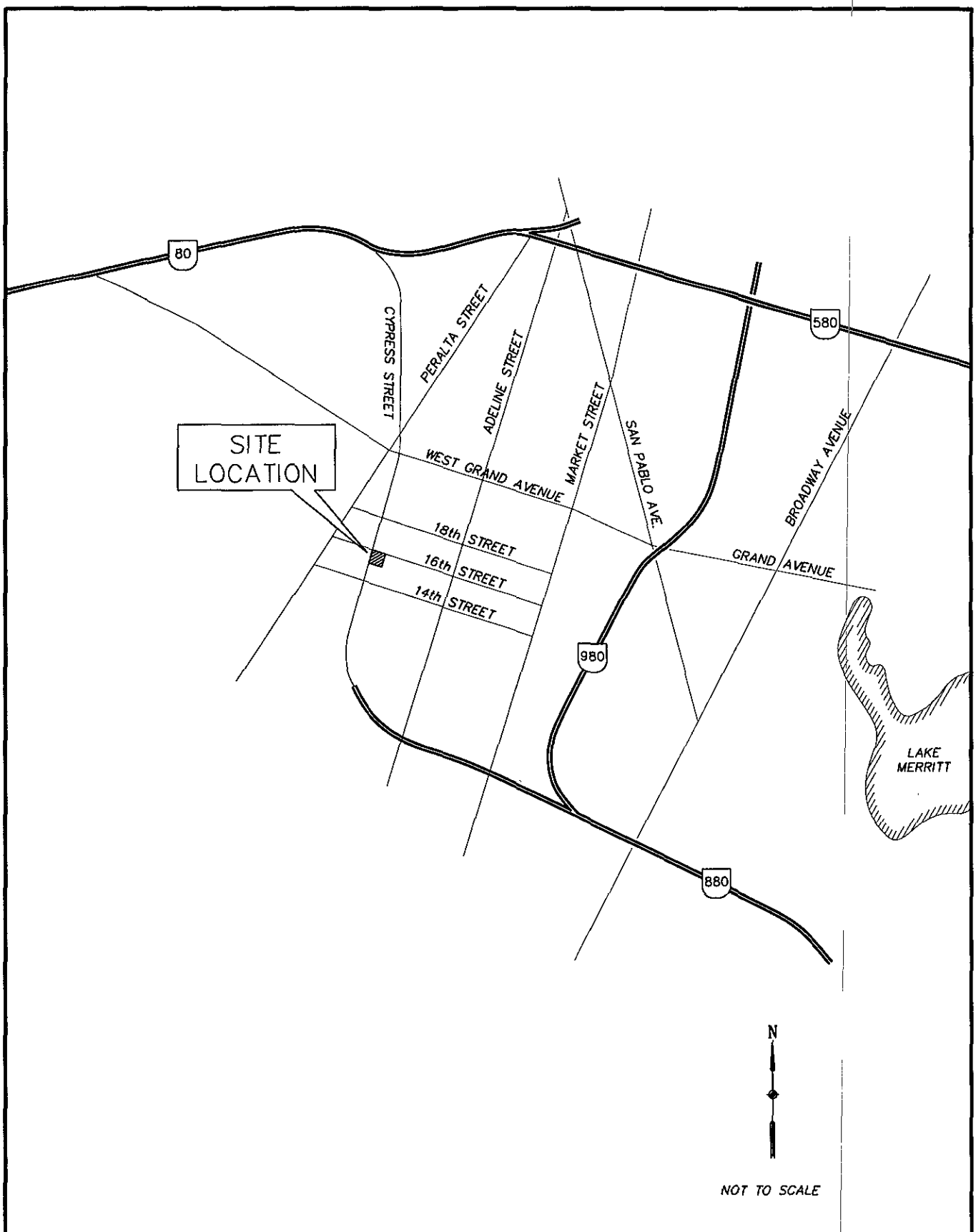


FIGURE 1.
SITE LOCATION MAP
NESTLE FACILITY
OAKLAND, CALIFORNIA

EA® EA ENGINEERING, SCIENCE, AND TECHNOLOGY

PROJECT NO:	60966.01.0008	DATE	2/8/96
FILE NAME:	NESTLE3.DWG	REVIEWED BY:	A. MOORE

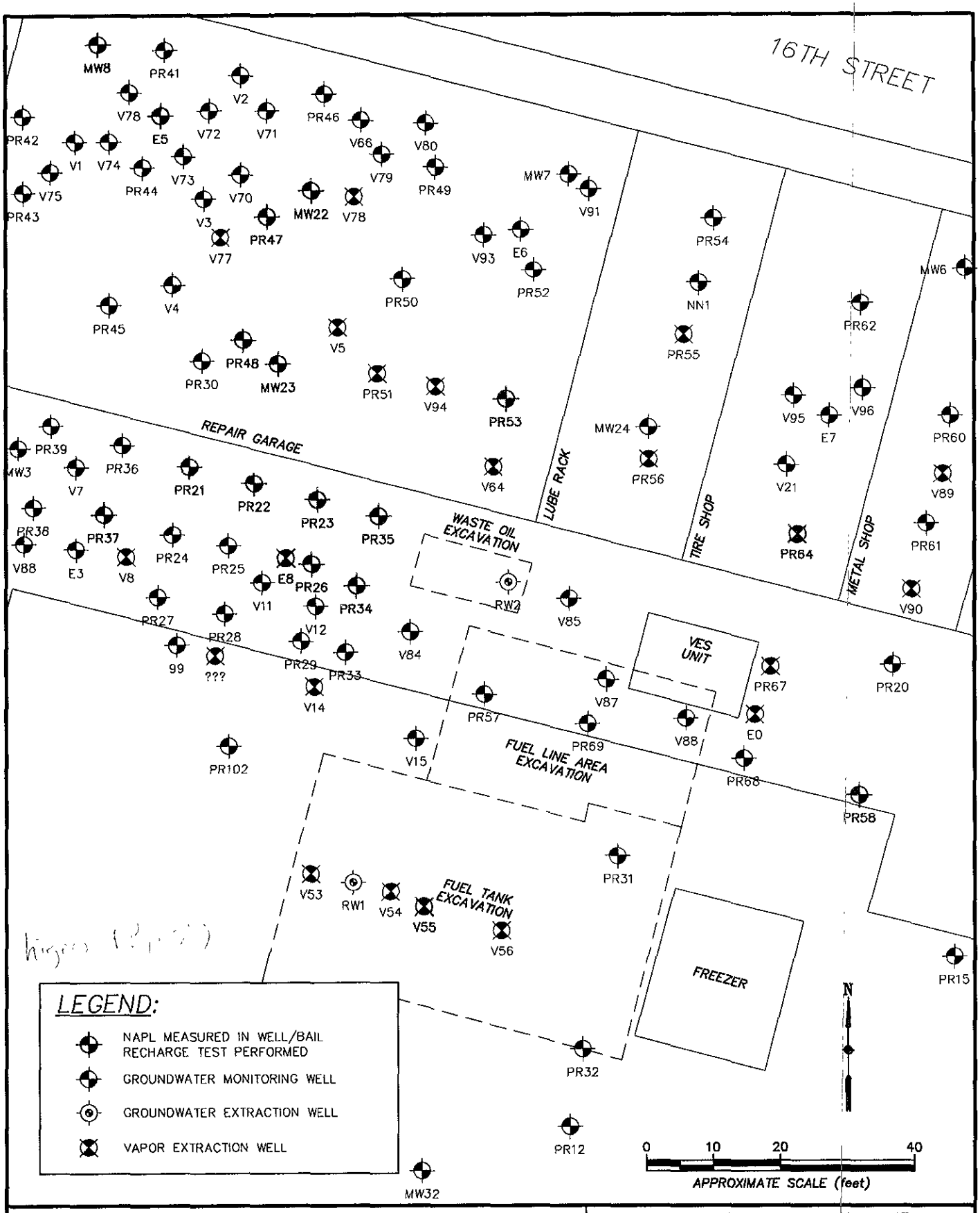


FIGURE 2.
SITE PLAN SHOWING WELLS CONTAINING FREE PRODUCT, 12/6/95 – 12/28/95
NESTLE FACILITY, OAKLAND, CALIFORNIA

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

PROJECT NO.: 12796.20.6000	DATE: 2/6/96
FILE NAME: NESTLE2.DWG	REVIEWED BY: A. MOORE

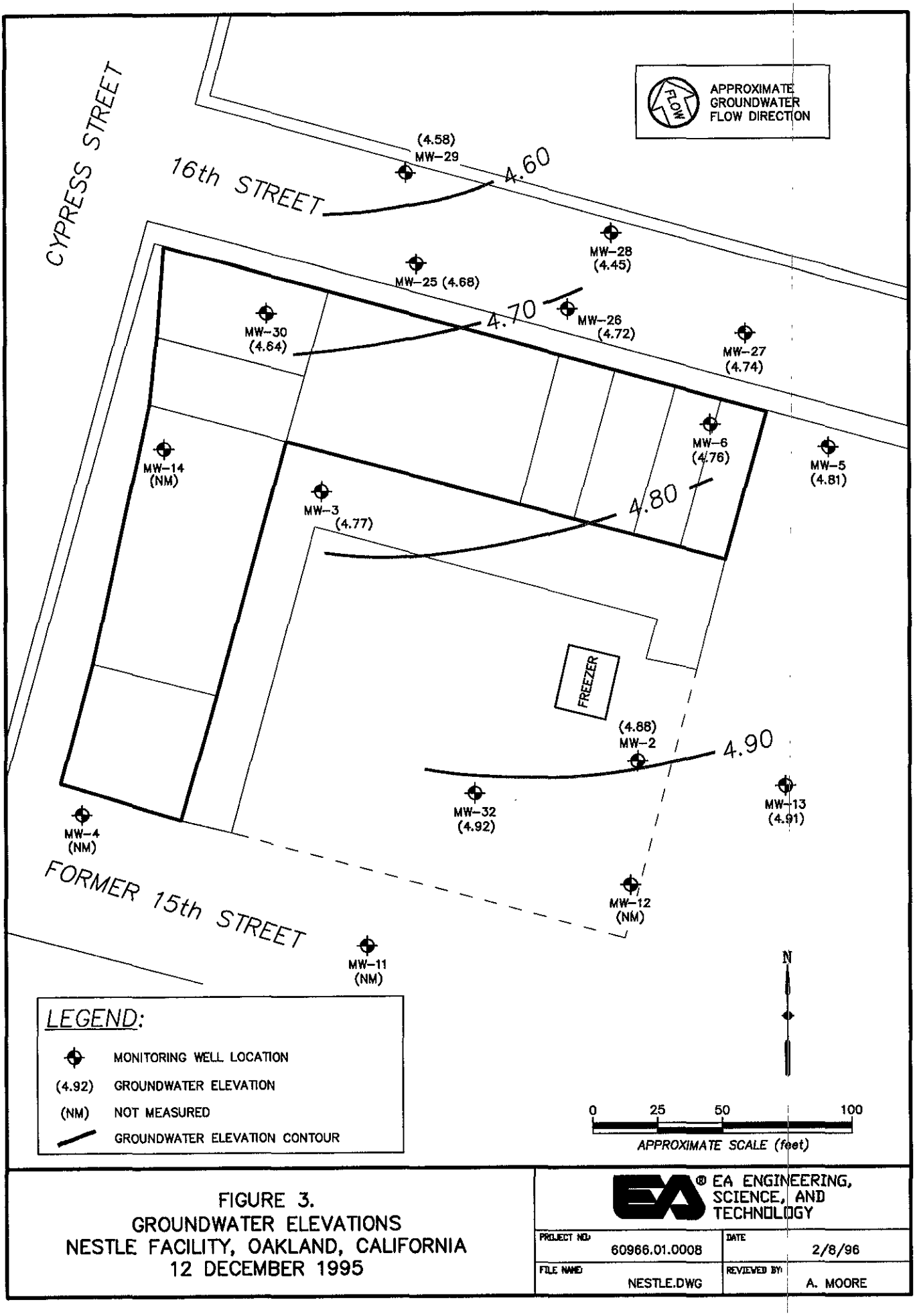


FIGURE 3.
GROUNDWATER ELEVATIONS
NESTLE FACILITY, OAKLAND, CALIFORNIA
12 DECEMBER 1995

EA® EA ENGINEERING, SCIENCE, AND TECHNOLOGY

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60966.01.0008	2/8/96
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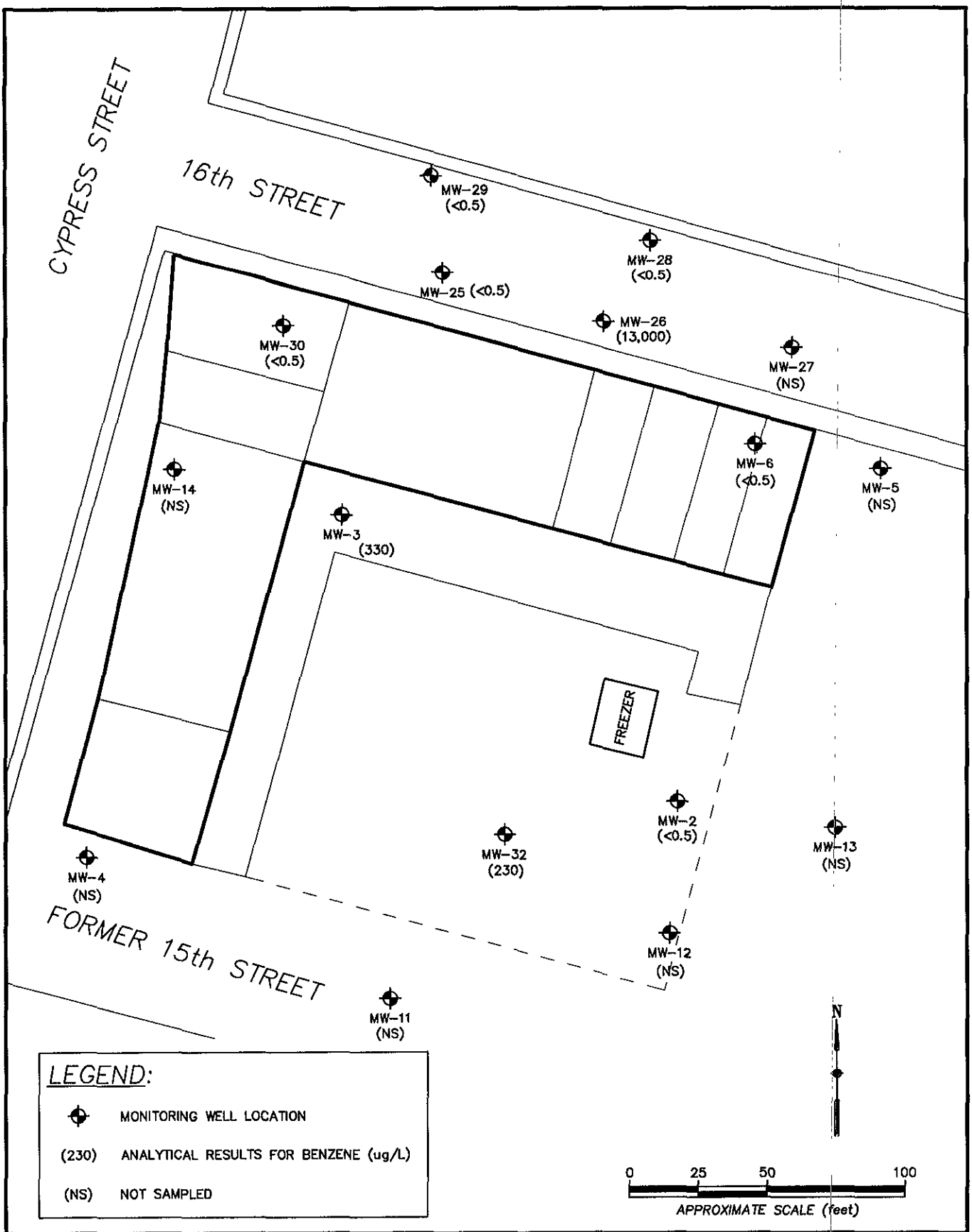
NESTLE.DWG	A. MOORE



LEGEND:

- ⊕ MONITORING WELL LOCATION
- (230) ANALYTICAL RESULTS FOR BENZENE (ug/L)
- (NS) NOT SAMPLED

FIGURE 4.
GROUNDWATER SAMPLING
ANALYTICAL RESULTS FOR BENZENE (ug/L)
NESTLE FACILITY, OAKLAND, CALIFORNIA
12 DECEMBER 1995

® EA ENGINEERING, SCIENCE, AND TECHNOLOGY

PROJECT NO.	DATE
60966.01.0008	2/8/96
FILE NAME: NESTLE.DWG	REVIEWED BY: A. MOORE

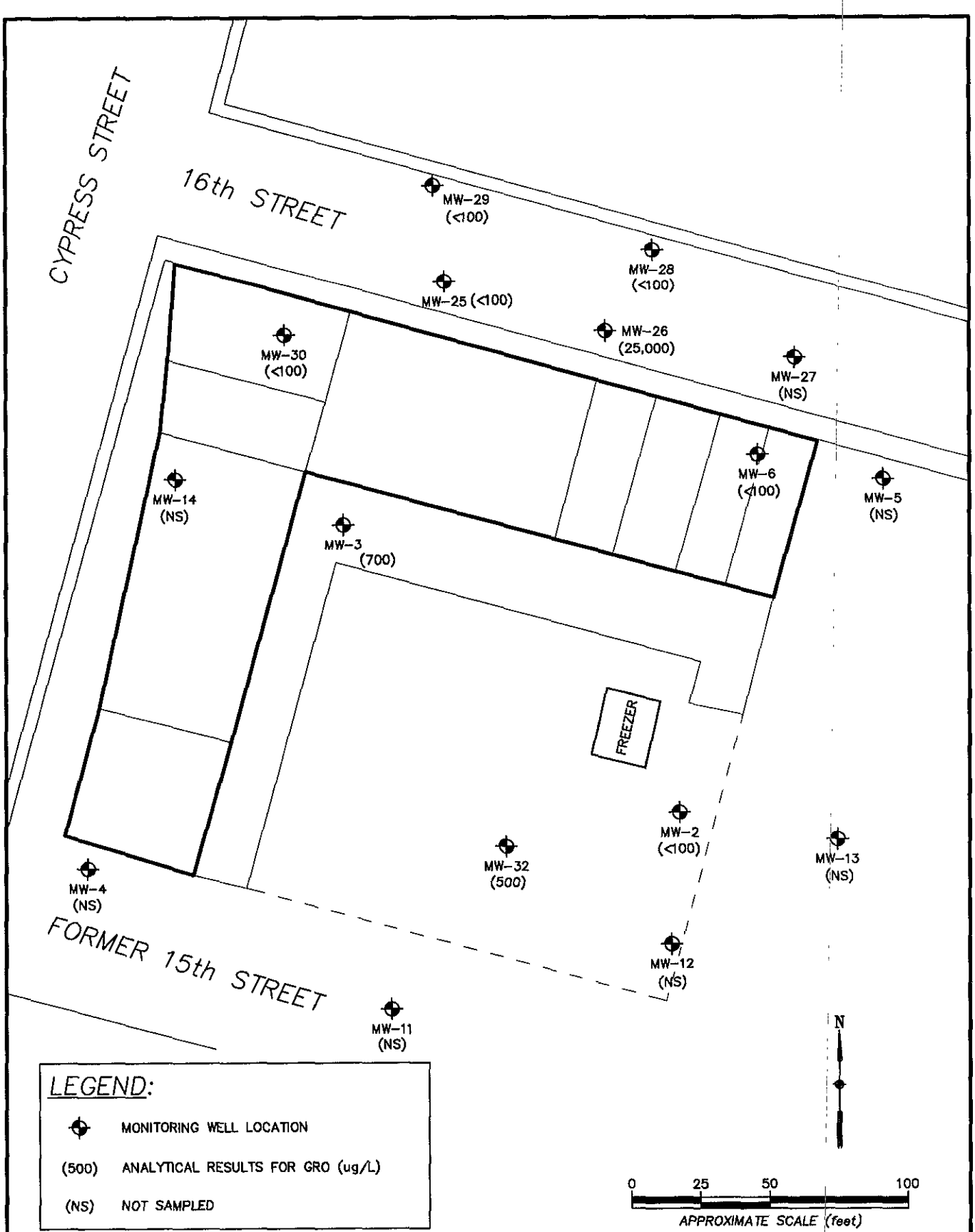


FIGURE 5.
GROUNDWATER SAMPLING
ANALYTICAL RESULTS FOR GRO (ug/L)
NESTLE FACILITY, OAKLAND, CALIFORNIA
12 DECEMBER 1995

® EA ENGINEERING, SCIENCE, AND TECHNOLOGY

PROJECT NO.	DATE
60966.01.0008	2/8/96
FILE NAME: NESTLE.DWG	REVIEWED BY: A. MOORE

Tables

TABLE 1 GAUGING DATA, FEBRUARY 1994 - DECEMBER 1995, NESTLE FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA

Well No.	Gauging Date	Time	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-1	02/24/94	--	16.49	--	10.41	--	6.08
	03/18/94	--	16.49	--	8.51	--	7.98
	06/02/94	--	16.49	--	10.83	--	5.66
MW-2	02/24/94	--	15.11	--	9.21	--	5.90
	03/18/94	--	15.11	--	7.47	--	7.64
	06/02/94	--	15.11	--	9.65	--	5.46
	08/31/94	--	15.11	--	10.49	--	4.62
	12/22/94	--	15.11	--	8.74	--	6.37
	03/13/95	--	15.11	--	6.87	--	8.24
	06/09/95	--	15.11	--	8.47	--	6.64
	09/22/95	--	15.11	--	9.42	--	5.69
	12/12/95	--	15.11	--	10.23	--	4.88
	12/18/95	--	15.11	--	9.87	--	5.24
MW-3	02/24/94	--	14.30	--	8.47	--	5.83
	03/18/94	--	14.30	--	7.23	--	7.07
	06/02/94	--	14.30	--	8.93	--	5.37
	08/31/94	--	14.30	--	9.91	--	4.39
	12/22/94	--	14.30	--	8.14	--	6.16
	03/13/95	--	14.30	--	6.64	--	7.66
	06/09/95	--	14.30	--	7.82	--	6.48
	09/22/95	--	14.30	--	9.08	--	5.22
	12/06/95	--	14.30	--	9.97	--	4.33
	12/12/95	--	14.30	--	9.53	--	4.77
	12/18/95	--	14.30	--	9.21	--	5.09
MW-4	02/24/94	--	14.42	--	8.09	--	6.33
	03/18/94	--	14.42	--	7.00	--	7.42
	12/18/95	--	14.42	--	dry	--	--
MW-5	02/24/94	--	14.41	--	8.08	--	6.33
	03/18/94	--	14.41	--	7.14	--	7.27
	06/02/94	--	14.41	--	9.09	--	5.32
	08/31/94	--	14.41	--	9.95	--	4.46
	12/22/94	--	14.41	--	8.22	--	6.19
	03/13/95	--	14.41	--	--	--	--
	06/09/95	--	14.41	--	--	--	--
	09/22/95	--	14.41	--	--	--	--
	12/12/95	--	14.41	--	9.60	--	4.81
MW-6	02/24/94	--	14.12	--	8.34	--	5.78
	03/18/94	--	14.12	--	7.04	--	7.08
	06/02/94	--	14.12	--	8.88	--	5.24
	08/31/94	--	14.12	--	9.65	--	4.47
	12/22/94	--	14.12	--	7.99	--	6.13

TABLE 1 (continued)

Well No.	Gauging Date	Time	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-6	03/13/95	--	14.12	--	6.32	--	7.80
	06/09/95	--	14.12	--	8.53	--	5.59
	09/22/95	--	14.12	--	8.63	--	5.49
	12/12/95	--	14.12	--	9.36	--	4.76
	12/18/95	--	14.12	--	9.16	--	4.96
MW-7	02/24/94	--	14.29	8.64	9.78	1.14	4.51
	03/18/94	--	14.29	6.56	9.38	2.82	4.91
	06/02/94	--	14.29	9.12	9.38	0.26	4.91
	08/31/94	--	14.29	9.87	9.88	0.01	4.41
	12/22/94	--	14.29	8.29	8.33	0.04	5.96
	03/13/95	--	14.29	--	6.72	--	7.57
	06/09/95	--	14.29	--	8.79	--	5.50
	09/22/95	--	14.29	9.30	9.51	0.21	4.78
MW-8	02/24/94	--	14.20	8.55	8.99	0.44	5.21
	03/18/94	--	14.20	7.34	7.64	0.30	6.56
	06/02/94	--	14.20	8.93	9.24	0.31	4.96
	08/31/94	--	14.20	9.82	10.13	0.31	4.07
	12/22/94	--	14.20	8.21	8.47	0.26	5.73
	03/13/95	--	14.20	6.77	6.85	0.08	7.35
	06/09/95	--	14.20	8.81	8.90	0.09	5.30
	07/27/95	--	14.20	8.32	8.55	0.23	5.65
	09/22/95	--	14.20	9.29	9.53	0.24	4.67
	12/06/95	--	14.20	9.94	10.18	0.24	4.02
	12/18/95	--	14.20	9.16	9.36	0.20	4.84
	12/18/95	2:20	14.20	--	9.62	--	4.58
	12/18/95	2:57	14.20	--	9.25	--	4.95
	12/19/95	9:00	14.20	9.21	9.30	0.09	4.90
	12/19/95	11:50	14.20	9.34	9.35	0.01	4.85
	12/19/95	12:20	14.20	9.25	9.28	0.03	4.92
	12/28/95	9:30	14.20	9.22	9.27	0.05	4.93
MW-9	06/02/94	--	14.96	--	9.46	--	5.50
MW-10	02/24/94	--	15.73	--	9.59	--	6.14
	03/18/94	--	15.73	--	--	--	--
	06/02/94	--	15.73	--	10.17	--	5.56
MW-11	03/18/94	--	14.55	--	6.95	--	7.60
	06/02/94	--	14.55	--	8.99	--	5.56
	08/31/94	--	14.55	--	9.80	--	4.75
	12/22/94	--	14.55	--	8.15	--	6.40
	03/13/95	--	14.55	--	--	--	--
	06/09/95	--	14.55	--	--	--	--
	09/22/95	--	14.55	--	--	--	--

TABLE 1 (continued)

Well No.	Gauging Date	Time	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-11	12/18/95	--	14.55	--	9.29	--	5.26
MW-12	03/18/94	--	15.28	--	7.62	--	7.66
	12/18/95	--	15.28	--	10.03	--	5.25
MW-13	02/24/94	--	14.85	--	8.94	--	5.91
	03/18/94	--	14.85	--	8.62	--	6.23
	06/02/94	--	14.85	--	9.34	--	5.51
	08/31/94	--	14.85	--	10.15	--	4.70
	12/22/94	--	14.85	--	8.45	--	6.40
	03/13/95	--	14.85	--	--	--	--
	06/09/95	--	14.85	--	--	--	--
	09/22/95	--	14.85	--	--	--	--
	12/12/95	--	14.85	--	9.94	--	4.91
	12/18/95	--	14.85	--	9.60	--	5.25
MW-14	02/24/94	--	14.10	--	dry	--	--
	03/18/94	--	14.10	--	dry	--	--
	12/06/95	--	14.10	--	dry	--	--
MW-15	12/06/95	--	14.17	--	dry	--	--
MW-16	12/06/95	--	14.11	--	dry	--	--
MW-22	02/24/94	--	14.44	8.59	10.13	1.54	4.31
	03/18/94	--	14.44	6.98	--	>3.0	--
	06/02/94	--	14.44	9.02	10.16	1.14	4.28
	08/31/94	--	14.44	9.97	10.16	0.19	4.28
	12/22/94	--	14.44	8.39	8.42	0.03	6.02
	03/13/95	--	14.44	--	5.92	--	8.52
	06/09/95	--	14.44	--	8.60	--	5.84
	07/27/95	--	14.44	--	8.49	--	5.95
	09/22/95	--	14.44	9.42	9.74	0.32	4.70
	12/06/95	--	14.44	10.08	10.38	0.30	4.06
	12/18/95	--	14.44	--	9.35	--	5.09
MW-23	02/24/94	--	14.48	8.87	8.94	0.07	5.54
	03/18/94	--	14.48	7.04	8.44	1.40	6.04
	06/02/94	--	14.48	8.21	10.00	1.79	4.48
	08/31/94	--	14.48	9.93	10.61	0.68	3.87
	12/22/94	--	14.48	8.32	8.73	0.41	5.75
	03/13/95	--	14.48	--	5.52	--	8.96
	06/09/95	--	14.48	8.24	8.55	0.31	5.93
	07/27/95	--	14.48	8.43	8.87	0.44	5.61
	09/22/95	--	14.48	9.35	10.06	0.71	4.42

TABLE 1 (continued)

Well No.	Gauging Date	Time	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-23	12/06/95	--	14.48	--	10.07	--	4.41
	12/18/95	--	14.48	9.40	9.70	0.30	4.78
	12/18/95	17:07	14.48	--	9.89	--	4.59
	12/18/95	17:55	14.48	9.46	9.49	0.03	4.99
	12/19/95	9:00	14.48	9.45	9.55	0.10	4.93
	12/19/95	10:50	14.48	--	9.88	--	4.60
	12/19/95	12:12	14.48	9.48	9.52	0.04	4.96
	12/28/95	9:30	14.48	9.40	9.52	0.12	4.96
MW-24	02/24/94	--	14.67	8.95	--	12.10	--
	03/18/94	--	14.67	7.45	--	>3.0	--
	06/02/94	--	14.67	9.11	10.08	0.97	4.59
	08/31/94	--	14.67	10.19	10.58	0.39	4.09
	12/22/94	--	14.67	--	8.55	--	6.12
	03/13/95	--	14.67	--	6.68	--	7.99
	06/09/95	--	14.67	--	9.54	--	5.13
	09/22/95	--	14.67	9.35	10.76	1.41	3.91
	12/06/95	--	14.67	10.39	10.39	--	4.28
MW-25	02/24/94	--	12.86	--	7.36	--	5.50
	03/18/94	--	12.86	--	6.14	--	6.72
	06/02/94	--	12.86	--	7.93	--	4.93
	08/31/94	--	12.86	--	8.75	--	4.11
	12/22/94	--	12.86	--	7.01	--	5.85
	03/13/95	--	12.86	--	5.77	--	7.09
	06/09/95	--	12.86	--	6.75	--	6.11
	09/22/95	--	12.86	--	7.45	--	5.41
	12/12/95	--	12.86	--	8.18	--	4.68
	12/18/95	--	12.86	--	7.84	--	5.02
MW-26	02/24/94	--	12.71	--	7.21	--	5.50
	03/18/94	--	12.71	--	5.83	--	6.88
	06/02/94	--	12.71	--	7.68	--	5.03
	08/31/94	--	12.71	--	8.47	--	4.24
	12/22/94	--	12.71	--	6.98	--	5.73
	03/13/95	--	12.71	--	5.25	--	7.46
	06/09/95	--	12.71	--	6.47	--	6.24
	09/22/95	--	12.71	--	7.23	--	5.48
	12/12/95	--	12.71	--	7.99	--	4.72
	12/18/95	--	12.71	--	7.69	--	5.02
MW-27	02/24/94	--	14.04	--	8.41	--	5.63
	03/18/94	--	14.04	--	7.23	--	6.81
	06/02/94	--	14.04	--	8.94	--	5.10
	12/22/94	--	14.04	--	--	--	--

TABLE 1 (continued)

Well No.	Gauging Date	Time	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-27	03/13/95	--	14.04	--	--	--	--
	06/09/95	--	14.04	--	--	--	--
	09/22/95	--	14.04	--	--	--	--
	12/12/95	--	14.04	--	9.30	--	4.74
MW-28	02/24/94	--	13.45	--	7.98	--	5.47
	03/18/94	--	13.45	--	6.65	--	6.80
	06/02/94	--	13.45	--	8.28	--	5.17
	08/31/94	--	13.45	--	9.03	--	4.42
	12/22/94	--	13.45	--	6.73	--	6.72
	03/13/95	--	13.45	--	5.93	--	7.52
	06/09/95	--	13.45	--	7.20	--	6.25
	09/22/95	--	13.45	--	8.37	--	5.08
	12/12/95	--	13.45	--	9.00	--	4.45
	12/18/95	--	13.45	--	8.44	--	5.01
MW-29	02/24/94	--	12.60	--	7.20	--	5.40
	03/18/94	--	12.60	--	5.82	--	6.78
	06/02/94	--	12.60	--	7.62	--	4.98
	08/31/94	--	12.60	--	8.44	--	4.16
	12/22/94	--	12.60	--	7.00	--	5.60
	03/13/95	--	12.60	--	5.55	--	7.05
	06/09/95	--	12.60	--	6.59	--	6.01
	09/22/95	--	12.60	--	7.58	--	5.02
	12/12/95	--	12.60	--	8.02	--	4.58
	12/18/95	--	12.60	--	7.76	--	4.84
MW-30	02/24/94	--	14.54	--	8.95	--	5.59
	03/18/94	--	14.54	--	7.79	--	6.75
	06/02/94	--	14.54	--	9.47	--	5.07
	08/31/94	--	14.54	--	10.27	--	4.27
	12/22/94	--	14.54	--	8.64	--	5.90
	03/13/95	--	14.54	--	7.23	--	7.31
	06/09/95	--	14.54	--	8.34	--	6.20
	09/22/95	--	14.54	--	9.41	--	5.13
	12/06/95	--	14.54	--	10.35	--	4.19
	12/12/95	--	14.54	--	9.90	--	4.64
	12/18/95	--	14.54	--	9.55	--	4.99
MW-31	06/02/94	--	14.92	--	9.42	--	5.50
MW-32	02/24/94	--	14.76	--	8.95	--	5.81
	03/18/94	--	14.76	--	7.25	--	7.51
	06/02/94	--	14.76	--	9.28	--	5.48
	08/31/94	--	14.76	--	10.12	--	4.64
	12/22/94	--	14.76	--	8.40	--	6.36

TABLE 1 (continued)

Well No.	Gauging Date	Time	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-32	03/13/95	--	14.76	--	6.63	--	8.13
	06/09/95	--	14.76	--	7.94	--	6.82
	09/22/95	--	14.76	--	9.32	--	5.44
	12/12/95	--	14.76	--	9.84	--	4.92
	12/18/95	--	14.76	--	9.53	--	5.23

TABLE 2 PRODUCT THICKNESS, NOVEMBER 1993 - DECEMBER 1995, NESTLE FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA

Well	11/4/93	2/24/93	3/18/94	6/2/94	8/31/94	12/22/94	3/13/95	6/9/95	7/27/95	9/22/95	12/6-28/95
MW-7	0.79	1.14	2.82	0.26	0.01	0.04	ND	ND	--	0.21	--
MW-8	0.47	0.44	0.30	0.31	0.31	0.26	0.08	0.09	0.23	0.24	0.24
MW-22	1.83	1.54	>3.0	1.14	0.19	0.03	ND	ND	ND	0.32	0.30
MW-23	1.21	0.07	1.40	1.79	0.68	0.41	ND	0.31	0.44	0.71	0.30
MW-24	1.77	12.10	>3.0	0.97	0.39	ND	ND	ND	--	1.41	ND
E-0	--	--	--	--	--	--	--	--	2.72	--	ND
E-1	--	--	--	--	--	--	--	--	--	--	0.27
E-5	--	--	--	--	--	--	--	--	--	--	1.50
E-6	--	--	--	--	--	--	--	--	0.08	--	ND
E-8	--	--	--	--	--	--	--	--	0.10	--	0.42
PR-20	0.91	1.15	3.41	1.45	0.88	1.04	0.14	0.16	2.54	1.12	ND
PR-21	0.63	--	2.76	1.39	0.42	2.01	4.11	2.42	1.93	0.70	0.60
PR-22	0.98	1.43	>3.0	0.90	0.47	0.04	0.60	0.71	0.68	0.71	0.23
PR-23	0.67	0.36	1.06	0.38	0.17	0.06	0.34	0.06	0.08	0.12	0.11
PR-24	--	--	--	ND	ND	ND	ND	ND	0.01	ND	ND
PR-26	0.6	0.54	2.05	0.39	0.17	ND	ND	ND	--	0.13	0.12
PR-27	--	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND
PR-30	--	--	--	2.81	1.21	1.97	ND	ND	--	Dry	Dry
PR-34	0.66	1.17	2.81	1.07	0.37	2.45	4.06	3.54	2.30	1.03	0.58
PR-35	0.62	1.26	>3.0	1.70	0.12	0.13	0.85	0.91	0.84	0.73	0.40
PR-36	-	1.13	1.43	1.13	0.37	0.19	0.15	0.23	0.22	Dry	Dry
PR-37	0.41	1.29	2.35	0.96	0.14	0.22	0.83	0.82	0.58	0.58	0.18
PR-41	0.59	0.53	0.42	0.13	0.43	0.03	ND	ND	--	Dry	Dry
PR-44	0.24	0.22	0.19	ND	ND	ND	ND	ND	--	Dry	-
PR-45	0.17	5.27	0.10	ND	ND	ND	ND	ND	--	ND	ND
PR-47	0.75	0.41	sheen	ND	ND	0.01	ND	ND	--	0.08	0.08
PR-48	1.12	0.20	>3.0	0.83	0.07	1.43	0.64	0.65	0.94	0.50	0.54
PR-49	--	3.24	ND	ND	ND	ND	ND	ND	--	ND	ND

TABLE 2 (continued)

Well	11/4/93	2/24/93	3/18/94	6/2/94	8/31/94	12/22/94	3/13/95	6/9/95	7/27/95	9/22/95	12/6-28/95
PR-50	1.08	1.58	0.89	ND	ND	ND	ND	ND	ND	ND	ND
PR-51	--	6.57	>3.0	0.01	0.72	2.02	ND	ND	ND	ND	ND
PR-52	1.01	5.09	1.16	0.45	0.05	0.03	ND	ND	ND	ND	-
PR-53	1.15	3.01	>3.0	0.61	0.49	1.52	ND	1.55	1.47	1.08	0.17
PR-54	0.97	0.99	1.20	ND	0.08	0.01	ND	ND	--	ND	ND
PR-55	1.48	0.07	1.31	0.87	ND	0.01	ND	Dry	Dry	Dry	-
PR-56	0.90	1.30	--	0.89	0.15	1.48	ND	ND	0.01	ND	-
PR-57	--	6.40	--	ND	ND	ND	ND	ND	--	ND	-
PR-58	0.96	0.85	--	1.48	0.89	2.15	1.41	1.34	2.40	1.18	0.57
PR-60	--	ND	--	ND	ND	ND	ND	ND	0.01	ND	ND
PR-61	0.25	0.39	0.35	1.03	ND	0.01	ND	ND	1.30	ND	ND
PR-62	0.04	--	0.07	0.09	ND	ND	ND	ND	--	ND	ND
PR-64	1.49	0.11	>3.0	--	1.06	2.15	1.03	1.17	2.12	1.15	0.58
PR-65	0.04	0.02	0.09	0.08	ND	ND	ND	ND	ND	ND	ND
PR-67	1.05	0.65	0.81	--	--	--	--	--	0.05	--	ND
PR-70	--	--	1.59	--	--	--	--	--	--	--	--
V-8	--	--	--	--	--	--	--	--	0.01	--	ND
V-55	--	--	--	--	--	--	--	--	--	--	0.04
V-77	--	--	--	--	--	--	--	--	0.78	Dry	--
V-78	--	--	--	--	--	--	--	--	0.01	--	ND
V-90	--	1.41	--	0.94	0.16	1.68	0.02	0.02	Dry	Dry	ND
V-94	--	--	--	--	--	--	--	--	0.01	--	--

-- No information.
ND None detected.

TABLE 3 CONCENTRATIONS (µg/L) OF ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES, MARCH 1993 - DECEMBER 1995, NESTLE FACILITY, OAKLAND, CALIFORNIA

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA	TCE	Analysis Method
MW-2	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	--	--	--	--	--	--	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	<0.5	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	<0.3	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50[a]	--	--	--	--	--	4,2
	03/13/95	0.8	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	0.7	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<100**	**<50**	--	--	--	--	--	**4,2**
MW-3	03/23/93	35	2.9	2	3.2	300	ND	--	--	--	--	--	1,2
	07/27/93	97	1	4	1.1	220	ND	--	--	--	--	--	1,2
	11/05/93	4.9	ND	ND	1.2	170	ND	--	--	--	--	--	1,2
	02/25/94	42	<1	<1	<1	100	<1,000	--	--	--	--	--	1,2
	06/03/94	120	8.2	8.4	4.5	320	<20,000	--	--	--	--	--	1,2
	08/31/94	83	1.1	5.3	2.9	<500	<500	--	--	--	--	--	4,2
	12/22/94	1,460	18	100	50	3,800	270	--	--	--	--	--	4,2
	03/13/95	3,600	260	270	280	14,000	1,700	--	--	--	--	--	1,2
	06/09/95	4,700	58	140	71	3,700	120	--	--	--	--	--	1,2
	09/21/95	9,800	58	600	95	14,000	300	--	--	--	--	--	1,2
	12/12/95	**330**	**2.1**	**47**	**5.3**	**700**	**<50**	--	--	--	--	--	**4,2**
MW-6	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	3.5	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	2.7	<0.5	<0.5	<0.5	69	<20,000	--	--	--	--	--	1,2
	08/31/94	<0.3	8.7	1.6	3.5	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50[a]	--	--	--	--	--	4,2
	03/13/95	1.2	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA	TCE	Analysis Method
MW-6	06/09/95	0.6	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<100**	**<50**	--	--	--	--	--	**4,2**
MW-25	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	4.2	4.4	2.5	20	170	ND	--	--	--	--	--	1,2
	02/25/94	2.1	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	2.4	14	<0.5	3.4	97	<20,000	--	--	--	--	--	1,2
	08/31/94	0.5	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	0.5	<0.5	<0.5	<0.5	<50	<50[a]	--	--	--	--	--	4,2
	03/13/95	0.58	<0.5	<0.5	<0.5	150	950	--	--	--	--	--	1,2
	06/09/95	0.8	<0.5	<0.5	<0.5	<100	60	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	50	<50	--	--	--	--	--	1,2
	12/12/95	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<100**	**<50**	--	--	--	--	--	**4,2**
MW-26	03/23/93	180	190	55	330	7,000	1,300	ND	ND	ND	ND	ND	1,2,3
	07/27/93	470	96	30	80	1,800	ND	140	ND	ND	ND	ND	1,2,3
	11/05/93	4,700	1,300	9	1,400	19,000	ND	120	ND	ND	ND	ND	1,2,3
	02/25/94	4,800	570	200	860	14,000	<1,000	28	<1	<1	<1	<1	1,2,3
	06/03/94	4,100	300	120	230	12,000	<20,000	140	1.7	0.84	<0.5	<0.5	1,2,3
	08/31/94	4,100	360	170	450	93,000	1,400	<4.0	<4.0	<4.0	<4.0	<4.0	4,2,7
	12/22/94	1,030	170	85	290	5,000	560	<2.0	<2.0	<2.0	<2.0	<2.0	4,2,7
	03/13/95	320	19	23	66	3,000	810	5.8	53	<0.5	<0.5	<0.5	1,2,9
	06/09/95	14,000	64	31	230	10,800	310	3.1	240	<0.5	1	<0.5	1,2,3
	09/21/95	1,900	160	160	330	8,000	200	120	1.3	<0.5	<0.5	<0.5	1,2,3
	12/12/95	**13,000**	**38**	**36**	**120**	**25,000**	**0.6[b]**	**180**	**1.4**	**<0.5**	**<0.5**	**<0.5**	**4,2,3**
MW-28	03/23/93	ND	ND	ND	ND	110	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	ND	2.1	ND	ND	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	<1	<100	<1	--	--	--	--	--	1,2

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA	TCE	Analysis Method
MW-28	06/03/94	3.1	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	1.4	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50[a]	--	--	--	--	--	4,2
	03/13/95	0.91	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<100**	**<50**	--	--	--	--	--	**4,2**
MW-29	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	2.1	11	ND	ND	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	<0.5	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	<0.3	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50[a]	--	--	--	--	--	4,2
	03/13/95	0.59	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<100**	**<50**	--	--	--	--	--	**4,2**
MW-30	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	ND	2.8	ND	ND	--	--	--	--	--	1,2
	02/25/94	1.3	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	1.1	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	0.8	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	0.6	<0.5	<0.5	<0.5	<50	<50[a]	--	--	--	--	--	4,2
	03/13/95	0.98	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	**<0.5**	**<0.5**	**<0.5**	**<1.0**	**<100**	**<50**	--	--	--	--	--	**4,2**

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA	TCE	Analysis Method
MW-32	03/23/93	391	6.2	3.1	9	440	ND	60	ND	ND	ND	ND	1,2,3
	07/27/93	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	1,2,3
	11/05/93	20	ND	1.8	2.1	170	ND	7.9	ND	ND	ND	ND	1,2,3
	02/25/94	5.6	<1	<1	<1	<100	<1,000	<1	<1	<1	<1	<1	1,2,3
	06/03/94	120	1.3	<0.5	1.4	350	<20,000	11	<0.5	<0.5	<0.5	<0.5	1,2,3
	08/31/94	39	0.5	2.2	1.2	<500	<500	10	<4.0	<4.0	<4.0	<4.0	4,2,7
	12/22/94	4.8	<0.5	<0.5	<0.5	<50	<50[a]	4.6	<2.0	<2.0	<2.0	<2.0	4,2,7
	03/13/95	220	3.6	6.5	5.8	1,100	<400	16	<0.5	<0.5	<0.5	<0.5	1,2,9
	06/09/95	1,500	7.9	43	14	2,200	180	<0.5	0.7	<0.5	0.5	<0.5	1,2,3
	09/21/95	1,200	2.4	72	4.5	2,300	60	6.7	<0.5	<0.5	<0.5	1.4	1,2,3
	12/12/95	**230**	**<0.5**	**8.9**	**<1.0**	**500**	**<50**	**28**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**4,2,3**

Notes: a. Non-diesel peak reported.
b. No diesel pattern detected; result due to high gasoline concentration.

Analytical Methods:

1. 8020.
2. 8015M (CA LUFT).
3. 8010.
4. 602.
5. 8270.
6. 8080.
7. 8260.
8. 8240.
9. 601.

TPH Total Petroleum Hydrocarbons.
GRO Gasoline-range organics.
DRO Diesel-range organics.
1,2-DCA 1,2-Dichloroethane.
1,1-DCA 1,1-Dichloroethane.
BDCM Bromodichloromethane.
1,1,1-TCA 1,1,1-Trichloroethane.
TCE Trichloroethene.

ND Not detected.

Appendix A

Field Documents

SCIENCE AND TECHNOLOGY

FIELD SUMMARY REPORT

Client and Station #: HESTLE

EA Project #: Pending

Sample Team: K Legge

Date: 12 12 95

Number of Drums on Site: Water 3 Soil _____ Empty _____

Summary:

I arrived on site at 0800 and opened and gauged wells listed. I could not locate MW4 and MW11 on former 15TH ST

The nine requested wells were purged and sampled according to protocol.

No problems were encountered on site.

KF

NOTE: PH meter shorted out from Rain PH was and could NOT Be taken.

Well Integrity is poor on majority of wells, Caps and well Boxes should Be replaced.

MONITORING WELL DATA SHEET

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.

Project Number | Station Number

Client: Hestie | Samplers: K Legge | Date: 12/12/95

Site Location: 16th st Oakland Ca

MONITORING WELL NUMBER	ELEVATION TOP OF CASING	DEPTH TO WATER	DEPTH TO PRODUCT	ELEVATION TOP OF GROUNDWATER	APPARENT PRODUCT THICKNESS	STICK UP (+) DOWN (-)	DEPTH TO BOTTOM
MW2		10.23					23.00
MW3		9.53					24.55
MW6	2" well	9.36					15.35
MW25		8.18					19.30
MW26		7.99					24.95
MW28		9.00					25.00
MW29		8.02					23.00
MW30		9.90					20.72
MW32		9.84					22.88
MW5		9.60					
MW4		Can not locate					
MW11		Can not locate					
MW13		9.94					
MW27		9.30					

Date: [illegible]

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well Number: MW2

Project Number: ____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter 2 / 0.16	(4) / 0.64	6 / 1.44	=	Casing Volume (gal)	Total Reqd Purge Volume (gal)
	2300		1023		1277			4			8.1	24.5

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 4gpm

Time	1115	1117	1119	1121			
Volume Purged (gal)	0	8	16	24.5			
Temperature (°F)	63.5°	65°	65°	65°			
pH	N/A →			→			
Specific Conductivity (μmhos)	660	720	740	740			
Turbidity / Color	low / LT Brn	low / CLR	low / CLR	low / CLR	/	/	
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: ____

SAMPLING DATA

Time Sampled: 1123 Approx. Depth to Water During Sampling: 14'

Comments: ____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW2	3	VOA	Hcl	40ml	low	CLR	yes	TPHg BTEX	Y
								8010	N
	1	Amber	NONE	1 Liter	low	CLR	yes	TPH Diesel	Y

Total Purge Volume: 24.5 Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New CAP

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 10/16/95

Project Name: Nestle Well Number: MW3

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter			=	Casing Volume (gal)	Total Reqd Purge Volume (gal)
							2	(4)	6			
	24.55		9.53		15.02		0.16	0.64	1.44		9.6	28.8

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 2gpm

Time	1140	1143	1147	1153			
Volume Purged (gal)	0	10	20	30			
Temperature (°F)	64	65	65	65			
pH	N/A →						
Specific Conductivity (µmhos)	715	810	815	815			
Turbidity / Color	low/CLR	low/CLR	low/CLR	low/CLR	/	/	/
Odor	Hc	Hc	Hc	Hc			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: MUST Purge well Slow or Dewaters

SAMPLING DATA

Time Sampled: 1155 Approx. Depth to Water During Sampling: 23'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW3	3	Voa	HCl	40ml	Low	CLR	Yes	TPH/BTEX	Y
							NO	8010	N
	1	Amber	None	1 Litre	Low	CLR	Yes	TPH Diesel	Y

Total Purge Volume: 30 gals Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: Box should Be Raised above groundgrade

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs new cap

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 6/14/95

Project Name: Nestle Well Number: MW6

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter (2 / 4 / 6)	=	Casing Volume (gal)	Total Recommended Purge Volume (gal)
	15.35		9.36		5.99		0.16 / 0.64 / 1.44		.95	3

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 1 gpm

Time	1200	1201	1202	1203				
Volume Purged (gal)	0	1	2	3				
Temperature (°F)	58°	58°	58°	58°				
pH	N/A	→	→	→				
Specific Conductivity (µmhos)	515	450	445	448				
Turbidity / Color	High / Brn	Med / Brn	Med / Brn	Med / Brn	/	/	/	
Odor	H	N	N	H				
Casing Volumes Removed	0	1	2	3				
Dewatered?	N	N	N	N				

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 1205 Approx. Depth to Water During Sampling: 12'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW6	3	VOA	HCl	40ml	Low	BRN	Yes	TPH/BTEX	Y
								8010	N
	1	Amber	None	1 Litre	Low	Brn	Yes	TPH Diesel	Y

Total Purge Volume: 3 gals Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): N

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 10/16/15

Project Name: Nestle Well Number: MW25

Project Number: Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter	=	Casing Volume (gal)	Total Recd Purge Volume (gal)
							2 / 4 / 6			
	19.30		8.18		11.12		0.16 / 0.64 / 1.44		7.1	21.3

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 1.5 gpm

Time	1039	1043	1047	1051				
Volume Purged (gal)	0	7	14	21.5				
Temperature (°C)	62	62	62	62				
pH	N/A →							
Specific Conductivity (µmhos)	820	860	855	855				
Turbidity / Color	Low LT Brn	Low LT Brn	Low LT Brn	Low LT Brn	/	/	/	
Odor	N	N	N	N				
Casing Volumes Removed	0	1	2	3				
Dewatered?	N	N	N	Y				

Comments/Observations: Purge slow, almost Dewaters

SAMPLING DATA

Time Sampled: 1055 Approx. Depth to Water During Sampling: 18'

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW25	3	VOA	HCl	40ml	Low	LT Brn	YES	TPH GBTEX	Y
								8010	N
	1	Amber	NONE	1 Litre	Low	LT Brn	YES	TPH Diesel	Y

Total Purge Volume: 21.5 gals Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New Cap

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 12/16/95

Project Name: Hestle Well Number: MW26

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter			=	Casing Volume (gal)	Total Reqd Purge Volume (gal)
							2	(4)	6			
	24.95		7.99		16.96		0.16	0.64	1.44		10.8	32.5

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 4.5 gpm

Time	1057	1059	1101	1104				
Volume Purged (gal)	0	11	22	32.5				
Temperature (°F)	62°	62°	62°	62°				
pH	N/A	→	→	→				
Specific Conductivity (µmhos)	650	655	650	650				
Turbidity / Color	low/clr	low/clr	low/clr	low/clr	/	/	/	
Odor	HC	HC	HC	HC				
Casing Volumes Removed	0	1	2	3				
Dewatered?	N	N	N	N				

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 1105 Approx. Depth to Water During Sampling: _____

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analytical Method	Comments
mw26	3	Voa	Hcl	40ml	Low	clr	Yes	TPH/BTEX	Y
	3	Voa	Hcl	40ml	Low	clr	yes	8010	Y
	1	Amber	NONE	Native	low	clr	yes	TPH Diesel	Y

Total Purge Volume: 32.5 gal Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc...: Needs New cap

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 4/14/95

Project Name: Nestle Well Number: MW28

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)		Depth To Water (feet)		Water Column (feet)		Multiplier For Casing Diameter				Casing Volume (gal)	Total Recd Purge Volume (gal)
		−		=		X	2	(4")	6	=		
	25.00		9.00		16.00		0.16	0.64	1.44		10.24	30.72

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 5 gpm

Time	1016	1018	1020	1022				
Volume Purged (gal)	0	10	20	31				
Temperature (°C)	63°	64°	65°	65°				
pH	N/A	→	→	→				
Specific Conductivity (µmhos)	550	350	351	354				
Turbidity / Color	low / LT Brn	low / clr	low / clr	low / LT Brn	/	/	/	
Odor	N	N	N	N				
Casing Volumes Removed	0	1	2	3				
Dewatered?	N	N	N	N				

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 1024 Approx. Depth to Water During Sampling: 19'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analytical Method	Comments
MW28	3	VOA	HCl	40ml	Low	LT Brn	Yes	TPH/BTEX	Y
								8010	N
	1	Amber	None	1 Litre	Low	LT Brn	Yes	TPH Diesel	Y

Total Purge Volume: 31 gals Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New cap

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 6/11/95

Project Name: Nestle Well Number: MW29

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter			=	Casing Volume (gal)	Total Reqd Purge Volume (gal)
							2	(4)	6			
	23.00		8.02		14.98		0.16	0.64	1.44		9.5	28.5

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 4.5 gpm

Time	1028	1030	1032	1034				
Volume Purged (gal)	0	9.5	19	28.5				
Temperature (°C)	64	64	65	65				
pH	N/A	→	→	→				
Specific Conductivity (µmhos)	325	328	300	300				
Turbidity / Color	low/clr	low/clr	low/clr	low/clr	/	/	/	
Odor	N	N	N	N				
Casing Volumes Removed	0	1	2	3				
Dewatered?	N	N	N	N				

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 1036 Approx. Depth to Water During Sampling: 17'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW29	3	VOA	HCl	40 ml	Low	clr	Yes	TPH/BTEX	Y
								8010	N
	1	Amber	None	1 Litre	Low	clr	Yes	TPH Diesel	Y

Total Purge Volume: 28.5 g Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New Cap

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 6/16/05

Project Name: Nestle Well Number: MW30

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter			=	Casing Volume (gal)	Total Reqd Purge Volume (gal)
							2	(4)	6			
	20.72		9.90		10.82		0.16	0.64	1.44		6.9	20.7

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 3.5gpm

Time	1218	1220	1222	1224			
Volume Purged (gal)	0	7	14	21			
Temperature (°F)	60	59	59	59			
pH	N/A	→	→	→			
Specific Conductivity (µmhos)	400	395	390	390			
Turbidity / Color	LOW/CLR	LOW/CLR	LOW/CLR	LOW/CLR	/	/	/
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 1226 Approx. Depth to Water During Sampling: 15'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW30	3	VOA	HCl	40ml	LOW	CLR	YES	TPHG BTEX	Y
								8010	N
	1	Amber	NONE	1 Litre	LOW	CLR	YES	TPHDiesel	Y

Total Purge Volume: 21 gals Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New Cap

Problems Encountered During Purging and Sampling: N

Comments: N

GROUNDWATER PURGE AND SAMPLE FORM

Date: 6/11/14

Project Name: Nestle Well Number: MW32

Project Number: _____ Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	−	Depth To Water (feet)	=	Water Column (feet)	X	Multiplier For Casing Diameter			=	Casing Volume (gal)	Total Recd Purge Volume (gal)
							2	(4)	6			
	22.88		9.84		13.04		0.16	0.64	1.44		8.3	25

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 4.3gpm

Time	1125	1127	1130	1133				
Volume Purged (gal)	0	8.5	17	25				
Temperature (°C)	64	66	67	67				
pH	N/A →			→				
Specific Conductivity (µmhos)	600	635	636	636				
Turbidity / Color	low/clr	low/clr	low/clr	low/clr	/	/	/	
Odor	N	LT HC	LT HC	LT HC				
Casing Volumes Removed	0	1	2	3				
Dewatered?	N	N	N	N				

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 1135 Approx. Depth to Water During Sampling: 14'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or l)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW32	3	voa	HCl	40ml	Low	clr	yes	TPH/BTEX	Y
	3	voa	HCl	40ml	Low	clr	yes	8010	Y
	1	Amber	NONE	40ml	Low	clr	yes	TPH Diesel	Y

Total Purge Volume: 25 gals Disposal/Containment Method: Drums

Weather Conditions: RAIN

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New Cap

Problems Encountered During Purging and Sampling: N

Comments: N

Appendix B

Laboratory Analytical Report

NESTLÉ USA, INC.

QUALITY ASSURANCE LABORATORY
PO BOX 1516
6625 EITERMAN ROAD
DUBLIN OH 43017-6516
TEL (614) 791-9144
FAX (614) 793-5353

JAN 10 1996

January 4, 1996

Binayak Acharya
Nestle USA, Inc.
800 N. Brand Blvd.
Glendale, CA 91203

cc: Walt Carey
Mark Litzau

RE: OAKLAND, CA QUARTERLY MONITORING PROJECT

Dear Binayak:

Attached are the analytical reports for the eleven water samples (NQAL # 9512180148/158) submitted to NQAL by Mark Litzau (EA Engineering, Science, and Technology) for various analyses.

If you have any questions please feel free to call.

Sincerely,

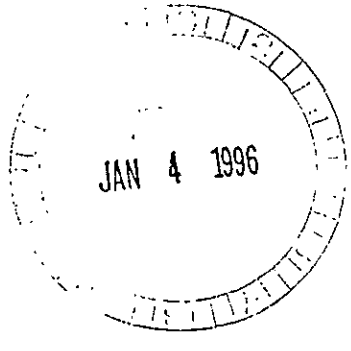
John R Heuser

John R. Heuser, Ph.D.
Manager, Organic Contaminants

JRH:frm

Attachment

n:/environ/cover/1995/misc/dec516.doc



NESTLÉ USA, INC.

QUALITY ASSURANCE LABORATORY
PO BOX 1516
6625 EITERMAN ROAD
DUBLIN, OH 43017-6516
TEL (614) 791-9144
FAX (614) 793-5353

Client: Binayak Acharya
Nestle USA
Glendale, CA

Report Date: 1/4/96
Date Sampled 12/12/95
Date Received 12/14/95

Project: Oakland, CA Quarterly Monitoring Project

Result Summary

NQAL #	Sample ID	Benzene (ug/L)	Toluene (ug/L)	Ethyl Benzene (ug/L)	Total Xylenes (ug/L)	GRO (mg/L)	DRO (mg/L)	Date Analyzed BTEX/GRO	Date Analyzed DRO
9512180148	Rinse Blank	ND	ND	ND	1.2	ND	ND	12/20/95	12/20/95
9512180149	MW-28	ND	ND	ND	ND	ND	ND	12/18/95	12/20/95
9512180150	MW-29	ND	ND	ND	ND	ND	ND	12/21/95	12/20/95
9512180151	MW-25	ND	ND	ND	ND	ND	ND	12/20/95	12/20/95
9512180152	MW-26	13000	38	36	120	25	0.6*	12/20/95	12/20/95
9512180153	MW-2	ND	ND	ND	ND	ND	ND	12/18/95	12/20/95
9512180154	MW-32	230	ND	8.9	ND	0.5	ND	12/18/95	12/20/95
9512180155	MW-3	330	2.1	47	5.3	0.7	ND	12/20/95	12/20/95
9512180156	MW-6	ND	ND	ND	ND	ND	ND	12/20/95	12/20/95
9512180157	MW-30	ND	ND	ND	ND	ND	ND	12/20/95	12/20/95
9512180158	Travel Blank	ND	ND	ND	ND	ND	NR	12/20/95	12/20/95
Detection Limit		**0.5**	**0.5**	**0.5**	**1.0**	**0.1**	**0.05**		

ND = Not Detected
NR = Not Requested
* = no diesel pattern detected, result due to high gasoline concentration

- BTEX compounds analyzed by EPA Method 602
- Gasoline and Diesel Range Organics analyzed by the California DOHS method found in the LUFT Field Manual, October 1989

NESTLÉ USA, INC.

QUALITY ASSURANCE LABORATORY
P.O. BOX 1516
6625 EITERMAN ROAD
DUBLIN, OH 43017-6516
TEL (614) 791-9144
FAX (614) 793-5353

Client:	Binayak Acharya	**Date of Report:**	1/4/96
Company:	Nestle USA Glendale, CA	**Date Sample Collected:** **Date Sample Received:**	12/12/95 12/14/95
Sample ID:	Travel Blank	**NQAL #:**	9512180158
Sample Location:	Oakland, CA Quarterly Monitoring Project		

EPA 8010
Purgeable Halocarbons in Water

Analyte	Units	Result	Reporting Limit	Date Analyzed
Bromodichloromethane	µg/L	ND	0.5	12/22/95
Bromoform	µg/L	ND	0.5	12/22/95
Bromomethane	µg/L	ND	0.5	12/22/95
Carbon tetrachloride	µg/L	ND	0.5	12/22/95
Chlorobenzene	µg/L	ND	0.5	12/22/95
Chlorodibromomethane	µg/L	ND	0.5	12/22/95
Chloroethane	µg/L	ND	0.5	12/22/95
Chloroform	µg/L	ND	0.5	12/22/95
Chloromethane	µg/L	ND	0.5	12/22/95
1,2-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,3-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,4-Dichlorobenzene	µg/L	ND	0.5	12/22/95
Dichlorodifluoromethane	µg/L	ND	0.5	12/22/95
1,1-Dichloroethane	µg/L	ND	0.5	12/22/95
1,2-Dichloroethane	µg/L	ND	0.5	12/22/95
1,1-Dichloroethene	µg/L	ND	0.5	12/22/95
cis-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
trans-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
1,2-Dichloropropane	µg/L	ND	0.5	12/22/95
cis-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
trans-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
Methylene chloride	µg/L	ND	0.5	12/22/95
1,1,2,2-Tetrachloroethane	µg/L	ND	0.5	12/22/95
Tetrachloroethene	µg/L	ND	0.5	12/22/95
1,1,1-Trichloroethane	µg/L	ND	0.5	12/22/95
1,1,2-Trichloroethane	µg/L	ND	0.5	12/22/95
Trichloroethene	µg/L	ND	0.5	12/22/95
Trichlorofluoromethane	µg/L	ND	0.5	12/22/95
Vinyl chloride	µg/L	ND	0.5	12/22/95
Surrogate Recovery				
Bromofluorobenzene	%	111	43-142 %	
Bromochloromethane	%	76	40-169 %	

ND = Not Detected

NESTLÉ USA, INC.

QUALITY ASSURANCE LABORATORY
PO BOX 1516
6625 EITERMAN ROAD
DUBLIN, OH 43017-6516
TEL (614) 791-9144
FAX (614) 793-5353

Client:	Binayak Acharya	**Date of Report:**	1/4/96
Company:	Nestle USA Glendale, CA	**Date Sample Collected:**	12/12/95
		Date Sample Received:	12/14/95
Sample ID:	Rinse Blank	**NQAL #:**	9512180148
Sample Location:	Oakland, CA Quarterly Monitoring Project		

EPA 8010
Purgeable Halocarbons in Water

Analyte	Units	Result	Reporting Limit	Date Analyzed
Bromodichloromethane	µg/L	ND	0.5	12/22/95
Bromoform	µg/L	ND	0.5	12/22/95
Bromomethane	µg/L	ND	0.5	12/22/95
Carbon tetrachloride	µg/L	ND	0.5	12/22/95
Chlorobenzene	µg/L	ND	0.5	12/22/95
Chlorodibromomethane	µg/L	ND	0.5	12/22/95
Chloroethane	µg/L	ND	0.5	12/22/95
Chloroform	µg/L	ND	0.5	12/22/95
Chloromethane	µg/L	ND	0.5	12/22/95
1,2-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,3-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,4-Dichlorobenzene	µg/L	ND	0.5	12/22/95
Dichlorodifluoromethane	µg/L	ND	0.5	12/22/95
1,1-Dichloroethane	µg/L	ND	0.5	12/22/95
1,2-Dichloroethane	µg/L	ND	0.5	12/22/95
1,1-Dichloroethene	µg/L	ND	0.5	12/22/95
cis-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
trans-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
1,2-Dichloropropane	µg/L	ND	0.5	12/22/95
cis-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
trans-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
Methylene chloride	µg/L	ND	0.5	12/22/95
1,1,2,2-Tetrachloroethane	µg/L	ND	0.5	12/22/95
Tetrachloroethene	µg/L	ND	0.5	12/22/95
1,1,1-Trichloroethane	µg/L	ND	0.5	12/22/95
1,1,2-Trichloroethane	µg/L	ND	0.5	12/22/95
Trichloroethene	µg/L	ND	0.5	12/22/95
Trichlorofluoromethane	µg/L	ND	0.5	12/22/95
Vinyl chloride	µg/L	ND	0.5	12/22/95
Surrogate Recovery				
Bromofluorobenzene	%	112	43-142 %	
Bromochloromethane	%	86	40-169 %	

ND = Not Detected

NESTLÉ USA, INC.

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PO BOX 1516
6625 EITERMAN ROAD
DUBLIN OH 43017-6516
TEL (614) 791-9144
FAX (614) 793-5353

Client:	Binayak Acharya	**Date of Report:**	1/4/96
Company:	Nestle USA Glendale, CA	**Date Sample Collected:** **Date Sample Received:**	12/12/95 12/14/95

Sample ID: MW-32 **NQAL #:** 9512180154
Sample Location: Oakland, CA Quarterly Monitoring Project

EPA 8010
Purgeable Halocarbons in Water

Analyte	Units	Result	Reporting Limit	Date Analyzed
Bromodichloromethane	µg/L	ND	0.5	12/22/95
Bromoform	µg/L	ND	0.5	12/22/95
Bromomethane	µg/L	ND	0.5	12/22/95
Carbon tetrachloride	µg/L	ND	0.5	12/22/95
Chlorobenzene	µg/L	ND	0.5	12/22/95
Chlorodibromomethane	µg/L	ND	0.5	12/22/95
Chloroethane	µg/L	ND	0.5	12/22/95
Chloroform	µg/L	ND	0.5	12/22/95
Chloromethane	µg/L	ND	0.5	12/22/95
1,2-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,3-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,4-Dichlorobenzene	µg/L	ND	0.5	12/22/95
Dichlorodifluoromethane	µg/L	ND	0.5	12/22/95
1,1-Dichloroethane	µg/L	ND	0.5	12/22/95
1,2-Dichloroethane	µg/L	28	0.5	12/22/95
1,1-Dichloroethene	µg/L	ND	0.5	12/22/95
cis-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
trans-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
1,2-Dichloropropane	µg/L	ND	0.5	12/22/95
cis-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
trans-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
Methylene chloride	µg/L	ND	0.5	12/22/95
1,1,2,2-Tetrachloroethane	µg/L	ND	0.5	12/22/95
Tetrachloroethene	µg/L	ND	0.5	12/22/95
1,1,1-Trichloroethane	µg/L	ND	0.5	12/22/95
1,1,2-Trichloroethane	µg/L	ND	0.5	12/22/95
Trichloroethene	µg/L	ND	0.5	12/22/95
Trichlorofluoromethane	µg/L	ND	0.5	12/22/95
Vinyl chloride	µg/L	ND	0.5	12/22/95
Surrogate Recovery				
Bromofluorobenzene	%	121	43-142 %	
Bromochloromethane	%	75	40-169 %	

ND = Not Detected

NESTLÉ USA, INC.

QUALITY ASSURANCE LABORATORY
PO BOX 1516
6625 EITERMAN ROAD
DUBLIN, OH 43017-6516
TEL (614) 791-9144
FAX (614) 793-5353

Client: Binayak Acharya
Company: Nestle USA
Glendale, CA

Date of Report: 1/4/96
Date Sample Collected: 12/12/95
Date Sample Received: 12/14/95

Sample ID: MW-26
NQAL #: 9512180152
Sample Location: Oakland, CA Quarterly Monitoring Project

EPA 8010
Purgeable Halocarbons in Water

Analyte	Units	Result	Reporting Limit	Date Analyzed
Bromodichloromethane	µg/L	ND	0.5	12/22/95
Bromoform	µg/L	ND	0.5	12/22/95
Bromomethane	µg/L	ND	0.5	12/22/95
Carbon tetrachloride	µg/L	ND	0.5	12/22/95
Chlorobenzene	µg/L	ND	0.5	12/22/95
Chlorodibromomethane	µg/L	ND	0.5	12/22/95
Chloroethane	µg/L	ND	0.5	12/22/95
Chloroform	µg/L	ND	0.5	12/22/95
Chloromethane	µg/L	ND	0.5	12/22/95
1,2-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,3-Dichlorobenzene	µg/L	ND	0.5	12/22/95
1,4-Dichlorobenzene	µg/L	ND	0.5	12/22/95
Dichlorodifluoromethane	µg/L	ND	0.5	12/22/95
1,1-Dichloroethane	µg/L	1.4	0.5	12/22/95
1,2-Dichloroethane	µg/L	180	0.5	12/22/95
1,1-Dichloroethene	µg/L	ND	0.5	12/22/95
cis-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
trans-1,2-Dichloroethene	µg/L	ND	0.5	12/22/95
1,2-Dichloropropane	µg/L	ND	0.5	12/22/95
cis-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
trans-1,3-Dichloropropene	µg/L	ND	0.5	12/22/95
Methylene chloride	µg/L	ND	0.5	12/22/95
1,1,2,2-Tetrachloroethane	µg/L	ND	0.5	12/22/95
Tetrachloroethene	µg/L	ND	0.5	12/22/95
1,1,1-Trichloroethane	µg/L	ND	0.5	12/22/95
1,1,2-Trichloroethane	µg/L	ND	0.5	12/22/95
Trichloroethene	µg/L	ND	0.5	12/22/95
Trichlorofluoromethane	µg/L	ND	0.5	12/22/95
Vinyl chloride	µg/L	ND	0.5	12/22/95
Surrogate Recovery				
Bromofluorobenzene	%	96	43-142 %	
Bromochloromethane	%	71	40-169 %	

m:/data/chem/environ/reports/misc/1995/12180152.XLS

ND = Not Detected

NESTLÉ USA, INC.

QUALITY ASSURANCE LABORATORY
PO BOX 1516
6625 SITERMAN ROAD
DUBLIN OH 43017-6516

TEL (614) 791-9144
FAX (614) 793-5353

Nestle USA Quality Assurance Laboratory

EPA Method 8010
Laboratory Control Sample

Date Analyzed: 12/22/95
Analyst: FRM

	Result (ug/L)	Amount Spiked (ug/L)	Recovery (%)	Limits (%)
Blank Spike Results				
1,1-Dichloroethene	22.5	20	113	63-137
Trichloroethene	21.5	20	108	77-123
Chlorobenzene	18.8	20	94	72-128
Surrogate Recoveries				
Bromofluorobenzene	35	30	117	43-142
Bromochloromethane	38	30	127	40-169

Column: Restek 502.2, 105 m
Limits based on EPA Method 8010B

NESTLÉ USA, INC.

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Nestle USA Quality Assurance Laboratory

EPA Method 8010
Matrix Spike/Matrix Spike Duplicate Report

Date Analyzed: 12/22/95 Matrix: Water
Matrix Sample #: 9.512E+09 Analyst: FRM

	Result (ug/L)	Amount Spiked (ug/L)	Recovery (%)	Limits (%)
Matrix Spike Results				
1,1-Dichloroethene	16.7	20	84	56-132
Trichloroethene	20.5	20	103	62-156
Chlorobenzene	21.7	20	109	65-132
Surrogate Recoveries				
Bromofluorobenzene	36	30	120	43-142
Bromochloromethane	38	30	127	40-169
Matrix Spike Duplicate Results				
1,1-Dichloroethene	19.5	20	98	56-132
Trichloroethene	17.3	20	87	62-156
Chlorobenzene	17.8	20	89	65-132
Surrogate Recoveries				
Bromofluorobenzene	34	30	113	43-142
Bromochloromethane	34	30	113	40-169
Matrix Results				
1,1-Dichloroethene	0.0			
Trichloroethene	0.0			
Chlorobenzene	0.0			
RPD Data				
1,1-Dichloroethene	15%			<25%
Trichloroethene	17%			<25%
Chlorobenzene	20%			<25%

Column: Restek 502.2, 105 m
Limits based on EPA Method 8010B