Water-Data Report 2013

07381495 (COE) Atchafalaya River at Melville, LA

Atchafalaya-Vermilion Basin
Atchafalaya Subbasin

LOCATION.--Lat 30°41′26″, long 91°44′10″ referenced to North American Datum of 1927, Pointe Coupee Parish, LA, Hydrologic Unit 08080101, at bridge on Texas and Pacific Railroad in Melville.

DRAINAGE AREA.--93,316 mi².

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1979 to September 1981.
WATER TEMPERATURES: May 1979 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 632 micromhos Oct. 8, 1981; minimum daily, 207 micromhos May 21, 1980.
WATER TEMPERATURES: Maximum daily, 32.0°C July 23, 24, 1981; minimum daily, 5.5°C Feb. 7, 1980, Jan. 22, 1981.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 1 of 5

[$CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; 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	Dissolved oxygen, water, unfiltered, mg/L (00300)	pH, water, unfiltered, field, standard units (00400)	Specific conduc-tance, water, unfiltered, µS/cm at 25°C (00095)	Tempera-ture, 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)	Dissolved solids dried at 180°C, water, filtered, mg/L (70300)	Calcium, water, filtered, mg/L (00915)	Magne-sium, water, filtered, mg/L (00925)
10-25-2012	1100	8.9	7.8	448	20.6	21	269	39.3	13.6
12-04-2012	0900	11.2	8.0	511	12.7	E 9.7	312	40.4	15.3
01-21-2013	1000	11.0	8.2	197	8.3	120	119	17.8	5.40
02-06-2013	1000	10.3	7.9	220	9.0	120	133	23.1	6.64
02-26-2013	1000	10.4	8.2	268	9.5	99	166	24.9	7.77
03-05-2013	0900	10.9	7.5	267	8.7	110	172	25.6	7.95
03-21-2013	0900	10.7	8.2	399	10.4	70	227	39.6	12.6
04-15-2013	1000	8.4	7.7	278	16.3	81	174	27.5	7.85
04-25-2013	0900	7.4	7.6	266	17.2	110	174	26.5	7.63
05-09-2013	1000	7.4	7.3	276	16.5	67	159	29.8	8.66
05-23-2013	1100	6.5	7.5	297	21.5	32	180	31.9	9.13
06-06-2013	1000	5.8	7.3	298	25.3	46	166	29.9	8.90
06-20-2013	0900	5.9	7.4	314	25.9	65	195	31.5	8.74
07-18-2013	1000	6.2	7.7	348	27.9	69	212	35.1	11.3
08-01-2013	1000	--	7.8	336	--	38	200	34.8	11.2
08-22-2013	1100	6.3	7.7	375	27.5	77	233	34.2	10.8

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 07381495, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/07381495.2013.pdf

07381495 (COE) Atchafalaya River at Melville, LA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 2 of 5

[$CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; 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	Potassium, water, filtered, mg/L (00935)	Sodium, water, filtered, mg/L (00930)	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)
10-25-2012	**1100**	3.85	33.0	112	135	1.74	27.9	0.17	< .03
12-04-2012	**0900**	3.38	32.2	127	153	1.35	30.7	.22	< .03
01-21-2013	**1000**	2.70	12.3	53.2	64.5	4.62	13.1	< .20	< .03
02-06-2013	**1000**	2.74	10.4	--	67.6	3.74	11.8	.10	.08
02-26-2013	**1000**	2.58	14.3	71.8	86.6	3.24	17.8	.11	< .03
03-05-2013	**0900**	2.48	13.8	69.3	83.6	3.78	18.0	.09	< .03
03-21-2013	**0900**	2.70	22.0	104	126	4.46	29.2	.11	.06
04-15-2013	**1000**	2.84	17.6	--	76.7	4.29	19.2	.11	< .03
04-25-2013	**0900**	2.83	13.7	74.4	90.1	5.21	15.0	.12	< .03
05-09-2013	**1000**	3.37	10.8	82.5	100	2.93	14.1	.13	< .03
05-23-2013	**1100**	2.93	10.7	90.6	110	1.92	14.0	.16	.07
06-06-2013	**1000**	3.14	13.5	88.4	107	2.37	16.7	.15	< .03
06-20-2013	**0900**	3.53	12.7	87.0	105	3.20	17.9	.16	< .03
07-18-2013	**1000**	3.05	12.3	104	126	3.22	16.1	.17	< .03
08-01-2013	**1000**	3.35	14.4	103	125	2.53	16.3	.16	< .03
08-22-2013	**1100**	3.22	19.9	101	122	4.04	23.0	.17	.07

07381495 (COE) Atchafalaya River at Melville, LA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 3 of 5

[$CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; 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	Silica, water, filtered, mg/L as SiO_2 (00955)	Sulfate, water, filtered, mg/L (00945)	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)	Orthophos-phate, water, filtered, mg/L as P (00671)	Particulate nitrogen, suspended in water, mg/L (49570)
10-25-2012	**1100**	5.55	60.8	0.38	0.50	< .010	0.449	0.003	0.066	0.208
12-04-2012	**0900**	4.67	79.8	.24	.45	< .010	.721	.001	.051	.193
01-21-2013	**1000**	5.94	20.8	.42	.89	.037	.432	.006	.049	.530
02-06-2013	**1000**	7.10	24.7	.34	.72	.030	.744	.011	.059	.538
02-26-2013	**1000**	5.98	27.1	.39	.78	.034	.925	.010	.057	.376
03-05-2013	**0900**	6.33	27.3	.47	.76	.037	.965	.009	.053	.493
03-21-2013	**0900**	5.81	44.2	.29	.76	.030	1.61	.014	.057	.302
04-15-2013	**1000**	5.86	28.8	.35	.78	.020	1.13	.019	.053	.441
04-25-2013	**0900**	5.30	28.5	.40	.83	< .010	1.16	.013	.065	.429
05-09-2013	**1000**	7.02	24.3	.42	.72	.011	2.89	.037	.067	.239
05-23-2013	**1100**	5.71	25.9	.42	.53	.011	1.78	.020	.072	.216
06-06-2013	**1000**	5.89	24.3	.46	.59	.012	1.48	.002	.084	.332
06-20-2013	**0900**	7.22	24.5	.58	.69	.010	2.57	.003	.096	.299
07-18-2013	**1000**	6.75	35.2	.32	.66	< .010	2.46	< .001	.106	.382
08-01-2013	**1000**	7.41	29.0	.42	.62	< .010	1.51	.005	.092	.352
08-22-2013	**1100**	6.97	40.0	.30	.64	< .010	.921	< .001	.094	.414

07381495 (COE) Atchafalaya River at Melville, LA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 4 of 5

[$CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; 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, filtered, mg/L as P (00666)	Phosphorus, water, unfiltered, mg/L as P (00665)	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)	Selenium, water, filtered, µg/L (01145)
10-25-2012	**1100**	0.069	0.148	32.4	8.14	223	1.5	1.7	70	0.52
12-04-2012	**0900**	.060	.111	12.3	11.8	250	.98	1.3	86	.49
01-21-2013	**1000**	.062	.403	196	3.04	90.2	1.3	.97	32	.22
02-06-2013	**1000**	.073	.311	212	2.91	104	1.1	.94	29	.27
02-26-2013	**1000**	.067	.256	180	2.85	114	1.1	.93	27	.33
03-05-2013	**0900**	.066	.270	190	2.88	109	1.2	.88	29	.32
03-21-2013	**0900**	.067	.262	96.0	4.29	171	.99	.89	39	.55
04-15-2013	**1000**	.062	.251	202	3.06	129	1.6	.95	28	.34
04-25-2013	**0900**	.074	.329	151	2.93	116	1.2	1.0	27	.41
05-09-2013	**1000**	.079	.296	154	2.29	115	1.4	1.2	25	.48
05-23-2013	**1100**	.082	.175	83.4	2.39	117	1.4	1.3	25	.53
06-06-2013	**1000**	.089	.213	143	3.05	118	1.7	1.4	27	.45
06-20-2013	**0900**	.103	.253	124	2.49	123	2.0	1.5	27	.53
07-18-2013	**1000**	.106	.284	24.1	3.80	143	1.9	1.5	36	.53
08-01-2013	**1000**	.099	.192	40.3	4.13	137	2.3	2.1	34	.50
08-22-2013	**1100**	.101	.284	22.5	5.73	162	2.5	1.8	42	.56

07381495 (COE) Atchafalaya River at Melville, LA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Part 5 of 5

[$CaCO_3$, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO_2, silicon dioxide; mg/L, milligrams per liter; 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	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)
10-25-2012	**1100**	1.73	4.34
12-04-2012	**0900**	1.35	3.53
01-21-2013	**1000**	4.62	8.35
02-06-2013	**1000**	3.67	5.08
02-26-2013	**1000**	3.24	4.75
03-05-2013	**0900**	3.78	4.61
03-21-2013	**0900**	4.40	3.35
04-15-2013	**1000**	4.29	5.37
04-25-2013	**0900**	5.21	5.17
05-09-2013	**1000**	2.93	4.55
05-23-2013	**1100**	1.85	4.24
06-06-2013	**1000**	2.37	4.60
06-20-2013	**0900**	3.20	5.21
07-18-2013	**1000**	3.22	3.52
08-01-2013	**1000**	2.53	4.35
08-22-2013	**1100**	3.98	3.71

07381495 (COE) Atchafalaya River at Melville, LA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
[ft^3/s, cubic feet per second; mg/L, milligrams per liter; mm, millimeters]

Date	Sample start time	Discharge, instanta-neous, ft^3/s (00061)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	Suspended sediment concen-tration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-25-2012	**1100**	62,800	100	29	4,920
12-04-2012	**0900**	65,100	100	19	3,340
01-21-2013	**1000**	264,000	84	256	182,000
02-06-2013	**1000**	289,000	84	167	130,000
02-26-2013	**1000**	259,000	90	143	100,000
03-05-2013	**0900**	219,000	94	142	84,000
03-21-2013	**0900**	262,000	88	172	122,000
04-15-2013	**1000**	284,000	89	134	103,000
04-25-2013	**0900**	349,000	82	232	219,000
05-09-2013	**1000**	381,000	77	136	140,000
05-23-2013	**1100**	411,000	53	111	123,000
06-06-2013	**1000**	333,000	83	91	81,800
06-20-2013	**0900**	359,000	84	106	103,000
07-18-2013	**1000**	288,000	93	136	106,000
08-01-2013	**1000**	211,000	96	79	45,000
08-22-2013	**1100**	209,000	96	159	89,700