

Summary of selected water-quality data from ground-water samples collected from February 1995 through December 2013 as a part of the *Equus* Beds Ground-Water Recharge Project.

[mg/L, milligrams per liter; DWA, drinking water advisory; SDWR, secondary drinking water regulation; <, less than; MCL, maximum contaminant level; µg/L, micrograms per liter; cols/100 mL, colonies per 100 milliliters; MCLG, maximum contaminant level goal]

Background Wells

Wells: TH-02-95, TH-06-95, TH-10-95, TH-12-95, Sedgwick well, EB-142-A3, City Well-Sedgwick, Alta Millis Well, TH-08-A1, TH-08-A2, TH-08-A3, TH-08-A4, TH-08-A5

Compound or fecal indicator bacteria	Water-quality criteria	Number of Samples	Minimum	Maximum	Mean	Median	Percentage of Samples Detected	Percentage of Samples Exceeding Criteria	Percentage of Replicate Samples Exceeding Criteria
Sodium, dissolved (mg/L)	20 mg/L (DWA) ^a	247	17.8	90.7	43.1	43.4	100.0	96.0	89.5
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ^a	244	5.0	186.0	58.0	56.0	98.8	0.0	0.0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ^a	245	2.5	65.0	19.926*	*20.000	89.0	0.0	0.0
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ^a	247	0.0	11.7	0.874*	*0.013	34.4	2.0	5.3
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ^a	195	0.5	15.4	6.002*	*6.060	85.1	18.5	12.5
Iron, dissolved (µg/L)	300 µg/L (SDWR) ^a	247	2.5	1,850.0	597.957*	*620.000	80.6	73.3	84.2
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ^a	247	3.0	4,320.0	327.9	260.3	99.6	89.1	89.5
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ^a	246	0.5	636.0	8.452*	*0.103	26.4	26.4	42.1
Fecal coliform bacteria ^c (cols/100 mL)	200 cols/100mL (MCLG) ^d	177	0.5	6.0	0.7	0.5	2.8	0.0	0.0
	2,000 cols/100mL (MCLG) ^d	69	0.5	2.0	0.6	0.5	0.0	0.0	0.0
<i>Escherichia coli</i> ^e (cols/100 mL)	262 cols/100mL (MCLG) ^f	NA	NA	NA	NA	NA	NA	NA	NA
	2,358 cols/100mL (MCLG) ^f	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine herbicide	3 µg/L as an annual average ^a (MCL)	102	0.0	1.6	0.1	0.0	38.2	0.0	0.0
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ^a (MCL)	252	0.0	2.3	0.1	0.1	14.3	0.0	0.0
Alachlor (µg/L)	2 µg/L (MCL) ^a	101	0.0	0.0	0.0	0.0	1.0	0.0	0.0

^a U.S. Environmental Protection Agency (2006)

^b Value is estimated by using a log-probability regression to predict the values of data below the detection limit.

^c For fecal coliform bacteria, the primary contact recreation surface-water criterion of 200 cols/100mL was used from April 1 - October 31 (when most water-contact recreation occurs); from November 1 - March 31, the criterion of 2,358 cols/100mL was used.

^d Kansas Department of Health and Environment (2001)

^e For *Escherichia coli*, the primary contact recreation surface-water quality criterion of 262 cols/100mL was used from April 1 - October 31 for Class B (public access) stream segments; from November 1 - March 31, the criterion of 2,358 cols/100mL was used.

^f Kansas Department of Health and Environment (2004)