

07288650 BOGUE PHALIA NEAR LELAND, MS

Yazoo Basin
Big Sunflower Subbasin

LOCATION.--Lat 33°23'48", long 90°50'52" referenced to North American Datum of 1983, in SW ¼ NW ¼ sec.20, T.18 N., R.6 W., Washington County, MS, Hydrologic Unit 08030207, Choctaw Meridian, County Code 151, at county road bridge 2.7 mi east of Leland and 1.5 mi downstream of U.S. Highway 82.

DRAINAGE AREA.--484 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1, 1995 to current year. Nov. 13, 1945, to September 29, 1992, stage data available; November 1945 to date, measured discharge available; November 14, 1945, to December 31, 1946, daily discharge available in U.S. Army Corps of Engineer's records.

PERIOD OF DAILY RECORD WATER QUALITY.--

SPECIFIC CONDUCTANCE: August 1996 to January 1998, August 2006 to September 2008.

WATER TEMPERATURE: July 1996 to January 1998, August 2006 to September 2008.

REVISED RECORDS.--WDR MS-99-1: 1998.

GAGE.--Water-stage recorder. Datum of gage is 86.21 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height 28.80 ft, Feb. 22, 1991, by U.S. Army Corps of Engineers.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,100 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 15	0200	*8,050	*26.22
Jan 31	1500	5,110	22.03
Apr 12	2300	6,210	23.71

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4,160	3.7	4.7	2,330	4,350	876	2,660	163	59	207	126	105
2	4,320	3.7	4.4	3,610	2,790	479	2,090	168	275	209	163	116
3	2,960	3.6	4.2	2,420	1,360	290	1,190	1,530	391	201	170	418
4	1,580	3.4	12	1,110	667	185	1,660	3,590	173	181	192	754
5	608	3.1	93	502	411	125	1,850	2,580	266	160	198	672
6	242	3.1	27	279	281	97	1,140	1,200	627	159	224	397
7	116	3.2	11	168	205	85	602	549	439	177	485	234
8	70	3.5	6.8	108	155	73	350	301	154	188	574	145
9	47	3.7	6.6	104	130	62	215	183	70	194	404	96
10	31	3.7	220	4,750	454	55	142	157	42	195	258	69
11	21	3.7	358	7,560	1,100	235	1,890	1,600	36	203	184	61
12	17	4.6	142	7,620	1,360	345	5,800	1,470	45	223	145	50
13	13	4.0	52	7,320	2,040	227	5,920	636	50	225	157	53
14	14	5.3	25	7,910	1,240	156	4,720	283	61	235	342	38
15	59	28	16	8,020	612	112	2,960	141	82	234	484	24
16	70	34	674	7,630	343	86	1,450	84	97	221	464	18
17	44	28	2,550	6,560	213	67	706	689	104	228	365	18
18	124	20	1,590	5,140	155	54	534	3,190	127	263	267	19
19	87	14	615	3,720	516	45	2,440	3,300	154	408	201	19
20	120	11	248	2,680	477	38	2,420	2,160	155	605	154	14
21	102	8.2	123	2,050	419	35	1,490	1,160	148	501	149	80
22	70	6.5	70	1,610	483	122	747	1,990	150	327	175	464
23	44	5.3	41	1,280	508	1,420	399	3,140	155	221	162	645
24	28	4.2	27	994	315	4,580	363	2,040	170	193	144	562
25	19	3.8	146	723	216	4,280	250	973	199	215	142	660
26	12	4.0	1,810	491	1,520	2,410	132	494	237	160	152	554
27	8.2	7.8	1,740	313	2,320	925	90	274	233	138	147	357
28	6.4	7.4	931	183	1,650	400	305	160	214	137	127	215
29	5.2	5.8	1,440	137	---	224	573	106	212	137	111	128
30	4.4	5.2	1,310	2,470	---	143	269	83	216	119	91	387
31	4.0	---	707	4,950	---	524	---	68	---	109	91	---
Total	15,006.2	245.5	15,004.7	94,742	26,290	18,755	45,357	34,462	5,341	6,973	7,048	7,372
Mean	484	8.18	484	3,056	939	605	1,512	1,112	178	225	227	246
Max	4,320	34	2,550	8,020	4,350	4,580	5,920	3,590	627	605	574	754
Min	4.0	3.1	4.2	104	130	35	90	68	36	109	91	14
Med	47	4.4	123	2,330	495	156	941	636	154	203	170	122
Cfsm	1.00	0.02	1.00	6.31	1.94	1.25	3.12	2.30	0.37	0.46	0.47	0.51
In.	1.15	0.02	1.15	7.28	2.02	1.44	3.49	2.65	0.41	0.54	0.54	0.57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	496	435	1,185	1,248	959	740	735	737	436	432	339	372
Max	3,456	1,872	4,928	3,144	2,527	2,135	2,201	3,033	1,360	1,201	982	1,857
(WY)	(2010)	(2005)	(2002)	(1999)	(2001)	(1997)	(2000)	(2009)	(1997)	(2007)	(2008)	(2008)
Min	6.73	6.84	57.9	22.2	66.9	36.2	65.4	38.9	71.9	86.9	65.5	32.6
(WY)	(1996)	(1996)	(2011)	(2011)	(2011)	(2007)	(2007)	(1996)	(2008)	(2006)	(2007)	(2010)

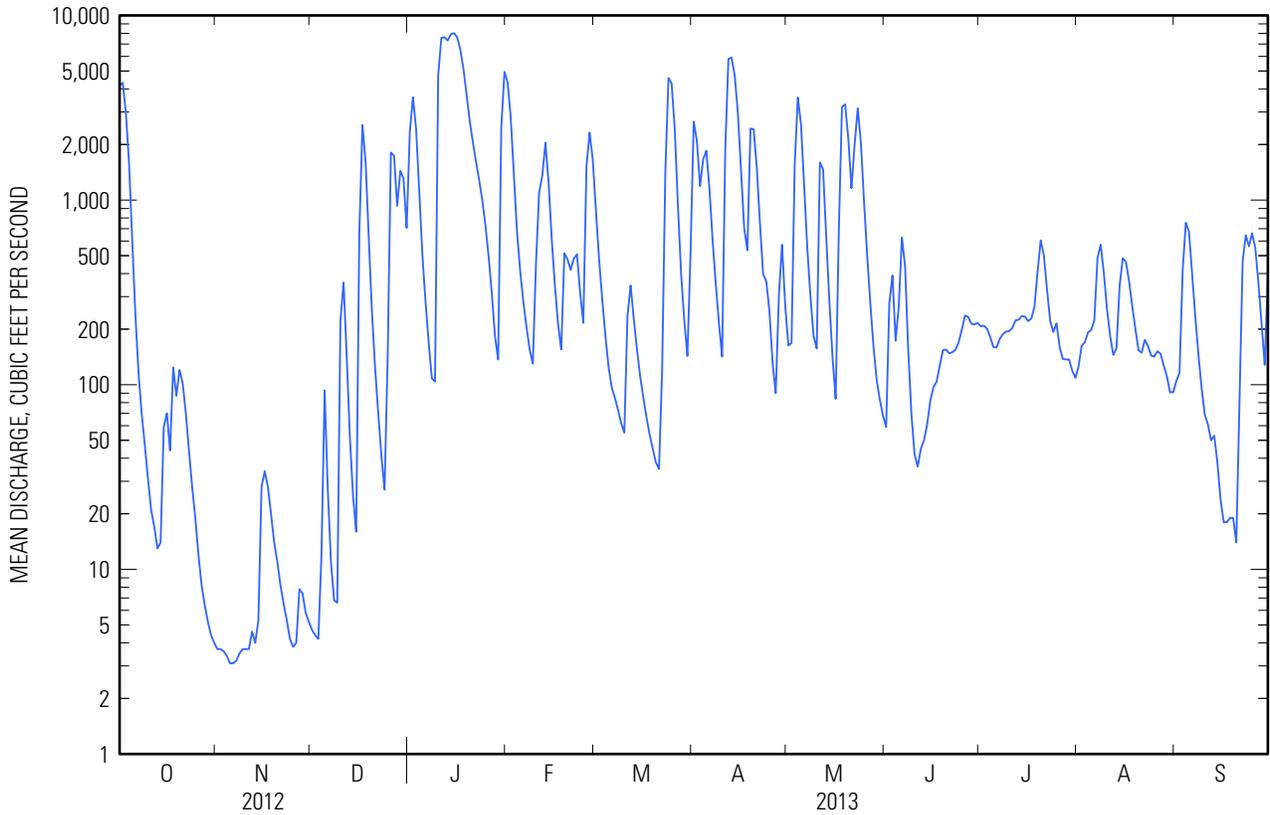
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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1996 - 2013	
Annual total	128,109.2		276,596.4			
Annual mean	350		758		676	
Highest annual mean					1,287	2002
Lowest annual mean					194	2011
Highest daily mean	5,510	Jun 14	8,020	Jan 15	9,670	Apr 4, 2000
Lowest daily mean	2.8	Sep 29	3.1	Nov 5 ^a	1.5	Oct 22, 2011
Annual seven-day minimum	3.4	Nov 2	3.4	Nov 2	1.5	Oct 21, 2011
Maximum peak flow			8,050	Jan 15	9,750	Apr 3, 2000
Maximum peak stage			26.22	Jan 15	27.91	Dec 2, 2001
Instantaneous low flow			2.9	Nov 6 ^b	1.4	Oct 30, 2011
Annual runoff (cfsm)	0.723		1.57		1.40	
Annual runoff (inches)	9.85		21.26		18.98	
10 percent exceeds	883		2,360		2,060	
50 percent exceeds	84		201		139	
90 percent exceeds	6.6		12		15	

^a Also Nov. 6.

^b Also Nov. 7.

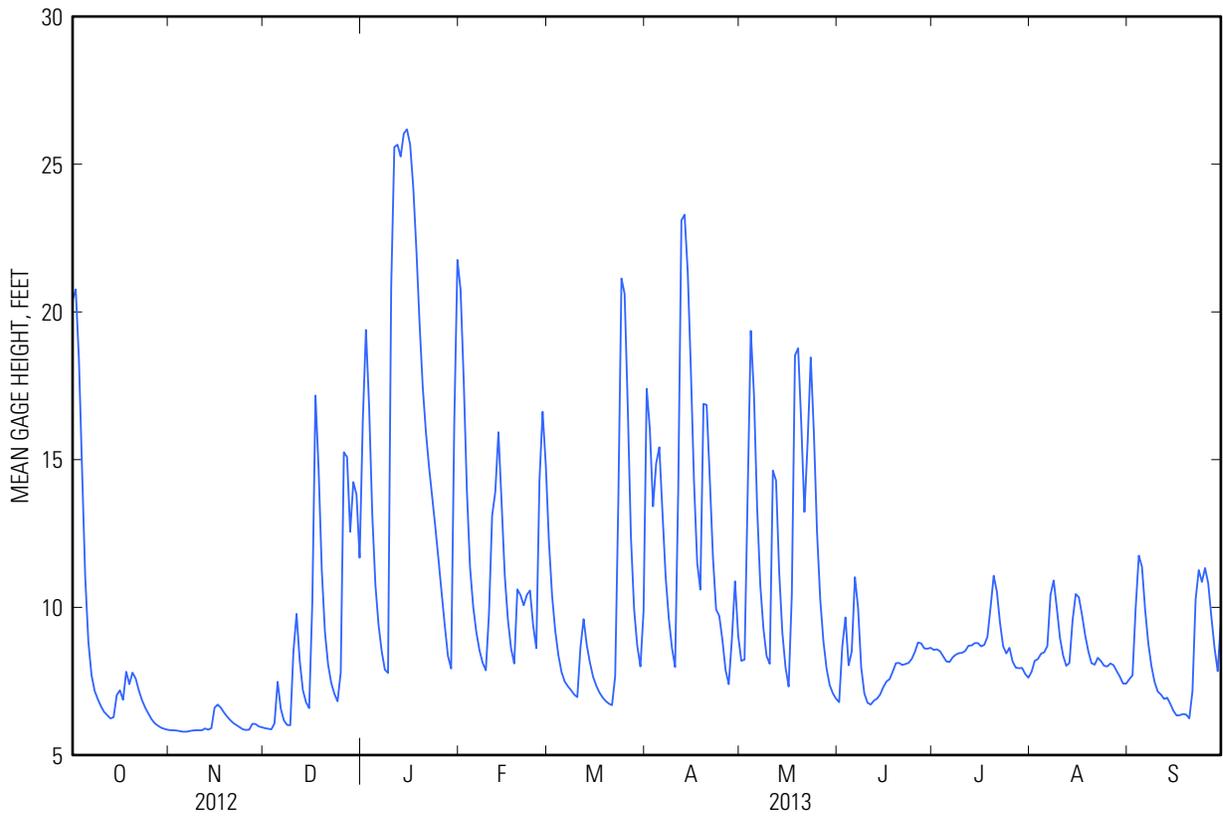


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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	20.40	5.84	5.91	16.32	20.74	12.23	17.40	8.19	6.79	8.56	7.82	7.57
2	20.76	5.84	5.89	19.39	17.65	10.40	16.02	8.23	8.68	8.58	8.19	7.70
3	18.42	5.83	5.87	16.81	13.94	9.21	13.42	13.85	9.66	8.51	8.25	9.99
4	14.69	5.81	6.07	13.15	11.34	8.38	14.88	19.36	8.04	8.34	8.43	11.75
5	11.03	5.79	7.48	10.75	10.02	7.81	15.42	17.20	8.51	8.17	8.48	11.37
6	8.84	5.79	6.57	9.40	9.15	7.49	13.20	13.38	11.02	8.15	8.69	9.92
7	7.71	5.81	6.17	8.51	8.54	7.33	11.04	10.76	9.99	8.31	10.42	8.78
8	7.17	5.83	6.02	7.89	8.12	7.20	9.63	9.28	7.96	8.40	10.91	8.01
9	6.89	5.84	6.01	7.78	7.87	7.05	8.63	8.35	7.08	8.45	9.98	7.47
10	6.65	5.84	8.49	20.84	9.79	6.96	7.98	8.09	6.77	8.46	8.97	7.15
11	6.46	5.84	9.78	25.58	13.11	8.65	14.02	14.63	6.71	8.53	8.37	7.05
12	6.35	5.90	8.20	25.66	13.91	9.60	23.10	14.29	6.84	8.70	8.02	6.90
13	6.24	5.86	7.20	25.26	15.93	8.72	23.29	11.17	6.91	8.71	8.12	6.94
14	6.28	5.91	6.79	26.04	13.54	8.13	21.37	9.14	7.05	8.79	9.56	6.73
15	7.03	6.60	6.59	26.18	11.08	7.65	18.02	7.97	7.30	8.79	10.45	6.49
16	7.19	6.71	10.20	25.67	9.58	7.35	14.22	7.32	7.49	8.68	10.34	6.34
17	6.87	6.60	17.17	24.21	8.61	7.12	11.51	10.43	7.57	8.73	9.74	6.35
18	7.82	6.44	14.64	22.07	8.10	6.95	10.60	18.53	7.83	9.00	9.05	6.39
19	7.40	6.30	11.25	19.60	10.61	6.83	16.89	18.77	8.11	10.0	8.51	6.37
20	7.79	6.18	9.16	17.46	10.41	6.74	16.85	16.20	8.12	11.07	8.11	6.24
21	7.59	6.08	8.06	15.94	10.07	6.69	14.34	13.23	8.05	10.53	8.06	7.16
22	7.19	6.01	7.44	14.75	10.42	7.66	11.69	15.57	8.08	9.47	8.29	10.27
23	6.86	5.94	7.07	13.73	10.57	13.60	9.93	18.46	8.12	8.68	8.18	11.26
24	6.61	5.87	6.82	12.71	9.39	21.13	9.71	15.89	8.25	8.44	8.02	10.86
25	6.41	5.85	7.79	11.61	8.62	20.61	8.89	12.52	8.49	8.63	8.00	11.33
26	6.22	5.86	15.25	10.48	14.29	16.75	7.88	10.28	8.81	8.16	8.10	10.81
27	6.08	6.06	15.09	9.37	16.62	12.38	7.40	8.87	8.78	7.96	8.04	9.67
28	6.00	6.05	12.56	8.35	14.84	9.94	8.92	7.94	8.61	7.94	7.84	8.63
29	5.93	5.97	14.24	7.93	---	8.70	10.88	7.37	8.60	7.95	7.65	7.84
30	5.89	5.94	13.82	16.28	---	8.00	9.04	7.09	8.63	7.74	7.42	9.53
31	5.86	---	11.68	21.76	---	9.87	---	6.91	---	7.62	7.42	---
Mean	8.47	6.01	9.20	16.50	11.67	9.58	13.21	11.91	8.10	8.65	8.63	8.43
Max	20.76	6.71	17.17	26.18	20.74	21.13	23.29	19.36	11.02	11.07	10.91	11.75
Min	5.86	5.79	5.87	7.78	7.87	6.69	7.40	6.91	6.71	7.62	7.42	6.24

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1995 to December 2010; March 2012 to December 2012.

PERIOD OF DAILY RECORD.--

TURBIDITY: October 2009 to December 2010; March 2012 to December 2012.

INSTRUMENTATION.--Specific conductance and water temperature data logger from July 1996 to January 1998, and August 2006 to September 2008.

Turbidity data logger October 2009, December 2010, March 2012 to December 2012, August 2013 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

TURBIDITY: Maximum, 1,110 FNU, April 4, 2012, but may have been higher during periods of instrument malfunction; minimum 1.7 FNU, October 7-9, 2010, but may have been lower during periods of instrument malfunction.

EXTREMES FOR CURRENT YEAR.--

TURBIDITY: Maximum, 1,080 FNU, Dec. 5, but may have been higher during periods of instrument malfunction; minimum 11 FNU, Nov. 3, but may have been lower during periods of instrument malfunction.

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 6

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per cm		Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25°C (00095)
				Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per cm (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per cm (61726)				
10-03-2012	1200	764	22.2	--	--	2,950	--	--	205
10-11-2012	1130	767	22.0	.269	.207	21	7.2	6.6	267
10-24-2012	1100	764	23.9	.243	.184	29	6.8	6.4	286
11-14-2012	1000	767	12.2	.194	.143	3.6	12.7	7.9	322
12-03-2012	0930	767	18.9	.192	.141	4.0	11.6	6.9	340
01-11-2013	1400	761	17.2	.160	.114	7,640	8.2	7.1	88
02-13-2013	1100	764	7.5	.146	.111	2,130	10.2	7.4	93
03-05-2013	1030	762	7.9	.182	.137	127	10.7	7.5	103
03-18-2013	1000	756	20.6	.235	.180	54	7.2	7.1	175
04-03-2013	0900	766	6.7	.267	.211	1,150	8.1	6.6	106
04-18-2013	0900	758	22.8	.262	.204	417	7.0	6.9	84
05-02-2013	1130	765	20.0	.191	.154	158	5.7	6.5	100
05-15-2013	1030	766	23.6	.145	.110	142	5.5	6.8	99
05-20-2013	1230	761	28.8	.179	.140	2,130	7.0	7.1	86
06-05-2013	1530	759	22.8	.174	.134	197	4.6	6.6	117
06-12-2013	1200	764	32.8	.201	.153	44	4.2	6.6	168
06-24-2013	1215	765	31.7	.139	.102	172	9.4	8.1	538
07-01-2013	1300	760	27.7	.126	.091	205	7.4	8.1	654
07-16-2013	1330	767	30.8	.122	.087	220	7.0	7.8	642
07-25-2013	1330	764	29.4	.127	.095	214	6.4	8.1	570
08-07-2013	1230	760	35.0	.137	.102	508	5.4	7.5	638
08-20-2013	1330	763	32.0	.145	.109	153	7.8	7.6	540
08-20-2013	1815	762	31.7	--	--	145	9.1	8.2	529
08-27-2013	1330	765	30.0	.137	.102	146	7.8	7.8	594
09-04-2013	1300	765	32.0	.192	.150	668	5.1	7.2	553
09-25-2013	1200	758	27.2	.481	.395	679	--	6.5	284

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 2 of 6

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Gage height, ft (00065)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)
10-03-2012	1200	18.6	34	18.50	--	--	--	--	--
10-11-2012	1130	19.4	42	6.36	170	29.6	9.28	7.89	9.08
10-24-2012	1100	20.9	44	6.62	186	31.7	10.4	8.15	9.80
11-14-2012	1000	12.9	E 20	5.83	206	37.5	12.1	7.25	11.1
12-03-2012	0930	14.0	27	5.87	206	38.0	12.6	7.22	12.7
01-11-2013	1400	14.5	640	25.69	80	8.21	2.55	2.17	3.34
02-13-2013	1100	10.0	1,240	16.16	55	8.79	2.69	1.90	3.52
03-05-2013	1030	11.6	530	7.83	67	11.5	3.34	2.73	2.91
03-18-2013	1000	18.3	210	6.96	110	19.3	5.39	3.62	7.13
04-03-2013	0900	15.1	570	13.27	80	10.7	3.03	2.81	3.83
04-18-2013	0900	21.5	180	10.07	63	9.31	2.51	3.13	2.02
05-02-2013	1130	20.9	380	8.16	74	10.8	2.93	3.10	3.06
05-15-2013	1030	22.0	670	8.00	80	10.1	2.91	2.71	3.01
05-20-2013	1230	25.6	300	16.15	58	8.28	2.42	3.05	2.60
06-05-2013	1530	26.3	470	7.95	70	12.4	3.61	2.97	3.30
06-12-2013	1200	30.0	180	6.83	104	18.0	5.37	3.50	4.55
06-24-2013	1215	30.6	43	8.27	341	65.8	19.9	4.05	20.9
07-01-2013	1300	28.8	47	8.54	425	76.2	25.9	4.80	28.8
07-16-2013	1330	30.1	33	8.67	410	73.5	27.4	3.91	30.3
07-25-2013	1330	28.4	36	8.62	364	70.1	22.9	3.45	22.0
08-07-2013	1230	30.3	160	10.56	394	74.5	26.4	3.85	23.1
08-20-2013	1330	28.7	31	8.10	340	64.2	21.6	4.56	17.4
08-20-2013	1815	28.8	--	8.02	--	--	--	--	--
08-27-2013	1330	30.0	28	8.04	379	72.6	24.5	4.21	19.9
09-04-2013	1300	28.4	33	11.91	330	61.6	21.3	4.82	17.7
09-25-2013	1200	24.6	E 18	11.42	178	31.3	10.1	9.67	8.44

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WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 6

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)
10-03-2012	1200	--	--	--	--	--	--	--	--
10-11-2012	1130	98	119	1.16	7.67	.14	< .03	10.7	21.6
10-24-2012	1100	101	122	1.22	10.3	.14	< .03	8.32	26.8
11-14-2012	1000	118	142	1.12	10.7	.16	< .03	6.57	31.2
12-03-2012	0930	131	159	2.01	13.6	.16	< .03	5.19	32.7
01-11-2013	1400	29	35	9.81	2.09	.12	< .03	5.53	6.55
02-13-2013	1100	33	40	12.7	1.79	.15	.26	5.06	5.54
03-05-2013	1030	38	47	7.64	1.59	.10	.12	5.85	4.82
03-18-2013	1000	64	78	6.51	4.19	E .09	< .03	6.52	12.3
04-03-2013	0900	33	40	9.99	2.30	.14	.08	6.63	6.39
04-18-2013	0900	32	39	3.42	1.21	E .10	< .03	6.12	2.72
05-02-2013	1130	38	46	5.30	1.43	.14	< .03	6.09	3.72
05-15-2013	1030	31	38	6.95	1.03	.18	< .03	6.02	5.71
05-20-2013	1230	22	27	3.93	1.32	.12	.07	6.33	4.59
06-05-2013	1530	40	49	5.85	1.53	.20	< .03	7.74	7.42
06-12-2013	1200	59	72	3.36	2.09	--	< .03	8.57	11.2
06-24-2013	1215	213	256	2.67	9.17	.23	< .03	13.3	76.7
07-01-2013	1300	236	276	3.00	12.5	.24	< .03	15.7	107
07-16-2013	1330	219	261	1.64	12.1	.24	< .03	11.6	96.5
07-25-2013	1330	215	255	1.17	9.16	.25	< .03	15.7	71.7
08-07-2013	1230	256	313	2.38	10.3	.24	< .03	15.4	77.8
08-20-2013	1330	236	280	1.96	9.93	.25	< .03	15.7	57.1
08-20-2013	1815	--	--	--	--	--	--	--	--
08-27-2013	1330	227	268	1.29	10.5	.24	< .03	16.1	73.0
09-04-2013	1300	180	215	1.45	9.62	.23	< .03	14.3	58.3
09-25-2013	1200	102	123	1.51	7.54	.20	< .03	11.0	21.6

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 6

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Nitrite, water, filtered, mg/L as N (00613)	Orthophosphate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)	Phosphorus, water, filtered, mg/L as P (00666)
10-03-2012	1200	--	--	--	--	--	--	--	--
10-11-2012	1130	.79	1.1	.155	.432	.027	.080	.200	.08
10-24-2012	1100	.78	1.1	.091	.410	.028	.056	.198	.05
11-14-2012	1000	.64	.94	.106	.207	.021	.040	.152	.05
12-03-2012	0930	.71	.82	.061	.087	.009	.032	.374	.05
01-11-2013	1400	.42	1.6	.016	.594	.009	.098	1.91	.12
02-13-2013	1100	.40	2.2	.063	.700	.008	.063	1.95	.07
03-05-2013	1030	.73	1.7	.121	.499	.009	.079	1.42	.09
03-18-2013	1000	.69	1.4	.117	.929	.028	.082	1.15	.09
04-03-2013	0900	.66	1.8	.124	1.48	.037	.086	1.41	.10
04-18-2013	0900	.49	1.1	.093	.573	.018	.157	.737	.17
05-02-2013	1130	1.2	2.1	.237	1.12	.093	.082	.924	.09
05-15-2013	1030	1.2	2.4	.289	1.93	.169	.074	.907	.08
05-20-2013	1230	1.1	2.0	.353	2.05	.148	.122	.649	.12
06-05-2013	1530	.76	1.6	.133	1.83	.137	.091	.785	.09
06-12-2013	1200	.56	1.2	.090	1.74	.111	.060	.404	.06
06-24-2013	1215	.69	1.4	.012	.985	.055	.039	.556	.04
07-01-2013	1300	.63	1.1	.036	.942	.098	.060	.495	.06
07-16-2013	1330	.45	.79	.042	.301	.033	.057	.295	.06
07-25-2013	1330	.40	.75	.067	.726	.049	.087	.213	.09
08-07-2013	1230	.51	1.3	.077	.205	.014	.106	.425	.11
08-20-2013	1330	.41	.68	.013	.170	.011	.099	.313	.10
08-20-2013	1815	--	--	--	--	--	--	--	--
08-27-2013	1330	.43	.62	.033	.057	.005	.103	.200	.10
09-04-2013	1300	.59	.96	.097	.097	.015	.150	.173	.15
09-25-2013	1200	1.0	1.5	.105	.115	.010	.284	.228	.30

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 6

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Phosphorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, analytically determined, mg/L (62854)	Iron, water, filtered, µg/L (01046)	Lithium, water, filtered, µg/L (01130)	Strontium, water, filtered, µg/L (01080)	Vanadium, water, filtered, µg/L (01085)	Arsenic, water, filtered, µg/L (01000)	Boron, water, filtered, µg/L (01020)
10-03-2012	1200	--	--	--	--	--	--	--	--
10-11-2012	1130	.18	--	101	2.61	112	2.0	2.3	48
10-24-2012	1100	.16	--	27.9	2.04	112	1.8	1.9	37
11-14-2012	1000	.10	--	11.5	2.46	138	1.1	1.8	44
12-03-2012	0930	.11	--	28.4	3.33	141	.95	1.6	43
01-11-2013	1400	.62	--	75.9	.98	34.2	1.2	1.1	17
02-13-2013	1100	.82	--	197	1.08	35.9	.95	1.1	16
03-05-2013	1030	.62	--	187	1.54	46.3	1.3	1.4	18
03-18-2013	1000	.37	--	185	2.07	75.0	1.8	1.7	28
04-03-2013	0900	.61	--	148	1.85	45.5	1.4	1.4	24
04-18-2013	0900	.41	--	201	1.93	42.1	1.7	2.5	20
05-02-2013	1130	.50	--	124	1.52	46.4	1.7	1.9	21
05-15-2013	1030	.66	3.22	67.4	1.40	40.0	1.5	1.5	19
05-20-2013	1230	.47	3.16	86.2	1.68	33.7	1.8	1.9	21
06-05-2013	1530	.52	2.56	20.5	1.89	48.6	1.7	1.7	26
06-12-2013	1200	.31	2.18	184	2.09	68.4	2.3	1.8	38
06-24-2013	1215	.16	1.69	12.8	4.98	233	3.7	3.0	44
07-01-2013	1300	.15	1.50	5.1	5.87	288	3.8	3.6	48
07-16-2013	1330	.12	.78	< 4.0	5.87	293	3.1	3.3	54
07-25-2013	1330	.15	1.12	13.6	5.00	245	3.0	3.3	46
08-07-2013	1230	.41	.68	5.7	5.35	286	4.2	4.7	47
08-20-2013	1330	.17	.55	6.1	4.40	238	3.3	4.1	45
08-20-2013	1815	--	--	--	--	--	--	--	--
08-27-2013	1330	.17	.45	5.5	4.92	262	3.9	5.0	46
09-04-2013	1300	.24	.59	12.5	4.41	228	3.7	5.2	43
09-25-2013	1200	.37	1.20	167	2.64	109	2.1	5.4	42

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 6 of 6

[CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; --, no data; <, less than; E, estimated]

Date	Sample start time	Selenium, water, filtered, µg/L (01145)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concentration, mg/L (80154)
10-03-2012	1200	--	--	--	--	71
10-11-2012	1130	.51	1.14	9.69	100	46
10-24-2012	1100	.47	1.22	9.28	100	50
11-14-2012	1000	.36	1.12	7.38	100	22
12-03-2012	0930	.30	2.01	7.55	100	29
01-11-2013	1400	.29	9.81	4.40	99	535
02-13-2013	1100	.33	12.4	4.31	100	863
03-05-2013	1030	.26	7.53	4.98	100	385
03-18-2013	1000	.39	6.51	6.26	100	191
04-03-2013	0900	.39	9.91	5.99	100	476
04-18-2013	0900	.29	3.39	5.24	100	141
05-02-2013	1130	.40	5.30	5.06	100	338
05-15-2013	1030	.40	6.95	4.68	100	481
05-20-2013	1230	.48	3.86	4.70	100	270
06-05-2013	1530	.49	5.85	4.43	100	356
06-12-2013	1200	.44	3.33	4.25	100	205
06-24-2013	1215	.45	2.67	4.55	100	79
07-01-2013	1300	.53	3.00	5.05	98	83
07-16-2013	1330	.46	1.64	4.76	100	50
07-25-2013	1330	.45	1.17	4.03	100	46
08-07-2013	1230	.41	2.38	4.50	100	52
08-20-2013	1330	.39	1.96	4.64	100	42
08-20-2013	1815	--	--	--	--	--
08-27-2013	1330	.37	1.29	4.58	100	42
09-04-2013	1300	.45	1.45	6.10	100	47
09-25-2013	1200	.68	1.51	13.9	100	19

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

[>, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	210	100	150	22	14	18	38	26	32	---	---	---
2	100	70	85	22	14	18	39	14	25	---	---	---
3	71	38	53	23	11	17	30	16	21	---	---	---
4	38	27	32	29	12	20	1,030	17	56	---	---	---
5	32	24	27	27	14	18	>1,080	250	---	---	---	---
6	31	23	27	26	14	18	260	95	150	---	---	---
7	28	20	24	34	16	22	110	59	89	---	---	---
8	26	13	20	28	17	23	85	54	70	---	---	---
9	28	13	21	41	26	35	120	64	95	---	---	---
10	31	13	23	61	30	38	990	100	420	---	---	---
11	37	22	28	61	31	38	370	120	220	---	---	---
12	36	20	26	39	23	31	---	---	---	---	---	---
13	38	24	29	32	20	25	---	---	---	---	---	---
14	83	29	43	31	19	25	---	---	---	---	---	---
15	52	31	39	40	24	31	---	---	---	---	---	---
16	64	39	49	51	21	37	---	---	---	---	---	---
17	56	38	46	34	22	27	---	---	---	---	---	---
18	240	39	120	32	15	24	---	---	---	---	---	---
19	98	21	52	67	22	39	---	---	---	---	---	---
20	23	12	17	68	20	35	---	---	---	---	---	---
21	24	14	18	63	27	45	---	---	---	---	---	---
22	26	13	19	60	30	45	---	---	---	---	---	---
23	40	20	28	91	29	56	---	---	---	---	---	---
24	41	19	28	90	43	67	---	---	---	---	---	---
25	34	19	27	86	37	59	---	---	---	---	---	---
26	41	21	32	82	28	47	---	---	---	---	---	---
27	40	30	36	66	36	51	---	---	---	---	---	---
28	36	20	31	57	22	40	---	---	---	---	---	---
29	32	17	24	53	23	36	---	---	---	---	---	---
30	80	15	28	48	24	32	---	---	---	---	---	---
31	28	12	20	---	---	---	---	---	---	---	---	---
Month	240	12	39	91	11	34	---	---	---	---	---	---

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
 WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

[>, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

07288650 BOGUE PHALIA NEAR LELAND, MS—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

[>, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	---	---	---	---	---	---	---	---	---	32	21	26
2	---	---	---	---	---	---	---	---	---	39	21	29
3	---	---	---	---	---	---	---	---	---	41	24	30
4	---	---	---	---	---	---	---	---	---	37	23	29
5	---	---	---	---	---	---	---	---	---	36	25	31
6	---	---	---	---	---	---	---	---	---	44	25	34
7	---	---	---	---	---	---	---	---	---	63	28	43
8	---	---	---	---	---	---	---	---	---	86	37	53
9	---	---	---	---	---	---	---	---	---	70	47	59
10	---	---	---	---	---	---	---	---	---	69	49	55
11	---	---	---	---	---	---	---	---	---	67	45	55
12	---	---	---	---	---	---	---	---	---	86	45	57
13	---	---	---	---	---	---	---	---	---	95	47	62
14	---	---	---	---	---	---	---	---	---	75	43	56
15	---	---	---	---	---	---	---	---	---	150	36	56
16	---	---	---	---	---	---	---	---	---	65	31	43
17	---	---	---	---	---	---	---	---	---	46	29	36
18	---	---	---	---	---	---	---	---	---	67	28	37
19	---	---	---	---	---	---	---	---	---	41	25	34
20	---	---	---	---	---	---	---	---	---	44	22	33
21	---	---	---	---	---	---	---	---	---	62	24	49
22	---	---	---	---	---	---	---	---	---	24	16	18
23	---	---	---	---	---	---	---	---	---	68	19	24
24	---	---	---	---	---	---	---	---	---	47	17	22
25	---	---	---	---	---	---	---	---	---	54	36	42
26	---	---	---	---	---	---	---	---	---	36	25	28
27	---	---	---	---	---	---	---	---	---	26	24	24
28	---	---	---	---	---	---	---	---	---	29	24	26
29	---	---	---	---	---	---	43	20	25	29	26	28
30	---	---	---	---	---	---	63	19	25	41	25	30
31	---	---	---	---	---	---	35	20	26	---	---	---
Month	---	---	---	---	---	---	---	---	---	150	16	38