

Water-Data Report 2011

422803087475301 Local number 46N12E-14.6g1 (Zion well 1)

Cambrian-Ordovician aquifer system
St. Peter Sandstone of Ansell Group

Lake County, IL

LOCATION.--Lat 42°28'05", long 87°47'58" referenced to North American Datum of 1983, in SW ¼ NE ¼ NW ¼ sec.14, T.46 N., R.12 E., Lake County, IL, Hydrologic Unit 04040002, at Illinois Beach State Park, northern unit. Owner: U.S. Geological Survey.

GROUNDWATER RECORDS

WELL CHARACTERISTICS.--Depth 940 ft. Upper casing diameter 2 in; top of first opening 589 ft, bottom of last opening 940 ft. Unscreened, observation, artesian.

DATUM.--Land-surface datum is 586 ft above National Geodetic Vertical Datum of 1929. Measuring point: Black file mark on top of blue PVC well casing, 2.73 ft above land-surface datum, December 4, 1980, to present. Accuracy of datum is +/- 5 ft.

PERIOD OF RECORD.--

GROUND-WATER LEVELS: September 2010 to current year. December 1980 to August 2010 (periodic).

GAGE.--In Situ Level Troll and telemetry. Ground water levels affected by regional pumping.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 207.08 ft below land-surface datum, December 6, 1980; lowest, 235.12 ft below land-surface datum, December 22, 1989.

EXTREMES FOR CURRENT YEAR.--Water Year 2010: Highest recorded water level, 217.59 ft below land-surface datum, September 2; lowest recorded, 219.19 ft below land-surface datum, September 25.

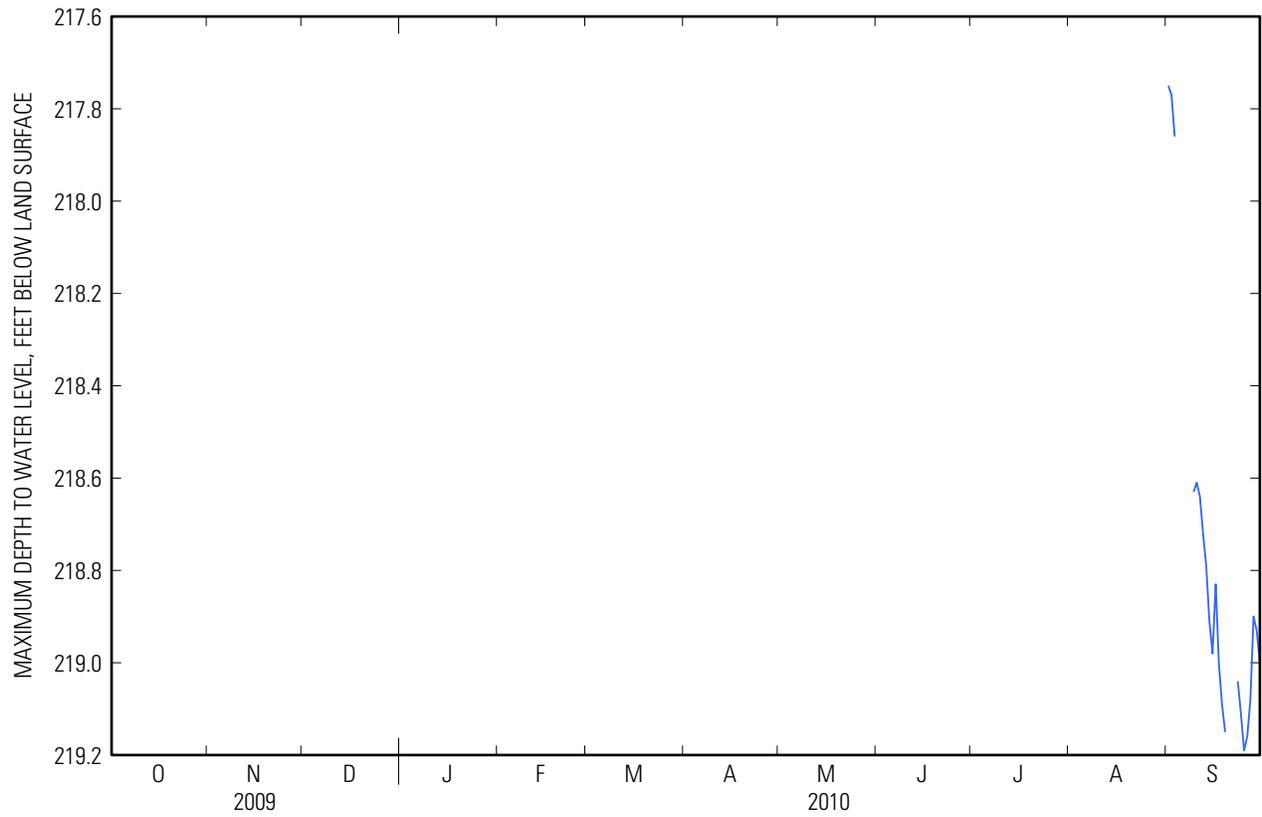
Water Year 2011: Highest water level, 213.08 ft below land-surface datum, June 21-22; lowest, 219.95 ft below land-surface datum, November 2.

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DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MAXIMUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	---	---	---	---	---	217.75
2	---	---	---	---	---	---	---	---	---	---	---	217.77
3	---	---	---	---	---	---	---	---	---	---	---	217.86
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	218.63
10	---	---	---	---	---	---	---	---	---	---	---	218.61
11	---	---	---	---	---	---	---	---	---	---	---	218.64
12	---	---	---	---	---	---	---	---	---	---	---	218.72
13	---	---	---	---	---	---	---	---	---	---	---	218.79
14	---	---	---	---	---	---	---	---	---	---	---	218.91
15	---	---	---	---	---	---	---	---	---	---	---	218.98
16	---	---	---	---	---	---	---	---	---	---	---	218.83
17	---	---	---	---	---	---	---	---	---	---	---	219.00
18	---	---	---	---	---	---	---	---	---	---	---	219.09
19	---	---	---	---	---	---	---	---	---	---	---	219.15
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	219.04
24	---	---	---	---	---	---	---	---	---	---	---	219.11
25	---	---	---	---	---	---	---	---	---	---	---	219.19
26	---	---	---	---	---	---	---	---	---	---	---	219.16
27	---	---	---	---	---	---	---	---	---	---	---	219.08
28	---	---	---	---	---	---	---	---	---	---	---	218.90
29	---	---	---	---	---	---	---	---	---	---	---	218.93
30	---	---	---	---	---	---	---	---	---	---	---	219.00
31	---	---	---	---	---	---	---	---	---	---	---	---
Mean	---	---	---	---	---	---	---	---	---	---	---	---
Max	---	---	---	---	---	---	---	---	---	---	---	---
Min	---	---	---	---	---	---	---	---	---	---	---	---

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DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MAXIMUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	219.11	219.94	219.01	218.04	216.96	216.34	215.19	214.58	214.09	213.59	216.12	216.26
2	219.04	219.95	219.12	218.00	217.08	216.48	215.35	214.76	214.10	213.55	216.06	216.22
3	219.20	219.77	219.08	217.98	217.08	216.46	215.35	214.69	213.89	213.62	216.08	216.28
4	219.26	219.53	219.02	217.80	217.03	216.10	215.09	214.84	213.86	213.60	216.18	216.29
5	219.25	219.75	219.02	217.81	216.65	216.11	215.25	214.71	213.89	213.61	216.19	216.39
6	219.12	219.87	219.02	217.52	216.61	216.17	215.19	214.37	213.74	213.66	216.15	216.50
7	219.12	219.87	218.89	217.35	216.64	216.09	215.34	214.34	213.56	213.70	216.13	216.55
8	219.12	219.63	218.91	217.59	216.90	216.07	215.22	214.42	213.64	213.66	216.14	216.51
9	219.06	219.50	218.91	217.77	216.86	215.83	215.15	214.37	213.74	213.79	216.10	216.47
10	219.03	219.57	218.62	217.81	216.76	215.87	214.92	214.17	213.65	213.84	216.27	216.55
11	218.98	219.72	218.62	217.63	216.54	215.85	215.11	214.19	213.66	213.94	216.37	216.61
12	219.06	---	218.24	217.72	216.57	215.85	215.21	214.17	213.79	214.09	216.38	216.62
13	219.19	---	218.54	217.70	216.42	216.10	215.14	214.16	213.84	214.26	216.27	216.76
14	219.24	---	218.55	217.58	216.81	216.06	215.20	214.08	213.74	214.32	216.27	216.99
15	219.24	219.33	218.53	217.53	216.79	215.90	215.09	214.12	213.46	214.38	216.32	217.14
16	219.30	219.25	218.36	217.50	216.51	215.77	214.66	214.26	213.45	214.52	216.35	217.15
17	219.35	---	218.45	217.40	216.31	215.67	214.90	214.23	213.54	214.66	216.35	217.14
18	219.31	---	218.41	217.23	216.63	215.95	215.00	214.13	213.49	214.68	216.32	217.17
19	219.30	---	218.41	217.37	216.76	216.07	214.85	214.23	213.40	214.77	216.24	217.10
20	219.21	219.50	218.40	217.37	216.63	215.91	214.97	214.23	213.38	214.83	216.27	217.20
21	219.43	219.43	218.34	217.23	216.15	215.64	215.16	214.06	213.31	215.00	216.29	217.28
22	219.47	219.17	218.50	217.17	216.44	215.59	214.93	213.88	213.21	215.09	216.38	217.43
23	219.42	219.52	218.53	217.24	216.39	215.27	214.72	213.82	213.22	215.27	216.34	217.49
24	219.34	219.53	218.46	217.15	216.27	215.69	214.79	214.00	213.41	215.38	216.11	217.48
25	219.15	219.02	218.23	217.10	216.33	215.66	214.70	213.89	213.52	215.51	216.33	217.45
26	219.08	219.09	218.15	217.05	216.24	215.63	214.33	213.87	213.54	215.58	216.39	217.36
27	219.55	219.22	218.17	216.96	215.99	215.68	214.31	213.96	213.37	215.70	216.30	217.46
28	219.80	219.26	218.11	216.86	216.36	215.70	214.52	213.86	213.55	215.77	216.28	217.53
29	219.88	219.08	217.97	216.97	---	215.72	214.65	213.94	213.69	215.95	216.37	217.54
30	219.63	218.81	217.76	217.19	---	215.59	214.57	213.91	213.59	216.07	216.38	217.77
31	219.79	---	217.65	217.18	---	215.36	---	213.96	---	216.13	216.35	---
Mean	219.29	---	218.52	217.45	216.60	215.88	214.96	214.20	213.61	214.60	216.26	216.96
Max	219.88	---	219.12	218.04	217.08	216.48	215.35	214.84	214.10	216.13	216.39	217.77
Min	218.98	---	217.65	216.86	215.99	215.27	214.31	213.82	213.21	213.55	216.06	216.22

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