EA Engineering, Science, and Technology

3468 Mt. Diablo Boulevard
Suite B-100
Lafayette, CA 94549
Telephone: 510-283-7077
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ENVIRONMENTAL
PROTECTION

98 AUG 19 AM 2:17

SITE 3779

13 August 1998

Tom Peacock
Alameda County Health Agency
Division of Environmental Protection
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

RE: Quarterly Monitoring Report for the Nestle Oakland Facility at
1310 14th Street, Oakland, California

Dear Mr. Seto:

Attached is the Second Quarter 1998 Monitoring Report for the above-referenced site.

Because only 3 wells are sampled at the site every other quarter, EA, on behalf of Nestle, proposes to submit sampling results twice per year. Each of these reports would contain the monitoring results of two rounds of quarterly monitoring, along with the monitoring results for the product recovery system. If approved, the third quarter 1998 results will be reported with the fourth quarter 1998 results, in December 1998.

If you have any questions I can be reached at (510) 283-7077.

Sincerely,

Douglas Oram
Project Manager

DEO/dh 60966.01.Q498

Enclosure
cc: Binayak Acharya, Nestle USA, Inc.

Second Quarter 1998
Monitoring Report
Nestle Facility
1310 14th Street
Oakland, California

Prepared for

Nestle USA, Inc.

Prepared by

EA Engineering, Science, and Technology

August 1998

60966.01.0008

60966.01.0008

Second Quarter 1998
Monitoring Report
Nestle Facility
1310 14th Street
Oakland, California

Prepared for

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

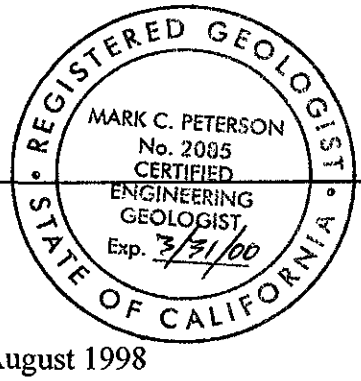
Prepared by

EA Engineering, Science, and Technology
3468 Mt. Diablo Boulevard, Suite B-100
Lafayette, California 94549
(925) 283-7077

13 Aug 98

Douglas E. Oram, Ph.D.
Project Manager

Date



8/14/98

Mark C. Peterson, C.E.G. #2085
Senior Geologist

Date

August 1998

CONTENTS

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 (925) 283-7077
EA Project Manager:	Douglas E. Oram
Regulatory Oversight:	Tom Peacock 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 Nestle facility at 1310 14th Street, Oakland, California (Figure 1). EA has been providing environmental services for the site since December 1995.

This report presents the results for quarterly sampling for the second quarter of 1998, conducted on 22 April 1998, and the results for well gauging and remediation system monitoring for the second quarter. The number of wells sampled each quarter alternates between three and nine. During the first and third quarters, wells MW2, MW3, MW6, MW25, MW26, MW28, MW29, MW30, and MW32 are gauged and sampled. During the second and fourth quarters, all nine wells are gauged but only wells MW3, MW26, and MW28 are sampled.

During the fourth quarter of 1997 and first quarter of 1998, a multiphase extraction (MPE) remediation system was installed. The focus of the remedial effort is the recovery of non-aqueous phase liquid (NAPL). Remediation system monitoring results are summarized in Section 4.

2. FIELD PROCEDURES

2.1 NAPL GAUGING

A total of 59 wells were gauged during the second quarter, using an interface probe to determine the presence and thickness of NAPL. The set of wells used to monitor the location of NAPL in the subsurface will vary as remediation progresses.

2.2 PURGING AND SAMPLING OF GROUNDWATER

After depths to groundwater were measured in all nine wells (MW2, MW3, MW6, MW25, MW26, MW28–MW30, and MW32), approximately 3 well casing volumes of water were removed from wells MW3, MW26, and MW28 and these wells were sampled, using a dedicated 1-inch PVC pipe attached to a vacuum truck. The temperature, pH, and electrical conductance of the purged water were recorded at approximately each well casing volume as each well was purged. When the parameters were stable (less than 10 percent change from the previous reading for temperature and electrical conductance, and less than 0.1 pH unit change for pH) 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 placed in an ice-filled cooler. A field-prepared sampling equipment rinse blank was stored and transported in the cooler with the samples. All samples were handled and transported under chain of custody.

The samples were submitted to the Nestle Quality Assurance Laboratory (NQAL), where they were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g) by the California DOHS method described in the October 1989 LUFT Field Manual. The samples were also analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and methyl t-butyl ether (MTBE) by EPA Method 8020 and for halogenated volatile organic compounds (HVOCs) by EPA Method 8010.

3. SUMMARY OF RESULTS

3.1 NAPL GAUGING AND MONITORING

NAPL monitoring data since November 1993 are summarized in Table 1. Of the wells monitored during the second quarter of 1998, 39 contained no detectable NAPL, 20 contained >0.01 feet of NAPL, and 6 of the 20 wells contained >1.0 feet of NAPL. The spacial distribution of wells containing the different thicknesses of NAPL is shown in Figure 2.

During the past quarter the number of wells containing a NAPL thickness >1.0 feet has decreased by 7 wells. During this same period, the number of wells containing a NAPL thickness >0.01 feet has decreased by 11. These results indicate that the MPE system is decreasing the amount of NAPL in the subsurface. During the past quarter, the MPE system has been operating from wells in the area of the main maintenance bay. The previous quarterly report showed 6 wells containing a NAPL thickness >1.0 feet in this area. The thickness of NAPL in 5 of these wells has decreased to ≤0.03 feet, and the thickness in well MW23 has been reduced to 0.37 feet. These results are summarized below.

Well	Maximum NAPL Thickness (feet)	
	Previous Quarter	Current Quarter
PR21	4.28	0.03
PR22	4.54	<0.01
PR26	3.39	<0.01
PR34	3.18	<0.01
PR48	1.30	0.01
MW23	1.60	0.37

3.2 DEPTH TO GROUNDWATER IN MONITORING WELLS

Groundwater elevations on 22 April 1998 ranged from 7.63 (MW30) to 8.74 (MW2) feet above mean sea level (Table 2). Groundwater elevations have increased approximately 0.25 feet since the 27 January 1998 monitoring event. A groundwater elevation contour map for 22 April 1998 is shown in Figure 3. The direction of groundwater flow in April was toward the north-northwest, at a gradient of approximately 0.005 feet per foot. Field documentation is provided in Appendix A.

3.3 ANALYSIS OF SAMPLES

The analytical results for the groundwater samples collected on 22 April 1998 are presented in Table 3, along with previous results. The distribution of BTEX, TPH-g, and HVOCs in the

groundwater samples is shown in Figure 4. Laboratory analytical reports and chain-of-custody documentation are included in Appendix B.

4. REMEDIATION SYSTEM MONITORING

The monitoring results through 1 June 1998 for the MPE water and vapor treatment systems are summarized in Tables 4 and 5, respectively. An estimated 162 pounds of hydrocarbons has been removed from extracted water, and an estimated 347 pounds of NAPL has been removed by the oil/water separator (Table 4). The estimated amount of NAPL fluctuates due to accumulation of water in the product storage tank. An estimated 2,960 pounds of hydrocarbons has been removed from extracted soil vapor (Table 5). Figure 5 graphically depicts the number of pounds of hydrocarbons removed from groundwater, vapor effluent, and as free product. An estimated combined total of 3,469 pounds of hydrocarbons has been removed and treated since system installation.

The MPE system operated until 1 June 1998, when it was shut down due to breakthrough of the vapor phase carbon. The MPE system was shut off at that time and was not restarted due to a planned modification in the vapor abatement equipment. A thermal oxidizer will be installed at the site to treat the extracted hydrocarbon vapors. Restart of the MPE system is anticipated for August 1998. The groundwater treatment portion of the system will not be modified.

5. WORK PROPOSED FOR THE NEXT QUARTER

During the third quarter of 1998, groundwater in wells MW2, MW3, MW6, MW25, MW26, MW28, MW29, MW30, and MW32 will be sampled and analyzed for BTEX, TPH-g, and MTBE. Samples from wells MW26 and MW28 will also be analyzed for HVOCs.

The MPE system will be restarted after the oxidizer is installed.

Because only 3 wells are sampled at the site every other quarter, EA, on behalf of Nestle, proposes to submit sampling results twice per year. Each of these reports would contain the monitoring results of two rounds of quarterly monitoring, along with the monitoring results for the product recovery system. If approved, the third quarter 1998 results will be reported with the fourth quarter 1998 results, in December 1998.

Figures

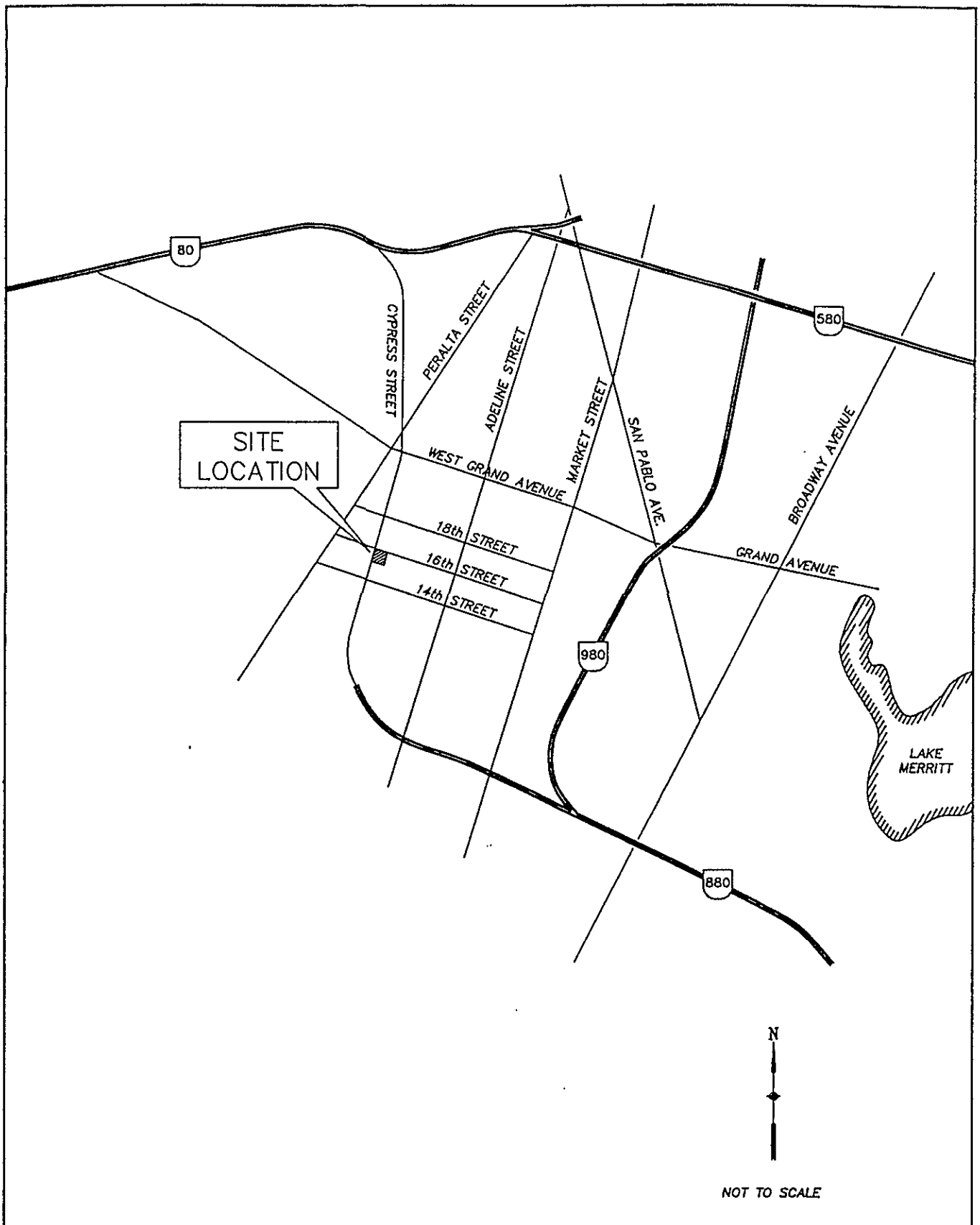


FIGURE 1.
SITE LOCATION MAP
NESTLE FACILITY, 1310 14th STREET,
OAKLAND, CALIFORNIA.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

PROJECT NO.	DATE
60966.01.0008	5/14/97
FILE NAME: LOCATION.DWG	REVIEWED BY: Joe Muehleck

LEGEND:

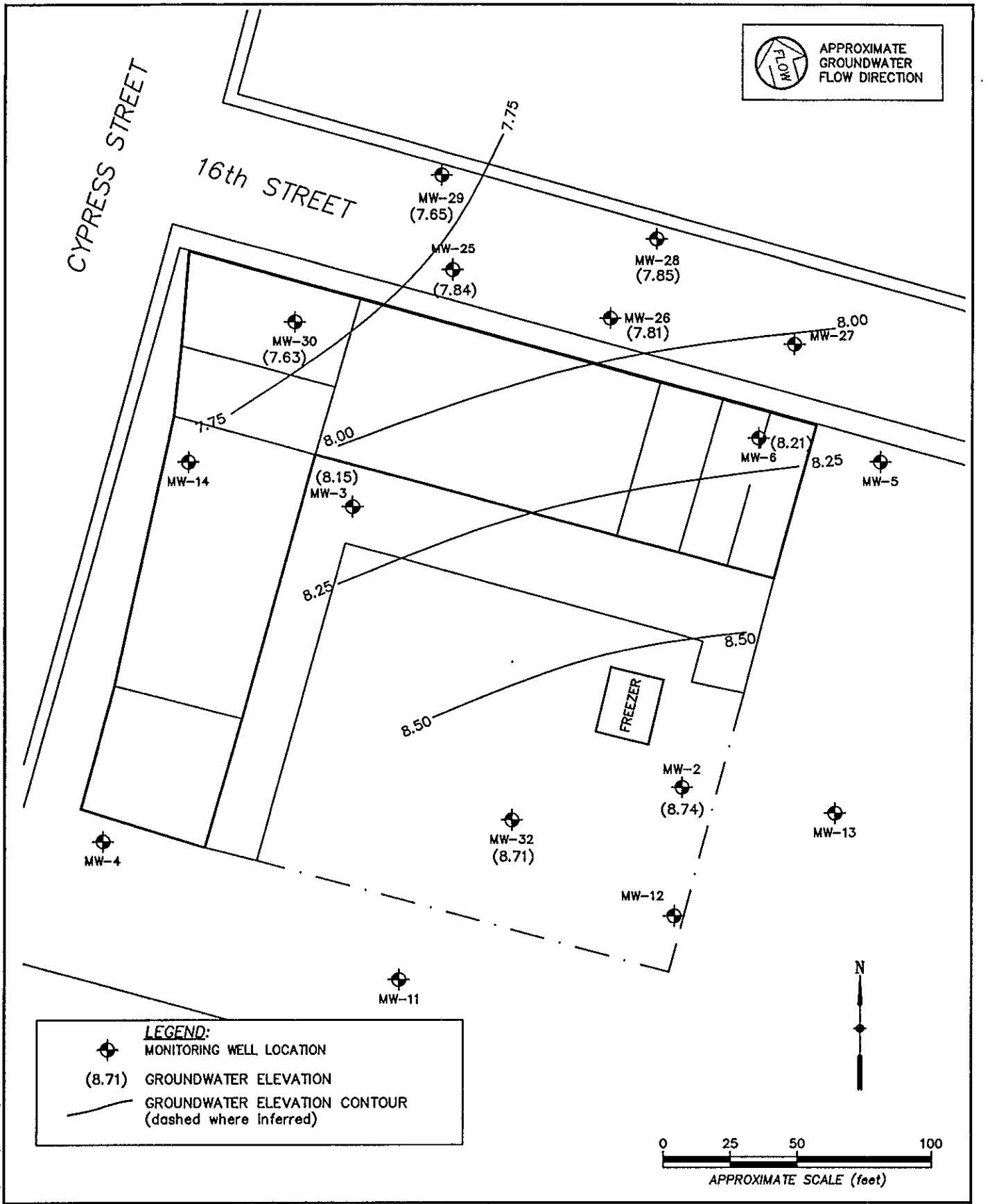
- GROUNDWATER MONITORING AND VAPOR EXTRACTION WELLS
- WELL OF UNKNOWN CONSTRUCTION
- Monitored wells having no detectable NAPL
- Wells containing >0.01 feet of NAPL
- Wells containing >1.0 feet of NAPL

NAPL Monitoring Results	
Total wells monitored	59
Wells containing no detectable NAPL	39
Wells containing >0.01 feet of NAPL	20
Wells containing >1.0 feet of NAPL	6

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

FILE: F:\PROJECTS\60996\MASTER\GRAPHICS\MAP1\NESSITE2.DWG; 072798

Figure 2. Site plan showing distribution of NAPL, Nestle USA Facility, 1310 14th Street, Oakland, California, April 1998.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

Figure 3. Groundwater elevations in wells sampled for dissolved hydrocarbons, Nestle Facility, Oakland, California. 22 April 1998.

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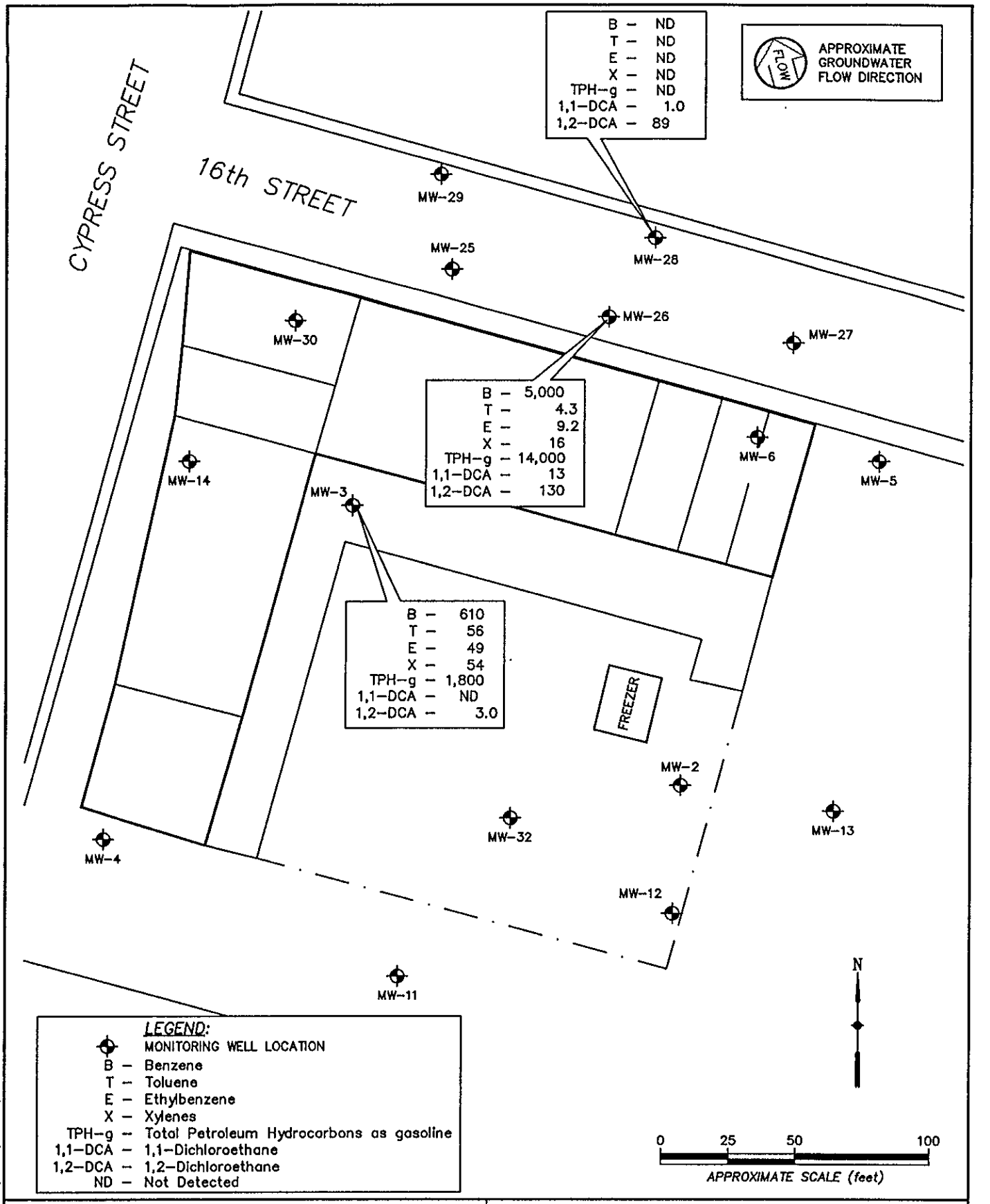

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Figure 4. Groundwater sampling analytical results (ug/L), Nestle Facility, Oakland, California. 22 April 1998.

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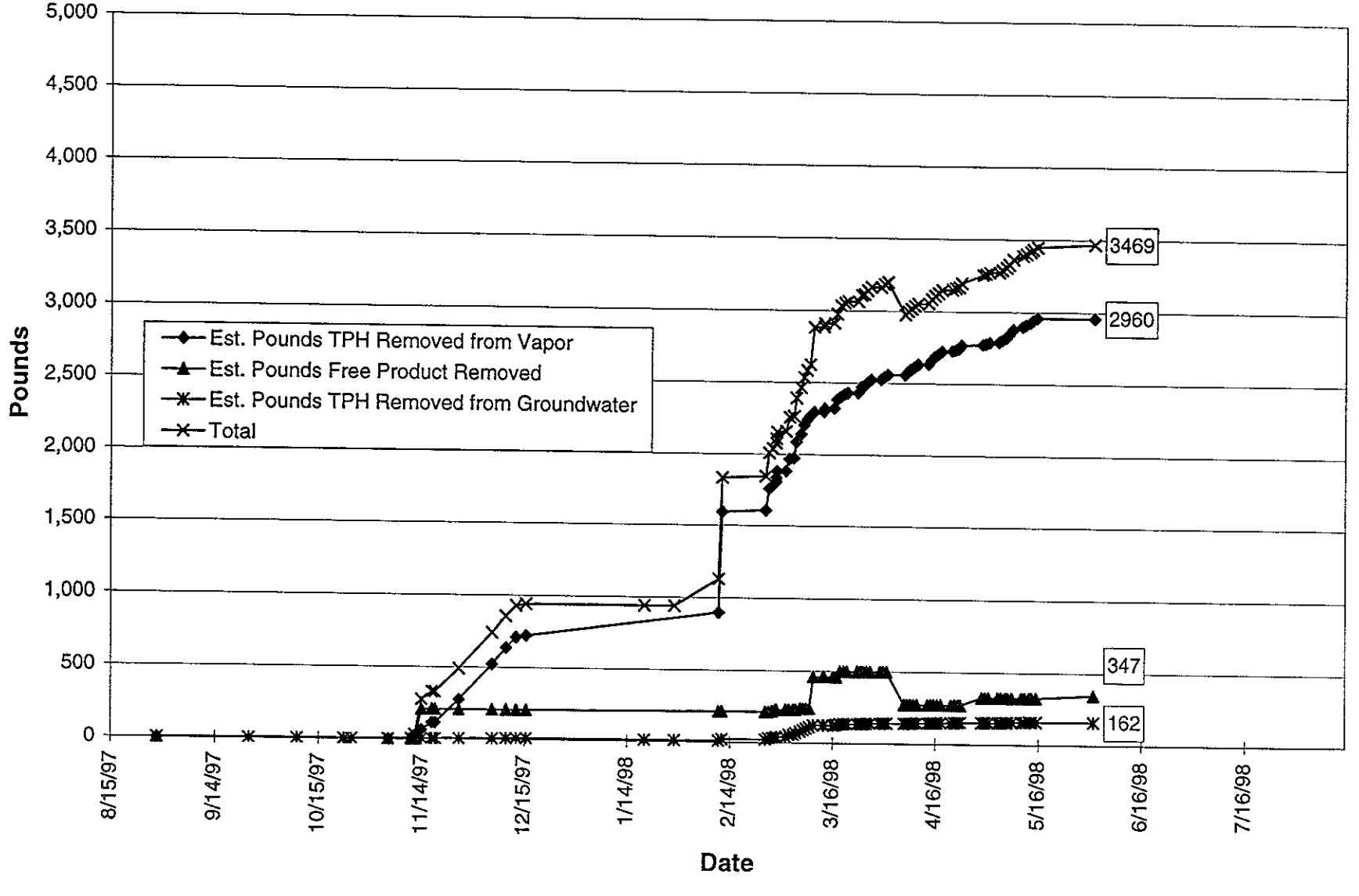
Figure 5: Total Pounds of Hydrocarbons Removed from Groundwater and Vapor Effluents and as Free Product Nestle' Facility, 1310 14th Street, Oakland, California



Tables

TABLE 1 PRODUCT THICKNESS (ft), FORMER CARNATION DAIRY FACILITY, OAKLAND, CALIFORNIA, NOVEMBER 1993 - APRIL 1998

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	2/27/96	2/29/96	6/20/96	8/30/96	9/18/96	10/4/96	10/11/96	10/18/96	10/22/96	11/22/96	12/6/96	12/17/96	12/21/96	1/3/97	1/14/97	2/10/97	2/17/97	2/28/97	3/7/97	3/14/97	3/28/97	4/11/97	4/17/97	4/25/97	5/2/97	5/9/97	5/16/97	6/6/97
MW-7	0.79	1.14	2.82	0.26	0.01	0.04	<0.01	<0.01	--	0.21	--	<0.01	--	0.02	0.20	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-8	0.47	0.44	0.30	0.31	0.31	0.26	0.08	0.09	0.23	0.24	0.24	<0.01	--	0.03	0.04	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-22	1.83	1.54	>3.0	1.14	0.19	0.03	<0.01	<0.01	<0.01	0.32	0.30	<0.01	--	0.01	0.04	0.22	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-23	1.21	0.07	1.40	1.79	0.68	0.41	<0.01	0.31	0.44	0.71	0.30	0.19	0.15	1.00	0.24	0.63	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-24	1.77	12.10	>3.0	0.97	0.39	<0.01	<0.01	<0.01	--	1.41	<0.01	<0.01	--	2.46	1.45	1.15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
E-0	--	--	--	--	--	--	--	--	2.72	--	<0.01	3.92	0.07	0.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.38	1.55	1.45	0.3	0.39	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
E-5	--	--	--	--	--	--	--	--	--	--	1.50	0.27	0.03	0.10	0.01	0.04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
E-6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
E-8	--	--	--	--	--	--	--	--	0.10	--	0.42	0.19	0.02	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-20	0.91	1.15	3.41	1.45	0.88	1.04	0.14	0.16	2.54	1.12	<0.01	3.5	2.65	3.50	0.69	0.47	0.36	0.2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-21	0.63	--	2.76	1.39	0.42	2.01	4.11	2.42	1.93	0.70	0.60	2.99	0.77	1.50	0.86	0.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-22	0.98	1.43	>3.0	0.90	0.47	0.04	0.60	0.71	0.68	0.71	0.23	1.57	0.94	1.20	0.47	0.42	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-23	0.67	0.36	1.06	0.38	0.17	0.06	0.34	0.06	0.08	0.12	0.11	<0.01	--	<0.01	0.09	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-24	--	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-26	0.6	0.54	2.05	0.39	0.17	<0.01	<0.01	<0.01	--	0.13	0.12	0.27	<0.01	0.01	0.07	0.03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-27	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-29	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-30	--	--	--	2.81	1.21	1.97	<0.01	<0.01	--	Dry	Dry	Dry	--	Dry	Dry	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-32	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-34	0.66	1.17	2.81	1.07	0.37	2.45	4.06	3.54	2.30	1.03	0.58	5.10	1.22	1.95	1.14	0.48	0.33	0.23	0.01	<0.01	<0.01	0.26	0.59	0.25	<0.01	<0.01	0.75	0.67	0.98	1.15	1.23	0.65	1.31	0.8	1.06	0.7	0.66	0.64	0.75
PR-35	0.62	1.26	>3.0	1.7	0.12	0.13	0.85	0.91	0.84	0.73	0.4	0.20	0.11	0.22	0.33	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-36	--	1.13	1.43	1.13	0.37	0.19	0.15	0.23	0.22	Dry	Dry	0.20	0.05	0.01	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	1.14	0.32	0.20	0.19	0.11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-41	0.59	0.53	0.42	0.13	0.43	0.03	<0.01	<0.01	--	Dry	Dry	Dry	--	Dry	Dry	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-44	0.24	0.22	0.19	<0.01	<0.01	<0.01	<0.01	<0.01	--	Dry	--	<0.01	--	Dry	Dry	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-45	0.17	5.27	0.10	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-47	0.75	0.41	sheen	<0.01	<0.01	0.01	<0.01	<0.01	--	0.08	0.08	<0.01	--	<0.01	0.08	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-48	1.12	0.20	>3.0	0.83	0.07	1.43	0.64	0.65	0.94	0.50	0.54	0.11	0.06	2.06	1.36	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-49	--	3.24	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	Dry	Dry	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-50	1.08	1.58	0.89	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-51	--	6.57	>3.0	<0.01	0.72	2.02	<0.01	<0.01	<0.01	<0.01	<0.01	Dry	--	Dry	Dry	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-52	1.01	5.09	1.16	0.45	0.05	0.03	<0.01	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-53	1.15	3.01	>3.0	0.61	0.49	1.52	<0.01	1.55	1.47	1.08	0.17	0.90	0.27	1.01	0.81	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-54	0.97	0.99	1.20	<0.01	0.08	0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-55	1.48	0.07	1.31	0.87	<0.01	0.01	<0.01	Dry	Dry	Dry	--	Dry	--	Dry	Dry	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-56	0.90	1.30	--	0.89	0.15	1.48	<0.01	<0.01	0.01	<0.01	--	<0.01	--	<0.01	<0.01	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-57	--	6.40	--	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-58	0.96	0.85	--	1.48	0.89	2.15	1.41	1.34	2.40	1.18	0.57	2.67	1.25	2.79	1.47	1.01	--	0.52	0.23	0.11	<0.01	<0.01	<0.01	<0.01	0.2	1.04	2.3	2.4	2.21	2.45	--	2.45	2.14	1.8	2.06	1.79	1.64	1.49	1.44
PR-60	--	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-61	0.25	0.39	0.35	1.03	<0.01	0.01	<0.01	<0.01	1.30	<0.01	<0.01	1.48	0.45	1.96	0.93	0.38	--	--	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.45	0.34	0.6	0.55	0.77	0.02	0.17	0.33	0.42	0.27	0.4	0.34	0.32
PR-62	0.04	--	0.07	0.09	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-64	1.49	0.11	>3.0	--	1.06	2.15	1.03	1.17	2.12	1.15	0.58	3.08	0.4	3.15	1.01	--	0.82	0.69	0.68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-65	0.04	0.02	0.09	0.08	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-67	1.05	0.65	0.81	--	--	--	--	--	0.05	--	<0.01	<0.01	--	0.03	0.10	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-68	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PR-70	--	--	1.59	--	--	--	--	--	--	--	--	--	--	*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-8	--	--	--	--	--	--	--	--	0.01	--	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-55	--	--	--	--	--	--	--	--	--	--	0.04	--	--	<0.01	<0.01	*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-56	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-70	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-71	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-77	--	--	--	--	--	--	--	--	0.78	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-78A	--	--	--	--	--	--	--	--	0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-78B	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-90	--	1.41	--	0.94	0.16	1.68	0.02	3.02	Dry	Dry	<0.01	Dry	--	Dry	Dry	Dry	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
V-94	--	--	--	--	--	--	--	--	0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
243	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
244	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
247	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
253	--	--	--	-	-	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

-- Well not monitored
* Well inaccessible
a Lots of oil in well
b Mud in well at 3.80 feet

TABLE 1 (extended)

Well	7&8/97	2/10/98	3/4/98	3/18/98	4/6/98	4/17/98
MW-7	0.03	<0.01	<0.01	--	<0.01	--
MW-8	<0.01	<0.01	<0.01	--	<0.01	--
MW-22	<0.01	<0.01	<0.01	--	<0.01	--
MW-23	1.60	0.51	0.55	--	0.37	--
MW-24	1.56	0.25	0.16	--	1.23	--
E-0	<0.01	0.02	0.03	--	0.03	--
E-5	0.24	<0.01	<0.01	--	<0.01	--
E-6	--	--	--	--	--	0.01
E-8	0.25	--	0.22	--	0.19	0.19
PR-12	0.10	--	--	--	<0.01	--
PR-20	1.19	3.40	4.77	--	4.36	--
PR-21	1.21	4.28	0.03	<0.01	0.03	--
PR-22	0.01	4.54	0.01	--	<0.01	--
PR-23	0.06	<0.01	0.01	<0.01	0.01	--
PR-24	<0.01	--	--	<0.01	--	<0.01
PR-26	0.11	3.39	0.09	<0.01	<0.01	--
PR-27	<0.01	--	--	<0.01	--	<0.01
PR-29	<0.01	--	--	<0.01	--	<0.01
PR-30	Dry	--	<0.01	<0.01	<0.01	--
PR-32	<0.01	<0.01	0.02	--	<0.01	--
PR-34	0.93	3.18	0.05	--	<0.01	--
PR-35	0.90	0.71	<0.01	--	<0.01	--
PR-36	Dry	0.54	0.10	--	0.10	--
PR-37	0.31	<0.01	0.06	--	<0.01	--
PR-41	Dry	--	<0.01	--	<0.01	<0.01
PR-44	Dry	--	--	--	--	<0.01
PR-45	<0.01	--	--	--	--	<0.01
PR-47	0.02	<0.01	<0.01	--	<0.01	--
PR-48	--	1.30	0.01	<0.01	0.01	--
PR-49	<0.01	--	<0.01	<0.01	<0.01	<0.01
PR-50	<0.01	--	<0.01	<0.01	<0.01	<0.01
PR-51	Dry	--	0.17	<0.01	<0.01	DRY
PR-52	<0.01	--	<0.01	--	<0.01	<0.01
PR-53	0.02	<0.01	<0.01	--	0.02	--
PR-54	<0.01	--	<0.01	--	<0.01	--
PR-55	Dry	--	0.02	--	<0.01	--
PR-56	Dry	--	<0.01	--	<0.01	--
PR-57	<0.01	--	<0.01	--	<0.01	<0.01
PR-58	0.85	4.25	5.22	--	4.25	--
PR-60	Dry	--	--	--	--	--
PR-61	0.49	0.55	1.14	--	1.74	--
PR-62	<0.01	--	--	--	--	--
PR-64	1.42	2.93	4.61	--	4.52	--
PR-65	Dry	--	<0.01	--	<0.01	--
PR-67	<0.01	--	<0.01	--	<0.01	--
PR-68	<0.01	--	<0.01	--	<0.01	--
PR-70	--	--	--	--	--	--
V-8	Dry	--	<0.01	--	--	--
V-21	Dry	--	<0.01	--	<0.01	<0.01
V-55	<0.01	--	0.05	--	0.04	--
V-56	0.66	--	--	--	0.03	--
V-70	Dry	--	<0.01	<0.01	<0.01	<0.01
V-71	Dry	--	--	<0.01	--	<0.01
V-77	<0.01	--	--	0.19	--	--
V-78A	<0.01	--	<0.01	--	<0.01	<0.01
V-78B	<0.01	--	<0.01	--	--	<0.01
V-80	--	--	--	<0.01	--	<0.01
V-90	Dry	--	--b	--	<0.01	--
V-93	--	--	--	--	--	0.06
V-94	Dry	--	--	--	--	0.60
243	1.88	<0.01	0.01	--	0.04	--
244	0.15	<0.01	<0.01	--	<0.01	--
247	<0.01	<0.01	<0.01	--	<0.01	--
253	1.13	0.66	1.04	--	1.38	--

-- Well not monitored.

* Well inaccessible.

a Lots of oil in well.

b Mud in well at 3.80 feet.

TABLE 2 GAUGING DATA FOR MONITORING WELLS AT THE FORMER NESTLE FACILITY, OAKLAND, CALIFORNIA, 1994–1998

Well No.	Gauging Date	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		--	8.51	--	7.98
	06/02/94		--	10.83	--	5.66
MW-2	02/24/94	15.11	--	9.21	--	5.90
	03/18/94		--	7.47	--	7.64
	06/02/94		--	9.65	--	5.46
	08/31/94		--	10.49	--	4.62
	12/22/94		--	8.74	--	6.37
	03/13/95		--	6.87	--	8.24
	06/09/95		--	8.47	--	6.64
	09/22/95		--	9.42	--	5.69
	12/12/95		--	10.23	--	4.88
	12/18/95		--	9.87	--	5.24
	03/12/96		--	6.70	--	8.41
	06/21/96		--	8.22	--	6.89
	08/29/96		--	9.59	--	5.52
	01/16/97		--	7.07	--	8.04
	04/15/97		--	8.21	--	6.90
	07/07/97		--	9.40	--	5.71
	10/27/97		--	10.25	--	4.86
	01/27/98		--	6.74	--	8.37
	04/22/98		**--**	**6.37**	**--**	**8.74**
MW-3	02/24/94	14.30	--	8.47	--	5.83
	03/18/94		--	7.23	--	7.07
	06/02/94		--	8.93	--	5.37
	08/31/94		--	9.91	--	4.39
	12/22/94		--	8.14	--	6.16
	03/13/95		--	6.64	--	7.66
	06/09/95		--	7.82	--	6.48
	09/22/95		--	9.08	--	5.22
	12/06/95		--	9.97	--	4.33
	12/12/95		--	9.53	--	4.77
	12/18/95		--	9.21	--	5.09
	03/12/96		--	6.31	--	7.99
	06/21/96		--	7.78	--	6.52
	08/29/96		--	9.05	--	5.25
	01/16/97		--	7.12	--	7.18
	04/15/97		--	7.78	--	6.52
	07/07/97		--	8.82	--	5.48
	10/27/97		--	9.60	--	4.70
	01/27/98		--	6.40	--	7.90
	04/22/98		**--**	**6.15**	**--**	**8.15**
MW-4	02/24/94	14.42	--	8.09	--	6.33
	03/18/94		--	7.00	--	7.42

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-4	12/18/95	14.42	--	dry		--
	03/12/96		--	6.45	--	7.97
MW-5	02/24/94	14.41	--	8.08	--	6.33
	03/18/94		--	7.14	--	7.27
	06/02/94		--	9.09	--	5.32
	08/31/94		--	9.95	--	4.46
	12/22/94		--	8.22	--	6.19
	12/12/95		--	9.60	--	4.81
	03/12/96		--	6.46	--	7.95
MW-6	02/24/94	14.12	--	8.34	--	5.78
	03/18/94		--	7.04	--	7.08
	06/02/94		--	8.88	--	5.24
	08/31/94		--	9.65	--	4.47
	12/22/94		--	7.99	--	6.13
	03/13/95		--	6.32	--	7.80
	06/09/95		--	8.53	--	5.59
	09/22/95		--	8.63	--	5.49
	12/12/95		--	9.36	--	4.76
	12/18/95		--	9.16	--	4.96
	03/12/96		--	6.03	--	8.09
	06/21/96		--	7.67	--	6.45
	08/29/96		--	8.93	--	5.19
	01/16/97		--	6.92	--	7.20
	04/15/97		--	7.65	--	6.47
	07/07/97		--	8.67	--	5.45
	10/27/97		--	9.43	--	4.69
	04/22/98		**--**	**5.91**	**--**	**8.21**
MW-7	02/24/94	14.29	8.64	9.78	1.14	4.51
	03/18/94		6.56	9.38	2.82	4.91
	06/02/94		9.12	9.38	0.26	4.91
	08/31/94		9.87	9.88	0.01	4.41
	12/22/94		8.29	8.33	0.04	5.96
	03/13/95		--	6.72	--	7.57
	06/09/95		--	8.79	--	5.50
	09/22/95		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		7.34	7.64	0.30	6.56
	06/02/94		8.93	9.24	0.31	4.96
	08/31/94		9.82	10.13	0.31	4.07
	12/22/94		8.21	8.47	0.26	5.73
	03/13/95		6.77	6.85	0.08	7.35
	06/09/95		8.81	8.90	0.09	5.30
	07/27/95		8.32	8.55	0.23	5.65
	09/22/95		9.29	9.53	0.24	4.67

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-8	12/06/95	14.20	9.94	10.18	0.24	4.02
	12/18/95		9.16	9.36	0.20	4.84
	12/18/95		--	9.62	--	4.58
	12/18/95		--	9.25	--	4.95
	12/19/95		9.21	9.30	0.09	4.90
	12/19/95		9.34	9.35	0.01	4.85
	12/19/95		9.25	9.28	0.03	4.92
	12/28/95		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		--	--	--	--
	06/02/94		--	10.17	--	5.56
MW-11	03/18/94	14.55	--	6.95	--	7.60
	06/02/94		--	8.99	--	5.56
	08/31/94		--	9.80	--	4.75
	12/22/94		--	8.15	--	6.40
	12/18/95		--	9.29	--	5.26
	03/12/96		--	5.95	--	8.60
MW-12	03/18/94	15.28	--	7.62	--	7.66
	12/18/95		--	10.03	--	5.25
	07/07/97		--	9.48	--	5.80
MW-13	02/24/94	14.85	--	8.94	--	5.91
	03/18/94		--	8.62	--	6.23
	06/02/94		--	9.34	--	5.51
	08/31/94		--	10.15	--	4.70
	12/22/94		--	8.45	--	6.40
	12/12/95		--	9.94	--	4.91
	12/18/95		--	9.60	--	5.25
	03/12/96		--	6.40	--	8.45
MW-14	02/24/94	14.10	--	dry	--	--
	03/18/94		--	dry	--	--
	12/06/95		--	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		6.98	--	>3.0	--
	06/02/94		9.02	10.16	1.14	4.28
	08/31/94		9.97	10.16	0.19	4.28
	12/22/94		8.39	8.42	0.03	6.02

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-22	03/13/95	14.44	--	5.92	--	8.52
	06/09/95		--	8.60	--	5.84
	07/27/95		--	8.49	--	5.95
	09/22/95		9.42	9.74	0.32	4.70
	12/06/95		10.08	10.38	0.30	4.06
	12/18/95		--	9.35	--	5.09
MW-23	02/24/94	14.48	8.87	8.94	0.07	5.54
	03/18/94		7.04	8.44	1.40	6.04
	06/02/94		8.21	10.00	1.79	4.48
	08/31/94		9.93	10.61	0.68	3.87
	12/22/94		8.32	8.73	0.41	5.75
	03/13/95		--	5.52	--	8.96
	06/09/95		8.24	8.55	0.31	5.93
	07/27/95		8.43	8.87	0.44	5.61
	09/22/95		9.35	10.06	0.71	4.42
	12/06/95		--	10.07	--	4.41
	12/18/95		9.40	9.70	0.30	4.78
	12/18/95		--	9.89	--	4.59
	12/18/95		9.46	9.49	0.03	4.99
	12/19/95		9.45	9.55	0.10	4.93
	12/19/95		--	9.88	--	4.60
	12/19/95		9.48	9.52	0.04	4.96
	12/28/95		9.40	9.52	0.12	4.96
MW-24	02/24/94	14.67	8.95	--	12.10	--
	03/18/94		7.45	--	>3.0	--
	06/02/94		9.11	10.08	0.97	4.59
	08/31/94		10.19	10.58	0.39	4.09
	12/22/94		--	8.55	--	6.12
	03/13/95		--	6.68	--	7.99
	06/09/95		--	9.54	--	5.13
	09/22/95		9.35	10.76	1.41	3.91
	12/06/95		10.39	10.39	--	4.28
MW-25	02/24/94	12.86	--	7.36	--	5.50
	03/18/94		--	6.14	--	6.72
	06/02/94		--	7.93	--	4.93
	08/31/94		--	8.75	--	4.11
	12/22/94		--	7.01	--	5.85
	03/13/95		--	5.77	--	7.09
	06/09/95		--	6.75	--	6.11
	09/22/95		--	7.45	--	5.41
	12/12/95		--	8.18	--	4.68
	12/18/95		--	7.84	--	5.02
	03/12/96		--	5.38	--	7.48
	06/21/96		--	6.50	--	6.36

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-25	08/29/96	12.86	--	7.72	--	5.14
	01/16/97		--	6.00	--	6.86
	04/15/97		--	6.44	--	6.42
	07/07/97		--	7.53	--	5.33
	10/27/97		--	8.34	--	4.52
	01/27/98		--	5.37	--	7.49
	04/22/98		**--**	**5.02**	**--**	**7.84**
MW-26	02/24/94	12.71	--	7.21	--	5.50
	03/18/94		--	5.83	--	6.88
	06/02/94		--	7.68	--	5.03
	08/31/94		--	8.47	--	4.24
	12/22/94		--	6.98	--	5.73
	03/13/95		--	5.25	--	7.46
	06/09/95		--	6.47	--	6.24
	09/22/95		--	7.23	--	5.48
	12/12/95		--	7.99	--	4.72
	12/18/95		--	7.69	--	5.02
	03/12/96		--	4.86	--	7.85
	06/21/96		--	6.30	--	6.41
	08/29/96		--	7.51	--	5.20
	01/16/97		--	5.70	--	7.01
	04/15/97		--	7.48	--	5.23
	07/07/97		--	7.38	--	5.33
	10/27/97		--	8.15	--	4.56
	01/27/98		--	5.12	--	7.59
	04/22/98		**--**	**4.90**	**--**	**7.81**
MW-27	02/24/94	14.04	--	8.41	--	5.63
	03/18/94		--	7.23	--	6.81
	06/02/94		--	8.94	--	5.10
	12/12/95		--	9.30	--	4.74
	06/21/96		--	7.64	--	6.40
	08/29/96		--	8.82	--	5.22
	01/16/97		--	7.06	--	6.98
	04/15/97		--	7.36	--	6.68
MW-28	02/24/94	13.45	--	7.98	--	5.47
	03/18/94		--	6.65	--	6.80
	06/02/94		--	8.28	--	5.17
	08/31/94		--	9.03	--	4.42
	12/22/94		--	6.73	--	6.72
	03/13/95		--	5.93	--	7.52
	06/09/95		--	7.20	--	6.25
	09/22/95		--	8.37	--	5.08
	12/12/95		--	9.00	--	4.45

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-28	12/18/95	13.45	--	8.44	--	5.01
	03/12/96		--	5.62	--	7.83
	06/21/96		--	7.08	--	6.37
	08/29/96		--	9.30	--	4.15
	01/16/97		--	6.50	--	6.95
	04/15/97		--	7.17	--	6.28
	07/07/97		--	8.26	--	5.19
	10/27/97		--	8.93	--	4.52
	01/27/98		--	5.81	--	7.64
	04/22/98		**--**	**5.60**	**--**	**7.85**
MW-29	02/24/94	12.60	--	7.20	--	5.40
	03/18/94		--	5.82	--	6.78
	06/02/94		--	7.62	--	4.98
	08/31/94		--	8.44	--	4.16
	12/22/94		--	7.00	--	5.60
	03/13/95		--	5.55	--	7.05
	06/09/95		--	6.59	--	6.01
	09/22/95		--	7.58	--	5.02
	12/12/95		--	8.02	--	4.58
	12/18/95		--	7.76	--	4.84
	03/12/96		--	5.01	--	7.59
	06/21/96		--	6.33	--	6.27
	08/29/96		--	7.50	--	5.10
	01/16/97		--	5.78	--	6.82
	04/15/97		--	6.36	--	6.24
	07/07/97		--	7.33	--	5.27
	10/27/97		--	8.11	--	4.49
	01/27/98		--	5.15	--	7.45
	04/22/98		**--**	**4.95**	**--**	***7.65***
MW-30	02/24/94	14.54	--	8.95	--	5.59
	03/18/94		--	7.79	--	6.75
	06/02/94		--	9.47	--	5.07
	08/31/94		--	10.27	--	4.27
	12/22/94		--	8.64	--	5.90
	03/13/95		--	7.23	--	7.31
	06/09/95		--	8.34	--	6.20
	09/22/95		--	9.41	--	5.13
	12/06/95		--	10.35	--	4.19
	12/12/95		--	9.90	--	4.64
	12/18/95		--	9.55	--	4.99
	03/12/96		--	6.93	--	7.61
	06/21/96		--	8.23	--	6.31
	08/29/96		--	9.53	--	5.01
	01/16/97		--	7.72	--	6.82
	04/15/97		--	8.31	--	6.23
	07/07/97		--	9.28	--	5.26

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-30	10/27/97	14.54	--	10.02	--	4.52
	01/27/98		--	7.04	--	7.50
	04/22/98		**--**	**6.91**	**--**	**7.63**
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		--	7.25	--	7.51
	06/02/94		--	9.28	--	5.48
	08/31/94		--	10.12	--	4.64
	12/22/94		--	8.40	--	6.36
	03/13/95		--	6.63	--	8.13
	06/09/95		--	7.94	--	6.82
	09/22/95		--	9.32	--	5.44
	12/12/95		--	9.84	--	4.92
	12/18/95		--	9.53	--	5.23
	03/12/96		--	6.23	--	8.53
	06/21/96		--	7.85	--	6.91
	08/29/96		--	9.22	--	5.54
	01/16/97		--	7.14	--	7.62
	04/15/97		--	7.89	--	6.87
	07/07/97		--	9.00	--	5.76
	10/27/97		--	9.86	--	4.90
	01/27/98		--	6.35	--	8.41
	04/22/98		**--**	**6.05**	**--**	**8.71**

-- Product not present.

TABLE 3 CONCENTRATIONS (µg/L) OF ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES, NESTLE FACILITY, OAKLAND, CALIFORNIA, 1993–1998

Well No.	Date Sampled	Concentration (µg/L)											Notes
		Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	MTBE	
MW-2	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	11/05/93	--	--	--	--	--	--	--	--	--	--	--	
	02/25/94	<1	<1	<1	<1	<100	<1,000	--	--	--	--	--	
	06/03/94	<0.5	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	
	08/31/94	<0.3	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	a
	03/13/95	0.8	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	09/21/95	0.7	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	06/21/96	--	--	--	--	--	--	--	--	--	--	--	
	08/29/96	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	--	
	01/16/97	<0.5	<0.5	<0.5	<0.5	<50	<150	0.7	<0.5	<0.5	<0.5	--	
	07/07/97	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	<0.5	
	01/27/98	<0.5	<0.5	<0.5	<0.5	100	<150	--	--	--	--	<0.5	
MW-3	03/23/93	35	2.9	2	3.2	300	ND	--	--	--	--	--	
	07/27/93	97	1	4	1.1	220	ND	--	--	--	--	--	
	11/05/93	4.9	ND	ND	1.2	170	ND	--	--	--	--	--	
	02/25/94	42	<1	<1	<1	100	<1,000	--	--	--	--	--	
	06/03/94	120	8.2	8.4	4.5	320	<20,000	--	--	--	--	--	
	08/31/94	83	1.1	5.3	2.9	<500	<500	--	--	--	--	--	
	12/22/94	1,460	18	100	50	3,800	270	--	--	--	--	--	
	03/13/95	3,600	260	270	280	14,000	1,700	--	--	--	--	--	
	06/09/95	4,700	58	140	71	3,700	120	--	--	--	--	--	
	09/21/95	9,800	58	600	95	14,000	300	--	--	--	--	--	
	12/12/95	330	2.1	47	5.3	700	<50	--	--	--	--	--	
	03/12/96	350	4.6	23	8.7	600	<50	--	--	--	--	--	
	06/21/96	940	76	98	57	1,900	<50	--	--	--	--	--	
	08/29/96	420	29	44	28	900	<150	--	--	--	--	--	
	01/16/97	1,600	270	120	194	3,600	700	<0.5	9.2	<0.5	<0.5	--	
	04/15/97	1,300	300	180	160	4,300	800	<0.5	16	<0.5	1.1	6.9	
	07/07/97	100	84	100	67	1,900	350	--	--	--	--	3.8	

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	MTBE	Notes
MW3	10/27/97	1,030	60	54	40	2,200	--	<0.5	2.4	<0.5	<0.5	3.1	
	01/27/98	1,070	98	73	69	3,200	--	--	--	--	--	3.9	
	04/22/98	**610**	**56**	**49**	**54**	**1,800**	**--**	**<0.5**	**3.0**	**<0.5**	**<0.5**	**1.1**	
MW-6	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	11/05/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	02/25/94	<1	<1	<1	3.5	<100	<1,000	--	--	--	--	--	
	06/03/94	2.7	<0.5	<0.5	<0.5	69	<20,000	--	--	--	--	--	
	08/31/94	<0.3	8.7	1.6	3.5	<500	<500	--	--	--	--	--	
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	a
	03/13/95	1.2	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	
	06/09/95	0.6	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	06/21/96	--	--	--	--	--	--	--	--	--	--	--	
	08/29/96	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	--	
	01/16/97	5.5	16	2.9	16	140	220	<0.5	6.3	<0.5	<0.5	--	
	07/07/97	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	<0.5	
MW-25	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	11/05/93	4.2	4.4	2.5	20	170	ND	--	--	--	--	--	
	02/25/94	2.1	<1	<1	<1	<100	<1,000	--	--	--	--	--	
	06/03/94	2.4	14	<0.5	3.4	97	<20,000	--	--	--	--	--	
	08/31/94	0.5	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	
	12/22/94	0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	a
	03/13/95	0.58	<0.5	<0.5	<0.5	150	950	--	--	--	--	--	
	06/09/95	0.8	<0.5	<0.5	<0.5	<100	60	--	--	--	--	--	
	09/21/95	<0.5	<0.5	<0.5	<0.5	50	<50	--	--	--	--	--	
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	03/12/96	<0.5	<0.5	<0.5	<0.5	120	<50	--	--	--	--	--	
	06/21/96	--	--	--	--	--	--	--	--	--	--	--	
	08/29/96	<0.5	<0.5	<0.5	<0.5	90	<150	--	--	--	--	--	

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	MTBE	Notes
MW-25	01/16/97	0.6	<0.5	<0.5	<0.5	80	<150	25	41	<0.5	<0.5	--	
	07/07/97	<0.5	<0.5	<0.5	<0.5	140	<150	--	--	--	--	11	
	01/27/98	<0.5	<0.5	<0.5	<0.5	<100	--	--	--	--	--	10	
MW-26	03/23/93	180	190	55	330	7,000	1,300	ND	ND	ND	ND	--	
	07/27/93	470	96	30	80	1,800	ND	ND	140	ND	ND	--	
	11/05/93	4,700	1,300	9	1,400	19,000	ND	ND	120	ND	ND	--	
	02/25/94	4,800	570	200	860	14,000	<1,000	<1	28	<1	<1	--	
	06/03/94	4,100	300	120	230	12,000	<20,000	1.7	140	<0.5	<0.5	--	c
	08/31/94	4,100	360	170	450	93,000	1,400	<4.0	<4.0	<4.0	<4.0	--	
	12/22/94	1,030	170	85	290	5,000	560	<2.0	<2.0	<2.0	<2.0	--	d
	03/13/95	320	19	23	66	3,000	810	53	5.8	<0.5	<0.5	--	
	06/09/95	14,000	64	31	230	10,800	310	240	3.1	1	<0.5	--	
	09/21/95	1,900	160	160	330	8,000	200	1.3	120	<0.5	<0.5	--	
	12/12/95	13,000	38	36	120	25,000	0.6	1.4	180	<0.5	<0.5	--	b
	03/12/96	9,000	33	30	65	4,400	<50	<0.5	180	<0.5	<0.5	--	
	06/21/96	14,000	27	16	66	5,400	<50	3.2	170	<0.5	<0.5	--	
	08/29/96	8,500	26	28	74	19,000	<150	<0.5	160	<0.5	<0.5	--	
	01/16/97	6,500	21	31	47	4,600	--	4.3	>50	<0.5	<0.5	26	
	04/15/97	16,000	33	40	160	26,000	2,200	3.5	97	<0.5	2.4	40	e
	07/07/97	22,000	44	170	200	28,000	1,100	<5.0	<5.0	<5.0	<5.0	95	
	10/27/97	16,000	26	100	37	30,000	--	3.6	92	<0.5	<0.5	38	
	01/27/98	23,600	<5.0	<5.0	<5.0	26,000	420	8.3	100	<0.5	<0.5	100	
	04/22/98	**5,000**	**4.3**	**9.2**	**16**	**14,000**	**--**	**13**	**130**	**<0.5**	**<0.5**	**27**	
MW-27	06/21/96	<0.5	<0.5	<0.5	<0.5	<50	<50	<0.5	6.8	<0.5	<0.5	--	
	08/29/96	--	--	--	--	--	--	--	--	--	--	--	
	01/16/97	12	5.0	<0.5	2.6	70	<150	<0.5	5.7	<0.5	<0.5	--	
MW-28	03/23/93	ND	ND	ND	ND	110	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	11/05/93	ND	ND	ND	2.1	ND	ND	--	--	--	--	--	
	02/25/94	<1	<1	<1	<1	<100	<1	--	--	--	--	--	
	06/03/94	3.1	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	
	08/31/94	1.4	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	MTBE	Notes
MW-28	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	a
	03/13/95	0.91	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	06/21/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	08/29/96	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	--	
	01/16/97	18	20	2.2	13	220	<150	5.1	85	<0.5	<0.5	8.2	
	04/15/97	<0.5	<0.5	<0.5	<0.5	120	<150	1.1	150	<0.5	<0.5	7.1	
	07/07/97	<0.5	<0.5	<0.5	<0.5	110	<150	<5.0	170	<5.0	<5.0	7.2	
	10/27/97	3.6	<0.5	<0.5	<0.5	300	--	6.2	120	<0.5	<0.5	36	
	01/27/98	7.6	<0.5	<0.5	<0.5	500	<150	--	--	--	--	56	
	04/22/98	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<50**	**--**	**1.0**	**89**	**<0.5**	**<0.5**	**8.6**	
MW-29	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	11/05/93	ND	ND	2.1	11	ND	ND	--	--	--	--	--	
	02/25/94	<1	<1	<1	<1	<100	<1,000	--	--	--	--	--	
	06/03/94	<0.5	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	
	08/31/94	<0.3	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	a
	03/13/95	0.59	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	03/12/96	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	06/21/96	--	--	--	--	--	--	--	--	--	--	--	
	08/29/96	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	--	
	01/16/97	6.6	8.9	0.6	9.3	120	<150	47	24	<0.5	<0.5	1.8	
	07/07/97	<0.5	<0.5	<0.5	<0.5	<50	<150	52	21	<5.0	<5.0	1.2	
	01/27/98	<0.5	<0.5	<0.5	<0.5	100	<150	--	--	--	--	8.0	
MW-30	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	MTBE	Notes
MW-30	11/05/93	ND	ND	ND	2.8	ND	ND	--	--	--	--	--	
	02/25/94	1.3	<1	<1	<1	<100	<1,000	--	--	--	--	--	
	06/03/94	1.1	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	
	08/31/94	0.8	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	
	12/22/94	0.6	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	a
	03/13/95	0.98	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	
	06/21/96	--	--	--	--	--	--	--	--	--	--	--	
	08/29/96	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	--	
	01/16/97	<0.5	<0.5	<0.5	0.6	80	<150	<0.5	<0.5	<0.5	0.9	--	
	07/07/97	<0.5	<0.5	<0.5	<0.5	<50	<150	--	--	--	--	<0.5	
	01/27/98	5.4	<0.5	<0.5	<0.5	100	--	--	--	--	--	<0.5	
MW-32	03/23/93	391	6.2	3.1	9	440	ND	ND	60	ND	ND	--	
	07/27/93	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	--	
	11/05/93	20	ND	1.8	2.1	170	ND	ND	7.9	ND	ND	--	
	02/25/94	5.6	<1	<1	<1	<100	<1,000	<1	<1	<1	<1	--	
	06/03/94	120	1.3	<0.5	1.4	350	<20,000	<0.5	11	<0.5	<0.5	--	
	08/31/94	39	0.5	2.2	1.2	<500	<500	<4.0	10	<4.0	<4.0	--	
	12/22/94	4.8	<0.5	<0.5	<0.5	<50	<50	<2.0	4.6	<2.0	<2.0	--	a
	03/13/95	220	3.6	6.5	5.8	1,100	<400	<0.5	16	<0.5	<0.5	--	
	06/09/95	1,500	7.9	43	14	2,200	180	0.7	<0.5	0.5	<0.5	--	
	09/21/95	1,200	2.4	72	4.5	2,300	60	<0.5	6.7	<0.5	1.4	--	
	12/12/95	230	<0.5	8.9	<1.0	500	<50	<0.5	28	<0.5	<0.5	--	
	03/12/96	40	<0.5	1.7	<0.5	110	<50	<0.5	6.8	<0.5	<0.5	--	
	06/21/96	--	--	--	--	--	--	--	--	--	--	--	
	08/29/96	150	<0.5	49	<0.5	700	<150	<0.5	27	<0.5	<0.5	--	
	01/16/97	14	<0.5	1.9	<0.5	150	<150	<0.5	10	<0.5	0.7	--	f
	07/07/97	370	11	110	21	1,600	190	--	--	--	--	11	g
	01/27/98	13	<0.5	1.0	<0.5	300	--	<0.5	7.5	<0.5	<0.5	2.5	

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L) Benzene	Toluene	Ethyl-benzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	MTBE	Notes
Rinse Blank	**04/22/98**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<50**	--	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	h
Trip Blank	**04/22/98**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<50**	--	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	

Notes:
a. Non-diesel peak reported.
b. No diesel pattern detected; result due to high gasoline concentration.
c. Bromodichloromethane detected, 0.84 µg/L.
d. 8 other volatiles detected by 8260.
e. c 1,2-DCE detected, 0.7 µg/L.
f. c 1,2-DCE detected, 0.8 µg/L.
g. Values for benzene and ethylbenzene are estimated.
h. Chloroform detected, 9.2 µg/L; and bromodichloromethane detected, 0.7 µg/L.

ND	Not detected.
--	Not analyzed or not sampled.
µg/L	Micrograms per liter.
TPH-g	Total Petroleum Hydrocarbons as gasoline.
TPH-d	Total Petroleum Hydrocarbons as diesel.
1,1-DCA	1,1-Dichloroethane.
1,2-DCA	1,2-Dichloroethane.
1,1,1-TCA	1,1,1-Trichloroethane.
c 1,2-DCE	cis 1,2-Dichloroethylene.
TCE	Trichloroethene.
MTBE	Methyl t-butyl ether.

TABLE 4 OPERATION AND PERFORMANCE DATA- GROUNDWATER EXTRACTION SYSTEM
NESTLE' FORMER CARNATION FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA

Date	Hours of Operation	Percent Operational[1]	Flow Total (gallons)	Average Operational Flow Rate (gpm)[2]	Total Influent TPH Conc. (µg/L)	Est. Pounds TPH in Water Removed[3]	Est. Cumulative Pounds Free Product Removed[4]	
			350					
8/28/97	15.0	NA	700	NM		0.00	0	Startup and testing. Repair needed.
11/4/97	0.2	0%	NM	NM	471,000	NM	0	Restart after repairs.
11/11/97	0.0	0%	1,440	NM		2.34	0	2 x 200 lb LGAC changed out
11/12/97	2.0	8%	1,446	0.05	286,000	0.02	0	
11/14/97	2.6	5%	1,820	2.40		0.99	209	
11/17/97	3.7	5%	2,610	3.56		2.09	209	
11/18/97	0.7	3%	2,820	5.00		0.56	209	
11/25/97	2.8	2%	2,870	NM		0.13	209	
12/5/97	3.0	1%	3,890	5.67		2.70	209	2 more 200 lb LGAC added in series
12/9/97	1.7	2%	4,380	4.80		1.30	209	
12/12/97	2.3	3%	4,900	3.77		1.38	209	
12/15/97	0.3	0%	5,020	6.67		0.32	209	
2/10/98	1.7	1%	5,369	NM	350,000	0.92	217	Restarted after additional repairs.
2/11/98	11.6	47%	7,830	3.54		9.23	217	Shut down for VGAC changeout
2/24/98	0.6	0%	7,980	4.17		0.56	217	Restart
2/25/98	11.6	49%	10,855	4.13	550,000	10.79	217	
2/26/98	1.9	8%	11,384	4.64		2.50	222	LGAC high pressure shutdown
2/27/98	2.3	9%	12,041	4.76		3.11	231	LGAC high pressure shutdown
2/27/98	1.7	93%	12,271	2.25		1.09	231	
2/27/98	2.2	50%	12,790	3.93		2.45	231	Shut down for weekend.
3/2/98	0.3	0%	13,080	16.11		1.37	231	Restart, open Line #2
3/3/98	12.1	50%	16,211	4.31		14.80	231	Shut down for LGAC, VGAC changeout
3/4/98	0.5	2%	16,400	6.30		0.89	231	Restart, 2x200lb LGAC changed out
3/5/98	8.2	48%	18,750	4.78	584,000	11.11	231	
3/6/98	8.0	25%	21,195	5.09		10.19	240	False high level in Tank #3. Restarted
3/7/98	10.6	49%	23,968	4.36		11.56	240	
3/8/98	11.5	53%	26,380	3.50		10.05	240	
3/9/98	11.6	50%	28,980	3.74		10.84	240	
3/10/98	15.8	57%	32,094	3.28	416,000	12.98	463	Shut down for VGAC and LGAC changeout.
3/13/98	0.6	1%	32,293	5.53		0.37	463	Restart, 3 x 200 lb LGAC changed out
3/13/98	2.6	43%	32,850	3.57		1.04	463	Shut down for weekend.
3/16/98	0.3	0%	33,055	11.39		0.38	463	Restarted after weekend.
3/17/98	9.4	45%	34,792	3.08		3.23	463	
3/18/98	9.3	36%	37,139	4.21	30,000	4.36	498	
3/19/98	12.2	44%	39,437	3.14		1.40	498	
3/20/98	7.3	33%	41,135	3.88		1.03	498	Shut down for weekend.
3/23/98	0.3	0%	41,155	1.11		0.01	498	Restarted after weekend.
3/24/98	9.0	41%	43,100	3.60		1.18	498	
3/25/98	4.1	20%	44,178	4.38	116,000	0.66	498	Separation samples collected
3/26/98	11.2	47%	46,200	3.01		1.31	498	Separation samples collected
3/27/98	10.0	38%	48,445	3.74		1.46	498	Shut down for weekend.
3/30/98	0.5	1%	48,656	7.03		0.14	498	
3/31/98	12.3	51%	51,166	3.40	40,000	1.63	498	
4/1/98	8.5	36%	52,750	3.11		0.47	498	Shut down for vapor phase carbon changeout.
4/6/98	0.0	0%	53,098	0.00		0.10	274	Restart after changeout. Drained water from product tank.
4/7/98	12.8	68%	54,971	2.44		0.56	274	
4/8/98	13.5	61%	57,087	2.61	31,500	0.63	274	Shut down for upgrades to system
4/8/98	0.9	17%	57,515	7.93		0.13	274	
4/9/98	12.1	56%	59,670	2.97		0.72	274	
4/10/98	10.4	46%	61,678	3.22		0.67	274	Shut down for the weekend.

TABLE 4 OPERATION AND PERFORMANCE DATA- GROUNDWATER EXTRACTION SYSTEM
NESTLE' FORMER CARNATION FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA

Date	Hours of Operation	Percent Operational[1]	Flow Total (gallons)	Average Operational Flow Rate (gpm)[2]	Total Influent TPH Conc. (µg/L)	Est. Pounds TPH in Water Removed[3]	Est. Cumulative Pounds Free Product Removed[4]	
4/13/98	0.5	1%	61,932	8.47		0.08	274	Restart after weekend
4/14/98	4.7	22%	63,462	5.43	48,500	0.51	274	Shut down from clogged filter
4/15/98	10.0	44%	66,411	4.92		0.98	274	
4/16/98	9.6	40%	69,230	4.89		1.40	274	Shut down from clogged filter
4/17/98	10.1	37%	72,380	5.20		1.57	274	Shut down from clogged filter. Shut down for weekend
4/20/98	2.3	3%	72,751	2.69		0.18	274	Restarted after weekend.
4/21/98	3.4	14%	74,261	7.40		0.75	274	Shut down from clogged filter
4/22/98	2.0	9%	NM	NM	71,000	NM	274	Shut down from clogged filter
4/23/98	8.9	46%	76,970	4.14		1.50	274	Shut down for VGAC and LGAC changeout.
4/29/98	1.6	1%	77,820	8.85		0.47	327	Restart after GAC changeout
4/30/98	1.6	8%	78,320	5.21		0.28	327	Filter fouling.
5/1/98	1.8	7%	79,136	7.56		0.45	327	Filter fouling. Shut down for weekend
5/4/98	1.3	2%	79,290	1.97	61,600	0.09	327	Restart after weekend
5/5/98	9.4	43%	81,382	3.71		0.71	327	
5/6/98	15.1	53%	84,062	2.96		0.91	327	
5/7/98	8.6	47%	86,055	3.86		0.68	327	
5/8/98	14.2	47%	89,207	3.70		1.07	327	
5/11/98	16.2	24%	92,465	3.35		1.11	327	System operated over weekend. Shutdown from low water level in separator #2.
5/12/98	4.9	23%	93,541	3.66		0.37	327	
5/13/98	6.1	19%	94,944	3.83		0.48	327	
5/14/98	8.3	50%	96,655	3.44	19,900	0.58	327	
5/15/98	16.3	52%	99,890	3.31		0.54	327	Shut down for vapor breakthrough
6/1/98	0.3	0%	99,930	2.22		0.01	347	
Total	**451.0**		**81,382**			**162.48**	**347**	

1 Percent operational = hours of blower operation / days between readings * 24 hours/day * 100%

2 Average operational flow rate = total flow in period/hours of operation in period

3 Est. TPH Pounds Removed = Average Influent conc. (µg/L) [using latest sampling] * period flow total (gallons) * 1 lb/454 g * 1/1,000,000 * 3.785 L/gallon

4 Est. Cumulative Pounds Free Product Removed assumes all liquid tank is 100% product, specific gravity = 0.8

gpm = gallons per minute

Total TPH = Total of TPH-gas and TPH-diesel

µg/L = micrograms per liter

TABLE 5 OPERATION AND PERFORMANCE DATA - VAPOR EXTRACTION SYSTEM
NESTLE' FORMER CARNATION FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA

Date	Hours Blower Operational	Percent Blower Operational	Average Blower Flow Rate (CFM)	GAC Influent Conc. by FID (ppmv)	GAC Midpoint Conc. by FID (ppmv)	GAC Effluent Conc. by FID (ppmv)	Estimated Pounds of TPH-g Removed*	
8/28/97	15	NA	25	120	0	0	0.8	Startup and testing. Repair needed.
11/4/97	0.2	0.1%	53	>1000	>1000	0	1.8	Restart after repairs.
11/11/97	0	0.0%	NM	NM	NM	NM	0.0	2,000 lb VGAC Change out.
11/12/97	2	8.2%	NM	>1000	0	0	27.4	
11/14/97	2.6	5.5%	50.5	16,000	0	0	36.0	
11/17/97	3.7	4.9%	NM	>10,000	3,000	0	50.7	VGAC flooded by water.
11/18/97	0.7	3.0%	NM	950	3,000	100	0.6	
11/25/97	2.8	1.7%	55	61,000	0	0	160.8	2,000 lb VGAC change out, restart.
12/5/97	3	1.3%	NM	NM	NM	NM	245.9	
12/9/97	1.7	1.7%	76	42,000	0	60	113.9	
12/12/97	2.3	3.2%	67	13,000	20	0	72.5	
12/15/97	0.3	0.4%	70	52,000	0	0	11.7	
2/10/98	1.7	0.5%	55	110,000	7	0.2	176.0	Restarted after additional repairs.
2/11/98	11.6	47.3%	54	20,000	1,608	0.2	696.9	Shutdown for VGAC changeout.
2/24/98	0.6	0.2%	55.5	20,000	6	0.3	11.4	Restart, 2,000 lb VGAC changeout 2/23
2/25/98	11.6	49.4%	55	8,020	5	0.1	153.0	
2/26/98	1.9	7.7%	54.5	16,000	3	0	21.3	
2/27/98	2.3	9.4%	56	8,089	3	0	26.6	
2/27/98	1.7	92.7%	53	29,000	0	0	28.6	
2/27/98	2.2	49.8%	54	14,500	0	0	44.2	Shut down for weekend.
3/2/98	0.3	0.5%	65	9,360	0	0	4.0	Restart, open Line #2
3/3/98	12.1	50.4%	58.5	4,386	17	0	83.3	Shutdown for VGAC changeout.
3/4/98	0.5	1.6%	NM	23,000	0	0	6.4	Restart. 1,000 lb VGAC changeout.
3/5/98	8.2	47.5%	51.5	8,740	2	2.8	114.7	
3/6/98	8	25.2%	47.5	7,720	0	0	53.5	
3/7/98	10.6	49.1%	64.5	2,586	0	0	60.3	
3/8/98	11.5	53.5%	69	3,130	1	0.1	38.8	
3/9/98	11.6	50.4%	62	1,420	8	0	28.0	
3/10/98	15.8	56.6%	60	1,574	316	0	24.3	Shutdown for VGAC changeout.
3/13/98	0.6	0.9%	44	12,000	1	0	3.1	1,000 lb VGAC changeout.
3/13/98	2.6	43.3%	50	8,100	0	0	22.4	Shutdown for weekend.
3/16/98	0.3	0.4%	55	10,400	0	0	2.6	Restart after weekend
3/17/98	9.4	45.3%	60	2,069	0	0	60.2	
3/18/98	9.3	36.4%	68	1,454	0	0	19.1	
3/19/98	12.2	44.2%	60	1,384	0	0	17.8	
3/20/98	7.3	32.9%	49	1,568	0	0	9.0	Shutdown for weekend.
3/23/98	0.3	0.4%	60	6,510	0	0	1.2	Restart after weekend
3/24/98	9	40.8%	64	1,977	0	0	41.8	
3/25/98	4.1	20.2%	58	1,338	0	0	6.7	
3/26/98	11.2	47.0%	65	2,476	2	0.1	23.8	
3/27/98	10	37.5%	69	1,215	45	0	21.8	Shutdown for weekend.
3/30/98	0.5	0.7%	63	1,170	30	0.3	0.6	
3/31/98	12.3	50.7%	64	1,715	85	0	19.4	
4/1/98	8.5	35.8%	62	1,245	110	0	13.3	Shutdown for vapor phase carbon changeout
4/6/98	0	0.0%	59	2,190	0	0	0.0	Restart after changeout.
4/7/98	12.8	67.7%	66	1,090	0	0	23.7	
4/8/98	13.5	61.4%	64	1,000	0	0	15.5	
4/8/98	0.9	17.1%	56	1,230	0	0	1.0	Shut down for upgrades to system
4/9/98	12.1	56.1%	67	1,370	1	0	18.0	
4/10/98	10.4	46.4%	65	1,370	0	0	15.9	Shut down for the weekend.

TABLE 5 OPERATION AND PERFORMANCE DATA - VAPOR EXTRACTION SYSTEM
NESTLE' FORMER CARNATION FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA

Date	Hours Blower Operational	Percent Blower Operational	Average Blower Flow Rate (CFM)	GAC Influent Conc. by FID (ppmv)	GAC Midpoint Conc. by FID (ppmv)	GAC Effluent Conc. by FID (ppmv)	Estimated Pounds of TPH-g Removed*	
4/13/98	0.5	0.7%	63	8,970	0	0	2.8	Restart after weekend
4/14/98	4.7	22.0%	62	2,650	0	0	29.0	
4/15/98	10	43.8%	71	1,180	0	0	23.3	
4/16/98	9.6	40.0%	69	1,930	0	0	17.6	
4/17/98	10.1	36.8%	56	2,036	30	0	19.2	Shut down for weekend
4/20/98	2.3	3.2%	60	2,240	22	0	5.0	Restarted after weekend.
4/21/98	3.4	13.6%	62	2,150	142	0	7.9	
4/22/98	2	8.7%	80	2,880	148	0	6.9	
4/23/98	8.9	46.2%	74	1,680	180	0	25.7	Shut down for VGAC and LGAC changeout.
4/29/98	1.6	1.1%	NM	3,680	0	0	4.6	Restart after GAC changeout
4/30/98	1.6	7.6%	52	6,000	0	0	6.9	
5/1/98	1.8	6.9%	93	988	0	0	10.0	Shut down for weekend
5/4/98	1.3	1.9%	94	1,126	0	0	2.2	Restart after weekend
5/5/98	9.4	42.7%	99.5	579	0	0.3	13.6	
5/6/98	15.1	52.7%	85	918	0	0	16.4	
5/7/98	8.6	47.3%	91.5	2,250	0	0	21.3	
5/8/98	14.2	47.5%	87	1,051	0	0	34.9	
5/11/98	16.2	23.7%	85	927	13	0	23.3	Discovered system operated over weekend
5/12/98	4.9	22.7%	84	2,433	17	0	11.8	
5/13/98	6.1	19.0%	85	1,193	0	0	16.1	
5/14/98	8.3	49.8%	98	771	83	0.5	13.7	
5/15/98	16.3	51.7%	81	685	290	0	16.5	Shut down system for vapor breakthrough
6/1/98	0.3	0.1%	87	4,253	78	0	1.1	
TOTAL	**451**						**2960**	

CFM = cubic feet per minute
FID = Flame Ionization Detector
TPH-g = Total Petroleum Hydrocarbons, as Gasoline
ppmv = parts per million by volume

* Estimated Pounds TPH Removed = Average Influent conc.(ppmv) * Average flowrate (CFM) * Hours of Operation * 60 min/hour * 1/1,000,000 ppm * 110 g/mole *1/24.055 L/mole * 1 lb/454 g * 28.32 L/ft3
(assuming average TPH-g molecular weight is 110 g/mole, at 20° C temperature)

Appendix A

Field Documents

EA Engineering, Science, and Technology

FIELD SUMMARY REPORT

Client: Nestle Station No: OAKLAND

EA Project No: 09606-01 Task No: 00006

Field Team: Chris Chatburn

Date: 4-22-98

No. of Drums on Site: _____ Water _____ Soil _____ Empty _____ LPH

Summary:

Opened and gauged MW2, MW3, MW6, MW25, MW26, MW28 - MW30, and MW32.
Purged at least 3 casing volumes using a vacuum truck from MW3, MW26, and MW28. Collected groundwater samples from MW3, MW26, and MW28 for TPH-g, BTEX, and 8010 analysis. Put purgewater through the system and secured the wells. Mailed the samples to the Nestle lab for analysis. The system was not in operation.

MONITORING WELL DATA FORM

Client: Nestle

Date: 4-22-98

Project Number: 609466.01.0004

Station Number: OAKLAND

Site Location: 1310 14th St. Oakland Ca

Samplers: Chris Chatburn

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		6.37					
MW3		6.15					24.91
MW6		5.91					
MW25		5.02					
MW26		4.90					24.99
MW28		5.60					25.05
MW29		4.95					
MW30		6.91					
MW32		6.05					

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW3 Date 4-22-98

Project No: 609666.01.0006 Personnel: Chris Chatburn

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 Req'd Purge Volume (gal)
							2	(4)	6			
	24.91		6.15		18.76		0.16	0.64	1.44	12.00		36.0192

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: SCREEN Purge Rate: 5.5-6.5 gpm

Time	840	842	844	846			
Volume Purges (gal)	0	13	26	37			
Temperature (°C)	19.1	19.3	19.4	19.6			
pH	7.53	7.55	7.61	7.59			
Specific Conductivity (umhos)	984	959	960	987			
Turbidity / Color	low clear	low clear	low clear	low clear	/	/	/
Odor	ND	NO	NO	NO			
Casing Volumes Removed	0	1	2	3			
Dewatered?	NO	NO	NO	NO			

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 856 Approx. Depth to Water During Sampling: 7 FT.

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	6	VOA	HCl	40ml	low	clear	Y	BTEX 8020 TPH-G	

Total Purge Volume: 37 gallons Disposal/Containment Method: SYSTEM

Weather Conditions: sunny

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

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NO – missing two bolts

Problems Encountered During Purging and Sampling: NO

Comments: _____

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW 26 Date 4-22-98

Project No: 6094L6-01.0006 Personnel: Chris Chatburn

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 Req'd Purge Volume (gal)
							2	(4)	6			
	24.99		4.90		20.09		0.16	0.64	1.44		12.8576	38.5728

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: SCREEN Purge Rate: 6.5 gpm

Time	917	919	921	923			
Volume Purges (gal)	0	13	26	39			
Temperature (°C)	17.8	18.0	18.1	18.2			
pH	6.76	7.04	6.95	7.04			
Specific Conductivity (umhos)	828	822	624	814			
Turbidity / Color	low clear	low clear	low clear				
Odor	NO	NO	NO				
Casing Volumes Removed	0	1	2				
Dewatered?	NO	NO	NO				

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 930 Approx. Depth to Water During Sampling: 5 FT

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
MW 26	6	VOA	HCl	40mL	low	clear	Y	TPH-G BTEX 8020	
[redacted]									

Total Purge Volume: 39 gallons Disposal/Containment Method: SYSTEM

Weather Conditions: cloudy

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

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NO

Problems Encountered During Purging and Sampling: NO

Comments: _____

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW 26 Date 9-22-98

Project No: 609666.01.0004 Personnel: Chris Chatham

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 Req'd Purge Volume (gal)
							2	(4)	6			
	25.05		5.60		19.45		0.16	0.64	1.44	12.448		37.344

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: SCREEN Purge Rate: 6-6.5 gpm

Time	902	904	906	908			
Volume Purges (gal)	0	13	24	38			
Temperature (°C)	18.7	18.7	19.0	19.2			
pH	6.83	7.36	7.35	7.16			
Specific Conductivity (umhos)	802	784	770	760			
Turbidity / Color	low clear	low clear	low clear	low clear			
Odor	NO	NO	NO	NO			
Casing Volumes Removed	0	/	2	3			
Dewatered?	NO	NO	NO	NO			

Comments/Observations: _____

SAMPLING DATA

Time Sampled: 915 Approx. Depth to Water During Sampling: 6 FT.

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
MW	3 6	VOA	HCl	40mL	low	clear	Y	602 BTEX	TPH-g 8015

Total Purge Volume: 38 gallons Disposal/Containment Method: SYSTEM

Weather Conditions: cloudy

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

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NO

Problems Encountered During Purging and Sampling: NO

Comments: _____

Appendix B

Laboratory Analytical Reports

Nestlé USA

P O. BOX 1516
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TEL (614) 526-5000
FAX (614) 526-5353

Nestlé

Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207734
Lab#: 98APR8479-01

Sample Description: Water - Oakland
Sample ID: MW3
4/22/98 8:56
PO/Ref/Disp#: 60966.01/2161/0006

FAXED
MAY 12 1998

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	1.80	mg/L	0.05	CA-Luft	5/5/98
Benzene	610	µg/L	0.50	EPA 8020	5/5/98
Toluene	56.0	µg/L	0.50	EPA 8020	5/5/98
Ethylbenzene	49.0	µg/L	0.50	EPA 8020	5/5/98
m&p Xylenes	38.0	µg/L	0.50	EPA 8020	5/5/98
o-Xylene	16.0	µg/L	0.50	EPA 8020	5/5/98
Total Xylene	54.0	µg/L	0.50	EPA 8020	5/5/98
Methyl t-butyl ether	1.10	µg/L	0.50	EPA 8020	5/5/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Vinyl Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
Bromomethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloroethane	3.0	µg/L	0.5	EPA 8010	5/5/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98

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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207734
Lab#: 98APR8479-01

Sample Description: Water - Oakland
Sample ID: MW3
4/22/98 8:56
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromoform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98

ND : Not Detected.

Unless you request otherwise, this sample will be discarded 90 days from from the date of this report.
Sample condition upon receipt: Good.
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John Heuser
Chemist

Nestlé USA

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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207735
Lab#: 98APR8479-02

Sample Description: Water - Oakland
Sample ID: MW26
4/22/98 9:30
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	14.0	mg/L	0.05	CA-Luft	5/5/98
Benzene	5000	µg/L	0.50	EPA 8020	5/5/98
Toluene	4.30	µg/L	0.50	EPA 8020	5/5/98
Ethylbenzene	9.20	µg/L	0.50	EPA 8020	5/5/98
m&p Xylenes	14.0	µg/L	0.50	EPA 8020	5/5/98
o-Xylene	2.30	µg/L	0.50	EPA 8020	5/5/98
Total Xylene	16.0	µg/L	0.50	EPA 8020	5/5/98
Methyl t-butyl ether	27.0	µg/L	0.50	EPA 8020	5/5/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Vinyl Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
Bromomethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethane	13	µg/L	0.5	EPA 8010	5/5/98
Chloroform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloroethane	130	µg/L	0.5	EPA 8010	5/5/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98

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Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207735
Lab#: 98APR8479-02

Sample Description: Water - Oakland
Sample ID: MW26
4/22/98 9:30
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromoform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98

ND : Not Detected.

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Sample condition upon receipt: Good.
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Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207736
Lab#: 98APR8479-03

Sample Description: Water - Oakland
Sample ID: MW28
4/22/98 9:15
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	5/5/98
Benzene	ND	µg/L	0.50	EPA 8020	5/5/98
Toluene	ND	µg/L	0.50	EPA 8020	5/5/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	5/5/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	5/5/98
o-Xylene	ND	µg/L	0.50	EPA 8020	5/5/98
Total Xylene	ND	µg/L	0.50	EPA 8020	5/5/98
Methyl t-butyl ether	8.60	µg/L	0.50	EPA 8020	5/5/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Vinyl Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
Bromomethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethane	1.0	µg/L	0.5	EPA 8010	5/5/98
Chloroform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloroethane	89	µg/L	0.5	EPA 8010	5/5/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98

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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207736
Lab#: 98APR8479-03

Sample Description: Water - Oakland
Sample ID: MW28
4/22/98 9:15
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromoform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98

ND : Not Detected.

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Sample condition upon receipt: Good.
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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207737
Lab#: 98APR8479-04

Sample Description: Water - Oakland
Sample ID: Rinse Blank
4/22/98 8:50
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	5/5/98
Benzene	ND	µg/L	0.50	EPA 8020	5/5/98
Toluene	ND	µg/L	0.50	EPA 8020	5/5/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	5/5/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	5/5/98
o-Xylene	ND	µg/L	0.50	EPA 8020	5/5/98
Total Xylene	ND	µg/L	0.50	EPA 8020	5/5/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	5/5/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Vinyl Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
Bromomethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroform	9.2	µg/L	0.5	EPA 8010	5/5/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromodichloromethane	0.7	µg/L	0.5	EPA 8010	5/5/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98

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Nestlé

Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207737
Lab#: 98APR8479-04

Sample Description: Water - Oakland
Sample ID: Rinse Blank
4/22/98 8:50
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromoform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98

ND : Not Detected.

Unless you request otherwise, this sample will be discarded 90 days from from the date of this report.
Sample condition upon receipt: Good.
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John Heuser
Chemist

Nestlé USA

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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207738
Lab#: 98APR8479-05

Sample Description: Water - Oakland
Sample ID: Trip Blank
4/22/98 NR
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	5/5/98
Benzene	ND	µg/L	0.50	EPA 8020	5/5/98
Toluene	ND	µg/L	0.50	EPA 8020	5/5/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	5/5/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	5/5/98
o-Xylene	ND	µg/L	0.50	EPA 8020	5/5/98
Total Xylene	ND	µg/L	0.50	EPA 8020	5/5/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	5/5/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Vinyl Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
Bromomethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1-Dichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Chloroform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	5/5/98

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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya
Nestle USA - Environmental Group
Glendale, CA 91203

Date Sampled 4/22/98
Date Received: 4/23/98
Date Reported: 5/12/98
Report Number: 207738
Lab#: 98APR8479-05

Sample Description: Water - Oakland
Sample ID: Trip Blank
4/22/98 NR
PO/Ref/Disp#: 60966.01/2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	5/5/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	5/5/98
Bromoform	ND	µg/L	0.5	EPA 8010	5/5/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	5/5/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	5/5/98

ND : Not Detected.

Unless you request otherwise, this sample will be discarded 90 days from from the date of this report.
Sample condition upon receipt: Good.
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John Heuser
Chemist

Company Name: Nestle	Project Manager or Contact: DOUG ORAM Phone (925) 283-7077 Ex. 205
Project No. 609166.01	Project Name: Nestle 1310 14th ST OAKLAND, CA
Dept.: 2161 Task: 0006	
Sample Storage Location: EA - LAFAYETTE	ATO Number:
Page 1 of 1	Report #.

Chain of Custody Record

EA Laboratories
19 Loveton Circle
Sparks, MD 21152
Telephone: (410) 771-4920
Fax: (410) 771-4407

Report Deliverables: 1 2 3 4 D E

EDD: Yes/No

DUE TO CLIENT: STANDARD TURN AROUND

Parameters/Method Numbers for Analysis

Date	Time	Water	Soil	Sample Identification 19 Characters	No. of Containers	6240 (TPH-G)	BTEX	8010								98APR	EA Labs Accession Number	Remarks
4-22-98	856	X		MW3	6	X	X	X			1/10	1/100				8479-01		LPM:
4-22-98	930	X		MW2G	6	X	X	X			1/10	1/1000					2	Project Summary No.:
4-22-98	915	X		MW2B	6	X	X	X			OK						3	
4-22-98	850	X		RINSE BLANK	6	X	X	X			OK						4	
4-22-98	NR	X		TRIP BLANK	2	X	X				OK						5	HOLD (Check with Doug Oram)
5/12/98																		

Sampled by: (Signature) — Date/Time 4-22-98 1515

Relinquished by: (Signature) — Date/Time — Received by: (Signature) — Date/Time

Relinquished by: (Signature) — Date/Time — Received by Laboratory: (Signature) Nancy Conquel — Date/Time 4/23/98 9:35AM — Airbill Number:

Sample Shipped by: (Circle) Fed Ex. Puro. UPS Hand Carried Other:

Cooler Temp. 13.7C pH: ☐ Yes ☐ No Comments: Custody Seals Intact ☐ Yes ☐ No

NOTE: Please indicate method number for analyses requested. This will help clarify any questions with laboratory techniques.

WHITE—EA Laboratories YELLOW—EA Laboratories PINK—Project Manager *Shaded Areas for Lab Use Only*