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

Prepared for

Nestle USA, Inc.

Prepared by

EA Engineering, Science, and Technology

April 1996

LETTER OF TRANSMITTAL



EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY

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DATE: 29 April 1996		
PROJECT NO.	TASK	DEPT
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RE:		
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Former Carnation Facility		
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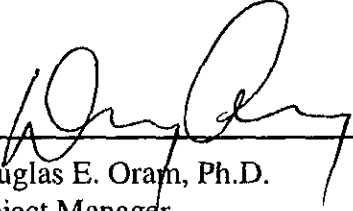
Report of Quarterly Sampling and Analysis
Nestle USA, Inc.
Former Carnation Dairy Facility
1310 14th Street
Oakland, California

Prepared for

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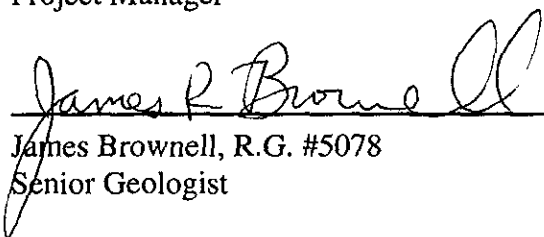
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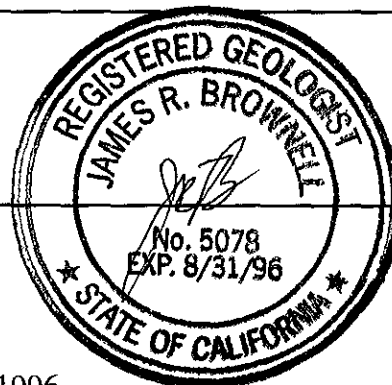
Douglas E. Oram, Ph.D.
Project Manager

4/29/96

Date



James Brownell, R.G. #5078
Senior Geologist



4/29/96

Date

April 1996

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SITE CONTACTS

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1. INTRODUCTION

Nestle USA, Inc. (Nestle) has retained EA Engineering, Science, and Technology (EA) to provide environmental services for the former Carnation facility at 1310 14th Street, Oakland, California (Figure 1). EA has prepared this report of quarterly groundwater sampling and analysis for the first quarter of 1996. A summary of additional field activities carried out in the first quarter of 1996 is listed below:

The second test of NAPL recoverability was conducted during the last week of February 1996. On 27 February the thickness of NAPL in 42 wells was measured using an optical oil/water interface probe. The subset of wells selected for NAPL monitoring was done on the basis of the well having been reported to contain NAPL since the first quarter of 1994. Figure 2 shows the location of the 42 wells monitored for NAPL thickness. NAPL that measured more than 0.05 feet was removed. Two days later, on 29 February, each well from which NAPL had been removed was again gauged to determine the thickness of NAPL recharge to it.

A set of wells separate from the NAPL monitoring wells is used to monitor the dissolved-phase plume. On 12 March 1996, 13 groundwater monitoring wells (MW-2, MW-6, MW-11, MW-13, MW-25, MW-28, MW-29, MW-30, and MW-32) were gauged with an optical oil/water interface probe, and groundwater samples were collected from the wells. All samples were analyzed for petroleum hydrocarbons, and the samples from two wells (MW-26 and MW-32) were also analyzed for halogenated volatile organics (HVOCs).

A work plan prepared by EA was submitted to the Alameda County Health Agency (ACHA) on 11 March 1996. The Work Plan outlined site activities for the installation of three aquifer air sparge wells and a soil vapor extraction/aquifer air sparge test. Three air sparge wells were installed on 18 March, and the pilot testing was conducted the week of 1 April 1996. The results of those activities will be submitted in a separate report.

2. FIELD PROCEDURES

2.1 NAPL Gauging and Recovery

A total of 42 wells were gauged with an interface probe capable of distinguishing between NAPL and groundwater to determine the thickness of NAPL. After gauging, a semi-rigid tube was inserted into the well at the estimated NAPL level. The NAPL was purged with a peristaltic pump, and the volume was recorded. Approximately 12 gallons of NAPL was removed from the site wells. The NAPL was temporarily stored in 55-gallon drums with secondary containment to await proper disposal. After the NAPL was removed on 27 February, the wells which contained measurable NAPL (>0.05 feet) were monitored again on 29 February to determine the thickness of NAPL that recharged into the well.

2.2 Purging and Sampling of Groundwater

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

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

3. SUMMARY OF RESULTS

3.1 NAPL Monitoring and Removal

Of the 42 wells (Figure 2) gauged on 27 February to monitor for the presence of NAPL, 17 contained NAPL ranging in thickness from 0.19 feet (E-8, PR-23) to 5.10 feet (PR34). NAPL was removed from all 17 wells, and the wells were allowed to recharge for 2 days. On 29 February, the NAPL thickness ranged from 0.02 feet (E-8) to 2.65 feet (PR20). NAPL did not recover to the original thickness in any of the wells. The field documents for the NAPL measurements are included in Appendix A, and the data are summarized in Table 1. A more detailed assessment of NAPL recoverability is being prepared, and a report will be available in early May.

3.2 Depth to Groundwater Measurements

On 12 March 1996, the depth to groundwater was measured in selected monitoring wells (MW-2-MW-6, MW-11, MW-13, MW-26, MW-28, MW-29, MW-30, and MW-32). Groundwater elevations ranged from 7.48 (MW-25) to 8.60 (MW-11) feet above mean sea level. Groundwater elevations have increased an average of 3.25 feet since groundwater measurements were taken on 12 December 1995 (Table 2). A groundwater elevation contour map for 12 March 1996 is shown in Figure 4. Groundwater flow direction continues to be toward the north-northwest at a gradient of 0.003. Field documentation is provided in Appendix A.

3.3 Analyses

Laboratory test results for GRO, DRO, BTEX, and HVOC analyses of groundwater samples collected on 12 March 1996 are reported in Table 3, along with the results of previous quarterly sampling events since March 1993. The laboratory analytical report for 12 March 1996 is included in Appendix B.

The concentration of benzene in groundwater samples is shown in Figure 5. Benzene was detected in groundwater samples collected from MW-3 (350 $\mu\text{g/L}$), MW-26 (9,000 $\mu\text{g/L}$), and MW-32 (240 $\mu\text{g/L}$). The concentrations of benzene in MW-26 and MW-32 have decreased since the December 1995 sampling event.

The concentration of GRO in groundwater samples is shown in Figure 6. GRO concentrations were detected in MW-3 (600 $\mu\text{g/L}$), MW-25 (120 $\mu\text{g/L}$), MW-26 (4,400 $\mu\text{g/L}$), and MW-32 (110 $\mu\text{g/L}$). The concentrations of GRO in MW-3, MW-26, and MW-32 have decreased since the December 1995 sampling event. GRO concentrations increased in MW-25 from not detected (at 100 $\mu\text{g/L}$) to 120 $\mu\text{g/L}$.

1,2-dichloroethane was detected in MW-32, at a concentration of 6.8 $\mu\text{g/L}$ and in MW-26 at a concentration of 180 $\mu\text{g/L}$.

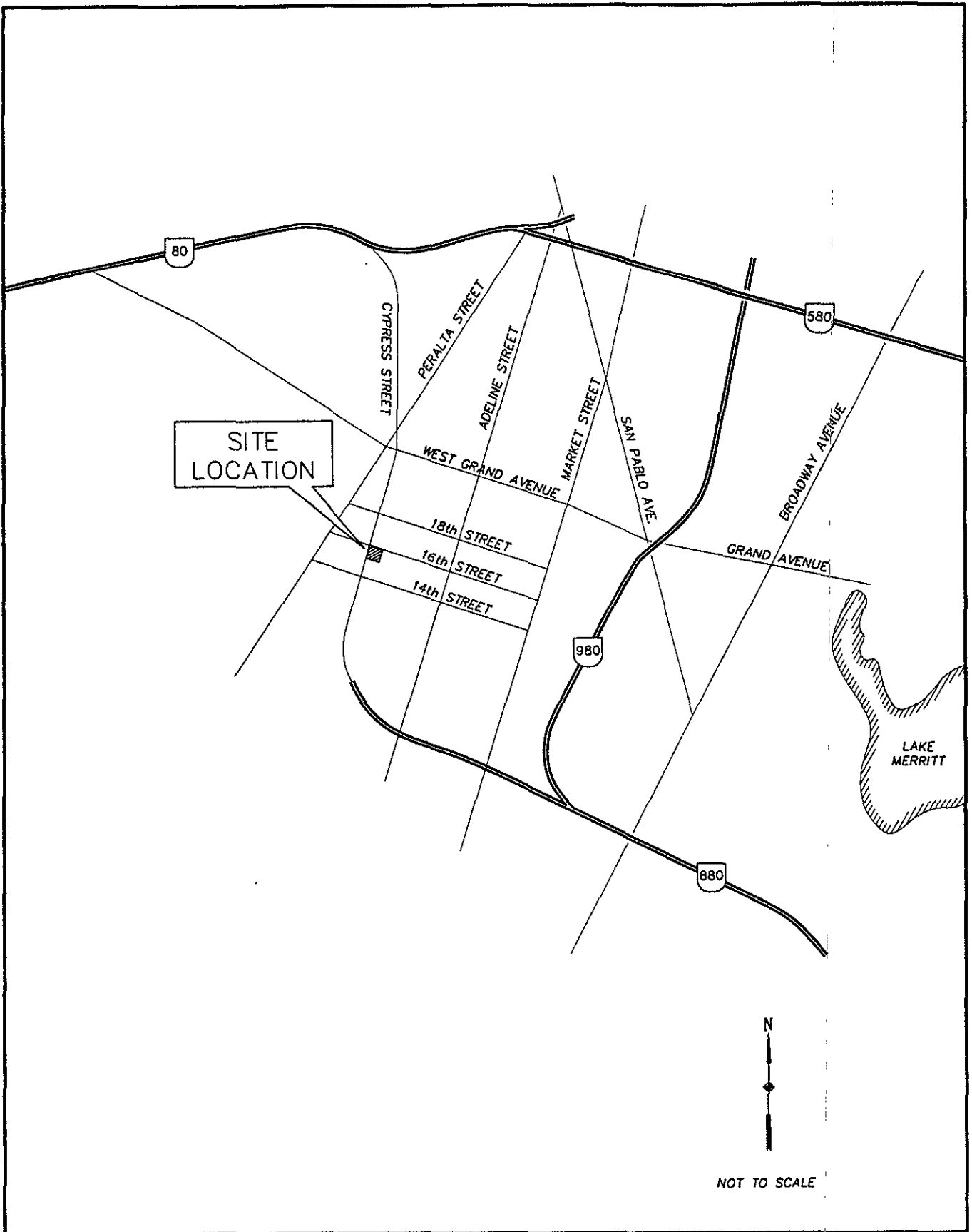
4. WORK PROPOSED FOR THE NEXT QUARTER

Nestle received a letter from ACHA dated 9 April 1996, outlining additional site activities based on a conference call on that date. The following activities will be performed:

- NAPL will be removed from the site wells on a weekly basis starting the week of 15 April for 4 consecutive weeks. A report will be submitted documenting the results.
- The results of the air sparge well installations and the vapor extraction/air sparge test results will be submitted in the week of 13 May 1996.
- The well box for MW-27 will be replaced, and this well will be sampled during the June quarterly monitoring. The analytes to be analyzed for will be BTEX, GRO, DRO, and HVOCs.
- The sampling frequency for the site wells was modified. Wells MW-3, MW-26, and MW-28 will be sampled in June 1996, and they will continue to be sampled on a quarterly basis. The sampling frequency for well MW-27 also may be modified, depending on the June 1996 results. Wells MW-2, MW-6, MW-25, MW-29, MW-30, and MW-32 will be sampled on a semi-annual basis starting September 1996.



Figures



NOT TO SCALE

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

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FILE NAME:	LOCATION.DWG	REVIEWED BY:	A. MOORE

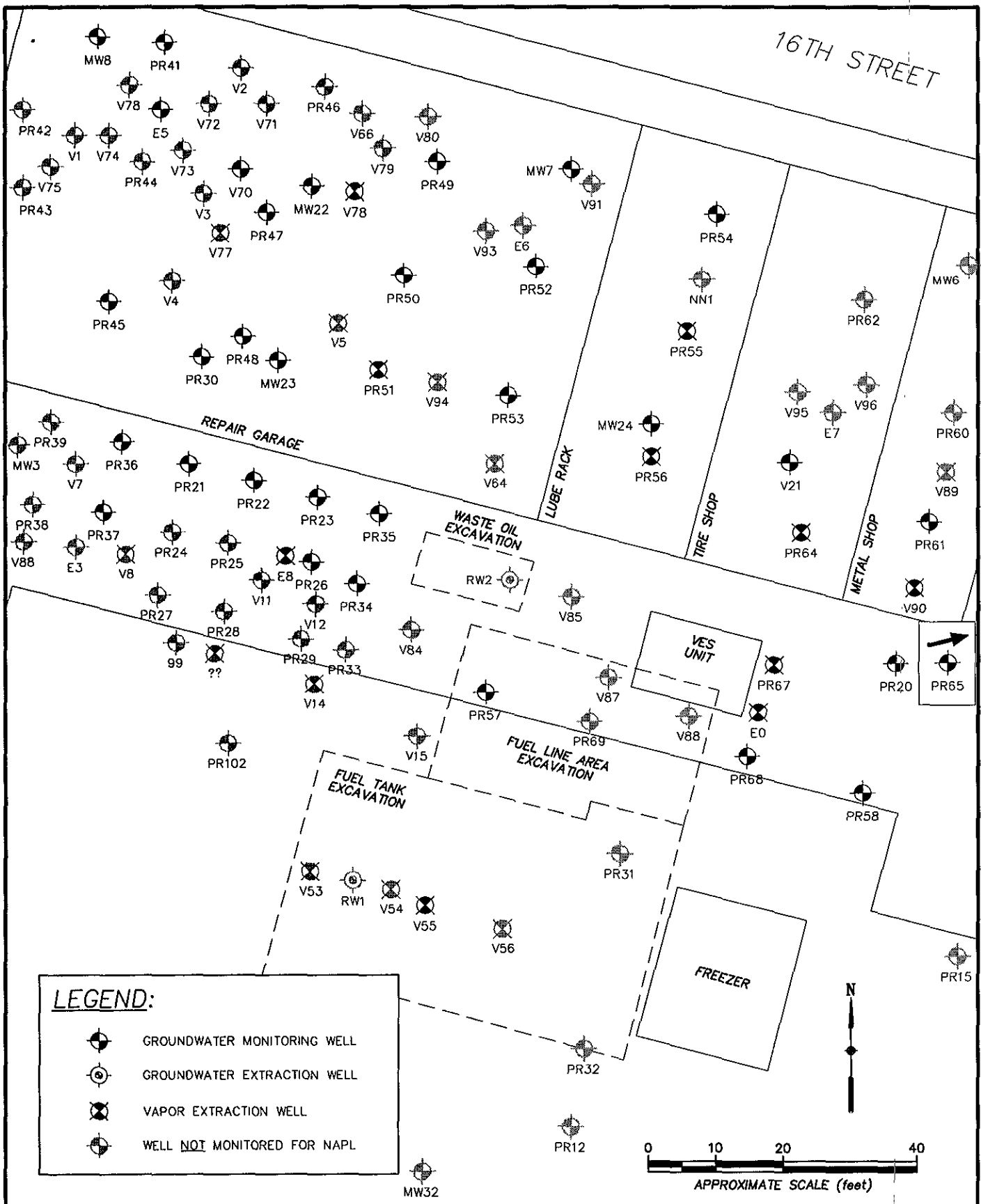
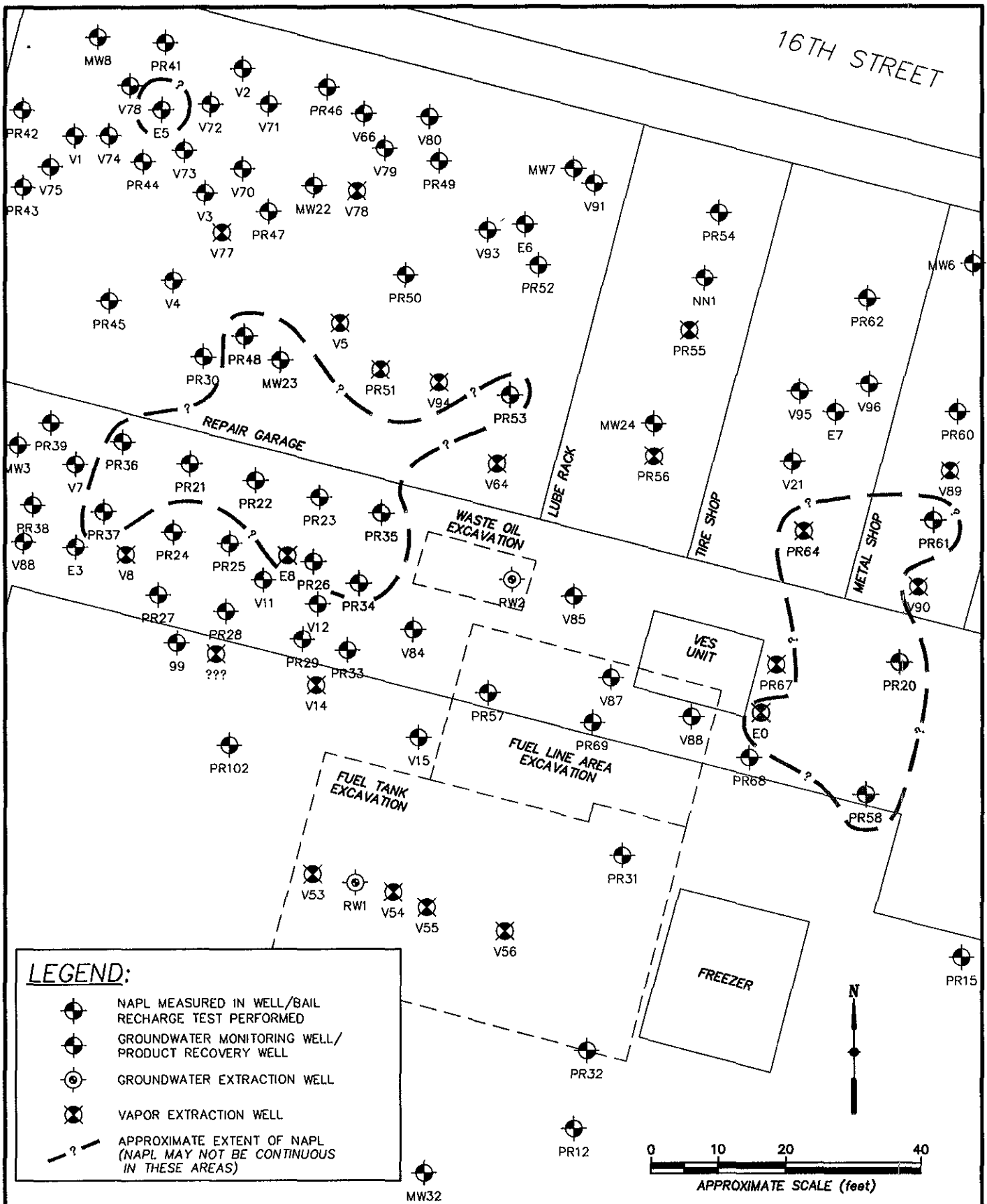


FIGURE 2.
 LOCATION OF WELLS MONITORED FOR NAPL
 NESTLE FACILITY,
 OAKLAND, CALIFORNIA

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FILE NAME:	NESTLE5.DWG	REVIEWED BY:	C. MARTING



LEGEND:

- NAPL MEASURED IN WELL/BAIL RECHARGE TEST PERFORMED
- GROUNDWATER MONITORING WELL/PRODUCT RECOVERY WELL
- ⊗ GROUNDWATER EXTRACTION WELL
- ⊗ VAPOR EXTRACTION WELL
- - - ? - - - APPROXIMATE EXTENT OF NAPL (NAPL MAY NOT BE CONTINUOUS IN THESE AREAS)

FIGURE 3.
SITE PLAN SHOWING WELL LOCATIONS CONTAINING FREE PRODUCT 27 FEBRUARY 1996
FORMER NESTLE FACILITY,
OAKLAND, CALIFORNIA



PROJECT NO.	60986.01.0008	DATE	3/6/96
FILE NAME	NEST_296.DWG	REVIEWED BY	C. MARTING

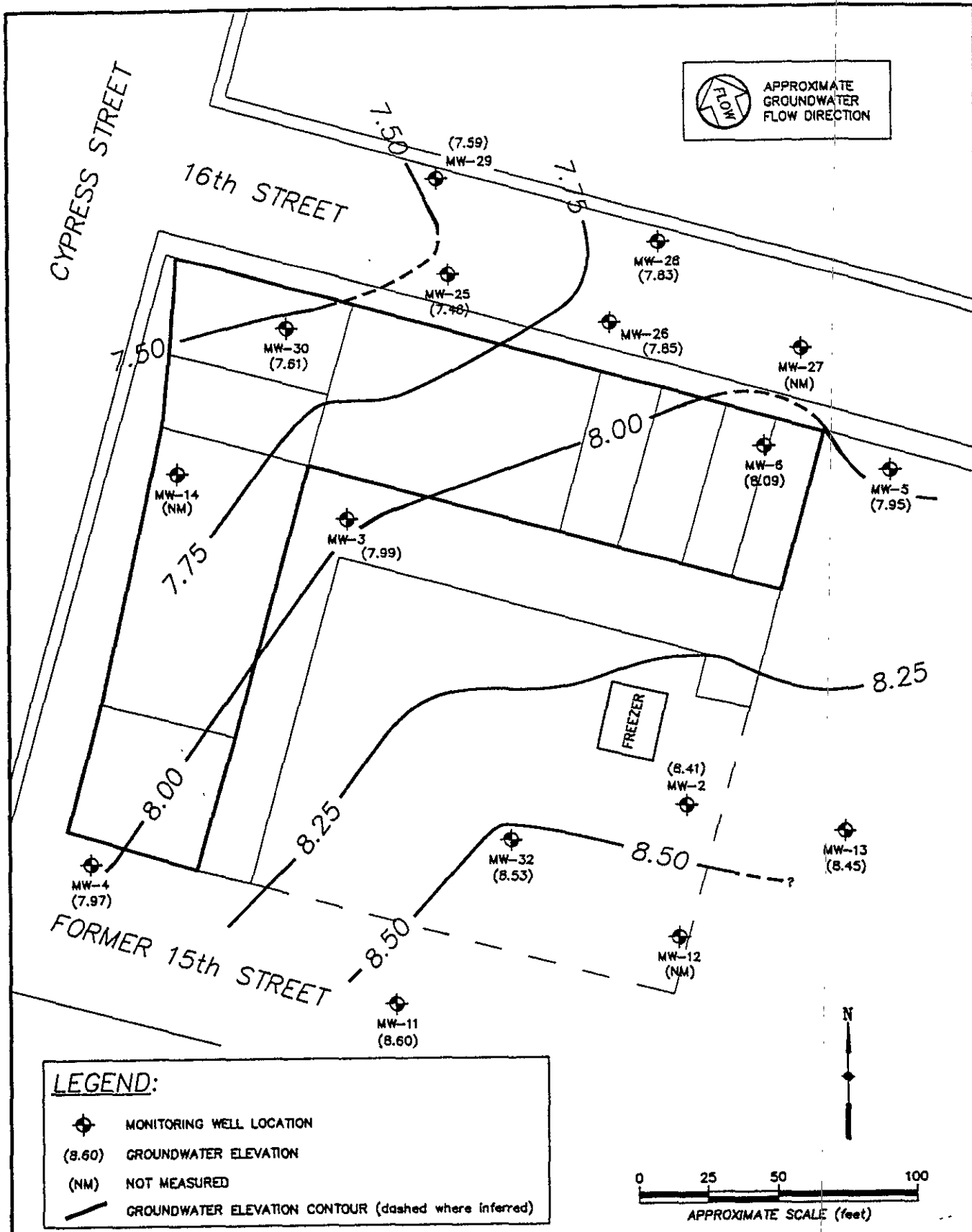


FIGURE 4.
GROUNDWATER ELEVATIONS IN WELLS
SAMPLED FOR DISSOLVED HYDROCARBONS
NESTLE FACILITY, OAKLAND, CALIFORNIA
12 MARCH 1996

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PROJECT NO:	60966.01.0008	DATE:	4/16/96
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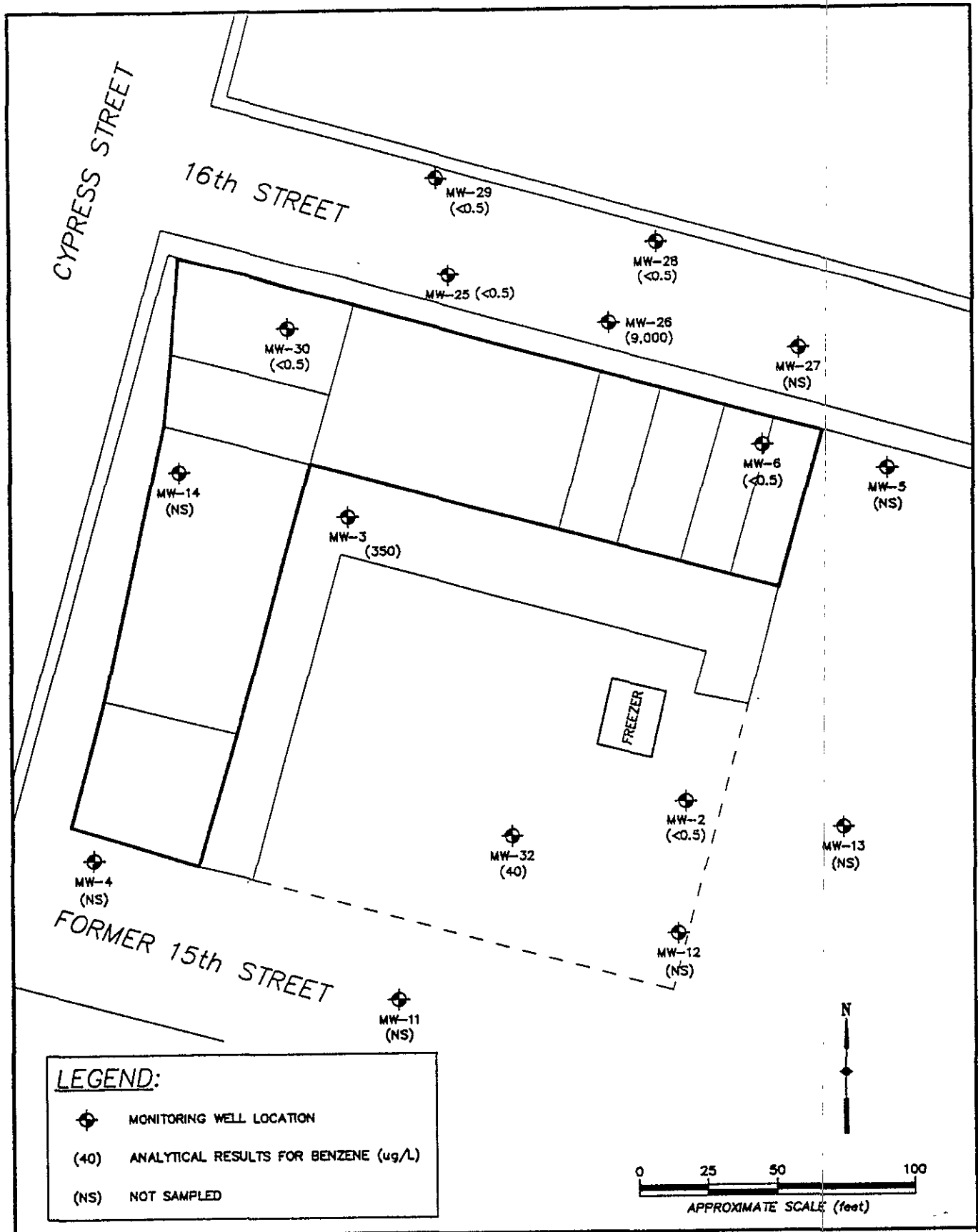


FIGURE 5.
 GROUNDWATER SAMPLING
 ANALYTICAL RESULTS FOR BENZENE (ug/L)
 NESTLE FACILITY, OAKLAND, CALIFORNIA
 12 MARCH 1996

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FILE NAME	NEST-296.DWG	REVIEWED BY	C. MARTING

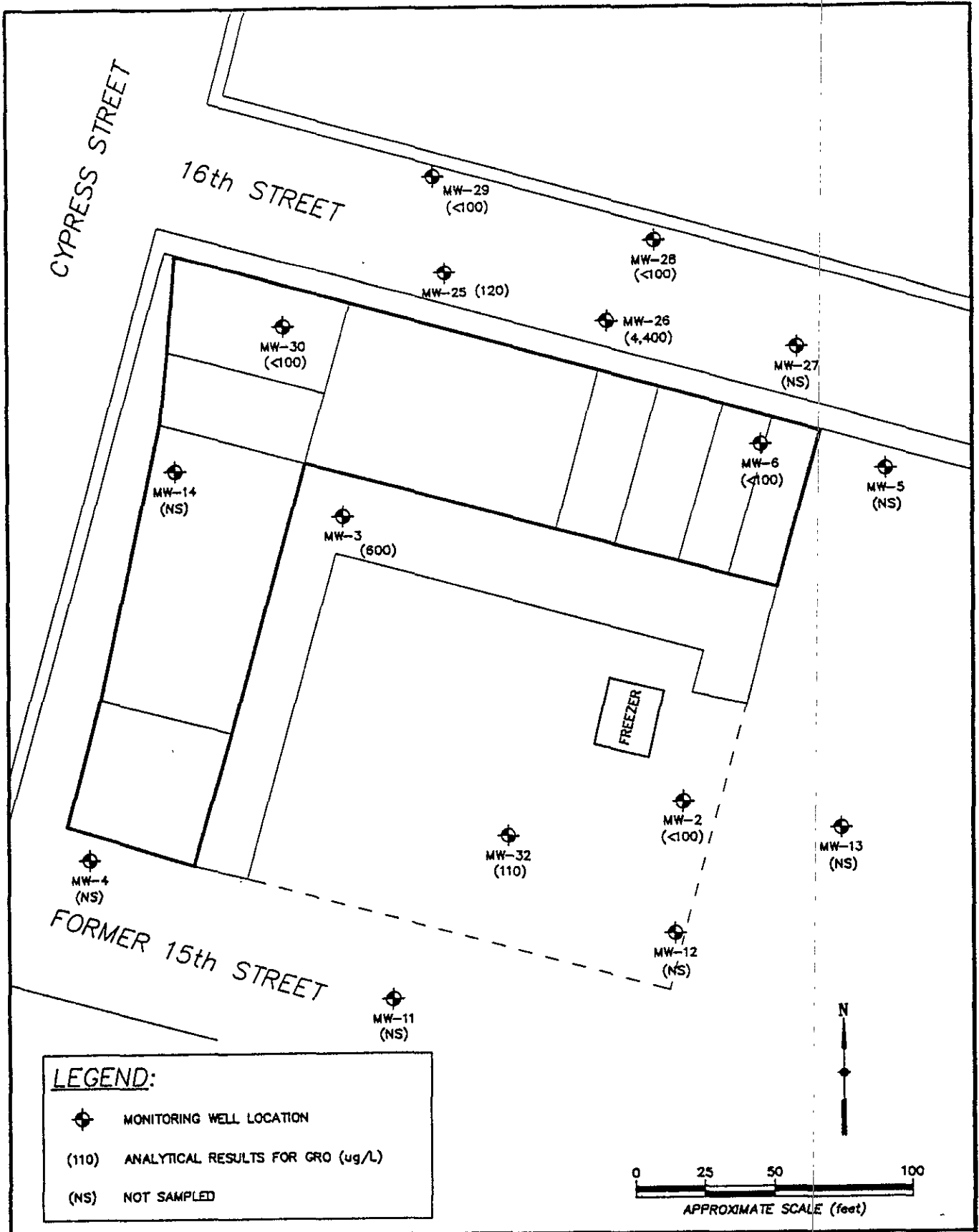



FIGURE 6.
 GROUNDWATER SAMPLING
 ANALYTICAL RESULTS FOR GRO (ug/L)
 NESTLE FACILITY, OAKLAND, CALIFORNIA
 12 MARCH 1996

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FILE NAME: NEST-296.DWG	REVIEWED BY: C. MARTING

TPH-9

Tables

TABLE 1 PRODUCT THICKNESS (FT), NESTLE FACILITY, 1310 14TH STREET,
OAKLAND, CALIFORNIA, NOVEMBER 1993 - FEBRUARY 1996

Well	1/14/93	2/24/93	3/18/94	6/2/94	8/31/94	12/22/94	3/13/95	6/9/95	7/27/95	9/22/95	12/6-28/95	2/27/96	2/29/96
MW-7	0.79	1.14	2.82	0.26	0.01	0.04	ND	ND	--	0.21	--	ND	--
MW-8	0.47	0.44	0.30	0.31	0.31	0.26	0.08	0.09	0.23	0.24	0.24	ND	--
MW-22	1.83	1.54	>3.0	1.14	0.19	0.03	ND	ND	ND	0.32	0.30	ND	--
MW-23	1.21	0.07	1.40	1.79	0.68	0.41	ND	0.31	0.44	0.71	0.30	0.19	0.15
MW-24	1.77	12.10	>3.0	0.97	0.39	ND	ND	ND	--	1.41	ND	ND	--
E-0	--	--	--	--	--	--	--	--	2.72	--	ND	3.92	0.07
E-1	--	--	--	--	--	--	--	--	--	--	0.27	--	--
E-5	--	--	--	--	--	--	--	--	--	--	1.50	0.27	0.03
E-6	--	--	--	--	--	--	--	--	0.08	--	ND	--	--
E-8	--	--	--	--	--	--	--	--	0.10	--	0.42	0.19	0.02
PR-20	0.91	1.15	3.41	1.45	0.88	1.04	0.14	0.16	2.54	1.12	ND	3.5	2.65
PR-21	0.63	--	2.76	1.39	0.42	2.01	4.11	2.42	1.93	0.70	0.60	2.99	0.77
PR-22	0.98	1.43	>3.0	0.90	0.47	0.04	0.60	0.71	0.68	0.71	0.23	1.57	0.94
PR-23	0.67	0.36	1.06	0.38	0.17	0.06	0.34	0.06	0.08	0.12	0.11	ND	--
PR-24	--	--	--	ND	ND	ND	ND	ND	0.01	ND	ND	--	--
PR-26	0.6	0.54	2.05	0.39	0.17	ND	ND	ND	--	0.13	0.12	0.27	ND
PR-27	--	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	--	--
PR-30	--	--	--	2.81	1.21	1.97	ND	ND	--	Dry	Dry	Dry	--
PR-34	0.66	1.17	2.81	1.07	0.37	2.45	4.06	3.54	2.30	1.03	0.58	5.10	1.22
PR-35	0.62	1.26	>3.0	1.70	0.12	0.13	0.85	0.91	0.84	0.73	0.40	0.20	0.11
PR-36	-	1.13	1.43	1.13	0.37	0.19	0.15	0.23	0.22	Dry	Dry	0.20	0.05
PR-37	0.41	1.29	2.35	0.96	0.14	0.22	0.83	0.82	0.58	0.58	0.18	1.14	0.32
PR-41	0.59	0.53	0.42	0.13	0.43	0.03	ND	ND	--	Dry	Dry	Dry	--
PR-44	0.24	0.22	0.19	ND	ND	ND	ND	ND	--	Dry	-	ND	--
PR-45	0.17	5.27	0.10	ND	ND	ND	ND	ND	--	ND	ND	ND	--
PR-47	0.75	0.41	shcen	ND	ND	0.01	ND	ND	--	0.08	0.08	ND	--
PR-48	1.12	0.20	>3.0	0.83	0.07	1.43	0.64	0.65	0.94	0.50	0.54	0.11	0.06

TABLE 1 (continued)

Well	11/4/93	2/24/93	3/18/94	6/2/94	8/31/94	12/22/94	3/13/95	6/9/95	7/27/95	9/22/95	12/16-28/95	2/27/96	2/29/96
PR-49	--	3.24	ND	ND	ND	ND	ND	ND	--	ND	ND	ND	--
PR-50	1.08	1.58	0.89	ND	ND	ND	ND	ND	ND	ND	ND	ND	--
PR-51	--	6.57	>3.0	0.01	0.72	2.02	ND	ND	ND	ND	ND	Dry	--
PR-52	1.01	5.09	1.16	0.45	0.05	0.03	ND	ND	ND	ND	--	ND	--
PR-53	1.15	3.01	>3.0	0.61	0.49	1.52	ND	1.55	1.47	1.08	0.17	0.90	0.27
PR-54	0.97	0.99	1.20	ND	0.08	0.01	ND	ND	--	ND	ND	ND	--
PR-55	1.48	0.07	1.31	0.87	ND	0.01	ND	Dry	Dry	Dry	--	Dry	--
PR-56	0.90	1.30	--	0.89	0.15	1.48	ND	ND	0.01	ND	--	ND	--
PR-57	--	6.40	--	ND	ND	ND	ND	ND	--	ND	--	ND	--
PR-58	0.96	0.85	--	1.48	0.89	2.15	1.41	1.34	2.40	1.18	0.57	2.67	1.25
PR-60	--	ND	--	ND	ND	ND	ND	ND	0.01	ND	ND	--	--
PR-61	0.25	0.39	0.35	1.03	ND	0.01	ND	ND	1.30	ND	ND	1.48	0.45
PR-62	0.04	--	0.07	0.09	ND	ND	ND	ND	--	ND	ND	ND	--
PR-64	1.49	0.11	>3.0	--	1.06	2.15	1.03	1.17	2.12	1.15	0.58	3.08	0.4
PR-65	0.04	0.02	0.09	0.08	ND	ND	ND	ND	ND	ND	ND	ND	--
PR-67	1.05	0.65	0.81	--	--	--	--	--	0.05	--	ND	ND	--
PR-70	--	--	1.59	--	--	--	--	--	--	--	--	--	--
V-8	--	--	--	--	--	--	--	--	0.01	--	ND	--	--
V-55	--	--	--	--	--	--	--	--	--	--	0.04	--	--
V-77	--	--	--	--	--	--	--	--	0.78	Dry	--	--	--
V-78	--	--	--	--	--	--	--	--	0.01	--	ND	ND	--
V-90	--	1.41	--	0.94	0.16	1.68	0.02	0.02	Dry	Dry	ND	Dry	--
V-94	--	--	--	--	--	--	--	--	0.01	--	--	--	--
--	Not monitored.												
ND	None detected.												

TABLE 2 GAUGING DATA, NESTLE FACILITY, 1310 14TH STREET, OAKLAND, CALIFORNIA, FEBRUARY 1994 - FEBRUARY 1996

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
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
	MW-4		02/24/94	14.42	--	8.09
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
	03/13/95		--	--	--	--
	06/09/95		--	--	--	--
	09/22/95		--	--	--	--
	12/12/95		--	9.60	--	4.81
	03/12/96		--	6.46	--	7.95

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-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	
MW-7	02/24/94	14.29	8.64	9.78	1.14	4.51
	03/18/94		6.56	9.38	2.82	4.91
	06/02/94		9.12	9.38	0.26	4.91
	08/31/94		9.87	9.88	0.01	4.41
	12/22/94		8.29	8.33	0.04	5.96
	03/13/95		--	6.72	--	7.57
	06/09/95		--	8.79	--	5.50
	09/22/95		9.30	9.51	0.21	4.78
MW-8	02/24/94	14.20	8.55	8.99	0.44	5.21
	03/18/94		7.34	7.64	0.30	6.56
	06/02/94		8.93	9.24	0.31	4.96
	08/31/94		9.82	10.13	0.31	4.07
	12/22/94		8.21	8.47	0.26	5.73
	03/13/95		6.77	6.85	0.08	7.35
	06/09/95		8.81	8.90	0.09	5.30
	07/27/95		8.32	8.55	0.23	5.65
	09/22/95		9.29	9.53	0.24	4.67
	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

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-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		
	03/13/95		--	--	--	--		
	06/09/95		--	--	--	--		
	09/22/95		--	--	--	--		
	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		
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		
	03/13/95		--	--	--	--		
	06/09/95		--	--	--	--		
	09/22/95		--	--	--	--		
	12/12/95		--	9.94	--	4.91		
	12/18/95		--	9.60	--	5.25		
	03/12/96		--	6.40	--	8.45		
	MW-14		02/24/94	14.10	--	dry	--	--
			03/18/94		--	dry	--	--
12/06/95		--	dry		--	--		
MW-15	12/06/95	14.17	--	dry	--	--		
MW-16	12/06/95	14.11	--	dry	--	--		
MW-22	02/24/94	14.44	8.59	10.13	1.54	4.31		
	03/18/94		6.98	--	>3.0	--		
	06/02/94		9.02	10.16	1.14	4.28		
	08/31/94		9.97	10.16	0.19	4.28		
	12/22/94		8.39	8.42	0.03	6.02		
	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				

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-23	02/24/94	14.48	8.87	8.94	0.07	5.54
	03/18/94		7.04	8.44	1.40	6.04
	06/02/94		8.21	10.00	1.79	4.48
	08/31/94		9.93	10.61	0.68	3.87
	12/22/94		8.32	8.73	0.41	5.75
	03/13/95		--	5.52	--	8.96
	06/09/95		8.24	8.55	0.31	5.93
	07/27/95		8.43	8.87	0.44	5.61
	09/22/95		9.35	10.06	0.71	4.42
	12/06/95		--	10.07	--	4.41
	12/18/95		9.40	9.70	0.30	4.78
	12/18/95		--	9.89	--	4.59
	12/18/95		9.46	9.49	0.03	4.99
	12/19/95		9.45	9.55	0.10	4.93
	12/19/95		--	9.88	--	4.60
12/19/95	9.48	9.52	0.04	4.96		
12/28/95	9.40	9.52	0.12	4.96		
MW-24	02/24/94	14.67	8.95	--	12.10	--
	03/18/94		7.45	--	>3.0	--
	06/02/94		9.11	10.08	0.97	4.59
	08/31/94		10.19	10.58	0.39	4.09
	12/22/94		--	8.55	--	6.12
	03/13/95		--	6.68	--	7.99
	06/09/95		--	9.54	--	5.13
	09/22/95		9.35	10.76	1.41	3.91
12/06/95	10.39	10.39	--	4.28		
MW-25	02/24/94	12.86	--	7.36	--	5.50
	03/18/94		--	6.14	--	6.72
	06/02/94		--	7.93	--	4.93
	08/31/94		--	8.75	--	4.11
	12/22/94		--	7.01	--	5.85
	03/13/95		--	5.77	--	7.09
	06/09/95		--	6.75	--	6.11
	09/22/95		--	7.45	--	5.41
	12/12/95		--	8.18	--	4.68
	12/18/95		--	7.84	--	5.02
	03/12/96		--	5.38	--	7.48
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

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	12/22/94	12.71	--	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
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
	12/22/94		--	--	--	--
	03/13/95		--	--	--	--
	06/09/95		--	--	--	--
	09/22/95		--	--	--	--
	12/12/95		--	9.30	--	4.74
	03/12/96		Well not accessible.			
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
MW-29	02/24/94	12.60	--	7.20	--	5.40
	03/18/94		--	5.82	--	6.78
	06/02/94		--	7.62	--	4.98
	08/31/94		--	8.44	--	4.16
	12/22/94		--	7.00	--	5.60
	03/13/95		--	5.55	--	7.05
	06/09/95		--	6.59	--	6.01
	09/22/95		--	7.58	--	5.02
	12/12/95		--	8.02	--	4.58
	12/18/95		--	7.76	--	4.84
	03/12/96		--	5.01	--	7.59
	MW-30		02/24/94	14.54	--	8.95
03/18/94		--	7.79		--	6.75
06/02/94		--	9.47		--	5.07
08/31/94		--	10.27		--	4.27

TABLE 2 (continued)

Well No.	Gauging Date	TOC Elevation (ft)	TOC Depth to Product (ft)	TOC Depth to Water (ft)	Product Thickness (ft)	Water Table Elevation (ft msl)
MW-30	12/22/94	14.54	--	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
MW-31	06/02/94	14.92	--	9.42	--	5.50
MW-32	02/24/94	14.76	--	8.95	--	5.81
	03/18/94		--	7.25	--	7.51
	06/02/94		--	9.28	--	5.48
	08/31/94		--	10.12	--	4.64
	12/22/94		--	8.40	--	6.36
	03/13/95		--	6.63	--	8.13
	06/09/95		--	7.94	--	6.82
	09/22/95		--	9.32	--	5.44
	12/12/95		--	9.84	--	4.92
	12/18/95		--	9.53	--	5.23
	03/12/96		--	6.23	--	8.53

-- Product not present.

TABLE 3

CONCENTRATIONS ($\mu\text{g/L}$) OF ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES,
NESTLE FACILITY, OAKLAND, CALIFORNIA, 1993 - 1996

Well No.	Date Sampled	Concentration ($\mu\text{g/L}$)										Analysis Method	
		Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA		TCE
MW-2	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	--	--	--	--	--	--	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	<0.5	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	<0.3	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50 ^a	--	--	--	--	--	4,2
	03/13/95	0.8	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	0.7	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	4,2
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
MW-3	03/23/93	35	2.9	2	3.2	300	ND	--	--	--	--	--	1,2
	07/27/93	97	1	4	1.1	220	ND	--	--	--	--	--	1,2
	11/05/93	4.9	ND	ND	1.2	170	ND	--	--	--	--	--	1,2
	02/25/94	42	<1	<1	<1	100	<1,000	--	--	--	--	--	1,2
	06/03/94	120	8.2	8.4	4.5	320	<20,000	--	--	--	--	--	1,2
	08/31/94	83	1.1	5.3	2.9	<500	<500	--	--	--	--	--	4,2
	12/22/94	1,460	18	100	50	3,800	270	--	--	--	--	--	4,2
	03/13/95	3,600	260	270	280	14,000	1,700	--	--	--	--	--	1,2
	06/09/95	4,700	58	140	71	3,700	120	--	--	--	--	--	1,2
	09/21/95	9,800	58	600	95	14,000	300	--	--	--	--	--	1,2
	12/12/95	330	2.1	47	5.3	700	<50	--	--	--	--	--	4,2
	03/12/96	350	4.6	23	8.7	600	<50	--	--	--	--	--	1,2
MW-6	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	3.5	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	2.7	<0.5	<0.5	<0.5	69	<20,000	--	--	--	--	--	1,2
	08/31/94	<0.3	8.7	1.6	3.5	<500	<500	--	--	--	--	--	4,2

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L)										Analysis Method	
		Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA		TCE
MW-6	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50 ^a	--	--	--	--	--	4,2
	03/13/95	1.2	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	0.6	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	4,2
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
MW-25	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	4.2	4.4	2.5	20	170	ND	--	--	--	--	--	1,2
	02/25/94	2.1	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	2.4	14	<0.5	3.4	97	<20,000	--	--	--	--	--	1,2
	08/31/94	0.5	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	0.5	<0.5	<0.5	<0.5	<50	<50 ^a	--	--	--	--	--	4,2
	03/13/95	0.58	<0.5	<0.5	<0.5	150	950	--	--	--	--	--	1,2
	06/09/95	0.8	<0.5	<0.5	<0.5	<100	60	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	50	<50	--	--	--	--	--	1,2
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	4,2
	03/12/96	<0.5	<0.5	<0.5	<0.5	120	<50	--	--	--	--	--	1,2
MW-26	03/23/93	180	190	55	330	7,000	1,300	ND	ND	ND	ND	ND	1,2,3
	07/27/93	470	96	30	80	1,800	ND	140	ND	ND	ND	ND	1,2,3
	11/05/93	4,700	1,300	9	1,400	19,000	ND	120	ND	ND	ND	ND	1,2,3
	02/25/94	4,800	570	200	860	14,000	<1,000	28	<1	<1	<1	<1	1,2,3
	06/03/94	4,100	300	120	230	12,000	<20,000	140	1.7	0.84	<0.5	<0.5	1,2,3
	08/31/94	4,100	360	170	450	93,000	1,400	<4.0	<4.0	<4.0	<4.0	<4.0	4,2,7
	12/22/94	1,030	170	85	290	5,000	560	<2.0	<2.0	<2.0	<2.0	<2.0	4,2,7
	03/13/95	320	19	23	66	3,000	810	5.8	53	<0.5	<0.5	<0.5	1,2,9
	06/09/95	14,000	64	31	230	10,800	310	3.1	240	<0.5	1	<0.5	1,2,3
	09/21/95	1,900	160	160	330	8,000	200	120	1.3	<0.5	<0.5	<0.5	1,2,3
	12/12/95	13,000	38	36	120	25,000	0.6 ^b	180	1.4	<0.5	<0.5	<0.5	4,2,3
	03/12/96	9,000	33	30	65	4,400	<50	180	<0.5	<0.5	<0.5	<0.5	1,2,3

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L)										Analysis Method	
		Benzene	Toluene	Ethylbenzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA		TCE
MW-28	03/23/93	ND	ND	ND	ND	110	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	ND	2.1	ND	ND	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	<1	<100	<1	--	--	--	--	--	1,2
	06/03/94	3.1	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	1.4	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50 ^a	--	--	--	--	--	4,2
	03/13/95	0.91	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	4,2
03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2	
MW-29	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	2.1	11	ND	ND	--	--	--	--	--	1,2
	02/25/94	<1	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	<0.5	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	<0.3	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	<0.5	<0.5	<0.5	<0.5	<50	<50 ^a	--	--	--	--	--	4,2
	03/13/95	0.59	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	4,2
03/12/96	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	1,2	
MW-30	03/23/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	07/27/93	ND	ND	ND	ND	ND	ND	--	--	--	--	--	1,2
	11/05/93	ND	ND	ND	2.8	ND	ND	--	--	--	--	--	1,2
	02/25/94	1.3	<1	<1	<1	<100	<1,000	--	--	--	--	--	1,2
	06/03/94	1.1	<0.5	<0.5	<0.5	<50	<20,000	--	--	--	--	--	1,2
	08/31/94	0.8	<0.3	<0.3	<0.6	<500	<500	--	--	--	--	--	4,2
	12/22/94	0.6	<0.5	<0.5	<0.5	<50	<50 ^a	--	--	--	--	--	4,2

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L)										Analysis Method	
		Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA		TCE
MW-30	03/13/95	0.98	<0.5	<0.5	<0.5	<50	<400	--	--	--	--	--	1,2
	06/09/95	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
	09/21/95	<0.5	<0.5	<0.5	<0.5	<50	<50	--	--	--	--	--	1,2
	12/12/95	<0.5	<0.5	<0.5	<1.0	<100	<50	--	--	--	--	--	4,2
	03/12/96	<0.5	<0.5	<0.5	<0.5	<100	<50	--	--	--	--	--	1,2
MW-32	03/23/93	391	6.2	3.1	9	440	ND	60	ND	ND	ND	ND	1,2,3
	07/27/93	ND	ND	ND	ND	ND	ND	14	ND	ND	ND	ND	1,2,3
	11/05/93	20	ND	1.8	2.1	170	ND	7.9	ND	ND	ND	ND	1,2,3
	02/25/94	5.6	<1	<1	<1	<100	<1,000	<1	<1	<1	<1	<1	1,2,3
	06/03/94	120	1.3	<0.5	1.4	350	<20,000	11	<0.5	<0.5	<0.5	<0.5	1,2,3
	08/31/94	39	0.5	2.2	1.2	<500	<500	10	<4.0	<4.0	<4.0	<4.0	4,2,7
	12/22/94	4.8	<0.5	<0.5	<0.5	<50	<50 ^a	4.6	<2.0	<2.0	<2.0	<2.0	4,2,7
	03/13/95	220	3.6	6.5	5.8	1,100	<400	16	<0.5	<0.5	<0.5	<0.5	1,2,9
	06/09/95	1,500	7.9	43	14	2,200	180	<0.5	0.7	<0.5	0.5	<0.5	1,2,3
	09/21/95	1,200	2.4	72	4.5	2,300	60	6.7	<0.5	<0.5	<0.5	1.4	1,2,3
	12/12/95	230	<0.5	8.9	<1.0	500	<50	28	<0.5	<0.5	<0.5	<0.5	4,2,3
	03/12/96	40	<0.5	1.7	<0.5	110	<50	6.8	<0.5	<0.5	<0.5	<0.5	1,2,3
Rinse Blank	03/12/96	15	9.5	2.6	11	110	ND	ND	ND	ND	ND	ND	1,2,3
Trip Blank	03/12/96	ND	ND	ND	ND	ND	--	--	--	--	--	--	1,2

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

Analytical Methods:

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

ND Not detected.
-- Not analyzed.

TABLE 3 (continued)

Well No.	Date Sampled	Concentration (µg/L)										Analysis Method
		Benzene	Toluene	Ethyl-benzene	Xylenes	TPH GRO	TPH DRO	1,2-DCA	1,1-DCA	BDCM	1,1,1-TCA	

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

Appendix A

Field Documents

FIELD SUMMARY REPORT

Client and Station #: Nestlé

EA Project #: 60966.01 0008

Sample Team: K Legge

Date: 2/27/96

Number of Drums on Site: Water 3 Soil 2 Empty 2
1 Drum LPH (45 gals)

Summary:

Arrived on site at 0930 All wells were located and gauged except E-1 and PR-70.

All wells with greater than .05" LPH were pumped till LPH was removed.

Wells were secured as well as possible well integrity is poor. Rain Runoff can easily enter some wells. New caps and well boxes are needed.

Left site at 1630

K Legge

MONITORING WELL DATA FORM



EA ENGINEERING,
SCIENCE AND
TECHNOLOGY, INC.

Project Number 60966.01 008

Station Number 909119 DATA
Page 10 of 2

Client Hestle

Samplers K Legge

Date 2/27/96

Site Location 1310 14th ST OAKLAND Ca.

MONITORING WELL NUMBER	ELEVATION TOP OF CASING	DEPTH TO WATER	DEPTH TO PRODUCT	ELEVATION TOP OF GROUNDWATER	APPARENT PRODUCT THICKNESS	STICK UP (+) DOWN (-)	DEPTH TO BOTTOM
MW 7		6.60					
MW 22		6.75					
MW 24		6.70					
E-0		9.42	5.50		3.92		
E-1	Can not locate well						
E-8		7.15	6.96		0.19		
V 78		7.88	Elevated casing				
V 90		Dry at 3.25' mud Bottom					
PR-20		9.60	6.10		3.5		
PR-30		Dry at 2.30' sand Bottom					
PR-36		7.10	6.90		0.20		
PR-41		Dry at 5.40' sand Bottom					
PR-44		6.90					
PR-45		6.85					
PR-47		7.11					
PR-49		6.88					
PR-50		6.70					
PR-51		Dry at 5.0' mud Bottom					
PR-52		6.87					
PR-54		6.75					
PR-55		Dry AT 6.49' mud Bottom					
PR-56		4.33					
PR-57		5.95					
PR 61		7.74	6.26		1.48		
PR-67		6.58					
PR-70	Can not locate well						
PR 62		6.86					
PR-65		6.37					
MW-8		6.67					
MW 23		6.88	6.69		0.19		
PR 21		9.24	6.25		2.99		
PR 22		7.78	6.21		1.57		
PR 23		7.70					
PR 26		7.17	6.90		0.27		
PR 34		8.47	3.37		5.10		



MONITORING WELL NUMBER	ELEVATION TOP OF CASING	DEPTH TO WATER	DEPTH TO PRODUCT	ELEVATION TOP OF GROUNDWATER	APPARENT PRODUCT THICKNESS	STICK UP (+) DOWN (-)	DEPTH TO BOTTOM
------------------------	-------------------------	----------------	------------------	------------------------------	----------------------------	-----------------------	-----------------

LPH RECOVERY DATA "POST PURGE"

WELL	DTW	DTP	H ₂ O Removed	LPH removed	Purge Time
PR36	7.50	—	1/8 gal	1/8 gal	4 minutes
PR21	9.10	8.95	0	2 gals	9 minutes
PR37	7.64	7.62	1/8 gal	1/4 gal	4 minutes
PR22	7.58	—	1/8 gal	1/4 gal	3 minutes
PR26	7.20	—	1/8 gal	1/8 gal	2 minutes
E-8	7.09	—	1/2 gal	1/2 gal	4 minutes
PR-34	9.60	9.45	1/4 gal	1.5 gal	5 minutes
PR-35	7.24	7.23	1/8 gal	1/8 gal	7.5 minutes
PR-48	7.34	—	1/8 gal	1/16 gal	2 minutes
PR-53	8.45	—	1/8 gal	1/8 gal	3 minutes
PR-58	9.00	8.94	1/8 gal	2 gal	5 minutes
PR-64	9.80	9.75	1/8 gal	1 gal	4 minutes
E-5	7.53	7.50	1.5 gal	1.5 gal	6 minutes
MW23	7.40	—	1/8 gal	1/16 gal	3 minutes
E-0	6.91	6.85	1/8 gal	8 gals	10 minutes
PR-20	9.81	9.77	0	1/2 gal	4 minutes
PR-61	7.98	7.94	1/8 gal	1 gal	6 minutes



EA Engineering,
Science, and
Technology

FIELD SUMMARY REPORT

Client: NESTLE Station No: _____

EA Project No: 60966.01 Task No: 0008

Sample Team: H. Legge

Date: 2/29/96

No. of Drums on Site: 3 Water 0 Soil 1 Empty 1 LPH

Summary:

arrived on site at 1130 AM. Located and
opened wells that LPH was removed from on
2/27/96.

Measured depth to water and depth to
product in wells. Recorded all data.

left site at 1300.

H.F.



Date: 2/29/96

MONITORING WELL DATA FORM

Project Number: 60966-01-0008 Station Number:
 Client: Hestie Samplers: R. Legge
 Site Location: 1310 14th St Oakland Ca

MONITORING WELL NUMBER	ELEVATION TOP OF CASING	DEPTH TO WATER	DEPTH TO PRODUCT	ELEVATION TOP OF GROUNDWATER	APPARENT PRODUCT THICKNESS	STICK UP (+) DOWN (-)	DEPTH TO BOTTOM
PR36		6.64	6.59		0.05		
PR21		8.00	7.23		0.77		
PR37		6.72	6.40		0.32		
PR22		7.54	6.60		0.94		
PR26		6.80	—		—		
PR34		8.45	7.23		1.22		
E8		7.07	7.05		0.02		
PR35		6.66	6.55		0.11		
PR48		6.99	6.93		0.06		
PR53		6.90	6.63		0.27		
PR58		7.55	6.30		1.25		
PR64		7.22	6.82		0.40		
E5		7.09	7.06		0.03		
MW23		7.00	6.85		0.15		
E0		6.60	6.53		0.07		
PR20		8.75	6.10		2.65		
PR61		7.05	6.60		0.45		

Date: 3/12/96

MONITORING WELL DATA FORM

Project Number: 60966.01 0008Station Number: Client: HestieSamplers: K FeggeSite Location: 1310 14th St Oakland Ca

MONITORING WELL NUMBER	ELEVATION TOP OF CASING	DEPTH TO WATER	DEPTH TO PRODUCT	ELEVATION TOP OF GROUNDWATER	APPARENT PRODUCT THICKNESS	STICK UP (+) DOWN (-)	DEPTH TO BOTTOM
MW2		6.70					2300
MW3		6.31					2455
MW6		6.03					15.35
MW25		5.38					19.30
MW26		4.86					24.95
MW28		5.62					25.00
MW29		5.01					23.00
MW30		6.93					20.72
MW32		6.23					22.88
MW5		6.46					
MW4		6.45					
MW11		5.95					
MW13		6.40					
MW27		Cannot open well box w/out destroying it					

Date: 5/12/78

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: HESTLEWell Number: MW2Project Number: 60966.01 0008Personnel: K. Legge

GAUGING DATA

Water Level Measuring Method: INTERFACE Probe Measuring Point Description: TOL

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)
		-	=	X	2	4	6	=
	2300	6.70	1630	0.16	0.64	1.44	10.4	31

PURGING DATA

Purge Method: VACUUM TRUCK Purge Depth: SCREEN Purge Rate: 3.5 gpm

Time	1020	1023	1026	1030
Volume Purges (gal)	0	10.5	21	31
Temperature (°C)	15	18	18.5	18.5
pH	8.0	7.6	7.7	7.7
Specific Conductivity (umhos)	940	950	953	950
Turbidity / Color	LOW CLR	LOW LTBTH	LOW LTBTH	LOW LTBTH
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO

Comments / Observations: _____

SAMPLING DATA

Time Sampled: 1032 Approx. Depth to Water During Sampling: 18'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW2	3	Voa	HCl	40ml	Low	LTBTH	yes	TPH BTEX	N-
↓	1	amber	NONS	White	↓	↓	yes	TPH DISSOL	N-
								8010	

Total Purge Volume: 31 gals Disposal/Containment Method: DRUMS ON SITEWeather Conditions: RAIN / ColdCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New Locking CapProblems Encountered During Purging and Sampling: NONEComments: NONE

Date: 5/12/10

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NETTLE Well Number: MW3
 Project Number: 60966.01 0008 Personnel: K. Legge

GAUGING DATA

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

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)	
		-	=	X	2	4	6	=	
	<u>2455</u>	<u>6.31</u>	<u>1824</u>		<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>11.6</u>	<u>35</u>

PURGING DATA

Purge Method: VACUUM TRUCK Purge Depth: SCREEN Purge Rate: 49 PPM

Time	1050	1053	1056	1059
Volume Purges (gal)	<u>0</u>	<u>11.5</u>	<u>23</u>	<u>35</u>
Temperature (°C)	<u>16</u>	<u>17.5</u>	<u>18</u>	<u>18</u>
pH	<u>7.8</u>	<u>7.6</u>	<u>7.5</u>	<u>7.6</u>
Specific Conductivity (umhos)	<u>1095</u>	<u>1150</u>	<u>1150</u>	<u>1147</u>
Turbidity / Color	<u>LOW / ATBN</u>	<u>LOW / ATBN</u>	<u>LOW / ATBN</u>	<u>LOW / ATBN</u>
Odor	<u>LT HC</u>	<u>LT HC</u>	<u>LT HC</u>	<u>LT HC</u>
Casing Volumes Removed	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
Dewatered?	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>

Comments / Observations: _____

SAMPLING DATA

Time Sampled: 1100 Approx. Depth to Water During Sampling: 18'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or L)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
<u>MW3</u>	<u>3</u>	<u>VOG</u>	<u>HCl</u>	<u>40ml</u>	<u>low</u>	<u>ATBN</u>	<u>YES</u>	<u>TPH</u>	<u>NO</u>
<u>↓</u>	<u>1</u>	<u>Amber</u>	<u>NONE</u>	<u>1 Litre</u>	<u>↓</u>	<u>↓</u>	<u>YES</u>	<u>TPH</u> <u>DIESEL</u>	<u>NO</u>
								<u>8010</u>	

Total Purge Volume: 35 gals Disposal/Containment Method: DRUMS ON SITE
 Weather Conditions: RAIN / Cold
 Condition of Well Box and Casing at Time of Sampling: POOR
 Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Box & Cap should be Replaced
 Problems Encountered During Purging and Sampling: NONE
 Comments: NONE



GROUNDWATER PURGE AND SAMPLE FORM

Project Name: HESTER
Project Number: 60966.01 0008

Well Number: MW6
Personnel: Legge

GAUGING DATA

Water Level Measuring Method: INTERFERENCE 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)
		-	=	X	(2)	4	6	=
	15.35	6.03	9.32	0.16	0.64	1.44	1.5	4.5

PURGING DATA

Purge Method: VACUUM TRUCK Purge Depth: SCREEN Purge Rate: 1.5 gpm

Time	1035	1036	1037	1038
Volume Purges (gal)	0	1.5	3.0	4.5
Temperature (°C)	12	13	13	13
pH	7.8	8.0	8.0	8.0
Specific Conductivity (umhos)	750	685	689	690
Turbidity / Color	LOW ATBEM	LOW ATBEM	LOW ATBEM	LOW ATBEM
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO

Comments / Observations: _____

SAMPLING DATA

Time Sampled: 1040 Approx. Depth to Water During Sampling: 10'

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	5	VOA	Hal	40ml	LOW	ATBEM	YES	TPH STX	M-
MW6	1	Amber	NONE	1 liter	↓	↓	YES	TPH DISSL 8010	M-

Total Purge Volume: 4.5 gals Disposal/Containment Method: DRUMS ON SITE

Weather Conditions: RAIN/COLD

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

Well Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): NONE

Problems Encountered During Purging and Sampling: NO

Comments: NO

Date: 2/17/18

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: HETLEWell Number: MW25Project Number: 60966.01 0008Personnel: K. Legge

GAUGING DATA

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

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
		-	=	X	2	4	6	=
	1930	5.38	13.92	0.16	0.64	1.44	8.9	26.7

PURGING DATA

Purge Method: Vacuum Truck Purge Depth: SCREEN Purge Rate: 2.5 gpm

Time	0820	0823	0826	0831
Volume Purges (gal)	0	9	18	27
Temperature (°C)	15	16	17	17
pH	7.8	7.8	7.9	7.9
Specific Conductivity (umhos)	1139	1345	1290	1294
Turbidity / Color	Low ATBm	Low ATBm	Low ATBm	Low ATBm
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO

Comments / Observations: _____

SAMPLING DATA

Time Sampled: 0835 Approx. Depth to Water During Sampling: 17'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW25	3	1/2 gal	HCl	40ml	Low	CLP	YES	TPH BTEX	N-
↓	1	Amber	NONE	1 liter	↓	↓	YES	TPH DISSOL	N-
								8010	

Total Purge Volume: 27 gal Disposal/Containment Method: Drums on siteWeather Conditions: Cold/RainingCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs New Locking CapProblems Encountered During Purging and Sampling: NONEComments: NONE



GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NESTLE

Well Number: MU26

Project Number: 62966-01 0008

Personnel: K Legge

GAUGING DATA

Water Level Measuring Method: Interface Probe

Measuring Point Description: TOC

WELL VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter			Casing Volume (gal)	Total Req'd Purge Volume (gal)
		$-$	$=$	\times	2	4	6	$=$
	2495	4.86	20.09	0.16	0.64	1.44	12.8	38.5

PURGING DATA

Purge Method: Vacuum Truck

Purge Depth: SCREEN

Purge Rate: 2.5 gpm

Time	0840	0843	0848	0855
Volume Purges (gal)	0	13	26	38.5
Temperature (°C)	15	16	16	17
pH	7.8	8.1	8.1	8.1
Specific Conductivity (umhos)	950	935	933	933
Turbidity / Color	LOW CLR	LOW CLR	LOW CLR	LOW CLR
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO

Comments / Observations:

SAMPLING DATA

Time Sampled: 0858

Approx. Depth to Water During Sampling: 19'

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4 °C (Y/N)	Analysis Method	Comments
MU26	3	vga	HCl	40ml	LOW CLR	LOW CLR	yes	TPH BTEX	N-
↓	1	Amber	None	1 litre	↓	↓	yes	TPH DISSOL	N-
↓	3	vga	HCl	40ml	↓	↓	yes	3010	N-

Total Purge Volume: 38.5 gals

Disposal/Containment Method: Drums on site

Weather Conditions: Raining/Cold

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

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

Problems Encountered During Purging and Sampling: NONE

Comments: NONE

Date: 3/12/96

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: HESTLEWell Number: MW28Project Number: 60966.01 0008Personnel: K Legge

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)
	-	=	X	2	4	6	=	
	<u>2500</u>	<u>5.62</u>	<u>19.38</u>	<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>12.4</u>	<u>37</u>

PURGING DATA

Purge Method: VACUUM TRUCKPurge Depth: SCREENPurge Rate: 3.5 gpm

Time	0745	0748	0751	0755
Volume Purges (gal)	<u>0</u>	<u>12.5</u>	<u>25</u>	<u>37</u>
Temperature (°C)	<u>15.5</u>	<u>17</u>	<u>17.5</u>	<u>17.5</u>
pH	<u>8.7</u>	<u>8.2</u>	<u>7.9</u>	<u>7.9</u>
Specific Conductivity (umhos)	<u>1450</u>	<u>155</u>	<u>450</u>	<u>448</u>
Turbidity / Color	<u>LOW CLR</u>	<u>LOW CLR</u>	<u>LOW CLR</u>	<u>LOW CLR</u>
Odor	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>
Casing Volumes Removed	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>
Dewatered?	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>NO</u>

Comments / Observations: _____

SAMPLING DATA

Time Sampled: 0758Approx. Depth to Water During Sampling: 17'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
<u>MW28</u>	<u>3</u>	<u>2oz</u>	<u>HCl</u>	<u>40ml</u>	<u>LOW CLR</u>	<u>CLR</u>	<u>YES</u>	<u>TPH</u>	<u>N-</u>
<u>G</u>	<u>1</u>	<u>Amber</u>	<u>None</u>	<u>1 litre</u>	<u>CLR</u>	<u>CLR</u>	<u>YES</u>	<u>TPH</u> <u>DISSL</u> <u>8010</u>	<u>N-</u>

Total Purge Volume: 37 galsDisposal/Containment Method: DRUMS ON SITEWeather Conditions: Rainy / WindCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) WOODS WELL CAPProblems Encountered During Purging and Sampling: N-Comments: N-

Date: 3/12/96

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: HETLEWell Number: MW29Project Number: 60966.01 0008Personnel: K Legge

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)
		-	=	X	2	4	6	=
	2300	5.01	17.99	0.16	0.64	1.44	11.5	34.5

PURGING DATA

Purge Method: VACUUM TRUCKPurge Depth: SCREENPurge Rate: 3 gpm

Time	0800	0803	0807	0811
Volume Purges (gal)	0	11.5	23	34.5
Temperature (°C)	15.5	17	18	18
pH	8.1	8.0	8.0	8.0
Specific Conductivity (umhos)	407	407	390	390
Turbidity / Color	LOW CLR	LOW CLR	LOW CLR	LOW LT Brn
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO
Comments / Observations:				

SAMPLING DATA

Time Sampled: 0814Approx. Depth to Water During Sampling: 19'

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4 °C (Y/N)	Analysis Method	Comments
MW29	3	var	HO1	40mL	low	LT Brn	YES	TPH BTEX	NO
↓	1	AMBOT	NONE	1 liter	low	LT Brn	YES	TPH DIESEL	NO
								8010	

Total Purge Volume: 34.5 gDisposal/Containment Method: DRUMS ON SITEWeather Conditions: Rainy ColdCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.) Needs new locking capProblems Encountered During Purging and Sampling: NONEComments: NONE

Date: 3/12/96

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NESTLEWell Number: MW30Project Number: 60966.01 0008Personnel: K Legge

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)
		-	=	X	2	4	6	=
	2072	6.93	1379	0.16	0.64	1.44	8.8	265

PURGING DATA

Purge Method: VACUUM TRUCKPurge Depth: SCREENPurge Rate: 39 gpm

Time	1110	1113	1116	1119
Volume Purges (gal)	0	9	18	26.5
Temperature (°C)	14.5	15.5	16	16.5
pH	8.0	8.0	8.0	8.0
Specific Conductivity (umhos)	670	540	538	538
Turbidity / Color	LOW LTBRN	LOW LTBRN	LOW LTBRN	LOW LTBRN
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO

Comments / Observations:

SAMPLING DATA

Time Sampled: 1120Approx. Depth to Water During Sampling: 18'

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
<u>MW30</u>	<u>3</u>	<u>100</u>	<u>Hcl</u>	<u>40ml</u>	<u>LOW</u>	<u>LTBRN</u>	<u>YES</u>	<u>TPH</u>	<u>M-</u>
<u>↓</u>	<u>1</u>	<u>Amber</u>	<u>None</u>	<u>1 Ltr</u>	<u>↓</u>	<u>↓</u>	<u>YES</u>	<u>DISSL</u>	<u>M-</u>
								<u>3010</u>	

Total Purge Volume: 26.5 galsDisposal/Containment Method: Drums on siteWeather Conditions: Warming / ColdCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Needs backing cap.Problems Encountered During Purging and Sampling: M-Comments: M-

Date: 3/12/96

GROUNDWATER PURGE AND SAMPLE FORM

Project Name: NESTLEWell Number: MW32Project Number: 62966.01 0008Personnel: K Legge

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)
		-	=	X	2	4	6	=
	22.85	6.73	16.65	0.16	0.64	1.44	10.6	31.9

PURGING DATA

Purge Method: VACUUM TRUCKPurge Depth: SCREENPurge Rate: 2.59 PM

Time	1000	1004	1008	1012
Volume Purges (gal)	0	10.5	21	32
Temperature (°C)	15	16	18	18
pH	7.3	7.6	7.8	7.8
Specific Conductivity (umhos)	780	750	720	720
Turbidity / Color	LOW CLR	LOW ATBm	LOW ATBm	LOW ATBm
Odor	NO	NO	NO	NO
Casing Volumes Removed	0	1	2	3
Dewatered?	NO	NO	NO	NO

Comments / Observations: _____

SAMPLING DATA

Time Sampled: 1015Approx. Depth to Water During Sampling: 19'

Comments: _____

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL or L)	Turbidity	Color	Shipped Under Chain of Custody at 4°C (Y/N)	Analysis Method	Comments
MW32	5	Voa Hcl		40ml	Low	LTBm	YES	TPH BTEX	
✓	1	AMB	NONE	1 Litre	Low	LTBm	YES	TPH DIESEL	
✓	3	Voa Hcl		40ml	Low	LTBm	YES	3010	

Total Purge Volume: 32 galDisposal/Containment Method: DRUMS ON SITEWeather Conditions: Training / ColdCondition of Well Box and Casing at Time of Sampling: OKWell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.): Head Lacking CapProblems Encountered During Purging and Sampling: NONEComments: NONE

Appendix B

Laboratory Analytical Report



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

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: Rinse Blank
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603180087
 LV#: 96MAR0501-0

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	0.11	mg/L	0.10	EPA 8015	3/21/96
Benzene	15	µg/L	0.5	EPA 8020	3/21/96
Toluene	9.5	µg/L	0.5	EPA 8020	3/21/96
Ethylbenzene	2.6	µg/L	0.5	EPA 8020	3/21/96
m&p Xylenes	7.5	µg/L	0.5	EPA 8020	3/21/96
o-Xylene	3.5	µg/L	0.5	EPA 8020	3/21/96
Total Xylene	11	µg/L	0.5	EPA 8020	3/21/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/25/96
Dichlorodifluoromethane	ND	ug/L	0.5	EPA 8010	3/21/96
Chloromethane	ND	ug/L	0.5	EPA 8010	3/21/96
Vinyl Chloride	ND	ug/L	0.5	EPA 8010	3/21/96
Bromomethane	ND	ug/L	0.5	EPA 8010	3/21/96
Chloroethane	ND	ug/L	0.5	EPA 8010	3/21/96
Trichlorofluoromethane	ND	ug/L	0.5	EPA 8010	3/21/96
1,1-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/21/96
Methylene Chloride	ND	ug/L	0.5	EPA 8010	3/21/96
1,2-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/21/96
cis 1,2-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/21/96
1,1-Dichloroethane	ND	ug/L	0.5	EPA 8010	3/21/96
Chloroform	ND	ug/L	0.5	EPA 8010	3/21/96
1,1,1-Trichloroethane	ND	ug/L	0.5	EPA 8010	3/21/96
Carbon Tetrachloride	ND	ug/L	0.5	EPA 8010	3/21/96
1,2-Dichloroethane	ND	ug/L	0.5	EPA 8010	3/21/96
Trichloroethene	ND	ug/L	0.5	EPA 8010	3/21/96

ND: Not Detected



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- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: Rinse Blank
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603180087
 LV#: 96MAR0501-0

cc: Mark Litzau

1,2-Dichloropropane	ND	ug/L	0.5	EPA 8010	3/21/96
Bromodichloromethane	ND	ug/L	0.5	EPA 8010	3/21/96
c 1,3-Dichloropropene	ND	ug/L	0.5	EPA 8010	3/21/96
t 1,3-Dichloropropene	ND	ug/L	0.5	EPA 8010	3/21/96
1,1,2-Trichloroethane	ND	ug/L	0.5	EPA 8010	3/21/96
Tetrachloroethene	ND	ug/L	0.5	EPA 8010	3/21/96
Dibromochloromethane	ND	ug/L	0.5	EPA 8010	3/21/96
Bromoform	ND	ug/L	0.5	EPA 8010	3/21/96
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	EPA 8010	3/21/96
1,3-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/21/96
1,4-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/21/96
1,2-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/21/96

ND: Not Detected



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 FAX (614) 793-5353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96

Report Date: 4/1/96

Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW2
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190088

LV#: 96MAR0501-1

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	ND	mg/L	0.10	EPA 8015	3/21/96
Benzene	ND	µg/L	0.5	EPA 8020	3/21/96
Toluene	ND	µg/L	0.5	EPA 8020	3/21/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/21/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/21/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/21/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/21/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected



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- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA

Sample ID: MW3

Submitted by E A Engineering

Lab#: 9603190089

LV#: 96MAR0501-2

PO/Ref/Disp#:

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	0.6	mg/L	0.1	EPA 8015	3/22/96
Benzene	350	µg/L	0.5	EPA 8020	3/22/96
Toluene	4.6	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	23	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	3.9	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	4.8	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	8.7	µg/L	0.5	EPA 8020	3/22/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected

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 FAX (614) 793-5353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW6
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190090
 LV#: 96MAR0501-3

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	ND	mg/L	0.10	EPA 8015	3/21/96
Benzene	ND	µg/L	0.5	EPA 8020	3/21/96
Toluene	ND	µg/L	0.5	EPA 8020	3/21/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/21/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/21/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/21/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/21/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected

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- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW25
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190091
 LV#: 96MAR0501-4

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	0.12	mg/L	0.10	EPA 8015	3/21/96
Benzene	ND	µg/L	0.5	EPA 8020	3/21/96
Toluene	ND	µg/L	0.5	EPA 8020	3/21/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/21/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/21/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/21/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/21/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected

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- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96

Report Date: 4/1/96

Sampling Date 3/12/96

Sample Description: Water - Oakland, CA

Sample ID: MW26

Submitted by E A Engineering

Lab#: 9603190092

LV#: 96MAR0501-5

PO/Ref/Disp#:

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	4.40	mg/L	0.10	EPA 8015	3/22/96
Benzene	9000	µg/L	0.5	EPA 8020	3/22/96
Toluene	33	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	30	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	58	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	7.2	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	65	µg/L	0.5	EPA 8020	3/22/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96
Dichlorodifluoromethane	ND	ug/L	0.5	EPA 8010	3/19/96
Chloromethane	ND	ug/L	0.5	EPA 8010	3/19/96
Vinyl Chloride	ND	ug/L	0.5	EPA 8010	3/19/96
Bromomethane	ND	ug/L	0.5	EPA 8010	3/19/96
Chloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Trichlorofluoromethane	ND	ug/L	0.5	EPA 8010	3/19/96
1,1-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
Methylene Chloride	ND	ug/L	0.5	EPA 8010	3/19/96
t 1,2-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
cis 1,2-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
1,1-Dichloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Chloroform	ND	ug/L	0.5	EPA 8010	3/19/96
1,1,1-Trichloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Carbon Tetrachloride	ND	ug/L	0.5	EPA 8010	3/19/96
1,2-Dichloroethane	180	ug/L	0.5	EPA 8010	3/19/96
Trichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96

ND: Not Detected



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- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96

Report Date: 4/1/96

Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW26
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190092

LV#: 96MAR0501-5

cc: Mark Litzau

1,2-Dichloropropane	ND	ug/L	0.5	EPA 8010	3/19/96
Bromodichloromethane	ND	ug/L	0.5	EPA 8010	3/19/96
c 1,3-Dichloropropene	ND	ug/L	0.5	EPA 8010	3/19/96
t 1,3-Dichloropropene	ND	ug/L	0.5	EPA 8010	3/19/96
1,1,2-Trichloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Tetrachloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
Dibromochloromethane	ND	ug/L	0.5	EPA 8010	3/19/96
Bromoform	ND	ug/L	0.5	EPA 8010	3/19/96
1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
1,3-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/19/96
1,4-Dichlorobenzene	ND	ug/L	0.50	EPA 8010	3/19/96
1,2-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/19/96

ND: Not Detected

QUALITY ASSURANCE LABORATORY
 PO BOX 1516
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 FAX (614) 793-5353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96

Report Date: 4/1/96

Sampling Date 3/12/96

Sample Description: Water - Oakland, CA

Sample ID: MW28

Submitted by E A Engineering

Lab#: 9603190093

LV#: 96MAR0501-6

PO/Ref/Disp#:

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	ND	mg/L	0.10	EPA 8015	3/22/96
Benzene	ND	µg/L	0.5	EPA 8020	3/22/96
Toluene	ND	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected



QUALITY ASSURANCE LABORATORY
 PO BOX 1516
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 TEL (614) 791-9144
 FAX (614) 793-5353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW29
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190094
 LV#: 96MAR0501-7

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	ND	mg/L	0.10	EPA 8015	3/22/96
Benzene	ND	µg/L	0.5	EPA 8020	3/22/96
Toluene	ND	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected

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

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW30
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190095
 LV#: 96MAR0501-8

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	ND	mg/L	0.10	EPA 8015	3/22/96
Benzene	ND	µg/L	0.5	EPA 8020	3/22/96
Toluene	ND	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96

ND: Not Detected

QUALITY ASSURANCE LABORATORY
 PO BOX 1516
 6625 EITERMAN ROAD
 DUBLIN, OH 43017-6516
 TEL (614) 791-9144
 FAX (614) 793-3353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW32
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190096
 LV#: 96MAR0501-9

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	0.11	mg/L	0.10	EPA 8015	3/22/96
Benzene	40	µg/L	0.5	EPA 8020	3/22/96
Toluene	ND	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	1.7	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Diesel Range Organics	ND	mg/L	0.05	EPA 8015	3/26/96
Dichlorodifluoromethane	ND	ug/L	0.5	EPA 8010	3/19/96
Chloromethane	ND	ug/L	0.5	EPA 8010	3/19/96
Vinyl Chloride	ND	ug/L	0.5	EPA 8010	3/19/96
Bromomethane	ND	ug/L	0.5	EPA 8010	3/19/96
Chloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Trichlorofluoromethane	ND	ug/L	0.5	EPA 8010	3/19/96
1,1-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
Methylene Chloride	ND	ug/L	0.5	EPA 8010	3/19/96
t 1,2-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
cis 1,2-Dichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
1,1-Dichloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Chloroform	ND	ug/L	0.5	EPA 8010	3/19/96
1,1,1-Trichloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Carbon Tetrachloride	ND	ug/L	0.5	EPA 8010	3/19/96
1,2-Dichloroethane	6.8	ug/L	0.5	EPA 8010	3/19/96
Trichloroethene	ND	ug/L	0.5	EPA 8010	3/19/96

ND: Not Detected

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 FAX (614) 793-5353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: MW32
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190096
 LV#: 96MAR0501-9

cc: Mark Litzau

1,2-Dichloropropane	ND	ug/L	0.5	EPA 8010	3/19/96
Bromodichloromethane	ND	ug/L	0.5	EPA 8010	3/19/96
c 1,3-Dichloropropene	ND	ug/L	0.5	EPA 8010	3/19/96
t 1,3-Dichloropropene	ND	ug/L	0.5	EPA 8010	3/19/96
1,1,2-Trichloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
Tetrachloroethene	ND	ug/L	0.5	EPA 8010	3/19/96
Dibromochloromethane	ND	ug/L	0.5	EPA 8010	3/19/96
Bromoform	ND	ug/L	0.5	EPA 8010	3/19/96
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	EPA 8010	3/19/96
1,3-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/19/96
1,4-Dichlorobenzene	ND	ug/L	0.50	EPA 8010	3/19/96
1,2-Dichlorobenzene	ND	ug/L	0.5	EPA 8010	3/19/96

ND: Not Detected



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 FAX (614) 793-5353

- Laboratory Report -

Client: Binayak Acharya
 Company: Nestle USA - Glendale, CA

Sample Received: 3/14/96
 Report Date: 4/1/96
 Sampling Date 3/12/96

Sample Description: Water - Oakland, CA
 Sample ID: Trip Blank
 Submitted by E A Engineering
 PO/Ref/Disp#:

Lab#: 9603190097
 LV#: 96MAR0501-10

cc: Mark Litzau

Test	Result	Units	MDL	Method	Date Analyzed
Gasoline Range Organics	ND	mg/L	0.10	EPA 8015	3/22/96
Benzene	ND	µg/L	0.5	EPA 8020	3/22/96
Toluene	ND	µg/L	0.5	EPA 8020	3/22/96
Ethylbenzene	ND	µg/L	0.5	EPA 8020	3/22/96
m&p Xylenes	ND	µg/L	0.5	EPA 8020	3/22/96
o-Xylene	ND	µg/L	0.5	EPA 8020	3/22/96
Total Xylene	ND	µg/L	0.5	EPA 8020	3/22/96

ND: Not Detected

Approved By: _____