

ENVIRONMENTAL  
PROTECTION

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11 December 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. Peacock:

Attached is the Third and Fourth Quarters 1998 Monitoring Report for the above-referenced site. Per my conversation with Larry Seto in September 1998, Nestle will be submitting quarterly monitoring results twice per year in the months of June and December.

If you have any questions I can be reached at (925) 283-7077.

Sincerely,

A handwritten signature in cursive script that reads "Douglas Oram/doh".

Douglas Oram  
Project Manager

DEO/dh 60966.01.Q7-1098

Enclosure  
cc: Binayak Acharya, Nestle USA, Inc.



**Third and Fourth Quarters 1998  
Monitoring Report  
Nestle Facility  
1310 14th Street  
Oakland, California**

*Prepared for*

Nestle USA, Inc.

*Prepared by*

EA Engineering, Science, and Technology

December 1998

60966.01.0008

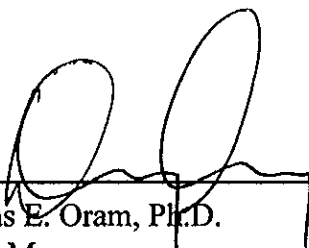
Third and Fourth Quarters 1998  
Monitoring Report  
Nestle Facility  
1310 14th Street  
Oakland, California

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

  
Douglas E. Oram, Ph.D.  
Project Manager

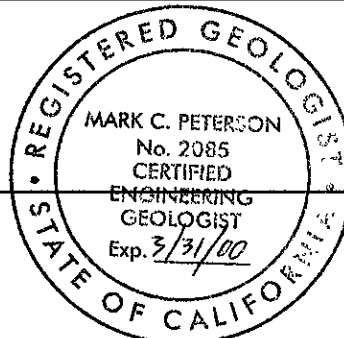
12/7/98

Date

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

12/9/98

Date



December 1998

# CONTENTS

Page

## SITE CONTACTS

1.	INTRODUCTION .....	1
2.	FIELD PROCEDURES .....	1
2.1	NAPL GAUGING .....	1
2.2	PURGING AND SAMPLING OF GROUNDWATER .....	1
3.	SUMMARY OF RESULTS .....	2
3.1	NAPL GAUGING AND MONITORING .....	2
3.2	DEPTH TO GROUNDWATER IN MONITORING WELLS .....	2
3.3	ANALYSIS OF SAMPLES .....	3
4.	REMEDIATION SYSTEM MONITORING .....	3
5.	WORK PROPOSED FOR THE NEXT QUARTER .....	3

## FIGURES

## TABLES

APPENDIX A:	Field Documents
APPENDIX B:	Laboratory Analytical Reports

## 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 third and fourth quarters of 1998, conducted on 22 July and 21 October 1998, and the results for well gauging and remediation system monitoring. 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 third quarter of 1998, well MW27 was also gauged and 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 58 wells were gauged during the third and fourth quarters to determine the presence and thickness of NAPL, using an interface probe. The set of wells used to monitor the location of NAPL in the subsurface will vary as remediation progresses, but in general 40 or more wells are gauged each quarter.

### 2.2 PURGING AND SAMPLING OF GROUNDWATER

After depths to groundwater were measured in wells on 22 July and 21 October 1998, each well to be sampled was purged, using a dedicated PVC pipe attached to a vacuum truck. Approximately 3 well casing volumes of water were removed from each well. 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 and groundwater samples were collected. The samples were collected from each well with factory-cleaned disposable polyethylene bailers and poured into 40-mL glass VOA vials and placed in an ice-filled cooler. A field-prepared sampling equipment rinse blank and a laboratory-prepared trip 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 the Nestle Quality Assurance Laboratory, 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, and for benzene, toluene,

ethylbenzene, and xylenes (BTEX) and methyl t-butyl ether (MTBE) by EPA Method 8020. In addition, selected samples were analyzed for Total Petroleum Hydrocarbons as diesel (TPH-d) by the California DOHS method and for halogenated volatile organic compounds (HVOCs) by EPA Method 8010.

### 3. SUMMARY OF RESULTS

#### 3.1 NAPL GAUGING AND MONITORING

NAPL monitoring data for a representative number of wells monitored since November 1993 are summarized in Table 1. Of the 58 wells monitored from 18 May to 2 November 1998, 31 contained no detectable NAPL, 21 contained between 0.01 and 1.0 feet of NAPL, and 6 contained >1.0 feet of NAPL. The spacial distribution of these wells containing the different thicknesses of NAPL is shown in Figure 2.

Gauging results indicate that the MPE system is decreasing the amount of NAPL in the subsurface. The results for some of the wells that have historically contained large thicknesses of NAPL are summarized below.

Well	Maximum NAPL Thickness (feet)			
	February 1998	April 1998	August 1998	November 1998
PR21	4.28	0.03	<0.01	Dry
PR22	4.54	<0.01	0.20	<0.01
PR26	3.39	<0.01	0.04	<0.01
PR34	3.18	<0.01	0.17	<0.01
PR48	1.30	0.01	0.71	0.04
PR58	4.25	4.25	--	0.03
PR64	2.93	4.52	--	<0.01
MW23	0.51	0.37	1.00	<0.01

-- not monitored.

#### 3.2 DEPTH TO GROUNDWATER IN MONITORING WELLS

The depth to groundwater in monitoring wells on 22 July 1998 ranged from 6.45 feet (MW29) to 8.44 feet (MW30), and groundwater elevations ranged from 6.10 (MW30) to 6.70 (MW32) feet above mean sea level (Table 2). Groundwater elevations had decreased between 1.45 feet (MW25) and 2.06 feet (MW2) since the 22 April 1998 monitoring event. A groundwater elevation contour map for 22 July 1998 is shown in Figure 3. The direction of groundwater flow

in July was toward the north-northwest, at a gradient of approximately 0.002 feet per foot. Field documentation is provided in Appendix A.

The depth to groundwater in monitoring wells on 21 October 1998 ranged from 7.64 feet (MW26) to 9.74 feet (MW2), and groundwater elevations ranged from 4.94 (MW30) to 5.41 (MW32) feet above mean sea level (Table 2). Groundwater elevations had decreased between 1.16 feet (MW28, MW30) and 1.39 feet (MW25) since the 22 July 1998 monitoring event. A groundwater elevation contour map for 21 October 1998 is shown in Figure 4. The direction of groundwater flow in October was toward the north-northwest, at a gradient of approximately 0.002 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 July and 21 October 1998 are presented in Table 3, along with previous results. The distribution of BTEX, TPH-g, TPH-d, and HVOCs in the groundwater samples is shown in Figures 5 and 6. Laboratory analytical reports and chain-of-custody documentation are included in Appendix B.

## **4. REMEDIATION SYSTEM MONITORING**

The monitoring results through 13 November 1998 for the MPE water and vapor treatment systems are summarized in Tables 4 and 5, respectively. An estimated 175 pounds of hydrocarbons has been removed from extracted water, and an estimated 569 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 5,946 pounds of hydrocarbons has been removed from extracted soil vapor (Table 5). Figure 7 graphically depicts the number of pounds of hydrocarbons removed from groundwater, vapor effluent, and as free product. An estimated combined total of 6,690 pounds of hydrocarbons has been removed and treated since system installation.

The MPE system was shut off on 1 June 1998, due to the addition of a thermal oxidizer. Installation of the oxidizer was completed, and the MPE system was restarted on 16 September 1998. During this period of downtime, the two 1,000-pound vapor phase carbon vessels were converted to liquid phase carbon vessels. The groundwater portion of the system was reconfigured to operate through two sets of two 200-pound liquid phase carbon vessels in parallel followed by the two 1,000-pound liquid phase carbon vessels in series. After restarting, the MPE system was adjusted to operate with different wells, most of which had measurable NAPL. Wells at the site will continue to be gauged for NAPL, and the MPE system will be adjusted to maximize NAPL removal from the subsurface.

## **5. WORK PROPOSED FOR THE NEXT QUARTER**

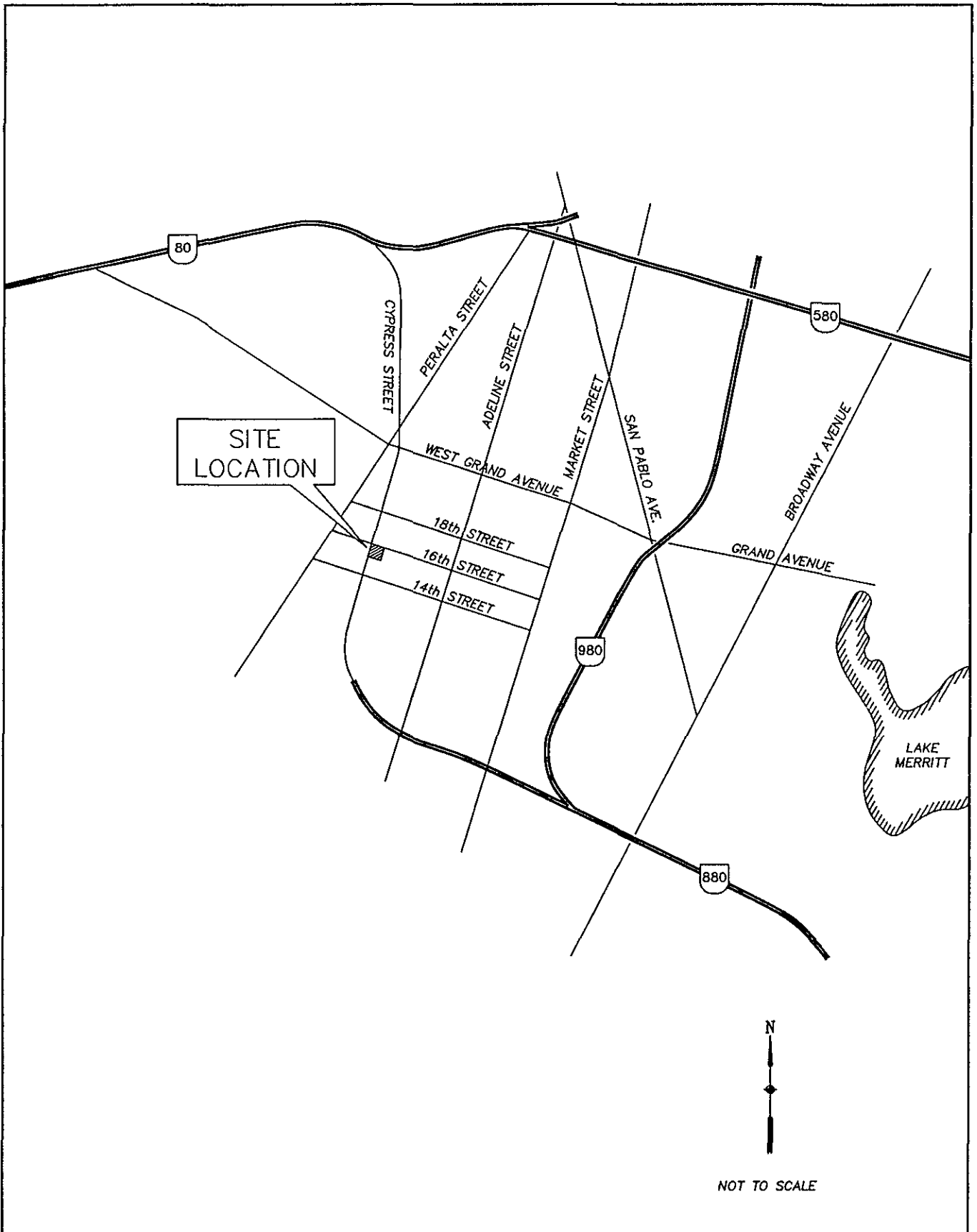
During the first and second quarters of 1999, groundwater in selected wells will be sampled and analyzed for BTEX and TPH-g. Selected samples will also be analyzed for TPH-d and HVOCs. As discussed with Tom Peacock of the Alameda County Health Agency on 8 December 1998,



the wells to be monitored will be changed each quarter so that it can be determined which wells can be destroyed.

The MPE system will be monitored and adjusted to concentrate on extraction from wells containing NAPL. In January 1999, the system will be turned off for 1 week, after which time approximately 58 wells will be gauged for the presence of NAPL. The MPE system may be turned off periodically to allow the subsurface conditions to equilibrate so that NAPL recharge can be evaluated.

Figures



NOT TO SCALE

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

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 SCIENCE, AND  
 TECHNOLOGY

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

FILE 2.DWG: 12/1/98

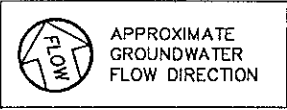


**LEGEND:**

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

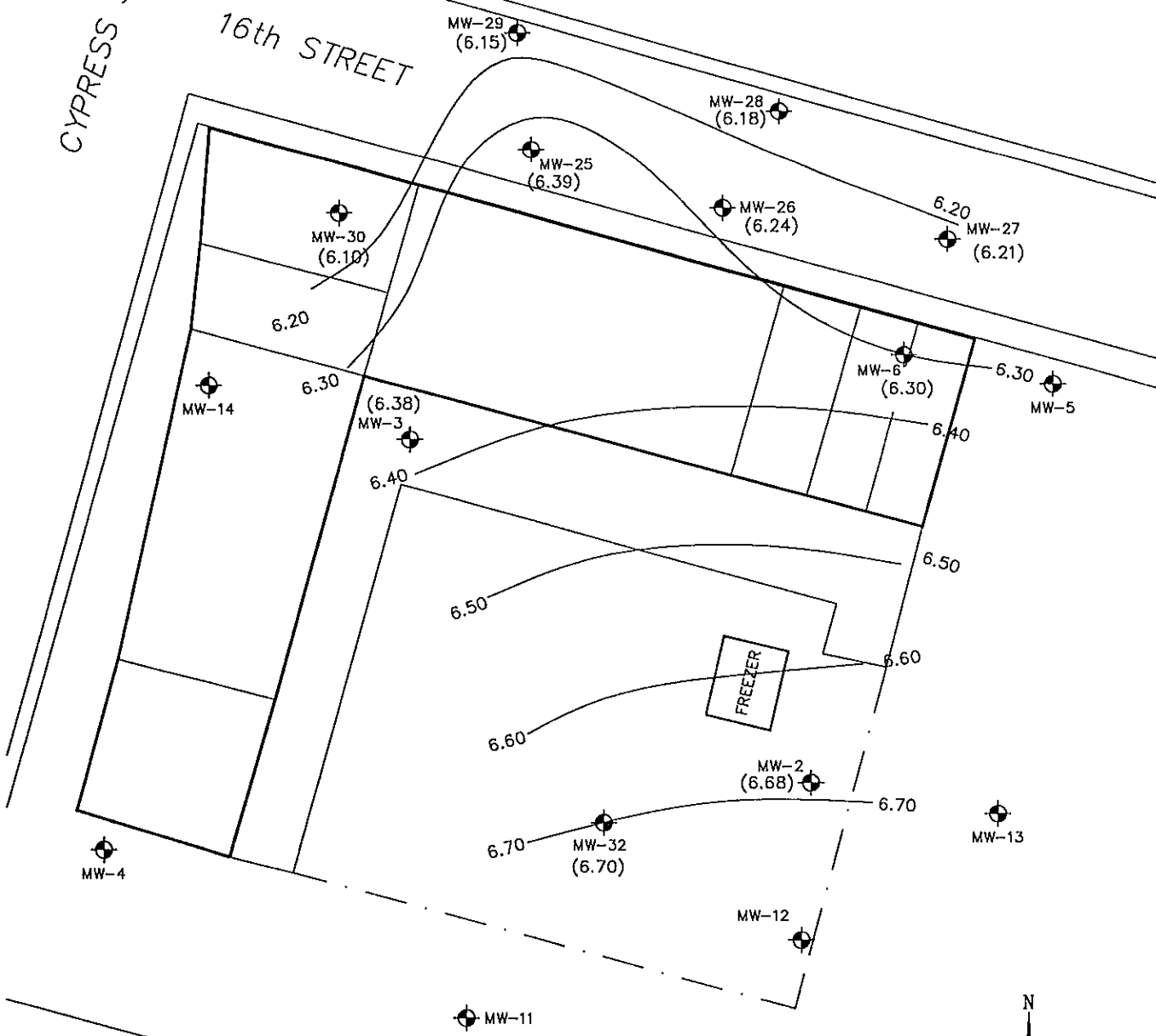
NAPL Monitoring Results	
Total wells monitored	58
Wells containing no detectable NAPL	31
Wells containing between 0.01–1.0 feet of NAPL	21
Wells containing > 1.0 feet of NAPL	6

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





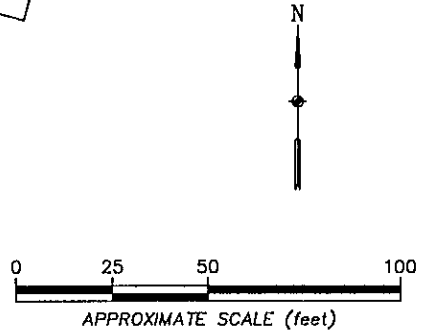
CYPRESS STREET

16th STREET



**LEGEND:**

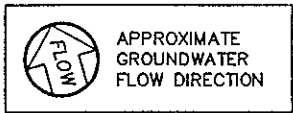
-  MONITORING WELL LOCATION
- (6.68) GROUNDWATER ELEVATION
-  GROUNDWATER ELEVATION CONTOUR (dashed where inferred)



FILE: F:\PROJECTS\60965\MASTER\GRAPHICS\WESTDATA.DWG: 12/7/98

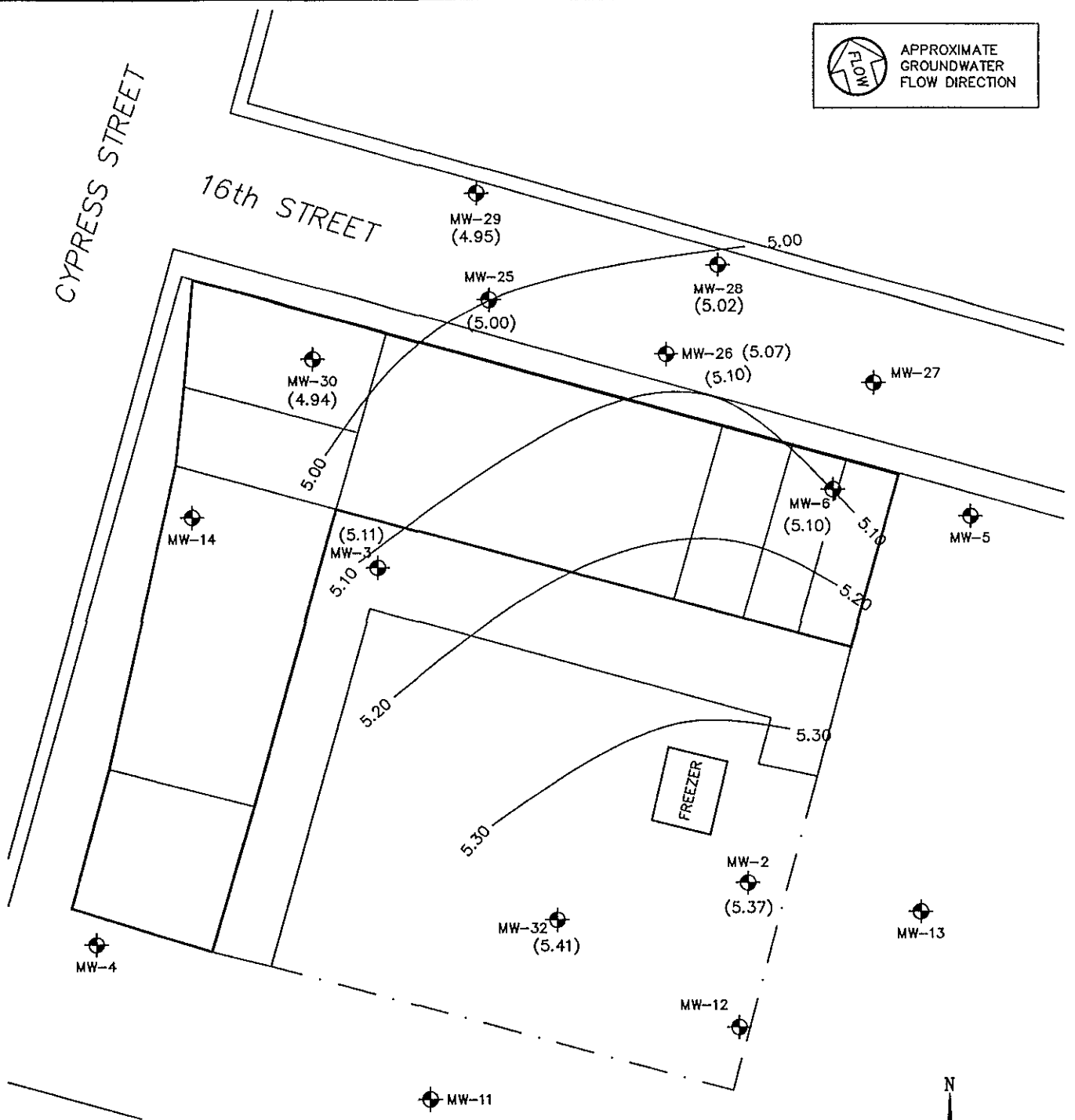


Figure 3. Groundwater elevations in wells sampled for dissolved hydrocarbons, Nestle Facility, Oakland, California. 22 July 1998



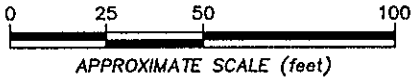
CYPRESS STREET

16th STREET



**LEGEND:**

- MONITORING WELL LOCATION
- (5.41) GROUNDWATER ELEVATION
- GROUNDWATER ELEVATION CONTOUR (dashed where inferred)



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Figure 4. Groundwater elevations in wells sampled for dissolved hydrocarbons, Nestle Facility, Oakland, California. 21 October 1998.

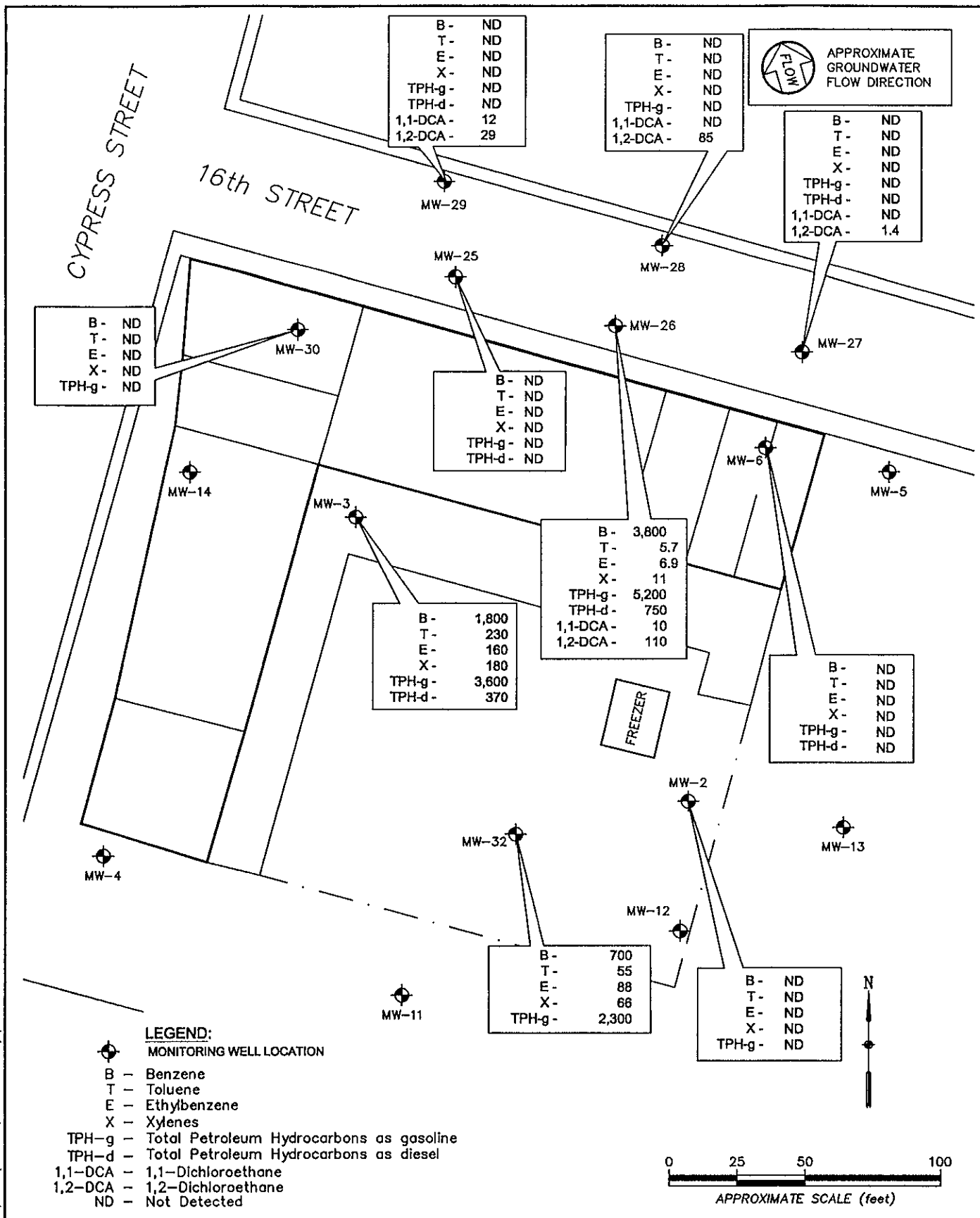


Figure 5. Groundwater sampling analytical results (ug/L), Nestle Facility, Oakland, California. 22 July 1998.

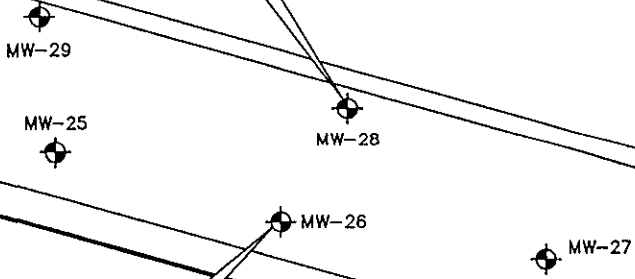
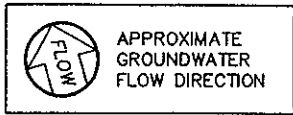


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TECHNOLOGY

CYPRESS STREET

16th STREET

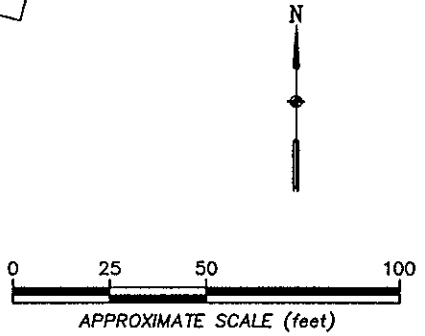
B -	ND
T -	ND
E -	ND
X -	ND
TPH-g -	ND
TPH-d -	ND
1,1-DCA -	0.5
1,2-DCA -	80



B -	420
T -	ND
E -	2.1
X -	2.7
TPH-g -	820
TPH-d -	ND
1,1-DCA -	24
1,2-DCA -	82

B -	78
T -	1.0
E -	3.8
X -	0.6
TPH-g -	110
TPH-d -	ND
1,1-DCA -	ND
1,2-DCA -	0.6

- LEGEND:**
- ◆ MONITORING WELL LOCATION
  - B - Benzene
  - T - Toluene
  - E - Ethylbenzene
  - X - Xylenes
  - 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
  - ND - Not Detected



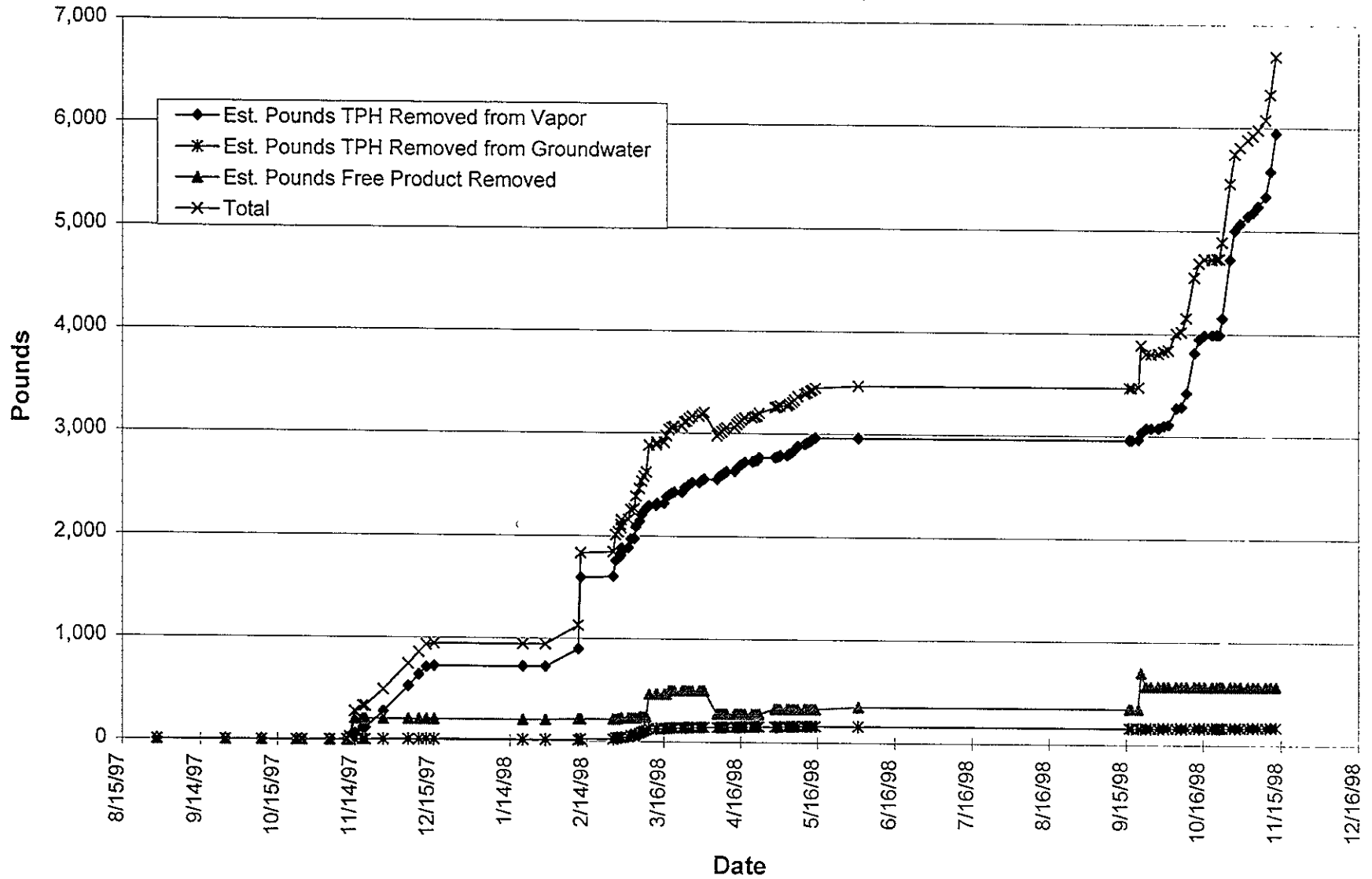
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Figure 6. Groundwater sampling analytical results (ug/L), Nestle Facility, Oakland, California. 21 October 1998.



**Figure 7: Total Pounds of Hydrocarbons Removed  
from Groundwater and Vapor Effluents and as Free Product  
Nestle' Facility, 1310 14th Street, Oakland, California**



Tables



TABLE 1 (extended)

Well	7&8/97	2/10/98	3/4/98	3/18/98	4/6/98	4/17/98	5/18/98	8/31/98	11/2/98
MW-7	0.03	<0.01	<0.01	--	<0.01	--	<0.01	0.01	--
MW-8	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	<0.01	--
MW-22	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	0.03	<0.01
MW-23	1.60	0.51	0.55	--	0.37	--	0.38	1.0	<0.01
MW-24	1.56	0.25	0.16	--	1.23	--	2.28	--	0.25
E-0	<0.01	0.02	0.03	--	0.03	--	0.03	--	<0.01
E-5	0.24	<0.01	<0.01	--	<0.01	--	<0.01	0.12	<0.01
E-6	--	--	--	--	--	0.01	--	--	0.01
E-8	0.25	--	0.22	--	0.19	0.19	0.18	0.16	--
PR-12	0.10	--	--	--	<0.01	--	<0.01	--	<0.01
PR-20	1.19	3.40	4.77	--	4.36	--	3.66	--	<0.01
PR-21	1.21	4.28	0.03	<0.01	0.03	--	0.1	<0.01	Dry
PR-22	0.01	4.54	0.01	--	<0.01	--	<0.01	0.20	<0.01
PR-23	0.06	<0.01	0.01	<0.01	0.01	--	<0.01	--	--
PR-24	<0.01	--	--	<0.01	--	<0.01	--	<0.01	--
PR-26	0.11	3.39	0.09	<0.01	<0.01	--	<0.01	0.04	<0.01
PR-27	<0.01	--	--	<0.01	--	<0.01	--	<0.01	--
PR-29	<0.01	--	--	<0.01	--	<0.01	--	<0.01	<0.01
PR-30	Dry	--	<0.01	<0.01	<0.01	--	<0.01	Dry	--
PR-32	<0.01	<0.01	0.02	--	<0.01	--	<0.01	--	--
PR-34	0.93	3.18	0.05	--	<0.01	--	0.04	0.17	<0.01
PR-35	0.90	0.71	<0.01	--	<0.01	--	<0.01	0.02	<0.01
PR-36	Dry	0.54	0.10	--	0.10	--	0.03	0.09	Dry
PR-37	0.31	<0.01	0.06	--	<0.01	--	0.13	0.07	<0.01
PR-41	Dry	--	<0.01	--	<0.01	<0.01	<0.01	Dry	--
PR-44	Dry	--	--	--	--	<0.01	--	--	--
PR-45	<0.01	--	--	--	--	<0.01	--	--	--
PR-47	0.02	<0.01	<0.01	--	<0.01	--	<0.01	0.06	<0.01
PR-48	--	1.30	0.01	<0.01	0.01	--	0.03	0.71	0.04
PR-49	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
PR-50	<0.01	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
PR-51	Dry	--	0.17	<0.01	<0.01	Dry	<0.01	Dry	--
PR-52	<0.01	--	<0.01	--	<0.01	<0.01	<0.01	0.01	<0.01
PR-53	0.02	<0.01	<0.01	--	0.02	--	0.30	1.31	<0.01
PR-54	<0.01	--	<0.01	--	<0.01	--	<0.01	--	<0.01
PR-55	Dry	--	0.02	--	<0.01	--	<0.01	--	Dry
PR-56	Dry	--	<0.01	--	<0.01	--	<0.01	--	Dry
PR-57	<0.01	--	<0.01	--	<0.01	<0.01	<0.01	--	--
PR-58	0.85	4.25	5.22	--	4.25	--	3.63	--	0.03
PR-60	Dry	--	--	--	--	--	--	--	<0.01
PR-61	0.49	0.55	1.14	--	1.74	--	2.46	--	0.80
PR-62	<0.01	--	--	--	--	--	--	--	--
PR-64	1.42	2.93	4.61	--	4.52	--	3.75	--	<0.01
PR-65	Dry	--	<0.01	--	<0.01	--	<0.01	--	--
PR-67	<0.01	--	<0.01	--	<0.01	--	<0.01	--	--
PR-68	<0.01	--	<0.01	--	<0.01	--	<0.01	--	--
PR-70	--	--	--	--	--	--	--	--	--
V-8	Dry	--	<0.01	--	--	--	--	--	--
V-21	Dry	--	<0.01	--	<0.01	<0.01	<0.01	--	--
V-55	<0.01	--	0.05	--	0.04	--	0.14	--	0.09
V-56	0.66	--	--	--	0.03	--	0.06	--	Dry <sup>c</sup>
V-70	Dry	--	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
V-71	Dry	--	--	<0.01	--	<0.01	--	<0.01	--
V-77	<0.01	--	--	0.19	--	--	--	0.49	Dry
V-78A	<0.01	--	<0.01	--	<0.01	<0.01	<0.01	<0.01	--
V-78B	<0.01	--	<0.01	--	--	<0.01	<0.01	<0.01	--
V-80	--	--	--	<0.01	--	<0.01	--	<0.01	--
V-90	Dry	--	-b	--	<0.01	--	<0.01	--	Dry
V-93	--	--	--	--	--	0.06	--	--	--
V-94	Dry	--	--	--	--	0.60	--	--	Dry
243	1.88	<0.01	0.01	--	0.04	--	0.01	--	<0.01
244	0.15	<0.01	<0.01	--	<0.01	--	<0.01	--	<0.01
247	<0.01	<0.01	<0.01	--	<0.01	--	<0.01	--	<0.01
253	1.13	0.66	1.04	--	1.38	--	--	--	<0.01

-- Well not monitored.

\* Well inaccessible.

a = Lots of oil in well; b = mud in well at 3.80 feet; c = well was dry, but probe showed oil on it.

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		
07/22/98	--	8.43	--	6.68		
10/21/98	--	9.74	--	5.37		
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		

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-3	04/22/98	14.30	--	6.15	--	8.15
	07/22/98		--	7.92	--	6.38
	10/21/98		--	9.19	--	5.11
MW-4	02/24/94	14.42	--	8.09	--	6.33
	03/18/94		--	7.00	--	7.42
	12/18/95		--	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
	07/22/98		--	7.82	--	6.30
10/21/98	--	9.02	--	5.10		
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

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-7	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		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
	12/06/95		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

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-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
	03/13/95		--	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



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-24	03/13/95	14.67	--	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
	08/29/96		--	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	
07/22/98		--	6.47	--	6.39	
10/21/98		--	7.86	--	5.00	
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	

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-26	10/27/97	12.71	--	8.15	--	4.56
	01/27/98		--	5.12	--	7.59
	04/22/98		--	4.90	--	7.81
	07/22/98		--	6.47	--	6.24
	10/21/98		--	7.64	--	5.07
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
	07/22/98		--	7.83	--	6.21
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
	12/18/95		--	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		
07/22/98	--	7.27	--	6.18		
10/21/98	--	8.43	--	5.02		
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

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-29	06/09/95	12.60	--	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
	07/22/98		--	6.45	--	6.15
	10/21/98		--	7.65	--	4.95
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
	10/27/97		--	10.02	--	4.52
	01/27/98		--	7.04	--	7.50
	04/22/98		--	6.91	--	7.63
07/22/98	--	8.44	--	6.10		
10/21/98	--	9.60	--	4.94		
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

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-32	12/22/94	14.76	--	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
	07/22/98		--	8.06	--	6.70
10/21/98		--	9.35	--	5.41	

-- Product not present.

TABLE 3

CONCENTRATIONS ( $\mu\text{g/L}$ ) OF ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES,  
NESTLE FACILITY, OAKLAND, CALIFORNIA, 1993-1998

Well No.	Date Sampled	Concentration ( $\mu\text{g/L}$ )											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	--	--	--	--	--	--	
	03/13/95	0.8	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	--	a
	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	
07/22/98	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--	--	--	<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	--	--	--	--	--	--		

TABLE 3 (continued)

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-3	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	
	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	
	07/22/98	1,800	230	160	180	3,600	370	--	--	--	--	5.0	
	10/21/98	78	1.0	3.8	0.6	110	<250	<0.5	0.6	<0.5	<0.5	<0.5	
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	--	--	--	--	--	
	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	
07/22/98	<0.5	<0.5	<0.5	<0.5	<50	<250	--	--	--	--	<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	--	--	--	--	--	

TABLE 3 (continued)

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-25	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	--	--	--	--	--	
	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	
	07/22/98	<0.5	<0.5	<0.5	<0.5	<50	<250	--	--	--	--	24	
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		

TABLE 3 (continued)

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-26	07/22/98	3,800	5.7	6.9	11	5,200	750	10	110	--	<1.0	33	
	10/21/98	420	<0.5	2.1	2.7	820	<250	24	82	<0.5	<0.5	31	
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	--	
	07/22/98	<0.5	<0.5	<0.5	<0.5	<50	<250	<1.0	1.4	--	<1.0	<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	--	--	--	--	--	
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	
	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	
07/22/98	<0.5	<0.5	<0.5	<0.5	<50	--	<1.0	85	--	<1.0	18		
10/21/98	<0.5	<0.5	<0.5	<0.5	<50	<250	0.5	80	<0.5	<0.5	12		
MW-29	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	

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TABLE 3 (continued)

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-29	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	--	--	--	--	--	
	03/13/95	0.59	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	a
	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	
07/22/98	<0.5	<0.5	<0.5	<0.5	<50	<250	12	29	--	<1.0	7.8		
MW-30	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	
	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	--	--	--	--	--	
	03/13/95	0.98	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	a
	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		

TABLE 3 (continued)

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-30	01/27/98	5.4	<0.5	<0.5	<0.5	100	--	--	--	--	--	<0.5	
	07/22/98	<0.5	<0.5	<0.5	<0.5	<50	--	--	--	--	--	<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	
07/22/98	700	55	88	66	2,300	--	--	--	--	--	14		
Rinse Blank	07/22/98	<0.5	<0.5	<0.5	<0.5	<50	<250	--	--	--	--	<0.5	
Trip Blank	07/22/98	<0.5	<0.5	<0.5	<0.5	<50	--	<1.0	<1.0	--	<1.0	<0.5	
	10/21/98	<0.5	<0.5	<0.5	<0.5	<50	--	<0.5	<0.5	<0.5	<0.5	<0.5	

- Notes:
- Non-diesel peak reported.
  - No diesel pattern detected; result due to high gasoline concentration.
  - Bromodichloromethane detected, 0.84 µg/L.
  - 8 other volatiles detected by 8260.
  - c 1,2-DCE detected, 0.7 µg/L.

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L)										Notes
		Benzene	Toluene	Ethylbenzene	Xylenes	TPH-g	TPH-d	1,1-DCA	1,2-DCA	1,1,1-TCA	TCE	

f. c 1,2-DCE detected, 0.8 µg/L.

g. Values for benzene and ethylbenzene are estimated.

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 <sup>1</sup>	Flow Total (gallons)	Average Operational Flow Rate (gpm) <sup>2</sup>	Total Influent TPH Conc. (µg/L)	Est. Pounds TPH in Water Removed <sup>3</sup>	Est. Cumulative Pounds Free Product Removed <sup>4</sup>	
			350					
8/28/97	15.0	NA	700	NM		0.00	0	Startup and testing. Repair needed.
9/24/97	0.0	0%	NM	NM		NM	0	
10/8/97	0.0	0%	NM	NM		NM	0	
10/22/97	0.0	0%	NM	NM		NM	0	
10/24/97	0.0	0%	NM	NM		NM	0	
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	
1/19/98	0.0	0%	NM	NM		NM	209	
1/28/98	0.0	0%	NM	NM		NM	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	False high level in Tank #3.
3/6/98	8.0	25%	21,195	5.09		10.19	240	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.

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

Date	Hours of Operation	Percent Operational <sup>1</sup>	Flow Total (gallons)	Average Operational Flow Rate (gpm) <sup>2</sup>	Total Influent TPH Conc. (µg/L)	Est. Pounds TPH in Water Removed <sup>3</sup>	Est. Cumulative Pounds Free Product Removed <sup>4</sup>		
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	
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		
RESTART SYSTEM WITH THERMAL OXIDIZER								0.00	0
9/16/98	7.4	0%	100,470	1.22		0.04	347		
9/17/98	3.9	14%	100,520	0.21		0.00	347		
9/20/98	2.1	3%	100,630	0.87		0.01	347		
9/21/98	21.4	98%	101,980	1.05	9,600	0.11	698		
9/23/98	10.0	21%	102,700	1.20		0.05	569		
9/25/98	24.2	51%	104,570	1.29		0.14	569		
9/28/98	2.2	3%	104,920	2.65		0.03	569		
9/30/98	15.8	31%	106,450	1.61		0.11	569		
10/2/98	12.4	27%	107,350	1.21		0.07	569		
10/5/98	72.3	98%	113,720	1.47		0.48	569		
10/7/98	5.5	11%	114,150	1.30	8,300	0.08	569		
10/9/98	44.7	97%	119,490	1.99		1.05	569		
10/12/98	74.9	100%	125,060	1.24		1.10	569		
10/14/98	29.8	67%	131,310	3.50		1.23	569		
10/16/98	26.4	52%	133,680	1.50		0.47	569		
10/19/98	1.6	2%	133,820	1.46		0.03	569		
10/21/98	3.5	8%	134,140	1.52		0.06	569		
10/22/98	5.9	24%	134,730	1.67		0.12	569		
10/23/98	26.5	99%	137,250	1.58		0.50	569		
10/26/98	73.4	101%	140,510	0.74	38,900	0.64	569		
10/28/98	45.4	99%	NM	NM		0.00	569		

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

Date	Hours of Operation	Percent Operational <sup>1</sup>	Flow Total (gallons)	Average Operational Flow Rate (gpm) <sup>2</sup>	Total Influent TPH Conc. (µg/L)	Est. Pounds TPH in Water Removed <sup>3</sup>	Est. Cumulative Pounds Free Product Removed <sup>4</sup>
10/30/98	22.1	44%	146,360	4.41		1.15	569
11/2/98	28.5	40%	150,710	2.54		0.86	569
11/4/98	14.7	29%	153,050	2.65		0.46	569
11/6/98	17.1	37%	155,490	2.38		0.48	569
11/9/98	31.8	44%	160,010	2.37		0.89	569
11/11/98	31.5	71%	165,613	2.96		1.10	569
11/13/98	51.5	99%	172,640	2.27		1.38	569 Shut down for LGAC changeout
<b>Total</b>	<b>1157.5</b>		<b>172,640</b>			<b>175.11</b>	<b>569</b>

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 Oxidizer Flowrate (CFM)	FID Concentrations (ppmv)		Estimated Pounds of TPH-g Removed*	
				Oxidizer Influent (ppmv)	Oxidizer Effluent (ppmv)		
8/28/97	15	NA	25	120	0	0.8	Startup and testing. Repair needed.
9/24/97	0	0.0%	NM	NM	NM	0.0	
10/8/97	0	0.0%	NM	NM	NM	0.0	
10/22/97	0	0.0%	NM	NM	NM	0.0	
10/24/97	0	0.0%	NM	NM	NM	0.0	
11/4/97	0.2	0.1%	53	>1000	0	1.8	Restart after repairs.
11/11/97	0	0.0%	NM	NM	NM	0.0	2,000 lb VGAC Change out.
11/12/97	2	8.2%	NM	>1000	0	27.4	
11/14/97	2.6	5.5%	50.5	16,000	0	36.0	
11/17/97	3.7	4.9%	NM	>10,000	0	50.7	VGAC flooded by water.
11/18/97	0.7	3.0%	NM	950	100	0.6	
11/25/97	2.8	1.7%	55	61,000	0	160.8	2,000 lb VGAC change out, restart.
12/5/97	3	1.3%	NM	NM	NM	245.9	
12/9/97	1.7	1.7%	76	42,000	60	113.9	
12/12/97	2.3	3.2%	67	13,000	0	72.5	
12/15/97	0.3	0.4%	70	52,000	0	11.7	
1/19/98	0	0.0%	NM	NM	NM	0.0	
1/28/98	0	0.0%	NM	NM	NM	0.0	
2/10/98	1.7	0.5%	55	110,000	0.2	176.0	Restarted after additional repairs.
2/11/98	11.6	47.3%	54	20,000	0.2	696.9	Shutdown for VGAC changeout.
2/24/98	0.6	0.2%	55.5	20,000	0.3	11.4	Restart, 2,000 lb VGAC changeout 2/23
2/25/98	11.6	49.4%	55	8,020	0.1	153.0	
2/26/98	1.9	7.7%	54.5	16,000	0	21.3	
2/27/98	2.3	9.4%	56	8,089	0	26.6	
2/27/98	1.7	92.7%	53	29,000	0	28.6	
2/27/98	2.2	49.8%	54	14,500	0	44.2	Shut down for weekend.
3/2/98	0.3	0.5%	65	9,360	0	4.0	Restart, open Line #2
3/3/98	12.1	50.4%	58.5	4,386	0	83.3	Shutdown for VGAC changeout.
3/4/98	0.5	1.6%	NM	23,000	0	6.4	Restart. 1,000 lb VGAC changeout.
3/5/98	8.2	47.5%	51.5	8,740	2.8	114.7	
3/6/98	8	25.2%	47.5	7,720	0	53.5	
3/7/98	10.6	49.1%	64.5	2,586	0	60.3	
3/8/98	11.5	53.5%	69	3,130	0.1	38.8	
3/9/98	11.6	50.4%	62	1,420	0	28.0	
3/10/98	15.8	56.6%	60	1,574	0	24.3	Shutdown for VGAC changeout.
3/13/98	0.6	0.9%	44	12,000	0	3.1	1,000 lb VGAC changeout.
3/13/98	2.6	43.3%	50	8,100	0	22.4	Shutdown for weekend.
3/16/98	0.3	0.4%	55	10,400	0	2.6	Restart after weekend
3/17/98	9.4	45.3%	60	2,069	0	60.2	
3/18/98	9.3	36.4%	68	1,454	0	19.1	
3/19/98	12.2	44.2%	60	1,384	0	17.8	
3/20/98	7.3	32.9%	49	1,568	0	9.0	Shutdown for weekend.
3/23/98	0.3	0.4%	60	6,510	0	1.2	Restart after weekend
3/24/98	9	40.8%	64	1,977	0	41.8	
3/25/98	4.1	20.2%	58	1,338	0	6.7	

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 Oxidizer Flowrate (CFM)	FID Concentrations (ppmv)		Estimated Pounds of TPH-g Removed*	
				Oxidizer Influent (ppmv)	Oxidizer Effluent (ppmv)		
3/26/98	11.2	47.0%	65	2,476	0.1	23.8	
3/27/98	10	37.5%	69	1,215	0	21.8	Shutdown for weekend.
3/30/98	0.5	0.7%	63	1,170	0.3	0.6	
3/31/98	12.3	50.7%	64	1,715	0	19.4	
4/1/98	8.5	35.8%	62	1,245	0	13.3	Shutdown for vapor phase carbon changeout
4/6/98	0	0.0%	59	2,190	0	0.0	Restart after changeout.
4/7/98	12.8	67.7%	66	1,090	0	23.7	
4/8/98	13.5	61.4%	64	1,000	0	15.5	
4/8/98	0.9	17.1%	56	1,230	0	1.0	Shut down for upgrades to system
4/9/98	12.1	56.1%	67	1,370	0	18.0	
4/10/98	10.4	46.4%	65	1,370	0	15.9	Shut down for the weekend.
4/13/98	0.5	0.7%	63	8,970	0	2.8	Restart after weekend
4/14/98	4.7	22.0%	62	2,650	0	29.0	
4/15/98	10	43.8%	71	1,180	0	23.3	
4/16/98	9.6	40.0%	69	1,930	0	17.6	
4/17/98	10.1	36.8%	56	2,036	0	19.2	Shut down for weekend
4/20/98	2.3	3.2%	60	2,240	0	5.0	Restarted after weekend.
4/21/98	3.4	13.6%	62	2,150	0	7.9	
4/22/98	2	8.7%	80	2,880	0	6.9	
4/23/98	8.9	46.2%	74	1,680	0	25.7	Shut down for VGAC and LGAC changeout.
4/29/98	1.6	1.1%	NM	3,680	0	4.6	Restart after GAC changeout
4/30/98	1.6	7.6%	52	6,000	0	6.9	
5/1/98	1.8	6.9%	93	988	0	10.0	Shut down for weekend
5/4/98	1.3	1.9%	94	1,126	0	2.2	Restart after weekend
5/5/98	9.4	42.7%	99.5	579	0.3	13.6	
5/6/98	15.1	52.7%	85	918	0	16.4	
5/7/98	8.6	47.3%	91.5	2,250	0	21.3	
5/8/98	14.2	47.5%	87	1,051	0	34.9	
5/11/98	16.2	23.7%	85	927	0	23.3	Discovered system operated over weekend
5/12/98	4.9	22.7%	84	2,433	0	11.8	
5/13/98	6.1	19.0%	85	1,193	0	16.1	
5/14/98	8.3	49.8%	98	771	0.5	13.7	
5/15/98	16.3	51.7%	81	685	0	16.5	Shut down system for vapor breakthrough
6/1/98	0.3	0.1%	87	4,253	0	1.1	
9/16/98	443.4	0.1%	87	NM	NM	NA	
9/17/98	3.9	13.6%	86	NM	NM	NA	
9/20/98	2.1	3.1%	84	2,286	NM	6.9	
9/21/98	21.4	98.0%	87.6	1,646	0.3	63.1	
9/23/98	10	21.1%	89.5	3,777	0.07	41.5	
9/25/98	24.2	50.5%	84.5	NM	NM	NA	
9/28/98	2.2	3.2%	73.5	1,094	NM	3.0	
9/30/98	15.8	31.5%	83	1,053	NM	23.6	
10/2/98	12.4	27.0%	67	382	6.07	10.2	



**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 Oxidizer Flowrate (CFM)	FID Concentrations (ppmv)		Estimated Pounds of TPH-g Removed*
				Oxidizer Influent (ppmv)	Oxidizer Effluent (ppmv)	
10/5/98	72.3	98.1%	94.5	2,430	2.38	164.4
10/7/98	5.5	11.0%	88.5	884	0.03	13.8
10/9/98	44.7	97.5%	85	3,230	0.21	133.8
10/12/98	74.9	99.7%	86	3,934	0.15	394.9
10/14/98	29.8	66.7%	94	1,711	0.09	135.3
10/16/98	26.4	52.5%	66	854	2.7	38.2
10/19/98	1.6	2.3%	74	557	1.4	1.4
10/21/98	3.5	7.7%	76.5	707	0.32	2.9
10/22/98	5.9	24.3%	NM	NM	NM	0.0
10/23/98	26.5	98.6%	81.5	1,135	1.3	163.5
10/26/98	73.4	100.0%	102	7,711	0.7	566.7
10/28/98	45.4	99.3%	79	1,485	0.12	282.3
10/30/98	22.1	44.0%	80	2,726	0.11	63.7
11/2/98	28.5	40.0%	70	1,573	0	73.4
11/4/98	14.7	29.3%	74.5	2,258	1.4	35.9
11/6/98	17.1	37.0%	87	2,374	1.15	59.0
11/9/98	31.8	43.8%	70	2,671	0	96.1
11/11/98	31.5	71.3%	92	7,158	0.74	243.8
11/13/98	51.5	99.4%	87.5	2,395	2.85	368.4
						Shut down for LGAC changeout
<b>TOTAL</b>	<b>789</b>					<b>5946</b>

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/ft<sup>3</sup>  
(assuming average TPH-g molecular weight is 110 g/mole, at 20° C temperature)

Appendix A  
Field Documents



### FIELD SUMMARY REPORT

Client: Nestle Station No: OAKLAND

EA Project No: 60966.01 Task No: 0006

Field Team: Chris Chubbain

Date: 7-22-98

No. of Drums on Site:  Water  Soil  Empty  LPH

Summary:

Opened and gauged MW2, MW3, MW4, MW25-  
MW30, and MW32. Purged at least 3 casing  
volumes from each well with a vacuum  
truck and put the purge water in the forewording  
tanks + the green poly tank for storage to be put through  
the system when it is running in the future. Collected  
groundwater samples from all wells for TPH and  
BTEX <sup>analysis</sup>. Collected groundwater from MW3, MW4,  
MW25, MW27, and MW29 for TPH-d analysis  
Collected groundwater samples from MW26-MW29  
for 8010 analysis. Secured all wells. There are numerous  
drums onsite. The system is off.





# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW2Date: 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	23.11	8.43	14.68	2	4	6	10	30
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 5 GPM

Time	955	957	959	1001			
Volume Purges (gal)	0	10	20	30			
Temperature (°C)	19.1	17.0	19.0	20.5			
pH	7.90	7.58	7.48	7.20			
Specific Conductivity (umhos)	432.5	444.4	472.1	497.8			
Turbidity/Color	med cloudy	low clear	low clear	med cloudy			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 1010Approx. Depth to Water During Sampling: 10 Feet

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	40 ml	low	clear	Y	TPH-g, BTEX	

Total Purge Volume: 30 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW3Date 7-22-96Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)	
		$-$	$=$	$\times$	2	4	6	$=$	
	24.91	7.92	16.99		0.16	0.64	1.44	11	33

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 5.5 GPM

Time	1040	1042	1044	1048			
Volume Purges (gal)	0	11	22	33			
Temperature (°C)	20.0	20.3	20.3	20.0			
pH	7.16	7.11	7.33	7.49			
Specific Conductivity (umhos)	506	511	521	531			
Turbidity/Color	low clear	low clear	low clear	low clear			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 1100Approx. Depth to Water During Sampling: 9 Feet

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	40 ml	low	clear	Y	TPH-g, BTEX	
MW3	1	Amber	None	1 Liter	↓	↓	Y	TPH-d	

Total Purge Volume: 33 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW6Date 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	15.60	$15.60 - 7.82 = 7.78$	7.78	$7.78 \times 0.16 = 1.24$	4	6	2	6
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 2 GPM

Time	940	941	942	943			
Volume Purges (gal)	0	2	4	6			
Temperature (°C)	15.0	15.8	16.2	16.1			
pH	7.86	7.92	8.00	8.13			
Specific Conductivity (umhos)	391.9	390.8	371.6	367.1			
Turbidity/Color	med clarity	med clarity	med clarity	med clarity			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 950Approx. Depth to Water During Sampling: 9 Feet

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	40 ml	med	clarity	Y	TPH-g, BTEX	
MW6	1	Amber	None	1 Liter	26	16	Y	TPH-d	

Total Purge Volume: 6 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW25Date: 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)	
		$-$	$=$	$\times$	2	4	6	$=$	
	19.32	6.47	12.85		0.16	0.64	1.44	9	27

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 4.5 GPM

Time	825	827	829	831			
Volume Purges (gal)	0	9	18	27			
Temperature (°C)	18.0	17.9	18.0	18.8			
pH	7.49	7.49	7.53	7.57			
Specific Conductivity (umhos)	745	740	701	679			
Turbidity / Color	low Clear	low Clear	low Clear	low Clear			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 840Approx. Depth to Water During Sampling: 8 Feet

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	40 ml	low	Clear	Y	TPH-g, BTEX	
MW25	1	Amber	None	1 Liter	↓	↓	Y	TPH-d	

Total Purge Volume: 27 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: CloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_





# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW26Date 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	24.99	6.47	18.52	2	4	6	12	36
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 6 GPM

Time	900	902	904	906		
Volume Purges (gal)	0	12	24	36		
Temperature (°C)	18.1	18.2	18.1	18.0		
pH	7.34	7.32	7.41	7.40		
Specific Conductivity (umhos)	693	697	697	699		
Turbidity/Color	med cloudy	med cloudy	low clear	low clear		
Odor	N	N	N	N		
Casing Volumes Removed	0	1	2	3		
Dewatered?	N	N	N	N		

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 915Approx. Depth to Water During Sampling: 8' Feet

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
MW26	6	Voa	HCL	40 ml	low	clear	Y	TPH-g, BTEX	
MW26	1	Amber	None	1 Liter	↓	↓	Y	TPH-d	

Total Purge Volume: 36 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW27Date: 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	<u>23.80</u>	<u>7.83</u>	<u>15.97</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>11</u>	<u>33</u>
			0.16	0.64	1.44			

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 5.5 GPM

Time	920	922	924	924		
Volume Purges (gal)	<u>0</u>	<u>11</u>	<u>22</u>	<u>33</u>		
Temperature (°C)	<u>18.3</u>	<u>18.0</u>	<u>18.0</u>	<u>19.3</u>		
pH	<u>7.35</u>	<u>7.34</u>	<u>7.52</u>	<u>7.61</u>		
Specific Conductivity (umhos)	<u>523</u>	<u>520</u>	<u>501</u>	<u>493.1</u>		
Turbidity/Color	<u>low</u> <u>Clear</u>	<u>low</u> <u>Clear</u>	<u>low</u> <u>Clear</u>	<u>low</u> <u>Clear</u>		
Odor	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>		
Casing Volumes Removed	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>		
Dewatered?	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>		

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 935Approx. Depth to Water During Sampling: 9 Feet

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
<u>MW27</u>	<u>6</u>	<u>Voa</u>	<u>HCL</u>	<u>40 ml</u>	<u>low</u>	<u>Clear</u>	<u>Y</u>	<u>TPH-g, BTEX, R010</u>	
<u>MW27</u>	<u>1</u>	<u>Amber</u>	<u>None</u>	<u>1 Liter</u>	<u>↓</u>	<u>↓</u>	<u>Y</u>	<u>TPH-d</u>	

Total Purge Volume: 33 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) N.DProblems Encountered During Purging and Sampling: N

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW28 Date: 7-22-98  
 Project No: 60966.01.0006 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)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	25.05	$-$ 7.27	$=$ 17.78	$\times$	2	④	6	12
				0.16	0.64	1.44		

**PURGING DATA**

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 6 GPM

Time	744	746	748	750		
Volume Purges (gal)	0	12	24	36		
Temperature (°C)	19.1	19.9	19.8	18.9		
pH	6.81	7.73	7.76	7.86		
Specific Conductivity (umhos)	919	898	893	887		
Turbidity/Color	med cloudy	low clear	low clear	low clear		
Odor	N	N	N	N		
Casing Volumes Removed	0	1	2	3		
Dewatered?	N	N	N	N		

Comments/Observations: \_\_\_\_\_

**SAMPLING DATA** Time Sampled: 800 Approx. Depth to Water During Sampling: 9 Feet

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
MW28	6	Voa	HCL	40 ml	low	clear	Y	TPH-g, BTEX, 8010	

Total Purge Volume: 36 Gallons Disposal/Containment Method: Treatment 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: NestleWell No: MW29Date 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	23.25	6.45	16.8	2	4	6	11	33
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 5.5 GPM

Time	805	807	809	811			
Volume Purged (gal)	0	11	22	33			
Temperature (°C)	19.1	20.2	20.0	19.2			
pH	7.69	7.83	7.89	7.86			
Specific Conductivity (umhos)	673	586	581	678			
Turbidity/Color	meq (cloudy)	low (clear)	low (clear)	low (clear)			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 820Approx. Depth to Water During Sampling: 8 Feet

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	6	Voa	HCL	40 ml	low	low	Y	TPH-g, BTEX, 8010	
MW29	1	Amber	None	1 Liter	↓	↓	Y	TPH-d	

Total Purge Volume: 33 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW30Date: 7-22-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	21.00	$-$ 8.44	$=$ 12.56	$\times$	2	④	6	9
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 4.5 GPM

Time	1105	1107	1109	1111			
Volume Purged (gal)	0	9	18	27			
Temperature (°C)	17.4	17.2	17.2	17.1			
pH	7.75	7.75	7.58	7.59			
Specific Conductivity (umhos)	415.2	361.2	353.8	343.8			
Turbidity/Color	low clear	low clear	low clear	low clear			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 1120Approx. Depth to Water During Sampling: 10 Feet

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	40 ml	low	clear	Y	TPH-g, BTEX	

Total Purge Volume: 27 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: cloudyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW32 Date: 7-22-98  
 Project No: 60966.01.0006 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)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	23.10	8.06	15.04	2	4	6	10	30
				0.16	0.64	1.44		

## PURGING DATA

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

Time	1020	1022	1024	1026			
Volume Purges (gal)	0	10	20	30			
Temperature (°C)	19.0	20.3	20.0	21.0			
pH	7.37	7.54	7.58	7.46			
Specific Conductivity (umhos)	447.3	438.9	447.5	453.3			
Turbidity/Color	low clear	low clear	low clear	low clear			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 1035 Approx. Depth to Water During Sampling: 10 Feet

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	40 ml	low	clear	Y	TPH-g, BTEX	

Total Purge Volume: 30 Gallons Disposal/Containment Method: Treatment 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: \_\_\_\_\_



FIELD SUMMARY REPORT

Client Nestle Station No. Oakland Facility  
 EA Project No. 60966.01 Task No. .0006  
 Field Team Chris Chatburn  
 Date 10-21-98

No. of Drums on Site: 5 Water      Soil      Empty      LPH 7 ~~unused~~ carbon 1 used Filters - 3/15/98

Summary:  
 Opened and gauged MW2, MW3, MW25, MW26, MW28 - MW30, and MW32.  
 Purged at least 3 casing volumes from MW3, MW26, and MW28 with a vacuum truck.  
 Collected groundwater samples from MW3, MW26, and MW28 for TPHig, BTEX, SOID, and TPH-d analysis and mailed via FED EXPRESS TO NESTLE LAB.  
 Put purgewater through system and the O&M technician for the site was present. The water draws are from cleaning the oil water separator on a previous date (4-9-98).  
 Secured the wells and no problems encountered. The system ~~was~~ is running.







# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW3 Date 10-21-98Project No: 60966.01.0006 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)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	24.91	9.19	15.72	2	④	6	10.07	30.21
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 3.3-3.7 GPM

Time	925	928	931	934			
Volume Purges (gal)	0	10	20	31			
Temperature (°C)	20.9	21.4	21.3	21.2			
pH	7.86	7.83	7.83	7.90			
Specific Conductivity (umhos)	.914	.933	.916	.910			
Turbidity/Color	low clear	low clear	low clear	low clear			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 943 Approx. Depth to Water During Sampling: 10 Feet

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	40 ml	low	clear	Y	TPH-g, BTEX, 8010	
MW3	1	Amber	None	1 Liter	↓	↓	Y	TPH-d	

Total Purge Volume: 31 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: SunnyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) NOProblems Encountered During Purging and Sampling: NO

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NestleWell No: MW26Date: 10-21-98Project No: 60966.01.0006Personnel: Chris Chatburn

## GAUGING DATA

Water Level Measuring Method: Interface ProbeMeasuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	24.99	7.64	17.35	2	4	6	11.11	33.33
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum TruckPurge Depth: ScreenPurge Rate: 4-5 GPM

Time	845	848	851	853			
Volume Purges (gal)	0	12	24	34			
Temperature (°C)	19.5	19.3	19.7	19.4			
pH	7.52	7.70	7.70	7.75			
Specific Conductivity (umhos)	.961	.979	.972	.967			
Turbidity/Color	low clear	low clear	low clear	low clear			
Odor	N	N	N	N			
Casing Volumes Removed	0	1	2	3			
Dewatered?	N	N	N	N			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 900Approx. Depth to Water During Sampling: 8 Feet

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
MW26	6	Voa	HCL	40 ml	low	clear	Y	TPH-g, BTEX, 8010	
MW26	1	Amber	None	1 Liter	↓	↓	Y	TPH-d	

Total Purge Volume: 34 Gallons Disposal/Containment Method: Treatment SystemWeather Conditions: SunnyCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) noProblems Encountered During Purging and Sampling: no

Comments: \_\_\_\_\_



# GROUNDWATER PURGE AND SAMPLE FORM

Project Name: Nestle Well No: MW28 Date 10-21-98  
 Project No: 60966.01.0006 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)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
	25.05	<u>843</u>	<u>19.57</u>	2	<u>4</u>	6	<u>12.53</u>	<u>37.59</u>
				0.16	0.64	1.44		

## PURGING DATA

Purge Method: Vacuum Truck Purge Depth: Screen Purge Rate: 4-4.3 GPM

Time	820	823	826	829			
Volume Purges (gal)	<u>0</u>	<u>13</u>	<u>26</u>	<u>38</u>			
Temperature (°C)	<u>19.0</u>	<u>19.9</u>	<u>19.9</u>	<u>20.0</u>			
pH	<u>5.85</u>	<u>6.60</u>	<u>6.69</u>	<u>6.78</u>			
Specific Conductivity (umhos)	<u>.884</u>	<u>.851</u>	<u>.853</u>	<u>.870</u>			
Turbidity/Color	<u>med clear</u>	<u>low clear</u>	<u>low clear</u>	<u>low clear</u>			
Odor	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>			
Casing Volumes Removed	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>			
Dewatered?	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>			

Comments/Observations: \_\_\_\_\_

## SAMPLING DATA

Time Sampled: 835 Approx. Depth to Water During Sampling: 9 Feet

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
<u>MW28</u>	<u>6</u>	<u>Voa</u>	<u>HCL</u>	<u>40 ml</u>	<u>low</u>	<u>clear</u>	<u>Y</u>	<u>TPH-g, BTEX, 8010</u>	
<u>↓</u>	<u>3</u>	<u>amber</u>	<u>NP</u>	<u>1L</u>	<u>↓</u>	<u>↓</u>	<u>↓</u>	<u>TPH-g</u>	

Total Purge Volume: 38 Gallons Disposal/Containment Method: Treatment 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

Problems Encountered During Purging and Sampling: no

Comments: \_\_\_\_\_

**Appendix B**

**Laboratory Analytical Reports**

Nestlé USA

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### Laboratory Report



QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213406

cc: Doug Oram

Lab#: 98JUL8467-01

Sample Description: Water-Oakland, CA  
Sample ID: MW2  
7/22/98 1010  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	8/4/98

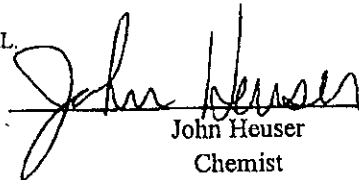
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Sample condition upon receipt: Good.

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### Laboratory Report



QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203

Date Sampled: 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213408

Lab#: 98JUL8467-02

cc: Doug Oram

Sample Description: Water-Oakland, CA

Sample ID: MW3

7/22/98 1100

PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	3.60	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	0.37	mg/L	0.25	CA-Luft	8/14/98
Benzene	1800	µg/L	0.50	EPA 8020	8/4/98
Toluene	230	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	160	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	130	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	52.0	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	180	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	5.00	µg/L	0.50	EPA 8020	8/4/98

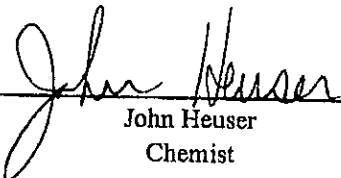
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### Laboratory Report

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Nestle USA - Environmental Group  
Glendale, CA 91203

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213409

cc: Doug Oram

Lab#: 98JUL8467-03

Sample Description: Water-Oakland, CA  
Sample ID: MW6  
7/22/98 950  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	8/14/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	8/4/98

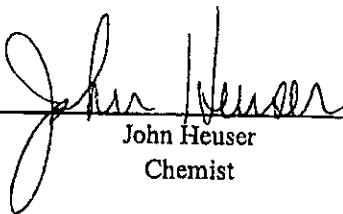
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### Laboratory Report

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Binayak Acharya  
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Glendale, CA 91203  
cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213410  
Lab#: 98JUL8467-04

Sample Description: Water-Oakland, CA  
Sample ID: MW25  
7/22/98 840  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	8/14/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	24.0	µg/L	0.50	EPA 8020	8/4/98

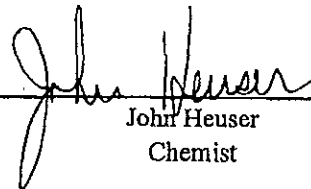
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cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213411  
Lab#: 98JUL8467-05

Sample Description: Water-Oakland, CA

Sample ID: MW26

7/22/98 915

PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	5.20	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	0.75	mg/L	0.25	CA-Luft	8/14/98
Dichlorodifluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Vinyl Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
Bromomethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Trichlorofluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Methylene Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
cis 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethane	10	µg/L	1.0	EPA 8010	8/4/98
Chloroform	ND	µg/L	1.0	EPA 8010	8/4/98
Carbon Tetrachloride	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloroethane	110	µg/L	1.0	EPA 8010	8/4/98
Trichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloropropane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromodichloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
c 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2-Trichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Tetrachloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Dibromochloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromoform	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,3-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,4-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98

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Glendale, CA 91203

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213411  
Lab#: 98JUL8467-05

cc: Doug Oram

Sample Description: Water-Oakland, CA  
Sample ID: MW26  
7/22/98 915  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Chlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
Benzene	3800	µg/L	0.50	EPA 8020	8/4/98
Toluene	5.70	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	6.90	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	8.90	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	2.10	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	11.0	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	33.0	µg/L	0.50	EPA 8020	8/4/98

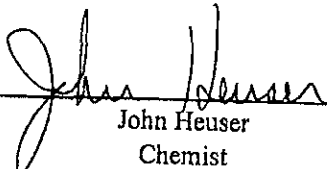
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### Laboratory Report



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Nestlé USA - Environmental Group  
Glendale, CA 91203

cc: Doug Oram

Date Sampled: 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213412  
Lab#: 98JUL8467-06

Sample Description: Water-Oakland, CA  
Sample ID: MW27  
7/22/98 935  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	8/14/98
Dichlorodifluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Vinyl Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
Bromomethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Trichlorofluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Methylene Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
cis 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroform	ND	µg/L	1.0	EPA 8010	8/4/98
Carbon Tetrachloride	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloroethane	1.4	µg/L	1.0	EPA 8010	8/4/98
Trichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloropropane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromodichloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
c 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2-Trichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Tetrachloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Dibromochloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromoform	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,3-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,4-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
Chlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98

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Glendale, CA 91203  
cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213412  
Lab#: 98JUL8467-06

Sample Description: Water-Oakland, CA  
Sample ID: MW27  
7/22/98 935  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DefLim	Method	Analysis Date
1,2-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	8/4/98

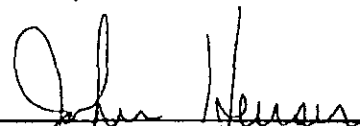
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### Laboratory Report



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Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213413  
Lab#: 98JUL8467-07

Sample Description: Water-Oakland, CA  
Sample ID: MW28  
7/22/98 800  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Dichlorodifluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Vinyl Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
Bromomethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Trichlorofluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Methylene Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
cis 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroform	ND	µg/L	1.0	EPA 8010	8/4/98
Carbon Tetrachloride	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloroethane	85	µg/L	1.0	EPA 8010	8/4/98
Trichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloropropane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromodichloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
c 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2-Trichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Tetrachloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Dibromochloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromoform	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,3-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,4-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
Chlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98

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Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213413  
Lab#: 98JUL8467-07

Sample Description: Water-Oakland, CA  
Sample ID: MW28  
7/22/98 800  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	18.0	µg/L	0.50	EPA 8020	8/4/98

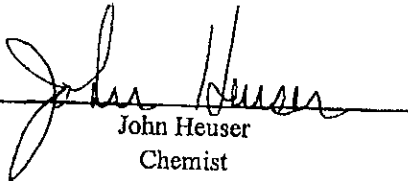
ND : Not Detected.

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Sample condition upon receipt: Good.

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Chemist

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### Laboratory Report



QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestlé USA - Environmental Group  
Glendale, CA 91203  
cc: Doug Oram

Date Sampled: 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213414

Lab#: 98JUL8467-08

Sample Description: Water-Oakland, CA

Sample ID: MW29

7/22/98 820

PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	8/14/98
Dichlorodifluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Vinyl Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
Bromomethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Trichlorofluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Methylene Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
cis 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethane	12	µg/L	1.0	EPA 8010	8/4/98
Chloroform	ND	µg/L	1.0	EPA 8010	8/4/98
Carbon Tetrachloride	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloroethane	29	µg/L	1.0	EPA 8010	8/4/98
Trichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloropropane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromodichloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
c 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2-Trichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Tetrachloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Dibromochloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromoform	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,3-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,4-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98

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### Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
cc: Doug Oram

Date Sampled: 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213414  
Lab#: 98JUL8467-08

Sample Description: Water-Oakland, CA  
Sample ID: MW29  
7/22/98 820  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Chlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	7.80	µg/L	0.50	EPA 8020	8/4/98

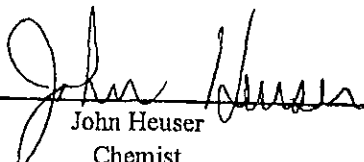
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### Laboratory Report

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Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213415  
Lab#: 98JUL8467-09

Sample Description: Water-Oakland, CA  
Sample ID: MW30  
7/22/98 1120  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	8/4/98

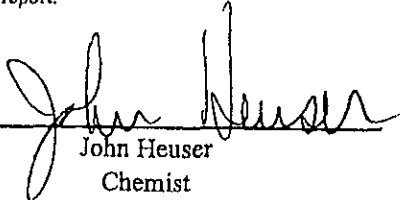
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### Laboratory Report

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Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213416  
Lab#: 98JUL8467-10

cc: Doug Oram

Sample Description: Water-Oakland, CA  
Sample ID: MW32  
7/22/98 1035  
PO/Ref/Disp#: 60966.01

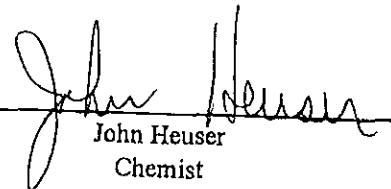
Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	2.30	mg/L	0.05	CA-Luft	8/4/98
Benzene	700	µg/L	0.50	EPA 8020	8/4/98
Toluene	55.0	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	88.0	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	58.0	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	8.30	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	66.0	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	14.0	µg/L	0.50	EPA 8020	8/4/98

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Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 213417  
Lab#: 98JUL8467-11

Sample Description: Water-Oakland, CA  
Sample ID: Rinse Blank  
7/22/98 1005  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	8/14/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	8/4/98

ND : Not Detected.

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Laboratory Report

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Binayak Acharya  
 Nestle USA - Environmental Group  
 Glendale, CA 91203

Date Sampled 7/22/98  
 Date Received: 7/24/98  
 Date Reported: 8/17/98  
 Report Number: 214965  
 Lab#: 98JUL8467-12

cc: Doug Oram

Sample Description: Water-Oakland, CA  
 Sample ID: Trip Blank  
 7/22/98  
 PO/Ref/Disp#: 60966.01

Test	Result	Units	DetLim	Method	Analysis Date
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	8/4/98
Benzene	ND	µg/L	0.50	EPA 8020	8/4/98
Toluene	ND	µg/L	0.50	EPA 8020	8/4/98
Ethylbenzene	ND	µg/L	0.50	EPA 8020	8/4/98
m&p Xylenes	ND	µg/L	0.50	EPA 8020	8/4/98
o-Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Total Xylene	ND	µg/L	0.50	EPA 8020	8/4/98
Methyl t-butyl ether	ND	µg/L	0.50	EPA 8020	8/4/98
Dichlorodifluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Vinyl chloride	ND	µg/L	1.0	EPA 8010	8/4/98
Bromomethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Trichlorofluoromethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
Methylene Chloride	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
cis 1,2-Dichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1-Dichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Chloroform	ND	µg/L	1.0	EPA 8010	8/4/98
Carbon Tetrachloride	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Trichloroethene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichloropropane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromodichloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
c 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
t 1,3-Dichloropropene	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2-Trichloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
Tetrachloroethene	ND	µg/L	1.0	EPA 8010	8/4/98

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### Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203

cc: Doug Oram

Date Sampled 7/22/98  
Date Received: 7/24/98  
Date Reported: 8/17/98  
Report Number: 214965  
Lab#: 98JUL8467-12

Sample Description: Water-Oakland, CA  
Sample ID: Trip Blank  
7/22/98  
PO/Ref/Disp#: 60966.01

Test	Result	Units	DefLim	Method	Analysis Date
Dibromochloromethane	ND	µg/L	1.0	EPA 8010	8/4/98
Bromoform	ND	µg/L	1.0	EPA 8010	8/4/98
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0	EPA 8010	8/4/98
1,3-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,4-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
1,2-Dichlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98
Chlorobenzene	ND	µg/L	1.0	EPA 8010	8/4/98

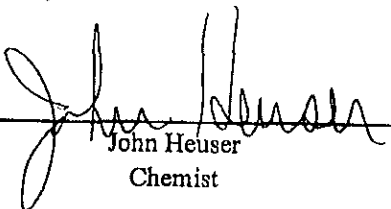
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Chemist



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### Amended Laboratory Report



QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestlé USA - Environmental Group  
Glendale, CA 91203  
Doug Oram - EA Engineering

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218827  
Lab#: 98OCT8440-01

Sample Description: Water - Oakland  
Sample ID: MW3  
10/21/98 9:43  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Benzene	78.0	µg/L	0.5	EPA 8020	11/2/98
Toluene	1.00	µg/L	0.5	EPA 8020	11/2/98
Ethylbenzene	3.80	µg/L	0.5	EPA 8020	11/2/98
m&p Xylenes	ND	µg/L	0.5	EPA 8020	11/2/98
o-Xylene	0.6	µg/L	0.5	EPA 8020	11/2/98
Total Xylene	0.6	µg/L	0.5	EPA 8020	11/2/98
Methyl t-butyl ether	ND	µg/L	0.5	EPA 8020	11/2/98
Gasoline Range Organics	0.11	mg/L	0.05	CA-Luft	11/2/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Vinyl chloride	ND	µg/L	0.5	EPA 8010	10/28/98
Bromomethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloroform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloroethane	0.6	µg/L	0.5	EPA 8010	10/28/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98

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Amended Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
Doug Oram - EA Engineering

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218827  
Lab#: 98OCT8440-01

Sample Description: Water - Oakland  
Sample ID: MW3  
10/21/98 9:43  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromoform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	10/30/98

ND : Not Detected.

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**Amended Laboratory Report**

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
 Nestle USA - Environmental Group  
 Glendale, CA 91203  
 Doug Oram - EA Engineering

Date Sampled 10/21/98  
 Date Received: 10/22/98  
 Date Reported: 11/5/98  
 Report Number: 218828  
 Lab#: 98OCT8440-02

Sample Description: Water - Oakland  
 Sample ID: MW26  
 10/21/98 9:00  
 PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Benzene	420	µg/L	0.5	EPA 8020	11/2/98
Toluene	ND	µg/L	0.5	EPA 8020	11/2/98
Ethylbenzene	2.10	µg/L	0.5	EPA 8020	11/2/98
m&p Xylenes	2.70	µg/L	0.5	EPA 8020	11/2/98
o-Xylene	ND	µg/L	0.5	EPA 8020	11/2/98
Total Xylene	2.70	µg/L	0.5	EPA 8020	11/2/98
Methyl t-butyl ether	31.0	µg/L	0.5	EPA 8020	11/2/98
Gasoline Range Organics	0.82	mg/L	0.05	CA-Luft	11/2/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Vinyl chloride	ND	µg/L	0.5	EPA 8010	10/28/98
Bromomethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethane	24	µg/L	0.5	EPA 8010	10/28/98
Chloroform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloroethane	82	µg/L	0.5	EPA 8010	10/29/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98

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### Amended Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218828  
Lab#: 98OCT8440-02

Doug Oram - EA Engineering

Sample Description: Water - Oakland  
Sample ID: MW26  
10/21/98 9:00  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromoform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	10/30/98

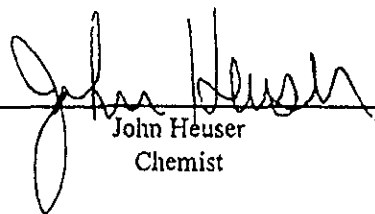
ND : Not Detected.

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Sample condition upon receipt: Good.

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John Heuser  
Chemist

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### Amended Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestlé USA - Environmental Group  
Glendale, CA 91203  
Doug Oram - EA Engineering

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218829  
Lab#: 98OCT8440-03

Sample Description: Water - Oakland  
Sample ID: MW28  
10/21/98 8:35  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Benzene	ND	µg/L	0.5	EPA 8020	11/2/98
Toluene	ND	µg/L	0.5	EPA 8020	11/2/98
Ethylbenzene	ND	µg/L	0.5	EPA 8020	11/2/98
m&p Xylenes	ND	µg/L	0.5	EPA 8020	11/2/98
o-Xylene	ND	µg/L	0.5	EPA 8020	11/2/98
Total Xylene	ND	µg/L	0.5	EPA 8020	11/2/98
Methyl t-butyl ether	12.0	µg/L	0.5	EPA 8020	11/2/98
Gasoline Range Organics	ND	mg/L	0.05	CA-Luft	11/2/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Vinyl chloride	ND	µg/L	0.5	EPA 8010	10/28/98
Bromomethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethane	0.5	µg/L	0.5	EPA 8010	10/28/98
Chloroform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloroethane	80	µg/L	0.5	EPA 8010	10/29/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98

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### Amended Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestlé USA - Environmental Group  
Glendale, CA 91203

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218829

Doug Oram - EA Engineering

Lab#: 98OCT8440-03

Sample Description: Water - Oakland  
Sample ID: MW28  
10/21/98 8:35  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromoform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Diesel Range Organics	ND	mg/L	0.25	CA-Luft	10/30/98

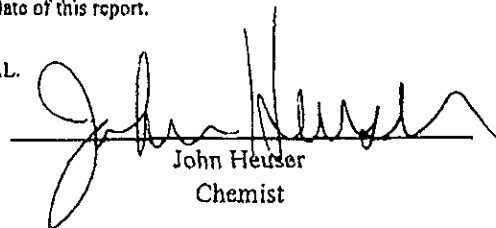
ND : Not Detected.

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Sample condition upon receipt: Good.

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### Amended Laboratory Report



QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestlé USA - Environmental Group  
Glendale, CA 91203

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218830

Doug Oram - EA Engineering

Lab#: 98OCT8440-04

Sample Description: Water - Oakland  
Sample ID: Trip Blank  
10/21/98 None  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Benzene	ND	µg/L	0.5	EPA 8020	10/29/98
Toluene	ND	µg/L	0.5	EPA 8020	10/29/98
Ethylbenzene	ND	µg/L	0.5	EPA 8020	10/29/98
m&p Xylenes	ND	µg/L	0.5	EPA 8020	10/29/98
o-Xylene	ND	µg/L	0.5	EPA 8020	10/29/98
Total Xylene	ND	µg/L	0.5	EPA 8020	10/29/98
Methyl t-butyl ether	ND	µg/L	0.5	EPA 8020	10/29/98
Gasoline Range Organics	ND	mg/L	0.05	CA-Lufl	10/29/98
Dichlorodifluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Vinyl chloride	ND	µg/L	0.5	EPA 8010	10/28/98
Bromomethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Trichlorofluoromethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Methylene Chloride	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
cis 1,2-Dichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1-Dichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Chloroform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,1-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Carbon Tetrachloride	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
Trichloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichloropropane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromodichloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
c 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
t 1,3-Dichloropropene	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2-Trichloroethane	ND	µg/L	0.5	EPA 8010	10/28/98

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### Amended Laboratory Report

QUALITY ASSURANCE LABORATORY

Binayak Acharya  
Nestle USA - Environmental Group  
Glendale, CA 91203  
Doug Oram - EA Engineering

Date Sampled 10/21/98  
Date Received: 10/22/98  
Date Reported: 11/5/98  
Report Number: 218830  
Lab#: 98OCT8440-04

Sample Description: Water - Oakland  
Sample ID: Trip Blank  
10/21/98 None  
PO/Ref/Disp#: Proj#60966.01 /2161/0006

Test	Result	Units	DetLim	Method	Analysis Date
Tetrachloroethene	ND	µg/L	0.5	EPA 8010	10/28/98
Dibromochloromethane	ND	µg/L	0.5	EPA 8010	10/28/98
Bromoform	ND	µg/L	0.5	EPA 8010	10/28/98
1,1,2,2-Tetrachloroethane	ND	µg/L	0.5	EPA 8010	10/28/98
1,3-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,4-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
1,2-Dichlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98
Chlorobenzene	ND	µg/L	0.5	EPA 8010	10/28/98

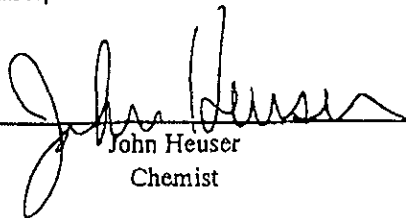
ND : Not Detected.

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