07194760 ILLINOIS RIVER NEAR VINEY GROVE, AR

Robert S. Kerr Reservoir Basin
Illinois Subbasin

LOCATION.--Lat 36°03′16″, long 94°19′06″ referenced to North American Datum of 1927, in NW ¼ NW ¼ sec.19, T.16 N., R.31 W., Washington County, AR, Hydrologic Unit 11110103, at bridge on Goose Creek Road, 3.0 mi northeast of Viney Grove.

DRAINAGE AREA.--80.7 mi^2.

SURFACE-WATER RECORDS

REMARKS.--As the number of streams on which streamflow information is likely to be desired far exceeds the number of continuous-record stream-gaging stations feasible to operate at one time, the USGS collects limited streamflow data at partial-record sites other than the continuous-record stream-gaging stations. When discharge measurements are made at sites not included in the continuous-record or partial-record program, these measurements, generally made in times of drought or flood to give better areal coverage to those events, and others collected for some special reason are called measurements at miscellaneous sites. Discharge measurements in the following table were made at this special study or miscellaneous site during the 2007 water year.

DISCHARGE MEASUREMENTS
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Date	Discharge, in ft^3/s	Gage height, in ft
Jan 17, 2007	199	19.45
Mar 7, 2007	38.3	20.56
Apr 10, 2007	14.4	4.08
July 19, 2007	19.8	20.85

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Aug 2005 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 1 of 4

[Remark codes: <, less than; E, estimated.]

Date	Time	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Sampling method, code (82398)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)
Oct													
04...	1000	80020	--	10	30	4.7	746	6.1	68	7.6	347	19.7	150
Jan													
17...	1145	80020	199	20	10	8.3	761	11.8	89	7.4	207	3.7	99
Mar													
07...	1405	--	38	8	10	<2.0	749	15.6	148	8.5	269	12.3	100
Apr													
10...	1045	--	14	5	10	<2.0	739	8.6	80	7.9	336	10.5	150
Jul													
19...	0700	--	20	15	10	9.9	745	5.2	64	8.1	315	24.2	140

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007

Part 2 of 4

[Remark codes: <, less than; E, estimated.]

Date	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium fraction of cations percent (00932)	Sodium, water, fltrd, mg/L (00930)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue fixed non-filterable, mg/L (00540)	Residue total non-filterable, mg/L (00530)	Residue volatile, suspended, mg/L (00535)
Oct													
04...	53.7	2.90	3.25	.2	8	5.79	8.62	<.10	15.4	214	5	6	1
Jan													
17...	35.3	2.55	2.39	.2	8	4.22	6.10	E.08	13.9	139	5	8	3
Mar													
07...	37.3	2.37	1.75	.2	10	5.14	7.95	E.06	16.7	167	3	5	1.5
Apr													
10...	56.0	3.00	2.44	.3	10	7.67	9.40	E.06	14.3	185	2	4	1.0
Jul													
19...	50.7	3.18	3.17	.2	9	6.34	7.50	E.09	12.6	179	10	13	3.7

07194760 ILLINOIS RIVER NEAR VINEY GROVE, AR—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
Part 3 of 4
[Remark codes: <, less than; E, estimated.]

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, unfltrd mg/L (00605)	Total nitro-gen, water, unfltrd mg/L (00600)	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)
Oct													
04...	.24	--	E.017	17.0	3.84	3.85	.019	.006	--	4.1	.107	.035	E.03
Jan													
17...	.21	--	E.010	15.1	3.42	3.42	.010	.003	--	3.6	.111	.036	E.02
Mar													
07...	.22	--	<.020	11.0	2.49	2.49	.026	.008	--	2.7	--	E.004	<.04
Apr													
10...	.20	--	<.020	12.1	2.73	2.74	.025	.008	--	2.9	.030	.010	<.04
Jul													
19...	.29	.03	.023	8.91	2.01	2.02	.025	.008	.26	2.3	.110	.036	.04

WATER-QUALITY DATA
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
Part 4 of 4
[Remark codes: <, less than; E, estimated.]

Date	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Biomass phyto-plank--ton, ashfree drymass mg/L (49953)	Biomass plank-ton, ash wgt mg/L (81353)	Biomass plank-ton, dry wgt mg/L (81354)	Chloro-phyll a phyto-plank-ton, fluoro, µg/L (70953)	Pheo-phytin a, phyto-plank-ton, µg/L (62360)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)	Sampler type, code (84164)
Oct												
04...	.06	180	86	3.1	146	150	.7	1.3	87	5	--	3070
Jan												
17...	.07	210	830	<4.3	194	198	.4	.4	84	14	7.5	3051
Mar												
07...	<.04	E8	E14	<3.0	136	139	3.1	2.2	80	4	.41	8010
Apr												
10...	E.03	E7	E290	<4.3	191	195	2.0	1.8	73	5	.19	3070
Jul												
19...	.07	E620	E310	<5.0	231	236	1.0	2.3	96	16	.86	3070