07308500 Red River near Burkburnett, TX

Red-Pease Basin
Blue-China Subbasin

LOCATION.--Lat 34°06′36″, long 98°31′53″ referenced to North American Datum of 1927, Wichita County, TX, Hydrologic Unit 11130102, on downstream guardrail of downstream bridge on U.S. Highways 277 and 281, 2.5 mi northeast of Burkburnett, and at mile 933.

DRAINAGE AREA.--20,570 mi^2 of which 5,936 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1924 to Sept. 1924 (daily mean discharge), Oct. 1924 to Aug. 1925 (monthly discharge only), Dec. 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 952.57 ft above NGVD of 1929. July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft downstream at same datum. Dec. 16, 1959, to Jan. 11, 1960, nonrecording gage at present site and datum. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No known regulation. There are many small diversions upstream from station for irrigation. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 3, 1957, reached a stage of 13.54 ft, from floodmarks. According to local residents, higher stages occurred in 1891 and June 1941.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 1	1445	*40,600	*10.05

07308500 Red River near Burkburnett, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	255	572	223	169	190	178	142	36,900	365	249	1,670	90
2	235	555	216	166	196	163	135	22,600	400	220	2,540	85
3	208	497	214	170	209	150	147	7,110	590	219	1,110	87
4	179	435	222	158	186	153	164	3,880	1,100	271	541	83
5	152	404	225	153	183	157	141	2,630	840	275	379	84
6	209	388	223	159	171	151	143	2,230	448	280	337	82
7	231	363	207	157	169	144	146	2,250	353	252	252	77
8	292	343	199	164	154	160	138	2,180	332	230	183	76
9	721	334	203	166	173	153	123	1,740	351	326	169	72
10	1,170	395	191	168	196	157	117	1,440	565	275	164	66
11	1,730	447	197	167	240	152	111	1,500	879	207	150	45
12	1,040	387	190	162	200	173	186	1,880	1,070	155	142	37
13	663	363	182	e158	199	186	264	3,340	673	149	128	52
14	843	335	186	e160	203	189	265	5,500	493	124	103	1,900
15	1,530	294	177	e160	226	183	257	4,060	384	111	77	3,110
16	3,250	280	192	160	214	191	244	5,570	331	104	82	1,600
17	6,250	264	170	169	210	183	281	4,970	1,110	124	63	617
18	6,660	263	172	152	213	191	280	4,100	1,900	122	62	213
19	5,050	265	183	e154	204	215	276	3,930	1,200	151	170	102
20	3,370	260	178	e156	196	188	418	1,890	724	181	201	64
21	2,410	253	178	158	189	175	1,080	1,200	478	190	145	39
22	1,780	252	174	160	181	161	600	990	333	194	122	20
23	1,410	248	167	150	169	150	423	722	266	165	155	17
24	1,150	245	149	146	172	152	350	722	281	138	132	15
25	971	242	144	141	179	145	292	713	239	107	136	14
26	916	260	166	142	172	262	240	872	196	97	121	18
27	830	252	193	151	167	256	251	1,090	163	109	114	20
28	743	255	201	120	170	187	389	689	154	125	110	16
29	686	252	192	88	---	177	2,280	537	182	139	110	16
30	621	236	182	106	---	165	20,900	473	225	280	111	15
31	603	---	170	172	---	162	---	414	---	421	103	---
Total	46,158	9,939	5,866	4,762	5,331	5,409	30,783	128,122	16,625	5,990	9,882	8,732
Mean	1,489	331	189	154	190	174	1,026	4,133	554	193	319	291
Max	6,660	572	225	172	240	262	20,900	36,900	1,900	421	2,540	3,110
Min	152	236	144	88	154	144	111	414	154	97	62	14
Ac-ft	91,550	19,710	11,640	9,450	10,570	10,730	61,060	254,100	32,980	11,880	19,600	17,320

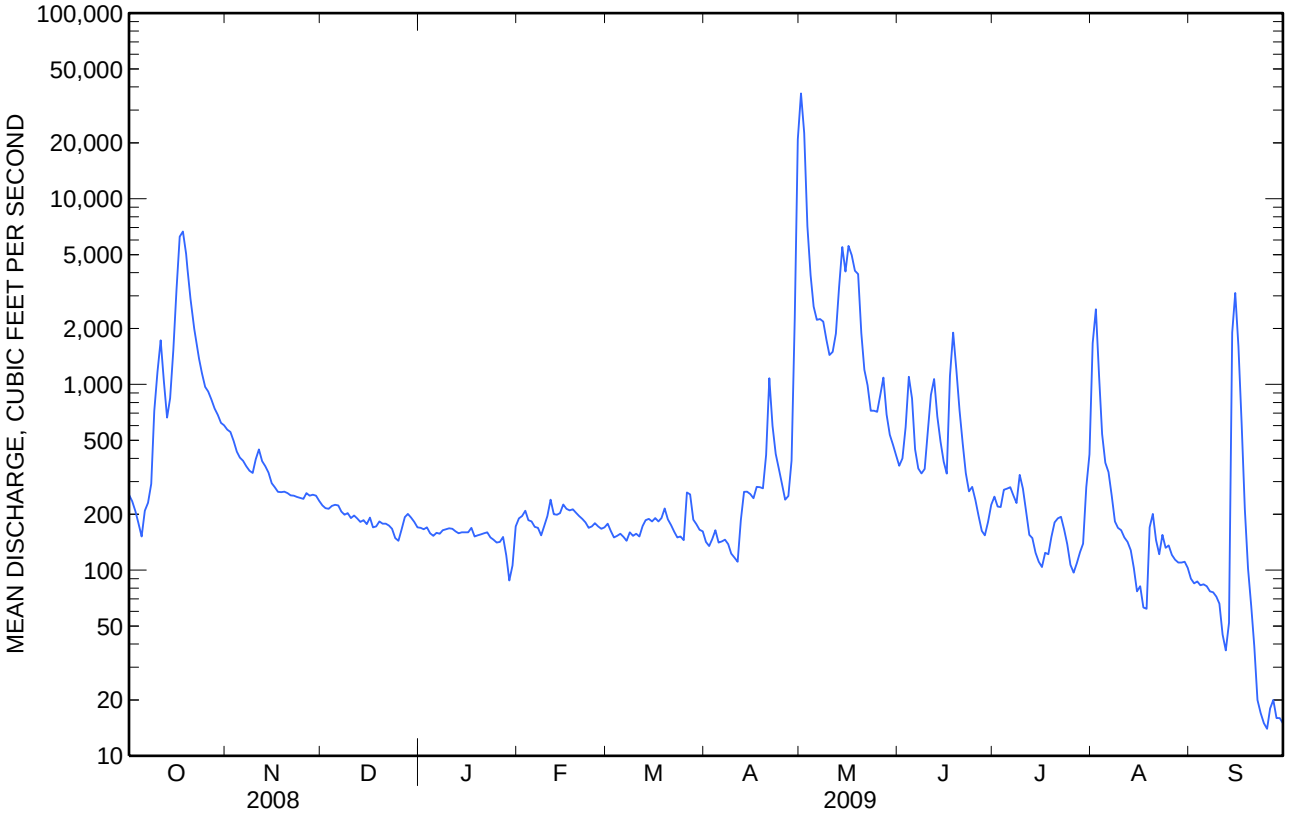
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,388	688	543	487	671	940	1,062	2,218	3,163	888	824	1,217
Max	14,900	4,960	4,435	2,293	4,986	10,050	13,040	12,470	24,780	5,947	10,540	6,381
(WY)	(1987)	(1987)	(1992)	(1998)	(1998)	(1998)	(1997)	(1977)	(1995)	(1975)	(1995)	(1996)
Min	21.9	0.96	2.98	5.53	8.37	7.97	0.15	11.4	148	0.06	1.29	29.9
(WY)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1970)	(1970)	(1964)	(2002)

07308500 Red River near Burkburnett, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1960 - 2009	
Annual total	287,095		277,599			
Annual mean	784		761		1,176	
Highest annual mean					4,424	1987
Lowest annual mean					178	1964
Highest daily mean	12,200	Apr 11	36,900	May 1	144,000	Jun 6, 1995
Lowest daily mean	41	Aug 6	14	Sep 25	0.00	Jul 19, 1964
Annual seven-day minimum	46	Jul 23	16	Sep 24	0.00	Jul 19, 1964
Maximum peak flow			40,600	May 1	174,000	Jun 6, 1995
Maximum peak stage			10.05	May 1	16.90	Oct 21, 1983
Instantaneous low flow					0.00	Jul 31, 2006
Annual runoff (ac-ft)	569,500		550,600		852,100	
10 percent exceeds	1,530		1,460		2,340	
50 percent exceeds	292		199		296	
90 percent exceeds	109		108		53	



07308500 Red River near Burkburnett, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1959 to May 2007, July 2009 to current year.
BIOCHEMICAL DATA: Oct. 1959 to May 2007, July 2009 to current year.
BIOLOGICAL DATA: Oct. 1974 to Aug. 1981.
PESTICIDE DATA: Oct. 1973 to Sept. 1982, Oct. 1996 to May 2007, July 2009 to current year.
RADIOCHEMICAL DATA: Dec. 1980 to July 1981.
SEDIMENT DATA: Oct. 1974 to Aug. 1994.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to Sept. 1981, Oct. 1994 to Jan. 2003, Dec. 2003 to current year.
WATER TEMPERATURE: July 1968 to Sept. 1981, Oct. 1994 to May 2003, Nov. 2003 to current year.

INSTRUMENTATION.--Water-quality monitor Dec. 1968 to Sept. 1981 and Oct. 1994 to May 2003, Nov. 2003 to current year.

REMARKS.--Temperature record fair. Specific conductance record poor. Interruptions or periods of missing record may be due to instrument failure, 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. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using the daily records of specific conductance and a regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 17,600 microsiemens/cm, June 24, 2008; minimum, 440 microsiemens/cm, Apr. 13, 2002.
WATER TEMPERATURE: Maximum, 38.0°C, July 24, 2001; minimum -0.9°, -0.5°C, Jan. 27-28, 2009.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 16,800 microsiemens/cm, Mar. 21; minimum, 1,500 microsiemens/cm, Sept. 15.
WATER TEMPERATURE: Maximum, 37.1°C, July 2; minimum, -0.5°C, Jan. 27-28.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 1 of 6

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

Date	Time	Medium name	Sample type code	Barometric pressure, mm Hg (00025)	Temperature, air, deg C (00020)	Instantaneous discharge, ft³/s (00061)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm @ 25 degC (00095)
Jul										
29...	*1129*	*QC sample - Surface water*	*2*	--	--	--	--	--	--	--
29...	1130	Surface water	9	733	28.3	143	7.9	108	8.2	6,910
Sep										
10...	1330	Surface water	9	737	32.8	73	8.1	113	8.4	5,850

07308500 Red River near Burkburnett, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
Part 2 of 6
[Remark codes: <, less than; E, estimated.]

Date	Temperature, water, deg C (00010)	Dissolved solids, sum of constituents, mg/L (70301)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Suspended solids, water, unfltrd mg/L (00530)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium fraction of cations percent (00932)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inf tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt infl pt titr., field, mg/L (00453)
Jul													
29...	--	--	--	--	*<15*	*<.02*	*<.012*	*<.06*	--	--	*<.12*	--	--
29...	28.1	E4,400	1,300	1,200	49	305	130	10.3	13	64	1,080	83	98
Sep													
10...	30.0	E3,810	1,300	1,200	167	294	128	9.74	11	60	865	76	90

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
Part 3 of 6
[Remark codes: <, less than; E, estimated.]

Date	Carbonate, wat flt infl pt titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)
Jul													
29...	--	*<.12*	*<.08*	*<.2*	*<.18*	*<.10*	--	*<.020*	*<.04*	*<.002*	--	--	*<.008*
29...	2	1,760	.49	3.4	1,070	.94	--	<.020	<.04	<.002	--	E.015	E.005
Sep													
10...	1	1,360	.56	5.5	1,100	1.5	E.01	E.011	.16	<.002	E1.4	E.014	E.004

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
Part 4 of 6
[Remark codes: <, less than; E, estimated.]

Date	Phosphorus, water, fltrd, mg/L as P (00666)	Phosphorus, water, unfltrd mg/L as P (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Barium, water, fltrd, µg/L (01005)	Barium, water, unfltrd recover-able, µg/L (01007)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Chromium, water, fltrd, µg/L (01030)	Chromium, water, unfltrd recover-able, µg/L (01034)	Copper, water, fltrd, µg/L (01040)	Copper, water, unfltrd recover-able, µg/L (01042)	Iron, water, fltrd, µg/L (01046)	Iron, water, unfltrd recover-able, µg/L (01045)
Jul													
29...	*<.04*	*<.04*	--	*<.4*	*<.4*	*<.02*	*<.06*	*<.12*	*<.40*	*<1.0*	*<4.0*	*<4*	*<14*
29...	<.04	.10	--	89	111	<.08	<.18	<.48	E1.0	<4.0	<12.0	<16	595
Sep													
10...	<.04	.16	1.6	83	115	E.04	<.18	E.28	2.6	<3.0	<12.0	<16	1,590

07308500 Red River near Burkburnett, TX—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
Part 5 of 6
[Remark codes: <, less than; E, estimated.]

Date	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover -able, µg/L (01051)	Mangan- ese, water, fltrd, µg/L (01056)	Mangan- ese, water, unfltrd recover -able, µg/L (01055)	Mercury water, fltrd, µg/L (71890)	Mercury water, unfltrd recover -able, µg/L (71900)	Nickel, water, fltrd, µg/L (01065)	Nickel, water, unfltrd recover -able, µg/L (01067)	Silver, water, fltrd, µg/L (01075)	Silver, water, unfltrd recover -able, µg/L (01077)	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover -able, µg/L (01092)	Arsenic water, fltrd, µg/L (01000)
Jul													
29...	*<.06*	*<.10*	*.3*	*<.4*	*<.010*	*<.010*	*<.12*	*<.20*	*<.008*	*<.06*	*<2.0*	*<2.0*	*<.06*
29...	<.24	.75	9.9	101	<.010	<.010	3.5	2.2	<.032	<.18	<8.0	<6.0	5.1
Sep													
10...	<.18	1.69	4.7	148	<.010	<.010	3.9	5.2	<.024	<.18	E5.2	14.7	3.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
Part 6 of 6
[Remark codes: <, less than; E, estimated.]

Date	Arsenic water, unfltrd µg/L (01002)	Selen- ium, water, fltrd, µg/L (01145)	Selen- ium, water, unfltrd µg/L (01147)	Data base number	Medium code
Jul					
29...	*<.20*	*<1*	*<1*	*02*	*WSQ*
29...	4.5	--	--	01	WS
Sep					
10...	7.4	--	--	01	WS

07308500 Red River near Burkburnett, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	---	---	---	8,690	8,680	8,680	9,460	9,350	9,400	9,520	9,370	9,440
2	9,090	9,000	9,060	8,720	8,680	8,700	9,690	9,430	9,600	9,490	9,380	9,430
3	---	8,780	---	8,730	8,700	8,720	9,760	9,650	9,690	9,410	9,220	9,320
4	9,230	8,100	8,610	8,730	8,390	8,640	9,840	9,680	9,780	9,520	9,290	9,410
5	8,100	7,890	7,990	---	---	---	10,000	9,830	9,910	9,570	9,440	9,500
6	8,390	7,840	8,280	---	---	---	10,000	9,740	9,880	9,440	9,290	9,350
7	8,470	7,770	8,070	---	---	---	9,860	9,740	9,800	9,310	9,180	9,240
8	7,870	7,410	7,650	---	---	---	9,990	9,680	9,870	9,250	9,070	9,160
9	10,300	7,470	8,240	---	---	---	9,960	9,630	9,850	9,440	9,130	9,280
10	12,600	10,300	11,800	---	---	---	9,940	9,790	9,870	9,570	9,420	9,500
11	12,300	7,420	10,500	---	---	---	9,880	9,770	9,820	9,580	9,420	9,500
12	7,420	6,760	6,920	---	---	---	9,850	9,570	9,720	9,540	9,380	9,440
13	7,360	6,640	7,200	8,950	8,800	8,870	9,720	9,550	9,630	9,550	9,200	9,370
14	6,640	6,220	6,430	8,950	8,840	8,890	9,880	9,610	9,720	9,260	9,020	9,150
15	6,680	4,500	5,930	8,980	8,870	8,940	10,100	9,880	10,000	9,440	9,260	9,360
16	5,360	3,830	4,310	9,060	8,880	8,970	10,200	9,970	10,100	9,570	9,340	9,500
17	8,460	5,360	7,270	9,370	---	---	10,000	9,890	9,960	9,580	9,330	9,460
18	7,260	5,730	6,440	9,450	9,260	9,380	9,920	9,470	9,740	9,450	9,370	9,430
19	5,730	4,760	5,120	9,520	9,320	9,420	9,470	9,320	9,400	---	---	---
20	4,770	4,420	4,620	9,560	9,390	9,470	9,740	9,410	9,520	10,000	9,710	9,840
21	4,560	4,020	4,140	9,410	9,160	9,270	9,920	9,740	9,830	10,100	9,950	10,000
22	5,330	4,080	4,570	9,220	8,990	9,120	9,830	9,610	9,720	10,200	9,960	10,000
23	5,990	5,320	5,550	9,090	8,960	9,010	9,830	9,680	9,740	10,100	9,860	9,950
24	7,000	5,830	6,290	9,070	8,910	9,000	9,760	9,670	9,710	10,200	10,100	10,200
25	---	---	---	9,210	9,030	9,160	9,670	9,520	9,590	10,300	10,100	10,200
26	7,920	7,510	7,750	9,330	9,140	9,240	9,600	9,440	9,540	10,200	10,100	10,200
27	7,930	7,730	7,890	9,200	9,110	9,150	9,570	8,890	9,290	10,100	9,620	9,870
28	8,110	7,480	8,000	9,280	8,830	9,150	9,550	9,160	9,300	10,600	9,700	10,000
29	8,380	8,100	8,280	8,950	8,830	8,890	9,600	9,500	9,540	9,950	9,490	9,750
30	8,680	8,070	8,430	9,460	8,950	9,260	9,620	9,450	9,550	9,880	9,040	9,530
31	8,700	8,670	8,680	---	---	---	9,570	9,430	9,510	9,530	9,080	9,330
Month	---	---	---	---	---	---	10,200	8,890	9,700	---	---	---

07308500 Red River near Burkburnett, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

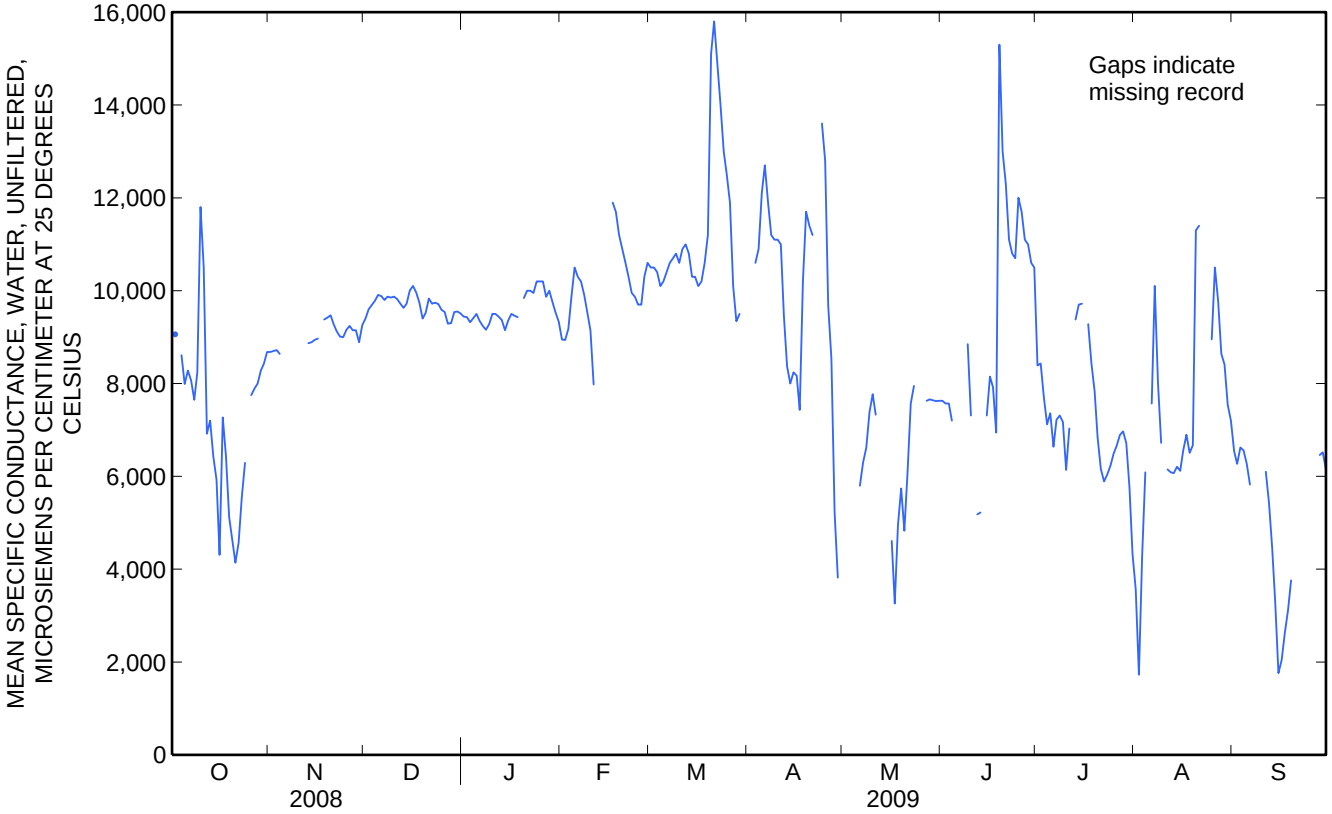
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	9,290	8,510	8,950	10,600	10,300	10,500	---	---	---	---	---	---
2	9,170	8,680	8,940	10,600	10,400	10,500	---	---	---	---	---	---
3	9,430	9,000	9,180	10,600	10,100	10,400	10,700	10,500	10,600	---	---	---
4	10,200	9,430	9,860	10,100	9,980	10,100	11,300	10,700	10,900	---	---	---
5	10,700	10,200	10,500	10,300	10,100	10,200	12,700	11,300	12,100	---	---	---
6	10,600	10,100	10,300	10,500	10,300	10,400	13,000	12,100	12,700	5,970	5,530	5,800
7	10,200	10,100	10,200	10,700	10,500	10,600	12,300	11,400	11,900	6,430	5,990	6,300
8	10,100	9,620	9,910	10,800	10,600	10,700	11,500	10,900	11,200	6,910	6,430	6,620
9	9,900	9,410	9,540	10,800	10,700	10,800	11,400	10,800	11,100	7,550	6,910	7,380
10	9,470	7,320	9,150	10,800	10,500	10,600	11,400	10,900	11,100	7,990	7,550	7,770
11	8,380	7,070	7,980	11,000	10,800	10,900	11,100	10,600	11,000	8,030	6,490	7,330
12	8,690	---	---	11,200	10,900	11,000	10,600	9,200	9,460	---	---	---
13	---	---	---	10,900	10,700	10,800	9,350	7,880	8,370	---	---	---
14	---	---	---	10,700	10,200	10,300	8,160	7,830	8,000	---	---	---
15	---	---	---	10,400	10,100	10,300	8,490	8,010	8,240	---	---	---
16	---	---	---	10,200	9,920	10,100	8,760	7,000	8,170	5,520	3,420	4,610
17	12,000	11,800	11,900	10,500	10,100	10,200	8,740	6,730	7,430	3,810	3,020	3,260
18	11,800	11,500	11,700	10,900	10,400	10,600	11,500	8,740	10,200	5,450	3,810	4,950
19	11,500	10,900	11,200	12,600	10,900	11,200	12,100	11,200	11,700	6,320	5,050	5,740
20	11,000	10,300	10,900	16,500	12,600	15,100	11,900	10,800	11,400	5,780	4,450	4,830
21	10,800	10,500	10,600	16,800	15,300	15,800	14,000	7,970	11,200	7,060	5,010	6,090
22	10,600	10,100	10,300	15,500	14,400	14,900	---	---	---	7,820	7,060	7,570
23	10,200	9,530	9,950	14,900	13,200	14,000	---	---	---	8,140	7,610	7,950
24	10,000	9,780	9,870	13,500	12,700	13,000	14,600	12,900	13,600	---	---	---
25	9,840	9,590	9,700	12,700	12,300	12,500	13,300	12,300	12,800	---	---	---
26	10,100	9,520	9,700	12,300	11,600	11,900	12,400	9,170	9,680	---	---	---
27	10,500	10,000	10,300	11,600	8,060	10,100	9,440	6,700	8,540	7,640	7,620	7,630
28	10,700	10,400	10,600	9,870	8,820	9,340	6,700	4,460	5,230	7,700	7,630	7,660
29	---	---	---	9,620	9,460	9,500	5,180	2,470	3,820	7,660	7,620	7,640
30	---	---	---	---	---	---	---	---	---	7,640	7,610	7,620
31	---	---	---	---	---	---	---	---	---	7,650	7,610	7,630
Month	---	---	---	---	---	---	---	---	---	---	---	---

07308500 Red River near Burkburnett, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	7,650	7,630	7,630	9,190	7,750	8,390	4,570	2,300	3,570	7,200	6,220	6,540
2	7,650	7,540	7,570	8,790	8,060	8,430	2,300	1,560	1,730	6,440	6,190	6,270
3	7,620	7,510	7,570	8,280	7,120	7,700	5,540	1,860	4,270	6,820	6,440	6,620
4	7,550	5,170	7,200	7,580	6,830	7,120	6,300	5,540	6,090	6,830	6,340	6,560
5	---	---	---	7,800	6,750	7,360	---	---	---	6,470	5,650	6,270
6	---	---	---	6,910	6,510	6,640	8,230	6,950	7,570	6,190	5,510	5,820
7	---	---	---	7,340	6,910	7,220	11,000	8,230	10,100	---	---	---
8	---	---	---	7,330	7,280	7,310	9,220	7,420	8,020	---	---	---
9	9,050	8,710	8,850	7,310	6,540	7,170	7,420	5,900	6,720	---	---	---
10	10,100	2,650	7,310	6,540	5,770	6,140	---	---	---	---	---	---
11	---	---	---	8,340	5,840	7,030	6,380	6,070	6,150	6,190	5,990	6,100
12	6,020	4,320	5,180	---	---	---	6,180	6,040	6,090	6,160	4,530	5,430
13	6,090	4,450	5,220	9,470	9,330	9,380	6,180	6,010	6,070	4,540	4,260	4,450
14	---	---	---	10,200	9,390	9,700	7,460	5,830	6,210	4,550	1,520	3,280
15	7,700	7,190	7,310	10,200	9,320	9,720	6,560	5,830	6,120	1,890	1,500	1,760
16	8,400	7,700	8,150	---	---	---	6,780	6,280	6,560	2,450	1,630	2,040
17	9,330	4,980	7,920	9,770	8,720	9,280	7,040	6,770	6,900	3,140	2,390	2,630
18	13,900	4,970	6,940	8,720	8,270	8,440	6,940	6,310	6,510	3,430	2,550	3,120
19	16,100	13,900	15,300	8,310	7,570	7,840	8,240	6,330	6,670	3,930	3,430	3,760
20	14,100	12,600	13,000	7,750	6,240	6,830	13,400	8,240	11,300	---	---	---
21	12,900	11,700	12,300	6,610	5,920	6,160	12,600	10,000	11,400	---	---	---
22	11,700	10,800	11,100	5,990	5,820	5,890	10,000	---	---	---	---	---
23	10,900	10,700	10,800	6,100	5,990	6,040	---	---	---	---	---	---
24	11,100	10,500	10,700	6,360	6,100	6,230	9,760	---	---	---	---	---
25	12,400	11,100	12,000	6,580	6,360	6,490	9,650	8,460	8,950	---	---	---
26	12,300	11,300	11,700	6,780	6,570	6,660	11,700	8,680	10,500	---	---	---
27	11,300	11,000	11,100	7,010	6,780	6,890	11,500	8,800	9,780	---	---	---
28	11,100	10,800	11,000	7,180	6,680	6,970	8,800	8,530	8,640	---	---	6,460
29	11,000	10,200	10,600	6,900	6,570	6,720	8,650	8,120	8,410	6,640	6,380	6,520
30	11,400	9,180	10,500	6,640	5,110	5,760	8,120	7,090	7,540	6,380	6,000	6,150
31	---	---	---	5,110	3,640	4,330	7,420	6,940	7,200	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

07308500 Red River near Burkburnett, TX—Continued



07308500 Red River near Burkburnett, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	26.9	19.2	24.1	---	---	---	8.0	3.7	5.8	9.9	2.8	6.2
2	25.4	19.0	22.2	---	---	---	10.0	3.4	6.7	9.8	4.5	7.0
3	25.5	19.3	22.0	---	---	---	10.0	5.1	7.9	12.6	6.0	8.9
4	25.4	19.5	22.1	20.9	---	---	7.2	2.5	4.6	7.9	2.4	4.0
5	23.8	18.3	20.9	19.0	17.7	18.1	6.8	1.7	4.1	4.6	0.9	2.6
6	25.0	19.0	21.5	---	---	---	8.4	2.3	5.2	4.9	1.2	3.1
7	22.1	18.1	20.3	---	---	---	10.6	4.0	7.2	6.9	0.8	3.8
8	23.9	16.0	19.8	---	---	---	13.5	7.6	10.5	10.2	3.1	6.4
9	23.3	18.1	20.6	---	---	---	12.4	2.7	7.8	13.0	5.5	9.0
10	22.5	17.8	20.1	---	---	---	5.2	-0.2	2.5	8.2	2.7	5.1
11	23.4	18.8	20.9	---	---	---	7.4	0.6	3.9	8.1	0.9	4.4
12	23.6	19.4	21.4	17.1	---	---	9.4	3.3	6.2	9.0	3.5	6.0
13	22.0	19.6	21.0	17.2	11.2	14.1	12.4	6.4	9.3	7.3	1.4	4.2
14	23.2	17.7	20.3	16.5	11.7	13.8	15.1	5.3	10.9	8.8	1.7	4.9
15	21.8	16.8	18.9	11.9	7.9	10	5.3	-0.2	1.7	4.6	0.3	2.5
16	17.5	16.0	16.8	13.8	6.6	10.1	1.0	-0.4	0.1	3.4	-0.4	1.2
17	17.9	15.4	16.7	15.0	9.5	11.9	2.9	-0.2	1.3	9.0	0.7	4.5
18	18.5	16.1	17.3	13.9	8.6	11.2	8.6	2.9	5.7	---	3.1	---
19	18.9	16.3	17.6	15.0	8.8	11.8	11.6	6.4	9.0	---	---	---
20	20.4	16.6	18.4	12.3	7.0	9.7	9.6	3.9	7.9	10.0	---	---
21	19.3	18.3	18.8	9.5	4.4	6.8	3.9	-0.3	1.0	11.4	3.8	7.3
22	19.3	14.3	17.4	10.8	4.1	7.4	0.4	-0.4	-0.1	12.9	4.7	8.7
23	14.4	11.6	13.2	14.5	7.5	10.8	3.7	-0.3	1.2	13.5	4.9	9.2
24	15.9	11.1	13.5	13.2	8.4	10.9	7.1	2.2	4.4	6.2	0.3	3.5
25	15.9	14.6	14.9	13.0	7.1	10.1	10.2	2.3	6.2	9.0	2.1	5.1
26	18.4	13.9	15.8	14.5	9.5	11.7	16.1	9.2	12.5	4.3	1.1	2.3
27	15.1	11.1	13.2	12.9	8.5	11.0	15.9	7.5	12.3	1.1	-0.5	-0.2
28	14.7	10.2	12.4	13.9	9.8	11.6	9.7	4.8	7.1	2.2	-0.5	0.2
29	16.3	10.4	13.2	11.9	9.2	10.4	10.2	3.9	7.0	5.5	-0.4	1.9
30	16.4	---	---	9.6	6.3	7.8	11.4	4.8	7.9	8.7	0.5	4.3
31	---	---	---	---	---	---	8.8	4.4	6.6	10.7	2.9	6.6
Month	---	---	---	---	---	---	16.1	-0.4	5.9	---	---	---

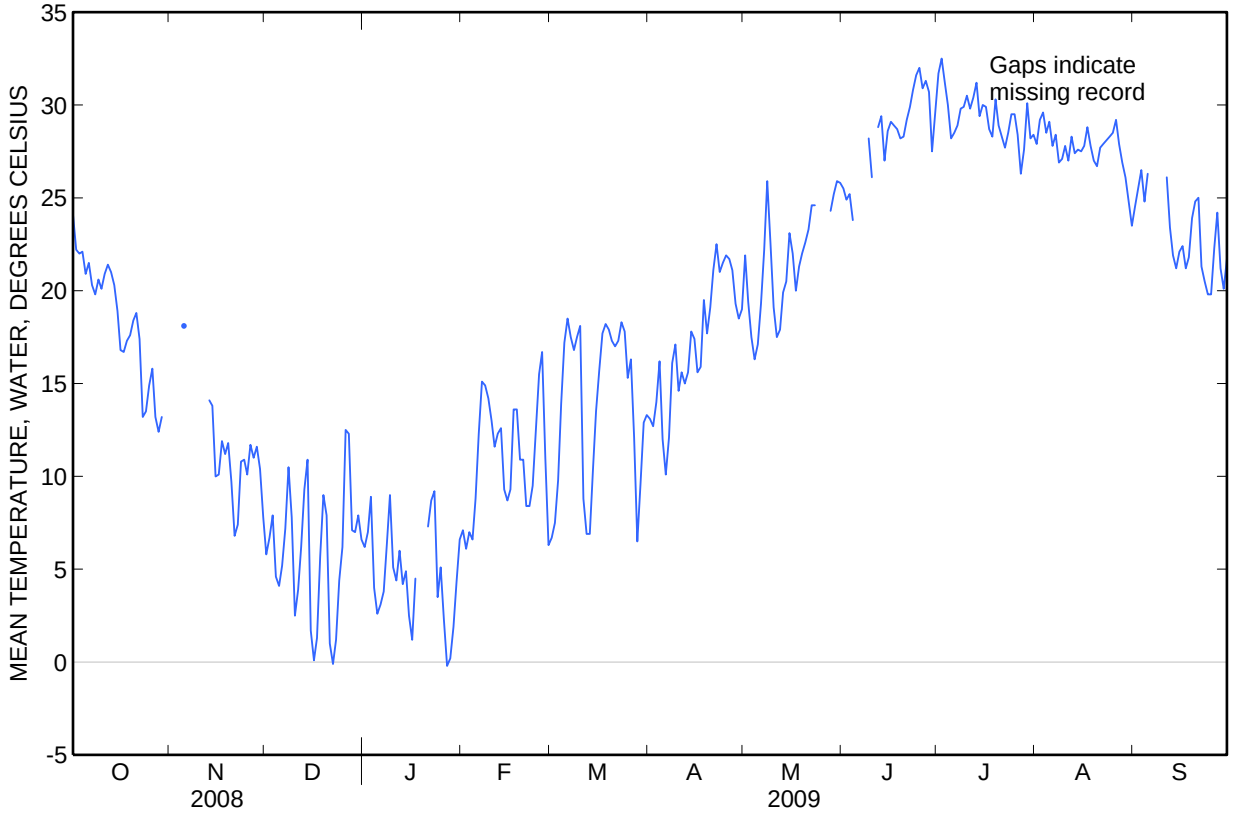
07308500 Red River near Burkburnett, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	10.5	4.3	7.1	11.7	2.2	6.7	15.8	10.4	13.1	23.4	21.0	21.9
2	9.8	2.8	6.1	11.0	4.4	7.5	14.2	11.2	12.7	22.0	18.1	19.4
3	11.0	3.6	7.0	15.3	4.8	9.8	19.4	10.0	14.0	18.1	17.1	17.5
4	10.0	3.4	6.6	19.4	9.3	13.9	22.0	11.2	16.2	17.1	15.7	16.3
5	13.8	4.4	8.8	21.3	13.3	17.2	17.1	7.4	12.0	17.7	16.7	17.1
6	16.8	8.2	12.3	22.8	15.1	18.5	15.2	5.5	10.1	22.0	17.7	19.3
7	19.1	11.8	15.1	19.3	15.7	17.5	18.7	6.2	12.1	25.1	20.0	22.2
8	16.1	13.5	14.9	21.2	12.9	16.8	23.1	9.9	16.1	29.2	23.3	25.9
9	16.7	11.8	14.2	21.6	13.9	17.5	20.2	14.0	17.1	26.6	20.1	22.6
10	17.5	10.0	13.0	20.7	11.7	18.1	20.6	9.0	14.6	20.1	18.4	19.1
11	15.4	8.0	11.6	11.7	7.2	8.8	20.1	11.3	15.6	18.4	16.6	17.5
12	15.8	9.0	12.3	8.4	5.2	6.9	18.1	12.9	15.0	19.6	16.9	17.9
13	13.8	11.6	12.6	7.4	6.3	6.9	19.4	11.8	15.6	20.1	19.6	19.9
14	11.7	8.5	9.3	16.1	6.5	10.4	23.7	12.8	17.8	20.7	20.1	20.5
15	10.0	7.5	8.7	18.9	9.0	13.5	20.9	14.8	17.4	26.5	20.7	23.1
16	10.4	8.3	9.3	21.8	10.6	15.7	17.4	13.9	15.6	24.8	19.9	22.0
17	18.4	10.2	13.6	22.7	13.5	17.7	18.2	14.2	15.9	22.1	18.0	20.0
18	17.3	10.5	13.6	23.6	13.6	18.2	25.7	16.1	19.5	23.3	19.7	21.3
19	14.8	7.2	10.9	21.7	13.9	17.9	21.0	14.1	17.7	24.1	20.2	22.0
20	15.1	6.8	10.9	21.3	14.2	17.3	24.9	13.6	19.1	25.2	20.3	22.6
21	11.2	4.6	8.4	20.1	14.6	17.0	24.9	17.5	21.1	26.2	20.6	23.3
22	13.0	4.3	8.4	19.7	14.9	17.3	26.3	19.0	22.5	27.3	22.2	24.6
23	13.2	6.3	9.5	22.8	15.5	18.3	23.6	17.9	21.0	26.2	23.4	24.6
24	18.1	7.6	12.5	21.5	14.1	17.8	25.1	18.7	21.5	---	---	---
25	20.5	11.1	15.5	18.5	12.6	15.3	25.8	19.0	21.9	---	---	---
26	20.6	13.6	16.7	21.0	12.8	16.3	23.2	20.6	21.7	---	---	---
27	15.5	7.3	11.0	17.5	6.4	12.1	24.2	19.4	21.1	25.8	---	---
28	9.7	3.4	6.3	9.3	4.2	6.5	22.6	16.8	19.3	26.1	22.5	24.3
29	---	---	---	13.4	6.5	9.6	20.4	17.4	18.5	26.7	23.5	25.2
30	---	---	---	17.0	10.0	12.9	21.4	17.2	19.0	27.0	24.6	25.9
31	---	---	---	16.0	10.6	13.3	---	---	---	27.0	24.7	25.8
Month	20.6	2.8	10.9	23.6	2.2	14.0	26.3	5.5	17.2	---	---	---

07308500 Red River near Burkburnett, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	26.1	24.6	25.5	36.5	27.3	31.7	30.5	24.7	27.9	29.5	20.7	24.5
2	25.7	23.9	24.9	37.1	28.4	32.5	31.8	27.0	29.2	29.9	21.8	25.5
3	25.3	24.9	25.2	34.8	28.1	31.2	31.6	27.6	29.6	31.4	23.6	26.5
4	27.3	22.2	23.8	34.1	26.6	30.0	31.4	25.6	28.5	27.5	23.2	24.8
5	---	---	---	29.5	27.3	28.2	33.1	26.5	29.1	31.0	22.8	26.3
6	---	---	---	33.5	24.6	28.5	31.0	24.9	27.8	---	23.9	---
7	---	---	---	31.2	26.3	28.9	31.5	26.0	28.4	---	---	---
8	32.4	---	---	30.8	28.8	29.8	29.4	24.6	26.9	---	---	---
9	31.0	25.7	28.2	31.8	28.4	29.9	30.3	24.4	27.1	---	---	---
10	27.9	25.2	26.1	34.3	27.3	30.5	31.2	24.4	27.8	32.7	---	---
11	---	---	---	34.0	26.0	29.8	29.8	24.5	27.0	28.9	23.8	26.1
12	33.0	25.4	28.8	34.2	27.1	30.4	33.3	24.9	28.3	25.5	21.5	23.4
13	33.3	26.7	29.4	35.2	27.2	31.2	31.7	24.4	27.4	23.3	21.0	21.9
14	29.9	24.4	27.0	33.6	25.8	29.4	32.5	23.9	27.6	21.7	20.9	21.2
15	32.7	25.2	28.6	36.3	25.0	30.0	31.3	24.7	27.5	23.0	21.3	22.1
16	32.9	25.5	29.1	35.4	26.3	29.9	33.2	23.6	27.8	22.9	21.8	22.4
17	31.3	26.5	28.9	34.4	24.4	28.7	34.1	24.6	28.8	21.8	20.8	21.2
18	30.8	26.3	28.7	31.7	25.0	28.3	31.6	24.2	27.8	23.1	20.6	21.8
19	29.8	26.3	28.2	35.9	25.5	30.3	30.5	23.2	27.0	26.8	21.7	23.9
20	30.7	26.1	28.3	31.9	25.4	28.9	30.5	23.9	26.7	27.6	22.5	24.8
21	32.9	26.0	29.2	32.3	24.2	28.3	32.5	23.9	27.7	28.3	22.6	25.0
22	34.0	26.1	29.9	30.8	24.5	27.7	32.4	23.9	27.9	23.5	18.6	21.3
23	34.9	27.1	30.8	33.3	24.6	28.5	33.0	24.1	28.1	22.1	18.9	20.5
24	36.4	27.9	31.6	34.3	25.6	29.5	32.5	24.8	28.3	21.6	19.0	19.8
25	36.2	28.5	32.0	32.6	26.1	29.5	32.8	24.9	28.5	23.4	16.7	19.8
26	34.7	27.5	30.9	31.1	25.8	28.4	34.1	25.6	29.2	27.3	18.3	22.3
27	36.6	27.3	31.3	27.4	25.5	26.3	31.3	25.2	27.9	27.7	21.0	24.2
28	34.3	27.4	30.7	32.2	24.2	27.6	30.5	23.9	26.9	23.9	18.6	21.2
29	29.5	26.0	27.5	35.0	26.5	30.1	30.4	22.3	26.1	24.2	16.4	20.1
30	34.2	25.6	29.6	32.2	24.7	28.2	28.6	21.6	24.8	26.4	17.7	21.7
31	---	---	---	31.3	25.7	28.4	27.5	20.4	23.5	---	---	---
Month	---	---	---	37.1	24.2	29.4	34.1	20.4	27.6	---	---	---

07308500 Red River near Burkburnett, TX—Continued