

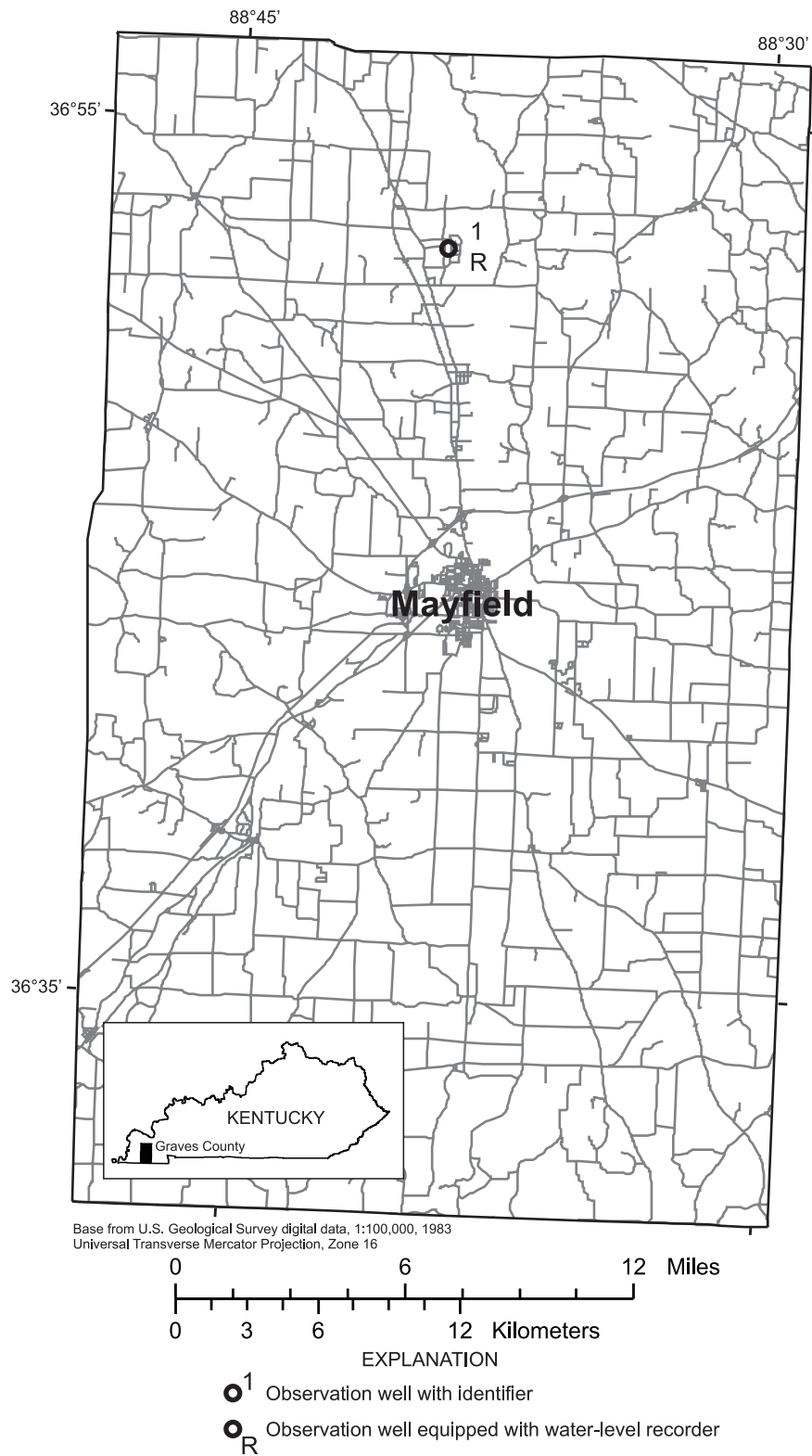
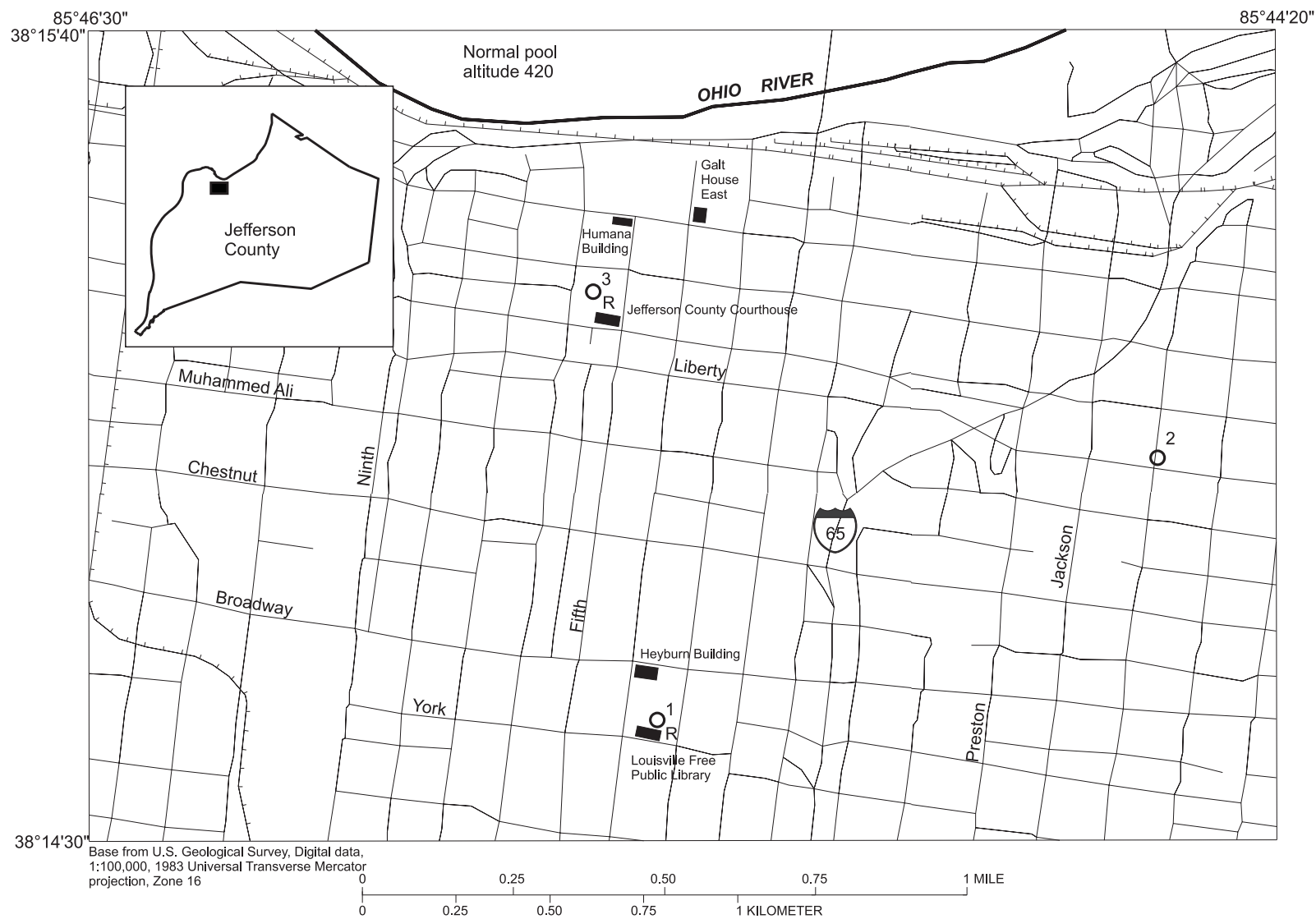


Figure 10. Location of observation wells in Graves County, Kentucky.



EXPLANATION

- ¹ Observation well with identifier
- _R Observation well equipped with water-level recorder

Figure 11. Location of observation wells in downtown Louisville, Kentucky.

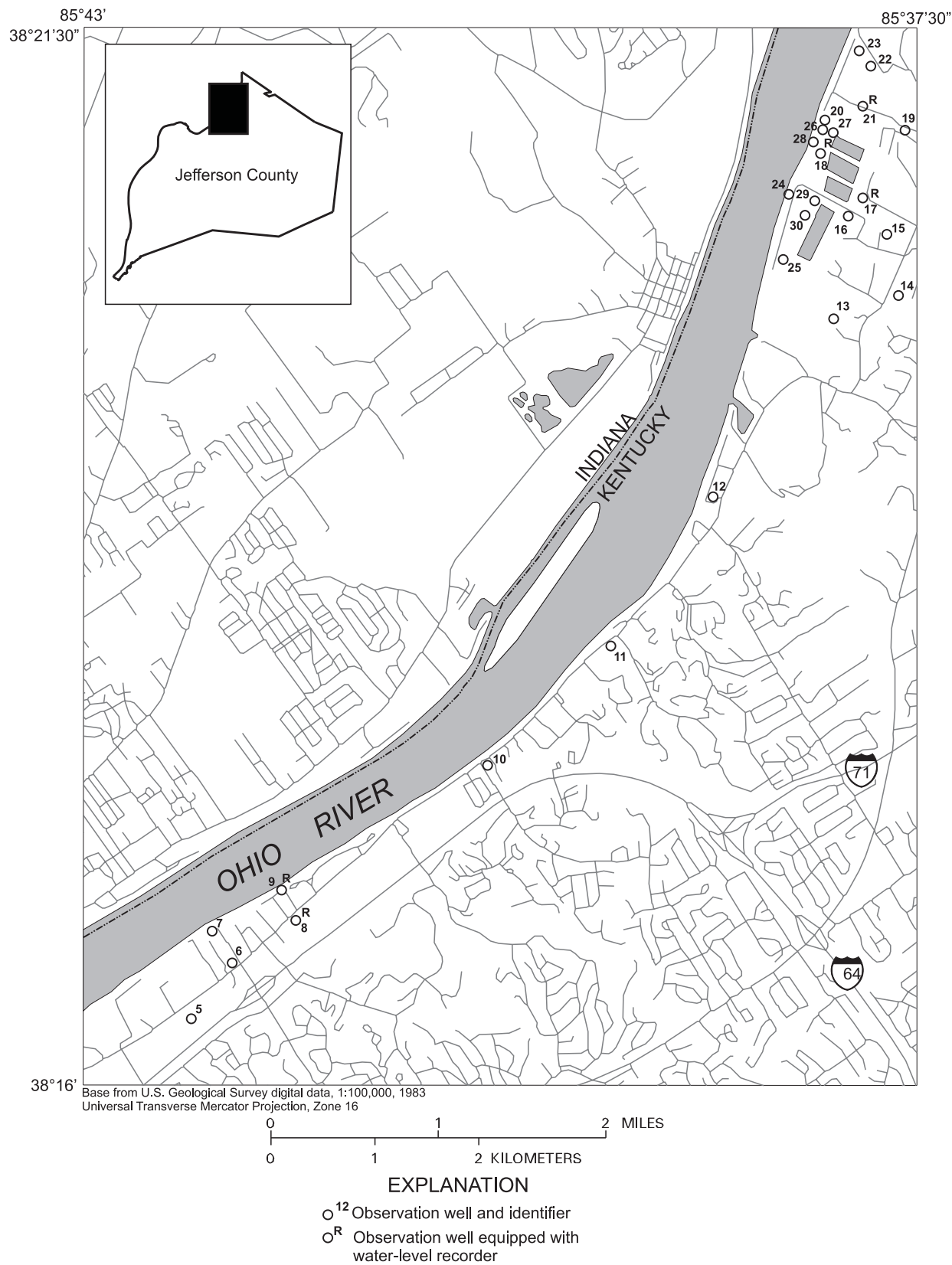


Figure 12. Location of observation wells in northeastern Jefferson County, Kentucky.

GRAVES COUNTY

365210088391301. (Viola well), map number 1.

LOCATION.--Lat 36°×52'10", long 88°×39'13". Hydrologic Unit 08010201, County Code 083, Hickory quadrangle, in a cultivated field, 200 ft east of a private road, 1.2 mi northwest of Viola. Owner: J. Whittemore.

AQUIFER.--Sand of Claiborne Group of Eocene age. Aquifer code: 124 CLBR.

WELL CHARACTERISTICS.--Drilled unused artesian well, diameter 10 in., depth 105 ft, cased to 85 ft, screened 85-105 ft.

INSTRUMENTATION.--Continuous water level recorder with telemetry, 60 minute interval.

DATUM.--Elevation of land-surface datum is 405.65 ft above NGVD of 1929. Measuring point: Floor of shelter, 4.03 ft above land-surface datum.

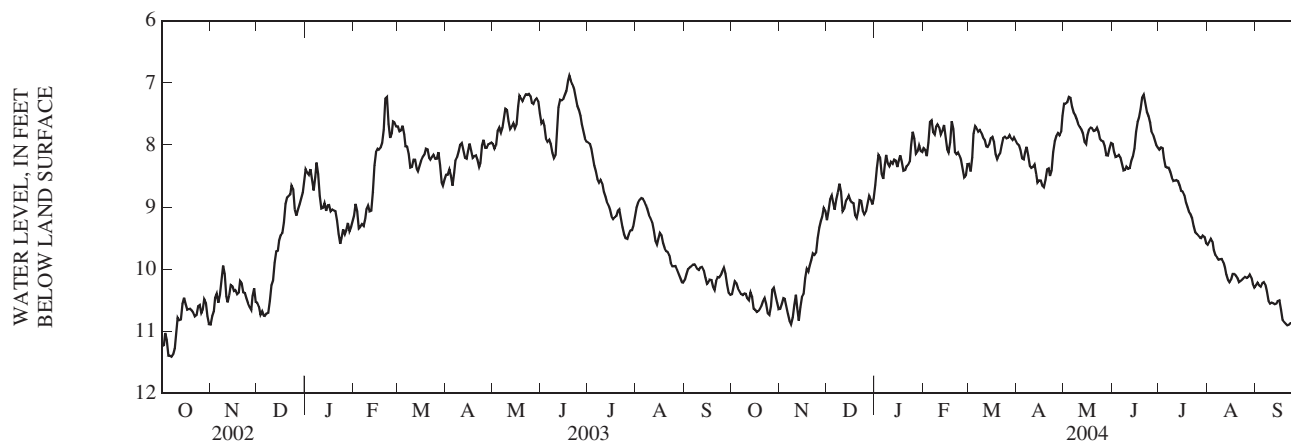
PERIOD OF RECORD.--February 1951 to September 1984 and October 1988 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.79 ft below land-surface datum, June 19, 2003: lowest measured, 19.24 ft below land-surface datum, Jan. 10, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.43	10.68	9.22	8.81	8.10	8.19	7.95	7.36	7.94	8.06	9.63	10.31
2	10.39	10.60	9.20	8.48	8.00	8.42	8.01	7.31	8.03	8.09	9.59	10.22
3	10.23	10.52	8.91	8.26	8.15	8.43	8.00	7.36	8.18	7.99	9.53	10.22
4	10.16	10.42	8.84	8.06	8.21	7.97	8.17	7.27	8.21	8.11	9.49	10.31
5	10.29	10.54	8.79	8.34	7.72	7.67	8.26	7.18	8.16	8.31	9.62	10.26
6	10.33	10.66	9.10	8.60	7.54	7.72	8.20	7.30	8.16	8.39	9.77	10.19
7	10.38	10.78	8.98	8.49	7.66	7.74	8.05	7.47	8.24	8.34	9.79	10.23
8	10.43	10.88	8.78	8.14	7.93	7.82	8.01	7.49	8.38	8.39	9.83	10.27
9	10.41	10.89	8.76	8.18	7.73	7.69	8.33	7.53	8.44	8.47	9.87	10.45
10	10.37	10.68	8.49	8.41	7.69	7.92	8.34	7.62	8.36	8.58	9.81	10.57
11	10.42	10.48	9.01	8.27	7.65	7.84	8.40	7.70	8.34	8.58	9.86	10.54
12	10.53	10.35	9.13	8.27	7.78	7.99	8.31	7.71	8.43	8.56	9.91	10.54
13	10.48	10.90	8.93	8.34	7.89	8.06	8.33	7.78	8.32	8.57	10.05	10.56
14	10.27	10.76	8.88	8.13	7.65	8.01	8.61	7.85	8.19	8.59	10.13	10.57
15	10.63	10.47	8.87	8.37	7.71	7.98	8.61	8.05	8.18	8.71	10.21	10.54
16	10.65	10.43	8.77	8.34	8.05	7.80	8.53	7.92	7.93	8.77	10.21	10.49
17	10.66	10.37	9.01	8.18	8.09	7.94	8.61	7.77	7.65	8.73	10.13	10.52
18	10.72	9.92	8.85	8.16	8.15	7.97	8.70	7.73	7.61	8.88	10.02	10.79
19	10.63	10.06	9.03	8.39	7.77	8.33	8.66	7.71	7.51	8.97	10.13	10.86
20	10.67	10.01	9.23	8.44	7.46	8.13	8.46	7.75	7.33	9.04	10.08	10.85
21	10.53	9.89	9.12	8.37	8.02	8.21	8.33	7.80	7.14	9.10	10.21	10.91
22	10.51	9.82	8.99	8.31	8.20	8.07	8.43	7.73	7.24	9.13	10.21	10.91
23	10.43	9.67	8.79	8.33	8.10	7.94	8.57	7.72	7.42	9.23	10.18	10.88
24	10.69	9.88	9.01	8.20	8.14	7.83	8.25	7.87	7.52	9.39	10.16	10.86
25	10.73	9.59	9.10	7.81	8.21	7.90	7.98	7.92	7.55	9.42	10.13	10.87
26	10.75	9.41	9.14	7.77	8.27	7.89	7.90	7.94	7.74	9.45	10.12	10.89
27	10.45	9.26	9.00	8.03	8.49	7.88	7.81	7.94	7.81	9.48	10.17	10.78
28	10.23	9.19	8.89	8.26	8.56	7.80	7.81	8.10	7.85	9.51	10.09	10.82
29	10.38	9.13	8.74	7.95	8.43	7.99	7.88	8.23	7.98	9.49	10.09	10.96
30	10.46	8.89	9.01	8.07	---	7.85	7.70	8.11	8.02	9.43	10.19	10.98
31	10.61	---	8.91	8.12	---	7.90	---	8.00	---	9.53	10.29	---
MAX	10.75	10.90	9.23	8.81	8.56	8.43	8.70	8.23	8.44	9.53	10.29	10.98
MIN	10.16	8.89	8.49	7.77	7.46	7.67	7.70	7.18	7.14	7.99	9.49	10.19

WTR YR 2004 HIGH 7.14 LOW 10.98



JEFFERSON COUNTY

381441085452701. (Lib A-2), map number 1.

LOCATION.--Lat 38°14'41", long 85°45'27", Hydrologic Unit 05140101, County Code 111, Louisville West quadrangle, at the Louisville Free Public Library, 301 West York Street, on east side of building 200 ft. west of 3rd st. in grass courtyard. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

well, diameter 8 in., depth 105 ft, cased and screened.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 454.23 ft NGVD of 1929. Measuring point: Top of casing, 1.00 ft above land-surface datum.

REMARKS.--Water-quality sample collected May 8, 1956.

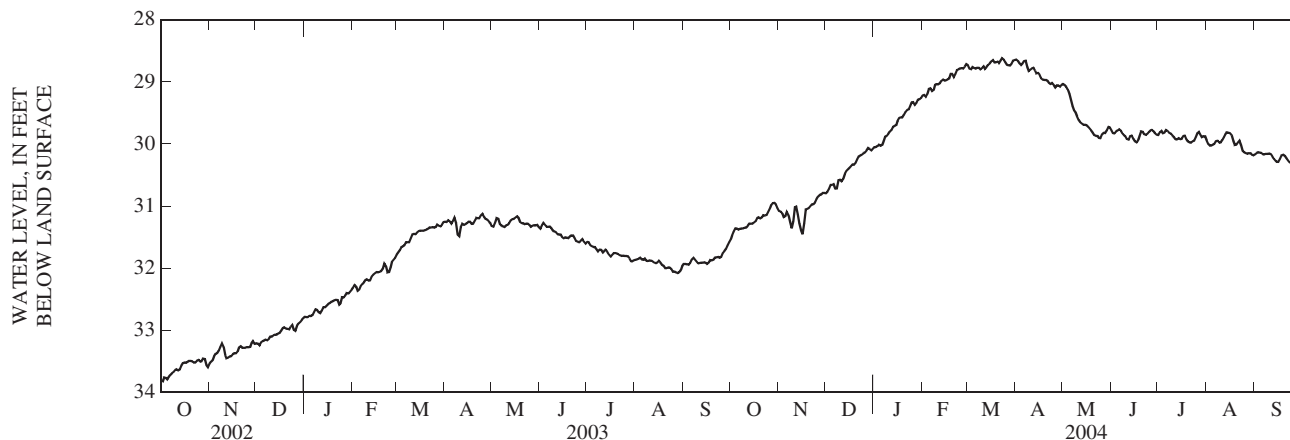
PERIOD OF RECORD.--February 1937 to current year. February 1937 to September 1976 published in hydrograph form and on file at district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 27.51 ft below land-surface datum, June 1, 1997; lowest, 77.82 ft below land-surface datum, Sept. 18, 1955.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31.56	31.07	30.82	30.07	29.24	28.70	28.64	29.03	29.76	29.86	29.90	30.18
2	31.51	31.09	30.77	30.03	29.20	28.76	28.64	29.04	29.80	29.85	29.98	30.16
3	31.44	31.10	30.76	30.07	29.22	28.81	28.68	29.06	29.85	29.77	30.02	30.14
4	31.38	31.15	30.68	30.00	29.26	28.78	28.72	29.09	29.81	29.81	30.03	30.13
5	31.34	31.21	30.64	30.02	29.13	28.74	28.73	29.15	29.79	29.85	30.02	30.15
6	31.38	31.12	30.68	30.04	29.09	28.81	28.67	29.24	29.77	29.79	30.01	30.14
7	31.38	31.07	30.62	29.99	29.11	28.76	28.66	29.34	29.75	29.76	29.99	30.19
8	31.35	31.22	30.81	29.90	29.19	28.78	28.66	29.45	29.81	29.83	29.92	30.15
9	31.37	31.30	30.62	29.87	29.07	28.76	28.85	29.46	29.86	29.82	29.98	30.17
10	31.35	31.42	30.55	29.87	29.03	28.83	28.80	29.52	29.87	29.85	29.98	30.15
11	31.35	31.07	30.60	29.81	29.04	28.72	28.81	29.59	29.88	29.88	29.97	30.16
12	31.34	30.97	30.60	29.79	29.04	28.77	28.75	29.63	29.96	29.90	29.90	30.17
13	31.30	31.05	30.53	29.76	29.01	28.80	28.79	29.67	29.90	29.94	29.88	30.22
14	31.27	31.22	30.45	29.69	28.96	28.72	28.85	29.67	29.85	29.91	29.82	30.26
15	31.30	31.35	30.44	29.73	28.96	28.73	28.87	29.71	29.88	29.90	29.81	30.28
16	31.27	31.42	30.38	29.66	29.00	28.68	28.84	29.67	29.95	29.94	29.83	30.30
17	31.26	31.49	30.39	29.60	28.95	28.66	28.93	29.72	29.97	29.89	29.83	30.28
18	31.22	31.07	30.33	29.56	28.97	28.64	28.95	29.72	29.98	29.85	29.89	30.20
19	31.16	31.04	30.33	29.58	28.92	28.73	28.97	29.78	29.92	29.88	30.01	30.17
20	31.20	31.05	30.34	29.56	28.82	28.64	28.97	29.78	29.83	29.97	30.02	30.18
21	31.20	31.02	30.27	29.50	28.92	28.71	28.97	29.86	29.77	29.95	30.00	30.20
22	31.17	30.99	30.22	29.47	28.92	28.69	29.00	29.86	29.84	30.00	29.95	30.25
23	31.13	30.96	30.19	29.44	28.82	28.63	29.03	29.88	29.85	29.96	29.95	30.28
24	31.18	30.98	30.19	29.44	28.80	28.60	29.04	29.86	29.86	29.96	30.08	30.31
25	31.11	30.91	30.16	29.35	28.80	28.67	29.00	29.94	29.81	29.93	30.13	30.29
26	31.07	30.86	30.15	29.31	28.76	28.70	29.10	29.87	29.80	29.85	30.14	30.21
27	31.01	30.83	30.13	29.34	28.79	28.75	29.08	29.82	29.77	29.80	30.16	30.13
28	30.96	30.81	30.08	29.40	28.78	28.71	29.03	29.82	29.77	29.81	30.16	30.19
29	30.95	30.82	30.05	29.28	28.73	28.76	29.08	29.83	29.82	29.88	30.14	30.14
30	30.95	30.76	30.11	29.28	---	28.66	29.07	29.74	29.84	29.90	30.16	30.09
31	31.00	---	30.09	29.27	---	28.66	---	29.71	---	29.85	30.19	---
MAX	31.56	31.49	30.82	30.07	29.26	28.83	29.10	29.94	29.98	30.00	30.19	30.31
MIN	30.95	30.76	30.05	29.27	28.73	28.60	28.64	29.03	29.75	29.76	29.81	30.09

WTR YR 2004 HIGH 28.60 LOW 31.56



JEFFERSON COUNTY

381504085443202. (CP7A), map number 2.

LOCATION.--Lat 38°15'04", long 85°44'32", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at the southwest corner of east Louisville Park, 13.7 ft west of a tennis court fence, 16.5 ft east of curb on south Hancock Street, 58.2 ft north of curb on east Liberty Street, in Louisville. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 1120TSH.

WELL CHARACTERISTICS.--Augered observation water-table well, diameter 1.5 in., depth 84.6 ft, screened 71.1-74.1 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 467.19 ft above NGVD of 1929. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Replaces destroyed well 381504085443201 (CP7), which was 10 ft north.

PERIOD OF RECORD.--July 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.41 ft below land-surface datum, May 6, 1997; lowest measured, 49.44 ft below land-surface datum, Oct. 21, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	45.80	Sept.30, 2004	Well Destroyed

JEFFERSON COUNTY

381518085453402. (Courthouse Annex), map number 3.

LOCATION.--Lat 38°15'18", long 85°45'34", Hydrologic Unit 05140101, County Code 111, New Albany quadrangle, at northwest corner behind Courthouse Annex building between 5th and 6th Streets, east of walkway to parking garage. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2.5 in., depth 102 ft, screened 42-44 ft, 61-63 ft, 99-101 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 461.63 ft above NGVD of 1929. Measuring point: Top of casing, 3.0 ft above land-surface datum.

REMARKS.--Water levels affected by Ohio River stage and pumping from nearby wells.

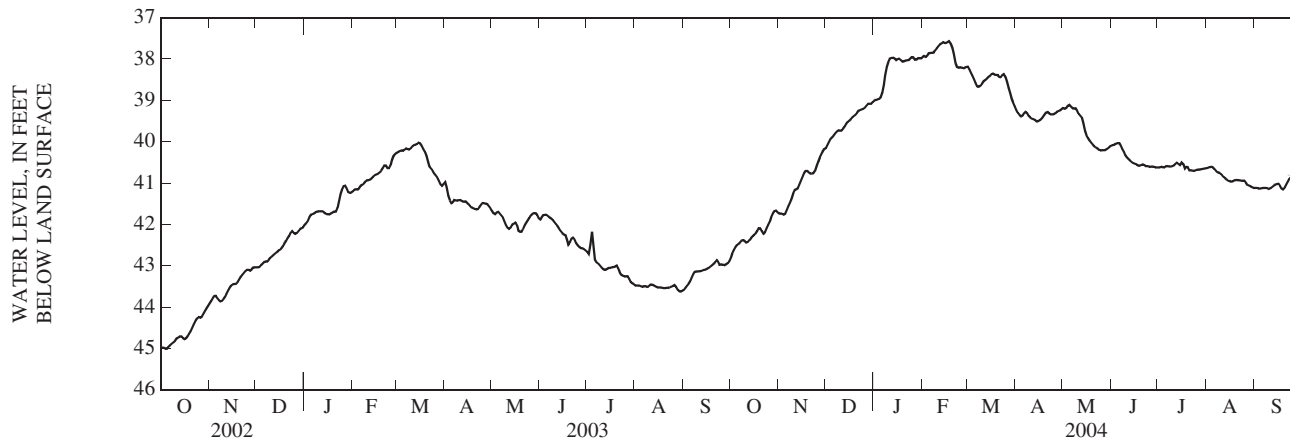
PERIOD OF RECORD.--November 1986 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 37.49 ft below land-surface datum, March 8, 1998; lowest, 46.82 ft below land-surface datum, July 27, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42.86	41.74	40.18	39.03	37.97	38.17	39.18	39.20	40.10	40.62	40.65	41.12
2	42.76	41.73	40.13	38.99	37.93	38.20	39.28	39.19	40.09	40.63	40.63	41.11
3	42.66	41.74	40.04	38.99	37.93	38.31	39.33	39.22	40.08	40.61	40.63	41.13
4	42.59	41.76	39.97	38.98	37.97	38.37	39.38	39.17	40.06	40.60	40.60	41.13
5	42.53	41.78	39.89	38.96	37.87	38.44	39.40	39.11	40.04	40.63	40.61	41.14
6	42.48	41.71	39.89	38.90	37.85	38.53	39.34	39.12	40.03	40.61	40.64	41.11
7	42.46	41.60	39.83	38.74	37.85	38.63	39.29	39.18	40.04	40.58	40.69	41.13
8	42.40	41.51	39.78	38.52	37.86	38.70	39.26	39.21	40.15	40.60	40.72	41.11
9	42.37	41.44	39.74	38.27	37.83	38.65	39.36	39.19	40.21	40.60	40.75	41.13
10	42.38	41.31	39.71	38.14	37.77	38.65	39.40	39.19	40.30	40.60	40.75	41.14
11	42.43	41.19	39.75	38.01	37.73	38.56	39.43	39.30	40.36	40.58	40.80	41.14
12	42.45	41.14	39.72	37.97	37.66	38.53	39.46	39.36	40.40	40.57	40.84	41.11
13	42.40	41.18	39.66	37.99	37.65	38.51	39.46	39.39	40.45	40.51	40.87	41.08
14	42.36	41.08	39.60	37.95	37.60	38.45	39.50	39.45	40.47	40.51	40.91	41.05
15	42.32	41.00	39.55	38.03	37.59	38.44	39.51	39.69	40.51	40.57	40.93	41.03
16	42.25	40.90	39.50	38.03	37.63	38.39	39.50	39.81	40.54	40.57	40.96	41.02
17	42.24	40.81	39.48	37.99	37.60	38.36	39.47	39.87	40.54	40.45	40.96	41.01
18	42.19	40.71	39.43	37.99	37.59	38.35	39.43	39.95	40.57	40.64	40.97	41.11
19	42.12	40.70	39.39	38.05	37.56	38.41	39.38	40.00	40.58	40.67	40.94	41.16
20	42.07	40.71	39.37	38.08	37.70	38.37	39.33	40.05	40.59	40.54	40.92	41.15
21	42.11	40.76	39.32	38.05	37.76	38.41	39.27	40.09	40.55	40.69	40.93	41.07
22	42.22	40.78	39.28	38.03	38.03	38.45	39.30	40.13	40.55	40.69	40.93	41.00
23	42.23	40.76	39.23	38.03	38.17	38.43	39.33	40.15	40.59	40.69	40.93	40.93
24	42.14	40.76	39.24	38.02	38.23	38.36	39.35	40.18	40.59	40.71	40.95	40.88
25	42.04	40.66	39.21	37.96	38.21	38.39	39.32	40.21	40.60	40.70	40.94	40.85
26	41.98	40.53	39.20	37.94	38.20	38.48	39.35	40.21	40.61	40.68	40.94	40.83
27	41.88	40.43	39.15	37.98	38.22	38.64	39.28	40.20	40.60	40.68	41.03	40.81
28	41.78	40.34	39.11	38.05	38.23	38.77	39.27	40.21	40.60	40.67	41.06	40.81
29	41.71	40.29	39.06	37.98	38.21	38.90	39.26	40.20	40.62	40.67	41.07	40.83
30	41.66	40.19	39.10	37.97	---	39.00	39.23	40.17	40.62	40.66	41.09	40.84
31	41.67	---	39.06	38.00	---	39.10	---	40.13	---	40.64	41.11	---
MAX	42.86	41.78	40.18	39.03	38.23	39.10	39.51	40.21	40.62	40.71	41.11	41.16
MIN	41.66	40.19	39.06	37.94	37.56	38.17	39.18	39.11	40.03	40.45	40.60	40.81

WTR YR 2004 HIGH 37.56 LOW 42.86



JEFFERSON COUNTY

381613085422801. (Edith Lane Landfill), map number 5.

LOCATION.--Lat 38° 16' 13", long 85° 42' 28", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 50 feet east of landfill, 200 feet south of River Road. Owner: City of Louisville.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 2 in., depth 60.9, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 433.66 ft above NGVD of 1929. Measuring point: Top of pvc casing, 68 ft land-surface datum.

REMARKS.-- Unused landfill monitoring well.

PERIOD OF RECORD.--March 2001 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.23 ft below land-surface datum, Mar. 29, 2002; lowest measured, 14.29 ft below land-surface datum, Sept. 25, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	13.36		

381638085415801. (WC-4), map number 6.

LOCATION.--Lat 38° 16' 38", long 85° 41' 58", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at the northwest corner of River Road and Zorn Avenue, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 104 ft, screened 98-100 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.79 ft above NGVD of 1929. Measuring point: Floor of recorder shelter, 4.41 ft above land-surface datum.

REMARKS.-- Water levels affected by Ohio River, which causes level to rise above land-surface and nearby pumpage. Water-quality sample collected July 10, 1979.

PERIOD OF RECORD.--October 1946 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level observed, 3.71 ft above land-surface datum, Mar. 13, 1967; lowest, 19.61 ft below land-surface datum, Feb. 13, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	15.02		

381648085421201. (WC-5), map number 7.

LOCATION.--Lat 38° 16' 48", long 85° 42' 12", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 200 ft west of Louisville Water Company pump house, 200 ft south of the Ohio River, 0.2 mi northwest of junction of River Road and Zorn Avenue, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 98 ft, screened 96-98 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.11 ft above NGVD of 1929. Measuring point: Top of pipe flange, 2.21 ft above land-surface datum.

REMARKS.-- Water levels affected by Ohio River, which causes level to rise above land-surface. Water-quality collected Apr. 30, 1948.

PERIOD OF RECORD.--May 1946 to current year. May 1946 to April 1977 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.04 ft above land-surface datum, Jan. 17, 1950; lowest measured, 18.31 ft below land-surface datum, Nov. 6, 1946.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	13.82		

JEFFERSON COUNTY

381653085413302 (WC-9A), map number 8

LOCATION.--Lat 38°16'53", long 85°41'33". Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 45 ft east of River Road at Wagner Lane, opposite the southwest corner of Cox Park, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 90 ft, screened 76-78 ft, 88-90 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval. DATUM.--Elevation of land-surface datum is 437.65 ft NGVD of 1929. Measuring point: Top of casing, 3.00 ft above land-surface datum.

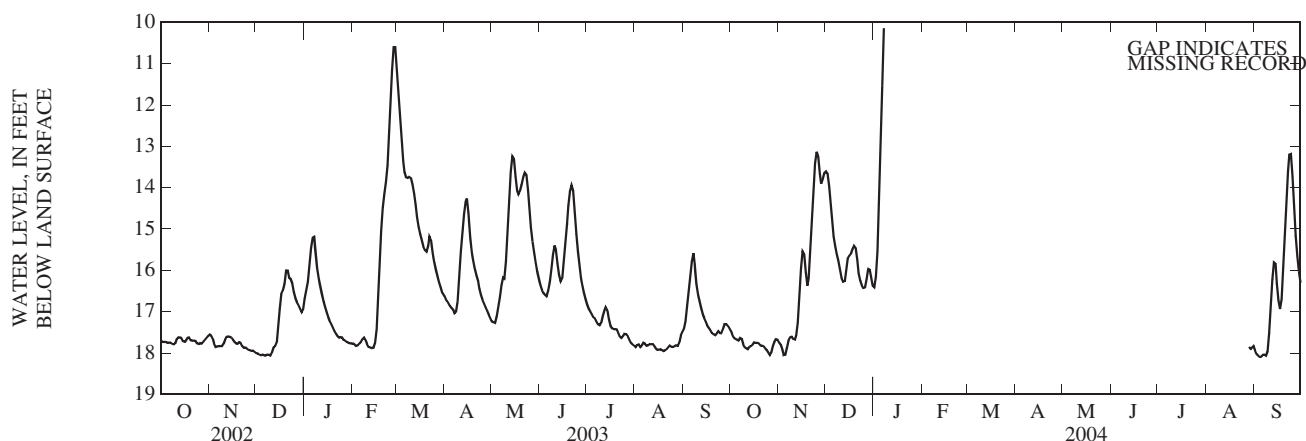
PERIOD OF RECORD.--December 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 6.40 ft below land-surface datum, May 20, 1996; lowest measured, 19.04 ft below land-surface datum, July 21, 1980.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17.42	17.71	13.62	16.44	---	---	---	---	---	---	---	17.88
2	17.50	17.78	13.59	16.37	---	---	---	---	---	---	---	17.99
3	17.58	17.81	13.72	15.95	---	---	---	---	---	---	---	18.05
4	17.66	18.03	14.20	15.13	---	---	---	---	---	---	---	18.07
5	17.66	18.06	14.67	13.79	---	---	---	---	---	---	---	18.11
6	17.69	18.01	15.06	12.24	---	---	---	---	---	---	---	18.05
7	17.70	17.74	15.30	10.80	---	---	---	---	---	---	---	18.02
8	17.57	17.65	15.53	9.49	---	---	---	---	---	---	---	18.06
9	17.74	17.59	15.70	---	---	---	---	---	---	---	---	18.06
10	17.85	17.62	15.86	---	---	---	---	---	---	---	---	17.86
11	17.86	17.70	16.12	---	---	---	---	---	---	---	---	17.17
12	17.91	17.64	16.25	---	---	---	---	---	---	---	---	16.49
13	17.90	17.50	16.30	---	---	---	---	---	---	---	---	15.95
14	17.80	17.01	16.22	---	---	---	---	---	---	---	---	15.65
15	17.86	16.25	15.80	---	---	---	---	---	---	---	---	16.01
16	17.74	15.67	15.64	---	---	---	---	---	---	---	---	16.62
17	17.75	15.39	15.66	---	---	---	---	---	---	---	---	16.83
18	17.76	15.81	15.54	---	---	---	---	---	---	---	---	17.03
19	17.74	16.27	15.43	---	---	---	---	---	---	---	---	16.35
20	17.80	16.46	15.38	---	---	---	---	---	---	---	---	15.48
21	17.82	15.91	15.54	---	---	---	---	---	---	---	---	14.64
22	17.82	15.04	15.95	---	---	---	---	---	---	---	---	13.87
23	17.86	14.30	16.18	---	---	---	---	---	---	---	---	13.32
24	17.90	13.63	16.30	---	---	---	---	---	---	---	---	13.08
25	17.94	13.17	16.42	---	---	---	---	---	---	---	---	13.29
26	18.02	13.09	16.44	---	---	---	---	---	---	---	---	14.16
27	18.07	13.42	16.38	---	---	---	---	---	---	---	---	14.90
28	17.91	13.91	16.05	---	---	---	---	---	---	---	17.86	15.44
29	17.76	13.91	15.88	---	---	---	---	---	---	---	17.85	15.86
30	17.69	13.67	16.10	---	---	---	---	---	---	---	17.95	16.19
31	17.64	---	16.30	---	---	---	---	---	---	---	17.78	---
MAX	18.07	18.06	16.44	---	---	---	---	---	---	---	---	18.11
MIN	17.42	13.09	13.59	---	---	---	---	---	---	---	---	13.08

WTR YR 2004 HIGH 9.49 LOW 18.11



JEFFERSON COUNTY

381701085414002 (WC-8A), map number 9

LOCATION.--Lat 38°17'01", long 85°41'40", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, on the south bank of the Ohio River at the northwest corner of Cox Park, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 1.5 in., depth 86.8 ft, screened 86.8-90.8 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 432.62 ft NGVD of 1929. Measuring point: Top of casing, 2.65 ft above land-surface datum.

REMARKS.--Replaces well 381702085414001 (WC-8) which was 100 ft north. Water levels affected by Ohio River.

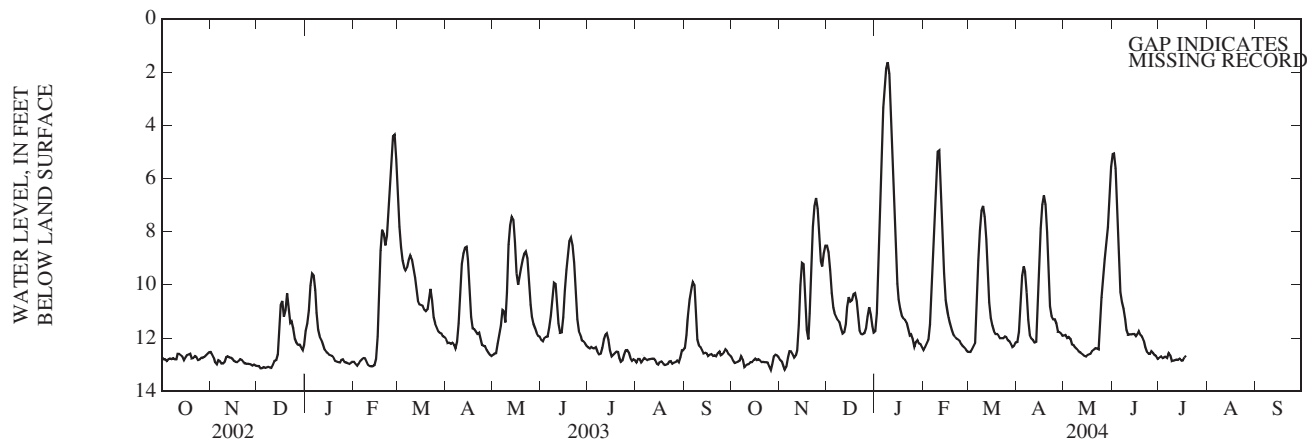
PERIOD OF RECORD.--August 1979 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.63 ft below land-surface datum, Ja. 10, 2004; lowest measured, 14.35 ft below land-surface datum, Oct. 18, 1991.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.70	12.78	8.47	11.93	12.47	12.53	12.10	11.92	5.19	12.79	---	---
2	12.77	12.87	8.58	11.57	12.42	12.51	12.21	11.89	4.98	12.68	---	---
3	12.92	12.89	8.97	10.55	12.27	12.54	11.33	11.88	5.15	12.70	---	---
4	12.96	13.23	9.92	8.73	12.15	12.28	9.96	12.13	6.08	12.82	---	---
5	12.89	13.17	10.68	5.98	12.00	12.36	9.36	11.81	7.65	12.66	---	---
6	12.90	13.00	11.05	3.85	10.98	12.04	9.27	12.26	9.96	12.74	---	---
7	12.83	12.50	11.08	2.84	8.92	9.74	9.75	12.22	10.59	12.76	---	---
8	12.54	12.50	11.33	2.11	7.89	8.44	10.82	12.31	10.73	12.38	---	---
9	13.05	12.49	11.33	1.64	6.74	7.49	11.79	12.38	11.08	12.94	---	---
10	13.13	12.73	11.47	1.63	5.43	6.95	11.97	12.43	11.52	12.81	---	---
11	12.96	12.75	11.83	2.50	4.56	7.11	12.06	12.51	11.90	12.88	---	---
12	13.03	12.57	11.85	4.74	5.32	7.77	12.10	12.56	11.85	12.78	---	---
13	12.94	12.39	11.72	6.70	7.00	8.80	12.25	12.57	11.88	12.85	---	---
14	12.87	10.66	11.24	8.34	8.76	10.25	12.04	12.67	11.83	12.79	---	---
15	12.95	9.39	10.43	9.54	10.36	11.07	10.06	12.70	11.87	12.77	---	---
16	12.71	8.95	10.49	10.36	10.77	11.42	8.40	12.71	11.83	12.93	---	---
17	12.83	9.48	10.77	10.74	11.10	11.66	7.35	12.58	12.03	12.76	---	---
18	12.84	11.35	10.41	11.08	11.38	11.83	6.63	12.67	11.67	12.73	---	---
19	12.75	12.03	10.31	11.25	11.57	11.86	6.64	12.51	11.81	12.61	---	---
20	12.92	12.07	10.32	11.26	11.82	11.83	7.32	12.46	11.97	---	---	---
21	12.89	10.09	10.91	11.35	11.92	12.02	8.73	12.41	11.91	---	---	---
22	12.89	8.29	11.57	11.47	12.00	12.00	10.40	12.34	12.26	---	---	---
23	12.92	7.34	11.86	11.84	12.06	12.01	11.20	12.43	12.46	---	---	---
24	12.90	6.72	11.84	11.99	12.05	12.01	11.16	12.43	12.58	---	---	---
25	12.94	6.76	11.88	11.76	12.16	11.87	11.42	10.92	12.61	---	---	---
26	13.19	7.53	11.77	12.33	12.25	12.08	11.17	10.03	12.58	---	---	---
27	13.20	8.67	11.51	12.34	12.34	12.09	11.73	9.44	12.41	---	---	---
28	12.79	9.56	10.87	11.96	12.38	12.16	11.80	8.63	12.71	---	---	---
29	12.60	9.05	10.80	12.20	12.48	12.31	11.75	8.29	12.57	---	---	---
30	12.66	8.59	11.44	12.23	---	12.38	11.90	7.38	12.78	---	---	---
31	12.65	---	11.68	12.24	---	12.22	---	5.94	---	---	---	---
MAX	13.20	13.23	11.88	12.34	12.48	12.54	12.25	12.71	12.78	---	---	---
MIN	12.54	6.72	8.47	1.63	4.56	6.95	6.63	5.94	4.98	---	---	---

WTR YR 2004 HIGH 1.63 LOW 13.23



JEFFERSON COUNTY

381742085402001. WC-13), map number 10.

LOCATION.--Lat 38° 17' 42", long 85° 40' 20", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 30 ft east of River Road, 300 ft northeast of junction of River Road and Blankenbaker Lane, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 106 ft, screened 104-106 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.87 ft above NGVD of 1929. Measuring point: Top of plug, 3.07 ft above land-surface datum.

PERIOD OF RECORD.--June 1946 to current year. June 1946 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.28 ft below land-surface datum, Jan. 18, 1950: lowest measured, 19.75 ft below land-surface datum, Jan. 29, 1954.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	17.13		

381827085392401. (WC-26), map number 11.

LOCATION.--Lat 38° 18' 27", long 85° 39' 24", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 20 ft east of River Road, opposite River Valley Club in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 4 in., depth 130 ft, screened 128-130 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 455.94 ft above NGVD of 1929. Measuring point: Top of plug, 4.68 ft above land-surface datum.

PERIOD OF RECORD.--July 1946 to current year. July 1946 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.93 ft below land-surface datum, Jan. 18, 1950: lowest measured, 38.53 ft below land-surface datum, Feb. 3, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	28.16		

381904085384801. (WC-27), map number 12.

LOCATION.--Lat 38° 19' 04", long 85° 38' 48", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 30 ft west of River Road, 250 ft north of north end of bridge over Goose Creek, in Louisville. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 4 in., depth 96 ft, screened 94-96 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.46 ft above NGVD of 1929. Measuring point: Top of plug, 2.29 ft above land-surface datum.

PERIOD OF RECORD.--August 1946 to current year. August 1946 to November 1976 published in hydrograph form and on file at the district office.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.84 ft above land-surface datum, Jan. 17, 1950: lowest measured, 20.97 ft below land-surface datum, Feb. 3, 1948.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 8, 2003	17.99		

JEFFERSON COUNTY

381958085380201. (Thompson well), map number 13.

LOCATION.--Lat 38°19'58", long 85°37'52", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6600 Upper River Road, in well house next to drive, near horse barn. Owner: Thompson.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled used water-table well, diameter 6 in., depth 53 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 461.44 above NGVD of 1929. Measuring point: Top of well seal, 7.00 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.58 ft below land-surface datum, Mar. 28, 2002; lowest measured, 42.05 ft below land-surface datum, Sept. 28, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	41.31	Aug. 6, 2004	39.54
Nov. 5, 2003	41.63	Aug. 27, 2004	40.02
May 11, 2004	38.18		

382007085373801. (Bird Man), map number 14.

LOCATION.--Lat 38°20'07", long 85°37'38", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 7105 Upper River Road, in well house next to drive, near main house. Owner: Bird Man.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 61.5 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 453.83 ft above NGVD of 1929. Measuring point: Top of casing, at land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.02 ft below land-surface datum, May 5, 2002; lowest measured, 33.99 ft below land-surface datum, Sept. 28, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	33.26	Jul. 29, 2004	30.52
Nov. 5, 2003	33.63	Aug. 6, 2004	30.65
May 11, 2004	29.50	Aug. 27, 2004	31.19

382016085382601. (LWC-P-4), map number 25.

LOCATION.--Lat 38°20'16", long 85°38'26", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, across from Transylvania Beach Road, 150 ft east of road, in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 90.6 ft., screen: unused water-table well, diameter 6 in., screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel. Measuring point: Top of 2 in. PVC, 3.17 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--August 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.66 ft below land-surface datum, March 25, 2004; lowest measured, 12.41 ft below land-surface datum, Nov. 5, 2003.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	11.97	May 11, 2004	10.51
Nov. 5, 2003	12.41	Aug. 6, 2004	10.69
Mar. 25, 2004	9.66	Aug. 28, 2004	11.24

JEFFERSON COUNTY

382026085374301. (Little Dean), map number 15.

LOCATION.--Lat 38°20'26", long 85°37'43", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6203 Mason Road, well is next to drive, 50 ft. northwest of house. Owner: Little Dean.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 90 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 460.26 ft above NGVD of 1929. Measuring point: Top of well seal, 1.30 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 31.12 ft below land-surface datum, Jul. 28, 2004; lowest measured, 34.84 ft below land-surface datum, Sept. 28, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	33.80	Jul. 28, 2004	31.12
Nov. 5, 2003	33.45	Aug. 6, 2004	31.29
May 11, 2004	31.55	Aug. 27, 2004	31.58

382032085375601. (Staples), map number 16.

LOCATION.--Lat 38°20'32", long 85°37'56", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6301 Mayfair Road, in concrete well pit next to drive, 15ft. north of garage. Owner: Staples.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 73 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 459.07 ft above NGVD of 1929. Measuring point: Top of concrete slab above hole in well seal at land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.35 ft below land-surface datum, Mar. 25, 1999; lowest measured, 42.30 ft below land-surface datum, Jan. 04, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	40.75	Jul. 28, 2004	33.07
Nov. 5, 2003	41.39	Aug. 6, 2004	34.24
May 11, 2004	32.41	Aug. 27, 2004	35.44

382034085381201. (LWC-P-1), map number 30.

LOCATION.--Lat 38°20'34", long 85°38'12", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 500 ft. west of lagoon 4, 400 ft. south of Louisville Water Company gate on Mayfair Ave., in yellow 4 in. square protective casing Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 101.8 ft., screen unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 437.86 ft above NGVD of 1929. Measuring point: Top of 2 in. PVC, 3.00 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water-level measured, 12.85 ft. below land-surface datum, May 11, 2004; lowest measured, 19.94 ft below land-surface datum, Nov. 05, 2003.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Nov. 5, 2003	19.94	Aug. 6, 2004	14.09
May 11, 2004	12.85	Aug. 27, 2004	14.88

JEFFERSON COUNTY

382037085381101. (LWC-P-2), map number 29.

LOCATION.--Lat 38°20'37", long 85°38'11", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 500 ft. west of lagoon 4, 200 ft. south of Louisville Water Company gate on Mayfair Ave., in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 102 ft., screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 435.90 ft above NGVD of 1929. Measuring point: Top of 2 in. PVC, 3.01 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.61 ft below land-surface datum, May 11, 2004; lowest measured, 18.59 ft below land-surface datum, Nov. 5, 2003.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Nov. 5, 2003	18.59	Jul. 28, 2004	11.81
Mar.25, 2004	12.45	Aug. 3, 2004	12.83
May11, 2004	11.61	Aug.29, 2004	13.90

382038085382001. (Scott), map number 24.

LOCATION.--Lat 38°20'38", long 85°38'20", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6410 Transylvania Beach Road in side yard 20 ft south of house. Owner: Resident.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 50 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 437.23 ft above NGVD of 1929. Measuring point: Top of 6 in. steel casing, 1.17 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--September 2002 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.52 ft below land-surface datum, Mar. 20, 2003; lowest measured, 18.79 ft below land-surface datum, Nov. 5, 2003.

Date	Water Level	Date	Water Level
Oct. 7, 2003	18.27	Aug. 6, 2004	16.71
Nov. 5, 2003	18.79	Aug.28, 2004	17.07
May11, 2004	16.15		

JEFFERSON COUNTY

382039085375201. (WP-7), map number 17

LOCATION.--Lat 38°20'39", long 85°37'52", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2.0 in., depth 83.5 ft, screen: unknown.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 462.66 ft NGVD of 1929. Measuring point: Top of casing, 3.80 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

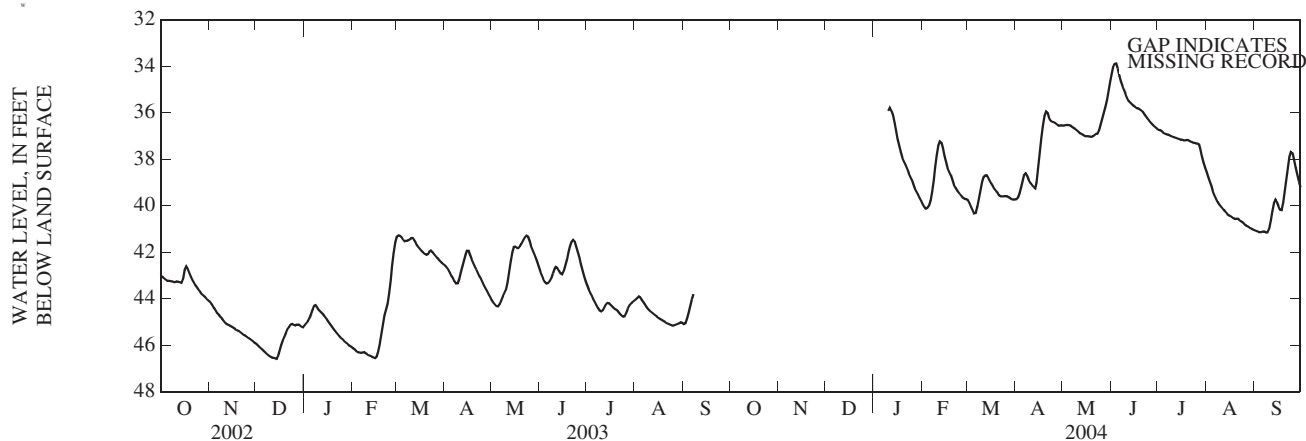
PERIOD OF RECORD.--December 1997 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 33.84 ft below land-surface datum, June 4, 2004; lowest measured, 48.10 ft below land-surface datum, Jan. 15, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	39.86	39.73	39.71	36.54	34.50	36.72	38.47	41.06
2	---	---	---	---	39.96	39.79	39.72	36.58	34.17	36.74	38.67	41.08
3	---	---	---	---	40.11	39.98	39.58	36.54	33.96	36.76	38.89	41.12
4	---	---	---	---	40.16	40.11	39.37	36.51	33.84	36.82	39.06	41.12
5	---	---	---	---	40.05	40.24	39.06	36.55	33.95	36.88	39.27	41.16
6	---	---	---	---	39.98	40.41	38.77	36.53	34.26	36.91	39.47	41.11
7	---	---	---	---	39.60	40.20	38.60	36.62	34.58	36.95	39.61	41.11
8	---	---	---	---	39.18	39.89	38.60	36.65	34.77	36.93	39.77	41.11
9	---	---	---	---	38.64	39.50	38.84	36.68	34.95	37.00	39.89	41.18
10	---	---	---	36.09	38.10	39.13	38.96	36.74	35.11	37.02	39.99	41.13
11	---	---	---	35.76	37.59	38.81	39.07	36.78	35.28	37.06	40.09	40.86
12	---	---	---	35.81	37.25	38.70	39.15	36.89	35.45	37.07	40.14	40.45
13	---	---	---	36.03	37.21	38.69	39.23	36.92	35.54	37.09	40.22	40.04
14	---	---	---	36.24	37.37	38.68	39.28	36.94	35.60	37.11	40.30	39.75
15	---	---	---	36.69	37.73	38.88	38.75	36.99	35.68	37.16	40.37	39.72
16	---	---	---	37.01	38.04	38.97	38.05	37.02	35.72	37.16	40.44	39.95
17	---	---	---	37.28	38.27	39.11	37.39	37.01	35.78	37.16	40.46	40.07
18	---	---	---	37.56	38.46	39.21	36.79	37.01	35.81	37.21	40.49	40.27
19	---	---	---	37.84	38.61	39.38	36.31	37.04	35.83	37.18	40.56	40.10
20	---	---	---	38.04	38.74	39.38	35.99	37.04	35.88	37.16	40.58	39.61
21	---	---	---	38.16	39.02	39.52	35.92	37.00	35.90	37.19	40.53	39.08
22	---	---	---	38.31	39.18	39.58	36.12	36.93	36.00	37.25	40.59	38.55
23	---	---	---	38.49	39.28	39.60	36.30	36.91	36.11	37.27	40.64	38.10
24	---	---	---	38.71	39.39	39.59	36.36	36.89	36.21	37.30	40.69	37.73
25	---	---	---	38.76	39.49	39.60	36.41	36.68	36.30	37.31	40.73	37.63
26	---	---	---	38.97	39.55	39.57	36.42	36.41	36.40	37.33	40.82	37.86
27	---	---	---	39.18	39.63	39.62	36.47	36.14	36.45	37.33	40.88	38.20
28	---	---	---	39.35	39.69	39.65	36.54	35.89	36.52	37.40	40.89	38.53
29	---	---	---	39.43	39.71	39.72	36.56	35.65	36.59	37.75	40.94	38.83
30	---	---	---	39.61	---	39.72	36.55	35.31	36.64	38.04	41.00	39.10
31	---	---	---	39.73	---	39.75	---	34.88	---	38.27	41.01	---
MAX	---	---	---	---	40.16	40.41	39.72	37.04	36.64	38.27	41.01	41.18
MIN	---	---	---	---	37.21	38.68	35.92	34.88	33.84	36.72	38.47	37.63

WTR YR 2004 HIGH 33.84 LOW 41.18



JEFFERSON COUNTY

382051085380801. (LWC-1), map number 18

LOCATION.--Lat 38°20'51", long 85°37'08", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville. Water Company B.E. Payne treatment plant, 300 ft. west of lagoon #2, 1000 ft. north of Mayfair road, along treeline. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 76.5 ft, screened: 66-67 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 434.26 ft NGVD of 1929. Measuring point: Top of casing, 3.40 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

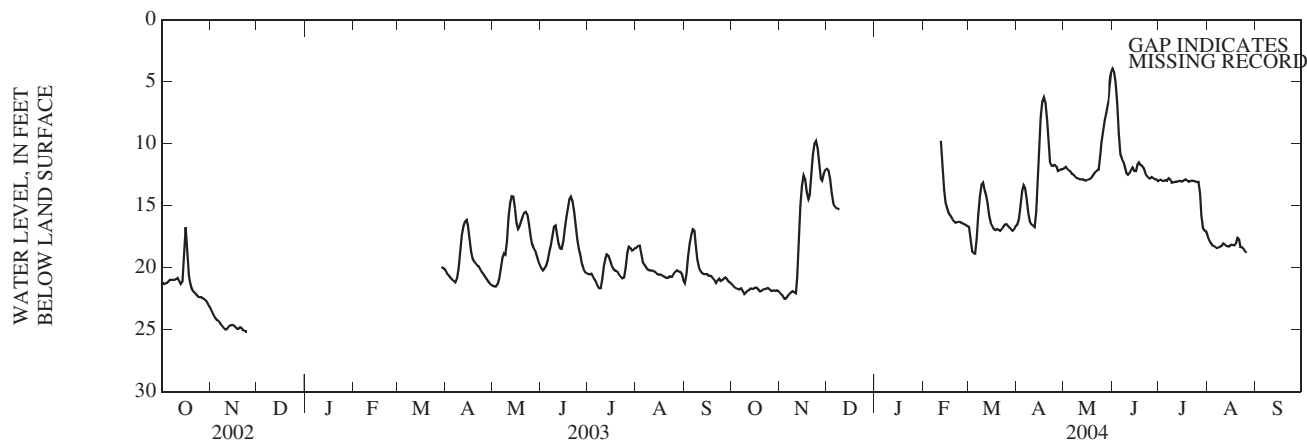
PERIOD OF RECORD.--March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.95 ft below land-surface datum, Jun. 2, 2004; lowest measured, 25.19 ft below land-surface datum, Nov. 26, 2002.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.27	21.99	12.10	---	---	16.66	16.48	12.08	3.96	13.04	17.22	---
2	21.41	22.12	11.97	---	---	16.76	16.53	11.93	3.95	12.87	17.69	---
3	21.49	22.19	12.39	---	---	18.63	15.64	11.82	4.43	12.92	17.85	---
4	21.64	22.50	13.38	---	---	18.76	14.23	12.24	5.67	13.09	18.16	---
5	21.69	22.52	14.57	---	---	18.90	13.41	12.03	7.78	12.91	18.26	---
6	21.74	22.42	15.02	---	---	18.79	13.26	12.41	10.53	13.00	18.26	---
7	21.73	22.14	15.08	---	---	16.52	13.84	12.46	11.22	13.00	18.37	---
8	21.63	22.07	15.31	---	---	14.82	15.01	12.58	11.24	12.54	18.46	---
9	22.08	21.88	15.21	---	---	13.65	16.09	12.69	11.72	13.20	18.26	---
10	22.15	21.87	15.33	---	---	13.03	16.41	12.79	12.21	13.06	18.38	---
11	21.88	22.08	---	---	---	13.28	16.57	12.87	12.58	13.14	18.10	---
12	21.87	22.01	---	---	8.76	14.25	16.62	12.90	12.43	13.01	18.00	---
13	21.76	19.54	---	---	10.81	14.21	16.79	12.85	12.27	13.10	18.25	---
14	21.58	16.11	---	---	12.79	15.41	14.21	12.92	11.98	13.03	18.23	---
15	21.82	13.83	---	---	14.54	16.23	11.13	12.97	11.86	12.97	18.35	---
16	21.55	12.91	---	---	15.07	16.54	8.62	12.99	12.57	13.13	18.18	---
17	21.62	12.20	---	---	15.42	16.76	7.07	12.84	11.86	12.95	18.07	---
18	21.63	13.58	---	---	15.72	16.96	6.17	12.93	11.41	12.96	18.24	---
19	21.84	14.21	---	---	15.83	16.99	6.36	12.74	11.60	12.80	18.17	---
20	21.95	14.76	---	---	16.07	16.83	7.12	12.59	11.82	13.17	17.93	---
21	21.80	13.57	---	---	16.34	17.07	9.04	12.39	11.74	13.00	17.24	---
22	21.72	11.47	---	---	16.35	16.97	11.03	12.19	12.19	13.00	18.20	---
23	21.74	10.31	---	---	16.34	16.83	11.86	12.17	12.52	12.98	18.43	---
24	21.67	9.72	---	---	16.26	16.64	11.68	12.01	12.74	13.03	18.27	---
25	21.61	9.83	---	---	16.33	16.44	11.90	10.39	12.79	13.08	18.60	---
26	21.82	10.91	---	---	16.39	16.55	11.51	9.32	12.79	13.06	18.74	---
27	21.92	12.34	---	---	16.48	16.71	12.15	8.60	12.58	13.09	18.81	---
28	21.78	13.29	---	---	16.51	16.85	12.24	7.66	12.92	14.94	---	---
29	21.88	12.69	---	---	16.62	17.01	12.05	7.34	12.76	16.57	---	---
30	21.86	12.17	---	---	---	17.04	12.07	6.29	13.01	17.04	---	---
31	21.79	---	---	---	---	16.80	---	4.56	---	16.96	---	---
MAX	22.15	22.52	---	---	---	18.90	16.79	12.99	13.01	17.04	---	---
MIN	21.27	9.72	---	---	---	13.03	6.17	4.56	3.95	12.54	---	---

WTR YR 2004 HIGH 3.95 LOW 22.52



382053085381301. (LWC-3B), map number 28.

LOCATION.--Lat 38°20'53", long 85°38'13", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, 500 ft. west of lagoon 4, 400 ft. south of Louisville Water Company B.E.gate on Mayfair Ave., in yellow 4 in. square protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 125 in., depth 85.8 ft., screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 436.29 ft. above NGVD of 1929. Measuring point: Top of PVC casing 1.90 ft. above land-surface.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--July 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.67 ft below land-surface datum, Jul. 28, 2004; lowest measured, 22.22 ft below land-surface datum, Aug. 27, 2004.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Jul. 20, 2004	19.94	Jul. 30, 2004	20.57
Jul. 28, 2004	15.67	Aug. 27, 2004	22.22

382054085380602. (LWC-7A), map number 27.

LOCATION.--Lat 38°20'54", long 85°38'06", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant, in field 1000 ft. southeast of collector well, inside 6 in. steel protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 82.7 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 431.99 ft above NGVD of 1929. Measuring point: Top of PVC casing 2.01 ft. above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--July 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.83 ft below land-surface datum, Jul. 28, 2004; lowest measured, 22.20 ft below land-surface datum, Aug. 27, 2004.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Jul. 20, 2004	10.97	Jul. 30, 2004	20.25
Jul. 28, 2004	10.83	Aug. 27, 2004	22.20

382057085380801. (LWC-2B), map number 26.

LOCATION.--Lat 38°20'57", long 85°38'08", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant, in field 300 ft. southeast of collector well, inside 6 in. steel protective casing. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 1.25 in., depth 82.1 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 432.59 ft above NGVD of 1929. Measuring point: Top of PVC casing 2.13 ft. above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--November 2003 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.92 ft below land-surface datum, May 11, 2004; lowest measured, 29.04 ft below land-surface datum, Aug. 27, 2004.

Date	Water Level	Date	Water Level
Nov. 5, 2003	33.93	Jul. 28, 2004	24.02
May 11, 2004	11.92	Jul. 30, 2004	27.43
Jul. 20, 2004	12.25	Aug. 27, 2004	29.04

JEFFERSON COUNTY

382058085373501. (Shirley Avenue), map number 19.

LOCATION.--Lat $38^{\circ}20'58''$, long $85^{\circ}37'35''$, Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 6401 Shirley Avenue, 50 ft. to rear of house. Owner: Resident.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled unused water-table well, diameter 6 in., depth 45 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 463.40 ft above NGVD of 1929. Measuring point: Under hand pump thru hole in side of casing, at land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--July 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.36 ft below land-surface datum, Jul. 28, 2004; lowest measured, 44.03 ft below land-surface datum, Mar. 26, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	41.58	Jul. 28, 2004	37.36
Nov. 5, 2003	41.90	Aug. 6, 2004	37.74
May11, 2004	38.36	Aug.27, 2004	38.94

382102085380701. (WP-19), map number 20.

LOCATION.--Lat $38^{\circ}21'02''$, long $85^{\circ}38'07''$, Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Louisville Water Company B.E. Payne treatment plant, 200 ft. east of collector well. Owner: Louisville Water Company.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 106 ft, screen: unknown.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 434.48 ft above NGVD of 1929. Measuring point: Top of casing, 2.28 ft above land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.25 ft below land-surface datum, Mar. 1, 1999; lowest measured, 49.70 ft below land-surface datum, Mar. 26, 2001.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	43.27	Jul. 28, 2004	14.00
Nov. 5, 2003	43.22	Aug. 6, 2004	37.73
May11, 2004	13.98	Aug.27, 2004	37.36

JEFFERSON COUNTY

382105085375101. (Hays-Kennedy), map number 21.

LOCATION.--Lat 38°21'05", long 85°37'51", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Hays Kennedy Park, 20 ft. south of Bass Road, along west edge of parking lot for picnic shelter. Owner: County Parks Dept.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 76.5 ft, screened: 66-76 ft.

INSTRUMENTATION.--Continuous recorder, 30 minute interval.

DATUM.--Elevation of land-surface datum is 439.68 ft above NGVD of 1929. Measuring point: Top of casing, 0.27 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

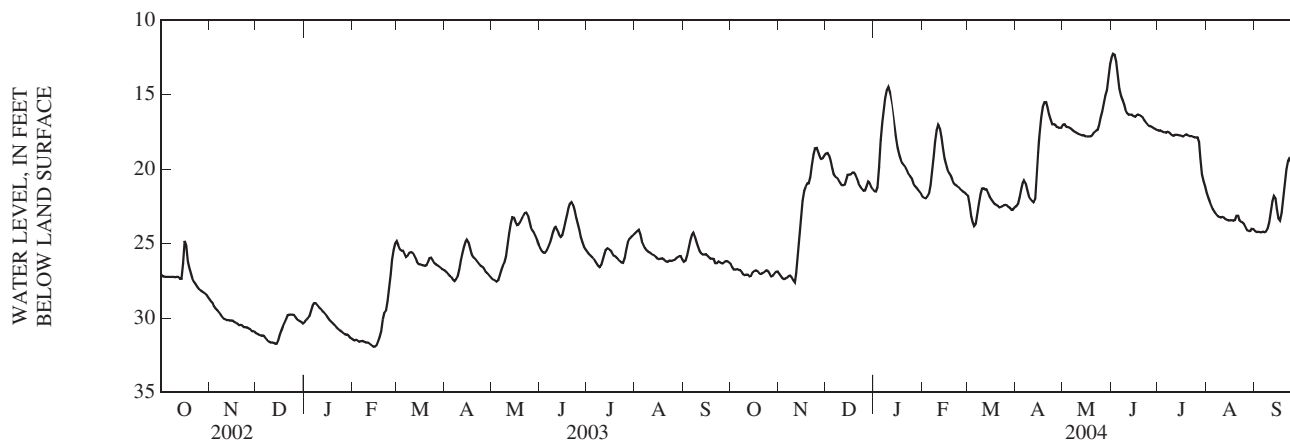
PERIOD OF RECORD.--March 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 12.20 ft below land-surface datum, Jun. 6, 2004; lowest measured, 32.04 ft below land-surface datum, Feb. 14, 2003.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 1200 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26.33	26.92	19.03	21.43	21.76	21.75	22.50	17.18	12.69	17.42	21.41	24.10
2	26.42	27.13	18.90	21.52	21.90	21.82	22.52	16.82	12.31	17.39	21.78	24.21
3	26.70	27.21	18.92	21.49	21.96	22.92	22.20	17.13	12.20	17.41	22.08	24.23
4	26.77	27.41	19.24	20.95	21.97	23.42	21.65	17.16	12.42	17.49	22.34	24.18
5	26.71	27.37	19.66	18.78	21.69	23.66	21.10	17.21	13.17	17.50	22.60	24.26
6	26.73	27.37	20.27	17.37	21.62	24.00	20.75	17.21	14.30	17.54	22.75	24.23
7	26.77	27.23	20.42	16.40	20.50	23.38	20.75	17.36	14.94	17.57	22.94	24.19
8	26.80	27.15	20.56	15.58	19.58	22.66	21.11	17.42	15.19	17.43	23.12	24.32
9	27.02	27.15	20.60	14.89	18.59	21.96	21.67	17.48	15.52	17.66	23.16	24.10
10	27.14	27.34	20.78	14.50	17.73	21.42	21.92	17.57	15.84	17.63	23.29	23.90
11	27.10	27.57	20.99	14.46	17.05	21.18	22.09	17.62	16.14	17.83	23.23	23.32
12	27.08	27.64	21.13	15.22	16.97	21.40	22.17	17.67	16.31	17.67	23.21	22.45
13	27.09	26.32	21.04	16.11	17.51	21.32	22.28	17.73	16.35	17.70	23.31	21.90
14	27.35	24.96	21.05	16.83	18.19	21.37	21.74	17.74	16.33	17.69	23.37	21.69
15	26.97	23.80	20.44	17.75	19.07	21.80	19.65	17.70	16.36	17.72	23.44	22.26
16	26.88	22.61	20.32	18.35	19.57	21.94	18.11	17.84	16.55	17.74	23.45	23.06
17	26.80	21.64	20.41	18.81	19.91	22.14	16.94	17.78	16.44	17.82	23.41	23.54
18	26.79	21.29	20.32	19.23	20.18	22.23	16.04	17.80	16.33	17.76	23.46	23.37
19	26.92	21.04	20.15	19.51	20.34	22.44	15.57	17.79	16.34	17.67	23.50	22.50
20	26.98	20.87	20.30	19.70	20.51	22.37	15.41	17.75	16.44	17.67	23.34	21.46
21	27.12	21.03	20.48	19.79	20.87	22.55	15.61	17.61	16.40	17.79	22.92	20.41
22	26.92	20.09	20.83	19.97	21.03	22.57	16.22	17.45	16.61	17.78	23.34	19.62
23	26.99	19.39	21.09	20.21	21.09	22.54	16.41	17.40	16.79	17.78	23.53	19.27
24	26.76	18.71	21.20	20.50	21.16	22.46	16.90	17.36	16.95	17.86	23.54	19.28
25	26.84	18.49	21.44	20.45	21.28	22.40	17.05	16.82	17.04	17.86	23.64	19.71
26	26.89	18.64	21.47	20.80	21.36	22.38	16.93	16.33	17.13	17.87	23.73	20.68
27	27.19	19.11	21.38	21.06	21.48	22.52	17.13	16.00	17.11	17.86	24.08	21.67
28	27.24	19.25	20.92	21.19	21.56	22.56	17.23	15.22	17.23	18.51	24.15	22.35
29	27.08	19.39	20.73	21.27	21.61	22.67	17.20	14.91	17.25	20.02	24.17	22.61
30	26.95	19.18	21.14	21.49	---	22.81	17.24	14.48	17.34	20.69	24.09	22.97
31	26.83	---	21.26	21.59	---	22.65	---	13.24	---	20.94	23.95	---
MAX	27.35	27.64	21.47	21.59	21.97	24.00	22.52	17.84	17.34	20.94	24.17	24.32
MIN	26.33	18.49	18.90	14.46	16.97	21.18	15.41	13.24	12.20	17.39	21.41	19.27

WTR YR 2004 HIGH 12.20 LOW 27.64



JEFFERSON COUNTY

382120085374701. (River Fields), map number 22.

LOCATION.--Lat 38°21'20", long 85°37'47", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at Garvin-Brown Preserve, 1000 ft. north of Bass Road, along tree line separating Garvin-Brown Preserve from Hays-Kennedy Park. Owner: River Fields.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled observation water-table well, diameter 2 in., depth 71.5 ft, screened: 61-71 ft.

INSTRUMENTATION.--Periodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 440.05 ft above NGVD of 1929. Measuring point: Top of casing, 0.19 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--May 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 18.03 ft below land-surface datum, May 11, 2004; lowest measured, 23.76 ft below land-surface datum, Jan. 04, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	21.86	Jul. 28, 2004	18.20
Nov. 5, 2003	22.34	Aug. 6, 2004	19.44
May11, 2004	18.03	Aug.27, 2004	20.39

382124085375401. (Abell), map number 23.

LOCATION.--Lat 38°21'24", long 85°37'54", Hydrologic Unit 05140101, County Code 111, Jeffersonville quadrangle, at 7222 Beechland Road, in well pit 200 ft. east of road Owner: Abell.

AQUIFER.--Glacial sand and gravel of Quaternary age. Aquifer code: 112OTSH.

WELL CHARACTERISTICS.--Drilled used water-table well, diameter 4 in., depth 45 ft, screen: unknown.

INSTRUMENTATION.--Preiodic measurement with chalked tape by USGS personnel.

DATUM.--Elevation of land-surface datum is 438.58 ft above NGVD of 1929. Measuring point: Top of well seal 3.66 ft below land-surface datum.

REMARKS.--Water levels affected by pumping.

PERIOD OF RECORD.--March 1999 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.04 ft below land-surface datum, Mar. 28, 2002; lowest measured, 20.81 ft below land-surface datum, Jan. 04, 2002.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Water Level	Date	Water Level
Oct. 7, 2003	19.64	Jul. 28, 2004	17.79
Nov. 5, 2003	20.15	Aug. 6, 2004	18.45
May11, 2004	17.76	Aug.27, 2004	19.14

CHEMICAL QUALITY OF PRECIPITATION

381353085401801 - SENECA PARK NEAR ST MATTHEWS, JEFFERSON COUNTY, KY

(National Atmospheric Deposition Program network station)

LOCATION.--Lat 38°13'53", Long 85°40'18", Jefferson County, Hydrologic Unit 05140101 at Seneca Park Golf Course, 0.5 mi northwest of Bowman Field Airport.

PERIOD OF RECORD.--October 2003 to current water year.

INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type recording rain gage.

REMARKS.--Samples collected on weekly basis by observer. Samples compromised during shipping on January 6-13 and September 7-14. No samples collected on February 10-24; May 4-11; June 22-29; August 10-17; September 14-28; and September 28-October 05 due to dry conditions.

COOPERATION.--Chemical quality data were provided by the National Atmospheric Deposition Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
OCT 07-14	0.209	M	4.67	16.5	0.30	0.04	0.06	0.01	0.09	1.76	0.380	1.64	<0.009
OCT 14-21	1.881	M	4.21	26.5	.12	.01	.02	.05	.10	1.46	.280	0.98	<.009
OCT 21-28	1.306	M	4.51	18.7	.12	.01	.01	.01	.06	1.54	.280	1.33	<.009
OCT 28-NOV 04	.098	M	4.64	18.0	.39	.05	.01	.02	.07	2.37	.600	1.72	<.009
NOV 04-12	1.615	M	4.63	12.9	.05	.01	.01	.04	.08	1.37	.170	.49	<.009
NOV 12-18	.432	2.30	4.55	15.3	.09	.01	.01	.04	.07	1.76	.280	.77	<.009
NOV 18-25	2.135	M	4.61	14.9	.05	.01	.01	.08	.15	1.69	.190	.56	<.009
NOV 25-DEC 02	2.098	M	4.49	19.0	.08	.01	.01	.03	.12	1.53	.160	1.11	<.009
DEC 02-09-16	1.111	.80	4.56	17.1	.12	.10	.14	.06	.15	1.59	.150	1.11	<.009
DEC 16-23	.704	.37	4.59	29.6	1.33	.12	.08	.69	1.11	4.41	.420	2.29	<.009
DEC 23-30	2.555	1.45	4.82	10.6	.08	.02	.12	.07	.12	0.96	.190	.70	<.009
DEC 30 2003-2004													
JAN 06 2004	4.200	M	4.52	19.2	.07	.03	.02	.20	.34	1.78	.190	.72	<.009
JAN 13-20	2.191	.85	4.40	21.3	.06	.01	M	.06	.14	1.72	.140	1.07	<.009
JAN 20-27	.060	1.10	M	M	.64	.05	.05	.35	.80	3.91	.920	4.39	<.009
JAN 27-FEB 03	1.569	.89	4.55	18.0	.07	.01	.01	.15	.27	1.60	.130	.93	<.009
FEB 03-10	1.361	.75	4.44	20.8	.08	.01	.01	.12	.21	1.94	.260	1.20	<.009
FEB 24-MAR 02	.549	.31	4.68	22.0	.30	.09	.04	.55	.90	1.88	.300	1.41	<.009
MAR 02-09	3.037	1.75	4.76	14.3	.34	.03	.03	.21	.34	.98	.140	.54	<.009
MAR 09-16	.752	.42	4.35	30.1	.13	.01	.01	.01	.11	2.28	.340	2.12	<.009
MAR 16-23	.562	.33	4.52	26.6	.23	.03	.03	.06	.12	2.71	.720	2.04	<.009
MAR 23-30	.878	.52	5.22	10.0	.32	.04	.02	.16	.24	1.25	.310	.95	<.009
MAR 30-APR 06	.414	.23	4.34	34.2	.29	.04	.01	.02	.09	2.65	.610	3.56	<.009
APR 06-13	1.476	.98	4.53	20.2	.08	.01	.01	.01	.08	1.99	.170	.97	<.009
APR 13-20	1.793	1.05	4.74	14.5	.04	.01	M	.01	.04	1.33	.420	1.37	<.009
APR 20-27	3.039	1.75	4.98	11.9	.12	.03	.03	.17	.27	1.15	.250	.91	<.009
APR 27-MAY 04	4.113	2.40	4.46	22.3	.13	.04	.07	.12	.17	2.19	.590	1.31	.115
MAY 11-18	2.467	M	4.90	10.2	.10	.03	.02	.11	.17	1.05	.240	.67	<.009

CHEMICAL QUALITY OF PRECIPITATION

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381353085401801 - SENECA PARK NEAR ST MATTHEWS, JEFFERSON COUNTY, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
MAY 18-25	0.297	0.20	4.41	27.7	0.41	0.06	0.03	0.13	0.21	3.48	0.290	1.49	<0.009
MAY 25- JUN 01	10.031	6.10	4.77	13.2	.14	.02	.03	.11	.15	1.41	.260	0.76	<.009
JUN 01-08	.324	.18	6.55	46.0	1.75	.34	1.56	.06	.21	6.22	7.19	2.72	1.97
JUN 08-15	2.862	1.66	4.24	40.1	.30	.06	.04	.11	.23	4.74	.610	1.91	<.009
JUN 15-22	.653	.37	6.94	56.9	.23	.13	.82	.10	.20	4.29	7.59	1.12	1.05
JUN 29- JUL 06	1.996	1.17	4.42	34.3	.87	.24	.06	.02	.09	5.25	.690	2.29	<.009
JUL 06-13	4.193	2.42	4.35	29.2	.19	.02	.02	.04	.08	3.15	.230	1.06	<.009
JUL 13-20	3.496	2.02	4.57	19.4	.48	.06	.03	.02	.06	2.70	.330	1.18	<.009
JUL 20-27	1.637	.95	4.27	33.7	.14	.01	.03	.01	.10	3.25	.290	1.36	<.009
JUL 27- AUG 03	1.956	1.15	5.75	17.8	.27	.09	1.40	.03	.14	3.13	1.04	1.18	.336
AUG 03-10	1.195	.70	4.36	34.7	.37	.04	.02	.02	.10	4.37	.650	1.57	<.009
AUG 17-24	.671	.38	4.41	32.0	.30	.03	.03	.03	.10	3.61	.600	1.65	<.009
AUG 24-31	1.431	.81	4.46	26.9	.10	.01	.14	.04	.11	2.85	.520	1.12	.152
AUG 31- SEP 07	.043	.03	M	M	.61	.10	.11	.03	.27	5.46	3.46	5.20	<.009

M--Presence of material verified but not quantified.
 <--Numeric result is less than the value shown.

CHEMICAL QUALITY OF PRECIPITATION

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY

(National Atmospheric Deposition Program network station)

LOCATION.--Lat 38°06'58", Long 83°33'18", Rowan County, Hydrologic Unit 05100101 at Clark State Fish Hatchery, 0.9 mi southwest of Clark State Fish Hatchery office, 1.2 mi west of Cave Run Reservoir Dam.

PERIOD OF RECORD.--September 1983 to current water year.

INSTRUMENTATION.--Wet/dry precipitation collector, weighing bucket type recording rain gage.

REMARKS.--Samples collected on weekly basis by observer.

COOPERATION.--Chemical quality data were provided by the National Atmospheric Deposition Program.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
OCT 07-14	0.161	M	5.63	11.7	0.76	0.05	0.02	0.02	0.08	1.73	0.290	1.83	<0.009
OCT 14-21	.617	M	4.84	28.6	.21	.02	.02	.01	.11	3.05	.320	2.51	<.009
OCT 21-28	2.407	1.40	5.19	15.3	.10	.01	.01	.01	.10	1.69	.190	0.94	<.009
OCT 28- NOV 04	.120	0.07	5.05	18.9	.38	.03	.02	.02	.09	1.51	.440	2.33	<.009
NOV 04-11	3.610	2.10	5.19	11.2	.06	.03	.34	.07	.12	1.17	.100	.15	.108
NOV 11-18	4.276	2.50	5.35	11.0	.05	.01	.01	.05	.07	1.01	.180	.62	<.009
NOV 18-25	2.196	1.27	5.56	8.1	.03	.01	.01	.05	.09	.79	.100	.44	<.009
NOV 25- DEC 02	2.669	1.55	5.78	13.0	.04	.01	.01	.01	.04	1.17	.140	.80	<.009
DEC 02-09	.913	.55	4.98	15.6	.04	M	.01	.01	.05	1.42	.110	1.25	<.009
DEC 09-16	1.949	1.15	5.17	12.9	.05	.06	.04	.20	.41	1.85	.280	2.69	<.009
DEC 16-23	1.443	.85	5.19	16.1	.55	.06	.04	.20	.41	1.85	.280	2.69	<.009
DEC 23-30	1.717	1.02	4.94	9.2	.09	.03	.17	.06	.13	1.03	.030	1.09	<.009
DEC 30 2003- JAN 06 2004	4.332	2.54	5.65	6.9	.03	.01	.01	.06	.11	.64	.080	.40	<.009
JAN 06-13	.336	.20	5.03	22.8	.19	.01	.02	.05	.11	1.18	.250	3.20	<.009
JAN 13-20	1.331	.85	5.21	10.9	.03	M	.01	.02	.08	1.50	.130	1.06	<.009
JAN 20-27	.990	.59	5.12	14.2	.13	.01	.01	.02	.07	1.74	.170	1.05	<.009
JAN 27- FEB 03	.992	.47	5.20	14.0	.09	.01	.01	.04	.12	.85	.090	1.40	<.009
FEB 03-10	2.485	1.44	4.91	8.9	.07	.04	.34	.04	.06	.63	<.020	.21	<.009
FEB 10-17	.056	.02	M	M	.12	.01	.01	.03	.08	1.01	.270	2.14	<.009
FEB 17-24	.069	.05	M	M	1.01	.14	.09	.58	.78	5.04	1.20	3.51	<.009
FEB 24- MAR 02	1.085	.65	4.33	23.6	.28	.09	.04	.71	1.16	1.88	.180	1.64	<.009
MAR 02-09	4.551	2.70	4.97	5.3	.07	.01	.01	.06	.12	.63	.050	.35	<.009
MAR 09-16	.208	.12	3.95	39.0	.39	.04	.03	.03	.19	4.83	.560	3.33	<.009
MAR 16-23	1.352	.87	4.56	17.3	.17	.02	.02	.02	.06	2.06	.680	1.95	<.009
MAR 23-30	1.807	1.05	4.36	25.9	.22	.04	.02	.15	.24	2.59	.430	1.65	<.009
MAR 30- APR 06	.366	.25	4.27	31.0	.30	.07	.03	.08	.25	3.32	.780	3.79	<.009
APR 06-13	1.732	1.00	4.48	17.8	.07	.01	.01	.01	.05	2.06	.150	1.09	<.009

380706083324900 - CLARK STATE FISH HATCHERY, ROWAN COUNTY, KY—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atm dep wet, liters (83177)	Precip- itation total for defined period, inches (00193)	pH, wet atm dep unfltrd field, std units (83106)	Specif. conduc- tance, wet dep unfltrd field, uS/cm (83154)	Calcium wet atm dep fltrd, mg/L (82932)	Magnes- ium, wet atm dep fltrd, mg/L (83002)	Potas- sium, wet atm dep fltrd, mg/L (83120)	Sodium, wet atm dep fltrd, mg/L (83138)	Chlor- ide, wet atm dep fltrd, mg/L (82944)	Sulfate wet atm dep fltrd, mg/L (83160)	Ammonia wet atm dep fltrd, mg/L as NH4 (83047)	Nitrate wet atm dep fltrd, mg/L (83071)	Ortho- phos- phate, wet atm dep fltrd, mg/L (83111)
APR 13-20	1.346	0.75	4.40	18.0	0.11	0.01	0.01	0.01	0.07	1.99	0.140	1.41	<0.009
APR 20-27	3.613	2.12	4.85	12.3	.14	.03	.05	.15	.21	1.45	.270	1.06	<.009
APR 27- MAY 04	1.706	.97	4.68	10.2	.08	.02	.03	.13	.20	1.37	.170	0.69	<.009
MAY 04-11	0.936	.55	4.25	36.1	.28	.03	.02	.03	.10	3.66	.640	1.73	<.009
MAY 11-18	.485	.27	4.52	19.0	.29	.05	.03	.29	.47	2.13	.190	.93	<.009
MAY 18-25	2.318	1.35	4.90	15.0	.29	.05	.05	.17	.25	2.03	.400	1.18	<.009
MAY 25- JUN 01	10.814	6.47	5.01	9.0	.11	.02	.03	.10	.13	1.07	.270	.69	<.009
JUN 01-08	2.710	1.60	5.76	17.4	.37	.04	.28	.13	.25	2.87	1.69	1.35	.498
JUN 08-15	2.580	1.57	4.98	16.3	.45	.05	.22	.19	.38	2.53	.940	2.10	.152
JUN 15-22	1.529	.80	4.53	17.4	.23	.08	.29	.16	.19	2.28	1.50	1.22	.480
JUN 22-29	.853	.49	4.93	25.0	.24	.03	.02	.01	.12	3.31	.490	2.26	<.009
JUN 29- JUL 06	.028	.02	M	M	.97	.08	.12	.22	.30	1.77	.260	2.06	<.009
JUL 06-13	5.068	2.89	4.53	16.5	.14	.02	.04	.04	.09	1.77	.230	.98	<.009
JUL 13-20	1.061	M	4.89	15.2	.22	.03	.32	.07	.17	2.24	.900	1.27	.315
JUL 20-27	2.193	1.20	4.46	25.1	.20	.03	.17	.02	.10	2.88	.600	1.56	.098
JUL 27- AUG 03	3.077	1.77	4.72	9.0	.03	.01	.01	.02	.08	.97	.070	.48	<.009
AUG 03-10	3.391	1.95	4.64	12.2	.07	.01	.01	.01	.03	1.42	.230	.61	<.009
AUG 10-17	1.703	1.10	4.43	23.0	.32	.03	.02	.01	.14	2.89	.400	1.50	<.009
AUG 17-24	3.281	1.90	4.66	11.4	.03	M	.02	.02	.04	1.50	.240	.43	<.009
AUG 24-31	.043	.12	M	M	.28	.03	.07	.04	.13	0.90	.050	1.32	<.009
AUG 31- SEP 07	.195	.15	4.50	16.2	.25	.02	.01	.01	.08	1.68	.030	1.35	<.009
SEP 07-14	6.401	3.75	5.00	4.9	.02	<.003	<.003	M	.02	.37	<.020	.20	<.009
SEP 14-21	6.154	M	5.96	3.7	.02	<.003	.01	.01	<.02	.13	.014	.26	<.009
SEP 28- OCT 05	.306	M	4.48	18.8	.19	.02	.03	.01	.34	1.68	.145	2.47	<.009

M--Presence of material verified but not quantified.

<--Numeric result is less than the value shown.