



RECEIVED
MEMORANDUM
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Washington State
Department of Ecology

DATE: 30 June 2003
TO: Panjini Balaraju, Ecology
FROM: Sharon Bell *SB*
RE: CleanCare

As you know, I conducted a Site Hazard Assessment of the CleanCare site after the first three quarters of monitoring were completed. It was scored based upon the following substances available to the groundwater route: pentachlorophenol, carcinogenic PAHs (c-PAHs), vinyl chloride, hexachlorobutadiene, 1,1-dichloroethene, and TPH-gasoline. The final ranking for CleanCare was a "3".

Analytes detected above MTCA Method A Cleanup Levels in the 4th and last round of groundwater sampling that were not considered in the ranking were cadmium, mercury, and naphthalene in the shallow aquifer; arsenic, oil, and naphthalene in the deeper aquifer. The final ranking would not have been effected by the consideration of these parameters.

Following is a synopsis of the contamination detected after all sampling was completed.

Subsurface soil investigation: Analytes detected in soil above MTCA Method A Cleanup Levels were arsenic, cadmium, chromium, lead, c-PAHs, gas, diesel, and oil. Also detected were various chlorinated hydrocarbons as well as barium, mercury, and benzene. Groundwater was encountered at about 5 feet in most borings; temporary well points were installed and water samples taken. Analytes detected above MTCA Method A Cleanup Levels in groundwater were arsenic, cadmium, chromium, lead, mercury, c-PAHs, and TPH.

Groundwater investigation of two aquifers: Analytes detected above MTCA Method A Cleanup Levels in the shallow/upper aquifer were arsenic, cadmium, lead, mercury, gasoline, diesel, oil, naphthalene, c-PAHs, benzene, vinyl chloride, trichloroethylene, tetrachloroethylene, and 1,2-dichloroethane. Also detected were barium, chromium, high concentrations of iron and manganese, various chlorinated hydrocarbons, toluene, ethylbenzene, xylenes, 2-butanone (MEK), and cresols.

Analytes detected above MTCA Method A Cleanup Levels in the deeper aquifer were arsenic, oil, diesel, and naphthalene. Also detected were barium, chromium, lead, elevated concentrations of iron and manganese, gasoline, benzene, 2-butanone, cresols, PAHs, and pentachlorophenol.

As discussed, I have tabulated the results of four consecutive quarters of groundwater monitoring at CleanCare and attached it here. This data set is in an Excel spreadsheet; please let me know if you would like to have it sent electronically. I have also provided site maps (aerial photos) depicting the approximate locations of the soil borings and monitoring wells, and a table with monitoring well information in this data package. The map depicting monitoring wells has an unidentified well located north of CCW-8B. The well is known as "MW-3" but was not identified on the map because it was not sampled. All well locations were determined using GPS, including that of MW-3, and location coordinates depicted on an aerial photo of the CleanCare property.

CleanCare Groundwater Monitoring Results

Parameter	CCW1A				CCW1B				CCW1C			
	7/2001	9/2001 ¹	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Arsenic	ND	8.52	9.68	ND	ND	2.53	ND	ND	ND	5.7	9.13	6.8
Barium	ND	ND	ND	0.0079	8.7	9.74	13.6	0.0094	9.3	9.71	9.72	9.72
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	3.36	ND	ND	ND	3.73	ND	ND	ND	9.39	ND	ND
Copper	0.038	ND	ND	0.035	ND	ND	ND	0.034	ND	ND	ND	ND
Iron	NT	NT	38900	NT	NT	NT	3600	NT	NT	NT	4100	4100
Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	1.4	1560	1710	0.73	850	776	771	0.43	440	342	279	279
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	0.011	ND	ND	0.011	ND	ND	15.4	0.015	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	0.486	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	0.159	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3- & 4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	0.467	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	0.385	ND	ND	ND
Acenaphthene	0.32	0.136	0.225	0.38	0.513	0.542	0.659	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	0.536	ND	ND	ND	0.308	ND	ND	ND	0.442	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	ND	0.6	ND	2.5	3.8	0.86	1.99	3	2.46	1.44	1.68	1.68
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	0.159	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	3.52	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	0.137	0.215	0.26	ND	ND	ND	ND	ND

CleanCare Groundwater Monitoring Results

Parameter	CCW1A					CCW1B					CCW1C					
	7/2001	9/2001 ¹	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Hexachlorobutadiene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15	ND	ND	ND
Isophorone	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	0.11		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.164	ND	ND
N-Nitrosodiphenylamine	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	ND		ND	ND	0.11	0.171	0.271	0.386	ND	ND	ND	ND	ND	ND	0.658	ND
Phenol	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
#2 Diesel	2		2290	1650	1.4	1250	1220	1400	2.1	2570	2340	2340	2.1	2570	2340	2340
Gasoline by NWTPH-G	0.12		112	76.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Motor Oil	1.2		1500	1460	0.94	696	876	970	1.3	2620	1480	1340	1.3	2620	1480	1340
1,1-Dichloroethane	0.2		ND	ND	0.45	0.448	ND	ND	0.079	0.0685	ND	ND	0.079	0.0685	ND	ND
1,1-Dichloroethene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.12		ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	0.11	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND		ND	0.486	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.22		ND	ND	0.13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	2.6		2.17	2.48	3.3	3.37	3.14	2.25	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	0.16		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND
Chloromethane	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.36		0.559	ND	0.07	ND	ND	ND	0.27	0.19	ND	ND	0.27	0.19	ND	ND
cis-1,3-Dichloropropene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	0.32		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND		ND	ND	ND	ND	ND	ND	0.15	ND	ND	ND	0.15	ND	ND	ND
Isopropylbenzene	0.22		ND	ND	0.13	0.198	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	0.41		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	0.11		ND	ND	ND	ND	ND	ND	ND	0.164	ND	ND	ND	0.164	ND	ND

CleanCare Groundwater Monitoring Results

Parameter	CCW1A				CCW1B				CCW1C			
	7/2001	9/2001 ¹	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
n-Butylbenzene	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.12		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	0.3		ND	ND	ND	0.097	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	0.59		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND		ND	ND	ND	ND	ND	ND	0.17	ND	ND	ND
t-Butylbenzene	0.081		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND		ND	ND	ND	ND	ND	ND	1.1	ND	ND	ND
Toluene	3.2		3.47	2.69	0.18	0.163	ND	ND	0.19	ND	ND	ND
trans-1,2-Dichloroethene	1.4		1.69	0.795	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	0.17		ND	ND	ND	ND	ND	ND	0.072	ND	ND	ND
Trichlorofluoromethane	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	0.4		ND	ND	ND	ND	ND	ND	0.065	0.058	ND	ND

1 - CCW1A was dry in 9/2001 and was not sampled.

CleanCare Groundwater Monitoring Results

Parameter	CCW2A						CCW2B						CCW2C					
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002		
Arsenic	0.012	ND	6.5	9.89	5.5	4800	4590	4580	0.0061	12	ND	13.8						
Barium	0.86	1400	314	436	0.011	ND	13	10.7	0.012	ND	19	19.6						
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Chromium	ND	14	5.41	ND	ND	3.6	4.65	ND	ND	6.9	17.1	ND						
Copper	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Iron	NT	NT	NT	21700	NT	NT	NT	2380	NT	NT	NT	11500						
Lead	0.0025	170	5.49	5.63	ND	0.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Manganese	1.9	520	1870	1.91	0.17	140	150	0.155	0.46	330	355	0.303						
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Nickel	0.017	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	ND	66	11.5	11.3	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,2-Dichlorobenzene	16	15.9	8.44	7.21	18	11.6	9.35	10.6	ND	ND	ND	ND	ND	ND	ND	ND		
1,3-Dichlorobenzene	1.6	ND	1.7	2.31	6.1		4.87	5.82	ND	ND	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	ND	ND	4.56	5.11	45	27.7	34.2	62.4	ND	ND	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ND	ND	ND	ND	ND	0.233	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	94	255	25	7.6	16	14.8	10.4	5.56	ND	ND	ND	ND	ND	ND	ND	ND		
2-Chlorophenol	0.27	ND	ND	ND	0.99	ND	0.558	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2-Methylnaphthalene	85	28.6	51.6	103	1.2	ND	ND	0.953	0.59	ND	ND	0.247						
2-Methylphenol	34	217	22.9	39.2	0.68	0.892	1.27	0.457	ND	ND	ND	ND	ND	ND	ND	ND		
3- & 4-Methylphenol	76	691	26.2	45.4	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Acenaphthene	7.4	ND	10.9	8.23	2.9	1.63	1.5	1.72	0.29	ND	ND	ND	ND	ND	ND	ND		
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Anthracene	0.74	ND	0.541	0.958	0.22	0.317	ND	0.293	ND	ND	ND	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Benzoic Acid	ND	ND	ND	ND	ND	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND		
Benzyl Alcohol	ND	ND	ND	ND	ND	0.708	ND	0.545	ND	ND	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	0.9	ND	0.734	66.3	1.4	1.31	1.21	1.47	0.84	0.895	0.983	1.59						
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Dibenzofuran	5.2	ND	6.94	5.09	0.98	0.633	ND	ND	0.16	ND	ND	0.159						
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Fluoranthene	ND	ND	ND	0.575	0.2	0.258	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Fluorene	6.3	ND	11.6	9.06	1.2	0.817	0.611	0.95	0.26	ND	ND	0.0958						

CleanCare Groundwater Monitoring Results

Parameter	CCW2A				CCW2B				CCW2C							
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Hexachlorobutadiene	5.3	14.3	0.376	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	310	109	186	424	25	17.2	8.22	32.8	0.92	0.193	ND	0.21	ND	ND	ND	0.21
N-Nitrosodiphenylamine	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	5.6	3.15	4.37	6.65	1.9	0.817	ND	1.04	0.42	ND	ND	0.158	ND	ND	ND	0.158
Phenol	21	198	12.9	10.2	0.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	0.2	ND	0.284	0.46	0.17	0.108	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
#2 Diesel	6.3	19400	5000	6830	2.6	2200	2790	2830	0.79	828	763	737	ND	ND	763	737
Gasoline by NWTPH-G	17	13000	6760	7070	6.2	4500	4150	4370	ND	ND	ND	ND	ND	ND	ND	ND
Motor Oil	2.4	5070	1800	2390	1.6	1170	1790	1640	0.83	618	796	650	ND	ND	796	650
1,1-Dichloroethane	2.2	8.89	1.46	ND	ND	5.12	3.66	3.94	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	4.9	21.8	1.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	340	140	372	569	56	45.4	9.88	91.8	0.17	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	16	15.9	8.44	7.21	18	11.6	9.35	10.6	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	19	17.5	15.8	25	12	9.76	2.04	14	0.082	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.6	ND	1.7	2.31	6.1	ND	4.87	5.82	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	4.56	5.11	45	27.7	34.2	62.4	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	4.77	1.35	6.29	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	0.767	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	15	10.4	15.4	23.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	320	271	245	313	240	228	132	193	0.093	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	63	43.7	58.6	64	770	731	241	857	0.1	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.1	ND	1.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	19	12.7	ND	ND	27.6	ND	ND	ND	ND	ND	ND	ND	ND	0.685
cis-1,2-Dichloroethene	1500	4920	302	276	ND	4.57	1.09	1.17	0.06	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	340	116	297	412	49	31.8	8.93	58	0.39	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5.3	14.3	0.376	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	19	6.76	20.1	30.7	ND	2.16	ND	2.89	0.082	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	390	300	249	255	140	103	28.5	164	0.36	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	0.72	11.2	0.985	ND	ND	ND	ND	0.713	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	310	109	186	424	25	17.2	8.22	32.8	0.92	0.193	ND	0.21	ND	ND	ND	0.21

CleanCare Groundwater Monitoring Results

Parameter	CCW2A				CCW2B				CCW2C			
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
n-Butylbenzene	ND	ND	8.67	ND	ND	ND	ND	ND	0.14	ND	ND	ND
n-Propylbenzene	42	12.8	46.9	46.3	ND	1.2	ND	1.57	0.19	ND	ND	ND
o-Xylene	240	135	210	211	140	87.8	37.5	157	0.21	ND	ND	ND
sec-Butylbenzene	7.9	2.79	7.88	ND	ND	ND	ND	ND	0.096	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
t-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	12000	11200	932	792	ND	26.3	ND	ND	0.66	ND	ND	ND
Toluene	320	226	235	313	520	476	180	545	0.27	ND	ND	ND
trans-1,2-Dichloroethene	100	541	64.8	70.6	ND	1.01	ND	ND	ND	ND	ND	ND
Trichloroethene	6100	5100	451	655	ND	7.21	ND	ND	0.25	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	170	640	106	60.4	ND	ND	1.46	1.2	0.21	0.883	ND	ND

CleanCare Groundwater Monitoring Results

Parameter	CCW3A						CCW3B						CCW3C					
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002		
Arsenic	0.071	63	84.3	102	ND	ND	9.45	ND	ND	9.45	ND	ND	ND	ND	5.06	ND		
Barium	3.8	4100	3610	3800	0.17	190	180	162	0.027	40	46.6	43	ND	40	46.6	43		
Cadmium	ND	2.3	2.73	12.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Chromium	ND	14	16.3	24.6	ND	3.6	3.27	ND	ND	6.2	5.13	ND	ND	6.2	5.13	ND		
Copper	ND	15	16.7	105	ND	ND	ND	18.7	ND	ND	10.7	10.7	ND	ND	ND	10.7		
Iron	NT	NT	NT	50700	NT	NT	NT	2040	NT	NT	12000	12000	NT	NT	NT	12000		
Lead	0.051	120	150	752	0.00064	1.9	0.878	49	0.87	1.97	8.99	8.99	ND	0.87	1.97	8.99		
Manganese	0.16	160	176	276	1.2	1300	1070	1030	0.96	710	905	905	0.96	710	995	905		
Mercury	ND	ND	ND	621	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Nickel	0.28	290	322	346	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.88	1100	1040	2680	ND	ND	ND	13.2	ND	ND	10.8	10.8	ND	ND	ND	10.8		
1,2-Dichlorobenzene	0.23	0.0889	ND	ND	0.2	ND	0.327	ND	ND	0.327	ND	ND	ND	ND	ND	ND		
1,3-Dichlorobenzene	0.62	ND	ND	ND	0.36	ND	0.46	0.542	ND	0.46	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	0.33	ND	ND	ND	0.29	0.333	0.195	ND	ND	0.195	ND	ND	ND	ND	ND	ND		
2,4-Dichlorophenol	ND	ND	ND	ND	ND	0.163	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2,4-Dimethylphenol	ND	ND	ND	ND	2.7	2.28	0.566	ND	ND	0.566	ND	ND	ND	ND	ND	ND		
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2-Methylnaphthalene	ND	1.01	ND	ND	2.9	0.642	2.52	1.44	0.088	2.52	ND	ND	ND	ND	ND	ND		
2-Methylphenol	0.62	ND	ND	ND	ND	0.285	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
3- & 4-Methylphenol	0.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4-Chloro-3-methylphenol	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	0.28	ND	ND	ND	ND	ND	ND	ND		
Acenaphthene	ND	ND	ND	ND	0.37	0.293	0.487	0.533	ND	0.487	ND	ND	ND	ND	ND	ND		
Acenaphthylene	ND	ND	ND	ND	ND	0.472	0.522	ND	ND	0.522	ND	ND	ND	ND	ND	ND		
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Benzo(a)anthracene	ND	ND	ND	0.575	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Benzo(a)pyrene	ND	ND	ND	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Benzoic Acid	ND	ND	ND	ND	ND	ND	1.91	ND	0.87	1.91	ND	ND	0.87	0.233	ND	ND		
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
bis(2-Ethylhexyl)phthalate	1.6	1.54	3.68	ND	0.79	7.93	1.11	0.8	5	1.11	7.52	7.52	5	3.08	1.61	7.52		
Chrysene	ND	ND	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Dibenzofuran	ND	ND	ND	ND	ND	ND	ND	0.183	ND	ND	ND	ND	ND	ND	ND	ND		
Diethylphthalate	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Di-n-octylphthalate	ND	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Fluoranthene	ND	ND	ND	1.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Fluorene	0.51	ND	ND	ND	0.27	0.252	0.496	ND	0.27	0.252	0.496	ND	0.27	0.252	0.496	ND		

CleanCare Groundwater Monitoring Results

Parameter	CCW3A						CCW3B						CCW3C					
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002		
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Naphthalene	1.6	1.89	1.25	2.36	1.2	0.545	1.56	0.925	0.14	ND	ND	ND	ND	ND	ND	ND		
N-Nitrosodiphenylamine	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Phenanthrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Phenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Pyrene	ND	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
#2 Diesel	12	13400	13500	15300	3.6	4030	3420	3870	1.3	1200	1290	1570						
Gasoline by NWTPH-G	0.35	330	635	337	0.56	540	531	549	ND	ND	ND	ND	ND	ND	ND	ND		
Motor Oil	11	7870	8940	24700	2.5	2730	2070	2330	1.2	795	883	1220						
1,1-Dichloroethane	0.46	ND	ND	ND	ND	0.489	0.746	0.525	ND	ND	ND	ND	ND	ND	ND	ND		
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,2,4-Trimethylbenzene	0.68	2.5	2.27	3.15	0.81	2.2	3.21	2.03	0.13	ND	ND	ND	ND	ND	ND	ND		
1,2-Dibromo-3-chloropropane	0.51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,2-Dichlorobenzene	0.23	0.0889	ND	ND	0.2	ND	0.327	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,3,5-Trimethylbenzene	0.13	0.669	0.789	ND	0.67	0.488	0.754	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,3-Dichlorobenzene	0.62	ND	ND	ND	0.36	ND	0.46	0.542	ND	ND	ND	ND	ND	ND	ND	ND		
1,3-Dichloropropane	1.5	ND	ND	ND	0.16	ND	1.15	ND	ND	ND	ND	ND	ND	ND	ND	ND		
1,4-Dichlorobenzene	0.33	ND	ND	ND	0.29	0.333	0.195	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2-Butanone	ND	3.45	ND	ND	ND	5.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2-Chlorotoluene	0.083	0.398	ND	ND	0.46	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4-Chlorotoluene	ND	0.169	ND	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4-Isopropyltoluene	1.5	0.857	ND	ND	0.99	1.73	1.92	1.11	ND	ND	ND	ND	ND	ND	ND	ND		
Benzene	3.6	13	12.9	14.1	ND	3.39	4.61	4.43	ND	ND	ND	ND	ND	ND	ND	ND		
Chlorobenzene	0.14	ND	ND	ND	0.21	0.146	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	0.091	ND	ND	ND	ND	ND	ND	ND		
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
cis-1,2-Dichloroethene	0.51	0.545	0.579	ND	ND	0.422	1.13	0.608	ND	ND	ND	ND	ND	ND	ND	ND		
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Ethylbenzene	0.36	15.7	18	25	19	0.311	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Isopropylbenzene	0.13	0.57	0.597	ND	0.67	0.114	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
m,p-Xylene	0.93	8.82	7.15	9.14	10	0.881	1.12	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Methylene chloride	0.2	ND	ND	ND	ND	0.209	ND	0.964	ND	ND	ND	ND	ND	ND	ND	0.885		
Naphthalene	1.6	1.89	1.25	2.36	1.2	0.545	1.56	0.925	0.14	ND	ND	ND	ND	ND	ND	ND		

CleanCare Groundwater Monitoring Results

Parameter	CCW3A				CCW3B				CCW3C			
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	0.34	0.278	ND	ND	0.36	0.266	ND	ND	ND	ND	ND	ND
o-Xylene	0.65	5.92	6.21	7.56	6.5	0.614	0.874	0.532	ND	ND	ND	ND
sec-Butylbenzene	0.12	ND	ND	ND	ND	0.0969	ND	ND	ND	ND	ND	ND
Styrene	0.29	4.15	ND	ND	4.2	ND	ND	ND	ND	ND	ND	ND
t-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.11	0.417	ND	ND	ND	0.341	ND	ND	ND	ND	ND	ND
Toluene	9.8	25.1	27.8	28.1	29	8.38	11.6	10.8	0.2	0.252	ND	ND
trans-1,2-Dichloroethene	0.89	0.283	ND	ND	ND	0.825	1.39	0.969	ND	ND	ND	ND
Trichloroethene	0.086	0.106	ND	ND	ND	0.132	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	0.154	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	1.1	ND	ND	ND	ND	ND	2.88	ND	ND	ND	ND	ND

CleanCare Groundwater Monitoring Results

MW-4

CCW4C

Parameter	7/2001 ¹	9/2001 ²	12/2001 ³	3/2002 ⁴	7/2001	9/2001	12/2001	3/2002
Arsenic	1 - MW-4 had .01" of LNAPL, not sampled.				ND	5.7	3.03	6.66
Barium	2 - MW-4 had 2" of LNAPL, not sampled.				0.013	ND	20.2	14.8
Cadmium	3 - MW-4 under water, not sampled.				ND	ND	ND	ND
Chromium	4 - MW-4 had .01" LNAPL, not sampled.				ND	11	17.9	ND
Copper					0.024	ND	ND	ND
Iron					NT	NT	NT	6610
Lead					ND	ND	ND	ND
Manganese					1.7	200	210	184
Mercury					ND	ND	ND	ND
Nickel					ND	ND	ND	ND
Selenium					ND	ND	ND	ND
Silver					ND	ND	ND	ND
Zinc					0.01	ND	ND	ND
1,2-Dichlorobenzene					5.4	ND	ND	ND
1,3-Dichlorobenzene					0.14	ND	ND	ND
1,4-Dichlorobenzene					0.58	ND	ND	ND
2,4-Dichlorophenol					ND	ND	ND	ND
2,4-Dimethylphenol					9.2	ND	ND	ND
2-Chlorophenol					ND	ND	ND	ND
2-Methylnaphthalene					150	ND	ND	0.184
2-Methylphenol					ND	ND	ND	ND
3- & 4-Methylphenol					ND	475	ND	ND
4-Chloro-3-methylphenol					ND	ND	ND	ND
4-Nitrophenol					ND	ND	ND	ND
Acenaphthene					5.4	ND	ND	ND
Acenaphthylene					ND	ND	ND	ND
Anthracene					ND	ND	ND	ND
Benzo(a)anthracene					ND	ND	ND	ND
Benzo(a)pyrene					ND	ND	ND	ND
Benzoic Acid					ND	1030	ND	ND
Benzyl Alcohol					ND	1900	1.82	1.94
bis(2-Ethylhexyl)phthalate					ND	ND	ND	ND
Chrysene					2.1	ND	ND	ND
Dibenzofuran					14	ND	ND	ND
Diethylphthalate					ND	ND	ND	ND
Di-n-butylphthalate					ND	ND	ND	ND
Di-n-octylphthalate					ND	ND	ND	ND
Fluoranthene					ND	ND	ND	ND
Fluorene					4.2	ND	ND	ND

CleanCare Groundwater Monitoring Results

Parameter	MW-4				CCW4C			
	7/2001 ¹	9/2001 ²	12/2001 ³	3/2002 ⁴	7/2001	9/2001	12/2001	3/2002
Hexachlorobutadiene					ND	ND	ND	ND
Isophorone					0.78	ND	ND	ND
Naphthalene					81	ND	ND	ND
N-Nitrosodiphenylamine					ND	ND	ND	ND
Pentachlorophenol					ND	ND	ND	ND
Phenanthrene					5.5	ND	ND	ND
Phenol					ND	ND	ND	ND
Pyrene					ND	ND	0.0806	ND
#2 Diesel					20	2850	1890	1920
Gasoline by NWTPH-G					2.5	ND	97.8	ND
Motor Oil					5.5	3180	1300	1200
1,1-Dichloroethane					21	ND	ND	ND
1,1-Dichloroethene					ND	ND	ND	ND
1,2,4-Trimethylbenzene					48	ND	ND	ND
1,2-Dibromo-3-chloropropane					ND	ND	ND	ND
1,2-Dichlorobenzene					5.4	ND	ND	ND
1,2-Dichloroethane					ND	ND	ND	0.547
1,3,5-Trimethylbenzene					5.3	ND	ND	ND
1,3-Dichlorobenzene					0.14	ND	ND	ND
1,3-Dichloropropane					ND	ND	ND	ND
1,4-Dichlorobenzene					0.58	ND	ND	ND
2-Butanone					ND	ND	ND	ND
2-Chlorotoluene					ND	ND	ND	ND
4-Chlorotoluene					ND	ND	ND	ND
4-Isopropyltoluene					4.1	ND	ND	ND
Benzene					99	ND	ND	ND
Chlorobenzene					2.6	ND	ND	ND
Chloroethane					120	ND	ND	ND
Chloroform					ND	ND	ND	ND
Chloromethane					ND	ND	ND	ND
cis-1,2-Dichloroethene					ND	ND	ND	ND
cis-1,3-Dichloropropene					ND	ND	ND	ND
Ethylbenzene					31	ND	ND	ND
Hexachlorobutadiene					ND	ND	ND	ND
Isopropylbenzene					7.4	ND	ND	ND
m,p-Xylene					31	ND	ND	ND
Methylene chloride					ND	ND	ND	ND
Naphthalene					81	ND	ND	ND

CleanCare Groundwater Monitoring Results

Parameter	MW-4				CCW4C			
	7/2001 ¹	9/2001 ²	12/2001 ³	3/2002 ⁴	7/2001	9/2001	12/2001	3/2002
n-Butylbenzene					ND	ND	ND	ND
n-Propylbenzene					9.7	ND	ND	ND
o-Xylene					8.2	ND	ND	ND
sec-Butylbenzene					5.5	ND	ND	ND
Styrene					ND	ND	ND	ND
t-Butylbenzene					ND	ND	ND	ND
Tetrachloroethene					ND	ND	ND	ND
Toluene					2.8	0.245	ND	ND
trans-1,2-Dichloroethene					ND	ND	ND	ND
Trichloroethene					ND	ND	ND	ND
Trichlorofluoromethane					ND	ND	ND	ND
Vinyl chloride					ND	ND	ND	ND

CleanCare Groundwater Monitoring Results

CCW5B

CCW5C

Parameter	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Arsenic	3.3	8200	8110	132	0.0059	ND	4.9	ND
Barium	0.08	82	77.2	204	0.014	25	34.3	28.9
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	3.57	ND	ND	ND	5.22	ND
Copper	ND	ND	ND	ND	ND	ND	ND	ND
Iron	NT	NT	NT	23200	NT	NT	NT	21300
Lead	0.0041	3.6	6.2	12	ND	ND	ND	ND
Manganese	1.4	1300	1050	1600	2.5	2900	3000	2480
Mercury	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	ND	ND	4.5	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	ND	ND	ND	ND	ND	4.3	ND	ND
1,2-Dichlorobenzene	0.67	1.15	1.35	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.26	ND	ND	0.372	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	16	21.7	17.9	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	18	4.42	3.57	37.3	ND	ND	ND	ND
2-Methylphenol	4.2	ND	3.08	ND	ND	ND	ND	ND
3- & 4-Methylphenol	50	ND	1.22	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	0.64	0.311	ND	ND
Acenaphthene	1.6	0.92	0.802	2.76	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	0.32	ND	0.741	0.142	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	1.3	ND	0.267	ND
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	1.6	1.8	2.01	6.88	0.99	0.807	0.802	1.74
Chrysene	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	2.38	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	1.5	0.389	0.241	3.79	ND	ND	ND	ND

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Parameter	CCW5B					CCW5C						
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	52	25.4	23.4	49.9	0.19	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	0.69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	1.4	0.965	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	6.7	2.47	3.96	0.929	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
#2 Diesel	4.4	4920	4800	4910	1.8	1980	2220	1920				
Gasoline by NWTPH-G	3.2	2900	2810	2570	ND	ND	ND	ND				
Motor Oil	2.4	1980	2170	3210	1.5	1050	1050	1220				
1,1-Dichloroethane	ND	2.48	3.54	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	180	152	151	193	0.16	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.67	1.15	1.35	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	4.06	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	22	26.6	20.5	7.02	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.26	ND	ND	0.372	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	6.8	5.09	1.67	9.5	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	110	143	118	44.6	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	9.8	16.1	12.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	2.32	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	0.2	ND	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	3.08	1.95	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100	79.3	73.5	86.3	0.077	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	10	7.6	4.67	12.6	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	130	217	184	34.9	0.22	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	0.129	ND	ND	ND	ND	ND	ND
Naphthalene	52	25.4	23.4	49.9	0.19	ND	ND	ND	ND	ND	ND	ND

CleanCare Groundwater Monitoring Results

Parameter	CCW5B					CCW5C				
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002		
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND		
n-Propylbenzene	20	10.5	5.24	26	ND	ND	ND	ND		
o-Xylene	70	117	124	20.6	0.096	ND	ND	ND		
sec-Butylbenzene	3.3	ND	0.908	5.78	ND	ND	ND	ND		
Styrene	ND	ND	ND	ND	ND	ND	ND	ND		
t-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND		
Tetrachloroethene	ND	ND	ND	ND	0.15	ND	ND	ND		
Toluene	47	79.4	83	15.6	0.17	ND	ND	ND		
trans-1,2-Dichloroethene	ND	ND	0.853	ND	ND	ND	ND	ND		
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND		
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND		
Vinyl chloride	ND	ND	0.884	ND	ND	ND	ND	ND		

CleanCare Groundwater Monitoring Results

Parameter	CCW7B				CCW7C				CCW8C							
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Arsenic	ND	ND	9.62	8.06	ND	ND	6.86	ND	0.007	ND	ND	ND	0.007	ND	ND	ND
Barium	0.085	170	132	111	0.012	11	6.86	5.97	0.028	16	ND	ND	0.028	16	ND	ND
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium	ND	ND	5.89	ND	0.014	17	19.4	11.2	0.012	ND	ND	ND	0.012	ND	ND	ND
Copper	ND	ND	ND	28300	ND	NT	NT	5390	0.034	ND	ND	ND	0.034	ND	ND	ND
Iron	NT	NT	NT	28300	NT	NT	NT	5390	NT	NT	NT	5390	NT	NT	NT	NT
Lead	0.0061	1.6	12.2	ND	0.47	380	239	197	0.0013	ND	ND	ND	0.0013	ND	ND	ND
Manganese	2	2000	1700	1520	0.47	380	239	197	0.41	1300	ND	ND	0.41	1300	ND	ND
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	ND	ND	18.1	14	ND	ND	ND	ND	0.019	ND	ND	ND	0.019	ND	ND	ND
1,2-Dichlorobenzene	8.2	13.6	15.4	17.6	ND	ND	ND	ND	ND	1.52	ND	ND	ND	1.52	ND	ND
1,3-Dichlorobenzene	3.4	15.3	6.27	12.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	9.7	ND	15.4	16.7	ND	ND	ND	ND	ND	0.196	ND	ND	ND	0.196	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	4.7	ND	1.4	2.04	ND	ND	ND	ND	ND	1.63	ND	ND	ND	1.63	ND	ND
2-Chlorophenol	1	0.782	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	69	28.7	15.7	22.8	ND	0.292	0.124	0.0551	ND	70.7	ND	ND	ND	70.7	ND	ND
2-Methylphenol	1.3	1.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3- & 4-Methylphenol	9.7	9.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	61	39.2	25.2	41.5	2.3	0.95	0.159	ND	0.1	6.67	ND	ND	0.1	6.67	ND	ND
Acenaphthylene	0.86	ND	0.211	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	5.9	4.98	2.39	2.46	0.31	0.25	ND	0.0624	ND	ND	ND	0.0624	ND	ND	ND	ND
Benzo(a)anthracene	0.18	0.126	0.211	0.232	ND	ND	ND	ND	ND	0.308	ND	ND	ND	0.308	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic Acid	ND	ND	ND	ND	1.1	ND	0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl Alcohol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)phthalate	3.2	ND	1.03	2.1	2.5	1.86	1.4	2.21	3.6	0.617	ND	2.21	3.6	0.617	ND	ND
Chrysene	0.29	0.109	0.149	0.514	ND	ND	ND	ND	ND	0.29	ND	ND	ND	0.29	ND	ND
Dibenzofuran	35	23.4	19.9	15	0.94	0.55	ND	ND	ND	1.82	ND	ND	ND	1.82	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.36	ND	ND	ND	2.36	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	7.6	5.64	2.52	3.11	0.49	0.425	0.133	0.166	ND	ND	0.166	0.166	ND	ND	ND	ND
Fluorene	41	27.1	21.1	16.8	1.7	0.717	0.159	0.133	ND	3.11	0.133	0.133	ND	3.11	0.133	0.133

CleanCare Groundwater Monitoring Results

Parameter	CCW7B				CCW7C				CCW8C							
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	330	211	121	351	0.22	0.442	0.212	0.165	0.34	22.4						
N-Nitrosodiphenylamine	ND	ND	ND	0.687	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	49	26.9	14.8	15.4	1.5	1.28	0.478	0.35	0.11	1.81						
Phenol	0.99	2.39	2.86	ND	ND	ND	ND	ND	ND	1.34						
Pyrene	3.5	2.24	1.27	1.56	0.27	0.183	0.0885	0.136	ND	0.28						
#2 Diesel	4.5	4210	3580	4740	1	864	884	700	1.5	12900						
Gasoline by NWTPH-G	3.1	2400	1520	2440	ND	79	ND	60.8	ND	1000						
Motor Oil	1.7	1520	1290	1870	0.91	581	823	563	1.2	4980						
1,1-Dichloroethane	ND	ND	ND	ND	ND	0.122	ND	ND	ND	7.9						
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
1,2,4-Trimethylbenzene	42	52.3	44.2	101	ND	ND	ND	ND	0.094	30.5						
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
1,2-Dichlorobenzene	8.2	13.6	15.4	17.6	ND	ND	ND	ND	ND	1.52						
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
1,3,5-Trimethylbenzene	2.2	2.19	0.896	ND	ND	ND	ND	ND	ND	2.3						
1,3-Dichlorobenzene	3.4	15.3	6.27	12.5	ND	ND	ND	ND	ND	ND						
1,3-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
1,4-Dichlorobenzene	9.7	ND	15.4	16.7	ND	ND	ND	ND	ND	0.196						
2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.973						
2-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
4-Chlorotoluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
4-Isopropyltoluene	6.1	14.2	3.11	ND	ND	1.99	ND	ND	0.093	1.97						
Benzene	130	148	116	182	1.2	0.99	0.579	0.676	ND	66.5						
Chlorobenzene	120	131	84.4	178	ND	ND	ND	ND	ND	1.54						
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	68.2						
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Chloromethane	ND	ND	4.08	ND	ND	ND	ND	0.802	ND	ND						
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	0.248	ND	ND	ND	0.247						
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Ethylbenzene	94	89.1	85.7	170	ND	ND	ND	ND	ND	11.7						
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
Isopropylbenzene	4.8	5.89	5.36	11	ND	ND	ND	ND	ND	4.58						
m,p-Xylene	51	50.7	21.8	75.4	ND	ND	ND	ND	ND	13.3						
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.317						
Naphthalene	330	211	121	351	0.22	0.442	0.212	0.165	0.34	22.4						

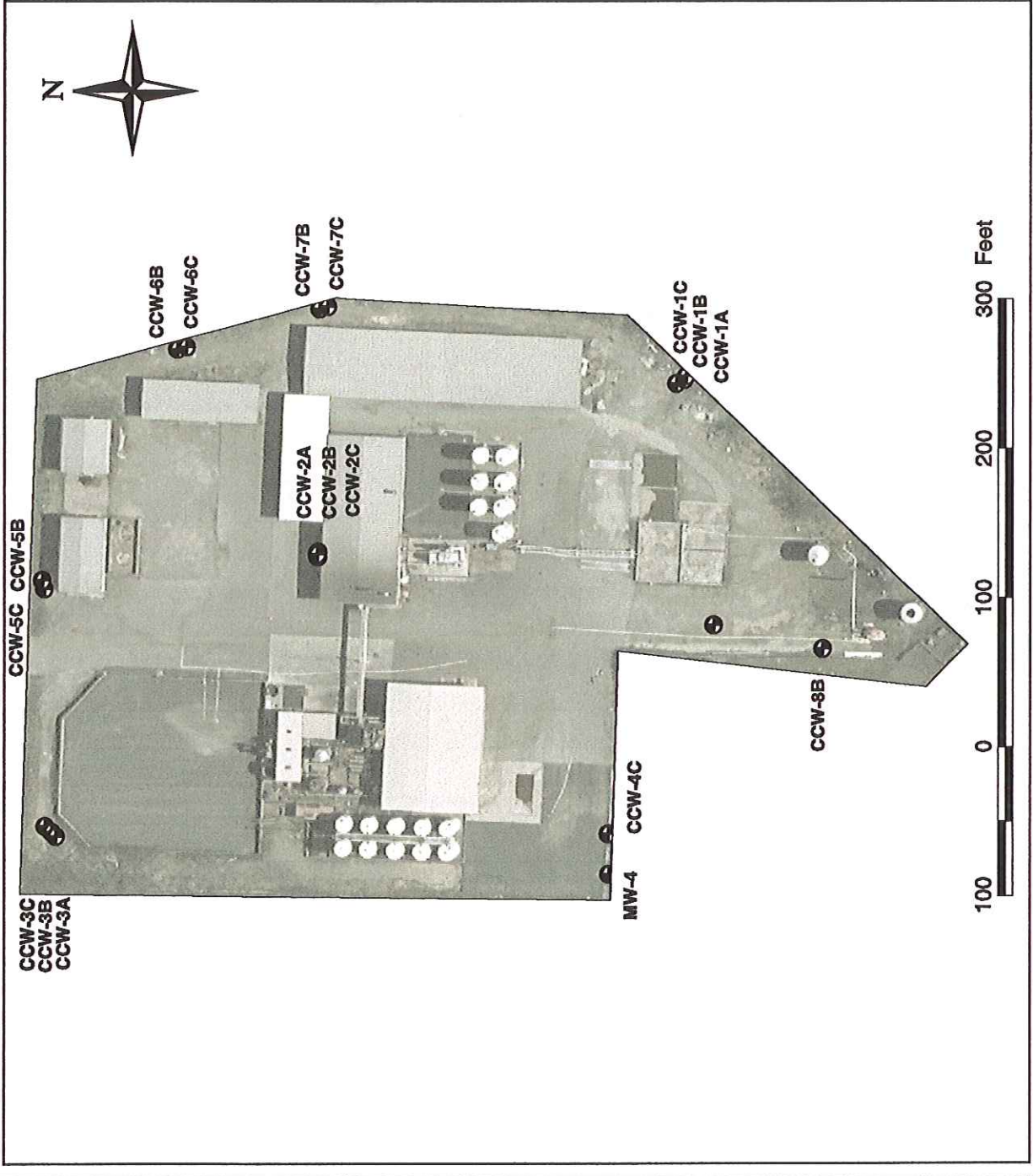
CleanCare Groundwater Monitoring Results

Parameter	CCW7B					CCW7C					CCW8C										
	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	7/2001	9/2001	12/2001	3/2002	
n-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	6.4	7.67	7.55	13.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	43	43.8	31.4	77.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
t-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	72	68.8	40.2	112	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	ND	ND	0.61	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1 - CCW8C had .12" of LNAPL, not sampled.

2 - CCW8C had .43" of LNAPL, not sampled.

CleanCare Groundwater Monitoring Wells

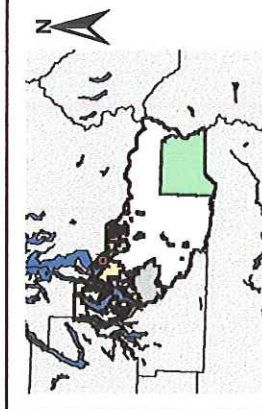


MAP LEGEND

- CleanCare Monitoring Wells

May 2003

Scale: 1:1300



All geographic information on this map should be considered under revision and each user should recognize the limitations on use of this data.



TACOMA-PIERCE COUNTY
HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH PROGRAM
CLEAN WATER. HEALTHY ENVIRONMENT. FOR LIFE.



Pierce County
Geographic Information Services

CleanCare Groundwater Monitoring Wells

Well ID #	DOE Tag #	Depth (ft., bgs)	Installation Date	Well Screen Details
CCW-1A		6	1994 (Pacific Groundwater Group)	4-6 ft, bgs; 20 slot
CCW-1B		10	1994 (Pacific Groundwater Group)	8-10 ft, bgs; 10 slot
CCW-1C	AGL480	23	2001 (TPCHD)	18-23 ft, bgs;
CCW-2A		6	1994 (Pacific Groundwater Group)	4-6 ft, bgs; 20 slot
CCW-2B		13	1994 (Pacific Groundwater Group)	11-13 ft, bgs; 10 slot
CCW-2C	AGL478	24	2001 (TPCHD)	19-24 ft, bgs;
CCW-3A		6	1994 (Pacific Groundwater Group)	4-6 ft, bgs; 20 slot
CCW-3B		11	1994 (Pacific Groundwater Group)	9-11 ft, bgs; 10 slot
CCW-3C	AGL477	28	2001 (TPCHD)	23-28 ft, bgs;
MW-4		10	1986 (Hart-Crowser)	4.5-9.5 ft, bgs; 20 slot
CCW-4C	AGL481	24	2001 (TPCHD)	19-24 ft, bgs;
CCW-5B	AGL471	10	2001 (TPCHD)	5-10 ft, bgs;
CCW-5C	AGL472	24	2001 (TPCHD)	19-24 ft, bgs;
CCW-6B	AGL473	8.5	2001 (TPCHD)	3.5-8.5 ft, bgs;
CCW-6C	AGL474	23	2001 (TPCHD)	18-23 ft, bgs;
CCW-7B	AGL475	9	2001 (TPCHD)	4-9 ft, bgs;
CCW-7C	AGL476	26	2001 (TPCHD)	21-26 ft, bgs;
CCW-8B	AGL479	11	2001 (TPCHD)	6-11 ft, bgs;

Boldface type denotes those wells installed by TPCHD in June and July 2001; details for other wells is best interpretation of archive files at Ecology.