

KINGBROOK RURAL WATER SYSTEM, INC.

WATER QUALITY ANALYSIS

	PHASE I-Bruce WTP (test results 6-2016)	PHASE II-DeSmet WTP (test results 6-2016)	PHASE III-Chester WTF (test results 10-2016)	SUGGESTED LIMITS
Nitrate	0.8 mg/L	<0.2 mg/L	0.5 mg/L	10 mg/L
Fluoride	0.68 mg/L	0.76 mg/L	0.55 mg/L	4.0 mg/L
Chloride	13 mg/L	13.0 mg/L	17 mg/L	250 mg/L
Iron, Total	<0.05 mg/L	0.16 mg/L	<0.05 mg/L	0.3 mg/L
Manganese	0.06 mg/L	<0.05 mg/L	0.05 mg/L	0.05 mg/L
Sulfate	128 mg/L	353 mg/L	283 mg/L	levels >250 mg/L may have bitter taste
Solids, Total Dissolved	493 mg/L	838 mg/L	682 mg/L	4000 mg/L
pH	7.95 pH	7.67 pH	8.29 pH	between 6.5 - 8.5
Alkalinity-M	269 mg/L	301 mg/L	255 mg/L	no rec. standard set
Alkalinity-P	0 mg/L	0 mg/L	0 mg/L	no rec. standard set
Bicarbonate	323 mg/L	367 mg/L	311 mg/L	no rec. standard set
Carbonate	0 mg/L	0 mg/L	0 mg/L	no rec. standard set
Conductivity	726 umho/cm	1150 umho/cm	978 umho/cm	2000 umho/cm
Calcium	93.7 mg/L	155 mg/L	119 mg/L	no rec. standard set
Magnesium	34.4 mg/L	57.2 mg/L	54.0 mg/L	1000 mg/L
Hardness (calcium)	22 grains	36 grains	30 grains	see chart
Langlier Index	(+)0.80	(+)0.73	(+)1.19	(+)deposit forming, (-)corrosive
Sodium	11.6 mg/L	28.1 mg/L	23.2 mg/L	**no rec. standard set
Potassium	3.1 mg/L	7.6 mg/L	7.3 mg/L	2000 mg/L

** sodium has no recommended EPA standard, however; individuals on a low-salt diet should use 25.0 mg/L or less as a guideline
 water samples for the above common ions are taken and analyzed by the Dept. Of Env. & Nat'l Resources once every three years
 updated 11-2-16