

Water-Data Report 2011

**422803087475305 Local number 46N12E-14.6g5 (Zion Well #5)**

Sand and gravel aquifers (glaciated regions)  
Quaternary System

Lake County, IL

LOCATION.--Lat 42°28'05.2", long 87°47'58.3" 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 21.8 ft. Upper casing diameter 1.0 in; top of first opening 16.6 ft, bottom of last opening 21.6 ft.

DATUM.--Land-surface datum is 586 ft above National Geodetic Vertical Datum of 1929. Measuring point: Black file mark on top of red PVC well casing, 2.85 ft above land-surface datum, August 31, 2010 to present.

PERIOD OF RECORD.--

GROUND-WATER LEVELS: September 2010 to current year.

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

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 3.04 ft below land-surface datum, May 27, 2011; lowest, 6.09 ft below land-surface datum, February 16, 2011.

EXTREMES FOR CURRENT YEAR.--Water Year 2010: Highest recorded water level, 5.10 ft below land-surface datum, September 20-22; lowest recorded, 5.38 ft below land-surface datum, Sept. 14-15.

Water Year 2011: Highest water level, 3.04 ft below land-surface datum, May 27; lowest, 6.09 ft below land-surface datum, February 16.

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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	---	---	---	---	---	---	---	---	---	---	---	5.24
2	---	---	---	---	---	---	---	---	---	---	---	5.25
3	---	---	---	---	---	---	---	---	---	---	---	5.21
4	---	---	---	---	---	---	---	---	---	---	---	5.25
5	---	---	---	---	---	---	---	---	---	---	---	5.27
6	---	---	---	---	---	---	---	---	---	---	---	5.28
7	---	---	---	---	---	---	---	---	---	---	---	5.28
8	---	---	---	---	---	---	---	---	---	---	---	5.31
9	---	---	---	---	---	---	---	---	---	---	---	5.33
10	---	---	---	---	---	---	---	---	---	---	---	5.34
11	---	---	---	---	---	---	---	---	---	---	---	5.32
12	---	---	---	---	---	---	---	---	---	---	---	5.32
13	---	---	---	---	---	---	---	---	---	---	---	5.35
14	---	---	---	---	---	---	---	---	---	---	---	5.38
15	---	---	---	---	---	---	---	---	---	---	---	5.38
16	---	---	---	---	---	---	---	---	---	---	---	5.37
17	---	---	---	---	---	---	---	---	---	---	---	5.19
18	---	---	---	---	---	---	---	---	---	---	---	5.13
19	---	---	---	---	---	---	---	---	---	---	---	5.12
20	---	---	---	---	---	---	---	---	---	---	---	5.12
21	---	---	---	---	---	---	---	---	---	---	---	5.11
22	---	---	---	---	---	---	---	---	---	---	---	5.12
23	---	---	---	---	---	---	---	---	---	---	---	5.13
24	---	---	---	---	---	---	---	---	---	---	---	5.13
25	---	---	---	---	---	---	---	---	---	---	---	5.18
26	---	---	---	---	---	---	---	---	---	---	---	5.18
27	---	---	---	---	---	---	---	---	---	---	---	5.16
28	---	---	---	---	---	---	---	---	---	---	---	5.21
29	---	---	---	---	---	---	---	---	---	---	---	5.25
30	---	---	---	---	---	---	---	---	---	---	---	5.28
31	---	---	---	---	---	---	---	---	---	---	---	---
<b>Mean</b>	---	---	---	---	---	---	---	---	---	---	---	5.24
<b>Max</b>	---	---	---	---	---	---	---	---	---	---	---	5.38
<b>Min</b>	---	---	---	---	---	---	---	---	---	---	---	5.11



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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	5.29	5.52	5.60	5.42	5.89	4.79	4.38	3.74	3.49	4.36	3.89	4.68
2	5.29	5.49	5.66	5.29	5.86	4.82	4.44	3.82	3.59	4.39	3.94	4.72
3	5.21	5.51	5.69	5.25	5.83	4.82	4.45	3.88	3.65	4.42	3.66	4.75
4	5.12	5.54	5.70	5.27	5.89	4.80	4.48	3.93	3.72	4.46	3.65	4.79
5	5.16	5.51	5.69	5.31	5.92	4.75	4.52	3.96	3.78	4.50	3.76	4.79
6	5.22	5.42	5.63	5.35	5.94	4.67	4.56	4.01	3.84	4.53	3.84	4.75
7	5.27	5.43	5.63	5.39	5.96	4.58	4.59	4.06	3.89	4.56	3.90	4.75
8	5.32	5.47	5.64	5.41	5.97	4.53	4.59	4.11	3.95	4.59	3.92	4.74
9	5.35	5.49	5.66	5.42	5.99	4.51	4.45	4.13	3.91	4.62	3.98	4.75
10	5.36	5.50	5.68	5.46	6.01	4.45	4.42	4.12	3.85	4.65	4.04	4.80
11	5.38	5.48	5.69	5.50	6.03	4.43	4.46	4.13	3.82	4.67	4.09	4.84
12	5.39	5.50	5.63	5.53	6.06	4.38	4.51	4.01	3.91	4.69	4.13	4.88
13	5.39	5.49	5.49	5.55	6.07	4.43	4.56	3.99	3.97	4.70	4.15	4.92
14	5.39	5.47	5.35	5.58	6.08	4.47	4.58	3.99	4.01	4.69	4.16	4.95
15	5.40	5.53	5.28	5.61	6.08	4.50	4.55	3.98	4.01	4.70	4.16	4.98
16	5.41	5.57	5.30	5.63	6.09	4.56	4.44	3.78	4.03	4.73	4.20	5.01
17	5.42	5.59	5.34	5.65	6.08	4.61	4.31	3.72	4.07	4.76	4.25	5.01
18	5.44	5.59	5.39	5.67	5.83	4.66	4.24	3.79	4.10	4.79	4.30	5.00
19	5.45	5.59	5.44	5.68	5.50	4.70	4.18	3.88	4.13	4.82	4.35	4.96
20	5.47	5.61	5.48	5.69	5.33	4.70	4.05	3.95	4.15	4.84	4.36	5.01
21	5.50	5.61	5.51	5.71	5.22	4.49	3.77	3.99	4.16	4.88	4.39	5.04
22	5.51	5.58	5.52	5.73	4.93	4.32	3.74	4.02	4.12	4.88	4.43	5.07
23	5.52	5.61	5.54	5.75	4.76	4.23	3.70	3.97	4.14	4.47	4.44	5.10
24	5.52	5.63	5.55	5.77	4.72	4.09	3.72	4.01	4.19	4.33	4.48	5.12
25	5.52	5.60	5.55	5.79	4.74	4.00	3.80	3.99	4.23	4.33	4.52	5.12
26	5.52	5.56	5.55	5.81	4.73	4.02	3.79	3.39	4.26	4.41	4.55	5.05
27	5.49	5.63	5.52	5.84	4.76	4.08	3.49	3.13	4.26	4.42	4.58	4.91
28	5.54	5.66	5.57	5.86	4.79	4.14	3.46	3.25	4.30	3.41	4.58	4.76
29	5.57	5.66	5.60	5.87	---	4.22	3.60	3.33	4.34	3.55	4.61	4.64
30	5.58	5.60	5.61	5.88	---	4.27	3.66	3.21	4.38	3.69	4.65	4.62
31	5.57	---	5.60	5.89	---	4.33	---	3.37	---	3.80	4.65	---
<b>Mean</b>	5.41	5.55	5.55	5.60	5.61	4.46	4.18	3.83	4.01	4.47	4.21	4.88
<b>Max</b>	5.58	5.66	5.70	5.89	6.09	4.82	4.59	4.13	4.38	4.88	4.65	5.12
<b>Min</b>	5.12	5.42	5.28	5.25	4.72	4.00	3.46	3.13	3.49	3.41	3.65	4.62

<b>Water Year 2011</b>	
<b>Mean</b>	4.81
<b>High</b>	3.13
<b>Low</b>	6.09

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