

Appendix 6: Water quality data from sampling locations at the Leetown Science Center, Leetown, West Virginia.

Table 1. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Station number	Local identifier	Local Name	Geologic Formation	Date	Depth of well (feet)
392037077553501	Jef-0594	Tabb Lower Piezometer	Stoufferstown Member	9/15/2004	41
392042077554301	Jef-0521S	Gray Spring	Stonehenge Limestone	9/13/2004	--
392049077554601	Jef-0659S	Blue Spring	Stonehenge Limestone	9/15/2004	--
392051077544301	Jef-0602	Old Dodson Farm Well	Stonehenge Limestone	9/15/2004	61
392051077544302	Jef-0752	New Dodson Farm Well	Stonehenge Limestone	9/8/2005	166
392101077554901	Jef-0590	Ball Field Well	Rockdale Run Formation	9/16/2004	160
392102077552001	Jef-0753	New Kaiser Farm Well	Stonehenge Limestone	9/14/2005	121
392102077554801	Jef-0584	Bone Yard Upper Well	Rockdale Run Formation	9/16/2004	113
392110077555201	Jef-0327S	Balch Spring	Rockdale Run Formation	9/14/2004	--
392115077544801	Jef-0589	Anticline Well	Rockdale Run Formation	9/13/2004	260
392117077550301	Jef-0592 ¹	Stable C Well	Stonehenge Limestone	7/27/2004	321
392117077550302	Jef-0585 ¹	Stable B Well	Stonehenge Limestone	7/21/2004	326
392117077550304	Jef-0601	Stable A Well	Stonehenge Limestone	9/14/2004	312
392119077554701	Jef-0603	USDA Sulfur Well	Martinsburg Formation	9/16/2004	475
392121077551701	Jef-0587	Low Road Well	Conococheague Limestone	9/14/2004	410
392035077544001	Jef-0306S	Bell Spring	Stoufferstown Member	7/22/2004	--

Table 1 (continued). Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Water level, below land surface (feet)	Landsurface altitude (feet)	Redox potential millivolts	Turbidity (NTU)	Dissolved oxygen (mg/L)	Dissolved oxygen, (% saturation)	pH (standard units)
Jef-0594	9/15/2004	6.35	491.67	128	2.4	1.8	18	6.7
Jef-0521S	9/13/2004	--	478.32	179	<1	4.4	41	6.6
Jef-0659S	9/15/2004	--	479.37	136	0.45	4.1	39	6.8
Jef-0602	9/15/2004	--	510.05	112	240	4.0	39	6.7
Jef-0752	9/8/2005	--	522.59	279	270	6.0	57	6.6
Jef-0590	9/16/2004	22.53	478.06	99	11	3.1	30	6.7
Jef-0753	9/14/2005	8.09	512.42	228	2.9	3.9	38	6.7
Jef-0584	9/16/2004	22.91	479.16	-8	43	<2.0	--	6.6
Jef-0327S	9/14/2004	--	456.10	121	0.88	4.0	39	6.9
Jef-0589	9/13/2004	24.6	516.76	124	--	2.9	28	6.7
Jef-0592 ¹	7/27/2004	35.58	528.55	--	--	1.3	--	7.0
Jef-0585 ¹	7/21/2004	38.56	529.89	44	1.0	1.1	10	7.0
Jef-0601	9/14/2004	43.45	532.36	131	5.1	6.6	66	6.8
Jef-0603	9/16/2004	38.48	489.72	340	7.0	0.6	6.0	7.0
Jef-0587	9/14/2004	42.16	533.93	119	6.9	1.6	16	6.7
Jef-0306S	7/22/2004	--	483.00	--	--	--	--	6.8

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Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Specific conductance at @25 °C (µS/cm)	Temperature, water (°C)	Hardness, water (mg/L CaCO ₃)	Non-Carbonate hardness, dissolved (mg/L CaCO ₃)	Calcium, dissolved (mg/L)	Magnesium, dissolved (mg/L)	Potassium, dissolved (mg/L)
Jef-0594	9/15/2004	694	15.3	360	90	132	6.45	1.87
Jef-0521S	9/13/2004	773	12.1	340	96	120	8.49	1.58
Jef-0659S	9/15/2004	623	13.3	320	85	115	8.35	1.74
Jef-0602	9/15/2004	621	13.2	350	87	125	8.27	2.28
Jef-0752	9/8/2005	602	12.6	--	--	--	--	--
Jef-0590	9/16/2004	634	12.6	360	77	129	7.79	1.65
Jef-0753	9/14/2005	623	13.6	340	33	127	5.24	1.1
Jef-0584	9/16/2004	667	13.6	350	45	128	7.53	1.79
Jef-0327S	9/14/2004	579	13.7	290	24	105	7.48	1.97
Jef-0589	9/13/2004	586	13.3	320	57	113	7.94	1.98
Jef-0592 ¹	7/27/2004	586	14.5	--	--	² 110	² 8.20	² 1.1
Jef-0585 ¹	7/21/2004	581	13.7	--	--	² 92.4	² 23.20	² 1.1
Jef-0601	9/14/2004	630	14.9	350	25	129	7.79	1.18
Jef-0603	9/16/2004	3180	14.1	550	240	116	59.9	7.66
Jef-0587	9/14/2004	975	13.9	490	120	142	30.7	1.42
Jef-0306S	7/22/2004	565	11.4	--	--	² 102	² 8.9	² 2.2

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Sodium, dissolved (mg/L)	Alkalinity, dissolved (mg/L CaCO ₃)	Bicarbonate, dissolved (mg/L)	Carbonate, Dissolved (mg/L)	Bromide, dissolved (mg/L)	Chloride, dissolved (mg/L)	Fluoride, dissolved (mg/L)
Jef-0594	9/15/2004	4.12	266	324	<1	0.01	9.14	<0.2
Jef-0521S	9/13/2004	2.83	240	293	<1	0.02	7.54	<0.2
Jef-0659S	9/15/2004	2.94	238	290	<1	0.01	7.5	<0.2
Jef-0602	9/15/2004	3.98	259	316	<1	0.03	8.83	<0.2
Jef-0752	9/8/2005	--	--	--	--	--	--	--
Jef-0590	9/16/2004	3.46	278	339	<1	0.03	7.67	<0.2
Jef-0753	9/14/2005	4.87	305	372	<1	--	9.48	0.1
Jef-0584	9/16/2004	5.43	307	374	<1	0.04	11.5	<0.2
Jef-0327S	9/14/2004	17.3	270	329	<1	0.04	14.4	<0.2
Jef-0589	9/13/2004	2.56	259	316	<1	0.02	5.59	0.2
Jef-0592 ¹	7/27/2004	² 4.03	263	321	<1	--	--	--
Jef-0585 ¹	7/21/2004	² 4.28	284	346	<1	--	--	--
Jef-0601	9/14/2004	5.5	330	402	<1	0.02	10.1	0.2
Jef-0603	9/16/2004	402	304	371	<1	0.68	538	1.9
Jef-0587	9/14/2004	28.5	373	455	<1	0.04	84.2	0.2
Jef-0306S	7/22/2004	² 3.4	313	382	² <1	² <0.05	² 8.4	² 0.2

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Silica, dissolved (mg/L)	Sulfate, dissolved (mg/L)	Residue, whole, sum of constituents (mg/L)	Residue on evaporation @ 180 °C, dissolved (mg/L)	Ammonia, dissolved (mg/L as N)	NO ₂ +NO ₃ , dissolved (mg/L as N)	Nitrite, dissolved (mg/L as N)
Jef-0594	9/15/2004	12.2	16.4	379	264	E0.03	8.53	<0.008
Jef-0521S	9/13/2004	11.4	17.5	332	170	<0.04	3.8	<0.008
Jef-0659S	9/15/2004	11.1	16.7	324	233	<0.04	3.89	<0.008
Jef-0602	9/15/2004	12.6	16.2	356	233	<0.04	5.27	<0.008
Jef-0752	9/8/2005	--	--	--	--	--	--	--
Jef-0590	9/16/2004	11.2	17.5	350	189	<0.04	1	<0.008
Jef-0753	9/14/2005	12	12.8		364	<0.04	1.78	<0.008
Jef-0584	9/16/2004	10.9	16.1	367	228	<0.04	0.14	<0.008
Jef-0327S	9/14/2004	11.4	16.7	345	240	<0.04	1.78	<0.008
Jef-0589	9/13/2004	10.3	15.6	323	186	0.07	2.24	<0.008
Jef-0592 ¹	7/27/2004	² 11.3	--	--	--	--	--	--
Jef-0585 ¹	7/21/2004	² 11.3	--	--	--	--	--	--
Jef-0601	9/14/2004	15.2	14.2	395	249	<0.04	3.18	<0.008
Jef-0603	9/16/2004	13.2	409	1740	1720	0.61	<0.06	<0.008
Jef-0587	9/14/2004	14.8	33.8	577	398	<0.04	1.48	0.014
Jef-0306S	7/22/2004	² 10.8	² 17.9	--	--	--	² 4.87	--

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Orthophosphate, dissolved (mg/L as P)	E. coli, NA-MUG (colonies/100mL)	Fecal coliforms (colonies/100mL)	Total Coliform, M-Endo (colonies/100mL)	Aluminum, dissolved (µg/L)	Antimony, dissolved (µg/L)
Jef-0594	9/15/2004	<0.02	5	3	290	<2	<0.2
Jef-0521S	9/13/2004	<0.02	1	<1	143	<2	<0.2
Jef-0659S	9/15/2004	<0.02	1	1	55	<2	<0.2
Jef-0602	9/15/2004	<0.02	20	37	700	<2	<0.2
Jef-0752	9/8/2005	--	--	--	--	--	--
Jef-0590	9/16/2004	<0.02	<1	1	E105	<2	<0.2
Jef-0753	9/14/2005	<0.02	--	--	--	E1	<0.2
Jef-0584	9/16/2004	<0.02	<1	<1	<92	<2	<0.2
Jef-0327S	9/14/2004	<0.02	2	4	360	<2	<0.2
Jef-0589	9/13/2004	<0.02	<1	<1	280	<2	<0.2
Jef-0592 ¹	7/27/2004	--	--	--	--	² <1	--
Jef-0585 ¹	7/21/2004	--	--	--	--	² 1	--
Jef-0601	9/14/2004	<0.02	<1	<1	207	<2	<0.2
Jef-0603	9/16/2004	<0.02	<1	<1	<1	<3	E0.21
Jef-0587	9/14/2004	<0.02	<1	<1	68	<2	E0.19
Jef-0306S	7/22/2004	--	--	--	--	² 3	--

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Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Arsenic, dissolved (µg/L)	Barium, dissolved (µg/L)	Beryllium, dissolved (µg/L)	Boron, dissolved (µg/L)	Cadmium, dissolved (µg/L)	Chromium, dissolved (µg/L)	Cobalt, dissolved (µg/L)
Jef-0594	9/15/2004	E0.1	46	<0.06	<8	<0.04	<0.8	0.355
Jef-0521S	9/13/2004	<0.2	47	<0.06	<8	<0.04	E0.5	0.303
Jef-0659S	9/15/2004	E0.1	47	<0.06	<8	<0.04	E0.4	0.31
Jef-0602	9/15/2004	<0.2	63	<0.06	E5	<0.04	E0.5	0.476
Jef-0752	9/8/2005	--	--	--	--	--	--	--
Jef-0590	9/16/2004	<0.2	52	<0.06	<8	<0.04	<0.8	0.482
Jef-0753	9/14/2005	E0.06	38	<0.06	8	<0.04	E0.03	<0.04
Jef-0584	9/16/2004	<0.2	55	<0.06	E4	<0.04	<0.8	0.431
Jef-0327S	9/14/2004	<0.2	51	<0.06	E6	<0.04	<0.8	0.225
Jef-0589	9/13/2004	<0.2	50	<0.06	<8	<0.04	E0.5	0.409
Jef-0592 ¹	7/27/2004	² <1	² 39.3	--	² <20	² <0.05	--	--
Jef-0585 ¹	7/21/2004	² <1	² 73.4	--	² <20	² <0.05	--	--
Jef-0601	9/14/2004	<0.2	33	<0.06	<8	<0.04	1.5	0.403
Jef-0603	9/16/2004	E0.2	55	<0.12	770	<0.08	<0.8	0.41
Jef-0587	9/14/2004	0.4	95	<0.06	8	<0.04	<0.8	1.15
Jef-0306S	7/22/2004	² 0.2	² 100	--	² <10	--	² <1.0	--

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Copper, dissolved (µg/L)	Iron, dissolved (µg/L)	Lead, dissolved (µg/L)	Lithium, dissolved (µg/L)	Manganese, dissolved (µg/L)	Molybdenum, dissolved (µg/L)	Nickel, dissolved (µg/L)
Jef-0594	9/15/2004	0.4	7	<0.08	0.8	E0.1	<0.4	0.21
Jef-0521S	9/13/2004	0.5	E6	<0.08	2.2	<0.2	E0.3	0.10
Jef-0659S	9/15/2004	0.4	<6	<0.08	2.3	0.2	<0.4	0.14
Jef-0602	9/15/2004	0.6	E6	<0.08	3.7	0.5	<0.4	0.40
Jef-0752	9/8/2005	--	--	--	--	--	--	--
Jef-0590	9/16/2004	0.6	9	<0.08	2.3	1.3	<0.4	0.45
Jef-0753	9/14/2005		14	<0.08	1.9	0.4	<0.4	
Jef-0584	9/16/2004	0.5	7	<0.08	2.4	6.2	<0.4	0.42
Jef-0327S	9/14/2004	0.4	<6	<0.08	2.6	E0.2	<0.4	0.38
Jef-0589	9/13/2004	0.7	E4	<0.08	2.7	22.5	E0.3	0.80
Jef-0592 ¹	7/27/2004	² 16.6	² 20	² 0.12	² 3.0	² 12	--	² 0.60
Jef-0585 ¹	7/21/2004	² 7.1	² <10	² <0.05	² 5.0	² 6.0	--	² 0.40
Jef-0601	9/14/2004	0.5	<6	<0.08	3.3	0.2	E0.3	0.92
Jef-0603	9/16/2004	5.8	20	<0.16	512	9.4	<0.8	1.65
Jef-0587	9/14/2004	0.8	E3	0.12	4.0	3.2	0.5	2.90
Jef-0306S	7/22/2004	² 2.5	² <10	² <0.05	² 4.0	² 1.0	² <0.1	--

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Selenium, dissolved (µg/L)	Silver, dissolved (µg/L)	Strontium, dissolved (µg/L)	Thallium, dissolved (µg/L)	Vanadium, dissolved (µg/L)	Zinc, dissolved (µg/L)	CIAT, dissolved (µg/L)
Jef-0594	9/15/2004	<0.4	<0.2	244	<0.04	0.8	<0.6	E0.364
Jef-0521S	9/13/2004	<0.4	<0.2	804	<0.04	1.1	E0.3	E0.143
Jef-0659S	9/15/2004	E0.2	<0.2	780	<0.04	0.8	<0.6	E0.159
Jef-0602	9/15/2004	<0.4	<0.2	543	<0.04	0.2	<0.6	E0.338
Jef-0752	9/8/2005	--	--	--	--	--	--	--
Jef-0590	9/16/2004	E0.3	<0.2	866	<0.04	1.6	<0.6	--
Jef-0753	9/14/2005	0.13	<0.2	250	<0.04	0.1	42.3	E0.024
Jef-0584	9/16/2004	<0.4	<0.2	790	<0.04	1.6	<0.6	--
Jef-0327S	9/14/2004	<0.4	<0.2	691	<0.04	1.2	<0.6	E0.183
Jef-0589	9/13/2004	<0.4	<0.2	426	<0.04	1.1	1.9	E0.157
Jef-0592 ¹	7/27/2004	² <1	--	² 289	--	² 0.4	--	--
Jef-0585 ¹	7/21/2004	² <1	--	² 736	--	² 0.3	--	--
Jef-0601	9/14/2004	<0.4	<0.2	245	<0.04	1.4	8	E0.039
Jef-0603	9/16/2004	0.8		8450	<0.08	0.7	2.7	<0.006
Jef-0587	9/14/2004	1.8	<0.2	11300	<0.04	1.7	4.7	--
Jef-0306S	7/22/2004	--		² 1060	--	² <0.1	² <1.0	--

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Atrazine, dissolved (µg/L)	Phenol, dissolved (µg/L)	Phenol, total (µg/L)	Prometon, dissolved (µg/L)	Simazine, dissolved (µg/L)	Tebuthiuron, dissolved (µg/L)	Terbacil, dissolved (µg/L)
Jef-0594	9/15/2004	0.19			<0.01	0.024	0.12	<0.034
Jef-0521S	9/13/2004	0.128	0.9	<1.6	0.01	0.034	<0.02	<0.034
Jef-0659S	9/15/2004	0.135	<0.5	<1.6	0.01	0.035	0.02	<0.034
Jef-0602	9/15/2004	0.226	<0.5	<1.6	0.02	0.045	E0.01	<0.034
Jef-0752	9/8/2005	--	--	--	--	--	--	--
Jef-0590	9/16/2004	--	--	--	--	--	--	--
Jef-0753	9/14/2005	0.01	--	--	<0.01	<0.005	<0.02	<0.034
Jef-0584	9/16/2004	--	--	--	--	--	--	--
Jef-0327S	9/14/2004	0.125	0.6	E1.2	0.01	0.028	<0.02	<0.034
Jef-0589	9/13/2004	0.094	--	--	0.01	0.023	<0.02	<0.034
Jef-0592 ¹	7/27/2004	--	--	--	--	--	--	--
Jef-0585 ¹	7/21/2004	--	--	--	--	--	--	--
Jef-0601	9/14/2004	0.036	--	--	0.07	0.013	<0.02	E0.016
Jef-0603	9/16/2004	<0.007	--	--	<0.01	<0.005	<0.02	<0.034
Jef-0587	9/14/2004	--	--	--	--	--	--	--
Jef-0306S	7/22/2004	--	--	--	--	--	--	--

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Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	1,1,1-Trichloro-ethane, total (µg/L)	1,2,4-Trimethyl-benzene, total (µg/L)	Acetone, total (µg/L)	m- + p-Xylene, total (µg/L)	o-Xylene, total (µg/L)	Tetrachloroethene, total (µg/L)	Toluene, total (µg/L)
Jef-0594	9/15/2004	<0.03	<0.06	<6	<0.06	<0.04	<0.06	<0.05
Jef-0521S	9/13/2004	<0.03	<0.06	<6	<0.06	<0.04	<0.06	<0.05
Jef-0659S	9/15/2004	<0.03	<0.06	<6	<0.06	<0.04	<0.06	<0.05
Jef-0602	9/15/2004	E0.04	<0.06	<6	<0.06	<0.04	E0.02	<0.05
Jef-0752	9/8/2005	E0.04	<0.06	8	<0.06	<0.04	<0.03	0.45
Jef-0590	9/16/2004	<0.03	<0.06	<6	<0.06	<0.04	<0.06	<0.05
Jef-0753	9/14/2005	<0.03	<0.06	<6	<0.06	<0.04	E0.02	1.1
Jef-0584	9/16/2004	--	--	--	--	--	--	--
Jef-0327S	9/14/2004	<0.03	<0.06	<6	<0.06	<0.04	<0.06	<0.05
Jef-0589	9/13/2004	E0.05	E0.03	<6	E0.04	E0.03	<0.06	E0.05
Jef-0592 ¹	7/27/2004	--	--	--	--	--	--	--
Jef-0585 ¹	7/21/2004	--	--	--	--	--	--	--
Jef-0601	9/14/2004	<0.03	<0.06	<6	<0.06	<0.04	<0.06	E0.03
Jef-0603	9/16/2004	--	--	--	--	--	--	--
Jef-0587	9/14/2004	--	--	--	--	--	--	--
Jef-0306S	7/22/2004	--	--	--	--	--	--	--

Table 1--continued. Water quality data from samples collected at the USGS Leetown Science Center, Leetown, West Virginia.

Local identifier	Date	Trichloromethane, total (µg/L)	Rn-222, total (pCi/L)	Tritium, total (pCi/L)	Uranium, dissolved (µg/L)
Jef-0594	9/15/2004	<0.02	1180	--	0.47
Jef-0521S	9/13/2004	<0.02	--	25.3	0.35
Jef-0659S	9/15/2004	<0.02	--	25	0.34
Jef-0602	9/15/2004	<0.02	800	--	0.29
Jef-0752	9/8/2005	<0.02	--	--	
Jef-0590	9/16/2004	E0.02	1100	--	0.35
Jef-0753	9/14/2005	<0.02	840	--	0.39
Jef-0584	9/16/2004	--	1280	--	0.3
Jef-0327S	9/14/2004	0.48	--	25.6	0.27
Jef-0589	9/13/2004	<0.02	650	--	0.28
Jef-0592 ¹	7/27/2004	--	--	24.6	² 0.4
Jef-0585 ¹	7/21/2004	--	--	19.8	² 0.92
Jef-0601	9/14/2004	<0.02	1080	--	0.63
Jef-0603	9/16/2004	--	10	--	<0.08
Jef-0587	9/14/2004	--	250	--	1.48
Jef-0306S	7/22/2004	--	--	--	² 0.30

¹Data were collected from discrete intervals using a packer assembly.

² Data for calcium, magnesium, sodium, and potassium were analyzed by inductively coupled plasma (icp) methods and data for arsenic, boron, barium, cadmium, copper, lithium, manganese, nickel, lead, selenium, strontium, uranium, and vanadium were analyzed by icp with mass spectrometry (icpms) at the USGS dissolved gas laboratory in Reston Virginia. All other data in this table were analyzed by standard laboratory methods at the USGS National Water Quality laboratory in Lakewood Colorado.

Appendix 6. Table 2. Additional laboratory analyses conducted on samples collected from wells and springs in the Leetown area, West Virginia.

Local Station Number	Local Station Name	Date Sampled	VOCs (Schedule 2020)	Organo-phosphate + Organochlorine Pesticides (Schedule 1399)	Triazine Pesticides (Schedule 2001)	Waste-Water Compounds (Schedule 1433)	Semi-Volatile Compounds (Schedule 1383)
Jef-0601	Stable well A	09/14/04	X	X	X		
Jef-0585	Stable well B	07/21/04					
Jef-0592	Stable well C	07/27/04					
Jef-0327S	Balch Spring	09/14/04	X	X	X	X	X
Jef-0659S	Blue Spring	09/15/04	X	X	X	X	X
Jef-0521S	Gray Spring	09/13/04	X	X	X	X	X
Jef-0589	Anticline well	09/13/04	X	X	X		
Jef-0587	Low road well	09/14/04					
Jef-0584	Boneyard upper well	09/24/04					
Jef-0594	Tabb lower piezometer	09/15/04	X	X	X		
Jef-0590	Ball field well	09/16/04	X				
Jef-0603	USDA sulfur well	09/16/04		X	X		
Jef-0602	Old Dodson farm well	09/15/04	X	X	X	X	X
Jef-0753	New Kaiser farm well	09/14/05	X	X	X		
Jef-0752	New Dodson farm well	09/08/05	X				
Jef-0306S	Bell Spring	07/22/04					

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
Volatile Organic Compounds (VOCs) in Unfiltered Water Samples			
1,2,3,4-Tetramethylbenzene	49999	488-23-3	0.14
1,2,3,5-Tetramethylbenzene	50000	527-53-7	0.12
2-Butanone	81595	78-93-3	1.6
trans-1,4-Dichloro-2-butene	73547	110-57-6	0.6
2-Hexanone	77103	591-78-6	0.6
4-Methyl-2-pentanone	78133	108-10-1	0.4
Acetone	81552	67-64-1	4
Acrylonitrile	34215	107-13-1	0.4
Benzene	34030	71-43-2	0.016
1,2,3-Trichlorobenzene	77613	87-61-6	0.08
1,2,3-Trimethylbenzene	77221	526-73-8	0.08
1,2,4-Trichlorobenzene	34551	120-82-1	0.08
Bromobenzene	81555	108-86-1	0.02
Chlorobenzene	34301	108-90-7	0.02
Ethylbenzene	34371	100-41-4	0.04
1,3-Dichlorobenzene	34566	541-73-1	0.04
Butylbenzene	77342	104-51-8	0.14
n-Propylbenzene	77224	103-65-1	0.04
1,2-Dichlorobenzene	34536	95-50-1	0.02
1,4-Dichlorobenzene	34571	106-46-7	0.02
sec-Butylbenzene	77350	135-98-8	0.04
tert-Butylbenzene	77353	98-06-6	0.06
Bromoethene	50002	593-60-2	0.12
Bromoform	32104	75-25-2	0.08
Hexachlorobutadiene	39702	87-68-3	0.06
Carbon disulfide	77041	75-15-0	0.06
Tetrachloromethane	32102	56-23-5	0.08
Chloroform	32106	67-66-3	0.02
Isopropylbenzene	77223	98-82-8	0.04

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
1,1,1,2-Tetrachloroethane	77562	630-20-6	0.04
1,1,1-Trichloroethane	34506	71-55-6	0.02
1,1,2-Trichlorotrifluoroethane	77652	76-13-1	0.04
1,2-Dibromoethane	77651	106-93-4	0.04
1,2-Dichloroethane	32103	107-06-2	0.06
Hexachloroethane	34396	67-72-1	0.14
1,1,2,2-Tetrachloroethane	34516	79-34-5	0.1
Chloroethane	34311	75-00-3	0.1
Diethyl ether	81576	60-29-7	0.12
Ethyl tert-butyl ether	50004	637-92-3	0.04
cis-1,2-Dichloroethylene	77093	156-59-2	0.02
Tetrachloroethylene	34475	127-18-4	0.04
trans-1,2-Dichloroethylene	34546	156-60-5	0.018
Trichloroethylene	39180	79-01-6	0.02
1,1-Dichloroethane	34496	75-34-3	0.04
Tetrahydrofuran	81607	109-99-9	1.4
Diisopropyl ether	81577	108-20-3	0.06
m- and p-Xylene	85795	m=108-38-3 p=106-42-3	0.08
1,3,5-Trimethylbenzene	77226	108-67-8	0.04
Ethyl methacrylate	73570	97-63-2	0.14
Methyl methacrylate	81597	80-62-6	0.2
Methyl acrylonitrile	81593	126-98-7	0.2
Bromochloromethane	77297	74-97-5	0.06
Bromodichloromethane	32101	75-27-4	0.04
Dibromochloromethane	32105	124-48-1	0.12

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
Dichlorodifluoromethane	34668	75-71-8	0.14
Trichlorofluoromethane	34488	75-69-4	0.08
Methyl acrylate	49991	96-33-3	0.6
Bromomethane	34413	74-83-9	0.4
Chloromethane	34418	74-87-3	0.1
Methyl iodide	77424	74-88-4	0.4
tert-Butyl methyl ether	78032	1634-04-4	0.1
Dibromomethane	30217	74-95-3	0.04
Dichloromethane	34423	75-09-2	0.04
Naphthalene	34696	91-20-3	0.2
o-Xylene	77135	95-47-6	0.04
4-Isopropyl-1-methylbenzene	77356	99-87-6	0.08
1,2,3-Trichloropropane	77443	96-18-4	0.12
1,3-Dichloropropane	77173	142-28-9	0.06
2,2-Dichloropropane	77170	594-20-7	0.06
1,2-Dibromo-3-chloropropane	82625	96-12-8	0.5
1,1-Dichloropropene	77168	563-58-6	0.04
3-Chloropropene	78109	107-05-1	0.08
cis-1,3-Dichloropropene	34704	10061-01-5	0.1
trans-1,3-Dichloropropene	34699	10061-02-6	0.1
1,2-Dichloropropane	34541	78-87-5	0.02
1,2,4-Trimethylbenzene	77222	95-63-6	0.04
Styrene	77128	100-42-5	0.04
tert-Pentyl methyl ether	50005	994-05-8	0.06
Toluene	34010	108-88-3	0.018
2-Chlorotoluene	77275	95-49-8	0.04
o-Ethyl toluene	77220	611-14-3	0.04
4-Chlorotoluene	77277	106-43-4	0.04
Vinyl chloride	39175	75-01-4	0.08
1,1,2-Trichloroethane	34511	79-00-5	0.06

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
1,1-Dichloroethylene	34501	75-35-4	0.02
Organochlorine and Organophosphate Pesticides And Gross PCBs in Unfiltered Water Samples			
Aldrin	39330	309-00-2	0.0018
S,S,S-Tributylphosphorothioate	39040	78-48-8	0.02
Chlordane, technical mix -mrl	39350	57-74-9	0.1
Chlorpyrifos	38932	2921-88-2	0.02
Diazinon	39570	333-41-5	0.02
Dieldrin	39380	60-57-1	0.0016
Disulfoton	39011	298-04-4	0.02
alpha-Endosulfan	39388	959-98-8	0.0016
Endrin	39390	72-20-8	0.0019
Ethion	39398	563-12-2	0.018
Fonofos	82614	944-22-9	0.018
Heptachlor	39410	76-44-8	0.0016
Heptachlor epoxide	39420	1024-57-3	0.0016
Lindane	39340	58-89-9	0.0014
Malathion -mrl	39530	121-75-5	0.1
p,p'-Methoxychlor	39480	72-43-5	0.002
Parathion-methyl	39600	298-00-0	0.018
Mirex	39755	2385-85-5	0.0011
p,p'-DDD	39360	72-54-8	0.0012
p,p'-DDE	39365	72-55-9	0.0019
p,p'-DDT	39370	50-29-3	0.0014
Parathion	39540	56-38-2	0.02
Polychlorinated biphenyls, total -mrl	39516	1336-36-3	0.1
Phorate	39023	298-02-2	0.019
Toxaphene -mrl	39400	8001-35-2	1
Carbophenothion	39786	786-19-6	0.02
Triazine Pesticides in Filtered Water Samples			
alpha-HCH	34253	319-84-6	0.002
Acetochlor	49260	34256-82-1	0.006
Alachlor	46342	15972-60-8	0.006

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
2,6-Diethylaniline	82660	579-66-8	0.002
Atrazine	39632	1912-24-9	0.007
Azinphos-methyl	82686	86-50-0	0.12
Benfluralin	82673	1861-40-1	0.004
Butylate	4028	2008-41-5	0.002
Carbaryl	82680	63-25-2	0.06
Carbofuran	82674	1563-66-2	0.02
Chlorpyrifos	38933	2921-88-2	0.005
cis-Permethrin	82687	54774-45-7	0.01
Cyanazine	4041	21725-46-2	0.02
Dacthal	82682	1861-32-1	0.003
2-Chloro-4-isopropylamino-6-amino-s-triazine {CIAT}	4040	6190-65-4	0.014
Diazinon	39572	333-41-5	0.005
Dieldrin	39381	60-57-1	0.009
Disulfoton	82677	298-04-4	0.04
EPTC	82668	759-94-4	0.002
Ethalfuralin	82663	55283-68-6	0.009
Ethoprophos	82672	13194-48-4	0.012
Desulfinylfipronil amide	62169		0.029
Fipronil sulfide	62167	120067-83-6	0.013
Fipronil sulfone	62168	120068-36-2	0.024
Desulfinylfipronil	62170		0.012
Fipronil	62166	120068-37-3	0.02
Fonofos	4095	944-22-9	0.01
Lindane	39341	58-89-9	0.006
Linuron	82666	330-55-2	0.06
Malathion	39532	121-75-5	0.016
Parathion-methyl	82667	298-00-0	0.008
Metolachlor	39415	51218-45-2	0.01
Metribuzin	82630	21087-64-9	0.012
Molinate	82671	2212-67-1	0.002
Napropamide	82684	15299-99-7	0.018
p,p'-DDE	34653	72-55-9	0.003
Parathion	39542	56-38-2	0.01
Pebulate	82669	1114-71-2	0.004

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
Pendimethalin	82683	40487-42-1	0.012
Phorate	82664	298-02-2	0.04
Prometon	4037	1610-18-0	0.008
Propyzamide	82676	23950-58-5	0.004
Propachlor	4024	1918-16-7	0.006
Propanil	82679	709-98-8	0.006
Propargite	82685	2312-35-8	0.04
Simazine	4035	122-34-9	0.006
Tebuthiuron	82670	34014-18-1	0.016
Terbacil	82665	5902-51-2	0.018
Terbufos	82675	13071-79-9	0.018
Thiobencarb	82681	28249-77-6	0.01
Tri-allate	82678	2303-17-5	0.006
Trifluralin	82661	1582-09-8	0.006
Waste-Water Compounds in Filtered Water Samples			
Cotinine	62005	486-56-6	0.4
5-Methyl-1H-benzotriazole	62063	136-85-6	0.08
Anthraquinone	62066	84-65-1	0.16
Acetophenone	62064	98-86-2	0.1
Acetyl hexamethyl tetrahydronaphthalene (AHTN)	62065	21145-77-7	0.5
Anthracene	34221	120-12-7	0.08
1,4-Dichlorobenzene	34572	106-46-7	0.08
Benzo[a]pyrene	34248	50-32-8	0.12
Benzophenone	62067	119-61-9	0.12
Bromacil	4029	314-40-9	0.4
Bromoform	34288	75-25-2	0.08
3-tert-Butyl-4-hydroxy anisole (BHA)	62059	25013-16-5	0.6
Caffeine	50305	58-08-2	0.1
Camphor	62070	76-22-2	0.1
Carbaryl	82680	63-25-2	1
Carbazole	62071	86-74-8	0.08
Chlorpyrifos	38933	2921-88-2	0.12
Cholesterol	62072	57-88-5	1.4
3-beta-Coprostanol	62057	360-68-9	1

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
Isopropylbenzene	62078	98-82-8	0.1
N,N-diethyl-met-toluamide (DEET)	62082	134-62-3	0.1
Diazinon	39572	333-41-5	0.08
Bisphenol A	62069	80-05-7	0.4
Triethyl citrate (ethyl citrate)	62091	77-93-0	0.2
Tetrachloroethylene	34476	127-18-4	0.08
Fluoranthene	34377	206-44-0	0.08
Hexahydrohexamethylcyclopentabenzopyran (HHCB)	62075	1222-05-5	0.5
Indole	62076	120-72-9	0.14
Isoborneol	62077	124-76-5	0.06
Isophorone	34409	78-59-1	0.08
Isoquinoline	62079	119-65-3	0.2
d-Limonene	62073	5989-27-5	0.04
Menthol	62080	89-78-1	0.2
Metalaxyl	50359	57837-19-1	0.08
Metolachlor	39415	51218-45-2	0.08
Naphthalene	34443	91-20-3	0.1
1-Methylnaphthalene	62054	90-12-0	0.1
2,6-Dimethylnaphthalene	62055	581-42-0	0.12
2-Methylnaphthalene	62056	91-57-6	0.08
4-Nonylphenol diethoxylates	62083		5
4-Octylphenol diethoxylates	61705		1
4-Octylphenol monoethoxylates	61706		1
p-Cresol	62084	106-44-5	0.18
4-Cumylphenol	62060	599-64-4	0.1
para-Nonylphenol (total)	62085	84852-15-3	1
4-n-Octylphenol	62061	1806-26-4	0.16
4-tert-Octylphenol	62062	140-66-9	1
Phenanthrene	34462	85-01-8	0.08

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
Phenol	34466	108-95-2	0.2
Pentachlorophenol	34459	87-86-5	2
Tributyl phosphate	62089	126-73-8	0.2
Triphenyl phosphate	62092	115-86-6	0.1
Tris(2-butoxyethyl)phosphate	62093	78-51-3	0.4
Tris(2-chloroethyl)phosphate	62087	115-96-8	0.1
Prometon	4037	1610-18-0	0.18
Pyrene	34470	129-00-0	0.08
Methyl salicylate	62081	119-36-8	0.1
3-Methyl-1(H)-indole (Skatole)	62058	83-34-1	0.08
beta-Sitosterol	62068	83-46-5	1.6
beta-Stigmasteranol	62086	19466-47-8	1.2
Triclosan	62090	3380-34-5	0.2
	62088	13674-87-8	0.12
Semi-Volatile Compounds in Unfiltered Water Samples			
Dibenz[a,h]anthracene	34556	53-70-3	0.4
Chrysene	34320	218-01-9	0.33
bis(2-chloroisopropyl) ether	34283	108-60-1	0.38
2,4-Dimethylphenol	34606	105-67-9	0.6
4,6-Dinitro-2-methylphenol	34657	534-52-1	0.77
4-Bromophenylphenylether	34636	101-55-3	0.36
4-Chlorophenyl phenyl ether	34641	7005-72-3	0.34
Fluorene	34381	86-73-7	0.33
Acenaphthene	34205	83-32-9	0.28
Acenaphthylene	34200	208-96-8	0.3
Anthracene	34220	120-12-7	0.39
Benz[a]anthracene	34526	56-55-3	0.26
1,2,4-Trichlorobenzene	34551	120-82-1	0.2

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
Hexachlorobenzene	39700	118-74-1	0.3
1,3-Dichlorobenzene	34566	541-73-1	0.2
Nitrobenzene	34447	98-95-3	0.21
1,2-Dichlorobenzene	34536	95-50-1	0.2
1,4-Dichlorobenzene	34571	106-46-7	0.2
Benzidine	39120	92-87-5	1000
3,3'-Dichlorobenzidine	34631	91-94-1	0.4
Benzo[a]pyrene	34247	50-32-8	0.33
Benzo[b]fluoranthene	34230	205-99-2	0.4
Benzo[ghi]perylene	34521	191-24-2	0.4
Benzo[k]fluoranthene	34242	207-08-9	0.4
bis(2-Chloroethyl)ether	34273	111-44-4	0.3
Hexachlorobutadiene	39702	87-68-3	0.2
Hexachlorocyclopentadiene	34386	77-47-4	0.4
N-Nitrosodi-n-propylamine	34428	621-64-7	0.4
N-Nitrosodimethylamine	34438	62-75-9	0.33
N-Nitrosodiphenylamine	34433	86-30-6	0.4
Hexachloroethane	34396	67-72-1	0.2
Fluoranthene	34376	206-44-0	0.3
1,2-Diphenylhydrazine	82626	122-66-7	0.3
Indeno[1,2,3-cd]pyrene	34403	193-39-5	0.4
Isophorone	34408	78-59-1	0.4
4-Chloro-3-methylphenol	34452	59-50-7	0.55
bis(2-Chloroethoxy)methane	34278	111-91-1	0.35
Naphthalene	34696	91-20-3	0.32

Table 3. Compounds not detected in any sample collected from the Leetown area, West Virginia.

Analyte	USGS Parameter Code	CAS Number ¹	Reporting Limit (µg/L)
2-Chloronaphthalene	34581	91-58-7	0.2
Phenanthrene	34461	85-01-8	0.32
Phenol	34694	108-95-2	0.44
2,4,6-Trichlorophenol	34621	88-06-2	0.6
2,4-Dichlorophenol	34601	120-83-2	0.39
2,4-Dinitrophenol	34616	51-28-5	0.8
2-Chlorophenol	34586	95-57-8	0.42
2-Nitrophenol	34591	88-75-5	0.6
4-Nitrophenol	34646	100-02-7	0.51
Pentachlorophenol	39032	87-86-5	0.4
bis(2-Ethylhexyl)phthalate	39100	117-81-7	2
Butylbenzyl phthalate	34292	85-68-7	0.4
Di-n-butyl phthalate	39110	84-74-2	0.4
Diethyl phthalate	34336	84-66-2	0.61
Dimethyl phthalate	34341	131-11-3	0.59
Di-n-octyl phthalate	34596	117-84-0	0.4
Pyrene	34469	129-00-0	0.35
2,4-Dinitrotoluene	34611	121-14-2	0.43
2,6-Dinitrotoluene	34626	606-20-2	0.43

¹This table contains CAS Registry Numbers®, which is a Registered Trademark of the American Chemical Society. CAS recommends the verification of the CASRN through CAS Client Services.