

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]

Artificial Storage and Recovery Prototype Diversion Wells

Sites Include: DW-TW-01 through DW-TW-09

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	95	26.7	40.4	31.4	31	100	100	100
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ¹	96	5	135	17.6	15	99	0	0
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ¹	96	<5.00	20.4	6.53 ²	6	83.3	0	0
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ¹	96	<0.020	1.43	0.046 ²	<0.020	42.7	0	0
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ¹	91	2.9	21.4	8.55	7.94	100	33	16.7
Iron, dissolved (µg/L)	300 µg/L (SDWR) ¹	95	<5.00	16.9	5.27 ²	<5.00	13.7	0	0
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ¹	95	126	330	205	199	100	100	100
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ¹	96	<1.00	224	5.38 ²	<1.00	18.8	18.8	0
Fecal coliform bacteria ³ (cols/100 mL)	200 cols/100mL (MCLG) ⁴	46	<1.00	<1.00	<1.00	<1.00	0	0	0
	2,358 cols/100mL (MCLG) ⁴	50	<1.00	1	<1.00	<1.00	2	0	0
<i>Escherichia coli</i> bacteria ⁵ (cols/100 mL)	262 cols/100mL (MCLG) ⁶	NA	NA	NA	NA	NA	NA	NA	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)	48	<0.007	<0.050	<0.007	<0.007	0	0	100
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ¹ (MCL)	95	<0.100	0.16	<0.100	<0.100	4.21	0	0
Alachlor (µg/L)	2 µg/L (MCL) ¹	41	<0.004	<0.050	<0.005	<0.005	0	0	100

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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Artificial Storage and Recovery Prototype Recharge Wells

Sites Include: RRW-01 through RRW-03

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	33	14.9	44.4	26.9	29.2	100	66.7	100
Sulfate, dissolved (mg/L)	250 mg/L (SDWR) ¹	33	<5.00	30	15.0 ²	15.1	93.9	0	100
Chloride, dissolved (mg/L)	250 mg/L (SDWR) ¹	33	<5.00	57	12.2 ²	7	84.8	0	100
Nitrite plus nitrate as nitrogen, dissolved (mg/L)	10 mg/L (MCL) ¹	33	<0.020	2.65	0.387 ²	0.15	69.7	0	100
Arsenic, dissolved (µg/L)	10 µg/L (MCL) ¹	30	<1.00	4.96	2.61 ²	2.27	93.3	0	100
Iron, dissolved (µg/L)	300 µg/L (SDWR) ¹	33	<5.00	470	72.8 ²	17.8	57.6	3.03	100
Manganese, dissolved (µg/L)	50 µg/L (SDWR) ¹	33	44	321	180	176	100	93.9	100
Total coliform bacteria (cols/100 mL)	0 cols/100 mL (MCLG) ¹	33	<1.00	98	<1.00	<1.00	12.1	12.1	0
Fecal coliform bacteria ³ (cols/100 mL)	200 cols/100mL (MCLG) ⁴	16	<1.00	<1.00	<1.00	<1.00	0	0	NA
	2,358 cols/100mL (MCLG) ⁴	17	<1.00	<1.00	<1.00	<1.00	0	0	0
<i>Escherichia coli</i> bacteria ⁵ (cols/100 mL)	262 cols/100mL (MCLG) ⁶	NA	NA	NA	NA	NA	NA	NA	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)	20	<0.007	0.05	<0.007	<0.007	15	0	100
Triazine herbicide screen, dissolved (µg/L as Atrazine)	3 µg/L as an annual average ¹ (MCL)	33	<0.100	0.31	<0.100	<0.100	12.1	0	0
Alachlor (µg/L)	2 µg/L (MCL) ¹	17	<0.004	<0.050	<0.005	<0.005	0	0	100

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