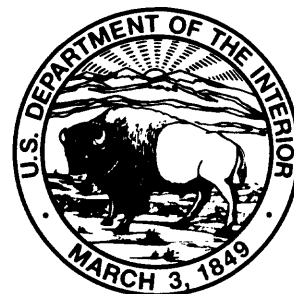


**HYDROGEOLOGIC, WATER-QUALITY, AND LAND-USE DATA FOR THE
RECONNAISSANCE OF HERBICIDES AND NITRATE IN NEAR-SURFACE
AQUIFERS OF THE MIDCONTINENTAL UNITED STATES, 1991**

By Dana W. Kolpin, Michael R. Burkart, and E. Michael Thurman

**U.S. GEOLOGICAL SURVEY
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**Iowa City, Iowa
1993**

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CONVERSION FACTORS AND ABBREVIATED WATER-QUALITY UNITS

<i>Multiply</i>	<i>By</i>	<i>To obtain</i>
inch (in.)	25,400	micrometer (μm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)

Degree Celsius ($^{\circ}\text{C}$) may be converted to degree Fahrenheit ($^{\circ}\text{F}$) by the using the following equation:

$$^{\circ}\text{F} = 9/5 (^{\circ}\text{C}) + 32.$$

Milligrams per liter (mg/L) is a unit expressing the concentration of a chemical constituent in solution as weight (milligrams) of solute per unit volume (liter) of water.

Microgram per liter ($\mu\text{g/L}$) is a unit expressing the concentration of a chemical constituent in solution as a weight (micrograms) of solute per unit volume (liter) of water.

HYDROGEOLOGIC, WATER-QUALITY, AND LAND-USE DATA FOR THE RECONNAISSANCE OF HERBICIDES AND NITRATE IN NEAR-SURFACE AQUIFERS OF THE MIDCONTINENTAL UNITED STATES, 1991

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ABSTRACT

Water samples were collected during the spring and summer of 1991 from 303 wells penetrating near-surface unconsolidated and bedrock aquifers of the midcontinental United States. Samples were analyzed for 11 herbicides, 2 dealkylated atrazine metabolites, and 4 nutrients. Specific conductance, pH, and dissolved-oxygen concentrations of the ground water were measured onsite. Ancillary data on well construction, hydrogeology, and land use also were obtained for each well.

INTRODUCTION

The midcontinental United States has become the focus for research on agricultural chemical contamination in surface and ground water because it is an area of intense application of pesticides and fertilizers. In 1991, the U.S. Geological Survey began a reconnaissance study to determine the hydrogeologic, spatial, and seasonal distribution of herbicides and nitrate in near-surface aquifers of the midcontinental region of the United States. For the purpose of this study, near-surface aquifers are defined as those where the top of the aquifer is within about 50 ft of the land surface, regardless of whether the aquifer material is saturated or unsaturated. Other objectives of this study were to: (1) determine statistical relations of herbicide and nitrate to natural and anthropogenic factors; and (2) obtain data on herbicide and herbicide metabolite concentrations in ground water from geographic areas where few data existed. This study was designed with a specifically defined geographic and hydrogeologic study region, sample-collection protocol, quality-assurance program, and ancillary data collection (Kolpin and Burkart, 1991).

This report presents data collected for this study during 1991 by the U.S. Geological Survey. Wells were sampled twice, first in the spring (March or April) and again in the

summer (July or August) of 1991. A total of 300 wells were sampled during the spring; these samples represented preplanting conditions. From these water samples, 299 herbicide, 300 nitrate, and 285 ammonium analyses were obtained. A total of 299 wells were sampled during the summer; these samples represented postplanting conditions. From these water samples, 290 herbicide, 299 nitrate, and 299 ammonium analyses were obtained. Four wells sampled during the preplanting sample collection could not be resampled during the postplanting sample collection, but three substitute wells were used making a total of 303 wells sampled during the 1991 study. A comprehensive discussion describing the interpretive results determined from the water-quality samples collected during 1991 is published elsewhere (Kolpin and others, 1993).

WELL SELECTION

Wells selected for this study were distributed geographically by State and hydrogeologically by aquifer class (either unconsolidated or bedrock) and relative depth of open interval within the aquifer. States included in this study were: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. The number of wells selected in each State was allocated in proportion to the area of near-surface aquifers and the number of acres of corn and soybeans (Kolpin and Burkart, 1991). Within each State, wells were selected proportionally by aquifer class on the basis of the area of near-surface unconsolidated and near-surface bedrock aquifers. To obtain a vertical distribution of wells in each aquifer class, about 50 percent of the wells selected were completed in the upper one-half of the near-surface aquifers and about 50 percent were completed in the lower one-half of the near-surface aquifers. No attempt was made to obtain a uniform distribution by water use or by well types across the study area. The location of wells sampled for this study is shown in figure 1.

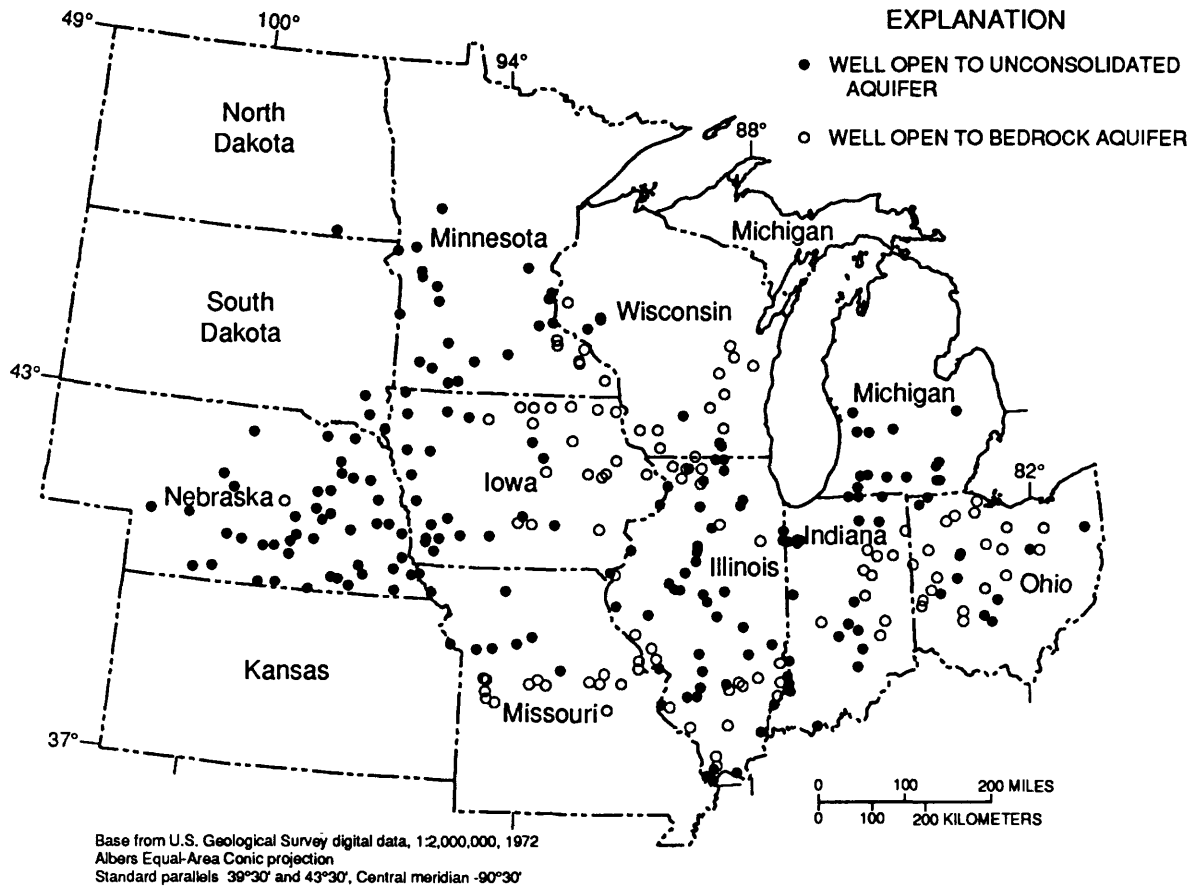


Figure 1. Location of wells sampled during 1991.

Selected wells had to meet minimum requirements for hydrogeologic, land-use, and well-construction information. Wells selected were completed in a single near-surface aquifer where at least 25 percent of the land use in a 2-mi radius had been planted in corn or soybeans during the previous growing season. Well-selection procedures were designed to obtain an unbiased geographic distribution across the midcontinental United States, which was accomplished by initiating a random search, by county, for wells in each State. A complete description of the criteria and procedures for well selection is given in Kolpin and Burkart (1991).

DATA COLLECTED

Hydrogeology

The hydrogeologic data obtained for this study (table 1) originated from sources such as:

driller's logs, State and county records, U.S. Geological Survey Ground-Water Site-Inventory (GWSI) files, and other available sources of information. Bedrock aquifers sampled for this study are composed of sandstone, dolomite, or limestone. Unconsolidated aquifers sampled for this study consist of materials that have not been lithified and are younger than bedrock. Unconfined aquifers have static water levels in wells that generally do not rise above the top of the aquifer. Confined aquifers have static water levels in wells that are above the top of the aquifer they penetrate. The depth to the top of the aquifer is the distance between the land surface and the top of the aquifer material, whether it is saturated or unsaturated.

Water Quality

All water-quality measurements and water samples were collected by U.S. Geological Survey personnel. Sampling equipment varied

but was constructed of materials that would not leach or adsorb organic compounds. All wells were purged to chemical stability before water-quality measurements or water samples were collected to ensure that a representative sample of the aquifer was obtained. Chemical stability was reached when successive measurements, at 5-minute intervals, of specific conductance, pH, and water temperature differed by less than the specified limits (Kolpin and Burkart, 1991). Water samples collected for herbicide analysis were filtered through a 1.0- μm glass-fiber filter into amber, baked-glass bottles and chilled immediately. Water samples for nutrient analysis were filtered through a 0.45- μm cellulose acetate filter into opaque, polyethylene bottles, preserved with mercuric chloride, and chilled immediately. Decontamination procedures were followed between collection of individual samples to prevent cross contamination between samples and wells. Water-quality data collected for this study are given in table 2, except for the herbicides ametryn, prometryn, propazine, and terbutryn which were analyzed for but never detected at concentrations greater than reporting limits. Duplicate herbicide and nutrient samples were collected for quality assurance at 6 percent of the wells (table 2). Wells for which sample duplicates were obtained were selected randomly.

Analyses for herbicides and two dealkylated atrazine metabolites were made at the U.S. Geological Survey laboratory in Lawrence, Kans., by gas chromatography/mass spectrometry (GC/MS) using solid-phase extraction techniques described by Thurman and others (1990). An analytical reporting limit of 0.05 $\mu\text{g/L}$ was used for all constituents in the GC/MS results. Analyses for nutrients were made at the U.S. Geological Survey National Water Quality Laboratory in Arvada, Colo., using automated colorimetric procedures described by Fishman and Friedman (1989). An analytical reporting limit of 0.01 mg/L was used for the nutrient results, except for nitrite plus nitrate, which had a reporting limit of 0.05 mg/L. All nitrogen species are reported as equivalent concentrations of nitrogen.

Land Use

Observations about land use and local features that could affect water quality also were made onsite at the time of sampling. These ancillary observations were summarized for three radial distances from the well--less than 100 ft, less than 0.25 mi, and from 0.25 to 2.0 mi (Kolpin and Burkart, 1991). Percentages of land use were estimated using broad intervals, and selected local features were noted for their presence or absence within the radial distances. Topographic maps of the area and interviews of land and well owners facilitated the collection of these data. Selected land-use data collected for this study are given in table 3.

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- Fishman, M.J., and Friedman, L.C., eds., 1989, Methods for the determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water Resources Investigations, book 5, chap. A1, 545 p.
- Kolpin, D.W., and Burkart, M.R., 1991, Work plan for regional reconnaissance for selected herbicides and nitrate in ground water of the mid-continental United States, 1991: U.S. Geological Survey Open-File Report 91-59, 18 p.
- Kolpin, D.W., Burkart, M.R., and Thurman, E.M., 1993, Herbicides and nitrate in near-surface aquifers in the Midcontinental United States, 1991: U.S. Geological Survey Water-Supply Paper 2413.
- Thurman, E.M., Meyer, Michael, Pomes, Michael, Perry, C.A., and Schwab, A.P., 1990, Enzyme-linked immunosorbent assay compared with gas chromatography/mass spectrometry for the determination of triazine herbicides in water: Analytical Chemistry, v. 62, no. 18, p. 2043-2048.

Table 1. Construction and aquifer characteristics for wells sampled during 1991

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			Depth to top of aquifer (feet)
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	
Illinois									
IL01	414529 0882643	1961	110	90-110	P	U	U	s & g	10
IL02	382800 0893250	1971	69	52-67	P	U	U	s & g	20
IL03	422723 0890336	1956	120	80-120	P	U	U	s & g	1
IL04	390910 0882439	1971	44	36-44	P	U	U	s & g	15
IL05	381817 0875321	1978	38	21-24	H	U	U	s & g	4
IL06	382725 0894330	1985	44	35-41	H	U	U	s & g	19
IL07	413957 0883130	1966	41	31-41	P	U	U	s & g	4
IL08	370851 0892027	1976	125	106-117	Z	U	U	s & g	5
IL09	414128 0892437	1982	39	31-39	H	U	U	s & g	2
IL10	383632 0892801	1985	61	53-59	I	U	U	s & g	42
IL11	422716 0885320	1987	72	69-72	H	U	U	s & g	8
IL12	395813 0911650	1983	191	181-191	H	U	U	s & g	50
IL13	385258 0892507	1967	64	55-64	N	U	U	s & g	20
IL14	421826 0893743	1979	74	65-74	P	U	U	s & g	20
IL15	393635 0883127	1983	74	70-74	H	U	U	s & g	43
IL16	420602 0891855	1989	100	95-100	U	U	U	s & g	2
IL17	401020 0892312	1983	54	39-54	P	U	U	s & g	0
IL18	410336 0873451	1987	47	42-47	U	U	U	s & g	0
IL19	405536 0893004	1951	95	80-95	P	U	U	s & g	4
IL20	401256 0885450	1962	62	42-62	H	U	U	s & g	45
IL21	394926 0903357	1978	104	79-104	N	U	U	s & g	0
IL22	401509 0895404	1988	115	95-115	I	U	U	s & g	2
IL23	421806 0894144	1970	120	49-120	H	B	U	carb	41
IL24	391820 0875353	1977	77	56-76	P	U	U	s & g	50
IL25	410033 0892809	1974	35	10-35	H	U	U	s & g	28
IL26	401542 0900047	1973	20	15-20	H	U	U	s & g	1
IL27	404453 0893148	1977	32	30-32	H	U	U	s & g	0
IL28	371512 0891106	1981	50	40-50	H	U	U	s & g	15
IL29	383938 0885424	1970	60	40-60	H	U	U	s & g	40
IL30	421555 0885209	1986	54	48-54	U	U	U	s & g	2
IL31	400312 0891654	1976	38	28-38	P	U	U	s & g	24
IL32	414152 0901837	1990	82	66-76	H	U	U	s & g	15
IL33	371121 0884313	1983	64	59-64	H	U	U	s & g	25
IL34	405512 0905736	1975	102	74-102	P	U	U	s & g	5
IL35	370441 0891312	1970	25	15-25	H	U	U	s & g	15
IL36	402149 0900656	1976	37	12-37	H	U	U	s & g	25
IL37	403224 0894559	1980	56	52-55	H	U	U	s & g	46
IL38	384533 0873645	1985	37	27-37	N	U	U	s & g	0
IL39	411758 0890958	1980	37	29-37	H	U	U	s & g	5
IL40	383958 0874532	1983	261	244-261	H	B	C	ss	18
IL41	381827 0900647	1982	395	388-395	H	B	C	carb	21
IL42	382708 0874934	1987	300	241-300	H	B	U	carb/ss	11

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			Depth to top of aquifer (feet)
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	
Illinois (continued)									
IL43	375740 0894000	1976	205	152-205	H	B	U	ss	35
IL44	384049 0883749	1976	175	155-175	H	B	U	carb/ss	23
IL45	403029 0911808	1979	305	135-305	S	B	C	carb	41
IL46	384623 0881300	1978	380	280-380	H	B	C	carb	20
IL47	421834 0892135	1946	750	145-750	P	B	C	carb/ss	51
IL48	420841 0894939	1989	230	150-230	H	B	U	other	33
IL49	372800 0890755	1966	310	272-310	T	B	U	carb/ss	12
IL50	422058 0900144	1987	191	136-191	H	B	U	carb	25
IL51	380020 0885238	1978	98	25-70	H	B	U	carb/ss	25
IL52	383412 0885047	1972	68	18-68	H	B	U	carb/ss	11
IL53	420233 0892426	1979	155	43-155	H	B	U	carb	32
IL54	383742 0883348	1969	82	54-82	H	B	C	carb/ss	49
IL55	412113 0885925	1984	117	42-117	H	B	U	ss	25
IL56	390018 0874307	1981	72	51-72	N	B	U	ss	12
IL57	392941 0905038	1979	86	46-86	S	B	U	carb	46
IL58	391545 0903040	1975	185	45-185	H	B	U	carb	45
IL59	371856 0890818	1977	87	40-87	H	B	U	carb	36
IL60	410408 0880541	1980	103	43-103	H	B	U	carb	41
IL61	375121 0881044	1979	78	53-78	P	U	U	s & g	18
IL62	391028 0892800	1979	32	0-32	H	U	U	s & g	22
IL63	394750 0890447	1987	52	10-52	H	U	U	s & g	47
IL64	405755 0892832	1974	37	10-37	H	U	U	s & g	20
IL65	381934 0901654	1974	60	51-60	H	U	U	s & g	25
IL66	420010 0900735	1985	60	58-60	H	U	U	s & g	2
IL67	411252 0873359	1970	8	6-8	H	U	U	s & g	0
IL68	390441 0902454	1984	85	44-85	H	B	U	carb	40
Indiana									
IN01	392943 0860147	1979	87	57-87	P	U	U	s & g	10
IN02	391034 0855620	1972	101	71-101	P	U	U	s & g	9
IN03	383114 0873157	1963	49	29-49	P	U	U	s & g	0
IN04	410046 0871744	1976	26	22-26	U	U	U	s & g	0
IN05	410323 0871157	1978	24	21-24	U	U	U	s & g	0
IN06	414532 0855216	1977	24	22-24	U	U	U	s & g	0
IN07	385319 0860324	1961	60	40-60	P	U	U	s & g	4
IN08	375548 0865925	1968	90	70-90	P	U	C	s & g	25
IN09	403036 0854939	1938	160	26-160	P	B	U	carb	26
IN10	390127 0873305	1960	58	38-58	P	U	C	s & g	20
IN11	412330 0852530	1927	135	110-135	P	U	U	s & g	0
IN12	404353 0851057	1962	233	42-233	P	B	C	carb	31
IN13	395816 0860420	1974	13	10-13	U	U	U	s & g	0

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	Depth to top of aquifer (feet)
Indiana (continued)									
IN14	405018 0854313	1949	226	80-226	P	B	U	carb	12
IN15	404432 0853004	1965	92	18-92	T	B	C	carb	18
IN16	400427 0855037	1959	150	40-110	P	B	C	carb	40
IN17	402458 0853905	1956	300	30-300	P	B	U	carb	26
IN18	392254 0853332	1989	85	20-85	H	B	C	carb	14
IN19	393952 0864822	1989	96	28-96	H	B	C	carb	13
IN20	393738 0852531	1976	175	51-175	H	B	C	carb	50
IN21	410736 0845112	1963	310	44-310	P	B	C	carb	44
IN22	384026 0873316	1976	42	39-42	U	U	U	s & g	0
IN23	412540 0855220	1981	45	42-45	U	U	U	s & g	0
IN24	410156 0872806	1978	23	20-23	U	U	U	s & g	0
IN25	393616 0861345	1979	34	31-34	U	U	U	s & g	0
IN26	414318 0852055	1981	45	42-45	U	U	U	s & g	0
IN27	414525 0860600	1991	25	20-25	U	U	U	s & g	0
IN28	410416 0871633	1978	24	22-24	U	U	U	s & g	0
IN29	392417 0862737	1979	24	21-24	U	U	C	s & g	11
IN30	400819 0872422	1978	37	27-37	P	U	C	s & g	19
Iowa									
IA01	431700 0914552	1960	110	42-110	H	B	U	carb/ss	25
IA02	424556 0921934	1943	205	113-205	T	B	C	carb	62
IA03	431459 0911949	1957	145	94-145	H	B	U	carb/ss	10
IA04	431758 0925022	1989	117	88-117	H	B	U	carb	2
IA05	421322 0925220	1962	120	45-120	P	B	C	carb	17
IA06	412045 0932915	1971	293	278-293	C	B	C	carb/ss	50
IA07	421205 0903653	1962	275	165-275	T	B	C	carb	45
IA08	430216 0931429	1986	120	60-120	H	B	C	carb/ss	55
IA09	412719 0932427	1966	48	43-48	P	U	U	s & g	0
IA10	420901 0913735	1961	400	235-400	P	B	C	carb	25
IA11	431917 0922208	1989	85	72-85	H	B	C	carb	43
IA12	411929 0931034	1971	100	82-100	H	B	C	ss	35
IA13	424312 0931321	1975	41	33-41	P	U	U	s & g	0
IA14	431715 0931215	1985	343	100-343	P	B	C	carb	53
IA15	422915 0953235	1985	54	34-52	P	U	U	s & g	0
IA16	412114 0923910	1988	55	40-55	P	U	U	s & g	0
IA17	422728 0925753	1961	70	70-70	H	U	U	s & g	5
IA18	410625 0940747	1975	31	26-31	P	U	U	s & g	0
IA19	422548 0911950	1958	278	110-278	P	B	C	carb	15
IA20	432622 0961019	1925	38	33-38	P	U	U	s & g	0
IA21	410134 0951416	1986	17	14-17	U	U	U	s & g	0
IA22	430453 0960625	1964	48	38-48	P	U	U	s & g	0

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			Depth to top of aquifer (feet)
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	
Iowa (continued)									
IA23	411501 0952513	1975	25	20-25	P	U	U	s & g	0
IA24	412204 0950352	1986	45	40-45	U	U	U	s & g	0
IA25	430546 0944116	1979	41	20-41	P	U	U	s & g	0
IA26	410107 0953000	1965	53	48-53	P	U	U	s & g	0
IA27	405006 0951756	1968	54	39-54	P	U	U	s & g	0
IA28	422924 0960420	1924	36	36-36	P	U	U	s & g	0
IA29	411550 0914118	1959	193	100-193	H	B	C	carb/ss	50
IA30	431725 0933108	1978	58	54-58	H	B	C	carb	50
IA31	421205 0913124	1963	104	57-104	P	B	C	carb	26
IA32	421157 0915542	1968	312	265-312	H	B	C	carb	40
IA33	430424 0941427	1968	141	111-141	P	B	C	ss	37
IA34	430931 0951145	1971	38	28-38	P	U	U	s & g	0
IA35	405911 0953023	1986	44	40-44	U	U	U	s & g	0
IA36	403226 0912527	1984	58	42-56	P	U	U	s & g	0
IA37	410548 0944521	1986	34	25-30	U	U	U	s & g	0
IA38	413830 0954658	1975	57	47-57	P	U	U	s & g	0
IA39	420420 0955457	1957	58	53-58	P	U	U	s & g	0
IA40	420420 0955457	1963	63	58-63	P	U	U	s & g	0
Kansas									
KS01	391523 0945139	1976	68	48-68	I	U	U	s & g	0
Michigan									
MI01	420533 0853815	1987	48	45-48	U	U	U	s & g	0
MI02	415602 0840356	--	66	63-66	H	U	U	s & g	0
MI03	415606 0840127	1968	37	33-37	H	U	U	s & g	0
MI04	421447 0840128	1970	42	35-39	H	U	U	s & g	0
MI05	421128 0840326	1976	75	70-75	H	U	U	s & g	0
MI06	425102 0850032	1981	34	30-34	H	U	U	s & g	0
MI07	420523 0854658	1980	79	68-72	U	U	U	s & g	0
MI08	424956 0854932	1985	42	37-42	R	U	C	s & g	36
MI09	430904 0855430	1988	68	63-68	H	U	C	s & g	55
MI10	424934 0853412	1969	34	31-34	H	U	U	s & g	0
MI11	420132 0844532	1989	54	50-54	H	U	U	s & g	0
MI12	415412 0855253	1973	78	72-78	H	U	U	s & g	0
MI13	420238 0851148	1987	34	30-34	H	U	U	s & g	0
MI14	430452 0833215	1984	50	42-50	H	U	C	s & g	20
Minnesota									
MN01	440907 0935144	1984	117	112-117	H	U	U	s & g	20
MN02	441638 0920424	1980	98	81-98	H	B	C	carb	67
MN03	451351 0953520	1977	65	56-65	H	U	C	s & g	45

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			Depth to top of aquifer (feet)
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	
Minnesota (continued)									
MN04	434028 0945908	1956	80	75-80	H	U	U	s & g	0
MN05	433755 0951132	1987	26	23-26	U	U	U	s & g	0
MN06	445842 0953235	1979	49	44-49	H	U	C	s & g	30
MN07	444147 0924916	1987	160	154-160	H	U	U	s & g	0
MN08	443848 0930814	1984	60	55-60	H	U	U	s & g	0
MN09	435133 0953608	1981	37	37-37	H	U	C	s & g	37
MN10	463140 0953446	1980	41	38-41	U	U	U	s & g	0
MN11	454718 0963309	1983	58	48-58	H	U	C	s & g	40
MN12	454717 0963312	1983	36	32-36	H	U	C	s & g	30
MN13	452711 0955708	1982	24	22-24	U	U	U	s & g	0
MN14	451143 0925252	1986	27	24-27	U	U	C	s & g	10
MN15	435625 0955403	1981	42	42-42	H	U	C	s & g	37
MN16	452811 0955828	1980	40	36-40	H	U	C	s & g	16
MN17	450545 0925525	1985	65	59-65	H	U	U	s & g	0
MN18	444307 0962458	1978	25	25-25	H	U	U	s & g	0
MN19	452210 0955707	1979	27	23-27	U	U	U	s & g	0
MN20	440233 0921151	1978	262	211-262	H	B	C	carb	36
MN21	440455 0921206	1979	520	474-520	H	B	C	carb	35
MN22	434613 0913505	1978	175	155-175	H	B	C	ss	12
MN23	442503 0924348	1976	350	260-350	H	B	C	carb	30
MN24	442003 0924235	1977	200	131-200	H	B	C	carb	12
MN25	453633 0932634	1988	36	34-36	U	U	U	s & g	0
MN26	441753 0951608	1976	44	44-44	H	U	C	s & g	22
MN27	440037 0943726	1965	24	19-22	U	U	U	s & g	0
MN28	455153 0960648	1975	32	28-32	H	U	U	s & g	0
Missouri									
MO01	390301 0904631	1957	100	30-100	U	B	U	ss	8
MO02	383759 0930740	1966	170	28-170	H	B	U	carb	20
MO03	391109 0941800	1960	86	78-86	H	U	U	s & g	0
MO04	385527 0902036	1967	116	106-116	P	U	U	s & g	0
MO05	392452 0930646	1951	58	38-58	P	U	U	s & g	0
MO06	402443 0953650	1983	25	22-25	S	U	U	s & g	0
MO07	391237 0935705	--	16	14-16	H	U	U	s & g	0
MO08	400708 0952027	1952	35	32-35	H	U	U	s & g	0
MO09	391724 0932608	--	25	22-25	H	U	U	s & g	0
MO10	401106 0934137	1956	105	95-105	H	U	U	s & g	0
MO11	384921 0913121	1960	136	39-136	H	B	U	carb	30
MO12	384015 0911017	1973	385	33-385	H	B	U	carb	35
MO13	384030 0913753	1957	750	330-750	P	B	U	carb	30
MO14	381403 0912711	1962	235	190-235	H	B	U	carb	35
MO15	385306 0922731	1984	98	63-98	P	U	U	s & g	0

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	Depth to top of aquifer (feet)
Missouri (continued)									
MO16	384143 0915052	1982	375	45-375	H	B	U	carb	25
MO17	382942 0940414	1958	276	229-276	P	B	U	ss	15
MO18	384208 0925704	1979	380	60-380	H	B	U	carb	10
MO19	382246 0940056	1955	303	202-303	H	B	U	ss	0
MO20	381900 0935205	1974	180	40-180	H	B	U	ss	40
MO21	384139 0940411	1965	455	302-455	H	B	U	carb/ss	15
MO22	384056 0940234	1959	155	6-155	H	B	U	carb/ss	5
MO23	383725 0924707	1965	410	308-410	H	B	U	carb	30
MO24	385458 0904807	1957	300	50-300	H	B	U	carb	40
Nebraska									
NE01	410708 1013608	1970	62	52-62	P	U	U	s & g	13
NE02	400612 0960935	1937	42	37-42	R	U	C	s & g	26
NE03	413641 0963656	1954	140	89-140	H	U	C	s & g	24
NE04	411243 0982708	1948	45	25-45	P	U	C	s & g	21
NE05	401635 1000945	1977	77	57-77	P	U	U	s & g	19
NE06	403539 0983023	1980	203	163-203	P	U	C	s & g	42
NE07	411302 0962053	1984	65	45-65	P	U	U	s & g	2
NE08	411902 0973941	1985	68	46-66	P	U	U	s & g	9
NE09	405455 0982254	1972	85	80-85	T	U	U	s & g	6
NE10	423624 0975236	1963	34	27-34	P	U	U	s & g	6
NE11	405225 0975952	1978	192	157-192	P	U	U	s & g	45
NE12	404124 0990433	1961	57	27-57	P	U	U	s & g	9
NE13	415636 0971305	1988	60	45-60	P	U	C	s & g	20
NE14	410404 0960328	1981	64	44-64	P	U	U	s & g	0
NE15	401211 1003404	1972	76	70-76	I	U	U	s & g	32
NE16	415549 0964845	1976	80	49-79	P	U	C	s & g	26
NE17	402803 0961156	1948	103	78-103	P	U	U	s & g	26
NE18	402249 0954727	1981	50	35-50	P	U	C	s & g	20
NE19	400150 0980116	1970	62	52-62	P	U	U	s & g	18
NE20	400809 0970849	1970	110	86-110	P	U	U	s & g	12
NE21	414030 0975848	1970	80	75-80	P	U	C	s & g	37
NE22	402908 0965814	1954	111	101-111	P	U	U	s & g	20
NE23	412308 0975831	1983	77	57-77	P	U	C	s & g	22
NE24	404839 0995406	1965	70	64-70	P	U	C	s & g	11
NE25	400530 0984537	1977	44	39-44	P	U	U	s & g	13
NE26	413712 0995152	1964	166	136-166	P	U	U	s & g	19
NE27	404200 0985054	1964	44	36-42	I	U	U	s & g	5
NE28	414217 0974151	1983	85	45-85	P	U	C	s & g	44
NE29	402016 0965119	1965	98	58-98	P	U	U	s & g	15
NE30	423614 0971504	1970	64	49-64	P	U	C	s & g	47

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			Depth to top of aquifer (feet)
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	
Nebraska (continued)									
NE31	404801 0982931	1964	42	35-42	I	U	U	s & g	5
NE32	410652 1004544	1969	75	63-75	T	U	U	s & g	24
NE33	404553 0993413	1988	40	15-40	U	U	U	s & g	5
NE34	420101 0972712	1979	53	32-47	N	U	U	s & g	9
NE35	411243 0975045	1976	29	5-28	P	U	U	s & g	3
NE36	404000 0960140	1940	45	25-45	P	U	C	s & g	26
NE37	423452 0993217	1947	65	45-65	P	U	C	s & g	37
NE38	410426 0971152	1955	65	50-65	P	U	C	s & g	35
NE39	414937 1000620	1950	87	60-87	P	U	U	s & g	6
NE40	401443 0972320	1938	65	55-65	P	U	U	s & g	15
NE41	400431 0990813	1977	49	33-49	P	U	C	s & g	33
NE42	412813 0984205	1960	159	99-159	P	B	U	ss	21
NE43	421209 0973114	1970	96	68-96	P	U	C	s & g	23
NE44	411256 0963642	1963	103	73-103	P	U	C	s & g	15
NE45	401518 0973327	1975	178	150-178	P	U	U	s & g	32
NE46	404128 0990455	1961	50	32-50	P	U	U	s & g	6
North Dakota									
ND01	460244 0980251	1979	21	19-21	U	U	U	s & g	0
Ohio									
OH01	392940 0830622	1986	122	122-122	H	U	C	s & g	10
OH02	393601 0831603	1987	37	37-37	H	U	C	s & g	30
OH03	394946 0843638	1985	100	26-100	H	B	C	carb	23
OH04	395646 0843355	1982	82	51-82	H	B	C	carb	48
OH05	394202 0834411	1979	61	26-61	H	B	C	carb	18
OH06	403311 0844511	1989	82	34-82	H	B	C	carb	32
OH07	393050 0834426	1977	58	24-58	H	B	C	carb	24
OH08	404647 0842314	1983	48	26-48	H	B	C	carb	26
OH09	400537 0842214	1983	67	24-67	H	B	C	carb	20
OH10	400113 0841028	1988	53	53-53	H	U	U	s & g	2
OH11	401805 0841410	1978	76	41-76	C	B	C	carb	38
OH12	405927 0814753	1963	80	28-80	H	B	C	other	17
OH13	403920 0821025	1972	40	40-40	H	U	C	s & g	38
OH14	403907 0815620	1984	62	35-62	H	B	C	ss	34
OH15	405643 0805322	1954	65	65-65	H	U	C	s & g	30
OH16	395041 0825633	1977	53	51-53	H	U	C	s & g	49
OH17	404127 0824519	1988	26	24-26	H	B	C	ss	23
OH18	410241 0823746	1978	16	15-16	S	B	C	ss	15
OH19	400324 0831218	1989	140	40-140	H	B	C	carb	40
OH20	404033 0834109	1972	87	87-87	H	U	C	s & g	12

Table 1. Construction and aquifer characteristics for wells sampled during 1991--Continued

[--, data not available]

Site identifier	Latitude and longitude (degrees, minutes, seconds)	Construction characteristics				Aquifer characteristics			Depth to top of aquifer (feet)
		Year of construction	Well depth (feet)	Open interval (feet)	Primary water use ¹	Class ²	Type ³	Material ⁴	
Ohio (continued)									
OH21	403841 0834227	1990	60	35-60	H	B	C	carb	34
OH22	412120 0831724	1976	80	25-80	H	B	C	carb	6
OH23	413134 0831318	1985	93	31-93	H	B	C	carb	28
OH24	411913 0834452	1976	50	34-50	H	B	C	carb	34
OH25	411426 0835707	1984	80	40-80	H	B	C	carb	39
OH26	413240 0843114	1983	43	39-43	H	U	C	s & g	38
OH27	414000 0841921	1986	45	42-45	H	U	C	s & g	38
OH28	401724 0834723	1981	73	73-73	H	U	C	s & g	20
OH29	404810 0830610	1977	107	36-107	H	B	C	carb	33
OH30	401522 0824410	1968	78	51-78	H	B	C	ss	48
South Dakota									
SD01	424833 0963548	1989	55	52-55	U	U	U	s & g	14
SD02	430130 0965744	1976	51	12-51	U	U	U	s & g	2
SD03	432013 0970520	1983	42	33-43	U	U	U	s & g	3
Wisconsin									
WI01	423911 0901857	1987	224	190-224	H	B	U	carb/ss	7
WI02	444620 0914306	1980	154	152-154	H	U	U	s & g	0
WI03	444828 0914233	1985	50	47-50	H	U	U	s & g	0
WI04	423015 0893217	1986	100	41-100	H	B	U	carb	6
WI05	424334 0885711	1959	284	284-284	H	U	U	s & g	0
WI06	424103 0885342	1987	60	57-60	H	U	U	s & g	7
WI07	443642 0920123	1977	104	101-104	H	U	U	s & g	0
WI08	425732 0904523	1978	275	214-275	H	B	U	carb/ss	8
WI09	450337 0922833	1979	370	341-370	H	B	U	carb/ss	35
WI10	431136 0894702	1980	220	217-220	H	U	U	s & g	0
WI11	431938 0891026	1958	220	136-220	H	B	U	carb/ss	44
WI12	441935 0884030	1981	140	53-140	H	B	U	carb/ss	16
WI13	440846 0883504	1967	82	54-82	H	B	U	carb	54
WI14	433223 0884912	1956	264	214-264	H	B	U	carb/ss	18
WI15	440003 0880914	1985	122	45-122	H	B	U	carb	11
WI16	435301 0885642	1987	123	42-123	H	B	U	carb/ss	18
WI17	425847 0885244	1973	221	116-221	H	B	U	carb/ss	36
WI18	425709 0902155	1982	120	41-120	H	B	U	carb	10

¹ Primary water use--C, commercial; H, domestic; I, irrigation; N, industrial; P, public supply; R, recreation; S, stock; T, institutional; U, unused; Z, other.

² Aquifer class--U, unconsolidated; B, bedrock.

³ Aquifer type--U, unconfined; C, confined.

⁴ Aquifer material-- carb, limestone or dolomite; ss, sandstone; carb/ss, limestone or dolomite and sandstone; s & g, sand and gravel; other, undefined.

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium, dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Illinois									
IL01	3-27	54	951	8.1	0.6	<0.01	0.23	0.12	<0.01
² IL01	3-27	--	--	--	--	<.01	.24	.11	<.01
IL01	7-23	54	980	9.0	.8	.02	.25	.07	<.01
IL02	3-25	14	527	6.8	0	.01	<.05	1.0	<.01
IL02	7-15	14	437	8.0	5.9	<.01	<.05	.98	<.01
IL03	3-13	³ 18	611	7.9	4.4	<.01	4.2	<.01	<.01
IL03	7-24	³ 26	614	7.7	5.7	.02	4.3	.02	<.01
IL04	3-27	10	751	7.1	0	<.01	.38	<.01	<.01
² IL04	3-27	--	--	--	--	<.01	<.05	.68	<.01
IL04	7-31	17	761	6.7	.1	<.01	1.0	.14	.02
² IL04	7-31	--	--	--	--	--	--	--	--
IL05	3-15	21	581	7.7	8.1	<.01	2.3	.02	.02
IL05	7-22	21	533	7.4	5.0	.02	4.8	.03	<.01
IL06	3-21	19	422	6.9	8.0	<.01	9.9	.06	.02
IL06	7-25	19	445	6.9	5.1	.04	10	.05	.02
IL07	3-14	6	768	8.3	4.0	<.01	4.3	<.01	<.01
IL07	7-23	6	776	7.6	2.7	.02	5.2	.02	<.01
IL08	3-13	10	383	7.6	.8	<.01	.06	.19	.02
IL08	7-17	10	413	8.2	1.5	<.01	<.05	.12	<.01
IL09	4-12	13	463	7.6	--	.02	1.1	.14	.03
IL09	7-26	13	588	7.4	1.6	.01	17	.02	<.01
IL10	3-21	32	1,070	7.1	2.0	.01	8.3	<.01	.17
IL10	7-15	32	1,360	7.3	1.6	<.01	12	.02	.13
IL11	3-13	14	590	8.1	3.3	<.01	9.0	<.01	<.01
IL11	7-24	14	632	8.6	--	.02	8.5	.02	<.01
IL12	3-21	20	747	8.1	.3	.01	<.05	.70	<.01
IL12	7-30	20	728	7.0	0	<.01	<.05	.73	<.01
IL13	3-27	42	1,160	6.9	.9	<.01	7.2	.04	<.01
IL13	7-31	42	1,070	6.8	2.3	<.01	8.1	.05	<.01
² IL13	7-31	--	--	--	--	--	--	--	--
IL14	3-12	³ 33	774	7.1	.3	<.01	.07	.78	<.01
IL14	7-25	³ 20	884	6.5	0	.01	<.05	.27	<.01
IL15	3-28	18	627	7.2	0	.05	1.3	.06	<.01
IL15	8-01	19	632	6.9	0	<.01	<.05	2.7	.02
IL16	3-11	³ 36	613	7.0	5.1	<.01	3.1	<.01	<.01
IL16	7-23	³ 38	601	9.9	4.5	.01	3.0	.03	<.01
IL17	4-03	12	729	6.9	.1	<.01	.78	.11	<.01
IL17	8-02	12	711	6.8	.1	<.01	.67	.09	<.01
IL18	3-15	³ 4	879	6.8	.4	<.01	<.05	.43	<.01
IL18	7-22	³ 4	824	--	.6	.01	<.05	.43	<.01
IL19	4-19	72	575	7.5	3.1	<.01	1.8	.01	<.01
IL19	7-24	72	568	7.3	3.4	.01	2.1	.02	<.01

and laboratory analyses of water samples, 1991

milligrams per liter; µg/L, micrograms per liter; <, less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Illinois									
IL01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
² IL01	--	--	--	--	--	--	--	--	--
IL01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL02	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	.06	<0.05
IL03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL03	<0.05	<0.05	<0.05	.06	<0.05	<0.05	.09	<0.05	<0.05
IL04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
² IL04	--	--	--	--	--	--	--	--	--
IL04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
² IL04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL06	<0.05	<0.05	<0.05	.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL07	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL07	<0.05	.30	<0.05	.10	.06	<0.05	<0.05	<0.05	<0.05
IL08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL08	<0.05	.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL10	<0.05	2.1	<0.05	.50	.09	<0.05	<0.05	<0.05	<0.05
IL10	<0.05	1.8	<0.05	.42	.06	<0.05	<0.05	<0.05	<0.05
IL11	<0.05	.05	<0.05	.13	<0.05	<0.05	<0.05	<0.05	<0.05
IL11	<0.05	<0.05	<0.05	.13	<0.05	<0.05	<0.05	<0.05	<0.05
IL12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL12	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL13	<0.05	.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
² IL13	<0.05	.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL13	<0.05	.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL14	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL14	<0.05	.12	<0.05	.07	<0.05	<0.05	<0.05	<0.05	<0.05
IL15	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL15	--	--	--	--	--	--	--	--	--
IL16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL16	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL17	--	--	--	--	--	--	--	--	--
IL18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL19	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Illinois (continued)									
IL20	3-29	13	782	6.9	0	<0.01	<0.05	0.01	0.05
IL20	8-01	12	779	6.8	0	<.01	<.05	4.0	.07
IL21	3-20	22	602	6.8	.9	.04	4.3	.22	<.01
IL21	7-29	22	525	7.1	.1	.03	3.2	.11	.02
IL22	4-05	12	404	8.0	.1	<.01	<.05	.14	.01
IL22	7-23	12	435	7.3	0	.01	<.05	.14	.01
IL23	3-28	49	683	6.9	.4	<.01	<.05	.95	<.01
IL23	7-25	49	691	6.9	0	.01	<.05	.92	<.01
² IL23	7-25	--	--	--	--	.01	<.05	.90	<.01
IL24	3-26	24	1,040	7.2	0	<.01	<.05	5.3	.02
IL24	7-24	24	1,030	7.3	0	<.01	<.05	5.1	.17
IL25	4-03	28	739	7.0	8.3	<.01	3.9	.01	.15
IL25	7-25	28	988	6.7	2.4	.01	4.6	.03	.07
IL26	4-05	12	429	8.3	1.8	<.01	9.7	<.01	.05
IL26	7-23	12	435	7.3	1.5	.02	6.4	.02	.04
² IL26	7-23	--	--	--	--	--	--	--	--
IL27	4-02	8	717	7.0	0	<.01	<.05	<.01	<.01
IL27	7-24	9	716	6.9	.2	.01	<.05	.02	<.01
IL28	3-12	9	757	7.0	0	<.01	<.05	.86	.01
IL28	7-18	9	768	8.0	.8	<.01	<.05	.80	<.01
IL29	3-22	20	1,220	7.1	6.8	.01	.08	.24	<.01
IL29	7-24	20	1,040	7.4	2.8	.02	.34	.24	<.01
IL30	3-26	³ 27	685	8.3	4.4	<.01	7.6	.07	<.01
IL30	7-24	³ 29	718	7.6	5.5	.01	7.3	.02	<.01
IL31	4-01	5	662	7.2	.2	<.01	1.3	.08	<.01
IL31	8-02	5	687	7.2	.1	<.01	<.05	.68	.03
IL32	3-22	31	468	7.9	2.7	.12	11	<.01	.04
IL32	8-01	31	461	7.4	2.9	<.01	11	.05	.03
IL33	3-14	51	288	6.6	8.6	<.01	5.9	<.01	.03
IL33	7-18	51	310	6.6	6.5	<.01	4.8	.01	<.01
IL34	4-12	10	517	7.3	0	.01	9.4	.01	<.01
IL34	7-31	³ 33	497	6.9	0	<.01	.48	.17	.03
IL35	3-13	9	501	7.4	0	<.01	.08	.07	<.01
IL35	7-18	9	589	8.0	.7	<.01	<.05	.10	<.01
IL36	4-02	25	815	6.8	1.0	<.01	.63	<.01	<.01
IL36	7-23	23	829	6.7	.3	.01	.27	.05	<.01
IL37	4-02	48	919	7.4	0	<.01	<.05	.02	.02
IL37	8-02	52	901	7.2	.3	<.01	<.05	.03	<.01
IL38	3-27	10	586	7.6	5.8	<.01	7.5	.08	<.01
IL38	7-23	10	490	7.5	6.4	.01	5.3	.02	<.01
IL39	4-04	26	796	7.1	.1	<.01	<.05	.63	<.01
IL39	7-25	26	751	6.8	.1	.01	<.05	.53	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Illinois (continued)									
IL20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL20	--	--	--	--	--	--	--	--	--
IL21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL23	--	--	--	--	--	--	--	--	--
IL24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL25	<.05	.36	.68	.09	.40	.71	<.05	<.05	<.05
IL26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL26	<.05	<.05	<.05	.08	<.05	<.05	<.05	<.05	<.05
² IL26	<.05	<.05	<.05	.09	<.05	<.05	<.05	<.05	<.05
IL27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL28	.60	<.05	<.05	<.05	<.05	.11	<.05	<.05	<.05
IL28	.45	<.05	<.05	<.05	<.05	.18	<.05	<.05	<.05
IL29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL31	<.05	.07	<.05	.05	<.05	<.05	<.05	<.05	<.05
IL31	--	--	--	--	--	--	--	--	--
IL32	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL32	--	--	--	--	--	--	--	--	--
IL33	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL33	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL34	<.05	.08	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL34	<.05	.07	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL35	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL35	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL36	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL36	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL37	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL37	--	--	--	--	--	--	--	--	--
IL38	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL38	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL39	<.05	.28	<.05	.07	<.05	<.05	<.05	<.05	<.05
IL39	<.05	1.0	<.05	.13	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Illinois (continued)									
IL40	3-26	34	150	9.5	0	<0.01	<0.05	<0.01	0.08
IL40	7-23	34	1,390	9.1	0	.02	<0.05	.05	.07
² IL40	7-23	--	--	--	--	--	--	--	--
IL41	3-20	85	925	7.0	0	<0.01	<0.05	.34	<.01
IL41	7-22	85	933	7.9	1.3	<0.01	<0.05	.36	<.01
IL42	3-15	115	743	8.0	.1	.01	.05	.27	<.01
IL42	7-22	115	749	7.7	.1	.01	<0.05	.26	<.01
IL43	3-19	100	741	7.0	0	<0.01	<0.05	.70	<.01
IL43	7-16	100	768	8.1	.9	<0.01	<0.05	.71	<.01
IL44	3-29	24	215	9.1	.1	<0.01	<0.05	.02	.05
² IL44	3-29	--	--	--	--	<0.01	<0.05	4.2	<.01
IL44	7-24	24	215	9.0	0	.02	<0.05	.05	.05
² IL44	7-24	--	--	--	--	.01	<0.05	.04	.05
IL45	3-21	118	799	9.7	.5	.01	.10	.25	.01
IL45	7-30	118	787	7.2	5.6	<0.01	.33	.09	<.01
IL46	3-26	100	263	9.2	.1	<0.01	<0.05	<.01	.05
² IL46	3-26	--	--	--	--	<0.01	<0.05	<.01	.06
IL46	7-23	100	224	8.7	.1	.02	<0.05	.03	.04
IL47	3-12	74	541	7.3	1.0	<0.01	1.0	.03	<.01
IL47	7-25	³ 158	558	7.1	.5	.02	1.4	.05	<.01
IL48	3-25	90	549	7.4	.7	.06	2.3	1.2	<.01
IL48	7-26	90	527	7.0	0	.02	<0.05	.82	<.01
IL49	3-19	16	340	7.2	.2	.01	<0.05	.05	<.01
IL49	7-17	16	750	7.9	2.7	<0.01	<0.05	.12	<.01
IL50	3-25	23	522	9.8	.5	<0.01	<0.05	.27	<.01
IL50	7-26	23	523	7.0	0	.02	<0.05	.21	<.01
² IL50	7-26	--	--	--	--	--	--	--	--
IL51	3-11	9	919	7.4	11.9	<0.01	8.5	<.01	.12
² IL51	3-11	--	--	--	--	--	--	--	--
IL51	7-19	9	793	8.2	4.9	<0.01	9.0	.01	.10
IL52	3-22	19	1,160	7.0	.9	<0.01	3.3	<.01	.04
IL52	7-25	19	1,160	7.1	1.9	.02	3.9	.04	.04
IL53	3-26	39	835	-	5.6	<0.01	7.5	.07	<.01
IL53	7-26	39	860	6.8	5.1	.02	7.8	.02	<.01
IL54	3-27	-1	581	7.6	0	<0.01	.05	1.5	.02
IL54	7-24	-1	587	7.6	.1	.01	<0.05	1.9	.01
IL55	4-04	68	694	7.1	10.4	.01	19	<.01	.06
IL55	7-25	70	689	6.8	10.2	.01	21	.02	.05
² IL55	7-25	--	--	--	--	.01	20	.02	.06
IL56	3-26	14	759	6.9	.5	<0.01	<0.05	3.0	<.01
IL56	7-30	14	1,310	7.0	.1	.07	.66	.20	<.01
² IL56	7-30	--	--	--	--	--	--	--	--

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Illinois (continued)									
IL40	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL40	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL40	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL41	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL41	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL42	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL42	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL43	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL43	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL44	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL44	--	--	--	--	--	--	--	--	--
IL44	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL44	--	--	--	--	--	--	--	--	--
IL45	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL45	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL46	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL46	--	--	--	--	--	--	--	--	--
IL46	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL47	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL47	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL48	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL48	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL49	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL49	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL50	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL50	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL50	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL51	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL51	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL51	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL52	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL52	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL53	<.05	.26	<.05	.19	<.05	<.05	<.05	.06	<.05
IL53	<.05	.28	<.05	.39	<.05	<.05	<.05	.06	<.05
IL54	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL54	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL55	<.05	.07	<.05	.10	<.05	<.05	<.05	<.05	<.05
IL55	<.05	.08	<.05	.10	<.05	<.05	<.05	<.05	<.05
² IL55	--	--	--	--	--	--	--	--	--
IL56	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL56	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL56	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Illinois (continued)									
IL57	3-18	20	553	8.5	9.1	0.03	1.8	<0.01	<0.01
IL57	7-30	20	591	6.6	6.4	<.01	2.1	.05	<.01
IL58	3-20	59	729	8.4	2.2	<.01	<.05	<.01	<.01
IL58	7-29	59	715	6.4	.9	<.01	<.05	.05	<.01
IL59	3-12	42	693	7.0	7.6	<.01	1.0	.02	.02
IL59	7-17	42	683	7.3	5.2	<.01	1.1	.02	<.01
IL60	3-15	6	631	6.9	.4	<.01	<.05	.45	<.01
IL60	7-23	6	628	7.6	.6	.02	<.05	.43	<.01
IL61	3-14	21	853	7.3	2.1	.01	5.3	.27	<.01
IL61	7-19	21	889	9.0	2.5	.01	4.8	.28	<.01
IL62	3-28	24	542	7.5	4.0	<.01	<.05	.65	<.01
IL62	7-31	24	474	7.2	1.8	<.01	.29	.05	<.01
IL63	3-29	47	734	7.0	2.3	<.01	4.8	.04	<.01
IL63	8-01	47	695	6.7	.2	.02	1.4	.27	<.01
IL64	4-20	25	693	7.2	5.6	<.01	.30	.02	<.01
² IL64	4-20	--	--	--	--	<.01	.30	.01	<.01
IL64	7-24	25	885	6.6	2.1	.01	.15	.03	<.01
IL65	3-20	10	671	7.2	4.6	<.01	.12	.31	<.01
IL65	7-16	10	698	7.9	3.6	<.01	.14	.29	<.01
IL66	3-22	29	441	8.0	7.6	<.01	16	<.01	.01
IL66	7-31	29	469	7.3	6.9	<.01	19	.05	<.01
IL67	3-15	2	895	7.2	3.2	.02	7.7	<.01	.12
IL67	7-22	2	829	8.8	2.8	.02	7.5	.03	.09
IL68	3-29	21	550	7.0	.5	<.01	<.05	.03	<.01
IL68	7-29	21	539	6.9	0	<.01	<.05	.06	<.01
Indiana									
IN01	3-13	28	1,010	6.9	.6	<.01	.08	.12	<.01
² IN01	3-13	--	--	--	--	--	--	--	--
IN01	8-06	24	942	6.9	.3	<.01	<.05	.15	<.01
IN02	3-13	31	721	7.2	.8	.02	1.3	.11	<.01
IN02	7-23	31	703	7.3	3.5	.03	1.8	.08	<.01
IN03	3-20	9	681	7.0	1.9	<.01	3.6	.02	.04
² IN03	3-20	--	--	--	--	--	--	--	--
IN03	7-24	19	683	7.0	1.4	<.01	4.1	.03	.05
IN04	3-28	³ 5	842	7.3	.5	<.01	<.05	.26	<.01
IN04	7-18	³ 7	871	7.4	.4	<.01	<.05	.25	<.01
IN05	3-28	³ 2	352	7.2	.2	<.01	<.05	.20	.06
IN05	7-18	³ 6	321	7.9	.4	<.01	<.05	.16	.07
IN06	3-21	³ 6	355	8.0	5.4	<.01	5.6	<.01	.02
IN06	7-17	³ 8	337	8.2	4.4	<.01	5.0	.02	<.01
IN07	3-14	13	661	7.1	1.1	.01	1.3	.06	<.01
IN07	7-23	15	694	7.2	5.2	<.01	1.2	.07	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Illinois (continued)									
IL57	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IL57	<.05	.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL58	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL58	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL59	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL59	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL60	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL60	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL61	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL61	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL62	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL62	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL63	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL63	--	--	--	--	--	--	--	--	--
IL64	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IL64	--	--	--	--	--	--	--	--	--
IL64	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL65	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL65	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL66	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL66	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL67	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL67	<.05	<.05	<.05	<.05	<.05	<.05	<.05	.22	<.05
IL68	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IL68	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Indiana									
IN01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IN01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IN03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN06	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
IN06	<.05	<.05	<.05	.06	<.05	<.05	<.05	<.05	<.05
IN07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN07	<.05	.08	<.05	.12	.05	<.05	.08	.07	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Indiana (continued)									
IN08	3-19	38	561	7.1	2.8	<0.01	1.8	0.01	0.01
IN08	7-24	37	564	7.1	2.9	<.01	2.9	.02	<.01
² IN08	7-24	--	--	--	--	<.01	2.8	<.01	<.01
IN09	3-07	12	739	7.1	.6	<.01	<.05	.23	<.01
IN09	8-02	12	770	7.2	.3	<.01	<.05	.26	<.01
IN10	3-18	21	617	7.2	1.0	<.01	5.0	<.01	.03
IN10	7-25	10	641	7.2	.9	<.01	5.5	<.01	.02
² IN10	7-25	--	--	--	--	<.01	5.5	.01	.01
IN11	3-26	18	527	7.5	.5	<.01	<.05	.48	.03
IN11	7-16	17	541	7.5	.9	<.01	<.05	.38	.02
IN12	3-08	28	1,060	7.0	.6	<.01	<.05	.26	<.01
² IN12	3-08	--	--	--	--	<.01	<.05	.26	<.01
IN12	7-31	32	934	7.0	.4	<.01	<.05	.20	<.01
IN13	3-05	³ 4	994	7.1	.7	<.01	<.05	.02	<.01
IN13	7-15	³ 12	973	7.1	.4	<.01	<.05	.02	<.01
IN14	3-08	40	886	7.1	2.8	.02	6.7	.05	<.01
IN14	7-31	40	876	7.1	1.9	<.01	4.7	.02	<.01
IN15	3-07	28	690	7.3	4.8	<.01	4.8	.04	<.01
IN15	7-31	28	756	7.3	4.6	<.01	4.6	.01	<.01
IN16	3-05	8	776	7.0	.5	<.01	<.05	.32	<.01
IN16	7-30	8	763	7.2	.4	<.01	<.05	.28	<.01
IN17	3-07	4	745	7.0	.6	<.01	<.05	.46	<.01
IN17	8-02	5	786	7.1	.3	<.01	<.05	.49	<.01
IN18	3-14	5	607	7.5	8.9	<.01	<.05	.06	<.01
IN18	8-01	5	700	7.1	.2	<.01	<.05	.07	<.01
IN19	3-11	7	686	7.1	.7	<.01	.07	.02	<.01
IN19	7-25	7	680	7.0	1.0	<.01	1.6	.01	.02
IN20	3-14	35	610	7.4	.5	.02	<.05	1.9	<.01
IN20	8-01	35	625	7.4	.4	<.01	<.05	1.6	<.01
IN21	3-26	60	869	7.3	.6	<.01	<.05	.35	<.01
IN21	7-16	66	883	7.3	.7	<.01	<.05	.36	<.01
IN22	3-20	³ 8	796	7.1	1.0	<.01	1.0	<.01	<.01
IN22	7-24	³ 16	744	7.2	4.0	.01	3.9	.01	<.01
IN23	3-26	³ 6	410	7.6	.5	<.01	<.05	<.01	<.01
IN23	7-17	³ 8	492	7.6	.5	<.01	<.05	.02	<.01
IN24	3-28	³ 2	783	6.9	.5	<.01	<.05	.25	<.01
² IN24	3-28	--	--	--	--	--	--	--	--
IN24	7-18	³ 6	749	7.1	.4	<.01	<.05	.20	.01
IN25	4-01	³ 8	702	7.2	2.1	<.01	8.2	.05	<.01
IN25	7-30	³ 14	616	7.2	2.2	<.01	4.0	.02	<.01
IN26	3-21	³ 18	650	7.4	.8	<.01	<.05	<.01	<.01
IN26	7-16	³ 18	657	7.6	.4	<.01	<.05	.01	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Indiana (continued)									
IN08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IN08	--	--	--	--	--	--	--	--	--
IN09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IN10	--	--	--	--	--	--	--	--	--
IN11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IN12	--	--	--	--	--	--	--	--	--
IN12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN14	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
IN14	<.05	.12	<.05	.10	<.05	<.05	<.05	<.05	<.05
IN15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IN24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Indiana (continued)									
IN27	3-22	³ 14	380	7.7	7.3	<0.01	3.7	<0.01	<0.01
IN27	7-17	³ 12	418	7.7	7.1	<.01	2.3	<.01	<.01
IN28	3-28	³ 2	384	8.0	4.3	.01	14	.10	.01
IN28	7-18	³ 5	257	7.9	4.5	.01	6.5	.02	<.01
IN29	4-01	³ 11	565	7.2	5.2	<.01	3.3	<.01	<.01
IN29	8-01	³ 18	545	7.2	6.4	<.01	3.6	.03	<.01
IN30	3-29	16	810	6.9	1.5	.01	6.8	.02	.04
IN30	7-25	16	757	6.9	1.5	<.01	6.1	<.01	<.01
Iowa									
IA01	3-21	40	1,040	6.4	.1	--	.06	--	--
IA01	7-23	40	977	7.0	0	<.01	<.05	.74	<.01
IA02	3-18	46	642	7.4	.4	--	.12	--	--
IA02	7-23	46	635	6.9	.1	<.01	<.05	1.3	<.01
IA03	3-21	25	602	7.3	12.0	--	5.7	--	--
IA03	7-24	25	588	7.2	11.9	<.01	6.4	<.01	.02
IA04	3-27	42	470	7.5	.3	<.01	.16	<.01	.01
IA04	7-25	38	610	7.3	.5	<.01	2.6	<.01	<.01
IA05	3-26	16	714	5.5	1.5	.02	4.7	.08	<.01
IA05	7-25	15	560	7.1	1.5	.02	4.5	.08	<.01
IA06	3-21	38	6,020	7.2	0	--	.07	--	--
IA06	8-07	38	5,500	7.7	.2	<.01	<.05	2.6	<.01
IA07	3-19	190	878	7.0	.1	--	.10	--	--
IA07	7-25	190	857	6.9	0	<.01	<.05	1.5	<.01
IA08	3-25	65	730	7.0	.2	<.01	<.05	.46	<.01
IA08	7-25	65	620	7.0	.1	<.01	.05	.44	<.01
IA09	3-22	25	686	6.5	1.5	--	.70	--	--
IA09	8-07	25	648	6.9	1.4	<.01	.64	<.01	.02
IA10	3-26	50	434	6.7	3.5	--	.10	--	--
IA10	8-02	50	473	7.4	0	<.01	<.05	.97	<.01
IA11	3-20	28	701	6.7	0	--	.09	--	--
IA11	7-23	28	714	7.4	.2	<.01	<.05	.04	<.01
IA12	3-21	54	525	6.9	.1	--	<.05	--	--
IA12	8-07	54	560	7.0	.6	<.01	<.05	.01	<.01
IA13	3-22	8	718	6.9	.1	<.01	<.05	.15	<.01
IA13	7-25	8	630	7.0	.1	<.01	.06	.14	<.01
IA14	3-22	34	655	7.0	.1	<.01	<.05	.31	<.01
IA14	7-25	34	720	7.0	.1	<.01	.11	.29	<.01
IA15	3-27	19	785	7.1	5.0	<.01	9.3	<.01	.02
IA15	7-17	23	790	7.0	7.4	<.01	10	.01	<.01
IA16	3-20	--	650	6.9	1.0	--	1.8	--	--
IA16	8-06	--	683	7.1	1.8	.02	2.7	.10	.11

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deisopropyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Indiana (continued)									
IN27	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IN27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN29	<.05	.14	<.05	.37	.10	<.05	<.05	<.05	<.05
IN29	<.05	.34	<.05	.65	.42	<.05	<.05	<.05	<.05
IN30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IN30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Iowa									
IA01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA03	<.05	.05	<.05	.10	.05	<.05	<.05	<.05	<.05
IA03	<.05	.08	<.05	.30	.10	<.05	<.05	<.05	<.05
IA04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA05	.50	1.5	<.05	.24	.14	.37	.19	.06	<.05
IA05	.26	1.0	.07	.33	.21	.25	.07	.09	<.05
IA06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA15	.12	1.1	.21	.25	.23	.90	<.05	.05	<.05
IA15	<.05	.80	<.05	.31	.21	.50	<.05	<.05	<.05
IA16	<.05	.08	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA16	<.05	.54	.13	.14	.15	.16	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Iowa (continued)									
IA17	3-26	12	571	6.7	0	<0.01	<0.05	1.4	0.04
IA17	7-25	14	580	7.2	0	<.01	<.05	1.3	.03
IA18	3-29	8	404	6.5	.2	<.01	<.05	.46	<.01
IA18	7-18	8	563	6.5	.4	.03	<.05	.50	.15
² IA18	7-18	--	--	--	--	--	--	--	--
IA19	3-19	50	625	6.7	2.8	--	2.6	--	--
² IA19	3-19	--	--	--	--	--	5.5	--	--
IA19	7-24	50	608	6.7	2.9	<.01	5.4	<.01	.02
IA20	3-19	31	893	7.3	3.4	.01	7.4	.63	.05
IA20	7-18	32	911	7.0	3.6	.03	8.9	.70	<.01
IA21	3-26	³ 11	410	6.3	7.0	<.01	2.2	<.01	.06
IA21	7-22	³ 8	605	6.2	1.8	.01	5.2	<.01	.06
IA22	3-19	21	1,040	7.1	.2	<.01	<.05	.30	<.01
IA22	7-17	23	1,110	7.0	.3	<.01	<.05	.28	<.01
IA23	3-28	14	721	6.9	.4	<.01	.25	.05	<.01
² IA23	3-28	--	--	--	--	--	--	--	--
IA23	7-16	15	706	7.0	.9	<.01	1.1	.04	<.01
IA24	3-26	³ 16	441	7.0	7.0	<.01	.68	.36	.03
IA24	7-26	³ 12	484	7.1	3.8	.18	5.3	.13	.05
IA25	3-21	12	1,300	7.4	.4	<.01	.30	.36	<.01
IA25	7-24	8	1,000	7.1	.4	<.01	.63	.22	<.01
IA26	3-22	20	610	6.8	5.8	<.01	5.4	<.01	.16
IA26	7-16	20	625	6.8	3.9	<.01	6.0	.01	.11
IA27	3-22	35	456	6.8	7.6	<.01	10	<.01	.11
² IA27	3-22	--	--	--	--	--	--	--	--
IA27	7-16	35	438	6.7	7.0	<.01	11	<.01	.05
² IA27	7-16	--	--	--	--	<.01	12	<.01	.05
IA28	3-27	³ 25	808	7.2	3.8	<.01	7.6	<.01	.13
IA28	7-18	³ 16	811	7.0	3.6	<.01	8.4	.01	.09
IA29	3-19	70	800	6.8	.1	--	.56	--	--
² IA29	3-19	--	--	--	--	--	.49	--	--
IA29	8-08	70	820	7.0	1.2	<.01	.79	.18	.02
IA30	3-25	25	700	7.2	.1	<.01	<.05	.28	<.01
IA30	7-26	25	700	7.1	.1	<.01	.10	.24	<.01
IA31	3-22	36	647	6.7	2.0	--	2.4	--	--
IA31	7-25	36	612	7.2	2.4	<.01	2.1	<.01	.01
IA32	3-22	--	599	6.7	.1	--	<.05	--	--
IA32	7-25	--	588	6.8	0	<.01	<.05	1.2	<.01
IA33	3-21	50	947	7.1	.2	<.01	<.05	.48	<.01
IA33	7-24	62	890	6.8	.2	<.01	.08	.43	<.01
IA34	3-20	17	607	7.4	.2	<.01	.15	.04	<.01
IA34	7-24	17	620	7.0	.3	<.01	.69	.05	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Iowa (continued)									
IA17	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
IA17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IA18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA19	<.05	<.05	<.05	.08	<.05	<.05	<.05	<.05	<.05
² IA19	--	--	--	--	--	--	--	--	--
IA19	<.05	.06	<.05	.16	<.05	<.05	<.05	<.05	<.05
IA20	<.05	.12	<.05	.07	<.05	<.05	<.05	.31	<.05
IA20	<.05	.20	<.05	.08	.06	<.05	<.05	.58	<.05
IA21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA21	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
IA22	<.05	.08	<.05	<.05	<.05	.06	<.05	<.05	<.05
IA22	<.05	.10	<.05	<.05	<.05	.06	<.05	<.05	<.05
IA23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IA23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA23	<.05	.10	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA25	<.05	<.05	<.05	.05	<.05	<.05	<.05	.05	<.05
IA25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	.09	<.05
IA26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA26	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
IA27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IA27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IA27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IA27	--	--	--	--	--	--	--	--	--
IA28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² IA29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA31	<.05	<.05	<.05	.05	<.05	<.05	<.05	.08	<.05
IA31	<.05	<.05	<.05	.06	<.05	<.05	<.05	.11	<.05
IA32	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA32	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA33	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA33	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA34	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA34	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Iowa (continued)									
IA35	3-21	³ 8	653	7.8	7.0	<.01	0.85	0.04	0.05
IA35	7-26	³ 8	697	7.3	6.4	.02	.49	.43	.17
IA36	3-20	--	600	7.1	2.0	--	3.5	--	--
IA36	8-06	--	606	6.5	2.2	<.01	3.9	.04	.05
IA37	3-26	³ 18	290	6.5	10.1	<.01	1.3	<.01	.09
IA37	7-22	³ 18	284	6.3	3.6	.01	.99	<.01	.10
IA38	3-20	³ 20	882	7.0	.9	.01	10	.03	.01
IA38	7-19	³ 19	927	6.8	1.0	.02	12	.15	<.01
IA39	3-20	20	1,080	7.2	.2	.02	36	<.01	.06
IA40	7-19	--	944	6.8	.2	.02	6.7	.06	<.01
Kansas									
KS01	3-20	11	1,190	7.2	.1	<.01	.05	.85	<.01
² KS01	3-20	--	--	--	--	<.01	.04	.85	<.01
KS01	7-29	11	1,260	7.6	.3	.01	.06	.87	<.01
Michigan									
MI01	3-29	³ 16	598	7.6	4.1	<.01	26	<.01	<.01
MI01	8-20	³ 16	626	7.6	5.7	.02	32	<.01	<.01
MI02	4-03	23	850	7.3	.2	<.01	<.05	.13	<.01
MI02	8-22	23	818	7.3	.2	<.01	<.05	.12	<.01
MI03	4-03	6	825	7.2	.2	<.01	<.05	.07	<.01
MI03	8-22	6	786	7.1	.2	<.01	<.05	.06	<.01
MI04	4-03	15	945	7.3	.6	<.01	<.05	.08	<.01
MI05	4-03	49	686	7.5	.3	<.01	<.05	<.01	<.01
MI05	8-23	49	644	7.5	.2	<.01	<.05	<.01	<.01
MI06	4-05	12	829	7.3	.6	<.01	<.05	.01	<.01
MI06	8-14	12	742	7.4	.2	<.01	<.05	.04	<.01
² MI06	8-14	--	--	--	--	<.01	<.05	.03	<.01
MI07	4-09	³ 24	229	7.4	2.3	<.01	6.2	<.01	<.01
MI07	8-20	³ 23	610	7.7	7.5	<.01	5.4	<.01	<.01
MI08	4-04	-1	747	7.3	.1	<.01	<.05	<.01	<.01
MI08	8-15	-1	737	7.5	2.2	<.01	<.05	<.01	<.01
² MI08	8-15	--	--	--	--	--	--	--	--
MI09	4-04	18	467	7.9	0	<.01	<.05	.77	.05
MI09	8-16	18	466	8.1	.1	<.01	<.05	.72	.07
MI10	4-04	20	856	7.0	0	<.01	<.05	.08	<.01
MI10	8-15	20	825	7.2	.1	<.01	<.05	.10	.01
MI11	4-16	10	755	7.5	0	<.01	<.05	.02	<.01
MI11	8-22	10	715	7.4	0	<.01	<.05	<.01	<.01
MI12	4-10	56	783	7.3	9.9	<.01	24	<.01	<.01
² MI12	4-10	--	--	--	--	<.01	24	<.01	<.01
MI12	8-21	56	732	7.3	10.4	<.01	23	<.01	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deisopropyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Iowa (continued)									
IA35	<0.05	0.07	<0.05	0.06	0.12	<0.05	<0.05	<0.05	<0.05
IA35	<.05	.07	<.05	.07	.15	<.05	<.05	<.05	<.05
IA36	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA36	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA37	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA37	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA38	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA38	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
IA39	.05	1.0	<.05	.22	<.05	1.5	<.05	<.05	<.05
IA40	<.05	.18	<.05	.07	<.05	<.05	<.05	<.05	<.05
Kansas									
KS01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² KS01	--	--	--	--	--	--	--	--	--
KS01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Michigan									
MI01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MI06	--	--	--	--	--	--	--	--	--
MI07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MI08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MI12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Michigan (continued)									
MI13	4-10	8	535	7.8	4.4	<0.01	1.8	<0.01	<0.01
MI13	8-21	8	536	7.3	.1	<.01	.07	<.01	<.01
MI14	4-11	20	1,050	7.4	.1	<.01	<.05	.02	<.01
MI14	8-23	20	960	7.2	.1	<.01	<.05	.02	<.01
Minnesota									
MN01	3-25	55	710	7.3	.1	<.01	.06	1.2	<.01
² MN01	3-25	--	--	--	--	--	--	--	--
MN01	7-22	55	695	7.3	0	<.01	<.05	.99	<.01
MN02	3-11	72	560	7.6	9.5	.01	2.4	<.01	.02
MN02	7-18	72	558	7.2	7.6	<.01	2.3	.02	<.01
MN03	3-19	20	949	7.3	0	<.01	<.05	2.1	<.01
MN03	7-24	20	874	7.2	.1	<.01	<.05	1.9	<.01
MN04	3-22	45	2,880	6.8	0	<.01	<.05	2.1	<.01
MN04	7-23	45	2,770	6.7	.1	<.01	<.05	1.9	<.01
MN05	3-26	³ 11	462	7.4	.6	<.01	2.4	<.01	.02
² MN05	3-26	--	--	--	--	<.01	2.3	.01	.03
MN05	7-23	³ 9	473	7.3	.4	.01	6.7	.02	.03
MN06	3-20	21	899	7.7	.1	<.01	<.05	5.7	.28
MN06	7-24	21	874	7.5	.1	<.01	<.05	5.3	.34
MN07	3-11	80	370	7.6	7.9	.01	5.7	<.01	.01
MN07	7-16	80	373	7.5	7.6	<.01	5.4	.01	<.01
MN08	3-08	9	710	7.1	2.1	<.01	4.1	<.01	.02
MN08	7-16	9	690	6.9	3.2	<.01	4.4	<.01	<.01
MN09	3-28	31	1,130	7.3	5.3	<.01	.94	.09	<.01
MN09	7-23	31	1,030	7.1	3.7	<.01	1.4	.01	<.01
MN10	3-14	³ 26	791	7.2	6.7	<.01	23	<.01	.01
MN10	8-06	³ 22	791	7.1	7.5	<.01	.28	.02	<.01
MN11	3-19	15	1,080	7.3	0	<.01	<.05	1.5	<.01
MN11	7-25	15	1,050	7.2	.1	<.01	2.4	.03	.02
² MN11	7-25	--	--	--	--	--	--	--	--
MN12	3-19	15	2,410	7.1	0	<.01	<.05	2.0	<.01
MN12	7-25	15	2,000	7.0	.1	<.01	<.05	1.6	<.01
MN13	3-18	³ 14	1,430	7.1	0	<.01	<.05	.66	<.01
MN13	7-25	³ 13	1,370	7.0	.8	<.01	<.05	.65	<.01
MN14	3-08	³ 22	624	8.1	10.7	<.01	6.3	<.01	.08
MN14	7-16	³ 18	810	7.6	6.6	<.01	3.9	<.01	.06
MN15	3-21	15	1,150	7.0	.1	.05	2.1	.13	<.01
MN15	7-23	15	1,120	6.9	.8	<.01	5.2	.20	<.01
MN16	3-18	18	2,070	6.7	0	<.01	<.05	.01	<.01
MN16	7-25	18	1,950	6.7	0	<.01	<.05	.06	<.01
MN17	3-29	20	591	7.4	8.2	<.01	2.5	.04	<.01
MN17	7-19	20	595	7.3	3.0	<.01	<.05	1.4	.02

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Michigan (continued)									
MI13	<0.05	0.09	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MI13	<.05	.11	<.05	.09	.05	<.05	<.05	<.05	<.05
MI14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MI14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Minnesota									
MN01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MN01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN02	<.05	.07	<.05	.07	<.05	<.05	<.05	<.05	<.05
MN02	<.05	.08	<.05	.07	<.05	<.05	<.05	<.05	<.05
MN03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MN05	--	--	--	--	--	--	--	--	--
MN05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	.84	.08
MN08	<.05	.05	<.05	<.05	<.05	<.05	<.05	.86	.09
MN09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN10	<.05	<.05	<.05	.07	.59	<.05	<.05	<.05	.06
MN10	<.05	<.05	<.05	.08	1.17	<.05	<.05	<.05	.10
MN11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MN11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN14	<.05	<.05	<.05	.13	<.05	<.05	<.05	<.05	<.05
MN14	<.05	<.05	<.05	.13	<.05	<.05	<.05	<.05	<.05
MN15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Minnesota (continued)									
MN18	3-27	10	648	7.0	0.1	<0.01	<0.05	0.14	<0.01
MN18	8-07	10	570	6.9	.1	<.01	<.05	.16	<.01
MN19	3-19	³ 16	552	10.4	.1	<.01	<.05	1.0	<.01
MN19	8-07	³ 17	577	7.4	1.2	<.01	<.05	.14	<.01
MN20	3-12	165	645	7.2	9.2	.01	4.4	<.01	.02
MN20	7-18	165	627	7.1	9.4	<.01	4.3	.01	<.01
MN21	3-11	125	524	7.4	0	.01	<.05	.02	<.01
MN21	7-18	125	480	7.4	.2	<.01	<.05	.05	<.01
MN22	3-12	135	538	7.2	13.1	.01	3.5	<.01	.04
MN22	7-18	135	530	7.2	13.7	<.01	3.7	<.01	<.01
MN23	3-13	210	581	7.2	0	<.01	.18	<.01	<.01
MN23	7-17	210	531	7.2	.1	<.01	.05	.01	<.01
MN24	3-13	85	498	7.3	0	<.01	.07	<.01	<.01
MN24	7-17	85	356	7.2	.1	<.01	<.05	.02	<.01
MN25	3-26	³ 19	416	7.5	.1	<.01	<.05	.25	.02
MN25	7-15	³ 17	275	7.3	3.2	<.01	<.05	.24	<.01
MN26	3-22	20	994	6.9	2.4	<.01	6.9	.04	.01
MN26	8-08	20	1,020	6.7	.1	.15	14	.07	<.01
MN27	3-26	³ 14	1,850	6.7	.1	<.01	<.05	.03	<.01
MN27	7-22	³ 13	1,930	6.6	3.0	<.01	<.05	.04	<.01
MN28	3-15	12	2,040	6.8	0	<.01	<.05	.28	<.01
MN28	8-07	12	2,010	6.6	.1	<.01	.13	.28	<.01
Missouri									
MO01	3-14	8	74	5.4	--	<.01	.13	.02	<.01
MO02	3-20	30	451	7.4	.6	<.01	<.05	<.01	<.01
MO02	7-19	30	421	7.1	1.5	<.01	<.05	<.01	<.01
MO03	3-25	20	772	6.8	.9	<.01	<.05	.28	<.01
MO03	8-07	20	757	7.0	0	<.01	<.05	.27	<.01
MO04	3-14	17	760	7.2	--	.01	<.05	.59	<.01
MO04	7-22	17	772	7.1	.1	.01	<.05	.59	.02
MO05	3-21	17	615	7.0	0	<.01	.15	.13	<.01
MO05	8-05	17	589	6.9	.1	<.01	<.05	.15	<.01
MO06	3-20	10	857	7.1	0	<.01	<.05	.23	<.01
MO06	8-06	10	801	7.0	.1	<.01	<.05	.24	<.01
MO07	3-26	6	883	7.0	.1	.01	1.7	.12	<.01
² MO07	3-26	--	--	--	--	<.01	1.7	.12	.01
MO07	8-07	6	838	7.1	.2	.01	2.1	.13	<.01
MO08	3-20	10	958	7.2	.1	<.01	<.05	.74	<.01
MO08	8-06	10	880	7.1	0	<.01	<.05	.68	<.01
MO09	3-21	10	687	7.1	0	.02	2.6	.03	<.01
MO09	8-05	10	679	7.0	2.0	.02	1.9	.04	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Minnesota (continued)									
MN18	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MN18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN20	<.05	.29	<.05	.22	<.05	<.05	<.05	<.05	<.05
MN20	<.05	.45	<.05	.27	<.05	<.05	<.05	<.05	<.05
MN21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MN28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Missouri									
MO01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO06	1.0	<.05	<.05	<.05	<.05	.11	<.05	<.05	<.05
MO06	--	--	--	--	--	--	--	--	--
MO07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MO07	--	--	--	--	--	--	--	--	--
MO07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO09	--	--	--	--	--	--	--	--	--

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Missouri (continued)									
MO10	3-22	50	1,480	7.1	4.3	0.02	4.0	1.4	0.11
MO10	8-06	50	1,360	7.0	.2	<.01	<.05	1.6	.05
MO11	3-18	35	716	6.8	2.3	<.01	3.1	.01	<.01
MO11	8-01	35	611	7.2	6.0	.02	2.5	<.01	<.01
² MO11	8-01	--	--	--	--	--	--	--	--
MO12	3-15	³ 64	465	6.9	--	<.01	.46	.02	.02
² MO12	3-15	--	--	--	--	--	--	--	--
MO12	8-01	³ 83	416	7.4	--	<.01	.43	<.01	<.01
MO13	3-13	152	469	7.2	1.0	.03	<.05	.04	<.01
MO13	7-31	152	374	7.3	.6	<.01	<.05	.03	<.01
MO14	3-18	95	912	6.9	.2	<.01	<.05	.05	<.01
MO14	7-31	95	700	7.3	.1	<.01	<.05	.03	<.01
MO15	3-19	32	715	7.0	--	<.01	<.05	.11	<.01
MO15	8-02	32	630	6.8	.4	<.01	<.05	.12	<.01
MO16	3-19	100	703	7.2	.1	<.01	.05	.18	<.01
MO16	8-01	100	623	7.3	0	<.01	<.05	.18	<.01
MO17	3-21	80	4,100	7.6	.1	<.01	<.05	1.1	<.01
² MO17	3-21	--	--	--	--	<.01	<.05	1.1	<.01
MO17	7-18	80	4,240	7.6	.5	<.01	.08	1.1	<.01
MO18	3-19	95	616	7.1	.2	<.01	<.05	.03	<.01
MO18	7-17	95	579	7.3	1.5	<.01	<.05	.03	<.01
MO19	3-20	--	2,690	7.7	.2	<.01	<.05	.66	<.01
MO19	7-18	--	2,720	7.7	--	<.01	<.05	.74	<.01
MO20	3-20	71	956	7.5	--	<.01	<.05	.85	<.01
MO20	7-18	71	875	7.5	2.5	.01	.09	.83	<.01
MO21	3-21	130	2,340	7.6	.1	<.01	<.05	.50	<.01
MO21	7-17	130	2,250	7.8	--	<.01	<.05	.48	<.01
MO22	3-21	60	4,160	7.6	.2	<.01	<.05	1.1	.01
MO22	7-17	60	4,340	7.6	.4	<.01	<.05	1.1	.01
² MO22	7-17	--	--	--	--	--	--	--	--
MO23	3-22	225	446	7.5	2.0	.03	4.4	.02	<.01
MO23	7-17	225	420	7.7	--	<.01	5.5	<.01	<.01
² MO23	7-17	--	--	--	--	<.01	5.3	<.01	<.01
MO24	7-22	40	1,390	6.8	.2	.01	<.05	.20	<.01
Nebraska									
NE01	3-13	16	1,420	6.3	1.2	<.01	2.2	.04	.01
² NE01	3-13	--	--	--	--	--	--	--	--
NE01	7-23	16	900	6.7	2.1	<.01	2.1	.02	<.01
NE02	3-27	26	700	7.6	--	<.01	1.3	.12	.32
NE02	7-17	26	660	7.6	9.7	.02	4.5	.09	.32
NE03	3-20	69	1,020	7.4	2.7	<.01	.10	.64	<.01
NE03	8-06	69	589	7.2	5.4	<.01	.17	.47	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <, less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Missouri (continued)									
MO10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MO10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO11	<.05	.20	<.05	.08	<.05	<.05	<.05	<.05	<.05
MO11	<.05	.14	<.05	.07	<.05	<.05	<.05	<.05	<.05
² MO11	<.05	.16	<.05	.13	<.05	<.05	<.05	<.05	<.05
MO12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MO12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MO17	--	--	--	--	--	--	--	--	--
MO17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² MO22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO23	<.05	.28	<.05	<.05	<.05	<.05	<.05	<.05	<.05
MO23	<.05	.35	<.05	.13	<.05	<.05	<.05	<.05	.08
² MO23	--	--	--	--	--	--	--	--	--
MO24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Nebraska									
NE01	<.05	.05	<.05	.08	<.05	<.05	<.05	<.05	<.05
² NE01	<.05	.05	<.05	.08	<.05	<.05	<.05	<.05	<.05
NE01	<.05	.06	<.05	.07	<.05	<.05	<.05	<.05	<.05
NE02	<.05	.06	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE02	<.05	.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Nebraska (continued)									
NE04	3-21	24	615	6.8	3.8	<0.01	7.8	0.03	0.17
NE04	7-23	25	618	6.8	3.8	.01	8.4	<.01	.15
NE05	3-12	50	1,640	7.0	1.1	.04	9.0	.04	.19
NE05	7-23	50	1,310	7.2	1.8	<.01	14	<.01	.18
NE06	3-20	95	164	7.4	6.5	<.01	2.2	<.01	.12
NE06	7-24	95	290	7.1	6.0	<.01	2.7	<.01	.11
NE07	3-26	4	514	7.6	.1	<.01	.05	<.01	.14
NE07	7-29	4	480	7.6	1.1	<.01	<.05	.05	.13
NE08	3-21	20	648	7.3	1.3	<.01	.07	.09	.02
NE08	7-24	20	952	6.3	2.1	.02	.14	.08	.09
NE09	3-21	24	281	7.2	.3	<.01	.09	.01	.06
NE09	7-25	24	250	7.0	.2	<.01	.17	<.01	.05
NE10	3-25	9	508	7.5	.3	<.01	.15	<.01	<.01
² NE10	3-25	--	--	--	--	<.01	.13	.05	<.01
NE10	7-31	9	427	7.5	.7	<.01	.12	.08	.01
NE11	3-11	59	503	6.8	2.4	<.01	2.7	.05	.21
NE11	7-25	59	360	7.1	2.4	<.01	3.4	.01	.16
NE12	3-15	21	1,710	8.1	3.8	<.01	11	.05	.05
NE13	3-20	22	970	7.2	0	<.01	<.05	.38	.03
NE13	8-01	22	672	7.3	.8	<.01	<.05	.41	.04
² NE13	8-01	--	--	--	--	--	--	--	--
NE14	3-26	13	508	7.3	.2	<.01	<.05	.17	.17
NE14	8-19	13	447	7.4	.4	<.01	<.05	.12	.14
NE15	3-12	38	887	5.6	10.8	.02	17	.06	.03
NE15	7-23	38	780	7.5	6.5	<.01	18	<.01	<.01
NE16	3-20	40	790	7.0	2.3	<.01	7.8	.02	.19
NE16	8-01	40	477	7.2	3.8	<.01	7.1	.05	.18
² NE16	8-01	--	--	--	--	<.01	7.9	.04	.18
NE17	3-18	48	686	7.0	3.8	<.01	3.0	<.01	<.01
NE17	7-16	49	742	7.1	6.3	.02	6.7	.02	.10
NE18	3-18	³ 10	762	7.1	.2	.02	.61	.05	<.01
NE18	7-15	³ 7	745	7.1	.9	.02	.58	.05	.14
NE19	3-20	37	666	7.1	9.4	<.01	6.5	.02	.26
NE19	7-23	23	500	7.2	6.6	<.01	7.2	<.01	.24
² NE19	7-23	--	--	--	--	<.01	7.0	.03	.22
NE20	3-19	59	460	7.1	10.8	<.01	8.5	.03	.20
NE20	7-17	59	477	7.1	11.5	.02	9.2	.02	.20
NE21	3-26	8	486	7.1	2.3	0.01	1.7	<.01	.18
NE21	7-25	8	476	--	3.0	<.01	1.7	<.01	.17
NE22	3-18	78	434	6.8	7.4	<.01	5.3	<.01	.42
NE22	7-16	78	478	6.8	7.2	.02	6.6	.02	.40

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Nebraska (continued)									
NE04	<0.05	0.28	<0.05	0.35	0.09	<0.05	<0.05	0.08	<0.05
NE04	<.05	.31	<.05	.47	.09	<.05	<.05	.05	<.05
NE05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE05	<.05	.14	<.05	.19	<.05	<.05	<.05	.22	<.05
NE06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE06	<.05	.08	<.05	.08	<.05	<.05	<.05	<.05	<.05
NE07	<.05	.40	<.05	.07	<.05	<.05	<.05	<.05	<.05
NE07	<.05	.47	<.05	.08	<.05	<.05	<.05	<.05	<.05
NE08	<.05	.77	<.05	.37	.07	<.05	<.05	<.05	<.05
NE08	<.05	.76	<.05	.41	.05	<.05	<.05	<.05	<.05
NE09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² NE10	--	--	--	--	--	--	--	--	--
NE10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE11	<.05	.06	<.05	<.05	<.05	<.05	.05	<.05	<.05
NE12	<.05	.19	<.05	.40	<.05	<.05	<.05	.74	<.05
NE13	<.05	.54	<.05	.05	<.05	<.05	<.05	<.05	<.05
NE13	<.05	.54	<.05	.07	<.05	<.05	<.05	<.05	<.05
² NE13	<.05	.57	<.05	.08	<.05	<.05	<.05	<.05	<.05
NE14	<.05	.52	<.05	.06	<.05	.05	<.05	<.05	<.05
NE14	<.05	.14	<.05	.08	.08	<.05	<.05	<.05	<.05
NE15	<.05	.08	<.05	.05	<.05	<.05	<.05	<.05	<.05
NE15	<.05	.10	<.05	.07	<.05	<.05	<.05	<.05	<.05
NE16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² NE16	--	--	--	--	--	--	--	--	--
NE17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE17	<.05	.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE19	<.05	.82	<.05	.35	<.05	<.05	<.05	<.05	<.05
NE19	<.05	.81	<.05	.40	.10	<.05	<.05	<.05	<.05
² NE19	--	--	--	--	--	--	--	--	--
NE20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE22	--	--	--	--	--	--	--	--	--
NE22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Nebraska (continued)									
NE23	3-11	³ 25	904	7.0	0.6	<0.01	1.8	0.03	0.16
NE23	7-25	³ 71	764	7.6	4.8	<.01	2.2	<.05	.16
² NE23	7-25	--	--	--	--	--	--	--	--
NE24	3-14	7	305	10.3	8.1	<.01	.38	.04	.01
NE24	7-24	7	275	7.6	5.4	<.01	.36	<.01	<.01
² NE24	7-24	--	--	--	--	--	--	--	--
NE25	3-20	42	648	7.4	.4	<.01	.73	.02	.31
NE25	7-22	42	420	7.4	1.1	<.01	1.2	.01	.28
² NE25	7-22	--	--	--	--	--	--	--	--
NE26	3-14	27	248	9.9	.3	<.01	.20	.04	.16
NE26	8-07	24	262	7.5	.7	<.01	.11	.26	.19
NE27	3-15	5	790	7.6	.5	.01	.17	.04	.02
NE27	7-24	5	840	7.6	.1	<.01	.20	<.01	.01
NE28	3-26	19	426	7.2	7.3	<.01	4.1	<.01	.21
NE28	7-25	³ 30	568	7.5	5.6	<.01	4.4	<.01	.20
NE29	3-19	25	550	6.9	7.1	<.01	9.3	.02	.18
² NE29	3-19	--	--	--	--	<.01	8.5	<.01	.18
NE29	7-17	29	549	6.9	7.0	.02	8.7	.02	.16
NE30	3-13	³ 26	737	7.0	1.4	<.01	4.0	.04	.08
NE30	7-30	³ 42	617	7.4	2.3	<.01	3.4	.04	.06
² NE30	7-30	--	--	--	--	<.01	3.4	.05	.07
NE31	3-15	6	929	7.7	.9	<.01	1.5	.03	.02
NE31	7-25	6	760	7.6	.5	<.01	1.4	.02	<.01
NE32	3-13	13	676	6.7	3.8	.01	1.2	.04	<.01
NE32	7-23	13	350	7.9	3.2	<.01	1.1	<.01	<.01
NE33	3-15	³ 2	1,630	6.6	1.1	<.01	18	.04	.11
NE33	8-07	³ 5	2,820	7.2	3.7	<.01	25	<.01	.14
NE34	3-25	10	680	7.3	.5	<.01	<.05	.04	.03
NE34	8-14	10	520	7.2	.6	<.01	1.0	.07	.03
NE35	3-11	8	1,060	7.2	.7	.01	3.0	.03	.03
NE35	7-23	8	861	7.3	--	<.01	3.2	<.01	<.01
² NE35	7-23	--	--	--	--	<.01	3.2	<.01	<.01
NE36	3-18	³ 21	598	6.9	2.6	.02	9.3	.03	.36
NE36	7-15	³ 25	474	6.9	3.1	.02	4.1	.02	.43
NE37	3-12	26	404	6.8	3.3	<.01	2.4	.03	.20
NE37	8-07	25	300	6.6	4.6	<.01	4.0	<.01	.18
NE38	3-26	14	634	7.1	6.6	<.01	10	<.01	.31
NE38	7-24	³ 25	582	7.3	5.5	<.01	9.5	<.01	.32
NE39	3-14	5	227	6.8	4.0	<.01	.19	.04	.13
NE39	8-13	22	89	6.8	1.8	<.01	.16	.05	.40
NE40	3-19	54	258	6.8	9.7	<.01	2.0	<.01	.22
NE40	7-18	54	357	6.9	7.1	.02	2.2	.03	.20

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deisopropyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Nebraska (continued)									
NE23	<.05	0.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE23	<.05	.06	<.05	<.05	<.05	<.05	<.05	<.05	.06
² NE23	<.05	.06	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² NE24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE25	<.05	.05	<.05	<.05	<.05	<.05	<.05	.13	<.05
NE25	<.05	.08	<.05	<.05	<.05	<.05	<.05	.25	<.05
² NE25	<.05	.05	<.05	<.05	<.05	<.05	<.05	.17	<.05
NE26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE27	<.05	.11	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE27	<.05	.15	<.05	.11	<.05	<.05	<.05	<.05	<.05
NE28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE29	<.05	.25	<.05	.15	<.05	<.05	<.05	<.05	<.05
² NE29	--	--	--	--	--	--	--	--	--
NE29	<.05	.23	<.05	.16	<.05	<.05	<.05	<.05	<.05
NE30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² NE30	--	--	--	--	--	--	--	--	--
NE31	<.05	<.05	<.05	.10	<.05	<.05	<.05	<.05	<.05
NE31	<.05	<.05	<.05	.20	<.05	<.05	<.05	<.05	<.05
NE32	<.05	<.05	<.05	<.05	<.05	.08	<.05	<.05	<.05
NE32	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE33	<.05	<.05	<.05	.15	<.05	<.05	<.05	<.05	<.05
NE33	<.05	.14	<.05	.45	.18	<.05	<.05	<.05	<.05
NE34	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE34	<.05	<.05	<.05	<.05	<.05	<.05	<.05	.07	<.05
NE35	<.05	.70	<.05	1.4	.21	.07	<.05	.06	<.05
NE35	<.05	.51	<.05	2.3	.43	<.05	<.05	.10	<.05
² NE35	--	--	--	--	--	--	--	--	--
NE36	<.05	.08	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE36	<.05	.16	<.05	.08	<.05	<.05	<.05	<.05	<.05
NE37	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE37	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE38	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE38	<.05	.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE39	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE39	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE40	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE40	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Nebraska (continued)									
NE41	3-20	14	622	7.4	1.6	<0.01	0.36	0.08	0.27
NE41	7-22	14	490	7.4	4.4	<.01	.80	.05	.24
NE42	3-21	28	628	7.2	2.2	<.01	2.5	.03	.07
NE42	7-23	30	649	7.2	2.4	.01	3.0	<.01	.06
NE43	3-25	9	322	7.5	.4	<.01	<.05	.39	.22
NE43	7-31	9	304	7.6	.7	.03	1.2	.23	.12
NE44	3-27	12	636	7.1	7.3	<.01	7.3	<.01	.21
NE44	8-08	25	538	7.1	7.1	<.01	5.4	<.01	.22
NE45	3-19	55	178	6.9	8.0	<.01	.98	.02	.33
NE45	7-25	55	155	6.8	4.7	<.01	1.1	<.01	.30
NE46	8-14	20	890	7.2	4.6	<.01	6.2	.01	.08
North Dakota									
ND01	3-27	³ 11	688	7.5	.7	<.01	<.05	.08	<.01
² ND01	3-27	--	--	--	--	<.01	<.05	.08	<.01
ND01	7-23	³ 8	694	7.2	.4	<.01	<.05	<.01	<.01
Ohio									
OH01	3-23	³ 34	1,380	7.6	.3	<.01	<.05	1.3	<.01
OH01	7-31	³ 37	1,380	7.2	1.0	<.01	<.05	1.3	.01
OH02	3-22	12	670	7.4	.2	<.01	<.05	.13	<.01
OH02	7-31	12	675	7.2	.9	<.01	<.05	.14	<.01
OH03	3-26	24	620	6.7	.1	<.01	<.05	.07	<.01
OH03	8-02	24	630	7.2	1.0	<.01	<.05	.09	<.01
OH04	3-26	19	680	6.5	.6	<.01	.65	1.1	<.01
OH04	8-02	19	715	7.3	.9	<.01	.30	1.1	<.01
OH05	3-22	8	660	6.0	0	<.01	<.05	<.01	<.01
² OH05	3-22	--	--	--	--	<.01	<.05	<.01	<.01
OH05	8-01	8	720	7.3	1.4	<.01	<.05	.02	<.01
OH06	3-27	20	1,380	6.8	.2	<.01	<.05	.32	<.01
OH06	8-06	20	1,390	6.9	.4	.01	<.05	.32	<.01
OH07	3-22	4	725	6.9	.2	<.01	<.05	.33	<.01
OH07	7-31	4	685	7.2	.9	<.01	<.05	.33	<.01
OH08	4-03	³ 15	1,880	7.1	.3	<.01	<.05	.31	<.01
OH08	8-06	³ 21	1,860	7.1	.6	<.01	<.05	.48	<.01
OH09	3-26	10	715	6.8	1.0	<.01	5.2	<.01	<.01
OH09	8-02	10	720	7.3	1.4	<.01	5.3	<.01	<.01
OH10	3-26	10	630	6.4	.5	.01	1.1	<.01	<.01
OH10	8-02	10	660	7.5	1.2	.01	1.9	<.01	<.01
OH11	3-26	19	910	6.7	.5	<.01	<.05	.31	<.01
OH11	8-02	19	940	7.2	.8	<.01	<.05	.33	<.01
OH12	4-01	³ 11	775	6.9	.7	.01	<.05	.03	<.01
OH12	8-08	³ 10	840	7.0	.3	<.01	<.05	.05	<.01

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Nebraska (continued)									
NE41	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NE41	<.05	.38	<.05	.19	<.05	.11	<.05	.46	<.05
NE42	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE42	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE43	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE43	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE44	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE44	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE45	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE45	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
NE46	<.05	1.8	<.05	2.2	.48	<.05	<.05	.09	.27
North Dakota									
ND01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² ND01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
ND01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Ohio									
OH01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH04	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² OH05	--	--	--	--	--	--	--	--	--
OH05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH06	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH08	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH11	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Ohio (continued)									
OH13	4-01	5	495	7.3	0.9	<0.01	<0.05	0.12	<0.01
OH13	8-09	5	540	7.3	.8	<.01	<.05	.13	<.01
² OH13	8-09	--	--	--	--	<.01	<.05	.12	<.01
OH14	4-01	16	560	7.3	3.0	<.01	.26	.01	<.01
² OH14	4-01	--	--	--	--	--	--	--	--
OH14	8-09	16	560	7.3	.3	<.01	.16	.05	<.01
OH15	4-01	30	650	7.2	.4	<.01	<.05	.11	<.01
OH15	8-08	30	715	7.0	.2	<.01	<.05	.12	<.01
OH16	3-23	³ 31	755	7.1	.3	<.01	<.05	.21	<.01
OH16	8-10	³ 35	765	7.4	.5	<.01	<.05	.24	<.01
² OH16	8-10	--	--	--	--	--	--	--	--
OH17	4-01	³ 4	1,420	6.9	1.0	<.01	<.05	.35	<.01
OH17	8-08	4	1,400	6.9	1.3	<.01	<.05	.34	<.01
OH18	4-02	³ 9	630	7.3	.8	.07	.07	.06	<.01
OH18	8-08	³ 12	690	7.2	.3	<.01	<.05	.12	<.01
OH19	3-25	20	755	7.6	.3	<.01	<.05	.27	<.01
OH19	8-01	³ 22	740	7.3	1.3	<.01	<.05	.28	<.01
OH20	3-27	³ 38	1,120	7.3	.3	<.01	<.05	.44	<.01
OH20	8-05	³ 40	1,120	7.3	.6	<.01	<.05	.45	<.01
OH21	3-27	9	840	7.2	.3	<.01	<.05	.25	<.01
OH21	8-05	9	820	7.0	.7	<.01	.05	.25	<.01
OH22	4-02	5	630	7.3	4.3	<.01	1.7	<.01	<.01
OH22	8-07	5	655	7.4	3.6	<.01	2.9	.02	<.01
² OH22	8-07	--	--	--	--	<.01	2.9	<.01	<.01
OH23	4-02	³ 25	1,150	7.3	.5	<.01	<.05	.29	<.01
OH23	8-07	25	1,120	7.3	.3	<.01	<.05	.25	<.01
OH24	4-02	³ 6	970	7.5	.6	.14	.14	.08	<.01
OH24	8-06	³ 7	995	7.7	.2	<.01	<.05	.02	<.01
OH25	4-02	21	2,480	7.6	1.0	<.01	<.05	.57	<.01
OH25	8-06	21	2,480	7.6	.3	<.01	<.05	.57	<.01
OH26	4-03	16	960	7.2	.2	<.01	<.05	.16	<.01
OH26	8-07	16	960	7.2	.5	<.01	<.05	.29	<.01
OH27	4-03	³ 10	675	7.4	0	<.01	<.05	.08	<.01
OH27	8-07	10	690	7.4	.3	<.01	<.05	.08	<.01
OH28	3-26	55	830	7.0	.3	<.01	<.05	.01	<.01
OH28	8-02	55	880	7.0	1.0	<.01	<.05	<.01	<.01
OH29	3-27	36	680	7.2	.2	<.01	<.05	.06	<.01
OH29	8-07	36	710	7.1	.5	<.01	<.05	.11	<.01
OH30	3-25	14	905	7.7	.3	<.01	<.05	.51	<.01
OH30	8-01	14	900	7.1	1.1	<.01	<.05	.52	<.01
² OH30	8-01	--	--	--	--	--	--	--	--

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deiso-propyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Ohio (continued)									
OH13	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
OH13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² OH13	--	--	--	--	--	--	--	--	--
OH14	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
² OH14	<.05	<.05	<.05	.06	<.05	<.05	<.05	<.05	<.05
OH14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² OH16	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH17	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH18	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH19	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH20	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH21	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH22	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² OH22	--	--	--	--	--	--	--	--	--
OH23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH23	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH24	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH25	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH26	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH27	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH28	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH29	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
OH30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² OH30	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05

Table 2. Water-quality data from field measurements

[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
South Dakota									
SD01	3-14	³ 12	802	6.8	4.0	<0.01	<0.05	0.38	<0.01
SD01	7-25	³ 11	822	7.0	4.2	<.01	.62	<.01	<.01
² SD01	7-25	--	--	--	--	<.01	.62	<.01	<.01
SD02	3-14	³ 7	1,080	6.8	4.0	.02	2.0	.03	.03
SD02	7-25	³ 6	1,080	7.1	.2	.02	2.6	.02	.01
² SD02	7-25	--	--	--	--	--	--	--	--
SD03	3-11	³ 19	1,290	6.6	4.2	<.01	<.05	.03	<.01
SD03	7-25	³ 20	1,320	7.0	1.2	<.01	.08	.02	<.01
Wisconsin									
WI01	3-25	120	535	7.0	1.4	<.01	<.05	.03	<.01
WI01	7-24	120	556	7.3	1.7	.01	<.05	.02	<.01
WI02	4-02	104	185	7.0	7.7	<.01	8.8	<.01	.10
WI02	8-16	104	205	6.9	9.4	<.01	11	.02	.12
WI03	4-02	36	229	6.1	5.2	<.01	11	<.01	.01
WI03	8-16	36	230	6.2	5.0	<.01	10	.01	.09
WI04	3-12	15	796	7.1	--	.02	18	<.01	<.01
WI04	7-23	15	792	6.9	--	.01	19	.02	<.01
WI05	3-26	105	609	7.1	9.0	<.01	5.1	.03	<.01
WI05	7-23	105	622	7.2	10.2	.01	5.0	.02	<.01
WI06	3-22	30	696	7.2	8.8	<.01	8.6	.02	<.01
WI06	7-23	30	707	7.2	10.9	.01	8.9	.02	<.01
WI07	4-02	85	333	6.3	9.4	<.01	13	.01	<.01
WI07	8-16	85	377	6.0	10.9	<.01	15	.01	<.01
WI08	4-04	206	662	7.1	9.7	<.01	3.8	<.01	.01
WI08	7-24	206	688	7.0	9.9	.01	4.2	.02	<.01
WI09	4-01	75	282	7.6	1.6	<.01	<.05	.03	<.01
² WI09	4-01	--	--	--	--	--	--	--	--
WI09	8-16	75	286	7.4	1.6	<.01	<.05	.03	<.01
WI10	3-11	65	522	7.4	1.7	<.01	<.05	.03	<.01
WI10	8-21	65	529	7.2	1.5	<.01	<.05	.04	.07
WI11	3-27	31	599	8.0	8.0	<.01	7.3	.02	<.01
WI11	7-22	31	622	7.5	8.0	.01	7.2	.02	<.01
WI12	3-18	40	605	7.1	2.7	<.01	<.05	.05	<.01
² WI12	3-18	--	--	--	--	<.01	<.05	.06	<.01
WI12	8-01	40	614	7.0	1.8	<.01	<.05	.05	<.01
WI13	3-19	20	923	7.3	.9	<.01	<.05	.04	<.01
WI13	7-31	20	890	7.3	1.2	<.01	<.05	.05	.01
WI14	3-20	102	526	7.2	3.1	<.01	.16	.01	<.01
WI14	7-25	102	541	7.1	2.7	.02	.20	.02	<.01
WI15	3-19	38	712	7.1	7.2	<.01	1.8	<.01	.01
WI15	8-01	38	722	7.0	7.4	<.01	1.6	.02	.02

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identifier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl-atrazine (µg/L)	Deisopropyl-atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
South Dakota									
SD01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
SD01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² SD01	--	--	--	--	--	--	--	--	--
SD02	<.05	.18	<.05	.08	<.05	<.05	<.05	<.05	<.05
SD02	<.05	.22	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² SD02	<.05	.38	<.05	.11	.06	<.05	<.05	<.05	<.05
SD03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
SD03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
Wisconsin									
WI01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI01	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI02	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI02	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
WI03	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI03	<.05	<.05	<.05	.10	<.05	<.05	<.05	<.05	<.05
WI04	<.05	.05	<.05	.19	.37	<.05	<.05	<.05	<.05
WI04	<.05	.06	<.05	.33	.43	<.05	<.05	<.05	<.05
WI05	<.05	<.05	<.05	.12	<.05	<.05	<.05	<.05	<.05
WI05	<.05	<.05	<.05	.10	<.05	<.05	<.05	<.05	<.05
WI06	<.05	.06	<.05	.23	<.05	<.05	<.05	<.05	<.05
WI06	<.05	.06	<.05	.23	<.05	<.05	<.05	<.05	<.05
WI07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI07	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI08	<.05	<.05	<.05	.05	<.05	<.05	<.05	<.05	<.05
WI08	<.05	<.05	<.05	.07	<.05	<.05	<.05	<.05	<.05
WI09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² WI09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI09	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI10	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI11	<.05	.09	<.05	.21	<.05	<.05	<.05	<.05	<.05
WI11	<.05	.13	<.05	.20	<.05	<.05	<.05	<.05	<.05
WI12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
² WI12	--	--	--	--	--	--	--	--	--
WI12	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI13	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI14	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
WI15	<.05	<.05	<.05	<.05	<.05	<.05	<.05	.08	<.05

Table 2. Water-quality data from field measurements[μ S/cm, microsiemens per centimeter at 25 degrees Celsius; mg/L,

Site identifier	Date (month, day)	Water level ¹ (feet)	Specific conductance (μ S/cm)	pH (standard units)	Dissolved oxygen (mg/L)	Nitrite, dissolved (mg/L as N)	Nitrite plus nitrate, dissolved (mg/L as N)	Ammonium, dissolved (mg/L as N)	Phosphorus ortho, dissolved (mg/L as P)
Wisconsin (continued)									
WI16	3-20	30	712	6.8	7.2	<0.01	7.3	<0.01	<0.01
WI16	7-25	30	729	6.7	6.5	.02	7.8	.02	<.01
WI17	3-26	44	607	7.6	2.7	.01	.43	.04	<.01
WI17	7-25	44	632	6.8	1.4	.03	.39	.02	<.01
WI18	3-21	44	735	7.1	6.6	<.01	17	.03	.02
² WI18	3-21	--	--	--	--	--	--	--	--
WI18	7-24	44	743	7.2	9.0	.01	15	.02	.01

¹ Estimated water level below land surface, except where noted.² Sample duplicate.³ Measured water level below land surface (rounded to nearest 1 foot).

and laboratory analyses of water samples, 1991--Continued

milligrams per liter; µg/L, micrograms per liter; <. less than; --, no data]

Site identi- fier	Alachlor (µg/L)	Atrazine (µg/L)	Cyanazine (µg/L)	Deethyl- atrazine (µg/L)	Deiso- propyl- atrazine (µg/L)	Metolachlor (µg/L)	Metribuzin (µg/L)	Prometon (µg/L)	Simazine (µg/L)
Wisconsin (continued)									
W116	0.21	<0.05	<0.05	0.34	<0.05	<0.05	<0.05	<0.05	<0.05
W116	.07	.05	<.05	.42	<.05	<.05	<.05	<.05	<.05
W117	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
W117	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05
W118	<.05	.06	<.05	.09	<.05	<.05	<.05	<.05	<.05
² W118	<.05	.05	<.05	.09	<.05	<.05	<.05	<.05	<.05
W118	<.05	<.05	<.05	.07	<.05	<.05	<.05	<.05	<.05

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0.25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Illinois							
IL01	0	26-50	76-100	no	1-25	0	1-25
IL02	0	1-25	26-50	no	1-25	1-25	1-25
IL03	0	0	26-50	no	0	0	1-25
IL04	1-25	76-100	76-100	no	0	0	0
IL05	1-25	26-50	51-75	no	0	0	26-50
IL06	26-50	76-100	76-100	no	1-25	1-25	1-25
IL07	0	26-50	26-50	no	26-50	0	1-25
IL08	26-50	76-100	51-75	no	1-25	0	1-25
IL09	0	76-100	76-100	yes	0	0	1-25
IL10	0	51-75	51-75	no	1-25	0	1-25
IL11	76-100	76-100	76-100	no	1-25	0	0
IL12	0	1-25	1-25	no	0	26-50	26-50
IL13	0	1-25	26-50	no	0	0	0
IL14	76-100	26-50	26-50	no	51-75	0	1-25
IL15	1-25	51-75	76-100	no	0	0	0
IL16	1-25	1-25	26-50	no	1-25	26-50	26-50
IL17	1-25	26-50	51-75	no	0	0	1-25
IL18	1-25	26-50	26-50	yes	26-50	0	1-25
IL19	1-25	1-25	26-50	no	51-75	0	1-25
IL20	0	51-75	76-100	yes	0	0	0
IL21	0	0	51-75	yes	1-25	0	1-25
IL22	76-100	76-100	76-100	yes	1-25	0	1-25
IL23	0	76-100	76-100	no	1-25	0	1-25
IL24	1-25	26-50	26-50	no	1-25	26-50	0
IL25	0	51-75	51-75	no	0	0	0
IL26	1-25	76-100	51-75	yes	0	0	26-50
IL27	0	1-25	26-50	yes	0	0	0
IL28	26-50	51-75	51-75	no	0	0	26-50
IL29	0	26-50	51-75	no	0	0	26-50
IL30	0	1-25	26-50	no	26-50	0	1-25
IL31	0	26-50	51-75	no	0	0	0
IL32	0	26-50	26-50	yes	1-25	0	1-25
IL33	0	1-25	26-50	no	1-25	26-50	1-25
IL34	0	26-50	26-50	yes	1-25	0	1-25
IL35	0	76-100	76-100	no	1-25	0	1-25
IL36	0	26-50	26-50	no	0	0	0
IL37	1-25	76-100	76-100	yes	0	0	1-25
IL38	0	76-100	76-100	no	0	0	1-25
IL39	0	26-50	51-75	no	0	0	1-25
IL40	0	51-75	51-75	no	0	1-25	1-25
IL41	0	26-50	51-75	no	1-25	0	26-50
IL42	0	26-50	51-75	no	0	0	26-50
IL43	0	26-50	51-75	no	0	0	26-50

features for areas surrounding wells

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Illinois								
IL01	no	no	no	no	no	no	no	yes
IL02	no	yes	yes	no	no	no	no	no
IL03	no	no	yes	no	no	no	no	yes
IL04	no	yes	yes	no	no	no	no	no
IL05	no	no	yes	no	no	no	no	no
IL06	no	no	yes	no	no	no	no	no
IL07	yes	yes	yes	no	no	no	no	no
IL08	no	no	no	no	no	no	no	no
IL09	no	no	no	no	no	no	no	no
IL10	yes	yes	yes	no	no	no	no	no
IL11	no	no	yes	no	no	no	no	no
IL12	no	no	no	no	no	no	no	no
IL13	no	no	yes	no	no	no	yes	no
IL14	yes	yes	no	no	no	no	no	no
IL15	no	yes	yes	no	no	no	no	no
IL16	no	yes	no	no	no	no	no	no
IL17	no	yes	no	no	no	no	no	no
IL18	no	no	no	no	no	no	no	no
IL19	no	no	yes	no	no	no	no	no
IL20	no	yes	no	no	no	no	no	no
IL21	no	yes	yes	no	no	no	yes	no
IL22	no	no	no	no	no	no	no	no
IL23	no	no	yes	no	no	no	no	yes
IL24	no	yes	no	no	no	no	no	no
IL25	no	no	no	no	no	no	no	no
IL26	no	no	no	no	no	no	no	no
IL27	no	no	yes	no	no	no	no	no
IL28	no	yes	yes	no	no	no	no	no
IL29	no	yes	yes	no	no	no	no	no
IL30	no	yes	no	no	no	no	yes	no
IL31	yes	yes	no	no	no	no	no	no
IL32	yes	yes	no	no	no	no	no	no
IL33	no	no	yes	no	no	no	no	yes
IL34	no	yes	no	no	no	no	no	no
IL35	no	no	yes	no	no	no	no	no
IL36	no	no	no	no	no	no	no	no
IL37	no	no	yes	no	no	no	yes	no
IL38	no	no	yes	no	no	no	no	no
IL39	no	no	yes	no	no	no	no	no
IL40	no	yes	yes	no	yes	yes	no	no
IL41	no	yes	yes	no	no	no	no	no
IL42	no	yes	no	yes	yes	no	no	no
IL43	no	yes	yes	no	no	no	no	no

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0.25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Illinois (continued)							
IL44	26-50	76-100	76-100	no	0	0	1-25
IL45	1-25	51-75	76-100	no	0	0	1-25
IL46	0	26-50	76-100	no	0	0	1-25
IL47	0	0	51-75	no	26-50	1-25	1-25
IL48	0	76-100	76-100	no	0	1-25	1-25
IL49	0	1-25	26-50	no	0	0	26-50
IL50	0	51-75	26-50	no	1-25	26-50	1-25
IL51	0	76-100	51-75	no	0	0	0
IL52	1-25	51-75	26-50	no	0	0	26-50
IL53	0	1-25	76-100	no	0	0	1-25
IL54	0	51-75	51-75	no	0	1-25	1-25
IL55	1-25	51-75	51-75	no	0	0	1-25
IL56	0	1-25	26-50	no	0	0	0
IL57	0	26-50	26-50	no	0	26-50	1-25
IL58	1-25	26-50	26-50	no	0	26-50	26-50
IL59	26-50	76-100	51-75	no	0	0	26-50
IL60	26-50	76-100	76-100	no	1-25	0	0
IL61	76-100	76-100	76-100	no	0	0	0
IL62	1-25	1-25	26-50	no	0	1-25	1-25
IL63	0	0	26-50	no	0	0	26-50
IL64	0	26-50	51-75	no	0	0	0
IL65	26-50	26-50	51-75	no	0	0	26-50
IL66	0	1-25	26-50	no	1-25	0	1-25
IL67	0	26-50	51-75	yes	0	0	1-25
IL68	0	0	26-50	no	0	0	26-50
Indiana							
IN01	76-100	76-100	51-75	no	1-25	0	1-25
IN02	0	1-25	26-50	yes	1-25	1-25	0
IN03	0	51-75	76-100	no	1-25	0	1-25
IN04	76-100	76-100	76-100	yes	0	0	1-25
IN05	51-75	76-100	76-100	yes	0	0	1-25
IN06	26-50	51-75	51-75	yes	1-25	0	1-25
IN07	51-75	26-50	26-50	no	0	0	0
IN08	0	1-25	51-75	yes	1-25	0	1-25
IN09	0	26-50	76-100	no	1-25	0	1-25
IN10	0	76-100	76-100	yes	1-25	0	1-25
IN11	0	26-50	51-75	no	1-25	0	1-25
IN12	0	0	26-50	no	1-25	1-25	1-25
IN13	26-50	76-100	51-75	no	1-25	1-25	0
IN14	26-50	51-75	76-100	no	1-25	0	1-25
IN15	0	26-50	51-75	no	0	1-25	0
IN16	0	51-75	76-100	no	1-25	0	0
IN17	0	1-25	76-100	no	1-25	0	1-25

features for areas surrounding wells--Continued

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Illinois (continued)								
IL44	no	no	yes	yes	yes	no	no	no
IL45	no	no	no	yes	yes	no	no	no
IL46	no	no	yes	no	yes	no	no	no
IL47	no	no	yes	no	no	no	no	no
IL48	no	yes	no	no	yes	no	yes	no
IL49	no	yes	no	no	no	no	no	no
IL50	no	no	no	yes	yes	no	no	no
IL51	no	yes	no	no	no	no	no	yes
IL52	no	yes	yes	no	no	no	no	no
IL53	no	no	no	no	no	no	yes	yes
IL54	no	yes	yes	no	no	no	no	no
IL55	no	no	no	no	no	no	no	no
IL56	no	no	yes	no	no	no	yes	yes
IL57	no	yes	no	yes	yes	no	no	no
IL58	no	yes	no	yes	yes	no	no	no
IL59	no	yes	no	no	no	no	no	no
IL60	no	no	yes	no	no	no	no	no
IL61	no	no	no	no	no	no	no	no
IL62	no	no	no	no	no	no	no	yes
IL63	no	no	yes	no	no	no	no	no
IL64	no	no	no	no	no	no	no	no
IL65	no	no	no	no	no	no	no	no
IL66	no	yes	no	no	no	no	yes	yes
IL67	yes	yes	no	no	no	no	no	yes
IL68	no	yes	no	no	no	no	no	no
Indiana								
IN01	yes	yes	no	no	no	no	yes	no
IN02	no	no	yes	no	no	yes	no	no
IN03	no	yes	no	no	no	no	no	no
IN04	no	no	no	no	no	no	no	no
IN05	no	no	no	no	no	no	no	no
IN06	no	no	no	no	no	no	no	no
IN07	no	no	yes	no	no	no	yes	no
IN08	no	yes	yes	no	no	no	no	no
IN09	no	no	no	no	no	no	no	no
IN10	no	no	no	no	no	no	no	no
IN11	no	no	yes	no	no	no	yes	no
IN12	no	no	yes	no	no	no	yes	no
IN13	no	no	no	no	no	no	no	no
IN14	no	yes	no	no	no	no	no	no
IN15	no	yes	no	no	no	no	no	no
IN16	no	yes	no	no	no	no	yes	yes
IN17	no	yes	no	no	no	no	yes	no

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0.25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Indiana (continued)							
IN18	51-75	51-75	76-100	no	1-25	0	1-25
IN19	0	76-100	51-75	no	0	1-25	1-25
IN20	0	51-75	51-75	no	0	0	1-25
IN21	0	51-75	76-100	no	1-25	0	0
IN22	51-75	76-100	51-75	yes	26-50	0	0
IN23	0	76-100	76-100	yes	0	0	1-25
IN24	51-75	26-50	26-50	yes	1-25	0	26-50
IN25	51-75	76-100	51-75	no	26-50	0	0
IN26	0	76-100	26-50	yes	0	0	1-25
IN27	0	26-50	26-50	yes	26-50	0	1-25
IN28	76-100	76-100	76-100	yes	1-25	0	0
IN29	1-25	51-75	26-50	no	1-25	0	0
IN30	0	26-50	26-50	no	1-25	0	1-25
Iowa							
IA01	0	1-25	1-25	no	0	26-50	26-50
IA02	0	76-100	76-100	no	1-25	0	0
IA03	0	0	1-25	no	0	76-100	1-25
IA04	51-75	51-75	51-75	no	1-25	0	0
IA05	1-25	1-25	26-50	no	26-50	1-25	1-25
IA06	0	51-75	51-75	no	0	0	0
IA07	0	26-50	51-75	no	0	1-25	1-25
IA08	76-100	76-100	76-100	no	0	1-25	0
IA09	26-50	76-100	76-100	no	0	1-25	0
IA10	26-50	26-50	76-100	no	1-25	1-25	1-25
IA11	0	76-100	76-100	no	0	1-25	1-25
IA12	26-50	26-50	26-50	no	0	26-50	0
IA13	76-100	76-100	51-75	no	26-50	1-25	0
IA14	0	26-50	26-50	no	51-75	1-25	0
IA15	1-25	51-75	51-75	no	0	1-25	0
IA16	0	51-75	51-75	no	1-25	1-25	0
IA17	76-100	76-100	76-100	no	0	1-25	0
IA18	26-50	26-50	26-50	no	0	26-50	1-25
IA19	0	0	26-50	no	51-75	1-25	0
IA20	0	51-75	51-75	no	1-25	1-25	1-25
IA21	51-75	51-75	51-75	no	26-50	1-25	1-25
IA22	0	51-75	51-75	no	1-25	1-25	0
IA23	76-100	76-100	51-75	no	1-25	1-25	1-25
IA24	26-50	1-25	76-100	no	0	0	0
IA25	0	1-25	1-25	no	26-50	1-25	1-25
IA26	76-100	51-75	51-75	no	1-25	1-25	0
IA27	51-75	51-75	51-75	no	1-25	1-25	0
IA28	1-25	1-25	51-75	no	51-75	0	0
IA29	0	26-50	26-50	no	1-25	1-25	0

features for areas surrounding wells--Continued

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Indiana (continued)								
IN18	no	no	yes	no	no	no	no	no
IN19	no	no	yes	no	no	yes	no	no
IN20	no	no	no	no	yes	yes	no	no
IN21	no	no	no	no	no	no	yes	no
IN22	no	yes	no	no	no	no	no	no
IN23	no	no	yes	no	no	no	no	no
IN24	no	no	no	no	no	no	yes	no
IN25	no	yes	no	no	no	no	no	no
IN26	no	no	yes	no	no	no	no	no
IN27	no	no	no	no	no	no	no	no
IN28	no	no	no	no	no	no	no	no
IN29	yes	yes	yes	no	no	no	no	no
IN30	no	no	no	no	no	no	yes	no
Iowa								
IA01	no	yes	yes	no	yes	no	no	no
IA02	no	no	no	yes	yes	no	no	no
IA03	yes	yes	yes	yes	yes	no	no	no
IA04	no	no	yes	yes	yes	yes	no	no
IA05	no	yes	no	no	no	yes	yes	yes
IA06	no	yes	no	no	yes	yes	no	no
IA07	no	no	no	no	yes	yes	no	no
IA08	no	yes	yes	yes	yes	yes	no	no
IA09	no	yes	no	no	yes	yes	no	no
IA10	no	no	no	no	no	no	no	no
IA11	yes	yes	yes	no	no	no	no	no
IA12	no	yes	yes	no	no	yes	no	no
IA13	no	no	yes	no	no	yes	yes	no
IA14	no	no	yes	no	no	yes	yes	yes
IA15	no	no	yes	no	no	yes	no	no
IA16	yes	yes	no	no	no	yes	no	no
IA17	no	yes	yes	yes	yes	yes	no	no
IA18	yes	yes	no	no	no	no	no	no
IA19	no	no	no	no	no	no	no	no
IA20	no	no	yes	no	no	yes	no	yes
IA21	no	yes	yes	no	no	yes	yes	yes
IA22	no	no	yes	no	yes	yes	no	yes
IA23	no	yes	no	no	no	no	no	no
IA24	no	yes	no	no	no	yes	no	no
IA25	no	no	yes	no	no	no	no	yes
IA26	no	no	yes	no	no	yes	yes	no
IA27	no	no	yes	no	no	no	yes	no
IA28	no	no	yes	no	no	yes	yes	yes
IA29	no	no	yes	no	no	no	no	yes

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0 .25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Indiana (continued)							
IA30	76-100	76-100	76-100	no	0	1-25	0
IA31	0	0	26-50	no	26-50	0	0
IA32	26-50	76-100	76-100	no	0	1-25	1-25
IA33	26-50	26-50	1-25	no	1-25	0	1-25
IA34	76-100	51-75	1-25	no	1-25	0	0
IA35	51-75	51-75	51-75	no	1-25	1-25	1-25
IA36	26-50	51-75	51-75	no	26-50	0	0
IA37	76-100	51-75	26-50	no	0	26-50	1-25
IA38	0	1-25	26-50	no	26-50	0	0
IA39	0	26-50	26-50	no	1-25	0	0
IA40	0	26-50	26-50	no	1-25	1-25	0
Kansas							
KS01	0	26-50	26-50	yes	1-25	0	1-25
Michigan							
MI01	0	26-50	51-75	yes	1-25	1-25	1-25
MI02	1-25	76-100	76-100	no	1-25	1-25	1-25
MI03	1-25	26-50	51-75	no	1-25	1-25	1-25
MI04	0	26-50	26-50	no	0	0	1-25
MI05	0	76-100	76-100	no	0	1-25	1-25
MI06	0	1-25	26-50	no	0	1-25	1-25
MI07	0	51-75	26-50	no	0	1-25	1-25
MI08	0	26-50	26-50	no	0	1-25	0
MI09	0	51-75	51-75	no	0	1-25	1-25
MI10	0	51-75	51-75	no	0	1-25	0
MI11	0	76-100	26-50	no	1-25	1-25	0
MI12	0	51-75	51-75	no	0	1-25	1-25
MI13	0	26-50	26-50	no	0	1-25	1-25
MI14	0	1-25	1-25	no	1-25	0	1-25
Minnesota							
MN01	0	1-25	26-50	no	1-25	1-25	1-25
MN02	0	51-75	26-50	no	1-25	0	26-50
MN03	0	76-100	51-75	no	0	1-25	1-25
MN04	0	26-50	26-50	no	0	1-25	1-25
MN05	0	1-25	26-50	no	0	1-25	1-25
MN06	0	51-75	51-75	no	0	1-25	1-25
MN07	0	26-50	51-75	yes	1-25	0	0
MN08	0	1-25	26-50	yes	51-75	0	0
MN09	0	1-25	26-50	no	1-25	1-25	1-25
MN10	76-100	51-75	26-50	yes	0	1-25	0
MN11	0	0	26-50	no	0	0	0
MN12	1-25	26-50	26-50	yes	0	1-25	0

features for areas surrounding wells--Continued

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Iowa (continued)								
IA30	no	yes	yes	yes	yes	no	no	no
IA31	no	yes	yes	no	no	yes	yes	yes
IA32	no	yes	yes	no	no	yes	no	no
IA33	no	yes	yes	no	no	no	yes	yes
IA34	no	no	yes	no	no	yes	yes	yes
IA35	yes	yes	no	no	no	yes	no	no
IA36	no	yes	yes	no	no	yes	yes	no
IA37	yes	yes	yes	no	no	yes	no	no
IA38	no	yes	no	no	no	yes	yes	no
IA39	no	yes	yes	no	no	no	yes	no
IA40	no	yes	yes	no	no	no	yes	no
Kansas								
KS01	no	no	yes	no	no	no	no	no
Michigan								
MI01	no	no	no	no	no	no	yes	yes
MI02	no	no	no	no	no	no	no	no
MI03	yes	yes	no	no	no	yes	no	yes
MI04	no	no	yes	no	no	no	no	no
MI05	no	no	yes	no	no	no	no	no
MI06	no	no	no	no	no	no	no	no
MI07	no	no	yes	no	yes	yes	no	no
MI08	yes	yes	no	no	no	no	no	no
MI09	no	no	yes	no	yes	yes	no	no
MI10	no	no	no	no	no	no	no	no
MI11	no	no	yes	yes	yes	yes	no	no
MI12	no	no	no	no	no	no	no	no
MI13	no	yes	yes	no	no	yes	no	no
MI14	no	no	yes	no	no	no	no	no
Minnesota								
MN01	no	yes	no	no	no	yes	no	no
MN02	no	no	no	no	yes	no	no	no
MN03	no	no	no	no	no	no	no	no
MN04	no	no	yes	no	no	yes	no	no
MN05	no	no	no	no	no	yes	no	no
MN06	no	no	no	yes	yes	no	no	no
MN07	no	no	no	no	no	no	no	no
MN08	no	yes	no	no	no	no	no	no
MN09	no	no	yes	no	no	no	no	no
MN10	no	no	yes	no	no	no	no	no
MN11	no	yes	no	no	no	yes	no	no
MN12	no	yes	yes	no	no	no	no	no

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0.25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Minnesota (continued)							
MN13	76-100	51-75	51-75	yes	0	0	1-25
MN14	0	1-25	26-50	yes	0	0	1-25
MN15	1-25	26-50	26-50	yes	0	26-50	1-25
MN16	51-75	51-75	51-75	yes	0	0	0
MN17	0	26-50	26-50	no	0	26-50	1-25
MN18	51-75	26-50	26-50	no	0	26-50	1-25
MN19	51-75	51-75	51-75	yes	0	26-50	0
MN20	76-100	76-100	51-75	no	0	1-25	1-25
MN21	0	26-50	51-75	no	0	26-50	1-25
MN22	0	1-25	26-50	yes	26-50	1-25	1-25
MN23	26-50	51-75	76-100	yes	1-25	0	0
MN24	0	1-25	26-50	yes	0	1-25	1-25
MN25	0	1-25	26-50	no	0	1-25	0
MN26	0	1-25	26-50	no	0	26-50	1-25
MN27	26-50	1-25	26-50	no	1-25	0	0
MN28	0	1-25	26-50	yes	0	1-25	1-25
Missouri							
MO01	0	26-50	26-50	no	0	1-25	1-25
MO02	0	1-25	1-25	no	0	26-50	26-50
MO03	1-25	76-100	76-100	no	0	0	1-25
MO04	0	0	51-75	no	1-25	0	1-25
MO05	76-100	76-100	51-75	no	1-25	1-25	1-25
MO06	0	26-50	76-100	yes	1-25	1-25	0
MO07	26-50	76-100	51-75	no	0	1-25	1-25
MO08	0	76-100	76-100	yes	0	1-25	0
MO09	0	76-100	76-100	no	0	0	1-25
MO10	0	26-50	1-25	no	0	51-75	0
MO11	1-25	26-50	51-75	no	0	0	1-25
MO12	0	0	1-25	no	0	0	51-75
MO13	0	26-50	26-50	no	1-25	0	1-25
MO14	0	0	1-25	no	0	0	51-75
MO15	76-100	51-75	26-50	no	0	0	26-50
MO16	0	0	51-75	no	0	0	0
MO17	0	0	1-25	no	26-50	51-75	1-25
MO18	1-25	1-25	1-25	no	0	51-75	26-50
MO19	26-50	76-100	26-50	no	0	26-50	1-25
MO20	1-25	76-100	51-75	no	1-25	1-25	1-25
MO21	0	1-25	26-50	no	0	26-50	1-25
MO22	0	1-25	26-50	no	0	1-25	1-25
MO23	0	26-50	26-50	no	0	0	1-25
MO24	0	1-25	26-50	no	0	1-25	1-25

features for areas surrounding wells--Continued

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Minnesota (continued)								
MN13	no	yes	yes	no	no	no	no	no
MN14	no	no	no	no	no	yes	no	no
MN15	no	no	no	no	no	no	no	no
MN16	no	no	no	no	yes	no	no	no
MN17	no	no	no	no	no	yes	no	no
MN18	no	yes	yes	no	no	yes	no	no
MN19	no	yes	no	no	no	no	no	no
MN20	no	yes	no	yes	yes	yes	no	no
MN21	no	no	yes	no	yes	no	no	no
MN22	no	yes	no	yes	yes	no	no	no
MN23	no	yes	yes	no	no	no	no	no
MN24	no	yes	yes	no	no	no	no	no
MN25	no	no	yes	no	no	no	no	no
MN26	no	no	no	no	yes	no	no	no
MN27	no	no	yes	no	no	yes	no	no
MN28	no	no	yes	yes	yes	no	no	no
Missouri								
MO01	no	yes	no	no	no	no	no	no
MO02	no	no	yes	no	no	yes	no	no
MO03	no	no	yes	no	no	no	no	no
MO04	no	no	yes	no	no	no	no	no
MO05	no	yes	yes	no	no	yes	yes	no
MO06	no	yes	yes	no	no	no	yes	no
MO07	no	no	yes	no	no	no	no	no
MO08	no	no	yes	no	no	no	no	no
MO09	no	no	yes	no	no	no	no	no
MO10	no	no	yes	no	yes	yes	no	no
MO11	no	yes	no	no	no	yes	no	no
MO12	no	no	no	no	no	no	no	no
MO13	no	no	yes	no	no	yes	no	no
MO14	no	no	yes	no	no	no	yes	no
MO15	no	no	yes	no	no	no	no	no
MO16	no	no	yes	yes	yes	yes	no	no
MO17	yes	yes	yes	no	no	no	no	no
MO18	no	no	yes	no	no	yes	no	no
MO19	no	no	yes	no	no	no	no	no
MO20	no	no	yes	no	no	no	no	no
MO21	no	no	yes	no	yes	no	no	no
MO22	no	no	yes	no	no	no	no	no
MO23	no	yes	yes	no	no	yes	no	no
MO24	no	yes	no	no	no	yes	no	no

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0 .25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Nebraska							
NE01	0	1-25	1-25	yes	0	26-50	0
NE02	26-50	26-50	51-75	no	1-25	0	0
NE03	0	51-75	76-100	yes	0	1-25	0
NE04	0	0	51-75	yes	0	0	0
NE05	0	1-25	1-25	yes	26-50	1-25	0
NE06	0	1-25	1-25	yes	1-25	1-25	0
NE07	0	0	51-75	yes	1-25	0	1-25
NE08	0	51-75	51-75	yes	0	0	1-25
NE09	0	0	1-25	yes	1-25	1-25	0
NE10	0	1-25	26-50	yes	1-25	1-25	1-25
NE11	0	0	26-50	yes	1-25	1-25	0
NE12	0	0	26-50	yes	1-25	1-25	0
NE13	0	26-50	51-75	yes	1-25	1-25	0
NE14	0	0	51-75	yes	1-25	0	1-25
NE15	0	26-50	26-50	yes	0	0	0
NE16	0	0	51-75	yes	1-25	1-25	0
NE17	0	0	26-50	no	0	0	1-25
NE18	76-100	76-100	76-100	no	0	0	0
NE19	0	26-50	26-50	yes	1-25	1-25	0
NE20	0	1-25	26-50	yes	1-25	0	1-25
NE21	0	26-50	76-100	yes	1-25	0	0
NE22	0	51-75	76-100	yes	0	0	0
NE23	0	51-75	51-75	yes	1-25	0	1-25
NE24	0	26-50	26-50	yes	0	26-50	0
NE25	0	1-25	1-25	yes	26-50	1-25	1-25
NE26	0	1-25	26-50	yes	1-25	0	0
NE27	0	26-50	26-50	yes	0	1-25	1-25
NE28	1-25	26-50	51-75	yes	1-25	0	1-25
NE29	26-50	76-100	76-100	yes	0	0	1-25
NE30	0	51-75	76-100	yes	1-25	0	0
NE31	0	1-25	51-75	yes	0	1-25	0
NE32	0	0	1-25	yes	1-25	1-25	0
NE33	76-100	76-100	76-100	yes	0	0	0
NE34	0	1-25	51-75	yes	26-50	0	1-25
NE35	0	0	51-75	yes	1-25	0	0
NE36	51-75	51-75	76-100	no	1-25	0	0
NE37	0	0	51-75	yes	1-25	0	0
NE38	0	1-25	51-75	yes	1-25	0	1-25
NE39	0	0	1-25	yes	1-25	0	0
NE40	0	1-25	51-75	yes	1-25	0	1-25
NE41	1-25	1-25	1-25	yes	1-25	1-25	0
NE42	0	0	51-75	yes	1-25	0	1-25
NE43	1-25	26-50	51-75	yes	1-25	1-25	0

features for areas surrounding wells--Continued

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Nebraska								
NE01	no	yes	yes	no	no	no	no	no
NE02	yes	yes	yes	no	no	no	no	no
NE03	no	no	no	no	no	no	no	no
NE04	no	no	yes	no	no	yes	yes	no
NE05	no	yes	no	no	no	no	no	no
NE06	no	no	yes	no	no	no	no	no
NE07	no	yes	yes	no	no	no	no	no
NE08	no	no	yes	no	yes	no	yes	no
NE09	no	no	yes	no	no	no	no	yes
NE10	yes	yes	yes	no	no	no	no	no
NE11	yes	yes	yes	no	no	no	no	yes
NE12	no	no	yes	no	no	no	no	yes
NE13	no	yes	yes	no	no	no	no	yes
NE14	no	yes	yes	no	no	yes	no	no
NE15	no	no	yes	no	no	no	no	no
NE16	no	no	yes	no	no	yes	yes	yes
NE17	no	yes	no	no	no	no	no	no
NE18	no	no	yes	no	no	no	no	no
NE19	no	yes	yes	no	no	no	no	no
NE20	no	no	yes	no	no	no	no	no
NE21	no	no	yes	no	no	no	no	no
NE22	no	no	no	no	no	no	no	no
NE23	no	no	yes	no	no	no	no	no
NE24	no	yes	yes	no	no	no	no	no
NE25	yes	yes	no	no	no	no	no	no
NE26	no	yes	yes	no	no	yes	yes	no
NE27	no	no	yes	no	no	no	no	no
NE28	no	no	yes	no	no	yes	no	no
NE29	no	yes	no	no	no	no	yes	no
NE30	no	yes	yes	no	no	no	no	yes
NE31	no	no	yes	no	no	no	no	no
NE32	no	yes	no	no	no	no	no	yes
NE33	no	no	yes	no	no	no	no	yes
NE34	no	yes	yes	no	no	no	no	no
NE35	no	no	yes	no	no	no	no	no
NE36	no	yes	no	no	no	no	no	no
NE37	no	no	no	no	no	no	yes	yes
NE38	no	no	yes	no	no	no	no	no
NE39	no	no	no	no	no	yes	no	yes
NE40	no	yes	yes	no	no	no	no	no
NE41	yes	yes	yes	no	no	no	no	no
NE42	no	no	yes	no	no	no	no	no
NE43	no	no	no	no	no	no	yes	no

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0.25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Nebraska (continued)							
NE44	0	1-25	51-75	yes	1-25	0	0
NE45	0	1-25	1-25	yes	1-25	1-25	0
NE46	0	0	26-50	yes	1-25	26-50	0
North Dakota							
ND01	51-75	51-75	26-50	yes	0	1-25	0
Ohio							
OH01	0	26-50	51-75	no	0	0	1-25
OH02	0	76-100	51-75	no	1-25	0	1-25
OH03	0	26-50	51-75	no	0	1-25	0
OH04	0	76-100	76-100	no	1-25	0	1-25
OH05	0	51-75	76-100	no	0	0	1-25
OH06	0	26-50	51-75	no	0	0	1-25
OH07	0	76-100	76-100	no	0	0	1-25
OH08	0	51-75	51-75	no	0	1-25	1-25
OH09	0	51-75	26-50	no	1-25	0	1-25
OH10	1-25	51-75	76-100	no	1-25	0	1-25
OH11	0	26-50	51-75	no	0	0	1-25
OH12	0	26-50	51-75	no	1-25	0	1-25
OH13	0	26-50	26-50	no	0	0	1-25
OH14	0	1-25	26-50	no	1-25	0	1-25
OH15	0	1-25	26-50	no	1-25	0	1-25
OH16	0	1-25	51-75	no	1-25	0	1-25
OH17	0	26-50	26-50	no	0	0	1-25
OH18	0	51-75	51-75	no	0	1-25	1-25
OH19	0	1-25	51-75	no	1-25	0	1-25
OH20	0	26-50	51-75	no	0	1-25	1-25
OH21	0	51-75	51-75	no	0	1-25	1-25
OH22	0	1-25	51-75	no	1-25	1-25	1-25
OH23	0	26-50	51-75	no	1-25	1-25	1-25
OH24	0	26-50	76-100	no	0	1-25	1-25
OH25	0	51-75	76-100	no	0	0	1-25
OH26	0	26-50	51-75	no	0	1-25	1-25
OH27	0	1-25	51-75	no	1-25	0	1-25
OH28	0	26-50	26-50	no	0	26-50	1-25
OH29	0	26-50	51-75	no	1-25	0	1-25
OH30	0	51-75	51-75	no	0	1-25	1-25
South Dakota							
SD01	76-100	76-100	76-100	no	0	0	0
SD02	76-100	76-100	76-100	yes	0	0	0
SD03	76-100	76-100	76-100	yes	0	0	0

features for areas surrounding wells--Continued

Site identifier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Nebraska (continued)								
NE44	no	no	yes	no	no	yes	yes	yes
NE45	no	no	yes	no	no	no	no	no
NE46	no	no	yes	no	no	no	no	yes
North Dakota								
ND01	no	no	no	no	no	no	no	no
Ohio								
OH01	no	yes	yes	no	no	yes	no	no
OH02	no	no	yes	no	no	yes	no	no
OH03	no	yes	yes	no	yes	yes	no	no
OH04	no	yes	yes	no	yes	yes	no	no
OH05	no	yes	yes	no	no	yes	no	no
OH06	no	no	yes	no	no	yes	no	no
OH07	no	yes	no	no	yes	yes	no	no
OH08	no	no	yes	no	yes	yes	no	no
OH09	no	no	yes	no	no	yes	yes	no
OH10	no	no	yes	no	yes	yes	yes	yes
OH11	no	no	yes	no	no	yes	no	no
OH12	no	no	yes	no	yes	yes	no	yes
OH13	no	yes	yes	no	yes	yes	no	no
OH14	yes	yes	yes	no	yes	yes	no	no
OH15	no	no	yes	no	yes	yes	no	yes
OH16	no	no	yes	no	no	yes	no	no
OH17	no	yes	yes	no	yes	yes	no	no
OH18	no	no	no	no	yes	yes	no	no
OH19	no	no	no	no	no	yes	no	no
OH20	no	yes	yes	no	yes	yes	no	no
OH21	no	no	yes	no	yes	yes	no	no
OH22	no	no	yes	no	yes	yes	no	no
OH23	no	no	no	no	yes	yes	no	no
OH24	no	no	no	no	yes	yes	no	no
OH25	no	no	yes	no	yes	yes	no	no
OH26	no	yes	yes	no	yes	yes	no	no
OH27	no	no	no	no	no	yes	no	no
OH28	no	no	no	no	no	yes	no	yes
OH29	no	yes	yes	yes	yes	yes	no	no
OH30	no	no	no	no	yes	yes	no	no
South Dakota								
SD01	no	yes	no	no	no	no	no	no
SD02	no	no	yes	no	no	no	no	no
SD03	no	no	no	no	no	no	no	no

Table 3. Land-use data and local

[<, less than]

Site identifier	Corn and soybeans, in percent			Irrigation within 2 miles	Land use within 2 miles, in percent		
	< 100 feet	<0.25 mile	0.25 to 2 miles		Urban residential	Pasture	Forest
Wisconsin							
WI01	1-25	26-50	76-100	no	0	1-25	0
WI02	1-25	51-75	51-75	yes	0	0	1-25
WI03	1-25	26-50	51-75	yes	0	0	0
WI04	1-25	51-75	51-75	no	0	1-25	0
WI05	1-25	26-50	51-75	yes	26-50	0	0
WI06	1-25	76-100	76-100	no	0	0	0
WI07	1-25	26-50	26-50	yes	0	0	1-25
WI08	1-25	26-50	26-50	no	0	1-25	0
WI09	1-25	26-50	76-100	no	0	1-25	1-25
WI10	1-25	51-75	51-75	yes	0	0	0
WI11	1-25	51-75	51-75	no	0	1-25	0
WI12	1-25	76-100	76-100	no	0	0	1-25
WI13	1-25	76-100	76-100	no	0	0	1-25
WI14	1-25	51-75	76-100	no	0	0	0
WI15	1-25	76-100	76-100	no	0	0	1-25
WI16	1-25	51-75	76-100	yes	0	26-50	0
WI17	26-50	51-75	51-75	no	0	1-25	0
WI18	26-50	51-75	76-100	no	1-25	0	0

features for areas surrounding wells--Continued

Site identi- fier	Stream presence			Feedlot presence			Chemical facility within 2 miles	Golf course within 2 miles
	< 100 feet	< 0.25 mile	0.25 to 2 miles	< 100 feet	< 0.25 mile	0.25 to 2 miles		
Wisconsin								
WI01	no	no	no	yes	yes	no	no	no
WI02	no	no	no	no	no	no	no	no
WI03	no	no	no	no	no	no	no	no
WI04	no	yes	no	no	no	no	no	no
WI05	no	no	yes	no	no	no	no	no
WI06	no	no	yes	no	no	no	no	no
WI07	no	no	yes	no	yes	no	no	no
WI08	no	yes	yes	no	yes	yes	no	no
WI09	no	no	no	no	yes	yes	no	no
WI10	no	no	no	no	yes	yes	no	no
WI11	no	no	yes	no	yes	yes	no	no
WI12	no	no	no	yes	yes	no	no	no
WI13	no	no	no	no	yes	no	no	no
WI14	no	no	no	yes	yes	no	no	no
WI15	no	no	no	no	no	no	no	no
WI16	no	no	yes	no	yes	no	no	no
WI17	no	no	no	no	yes	yes	no	no
WI18	no	no	no	no	yes	yes	no	no

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