

Water-Data Report 2008

**06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD**

Cheyenne Basin  
Lower Cheyenne Subbasin

LOCATION.--Lat 44°41'47", long 101°13'01" referenced to North American Datum of 1927, in NW ¼ NW ¼ NW ¼ sec.33, T.9 N., R.2 4., Haakon County, SD, Hydrologic Unit 10120112, on SD Highway 63 bridge, 23 mi south of Eagle Butte.

DRAINAGE AREA.--24,500 mi<sup>2</sup>, approximately.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--August 1928 to September 1967, March 2007 to October 2008 (discontinued). Monthly discharge only for some periods, published in WSP 1309. Published as "near Carlin" 1928-33.

GAGE.--Water-stage recorder. Datum of gage is 1601.57 ft above NGVD of 1929. Prior to Mar. 21, 2007 at site 0.35 miles upstream at different datum.

REMARKS.--Records good. Flows regulated by: Angostura Dam on the Cheyenne River near Hot Springs (see station 06401000) since October 1949 significantly affect peak flows; Pactola Reservoir, 25.4 mi upstream from Rapid City (see station 06411000) since June 1963; Keyhole Reservoir (see station 06427000) near Moorcroft, WY, since Oct. 25, 1952; and Belle Fourche Reservoir near Belle Fourche (see station 06435000) since May 1910. Flow also affected by diversions for irrigation of about 70,000 acres and return flow from irrigated areas. Satellite data-collection platform at station. Water temperature and specific conductance measured with each discharge measurement.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 104,000 ft<sup>3</sup>/s, May 24, 1933, gage height, 15.00 ft (site and datum then in use), from rating curve extended above 30,000 ft<sup>3</sup>/s; no flow Feb. 14-16, 1949, Jan. 25 to Feb. 4, 1950, Jan. 18 to Feb. 1, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum known stage, 18.9 ft, May 13, 1920, from information by local residents. Flood of May 9, 1927, reached a stage of 18.1 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 84,300 ft<sup>3</sup>/s, June 7, gage height, 26.82 ft, from rating curve extended above 47,000 ft<sup>3</sup>/s.

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	184	118	---	---	---	---	---	97	2,750	1,130	555	343
2	172	116	---	---	---	---	---	153	2,770	1,100	516	353
3	165	---	---	---	---	---	---	283	6,900	1,070	478	378
4	142	---	---	---	---	---	---	842	5,780	975	503	374
5	135	---	---	---	---	---	---	837	13,000	878	539	414
6	140	---	---	---	---	---	---	1,500	30,400	830	661	446
7	146	---	---	---	---	---	---	2,430	65,200	1,160	618	458
8	137	---	---	---	---	---	---	3,530	53,200	1,070	830	468
9	134	---	---	---	---	---	---	2,710	33,700	1,370	832	476
10	129	---	---	---	---	---	---	5,550	18,900	1,170	693	482
11	144	---	---	---	---	---	---	5,060	13,000	983	668	490
12	160	---	---	---	---	---	---	4,300	7,340	862	630	497
13	173	---	---	---	---	---	---	4,240	6,700	772	1,110	534
14	185	---	---	---	---	---	---	2,550	7,130	689	771	511
15	186	---	---	---	---	---	317	1,670	5,240	656	701	507
16	1,150	---	---	---	---	---	236	1,270	4,190	585	616	504
17	560	---	---	---	---	---	186	977	3,460	707	551	493
18	360	---	---	---	---	---	151	784	3,050	787	514	515
19	278	---	---	---	---	---	117	656	2,680	2,130	486	488
20	223	---	---	---	---	---	99	565	2,230	2,520	451	447
21	196	---	---	---	---	---	93	478	2,090	2,270	452	439
22	179	---	---	---	---	---	97	415	2,000	1,280	416	428
23	168	---	---	---	---	---	87	420	1,860	973	392	427
24	159	---	---	---	---	---	92	2,670	1,770	879	385	403
25	147	---	---	---	---	---	94	11,200	1,640	793	371	395
26	135	---	---	---	---	---	92	13,800	1,560	728	372	411
27	137	---	---	---	---	---	129	11,300	1,500	1,020	368	412
28	132	---	---	---	---	---	131	7,070	1,470	823	352	394
29	125	---	---	---	---	---	113	8,110	1,250	709	347	391
30	120	---	---	---	---	---	97	5,150	1,170	651	329	386
31	119	---	---	---	---	---	---	3,620	---	611	321	---
<b>Total</b>	6,520	---	---	---	---	---	---	104,237	303,930	32,181	16,828	13,264
<b>Mean</b>	210	---	---	---	---	---	---	3,362	10,130	1,038	543	442
<b>Max</b>	1,150	---	---	---	---	---	---	13,800	65,200	2,520	1,110	534
<b>Min</b>	119	---	---	---	---	---	---	97	1,170	585	321	343
<b>Ac-ft</b>	12,930	---	---	---	---	---	---	206,800	602,800	63,830	33,380	26,310

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1967, BY WATER YEAR (WY) \***

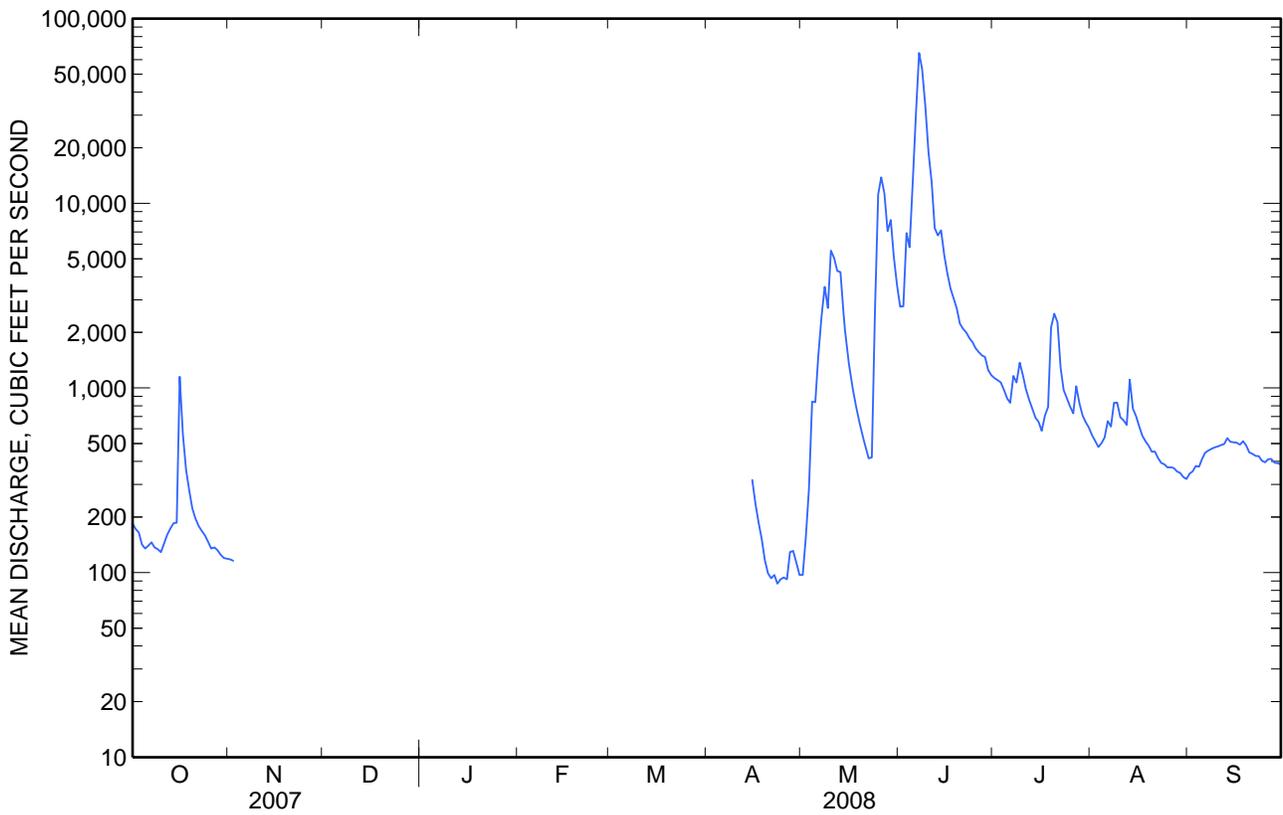
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	251	186	116	83.1	241	1,511	1,445	1,717	3,144	1,016	425	353
<b>Max</b>	1,291	581	325	250	1,286	9,961	8,200	11,110	10,430	5,925	1,097	1,171
<b>(WY)</b>	(1947)	(1947)	(1947)	(1947)	(1943)	(1949)	(1952)	(1942)	(1967)	(1937)	(1953)	(1946)
<b>Min</b>	29.9	50.3	15.5	1.25	4.43	180	76.7	107	176	77.7	54.2	12.5
<b>(WY)</b>	(1962)	(1941)	(1961)	(1962)	(1950)	(1964)	(1961)	(1961)	(1961)	(1960)	(1961)	(1961)

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SUMMARY STATISTICS

	Water Years 1935 - 1967*	
Annual mean	874	
Highest annual mean	1,744	1962
Lowest annual mean	95.0	1961
Highest daily mean	52,600	Jun 11, 1941
Lowest daily mean	0.00	Feb 14, 1949
Annual seven-day minimum	0.00	Jan 25, 1950
Annual runoff (ac-ft)	633,400	
10 percent exceeds	1,650	
50 percent exceeds	243	
90 percent exceeds	45	

\* See PERIOD OF RECORD.

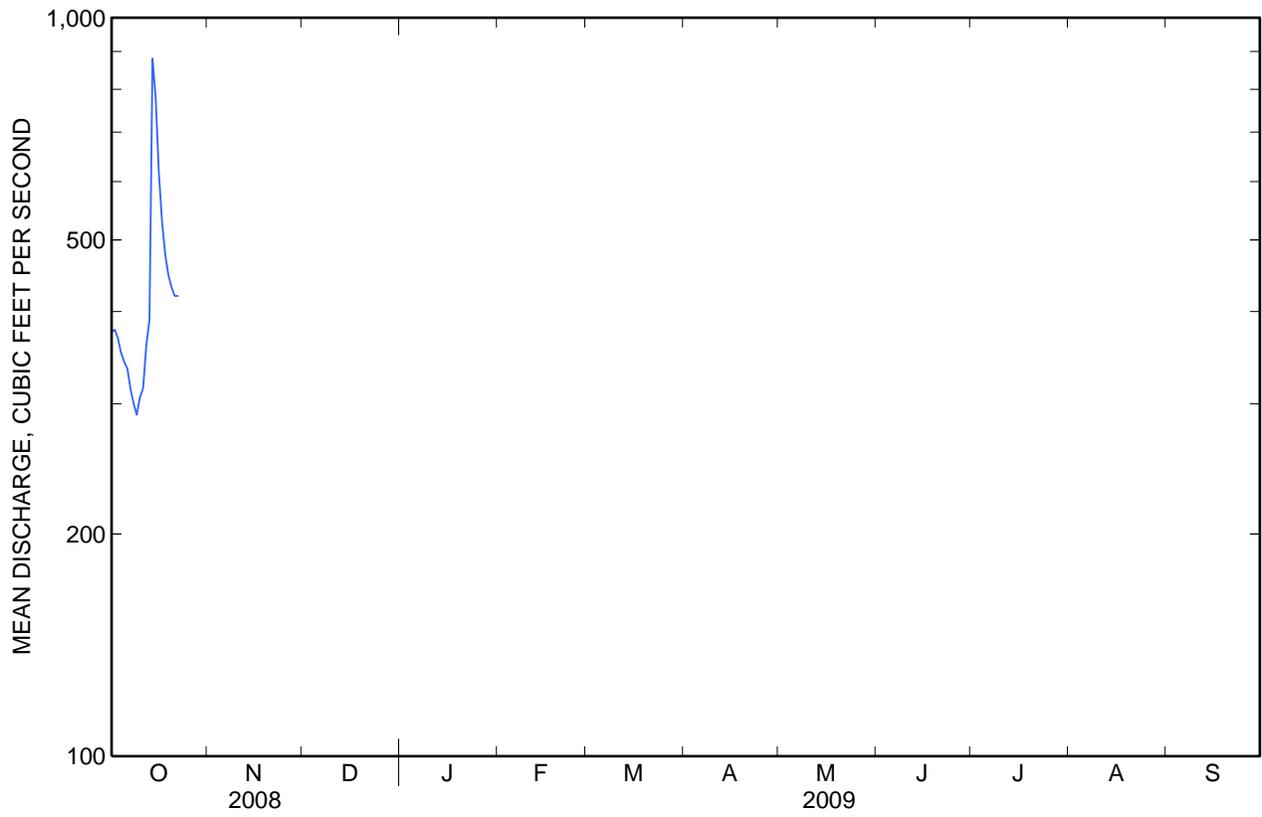


## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	375	---	---	---	---	---	---	---	---	---	---	---
2	378	---	---	---	---	---	---	---	---	---	---	---
3	368	---	---	---	---	---	---	---	---	---	---	---
4	352	---	---	---	---	---	---	---	---	---	---	---
5	342	---	---	---	---	---	---	---	---	---	---	---
6	335	---	---	---	---	---	---	---	---	---	---	---
7	314	---	---	---	---	---	---	---	---	---	---	---
8	300	---	---	---	---	---	---	---	---	---	---	---
9	290	---	---	---	---	---	---	---	---	---	---	---
10	306	---	---	---	---	---	---	---	---	---	---	---
11	315	---	---	---	---	---	---	---	---	---	---	---
12	360	---	---	---	---	---	---	---	---	---	---	---
13	390	---	---	---	---	---	---	---	---	---	---	---
14	881	---	---	---	---	---	---	---	---	---	---	---
15	778	---	---	---	---	---	---	---	---	---	---	---
16	616	---	---	---	---	---	---	---	---	---	---	---
17	529	---	---	---	---	---	---	---	---	---	---	---
18	478	---	---	---	---	---	---	---	---	---	---	---
19	449	---	---	---	---	---	---	---	---	---	---	---
20	432	---	---	---	---	---	---	---	---	---	---	---
21	420	---	---	---	---	---	---	---	---	---	---	---
22	420	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
<b>Total</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>Mean</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>Max</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>Min</b>	---	---	---	---	---	---	---	---	---	---	---	---
<b>Ac-ft</b>	---	---	---	---	---	---	---	---	---	---	---	---

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued



**06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Chemical analysis: Water years 1972 to 1981.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2007 to October 2008 (discontinued).

pH: April 2007 to October 2008 (discontinued).

WATER TEMPERATURE: April 2007 to October 2008 (discontinued).

DISSOLVED OXYGEN: April 2007 to October 2008 (discontinued).

TURBIDITY: April 2007 to October 2008 (discontinued).

REMARKS.--Data published in the tables below are rated as follows: specific conductance excellent except for October 12-16, 2007, July 28 to August 25, 2008, October 4-20, 2008 which are good, August 26 to September 6, 2008 which are fair; pH excellent except for October 1, 12-16, 2007, which are good; October 2-3, 2007 which are fair; water temperature excellent; dissolved oxygen excellent except for August 28 to September 6, 2008, which are good, October 1-3, 2007, October 12-16, 2007 which are fair; turbidity excellent except for May 6-7, 2008, June 7-19, 2008, June 21-22, 2008, and September 22 to October 7, 2008 which are good, October 12-17, 2007, June 23-24, 2008 and October 8-20, 2008 which are fair, and October 1-3, 2007, June 25 to July 1, 2008 which are poor. Daily records are collected at 15-minute intervals using multi-parameter water-quality instrument from April to November. Satellite data-collection platform at station.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,700  $\mu\text{S}/\text{cm}$ , May 25, 28, 2007; minimum, 716  $\mu\text{S}/\text{cm}$ , May 25, 2008.

pH: Maximum, 8.7 standard units, June 2, 2007; minimum, 7.4 standard units, June 10, 14-15, 2007, July 30-31, 2007.

WATER TEMPERATURE: Maximum, 35.0°C, July 25, 2007.

DISSOLVED OXYGEN: Maximum, 13.6 mg/L, April 6, 2007; minimum, 0.0 mg/L, May 7 and August 6, 2007.

TURBIDITY: Maximum, >1,830 FN units, July 24, 28-30, 2008; minimum, 4.7 FN units, October 9, 11, 2008.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,460  $\mu\text{S}/\text{cm}$ , April 29, 2008; minimum, 716  $\mu\text{S}/\text{cm}$ , May 25, 2008.

pH: Maximum, 8.5 standard units, October 17, 2007, April 24-25, 2008, May 21, 2008; minimum, 7.5 standard units, June 2, 2008.

WATER TEMPERATURE: Maximum, 29.4 C, August 2, 2008.

DISSOLVED OXYGEN: Maximum, 12.8 mg/L, April 25, 2008; minimum, 6.0 mg/L, July 20, 2008.

TURBIDITY: Maximum, >1,830 FN units, July 24, 28-30, 2008; minimum, 7.5 FN units, September 30, 2008.

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	1,860	1,810	1,840	---	---	---	---	---	---	---	---	---
13	1,810	1,700	1,760	---	---	---	---	---	---	---	---	---
14	1,800	1,700	1,740	---	---	---	---	---	---	---	---	---
15	1,710	1,670	1,700	---	---	---	---	---	---	---	---	---
16	1,680	1,000	1,380	---	---	---	---	---	---	---	---	---
17	1,000	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	2,370	1,960	2,260
2	---	---	---	---	---	---	---	---	---	1,960	1,580	1,680
3	---	---	---	---	---	---	---	---	---	1,910	1,640	1,790
4	---	---	---	---	---	---	---	---	---	1,760	913	1,510
5	---	---	---	---	---	---	---	---	---	1,110	850	1,020
6	---	---	---	---	---	---	---	---	---	1,110	835	918
7	---	---	---	---	---	---	---	---	---	---	981	---
8	---	---	---	---	---	---	---	---	---	1,190	915	1,060
9	---	---	---	---	---	---	---	---	---	937	915	924
10	---	---	---	---	---	---	---	---	---	961	813	877
11	---	---	---	---	---	---	---	---	---	871	808	835
12	---	---	---	---	---	---	---	---	---	898	823	857
13	---	---	---	---	---	---	---	---	---	977	853	937
14	---	---	---	---	---	---	---	---	---	975	899	929
15	---	---	---	---	---	---	---	---	---	1,020	951	987
16	---	---	---	---	---	---	1,260	1,100	1,220	1,140	1,020	1,090
17	---	---	---	---	---	---	1,400	1,240	1,320	1,240	1,140	1,190
18	---	---	---	---	---	---	1,660	1,400	1,520	1,340	1,240	1,280
19	---	---	---	---	---	---	1,880	1,660	1,780	1,440	1,340	1,390
20	---	---	---	---	---	---	2,100	1,880	1,990	1,520	1,440	1,480
21	---	---	---	---	---	---	2,190	2,100	2,160	1,590	1,520	1,550
22	---	---	---	---	---	---	2,260	2,190	2,230	1,600	1,560	1,580
23	---	---	---	---	---	---	2,310	2,260	2,290	1,600	1,510	1,560
24	---	---	---	---	---	---	2,360	2,280	2,300	1,510	851	1,350
25	---	---	---	---	---	---	2,400	2,360	2,390	851	716	782
26	---	---	---	---	---	---	2,410	2,360	2,380	848	758	802
27	---	---	---	---	---	---	2,430	2,380	2,400	810	772	795
28	---	---	---	---	---	---	2,450	2,410	2,430	895	807	862
29	---	---	---	---	---	---	2,460	2,410	2,440	851	805	824
30	---	---	---	---	---	---	2,410	2,370	2,400	959	820	883
31	---	---	---	---	---	---	---	---	---	1,010	935	969
Month	---	---	---	---	---	---	---	---	---	---	716	---

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

<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>September</b>		
<b>1</b>	1,100	984	1,050	1,880	1,830	1,850	1,910	1,880	1,890	2,230	2,110	2,170
<b>2</b>	1,150	838	1,110	1,880	1,850	1,870	1,980	1,910	1,950	2,130	2,100	2,120
<b>3</b>	1,150	718	916	1,910	1,850	1,870	2,010	1,960	1,990	2,100	2,040	2,070
<b>4</b>	1,180	767	1,070	1,940	1,900	1,920	2,020	1,910	1,970	2,070	2,000	2,030
<b>5</b>	949	737	808	1,970	1,940	1,950	2,000	1,940	1,970	2,020	2,000	2,010
<b>6</b>	885	774	857	2,000	1,970	1,990	2,050	1,990	2,020	2,000	1,950	1,970
<b>7</b>	843	759	792	2,000	1,810	1,880	2,040	1,850	1,950	1,960	1,920	1,940
<b>8</b>	793	762	778	2,080	1,900	2,020	1,930	1,760	1,830	1,940	1,920	1,930
<b>9</b>	841	793	814	2,060	1,960	2,010	1,960	1,710	1,880	1,920	1,840	1,890
<b>10</b>	936	841	890	1,960	1,560	1,740	1,710	1,490	1,570	1,870	1,840	1,860
<b>11</b>	1,060	936	990	1,830	1,570	1,730	1,740	1,650	1,700	1,850	1,830	1,830
<b>12</b>	1,210	1,060	1,140	1,880	1,820	1,850	1,740	1,640	1,700	1,830	1,780	1,790
<b>13</b>	1,290	1,210	1,260	1,890	1,860	1,870	1,840	1,710	1,780	1,780	1,660	1,710
<b>14</b>	1,300	1,190	1,270	1,930	1,880	1,910	1,710	1,250	1,380	1,740	1,680	1,730
<b>15</b>	1,260	1,170	1,220	1,950	1,920	1,930	1,590	1,320	1,460	1,740	1,730	1,730
<b>16</b>	1,360	1,260	1,320	1,990	1,950	1,970	1,760	1,590	1,700	1,770	1,740	1,750
<b>17</b>	1,420	1,360	1,390	---	---	---	1,800	1,710	1,750	1,800	1,770	1,780
<b>18</b>	1,480	1,420	1,450	2,080	1,840	1,960	1,950	1,800	1,880	1,800	1,780	1,790
<b>19</b>	1,570	1,480	1,530	1,840	1,250	1,580	1,940	1,840	1,860	1,780	1,760	1,770
<b>20</b>	---	---	---	1,870	1,340	1,670	1,970	1,860	1,920	1,790	1,760	1,780
<b>21</b>	---	---	---	1,340	1,020	1,100	1,980	1,920	1,940	1,800	1,780	1,790
<b>22</b>	---	---	---	1,320	1,090	1,200	2,040	1,980	2,020	1,820	1,780	1,800
<b>23</b>	1,730	---	---	1,580	1,320	1,460	2,100	2,040	2,070	1,820	1,780	1,790
<b>24</b>	1,810	1,680	1,760	1,880	1,580	1,700	2,170	2,100	2,130	1,850	1,820	1,830
<b>25</b>	1,780	1,760	1,780	1,890	1,800	1,850	2,190	2,160	2,180	1,860	1,840	1,850
<b>26</b>	1,790	1,780	1,780	1,840	1,780	1,800	2,200	2,120	2,170	1,870	1,860	1,860
<b>27</b>	1,830	1,790	1,810	1,910	1,810	1,860	2,180	2,150	2,160	1,860	1,840	1,850
<b>28</b>	1,840	1,780	1,800	1,900	1,720	1,810	2,220	2,160	2,180	1,860	1,840	1,850
<b>29</b>	1,820	1,740	1,790	1,750	1,610	1,660	2,200	2,180	2,190	1,870	1,860	1,860
<b>30</b>	1,830	1,740	1,780	1,860	1,750	1,810	2,210	2,170	2,190	1,890	1,870	1,880
<b>31</b>	---	---	---	1,900	1,830	1,860	2,240	2,200	2,220	---	---	---
<b>Month</b>	---	---	---	---	---	---	2,240	1,250	1,920	2,230	1,660	1,870

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—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	1,880	1,870	1,880	---	---	---	---	---	---	---	---	---
2	1,880	1,870	1,870	---	---	---	---	---	---	---	---	---
3	1,870	1,860	1,870	---	---	---	---	---	---	---	---	---
4	1,880	1,850	1,870	---	---	---	---	---	---	---	---	---
5	1,880	1,870	1,880	---	---	---	---	---	---	---	---	---
6	1,900	1,880	1,890	---	---	---	---	---	---	---	---	---
7	1,930	1,900	1,910	---	---	---	---	---	---	---	---	---
8	1,950	1,920	1,930	---	---	---	---	---	---	---	---	---
9	1,960	1,940	1,950	---	---	---	---	---	---	---	---	---
10	1,960	1,880	1,900	---	---	---	---	---	---	---	---	---
11	1,930	1,910	1,920	---	---	---	---	---	---	---	---	---
12	1,910	1,830	1,870	---	---	---	---	---	---	---	---	---
13	1,930	1,840	1,880	---	---	---	---	---	---	---	---	---
14	1,890	1,820	1,850	---	---	---	---	---	---	---	---	---
15	1,900	1,060	1,430	---	---	---	---	---	---	---	---	---
16	1,280	1,050	1,140	---	---	---	---	---	---	---	---	---
17	1,440	1,280	1,370	---	---	---	---	---	---	---	---	---
18	1,560	1,430	1,490	---	---	---	---	---	---	---	---	---
19	1,580	1,520	1,540	---	---	---	---	---	---	---	---	---
20	1,580	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	8.4	8.3	---	---	---	---	---	---	---	---	---	---
2	8.4	8.3	---	---	---	---	---	---	---	---	---	---
3	8.4	8.3	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	8.2	8.2	---	---	---	---	---	---	---	---	---	---
13	8.3	8.2	---	---	---	---	---	---	---	---	---	---
14	8.3	8.3	---	---	---	---	---	---	---	---	---	---
15	8.3	8.3	---	---	---	---	---	---	---	---	---	---
16	8.4	8.0	---	---	---	---	---	---	---	---	---	---
17	8.5	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

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

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	8.1	8.1	---	---	---	---	---	---	---	---	---	---
2	8.1	8.1	---	---	---	---	---	---	---	---	---	---
3	8.1	8.1	---	---	---	---	---	---	---	---	---	---
4	8.1	8.1	---	---	---	---	---	---	---	---	---	---
5	8.1	8.1	---	---	---	---	---	---	---	---	---	---
6	8.1	8.1	---	---	---	---	---	---	---	---	---	---
7	8.2	8.1	---	---	---	---	---	---	---	---	---	---
8	8.2	8.1	---	---	---	---	---	---	---	---	---	---
9	8.2	8.1	---	---	---	---	---	---	---	---	---	---
10	8.2	8.2	---	---	---	---	---	---	---	---	---	---
11	8.2	8.1	---	---	---	---	---	---	---	---	---	---
12	8.2	8.1	---	---	---	---	---	---	---	---	---	---
13	8.2	8.1	---	---	---	---	---	---	---	---	---	---
14	8.2	7.9	---	---	---	---	---	---	---	---	---	---
15	8.2	7.9	---	---	---	---	---	---	---	---	---	---
16	8.2	8.1	---	---	---	---	---	---	---	---	---	---
17	8.1	8.0	---	---	---	---	---	---	---	---	---	---
18	8.0	8.0	---	---	---	---	---	---	---	---	---	---
19	8.0	8.0	---	---	---	---	---	---	---	---	---	---
20	8.0	8.0	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	18.9	12.2	15.5	---	---	---	---	---	---	---	---	---
2	16.8	13.1	15.0	---	---	---	---	---	---	---	---	---
3	18.0	10.5	14.2	---	---	---	---	---	---	---	---	---
4	---	12.4	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	14.9	---	---	---	---	---	---	---	---	---	---	---
12	15.2	9.2	12.3	---	---	---	---	---	---	---	---	---
13	13.3	11.0	11.7	---	---	---	---	---	---	---	---	---
14	11.4	10.4	10.9	---	---	---	---	---	---	---	---	---
15	10.7	8.8	9.7	---	---	---	---	---	---	---	---	---
16	9.7	8.7	9.3	---	---	---	---	---	---	---	---	---
17	---	8.8	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	17.0	9.0	12.3
2	---	---	---	---	---	---	---	---	---	9.0	4.4	6.5
3	---	---	---	---	---	---	---	---	---	11.7	4.0	7.7
4	---	---	---	---	---	---	---	---	---	11.3	8.4	9.6
5	---	---	---	---	---	---	---	---	---	13.8	8.6	11.2
6	---	---	---	---	---	---	---	---	---	15.3	11.8	13.5
7	---	---	---	---	---	---	---	---	---	16.6	13.3	15.1
8	---	---	---	---	---	---	---	---	---	15.5	11.7	13.4
9	---	---	---	---	---	---	---	---	---	12.1	11.2	11.6
10	---	---	---	---	---	---	---	---	---	12.0	10.2	11.2
11	---	---	---	---	---	---	---	---	---	12.4	9.2	10.7
12	---	---	---	---	---	---	---	---	---	13.7	11.6	12.6
13	---	---	---	---	---	---	---	---	---	13.4	12.2	12.6
14	---	---	---	---	---	---	---	---	---	13.9	11.3	12.6
15	---	---	---	---	---	---	---	---	---	15.7	12.5	14.1
16	---	---	---	---	---	---	13.6	9.8	11.1	18.0	13.1	15.5
17	---	---	---	---	---	---	14.1	6.9	10.2	18.8	15.2	17.1
18	---	---	---	---	---	---	14.9	7.3	11.0	20.5	15.5	18.0
19	---	---	---	---	---	---	15.0	7.8	11.4	19.7	17.4	18.6
20	---	---	---	---	---	---	16.9	8.9	12.1	20.8	15.4	18.1
21	---	---	---	---	---	---	11.8	5.1	8.7	18.8	15.2	16.6
22	---	---	---	---	---	---	15.1	6.2	10.5	15.2	12.5	13.4
23	---	---	---	---	---	---	13.7	8.0	11.1	12.7	11.4	12.1
24	---	---	---	---	---	---	12.9	6.8	9.8	14.8	12.0	13.1
25	---	---	---	---	---	---	8.1	4.8	6.1	16.1	13.4	14.6
26	---	---	---	---	---	---	10.9	3.8	6.8	15.7	14.2	15.0
27	---	---	---	---	---	---	12.4	3.6	7.9	14.2	12.9	13.6
28	---	---	---	---	---	---	13.9	5.1	9.3	13.9	12.1	13.0
29	---	---	---	---	---	---	18.1	6.7	12.1	14.2	12.8	13.4
30	---	---	---	---	---	---	19.9	11.7	15.8	17.6	13.7	15.5
31	---	---	---	---	---	---	---	---	---	19.7	16.6	18.1
Month	---	---	---	---	---	---	---	---	---	20.8	4.0	13.6

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**TEMPERATURE, WATER, DEGREES CELSIUS**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
<b>1</b>	22.5	18.8	20.5	26.0	22.1	23.9	27.8	23.7	25.7	23.6	20.0	22.0
<b>2</b>	22.5	12.2	20.4	25.4	22.4	23.5	29.4	22.6	25.9	20.0	16.3	17.8
<b>3</b>	18.9	11.3	15.4	23.3	21.2	22.2	28.3	25.2	26.8	18.8	14.1	16.5
<b>4</b>	18.7	16.8	17.8	25.7	20.2	22.9	26.6	22.5	23.8	20.0	15.1	17.5
<b>5</b>	18.6	15.3	17.0	26.7	23.2	25.0	27.7	21.6	24.4	19.5	15.5	17.5
<b>6</b>	16.9	14.1	15.3	27.9	23.6	25.7	28.3	23.3	25.7	21.1	15.9	18.1
<b>7</b>	17.2	16.5	16.8	27.1	22.4	25.5	28.9	24.3	26.5	18.5	15.9	16.9
<b>8</b>	18.1	16.7	17.4	25.8	23.0	24.5	27.8	24.4	26.4	19.1	15.0	16.7
<b>9</b>	17.8	16.6	17.1	26.8	22.7	24.7	27.6	25.5	26.5	19.0	14.2	16.5
<b>10</b>	17.8	16.4	17.0	27.0	23.2	25.2	27.0	24.0	25.4	19.6	16.2	17.9
<b>11</b>	17.6	16.4	16.9	25.7	21.1	24.0	26.0	23.7	24.8	19.0	17.8	18.4
<b>12</b>	17.8	15.9	16.8	21.3	19.0	20.2	27.4	22.8	25.0	19.1	16.6	17.9
<b>13</b>	17.7	15.2	16.4	23.5	18.3	20.8	27.2	23.9	25.5	20.6	17.0	18.8
<b>14</b>	19.5	16.4	17.8	26.4	20.3	23.2	25.4	22.0	23.5	18.5	14.4	16.5
<b>15</b>	20.9	18.3	19.5	28.7	22.8	25.7	24.9	20.8	22.7	19.8	14.8	17.2
<b>16</b>	21.7	19.1	20.4	28.5	24.1	26.2	25.7	21.8	23.7	21.5	16.1	18.7
<b>17</b>	22.7	18.9	20.7	---	---	---	26.0	21.9	24.0	22.2	17.5	19.8
<b>18</b>	23.3	21.0	22.1	26.8	---	---	27.1	22.2	24.5	23.0	18.6	20.7
<b>19</b>	24.7	21.4	23.1	25.2	19.8	22.9	25.8	21.8	23.7	23.3	19.0	21.0
<b>20</b>	---	---	---	26.3	23.3	24.8	25.1	20.3	22.7	22.3	18.0	20.3
<b>21</b>	---	---	---	26.0	23.2	24.6	26.7	20.9	23.6	20.3	18.1	19.1
<b>22</b>	---	---	---	25.7	23.8	24.8	24.9	19.4	21.7	21.2	17.6	19.4
<b>23</b>	23.6	---	---	25.6	22.6	24.2	23.0	17.1	20.0	20.9	17.7	19.2
<b>24</b>	26.2	21.8	23.9	28.1	24.2	25.9	25.1	18.6	21.6	19.1	15.1	17.2
<b>25</b>	27.1	23.7	25.4	28.7	24.8	26.8	26.8	20.6	23.5	21.4	15.4	18.3
<b>26</b>	26.9	24.1	25.5	29.3	24.9	27.0	25.6	20.9	22.9	21.4	17.6	19.3
<b>27</b>	26.1	23.5	24.8	29.1	24.5	26.7	22.4	19.1	20.3	19.9	16.3	18.1
<b>28</b>	23.5	20.5	21.9	28.5	26.0	27.3	22.5	17.8	20.0	19.6	16.1	17.7
<b>29</b>	23.4	19.8	21.6	27.9	25.5	26.8	24.1	17.7	20.8	18.2	13.7	16.0
<b>30</b>	24.4	20.5	22.4	28.1	24.0	26.1	25.9	19.8	22.7	18.2	13.3	15.8
<b>31</b>	---	---	---	28.2	24.5	26.4	26.1	21.1	23.5	---	---	---
<b>Month</b>	---	---	---	---	---	---	29.4	17.1	23.8	23.6	13.3	18.2

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—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	18.8	14.0	16.3	---	---	---	---	---	---	---	---	---
2	18.9	13.8	16.3	---	---	---	---	---	---	---	---	---
3	18.0	13.8	16.0	---	---	---	---	---	---	---	---	---
4	17.6	14.3	16.1	---	---	---	---	---	---	---	---	---
5	17.4	15.5	16.4	---	---	---	---	---	---	---	---	---
6	16.4	13.9	15.5	---	---	---	---	---	---	---	---	---
7	16.1	11.2	13.7	---	---	---	---	---	---	---	---	---
8	15.4	12.0	13.5	---	---	---	---	---	---	---	---	---
9	12.5	9.5	10.9	---	---	---	---	---	---	---	---	---
10	9.5	7.8	8.2	---	---	---	---	---	---	---	---	---
11	7.8	7.4	7.6	---	---	---	---	---	---	---	---	---
12	8.6	7.2	7.7	---	---	---	---	---	---	---	---	---
13	9.3	5.8	7.5	---	---	---	---	---	---	---	---	---
14	8.9	6.2	7.7	---	---	---	---	---	---	---	---	---
15	8.4	6.5	7.6	---	---	---	---	---	---	---	---	---
16	9.1	6.8	8.0	---	---	---	---	---	---	---	---	---
17	10.4	7.6	9.0	---	---	---	---	---	---	---	---	---
18	11.2	8.1	9.7	---	---	---	---	---	---	---	---	---
19	12.3	9.4	10.8	---	---	---	---	---	---	---	---	---
20	11.8	9.4	10.6	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	9.8	8.7	9.2	---	---	---	---	---	---	---	---	---
2	9.6	8.7	9.2	---	---	---	---	---	---	---	---	---
3	9.9	8.8	9.4	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	10.5	9.8	10.0	---	---	---	---	---	---	---	---	---
12	10.7	9.6	10.1	---	---	---	---	---	---	---	---	---
13	10.4	9.7	10.1	---	---	---	---	---	---	---	---	---
14	10.6	10.2	10.4	---	---	---	---	---	---	---	---	---
15	10.7	10.4	10.6	---	---	---	---	---	---	---	---	---
16	10.7	6.9	9.1	---	---	---	---	---	---	---	---	---
17	9.1	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	10.2	8.6	9.5
2	---	---	---	---	---	---	---	---	---	11.6	10.2	11.0
3	---	---	---	---	---	---	---	---	---	11.7	10.1	11.1
4	---	---	---	---	---	---	---	---	---	10.2	9.9	10.0
5	---	---	---	---	---	---	---	---	---	10.4	9.0	9.9
6	---	---	---	---	---	---	---	---	---	9.3	8.8	9.0
7	---	---	---	---	---	---	---	---	---	8.9	7.9	8.4
8	---	---	---	---	---	---	---	---	---	9.1	8.1	8.6
9	---	---	---	---	---	---	---	---	---	9.5	9.1	9.3
10	---	---	---	---	---	---	---	---	---	9.3	8.8	9.1
11	---	---	---	---	---	---	---	---	---	9.6	9.2	9.4
12	---	---	---	---	---	---	---	---	---	9.2	8.9	9.1
13	---	---	---	---	---	---	---	---	---	9.1	8.9	9.0
14	---	---	---	---	---	---	---	---	---	9.3	9.0	9.2
15	---	---	---	---	---	---	---	---	---	9.2	8.8	9.0
16	---	---	---	---	---	---	10.2	9.1	9.8	9.1	8.4	8.8
17	---	---	---	---	---	---	10.9	9.8	10.4	8.7	8.3	8.5
18	---	---	---	---	---	---	10.7	9.5	10.2	8.6	8.0	8.3
19	---	---	---	---	---	---	10.7	9.4	10.0	8.5	7.9	8.2
20	---	---	---	---	---	---	10.4	9.1	9.8	9.2	8.3	8.8
21	---	---	---	---	---	---	11.6	9.8	10.8	9.5	8.3	9.0
22	---	---	---	---	---	---	11.2	9.7	10.5	10.1	8.9	9.5
23	---	---	---	---	---	---	11.4	9.6	10.5	10.3	9.5	9.9
24	---	---	---	---	---	---	12.0	9.5	10.9	9.6	8.3	9.3
25	---	---	---	---	---	---	12.8	11.2	11.9	8.5	8.0	8.3
26	---	---	---	---	---	---	12.4	10.9	11.6	8.5	7.8	8.1
27	---	---	---	---	---	---	12.3	10.5	11.3	9.1	8.5	8.7
28	---	---	---	---	---	---	11.5	10.0	10.8	9.3	9.1	9.2
29	---	---	---	---	---	---	10.9	9.0	10.2	9.1	9.0	9.1
30	---	---	---	---	---	---	9.9	8.5	9.3	9.0	8.3	8.8
31	---	---	---	---	---	---	---	---	---	8.4	8.0	8.3
Month	---	---	---	---	---	---	---	---	---	11.7	7.8	9.1

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	8.0	7.6	7.9	8.0	7.5	7.8	9.0	7.3	8.1	8.0	7.2	7.6
2	7.9	7.2	7.7	8.5	7.4	7.9	8.8	7.1	7.9	8.7	7.8	8.4
3	7.7	6.5	7.0	8.8	7.8	8.3	8.0	7.0	7.5	9.0	8.4	8.7
4	7.8	6.5	7.3	8.7	7.6	8.3	7.9	7.2	7.6	8.8	8.2	8.5
5	7.9	6.7	7.3	8.2	7.4	7.8	8.5	7.5	8.0	8.8	8.2	8.5
6	7.9	7.6	7.8	8.2	7.3	7.7	8.3	7.3	7.8	8.8	8.2	8.5
7	7.8	7.4	7.6	7.8	7.2	7.4	9.1	7.3	8.0	9.0	8.2	8.7
8	7.9	7.7	7.8	7.6	7.2	7.4	8.4	7.0	7.6	9.1	8.6	8.8
9	8.1	7.7	8.0	7.8	7.3	7.5	7.4	6.9	7.1	9.1	8.3	8.7
10	8.2	8.0	8.1	7.3	6.9	7.2	7.3	7.0	7.2	8.7	8.1	8.5
11	8.2	8.1	8.2	7.8	7.0	7.4	7.4	7.2	7.3	8.8	8.0	8.4
12	8.4	8.1	8.3	8.4	7.8	8.2	7.7	7.2	7.5	8.8	8.3	8.5
13	8.7	8.4	8.6	8.5	7.9	8.3	7.4	6.8	7.1	8.6	8.2	8.3
14	8.5	8.1	8.3	9.2	7.8	8.4	7.6	6.9	7.3	9.2	8.3	8.8
15	8.2	7.9	8.1	8.8	7.3	8.0	7.8	7.4	7.6	9.1	8.3	8.7
16	8.1	7.9	8.0	8.1	7.2	7.6	7.8	7.4	7.6	8.8	8.1	8.5
17	8.2	7.8	8.0	---	---	---	7.9	7.4	7.7	8.6	7.9	8.3
18	7.9	7.6	7.8	---	7.0	---	8.5	7.4	7.9	8.5	7.8	8.1
19	7.8	7.5	7.6	7.5	6.1	6.7	8.5	7.4	7.9	8.6	7.7	8.1
20	---	---	---	7.1	6.0	6.5	8.5	7.5	8.0	8.5	7.8	8.1
21	---	---	---	7.0	6.2	6.8	8.5	7.2	7.9	8.5	7.9	8.2
22	---	---	---	7.3	6.9	7.2	8.3	7.2	7.9	8.5	7.9	8.2
23	8.0	7.7	7.9	7.7	7.2	7.5	8.7	7.8	8.2	8.5	7.9	8.3
24	7.8	7.3	7.7	7.4	7.0	7.3	8.4	7.6	8.0	8.9	8.3	8.6
25	8.1	7.3	7.6	8.4	7.0	7.7	8.0	7.3	7.7	8.8	8.1	8.5
26	8.3	7.2	7.7	8.9	7.1	7.9	7.9	7.3	7.6	8.5	8.0	8.2
27	8.6	7.0	7.7	7.4	7.1	7.2	8.2	7.4	7.9	8.8	8.2	8.5
28	8.5	7.5	8.0	7.2	6.8	7.0	8.5	7.8	8.1	8.7	8.4	8.5
29	8.2	7.8	8.0	7.2	6.8	7.1	8.4	7.6	8.0	9.1	8.5	8.8
30	8.1	7.6	7.9	7.5	7.1	7.3	8.1	7.2	7.7	9.2	8.7	8.9
31	---	---	---	7.5	7.1	7.4	7.9	7.2	7.5	---	---	---
Month	---	---	---	---	---	---	9.1	6.8	7.7	9.2	7.2	8.4

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
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	9.1	8.6	8.8	---	---	---	---	---	---	---	---	---
2	9.0	8.5	8.7	---	---	---	---	---	---	---	---	---
3	9.0	8.5	8.7	---	---	---	---	---	---	---	---	---
4	8.9	8.5	8.7	---	---	---	---	---	---	---	---	---
5	8.8	8.5	8.6	---	---	---	---	---	---	---	---	---
6	9.0	8.5	8.8	---	---	---	---	---	---	---	---	---
7	9.6	8.9	9.2	---	---	---	---	---	---	---	---	---
8	9.4	9.0	9.2	---	---	---	---	---	---	---	---	---
9	9.9	9.2	9.7	---	---	---	---	---	---	---	---	---
10	10.5	9.9	10.3	---	---	---	---	---	---	---	---	---
11	10.6	10.4	10.5	---	---	---	---	---	---	---	---	---
12	10.6	10.5	10.5	---	---	---	---	---	---	---	---	---
13	11.0	10.5	10.7	---	---	---	---	---	---	---	---	---
14	10.8	10.0	10.4	---	---	---	---	---	---	---	---	---
15	10.3	9.9	10.1	---	---	---	---	---	---	---	---	---
16	10.5	10.2	10.4	---	---	---	---	---	---	---	---	---
17	10.4	10.0	10.2	---	---	---	---	---	---	---	---	---
18	10.2	9.7	10.0	---	---	---	---	---	---	---	---	---
19	9.9	9.7	9.8	---	---	---	---	---	---	---	---	---
20	10.1	9.6	9.9	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS  
 WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

[>, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	95	65	80	---	---	---	---	---	---	---	---	---
2	140	70	85	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	57	38	43	---	---	---	---	---	---	---	---	---
13	63	44	50	---	---	---	---	---	---	---	---	---
14	62	51	56	---	---	---	---	---	---	---	---	---
15	190	47	87	---	---	---	---	---	---	---	---	---
16	>990	150	>780	---	---	---	---	---	---	---	---	---
17	>980	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
 [>, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	February			March			April			May		
1	---	---	---	---	---	---	---	---	---	150	92	110
2	---	---	---	---	---	---	---	---	---	>1,580	150	>1,030
3	---	---	---	---	---	---	---	---	---	>1,640	1,050	>1,390
4	---	---	---	---	---	---	---	---	---	>1,640	>1,560	>1,610
5	---	---	---	---	---	---	---	---	---	>1,670	>1,600	>1,630
6	---	---	---	---	---	---	---	---	---	>1,690	>1,640	>1,660
7	---	---	---	---	---	---	---	---	---	>1,710	>1,660	>1,680
8	---	---	---	---	---	---	---	---	---	>1,690	>1,580	>1,660
9	---	---	---	---	---	---	---	---	---	>1,640	>1,630	>1,640
10	---	---	---	---	---	---	---	---	---	>1,640	>1,620	>1,630
11	---	---	---	---	---	---	---	---	---	>1,640	>1,570	>1,620
12	---	---	---	---	---	---	---	---	---	>1,660	>1,630	>1,650
13	---	---	---	---	---	---	---	---	---	>1,660	>1,640	>1,650
14	---	---	---	---	---	---	---	---	---	>1,660	>1,630	>1,650
15	---	---	---	---	---	---	---	---	---	>1,660	1,300	>1,560
16	---	---	---	---	---	---	---	---	---	1,300	860	1,050
17	---	---	---	---	---	---	>1,690	>1,590	>1,630	860	580	710
18	---	---	---	---	---	---	>1,700	>1,590	>1,640	580	370	460
19	---	---	---	---	---	---	>1,700	>1,560	>1,650	370	280	320
20	---	---	---	---	---	---	>1,720	>1,610	>1,660	280	200	230
21	---	---	---	---	---	---	>1,650	>1,560	>1,610	210	170	190
22	---	---	---	---	---	---	>1,590	670	>1,110	180	130	150
23	---	---	---	---	---	---	670	380	450	220	130	150
24	---	---	---	---	---	---	480	220	310	>1,670	220	>900
25	---	---	---	---	---	---	220	130	170	>1,680	>1,650	>1,660
26	---	---	---	---	---	---	170	110	140	>1,680	>1,660	>1,670
27	---	---	---	---	---	---	370	130	220	>1,660	>1,640	>1,650
28	---	---	---	---	---	---	310	160	210	>1,650	>1,630	>1,640
29	---	---	---	---	---	---	160	120	140	>1,660	>1,640	>1,650
30	---	---	---	---	---	---	120	98	110	>1,700	>1,650	>1,670
31	---	---	---	---	---	---	---	---	---	>1,710	>1,530	>1,680
Month	---	---	---	---	---	---	---	---	---	1,710	92	1,220

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

[&gt;, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	June			July			August			September		
1	>1,610	1,110	>1,340	1,340	330	640	560	180	260	65	57	61
2	>1,750	880	>1,100	---	---	---	230	130	190	61	53	57
3	>1,720	>1,610	>1,670	---	---	---	130	110	120	56	45	51
4	>1,710	>1,690	>1,700	---	---	---	500	92	210	50	39	43
5	>1,710	>1,600	>1,690	---	---	---	460	160	230	76	38	48
6	>1,680	>1,650	>1,660	---	---	---	340	160	270	62	55	58
7	>1,690	>1,660	>1,680	---	---	---	220	160	190	59	51	55
8	>1,700	>1,680	>1,690	---	---	---	610	170	320	55	49	52
9	>1,700	>1,680	>1,690	---	---	---	>1,810	480	>860	54	45	48
10	>1,700	>1,680	>1,680	---	---	---	>1,810	>1,770	>1,790	49	43	45
11	>1,690	>1,680	>1,680	---	---	---	>1,800	>1,760	>1,780	50	44	47
12	>1,690	>1,670	>1,680	---	---	---	>1,780	590	>1,330	49	40	43
13	>1,690	>1,650	>1,670	---	---	---	>1,810	560	>1,590	93	40	54
14	>1,720	>1,670	>1,690	---	---	---	>1,790	>1,740	>1,760	100	44	62
15	>1,710	>1,420	>1,640	---	---	---	>1,780	>1,720	>1,750	50	35	41
16	>1,520	1,020	>1,210	---	---	---	>1,770	1,290	>1,680	43	32	34
17	1,020	760	900	---	---	---	1,370	630	1,110	40	28	31
18	760	650	690	---	---	---	630	200	350	56	32	39
19	670	500	580	>1,790	>1,600	>1,760	510	190	380	80	56	69
20	---	---	---	>1,810	>1,760	>1,780	380	240	300	62	30	45
21	---	---	---	>1,800	>1,730	>1,780	360	200	300	40	20	26
22	---	---	---	>1,800	>1,770	>1,780	270	170	220	28	18	22
23	>1,540	---	---	>1,790	>1,750	>1,770	280	130	180	31	18	24
24	>1,530	490	>840	>1,830	970	>1,670	130	100	110	24	12	15
25	490	230	300	1,000	250	450	110	88	98	14	9.7	11
26	250	180	200	250	130	190	98	83	89	14	11	12
27	240	170	190	840	140	540	110	74	88	19	9.7	12
28	420	210	300	>1,830	530	>1,240	96	68	72	12	9.2	11
29	>1,580	330	>1,330	>1,830	>1,790	>1,810	70	55	62	13	7.9	10
30	>1,580	1,230	>1,530	>1,830	>1,770	>1,800	64	51	54	10	7.5	8.4
31	---	---	---	>1,810	560	>1,400	75	58	66	---	---	---
<b>Month</b>	---	---	---	---	---	---	1,810	51	570	100	7.5	38

06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS  
 WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

[>, greater than]

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	12	7.1	8.7	---	---	---	---	---	---	---	---	---
2	9.8	6.8	8.2	---	---	---	---	---	---	---	---	---
3	12	7.1	8.4	---	---	---	---	---	---	---	---	---
4	10	6.7	7.9	---	---	---	---	---	---	---	---	---
5	10	5.8	7.8	---	---	---	---	---	---	---	---	---
6	10	6.1	7.3	---	---	---	---	---	---	---	---	---
7	9.8	5.2	6.6	---	---	---	---	---	---	---	---	---
8	15	5.6	7.8	---	---	---	---	---	---	---	---	---
9	14	4.7	6.3	---	---	---	---	---	---	---	---	---
10	27	6.4	13	---	---	---	---	---	---	---	---	---
11	12	4.7	7.7	---	---	---	---	---	---	---	---	---
12	52	6.3	13	---	---	---	---	---	---	---	---	---
13	180	12	45	---	---	---	---	---	---	---	---	---
14	>1,660	11	>580	---	---	---	---	---	---	---	---	---
15	>1,650	>1,560	>1,620	---	---	---	---	---	---	---	---	---
16	>1,670	>1,630	>1,650	---	---	---	---	---	---	---	---	---
17	>1,690	>1,640	>1,670	---	---	---	---	---	---	---	---	---
18	>1,700	>1,660	>1,680	---	---	---	---	---	---	---	---	---
19	>1,710	1,270	>1,620	---	---	---	---	---	---	---	---	---
20	1,270	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

## 06439500 CHEYENNE RIVER NEAR EAGLE BUTTE, SD—Continued

**WATER-QUALITY DATA**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**

<b>Date</b>	<b>Time</b>	<b>Instantaneous discharge, ft<sup>3</sup>/s (00061)</b>	<b>Specific conductance, <math>\mu</math>S/cm 25 degC (00095)</b>	<b>Temperature, air, deg C (00020)</b>	<b>Temperature, water, deg C (00010)</b>
<b>Oct</b>					
11...	1550	162	--	19.0	14.8
<b>Nov</b>					
02...	1345	112	--	14.0	8.0
<b>Apr</b>					
15...	1750	303	992	20.0	15.0
<b>May</b>					
07...	1100	2,040	1,270	17.0	14.3
12...	1025	4,180	841	16.5	12.0
26...	1150	13,700	829	10.0	14.0
29...	1305	8,160	824	17.5	13.0
<b>Jun</b>					
08...	1810	46,700	820	19.5	18.0
19...	1325	2,840	--	28.5	--
<b>Jul</b>					
16...	1115	589	--	30.5	--
<b>Sep</b>					
06...	1218	441	--	23.0	--