

Summary of selected water-quality data from surface-water samples collected from February 1995 through December 2007 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; MCL, Maximum Contaminant Level; µg/L, micrograms per liter; cols/100 mL, colonies per 100 milliliter; MCLG, Maximum Contaminant Level Goal; NA, Not Analyzed]

Shallow Index Wells

Sites Include: IW-01A through IW-38A

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) ¹	362	12.5	330	86.7	63.9	100	95.3	94.3
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ¹	354	5	770	152	109	98.9	18.9	21.2
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ¹	360	5	773	74.5	40	96.9	6.39	17
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ¹	360	<0.020	23.8	3.74 ²	0.296	68.9	15	30.5
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ¹	355	<1.00	55	4.05 ²	<1.00	47.3	11.5	16.7
Iron, dissolved (µg/L)	300 µg/L (SDWR) ¹	362	<5.00	40,700	23,70 ²	51.4	58.8	37.8	35.8
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ¹	362	<1.00	1,490	266 ²	85	72.7	55.8	55.8
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ¹	347	<1.00	368	7.30 ²	<1.00	27.7	27.7	21.1
Fecal coliform bacteria ³ (cols/100 mL)	200 cols/100mL (MCLG) ⁴	279	<1.00	116	1.59	<1.00	2.15	0	0
	2,358 cols/100mL (MCLG) ⁴	82	<1.00	24	1.6	<1.00	4.88	0	0
<i>Escherichia coli</i> bacteria ⁵ (cols/100 mL)	262 cols/100mL (MCLG) ⁶	9	<1.00	1	<1.00	<1.00	11.1	0	NA
	2,358 cols/100mL (MCLG) ⁶	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine herbicide	3 µg/L as an annual average ¹ (MCL)	138	<0.007	1.37	0.055 ²	0.006	58.7	0	0
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ¹ (MCL)	346	<0.100	1.51	0.060 ²	<0.100	14.2	0	0
Alachlor (µg/L)	2 µg/L (MCL) ¹	132	<0.004	0.013	<0.005	<0.005	3.79	0	0

¹ U.S. Environmental Protection Agency (2006)

² Value is estimated by using a log-probability regression to predict the values of data below the detection limit

³ For fecal coliform bacteria, the primary contact recreation surface-water criteria of 200 cols/100mL was used from April 1 - October 31 (when most water-contact recreation occurs); from November 1 - March 31, the criteria of 2,358 cols/100mL was used.

⁴ Kansas Department of Health and Environment (2001)

⁵ For *Escherichia coli* bacteria, the primary contact recreation surface-water quality criteria of 262 cols/100mL was used from Apr 1 - Oct 31 for Class B (public access) stream segments; from November 1 - March 31, the criteria of 2,358 cols/100mL was used.

⁶ Kansas Department of Health and Environment (2004)

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Deep Index Wells

Sites Include: IW-01C through IW-38C

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) ¹	365	17.4	409	96.1	90.8	100	95.6	94.7
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ¹	356	5	585	104	69	98.6	12.4	13.2
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ¹	359	5	1,460	121	67	96.7	7.52	28.9
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ¹	365	<0.020	9.61	0.420 ²	<0.060	47.9	0	0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ¹	354	<1.00	23.9	7.38 ²	5.9	82.5	34.5	35.7
Iron, dissolved (µg/L)	300 µg/L (SDWR) ¹	365	<5.00	15,800	1,390 ²	98	67.1	43.6	47.4
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ¹	365	0.114	1,450	436	307	98.9	92.1	78.9
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ¹	350	<1.00	84	1.41 ²	<1.00	15.1	15.1	0
Fecal coliform bacteria ³ (cols/100 mL)	200 cols/100mL (MCLG) ⁴	281	<1.00	4	1.01	<1.00	0.712	0	0
	2,358 cols/100mL (MCLG) ⁴	81	<1.00	21	1.49	<1.00	2.47	0	NA
<i>Escherichia coli</i> bacteria ⁵ (cols/100 mL)	262 cols/100mL (MCLG) ⁶	10	<1.00	1	<1.00	<1.00	10	0	NA
	2,358 cols/100mL (MCLG) ⁶	NA	NA	NA	NA	NA	NA	NA	NA
Atrazine herbicide	3 µg/L as an annual average ¹ (MCL)	75	<0.007	0.09	0.011 ²	<0.050	24	0	100
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ¹ (MCL)	349	<0.100	0.53	<0.100	<0.100	2.01	0	0
Alachlor (µg/L)	2 µg/L (MCL) ¹	64	<0.004	<0.050	<0.005	<0.005	0	0	100

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