Attachment A.

153684

Table 3. Ground water quality in private wells (background), concentrations in ppm except where noted

Parameters	Ground water standards	Collection date and well number			
		9/16/80 G501	9/16/80 G502	9/16/80 G503	9/23/80 G504
Arsenic	0.05	0.008	0.004	0.001	< 0.001
Barium	1.0	0.2	0.16	0.39	0.05
Boron	1.0	0.28	0.27	0.25	0.58
Cadmium	0.01	<0.001	< 0.005	< 0.002	< 0.002
Chromium	1.05	<0.01	< 0.005	< 0.01	NA
Copper	0.02	0.02	< 0.005	< 0.005	0.06
Iron	1.0	4.6	19.0	17.7	0.73
Lead	0.05	< 0.02	< 0.02	< 0.05	< 0.04
Magnesium	NE	33.0	39.0	36.0	30.0
Manganese	0.15	1.02	1.26	0.79	0.65
Mercury	0.0005	< 0.0001	< 0.0001	< 0.0001	0.0001
Nickel	1.0	< 0.005	< 0.0005	< 0.01	0.02
Phosphorus	0.05	< 1.0	< 1.0	< 1.0	0.2
Potassium	NE	6.6	5.7	4.5	6.0
Silver	0.0005	< 0.005	< 0.005	<0.005	< 0.01
Sodium	NE	21.0	24.0	12.0	26.0
Zinc	1.0	0.85	NA	0.18	0.8
PCB (ppb)	NE	NA	NA	NA	< 0.1

NE - Not established
NA - Not attempted

Table 4a. Analysis of ground water samples from the IEPA monitoring wells on 10/23/80 in ppm except when noted

PARAMETERS	STANDARDS	G101	G102	G103	G104	G105	G106	G107	G108	G109	G110	G111	G112
Alkalinity	NE	362	410	336	406	271	387	552	375	287	210	302	699
Ammonia	1.5	0.3	1.6 ✓	1.7 ✓	0.4	0.9	2.9 ✓	0.5	0.3	4.5 ✓	1.2	0.1	1.5
Arsenic	.05	.023	.023	.043	.049	.067 ✓	.16 ✓	.043	.008	.055 ✓	.053 ✓	.008	.019
Barium	1.0	1.3 ✓	0.8	2.9 ✓	2.2 ✓	2.0 ✓	0.6	2.1 ✓	0.3	0.2	0.5	0.2	0.5
Boron	1.0	0.5	0.4	0.5	0.6	0.4	0.5	0.5	0.4	0.4	0.5	0.5	5.6 ✓
Cadmium	.01	0.0	0.0	.03 ✓	0.0	0.0	0.0	0.0	0.0	0.0	1.5 ✓	0.0	.06 ✓
Calcium	NE	180	210	210	210	340	185	500	140	380	500	110	242
C.O.D.	NE	237	160	244	206	473	115	1070	298	275	780	79	162
Chloride	250	48	103	56	52	65	109	132	79	69	61	32	363 ✓
Chromium (total)	1.05	.04	.02	.09	.04	.12	.01	.07	0.0	0.0	.38	0.0	.01
Chromium (+6)	.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Copper	.02	.46 ✓	.13 ✓	1.1 ✓	.31 ✓	.73 ✓	.44 ✓	.68 ✓	.04 ✓	.13 ✓	2.3 ✓	.04 ✓	1.2 ✓
Cyanide	.025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0
Fluoride	1.4	0.4	0.7	0.7	0.3	1.0	0.7	0.7	0.3	1.2	0.8	0.3	0.5
Hardness	NE	501	884	549	630	528	637	777	496	1664	279	419	1080
Iron	1.0	51.0 ✓	39.5 ✓	86 ✓	89 ✓	18 ✓	62 ✓	13 ✓	4.1 ✓	39.0 ✓	340 ✓	5 ✓	18 ✓
Lead	.05	.19 ✓	.15 ✓	0.26 ✓	0.2 ✓	0.31 ✓	0.0	0.27 ✓	0.0	0.0	7.3 ✓	0.07 ✓	0.44 ✓
Magnesium	NE	69	90	79	72	100	49	205	24	100	209	24	82.5
Manganese	.15	5.1 ✓	3.8 ✓	4.2 ✓	3.4 ✓	4.2 ✓	1.9 ✓	9.8 ✓	0.98 ✓	4.5 ✓	8.8 ✓	1.1 ✓	3.9 ✓
Mercury	.0005	0.0	0.0	.0002	0.0	0.0	0.0	0.0	.0001	0.0	0.0	0.0	.0001
Nickle	1.0	0.1	0.1	0.9	0.1	0.8	0.1	0.3	0.0	0.5	1.9 ✓	0.0	0.3
Nitrate-nitrite	10.0	0.1	0.1	0.1	0.4	0.0	0.1	0.1	1.1	0.0	0.4	0.5	0.0
pH	6.5-9.0	6.6	6.6	6.5	6.6	6.6	6.5	6.4 ✓	6.6	6.3 ✓	6.7	7.0	6.4 ✓
Phenolics	.001	0.0	.01 ✓	0.0	.005 ✓	0.0	.065 ✓	2.5 ✓	.01 ✓	.45 ✓	.015 ✓	0.0	.875 ✓
Phosphorus	.05	2.9 ✓	1.2 ✓	3.3 ✓	2.7 ✓	6.0 ✓	1.8 ✓	9.4 ✓	.18 ✓	.72 ✓	16 ✓	.24 ✓	.69 ✓
Potassium	NE	10.6	13.1	13.4	12.3	22	7.7	15.2	13.7	14.9	29	4.9	58
R.O.E.	500	650 ✓	1230 ✓	765 ✓	790 ✓	824 ✓	1020 ✓	1230 ✓	704 ✓	2460 ✓	508 ✓	512 ✓	2190 ✓
Selenium	.01	.003	.001	.004	.01	.008	.001	.004	.001	.001	.005	.002	.001
Silver	.005	.01 ✓	0.0	.02 ✓	0.0	0.0	0.0	0.0	.01 ✓	0.0	0.0	.02 ✓	.11 ✓
Sodium	NE	24	60	40	29	57	96	NA	40	40	53	24	260
S.C.	NE	870	1560	1050	1080	1040	1340	1430	960	2470	720	490	NA
Sulfate	250	132	434 ✓	230	204	296 ✓	281 ✓	201	103	1348 ✓	93	104	518 ✓
Zinc	1.0	0.6	0.4	6.2 ✓	0.3	3.7 ✓	0.1	0.8	0.0	0.1	9.0 ✓	0.0	7.8 ✓
PCB (ppb)	NE	1.0 ✓	1.2 ✓	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	2.7 ✓	< 0.1	< 0.1
Chlorophenol (ppb)	NE	BDL	1200 ✓	BDL	BDL	BDL	BDL	630 ✓	BDL	19 ✓	BDL	BDL	BDL
Chlorobenzene (ppb)	NE	BDL	BDL	BDL	BDL	BDL	BDL	19 ✓	BDL	BDL	BDL	BDL	100 ✓
Dichlorobenzene (ppb)	NE	BDL	BDL	BDL	BDL	BDL	BDL	25 ✓	BDL	BDL	BDL	BDL	65 ✓
Dichlorophenol (ppb)	NE	BDL	BDL	BDL	BDL	BDL	BDL	890 ✓	BDL	BDL	BDL	BDL	BDL
Cyclohexanone (ppb)	NE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	120 ✓	5.9 ✓	BDL	BDL
Chloroaniline (ppb)	NE	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	3500 ✓

✓ indicates above standard amounts NA = Not Attempted NE = Not Established BDL = Below Detection Limit

Table 4b. Analysis of ground water samples from the IEPA monitoring wells on 1/28/81 in ppm except when noted

PARAMETERS	STANDARDS	G101	G102	G103	G104	G105	G106	G107	G108	G109	G110	G111	G112
Alkalinity	NE	447	421	266	520	363	556	621	448	18	308	394	619
Ammonia	1.5	0.3	0.0	1.4	0.2	0.7	3.3✓	1.0	0.0	17✓	0.2	0.1	0.5
Arsenic	0.05	0.015	0.016	0.018	0.002	0.037	0.11	0.021	0.004	7.5✓	0.013	0.014	0.027
Barium	1.0	0.9	1.2✓	0.9	0.3	1.8✓	1.0	3.2✓	0.5	0.2	1.0	0.7	0.5
Boron	1.0	0.3	0.4	0.4	0.7	0.4	0.5	0.5	0.2	0.8	0.2	0.6	0.9
Cadmium	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14✓	0.00	0.00	0.00
Calcium	NE	220.0	328.9	176.3	218.0	319.2	225.5	1169.5	205.5	466.7	169.4	181.4	198.3
C.O.D.	NE	45	93	56	9	143	212	635	8	1315	37	28	47
Chloride	250	20	128	64	29	59	156	201	76	32	36	18	210
Chromium (total)	1.05	0.02	0.02	0.02	0.00	0.03	0.00	0.09	0.00	0.04	0.02	0.02	0.00
Chromium (+6)	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.02	0.59✓	0.79✓	0.36✓	0.14✓	0.43✓	0.29✓	0.97✓	0.00	94.1✓	0.11✓	0.04✓	0.28✓
Cyanide	0.025	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Fluoride	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Hardness	NE	554	1072	490	717	764	617	960	564	2144	447	530	486
Iron	1.0	30.4✓	16.5✓	20.8✓	1.4✓	60.8✓	67.5✓	172✓	0.3	198✓	19.1✓	10.7✓	18.9✓
Lead	0.05	0.17✓	0.08✓	0.00	0.00	0.07✓	0.00	0.32✓	0.00	0.00	0.00	0.00	0.00
Magnesium	NE	48.2	78.0	46.3	49.1	73.6	49.1	288.1	34.3	184.4	43.5	37.9	54.0
Manganese	0.15	3.02✓	3.15✓	3.07✓	1.41✓	4.10✓	2.13✓	9.64✓	0.34✓	8.30✓	0.77✓	1.76✓	2.78✓
Mercury	.0005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0004	0.0	0.0	0.0
Nichel	1.0	0.1	0.1	0.4	0.0	0.2	0.0	0.5	0.0	176✓	0.9	0.0	0.0
Nitrate - nitrite	10.0	0.0	2.5	0.1	0.5	0.0	0.0	0.2	3.5	0.3	18✓	0.5	0.0
pH	6.5 - 9.0	7.0	7.0	7.1	7.2	7.0	6.9	6.9	7.1	4.1✓	6.9	7.0	6.9
Phenolics	.001	0.0	0.0	0.0	0.0	0.0	1.46✓	0.5✓	0.01✓	1.86✓	0.02✓	0.015✓	0.05✓
Phosphorous	0.05	0.91✓	0.88✓	0.41✓	0.06✓	3.6✓	2.1✓	10✓	0.03	3.7✓	1.0✓	0.51✓	0.53✓
Potassium	NE	6.4	12	8.8	6.0	13	6.2	20	16	18	7.5	4.2	20
R.O.E.	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.01	0.002	0.002	0.002	0.002	0.003	0.002	0.011✓	0.004	0.006	0.016✓	0.002	0.0
Silver	.005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sodium	NE	13	63	48	15	50	94	60	30	37	13	14	18
S.C.	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate	250	129	583✓	256✓	265✓	468✓	143	276✓	86	3371✓	57	153	212
Zinc	1.0	0.3	1.2✓	1.8✓	0.1	1.5✓	0.1	1.5✓	0.0	10.1✓	2.0✓	0.1	2.8✓
PCB (ppb)	NE	0.22✓	3.9✓	NA	0.3✓	BDL	NA	0.4✓	BDL	NA	NA	NA	BDL
Chlorobenzene (ppb)	NE	NA	NA	NA	NA	NA	NA	63✓	BDL	BDL	NA	NA	25✓
Dichlorophenol (ppb)	NE	NA	NA	NA	NA	NA	NA	560✓	BDL	BDL	NA	NA	BDL
Chloroaniline (ppb)	NE	NA	NA	NA	NA	NA	NA	90✓	BDL	BDL	NA	NA	21✓

✓ indicates above standard amounts NA= Not Attempted NE=Not Established BDL=Below Detection Level