11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA

Cockleburr Creek Basin

LOCATION.--Lat 33°15′02″, long 117°25′53″ referenced to North American Datum of 1983, in SW ¼ NW ¼ sec.5, T.11 S., R.5 W., San Diego County, CA, Hydrologic Unit 18070301, on Camp Joseph H. Pendleton Naval Reservation, at the mouth of unnamed creek draining Cockleburr Canyon at the Pacific Ocean, 0.2 mi west of Interstate Highway 5, and 4.7 mi northwest of Oceanside.

DRAINAGE AREA.--1.60 mi^2.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2003 to current year.
CHEMICAL DATA: Water years 2005 to current year.

PERIOD OF DAILY RECORD.--
DISSOLVED OXYGEN: June 2003 to current year.
pH: June 2003 to current year.
SPECIFIC CONDUCTANCE: June 2003 to current year.
WATER TEMPERATURE: June 2003 to current year.

INSTRUMENTATION.--Water-quality monitor since June 2003.

REMARKS.--Interruption of records at times due to malfunction of recording equipment.
Dissolved oxygen records rated poor.
pH records rated good.
Specific Conductance records rated good, except for the period between Nov. 16 to Jan. 9, which is rated poor.
Water temperature records rated excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.--
DISSOLVED OXYGEN: Maximum recorded, >20.0 mg/L, many days, 2004-08; minimum recorded, <0.2 mg/L, several days during 2008.
pH: Maximum recorded, 9.6 standard units, Nov. 24, Dec. 14, 2004; minimum recorded, 6.7 standard units, Jan. 9, 11, 2005.
SPECIFIC CONDUCTANCE: Maximum recorded, 47,300 microsiemens, June 3, 2004; minimum recorded, 128 microsiemens, Jan. 9, 2005.
WATER TEMPERATURE: Maximum recorded, 32.5°C, July 28, 2005; minimum recorded, 5.8°C, Jan. 15, 16, 2007.

EXTREMES FOR CURRENT YEAR.--
DISSOLVED OXYGEN: Maximum recorded, >20.0 mg/l, many days; minimum recorded, <0.2 mg/L, several days.
pH: Maximum recorded, 8.7 standard units, Aug. 29; minimum recorded, 7.1 standard units, Jan. 22, Feb. 19, 20.
SPECIFIC CONDUCTANCE: Maximum recorded, 46,200 microsiemens, July 4; minimum recorded, 241 microsiemens, Jan. 7.
WATER TEMPERATURE: Maximum recorded, 29.0°C, Aug. 11, 12; minimum recorded, 7.8°C, Jan. 19, Feb. 15.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 3

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

Date	Time	Barometric pressure, mm Hg (00025)	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)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	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)
Mar													
25...	1625	765	15.0	153	7.8	6,300	15.5	1,700	331	216	4.84	8.2	50
Jul													
30...	1130	760	11.1	133	7.9	6,920	23.0	1,700	308	218	9.68	9.6	54

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 3
[Remark codes: <, less than; E, estimated.]

Date	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt inf tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt infl pt titr., field, mg/L (00453)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)
Mar													
25...	784	347	423	1,110	.47	23.4	1,110	E4,190	5.90	4,340	.88	.037	91.2
Jul													
30...	901	345	421	1,430	.51	31.3	1,130	4,610	6.67	4,900	.84	.084	85.0

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 3 of 3
[Remark codes: <, less than; E, estimated.]

Date	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L as P (00666)	Boron, water, fltrd, µg/L (01020)	Iron, water, fltrd, µg/L (01046)	Mangan-ese, water, fltrd, µg/L (01056)
Mar						
25...	.048	.017	<.04	456	E22	34.4
Jul						
30...	.105	.030	<.04	514	<32	7.8

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[<, less than; >, greater than]

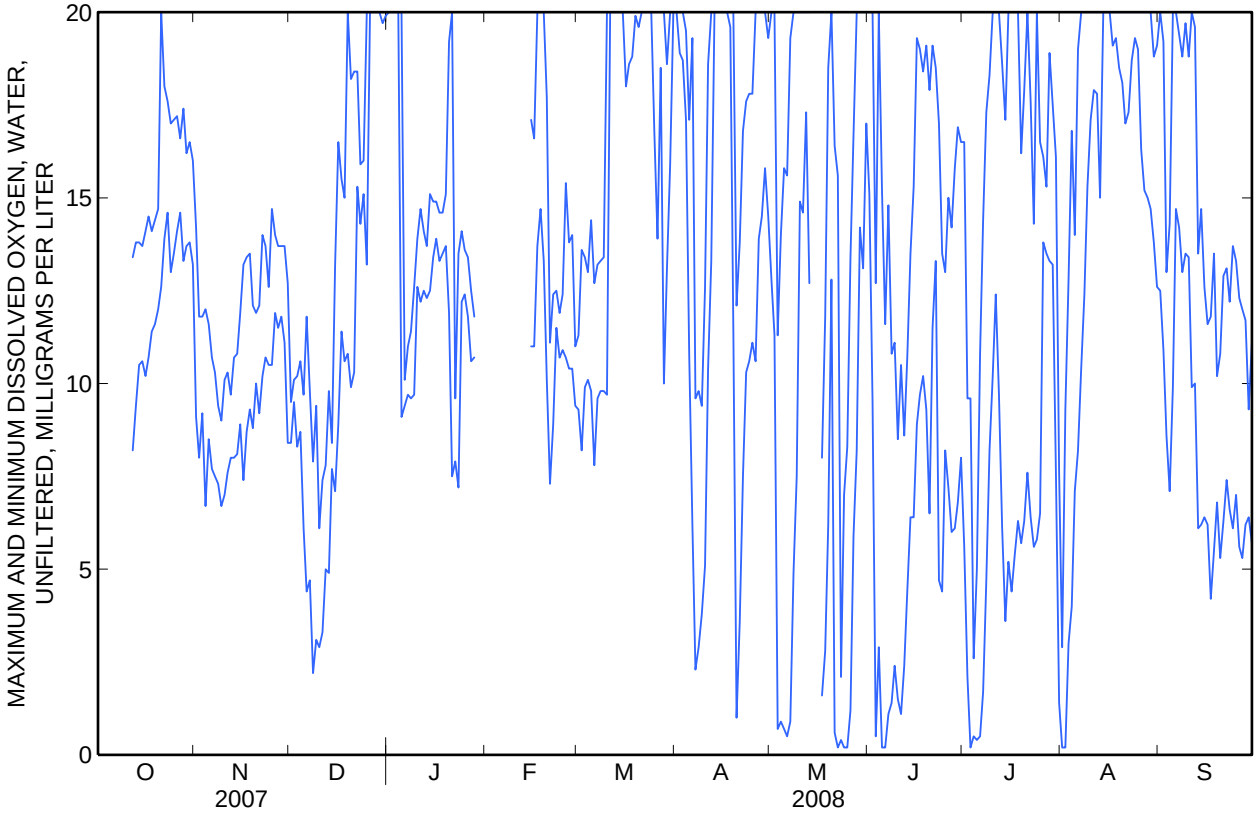
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	---	---	14.2	9.1	9.5	8.4	>20.0	>20.0	---	---	11.3	9.3
2	---	---	11.8	8.0	10.1	9.5	>20.0	>20.0	---	---	13.6	8.2
3	---	---	11.8	9.2	10.2	8.3	>20.0	>20.0	---	---	13.4	9.9
4	---	---	12.0	6.7	10.6	8.7	>20.0	>20.0	---	---	13.0	10.1
5	---	---	11.6	8.5	9.7	6.1	>20.0	9.1	---	---	14.4	9.8
6	---	---	10.7	7.7	11.8	4.4	10.1	9.4	---	---	12.7	7.8
7	---	---	10.3	7.5	9.8	4.7	11.0	9.7	---	---	13.2	9.6
8	---	---	9.4	7.3	7.9	2.2	11.4	9.6	---	---	13.3	9.8
9	---	---	9.0	6.7	9.4	3.1	12.6	9.7	---	---	13.4	9.8
10	---	---	10.1	7.0	6.1	2.9	13.9	12.6	---	---	>20.0	9.7
11	---	---	10.3	7.6	7.4	3.3	14.7	12.2	---	---	>20.0	>20.0
12	13.4	8.2	9.7	8.0	7.8	5.0	14.1	12.5	---	---	>20.0	>20.0
13	13.8	9.4	10.7	8.0	9.8	4.9	13.7	12.3	---	---	>20.0	>20.0
14	13.8	10.5	10.8	8.1	8.4	7.7	15.1	12.5	---	---	>20.0	>20.0
15	13.7	10.6	11.9	8.9	13.2	7.1	14.9	13.4	17.1	11.0	>20.0	>20.0
16	14.1	10.2	13.2	7.4	16.5	8.9	14.9	13.9	16.6	11.0	>20.0	18.0
17	14.5	10.7	13.4	8.7	15.5	11.4	14.6	13.3	>20.0	13.7	>20.0	18.6
18	14.1	11.4	13.5	9.3	15.0	10.6	14.6	13.5	>20.0	14.7	>20.0	18.8
19	14.4	11.6	12.1	8.8	>20.0	10.8	15.1	13.7	>20.0	13.3	>20.0	19.9
20	14.7	12.0	11.9	10.0	18.2	9.9	19.2	11.9	17.7	10.1	>20.0	19.6
21	>20.0	12.6	12.1	9.2	18.4	10.3	>20.0	7.5	11.1	7.3	>20.0	>20.0
22	18.0	13.9	14.0	10.2	18.4	15.3	9.6	7.9	12.4	8.9	>20.0	>20.0
23	17.6	14.6	13.7	10.7	15.9	14.3	13.5	7.2	12.5	11.5	>20.0	>20.0
24	17.0	13.0	12.6	10.5	16.0	15.1	14.1	12.2	11.9	10.7	>20.0	>20.0
25	17.1	13.5	14.7	10.5	>20.0	13.2	13.6	12.4	12.4	10.9	>20.0	16.8
26	17.2	14.1	14.0	11.9	>20.0	>20.0	13.4	11.8	15.4	10.7	20.0	13.9
27	16.6	14.6	13.7	11.5	>20.0	>20.0	12.5	10.6	13.8	10.4	>20.0	18.5
28	17.4	13.3	13.7	11.8	>20.0	>20.0	11.8	10.7	14.0	10.4	>20.0	10.0
29	16.2	13.7	13.7	11.1	>20.0	>20.0	---	---	11.0	9.4	18.6	13.1
30	16.5	13.8	12.7	8.4	>20.0	19.7	---	---	---	---	>20.0	15.9
31	16.0	13.2	---	---	>20.0	19.9	---	---	---	---	>20.0	>20.0
Month	---	---	14.7	6.7	20.0	2.2	---	---	---	---	20.0	7.8

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
[<, less than; >, greater than]

Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	April		May		June		July		August		September	
1	>20.0	20.0	>20.0	12.8	>20.0	15.1	16.5	5.6	2.9	<0.2	>20.0	12.5
2	>20.0	18.9	>20.0	11.3	>20.0	9.5	9.6	2.1	9.3	<0.2	19.2	10.9
3	>20.0	18.7	11.3	0.7	12.7	0.5	9.6	<0.2	12.8	3.0	13.0	8.6
4	19.5	17.1	14.0	0.9	>20.0	2.9	2.6	0.5	16.8	4.0	14.3	7.1
5	17.1	10.8	15.8	0.7	15.2	<0.2	5.0	0.4	14.0	7.1	>20.0	9.9
6	19.3	6.2	15.6	0.5	11.6	<0.2	10.8	0.5	19.0	8.2	>20.0	14.7
7	9.6	2.3	19.3	0.9	14.8	1.1	14.4	1.7	>20.0	10.4	19.4	14.2
8	9.8	2.9	>20.0	4.9	10.8	1.4	17.3	4.7	>20.0	12.4	18.8	13.0
9	9.4	3.8	>20.0	7.5	11.1	2.4	18.3	8.2	>20.0	15.3	19.7	13.5
10	12.6	5.1	>20.0	14.9	8.5	1.5	>20.0	10.2	>20.0	17.1	18.8	13.4
11	18.6	10.4	>20.0	14.6	10.5	1.1	>20.0	12.4	>20.0	17.9	>20.0	9.9
12	>20.0	13.3	>20.0	17.3	8.6	2.4	>20.0	9.7	>20.0	17.8	19.6	10.0
13	>20.0	>20.0	>20.0	12.7	10.7	4.4	18.6	6.1	>20.0	15.0	13.5	6.1
14	>20.0	>20.0	---	---	13.5	6.4	17.1	3.6	>20.0	>20.0	14.7	6.2
15	>20.0	>20.0	---	---	15.3	6.4	>20.0	5.2	>20.0	>20.0	12.6	6.4
16	>20.0	>20.0	---	---	19.3	8.9	>20.0	4.4	>20.0	>20.0	11.6	6.2
17	>20.0	>20.0	8.0	1.6	19.0	9.7	>20.0	5.4	>20.0	19.1	11.8	4.2
18	>20.0	19.6	11.8	2.8	18.4	10.2	>20.0	6.3	>20.0	19.3	13.5	5.5
19	>20.0	11.4	18.5	6.2	19.1	9.3	16.2	5.7	>20.0	18.5	10.2	6.8
20	12.1	1.0	>20.0	12.8	17.9	6.5	17.9	6.3	>20.0	18.1	10.8	5.3
21	13.8	3.6	16.4	0.6	19.1	11.5	>20.0	7.6	>20.0	17.0	12.9	6.3
22	16.8	7.5	15.6	<0.2	18.5	13.3	17.6	6.4	>20.0	17.3	13.1	7.4
23	17.6	10.3	2.1	0.4	17.0	4.7	14.3	5.6	>20.0	18.7	12.2	6.6
24	17.8	10.6	7.0	<0.2	13.5	4.4	>20.0	5.8	>20.0	19.3	13.7	6.1
25	17.8	11.1	8.3	<0.2	13.0	8.2	16.5	6.5	>20.0	19.0	13.3	7.0
26	>20.0	10.6	13.4	1.2	15.0	7.2	16.1	13.8	>20.0	16.3	12.3	5.6
27	>20.0	13.9	16.7	5.9	14.2	6.0	15.3	13.5	>20.0	15.2	12.0	5.3
28	>20.0	14.5	>20.0	8.2	15.8	6.1	18.9	13.3	>20.0	15.0	11.7	6.2
29	>20.0	15.8	>20.0	14.2	16.9	6.8	17.5	13.2	>20.0	14.7	9.3	6.4
30	19.3	14.5	>20.0	13.1	16.5	8.0	16.1	7.6	18.8	13.8	11.1	5.7
31	---	---	>20.0	17.0	---	---	7.6	1.4	19.1	12.6	---	---
Month	20.0	1.0	---	---	20.0	0.2	20.0	0.2	20.0	0.2	20.0	4.2

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued



11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

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

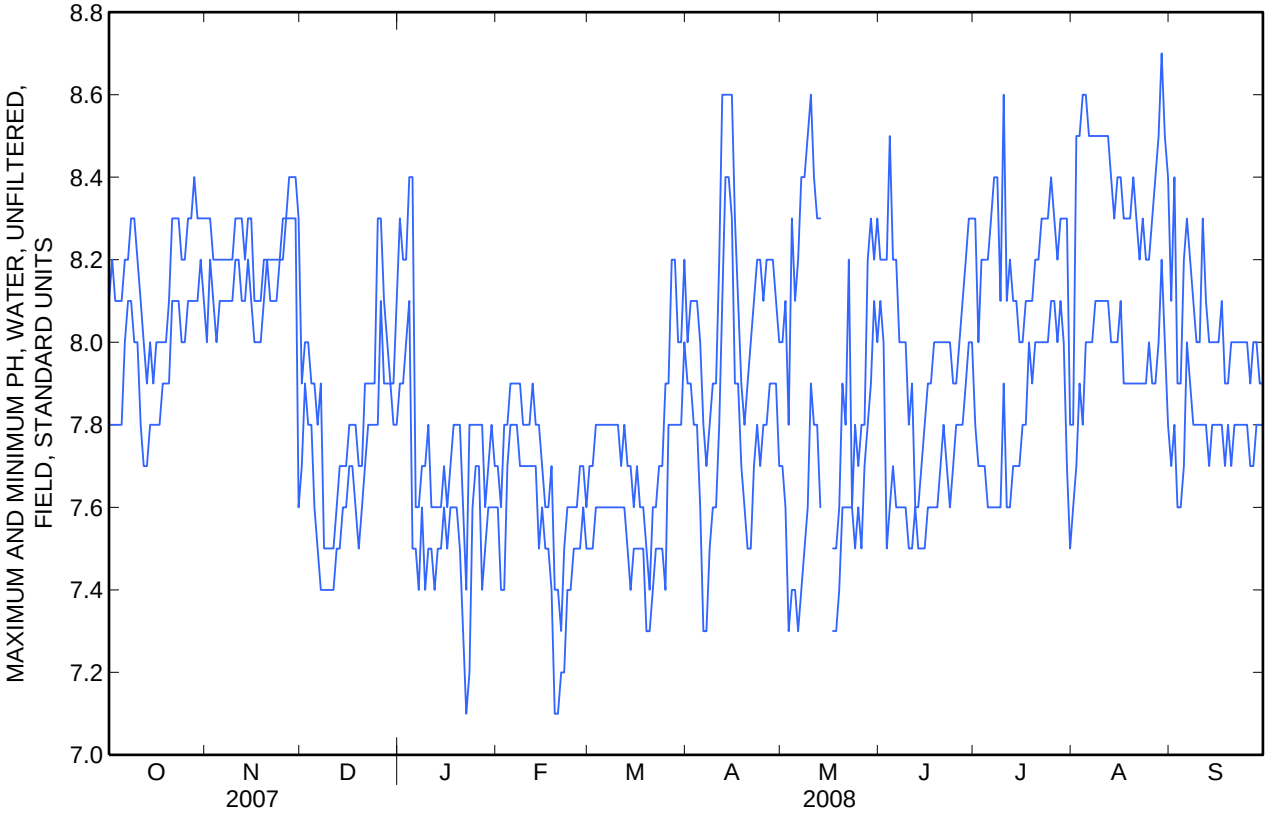
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	8.1	7.8	8.3	8.0	7.9	7.7	8.3	7.9	7.7	7.6	7.7	7.5
2	8.2	7.8	8.3	8.2	8.0	7.9	8.2	7.9	7.6	7.4	7.7	7.5
3	8.1	7.8	8.2	8.1	8.0	7.8	8.2	8.0	7.8	7.4	7.8	7.6
4	8.1	7.8	8.2	8.0	7.9	7.8	8.4	8.1	7.8	7.7	7.8	7.6
5	8.1	7.8	8.2	8.1	7.9	7.6	8.4	7.5	7.9	7.8	7.8	7.6
6	8.2	8.0	8.2	8.1	7.8	7.5	7.6	7.5	7.9	7.8	7.8	7.6
7	8.2	8.1	8.2	8.1	7.9	7.4	7.6	7.4	7.9	7.8	7.8	7.6
8	8.3	8.1	8.2	8.1	7.5	7.4	7.7	7.6	7.9	7.7	7.8	7.6
9	8.3	8.0	8.2	8.1	7.5	7.4	7.7	7.4	7.8	7.7	7.8	7.6
10	8.2	8.0	8.3	8.2	7.5	7.4	7.8	7.5	7.8	7.7	7.8	7.6
11	8.1	7.8	8.3	8.2	7.5	7.4	7.6	7.5	7.8	7.7	7.7	7.6
12	8.0	7.7	8.3	8.1	7.6	7.5	7.6	7.4	7.9	7.7	7.8	7.6
13	7.9	7.7	8.2	8.1	7.7	7.5	7.6	7.5	7.8	7.7	7.7	7.5
14	8.0	7.8	8.3	8.2	7.7	7.6	7.6	7.5	7.8	7.5	7.7	7.4
15	7.9	7.8	8.3	8.1	7.7	7.6	7.7	7.6	7.7	7.6	7.6	7.5
16	8.0	7.8	8.1	8.0	7.8	7.7	7.6	7.5	7.6	7.5	7.7	7.5
17	8.0	7.8	8.1	8.0	7.8	7.7	7.7	7.6	7.6	7.5	7.6	7.5
18	8.0	7.9	8.1	8.0	7.8	7.6	7.8	7.6	7.7	7.4	7.6	7.5
19	8.0	7.9	8.2	8.1	7.7	7.5	7.8	7.6	7.4	7.1	7.5	7.3
20	8.1	7.9	8.2	8.2	7.7	7.6	7.8	7.5	7.4	7.1	7.4	7.3
21	8.3	8.1	8.2	8.1	7.9	7.7	7.6	7.3	7.3	7.2	7.6	7.4
22	8.3	8.1	8.2	8.1	7.9	7.8	7.4	7.1	7.5	7.2	7.6	7.5
23	8.3	8.1	8.2	8.1	7.9	7.8	7.8	7.2	7.6	7.4	7.7	7.5
24	8.2	8.0	8.2	8.2	7.9	7.8	7.8	7.6	7.6	7.4	7.7	7.5
25	8.2	8.0	8.3	8.2	8.3	7.8	7.8	7.7	7.6	7.5	7.9	7.4
26	8.3	8.1	8.3	8.3	8.3	8.1	7.8	7.7	7.6	7.5	7.9	7.8
27	8.3	8.1	8.4	8.3	8.1	7.9	7.8	7.4	7.7	7.5	8.2	7.8
28	8.4	8.1	8.4	8.3	8.0	7.9	7.6	7.5	7.7	7.6	8.2	7.8
29	8.3	8.1	8.4	8.3	7.9	7.9	7.7	7.6	7.6	7.5	8.0	7.8
30	8.3	8.2	8.3	7.6	7.9	7.8	7.8	7.6	---	---	8.0	7.8
31	8.3	8.1	---	---	8.1	7.8	7.7	7.6	---	---	8.2	8.0
Month	8.4	7.7	8.4	7.6	8.3	7.4	8.4	7.1	7.9	7.1	8.2	7.3

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—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	8.0	7.9	8.0	7.7	8.2	8.1	8.3	7.8	7.8	7.6	8.1	7.7
2	8.1	7.9	8.1	7.6	8.2	8.0	8.0	7.7	8.5	7.7	8.4	7.8
3	8.1	7.8	7.8	7.3	8.2	7.5	8.2	7.7	8.5	7.9	7.9	7.6
4	8.1	7.8	8.3	7.4	8.5	7.6	8.2	7.7	8.6	7.8	7.9	7.6
5	8.0	7.6	8.1	7.4	8.2	7.7	8.2	7.6	8.6	8.0	8.2	7.7
6	7.8	7.3	8.2	7.3	8.2	7.6	8.3	7.6	8.5	8.0	8.3	8.0
7	7.7	7.3	8.4	7.4	8.0	7.6	8.4	7.6	8.5	8.0	8.2	7.9
8	7.8	7.5	8.4	7.5	8.0	7.6	8.4	7.6	8.5	8.1	8.1	7.8
9	7.9	7.6	8.5	7.6	8.0	7.6	8.1	7.6	8.5	8.1	8.0	7.8
10	7.9	7.6	8.6	7.9	7.8	7.5	8.6	7.9	8.5	8.1	8.0	7.8
11	8.2	7.8	8.4	7.8	7.9	7.5	8.1	7.6	8.5	8.1	8.3	7.8
12	8.6	8.1	8.3	7.8	7.6	7.6	8.2	7.6	8.5	8.1	8.1	7.8
13	8.6	8.4	8.3	7.6	7.6	7.5	8.1	7.7	8.4	8.0	8.0	7.7
14	8.6	8.4	---	---	7.7	7.5	8.1	7.7	8.3	8.0	8.0	7.8
15	8.6	8.3	---	---	7.8	7.5	8.0	7.7	8.4	8.0	8.0	7.8
16	8.3	7.9	---	---	7.9	7.6	8.0	7.8	8.4	8.1	8.0	7.8
17	8.1	7.9	7.5	7.3	7.9	7.6	8.1	7.8	8.3	7.9	8.1	7.8
18	7.9	7.7	7.5	7.3	8.0	7.6	8.1	8.0	8.3	7.9	7.9	7.7
19	7.8	7.6	7.6	7.4	8.0	7.6	8.1	7.9	8.3	7.9	7.9	7.8
20	7.9	7.5	7.9	7.6	8.0	7.7	8.2	8.0	8.4	7.9	8.0	7.7
21	8.0	7.5	7.8	7.6	8.0	7.8	8.2	8.0	8.3	7.9	8.0	7.8
22	8.1	7.7	8.2	7.6	8.0	7.7	8.3	8.0	8.2	7.9	8.0	7.8
23	8.2	7.8	7.6	7.6	8.0	7.6	8.3	8.0	8.3	7.9	8.0	7.8
24	8.2	7.7	7.8	7.5	7.9	7.7	8.3	8.0	8.2	7.9	8.0	7.8
25	8.1	7.8	7.7	7.6	7.9	7.8	8.4	8.1	8.2	8.0	8.0	7.8
26	8.2	7.8	7.8	7.5	8.0	7.8	8.3	8.1	8.3	7.9	7.9	7.7
27	8.2	7.9	7.8	7.7	8.1	7.8	8.2	8.0	8.4	7.9	8.0	7.7
28	8.2	7.9	8.2	7.8	8.2	7.9	8.3	8.1	8.5	8.0	8.0	7.8
29	8.1	7.9	8.3	7.9	8.3	8.0	8.3	8.0	8.7	8.2	7.9	7.8
30	8.0	7.7	8.2	8.1	8.3	8.0	8.3	7.7	8.5	8.0	7.9	7.8
31	---	---	8.3	8.0	---	---	7.8	7.5	8.4	7.8	---	---
Month	8.6	7.3	---	---	8.5	7.5	8.6	7.5	8.7	7.6	8.4	7.6

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued



11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

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

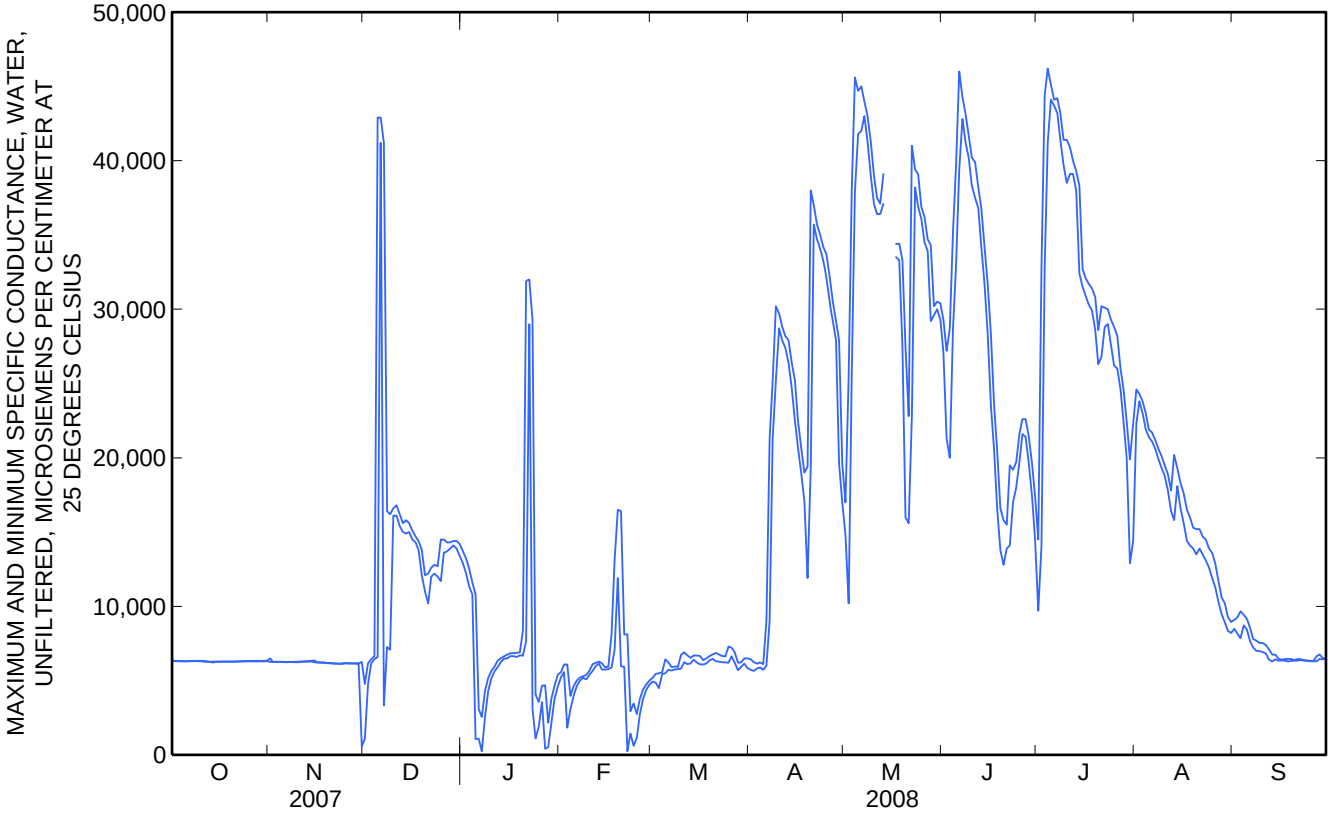
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	6,330	6,320	6,490	6,260	4,770	1,100	13,700	12,900	5,570	5,220	5,190	4,950
2	6,330	6,310	6,260	6,260	6,170	4,770	13,200	12,200	6,090	5,570	5,450	4,860
3	6,320	6,300	6,270	6,250	6,450	6,170	12,500	11,300	6,090	1,830	5,490	4,490
4	6,320	6,290	6,270	6,250	6,640	6,450	11,600	10,800	3,970	3,080	5,560	5,430
5	6,300	6,300	6,260	6,250	42,900	6,580	10,800	1,070	4,620	3,970	6,430	5,490
6	6,310	6,300	6,260	6,240	42,900	41,200	3,080	1,090	5,000	4,620	6,230	5,730
7	6,320	6,300	6,260	6,250	41,200	3,320	2,550	241	5,200	5,000	5,910	5,680
8	6,320	6,310	6,260	6,250	16,400	7,260	4,300	2,550	5,290	5,190	5,940	5,750
9	6,330	6,310	6,260	6,240	16,200	7,080	5,180	4,300	5,380	5,080	5,920	5,780
10	6,320	6,300	6,280	6,240	16,600	16,100	5,650	5,160	5,640	5,380	6,730	5,810
11	6,330	6,280	6,290	6,280	16,800	16,100	5,950	5,630	6,100	5,640	6,900	6,240
12	6,290	6,270	6,290	6,270	16,200	15,400	6,340	5,900	6,190	5,980	6,700	6,110
13	6,270	6,260	6,300	6,280	15,600	15,000	6,500	6,250	6,280	6,140	6,530	6,160
14	6,280	6,220	6,330	6,290	15,800	14,900	6,630	6,470	6,160	5,740	6,690	6,410
15	6,280	6,270	6,350	6,240	15,600	15,000	6,740	6,500	5,890	5,740	6,690	6,220
16	6,280	6,260	6,240	6,220	15,100	14,500	6,840	6,650	5,940	5,770	6,660	6,100
17	6,290	6,270	6,230	6,210	14,700	14,300	6,840	6,650	8,130	5,880	6,380	6,090
18	6,290	6,280	6,230	6,190	14,400	13,800	6,870	6,590	13,100	7,070	6,490	6,150
19	6,300	6,280	6,190	6,170	13,800	12,100	6,900	6,700	16,500	11,900	6,640	6,360
20	6,280	6,270	6,180	6,160	12,100	11,000	8,370	6,680	16,400	5,970	6,760	6,460
21	6,300	6,260	6,170	6,140	12,200	10,200	31,900	7,660	8,110	5,930	6,860	6,300
22	6,300	6,270	6,150	6,140	12,600	12,000	32,000	29,000	8,110	249	6,750	6,280
23	6,300	6,280	6,140	6,130	12,800	12,200	29,300	3,100	2,940	1,430	6,660	6,240
24	6,310	6,280	6,170	6,130	12,700	12,000	4,060	1,110	3,460	614	6,620	6,230
25	6,330	6,300	6,180	6,160	14,500	11,700	3,560	1,890	2,750	1,170	7,290	6,210
26	6,330	6,300	6,160	6,150	14,500	13,600	4,650	3,560	3,780	2,750	7,220	6,640
27	6,330	6,300	6,160	6,150	14,300	13,700	4,680	407	4,390	3,780	6,900	6,200
28	6,330	6,290	6,170	6,140	14,300	13,900	2,160	517	4,740	4,390	6,200	5,700
29	6,320	6,300	6,160	6,140	14,400	14,100	3,790	2,160	5,010	4,730	6,230	5,920
30	6,330	6,290	6,260	565	14,400	13,900	4,660	3,790	---	---	6,490	6,140
31	6,330	6,310	---	---	14,200	13,400	5,400	4,600	---	---	6,490	5,850
Month	6,330	6,220	6,490	565	42,900	1,100	32,000	241	16,500	249	7,290	4,490

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
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	6,440	5,730	17,000	14,800	29,300	27,100	14,500	9,710	24,600	22,300	9,090	8,490
2	6,250	5,660	25,500	10,200	27,200	21,300	32,800	14,100	24,300	23,800	9,270	8,150
3	6,140	5,820	37,900	25,500	28,700	20,000	44,400	32,800	23,800	23,000	9,670	7,850
4	6,230	5,880	45,600	37,900	35,200	28,700	46,200	41,200	23,000	21,900	9,440	8,730
5	6,110	5,730	44,700	41,800	39,700	32,900	45,100	44,100	21,900	21,400	9,160	8,440
6	9,050	6,010	45,000	42,000	46,000	39,400	44,100	43,700	21,700	21,100	8,540	7,640
7	21,300	9,050	44,000	43,000	44,300	42,800	44,200	43,200	21,200	20,600	7,800	7,230
8	25,200	21,300	43,000	41,300	43,100	41,200	43,200	41,400	20,600	19,900	7,690	7,000
9	30,200	25,200	41,300	39,000	41,700	40,200	41,400	39,700	20,100	19,300	7,530	6,990
10	29,700	28,700	39,000	37,100	40,200	38,300	41,400	38,500	19,500	18,800	7,530	6,920
11	28,800	27,900	37,500	36,400	39,900	37,500	40,900	39,100	18,900	17,800	7,390	6,820
12	28,200	27,400	37,100	36,400	38,200	36,800	40,000	39,100	17,800	16,400	7,100	6,410
13	27,900	26,400	39,100	37,100	36,800	34,200	39,300	38,000	20,200	15,800	6,760	6,290
14	26,400	24,700	---	---	34,200	31,700	38,300	32,400	19,300	18,100	6,750	6,430
15	25,200	22,500	---	---	31,700	28,300	32,700	31,500	18,300	16,600	6,480	6,340
16	22,500	20,700	---	---	28,300	23,500	32,100	30,900	17,600	15,600	6,410	6,360
17	20,700	19,000	34,400	33,500	23,500	20,500	31,700	30,300	16,500	14,400	6,440	6,340
18	19,000	17,100	34,400	33,300	20,500	16,600	31,400	29,900	16,000	14,100	6,470	6,290
19	19,400	11,900	33,300	27,500	16,600	13,800	30,800	28,600	15,300	13,900	6,460	6,320
20	38,000	19,400	27,500	16,000	15,800	12,800	28,600	26,300	15,200	13,500	6,380	6,340
21	37,000	35,700	22,800	15,600	15,500	13,900	30,200	26,800	15,200	13,900	6,460	6,340
22	35,700	34,700	41,000	22,800	19,500	14,100	30,100	28,800	14,700	13,500	6,440	6,390
23	35,000	34,000	39,400	38,200	19,200	17,000	30,000	29,000	14,500	13,100	6,390	6,340
24	34,200	33,300	39,100	36,900	19,700	18,000	29,300	27,600	13,900	12,600	6,360	6,330
25	33,700	32,100	36,900	36,100	21,600	19,700	28,800	26,200	13,600	11,900	6,340	6,300
26	32,200	30,500	36,200	34,500	22,600	21,600	28,200	26,000	12,900	11,300	6,320	6,300
27	30,500	29,200	34,700	33,900	22,600	21,400	26,000	24,600	11,700	10,300	6,640	6,300
28	29,200	27,900	34,300	29,200	21,400	19,600	24,600	22,400	10,600	9,480	6,770	6,450
29	27,900	19,600	30,200	29,600	19,600	17,400	22,400	19,900	10,200	8,920	6,510	6,430
30	19,600	17,000	30,500	30,000	17,400	14,500	19,900	12,900	9,300	8,350	6,510	6,490
31	---	---	30,400	29,300	---	---	22,300	14,400	8,940	8,210	---	---
Month	38,000	5,660	---	---	46,000	12,800	46,200	9,710	24,600	8,210	9,670	6,290

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued



11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

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

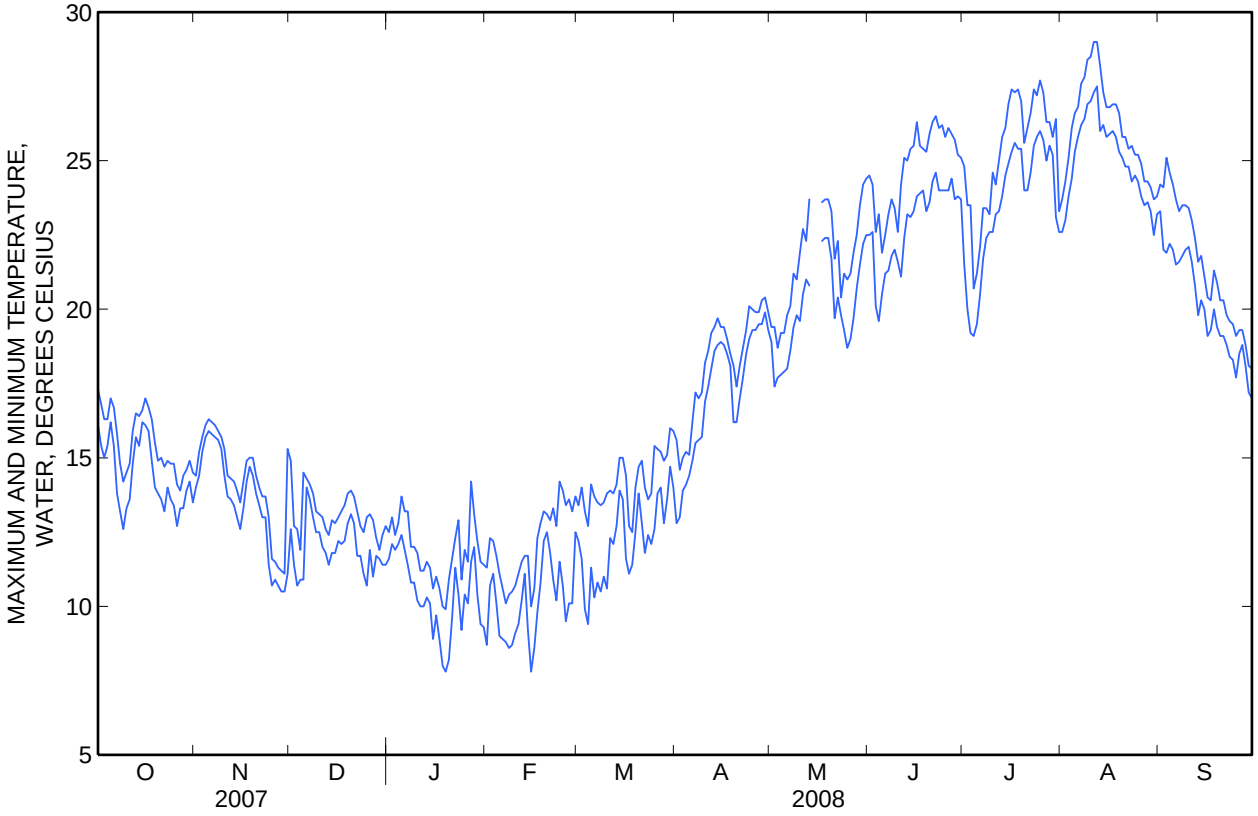
Day	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
	October		November		December		January		February		March	
1	17.3	16.1	14.4	14.0	14.9	12.6	12.5	11.6	11.3	8.7	13.4	12.2
2	16.8	15.4	15.2	14.4	12.7	11.4	13.0	12.1	12.3	10.7	14.0	11.6
3	16.3	15.0	15.7	15.2	12.6	10.7	12.4	11.9	12.2	11.1	13.2	9.9
4	16.3	15.4	16.1	15.7	11.9	10.9	12.8	12.1	11.7	10.1	12.7	9.4
5	17.0	16.2	16.3	15.9	14.5	10.9	13.7	12.4	11.1	9.0	14.1	11.3
6	16.7	15.4	16.2	15.8	14.3	14.0	13.2	11.9	10.6	8.9	13.7	10.3
7	15.8	13.8	16.1	15.7	14.1	13.6	13.2	11.4	10.1	8.8	13.5	10.8
8	14.8	13.2	15.9	15.6	13.8	13.0	12.0	10.8	10.4	8.6	13.4	10.5
9	14.2	12.6	15.7	15.3	13.2	12.5	12.0	10.8	10.5	8.7	13.5	11.0
10	14.5	13.3	15.3	14.4	13.1	12.5	11.8	10.2	10.7	9.1	13.8	10.6
11	14.8	13.6	14.4	13.7	13.0	12.0	11.2	10.0	11.1	9.4	13.9	12.3
12	15.9	14.8	14.3	13.6	12.6	11.8	11.2	10.0	11.5	10.2	13.8	12.1
13	16.5	15.7	14.2	13.4	12.4	11.4	11.5	10.3	11.7	11.1	14.1	12.7
14	16.4	15.4	13.9	13.0	12.9	11.8	11.3	10.1	11.7	9.2	15.0	13.9
15	16.6	16.2	13.5	12.6	12.8	11.8	10.6	8.9	10.0	7.8	15.0	13.6
16	17.0	16.1	14.2	13.3	13.0	12.2	11.0	9.7	10.6	8.6	14.4	11.6
17	16.7	15.9	14.9	14.2	13.2	12.1	10.6	8.9	12.3	9.8	12.7	11.1
18	16.3	14.9	15.0	14.7	13.4	12.2	10.0	8.0	12.8	10.8	12.5	11.4
19	15.5	14.0	15.0	14.4	13.8	12.8	9.9	7.8	13.2	12.2	14.0	12.5
20	14.9	13.8	14.4	13.8	13.9	13.1	10.9	8.2	13.1	12.5	14.7	13.8
21	15.0	13.6	14.0	13.4	13.7	12.8	11.6	9.6	12.9	11.8	14.9	12.8
22	14.7	13.2	13.7	13.0	13.2	11.7	12.3	11.3	13.3	10.9	14.0	11.8
23	14.9	14.0	13.7	13.0	12.7	11.7	12.9	10.4	12.7	10.2	13.6	12.4
24	14.8	13.6	13.0	11.4	12.5	11.1	10.9	9.2	14.2	11.5	13.8	12.1
25	14.8	13.4	11.6	10.7	13.0	10.7	11.9	10.4	13.9	10.7	15.4	12.6
26	14.1	12.7	11.5	10.9	13.1	11.9	11.5	10.1	13.4	9.5	15.3	13.8
27	13.9	13.3	11.3	10.7	12.9	11.0	14.2	11.5	13.6	10.1	15.2	14.0
28	14.4	13.3	11.2	10.5	12.3	11.7	13.1	12.0	13.2	10.1	14.9	12.8
29	14.6	13.9	11.1	10.5	11.9	11.6	12.2	10.4	13.7	12.5	15.1	13.6
30	14.9	14.2	15.3	11.1	12.4	11.4	11.5	9.4	---	---	16.0	14.7
31	14.5	13.5	---	---	12.7	11.4	11.4	9.3	---	---	15.9	14.0
Month	17.3	12.6	16.3	10.5	14.9	10.7	14.2	7.8	14.2	7.8	16.0	9.4

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
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	15.6	12.8	19.4	18.9	24.5	22.5	24.8	21.5	23.7	22.6	24.2	23.3
2	14.6	13.0	19.4	17.4	24.2	22.6	23.5	20.0	24.3	23.0	24.1	22.0
3	15.0	13.9	18.7	17.7	22.6	20.1	23.5	19.2	25.1	23.8	25.1	21.9
4	15.2	14.1	19.2	17.8	23.2	19.6	20.7	19.1	26.1	24.4	24.6	22.2
5	15.1	14.4	19.2	17.9	21.9	20.5	21.2	19.5	26.6	25.3	24.2	22.0
6	16.2	14.9	19.8	18.0	22.5	21.2	22.1	20.5	26.8	25.8	23.7	21.5
7	17.2	15.5	20.1	18.6	23.2	21.3	23.4	21.7	27.6	26.2	23.3	21.6
8	17.0	15.6	21.2	19.4	23.7	21.8	23.4	22.4	27.8	26.4	23.5	21.8
9	17.2	15.7	21.0	19.8	23.4	22.0	23.2	22.6	28.4	26.9	23.5	22.0
10	18.2	16.9	21.9	19.6	22.6	21.6	24.6	22.6	28.5	27.0	23.4	22.1
11	18.6	17.4	22.7	20.5	24.2	21.1	24.2	23.2	29.0	27.3	23.0	21.6
12	19.2	18.0	22.3	21.0	25.1	22.4	25.0	23.3	29.0	27.5	22.4	20.8
13	19.4	18.6	23.7	20.8	25.0	23.2	25.8	23.8	28.2	26.0	21.6	19.8
14	19.7	18.8	---	---	25.4	23.1	26.1	24.5	27.3	26.2	21.8	20.3
15	19.4	18.9	---	---	25.5	23.3	26.9	24.9	26.8	25.8	21.1	20.0
16	19.4	18.8	---	---	26.3	23.8	27.4	25.3	26.8	25.9	20.4	19.1
17	19.0	18.5	23.6	22.3	25.5	23.9	27.3	25.6	26.9	26.0	20.3	19.3
18	18.5	18.1	23.7	22.4	25.4	24.0	27.4	25.4	26.9	25.8	21.3	20.0
19	18.1	16.2	23.7	22.4	25.3	23.3	27.0	25.4	26.6	25.3	20.9	19.4
20	17.4	16.2	23.3	21.7	25.9	23.6	25.6	24.0	25.8	25.1	20.3	19.1
21	18.1	17.0	21.7	19.7	26.3	24.3	26.1	24.0	25.8	24.8	20.3	19.1
22	18.7	17.7	22.3	20.4	26.5	24.6	26.6	24.6	25.4	24.8	19.8	18.8
23	19.3	18.5	20.4	19.8	26.1	24.0	27.4	25.5	25.5	24.3	19.6	18.4
24	20.1	19.0	21.2	19.3	26.2	24.0	27.2	25.8	25.2	24.5	19.5	18.3
25	20.0	19.3	21.0	18.7	25.8	24.0	27.7	26.0	25.2	24.3	19.1	17.7
26	19.9	19.3	21.2	19.0	26.1	24.0	27.3	25.7	24.9	23.8	19.3	18.5
27	19.9	19.5	21.9	19.7	25.9	24.4	26.3	25.0	24.3	23.5	19.3	18.8
28	20.3	19.5	22.5	20.7	25.7	23.7	26.3	25.5	24.3	23.6	18.8	18.1
29	20.4	19.9	23.5	21.5	25.2	23.8	25.8	25.2	24.1	23.3	18.1	17.2
30	19.9	19.3	24.2	22.2	25.1	23.7	26.4	23.1	23.7	22.5	18.0	17.0
31	---	---	24.4	22.5	---	---	23.3	22.6	23.8	23.2	---	---
Month	20.4	12.8	---	---	26.5	19.6	27.7	19.1	29.0	22.5	25.1	17.0

11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued



11046062 Cockleburr Creek Lagoon at Mouth, near Oceanside, CA—Continued

PROFILE DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Date	Time	DepthTo bottom at sample location, feet (81903)	Distance, obs pnt to samplng locatn, feet (50417)	Sampling depth, feet (00003)	Barometric pressure, mm Hg (00025)	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)	Temperature, water, deg C (00010)
Mar										
25...	1701	2.00	.00	1.00	762	14.5	147	7.9	6,320	15.0
25...	1703	1.50	10.0	.75	762	12.4	128	7.9	6,280	15.7
25...	1705	2.50	10.0	.50	762	15.6	159	7.8	6,360	15.2
25...	1707	1.50	10.0	.75	762	13.6	139	7.9	6,300	15.3
25...	1709	2.50	10.0	1.50	762	15.4	155	7.9	6,470	14.8
25...	1712	1.50	10.0	.75	762	14.2	145	7.9	6,370	15.2
25...	1714	2.00	.00	1.00	762	13.6	140	7.9	6,320	15.6
Jul										
30...	1141	3.50	10.0	1.50	760	14.1	192	7.9	29,000	25.6
30...	1142	3.50	10.0	3.00	760	7.5	106	7.7	37,600	25.9
30...	1144	3.00	10.0	1.00	760	12.3	152	7.7	10,000	24.0
30...	1145	3.00	10.0	2.00	760	11.2	157	7.7	32,100	26.7
30...	1146	3.00	10.0	1.00	760	11.2	138	7.7	10,500	23.9
30...	1147	3.00	10.0	2.00	760	4.0	56	7.5	31,700	26.5
30...	1149	3.00	10.0	1.00	760	10.3	125	7.7	11,200	23.0
30...	1150	3.00	10.0	2.00	760	11.5	150	7.6	21,700	24.7