

Figure 10.--Locations of wells in the Carmel, Hamilton County, IN network.

The following tables contain ground-water level measurements from a network of monitoring wells in south-central Hamilton County at Carmel, Indiana. The data were collected as part of a cooperative effort with the City of Carmel to determine ambient ground-water level conditions on an approximately semi-annual basis within the alluvial aquifer near the White River. Locations of observation wells where measurements were made are shown in figure 10.

395609086064201. Local number CAR-1.

LOCATION.--Lat $39^{\circ}56'09$ ", long $86^{\circ}06'43$ ", in $NW^{1}/_{4}SE^{1}/_{4}NE^{1}/_{4}$ sec.7, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, between Keystone Avenue and Frontage Road, at 10200 North in Carmel. Owner: U.S. Geological Survey.

AOUIFER .-- Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS,--Drilled artesian well, diameter 1.5 in., depth 50.1 ft, cased to 47.1 ft, screened to 50.1 ft.

INSTRUMENTATION.--None

DATUM.--Elevation of land-surface datum is 774.71 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.30 ft above ground level.

PERIOD OF RECORD.--59 entries from September 1974 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 18.69 ft below land-surface datum, Apr. 17, 1991; lowest, 23.55 ft below land surface datum, Sep. 5, 1986.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 2005.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
APR 5, 2005	20.62	AUG 8, 2005	21.19	SEP 10, 2005	21.68	

395628086052901. Local number CAR-4.

LOCATION.--Lat $39^056'29$ ", long 86'05'30", in $NW^1/_4NE^1/_4NE^1/_4$ sec.8, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 1000 ft west of Gray Road (Hinkle Road on topographic map) on south side of East 106th Street, in Carmel.

Owner: U.S. Geological Survey.

AOUIFER.--Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 23.8 ft, cased to 20.8 ft, screened to 23.8 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 744.00 ft above National Geodetic Vertical Datum of 1929.

Measuring point, 2003 water year and previous: top of well casing, at land surface datum. Measuring point, 2004 water year and later: top of well casing: 0.22 ft below land-surface datum.

REMARKS.--Water level may be affected by nearby pumping.

PERIOD OF RECORD.--49 entries from September 1974 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 5.07 ft below land-surface datum, Apr. 23, 1982; lowest, 16.69 ft below land surface datum, Oct. 27, 1988.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
APR 5, 2005	13.01	AUG 8, 2005	13.38	SEP 10, 2005	16.40	

395717086051801. Local number CAR-6.

LOCATION.--Lat $39^{\circ}57^{\circ}17^{\circ}$, long $86^{\circ}05^{\circ}19^{\circ}$, in $NW^{1}_{/4}NW^{1}_{/4}NW^{1}_{/4}$ sec.4, T.17 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 11500 North Gray Road, well on east side, 600 ft south of East 116th Street. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.7 ft, cased to 31.7 ft, screened to 34.7 ft.

INSTRUMENTATION .-- None.

DATUM.--Elevation of land-surface datum is 768.36 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

PERIOD OF RECORD.--58 entries from November 1974 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 18.10 ft below land-surface datum, Jun. 26, 1996; lowest, 23.14 ft below land surface datum, Nov. 30, 1981.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 2005.)

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5, 2005	20.57	AUG 8, 2005	21.67	SEP 10, 2005	22.09

395750086052101. Local number CAR-9.

LOCATION.--Lat $39^{0}57'50"$, long $86^{0}05'22"$, in $SW^{1}/_{4}SW^{1}/_{4}NW^{1}/_{4}$ sec.33, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 12100 North Gray Road, on east side, north of entrance road into abandoned gravel pit. Owner: U.S. Geological Survey.

AQUIFER .-- Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 48.38 ft, cased to 45.38 ft, screened to 48.38 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 778.74 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Water level may be affected by nearby pumping.

PERIOD OF RECORD.--54 entries from September 1974 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 24.75 ft below land-surface datum, Jun. 4, 1986; lowest, 34.09 ft below land surface datum, Nov. 4, 1999.

	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
	APR 5, 2005	30.62	AUG 8, 2005	31.98	SEP 10, 2005	32.28	
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395816086044901. Local number CAR-11.

LOCATION.--Lat $39^{\circ}58'16"$, long 86'04'50", in $SE^{1}/_{4}SE^{1}/_{4}SW^{1}/_{4}$ sec.28, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, 5200 East 126th Street, north side, at east entrance to Clay Jr. High School. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 59.0 ft, cased to 56.0 ft, screened to 59.0 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 789.59 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, at land surface.

REMARKS.--Water level may be affected by nearby pumping.

PERIOD OF RECORD.--55 entries from November, 1974 to current date. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 32.77 ft below land-surface datum, Apr. 14, 1975; lowest, 48.17 ft below land surface datum, Sep. 23, 1999.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5, 2005	43.91	AUG 8, 2005	45.27	SEP 10, 2005	45.14

GROUND-WATER LEVELS FOR THE ALLUVIAL AQUIFER AT THE CITY OF CARMEL, HAMILTON COUNTY NETWORK--Continued

395818086042101 Local number CAR-12NEW

LOCATION.--Lat 39°58'20". long 86°04'14", in SW¹/₄SW¹/₄SW¹/₄sec.27, T.18 N., R.4 E., Hamilton County. Hydrologic Unit 05120201. Well is in ditch for Hazel Dell Road about 350 ft north of East 126th Street. Owner: City of Carmel Utilities Department

AQUIFER .-- Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation

WELL CHARACTERISTICS.--Drilled water-table well, diameter 4.0 in., depth 73.9 ft, cased from 1.20 ft above to 69.0 ft below ground, screened from 69.0 to 73.9 ft. Well casing was shortened in Fall 2000, and placed under a manhole cover. Well-measuring point was lowered 2.46 ft.

INSTRUMENTATION.--None

DATUM.--Elevation of land-surface datum was 753.69 ft above National Geodetic Vertical Datum of 1929 until land surface altitude was changed during construction of Hazel Dell Road. Measuring point for 1977 through 2000: top of well casing, 1.20 ft above land-surface datum. Measuring point, 2001 and after: 752.43 ft above National Geodetic Vertical Datum of 1929, 1.26 ft below original land-surface datum.

REMARKS.--Entire record of water levels is republished in this report to reflect more accurate understanding of vertical control than previously had been available; these data supersede data previously published for well CAR-12NEW. After July 1977 water levels are affected by nearby pumping. Well was drilled July 25, 1977, but it was not used to monitor Carmel network wells until October 1995, following the loss of well CAR-12.

PERIOD OF RECORD.--17 entries from July 25, 1977 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 4.00 ft below land-surface datum, Jul. 25, 1977; lowest, 20.81 ft below land surface datum, Apr. 5, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEARS 1977 and 1995 THROUGH 2005.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
JUL 25, 1977	4.00	OCT 26, 1995	13.16	JUN 25, 1996	6.80
JUN 5, 1997	7.28	OCT 29, 1997	11.14	JUN 3, 1998	10.66
FEB 8, 1999	16.53	NOV 4, 1999	20.12	MAY 3, 2000	15.36
APR 5, 2001	18.57	APR 25, 2002	16.65	MAR 17, 2003	18.02
APR 26, 2004	11.58	AUG 16, 2004	11.55	APR 5, 2005	20.81
AUG 8, 2005	13.86	SEP 10, 2005	13.05		

395923086023901. Local number CAR-20.

LOCATION.--Lat 39°59'22", long 86°02'40", in SE¹/₄NE¹/₄SW¹/₄ sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, east side of 13900 North River Avenue, just south of private drive. Owner: U.S. Geological Survey.

AQUIFER,--Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 34.6 ft, cased to 31.6 ft, screened to 34.6 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 753.45 ft above National Geodetic Vertical Datum of 1929.

Measuring point, 2003 water year and previous: top of well casing, 0.24 ft above land-surface datum. Measuring point 2004 water year and later: top of well casing: 0.26 ft below land-surface datum.

REMARKS.--Water level may be affected by nearby pumping.

PERIOD OF RECORD.--55 entries from November 1974 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 3.58 ft below land-surface datum, September 10, 2005; lowest, 11.90 ft below land surface datum, October 29, 1997.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 2005.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
APR 5, 2005	8.72	AUG 8, 2005	8.60	SEP 10, 2005	3.58	

395919086015901. Local number CAR-21.

LOCATION.--Lat $39^{\circ}59'18''$, long $86^{\circ}01'58''$, in NE $^{1}/_{4}$ SE $^{1}/_{4}$ Sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, south side of Connor Lane, 0.5 mi west of Allisonville Road, on Connor Prairie Museum property. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel outwash deposit, White River valley train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled water-table well, diameter 1.5 in., depth 23.9 ft, cased to 20.9 ft, screened to 23.9 ft. INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 744.70 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 1.60 ft above land-surface datum.

REMARKS.--Water level may be affected by river stage in White River, which is located 400 ft north of the well.

PERIOD OF RECORD.--58 entries from November 1974 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 8.03 ft below land-surface datum, Dec. 02, 1992; lowest, 14.11 ft below land surface datum, Oct. 26, 1988.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
APR 5, 2005	9.96	AUG 8, 2005	11.41	SEP 10, 2005	11.99	

395837086045701. Local number CAR-26.

LOCATION.--Lat 39°58'38", long 86°04'58", in NW¹/₄NE¹/₄SW¹/₄ sec.28, T.18 N., R.4 E., Hamilton County,Hydrologic Unit 05120201, in northwest part of Clay Jr. High School property, near southeast corner of private property, west of School Administration Building. Owner: U.S. Geological Survey.

AQUIFER .-- Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 1.5 in., depth 63.3 ft, cased to 60.3 ft, screened to 63.3 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 777.81 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 3.0 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby pumping.

PERIOD OF RECORD.--57 entries from April 1976 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 11.76 ft below land-surface datum, Apr. 27, 1978; lowest, 24.75 ft below land surface datum, Sep. 07, 2001.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEAR 2005.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5, 2005	19.36	AUG 8, 2005	21.19	SEP 10, 2005	21.54

395830086044701. Local number CAR-27.

LOCATION.--Lat 39°58'30", long 86°04'48", in SE¹/₄NE¹/₄SW¹/₄ sec.28, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, on Clay Jr. High School property, well in tree line on east property line, at north end of football and track field. Owner: U.S. Geological Survey.

AQUIFER .-- Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 2.0 in., depth 62.5 ft, cased to 59.5 ft, screened to 62.5 ft.

INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 783.07 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 3.5 ft above land-surface datum.

REMARKS.--Water level may be affected by nearby pumping.

PERIOD OF RECORD.--57 entries from April 1976 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 23.12 ft below land-surface datum, Jun. 04, 1986; lowest, 39.02 ft below land surface datum, Sep. 23, 1999.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
APR 5, 2005	32.46	AUG 8, 2005	34.53	SEP 10, 2005	34.47

395954086040001. Local number CAR-30.

 $LOCATION.--Lat\ 39^{o}59'54'',\ long\ 86^{o}04'00'',\ in\ SE^{1}{}_{4}NW^{1}{}_{4}NW^{1}{}_{4}\ sec.22,\ T.18\ N.,\ R.4\ E.,\ Hamilton\ County,\ Hydrologic\ Unit\ 05120201,\ approximately\ 1000\ ft\ east\ of\ Hazel\ Dell\ Road\ at\ the\ Hazel\ Dell\ Christian\ Church,\ 14500\ Hazel\ Dell\ Road.$

Owner: U.S. Geological Survey.

AQUIFER .-- Sand zone in till of Pleistocene age.

WELL CHARACTERISTICS.--Drilled artesian well, diameter 2.0 in., depth 26.0 ft, cased to 15.0 ft, screened to 20.0 ft.

INSTRUMENTATION.--None

DATUM.--Elevation of land-surface datum is 772.31 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.25 ft below ground level.

REMARKS.--Entire record of water levels is republished in this report to reflect more accurate vertical control than previously had been available and correction of a well-identification error. Replaces well CAR-22 which was destroyed in 1994.

PERIOD OF RECORD.--7 entries from September 2002 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 6.86 ft below land-surface datum, Mar. 18, 2003; lowest, 8.84 ft below land surface datum, Sep. 10, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEARS 2002 THROUGH 2005.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 23, 2002	8.26	MAR 18, 2003	6.86	APR 26, 2004	7.71
AUG 16, 2004	8.37	APR 5, 2005	8.05	AUG 8, 2005	8.57
SEP 10, 2005	8.84				

40000086030301. Local number CAR-31.

LOCATION.--Lat $40^{\circ}00'00''$, long $86^{\circ}03'03''$, in NW $^{1}/_{4}$ NW $^{1}/_{4}$ NW $^{1}/_{4}$ sec.23, T.18 N., R.4 E., Hamilton County, Hydrologic Unit 05120201, well is 20 ft south of 146^{th} Street, and 200 ft east of section line. Owner: U.S. Geological Survey.

AQUIFER .-- Sand and gravel outwash deposit, White River valley-train of Pleistocene age, Atherton Formation.

WELL CHARACTERISTICS.--Bored water-table well, diameter 2.0 in., depth 20.0 ft, cased to 15.0 ft, screened to 20.0 ft. INSTRUMENTATION.--None.

DATUM.--Elevation of land-surface datum is 755.84 ft above National Geodetic Vertical Datum of 1929. Measuring point: top of well casing, 0.40 ft below ground level.

REMARKS.--Entire record of water levels is republished in this report to reflect more accurate vertical control than previously had been available and correction of a well-identification error. Replaces well CAR-23 which was removed in May 2000.

PERIOD OF RECORD.-- 7 entries from September 2002 to current year. Measured approximately semi-annually.

EXTREMES FOR THE PERIOD OF RECORD.--Highest water level, 11.26 ft below land-surface datum, Mar. 18, 2003; lowest, 16.85 ft below land surface datum, Sep. 10, 2005.

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM, WATER YEARS 2003 THROUGH 2005.

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
SEP 23, 2002	11.34	MAR 18, 2003	11.26	APR 26, 2004	14.77
AUG 19, 2004	14.20	APR 5, 2005	12.75	AUG 8, 2005	15.92
SEP 10, 2005	16.85				

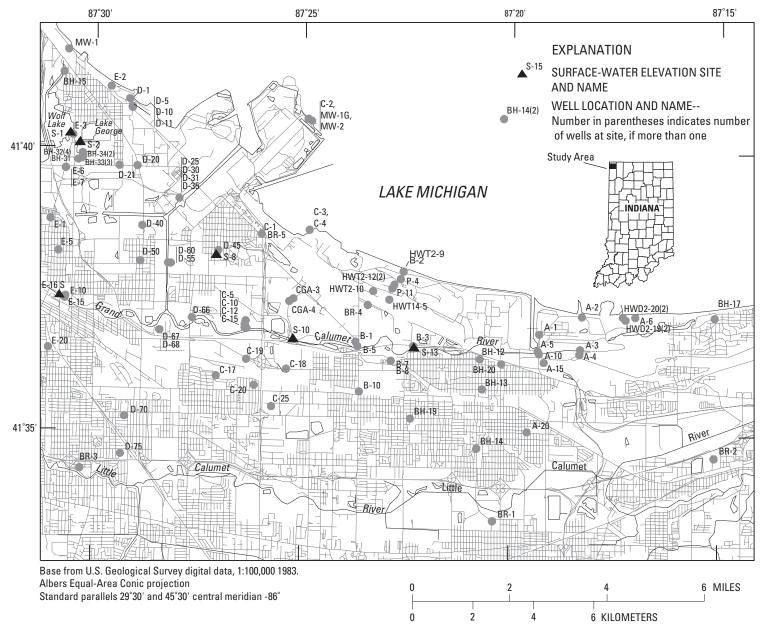


Figure 11.--Locations of wells in the Northern Lake County, IN network.

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

The following tables (1-5) list characteristics of water wells, surface-water-stage measurement sites, and results of miscellaneous measurements of ground-water level and surface-water stage in Northern Lake County, Indiana. Data presented here have been collected periodically since 1985 to provide a base of information to evaluate ground-water-flow directions and ground-water/surface-water interactions. Locations of wells and surface-water sites are shown in figure 11.

Table 1. Characteristics of observation wells in the Northern Lake County network.

USGS, U.S. Geological Survey; Auger, hollow-stem auger; SS, stainless steel; CA, Calumet aquifer; USEPA, U.S. Environmental Protection Agency; PVC, polyvinyl chloride; n.a., not applicable; ?, not known; GAA, Gary Airport Authority; USX, USX Corporation; ISPAT, ISPAT Inland Incorporated.

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month-year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
A-1	USGS	41°36′47″/87°19′19″	413647087191901	07–85	Auger	604	18-21	SS 304	CA Top
A-2	USGS	41°37′06″/87°18′18″	413706087181800	06-87	Auger	603	34-39	SS 316L	CA Middle
A-3	USGS	41°36′31″/87°18′20″	413631087182000	06-87	Hand driven	590	3-6	SS 316L	CA Top
A-4	USGS	41°36′30″/87°18′16″	413630087182100	06-87	Auger	603	18-23	SS 316L	CA Middle
A-5	USGS	41°36′29″/87°19′21″	413629087192102	12–85	Auger	601	18-21	SS 304	CA Top
A-6	USGS	41°37′06″/87°17′01″	413706087170101	06–87	Hand driven	588	4-7	SS 316L	СА Тор
A-10	USGS	41°36′26″/87°19′19″	413626087191901	07–85	Hand driven	590	12-15	SS 304	CA Top
A-15	USGS	41°36′17″/87°19′12″	413617087191201	07–85	Hand driven	591	2-5	SS 304	CA Top
A-20	USGS	41°35′03″/87°19′35″	413503087193501	12-85	Auger	614	21-24	SS 304	CA Top
B-1	USGS	41°36′37″/87°23′43″	413637087234301	08-85	Hand driven	585	9-12	SS 304	CA Top
B-2	USGS	41°37′52″/87°22′35″	413752087223500	06–87	Auger	608	43-48	SS 316L	CA Middle
B-3	USGS	41°36′33″/87°22′20″	413633087222000	06–87	Auger	594	18-23	SS 316L	CA Middle
B-5	USGS	41°36′32″/87°23′40″	413632087234001	08-85	Hand driven	589	8-11	SS 304	CA Top
B-7	USGS	41°36′16″/87°22′51″	413617087225202	06–87	Hand driven	596	8-11	SS 316L	CA Top
B-8	USGS	41°36′17″/87°22′51″	413617087225201	06-87	Auger	596	32-37	SS 316L	CA Bottom
B-10	USGS	41°35′44″/87°23′37″	413544087233700	12–85	Auger	607	17-20	SS 304	СА Тор
BH-12	USEPA	41°36′20″/87°20′44″	413620087204401	06-92	Mud rotary	601	10-20	PVC	CA Top
BH-13	USEPA	41°35′48″/87°20′40″	413548087204001	06-92	Mud rotary	603	9-19	PVC	CA Top
BH-14	USEPA	41°34′45″/87°20′47″	413445087204701	06-92	Mud rotary	610	9-19	PVC	CA Top
BH-15	USEPA	41°41′20″/87°30′47″	414120087304701	06-92	Mud rotary	585	10-15	PVC	CA Top
BH-17	USEPA	41°37′06″/87°15′07″	413706087150701	06-92	Mud rotary	599	10-20	PVC	CA Top

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA--Continued

Table 1. Characteristics of observation wells in the Northern Lake County network.—Continued

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month-year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
BH-19	USEPA	41°35′16″/87°22′23″	413516087222301	06–92	Mud rotary	602	10-20	PVC	CA Top
BH-20	USEPA	41°36′15″/87°20′13″	413615087201301	06-92	Mud rotary	600	14-24	PVC	CA Top
BH-31	USEPA	41°39′47″/87°30′25″	413947087302501	04–93	Mud rotary	598	18-28	PVC	CA Top
BH-32-D	USGS	41°39′49″/87°30′19″	413949087301901	07–96	Auger	597	36-38.5	PVC	CA Bottom
BH-32-I	USGS	41°39′49″/87°30′19″	413949087301902	07-96	Auger	597	26.4-28.9	PVC	CA Middle
BH-32-SH	USGS	41°39′49″/87°30′19″	413949087301903	07–96	Auger	597	21.6-23.1	PVC	CA Top
BH-32-SL	USGS	41°39′49″/87°30′19″	413949087301904	07-96	Auger	597	7.4-19.9	PVC	Slag Bottom
BH-33-I	USGS	41°39′51″/87°30′19″	413951087301901	07–96	Auger	585	11.5-14	PVC	CA Middle
BH-33-SH	USGS	41°39′51″/87°30′19″	413951087301902	07–96	Auger	585	7.6-10.1	PVC	CA Top
BH-33-SL	USGS	41°39′51″/87°30′19″	413951087301903	07-96	Auger	585	2.5-5	PVC	Slag Bottom
BH-34-D	USGS	41°39′54″/87°30′19″	413954087301901	07–96	Hand driven	580	4.4-6.4	PVC	CA Top
BH-34-SH	USGS	41°39′54″/87°30′19″	413954087301902	07-96	Hand driven	581	1.8-3.8	PVC	Slag Bottom
BR-1	USGS	41°33′28″/87°20′24″	413328087202301	12-93	Mud rotary	595	135-145	PVC	Devonian
BR-2	USGS	41°34′37″/87°15′06″	413437087150601	12–93	Mud rotary	600	136-146	PVC	Silurian
BR-3	USGS	41°34′19″/87°30′17″	413419087301701	11-94	Mud rotary	595	137-147	PVC	Silurian
BR-4	USGS	41°37′17″/87°23′26″	413716087232601	11–94	Mud rotary	595	138-148	PVC	Silurian
BR-5	USEPA	41°37′32″/87°25′58″	413732087255801	06-95	Mud rotary	587	146-156	PVC	Silurian
C-1	USGS	41°38′30″/87°26′00″	413830087260000	12-85	Auger	587	4-7	SS 304	CA Top
C-2	USGS	41°40′30″/87°24′51″	414031087245000	06–87	Auger	594	13-18	SS 316L	CA Top
C -3	USGS	41°38′27″/87°25′16″	413828087251301	06-87	Auger	589	23-28	SS 316L	CA Middle
C-4	USGS	41°38′27″/87°25′16″	413828087251302	06-87	Auger	589	8-13	SS 316L	CA Top
C-5	USGS	41°36′55″/87°26′20″	413655087275202	07–85	Hand driven	584	2-5	SS 304	CA Top
C-10	USGS	41°36′50″/87°26′20″	413652087274901	07–85	Hand driven	584	1-4	SS 304	CA Top
C-12	USGS	41°36′50″/87°26′20″	413650087262000	06–87	Auger	584	13-18	SS 316L	CA Middle
C-15	USGS	41°36′48″/87°26′20″	413650087274802	07–85	Hand driven	583	1-4	SS 304	CA Top
C-17 ¹	USGS	41°35′59″/87°27′03″	413559087270301	07–86	Mud rotary	592	18-23	?	CA Bottom

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA--Continued

Table 1. Characteristics of observation wells in the Northern Lake County network.—Continued

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month-year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
C-18	USGS	41°36′07″/87°25′22″	413607087252200	06–87	Auger	595	17-22	SS 316L	CA Bottom
C-19	USGS	41°36′17″/87°26′20″	413617087262001	12-86	Hand driven	592	2-5	SS 304	CA Top
C-20	USGS	41°35′57″/87°26′11″	413557087283901	07–85	Hand driven	593	3-6	SS 304	CA Top
C-25	USGS	41°35′27″/87°25′43″	413527087270301	07–85	Hand driven	599	2-5	SS 304	CA Top
CGA-3	GAA	41°37′22″/87°25′13″	413722087251301	pre–1985	?	590	?	PVC	CA?
CGA-4	GAA	41°37′19″/87°25′19″	413719087251901	pre-1985	?	591	?	PVC	CA?
D-1	USGS	41°40′52″/87°29′12″	414052087291201	07–85	Hand driven	590	8-11	SS 304	CA Top
D-5	USGS	41°40′44″/87°29′08″	414044087290801	07–85	Hand driven	588	2-7	SS 304	CA Top
D-10	USGS	41°40′43″/87°29′08″	414043087290802	07–85	Hand driven	588	7-10	SS 304	CA Top
D-11	USGS	41°40′43″/87°29′08″	414043087290801	06-87	Auger	588	17-22	SS 316L	CA Middle
D-20	USGS	41°39′41″/87°29′00″	413941087290000	07-85	Hand	588	6-9	SS 304	CA Top
D-21	USGS	41°39′41″/87°29′26″	413941087292600	06-87	Auger	584	13-18	SS 316L	CA Middle
D-25	USGS	41°39′09″/87°28′03″	413804087291102	07–85	Hand driven	588	5-8	SS 304	CA Top
D-30	USGS	41°39′07″/87°27′58″	413758087290702	07–85	Hand driven	586	6-9	SS 304	CA Top
D-31	USGS	41°39′07″/87°27′58″	413907087275901	06-87	Auger	586	12-17	SS 316L	CA Middle
D-35	USGS	41°39′06″/87°27′57″	413757087290601	07-85	Hand driven	586	4-7	SS 304	CA Top
D-40	USGS	41°38′35″/87°28′51″	413835087245101	07-85	Hand driven	584	4-7	SS 304	CA Top
D-45	USGS	41°38′12″/87°27′02″	413812087270201	07–85	Hand driven	586	6-9	SS 304	CA Top
D-50	USGS	41°38′00″/87°28′54″	413800087285401	12-85	Hand driven	585	9-12	SS 304	CA Top
D-55	USGS	41°37′58″/87°28′14″	413758087281401	07-85	Hand driven	585	5-8	SS 304	CA Top
D-60	USGS	41°37′58″/87°28′10″	413758087281001	07–85	Hand driven	587	5-8	SS 304	CA Top
D-66	USGS	41°36′54″/87°27′40″	413654087274000	06-87	Auger	587	17-22	SS 316L	CA Middle
D-67	USGS	41°36′47″/87°28′25″	413647087282502	06-87	Hand driven	589	4-7	SS 316L	CA Top
D-68	USGS	41°36′47″/87°28′25″	413647087282501	06-87	Auger	589	18-23	SS 316L	CA Middle
D-70	USGS	41°35′15″/87°29′15″	413515087291401	07–85	Hand driven	603	6-9	SS 304	CA Top
D-75	USGS	41°34′34″/87°29′19″	413435087291901	07–85	Hand driven	601	5-8	SS 304	CA Top
E-1	USGS	41°38′44″/87°31′04″	413844087310401	07–85	Hand driven	582	5-8	SS 304	CA Top
E-2	USGS	41°41′05″/87°29′39″	414105087293900	06-87	Hand driven	585	3-6	SS 316L	CA Top

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA--Continued

Table 1. Characteristics of observation wells in the Northern Lake County network.—Continued

Well name	Well owner	Latitude/longitude	USGS site identifier	Date drilled (month-year)	Method of installation	Land surface, in feet above sea level	Open interval, in feet below land surface	Screen and casing material	Aquifer and relative vertical position of open interval in aquifer
E-3	USGS	41°40′13″/87°30′33″	414013087303300	06–87	Auger	585	8-13	SS 316L	CA Middle
E-5	USGS	41°38′10″/87°30′52″	413810087305201	07-85	Hand driven	587	9-12	SS 304	CA Top
E-6	USGS	41°39′38″/87°30′43″	413938087304301	06-87	Auger	586	17-22	SS 316L	CA Bottom
E-7	USGS	41°39′38″/87°30′43″	413938087304302	06-87	Hand driven	586	2-5	SS 316L	CA Top
E-10	USGS	41°37′22″/87°30′41″	413722087304101	07–85	Hand driven	586	6-9	SS 304	CA Top
E-15	USGS	41°37′20″/87°30′42″	413720087 304201	07–85	Hand driven	584	11-14	SS 304	CA Top
E-20	USGS	41°36′27″/87°31′05″	413627087310500	07-85	Hand driven	592	5-8	SS 304	CA Top
HWD2-19D	USX	41°37′06″/87°17′19″	413706087171901	12-93	Auger	598	47-57	PVC	CA Bottom
HWD2-19S	USX	41°37′06″/87°17′19″	413706087171902	12-93	Auger	598	6-21	PVC	CA Top
HWD2-20D	USX	41°37′03″/87°17′15″	413703087171501	12–93	Auger	617	62-72	PVC	CA Middle
HWD2-20S	USX	41°37′03″/87°17′15″	413703087171502	12-93	Auger	617	23-38	PVC	CA Middle
HWT2-9	USX	41°37′52″/87°22′35″	413752087223501	04-84	Auger	608	50-70	PVC	Slag + CA
HWT2-10	USX	41°37′32″/87°23′22″	413732087232201	04-84	Auger	589	24-44	PVC	CA Top
HWT2-12D	USX	41°37′38″/87°22′48″	413738087224803	03-91	Auger	600	49-59	PVC	CA Bottom
HWT2-12S	USX	41°37′38″/87°22′48″	413738087224801	03-91	Auger	601	14-29	PVC	Slag and CA
HWT14-5	USX	41°37′22″/87°22′55″	413722087225501	04–84	Auger	589	37-47	PVC	CA Bottom
P-4	USX	41°37′44″/87°22′39″	413744087223901	04-84	Auger	603	25-35	PVC	Slag
P-11	USX	41°37′34″/87°22′51″	413734087225101	04-84	Auger	596	15-25	PVC	CA Top
MW-1	USEPA	41°41′44″/87°30′41″	414144087304101	?	Auger	591	21-24	SS 304	CA Bottom
MW-1G	ISPAT	41°40′33″/87°24′55″	414033087245501	?	Drilled	594	?-13	PVC	Slag
MW-2	ISPAT	41°40′33″/87°24′55″	414033087245502	?	Drilled	594	?-124	PVC	Silurian

¹ This well also known as LK-13, a continuous recording water-level well operated by the USGS as part of a statewide ground-water-data network. Water levels for LK-13 are published in the U.S. Geological Survey water data reports, IN-87-1 to IN-04-1, and on page 431 of this report.

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 2. Period of record for observation wells in the Northern Lake County network.

	Period	of Record		Period o	f Record	
Well name	Beginning (month-year)	End (month-year)	Well name	Beginning (month-year)	Beginning End month-year) (month-year	
A-1	10-1985	07-2005	C-19	12-1986	07-2005	
A-2	06-1987	07-2005	C-20	08-1985	04-2004	
A-3	06-1987	03-1998	C-25	12-1985	07-2005	
A-4	06-1987	07-2003	CGA-3	10-1985	03-1999	
A-5	12-1985	07-2005	CGA-4	10-1985	08-1999	
A-6	07-1987	07-2005	D-1	08-1985	07-2005	
A-10	10-1985	04-2004	D-5	08-1985	04-2005	
A-15	10-1985	07-2005	D-10	08-1985	07-2005	
A-20	01-1986	07-2005	D-11	06-1987	07-2005	
B-1	08-1985	09-1999	D-20	08-1985	01-1995	
3-2	06-1987	07-2005	D-21	07-1987	07-2005	
3-2 3-3	07-1987	06-2000	D-21 D-25	12-1985	07-2005	
5-5 3-5			D-25 D-30			
	08-1985	07-2005		12-1985	07-2005	
3-7 • •	06-1987	07-2005 07-2005	D-31 D-35	07-1987	07-2005	
3-8	07-1987	07-2005	D-35	12-1985	06-2001	
B-10	12-1985	07-2005	D-40	10-1985	07-2005	
3H-12	06-1992	07-2005	D-45	10-1985	07-2005	
3H-13	06-1992	07-2005	D-50	12-1985	07-2005	
3H-14	06-1992	07-2005	D-55	10-1985	04-2005	
BH-15	06-1992	07-2005	D-60	10-1985	07-2005	
BH-17	06-1992	07-2005	D-66	07-1987	07-2005	
3H-19	06-1992	07-2005	D-67	07-1987	07-2005	
3H-20	06-1992	09-1998	D-68	07-1987	07-2005	
3H-31	04-1993	09-1998	D-70	01-1986	09-2002	
3H-32-D	07-1996	09-2001	D-75	01-1986	07-2005	
ВН-32-І	07-1996	09-2001	E-1	12-1985	07-2005	
BH-32-S	07-1996	09-2001	E-2	06-1987	07-2005	
BH-32-SL	07-1996	09-2001	E-2 E-3	06-1987	07-2005	
BH-33-I	07-1996	04-2005	E-5 E-5	08-1985	07-2005	
BH-33-S	07-1996 07-1996	04-2005	E-6	06-1987	07-2005	
DII 22 CI	07.1007	04 2005	E 7	07 1007	07.2005	
BH-33-SL	07-1996	04-2005	E-7	06-1987	07-2005	
BH-34-D	06-1996	07-1998	E-10	10-1985	07-2005	
BH-34-SH	06-1996	07-1998	E-15	10-1985	07-2005	
BR-1	01-1995	07-2005	E-20	08-1985	07-2005	
BR-2	01-1995	07-2004	HWD2-19D	07-1995	07-2005	
3R-3	07-1995	07-2005	HWD2-19S	07-1995	07-2005	
3R-4	07-1995	07-2005	HWD2-20D	07-1996	07-2005	
3R-5	07-1995	07-2005	HWD2-20S	07-1996	07-2005	
C-1	12-1985	07-2005	HWT2-9	12-1985	07-2005	
C-2	07-1987	09-1998	HWT2-10	12-1985	12-1997	
C-3	06-1987	07-2005	HWT2-12D	12-1992	12-1998	
C -4	06-1987	07-2005	HWT2-12S	06-1992	12-1998	
C -5	10-1985	07-2005	HWT14-5	12-1985	07-2005	
C-10	10-1985	04-2004	P-4	12-1985	07-2005	
C-12	08-1987	04-2004	P-11	10-1985	07-2005	
C-15	10-1985	03-1998	MW-1	06-1992	07-2005	
C-17	07-1986	07-2005	MW-1G	10-1992	04-2005	
C-18	06-1987	06-2000	MW-2	10-1992	04-2005	

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.

SITE ID NUMBER: 413647087191901

STATION NAME: USGS well A-1 at USX NR. Boat Slip, Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	19.37	Feb 16	18.86	Apr 20	19.29	Jul 20	19.78

WATER YEAR 2005: Highest 18.86, Feb 16, 2005; Lowest 19.78, Jul 20, 2005 PERIOD OF RECORD: Highest 15.72, Sep 8, 1993; Lowest 20.31, Jan 7, 2004

RECORD AVAILABLE FROM: Oct 24, 1985 to Jul 20, 2005: 67 Entries

SITE ID NUMBER: 413706087181800

STATION NAME: USGS well A-2 at USX, NR. Lake, Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	18.31	Feb 16	17.26	Apr 20	17.93	Jul 20	18.60

WATER YEAR 2005: Highest 17.26, Feb 16, 2005; Lowest 18.60, Jul 20, 2005 PERIOD OF RECORD: Highest 14.83, Sep 8, 1993; Lowest 19.42, Apr 10, 2003

RECORD AVAILABLE FROM: Jun 26, 1987 to Jul 20, 2005: 56 Entries

SITE ID NUMBER: 413629087192102

STATION NAME: USGS well A-5 at USX, N of GCR, at Gary Harbor, Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
16.50	Jul 20	16.04	Apr 20	15.20	Feb 16	16.24	Oct 27

WATER YEAR 2005: Highest 15.20, Feb 16, 2005; Lowest 16.50, Jul 20, 2005

PERIOD OF RECORD: Highest 13.64, Sep 8, 1993, Jun 29, 2000; Lowest 16.50, Jul 20, 2005

RECORD AVAILABLE FROM: Dec 17, 1985 to Jul 20, 2005: 62 Entries

SITE ID NUMBER: 413706087170101 STATION NAME: USGS well A-6, E of USX IN DUNES NAT LKSH, Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	4.25	Feb 14	2.98	Apr 20	3.63	Jul 18	4.94

WATER YEAR 2005: Highest 2.98, Feb 14, 2005; Lowest 4.94, Jul 18, 2005 PERIOD OF RECORD: Highest 2.65, Jun 10, 1993; Lowest 4.94, Jul 18, 2005

RECORD AVAILABLE FROM: Jul 14, 1987 to Jul 18, 2005: 34 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413617087191201 STATION NAME: USGS well A15 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+") WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	2.25	Feb 14	0.83	Iul 18	2.56

WATER YEAR 2005: Highest 0.83, Feb 14, 2005; Lowest 2.56, Jul 18, 2005 PERIOD OF RECORD: Highest +0.99, Mar 19, 1991; Lowest 2.56, Jul 18, 2005

RECORD AVAILABLE FROM: Oct 24, 1985 to Jul 18, 2005: 62 Entries

SITE ID NUMBER: 413503087193501 STATION NAME: USGS well A20 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	18.03	Feb 14	17.49	Apr 18	17.74	Jul 18	18.07

WATER YEAR 2005: Highest 17.49, Feb 14, 2005; Lowest 18.07, Jul 18, 2005 PERIOD OF RECORD: Highest 17.32, Jul 12, 1996, Jul 01, 1997; Lowest 19.07, Mar 06, 1986

RECORD AVAILABLE FROM: Jan 03, 1986 to Jul 18, 2005: 72 Entries

SITE ID NUMBER: 413752087223500

STATION NAME: USGS well B2 at USXBY HWT-2-9 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
29.18	Jul 20	29.04	Apr 20	28.46	Feb 16	28.75	Oct 27

WATER YEAR 2005: Highest 28.46, Feb 16, 2005; Lowest 29.18, Jul 20, 2005 PERIOD OF RECORD: Highest 25.92, Jun 25, 1987; Lowest 29.53, Mar 29, 2000

RECORD AVAILABLE FROM: Jun 25, 1987 to Jul 20, 2005: 55 Entries

SITE ID NUMBER: 413632087234001 STATION NAME: USGS well B5 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	5.22	Feb 16	2.94	Apr 20	4.26	Jul 20	5.54

WATER YEAR 2005: Highest 2.94, Feb 16, 2005; Lowest 5.54, Jul 20, 2005 PERIOD OF RECORD: Highest 2.77, Jun 09, 1993; Lowest 7.66, Oct 11, 1988

RECORD AVAILABLE FROM: Aug 28, 1985 to Jul 20, 2005: 75 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413617087225202

STATION NAME: USGS well B7 SHALLOW at Chase St. at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
9.02	Jul 19	7.95	Apr 18	6.91	Feb 16	8.82	Oct 26

WATER YEAR 2005: Highest 6.91, Feb 16, 2005; Lowest 9.02, Jul 19, 2005 PERIOD OF RECORD: Highest 6.84, Jun 9, 1993; Lowest 9.56, Apr 7, 2003

RECORD AVAILABLE FROM: Jun 22, 1987 to Jul 19, 2005: 59 Entries

SITE ID NUMBER: 413617087225201

STATION NAME: USGS well B8 DEEP at Chase St. at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	8.84	Feb 16	6.94	Apr 18	7.99	Jul 19	9.02

WATER YEAR 2005: Highest 6.94, Feb 16, 2005; Lowest 9.02, Jul 19, 2005 PERIOD OF RECORD: Highest 6.88, Jun 9, 1993; Lowest 9.57, Apr 7, 2003

RECORD AVAILABLE FROM: Jul 14, 1987 to Jul 19, 2005: 60 Entries

SITE ID NUMBER: 413544087233700

STATION NAME: USGS well B10 at Brunswick at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	14.72	Feb 16	11.87	Apr 18	12.52	Jul 19	14.42

WATER YEAR 2005: Highest 11.87, Feb 16, 2005; Lowest 14.72, Oct 26, 2004 PERIOD OF RECORD: Highest 11.47, Mar 20, 1991; Lowest 15.16, Apr 8, 2003

RECORD AVAILABLE FROM: Dec 10, 1985 to Jul 19, 2005: 73 Entries

SITE ID NUMBER: 413620087204401 STATION NAME: USEPA well BH-12 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	13.58	Feb 14	11.97	Apr 18	12.50	Jul 18	13.66

WATER YEAR 2005: Highest 11.97, Feb 14, 2005; Lowest 13.66, Jul 18, 2005 PERIOD OF RECORD: Highest 10.80, Sep 8, 1993; Lowest 13.66, Jul 18, 2005

RECORD AVAILABLE FROM: Jun 23, 1992 to Jul 18, 2005: 40 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413548087204001

STATION NAME: USEPA well BH-13 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	11.01	Feb 14	9.86	Apr 18	10.21	Jul 18	11.10

WATER YEAR 2005: Highest 9.86, Feb 14, 2005; Lowest 11.10 Jul 18, 2005 PERIOD OF RECORD: Highest 9.61, Mar 24, 1998; Lowest 11.29 Sep 3, 2002

RECORD AVAILABLE FROM: Jun 23, 1992 to Jul 18, 2005: 40 Entries

SITE ID NUMBER: 413445087204701

STATION NAME: USEPA well BH-14 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	6.60	Feb 14	5.01	Apr 18	5.78	Jul 18	5.83

WATER YEAR 2005: Highest 5.01 Feb 14, 2005; Lowest 6.60 Oct 26, 2004 PERIOD OF RECORD: Highest 2.59 Jul 12, 1996; Lowest 9.49 Mar 27, 2000

RECORD AVAILABLE FROM: Jun 23, 1992 to Jul 18, 2005:

SITE ID NUMBER: 414120087304701

STATION NAME: USEPA well BH-15 at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
2.85	Jul 19	2.59	Apr 19	2.14	Feb 15	2.82	Oct 25

WATER YEAR 2005: Highest 2.14, Feb 15, 2005; Lowest 2.85, Jul 19, 2005 PERIOD OF RECORD: Highest 1.28, Mar 29, 1996; Lowest 2.85, Jul 19, 2005

RECORD AVAILABLE FROM: Jun 23, 1992 to Jul 19, 2005: 37 Entries

SITE ID NUMBER: 413706087150701 STATION NAME: USEPA well BH-17 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	11.90	Feb 14	10.40	Apr 18	11.03	Jul 18	12.08

WATER YEAR 2005: Highest 10.40, Feb 14, 2005; Lowest 12.08, Jul 18, 2005 PERIOD OF RECORD: Highest 10.00, Sep 8, 1993; Lowest 13.23, Oct 11, 2001

RECORD AVAILABLE FROM: Jun 23, 1992 to Jul 18, 2005: 43 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413516087222301 STATION NAME: USEPA well BH-19 AT Gary, IN

RECORD AVAILABLE FROM: Jul 17, 1996 to Apr 19, 2005: 24 Entries

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

		ER LEVELS IN FEET BELO VATER YEAR OCTOBER 200										
	DATE	WATER LEVEL	DATE	WATI LEVE								
	Feb 14	10.40	Apr 18	10.9	08							
WATER YEAR 2005: PERIOD OF RECORD	Highest 10.40, Feb D: Highest 6.03, M	o 14, 2005; Lowest 10.98, Apr (ar 25, 2002; Lowest 12.00, Jul	18, 2005 17, 2003									
RECORD AVAILABL	E FROM: Jun 23	, 1992 to Jul 18, 2005: 27 En	tries									
SITE ID NUMBER: 413951087301901 STATION NAME: USGS well BH-33-INTERMEDIATE at Bairstow Slag Dump												
WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005												
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL							
Oct 25	2.88	Feb 15	2.07	Apr 19	2.11							
		15, 2005; Lowest 2.88, Oct 25, in 5, 2001; Lowest 5.73, Jun 2										
RECORD AVAILABL	E FROM: Jul 17,	1996 to Apr 19, 2005: 26 Er	ntries									
SITE ID NUMBER: 4 STATION NAME: US		IALLOW at Bairstow Slag Du	тр									
		ER LEVELS IN FEET BELO VATER YEAR OCTOBER 200										
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL							
Oct 25	2.76	Feb 15	1.94	Apr 19	1.98							
		15, 2005; Lowest 2.76, Oct 25, ıl 31, 1996, Aug 02, 1996; Low										
RECORD AVAILABL	E FROM: Jul 17,	1996 to Apr 19, 2005: 24 Er										
SITE ID NUMBER: 413951087301903 STATION NAME: USGS well BH-33-SLAG at Bairstow Slag Dump												
	WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005											
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL							
Oct 25	2.56	Feb 15	1.76	Apr 19	1.75							
		19, 2005; Lowest 2.56, Oct 25 il 31, 1996; Lowest 4.59, Jun 2										

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413328087202301

STATION NAME: USGS well BR-1, at IU-NW Campus, Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+") WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
0.18	Jul 18	0.20	Apr 18	0.20	Feb 14	0.47	Oct 26

WATER YEAR 2005: Highest 0.18, Jul 18, 2005; Lowest 0.47, Oct 26, 2004 PERIOD OF RECORD: Highest +0.29, Jun 26, 2000; Lowest 3.06, Jan 18, 1995

RECORD AVAILABLE FROM: Jan 18, 1995 to Jul 18, 2005: 38 Entries

SITE ID NUMBER: 413419087301701

STATION NAME: USGS well BR-3 at Riverside Park, Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+") WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
2.45	Jul 19	1.09	Apr 19	1.29	Feb 15	2.23	Oct 25

WATER YEAR 2005: Highest 1.09, Apr 19, 2005; Lowest 2.45, Jul 19, 2005 PERIOD OF RECORD: Highest 1.09, Apr 19, 2005; Lowest 9.34, Jul 21, 1995

RECORD AVAILABLE FROM: Jul 21, 1995 to Jul 19, 2005: 24 Entries

SITE ID NUMBER: 413716087232601

STATION NAME: USGS well BR-4, IDNR BONGI PROP, Clark St. Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	21.27	Feb 16	19.04	Apr 18	18.30	Jul 19	17.47

WATER YEAR 2005: Highest 17.47, Jul 19, 2005; Lowest 21.27, Oct 26, 2004

PERIOD OF RECORD: Highest 8.01, Mar 02, 1999, Jun 06, 2001; Lowest 53.60, Apr 8, 2003

RECORD AVAILABLE FROM: Jul 21, 1995 to Jul 19, 2005: 34 Entries

SITE ID NUMBER: 413732087255801 STATION NAME: USEPA well BR-5 at SR-912 & US-12, East Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
18 25	Jul 19	18 67	Apr 19	18.99	Feb 15	20.39	Oct 27

WATER YEAR 2005: Highest 18.25, Jul 19, 2005; Lowest 20.39, Oct 27, 2004 PERIOD OF RECORD: Highest 14.26, Mar 3, 1999; Lowest 30.20, Jul 9, 2003

RECORD AVAILABLE FROM: Jul 21, 1995 to Jul 19, 2005: 34 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413830087260000 STATION NAME: USGS well C1 at Cline & Guthrie at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	4.32	Feb 15	2.10	Apr 19	3.60	Jul 19	5.00

WATER YEAR 2005: Highest 2.10, Feb 15, 2005; Lowest 5.00, Jul 19, 2005 PERIOD OF RECORD: Highest 2.04, Jun 11, 1993; Lowest 5.30, Oct 11, 1988

RECORD AVAILABLE FROM: Dec 09, 1985 to Jul 19, 2005: 74 Entries

SITE ID NUMBER: 413828087251301

STATION NAME: USGS well C3 at Buffington Harbor, E. Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	9.18	Feb 15	9.05	Apr 19	9.47	Jul 19	9.39

WATER YEAR 2005: Highest 9.05, Feb 15, 2005; Lowest 9.47, Apr 19, 2005 PERIOD OF RECORD: Highest 7.05, Jun 11, 1993; Lowest 10.17, Apr 9, 2003

RECORD AVAILABLE FROM: Jun 24, 1987 to Jul 19, 2005: 57 Entries

SITE ID NUMBER: 413828087251302

STATION NAME: USGS well C4 at Buffington Harbor, E. Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
9.55	Jul 19	9.62	Apr 19	9.21	Feb 15	9.30	Oct 27

WATER YEAR 2005: Highest 9.21, Feb 15, 2005; Lowest 9.62, Apr 19, 2005 PERIOD OF RECORD: Highest 6.69, Sep 8, 1998; Lowest 10.30, Apr 9, 2003

RECORD AVAILABLE FROM: Jun 24, 1987 to Jul 19, 2005: 57 Entries

SITE ID NUMBER: 413655087275202 STATION NAME: USGS well C-5 Dupont Property North (RPD=96)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+") WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	1.70	Feb 16	0.03	Apr 20	0.08	Inl 20	2 38

WATER YEAR 2005: Highest 0.03, Feb 16, 2005; Lowest 2.38, Jul 20, 2005 PERIOD OF RECORD: Highest +0.91, Jun 10, 1993; Lowest 3.49, Sep 5, 2002

RECORD AVAILABLE FROM: Oct 25, 1985 to Jul 20, 2005: 43 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413559087270301

STATION NAME: USGS well C17 at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+")
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
4.43	Jul 19	0.98	Apr 20	0.07	Feb 16	3.29	Oct 26

WATER YEAR 2005: Highest 0.07, Feb 16, 2005; Lowest 3.29, Oct 26, 2004 PERIOD OF RECORD: Highest +2.34, Mar 26, 2002; Lowest 4.90, Oct 12, 1988

RECORD AVAILABLE FROM: Jul 18, 1986 to Feb 16, 2005: 22 Entries

SITE ID NUMBER: 413617087262001

STATION NAME: USGS well C19 at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+") WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	1.61	Feb 16	1.10	Apr 20	1.63	Jul 19	2.97

WATER YEAR 2005: Highest 1.10, Feb 16, 2005; Lowest 2.97, Jul 19, 2005 PERIOD OF RECORD: Highest +0.61, Mar 18, 1993; Lowest 3.83, Sep 5, 2002

RECORD AVAILABLE FROM: Dec 15, 1986 to Jul 19, 2005: 54 Entries

SITE ID NUMBER: 413527087254301

STATION NAME: USGS well C25 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	2.06	Feb 16	1.12	Apr 20	1.82	Jul 19	3.82

WATER YEAR 2005: Highest 1.12, Feb 16, 2005; Lowest 3.82, Jul 19, 2005 PERIOD OF RECORD: Highest 0.46, Feb 27, 2001; Lowest 4.17, Aug 31, 1999

RECORD AVAILABLE FROM: Dec 5, 1985 to Jul 19, 2005: 68 Entries

SITE ID NUMBER: 414052087291201 STATION NAME: USGS well D1 at Whiting, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	10.12	Fob 15	0.18	Apr 10	0.61	Tul 10	0.80

WATER YEAR 2005: Highest 9.18, Feb 15, 2005; Lowest 10.12, Oct 27, 2004 PERIOD OF RECORD: Highest 6.76, Aug 25, 1985; Lowest 10.14, Apr 6, 2004

RECORD AVAILABLE FROM: Aug 25, 1985 to Jul 19, 2005: 73 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 414044087290801 STATION NAME: USGS well D5 at Whiting, IN

3.50

Oct 27

Feb 15

WATER YEAR 2005: Highest 2.24, Feb 15, 2005; Lowest 4.12, Jul 19, 2005 PERIOD OF RECORD: Highest 1.48, Nov 28, 1990; Lowest 4.74, Dec 12, 1997

RECORD AVAILABLE FROM: Jul 17, 1987 to Jul 19, 2005 62 Entries

2.24

Apr 19

3.46

Jul 19

4.12

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

	V				SURFACE DAT EPTEMBER 2005		
	DATE		ATER EVEL		DATE	WATE LEVEI	
	Feb 15		6.24		Apr 19	6.9	6
	005: Highest 6.24, CORD: Highest 4.1						
	ABLE FROM: A	, . ,	,	,			
	R: 4140430872908 E: USGS well D10		N				
	V				SURFACE DAT EPTEMBER 2005		
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	7.41	Feb 15	6.20	Apr 19	6.93	Jul 19	7.52
RIOD OF REC	005: Highest 6.20, CORD: Highest 4.1 ABLE FROM: A	2, Sep 7, 199	3; Lowest 8.38, J	Jan 6, 2000			
	R: 4140430872908 E: USGS well D11		iting Garage at V	Whiting, IN			
	V				SURFACE DAT EPTEMBER 2005		
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	7.28	Feb 15	6.06	Apr 19	6.79	Jul 19	7.37
	005: Highest 6.06, CORD: Highest 4.0						
CORD AVAIL	ABLE FROM: Ju	ın 11, 1987 to	Jul 19, 2005;	63 Entries			
TE ID NUMBE	R: 4139410872926	500					
	E: USGS well D21		k at Hammond,	IN			
	V				SURFACE DAT EPTEMBER 2005		
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
0 . 45	2.50				2.46	* 140	

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413804087291102 STATION NAME: USGS well D-25 Dicky Road at IHC WEST (RPD=96)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
6.52	Jul 19	5.36	Apr 19	3.78	Feb 15	5.83	Oct 27

WATER YEAR 2005: Highest 3.78, Feb 15, 2005; Lowest 6.52, Jul 19, 2005 PERIOD OF RECORD: Highest 1.94, Jun 9, 1993; Lowest 6.52, Jul 19, 2005

RECORD AVAILABLE FROM: Dec 5, 1985 to Jul 19, 2005: 70 Entries

SITE ID NUMBER: 413758087290702

STATION NAME: USGS well D-30 Dicky Road at IHC Middle (RPD=96)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	5.66	Feb 15	4.86	Apr 19	5.51	Jul 19	5.96

WATER YEAR 2005: Highest 4.86, Feb 15, 2005; Lowest 5.96, Jul 19, 2005 PERIOD OF RECORD: Highest 2.43, Dec 5, 1985; Lowest 6.19, Apr 9, 2003

RECORD AVAILABLE FROM: Dec 5, 1985 to Jul 19, 2005: 70 Entries

SITE ID NUMBER: 413907087275901

STATION NAME: USGS well D31 DEEP at Dicky Road at East Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
5.91	Jul 19	5.47	Apr 19	4.81	Feb 15	6.63	Oct 27

WATER YEAR 2005: Highest 4.81, Feb 15, 2005; Lowest 6.63, Oct 27, 2004 PERIOD OF RECORD: Highest 2.71, Jun 9, 1993; Lowest 6.63, Oct 27, 2004

RECORD AVAILABLE FROM: Jul 16, 1987 to Jul 19, 2005: 59 Entries

SITE ID NUMBER: 413835087245101 STATION NAME: USGS well D40 at E. Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	2.96	Feb 15	1 18	Anr 19	2.31	Jul 19	2.96

WATER YEAR 2005: Highest 1.18, Feb 15, 2005; Lowest 2.96, Oct 27, 2004, Jul 19, 2005

PERIOD OF RECORD: Highest 0.15, Jun 9, 1993; Lowest 4.55, Jun 29, 1999

RECORD AVAILABLE FROM: Oct 24, 1985 to Jul 19, 2005 73 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413812087270201 STATION NAME: USGS well D45 at E. Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	5.10	Feb 15	3.63	Apr 19	4.61	Jul 19	5.22

WATER YEAR 2005: Highest 3.63, Feb 15, 2005; Lowest 5.22, Jul 19, 2005 PERIOD OF RECORD: Highest 2.93, Nov 28, 1990; Lowest 6.87, Jun 29, 1999

RECORD AVAILABLE FROM: Oct 24, 1985 to Jul 19, 2005: 72 Entries

SITE ID NUMBER: 413800087285401

STATION NAME: USGS well D50 at East Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
7.19	Jul 19	7.17	Apr 19	6.97	Feb 15	7.17	Oct 27

WATER YEAR 2005: Highest 6.97, Feb 15, 2005; Lowest 7.19, Jul 19, 2005 PERIOD OF RECORD: Highest 5.98, Jun 10, 1993; Lowest 7.46, Sep 8, 1992

RECORD AVAILABLE FROM: Dec 13, 1985 to Jul 19, 2005: 63 Entries

SITE ID NUMBER: 413758087281401

STATION NAME: USGS well D-55 Phillips Pipeline West RPD=24)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

> DATE WATER LEVEL

1.11 Apr 19

PERIOD OF RECORD: Highest 1.11, Apr 19, 2005; Lowest 5.63, Feb 28, 1990, Nov 28, 1990

RECORD AVAILABLE FROM: Oct 24, 1985 to Apr 19, 2005: 43 Entries

SITE ID NUMBER: 413758087281001 STATION NAME: USGS well D-60 Phillips Pipeline Middle (RPD=96)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Fab 15	4.00	A n.m. 10	5 2¢	To 1 20	7.01

WATER YEAR 2005: Highest 4.90, Feb 15, 2005; Lowest 7.01, Jul 20, 2005 PERIOD OF RECORD: Highest 3.29, Nov 27, 1985; Lowest 7.01, Jul 20, 2005

RECORD AVAILABLE FROM: Oct 29, 1985 to Jul 20, 2005: 45 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413654087274000 STATION NAME: USGS well D66 at Dupont,Kennedy & GR.CAL. at East Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005											
DATE	WATEI LEVEI		DATE	WATE! LEVE!		DATE	WATER LEVEL				
Feb 16	5.16		Apr 20	5.47	7	Jul 20	6.61				
WATER YEAR 2005: Highest 5.16, Feb 16, 2005; Lowest 6.61, Jul 20, 2005 PERIOD OF RECORD: Highest 4.76, Jun 27, 1997; Lowest 6.68, Mar 28, 2000											
RECORD AVAIL	LABLE FROM:	Jul 15, 1987 to	Jul 20, 2005: 54	Entries							
								-			
SITE ID NUMBE STATION NAMI			IIPSCO SUBSTA	at Hammond,	IN						
			ELS IN FEET BE YEAR OCTOBER								
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL				
Oct 26	5.26	Feb 15	1.60	Apr 19	3.18	Jul 19	6.05				
			; Lowest 6.05, Jul 90; Lowest 6.21, S								
RECORD AVAIL	LABLE FROM:	Jul 16, 1987 to	Jul 19, 2005: 59	Entries							
								-			
SITE ID NUMBI STATION NAM			CO SUBSTA, at Ha	ammond, IN							
			ELS IN FEET BE YEAR OCTOBER								
DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL				
Oct 26	5.43	Feb 15	1.77	Apr 19	3.35	Jul 19	6.23				
			; Lowest 6.23, Jul 90; Lowest 6.38, S								
RECORD AVAII	LABLE FROM:	Jul 16, 1987 to	Jul 19, 2005: 59	Entries							
SITE ID NUMBER: 413435087291901											
STATION NAMI	E: USGS well D-7		, IN		~~~~~						

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	4.46	Feb 15	3.59	Apr 19	4.61	Jul 19	5.08

WATER YEAR 2005: Highest 3.59, Feb 15, 2005; Lowest 5.08, Jul 19, 2005 PERIOD OF RECORD: Highest 3.40, Jun 10, 1993; Lowest 5.08, Jul 19, 2005

RECORD AVAILABLE FROM: Jan 07, 1986 to Jul 19, 2005: 70 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413844087310401 STATION NAME: USGS well E1 at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	3.45	Feb 15	2.31	Apr 19	3.03	Jul 19	2.76

WATER YEAR 2005: Highest 2.31, Feb 15, 2005; Lowest 3.45, Oct 25, 2004 PERIOD OF RECORD: Highest 1.08, Jul 18, 1996; Lowest 3.97, Oct 12, 1988

RECORD AVAILABLE FROM: Dec 13, 1985 to Jul 19, 2005: 74 Entries

SITE ID NUMBER: 414105087293900

STATION NAME: USGS well E2 at Whihala Beach Park at Whiting, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
5.97	Jul 19	5.40	Apr 19	5.42	Feb 15	5.72	Oct 27

WATER YEAR 2005: Highest 5.40, Apr 19, 2005; Lowest 5.97, Jul 19, 2005 PERIOD OF RECORD: Highest 2.95, Jun 9, 1987; Lowest 6.20, Jan 6, 2000

RECORD AVAILABLE FROM: Jun 9, 1987 to Jul 19, 2005: 58 Entries

SITE ID NUMBER: 414013087303300

STATION NAME: USGS well E3 at Wolf Lake Park at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
3.63	Jul 19	2.58	Apr 19	1.13	Feb 15	3.20	Oct 25

WATER YEAR 2005: Highest 1.13, Feb 15, 2005; Lowest 3.63, Jul 19, 2005 PERIOD OF RECORD: Highest 0.59, Jul 18, 1996; Lowest 3.63, Jul 19, 2005

RECORD AVAILABLE FROM: Jun 22, 1987 to Jul 19, 2005: 65 Entries

SITE ID NUMBER: 413810087305201 STATION NAME: USGS well E5 at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	5 53	Feb 15	4 30	Jul 19	5.81

WATER YEAR 2005: Highest 4.30, Feb 15, 2005; Lowest 5.81, Jul 19, 2005 PERIOD OF RECORD: Highest 3.60, Jul 10, 1993; Lowest 5.98, Sep 6, 2001

RECORD AVAILABLE FROM: Aug 28, 1985 to Jul 19, 2005: 70 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413938087304301

STATION NAME: 8SGS well E6 at 129th & Sheffeld at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	1.72	Feb 15	0.14	Apr 19	1.49	Jul 19	3.05

WATER YEAR 2005: Highest 0.14, Feb 15, 2005; Lowest 3.05, Jul 19, 2005 PERIOD OF RECORD: Highest 0.14, Feb 15, 2005; Lowest 3.15, Aug 31, 1999

RECORD AVAILABLE FROM: Jun 22, 1987 to Jul 19, 2005: 62 Entries

SITE ID NUMBER: 413938087304302

STATION NAME: USGS well E7 at 129th & Sheffield at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	1 73	Feb 15	0.21	Apr 19	1.62	Jul 19	3 18

WATER YEAR 2005: Highest 0.21, Feb 15, 2005; Lowest 3.18, Jul 19, 2005 PERIOD OF RECORD: Highest 0.08, Jun 5, 2001; Lowest 3.18, Jul 19, 2005

RECORD AVAILABLE FROM: Jun 22, 1987 to Jul 19, 2005: 64 Entries

SITE ID NUMBER: 413722087304101

STATION NAME: USGS well E-10 Spohn School North (RPD=24)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
6.17	Jul 19	3.88	Apr 19	2.81	Feb 15	5.96	Oct 25

WATER YEAR 2005: Highest 2.81, Feb 15, 2005; Lowest 6.17, Jul 19, 2005 PERIOD OF RECORD: Highest 2.46, Jun 10, 1993; Lowest 6.17, Jul 19, 2005

RECORD AVAILABLE FROM: Oct 17, 1985 to Jul 19, 2005: 77 Entries

SITE ID NUMBER: 413720087304201

STATION NAME: USGS well E-15 Spohn School South (RPD=24)

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	4.54	Feb 15	2.02	Apr 19	2.86	Jul 19	4.70

WATER YEAR 2005: Highest 2.02, Feb 15, 2005; Lowest 4.70, Jul 19, 2005 PERIOD OF RECORD: Highest 1.48, Jun 10, 1993; Lowest 6.50, Oct 18, 1991

RECORD AVAILABLE FROM: Oct 30, 1985 to Jul 19, 2005: 64 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413627087310500 STATION NAME: USGS well E20 at Eggers School at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	4.14	Feb 15	1.55	Apr 19	3.12	Jul 19	4.50

WATER YEAR 2005: Highest 1.55, Feb 15, 2005; Lowest 4.50, Jul 19, 2005

PERIOD OF RECORD: Highest 1.55, Feb 15, 2005; Lowest 4.86, Aug 20, 1986, Oct 11, 1988

RECORD AVAILABLE FROM: Aug 28, 1985 to Jul 19, 2005: 70 Entries

SITE ID NUMBER: 413706087171901

STATION NAME: USX well HWD2-19D, Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
15.63	Jul 20	14.88	Apr 20	14.35	Feb 16	15.34	Oct 27

WATER YEAR 2005: Highest 14.35, Feb 16, 2005; Lowest 15.63, Jul 20, 2005 PERIOD OF RECORD: Highest 13.26, Jul 10, 1996; Lowest 15.77, Jul 10, 2002

RECORD AVAILABLE FROM: Jul 18, 1995 to Jul 20, 2005: 26 Entries

SITE ID NUMBER: 413706087171902

STATION NAME: USX well HWD-2-19 SHALLOW, at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL
Apr 20	13.52	Jul 20	15.49

WATER YEAR 2005: Highest 13.52, Apr 20, 2005; Lowest 15.49, Jul 20, 2005 PERIOD OF RECORD: Highest 13.04, Mar 24, 1998; Lowest 15.64, Jul 10, 2002

RECORD AVAILABLE FROM: Jul 18, 1995 to Jul 20, 2005: 27 Entries

SITE ID NUMBER: 413703087171501 STATION NAME: USX well HWD-2-20D, at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	31.62	Feb 16	30.42	Apr 20	31.01	Jul 20	32.00

WATER YEAR 2005: Highest 30.42, Feb 16, 2005; Lowest 32.00, Jul 20, 2005 PERIOD OF RECORD: Highest 29.93, Jul 01, 1999; Lowest 32.23, Apr 10, 2003

RECORD AVAILABLE FROM: Jul 10, 1996 to Jul 20, 2005: 25 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 413703087171502 STATION NAME: USX well HWD-2-20S at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	31.80	Feb 16	30.58	Apr 20	31.18	Jul 20	32.18

WATER YEAR 2005: Highest 30.58, Feb 16, 2005; Lowest 32.18, Jul 20, 2005 PERIOD OF RECORD: Highest 30.10, Jul 1, 1999; Lowest 32.41, Apr 10, 2003

RECORD AVAILABLE FROM: Jul 10, 1996 to Jul 20, 2005: 25 Entries

SITE ID NUMBER: 413722087225501

STATION NAME: USX well (B)HWT14-05 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oat 26	5 20	A n.u. 10	4 95	Tul 10	<i>5 5</i> 0

WATER YEAR 2005: Highest 4.85, Apr 18, 2005; Lowest 5.58, Jul 19, 2005 PERIOD OF RECORD: Highest 3.01, Feb 27, 1990; Lowest 5.58, Jul 19, 2005

RECORD AVAILABLE FROM: Dec 10, 1985 to Jul 19, 2005: 49 Entries

SITE ID NUMBER: 413752087223501

STATION NAME: USX well (B)HWT2-9 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM (READINGS ABOVE LAND-SURFACE INDICATED BY "+") WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	29.07	Feb 16	28.70	Apr 20	29.29	Jul 20	29.51

WATER YEAR 2005: Highest 28.70, Feb 16, 2005; Lowest 29.51, Jul 20, 2005 PERIOD OF RECORD: Highest 25.68, Jul 24, 1986; Lowest 29.94, Mar 29, 2000

RECORD AVAILABLE FROM: Dec 10, 1985 to Jul 20, 2005: 64 Entries

SITE ID NUMBER: 413734087225101 STATION NAME: USX well (B)P-11 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 26	11 35	Apr 18	10.57	Inl 10	11.86

WATER YEAR 2005: Highest 10.57, Apr 18, 2005; Lowest 11.86, Jul 19, 2005 PERIOD OF RECORD: Highest 8.41, Jun 8, 1993; Lowest 11.86, Jul 19, 2005

RECORD AVAILABLE FROM: Oct 12, 1985 to Jul 19, 2005: 65 Entries

Table 3. Water-level records for observation wells in the Northern Lake County network, collected during water year 2005 and summary statistics.--Continued

SITE ID NUMBER: 414144087304101

STATION NAME: USEPA well MW-1 at Hammond, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE
13.05	Jul 19	12.86	Apr 19	12.49	Feb 15	13.13	Oct 25

WATER YEAR 2005: Highest 12.49, Feb 15, 2005; Lowest 13.13, Oct 25, 2004 PERIOD OF RECORD: Highest 2.46, Jul 9, 2002; Lowest 13.91, Jan 6, 2000

RECORD AVAILABLE FROM: Mar 17, 1993 to Jul 19, 2005: 31 Entries

SITE ID NUMBER: 414033087245501

STATION NAME: ISPAT Inland Steel well MW-1G, East Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 25	13.45	Feb 16	13.14	Apr 19	12.77

WATER YEAR 2005: Highest 12.77, Apr 19, 2005; Lowest 13.45, Oct 25, 2004 PERIOD OF RECORD: Highest 5.80, Dec 16, 1998; Lowest 19.56, Jul 10, 2003

RECORD AVAILABLE FROM: Oct 7, 1992 to Apr 19, 2005: 26 Entries

SITE ID NUMBER: 414033087245502

STATION NAME: ISPAT Inland Steel well MW-2, at East Chicago, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE WATER LEVEL

Oct 25 13.2

WATER YEAR 2005: Highest 13.21, Oct 25, 2004; Lowest 13.21, Oct 25, 2004 PERIOD OF RECORD: Highest 9.16, Mar 03, 1999; Lowest 13.60, Jan 5, 2000

RECORD AVAILABLE FROM: Oct 7, 1992 to Apr 19, 2005: 24 Entries

SITE ID NUMBER: 413744087223901

STATION NAME: USX well (B)P-4 at Gary, IN

WATER LEVELS IN FEET BELOW LAND SURFACE DATUM WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Oct 27	21.97	Feb 16	20.07	Apr 20	22.09	Jul 20	22.79

WATER YEAR 2005: Highest 20.07, Feb 16, 2005; Lowest 22.79, Jul 20, 2005 PERIOD OF RECORD: Highest 18.39, Jun 8, 1993; Lowest 22.79, Jul 20, 2005

RECORD AVAILABLE FROM: Dec 10, 1985 to Jul 20, 2005: 62 Entries

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, IN--Continued

Table 4. Location and description of surface-water stage measurement sites in Northern Lake County network measured during water year 2005.

Site name	Surface-water body	Latitude/longitude	USGS site identifier	Measurement location
S-1	Wolf Lake	41°40′16″/87°30′37″	414016087303701	Fishing pier in Wolf Lake Park, Hammond, IN.
S-8	Sewer	41°38′08″/87°27′05″	413808087270501	Sewer grate, Washington Park, East Chicago, IN.
S-13	Grand Calumet River	41°36′32″/87°22′18″	413632087221900	At Bridge Street bridge, Gary, IN.
E-16S	Grand Calumet River	41°37′19″/87°30′44″	413719087304302	Spohn School, Hammond, IN.

GROUND-WATER AND SURFACE-WATER LEVELS IN NORTHERN LAKE COUNTY, INDIANA

Table 5. Reference-point altitude and miscellaneous measurements of surface-water stage in the Northern Lake County network, water year 2005 and period of record.

ft, feet; LSD, land surface datum; --, not recorded; >, greater than

Site name	USGS site identifier	Period of record	Date	Depth to water surface below measuring point (ft)	Altitude of measuring point (ft above sea level) ¹
S-1	414016087303701	03-1986 through 07-2005	OCT 25, 2004	2.14	581.49
			APR 19, 2005	1.45	581.49
			JUL 19, 2005	2.11	581.49
S-8	413808087270501	01-1986 through 07-2005	FEB 2, 2005	1.47	581.56
			APR 19, 2005	1.45	581.56
			JUL 19, 2005	1.85	581.56
S-13	413632087221900	10-1988 through 07-2005	FEB 2, 2005	17.98	600.00
			APR 18, 2005	17.93	600.00
			JUL 18, 2005	16.60	600.00
E-16S	413719087304302	12-1985 through 07-2005	FEB 2, 2005	6.30	588.82
		G	APR 19, 2005	6.55	588.82
			JUL 19, 2005	6.53	588.82

 $^{^{\}rm 1}$ Several sites have multiple measuring points to accommodate changing site conditions.