



Water-Data Report 2011

**08180700 Medina River near Macdona, TX**

San Antonio Basin  
Medina Subbasin

LOCATION.--Lat 29°20'05", long 98°41'22" referenced to North American Datum of 1927, Bexar County, TX, Hydrologic Unit 12100302, at downstream side of Loop 1604 bridge, 0.1 mi downstream from Polecat Creek, 0.7 mi north of Macdona, 2.2 mi downstream from Potranca Creek, and 21.2 mi upstream from mouth.

DRAINAGE AREA.--885 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Jan. 1981 to Sept. 1995, May 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 589.86 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in water year 1981, at least 10% of contributing drainage area has been regulated. A large part of the streamflow is lost into the Edwards and associated limestones where the Balcones Fault crosses the basin between the upstream end of Medina Lake and about 5 mi downstream from Medina Dam, or 0.9 mi downstream from the Medina Diversion Dam. There are several small diversions below Medina Diversion Dam. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

**08180700 Medina River near Macdona, TX—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**DAILY MEAN VALUES**

<b>Day</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>1</b>	120	77	72	71	72	58	46	48	46	40	31	37
<b>2</b>	114	76	72	64	74	58	46	49	45	41	29	37
<b>3</b>	113	76	69	63	73	58	45	51	43	40	29	37
<b>4</b>	113	79	70	63	67	58	42	53	41	40	37	36
<b>5</b>	112	77	72	64	66	58	38	52	42	39	36	35
<b>6</b>	107	75	73	63	65	56	38	53	41	39	34	34
<b>7</b>	99	74	75	62	65	56	39	53	42	39	34	34
<b>8</b>	97	72	74	62	65	56	42	53	42	38	35	35
<b>9</b>	97	72	72	72	65	56	41	50	43	38	35	36
<b>10</b>	96	77	71	68	64	55	41	48	43	38	35	36
<b>11</b>	95	79	71	65	65	54	39	50	44	38	36	36
<b>12</b>	94	79	72	64	64	54	38	58	43	38	36	36
<b>13</b>	94	77	72	63	64	53	39	62	43	38	36	36
<b>14</b>	91	77	73	64	64	51	39	58	43	38	37	37
<b>15</b>	92	77	76	69	63	47	39	55	44	39	36	37
<b>16</b>	91	76	77	74	64	46	38	53	45	39	36	38
<b>17</b>	90	76	77	70	63	46	38	51	42	39	36	40
<b>18</b>	89	73	77	68	63	46	39	51	40	38	35	43
<b>19</b>	89	73	77	66	63	48	39	51	39	39	35	47
<b>20</b>	88	73	77	65	63	47	39	52	39	41	35	41
<b>21</b>	87	73	78	63	62	45	39	54	38	40	35	37
<b>22</b>	86	73	75	63	62	44	39	53	44	39	36	36
<b>23</b>	87	73	74	63	62	45	38	51	48	38	37	36
<b>24</b>	86	73	75	63	62	46	41	49	45	38	37	37
<b>25</b>	85	72	74	63	60	46	47	48	43	37	37	37
<b>26</b>	84	70	73	63	60	46	47	46	43	37	38	37
<b>27</b>	85	71	73	63	60	47	46	45	45	37	38	37
<b>28</b>	83	73	75	63	60	47	46	44	45	37	37	38
<b>29</b>	80	73	80	64	---	46	46	44	43	36	37	39
<b>30</b>	78	72	87	65	---	47	47	43	41	36	35	40
<b>31</b>	77	---	86	69	---	46	---	45	---	33	35	---
<b>Total</b>	2,899	2,238	2,319	2,022	1,800	1,566	1,241	1,573	1,285	1,187	1,095	1,122
<b>Mean</b>	93.5	74.6	74.8	65.2	64.3	50.5	41.4	50.7	42.8	38.3	35.3	37.4
<b>Max</b>	120	79	87	74	74	58	47	62	48	41	38	47
<b>Min</b>	77	70	69	62	60	44	38	43	38	33	29	34
<b>Ac-ft</b>	5,750	4,440	4,600	4,010	3,570	3,110	2,460	3,120	2,550	2,350	2,170	2,230

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2011<sup>b</sup>, BY WATER YEAR (WY)**

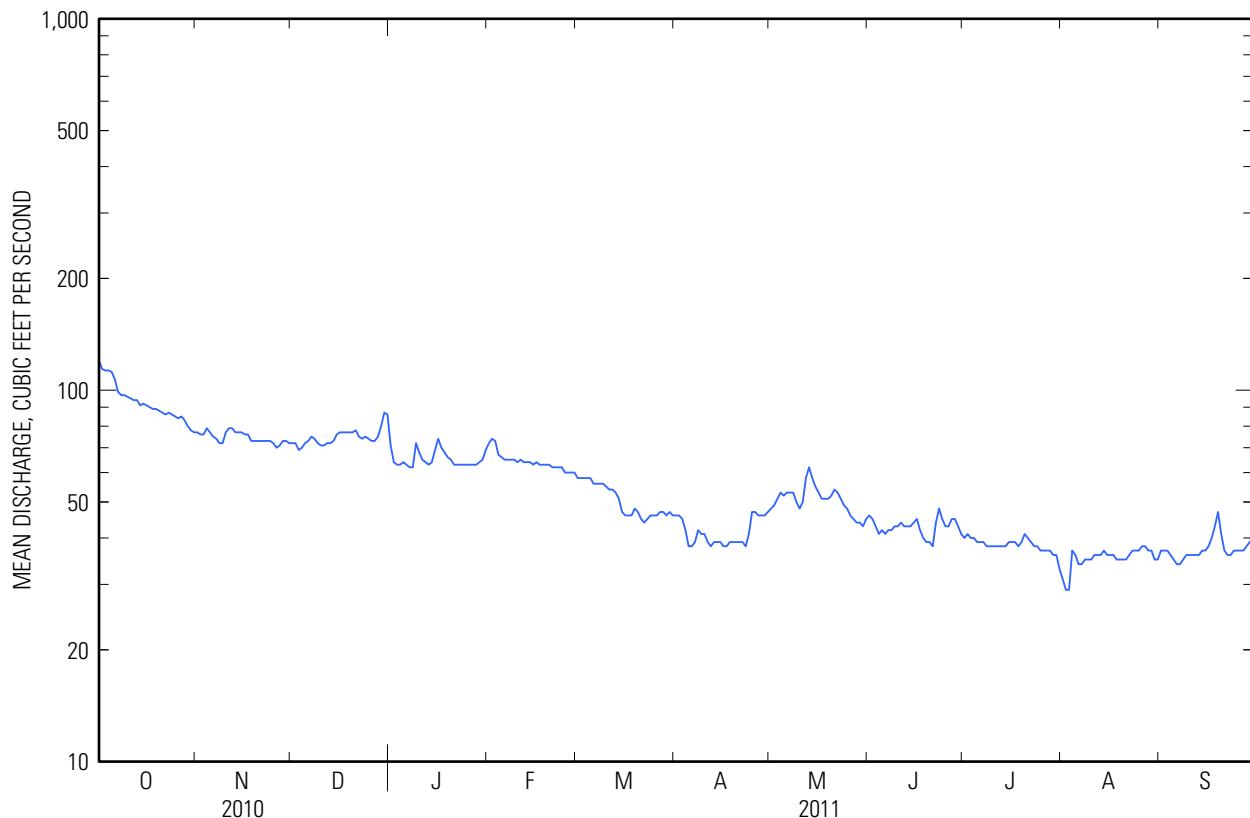
	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	156	168	138	134	177	184	152	179	478	415	152	139
<b>Max</b>	758	1,429	567	698	2,333	2,097	1,302	1,636	5,726	6,555	1,866	1,209
(WY)	(2003)	(2005)	(2005)	(1992)	(1992)	(1992)	(1992)	(1992)	(1987)	(2002)	(2007)	(2007)
<b>Min</b>	32.3	25.7	18.0	22.1	34.2	38.6	34.1	29.6	25.1	27.4	25.1	27.8
(WY)	(1992)	(1985)	(1985)	(1985)	(1985)	(2009)	(1986)	(1989)	(1990)	(1989)	(1989)	(1989)

**08180700 Medina River near Macdona, TX—Continued****SUMMARY STATISTICS**

	<b>Calendar Year 2010</b>	<b>Water Year 2011</b>		<b>Water Years 1981 - 2011<sup>h</sup></b>	
<b>Annual total</b>	42,501	20,347			
<b>Annual mean</b>	116	55.7		178	
<b>Highest annual mean</b>				954	1992
<b>Lowest annual mean</b>				38.1	1989
<b>Highest daily mean</b>	4,640	May 15	120	Oct 1	40,500 Jul 6, 2002
<b>Lowest daily mean</b>	28	Jan 12	29	Aug 2	14 Jan 11, 1985
<b>Annual seven-day minimum</b>	31	Jan 8	33	Jul 31	16 Jan 7, 1985
<b>Maximum peak flow</b>			90	Dec 31	55,400 Jul 6, 2002
<b>Maximum peak stage</b>			2.11	Dec 31	<sup>a</sup> 24.78 Jul 6, 2002
<b>Annual runoff (ac-ft)</b>	84,300	40,360		128,700	
<b>10 percent exceeds</b>	145	78		306	
<b>50 percent exceeds</b>	75	51		59	
<b>90 percent exceeds</b>	49	36		35	

<sup>h</sup> See Period of Record paragraph.

<sup>a</sup>From floodmark.



**08180700 Medina River near Macdona, TX—Continued****WATER-QUALITY RECORDS****PERIOD OF RECORD.--**

CHEMICAL DATA: July 1998 to Sept. 2000, Jan. 2006 to current year.

BIOCHEMICAL DATA: July 1998 to Sept. 2000, Jan. 2006 to current year.

PESTICIDE DATA: July 1998 to Sept. 2000, Jan. 2006 to current year.

SEDIMENT DATA: July 1998 to Sept. 2000.

**PERIOD OF DAILY RECORD.--**

SPECIFIC CONDUCTANCE: Nov. 2001 to current year.

WATER TEMPERATURE: Nov. 2001 to current year.

pH: Jan. 2005 to current year.

DISSOLVED OXYGEN: Jan. 2005 to current year.

TURBIDITY: Jan. 2005 to Sept. 2005.

INSTRUMENTATION.--A 4-parameter continuous water-quality monitor since Nov. 2001.

REMARKS.--Specific conductance, temperature, and dissolved oxygen record is excellent, pH record is good. Interruptions in the record may be due to malfunctions of the instrument, no flow conditions, or data corrections exceeding allowable criteria, which were deleted. Other than no flow conditions, minimum and maximum extremes may have occurred during period of missing record.

**EXTREMES FOR PERIOD OF DAILY RECORD.--**

SPECIFIC CONDUCTANCE: Maximum, 773 microsiemens/cm, May 14, 2003; minimum, 115 microsiemens/cm, Apr. 30, 2007.

WATER TEMPERATURE: Maximum, 30.7°C, Aug. 13, 2010; minimum, 8.7°C, Feb 5, 2011.

pH: Maximum, 8.7 standard units, on Dec 8,9, 2010; minimum, 7.3 standard units, Nov. 4, 2008, Sept 28,30, 2011.

DISSOLVED OXYGEN: Maximum, 14.1 mg/L, Feb 12, 13, 2011; minimum, 2.1 mg/L, Sept. 4, 2006.

TURBIDITY: Maximum, 52 FNU, May 30, 2005; minimum, 4 FNU, on several days in June 2005.

**EXTREMES FOR CURRENT YEAR.--**

SPECIFIC CONDUCTANCE: Maximum, 654 microsiemens/cm, Apr. 5; minimum, 517 microsiemens/cm, Sept. 18.

WATER TEMPERATURE: Maximum, 30.5°C, Aug. 5, 12; minimum, 8.7°C, Feb. 5.

pH: Maximum, 8.7 standard units, Dec. 8, 9; minimum, 7.3 standard units, Sept. 28, 30.

DISSOLVED OXYGEN: Maximum, 14.1 mg/L, Feb. 12, 13; minimum, 5.7 mg/L, Aug. 9, 10.

**WATER-QUALITY DATA  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 1 of 23

[%; percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>,silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm,

nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; &lt;, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Tempera-ture, air, °C (00020)	Discharge, instantane-ous, ft <sup>3</sup> /s (00061)	Discharge, instantane-ous, cubic meters per second (30209)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)
05-25-2011	0900	Surface water	Regular	747	24.2	48	1.4	6.4	80

## 08180700 Medina River near Macdona, TX—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 2 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Specific				Turbidity, water, unfiltered, mono-chrome near infrared LED light, 780-900 nm, detection angle 90 +/- 2.5 degrees, FNU	Gage height, above datum, meters	Gage height, ft	
		pH, water, unfiltered, field	pH, water, unfiltered, laboratory	conductance, water, unfiltered, laboratory	conductance, water, unfiltered, laboratory				
		standard units (00400)	standard units (00403)	µS/cm at 25 °C (90095)	µS/cm at 25 °C (00095)	(00010)	(63680)	(30207)	(00065)
05-25-2011	0900	7.9	8.1	539	571	25.9	13	.52	1.71

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 3 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Bisphenol alpha-HCH-d6, surrogate, Schedule ab code 2003, water, filtered, percent recovery (99995)	Caffeine-13C, surrogate, Schedule/I ab code 2033/8033, water, filtered, percent recovery (99583)	Decafluorobiphenyl, surrogate, Schedule/I ab code 2033/8033, water, filtered, percent recovery (99584)	Diazinon-d10, surrogate, Schedule/I ab code 2033/8033, water, filtered, percent recovery (99585)	Fluoranthene-d10, surrogate, Schedule/I ab code 2033/8033, water, filtered, percent recovery (99994)	Sample volume, wastewater method, water, filtered, percent recovery (99586)	Sample splitter type, field (84171)	Sample volume, 2003, mL (99972)
05-25-2011	0900	96.8	11.5	88.5	46.4	88.1	89.6	902	CS FP 8L 938

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 4 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Sampling method (82398)	Type of quality assurance data associated with sample (99111)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Dissolved solids, water, tons per day (70302)	Hardness, water, mg/L as CaCO <sub>3</sub> (00900)	Non-carbonate hardness, water, filtered, field, mg/L as CaCO <sub>3</sub> (00904)	Calcium, water, filtered, mg/L (00915)
05-25-2011	0900	EWI	No assoc QA data	333	.45	43.1	251	55	72.5

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 5 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Magne-	Potassium,	Sodium	percent in equivalents of major cations	Sodium, water,	Alkalinity, water, filtered, inflection-point, incremental	Bicarbonate, water, filtered, inflection-point, titration method, field, mg/L as CaCO <sub>3</sub>	Carbon dioxide, water, unfiltered, mg/L
		sium, water, filtered,	water, filtered,	adsorption ratio, water, number		water, filtered,	method, field, mg/L	incremental titration point, method, field, mg/L	mg/L
(00925)	(00935)	(00931)	(00932)	(00930)	(39086)	(00453)	(00405)		
05-25-2011	0900	17.1	2.19	.58	15	21.0	197	237	5.1

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 6 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Carbonate, water, filtered, inflection-point, incremental titration method, field, mg/L	Chloride, water, filtered, mg/L	Fluoride, water, filtered, mg/L	Hydrogen ion, water, unfiltered, calculated, mg/L	Silica, water, filtered, mg/L as SiO <sub>2</sub>	Sulfate, water, filtered, mg/L as	Ammonia plus organic nitrogen, water, filtered, mg/L as N	Ammonia, water, filtered, mg/L as NH <sub>4</sub>	Ammonia, water, filtered, mg/L as N
		(00452)	(00940)	(00950)	(00191)	(00955)	(00945)	(00623)	(71846)	(00608)
05-25-2011	0900	1	22.7	.23	.00001	10.7	57.6	.14	.023	.018

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 7 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Nitrate plus nitrite, water, filtered, mg/L as N	Nitrate, water, filtered, mg/L	Nitrate, water, filtered, mg/L as N	Nitrite, water, filtered, mg/L	Nitrite, water, filtered, mg/L as N	Organic nitrogen, water, filtered, mg/L	Orthophosphate, water, filtered, mg/L	Orthophosphate, water, filtered, mg/L as P	Phosphorus, water, filtered, mg/L as P
		(00631)	(71851)	(00618)	(71856)	(00613)	(00607)	(00660)	(00671)	(00666)
05-25-2011	0900	2.38	10.5	2.37	.020	.006	.12	.020	.006	.02

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 8 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	2,6-								
		1-Naphthol, 1,4-Dichloro- benzene,	Diethyl- aniline, water, filtered (0.7 micron)	2-Chloro- acetanilide, water, filtered, (0.7 micron)	2-Chloro- isopropyl- amino-6- triazine, water, filtered, (0.7 micron)	2-Ethyl-6- methyl- aniline, water, filtered, (0.7 micron)	3,4- Dichloro- aniline, water, filtered, (0.7 micron)	3,5-Di- chloro- aniline, water, filtered, (0.7 micron)		
05-25-2011	0900	2.5	< 0.040	< .036	< .006	< .010	E .043	< .010	< .004	< .004

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 9 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Azinphos-								
		4-Chloro-2- methyl- phenol, water, filtered, recover- able, µg/L (61633)	Aceto- chlor, water, filtered, recover- able, µg/L (49260)	alpha- Endo- sulfan, water, filtered, recover- able, µg/L (46342)	Atrazine, water, filtered, recover- able, µg/L (34362)	Azinphos- methyl oxygen analog, water, filtered, recover- able, µg/L (61635)	Azinphos- methyl, water, glass fiber (0.7 micron) (filter), recover- able, µg/L (82686)	Benfluralin, water, glass fiber (0.7 micron) (filter), recover- able, µg/L (82673)	Bromacil, water, glass fiber (0.7 micron) (filter), recover- able, µg/L (04029)	
05-25-2011	0900	< .005	< .010	< .008	< .006	.011	< .04	< .120	< .014	< .4

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 10 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Carbaryl, water, filtered Camphor, water, filtered, recover- able, µg/L (62070)	Carbazole, glass fiber (0.7 micron) water, filter), recover- able, µg/L (82680)	Carbofuran, water, filtered recovery, able, µg/L (62071)	Chlorpyrifos, oxygen (0.7 micron) water, filter), recover- able, µg/L (82674)	Chlor- pyrifos, water, filtered, recover- able, µg/L (61636)	cis- Permeth- rin, water, filtered (0.7 micron) glass fiber filter), recover- able, µg/L (38933)	Propicon- azole, water, filtered, recover- able, µg/L (82687)	cis- Propicon- azole, water, filtered, recover- able, µg/L (79846)
05-25-2011	0900	< 0.044	< .060	< 0.03	< .060	< .06	< .004	< .010	< .008

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 11 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	DCPA, water, filtered Cyanazine, water, filtered, recover- able, µg/L (04041)	Cyfluthrin, water, filtered, recover- able, µg/L (61585)	Cyper- methrin, water, filtered, recover- able, µg/L (61586)	(0.7 micron) DEET, water, filter), recover- able, µg/L (82682)	DEET, water, filtered, recover- able, µg/L (62082)	Desulfinyl- fipronil, water, filtered, recover- able, µg/L (62169)	Desulfinyl- fipronil, water, filtered, recover- able, µg/L (62170)	Diazinon, water, filtered, recover- able, µg/L (39572)	Dichlor- vos, water, filtered, recover- able, µg/L (38775)
05-25-2011	0900	< .022	< .016	< .020	< .008	M	< .029	< .012	< .006	< .04

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 12 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Dicrotophos, water, filtered, recovered, recoverable, µg/L (38454)	Dimethoate, water, filtered, recoverable, µg/L (39381)	Disulfoton, sulfone, glass fiber filter, recoverable, µg/L (82662)	Disulfoton, water, filtered, recoverable, µg/L (61640)	Endosulfan, water, glass fiber filter, recoverable, µg/L (82677)	EPTC, water, glass fiber filter, recoverable, µg/L (61590)	Ethion monoxon, water, filtered, recoverable, µg/L (82668)	Ethion, water, filtered, recoverable, µg/L (61644)	
05-25-2011	0900	< .08	< .008	< .006	< .01	< .04	< .016	< .006	< .02	< .008

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 13 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Ethoprop, water, filtered, recoverable, µg/L (82672)	Fenami-phos, water, glass fiber filter, recoverable, µg/L (61645)	Fenami-phos, sulfone, water, filtered, recoverable, µg/L (61646)	Fenami-phos, sulfoxide, water, filtered, recoverable, µg/L (61591)	Fipronil, sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil, sulfone, water, filtered, recoverable, µg/L (62168)	Fipronil, sulfone, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexazinone, water, filtered, recoverable, µg/L (04025)
05-25-2011	0900	< .016	< .054	< .08	< .03	< .012	< .024	< .018	< .005	< .008

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 14 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Iprodione, water, filtered, recovered, recoverable, µg/L (61593)	Isofen-phos, water, filtered, recovered, recoverable, µg/L (61594)	Cyhalothrin, water, filtered, recovered, recoverable, µg/L (61595)	Malaoxon, water, filtered, recovered, recoverable, µg/L (61652)	Malathion, water, filtered, recovered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recovered, recoverable, µg/L (50359)	Metalaxyl, water, filtered, recovered, recoverable, µg/L (61596)	Methidathion, water, filtered, recovered, recoverable, µg/L (61598)	Methyl paraoxon, water, filtered, recovered, recoverable, µg/L (61664)
05-25-2011	0900	< .014	< .006	< .010	< .022	< .016	< .1	.008	< .012	< .01

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 15 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82667)	Metola- chlor, water, filtered, recover- able, µg/L (39415)	Metri- buzin, water, filtered, recover- able, µg/L (82630)	Myclo- butanil, water, filter), recover- able, µg/L (82671)	Oxy- fluorfen, water, filtered, recover- able, µg/L (61599)	p-Cresol, water, filtered, recover- able, µg/L (61600)	Pendi- methalin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (62084)	Phorate oxygen analog, water, filtered, recover- able, µg/L (82683)	
05-25-2011	0900	< .008	< .020	< .012	< .004	< .010	< .006	< .08	< .012	< .03

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 16 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Phorate, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82664)	Phosmet oxygen analog, water, filtered, recover- able, µg/L (61668)	Phosmet water, filtered, recover- able, µg/L (61601)	Prometon, water, filtered, recover- able, µg/L (04037)	Prometryn, water, filtered, recover- able, µg/L (04036)	(0.7 micron glass fiber filter), recover- able, µg/L (82679)	(0.7 micron glass fiber filter), recover- able, µg/L (82685)	Propyz- amide, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82676)	Simazine, water, filtered, recover- able, µg/L (04035)
05-25-2011	0900	< .020	< .05	< .140	< .012	< .006	< .010	< .02	< .004	.007

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 17 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Tebu-thiuron, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82670)	Tefluthrin, water, filtered, recover- able, µg/L (61606)	Terbufos oxygen analog water, filtered, recover- able, µg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (82675)	Terbutyl- azine, water, filtered, recover- able, µg/L (04022)	Thioben-carb, water, trans- filtered (0.7 micron glass fiber filter), recover- able, µg/L (82681)	Propiconazole, water, filtered, recover- able, µg/L (79847)	Trifluralin, water, filtered (0.7 micron glass fiber filter), recover- able, µg/L (61610)
05-25-2011	0900	< .03	< .010	< .04	< .02	< .01	< .016	< .01	< .018

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 18 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	2,6- 1-Methyl- naphtha- lene, water, filtered, recover- able, µg/L (62054)	2,6- Dimethyl- naphtha- lene, water, filtered, recover- able, µg/L (62055)	2-Methyl- naphtha- lene, water, filtered, recover- able, µg/L (62056)	3-beta- Copros- tanol, water, filtered, recover- able, µg/L (62057)	3-tert- Butyl-4- hydroxy- anisole, water, filtered, recover- able, µg/L (62058)	3-tert- Butyl-4- hydroxy- anisole, water, filtered, recover- able, µg/L (62059)	3-tert- Butyl-4- hydroxy- anisole, water, filtered, recover- able, µg/L (62060)	4-Nonyl- phenol (sum of all isomers), water, filtered, recover- able, µg/L (62061)
05-25-2011	0900	< 0.022	< .1	< 0.036	< 2	< 0.036	< 0.6	< 0.060	< 0.06

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 19 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	4-Nonyl-phenol (sum of all isomers), water, filtered, recoverable, µg/L (62083)	4-tert-dieth-oxylate Octyl-phenol (sum of all isomers), water, filtered, recoverable, µg/L (61705)	4-tert-Octyl-phenol Octyl-ethoxylate, water, filtered, recoverable, µg/L (61706)	5-Methyl-1H-benzotriazole, water, filtered, recoverable, µg/L (62062)	9,10-Anthraquinone, water, filtered, recoverable, µg/L (62063)	Aceto-phenone, water, filtered, recoverable, µg/L (62066)	Acetyl hexa-methyl tetrahydro naphthalene, water, filtered, recoverable, µg/L (62064)	Anthra-cene, water, filtered, recoverable, µg/L (62065)	
05-25-2011	0900	< 5	< 1	< 1	< 0.14	< 1	< .2	< .4	< 0.028	< 0.01

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 20 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Benzo[a]-pyrene, water, filtered, recoverable, µg/L (34248)	Benzo-phenone, water, filtered, recoverable, µg/L (62067)	beta-Sitos-terol, water, filtered, recoverable, µg/L (62068)	Stigmas-tanol, water, filtered, recoverable, µg/L (62086)	Caffeine, water, filtered, recoverable, µg/L (50305)	Choles-terol, water, filtered, recoverable, µg/L (62072)	Cotinine, water, filtered, recoverable, µg/L (62005)	D-Limonene, water, filtered, recoverable, µg/L (62073)	Fluoranthene, water, filtered, recoverable, µg/L (34377)
05-25-2011	0900	< 0.018	< .1	< 4	M	< .1	M	< .800	< .1	< 0.024

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 21 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Hexa-hydro-hexa-methyl cyclo-penta-benzo-pyran, water, filtered, recoverable, µg/L (62075)	Iodo-, Indole, water, filtered, recoverable, µg/L (62076)	Iso-isoborneol, water, filtered, recoverable, µg/L (62077)	Phorone, water, filtered, recoverable, µg/L (34409)	Iso-propyl-benzene, water, filtered, recoverable, µg/L (62078)	Iso-quinoline, water, filtered, recoverable, µg/L (62079)	Menthol, water, filtered, recoverable, µg/L (62080)	Methyl salicylate, water, filtered, recoverable, µg/L (62081)	Naphthalene, water, filtered, recoverable, µg/L (34443)
05-25-2011	0900	<.1	<.1	<.1	<0.032	<.3	<0.046	<.3	<0.044	<0.040

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 22 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Phenanthrene, water, filtered, recoverable, µg/L (34462)	Phenol, water, filtered, recoverable, µg/L (34466)	Pyrene, water, filtered, recoverable, µg/L (34470)	Tetra-chloro-ethene, water, filtered, recoverable, µg/L (34476)	Tribromo-methane, water, filtered, recoverable, µg/L (34288)	Tributyl-phosphate, water, filtered, recoverable, µg/L (62089)	Triclosan, water, filtered, recoverable, µg/L (62090)	Triethyl-citrate, water, filtered, recoverable, µg/L (62091)	Triphenyl-phosphate, water, filtered, recoverable, µg/L (62092)
05-25-2011	0900	<0.016	<.2	<0.042	<.1	<.1	<.2	<0.20	<.2	<.1

**08180700 Medina River near Macdona, TX—Continued**

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Part 23 of 23

[%, percent; CaCO<sub>3</sub>, calcium carbonate; FNU, Formazin nephelometric units; LED, light-emitting diode; N, nitrogen; P, phosphorus; SiO<sub>2</sub>, silicon dioxide; ft, feet; ft<sup>3</sup>/s, cubic feet per second; mL, milliliters; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; <, less than; E, estimated; M, presence verified but not quantified]

Date	Sample start time	Tris(2-butoxyethyl) phosphate, water, filtered, recoverable, µg/L (62093)	Tris(2-chloroethyl) phosphate, water, filtered, recoverable, µg/L (62087)	Tris(di-chloroisopropyl) phosphate, water, filtered, recoverable, µg/L (62088)
05-25-2011	0900	<.8	<.1	<.2

**08180700 Medina River near Macdona, TX—Continued**
**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

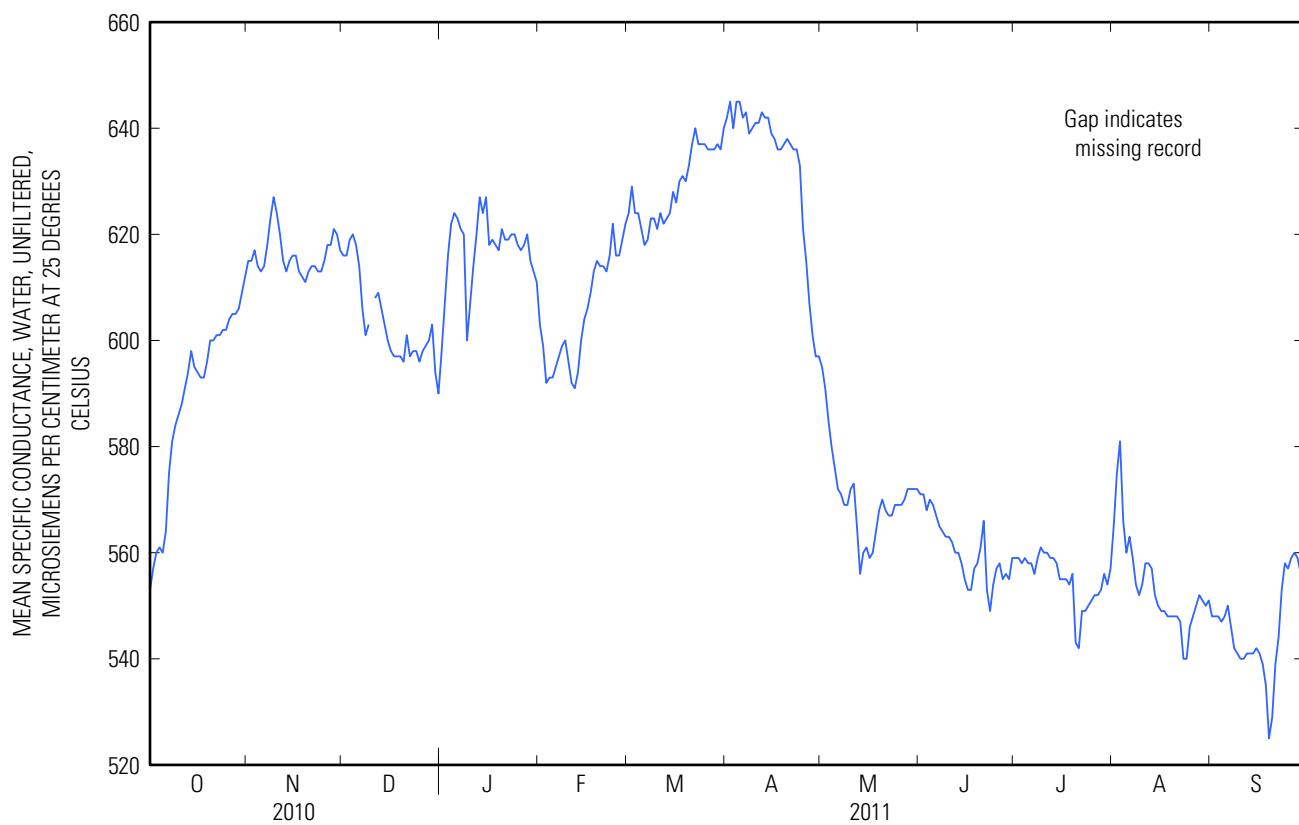
<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
<b>October</b>				<b>November</b>				<b>December</b>				<b>January</b>
<b>1</b>	554	551	553	619	603	615	620	614	616	604	590	598
<b>2</b>	560	553	557	618	607	615	618	615	616	611	603	607
<b>3</b>	562	558	560	619	614	617	623	617	619	622	609	616
<b>4</b>	562	560	561	618	611	614	623	618	620	625	617	622
<b>5</b>	562	559	560	614	612	613	619	615	618	630	621	624
<b>6</b>	567	561	564	617	613	614	616	612	614	626	621	623
<b>7</b>	579	567	575	621	617	618	613	600	606	624	618	621
<b>8</b>	584	579	581	626	621	623	602	600	601	622	612	620
<b>9</b>	586	582	584	629	625	627	605	601	603	617	588	600
<b>10</b>	587	584	586	630	622	624	---	---	---	614	589	607
<b>11</b>	591	586	588	622	617	620	610	607	608	616	612	614
<b>12</b>	594	589	591	618	613	615	610	608	609	623	613	620
<b>13</b>	597	592	594	614	610	613	609	604	606	630	623	627
<b>14</b>	599	597	598	617	613	615	605	601	603	626	621	624
<b>15</b>	597	594	595	617	614	616	603	597	600	629	622	627
<b>16</b>	595	592	594	618	615	616	600	596	598	622	615	618
<b>17</b>	596	590	593	616	612	613	598	595	597	621	616	619
<b>18</b>	595	590	593	613	608	612	599	595	597	620	615	618
<b>19</b>	599	594	596	614	609	611	598	595	597	620	614	617
<b>20</b>	603	596	600	615	611	613	597	594	596	635	614	621
<b>21</b>	602	599	600	615	613	614	605	595	601	621	615	619
<b>22</b>	602	599	601	616	613	614	599	596	597	621	613	619
<b>23</b>	602	600	601	616	609	613	599	596	598	627	618	620
<b>24</b>	604	600	602	615	611	613	600	595	598	625	611	620
<b>25</b>	605	601	602	618	613	615	599	594	596	625	611	618
<b>26</b>	607	603	604	620	616	618	599	596	598	622	610	617
<b>27</b>	607	603	605	622	615	618	601	598	599	631	610	618
<b>28</b>	606	604	605	625	616	621	602	598	600	631	612	620
<b>29</b>	609	604	606	623	616	620	604	598	603	623	606	615
<b>30</b>	611	607	609	623	613	617	598	589	594	618	606	613
<b>31</b>	615	610	612	---	---	---	595	586	590	617	602	611
<b>Month</b>	615	551	589	630	603	616	---	---	---	635	588	617

**08180700 Medina River near Macdona, TX—Continued**
**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
<b>February</b>				<b>March</b>				<b>April</b>				<b>May</b>
<b>1</b>	616	594	603	635	614	624	651	636	642	600	591	595
<b>2</b>	605	591	599	635	619	629	652	641	645	595	588	591
<b>3</b>	598	586	592	634	616	624	647	636	640	590	580	585
<b>4</b>	598	587	593	632	619	624	653	638	645	585	575	580
<b>5</b>	597	588	593	626	613	621	654	640	645	583	570	576
<b>6</b>	599	588	595	623	611	618	648	637	642	578	567	572
<b>7</b>	600	591	597	625	611	619	648	639	643	575	566	571
<b>8</b>	604	592	599	633	613	623	644	636	639	576	565	569
<b>9</b>	603	596	600	634	614	623	644	638	640	572	565	569
<b>10</b>	599	590	596	627	612	621	644	638	641	575	570	572
<b>11</b>	598	583	592	638	617	624	644	638	641	576	569	573
<b>12</b>	595	584	591	628	616	622	648	639	643	573	556	565
<b>13</b>	598	586	594	627	618	623	649	638	642	563	551	556
<b>14</b>	603	593	600	629	620	624	648	637	642	568	556	560
<b>15</b>	608	599	604	634	622	628	645	635	639	570	554	561
<b>16</b>	614	601	606	631	621	626	645	634	638	564	554	559
<b>17</b>	613	604	609	635	628	630	644	631	636	568	555	560
<b>18</b>	615	608	613	635	628	631	642	630	636	566	561	564
<b>19</b>	619	608	615	633	626	630	642	634	637	570	566	568
<b>20</b>	619	609	614	637	629	633	642	634	638	573	568	570
<b>21</b>	620	610	614	641	634	637	641	635	637	572	566	568
<b>22</b>	615	611	613	644	637	640	639	633	636	571	564	567
<b>23</b>	619	614	616	640	633	637	640	633	636	569	565	567
<b>24</b>	624	619	622	642	633	637	639	624	633	572	567	569
<b>25</b>	623	612	616	641	635	637	628	615	621	572	565	569
<b>26</b>	622	613	616	643	630	636	621	610	615	573	565	569
<b>27</b>	622	614	619	642	628	636	616	599	607	574	567	570
<b>28</b>	632	614	622	644	632	636	608	597	601	575	569	572
<b>29</b>	---	---	---	642	634	637	604	592	597	575	569	572
<b>30</b>	---	---	---	640	630	636	602	592	597	575	569	572
<b>31</b>	---	---	---	653	635	640	---	---	---	575	568	572
<b>Month</b>	632	583	605	653	611	629	654	592	633	600	551	570

**08180700 Medina River near Macdona, TX—Continued**
**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	<b>June</b>				<b>July</b>				<b>August</b>			
<b>1</b>	574	568	571	561	558	559	570	563	565	551	546	548
<b>2</b>	577	567	571	562	557	559	578	570	575	551	547	548
<b>3</b>	575	563	568	560	555	558	583	578	581	550	547	548
<b>4</b>	578	564	570	571	555	559	581	557	566	549	545	547
<b>5</b>	573	564	569	561	555	558	564	559	560	550	545	548
<b>6</b>	572	562	567	560	555	558	565	560	563	553	546	550
<b>7</b>	569	560	565	560	553	556	565	556	559	554	541	546
<b>8</b>	568	560	564	562	555	559	557	552	554	546	537	542
<b>9</b>	569	559	563	563	558	561	554	550	552	543	537	541
<b>10</b>	568	559	563	561	558	560	558	550	554	544	535	540
<b>11</b>	566	557	562	561	559	560	560	557	558	543	536	540
<b>12</b>	564	556	560	561	557	559	559	556	558	544	537	541
<b>13</b>	563	556	560	560	557	559	559	555	557	543	538	541
<b>14</b>	563	555	558	560	554	558	556	550	552	543	538	541
<b>15</b>	560	552	555	556	553	555	551	549	550	544	539	542
<b>16</b>	557	549	553	557	553	555	551	548	549	544	538	541
<b>17</b>	556	552	553	557	552	555	550	547	549	541	537	539
<b>18</b>	560	554	557	557	552	554	550	546	548	538	517	535
<b>19</b>	561	556	558	558	551	556	549	547	548	528	523	525
<b>20</b>	568	558	561	551	537	543	549	547	548	535	524	529
<b>21</b>	568	563	566	546	537	542	549	546	548	544	535	539
<b>22</b>	565	549	553	551	546	549	549	545	547	548	542	544
<b>23</b>	551	548	549	550	546	549	545	538	540	560	544	553
<b>24</b>	556	550	554	551	548	550	541	538	540	562	555	558
<b>25</b>	560	554	557	553	548	551	555	540	546	561	554	557
<b>26</b>	560	555	558	553	549	552	549	547	548	561	556	559
<b>27</b>	559	551	555	554	550	552	551	548	550	562	557	560
<b>28</b>	557	554	556	555	551	553	553	551	552	562	556	559
<b>29</b>	559	551	555	557	554	556	553	549	551	561	550	556
<b>30</b>	562	556	559	557	553	554	554	548	550	553	547	550
<b>31</b>	---	---	---	563	554	557	554	549	551	---	---	---
<b>Month</b>	578	548	560	571	537	555	583	538	554	562	517	546

**08180700 Medina River near Macdona, TX—Continued**

**08180700 Medina River near Macdona, TX—Continued**
**TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	
<b>October</b>				<b>November</b>				<b>December</b>				<b>January</b>	
<b>1</b>	23.8	23.1	23.5	20.6	19.2	19.9	16.1	14.8	15.3	15.7	14.7	15.2	
<b>2</b>	23.6	22.9	23.3	20.6	19.8	20.1	15.6	14.2	14.9	14.7	13.6	14.2	
<b>3</b>	23.1	22.4	22.8	19.9	19.2	19.5	16.0	14.4	15.2	14.1	13.4	13.8	
<b>4</b>	22.4	21.6	22.1	19.2	18.2	18.7	16.7	15.2	15.9	15.2	14.1	14.6	
<b>5</b>	21.8	21.2	21.5	18.2	17.1	17.6	16.1	15.2	15.7	16.1	15.1	15.5	
<b>6</b>	21.6	21.0	21.2	17.4	16.2	16.8	15.2	14.2	14.6	15.3	14.3	14.8	
<b>7</b>	21.5	20.5	20.9	17.2	15.8	16.5	14.2	13.5	13.8	14.9	13.7	14.4	
<b>8</b>	21.4	20.3	20.7	17.6	16.1	16.8	14.2	13.1	13.6	14.8	13.8	14.4	
<b>9</b>	21.5	20.4	20.8	18.0	16.7	17.4	13.6	12.4	13.1	14.5	13.9	14.1	
<b>10</b>	21.9	20.7	21.2	18.8	17.4	18.1	---	---	---	13.9	13.3	13.7	
<b>11</b>	22.1	21.4	21.7	19.3	18.2	18.7	14.6	13.1	13.8	13.3	12.6	13.0	
<b>12</b>	22.8	21.6	22.0	20.0	18.9	19.5	14.2	13.3	13.6	12.6	11.8	12.1	
<b>13</b>	22.4	21.6	21.9	19.4	18.5	18.9	13.3	12.3	12.8	11.8	11.3	11.5	
<b>14</b>	21.9	20.9	21.4	18.5	17.7	18.0	13.4	11.9	12.6	11.5	11.1	11.3	
<b>15</b>	21.2	20.0	20.6	18.1	17.4	17.7	14.1	12.6	13.4	12.5	11.5	12.0	
<b>16</b>	21.1	20.0	20.4	17.9	17.0	17.4	14.4	13.3	13.8	13.1	12.5	12.8	
<b>17</b>	21.3	20.0	20.5	17.6	16.4	17.0	14.1	13.2	13.6	13.1	12.4	12.8	
<b>18</b>	21.7	20.6	21.0	17.4	16.3	16.8	13.5	12.6	13.0	14.7	12.9	13.7	
<b>19</b>	22.1	20.9	21.4	16.6	15.4	16.0	13.3	12.1	12.7	14.9	13.5	14.2	
<b>20</b>	22.6	21.5	21.9	17.0	15.5	16.3	14.3	12.5	13.4	14.7	13.6	14.3	
<b>21</b>	22.8	21.8	22.2	18.4	17.0	17.8	15.2	13.7	14.5	13.7	12.6	13.1	
<b>22</b>	22.9	22.2	22.5	19.6	18.4	19.0	15.9	14.7	15.4	13.4	11.7	12.5	
<b>23</b>	22.9	22.3	22.6	20.4	19.5	20.0	16.2	15.4	15.8	13.0	12.0	12.5	
<b>24</b>	23.2	22.3	22.6	21.2	20.3	20.7	16.7	15.9	16.3	13.8	12.3	13.0	
<b>25</b>	23.4	22.4	22.8	21.6	19.8	20.9	15.9	14.4	15.2	14.0	12.5	13.2	
<b>26</b>	23.5	22.5	22.9	19.8	17.3	18.6	14.4	13.2	13.8	13.7	12.0	12.8	
<b>27</b>	22.8	22.0	22.4	17.3	15.8	16.5	13.5	12.3	13.0	14.0	12.2	13.1	
<b>28</b>	22.3	21.0	21.8	16.4	15.2	15.9	14.3	13.2	13.7	14.5	12.5	13.5	
<b>29</b>	21.0	19.5	20.2	18.0	16.3	17.2	15.2	14.2	14.7	15.2	13.6	14.4	
<b>30</b>	19.7	18.5	19.1	17.4	16.1	16.9	15.7	14.6	15.1	16.7	14.9	15.7	
<b>31</b>	19.8	18.2	19.0	---	---	---	16.2	15.3	15.7	17.0	15.7	16.3	
<b>Month</b>	23.8	18.2	21.6	21.6	15.2	18.0	---	---	---	17.0	11.1	13.6	

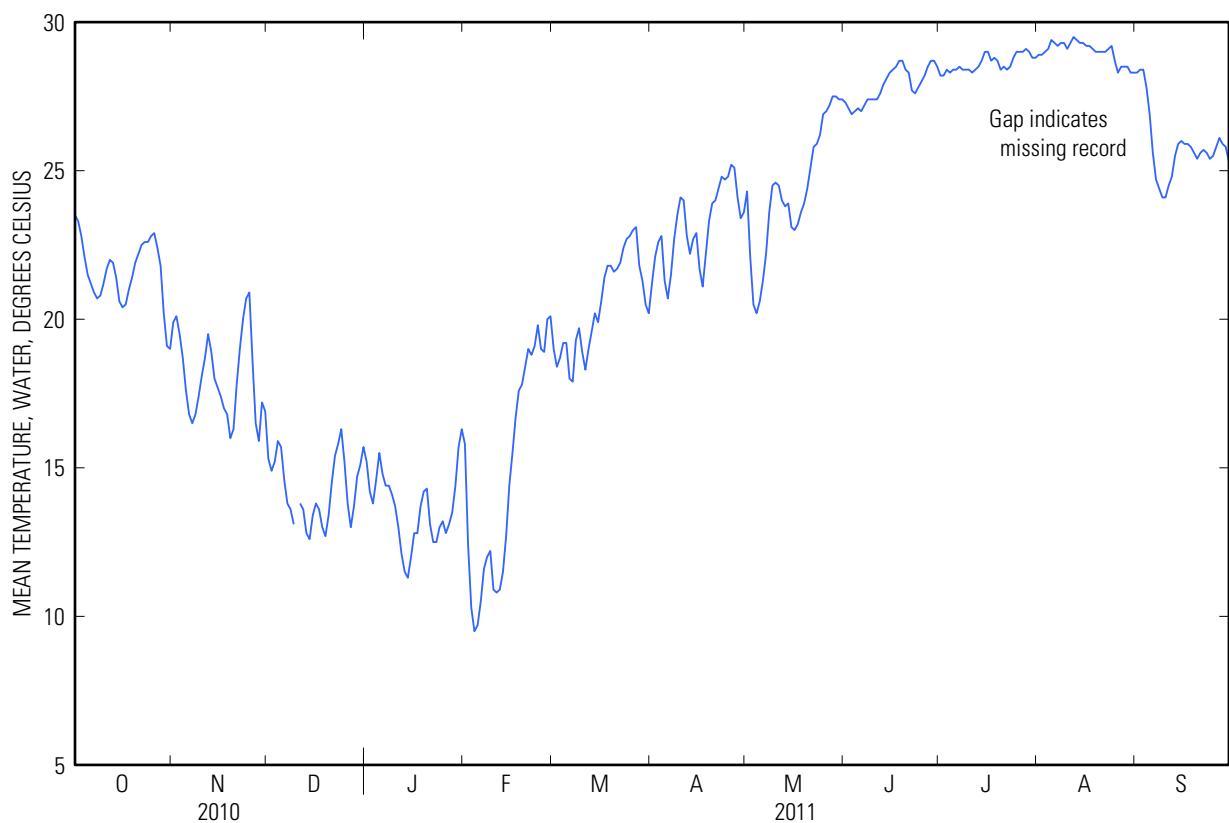
**08180700 Medina River near Macdona, TX—Continued**
**TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
<b>February</b>				<b>March</b>				<b>April</b>				<b>May</b>
<b>1</b>	16.8	14.1	15.8	20.0	18.1	19.0	22.4	20.2	21.2	25.1	23.5	24.3
<b>2</b>	14.1	11.1	12.4	19.4	17.4	18.4	22.9	21.6	22.1	23.5	20.8	22.1
<b>3</b>	11.1	9.6	10.3	19.8	17.7	18.7	23.1	22.1	22.6	21.4	19.6	20.5
<b>4</b>	10.3	8.9	9.5	19.9	18.5	19.2	23.6	21.9	22.8	21.1	19.4	20.2
<b>5</b>	10.8	8.7	9.7	20.0	18.6	19.2	22.1	20.4	21.3	21.8	19.5	20.6
<b>6</b>	11.8	9.4	10.5	18.9	17.1	18.0	21.8	19.7	20.7	22.2	20.6	21.3
<b>7</b>	12.6	10.7	11.6	19.1	16.7	17.9	22.5	20.7	21.5	23.3	21.4	22.2
<b>8</b>	12.9	11.0	12.0	20.4	18.4	19.3	23.8	21.9	22.7	24.9	22.6	23.6
<b>9</b>	12.7	11.3	12.2	20.6	18.8	19.7	24.6	22.7	23.5	25.4	23.8	24.5
<b>10</b>	11.6	10.1	10.9	19.9	17.8	18.9	25.1	23.3	24.1	25.0	24.3	24.6
<b>11</b>	11.9	9.8	10.8	19.4	17.3	18.3	24.7	23.1	24.0	24.8	24.2	24.5
<b>12</b>	12.1	9.8	10.9	20.2	17.9	19.0	23.8	22.0	22.8	24.4	23.5	24.0
<b>13</b>	12.7	10.2	11.5	20.1	19.2	19.6	23.1	21.3	22.2	24.9	22.9	23.8
<b>14</b>	13.9	11.5	12.7	21.0	19.6	20.2	23.5	22.1	22.7	24.9	23.1	23.9
<b>15</b>	15.5	13.5	14.4	20.8	19.1	19.9	23.8	22.3	22.9	23.9	22.3	23.1
<b>16</b>	16.3	14.9	15.5	21.8	19.8	20.6	22.5	21.1	21.7	24.0	22.1	23.0
<b>17</b>	17.6	16.1	16.7	22.2	20.8	21.4	21.9	20.4	21.1	24.3	22.3	23.2
<b>18</b>	18.2	17.2	17.6	22.6	21.2	21.8	23.5	21.3	22.2	24.4	23.0	23.6
<b>19</b>	18.3	17.5	17.8	22.2	21.5	21.8	24.1	22.7	23.3	24.4	23.6	23.9
<b>20</b>	19.3	17.7	18.4	22.1	21.3	21.6	24.4	23.5	23.9	25.2	24.0	24.4
<b>21</b>	19.8	18.5	19.0	22.3	21.3	21.7	24.6	23.7	24.0	25.9	24.6	25.1
<b>22</b>	19.3	18.4	18.8	22.9	21.3	21.9	25.4	23.7	24.4	26.7	25.2	25.8
<b>23</b>	19.8	18.5	19.1	23.5	21.7	22.4	25.6	24.2	24.8	26.3	25.5	25.9
<b>24</b>	20.6	19.3	19.8	23.4	22.2	22.7	25.1	24.4	24.7	27.2	25.4	26.2
<b>25</b>	19.9	18.1	19.0	23.6	22.2	22.8	25.5	24.3	24.8	28.0	26.1	26.9
<b>26</b>	19.6	18.3	18.9	23.7	22.5	23.0	26.2	24.4	25.2	27.9	26.0	27.0
<b>27</b>	21.0	19.2	20.0	23.5	22.6	23.1	25.9	24.5	25.1	28.3	26.4	27.2
<b>28</b>	21.0	19.4	20.1	22.6	21.4	21.8	24.9	23.3	24.1	28.6	26.6	27.5
<b>29</b>	---	---	---	21.5	21.0	21.3	24.3	22.6	23.4	28.5	26.8	27.5
<b>30</b>	---	---	---	21.0	20.0	20.5	24.5	23.0	23.6	28.3	26.7	27.4
<b>31</b>	---	---	---	21.1	19.4	20.2	---	---	---	28.2	26.8	27.4
<b>Month</b>	21.0	8.7	14.9	23.7	16.7	20.4	26.2	19.7	23.1	28.6	19.4	24.4

**08180700 Medina River near Macdona, TX—Continued**
**TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
				<b>June</b>			<b>July</b>			<b>August</b>		
<b>1</b>	28.1	26.7	27.3	28.9	27.7	28.2	30.1	27.9	28.9	29.3	27.6	28.3
<b>2</b>	28.1	26.3	27.1	29.2	27.5	28.2	30.1	27.8	28.9	29.3	27.8	28.4
<b>3</b>	27.9	26.1	26.9	29.4	27.6	28.4	30.3	27.8	29.0	29.1	28.0	28.4
<b>4</b>	27.8	26.3	27.0	29.3	27.6	28.3	30.3	28.2	29.1	28.4	27.2	27.8
<b>5</b>	28.1	26.2	27.1	29.4	27.5	28.4	30.5	28.6	29.4	27.6	26.1	26.9
<b>6</b>	28.1	26.2	27.0	29.5	27.6	28.4	30.4	28.5	29.3	26.5	24.7	25.6
<b>7</b>	28.1	26.4	27.2	29.5	27.7	28.5	30.2	28.5	29.2	25.6	23.8	24.7
<b>8</b>	28.4	26.6	27.4	29.4	27.6	28.4	30.4	28.6	29.3	25.4	23.6	24.4
<b>9</b>	28.5	26.7	27.4	29.3	27.6	28.4	30.3	28.6	29.3	25.0	23.3	24.1
<b>10</b>	28.5	26.7	27.4	29.2	27.7	28.4	29.9	28.6	29.1	25.1	23.3	24.1
<b>11</b>	28.3	26.8	27.4	29.1	27.7	28.3	30.3	28.6	29.3	25.5	23.7	24.5
<b>12</b>	28.7	26.8	27.6	29.4	27.8	28.4	30.5	28.8	29.5	25.8	24.0	24.8
<b>13</b>	28.9	27.0	27.9	29.6	27.7	28.5	30.1	28.8	29.4	26.5	24.7	25.5
<b>14</b>	29.1	27.2	28.1	29.7	27.9	28.7	30.3	28.6	29.3	26.9	25.1	25.9
<b>15</b>	29.3	27.5	28.3	30.0	28.2	29.0	30.3	28.5	29.3	26.7	25.4	26.0
<b>16</b>	29.4	27.6	28.4	29.8	28.4	29.0	30.1	28.4	29.2	26.5	25.5	25.9
<b>17</b>	29.6	27.8	28.5	29.5	27.9	28.7	30.2	28.5	29.2	26.2	25.7	25.9
<b>18</b>	29.7	27.9	28.7	29.9	27.9	28.8	30.1	28.3	29.1	26.5	25.4	25.8
<b>19</b>	29.7	27.9	28.7	29.7	28.1	28.7	30.0	28.2	29.0	26.5	24.9	25.6
<b>20</b>	29.3	27.8	28.4	29.4	27.7	28.4	30.0	28.2	29.0	26.2	24.6	25.4
<b>21</b>	29.1	27.8	28.3	29.5	27.9	28.5	29.9	28.3	29.0	26.5	24.9	25.6
<b>22</b>	28.4	27.1	27.7	29.1	27.9	28.4	29.8	28.3	29.0	26.5	24.9	25.7
<b>23</b>	28.4	27.0	27.6	29.5	27.8	28.5	30.1	28.4	29.1	26.4	24.9	25.6
<b>24</b>	28.8	27.0	27.8	29.9	28.1	28.8	30.2	28.4	29.2	26.3	24.7	25.4
<b>25</b>	28.7	27.4	28.0	30.0	28.1	29.0	29.1	28.1	28.7	26.4	24.8	25.5
<b>26</b>	29.3	27.5	28.2	30.0	28.2	29.0	29.2	27.7	28.3	26.7	25.0	25.8
<b>27</b>	29.6	27.8	28.5	30.0	28.2	29.0	29.4	27.7	28.5	27.0	25.6	26.1
<b>28</b>	29.6	28.1	28.7	30.1	28.4	29.1	29.4	27.8	28.5	26.8	25.3	25.9
<b>29</b>	29.6	28.0	28.7	29.9	28.4	29.0	29.5	27.8	28.5	26.8	25.2	25.8
<b>30</b>	29.4	27.8	28.5	29.5	28.2	28.8	29.3	27.5	28.3	25.8	24.9	25.3
<b>31</b>	---	---	---	29.8	28.0	28.8	29.2	27.6	28.3	---	---	---
<b>Month</b>	29.7	26.1	27.9	30.1	27.5	28.6	30.5	27.5	29.0	29.3	23.3	25.8

**08180700 Medina River near Macdona, TX—Continued**



**08180700 Medina River near Macdona, TX—Continued****PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	
<b>October</b>				<b>November</b>				<b>December</b>				<b>January</b>	
<b>1</b>	8.0	8.0	8.0	8.2	8.1	8.1	8.1	8.0	8.0	8.2	8.0	8.1	
<b>2</b>	8.0	8.0	8.0	8.3	8.1	8.2	8.1	8.0	8.0	8.2	8.0	8.1	
<b>3</b>	8.0	8.0	8.0	8.3	8.2	8.2	8.1	8.0	8.0	8.2	8.0	8.1	
<b>4</b>	8.1	8.0	8.0	8.4	8.2	8.3	8.1	7.9	8.0	8.1	8.0	8.0	
<b>5</b>	8.2	8.0	8.1	8.5	8.3	8.4	8.2	8.0	8.0	8.1	7.9	8.0	
<b>6</b>	8.2	8.1	8.2	8.5	8.4	8.4	8.2	8.0	8.0	8.1	7.9	7.9	
<b>7</b>	8.2	8.0	8.1	8.5	8.4	8.4	8.6	8.0	8.2	8.1	7.9	8.0	
<b>8</b>	8.1	8.0	8.0	8.5	8.3	8.4	8.7	8.5	8.5	8.2	7.9	8.0	
<b>9</b>	8.1	8.0	8.0	8.5	7.8	8.0	8.7	8.5	8.6	8.1	8.0	8.0	
<b>10</b>	8.2	8.0	8.1	7.9	7.8	7.8	---	---	---	8.1	8.0	8.0	
<b>11</b>	8.1	8.1	8.1	8.0	7.8	7.9	8.2	8.0	8.1	8.2	8.0	8.1	
<b>12</b>	8.1	8.1	8.1	7.9	7.8	7.9	8.2	8.0	8.1	8.2	8.0	8.1	
<b>13</b>	8.1	8.1	8.1	8.0	7.8	7.9	8.2	8.0	8.1	8.3	8.0	8.2	
<b>14</b>	8.2	8.1	8.1	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.1	8.2	
<b>15</b>	8.2	8.1	8.2	8.1	8.0	8.0	8.2	8.0	8.0	8.2	8.1	8.1	
<b>16</b>	8.3	8.2	8.2	8.1	8.0	8.0	8.1	8.0	8.0	8.2	8.1	8.1	
<b>17</b>	8.3	8.2	8.2	8.1	8.0	8.1	8.2	8.0	8.1	8.2	8.1	8.1	
<b>18</b>	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.1	8.2	8.2	8.1	8.1	
<b>19</b>	8.3	8.2	8.2	8.3	8.1	8.2	8.3	8.1	8.2	8.2	8.1	8.1	
<b>20</b>	8.3	7.8	8.2	8.2	8.1	8.2	8.2	8.1	8.1	8.1	7.9	8.0	
<b>21</b>	8.3	8.1	8.2	8.3	8.2	8.2	8.2	8.1	8.1	8.1	7.9	7.9	
<b>22</b>	8.2	8.0	8.1	8.2	8.1	8.1	8.1	8.0	8.0	8.1	7.9	7.9	
<b>23</b>	8.1	8.0	8.0	8.1	7.9	8.0	8.1	8.0	8.0	8.0	7.9	7.9	
<b>24</b>	8.1	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.1	7.9	7.9	
<b>25</b>	8.1	8.0	8.0	8.0	7.9	7.9	8.1	8.0	8.1	8.1	7.9	7.9	
<b>26</b>	8.1	7.9	8.0	8.0	7.9	7.9	8.2	8.1	8.1	8.1	7.9	7.9	
<b>27</b>	8.1	8.0	8.0	8.0	7.9	7.9	8.3	8.1	8.2	8.1	7.9	7.9	
<b>28</b>	8.2	8.0	8.1	8.1	7.9	7.9	8.1	8.0	8.1	8.1	7.9	7.9	
<b>29</b>	8.3	8.1	8.2	8.1	7.9	8.0	8.1	8.0	8.0	8.1	7.8	7.9	
<b>30</b>	8.3	8.2	8.2	8.1	7.9	8.0	8.1	8.0	8.1	8.1	7.8	7.9	
<b>31</b>	8.3	8.1	8.3	---	---	---	8.1	8.0	8.1	8.0	7.8	7.9	
<b>Max</b>	8.3	8.2	8.3	8.5	8.4	8.4	---	---	---	8.3	8.1	8.2	
<b>Min</b>	8.0	7.8	8.0	7.9	7.8	7.8	---	---	---	8.0	7.8	7.9	

**08180700 Medina River near Macdona, TX—Continued****PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	
<b>February</b>				<b>March</b>				<b>April</b>				<b>May</b>	
<b>1</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.7	7.9	7.8	7.8	
<b>2</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.7	7.9	7.8	7.8	
<b>3</b>	8.1	8.0	8.0	7.9	7.8	7.8	7.8	7.7	7.7	7.9	7.8	7.9	
<b>4</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	8.0	7.8	7.9	
<b>5</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.8	
<b>6</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.8	
<b>7</b>	8.2	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.8	
<b>8</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.8	
<b>9</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.8	7.8	
<b>10</b>	8.2	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.8	
<b>11</b>	8.1	7.9	8.0	7.9	7.8	7.8	7.8	7.7	7.8	7.7	7.6	7.7	
<b>12</b>	8.1	7.8	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.7	7.6	7.6	
<b>13</b>	8.1	7.8	7.9	7.9	7.8	7.8	7.9	7.7	7.8	7.7	7.6	7.7	
<b>14</b>	8.1	7.8	7.9	7.9	7.8	7.8	7.8	7.7	7.8	7.7	7.6	7.7	
<b>15</b>	7.9	7.7	7.8	7.9	7.8	7.8	7.9	7.7	7.8	7.8	7.7	7.7	
<b>16</b>	7.9	7.7	7.7	7.9	7.8	7.8	7.9	7.8	7.8	7.8	7.7	7.7	
<b>17</b>	7.9	7.7	7.7	7.9	7.8	7.8	7.9	7.8	7.8	7.7	7.6	7.7	
<b>18</b>	7.8	7.7	7.7	7.8	7.7	7.7	7.9	7.8	7.8	7.8	7.7	7.7	
<b>19</b>	7.8	7.7	7.7	7.8	7.7	7.7	7.9	7.7	7.8	7.8	7.7	7.7	
<b>20</b>	7.8	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.8	
<b>21</b>	7.7	7.6	7.7	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.8	
<b>22</b>	7.7	7.6	7.6	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.8	
<b>23</b>	7.7	7.6	7.6	7.8	7.7	7.7	7.9	7.7	7.8	7.8	7.7	7.8	
<b>24</b>	7.7	7.6	7.6	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.8	
<b>25</b>	7.9	7.6	7.8	7.8	7.7	7.7	7.8	7.6	7.8	7.8	7.7	7.8	
<b>26</b>	7.8	7.7	7.8	7.8	7.7	7.7	7.8	7.7	7.8	7.9	7.7	7.8	
<b>27</b>	7.9	7.7	7.8	7.8	7.7	7.7	7.8	7.7	7.8	7.9	7.8	7.8	
<b>28</b>	7.9	7.8	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.9	7.8	7.8	
<b>29</b>	---	---	---	7.8	7.7	7.7	7.9	7.8	7.8	7.9	7.8	7.8	
<b>30</b>	---	---	---	7.9	7.7	7.8	7.9	7.8	7.8	7.9	7.8	7.8	
<b>31</b>	---	---	---	7.8	7.7	7.7	---	---	---	7.9	7.8	7.8	
<b>Max</b>	8.2	8.0	8.0	7.9	7.8	7.8	7.9	7.8	7.8	8.0	7.8	7.9	
<b>Min</b>	7.7	7.6	7.6	7.8	7.7	7.7	7.8	7.6	7.7	7.7	7.6	7.6	

**08180700 Medina River near Macdona, TX—Continued****PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>	<b>Min</b>	<b>Median</b>	
<b>June</b>				<b>July</b>				<b>August</b>				<b>September</b>	
<b>1</b>	7.8	7.4	7.8	7.7	7.6	7.6	7.9	7.8	7.8	7.8	7.6	7.6	
<b>2</b>	7.7	7.6	7.6	7.7	7.6	7.6	7.9	7.8	7.8	7.7	7.5	7.6	
<b>3</b>	7.7	7.6	7.6	7.7	7.6	7.6	7.9	7.8	7.8	7.7	7.5	7.6	
<b>4</b>	7.7	7.5	7.6	7.7	7.6	7.6	7.9	7.8	7.8	7.8	7.6	7.6	
<b>5</b>	7.7	7.6	7.6	7.7	7.6	7.6	8.0	7.8	7.9	7.8	7.5	7.6	
<b>6</b>	7.7	7.6	7.6	7.7	7.6	7.6	7.9	7.8	7.8	7.8	7.6	7.7	
<b>7</b>	7.7	7.6	7.6	7.7	7.6	7.6	7.9	7.8	7.8	7.8	7.6	7.7	
<b>8</b>	7.8	7.6	7.7	8.0	7.6	7.9	8.0	7.8	7.9	7.7	7.5	7.6	
<b>9</b>	7.9	7.7	7.7	8.0	7.9	7.9	8.0	7.8	7.9	8.1	7.5	8.0	
<b>10</b>	7.9	7.7	7.7	8.0	7.9	8.0	7.8	7.6	7.8	8.4	8.1	8.3	
<b>11</b>	7.8	7.7	7.7	8.1	7.9	8.0	7.9	7.6	7.7	8.6	8.3	8.5	
<b>12</b>	7.9	7.7	7.7	8.1	8.0	8.0	7.9	7.7	7.7	8.6	8.4	8.5	
<b>13</b>	7.8	7.7	7.7	8.1	8.0	8.0	7.8	7.7	7.7	8.5	8.4	8.4	
<b>14</b>	7.8	7.7	7.7	8.1	8.0	8.0	7.9	7.7	7.7	8.5	8.2	8.4	
<b>15</b>	7.8	7.7	7.7	8.1	7.9	8.0	7.9	7.7	7.7	8.3	8.1	8.2	
<b>16</b>	7.8	7.7	7.7	8.0	7.9	7.9	7.9	7.7	7.7	8.2	8.1	8.1	
<b>17</b>	7.8	7.7	7.7	8.0	7.9	7.9	7.9	7.7	7.7	8.1	8.0	8.0	
<b>18</b>	7.8	7.7	7.7	8.0	7.9	7.9	7.9	7.7	7.7	8.1	7.9	8.0	
<b>19</b>	7.8	7.7	7.7	8.0	7.9	7.9	7.9	7.7	7.7	8.1	7.9	8.0	
<b>20</b>	7.8	7.6	7.7	8.0	7.9	7.9	7.9	7.7	7.7	8.1	7.9	8.0	
<b>21</b>	7.7	7.6	7.6	8.0	7.9	7.9	7.8	7.7	7.7	8.1	7.8	8.0	
<b>22</b>	7.6	7.5	7.6	8.0	7.9	7.9	7.8	7.7	7.7	8.0	7.8	7.9	
<b>23</b>	7.7	7.5	7.6	8.0	7.9	7.9	7.9	7.7	7.8	8.0	7.5	7.6	
<b>24</b>	7.7	7.6	7.6	8.0	7.9	7.9	7.9	7.7	7.7	7.6	7.5	7.5	
<b>25</b>	7.7	7.5	7.6	8.0	7.9	7.9	7.9	7.7	7.8	7.6	7.4	7.5	
<b>26</b>	7.7	7.6	7.6	8.0	7.9	7.9	7.9	7.8	7.8	7.6	7.4	7.5	
<b>27</b>	7.7	7.6	7.6	8.0	7.8	7.9	7.9	7.7	7.8	7.6	7.4	7.5	
<b>28</b>	7.7	7.6	7.6	7.9	7.8	7.8	7.9	7.7	7.8	8.2	7.3	7.4	
<b>29</b>	7.7	7.6	7.6	7.9	7.8	7.8	7.9	7.6	7.7	7.5	7.4	7.4	
<b>30</b>	7.7	7.6	7.6	7.9	7.8	7.8	7.8	7.6	7.6	7.5	7.3	7.4	
<b>31</b>	---	---	---	7.9	7.8	7.8	7.7	7.5	7.6	---	---	---	
<b>Max</b>	7.9	7.7	7.8	8.1	8.0	8.0	8.0	7.8	7.9	8.6	8.4	8.5	
<b>Min</b>	7.6	7.4	7.6	7.7	7.6	7.6	7.7	7.5	7.6	7.5	7.3	7.4	

**08180700 Medina River near Macdona, TX—Continued**
**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
<b>October</b>				<b>November</b>				<b>December</b>				<b>January</b>
<b>1</b>	8.1	7.3	7.6	9.5	7.8	8.3	10.3	8.3	9.0	10.8	8.6	9.4
<b>2</b>	8.2	7.3	7.7	9.4	7.5	8.2	10.5	8.6	9.2	11.2	8.9	9.7
<b>3</b>	8.3	7.4	7.8	9.3	7.6	8.1	10.6	8.6	9.3	10.6	9.0	9.5
<b>4</b>	8.5	7.6	8.0	9.7	7.8	8.4	10.5	8.4	9.1	10.2	8.8	9.3
<b>5</b>	8.7	7.7	8.1	9.9	8.1	8.7	10.6	8.4	9.2	11.3	8.6	9.6
<b>6</b>	8.9	7.8	8.2	10.2	8.4	9.0	10.8	8.7	9.5	11.1	8.8	9.6
<b>7</b>	8.9	7.9	8.3	10.3	8.5	9.1	10.3	8.9	9.4	11.6	8.9	9.8
<b>8</b>	9.0	7.9	8.3	10.4	8.4	9.0	10.9	8.9	9.6	11.4	8.8	9.7
<b>9</b>	8.9	7.9	8.2	10.4	8.3	8.9	11.2	9.1	9.8	10.8	8.8	9.5
<b>10</b>	8.8	7.7	8.1	10.1	8.1	8.7	---	---	---	10.1	8.8	9.3
<b>11</b>	8.6	7.6	7.9	9.7	7.9	8.5	11.5	9.3	10.0	12.0	9.0	10.1
<b>12</b>	8.7	7.5	7.9	9.4	7.8	8.3	11.5	9.2	10.0	11.9	9.5	10.4
<b>13</b>	8.6	7.5	7.9	9.7	7.8	8.4	11.7	9.5	10.3	12.1	9.7	10.5
<b>14</b>	8.7	7.5	7.9	9.4	7.9	8.4	11.7	9.6	10.3	11.2	9.7	10.3
<b>15</b>	8.8	7.7	8.1	9.6	8.0	8.5	11.4	9.4	10.1	11.4	9.5	10.2
<b>16</b>	8.8	7.7	8.1	9.8	8.1	8.6	11.1	9.2	9.9	10.4	9.3	9.8
<b>17</b>	8.8	7.8	8.1	9.9	8.2	8.8	11.0	9.2	9.9	11.2	9.1	9.9
<b>18</b>	8.8	7.5	7.9	10.0	8.3	8.9	11.2	9.3	10.0	12.0	9.1	10.1
<b>19</b>	8.6	7.4	7.8	10.3	8.4	9.0	11.3	9.5	10.1	12.0	8.9	10.0
<b>20</b>	8.9	7.3	7.9	10.2	8.5	9.0	11.0	9.4	9.9	11.7	8.7	9.8
<b>21</b>	8.7	7.4	7.8	9.7	8.0	8.6	10.5	9.0	9.5	12.4	9.0	10.3
<b>22</b>	8.2	7.3	7.6	9.5	7.7	8.3	10.2	8.7	9.2	12.7	9.3	10.6
<b>23</b>	8.3	7.2	7.6	8.9	7.4	7.9	10.0	8.5	9.0	11.3	9.3	10.1
<b>24</b>	8.5	7.2	7.6	8.7	7.2	7.7	9.3	8.3	8.6	12.8	9.2	10.5
<b>25</b>	8.6	7.2	7.6	8.5	6.9	7.5	10.2	8.3	9.1	12.8	9.2	10.5
<b>26</b>	8.6	7.1	7.6	9.1	7.2	7.9	10.7	9.0	9.6	12.8	9.3	10.7
<b>27</b>	8.5	7.2	7.6	9.6	7.9	8.5	11.0	9.3	9.9	12.8	9.3	10.7
<b>28</b>	8.9	7.3	7.8	9.8	8.3	8.8	9.6	8.9	9.3	12.8	9.3	10.6
<b>29</b>	9.2	7.6	8.2	9.7	8.1	8.6	10.1	8.8	9.2	12.2	9.0	10.2
<b>30</b>	9.4	7.9	8.4	9.8	7.9	8.6	10.1	8.7	9.1	12.0	8.6	9.8
<b>31</b>	9.6	8.0	8.5	---	---	---	10.2	8.5	9.1	11.4	8.4	9.4
<b>Month</b>	9.6	7.1	7.9	10.4	6.9	8.5	---	---	---	12.8	8.4	10.0

**08180700 Medina River near Macdona, TX—Continued**
**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

<b>Day</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>	<b>Max</b>	<b>Min</b>	<b>Mean</b>
<b>February</b>				<b>March</b>				<b>April</b>				<b>May</b>
<b>1</b>	11.4	8.3	9.5	10.6	7.9	8.9	9.7	7.5	8.3	8.3	6.7	7.3
<b>2</b>	11.6	9.1	10.1	10.8	8.1	9.1	9.0	7.2	7.8	7.6	6.8	7.1
<b>3</b>	12.0	10.0	10.7	10.8	8.1	9.0	8.6	7.0	7.5	9.4	7.2	8.1
<b>4</b>	13.6	10.3	11.5	10.2	7.8	8.7	9.2	6.8	7.7	9.6	7.7	8.4
<b>5</b>	13.5	10.5	11.6	10.6	7.7	8.8	9.5	7.2	8.0	9.7	7.8	8.4
<b>6</b>	13.6	10.2	11.5	10.9	8.1	9.2	9.9	7.4	8.3	9.2	7.5	8.1
<b>7</b>	13.5	9.9	11.3	10.9	8.3	9.2	9.5	7.3	8.1	9.0	7.3	7.9
<b>8</b>	13.3	9.7	11.1	10.3	7.9	8.8	9.6	7.1	8.0	8.9	7.0	7.7
<b>9</b>	12.5	9.3	10.5	10.4	7.7	8.7	9.4	6.9	7.8	8.6	6.8	7.5
<b>10</b>	13.6	9.8	11.3	10.6	8.0	8.9	9.1	6.7	7.6	8.0	6.6	7.1
<b>11</b>	13.9	10.1	11.5	10.6	8.1	9.1	9.2	6.6	7.6	7.7	6.5	6.9
<b>12</b>	14.1	10.2	11.7	10.4	8.0	8.9	9.4	6.9	7.8	7.1	6.2	6.6
<b>13</b>	14.1	10.0	11.6	9.3	7.7	8.3	9.7	6.9	8.0	7.8	6.2	6.9
<b>14</b>	13.6	9.7	11.2	9.9	7.5	8.4	9.1	6.9	7.6	8.1	6.7	7.2
<b>15</b>	12.4	9.1	10.2	10.1	7.6	8.6	9.5	6.8	7.8	8.3	6.8	7.4
<b>16</b>	11.4	8.6	9.6	9.9	7.7	8.5	9.8	7.1	8.1	8.6	6.9	7.5
<b>17</b>	11.1	8.2	9.2	9.4	7.4	8.1	9.7	7.3	8.2	8.7	6.8	7.5
<b>18</b>	10.1	8.0	8.7	9.4	7.2	8.0	9.7	7.1	8.1	8.3	6.7	7.3
<b>19</b>	9.3	7.9	8.4	8.7	7.2	7.7	9.0	6.9	7.6	7.8	6.7	7.1
<b>20</b>	10.1	7.9	8.7	8.7	7.1	7.7	8.5	6.6	7.2	7.7	6.6	7.0
<b>21</b>	9.6	7.8	8.4	9.1	7.0	7.8	8.4	6.5	7.1	7.7	6.5	6.9
<b>22</b>	9.4	7.7	8.4	9.4	7.1	7.9	8.9	6.4	7.3	7.7	6.4	6.9
<b>23</b>	9.7	7.8	8.5	9.5	7.0	7.9	8.7	6.3	7.3	7.3	6.4	6.8
<b>24</b>	9.7	7.6	8.4	9.2	6.9	7.7	8.2	6.4	7.0	7.9	6.3	6.9
<b>25</b>	10.3	7.8	8.8	9.2	6.9	7.7	8.1	6.3	6.9	7.9	6.3	6.8
<b>26</b>	9.5	7.9	8.5	8.9	6.7	7.5	8.4	6.4	7.1	8.0	6.3	6.9
<b>27</b>	9.9	7.6	8.3	8.6	6.7	7.4	8.6	6.4	7.2	8.0	6.3	6.9
<b>28</b>	10.4	7.5	8.6	8.5	6.8	7.4	8.9	6.7	7.4	8.0	6.2	6.8
<b>29</b>	---	---	---	8.2	7.0	7.4	9.1	6.9	7.7	8.0	6.1	6.8
<b>30</b>	---	---	---	9.6	7.2	8.0	8.7	6.9	7.5	8.0	6.1	6.8
<b>31</b>	---	---	---	9.8	7.6	8.4	---	---	---	7.8	6.1	6.8
<b>Month</b>	14.1	7.5	9.9	10.9	6.7	8.3	9.9	6.3	7.7	9.7	6.1	7.2

**08180700 Medina River near Macdona, TX—Continued**
**DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
<b>1</b>	7.9	6.2	6.8	8.0	6.2	6.8	8.3	6.0	6.9	8.7	6.1	7.0
<b>2</b>	8.2	6.3	7.0	8.1	6.3	7.0	8.3	5.9	6.9	8.4	6.0	6.9
<b>3</b>	8.3	6.4	7.1	8.1	6.2	6.9	8.3	5.9	6.8	8.1	6.0	6.8
<b>4</b>	8.2	6.3	7.0	8.0	6.2	6.9	8.1	5.9	6.7	8.4	6.0	6.9
<b>5</b>	8.3	6.4	7.1	8.1	6.2	6.9	8.1	5.8	6.7	8.6	6.1	7.1
<b>6</b>	8.4	6.4	7.1	8.1	6.1	6.9	8.1	5.8	6.7	8.7	6.4	7.2
<b>7</b>	8.3	6.4	7.1	8.1	6.1	6.9	7.9	5.8	6.6	9.0	6.6	7.5
<b>8</b>	8.3	6.3	7.0	8.1	6.1	6.9	8.1	5.8	6.6	9.2	6.7	7.6
<b>9</b>	8.4	6.3	7.0	8.0	6.2	6.9	7.9	5.7	6.6	9.3	6.8	7.7
<b>10</b>	8.3	6.3	7.0	7.8	6.1	6.8	7.8	5.7	6.5	9.3	6.9	7.8
<b>11</b>	8.1	6.3	7.0	7.8	6.1	6.8	8.2	5.9	6.7	9.2	6.9	7.7
<b>12</b>	8.3	6.4	7.1	7.8	6.1	6.8	8.2	5.9	6.8	9.1	6.8	7.7
<b>13</b>	8.3	6.3	7.1	8.0	6.1	6.8	8.1	5.8	6.7	9.0	6.7	7.5
<b>14</b>	8.2	6.3	7.0	8.0	6.1	6.8	8.1	5.8	6.7	8.8	6.6	7.4
<b>15</b>	8.3	6.3	7.0	8.0	6.1	6.8	8.2	5.9	6.8	8.5	6.5	7.2
<b>16</b>	8.3	6.3	7.0	8.0	6.1	6.8	8.3	5.9	6.8	8.3	6.5	7.1
<b>17</b>	8.4	6.2	7.0	7.9	6.1	6.8	8.4	5.8	6.8	7.8	6.5	7.0
<b>18</b>	8.2	6.2	7.0	8.2	6.1	6.9	8.4	5.9	6.9	8.1	6.5	7.1
<b>19</b>	8.2	6.2	6.9	8.0	6.1	6.7	8.4	5.9	6.9	8.0	6.3	6.9
<b>20</b>	8.2	6.2	6.9	7.8	5.9	6.6	8.5	6.0	6.9	8.3	6.3	7.0
<b>21</b>	7.8	6.3	6.8	8.0	6.1	6.8	8.4	5.9	6.9	8.5	6.4	7.1
<b>22</b>	7.4	6.2	6.6	7.7	6.1	6.7	8.3	6.0	6.9	8.3	6.4	7.1
<b>23</b>	7.8	6.1	6.7	8.2	6.2	6.9	8.6	6.0	7.0	8.4	6.4	7.1
<b>24</b>	8.0	6.4	6.9	8.2	6.2	7.0	8.6	6.1	7.0	8.3	6.4	7.1
<b>25</b>	7.7	6.3	6.8	8.3	6.2	7.0	7.5	6.1	6.6	8.3	6.4	7.0
<b>26</b>	7.9	6.2	6.8	8.3	6.2	7.0	8.3	6.0	6.9	8.2	6.3	7.0
<b>27</b>	8.0	6.2	6.8	8.4	6.2	7.0	8.4	6.2	7.0	8.1	6.3	6.9
<b>28</b>	7.8	6.2	6.8	8.4	6.2	7.0	8.3	6.1	6.9	8.1	6.3	6.9
<b>29</b>	8.0	6.2	6.8	8.1	6.2	6.9	8.4	6.0	6.9	8.0	6.3	6.8
<b>30</b>	8.1	6.2	6.9	8.0	6.1	6.8	8.6	6.0	7.0	7.8	6.0	6.7
<b>31</b>	---	---	---	8.3	6.0	6.9	8.6	6.0	7.0	---	---	---
<b>Month</b>	8.4	6.1	6.9	8.4	5.9	6.9	8.6	5.7	6.8	9.3	6.0	7.2

**08180700 Medina River near Macdona, TX—Continued**