

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]

### Little Arkansas River at Highway 50 near Halstead (07143672)

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) <sup>a</sup>	256	2.1	498.0	80.0	71.7	100.0	78.5	78.1
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) <sup>a</sup>	256	5.0	312.0	37.2	36.2	96.1	0.4	0.0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) <sup>a</sup>	257	5.0	932.0	149.7	136.0	99.6	21.8	12.5
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) <sup>a</sup>	224	--	5.4	0.808*	*0.620	84.8	0.0	0.0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) <sup>a</sup>	151	1.0	14.1	5.4	4.9	97.4	9.3	7.7
Iron, dissolved (µg/L)	300 µg/L (SDWR) <sup>a</sup>	256	--	864.2	37.368*	*9.886	48.8	3.1	3.1
Manganese, dissolved (µg/L)	50 µg/L (SDWR) <sup>a</sup>	254	--	1,140.0	165.351*	*71.700	86.6	55.1	66.7
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) <sup>a</sup>	190	1.0	2,000,000.0	20,387.4	1,350.0	96.3	96.3	96.3
Fecal coliform bacteria <sup>c</sup> (cols/100 mL)	200 cols/100mL (MCLG) <sup>d</sup>	232	10.0	3,000,000.0	17,161.5	900.0	99.6	83.2	90.9
	2,000 cols/100mL (MCLG) <sup>d</sup>	96	1.0	6,670.0	780.9	118.0	99.0	12.5	7.1
<i>Escherichia coli</i> <sup>e</sup> (cols/100 mL)	262 cols/100mL (MCLG) <sup>f</sup>	80	33.0	25,700.0	2,461.4	1,035.0	100.0	83.8	100.0
	2,358 cols/100mL (MCLG) <sup>f</sup>	36	0.5	4,100.0	811.5	98.0	97.2	11.1	25.0
Atrazine herbicide	3 µg/L as an annual average <sup>a</sup> (MCL)	230	0.0	46.2	4.6	2.1	97.8	43.9	35.3
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average <sup>a</sup> (MCL)	1238	0.0	46.4	2.4	1.0	87.8	23.6	31.4
Alachlor (µg/L)	2 µg/L (MCL) <sup>a</sup>	250	0.0	28.0	0.4	0.0	46.4	2.4	5.9

<sup>a</sup> U.S. Environmental Protection Agency (2006)

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

<sup>c</sup> 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.

<sup>d</sup> Kansas Department of Health and Environment (2001)

<sup>e</sup> 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.

<sup>f</sup> Kansas Department of Health and Environment (2004)