

Summary of selected water-quality data from ground-water samples collected from February 1995 through December 2012 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

Site Number: 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>	248	3.38	498	79.0	70.3	100	78.2	76.7
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) <sup>a</sup>	248	<5	312	37.3	36.7	96.4	0.403	0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) <sup>a</sup>	249	<5	932	148	136	99.6	21.7	13.3
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) <sup>a</sup>	216	0.01	5.44	0.821 <sup>b</sup>	0.683 <sup>b</sup>	84.7	0	0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) <sup>a</sup>	143	<1	14.1	5.33	4.86	97.2	9.09	9.1
Iron, dissolved (µg/L)	300 µg/L (SDWR) <sup>a</sup>	248	4.3	864	35.7 <sup>b</sup>	9.73 <sup>b</sup>	49.6	2.82	3.33
Manganese, dissolved (µg/L)	50 µg/L (SDWR) <sup>a</sup>	246	<1	1,140	167 <sup>b</sup>	70.1 <sup>b</sup>	86.2	54.9	67.9
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) <sup>a</sup>	190	<1	2,000,000	20,387	1,350	96.3	96.3	96.3
Fecal coliform bacteria <sup>c</sup> (cols/100 mL)	200 cols/100mL (MCLG) <sup>d</sup>	228	10	3,000,000	17,416	883.5	99.6	82.9	90.0
	2,000 cols/100mL (MCLG) <sup>d</sup>	93	1	6,670	803	120	98.9	12.9	7.1
<i>Escherichia coli</i> <sup>e</sup> (cols/100 mL)	262 cols/100mL (MCLG) <sup>f</sup>	76	33	25,700	2,458	1,019	100	82.9	100
	2,358 cols/100mL (MCLG) <sup>f</sup>	33	<1	4,100	878	108	97.0	12.1	25
Atrazine herbicide	3 µg/L as an annual average <sup>a</sup> (MCL)	224	<0.025	46.2	4.70	2.19	97.8	44.6	33.3
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average <sup>a</sup> (MCL)	1154	<0.050	46.4	2.43	0.995	88.5	24.1	31.2
Alachlor (µg/L)	2 µg/L (MCL) <sup>a</sup>	232	<0.002	28	0.404	0.025	49.6	2.59	6.67

<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.

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### Little Arkansas River at Sedgwick, KS

Site Number 07144100

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>	249	1.5	132	47.1	45.3	100	71.5	74.2
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) <sup>a</sup>	248	<5	211	38.7	37.5	96	0	0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) <sup>a</sup>	252	<5	305	72.1	58.4	97.3	0.78	0
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) <sup>a</sup>	248	0.01	11.7	1.30	1.12	99.2	0.40	0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) <sup>a</sup>	171	<1	15.9	5.65	4.67	99.4	12.3	29.4
Iron, dissolved (µg/L)	300 µg/L (SDWR) <sup>a</sup>	249	<5	621	61.4 <sup>b</sup>	16.1 <sup>b</sup>	57	8.03	0
Manganese, dissolved (µg/L)	50 µg/L (SDWR) <sup>a</sup>	248	<1	740	111 <sup>b</sup>	36.1 <sup>b</sup>	81	45.6	51.7
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) <sup>a</sup>	190	<1	9,000,000	56,927 <sup>b</sup>	1700 <sup>b</sup>	93.2	93.2	78.3
Fecal coliform bacteria <sup>c</sup> (cols/100 mL)	200 cols/100mL (MCLG) <sup>d</sup>	265	16	4,000,000	20,562	900	100	74.3	60
	2,000 cols/100mL (MCLG) <sup>d</sup>	101	<1	20,500	1,437	120	96	14.9	10
<i>Escherichia coli</i> <sup>e</sup> (cols/100 mL)	262 cols/100mL (MCLG) <sup>f</sup>	98	13	46,000	4,708	1,069	100	70.4	50
	2,358 cols/100mL (MCLG) <sup>f</sup>	36	3	17,250	1,405	206	100	19.4	0
Atrazine herbicide	3 µg/L as an annual average <sup>a</sup> (MCL)	451	<0.025	48	5.49	3.17	98.9	52.1	50
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average <sup>a</sup> (MCL)	3059	<0.1	41	3.74	1.9	96.3	36.4	41.8
Alachlor (µg/L)	2 µg/L (MCL) <sup>a</sup>	482	<0.002	12.7	0.418	0.095	67	2.28	0

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

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