Ground-Water Station Records

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Ground-Water Levels by County

### **GROUND WATER STATION RECORDS**

#### **GROUND-WATER LEVELS BY COUNTY**

#### ANOKA COUNTY

450927093033802. Local number, 031N22W23CBC02.

LOCATION.-- Lat 45°09'27", long 93°03'38", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>sec.23, T.31 N., R.22 W., Hydrologic Unit 07010206, at the city of Centerville. Owner: U. S. Geological Survey.

AQUIFER .-- Jordan Sandstone of Late Cambrian Age.

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 6 in. to 95 ft, 2.5 in. to 267 ft, total depth 277 ft, screened 267 to 277 ft, screen diameter 2.4 in.

INSTRUMENTATION.--Digital recorder with one-hour punch cycle to Aug. 17, 1998, then electronic data logger with one-hour scan interval. DATUM.-- Land-surface datum is 901.6 ft above mean sea level. Measuring point: Top of recorder platform, 2.20 ft above land-surface datum. REMARKS.-- Water level affected by nearby flowing wells.

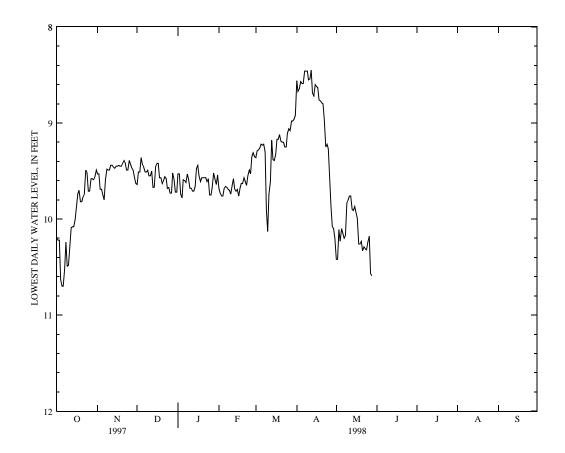
PERIOD OF RECORD.-- Feb. 1971 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 7.50 ft below land-surface datum, July 8, 1993; lowest, 18.57 ft below land-surface datum, Oct. 2, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.70	9.75	9.43	9.59	9.68	9.22	8.59	10.10				
10	10.48	9.49	9.55	9.68	9.74	10.13	8.55	9.80				
15	10.00	9.45	9.45	9.47	9.69	9.39	8.60	9.87				
20	9.82	9.42	9.63	9.57	9.57	9.19	8.79	10.23				
25	9.71	9.39	9.67	9.75	9.53	9.11	9.27	10.24				
EOM	9.49	9.63	9.72	9.54	9.35	8.92	10.20					

WTR YR: LOWEST (RECORDED) 12.02 SEP 08; HIGHEST (RECORDED) APR 7, 12.



#### **GROUND-WATER LEVELS BY COUNTY--Continued**

# BLUE EARTH COUNTY

440050094102801. Local number, 106N28W03DBA01.

LOCATION.-- Lat 44°00'50", long 94°10'28", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.3, T.106 N., R.28 W., Hydrologic Unit 07020010, at Farmland Industries Ammonia Plant, 3.2 mi north of Vernon Center.

Owner: Farmland Industries.

AQUIFER.-- Ironton-Galesville Sandstones of Cambrian Age.

WELL CHARACTERISTICS .-- Drilled, un-used artesian well, diameter 16 in., depth 390 ft, cased to 150 ft.

INSTRUMENTATION .-- Digital recorder with one-hour punch cycle until Aug. 18. Electronic data logger with 30-minute scan interval.

DATUM.-- Land-surface datum is 1,005 ft above mean seal level. Measuring point: Top of recorder platform, 2.00 ft above land-surface datum. PERIOD OF RECORD.-- Oct. 1973 to current year.

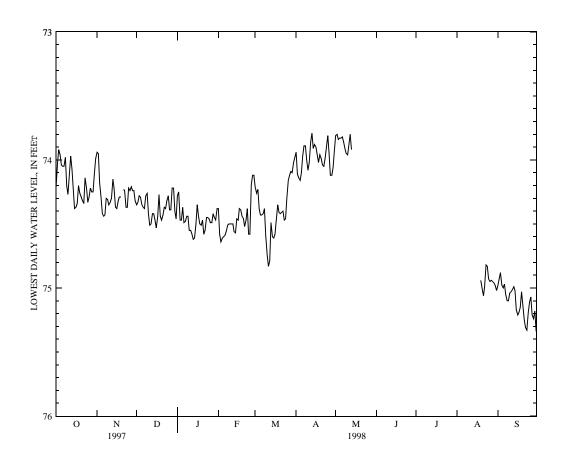
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 71.25 ft below land-surface datum, July 4, 1993; lowest, 76.73 ft below land-surface datum, Oct. 18, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

LOWEST 5TH-DAY WATER LEVEL

DAY	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	74.04	74.42	74.35	74.37	74.60	74.43	74.10	73.83				75.00
10	74.27	74.35	74.42	74.55	74.50	74.74	74.08	73.96				75.04
15	74.38	74.37	74.47	74.50	74.46	74.61	73.88					75.17
20	74.29		74.47	74.47	74.46	74.42	73.99				75.00	75.15
25	74.33	74.22	74.28	74.46	74.58	74.31	73.81				74.93	75.11
EOM	73.99	74.32	74.46	74.38	74.12	73.98	73.93				75.02	75.34

WTR YR: LOWEST 75.34 SEP 30; HIGHEST 73.63 APR 13



# **GROUND-WATER LEVELS BY COUNTY--Continued**

### CLAY COUNTY

465237096383901. Local number, 139N47W05CDC01.

LOCATION.-- Lat 46°52'37", long 96°38'39", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.5, T.139 N., R.47 W., Hydrologic Unit 09020104, 2.4 mi east of Dilworth. Owner: Steven Schroeder.

AQUIFER .-- Surficial sand and gravel of Pleistocene Age (Buffalo Aquifer).

WELL CHARACTERISTICS .-- Drilled water-table observation well, diameter 8 in., depth 131.3 ft, slotted 91 to 107 ft.

INSTRUMENTATION .-- Electronic data logger with 15-minute scan cycle.

DATUM.-- Land-surface datum is 916.7 ft above mean sea level. Measuring point: Top of recorder platform, 3.60 ft above land-surface datum. REMARKS.-- Water level affected by pumping from nearby wells.

PERIOD OF RECORD .-- Jan. 1947 to current year.

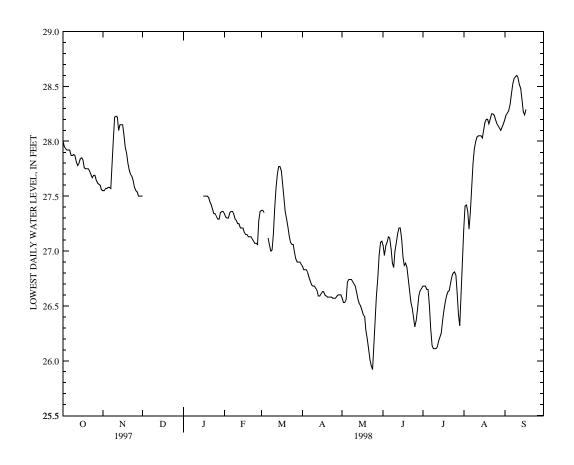
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 12.19 ft below land-surface datum, July 15, 1947; lowest, 32.94 ft below land-surface datum, Aug. 24, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	27.92	27.58			27.35		26.80	26.72	27.13	26.65	27.20	28.34
10	27.88	28.22			27.28	27.15	26.68	26.70	27.00	26.11	28.00	28.60
15	27.84	28.15			27.21	27.77	26.61	26.50	27.11	26.25	28.03	28.27
20	27.75	27.80		27.49	27.13	27.29	26.58	26.20	26.74	26.63	28.16	
25	27.69	27.58		27.34	27.07	27.06	26.57	26.14	26.31	26.81	28.20	
EOM	27.56	27.50		27.36	27.36	26.88	26.60	27.09	26.66	26.83	28.16	

WTR YR: LOWEST 26.10 JUL 9-12; HIGHEST (RECORDED) 28.60 SEP 10.



### **GROUND-WATER LEVELS BY COUNTY--Continued**

### DAKOTA COUNTY

445330093054301. Local number, 028N22W19DCC02.

 $LOCATION. -- Lat \ 44^{\circ}53'30'', \ long \ 93^{\circ}05'43'', \ in \ SW^{1}_{4}SW^{1}_{4}SE^{1}_{4} \ sec. 19, \ T. 28 \ N., \ R. \ 22 \ W., \ Hydrologic \ Unit \ 07010206, \ in \ West \ St. \ Paul.$ 

Owner: U.S. Geological Survey.

AQUIFER.--Prairie du Chien Group of Early Ordovician Age.

WELL CHARACTERISTICS .-- Drilled artesian observation well, diameter 6 in., depth 539 ft, cased to 409 ft.

INSTRUMENTATION.--Electronic data logger with 30-minute scan interval.

DATUM.--Land-surface datum is 1,036.9 ft above mean sea level. Measuring point: Top of recorder platform, 2.60 ft above land-surface datum. REMARKS.--Water-level affected by regional pumping.

PERIOD OF RECORD.--Jan. 1971 to current year.

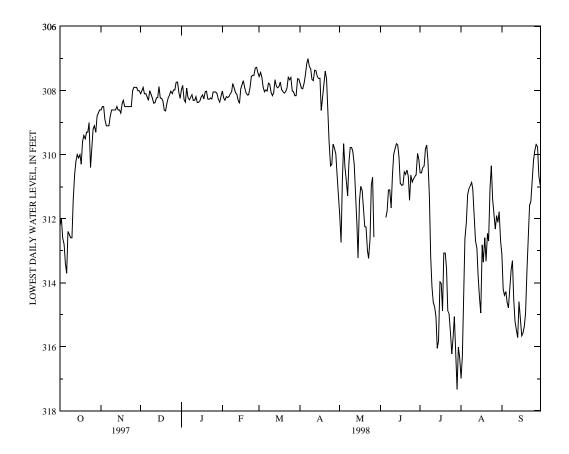
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 306.22 ft below land-surface datum, Apr. 15, 1997; lowest, 328.0 ft below land-surface datum, July 31, 1975.

#### WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

#### LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	313.40	309.10	308.10	307.92	308.21	308.03	307.51	310.37	311.96	309.83	312.11	314.62
10	312.60	308.60	308.24	308.30	307.92	308.06	307.65	309.78	310.64	314.12	311.06	314.52
15	310.10	308.60	307.87	308.32	307.94	307.91	307.62	313.22	310.07	315.82	314.47	315.12
20	309.50	308.50	308.63	308.02	308.14	308.08	307.39	312.25	310.62	313.07	313.33	313.59
25	309.80	308.00	308.09	308.05	307.52	307.58	310.30	310.95	310.85	316.23	311.38	310.16
EOM	308.60	308.00	308.24	308.17	307.44	307.64	311.31		310.15	316.33	312.70	310.94

WTR YR: LOWEST 317.33 JUI 29; HIGHEST 306.82 APR 13



# **GROUND-WATER LEVELS BY COUNTY--Continued**

#### DAKOTA COUNTY -- Continued

444205092500001. Local number, 114N17W10AAA01.

LOCATION.-- Lat 44°42'05", long 92°50'00", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.10, T.114 N., R.17 W., Hydrologic Unit 07040001, southeast of Hastings. Owner: John Conzemius.

AQUIFER .-- Prairie du Chien Group of Early Ordovician Age.

WELL CHARACTERISTICS .-- Drilled, unused artesian well, diameter 4 in., depth 151 ft, depth of casing unknown.

INSTRUMENTATION .-- Electronic data logger with 30-minute scan interval.

DATUM .-- Land-surface datum is 827 ft above mean sea level. Measuring point: Top of platform, 2.50 ft above land-surface datum.

PERIOD OF RECORD.-- Apr. 1976 to current year.

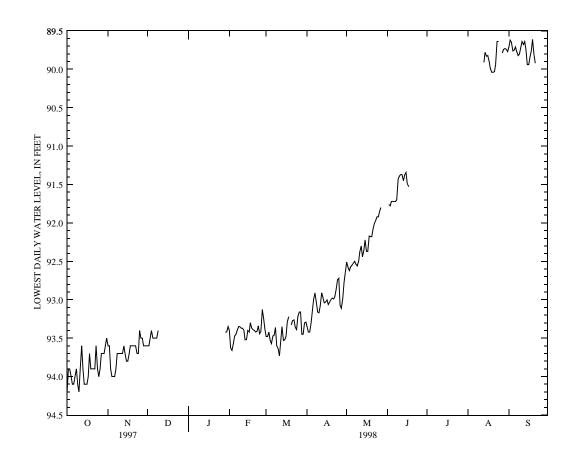
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 89.49 ft below land-surface datum, Sep. 19, 1998; lowest, 107.4 ft below land-surface datum, Mar. 12, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
94.10	94.00	93.50		93.47	93.57	93.14	92.55	91.72			89.75
94.20	93.70			93.37	93.64	93.17	92.50	91.39			89.72
94.10	93.80			93.40	93.52	93.03	92.22	91.34		89.83	89.94
93.90	93.60			93.40	93.33	92.98	92.18			90.04	89.81
94.00	93.40			93.41	93.22	92.72	91.92				
93.50	93.60		93.35	93.38	93.29	92.64				89.77	
	94.10 94.20 94.10 93.90 94.00	94.10    94.00      94.20    93.70      94.10    93.80      93.90    93.60      94.00    93.40	94.10    94.00    93.50      94.20    93.70       94.10    93.80       93.90    93.60       94.00    93.40	94.10  94.00  93.50     94.20  93.70      94.10  93.80      93.90  93.60      94.00  93.40	94.10  94.00  93.50   93.47    94.20  93.70   93.37    94.10  93.80   93.40    93.90  93.60   93.40    94.00  93.40   93.41	94.10  94.00  93.50   93.47  93.57    94.20  93.70   93.37  93.64    94.10  93.80    93.40  93.52    93.90  93.60    93.40  93.33    94.00  93.40    93.41  93.22	94.10  94.00  93.50   93.47  93.57  93.14    94.20  93.70    93.37  93.64  93.17    94.10  93.80    93.40  93.52  93.03    93.90  93.60    93.40  93.33  92.98    94.00  93.40    93.41  93.22  92.72	94.10  94.00  93.50   93.47  93.57  93.14  92.55    94.20  93.70   93.37  93.64  93.17  92.50    94.10  93.80    93.40  93.52  93.03  92.22    93.90  93.60    93.40  93.33  92.98  92.18    94.00  93.40    93.41  93.22  92.72  91.92	94.10  94.00  93.50   93.47  93.57  93.14  92.55  91.72    94.20  93.70   93.37  93.64  93.17  92.50  91.39    94.10  93.80   93.40  93.52  93.03  92.22  91.34    93.90  93.60   93.40  93.33  92.98  92.18     94.00  93.40   93.41  93.22  92.72  91.92	94.10  94.00  93.50   93.47  93.57  93.14  92.55  91.72     94.20  93.70   93.37  93.64  93.17  92.50  91.39     94.10  93.80    93.40  93.52  93.03  92.22  91.34     93.90  93.60    93.40  93.33  92.98  92.18      94.00  93.40   93.41  93.22  92.72  91.92	94.10  94.00  93.50   93.47  93.57  93.14  92.55  91.72      94.20  93.70   93.37  93.64  93.17  92.50  91.39      94.10  93.80   93.40  93.52  93.03  92.22  91.34   89.83    93.90  93.60   93.40  93.33  92.98  92.18   90.04    94.00  93.40   93.41  93.22  91.92

LOWEST 5TH-DAY WATER LEVEL

WTR YR: LOWEST 94.20, OCT 1,10; HIGHEST 89.49, SEP 19



### **GROUND-WATER LEVELS BY COUNTY--Continued**

#### HENNEPIN COUNTY

444801093202801. Local number, 027N24W30BDA01.

LOCATION.-- Lat 44°48'01", long 93°20'28", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.30, T.27 N., R.24 W., Hydrologic Unit 07020012, by Southwood School in Bloomington.

Owner: City of Bloomington.

AQUIFER .-- Jordan Sandstone of Late Cambrian Age.

WELL CHARACTERISTICS.--Drilled, unused artesian well, diameter 12 in. to 137 ft, 8 in. to 269 ft, total depth 365 ft, cased to 269 ft.

INSTRUMENTATION .-- Electronic data logger with 30-minute scan interval.

DATUM .-- Land-surface datum is 815 ft above mean sea level. Measuring point: Top of recorder platform, 2.20 ft above land-surface datum.

REMARKS .-- Water level affected by pumping.

PERIOD OF RECORD .-- Mar. 1969 to current year.

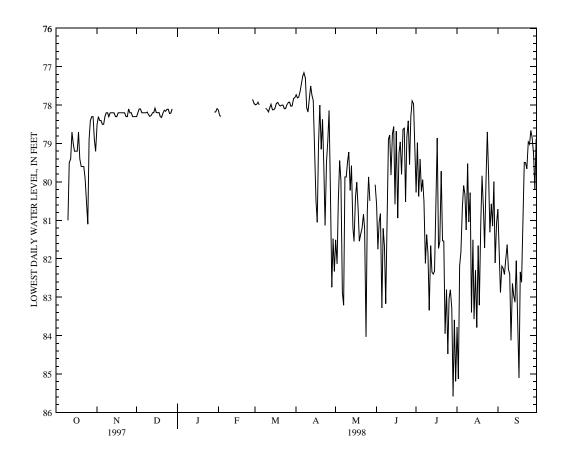
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 63.05 ft below land-surface datum, Apr. 15, 1969; lowest, 87.34 ft below land-surface datum, Jan. 30, 1997.

REVISIONS .-- Water levels for Aug. 7 to Sep. 30, 1995.

# WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		78.50	78.20				77.45	79.96	83.28	80.25	80.67	82.25
10	81.00	78.30	78.25			78.12	78.18	79.45	78.89	81.86	81.04	82.40
15	79.20	78.30	78.08			78.12	79.37	81.55	80.58	82.32	82.30	82.05
20	79.60	78.20	78.32			78.02	79.15	81.35	79.80	79.72	79.84	81.34
25	81.10	78.10	78.11			77.99	78.93	80.74	78.41	84.48	79.81	79.02
EOM	79.20	78.30		78.09	77.95	77.80	82.33	80.07	79.12	85.19	81.06	78.88
WTD V		VEST 85 58	пп 20- г	IICHEST 7	7 08 100	07						

WTR YR: LOWEST 85.58 JUL 29; HIGHEST 77.08 APR 07



# **GROUND-WATER LEVELS BY COUNTY--Continued**

#### HENNEPIN COUNTY -- Continued

450116093205301. Local number, 029N24W06CCC01.

LOCATION.-- Lat 45°01'16", long 93°20'53", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW

Owner: Minnesota Department of Transportation.

AQUIFER.-- St. Peter Sandstone of Middle Ordovician Age.

WELL CHARACTERISTICS .-- Drilled, unused artesian well, diameter 5 in., depth 200 ft, cased to 152 ft.

INSTRUMENTATION.-- Electronic data logger with 30-minute scan interval.

DATUM.-- Land-surface datum is 870 ft above mean sea level. Measuring point: Top of casing, 3.50 ft above land-surface datum.

REMARKS .-- Water level affected by pumping.

PERIOD OF RECORD .-- Mar. 1973 to current year.

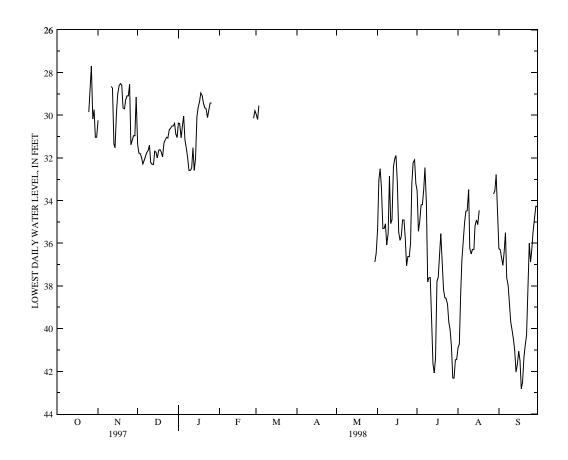
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 24.54 ft below land-surface datum, Dec. 28, 29, 1975; lowest, 53.03 ft below land-surface datum, June 15, 1988.

# WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5			32.28	30.04					35.31	34.19	35.92	36.41
10			31.41	32.59					32.86	37.62	36.22	39.68
15		29.87	31.73	30.04					31.89	41.38	34.91	41.70
20		29.66	31.96	29.46					34.91	37.09		41.32
25	29.85	28.55	30.68	29.44					36.63	39.70		36.87
EOM	31.03	29.15	31.05		29.79			36.47	33.20	41.45	34.89	34.28

WTR YR: LOWEST (RECORDED) 42.82 SEP 18; HIGHEST (RECORDED) 26.93 NOV 16.



### **GROUND-WATER LEVELS BY COUNTY--Continued**

HENNEPIN COUNTY -- Continued

445740093333001. Local number, 117N23W11BBD01.

LOCATION.-- Lat 44°57'40", long 93°33'30", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.11, T.117 N., R.23 W., Hydrologic Unit 07010206, 2 mi southwest of Wayzata, at Lake Minnetonka.

Owner: Minnetonka Boat Works, Inc., Orono.

AQUIFER .-- Prairie du Chien Group of Early Ordovician Age and Jordan Sandstone of Late Cambrian Age.

WELL CHARACTERISTICS .-- Drilled artesian observation well, diameter 6 in., depth 437 ft, cased to 270 ft.

INSTRUMENTATION .-- Electronic data logger with 15-minute scan interval.

DATUM.-- Land-surface datum is 930.8 ft above mean sea level. Measuring point: Floor of recorder platform, 3.30 ft above land-surface datum. REMARKS.-- Water level affected by pumping.

KEWIAKKS.-- water level affected by pullphig.

PERIOD OF RECORD .-- Aug. 1942 to current year.

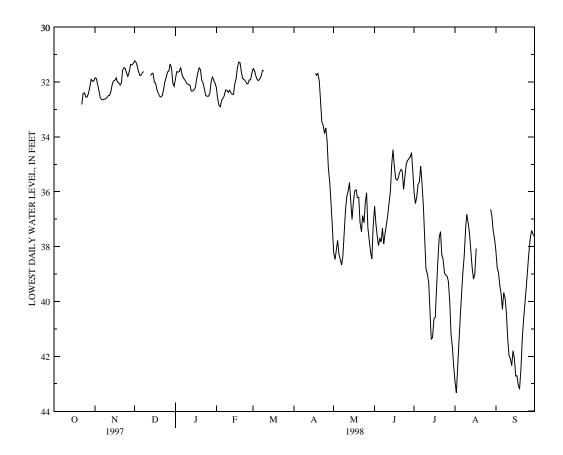
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 14.05 ft below land-surface datum, Apr. 30, 1954; lowest, 44.77 ft below land-surface datum, June 28, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

### LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		32.59	31.76	31.47	32.66	31.95		38.27	37.70	35.64	40.50	39.73
10		32.58		32.08	32.38			36.59	37.20	38.81	36.83	41.36
15		31.96	31.68	32.29	32.08			37.01	34.47	41.32	39.18	42.04
20		32.11	32.52	31.56	31.66		31.95	36.21	35.30	37.65		42.43
25	32.55	31.68	31.82	32.52	32.07		33.67	36.37	34.98	39.04		38.88
EOM	31.97	31.33	32.16	32.05	31.67		37.28	37.27	35.28	42.34	37.73	37.62

WTR YR: LOWEST 43.33, AUG 02; HIGHEST (RECORDED) 31.04, DEC 02



# **GROUND-WATER LEVELS BY COUNTY--Continued**

#### HENNEPIN COUNTY--Continued

450223093231801. Local number, 118N21W07DCB01.

 $LOCATION.-- Lat \ 45^\circ 02'23'', \ long \ 93^\circ 23'18'', \ in \ NW^{1/_4}SW^{1/_4}SE^{1/_4} \ sec. 7, \ T.118 \ N., \ R.21 \ W., \ Hydrologic \ Unit \ 07010206, \ by \ water \ tower \ at \ 47th \ Avenue \ North \ and \ Aquila \ Avenue.$ 

Owner: City of New Hope.

AQUIFER.-- Jordan Sandstone of Late Cambrian Age.

WELL CHARACTERISTICS .-- Drilled, unused artesian well, diameter 16 in., depth 422 ft, cased to 339 ft.

INSTRUMENTATION.-- Electronic data logger with 30-minute scan interval.

DATUM .-- Land-surface datum is 933 ft above mean sea level. Measuring point: Top of recorder platform, 3.00 ft above land-surface datum.

REMARKS .-- Water level affected by pumping.

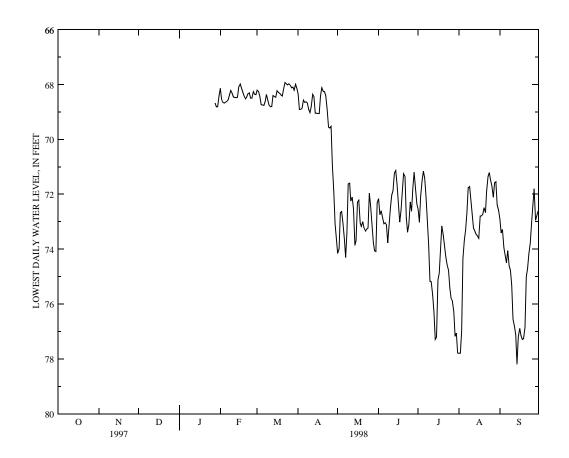
PERIOD OF RECORD .-- Oct. 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 60.46 ft below land-surface datum, Dec. 17, 1967; lowest, 78.37 ft below land-surface datum, June 13, 1997.

# WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

	LOWEST 5TH-DAY WATER LEVEL														
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
5					68.64	68.75	68.57	73.04	73.07	71.16	73.67	74.23			
10					68.33	68.76	69.02	71.59	72.49	75.17	72.18	75.31			
15					68.08	68.46	69.05	73.69	71.62	77.20	73.53	77.20			
20					68.52	68.42	68.25	73.00	71.25	73.48	72.49	76.85			
25					68.50	67.97	69.58	71.96	72.28	75.40	71.49	73.06			
EOM				68.40	68.37	68.14	73.61	72.31	72.35	77.79	72.58	72.61			

WTR YR: LOWEST 78.19, SEP 14; HIGHEST (RECORDED) 66.89, MAR 22



### **GROUND-WATER LEVELS BY COUNTY--Continued**

### MORRISON COUNTY

460444094212501. Local number, 130N29W08DCC01.

LOCATION.-- Lat 46°04'44", long 94°21'25", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.8, T.130 N., R.29 W., Hydrologic Unit 07010104, at Camp Ripley. Owner: Minnesota Army National Guard, Camp Ripley.

AQUIFER .-- Surficial outwash sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS .-- Drilled water-table observation well, diameter 2 in., depth 59 ft, screened 56 to 59 ft.

INSTRUMENTATION .-- Monthly measurements by observer.

DATUM .-- Land-surface datum is 1,149.0 ft above mean sea level. Measuring point: Top of casing, 2.10 ft above land-surface datum.

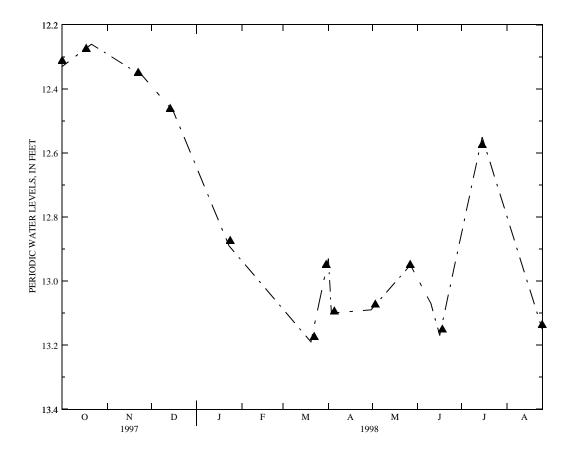
REMARKS .-- Water levels used in monthly National Water Conditions Report.

PERIOD OF RECORD.-- Apr. 1949 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 7.35 ft below land-surface datum, July 28, 1972; lowest, 19.75 ft below land-surface datum, Aug. 4, 1961.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 01	12.33	JAN 23 MAR 20	12.89	APR 30 MAY 27	13.09	JUN 16	13.17
OCT 21 NOV 25	12.26 12.36	MAR 20 APR 01	13.19 12.93	JUN 10	12.95 13.07	JUL 15 AUG 25	12.55 13.15
DEC 16	12.47	APR 03	13.10				



# **GROUND-WATER LEVELS BY COUNTY--Continued**

#### RAMSEY COUNTY -- Continued

450238093082501. Local number, 030N23W35BDC01.

LOCATION.-- Lat 45°02'38", long 93°08'25", in SW1/<sub>4</sub>SE1/<sub>4</sub>NW1/<sub>4</sub> sec.35, T.30 N., R.23 W., Hydrologic Unit 07010206, southeast corner of Arbogast Street and Richmond Avenue.

Owner: City of Shoreview.

AQUIFER.-- Jordan Sandstone of Late Cambrian Age.

WELL CHARACTERISTICS .-- Drilled unused artesian well, diameter 20 in. to 129 ft, 12 in to 465 ft, total depth 510 ft, cased to 465 ft.

INSTRUMENTATION .-- Electronic data logger with 30-minute scan interval.

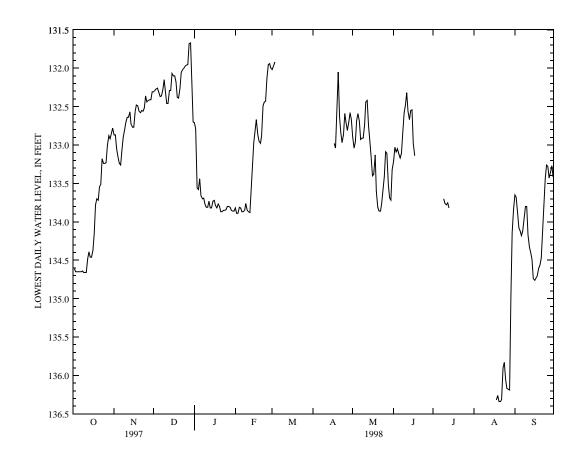
DATUM.-- Land-surface datum is 960 ft above mean sea level. Measuring point: Top of recorder platform, 1.50 ft above land-surface datum. PERIOD OF RECORD.-- Apr. 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 129.26 ft below land-surface datum, Mar. 1, 1987; lowest, 146.01 ft below land-surface datum, July 28, 1989.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

LOWEST 5TH-DAY WATER LEVEL													
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
5	134.65	133.24	132.32	133.44	133.82			132.59	133.12			134.12	
10	134.66	132.71	132.31	133.81	133.85			132.73	132.48	133.76		133.80	
15	134.46	132.77	132.07	133.73	132.97			133.14	132.54			134.74	
20	133.72	132.56	132.39	133.80	132.98		132.05	133.81			136.34	134.56	
25	133.24	132.36	131.97	133.84	132.14		132.59	133.41			136.05	133.26	
EOM	132.78	132.31	132.70	133.86	132.00		132.67	133.32			133.83	133.42	

WTR YR: LOWEST (RECORDED) 136.34, AUG 20,21; HIGHEST (RECORDED) 131.62, DEC 28



### **GROUND-WATER LEVELS BY COUNTY--Continued**

### SCOTT COUNTY

444427093353901. Local number, 115N23W28BDD01.

 $LOCATION. -- Lat \ 44^{\circ}44^{\circ}27^{"}, \ long \ 93^{\circ}35^{\circ}39^{"}, \ in \ SE^{1}_{4}SE^{1}_{4}NW^{1}_{4} \ sec. 28, \ T.115 \ N., \ R.23 \ W., \ Hydrologic \ Unit \ 07020012, \ Merriam \ Junction.$ 

Owner: Chicago and Northwestern Transportation Company. AQUIFER.-- Jordan Sandstone of Early Cambrian Age.

WELL CHARACTERISTICS.-- Drilled artesian observation well, diameter 16 in., depth 140 ft, cased to 75 ft.

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INSTRUMENTATION .-- Electronic data logger with 30-minute scan interval..

DATUM .-- Land-surface datum is 758 ft above mean sea level. Measuring point: Top of casing, 0.90 ft above land-surface datum.

PERIOD OF RECORD.-- Periodic record since Nov. 1984; continuous record, July to Sep. 1997.

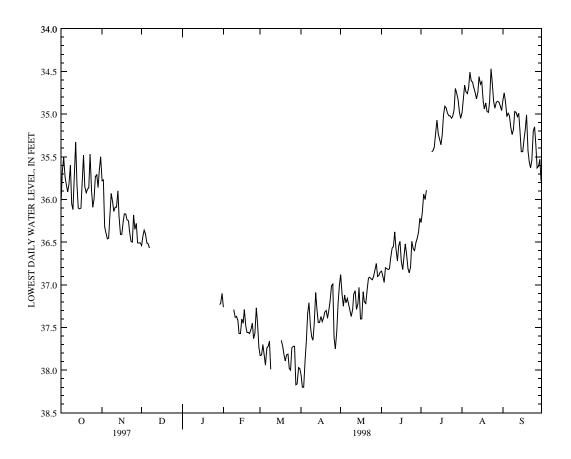
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 25.75 ft below land-surface datum, Mar. 8, 1985; lowest, 43.20 ft below land-surface datum, Feb. 28, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	35.83	36.46	36.51			37.94	37.65	37.21	36.81	35.89	34.76	34.99
10	36.12	36.14			37.38		37.65	37.29	36.55	35.43	34.69	34.97
15	36.11	36.41			37.40		37.44	37.03	36.49	35.29	34.65	35.44
20	35.92	36.24			37.56	37.89	37.30	37.22	36.64	34.93	34.97	35.43
25	36.09	36.18			37.57	37.74	36.99	36.94	36.58	35.02	34.85	35.15
EOM	35.50	36.51		37.10	37.73	37.98	37.01	36.85	36.22	35.05	34.96	35.79

WTR YR: LOWEST 38.20, APR 2,3; HIGHEST 34.40, AUG 22,23



# **GROUND-WATER LEVELS BY COUNTY--Continued**

#### SCOTT COUNTY--Continued

444427093353902. Local number, 115N23W28BDD02.

LOCATION.-- Lat 44°44'27", long 93°35'39", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.28, T.115 N., R.23 W., Hydrologic Unit 07020012, Merriam Junction. Owner: Chicago and Northwestern Transportation Company.

AQUIFER.-- Ironton-Galesville Sandstone of Cambrian Age.

WELL CHARACTERISTICS .-- Drilled artesian observation well, diameter 4 in., depth 355 ft, screened 350 to 355 ft.

INSTRUMENTATION .-- Electronic data logger with 30-minute scan interval.

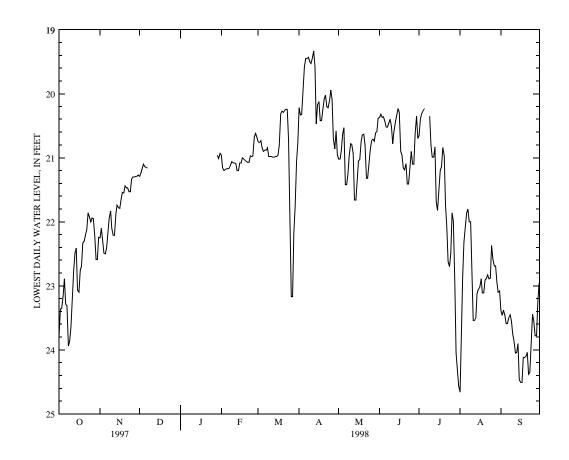
DATUM.-- Land-surface datum is 758 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum. PERIOD OF RECORD.-- Nov. 1984 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 19.09 ft below land-surface datum, Apr. 12,13, 1998; lowest, 45.28 ft below land-surface datum, July 29, 1991.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998 LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	22.89	22.50	21.14		21.17	20.90	19.58	20.53	20.43	20.23	22.07	23.59
10	23.64	22.10			21.08	20.98	19.53	20.78	20.51	20.80	22.71	23.75
15	23.07	21.78			21.08	20.98	20.17	21.42	20.23	21.82	23.05	24.47
20	22.30	21.44			21.06	20.29	20.08	20.63	21.19	20.97	22.91	24.10
25	22.00	21.33			20.97	22.18	19.94	20.87	20.90	22.49	22.37	23.44
EOM	22.24	21.27		20.93	20.68	20.76	20.95	20.38	20.70	24.56	23.08	22.96

WTR YR: LOWEST 24.66, AUG 01; HIGHEST 19.09, APR 12,13



### **GROUND-WATER LEVELS BY COUNTY--Continued**

SCOTT COUNTY--Continued

444427093353903. Local number, 115N23W28BDD03.

LOCATION.-- Lat 44°44'27", long 93°35'39", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.28, T.115 N., R.23 W., Hydrologic Unit 07020012, at Merriam Junction. Owner: Chicago and Northwestern Transportation Company.

AQUIFER.-- Mount Simon Sandstone of early Cambrian Age.

WELL CHARACTERISTICS .-- Drilled artesian observation well, diameter 4 in., depth 525 ft, screened 520 to 525 ft.

INSTRUMENTATION .-- Electronic data logger with 30-minute scan interval.

DATUM .-- Land-surface datum is 758 ft above mean sea level. Measuring point: Top of casing, 1.00 ft above land-surface datum.

PERIOD OF RECORD .-- Nov. 1984 to current year.

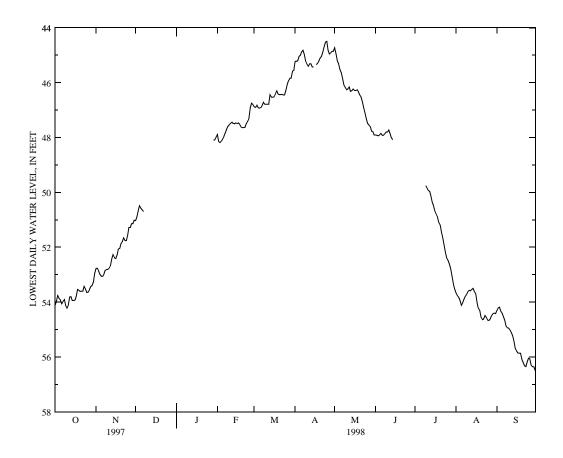
EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 33.85 ft below land-surface datum, Mar. 8, 1985; lowest, 55.12 ft below land-surface datum, Aug. 1, 1988.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

LOWEST 5TH-DAY WATER LEVEL

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	53.92	53.06	50.58		48.05	46.93	45.00	45.52	47.85		54.11	54.41
10	54.22	52.81			47.54	46.79	45.33	46.26	47.80	49.84	53.63	54.95
15	53.94	52.39			47.47	46.53	45.43	46.23		50.49	53.63	55.69
20	53.61	51.86			47.64	46.44	45.10	46.45		51.20	54.55	56.10
25	53.65	51.57			47.31	46.29	44.49	47.32		52.40	54.66	56.04
EOM	52.96	51.02		47.98	46.80	45.55	44.86	47.91		53.52	54.42	56.50

WTR YR: LOWEST 56.40, SEP 30; HIGHEST 44.43, APR 25



# **GROUND-WATER LEVELS BY COUNTY--Continued**

#### WATONWAN COUNTY

440037094372601. Local number, 106N32W01DDB01.

LOCATION.-- Lat 44°00'37", long 94°37'26", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>Sec.1, T.106 N., R.32 W., Hydrologic Unit 07020010, north of St. James. Owner: U.S. Geological Survey.

AQUIFER .-- Surficial outwash sand and gravel of Pleistocene Age.

WELL CHARACTERISTICS .-- Drilled water-table observation well, diameter 2 in., depth 22 ft, screened 19 to 22 ft.

INSTRUMENTATION .-- Monthly measurements by observer.

DATUM.-- Land-surface datum is 1,056.2 ft above mean sea level. Measuring point: Top of casing, 4.80 ft above land-surface datum. REMARKS.-- Water levels used in monthly National Water Conditions Report.

PERIOD OF RECORD.-- Nov. 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.-- Highest water level, 4.11 ft below land-surface datum, Apr. 27, 1969; lowest, 16.22 ft below land-surface datum, Mar. 7, 1990.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

	WATER		WATER		WATER		WATER
DATE	LEVEL	DATE	LEVEL	DATE	LEVEL	DATE	LEVEL
OCT 20 NOV 19 DEC 24	9.54 9.69 10.00	JAN 01 FEB 25	10.38 10.60	APR 27 AUG 03	9.52 10.40	AUG 28 SEP 29	10.85 11.19

