

Well abandoned sch. for 7/20 7/30



Engineering, Inc.

9 June 1999

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

RE: Proposed Well Abandonments at the Nestle Oakland Facility located at 1310 14th Street, Oakland, CA

Dear Mr. Seto:

Per a meeting with Tom Peacock on 8 December 1998, ETIC Engineering, on behalf of Nestle USA, Inc., is proposing the abandonment of several wells. This is the first phase of abandonment. Other phases will be proposed as analytical results become available and indicate that it is appropriate to abandon wells. Nestle would like to begin abandoning unnecessary wells outside of the hydrocarbon impacted area. These wells are not needed for site remediation or monitoring and may cause short circuits diminishing the efficiency of the high vacuum remediation system. During the meeting with Tom it was decided that each quarter the downgradient wells in 16th Street would be monitored along with a different group of onsite wells. The results for the onsite wells would be used to determine which wells are outside the area of hydrocarbon impact and could be abandoned. Because there are so many wells (in many cases within 5 feet of each other), it was also decided that the results from a single well could be used to represent nearby adjacent wells.

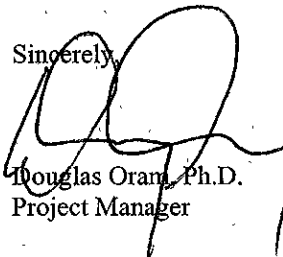
Figure 15 shows the quarterly monitoring results for the first two quarters of 1999. Based on the recent monitoring results and historical results shown in Table 7 (HLA 1991) some of the wells listed in the below table are proposed for abandonment. Plate 2 from HLA 1991 has also been included to show the locations of the monitoring wells away from the treatment area. Wells proposed for abandonment are highlighted in Figure 15 and Plate 2.

Well Number	Abandon	Do Not Abandon	Reason
MW1	X		ND
MW2	X		ND
MW3		X	In plume
MW4	X		ND
MW5	X		ND
MW6		X	Monitors edge of plume
MW7		X	In plume
MW8		X	In plume
MW9	X		ND
MW10	X		ND
MW11	X		ND
MW12	X		ND
MW13	X		ND
MW14	X		Between wells MW15 and MW?, which are ND
MW15		X	Monitors edge of plume
MW16	X		Crossgradient from MW3, which is ND for hydrocarbons and at the detection limit for HVOCs
MW22		X	In plume
MW23		X	In plume
MW24		X	In plume
MW25		X	In plume
MW26		X	In plume
MW27		X	In plume
MW28		X	In plume
MW29		X	In plume
MW30		X	Monitors edge of plume
MW?/100		X	Monitors edge of plume

O.K.
O.K.
O.K.
O.K.
O.K.
O.K.
O.K.
O.K.
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O.K.
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O.K.
O.K.
O.K.

Well Number	Abandon	Do Not Abandon	Reason	
PR100	X		Outside area of hydrocarbon impact	O.K.
240	X		Outside area of hydrocarbon impact	O.K.
241	X		Outside area of hydrocarbon impact	O.K.
PR15	X		Outside area of hydrocarbon impact	O.K.
250	X		Outside area of hydrocarbon impact	O.K.
249	X		Outside area of hydrocarbon impact	O.K.
233	X		Outside area of hydrocarbon impact	O.K.
81	X		Outside area of hydrocarbon impact	O.K.
231	X		Outside area of hydrocarbon impact	O.K.
V24	X		Outside area of hydrocarbon impact	O.K.
PR203	X		Outside area of hydrocarbon impact	O.K.
PR206	X		Outside area of hydrocarbon impact	O.K.
PR202	X		Outside area of hydrocarbon impact	O.K.
224	X		Outside area of hydrocarbon impact	O.K.
PR201	X		Outside area of hydrocarbon impact	O.K.
V46	X		Outside area of hydrocarbon impact	O.K.
94	X		Outside area of hydrocarbon impact	O.K.
200	X		Outside area of hydrocarbon impact	O.K.
201	X		Outside area of hydrocarbon impact	O.K.
202	X		Outside area of hydrocarbon impact	O.K.
203	X		Outside area of hydrocarbon impact	O.K.
204	X		Outside area of hydrocarbon impact	O.K.
205	X		Outside area of hydrocarbon impact	O.K.
206	X		Outside area of hydrocarbon impact	O.K.
207	X		Outside area of hydrocarbon impact	O.K.
208	X		Outside area of hydrocarbon impact	O.K.
209	X		Outside area of hydrocarbon impact	O.K.
210	X		Outside area of hydrocarbon impact	O.K.
212	X		Outside area of hydrocarbon impact	O.K.
214	X		Outside area of hydrocarbon impact	O.K.
215	X		Outside area of hydrocarbon impact	O.K.

We would like to proceed with the abandonment of wells in late June or early July. We appreciate your time and consideration of this matter. If you have any questions please contact me at (925) 977-7914 or Binayak Acharya at (818) 549-5948.

Sincerely,

 Douglas Oran, Ph.D.
 Project Manager

DEO/dah

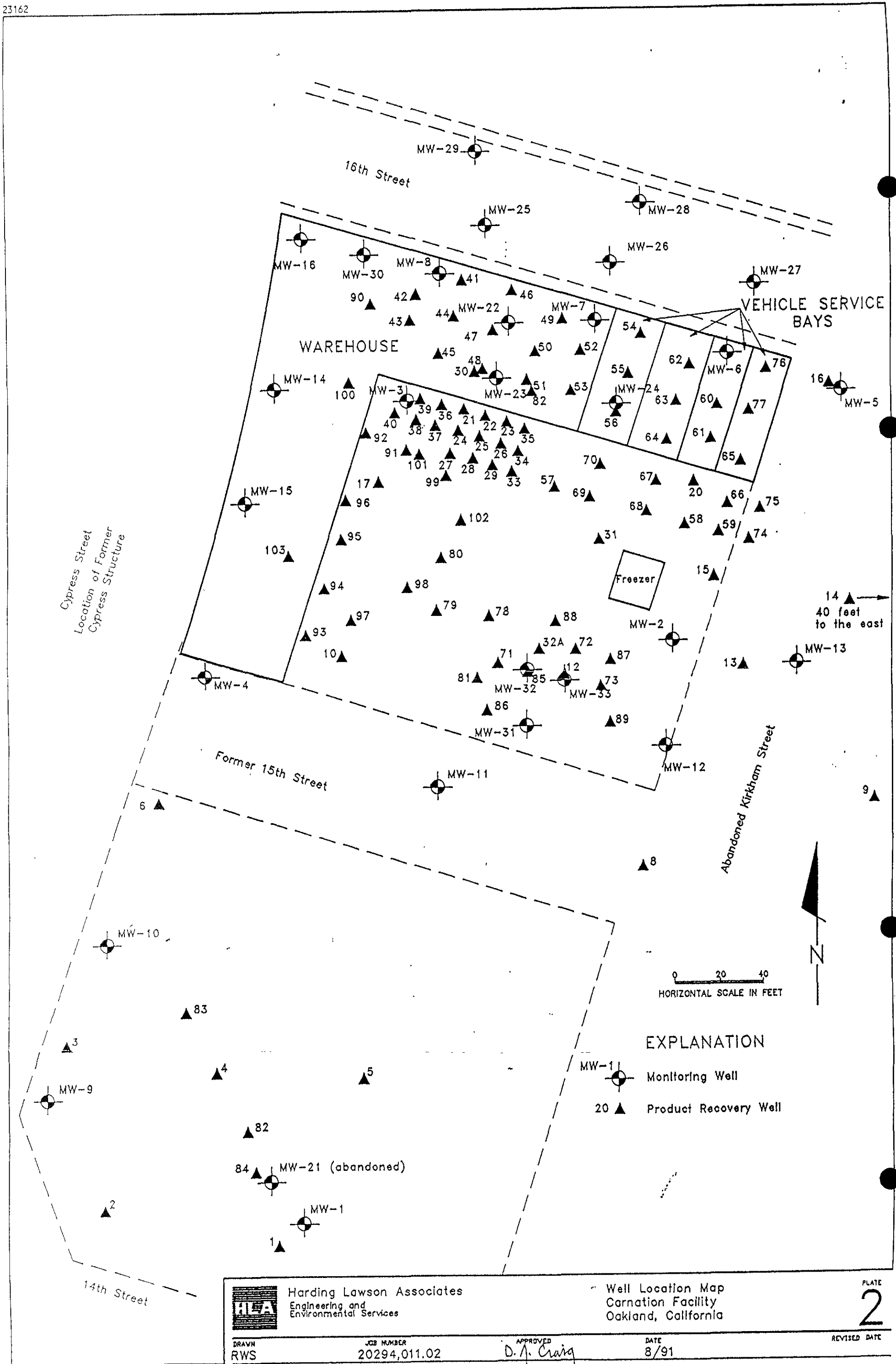
cc: Binayak Acharya, Nestle USA, Inc.

Sampled 1991

Table 7. Petroleum Hydrocarbon Concentrations in Groundwater Samples

Well Number	Sample Number	Hydrocarbon Concentrations (ug/l)									
		TPH as gasoline	TPH as diesel	TPH as motor oil	Oil and Grease (Total)	Oil and Grease (Nonpolar)	Benzene	Toluene	Ethyl-Benzene	Xylenes (Total)	Other 8240 Compounds
MW-1	91062501	<50	<50	<500	<5000	<5000	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-2	91062510	<50	<50	<500	<5000	<5000	<0.5	<0.5	<0.5	<0.5	NT
MW-3	91062605	<50	<50	<500	<5000	<5000	22	<0.5	0.5	<0.5	NT
W-3 dup	91062606	100	<50	<500	<5000	<5000	25	<0.5	0.6	<0.5	NT
MW-4	91062502	<50	<50	<500	<5000	<5000	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-5	91062509	<50	<50	<500	<5000	<5000	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-9	91062503	<50	<50	<500	NT	NT	<0.5	<0.5	<0.5	<0.5	NT
MW-10	91062504	<50	<50	<500	NT	NT	<0.5	<0.5	<0.5	<0.5	NT
MW-11	91062505	<50	<50	<500	NT	NT	<0.5	<0.5	<0.5	<0.5	NT
MW-12	91062512	<50	<50	<500	NT	NT	<0.5	<0.5	<0.5	<0.5	NT
MW-13	91062506	<50	<50	<500	<5000	<5000	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-14	91062507	<50	<50	<500	NT	NT	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-15	91062508	<50	<50	<500	NT	NT	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-16	91062513	<50	<50	<500	<5000	<5000	NT	NT	NT	NT	NT
MW-25	91062607	<50	<50	<500	NT	NT	0.8	<0.5	<0.5	<0.5	NT
MW-26	91062608	300000	2100	1600	<5000	<5000	4400	3600	260	4600	470 (1,2-DCA)
MW-26 dup	91062609	85000	1100	1000	5400	5100	3700	2700	160	3100	480 (1,2-DCA)
MW-27	91062610	<50	<50	<500	NT	NT	1.8	<0.5	<0.5	<0.5	NT
MW-28	91062601	<50	<50	<500	NT	NT	<0.5	<0.5	<0.5	<0.5	NT
MW-29	91062602	<50	<50	<500	<5000	<5000	<5.0	<5.0	<5.0	<5.0	<5.0-<10
MW-31	91062603	<50	<50	<500	NT	NT	<0.5	<0.5	<0.5	<0.5	NT
MW-32	91062604	690	<50	<500	<5000	<5000	550	<5.0	7.6	11	14 (1,2-DCA)
Field Blank	91062511	<50	<50	<500	<5000	<5000	<0.5	<0.5	<0.5	<0.5	NT
Field Blank	91062611	<50	<50	<500	<5000	<5000	<5.0	<5.0	<5.0	<5.0	<5.0-<10
Trip Blank	Trip Blank	<50	NT	NT	NT	NT	<0.5	<0.5	<0.5	<0.5	NT

Notes: <50 - Chemical not detected above reporting limit. NT- Not Tested.



Harding Lawson Associates
Engineering and
Environmental Services

Well Location Map
Carnation Facility
Oakland, California

PLATE
2

DRAWN
RWS

JOB NUMBER
20294,011.02

APPROVED
D.A. Craig

DATE
8/91

REVISED DATE



04/07/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	430
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	430
MTBE	ND
HVOCs	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	980
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	170
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	270
MTBE	ND
HVOCs	ND

04/07/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	120
TPH-d	ND
MTBE	0.5

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND
HVOCs	ND

04/07/99

Benzene	0.60
Toluene	ND
Ethylbenzene	0.90
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND
1,1-DCA	ND
1,2-DCA	0.7
1,1-DCE	ND

	02/05/99	04/07/99
Benzene	ND	ND
Toluene	ND	ND
Ethylbenzene	ND	ND
Xylenes	ND	ND
TPH-g	ND	ND
TPH-d	ND	ND
MTBE	5.0	4.5
1,1-DCA	32	ND
1,2-DCA	29	62
1,1-DCE	0.9	ND

	02/05/99	04/07/99
Benzene	20	ND
Toluene	ND	ND
Ethylbenzene	0.60	ND
Xylenes	0.80	ND
TPH-g	230	80
TPH-d	230	ND
MTBE	29	25
1,1-DCA	10	15
1,2-DCA	51	54
1,1-DCE	ND	ND

	02/05/99	04/07/99
Benzene	ND	ND
Toluene	ND	ND
Ethylbenzene	ND	ND
Xylenes	ND	ND
TPH-g	ND	ND
TPH-d	ND	ND
MTBE	8.5	4.9
1,1-DCA	ND	30
1,2-DCA	68	38
1,1-DCE	ND	1.4

	02/05/99	04/07/99
Benzene	ND	ND
Toluene	ND	ND
Ethylbenzene	ND	ND
Xylenes	ND	ND
TPH-g	ND	ND
TPH-d	ND	ND
MTBE	28	27
1,1-DCA	28	27
1,2-DCA	59	72
1,1-DCE	0.9	1.6

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND
HVOCs	ND

04/07/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND

04/07/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND

02/05/99

Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylenes	ND
TPH-g	ND
TPH-d	ND
MTBE	ND

LEGEND:

- ⊕ GROUNDWATER MONITORING AND VAPOR EXTRACTION WELLS
- ⊙ WELL OF UNKNOWN CONSTRUCTION
- REMEDIATION SYSTEM VACUUM PIPING

TPH-g Total Petroleum Hydrocarbons as gasoline
TPH-d Total Petroleum Hydrocarbons as diesel
MTBE Methyl t-butyl ether
1,1-DCA 1,1-Dichloroethane
1,2-DCA 1,2-Dichloroethane
1,1-DCE 1,1-Dichloroethane
HVOCs Halogenated Volatile Organic Compounds
ND Not Detected

NOTES:

- CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L)
- TPH-g, TPH-d, MTBE, and BTEX CONCENTRATIONS IN OFFSITE WELL MW-11 WERE ALL ND ON 02/05/99

SITE PLAN SHOWING GROUNDWATER ANALYTICAL RESULTS, FEBRUARY AND APRIL 1999
 NESTLE OAKLAND FACILITY
 1310 14th STREET, OAKLAND, CALIFORNIA



Figure 15