

Table S2: Distribution of inorganic ion contaminants detected across roadside spring and home tap water samples featuring highest concentration. Constituents with concentrations that exceeded SDWA recommendations are bolded and include the ratio of samples exceeding SDWA recommendations. (MCL = Maximum Contaminant Level, TT = Treatment Technique, SMCL = Secondary Maximum Contaminant Level, HRL = Health Reference Level, GL = Guidance Level, BD = below detection limit).

Inorganic Ion Contaminants		Paired Springs (Maximum Value)						Home Sample Locations			
		#1	#2	#3	#4	#5	#6	Floyd County, VA	Craig County, VA	McDowell County, WV	Martin County, KY
MCL	<i>As</i> (> 10 ppb)	BD	0.19	0.05	0.23	0.07	BD	7.27	0.08	5.97	0.24
	<i>Ba</i> (> 2,000 ppb)	34.0	14.7	49.9	25.5	64.6	31.8	44.7	42.3	12,399.0 (2/10)	19.9
	<i>Cd</i> (> 5 ppb)	0.03	0.01	0.02	0.01	0.00	0.01	0.02	0.03	0.42	0.03
	<i>Cr</i> (> 100 ppb)	0.26	0.44	0.10	0.26	0.59	0.25	0.52	0.38	1.00	0.52
	<i>F</i> (> 4 ppm)	0.08	0.03	0.06	0.04	0.10	0.06	0.08	0.02	0.64	0.82
	<i>NO³-N</i> (> 10 ppm)	0.28	0.31	0.10	0.23	0.16	0.09	0.44	0.26	1.11	0.18
	<i>Se</i> (> 50 ppb)	0.12	0.31	2.60	0.41	BD	0.21	0.47	BD	3.93	1.47
	<i>U</i> (> 30 ppb)	0.00	0.06	0.13	0.02	0.03	0.02	6.28	0.04	0.05	0.05
TT	<i>Cu</i> (> 1,300 ppb)	0.88	0.24	0.34	0.46	2.09	0.51	227.6	0.51	332.0	177.4
	<i>Pb</i> (> 15 ppb)	0.02	0.21	BD	0.34	0.23	0.08	0.35	0.47	2.42	3.24
SMCL	<i>Ag</i> (> 100 ppb)	0.0	0.11	0.00	0.01	0.02	0.01	6.04	0.05	0.03	0.29
	<i>Al</i> (> 50 – 200 ppb)	22.9	211.3 (1/1)	BD	119.7 (1/1)	477.8 (2/2)	164.4 (1/1)	3.66	244.0 (1/1)	704.6 (3/10)	5,404.1 (8/12)
	<i>Fe</i> (> 300 ppb)	27.0	127.5	1.70	223.0	221.5	72.2	111.2	48.9	34,776.0 (6/10)	96.7
	<i>Mn</i> (> 50 ppb)	1.06	7.21	0.03	18.9	3.40	18.9	55.6 (1/1)	17.7	1,330.4 (6/10)	2.49
	<i>SO₄²⁻</i> (> 250 ppm)	0.92	1.06	62.5	11.6	28.6	33.6	7.98	3.53	52.2	10.7
	<i>Zn</i> (> 5,000 ppb)	9.04	14.3	12.2	8.38	15.0	8.26	1,048.4	15.9	1,848.6	266.9
	<i>pH</i> (6.5 – 8.5)	6.59	7.55	6.17	7.6	7.73 - 8.41	6.85	6.90	6.15 (1/1)	6.67 - 7.33	7.11 - 7.43
HRL/ GL	<i>Na</i> (> 20,000 ppb)	5,629.7	725.0	8,224.2	3,382.4	10,185.5	4,467.1	7,179.8	313.2	604,434.9 (2/10)	6,286.6
	<i>Sr</i> (> 1,500 ppb)	42.9	33.5	954.4	47.5	315.9	172.7	43.7	11.1	9,351.1 (2/10)	41.8