ble 5–3: Pearce Creek Phase I – EPA Drinking Water Standards Comparis

H:...23Files\EPA.wk1

Well #	Well Permit #	Screen Elev	Scrn Med.	Aquifer	Sample Date	Time	Field Data pH units	Field Data Temp deg C	Field Data Cond umhos/cm	Field Data DO mg/l	Dissolved Solids mg/l	Total Alkalinity mg/l	Bicarb. Alkalinity mg/l	BOD mg/l	COD mg/l	Br mg/l	Na mg/l	Cl mg/l	F mg/l	SO4 mg/l	Sulfide mg/l
EPA Drinking Water Standards							6.5–8.5				500						20	250	2.0	250	
08/23 Effluent	Facility Effluent				08/23/94	1245	3.20	N/A	N/A	N/A	3510	1.0 L	1.0 L	543	200	1.20	201.00	190	0.02 L	3500.0	0.03 L
PC1	Lagoon Behind Facility				10/25/94	1145	7.32	16.1	72	9.70	63	4.5	4.5	2 L	15	4.00	5.39	5	0.02 L	19.0	0.03
PC2	Pearce Creek Downstream				10/27/94	1140	5.55	12.2	600	7.07	420	17.0	17.0	2 L	19	1.00	74.63	150	0.18	130.0	0.08
PC3	Pearce Creek Upstream				10/27/94	1300	6.89	10.8	85	8.57	76	15.0	15.0	2 L	10 L	0.40 L	5.69	12	0.12	6.0	0.07
REF1	Bohemia River				10/27/94	1330	6.54	15.1	2100	8.74	2300	41.0	41.0	7	63	9.60	685.00	1300	0.19	220.0	0.09
REF2	Sassafras River				10/27/94	1400	5.32	15.6	450	12.77	390	41.0	41.0	5	25	1.30	97.21	260	0.13	31.0	0.06
WVS	West View Shores Shoreline				10/27/94	1110	6.25	12.3	2500	10.67	1700	51.0	51.0	3	25	7.20	492.00	890	0.10	203.0	0.07
HH1	CE 88–0811			Undetermined	10/20/94	1300	5.37	13.9	60	10.85	45	3.0	3.0	4	10 L	0.70	5.20	9	0.02 L	1.2	0.04
HH2	CE 92–0468		Cr Y/Wh Sand	Potomac	10/20/94	1315	5.30	14.1	40	10.66	44	2.5	2.5	3	10 L	0.40 L	4.21	6	0.02 L	1.3	0.03 L
HH3	CE 81–1895		WSand/RClay	Potomac	10/20/94	1345	5.14	14.9	50	10.65	38	5.0	5.0	3	10 L	0.40 L	3.92	5	0.02 L	1.0	0.03 L
HH4				Undetermined	10/20/94	1245	5.68	14.7	60	5.81	28	17.0	17.0	3	10 L	0.40 L	3.37	4	0.02 L	1.7	0.03 L
HH5	CE 81–3394		F/M Tan Sand	Potomac	10/20/94	1400	5.17	15.2	70	10.65	60	4.5	4.5	3	10 L	0.40 L	3.77	5	0.02 L	1.8	0.03 L
PN1	CE 88–2057		Gr/W Sand	Potomac	10/25/94	1000	6.79	16.5	180	4.31	130	92.0	92.0	2 L	10 L	0.40 L	45.78	5	0.16	11.0	0.07
PN2	CE 94–0187		Med Cr Sand	Undetermined	10/25/94	0935	6.27	15.2	140	3.73	110	59.0	59.0	2 L	10 L	0.40 L	14.49	7	0.16	9.3	0.03 L
PN3a	CE 93–2229			Undetermined	10/25/94	0900	6.48	14.7	155	3.80	100	55.0	55.0	2 L	10 L	0.40 L	19.36	8	0.19	8.8	0.05
USGS	CE 81–0469	–89.2	Med. Sand	Potomac	10/20/94	1100	2.67	15.7	4200	3.85	3700	1.0 L	1.0 L	5	35	7.00	336.00	470	0.90	2400.0	0.03 L
2	CE 73–2006	–103.62	Crs Wh Sand	Potomac	10/25/94	1020	6.30	15.7	125	4.68	89	54.0	54.0	2 L	10 L	0.40 L	7.01	5	0.02 L	28.0	0.03 L
6				Undetermined	10/15/94	820	5.50	15.0	150	4.18	91	56.0	56.0	2 L	10 L	0.40 L	4.63	5	0.02 L	0.14 L	0.05
16	CE 81–2368	–49.16	Coarse Sand	Potomac	10/18/94	930	4.93	16.6	120	4.42	83	6.5	6.5	2 L	10 L	0.40 L	10.03	18	0.02 L	9.2	0.03 L
18	CE 81–2367	–54.92	Md/CrsTnSnd	Potomac	10/18/94	1245	5.32	14.8	270	4.89	220	7.5	7.5	2	10 L	0.42	19.37	32	0.02 L	92.0	0.05
20	CE 66–0037	–44.12	Wh/Tan Sand	Potomac	10/13/94	1515	5.39	16.3	320	6.89	210	7.0	7.0	2 L	10 L	0.56	15.88	26	0.02 L	130.0	0.03 L
22a	CE 88–1861	–62.13	Y/Wh Sand	Potomac	10/19/94	1100	5.30	16.5	1100	2.01	980	20.0	20.0	2 L	10 L	0.62	46.59	71	0.02 L	450.0	0.03 L
22b		–37		Undetermined	10/19/94	1100	6.50	19.4	1200	0.61	1000	1.0 L	1.0 L	10	15	0.80	43.25	80	0.02 L	460.0	0.09
23				Undetermined	10/25/94	1500	6.14	16.0	1500	2.70	1200	160.0	160.0	2 L	10	0.90	422.00	62	0.02 L	66.0	0.03 L
25		–6.47		Undetermined	10/20/94	0930	5.90	15.8	2000	4.88	920	31.0	31.0	3	10 L	2.20	54.58	57	0.02 L	614.0	0.03
31	CE 93–0288	–92.38	Crs Tan Sand	Potomac	10/27/94	0950	6.49	15.4	130	2.55	96	30.0	30.0	2 L	10	0.40 L	5.72	10	0.10	0.14 L	0.05
34	CE 81–0769			Undetermined	10/25/94	1445	5.31	15.9	318	5.30	210	5.5	5.5	2 L	10 L	0.64	46.50	108	0.02 L	35.0	0.04
35	CE 81–1620	–32.52	Gravel	Undetermined	10/27/94	1000	4.90	14.6	270	3.93	180	35.0	35.0	2 L	10 L	0.65	42.28	63	0.02 L	32.0	0.05
40	CE 73–1473	–60.46	Crs Wh Sand	Potomac	10/15/94	910	6.30	16.5	150	5.63	97	43.0	43.0	2	10 L	0.40 L	5.74	5	0.12	2.4	0.07
46		–61.97		Undetermined	10/18/94	1100	6.10	16.1	140	3.64	77	17.0	17.0	3	10 L	0.40 L	8.43	13	0.11	6.1	0.08
48	CE 81–1493	–31.33	Med.Wh.Sand	Potomac	10/12/94	1030	5.48	15.5	145	5.17	96	6.0	6.0	2 L	10 L	0.40 L	11.01	19	0.02 L	48.0	0.04
49a		–44.68		Undetermined	10/18/94	1000	5.60	15.6	240	4.09	140	12.0	12.0	2	10 L	0.40	20.41	40	0.02 L	48.0	0.05
49b	CE 88–1852	–74.18	Y/Wh Sand	Potomac	10/18/94	1015	3.01	16.9	3200	4.45	3100	1.0 L	1.0 L	7	31	4.00	248.00	410	0.15	1500.0	0.05
51				Undetermined	10/27/94	1045	5.62	14.9	320	4.11	240	9.0	9.0	2 L	10 L	0.60	47.23	71	0.02 L	47.0	0.09
52a	CE 88–1824	–55.19	Md/CsTnSnd	Potomac	10/13/94	1205	5.19	15.3	900	9.10	730	7.0	7.0	17	10 L	1.50	61.34	120	0.02 L	440.0	0.04
52b	CE 73–1788	–61.99	Crs Y Sand	Potomac	10/13/94	1215	5.46	16.5	1000	5.00	830	5.0	5.0	6	10 L	0.95	50.35	70	0.02 L	560.0	0.07
54	CE 88–1825	–68.14	Y/Wh Sand	Potomac	10/15/94	1330	5.70	17.7	1900	5.70	1700	1.0 L	1.0 L	13	10 L	2.70	89.01	140	0.40	1200.0	0.03 L
61	CE 92–0198	–56.24	Crs Tan Sand	Potomac	10/13/94	1320	5.29	15.2	600	5.33	390	5.0	5.0	2 L	10 L	0.78	27.15	47	0.02 L	180.0	0.09
62	CE 81–0301	–63.47	CrsY/WhSand	Potomac	10/12/94	1045	6.38	14.5	1500	4.09	1500	62.0	62.0	5	21	1.60	75.28	120	0.02 L	1000.0	2.50
67	CE 73–1781	–98.79	Cr Y/Wh Sand	Potomac	10/19/94	1230	5.50	15.8	2200	2.45	2600	1.0 L	1.0 L	17	42	1.40	84.08	140	0.11	1700.0	0.08
69	CE 93–0349	–59.76	Crs Tan Sand	Potomac	10/13/94	1245	5.20	15.5	900	3.75	1300	8.0	8.0	2 L	12	1.70	42.00	140	0.02 L	580.0	0.03
71	CE 73–2079	–63.46	Crs Y Sand	Potomac	10/13/94	1450	5.33	16.6	1400	7.85	1300	58.0	58.0	3	10	1.70	78.35	109	0.02 L	840.0	0.03 L
73	CE 72–0423	–53.5	Cr Y/Wh Sand	Potomac	10/13/94	1430	5.33	16.7	1200	4.70	970	22.0	22.0	2	10	2.40	84.71	160	0.02 L	470.0	0.03 L
76	CE 88–1774	–12.22	Gry Tan Sand	Magothy	10/13/94	1535	4.81	16.0	600	6.31	420	1.0 L	1.0 L	2 L	10 L	1.80	62.26	120	0.02 L	240.0	0.03 L
78	CE 88–1583	–20.89	Tan Sand	Magothy	10/18/94	1330	4.98	16.3	600	3.41	490	1.0 L	1.0 L	2 L	10 L	1.10	51.96	90	0.11	210.0	0.05
79	CE 88–1441	–64.86	MdFnWhSand	Potomac	10/12/94	1100	6.80	14.1	230	8.74	170	37.0	37.0	2 L	14	0.40 L	10.39	10	0.02 L	62.0	0.06
89	CE 73–3488	–72.41	F.Br/Wh Sand	Potomac	10/15/94	1005	5.80	18.0	1100	3.23	970	60.0	60.0	4	10 L	0.90	50.15	61	0.12	550.0	2.60
94	CE 73–3415	–63.66	F.Br. Sand	Potomac	10/12/94	1415	6.80	16.4	550	8.64	370	47.0	47.0	2 L	18	0.64	23.78	54	0.02 L	180.0	0.04
95		–86		Undetermined	10/12/94	1345	6.90	16.1	200	6.57	120	37.0	37.0	2 L	10 L	0.40 L	9.53	19	0.02 L	11.0	0.05
100	CE 81–1671	–24.21		Potomac	10/20/94	1215	6.01	18.1	4200	3.42	4200	14.0	14.0	57	58	6.80	339.00	530	0.33	2500.0	0.03 L
106	CE 73–3474	–50.34	F.Br/Wh Sand	Potomac	10/12/94	0945	6.40	15.0	160	4.67	100	30.0	30.0	3	10 L	0.58	12.64	25	0.02 L	25.0	0.03
113	CE 68–0140	–27.85	Crs Y Sand	Undetermined	10/13/94	0940	5.78	15.0	165	3.52	370	28.0	28.0	22	10 L	0.42	51.65	21	0.02 L	23.0	0.03 L
132				Undetermined	10/19/94	1400	4.69	16.4	2300	5.27	2200	1.0 L	1.0 L	3	10	5.40	233.00	440	0.64	1100.0	0.03 L

An "L" indicates the value reported is below the detection limit

Table 5-3: Pearce Creek Phase I – EPA Drinking Water Standards Comparison

H:\123Files\EPA.wk1

Well #	Well Permit #	Screen Elev	Scrn Med.
134	CE 88-1723	-6.45	Tan Sand
135	CE 81-3805	-19.46	White Sand
136	CE 88-1249	-7.11	Lt Tan Sand
138a	CE 81-1463	-15.76	C.WhSnd/Grv
138b	CE 73-2075	-52.82	Cr Y/Wh Sand
143	CE 92-0120	-20.72	
147	CE 88-1923	-83.25	Y/Wh Sand
150	CE 71-0176	-56.03	Cr Y/Wh Sand
152		-22.2	
161	CE 81-3970	-24.66	White Sand
167a	CE 88-0533	-12.27	White Sand
170			
172		-11.48	
174			
177	CE 81-2689	-57.94	Coarse Sand
184			
200	CE 94-0323	-36.26	
217a	CE 73-2227	3.29	Blue Clay
217b	CE 88-0624	-52.4	
232	CE 73-3855	-49.22	F.Br/Wh Sand
HH2 Duplicate			
REF1 Duplicate			
18 Duplicate			
54 Duplicate			
71 Duplicate			
147 Duplicate			
232 Duplicate			
Field Blank			
10/15 Trip			
10/18 Trip			
10/19 Trip			
10/20 Trip			
10/25 Trip			

Aquifer	Sample Date	Time	Field Data				Dissolved Solids	Total Alkalinity	Bicarb. Alkalinity	BOD	COD	Br	Na	Cl	F	SO4	Sulfide
			pH units	Temp deg C	Cond umhos/cm	DO mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
Magothy	10/13/94	0920	4.61	15.8	200	8.77	130	1.0 L	1.0 L	25	10 L	0.52	16.11	36	0.02 L	42.0	0.03
Potomac	10/15/94	1100	5.90	18.5	1400	3.06	1200	69.0	69.0	2 L	10 L	1.40	89.18	120	0.02 L	570.0	0.08
Magothy	10/15/94	1040	5.13	16.1	485	5.21	350	1.0 L	1.0 L	2 L	38	0.78	35.54	85	0.02 L	200.0	0.03 L
Undetermined	10/18/94	1415	5.20	18.0	130	8.06	81	3.5	3.5	2 L	10 L	0.40 L	11.18	19	0.02 L	19.0	0.03 L
Potomac	10/18/94	1415	6.92	18.9	2000	6.35	1600	107.0	107.0	5	15	3.00	191.00	270	1.20	620.0	0.03 L
Potomac	10/18/94	1445	5.58	17.4	110	5.97	65	5.5	5.5	2 L	10 L	0.40 L	6.93	10	0.02 L	9.6	0.04
Potomac	10/25/94	1345	4.73	16.8	2500	4.10	2300	5.5	5.5	2 L	15	4.00	190.00	490	0.10	1270.0	0.03 L
Potomac	10/13/94	1300	4.21	18.7	2900	5.94	3700	1.0 L	1.0 L	16	46	6.80	274.00	490	0.62	2200.0	0.03 L
Undetermined	10/12/94	1300	5.14	17.4	550	7.58	420	5.0	5.0	2 L	10 L	1.10	79.35	83	0.02 L	190.0	0.04
Potomac	10/18/94	1500	4.17	16.3	600	3.88	510	1.0 L	1.0 L	2	10 L	0.68	45.20	77	0.13	280.0	0.03 L
Magothy	10/25/94	1055	4.39	16.7	253	7.73	190	1.0 L	1.0 L	2 L	10 L	0.40 L	16.40	24	0.02 L	85.0	0.04
Undetermined	10/12/94	1240	5.10	16.7	105	9.41	68	1.0	1.0	2 L	10 L	0.40 L	7.77	10	0.02 L	15.0	0.03 L
Undetermined	10/15/94	1120	5.61	15.2	420	4.04	320	43.0	43.0	12	34	0.70	21.56	35	0.02 L	120.0	0.05
Undetermined	10/19/94	1250	5.92	16.0	700	2.28	510	37.0	37.0	3	10 L	1.30	47.63	95	0.02 L	306.0	0.08
Potomac	10/20/94	0900	6.80	16.1	200	2.01	120	68.0	68.0	6	10 L	0.40 L	8.24	7	0.02 L	7.2	0.05
Undetermined	10/12/94	1520	6.83	16.7	160	3.79	88	27.0	27.0	5	11	0.40 L	4.35	14	0.02 L	0.14 L	0.03 L
Undetermined	10/25/94	1415	6.39	15.9	440	5.40	300	84.0	84.0	2 L	24	0.40	27.97	48	0.02 L	52.0	0.09
Magothy	10/19/94	1000	5.78	19.5	1600	5.16	1400	1.0 L	1.0 L	20	10 L	2.10	91.31	160	0.02 L	590.0	0.03 L
Potomac	10/19/94	1000	6.27	17.4	900	5.75	500	14.0	14.0	2 L	10 L	1.40	184.00	300	0.02 L	33.0	0.06
Potomac	10/19/94	1335	6.82	16.2	500	4.11	99	73.0	73.0	6	10 L	0.40 L	4.94	13	0.02 L	0.14 L	0.03 L
Undetermined	10/20/94	1320	5.31	14.1	40	10.66	34	3.0	3.0	3	10 L	0.40 L	4.48	6	0.02 L	1.4	0.03
Undetermined	10/27/94	1330	6.24	15.1	2100	9.05	2200	41.0	41.0	8	59	10.00	678.00	1300	0.19	210.0	0.07
Undetermined	10/18/94	1245	5.31	14.8	270	4.89	200	7.0	7.0	2 L	10 L	0.40 L	18.42	32	0.02 L	96.0	0.04
Undetermined	10/15/94	1330	5.70	17.7	1900	5.70	1800	1.0 L	1.0 L	2 L	17	2.70	86.30	130	0.40	1200.0	0.03 L
Undetermined	10/13/94	1450	5.90	16.2	1400	7.13	1300	67.0	67.0	3	14	2.10	74.73	105	0.02 L	870.0	0.03 L
Undetermined	10/25/94	1345	4.72	16.8	2500	4.16	2300	5.5	5.5	2 L	10 L	3.40	188.00	500	0.10	1240.0	0.03 L
Undetermined	10/19/94	1335	6.79	16.1	500	4.11	86	72.0	72.0	6	10 L	0.40 L	5.19	10	0.02 L	0.14 L	0.03 L
Undetermined	10/13/94	1150	5.88	16.3	0	12.47	10 L	1.0 L	1.0 L	2 L	10 L	0.40 L	0.24	1 L	0.02 L	0.14 L	0.03 L
Undetermined	10/13/94	1540					21	1.0 L	1.0 L	2	10 L	0.40 L	0.20 L	1 L	0.02 L	0.14 L	0.03 L
Undetermined	10/18/94	0800					10 L	1.0 L	1.0 L	2 L	10 L	0.40 L	0.31	1 L	0.02 L	0.14 L	0.03 L
Undetermined	10/13/94	1540					10 L	1.0 L	1.0 L	3	10 L	0.40 L	0.30	1 L	0.13	0.14 L	0.03 L
Undetermined	10/13/94	1540					10 L	1.0 L	1.0 L	2	10 L	0.40 L	1.18	2	0.02 L	0.14 L	0.03 L
Undetermined	10/13/94	1540					10 L	1.0 L	1.0 L	2 L	10 L	0.40 L	0.54	1 L	0.02 L	0.14 L	0.05

An "L" indicates the value reported is below the detection limit

Table 5–3: Pearce Creek Phase I – EPA Drinking Water Standards Comparison

H:\123Files\EPA.wk1

Well #	NH4 mg/l	NO3 mg/l	Al mg/l	As mg/l	Cd mg/l	Ca mg/l	Cr mg/l	Cu mg/l	Fe mg/l	Pb mg/l	Mg mg/l	Mn mg/l	Ni mg/l	K mg/l	Zn mg/l
EPA Drinking Water Standards	30**	10.00	0.05–0.2	0.05	0.005		0.100	1.0	0.30	0.015		0.050	0.100		5.0
08/23 Effluent	10.0	0.50 L	6.650	0.002	0.006	285.00	0.008 L	0.039	108.000	0.024 L	219.00	226.000	1.100	24.53	3.230
PC1	1.0 L	0.50 L	1.600	0.001 L	0.004 L	3.15	0.015	0.010	1.340	0.031	3.78	0.112	0.013	0.78	0.180
PC2	1.0 L	0.50 L	0.537	0.001 L	0.004 L	20.20	0.008 L	0.003 L	1.240	0.024 L	20.40	5.660	0.011 L	7.37	0.022
PC3	1.0 L	0.50 L	0.459	0.001 L	0.004 L	6.67	0.008 L	0.003 L	2.040	0.024 L	2.89	0.222	0.011 L	3.47	0.004
REF1	1.0 L	0.50 L	8.270	0.001	0.004 L	46.80	0.008 L	0.003 L	10.400	0.024 L	78.80	0.728	0.011 L	37.80	0.037
REF2	1.0 L	0.75	0.559	0.001 L	0.004 L	19.20	0.008 L	0.003 L	0.754	0.024 L	16.30	0.147	0.011 L	6.86	0.003 L
WWS	1.0 L	0.63	2.010	0.001 L	0.004 L	40.50	0.008 L	0.003 L	1.940	0.024	61.90	0.283	0.011 L	20.80	0.010
HH1	1.0 L	4.30	0.052 L	0.001 L	0.004 L	3.65	0.008 L	0.013	0.061	0.024 L	1.75	0.025	0.011 L	1.90	0.003 L
HH2	1.0 L	1.60	0.052 L	0.001 L	0.004 L	2.18	0.008 L	0.003 L	0.079	0.024 L	1.00	0.025	0.011 L	1.15	0.003 L
HH3	1.0 L	2.50	0.052 L	0.001 L	0.004 L	2.40	0.008 L	0.013	0.103	0.024 L	1.41	0.010	0.011 L	1.26	0.617
HH4	1.0 L	1.40	0.052 L	0.001 L	0.004 L	2.82	0.008 L	0.065	0.618	0.024 L	1.70	0.206	0.011 L	1.15	0.003 L
HH5	1.0 L	4.70	0.052 L	0.001 L	0.004 L	4.99	0.008 L	0.136	0.012	0.024 L	2.46	0.013	0.011 L	1.68	0.003 L
PN1	1.0 L	0.86	0.052 L	0.001 L	0.004 L	0.12	0.008 L	0.019	0.108	0.024 L	0.03	0.005 L	0.011 L	0.54	0.012
PN2	1.0 L	0.50 L	0.066	0.001 L	0.004 L	9.71	0.008 L	0.009	13.140	0.029	1.89	0.125	0.011 L	2.22	0.068
PN3a	1.0 L	0.50 L	0.206	0.001 L	0.004 L	8.54	0.008 L	0.010	14.240	0.024 L	1.97	0.123	0.011 L	2.26	0.077
USGS	11.0	0.50 L	41.470	0.001 L	0.014	217.00	0.011	0.573	99.120	0.137	185.00	124.000	0.619	13.02	4.380
2	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	12.04	0.008 L	0.011	7.340	0.024 L	1.92	1.530	0.011 L	0.70	0.141
6	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	10.92	0.008 L	0.006	31.780	0.024 L	1.76	0.236	0.011 L	0.91	0.342
16	1.0 L	1.30	0.052 L	0.001 L	0.004 L	4.81	0.008	0.152	0.281	0.024 L	2.60	0.041	0.015	1.87	0.024
18	1.3	1.10	0.126	0.001 L	0.004 L	25.91	0.008 L	0.222	0.329	0.057	14.49	0.067	0.019	2.96	0.036
20	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	24.84	0.008 L	0.053	0.644	0.024 L	17.61	0.084	0.011 L	2.08	0.028
22a	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	98.03	0.008 L	0.060	0.193	0.024 L	72.00	9.700	0.050	5.09	0.027
22b	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	88.79	0.008 L	0.058	75.270	0.024 L	67.17	7.310	0.011 L	4.39	0.049
23	1.7	0.50 L	0.052 L	0.001 L	0.004 L	4.55	0.008 L	0.050	0.426	0.024 L	2.76	0.309	0.011 L	1.16	0.008
25	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	101.00	0.008 L	0.010	5.660	0.024 L	69.62	5.780	0.013	4.13	0.003 L
31	1.3	0.50 L	0.257	0.002	0.004 L	8.40	0.008 L	0.010	19.170	0.024 L	1.74	0.362	0.011 L	0.39 L	0.005
34	1.0 L	4.10	0.056	0.001 L	0.004 L	7.78	0.008 L	0.333	0.207	0.047	8.26	0.104	0.015	1.97	0.026
35	1.0 L	2.20	0.196	0.001 L	0.004 L	6.81	0.008 L	0.035	0.156	0.024 L	6.06	0.064	0.013	1.57	0.045
40	1.3	0.50 L	0.069	0.007	0.004 L	9.64	0.008 L	0.003 L	31.450	0.024	2.22	1.030	0.011 L	0.97	0.138
46	1.0 L	0.50 L	0.054	0.001 L	0.004 L	6.16	0.009	0.087	7.460	0.036	2.81	0.957	0.102	1.72	0.022
48	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	8.93	0.008 L	0.008	0.206	0.024 L	6.55	0.019	0.011 L	1.95	0.078
49a	1.0 L	0.73	0.052 L	0.001 L	0.004 L	10.35	0.008 L	0.176	6.160	0.067	11.03	0.324	0.011 L	3.46	0.013
49b	2.4	0.50 L	1.280	0.001 L	0.004 L	181.00	0.008 L	13.260	242.000	0.174	152.00	113.000	0.885	9.23	11.050
51	1.0 L	2.50	0.052	0.001 L	0.004 L	10.11	0.008 L	0.179	0.901	0.041	9.94	0.098	0.011 L	3.58	0.077
52a	1.4	0.50 L	0.079	0.001 L	0.004 L	62.48	0.008 L	0.326	0.024	0.030	48.25	10.290	0.040	3.64	0.097
52b	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	77.09	0.008 L	0.132	2.080	0.024 L	67.18	4.730	0.101	4.28	0.440
54	2.9	0.50 L	2.180	0.001 L	0.004 L	163.00	0.008 L	0.132	48.150	0.024 L	130.00	59.150	0.507	6.81	1.940
61	1.0 L	0.53	0.070	0.001	0.004 L	39.14	0.008 L	0.006	0.333	0.024 L	29.91	3.150	0.020	2.57	0.028
62	2.0	0.50 L	0.052 L	0.010	0.004 L	168.00	0.008 L	0.010	31.960	0.024 L	132.00	29.960	0.089	6.36	0.088
67	2.4	0.50 L	1.820	0.001 L	0.004 L	155.00	0.008 L	0.108	299.000	0.024	131.00	59.630	0.193	6.54	0.163
69	1.5	0.50 L	0.085	0.001 L	0.004 L	33.72	0.008 L	0.090	1.690	0.024 L	31.33	5.660	0.046	2.86	0.142
71	1.8	0.50 L	0.136	0.001 L	0.004 L	137.00	0.008 L	0.003 L	25.340	0.024 L	105.00	39.420	0.104	5.34	0.107
73	1.7	0.50 L	0.120	0.001 L	0.004 L	81.44	0.008 L	0.124	7.610	0.027	66.14	15.810	0.092	5.43	0.195
76	1.0 L	4.10	0.315	0.001 L	0.004 L	24.19	0.008 L	0.009	0.628	0.024 L	25.35	1.650	0.024	5.38	0.089
78	2.0	1.40	0.363	0.001	0.009	43.34	0.008 L	0.052	17.920	0.143	28.06	3.470	0.033	5.02	0.086
79	1.3	0.50 L	0.075	0.003	0.004 L	20.50	0.008 L	0.011	19.920	0.024 L	6.19	0.183	0.011 L	0.95	0.006
89	1.0 L	0.50 L	0.801	0.001	0.004 L	93.37	0.008 L	0.270	133.000	0.077	47.59	8.730	0.057	2.91	1.090
94	1.0 L	0.50 L	0.052 L	0.037	0.004 L	24.44	0.008 L	0.061	88.960	0.024 L	14.15	0.385	0.011 L	2.10	0.016
95	1.0 L	0.50 L	0.052 L	0.013	0.004 L	6.50	0.008 L	0.010	49.100	0.024 L	2.16	0.426	0.011 L	0.70	0.010
100	5.7	0.50 L	0.411	0.001 L	0.004 L	211.00	0.008 L	0.010	427.000	0.040	199.00	136.000	0.149	7.97	0.122
106	1.0 L	0.50 L	0.079	0.001 L	0.004 L	7.69	0.008 L	0.029	21.520	0.024 L	4.68	1.250	0.011 L	1.54	0.072
113	1.0 L	0.50 L	0.655	0.001 L	0.004 L	15.22	0.008 L	0.067	13.660	0.046	9.91	0.898	0.011 L	1.92	0.221
132	5.6	0.50 L	17.170	0.001 L	0.007	175.00	0.016	0.060	4.890	0.024	123.00	59.270	0.402	8.75	2.520

An "L" indicates the value reported is below the detection limit

Table 5-3: Pearce Creek Phase I – EPA Drinking Water Standards Comparison

H:\123Files\EPA.wk1

Well #	NH4 mg/l	NO3 mg/l	Al mg/l	As mg/l	Cd mg/l	Ca mg/l	Cr mg/l	Cu mg/l	Fe mg/l	Pb mg/l	Mg mg/l	Mn mg/l	Ni mg/l	K mg/l	Zn mg/l
134	1.1	1.50	0.269	0.001 L	0.004 L	12.28	0.008 L	0.403	1.440	0.024 L	8.22	0.231	0.013	1.84	0.036
135	1.1	0.50 L	0.104	0.012	0.004 L	105.00	0.008 L	0.003 L	218.000	0.024 L	62.20	15.210	0.011 L	3.00	0.014
136	1.0 L	0.50 L	0.089	0.001 L	0.004 L	23.90	0.008 L	0.018	28.210	0.024 L	12.69	1.770	0.011 L	2.85	0.049
138a	1.0 L	2.40	0.094	0.001 L	0.004 L	7.92	0.008 L	0.068	0.072	0.041	5.88	0.067	0.011 L	2.06	0.003 L
138b	4.8	0.50 L	0.184	0.001 L	0.004 L	103.00	0.008 L	0.304	21.070	0.041	96.81	23.540	0.039	6.48	0.551
143	1.4	1.90	0.052 L	0.001 L	0.004 L	2.72	0.008 L	0.802	0.132	0.093	3.96	0.037	0.011 L	1.53	0.076
147	1.7	0.50 L	1.010	0.001 L	0.004	185.00	0.008 L	0.045	3.510	0.024 L	178.00	64.740	0.586	4.87	0.790
150	8.8	0.50 L	37.040	0.001 L	0.005	188.00	0.066	0.122	240.000	0.024 L	158.00	130.000	0.668	8.95	3.890
152	1.0 L	2.40	0.511	0.001 L	0.004 L	88.87	0.008 L	0.074	4.700	0.029	70.09	15.420	0.073	5.26	0.219
161	2.2	0.52	0.553	0.001 L	0.004 L	50.62	0.008 L	0.089	7.660	0.024 L	26.95	10.600	0.044	3.01	0.147
167a	1.0 L	1.30	0.807	0.001 L	0.004 L	13.14	0.008 L	0.426	0.100	0.027	9.84	2.570	0.030	0.49	0.117
170	1.0 L	3.30	0.101	0.001 L	0.004 L	3.77	0.008 L	0.045	0.491	0.024 L	5.79	0.240	0.029	0.81	0.063
172	1.0 L	0.50 L	0.075	0.002	0.004 L	35.58	0.008 L	0.211	23.830	0.024 L	11.04	6.800	0.011 L	1.66	0.072
174	1.0 L	0.50 L	0.053	0.001 L	0.004 L	49.40	0.008 L	0.006	9.160	0.024 L	33.51	10.970	0.011 L	2.16	0.007
177	2.4	0.50 L	0.099	0.003	0.004 L	20.85	0.008 L	0.026	18.660	0.024 L	2.54	0.228	0.011 L	1.36	0.017
184	2.4	0.50 L	0.052 L	0.002	0.004 L	10.41	0.008 L	0.263	26.110	0.034	1.75	0.405	0.011 L	0.93	0.009
200	3.6	0.56	0.052 L	0.001 L	0.004 L	21.09	0.008 L	0.003 L	68.560	0.025	4.48	1.330	0.011 L	0.88	0.016
217a	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	143.00	0.045	0.003 L	34.310	0.024 L	89.85	27.350	0.089	4.11	0.035
217b	1.0 L	13.00	0.052 L	0.001 L	0.004 L	10.63	0.008 L	0.024	0.165	0.024 L	5.93	0.072	0.011 L	5.00	0.003 L
232	1.7	0.50 L	0.052 L	0.001 L	0.004 L	17.55	0.008 L	0.012	20.440	0.024 L	2.14	0.256	0.011 L	1.00	0.003 L
HH2 Duplicate	1.0 L	1.60	0.052 L	0.001 L	0.004 L	2.18	0.008 L	0.003 L	0.076	0.024 L	0.95	0.010	0.011 L	1.37	0.003 L
REF1 Duplicate	1.0 L	0.50 L	6.590	0.001 L	0.004 L	45.40	0.008 L	0.003 L	8.860	0.024 L	76.70	0.665	0.011 L	30.70	0.048
18 Duplicate	1.0 L	1.40	0.115	0.001 L	0.004 L	24.74	0.008 L	0.293	0.264	0.079	13.83	0.060	0.017	2.95	0.052
54 Duplicate	2.8	0.50 L	2.160	0.001 L	0.005	160.00	0.008	0.132	46.930	0.024 L	127.00	57.810	0.478	7.08	1.850
71 Duplicate	2.0	0.50 L	0.105	0.001 L	0.004 L	131.00	0.008 L	0.003 L	31.740	0.024 L	100.00	37.660	0.106	5.56	0.100
147 Duplicate	1.7	0.50 L	1.210	0.001	0.004 L	180.00	0.008 L	0.045	3.420	0.024 L	172.00	63.320	0.564	4.63	0.764
232 Duplicate	1.5	0.50 L	0.052 L	0.001 L	0.004 L	17.12	0.008 L	0.016	20.170	0.024 L	2.24	0.374	0.011 L	1.09	0.003 L
Field Blank	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	0.15	0.008 L	0.003 L	0.119	0.024 L	0.10	0.013	0.011 L	0.39 L	0.003 L
10/15 Trip	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	0.08 L	0.008 L	0.003 L	0.011	0.024 L	0.01	0.005 L	0.011 L	0.39 L	0.017
10/18 Trip	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	0.08 L	0.008 L	0.006	0.009 L	0.024 L	0.00 L	0.005 L	0.011 L	0.39 L	0.003 L
10/19 Trip	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	0.08 L	0.008 L	0.003 L	0.009 L	0.024 L	0.00 L	0.005 L	0.011 L	0.39 L	0.003 L
10/20 Trip	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	0.08 L	0.008 L	0.007	0.042	0.024 L	0.01	0.007	0.011 L	0.39 L	0.003 L
10/25 Trip	1.0 L	0.50 L	0.052 L	0.001 L	0.004 L	0.08	0.008 L	0.007	0.009 L	0.024 L	0.02	0.005 L	0.011 L	0.39 L	0.011

An "L" indicates the value reported is below the detection limit

copper and zinc and two wells exceed the MCL for cadmium (78 and USGS). One sample from Well 217b exceeds the MCL for nitrate.

A comparison of the questionnaire responses with the sample analyses, indicate that some residents are drinking untreated well water which does not meet U.S. Environmental Protection Agency (EPA) 1993 drinking water standards for pH and manganese. In addition, findings for some of the untreated wells indicate that some well water does not meet EPA drinking water standards for iron, sodium, aluminum, lead, dissolved solids, sulfates and nickel.

5.3 COMPARISON OF WELL DATA WITH AQUIFER WATER QUALITY

The two aquifers of concern in the study area are the upper Potomac and the Magothy. Well water quality data from the West View Shores Subdivision obtained during this study was compared to water quality in these local aquifers as documented in Maryland Geological Survey Bulletin 34 (MGS, 1988) and Report of Investigations Number 39 (MGS, 1984) for parameters which are indicative of potential contributing sources (i.e., salt water intrusion, dredged material). The comparison is summarized in Table 5-4. The water quality reported for the Magothy aquifer in Table 5-4 was obtained from one sample from a well located in Kennedyville in Kent County, Maryland as reported in MGS Report of Investigations Number 39. The comparison of the quality of well water samples obtained during this study and local aquifers are graphed for selected parameters in Appendix F. The EPA drinking water standards are included as a reference, where applicable.

Generally, the groundwater of the upper Potomac and Magothy aquifers has low pH and high concentrations of iron (MGS, 1988). This is also evident in most of the West View Shores well samples.

The pH of samples from wells thought to be screened in the Magothy aquifer appears to be within the typical range for pH of aquifers within the Coastal Plain. The pH of samples from four wells thought to be screened within the upper Potomac aquifer is below the documented