Water-Data Report 2013

405747093233201 McNay Research Station near Chariton, IA

Chariton and Little Chariton Basin
Upper Chariton Subbasin

LOCATION.--Lat 40°57′47″, long 93°23′34″ referenced to North American Datum of 1927, in SW ¼ NE ¼ sec.9, T.71 N., R.23 W., Lucas County, IA, Hydrologic Unit 10280201, 3.1 mi east and 2.0 mi north of Derby, and 3.4 mi west and 2.8 mi south of Chariton.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1984 to current year. Collection of field pH and field specific conductance was discontinued December 7, 2004.

INSTRUMENTATION.--Wet/dry precipitation collector and digital precipitation gage.

REMARKS.--Data collected as part of the National Atmospheric Deposition Program's National Trends Network.

EXTREMES FOR PERIOD OF RECORD.--Maximum lab pH, 7.6, October 12-19, 2010; minimum lab pH, 4.4, November 23-30, 2004, August 23-30, 2005.

EXTREMES FOR CURRENT YEAR.--Maximum lab pH, 7.1, March 19-26, 2013; minimum lab pH, 4.9, April 16-23, 2013.

405747093233201 McNay Research Station near Chariton, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 4

[N, nitrogen; P, phosphorus; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data due to lack of precipitation or failure in meeting quality-assurance standards; <, less than; M, presence verified but not quantified]

Begin date	End date	pH, wet atmospheric deposition, unfiltered, lab, standard units (83107)	Specific conductance, wet atmospheric deposition, unfiltered, laboratory, µS/cm at 25°C (83156)	Calcium, wet atmospheric deposition, filtered, mg/L (82932)	Magnesium, wet atmospheric deposition, filtered, mg/L (83002)	Potassium, wet atmospheric deposition, filtered, mg/L (83120)	Sodium, wet atmospheric deposition, filtered, mg/L (83138)	Chloride, wet atmospheric deposition, filtered, mg/L (82944)	Sulfate, wet atmospheric deposition, filtered, mg/L (83160)	Ammonia, wet atmospheric deposition, filtered, mg/L as N (83044)
10-02-2012	10-09-2012	--	--	--	--	--	--	--	--	--
10-09-2012	10-16-2012	5.9	6.3	.28	.02	.01	.05	.08	.92	.310
10-16-2012	10-23-2012	6.2	8.0	.42	.04	.04	.06	.06	.98	.440
10-23-2012	10-30-2012	6.2	12.1	.52	.04	.03	.16	.19	1.80	.730
10-30-2012	11-06-2012	6.4	16.4	.94	.04	.02	.01	.03	1.21	1.14
11-06-2012	11-13-2012	--	--	--	--	--	--	--	--	--
11-13-2012	11-20-2012	--	--	--	--	--	--	--	--	--
11-20-2012	11-27-2012	--	--	--	--	--	--	--	--	--
11-27-2012	12-04-2012	--	--	--	--	--	--	--	--	--
12-04-2012	12-11-2012	6.4	25.9	2.66	.15	.06	.05	.10	2.48	.880
12-11-2012	12-18-2012	5.9	3.1	.14	.01	.01	.01	.01	.14	.160
12-18-2012	12-25-2012	5.7	10.9	.70	.04	.04	.04	.07	1.50	.510
12-25-2012	01-01-2013	--	--	--	--	--	--	--	--	--
01-01-2013	01-08-2013	--	--	--	--	--	--	--	--	--
01-08-2013	01-15-2013	5.4	5.4	.17	.01	.01	.03	.05	.52	.190
01-15-2013	01-22-2013	--	--	--	--	--	--	--	--	--
01-22-2013	01-29-2013	5.7	13.3	.52	.04	.04	.12	.14	1.96	.790
01-29-2013	02-05-2013	6.5	11.0	.80	.05	.04	.08	.08	.78	.540
02-05-2013	02-12-2013	6.4	9.8	.63	.02	.02	.14	.05	1.24	.510
02-12-2013	02-19-2013	--	--	--	--	--	--	--	--	--
02-19-2013	02-26-2013	5.8	5.2	.40	.04	.01	.05	.05	.32	.130
02-26-2013	03-05-2013	6.1	16.9	.69	.06	.04	.12	.20	1.64	1.06
03-05-2013	03-12-2013	5.8	6.0	.24	.02	.02	.05	.05	.79	.300
03-12-2013	03-19-2013	6.0	5.4	.18	.02	.01	.03	.04	.56	.330
03-19-2013	03-26-2013	7.1	18.1	2.14	.20	.05	.09	.12	.56	.480
03-26-2013	04-02-2013	7.0	23.6	.79	.08	.04	.09	.15	1.82	1.82
04-02-2013	04-09-2013	6.4	6.0	.34	.04	.02	.06	.07	.49	.330
04-09-2013	04-16-2013	6.3	10.2	.57	.04	.04	.14	.18	1.20	.540
04-16-2013	04-23-2013	4.9	11.7	.24	.02	.04	.07	.08	1.23	.330
04-23-2013	04-30-2013	6.7	10.4	.53	.06	.02	.02	.04	.97	.690
04-30-2013	05-07-2013	6.1	4.5	.16	.03	.04	.03	.04	.44	.260
05-07-2013	05-14-2013	6.7	13.5	.70	.05	.03	.04	.09	1.20	.930
05-14-2013	05-21-2013	6.8	13.4	.96	.06	.04	.06	.07	1.04	.790
05-21-2013	05-28-2013	6.1	8.3	.33	.04	.04	.10	.15	1.09	.510
05-28-2013	06-04-2013	6.2	9.6	.37	.04	.07	.13	.15	1.02	.610
06-04-2013	06-11-2013	6.4	10.6	.60	.05	.05	.03	.08	.95	.640
06-11-2013	06-18-2013	6.3	9.5	.60	.05	.04	.07	.11	.71	.500
06-18-2013	06-25-2013	6.2	6.2	.38	.04	.04	.10	.16	.62	.230
06-25-2013	07-02-2013	6.7	10.4	1.00	.11	.14	.01	.06	.20	.400
07-02-2013	07-09-2013	6.9	36.9	3.74	.34	.11	.08	.23	1.69	1.47

405747093233201 McNay Research Station near Chariton, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 2 of 4

[N, nitrogen; P, phosphorus; mg/L, milligrams per liter; °C, degrees Celsius; µS/cm, microsiemens per centimeter; --, no data due to lack of precipitation or failure in meeting quality-assurance standards; <, less than; M, presence verified but not quantified]

Begin date	End date	Nitrate, wet atmospheric deposition, filtered, mg/L as N (83068)	Orthophosphate, wet atmospheric deposition, filtered, mg/L as P (83108)
10-02-2012	10-09-2012	--	--
10-09-2012	10-16-2012	.155	< .002
10-16-2012	10-23-2012	.175	< .002
10-23-2012	10-30-2012	.269	< .002
10-30-2012	11-06-2012	.491	.002
11-06-2012	11-13-2012	--	--
11-13-2012	11-20-2012	--	--
11-20-2012	11-27-2012	--	--
11-27-2012	12-04-2012	--	--
12-04-2012	12-11-2012	.864	< .002
12-11-2012	12-18-2012	.051	< .002
12-18-2012	12-25-2012	.431	< .002
12-25-2012	01-01-2013	--	--
01-01-2013	01-08-2013	--	--
01-08-2013	01-15-2013	.158	< .002
01-15-2013	01-22-2013	--	--
01-22-2013	01-29-2013	.320	.005
01-29-2013	02-05-2013	.426	.003
02-05-2013	02-12-2013	.258	< .002
02-12-2013	02-19-2013	--	--
02-19-2013	02-26-2013	.264	.003
02-26-2013	03-05-2013	.886	< .002
03-05-2013	03-12-2013	.164	< .002
03-12-2013	03-19-2013	.155	< .002
03-19-2013	03-26-2013	.331	.004
03-26-2013	04-02-2013	.575	< .002
04-02-2013	04-09-2013	.133	.002
04-09-2013	04-16-2013	.262	.002
04-16-2013	04-23-2013	.189	< .002
04-23-2013	04-30-2013	.169	< .002
04-30-2013	05-07-2013	.133	< .002
05-07-2013	05-14-2013	.437	< .002
05-14-2013	05-21-2013	.273	< .002
05-21-2013	05-28-2013	.226	< .002
05-28-2013	06-04-2013	.266	.012
06-04-2013	06-11-2013	.302	< .002
06-11-2013	06-18-2013	.302	< .002
06-18-2013	06-25-2013	.142	< .002
06-25-2013	07-02-2013	.153	< .002
07-02-2013	07-09-2013	.806	< .002

405747093233201 McNay Research Station near Chariton, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
Part 3 of 4

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07-09-2013	07-16-2013	6.4	12.8	0.73	0.05	0.02	0.09	0.16	1.02	0.810
07-16-2013	07-23-2013	6.2	4.4	.30	.02	.01	.01	.02	.28	.230
07-23-2013	07-30-2013	6.6	43.6	1.47	.35	1.37	.06	.23	3.13	3.42
07-30-2013	08-06-2013	6.8	22.3	1.92	.26	.03	.02	.05	.73	1.00
08-06-2013	08-13-2013	6.5	11.7	1.02	.07	.02	.03	.05	1.11	.490
08-13-2013	08-20-2013	6.9	11.6	1.15	.10	.01	M	.03	.40	.540
08-20-2013	08-27-2013	--	--	--	--	--	--	--	--	--
08-27-2013	09-03-2013	6.4	5.1	.31	.02	.01	.01	.02	.27	.320
09-03-2013	09-10-2013	--	--	--	--	--	--	--	--	--
09-10-2013	09-17-2013	6.5	11.9	.50	.04	.03	.05	.09	1.29	.840
09-17-2013	09-24-2013	6.2	5.0	.38	.03	.02	.06	.07	.46	.190
09-24-2013	10-01-2013	--	--	--	--	--	--	--	--	--

405747093233201 McNay Research Station near Chariton, IA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 4

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Begin date	End date	Nitrate, wet atmospheric deposition, filtered, mg/L as N (83068)	Orthophosphate, wet atmospheric deposition, filtered, mg/L as P (83108)
07-09-2013	07-16-2013	0.420	< .002
07-16-2013	07-23-2013	.091	< .002
07-23-2013	07-30-2013	.297	1.03
07-30-2013	08-06-2013	.366	< .003
08-06-2013	08-13-2013	.440	.002
08-13-2013	08-20-2013	.218	< .002
08-20-2013	08-27-2013	--	--
08-27-2013	09-03-2013	.115	< .002
09-03-2013	09-10-2013	--	--
09-10-2013	09-17-2013	.382	< .002
09-17-2013	09-24-2013	.127	< .002
09-24-2013	10-01-2013	--	--