

Sand and gravel aquifers (glaciated regions)
Glacial Surficial Sand and/or Gravel

Polk County, MN

LOCATION.--Lat 47°43'45.98", long 96°18'54.81" referenced to North American Datum of 1983, in NE ¼ NW ¼ NE ¼ sec.17, T.149 N., R.44 W., Polk County, MN, Hydrologic Unit 09020303, 12.9 miles east and 2.1 miles south of Crookston, Minnesota or 7.7 miles west and 1.95 miles north of Mentor, Minnesota. The well is located about 50 yards SW of a gravel haul road.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 11.81 ft. Upper casing diameter 2.04 in; top of first opening 6.97 ft, bottom of last opening 11.27 ft. The hole for well G08 was drilled with an 8.25-inch-diameter power auger on Aug. 20, 2002 to a depth of 11.4 feet. The well is constructed of a 5-foot-long, 2.04-inch-diameter, schedule-40 PVC,0.010-inch slotted, flush-threaded screen attached to 8.22 feet of 2.04-inch-diameter, schedule-40 PVC casing. This casing stick-up was 1.59 feet above land surface on Aug. 20, 2002.

DATUM.--Land-surface datum is 1,093.01 ft above North American Vertical Datum of 1988. Measuring point: MP is mark on top of casing, NOT protection post., 1.59 ft above land-surface datum, Aug. 20, 2002, to present. Water levels are in depth below land surface and feet above sea level. Water levels are accurate to within 0.01 feet below land surface. Water-level elevations are accurate to plus-or-minus 0.05 feet, based on the elevation of the land surface from a differential GPS survey. Water-level differences are accurate to plus-or-minus 0.001 feet.

PERIOD OF RECORD.--Water levels were recorded daily during Oct. 26, 2002 to May 13, 2003. Water levels were recorded hourly during May 13, 2003 at 11:00 CDT to the present, except during the following periods:

Aug. 03, 2010 at 06:00 CST - Sept. 20, 2010 at 12:00 CDT: due to unplugged comm. cable.
Jul. 04, 2011 at 21:00 CDT - Jul. 12, 2011 at 16:00 CDT: due to transducer thermistor failure.

GAGE.--Water level and water temperature were measured with a Design Analysis H-310 submersible pressure transducer accurate to 0.01 feet and 0.1°C respectively. Data were recorded hourly by a Campbell Scientific, Inc. CR500 data logger. The data logger was upgraded to a Campbell Scientific, Inc. CR206 on Apr. 14, 2011. The data logger is housed in a shelter attached to the well casing, is solar powered, and data are telemetered by radio and telephone.

An unheated Texas Electronics, Inc. TR-6118-1L tipping-bucket rain gage was added to the station on Apr. 27, 2003 at 19:00 CDT which measures and records precipitation total hourly. On Apr. 14, 2011, precipitation total began being recorded quarter-hourly.

COOPERATION.--This station is operated as part of a study to understand hydrologic changes resulting from wetland and prairie restoration and climate change. The station is operated by the U.S. Geological Survey in cooperation with the Red Lake Watershed District, the U.S. Fish and Wildlife Service, and The Nature Conservancy.

REMARKS.--Measured groundwater levels are precise to two decimal places, not the 3 decimal places reported. Differences between subsequent groundwater levels are precise to 3 decimal places, however. Three-decimal place precision is useful at this site for hydrologic analyses such as estimation of groundwater recharge and evapotranspiration.

EXTREMES FOR PERIOD OF RECORD.--Maximum hourly water level: 4.139 feet below land surface (1088.871 feet NAVD88) on Apr. 24, 2011 at 16:00 CDT; minimum hourly water level, 8.450 ft. below land surface datum (1084.560 NAVD) on Mar. 5, 2007 at 07:00 CST.

Maximum daily-average water level: 4.146 feet below land surface (1088.864 feet NAVD88) on Apr. 24, 2011; minimum daily-average water level: 8.441 feet below land surface (1084.569 feet NAVD88) on Mar. 05, 2007.

EXTREMES FOR CURRENT YEAR.--Maximum hourly water level: 4.139 feet below land surface (1088.871 feet NAVD88) on Apr. 24, 2011 at 16:00 CDT; minimum hourly water level: 7.061 feet below land surface (1085.949 feet NAVD88) on Sept. 29, 2011 at 15:00 CDT.

Maximum daily-average water level: 4.146 feet below land surface (1088.864 feet NAVD88) on Apr. 24, 2011; minimum daily-average water level: 7.052 feet below land surface (1085.958 feet NAVD88) on Sept. 30, 2011.

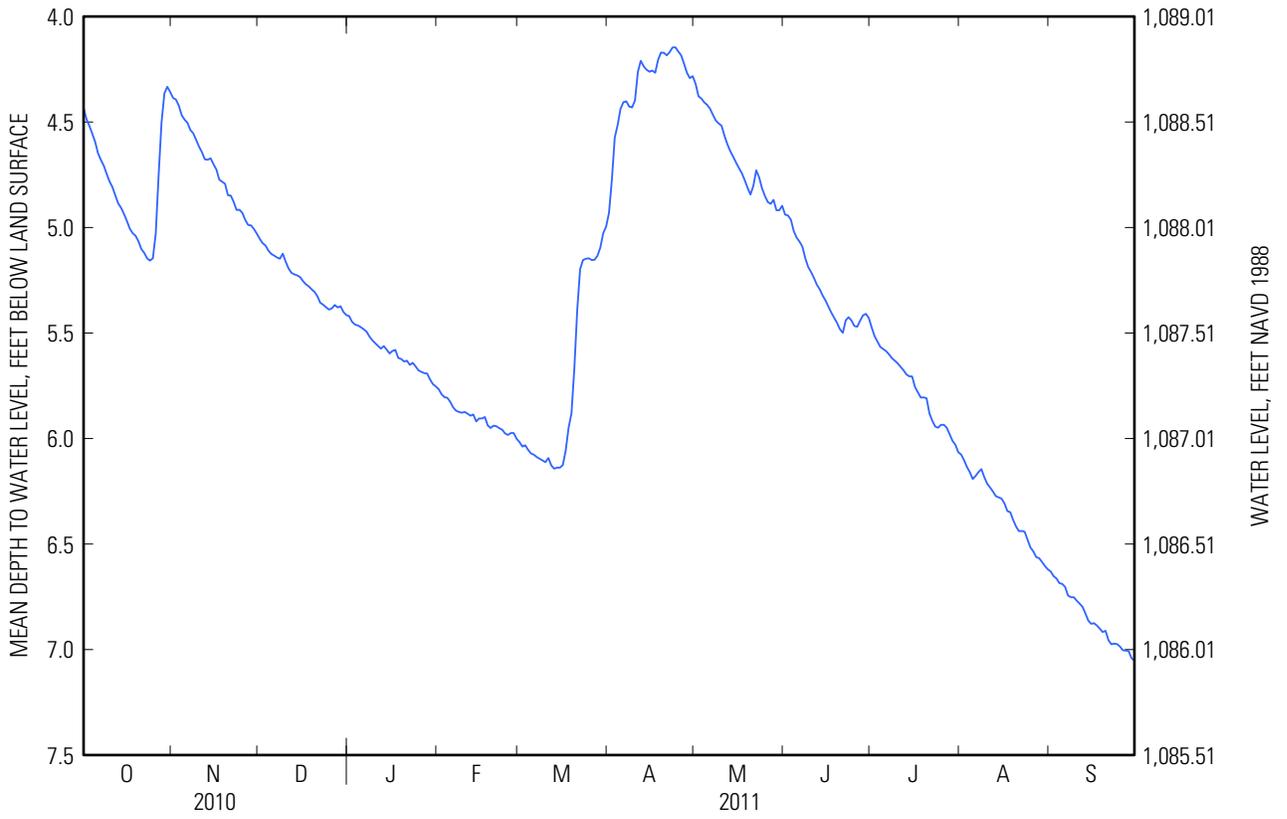
EXTREMES FOR CURRENT YEAR.--Highest water level, 4.139 ft below land surface datum, Apr. 24; lowest water level, 7.061 ft below land surface datum, Sept. 29.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.434	4.386	5.053	5.420	5.766	6.017	4.931	4.319	4.939	5.474	6.076	6.630
2	4.487	4.394	5.074	5.447	e5.790	6.038	4.773	4.378	4.943	5.515	6.103	6.652
3	4.518	4.423	5.085	5.460	5.804	6.032	4.573	4.389	4.963	5.541	6.135	6.663
4	4.555	4.468	5.109	5.464	5.807	6.054	4.514	4.407	5.017	5.566	6.160	6.685
5	4.594	4.489	5.125	5.472	5.826	6.071	4.437	4.419	5.048	5.576	6.192	6.689
6	4.648	4.504	5.133	5.482	5.852	6.077	4.406	4.437	5.067	5.586	6.177	6.703
7	4.680	4.538	5.142	5.493	5.868	6.088	4.402	4.466	5.091	5.601	6.159	6.744
8	4.707	4.554	5.148	5.516	5.874	6.096	4.427	4.493	5.146	5.619	6.145	6.752
9	4.746	4.585	5.124	5.534	5.878	6.104	4.431	4.507	5.187	5.631	6.183	6.752
10	4.782	4.617	5.162	5.548	5.874	6.112	4.398	4.518	5.211	5.644	6.214	6.768
11	4.809	4.643	5.194	5.561	5.882	6.092	4.263	4.565	5.239	e5.660	6.232	6.782
12	4.848	4.677	5.215	5.574	5.892	6.127	4.210	4.605	5.271	5.676	6.251	6.797
13	4.886	4.679	5.222	5.562	5.886	6.143	4.236	4.638	5.293	5.696	6.273	6.828
14	4.907	4.672	5.227	5.579	5.919	6.138	4.252	4.664	5.322	5.705	6.279	6.862
15	4.936	4.700	5.235	5.597	5.905	6.138	4.262	4.692	5.346	5.706	6.285	6.878
16	4.969	4.725	5.254	5.585	5.905	6.126	4.256	4.718	5.375	5.756	6.308	6.875
17	5.005	4.773	5.269	5.580	5.898	6.057	4.267	4.742	5.403	5.781	6.344	6.886
18	5.027	4.783	5.279	5.618	5.938	5.949	4.206	4.775	5.428	5.806	6.349	6.901
19	5.039	4.793	5.293	5.623	5.950	5.881	4.171	4.812	5.452	5.805	6.386	6.917
20	5.065	4.847	5.305	5.635	5.939	5.667	4.172	4.844	5.482	5.809	6.417	6.911
21	5.102	4.849	5.326	5.631	5.942	5.390	4.184	4.803	5.499	5.881	6.439	6.955
22	5.120	4.879	5.357	5.651	5.951	5.197	4.169	4.729	5.440	5.916	6.438	6.975
23	5.146	4.917	5.366	5.641	5.958	5.154	4.147	4.762	5.425	5.943	6.442	6.972
24	5.157	4.916	5.378	5.658	5.976	5.148	4.146	4.814	5.441	5.949	6.480	6.974
25	5.146	4.931	5.389	5.677	5.983	5.146	4.166	4.850	5.467	5.935	6.517	6.986
26	5.028	4.964	5.383	5.684	5.974	5.154	4.184	4.879	5.470	5.935	6.535	7.003
27	4.750	4.988	5.367	5.690	5.974	5.153	4.224	4.888	5.441	5.949	6.562	7.005
28	4.502	4.990	5.379	5.692	6.001	5.134	4.267	4.869	5.416	5.980	6.567	7.007
29	4.364	5.007	5.373	5.720	---	5.095	4.292	4.918	5.409	6.011	6.585	7.041
30	4.333	5.029	5.400	5.742	---	5.027	4.283	4.918	5.429	6.030	6.604	7.052
31	4.358	---	5.415	5.753	---	4.996	---	4.897	---	6.065	6.620	---
Mean	4.795	4.724	5.251	5.590	5.900	5.729	4.322	4.668	5.289	5.766	6.337	6.855
Max	5.157	5.029	5.415	5.753	6.001	6.143	4.931	4.918	5.499	6.065	6.620	7.052
Min	4.333	4.386	5.053	5.420	5.766	4.996	4.146	4.319	4.939	5.474	6.076	6.630
Med	4.809	4.712	5.254	5.585	5.901	6.032	4.262	4.718	5.360	5.756	6.308	6.877

Water Year 2011

Mean	5.433
High	4.146
Low	7.052
Med	5.416



WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water temperatures were recorded daily during Oct. 26, 2002 to May 13, 2003. Water temperatures were recorded hourly during May 13, 2003 at 11:00 CDT to the present, except during the following periods:

Aug. 03, 2010 at 06:00 CST - Sept. 20, 2010 at 12:00 CDT: due to unplugged comm. cable.

Jul. 04, 2011 at 21:00 CDT - Jul. 12, 2011 at 16:00 CDT: due to transducer thermistor failure.

INSTRUMENTATION.--Water temperature is measured with a Design Analysis H-310 submersible pressure transducer accurate to 0.1°C. Record is currently uncalibrated while sufficient calibration data is being collected.

COOPERATION.--This station is operated as part of a study to understand hydrologic changes resulting from wetland and prairie restoration and climate change. The station is operated by the U.S. Geological Survey in cooperation with the Red Lake Watershed District, the U.S. Fish and Wildlife Service, and The Nature Conservancy.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE: Maximum, 12.1°C many hours during Sept. 2006 and many hours during Sept. 2011; minimum, 3.3°C many hours during Apr. 2007.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 12.1°C during Sep. 22-30, 2006 and during Sep. 17-28, 2011; minimum, 3.3°C during April 14-23, 2007.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: maximum hourly recorded: 12.1°C on many hours during Sept. 2011; minimum hourly recorded: 4.2°C on many hours during Apr. 2011.

Maximum daily-average: 12.1°C during Sep. 17-28, 2011; minimum daily-average: 4.2°C during Apr. 15-19, 2011.

EXTREMES FOR CURRENT YEAR.--

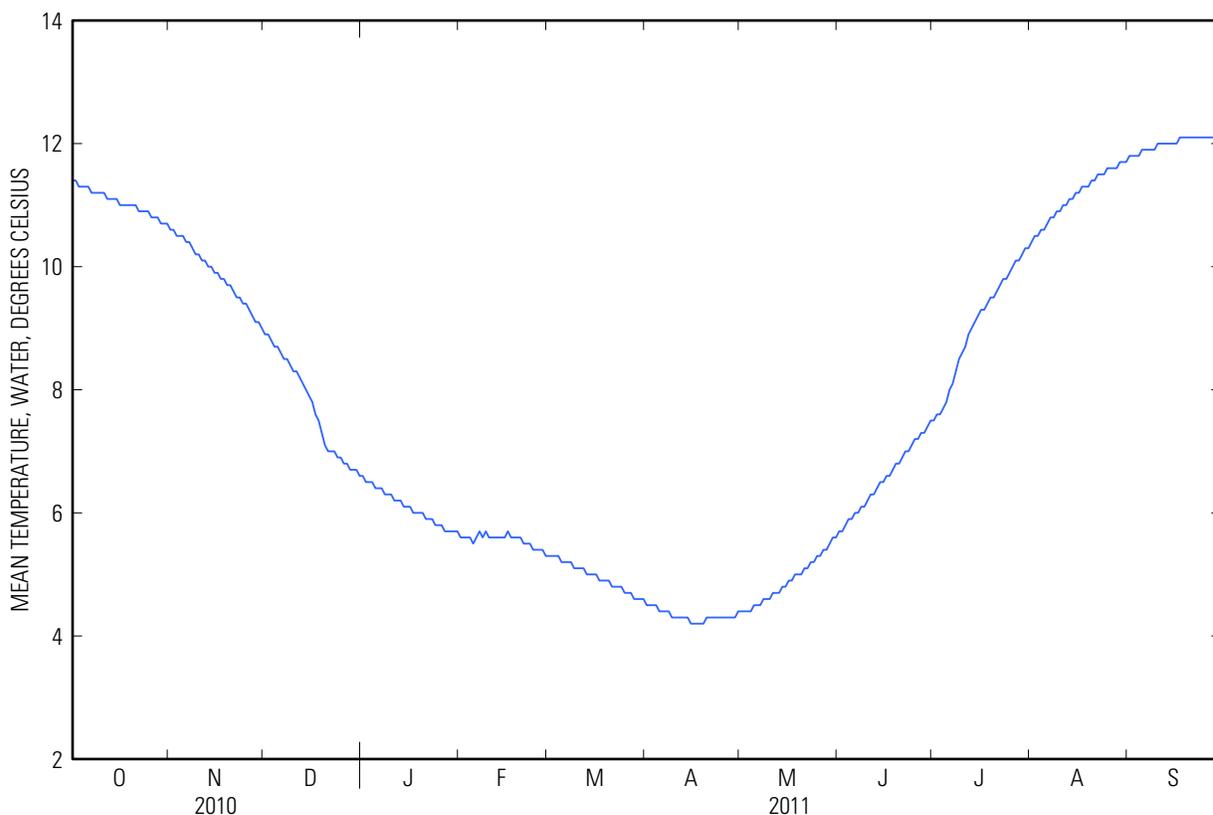
WATER TEMPERATURE: Maximum, 12.1°C, on several days; minimum, 4.2°C, on several days.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11.4	10.6	8.9	6.6	5.6	5.3	4.5	4.4	5.7	7.5	10.4	11.8
2	11.4	10.6	8.9	6.5	5.6	5.3	4.5	4.4	5.7	7.6	10.5	11.8
3	11.3	10.5	8.8	6.5	5.6	5.3	4.5	4.4	5.8	7.6	10.5	11.8
4	11.3	10.5	8.7	6.5	5.6	5.3	4.5	4.4	5.9	e7.7	10.6	11.8
5	11.3	10.5	8.7	6.4	5.5	5.2	4.4	4.5	5.9	e7.8	10.6	11.9
6	11.3	10.4	8.6	6.4	5.6	5.2	4.4	4.5	6.0	e8.0	10.7	11.9
7	11.2	10.4	8.5	6.4	5.7	5.2	4.4	4.5	6.0	e8.1	10.8	11.9
8	11.2	10.3	8.5	6.3	5.6	5.2	4.4	4.6	6.1	e8.3	10.8	11.9
9	11.2	10.2	8.4	6.3	5.7	5.1	4.3	4.6	6.1	e8.5	10.9	11.9
10	11.2	10.2	8.3	6.3	5.6	5.1	4.3	4.6	6.2	e8.6	10.9	12.0
11	11.2	10.1	8.3	6.2	5.6	5.1	4.3	4.7	6.3	e8.7	11.0	12.0
12	11.1	10.1	8.2	6.2	5.6	5.1	4.3	4.7	6.3	e8.9	11.0	12.0
13	11.1	10.0	8.1	6.2	5.6	5.0	4.3	4.7	6.4	9.0	11.1	12.0
14	11.1	10.0	8.0	6.1	5.6	5.0	4.3	4.8	6.5	9.1	11.1	12.0
15	11.1	9.9	7.9	6.1	5.6	5.0	4.2	4.8	6.5	9.2	11.2	12.0
16	11.0	9.9	7.8	6.1	5.7	5.0	4.2	4.9	6.6	9.3	11.2	12.0
17	11.0	9.8	7.6	6.0	5.6	4.9	4.2	4.9	6.6	9.3	11.3	12.1
18	11.0	9.8	7.5	6.0	5.6	4.9	4.2	5.0	6.7	9.4	11.3	12.1
19	11.0	9.7	7.3	6.0	5.6	4.9	4.2	5.0	6.8	9.5	11.3	12.1
20	11.0	9.7	7.1	6.0	5.6	4.9	4.3	5.0	6.8	9.5	11.4	12.1
21	11.0	9.6	7.0	5.9	5.5	4.8	4.3	5.1	6.9	9.6	11.4	12.1
22	10.9	9.5	7.0	5.9	5.5	4.8	4.3	5.1	7.0	9.7	11.5	12.1
23	10.9	9.5	7.0	5.9	5.5	4.8	4.3	5.2	7.0	9.8	11.5	12.1
24	10.9	9.4	6.9	5.8	5.4	4.8	4.3	5.2	7.1	9.8	11.5	12.1
25	10.9	9.4	6.9	5.8	5.4	4.7	4.3	5.3	7.2	9.9	11.6	12.1
26	10.8	9.3	6.8	5.8	5.4	4.7	4.3	5.3	7.2	10.0	11.6	12.1
27	10.8	9.2	6.8	5.7	5.4	4.7	4.3	5.4	7.3	10.1	11.6	12.1
28	10.8	9.1	6.7	5.7	5.3	4.6	4.3	5.4	7.3	10.1	11.6	12.1
29	10.7	9.1	6.7	5.7	---	4.6	4.3	5.5	7.4	10.2	11.7	12.0
30	10.7	9.0	6.7	5.7	---	4.6	4.4	5.6	7.5	10.3	11.7	12.0
31	10.7	---	6.6	5.7	---	4.6	---	5.6	---	10.3	11.7	---
Mean	11.0	9.9	7.7	6.1	5.6	5.0	4.3	4.9	6.6	9.1	11.2	12.0
Max	11.4	10.6	8.9	6.6	5.7	5.3	4.5	5.6	7.5	10.3	11.7	12.1
Min	10.7	9.0	6.6	5.7	5.3	4.6	4.2	4.4	5.7	7.5	10.4	11.8
Med	11.0	9.9	7.8	6.1	5.6	5.0	4.3	4.9	6.5	9.3	11.2	12.0

Water Year 2011	
Mean	7.8
Max	12.1
Min	4.2
Med	7.0



**WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 3

[CaCO₃, calcium carbonate; N, nitrogen; NTU, nephelometric turbidity unit; P, phosphorus; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; <, less than; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Medium name	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Depth to water level, ft below land surface (72019)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detection angle 90 +/- 30 degrees to incident light, NTU (63675)
07-11-2011	1715	Groundwater	734	25.0	5.67	.9	7.4	683	11.5	E 3.0
08-22-2011	1630	Groundwater	729	29.0	6.43	.3	7.2	735	14.6	4.6

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 3

[CaCO₃, calcium carbonate; N, nitrogen; NTU, nephelometric turbidity unit; P, phosphorus; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; <, less than; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Sample purpose (71999)	Sampler type (84164)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Carbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00452)	Hydrogen sulfide, water, unfiltered, mg/L (71875)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)
07-11-2011	1715	GW Network	Peristaltic pump	319	389	.4	U	< .010	1.45
08-22-2011	1630	GW Network	Peristaltic pump	352	428	.5	U	< .010	1.60

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 3

[CaCO₃, calcium carbonate; N, nitrogen; NTU, nephelometric turbidity unit; P, phosphorus; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; <, less than; E, estimated; U, analyzed for but not detected]

Date	Sample start time	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Phosphorus, water, filtered, mg/L as P (00666)	Total nitrogen, water, filtered, analytically determined, mg/L (62854)
07-11-2011	1715	.011	.011	.003	1.71
08-22-2011	1630	.012	.007	< .003	1.97

CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--Precipitation were recorded hourly during Apr. 27, 2003 at 19:00 CDT - to the present, except during the following periods:

Aug. 03, 2010 at 06:00 CDT - Sept. 20, 2010 at 14:00 CDT: due to unplugged comm. cable.

Precipitation was recorded quarter-hourly from Apr. 14, 2011 at 18:30 CDT to the present.

INSTRUMENTATION.--Precipitation is measured with an unheated Texas Electronics, Inc. 10.3-inch TR-6118-1L tipping-bucket raingage accurate to 0.01 inch, except during freezing periods (about Dec. through early Apr.). The rain gage is unheated and uncovered. The precipitation data during freezing periods result from melting of snow (accumulated in the rain gage) during warm periods and do NOT represent actual precipitation. Precipitation totals during freezing periods may underestimate actual totals because the rain gage funnel may be full of snow (preventing further accumulation) or because snow in the funnel may sublimate instead of melt.

EXTREMES FOR PERIOD OF RECORD.--

PRECIPITATION: Maximum hourly, 1.66 inches on June 22, 2003 at 19:00 CDT, maximum daily, 2.90 inches on Aug. 12, 2006.

EXTREMES FOR CURRENT YEAR.--Maximum hourly precipitation: 1.20 inches on Jul. 04, 2011 at 21:00 CDT; Maximum daily precipitation: 1.69 inches on Oct. 26, 2010.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.69 in., Oct. 26; minimum precipitation, 0.00 in., on many days.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.09	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.11	0.33
2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.01
4	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.05	0.00	1.21	0.00	0.00
5	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.07	0.00	0.97	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.09	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.10	0.03	0.00
9	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.09	0.00	0.51	0.21	0.00
10	0.00	0.24	0.00	0.00	0.00	0.00	0.86	0.01	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.00	0.23	0.00
13	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.04	0.00	0.00	0.00	0.01
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.06	0.15	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.11	0.10	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.10	0.00	0.00	0.05
19	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.04	0.06	0.00
20	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.26	0.00	0.00	0.18	0.51
21	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.72	0.99	0.00	0.00	0.17
22	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.13	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.63	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00	0.00
25	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
26	1.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.08	0.00	0.00
27	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.00
28	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.09	0.00	0.00	0.00	0.00	0.01
30	0.00	0.00	0.00	0.00	---	0.00	0.30	0.43	0.00	0.07	0.23	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.16	---	0.00	0.02	---
Total	2.89	0.36	0.00	0.00	0.12	0.21	1.88	2.31	2.47	3.29	2.37	1.09
Mean	0.09	0.01	0.00	0.00	0.00	0.01	0.06	0.07	0.08	0.11	0.08	0.04
Max	1.69	0.24	0.00	0.00	0.09	0.13	0.86	0.72	0.99	1.21	0.97	0.51
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Water Year 2011	
Total	16.99
Mean	0.05
Max	1.69
Min	0.00

