

**Region 3 – Regional Water Quality Control Board  
Data Submissions and Corrections for the 2004 303(d) list**

1) Describe the reason(s) the listing is needed.

Staff is proposing that Morro Bay and Chorro Creek (downstream of Chorro Creek Road) be listed as impaired for dissolved oxygen. The impairment is evidenced by depressed levels of dissolved oxygen measured during pre-dawn and 24-hour sampling periods.

2) Provide the data and information necessary to enable SWRCB to conduct a complete reassessment. Please see below and/or attached.

505

- a. Name of the person or organization providing the information;  
**Regional Water Quality Control Board, Region 3**
- b. Mailing address, phone number, and email address of a contact responsible for answering questions about the information submitted;  
**895 Aerovista Place, Ste. 101  
San Luis Obispo, CA 93401  
805-549-3147  
skeeling@rb3.swrcb.ca.gov  
Staff person: Shanta Keeling**
- c. Bibliographic citations for all published information provided;  
**See attached documentation in excel files (and jpg)**
- d. To the extent possible, all information should be submitted in electronic format (e.g., Microsoft [MS] Word, Access database, Excel spreadsheet, ASCII, or Adobe Acrobat files);  
**Files attached in:**  
**Morro Bay DO dawn patrol through 12-02 (excel) ✓**  
**Morro Bay DO on Bay\_map (jpg) ✓**  
**Chorro Creek 24 hour DO Sept 2003 (excel) ✓**  
**Chorro Creek 24HourDO\_081103 (excel) ✓**  
**Chorro Creek 24 hour DO July 310 CAN (excel) ✓**  
**Chorro Creek 24 hour DO July 310 TWB (excel) ✓**  
**Chorro Creek 24 hour DO July 310 CHO (excel) ✓**
- e. Detailed quality assurance and quality control information about sampling and analysis of all numeric data;  
**Morro Bay were taken according to the Morro Bay Volunteer Monitoring Program protocols for pre-dawn sampling in the Morro Bay National Estuary Program's Quality Assurance Program Plan.**

**Dissolved oxygen measurements in Chorro Creek were taken according to CCAMP 24-hour hourly recording meter sampling protocols.**

- f. Water body name and California water body identification number (available from local RWQCB). The preferred statewide Geographic Information System (GIS) projection is the California Teale Albers, NAD27. Please refer to the following web site for details on the Teale Albers projection for GIS information: <http://gis.ca.gov/albers.epl>;  
➤ **Morro Bay Estuary, Calwater watershed no. 31023012**  
**Chorro Creek, Calwater watershed no. 31022012**
- g. Geographic extent of the potential water quality limited segment;  
**San Luis Obispo County**
- h. Pollutant(s) of concern;  
**Dissolved Oxygen**
- i. Applicable water quality objective or criterion;  
**COLD dissolved oxygen water quality objective of 7.0 mg/l.**
- j. Comparison of results against applicable water quality objective or criterion;  
**Morro Bay: 231 data points (of a total 283 data points) collected between 1997 and 2002 fell below the COLD dissolved oxygen water quality objective of 7.0 mg/l. Depressed levels of oxygen were found at all sampling locations with the exception of EEL. Staff considers the Morro Bay estuary as impaired for dissolved oxygen. (see map and excel file)**  
  
**Chorro Creek: Continuous depressed levels of dissolved oxygen (< 7.0 mg/l) were found in Chorro Creek at TWB (approximately between 12a.m-8a.m.) during three 24-hour hourly sampling periods in July, August and September, 2003. Continuous depressed levels of oxygen were also found between 5 p.m. and 7 a.m. at site added in September, 2003 upstream of TWB (usTWB).**  
  
**Dissolved oxygen levels were within the COLD water quality objective at CAN during three 24-hour hourly sampling periods in July, August and September, 2003. Dissolved oxygen levels just under the COLD water quality objective (6.81-6.99 mg/l) were found during one of three sampling periods at an upstream site (CHO) in August, 2003. Staff does not consider the segment upstream of CAN (and CHO) as impaired.**  
  
**Staff considers the segment between usTWB and TWB (downstream of Chorro Creek Road) as impaired for dissolved oxygen. The level of impairment between CAN and usTWB is unknown. (See attached excel files).**
- k. Designated beneficial use(s) that may be impacted by pollutant(s);

**The COLD beneficial use may be impacted as evidenced by dissolved oxygen values falling below the COLD water quality objective.**

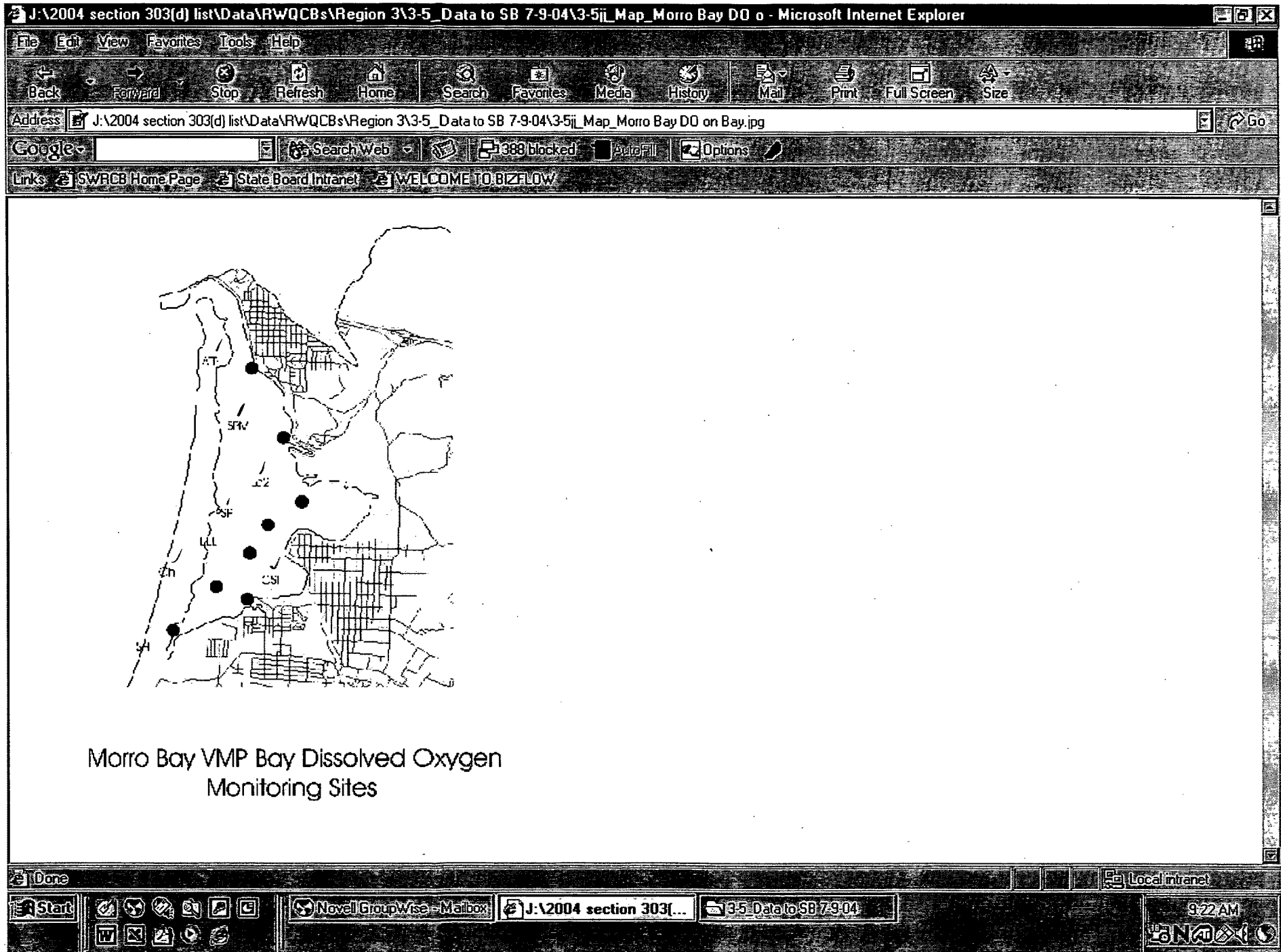
1. Complete background information (metadata) for field data (i.e., when and where measurements were taken, number of samples, detection limits, etc.); and  
**Single measurements were taken in the Morro Bay estuary using a hand-held meter at the locations specified in the attached map. Samples were primarily taken during pre-dawn conditions, when dissolved oxygen levels are expected to be lowest.**

**Hourly dissolved oxygen measurements were taken in Chorro Creek at four locations (CHO, CAN, usTWB, and TWB). Measurements were taken using a recording dissolved oxygen meter.**

- m. Full identification of any citizen volunteer water quality monitoring efforts including:
  - 1) The name of the group;  
**Morro Bay Volunteer Monitoring Program**
  - 2) A description of any training in water quality assessment completed by members of the group.

**The Morro Bay Volunteer Monitoring Program staff have monthly correspondence with volunteers regarding data review, meter operation, and safety. Volunteer monitors collect dissolved oxygen data according to the Morro Bay National Estuary Program's Quality Assurance Program Plan.**

# Morro Bay Pre-Dawn DO



3-5\_Data to SB 7-9-04

File Edit View Go Favorites Help

Back Forward Up Cut Copy Paste Undo Delete Properties Views

Address J:\2004 section 303(d) list\Data\RWQCBs\Region 3\3-5\_Data to SB 7-9-04

## 3-5\_Data to SB 7-9-04

**3-5p\_Chorro Creek 24HourDO\_081103.xls**  
Microsoft Excel Worksheet

Modified:  
6/8/04 12:54 PM

Size: 43KB

Author: RWQCB

Name	Size	Type	Modified
3-5t_FS - Correction- Santa Barbara Co Beaches	27KB	Microsoft Word Doc...	6/29/04 12:29 PM
3-5ss_Waddell Cr Delisting Report	15,761KB	Microsoft Word Doc...	6/14/04 3:46 PM
3-5s_FS - Correction- Rider Creek	47KB	Microsoft Word Doc...	6/15/04 10:00 AM
3-5pp_QAQC for Salinas Reclamation Canal Delist	22KB	Microsoft Word Doc...	6/10/04 11:59 AM
3-5ii_Map_Los Osos Creek_correction_Katie	2,827KB	Microsoft Word Doc...	7/1/04 1:59 PM
3-5hh_Map_Alamo Creek, Orcutt Solomon_correction	2,713KB	Microsoft Word Doc...	6/29/04 12:33 PM
3-5gg_FS-Delist Waddell Creek Nutrients	50KB	Microsoft Word Doc...	6/29/04 2:05 PM
3-5ff_FS-Delist Salinas Reclamation Canal	51KB	Microsoft Word Doc...	6/29/04 1:53 PM
3-5ee_FS-Delist Salinas Lagoon South	49KB	Microsoft Word Doc...	6/29/04 1:52 PM
3-5dd_FS-Delist Morro Bay metals	52KB	Microsoft Word Doc...	6/29/04 12:39 PM
3-5cc_FS-Delist Espinosa Slough	50KB	Microsoft Word Doc...	6/29/04 1:47 PM
3-5bb_FS -Delist SLO Ck Priority Organics	136KB	Microsoft Word Doc...	7/8/04 11:29 AM
3-5aa_FS -Delist MontereyBay	8,298KB	Microsoft Word Doc...	6/4/04 4:26 PM
3-5rr_VMPL002-04	4,780KB	Microsoft Excel Wor...	7/1/04 12:10 PM
3-5qq_Salinas Reclamation Canal Delist Data	18KB	Microsoft Excel Wor...	6/10/04 12:00 PM
3-5q_CHUD093-03	26KB	Microsoft Excel Wor...	6/30/04 2:26 PM
3-5p_Chorro Creek 24HourDO_081103	43KB	Microsoft Excel Wor...	6/8/04 12:54 PM
3-5oo_NMPLO93-02	49KB	Microsoft Excel Wor...	7/1/04 12:08 PM
3-5o_Chorro Creek 24 hour DO Sept 2003	44KB	Microsoft Excel Wor...	6/8/04 12:49 PM
3-5nn_Morro Bay DO dawn patrol through-12-02	91KB	Microsoft Excel Wor...	6/8/04 1:33 PM
3-5m_Chorro Creek 24 hour DO July 310CHO	16KB	Microsoft Excel Wor...	6/10/04 11:59 AM
3-5m_Chorro Creek 24 hour DO July 310CAN	16KB	Microsoft Excel Wor...	6/10/04 11:49 AM
3-5l_Chorro Creek 24 hour DO 310twb	16KB	Microsoft Excel Wor...	6/10/04 12:00 PM
3-5mm_Map_Salinas_Rec_Canal_correction	112KB	JPEG Image	6/2/04 7:54 PM
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3-5kk_Map_Rider Creek1	179KB	JPEG Image	6/15/04 9:48 AM
3-5j_Map_Morro Bay DO on Bay	468KB	JPEG Image	1/2/85 3:02 AM
3-5e_AttachmenttoRecCanalCorrection.dbf	5KB	DBF File	6/14/04 9:10 AM
3-5r_Final Delist Project Report_Morro Bay metals	2,535KB	Adobe Acrobat Doc...	6/1/04 1:13 PM
3-5d_Appendix 4 - MB_met_Coring data	480KB	Adobe Acrobat Doc...	2/18/04 9:20 AM
3-5c_Appendix 3 - MB_met_Tissue data	121KB	Adobe Acrobat Doc...	2/18/04 9:20 AM
3-5b_Appendix 2 - MB_met_Monitored Assessment data	234KB	Adobe Acrobat Doc...	2/18/04 9:19 AM
3-5a_Appendix 1 - MB_met_State Mussel Watch data	173KB	Adobe Acrobat Doc...	2/18/04 9:19 AM

42.5KB Local intranet

Start Novel GroupWise - Mailbox California Assessment Da... 3-5\_Data to SB 7-9-04 New References2 - Micros... 10:01 AM

New References - Micros...

MiniSonde 4a 40102

Log File Name : 310TWB

Setup Date (MMDDYY) : 090803

Setup Time (HHMMSS) : 110147

Starting Date (MMDDYY) : 091603

Starting Time (HHMMSS) : 170000

Stopping Date (MMDDYY) : 091803

Stopping Time (HHMMSS) : 080000

Interval (HHMMSS) : 010000

Sensor warmup (HHMMSS) : 000200

Circltr warmup (HHMMSS) : 000100

Date	Time	Temp	DO%	pH	IBatt	DO
MMDDYY	HHMMSS	°C	Sat	Units	Volts	mg/l

Parameter setup or calibration changed at 090803 110433

Power loss from 090803 110846 to 090803 113846

91603	170000	17.9	129	8.2	12.2	12.23 @
91603	180000	17.68	114.6	8.13	12.2	10.92 @
91603	190000	17.41	97.2	8.06	12.3	9.31 @
91603	200000	17.18	82.6	8.01	12.3	7.95 @
91603	210000	16.98	76.3	8	12.2	7.38 @
91603	220000	16.83	71.7	7.99	12.1	6.95 @
91603	230000	16.61	65.2	7.96	12.2	6.36 @
91703	0	16.38	59.3	7.93	12.1	5.81 @
91703	10000	16.18	53.6	7.89	12.1	5.27 @
91703	20000	16.02	49.7	7.86	12.1	4.9 @
91703	30000	15.88	45.3	7.83	12.1	4.49 @
91703	40000	15.8	41.9	7.8	12.2	4.16 @
91703	50000	15.62	40.3	7.78	12.2	4.01 @
91703	60000	15.34	41.9	7.8	12.2	4.2 @
91703	70000	15.11	44	7.81	12.2	4.42 @
91703	80000	14.95	48.3	7.84	12.1	4.87 @
91703	90000	15.04	56.4	7.87	12.2	5.69 @
91703	100000	15.29	69.1	7.91	12.2	6.93 @
91703	110000	15.52	79.9	7.98	12.1	7.97 @
91703	120000	15.81	93.4	8.06	12.1	9.26 @
91703	130000	16.1	107.4	8.14	12.1	10.58 @
91703	140000	16.47	123.1	8.21	12.1	12.03 @
91703	150000	16.66	133.5	8.25	12.1	12.99 @
91703	160000	16.69	138.8	8.26	12.1	13.5 @
91703	170000	16.68	133.2	8.23	12.1	12.96 @
91703	180000	16.55	121.8	8.18	12.1	11.89 @
91703	190000	16.34	103.2	8.13	12	10.11 @
91703	200000	16.13	90.7	8.08	12.1	8.92 @
91703	210000	16.05	86	8.03	12.1	8.48 @
91703	220000	15.89	77.4	8	12.1	7.66 @
91703	230000	15.69	71.4	8	12.1	7.1 @
91803	0	15.52	67.7	8	12.1	6.75 @
91803	10000	15.4	62.6	7.98	12.1	6.26 @
91803	20000	15.3	57.4	7.92	12.1	5.75 @
91803	30000	15.2	52.2	7.89	12	5.25 @
91803	40000	15.04	49.9	7.86	12.1	5.03 @
91803	50000	14.91	48.3	7.86	12.1	4.88 @
91803	60000	14.79	46.2	7.85	12.1	4.68 @
91803	70000	14.66	46.1	7.84	11.9	4.69 @
91803	80000	14.58	48.4	7.83	11.9	4.92 @

Recovery finished at 092603 100951

MiniSonde 4a 40102

Log File Name : 310TWB

Setup Date (MMDDYY) : 090803

Setup Time (HHMMSS) : 110147

Starting Date (MMDDYY) : 091603

Starting Time (HHMMSS) : 170000

Stopping Date (MMDDYY) : 091803

Stopping Time (HHMMSS) : 080000

Interval (HHMMSS) : 010000

Sensor warmup (HHMMSS) : 000200

Circltr warmup (HHMMSS) : 000100

Date	Time	Temp	DO%	pH	IBatt	DO
MMDDYY	HHMMSS	°C	Sat	Units	Volts	mg/l

Parameter setup or calibration changed at 090803 110433

Power loss from 090803 110846 to 090803 113846

91603	170000	17.9	129	8.2	12.2	12.23 @
91603	180000	17.68	114.6	8.13	12.2	10.92 @
91603	190000	17.41	97.2	8.06	12.3	9.31 @
91603	200000	17.18	82.6	8.01	12.3	7.95 @
91603	210000	16.98	76.3	8	12.2	7.38 @
91603	220000	16.83	71.7	7.99	12.1	6.95 @
91603	230000	16.61	65.2	7.96	12.2	6.36 @
91703	0	16.38	59.3	7.93	12.1	5.81 @
91703	10000	16.18	53.6	7.89	12.1	5.27 @
91703	20000	16.02	49.7	7.86	12.1	4.9 @
91703	30000	15.88	45.3	7.83	12.1	4.49 @
91703	40000	15.8	41.9	7.8	12.2	4.16 @
91703	50000	15.62	40.3	7.78	12.2	4.01 @
91703	60000	15.34	41.9	7.8	12.2	4.2 @
91703	70000	15.11	44	7.81	12.2	4.42 @
91703	80000	14.95	48.3	7.84	12.1	4.87 @
91703	90000	15.04	56.4	7.87	12.2	5.69 @
91703	100000	15.29	69.1	7.91	12.2	6.93 @
91703	110000	15.52	79.9	7.98	12.1	7.97 @
91703	120000	15.81	93.4	8.06	12.1	9.26 @
91703	130000	16.1	107.4	8.14	12.1	10.58 @
91703	140000	16.47	123.1	8.21	12.1	12.03 @
91703	150000	16.66	133.5	8.25	12.1	12.99 @
91703	160000	16.69	138.8	8.26	12.1	13.5 @
91703	170000	16.68	133.2	8.23	12.1	12.96 @
91703	180000	16.55	121.8	8.18	12.1	11.89 @
91703	190000	16.34	103.2	8.13	12	10.11 @
91703	200000	16.13	90.7	8.08	12.1	8.92 @
91703	210000	16.05	86	8.03	12.1	8.48 @
91703	220000	15.89	77.4	8	12.1	7.66 @
91703	230000	15.69	71.4	8	12.1	7.1 @
91803	0	15.52	67.7	8	12.1	6.75 @
91803	10000	15.4	62.6	7.98	12.1	6.26 @
91803	20000	15.3	57.4	7.92	12.1	5.75 @
91803	30000	15.2	52.2	7.89	12	5.25 @
91803	40000	15.04	49.9	7.86	12.1	5.03 @
91803	50000	14.91	48.3	7.86	12.1	4.88 @
91803	60000	14.79	46.2	7.85	12.1	4.68 @
91803	70000	14.66	46.1	7.84	11.9	4.69 @
91803	80000	14.58	48.4	7.83	11.9	4.92 @
Recovery finished at 092603 100951						

# Chorro Creek 24 DO July 310CHO

MiniSonde 4a 40102

Log File Name : 310CHO

Setup Date (MMDDYY) : 071103

Setup Time (HHMMSS) : 141617

Starting Date (MMDDYY) : 071403

Starting Time (HHMMSS) : 170000

Stopping Date (MMDDYY) : 071603

Stopping Time (HHMMSS) : 070000

Interval (HHMMSS) : 010000

Sensor warmup (HHMMSS) : 000200

Circltr warmup (HHMMSS) : 000200

Date,"Time",,"Temp",,"DO%",,"pH",,"IBatt",,"DO",,"  
MMDDYY,"HHMMSS",,"°C",,"Sat",,"Units",,"Volts",,"mg/l",,"

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Recovery finished at 072103 093415



# Chorro Creek 24 hour DO July 310CAN

MiniSonde 4a 40100

Log File Name : 310CAN

Setup Date (MMDDYY) : 071103

Setup Time (HHMMSS) : 141256

Starting Date (MMDDYY) : 071403

Starting Time (HHMMSS) : 170000

Stopping Date (MMDDYY) : 071603

Stopping Time (HHMMSS) : 070000

Interval (HHMMSS) : 010000

Sensor warmup (HHMMSS) : 000200

Circltr warmup (HHMMSS) : 000200

Date,"Time",,"Temp",,"DO%",,"pH",,"IBatt",,"DO",,"  
MMDDYY,"HHMMSS",,"øC",,"Sat",,"Units",,"Volts",,"mg/l",,"

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071403,230000	17.1	86.6	8.39	12.5	8.35	@
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071503,040000	16.08	86.6	8.38	12.5	8.53	@
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071503,060000	15.74	86.6	8.37	12.5	8.59	@
071503,070000	15.66	86.3	8.37	12.5	8.58	@
071503,080000	15.68	87.6	8.38	12.4	8.71	@
071503,090000	15.76	90.8	8.4	12.4	9.01	@
071503,100000	16.02	92.7	8.42	12.4	9.15	@
071503,110000	16.38	95.4	8.43	12.4	9.34	@
071503,120000	16.83	97.2	8.45	12.3	9.43	@
071503,130000	17.28	98.8	8.46	12.4	9.49	@
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071503,150000	17.99	99.3	8.48	12.3	9.41	@
071503,160000	18.1	98.1	8.48	12.3	9.27	@
071503,170000	18.08	96.1	8.47	12.3	9.08	@
071503,180000	17.88	92.8	8.45	12.3	8.81	@
071503,190000	17.67	90	8.44	12.4	8.58	@
071503,200000	17.44	87.9	8.41	12.3	8.42	@
071503,210000	17.22	86	8.4	12.2	8.27	@
071503,220000	17.02	85.6	8.39	12.3	8.27	@
071503,230000	16.83	85.6	8.39	12.1	8.3	@
071603,000000	16.67	85.9	8.38	12.3	8.36	@
071603,010000	16.51	86.3	8.38	12.3	8.43	@
071603,020000	16.35	85.8	8.37	12.3	8.41	@
071603,030000	16.19	85.2	8.37	12.3	8.38	@
071603,040000	16.04	85.3	8.37	12.2	8.41	@
071603,050000	15.91	85.5	8.37	12.2	8.45	@
071603,060000	15.84	86.6	8.37	12.2	8.58	@
071603,070000	15.78	87	8.38	12.2	8.63	@

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Recovery finished at 072103 093835

Chorro Creek 24 hour DO 310twb

MiniSonde 4a 40099

Log File Name : 310WAR

Setup Date (MMDDYY) : 071103

Setup Time (HHMMSS) : 140931

Starting Date (MMDDYY) : 071403

Starting Time (HHMMSS) : 170000

Stopping Date (MMDDYY) : 071603

Stopping Time (HHMMSS) : 070000

Interval (HHMMSS) : 010000

Sensor warmup (HHMMSS) : 000200

Circltr warmup (HHMMSS) : 000200

Date,"Time","Temp","DO%","pH","IBatt","DO","  
MMDDYY,"HHMMSS","°C","Sat","Units","Volts","mg/l","

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071403,170000	17.62	138.1	8.43	12.5	13.17	@
071403,180000	17.4	127.8	8.43	12.4	12.25	@
071403,190000	17.17	113.9	8.37	12.5	10.97	@
071403,200000	16.9	101.9	8.31	12.5	9.87	@
071403,210000	16.75	94.8	8.27	12.5	9.22	@
071403,220000	16.56	82.8	8.26	12.4	8.07	@
071403,230000	16.42	74	8.21	12.4	7.24	@
071503,000000	16.31	70.1	8.21	12.4	6.87	@
071503,010000	16.21	67.7	8.22	12.4	6.65	@
071503,020000	16.15	65.8	8.28	12.4	6.47	@
071503,030000	16.11	65.7	8.33	12.4	6.47	@
071503,040000	16.03	64.4	8.32	12.4	6.35	@
071503,050000	15.92	63.4	8.27	12.3	6.27	@
071503,060000	15.83	60.5	8.19	12.2	5.99	@
071503,070000	15.69	64.7	8.19	12.2	6.43	@
071503,080000	15.64	66	8.16	12.3	6.57	@
071503,090000	15.65	73.4	8.16	12.2	7.3	@
071503,100000	15.73	86.1	8.21	12.3	8.55	@
071503,110000	15.92	94.8	8.25	12.1	9.38	@
071503,120000	16.22	103.5	8.32	12.2	10.17	@
071503,130000	16.52	109.8	8.36	12.1	10.72	@
071503,140000	16.77	119.2	8.41	12.2	11.58	@
071503,150000	17	124.6	8.44	12.3	12.05	@
071503,160000	17.05	124.6	8.45	12.1	12.03	@
071503,170000	17.03	125.6	8.46	12.2	12.14	@
071503,180000	16.87	114.7	8.42	12.2	11.12	@
071503,190000	16.8	107.2	8.4	12.1	10.41	@
071503,200000	16.73	93.9	8.39	12.2	9.13	@
071503,210000	16.67	83.7	8.4	12.1	8.15	@
071503,220000	16.81	77.4	8.46	12.1	7.51	@
071503,230000	16.86	74.1	8.48	12.1	7.18	@
071603,000000	16.82	71.6	8.48	12.1	6.94	@
071603,010000	16.72	69.5	8.45	12.1	6.76	@
071603,020000	16.6	67.6	8.42	12.1	6.59	@
071603,030000	16.44	66.6	8.37	12.1	6.51	@
071603,040000	16.31	63.6	8.3	12.1	6.24	@
071603,050000	16.15	60.8	8.23	12.1	5.98	@
071603,060000	15.98	60.6	8.19	12.1	5.99	@
071603,070000	15.91	60.1	8.15	12.1	5.94	@

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Recovery finished at 072103 093752

MiniSonde 4a 40099

Log File Name : 310TWB

Setup Date (MMDDYY) : 080403

Setup Time (HHMMSS) : 154141

Starting Date (MMDDYY) : 081103

Starting Time (HHMMSS) : 170000

Stopping Date (MMDDYY) : 081303

Stopping Time (HHMMSS) : 080000

Interval (HHMMSS) : 010000

Sensor warmup (HHMMSS) : 000200

Circltr warmup (HHMMSS) : 000100

Date	Time	Temp	DO%	pH	IBatt	DO
MMDDYY	HHMMSS	°C	Sat	Units	Volts	mg/l

Parameter setup or calibration changed at 080403 155207

Power loss from 080503 124526 to 081103 101600

81103	170000	18.68	167.2	8.24	12.5	15.61 @
81103	180000	18.49	162.7	8.24	12.5	15.26 @
81103	190000	18.21	138.3	8.14	12.4	13.03 @
81103	200000	17.92	117.7	8.05	12.4	11.16 @
81103	210000	17.69	101.4	7.98	12.4	9.66 @
81103	220000	17.5	88.8	7.94	12.3	8.49 @
81103	230000	17.34	81.8	7.91	12.4	7.85 @
81203	0	17.17	76.8	7.9	12.3	7.4 @
81203	10000	17.02	72.2	7.88	12.4	6.97 @
81203	20000	16.89	66.3	7.85	12.4	6.42 @
81203	30000	16.73	61.9	7.84	12.3	6.02 @
81203	40000	16.58	57.3	7.82	12.3	5.59 @
81203	50000	16.42	52.4	7.8	12.2	5.13 @
81203	60000	16.27	49.1	7.78	12.3	4.82 @
81203	70000	16.15	46.9	7.77	12.3	4.61 @
81203	80000	16.22	56.7	7.8	12.4	5.57 @
81203	90000	16.7	78.6	7.89	12.3	7.65 @
81203	100000	17.36	104.6	8	12.3	10.03 @
81203	110000	17.86	128.8	8.1	12.2	12.23 @
81203	120000	17.94	135.4	8.1	12.2	12.83 @
81203	130000	18.04	143.8	8.13	12.2	13.6 @
81203	140000	18.25	151.8	8.17	12.2	14.3 @
81203	150000	18.45	162.2	8.24	12.2	15.22 @
81203	160000	18.51	166.4	8.27	12.1	15.59 @
81203	170000	18.41	163.8	8.27	12.2	15.38 @
81203	180000	18.19	159.1	8.25	12.2	15.01 @
81203	190000	17.85	141.5	8.16	12.3	13.44 @
81203	200000	17.59	115.7	8.04	12.1	11.05 @
81203	210000	17.38	96.6	7.96	12.1	9.26 @
81203	220000	17.14	82.4	7.91	12.1	7.94 @
81203	230000	16.91	76.6	7.9	12.1	7.42 @
81303	0	16.7	73.1	7.89	12.1	7.11 @
81303	10000	16.44	68.1	7.88	12.1	6.66 @
81303	20000	16.17	63.4	7.86	12.1	6.23 @
81303	30000	15.99	58	7.84	12.1	5.72 @
81303	40000	16.02	52.3	7.81	12.1	5.16 @
81303	50000	15.97	47	7.79	12.1	4.65 @
81303	60000	15.94	41.1	7.75	12.1	4.06 @
81303	70000	15.81	42	7.74	12.1	4.16 @
81303	80000	15.7	50.4	7.78	12.1	5.01 @

Recovery finished at 081303 093748

PPM = mg/L

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTH OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310ATP	07/12/00 11:11		H2O	St. John, Fall	Normal	B	26		Calm	6.03	14.7	70.1	59.4619677
DAWN	31020	310ATP	07/12/00 11:11		H2O	St. John, Fall	Normal	T	6.5		Calm	6.94	14.7	81.5	68.43549849
DAWN	31020	310ATP	07/12/00 11:11		H2O	St. John, Fall	Normal	M	19.5		Calm	7.01	14.3	81.6	68.52079005
DAWN	31020	310ATP	07/25/00 09:20		H2O	St. John, Fall	Taken at the northern end of Tidelands boat dock.	T	16		Calm, marine layer	5.36	15.6	64.4	53.89736686
DAWN	31020	310ATP	07/25/00 09:20		H2O	St. John, Fall	Taken at the northern end of Tidelands boat dock.	B	80		Calm, marine layer	5.43	15.5	65	54.48384894
DAWN	31020	310ATP	07/25/00 09:20		H2O	St. John, Fall	Taken at the northern end of Tidelands boat dock.	M	48		Calm, marine layer	5.5	15.6	66	55.30513391
DAWN	31020	310ATP	08/01/00 09:22		H2O	Tanner, Newman	Foam in water	M	14.55		Calm day, little wind.	6.13	16.5	74.9	62.83349061
DAWN	31020	310ATP	08/01/00 09:22		H2O	Tanner, Newman	Foam in water	T	4.85		Calm day, little wind.	6.23	16.4	76.6	63.72371003
DAWN	31020	310ATP	08/01/00 09:22		H2O	Tanner, Newman	Foam in water	B	24.25		Calm day, little wind.	7.11	16.5	54.5	72.87864898
DAWN	31020	310ATP	08/09/01 06:21		H2O	St. John, Pardo	Salinity Meter not working?	T	7			4.57	16.2	5.57	46.54661023
DAWN	31020	310ATP	08/09/01 06:21		H2O	St. John, Pardo	Salinity Meter not working?	M	21			5.68	14.4	65.6	55.64291232
DAWN	31020	310ATP	08/09/01 06:21		H2O	St. John, Pardo	Salinity Meter not working?	B	35			5.87	8	3.5	49.53753713
DAWN	31020	310ATP	07/18/02 05:10		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; incoming tide; tide 3.2 ft. ; surface				clear, wind (10-15 knots SW)	8	15.8	96.6	80.78983047
DAWN	31020	310ATP	07/18/02 05:10		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; 3 ft below surface; incoming tide; tide 3.2 ft.				clear, wind (10-15 knots SW)	8.43	15.8	98.8	85.13228385
DAWN	31020	310ATP	08/14/02 04:20		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; surface				med to heavy fog	7.38		84.3	
DAWN	31020	310ATP	08/14/02 04:20		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; 3 ft below surface				med to heavy fog	7.45		84.5	
DAWN	31020	310ATP	09/13/02 04:30		H2O	DaRoss, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	7.64	13.6	84.7	

## MORro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPHTL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310ATP	09/13/02 04:30		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	7.81	13.5	86.3	
DAWN	31020	310ATP	10/15/02 05:00		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.45	15.4	76.5	
DAWN	31020	310ATP	10/15/02 05:00		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.45	15.5	76	
DAWN	31020	310ATP	11/11/02 04:45		H2O	Newman	Incoming tide, 3.8; surface				clear, calm (rain previous week)	9.4	13.6	90.1	
DAWN	31020	310ATP	11/11/02 04:45		H2O	Newman	incoming tide 3.8 depth				clear, calm (rain previous week)	9.7	13.6	92.2	
DAWN	31020	310ATP	12/13/02 05:00		H2O	Newman	Incoming tide, 4.6; surface				wind about 10mph, water somewhat choppy	8.03	13.8	91.6	
DAWN	31020	310ATP	12/13/02 05:00		H2O	Newman	incoming tide 4.6 depth				wind about 10mph, water somewhat choppy	8.24	13.8	94.5	
DAWN	31020	310BW1	05/03/97 05:44		H2O	Blake, Rooney					calm/clear	4.63	16.1		47.05756109
DAWN	31020	310BW1	06/16/97 05:20		H2O	Blake, Rooney				30	calm/overcast	4.67	21.3		52.6995119
DAWN	31020	310BW1	07/27/97 07:07		H2O	Blake, Rooney	Inner Cuesta Beach			30		4.71	20.4		52.24275137
DAWN	31020	310BW1	07/30/97 05:30		H2O	Blake, Rooney				20	calm/overcast	4.23	21		47.46276193
DAWN	31020	310BW1	08/26/97 07:23		H2O	Blake, Rooney				66		4.29	21.8		48.86928326
DAWN	31020	310BW1	06/05/98 11:20		H2O	Blake, Rooney	Inner Cuesta Beach, new meter			30		3.45	20.3		38.19290798
DAWN	31020	310BW10	05/03/97 06:21		H2O	Blake, Rooney					calm/clear	6.35	14.1		61.79569362
DAWN	31020	310BW10	06/16/97 06:03		H2O	Blake, Rooney				48	calm/overcast	6.41	20.2		70.82362998
DAWN	31020	310BW10	07/30/97 06:05		H2O	Blake, Rooney				72	calm/overcast	6.51	20.5		72.34785315
DAWN	31020	310BW11	07/30/97 06:08		H2O	Blake, Rooney				72	calm/overcast	6.5	20.4		72.09721526
DAWN	31020	310BW12	05/03/97 06:29		H2O	Blake, Rooney					calm/clear	6.06	14.8		59.8886285

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTH OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	3 1020	310BW12	06/16/97 06:08		H2O	Blake, Rooney				25	calm/overcast	5.68	20.6		63.24563317
DAWN	3 1020	310BW12	07/30/97 06:15		H2O	Blake, Rooney				26	calm/overcast	6.15	20.3		68.08300988
DAWN	3 1020	310BW13	05/03/97 06:36		H2O	Blake, Rooney					calm/clear	5.91	15.1		58.78917897
DAWN	3 1020	310BW13	06/16/97 06:15		H2O	Blake, Rooney				48	calm/overcast	5.2	20.7		58.01243906
DAWN	3 1020	310BW13	07/27/97 06:55		H2O	Blake, Rooney				60		7.22	19.3		78.37493247
DAWN	3 1020	310BW13	07/30/97 06:23		H2O	Blake, Rooney				48	calm/overcast	6.13	20.8		68.51913188
DAWN	3 1020	310BW13	08/26/97 07:12		H2O	Blake, Rooney				62	algae	5.61	21.3		63.30712244
DAWN	3 1020	310BW13	06/05/98 00:00		H2O	Blake, Rooney				36		6.36	18.5		67.94168606
DAWN	3 1020	310BW14	07/30/97 06:33		H2O	Blake, Rooney				39.6	foggy	2.47	21.3		27.87318938
DAWN	3 1020	310BW2	✱ 04/17/97 05:50		H2O	Blake, Rooney					foggy	3.54	18.8		38.04586793
DAWN	3 1020	310BW2	05/03/97 05:50		H2O	Blake, Rooney				12	calm, clear	3.42	16.3		34.90756001
DAWN	3 1020	310BW2	05/17/97 05:30		H2O	Blake, Rooney				36	foggy	3.87	21.5		43.83713711
DAWN	3 1020	310BW2	06/16/97 05:26		H2O	Blake, Rooney				12	calm, overcast	4.34	20.2		47.95234854
DAWN	3 1020	310BW2	07/27/97 05:56		H2O	Blake, Rooney				24	foggy	5.37	19.5		58.52410543
DAWN	3 1020	310BW2	07/30/97 05:30		H2O	Blake, Rooney				42		4.55	21		51.05332548
DAWN	3 1020	310BW2	08/26/97 06:05		H2O	Blake, Rooney				42	clear and calm	5.21	21.4		58.90459522
DAWN	3 1020	310BW2	04/18/98 09:45		H2O	Blake, Rooney				48		3.11	20.3		34.42896923
DAWN	3 1020	310BW3	05/03/97 05:55		H2O	Blake, Rooney					calm/clear	5.55	15.3		55.44797234
DAWN	3 1020	310BW3	06/16/97 05:54		H2O	Blake, Rooney				19.2	calm/overcast	5.54	21.3		62.51719399
DAWN	3 1020	310BW3	07/30/97 05:20		H2O	Blake, Rooney				12	calm/overcast	6.02	20.8		67.28958792

## MOrro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTHL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310BW4	05/03/97 05:58		H2O	Blake, Rooney				30	calm/clear	5.25	14.3		51.31728213
DAWN	31020	310BW4	06/16/97 05:36		H2O	Blake, Rooney				32	calm/overcast	5.72	20.7		63.81368297
DAWN	31020	310BW4	07/30/97 05:30		H2O	Blake, Rooney				18	calm/overcast	5.48	20.5		60.9011114
DAWN	31020	310BW5	05/03/97 06:04		H2O	Blake, Rooney				30	calm/clear	4.47	15.4		44.75471353
DAWN	31020	310BW5	06/16/97 05:42		H2O	Blake, Rooney				12	calm/overcast	5.45	20.4		60.45074203
DAWN	31020	310BW5	07/30/97 05:42		H2O	Blake, Rooney				16	calm/overcast	3.12	19.6		34.07002036
DAWN	31020	310BW6	05/03/97 06:10		H2O	Blake, Rooney				30	calm/clear	4.5	15.4		45.05508074
DAWN	31020	310BW6	06/16/97 05:48		H2O	Blake, Rooney				24	calm/overcast	5.45	20.4		60.45074203
DAWN	31020	310BW6	07/30/97 05:42		H2O	Blake, Rooney				16	calm/overcast	3.14	19.2		34.01781511
DAWN	31020	310BW7	05/03/97 06:10		H2O	Blake, Rooney				42	calm/clear	5.22	15.3		52.15106587
DAWN	31020	310BW7	06/16/97 05:48		H2O	Blake, Rooney				12	calm/overcast	5.32	21.4		60.1482623
DAWN	31020	310BW7	07/30/97 05:47		H2O	Blake, Rooney				18	calm/overcast	5.7	20.7		63.5905582
DAWN	31020	310BW8	05/03/97 06:12		H2O	Blake, Rooney				54	calm/clear	6.14	14.9		60.81182469
DAWN	31020	310BW8	06/16/97 05:50		H2O	Blake, Rooney				30	calm/overcast	4.6	20.3		50.92387731
DAWN	31020	310BW8	07/30/97 05:53		H2O	Blake, Rooney				42	calm/overcast	3.95	20.2		43.64326652
DAWN	31020	310BW9	05/03/97 06:18		H2O	Blake, Rooney					calm/clear	6.28	14.5		61.65616258
DAWN	31020	310BW9	06/16/97 05:59		H2O	Blake, Rooney				36	calm/overcast	6.3	20.7		70.28430117
DAWN	31020	310BW9	07/30/97 05:58		H2O	Blake, Rooney				32	calm/overcast	6.53	20.1		72.00918228
DAWN	31020	310CH1	10/23/00 17:50		H2O	St. John, Wilson, Dalton		B	14.75		Windy	10.42	16.2	126.6	106.1303454

## MORro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTH OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310CH1	10/23/00 17:50		H2O	St. John, Wilson, Dalton		M	8.05		Windy	10.47	16.2	127.7	106.6396081
DAWN	31020	310CH1	10/23/00 17:50		H2O	St. John, Wilson, Dalton		T	1.35		Windy	10.5	16.3	128.5	107.1723334
DAWN	31020	310CH1	07/18/02 06:35		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; 3 ft below surface; incoming tide; tide 3.2 ft.				clear, wind (10-15 knots SW)	6.38	17.9	80.6	67.32819219
DAWN	31020	310CH1	07/18/02 06:35		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; incoming tide; tide 3.2 ft. ; surface				clear, wind (10-15 knots SW)	6.47	17.9	81.1	68.27796292
DAWN	31020	310CH1	08/14/02 06:20		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; surface				med to heavy fog	5.9		72	
DAWN	31020	310CH1	08/14/02 06:20		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; 3 ft below surface				med to heavy fog	6		73.3	
DAWN	31020	310CHI	09/13/02 06:10		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	3.79	15.7	45.6	
DAWN	31020	310CHI	09/13/02 06:10		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	3.84	15.7	46.1	
DAWN	31020	310CHI	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.15	15.3	73.3	
DAWN	31020	310CHI	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.62	15.4	78.5	
DAWN	31020	310CHI	11/13/02 06:15		H2O	Daross	Incoming tide 4 ft ; clear, no wind; surface				clear, no wind	8.32	15.1	98.7	
DAWN	31020	310CHI	11/13/02 06:15		H2O	Daross	Incoming tide 4 ft ; clear, no wind; depth				clear, no wind	8.81	15	104.4	
DAWN	31020	310CHI	12/13/02 07:08		H2O	Thackery	Outgoing; 4.5 ft, surface				clear, cool, slight breeze	8.25	13.5	95.2	
DAWN	31020	310CHI	12/13/02 07:08		H2O	Thackery	Outgoing; 4.5 ft depth				clear, cool, slight breeze	8.31	13.6	95.2	
DAWN	31022	310CN1	07/21/01 05:17		H2O	Dodson, St. John, Wilson	Stagnate, pooled, 85% algal mat, enteromorpha	M	4.5		Overcast, calm	4.2	14.2	33	40.96327042



Morro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTHL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31022	310CN1	07/21/01 05:17		H2O	Dodson, St. John, Wilson	Stagnate, pooled, 85% algal mat, enteromorpha	T	1.5		Overcast, calm	4.2	14.2	35	40.96327042
DAWN	31022	310CN1	07/21/01 05:17		H2O	Dodson, St. John, Wilson	Stagnate, pooled, 85% algal mat, enteromorpha	B	7.5		Overcast, calm	4.21	14.2	33	41.06080202
DAWN	31022	310CN2	07/21/01 05:46		H2O	Dodson, St. John, Wilson	Low flow; Braided channel-sampled in left pool	B	1		Overcast, calm	3.86	14.8	62	38.14688218
DAWN	31022	310CN2	07/21/01 05:46		H2O	Dodson, St. John, Wilson	Low flow; Braided channel-sampled in left pool	T	0.2		Overcast, calm	3.92	14.9	63	38.82448742
DAWN	31022	310CN2	07/21/01 05:46		H2O	Dodson, St. John, Wilson	Low flow; Braided channel-sampled in left pool	M	0.6		Overcast, calm	3.99	14.9	64	39.51778184
DAWN	31022	310CS1	07/21/01 05:36		H2O	Dodson, St. John, Wilson		B	2		Overcast, calm	4.96	12.2	54	46.24527697
DAWN	31022	310CS1	07/21/01 05:36		H2O	Dodson, St. John, Wilson		T	0.4		Overcast, calm	4.98	12.2	55	46.43174986
DAWN	31022	310CS1	07/21/01 05:36		H2O	Dodson, St. John, Wilson		M	1.2		Overcast, calm	4.99	12.3	58	46.63168477
DAWN	31020	310CSI	10/23/00 05:53		H2O	St. John, Wilson, Dalton		B	23		Windy	6.75	17.9	65.1	71.23280521
DAWN	31020	310CSI	10/23/00 05:53		H2O	St. John, Wilson, Dalton		M	15		Windy	6.85	17.8	66	72.14000882
DAWN	31020	310CSI	10/23/00 05:53		H2O	St. John, Wilson, Dalton		T	6		Windy	6.86	17.8	66.1	72.24532271
DAWN	31020	310CSI	10/23/00 16:51		H2O	St. John, Wilson, Dalton		T	4.35		Windy	10	18	127.6	105.7462513
DAWN	31020	310CSI	10/23/00 16:51		H2O	St. John, Wilson, Dalton		M	13.05		Windy	10.6	18.1	132.3	112.3201308

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPHTL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310CSI	10/23/00 16:51		H2O	St. John, Wilson, Dalton		B	21.75		Windy	11.4	18.5	146	121.7822675
DAWN	31020	310CSI	04/02/01 19:55		H2O	Blake, Rooney		T	6		Calm	5.78	22.2	79.5	66.33491862
DAWN	31020	310CSI	04/02/01 19:55		H2O	Blake, Rooney		M	18		Calm	5.81	21.7	78.4	66.06036404
DAWN	31020	310CSI	04/02/01 19:55		H2O	Blake, Rooney		B	30		Calm	5.89	21.5	79.1	66.71853684
DAWN	31020	310CSI	09/13/02 06:43		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	3.68	17.1	41.6	
DAWN	31020	310CSI	09/13/02 06:43		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	4.04	16.7	48.6	
DAWN	31020	310CSI	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	5.29	15.1	62.8	
DAWN	31020	310CSI	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	5.6	15.6	67.1	
DAWN	31020	310CSI	11/13/02 06:05		H2O	Daross	Incoming tide 4 ft ; clear, no wind; depth				clear, no wind	5.84	14.5	68.8	
DAWN	31020	310CSI	11/13/02 06:05		H2O	Daross	Incoming tide 4 ft ; clear, no wind; surface				clear, no wind	5.85	14.9	69.3	
DAWN	31020	310CSI	12/13/02 07:25		H2O	Thackery	Outgoing; 4.5 ft, surface				clear, cool, slight breeze	6.71	13.2	76.8	
DAWN	31020	310CSI	12/13/03 07:25		H2O	Thackery	Outgoing; 4.5 ft depth				clear, cool, slight breeze	6.49	13.2	72.3	
DAWN	31020	310EEL	10/23/00 06:14		H2O	St. John, Wilson, Dalton		B	32		Windy	7.8	15	86	77.42127596
DAWN	31020	310EEL	10/23/00 06:14		H2O	St. John, Wilson, Dalton		M	22		Windy	7.9	15	89	78.41385642
DAWN	31020	310EEL	10/23/00 06:14		H2O	St. John, Wilson, Dalton		T	12		Windy	7.9	15.1	89.3	78.58452011
DAWN	31020	310EEL	04/02/01 18:50		H2O	Blake, Rooney		B	25		Calm	7.76	16.2	94	79.0375701
DAWN	31020	310EEL	04/02/01 18:50		H2O	Blake, Rooney		M	15		Calm	8.06	16.3	97.7	82.26752447
DAWN	31020	310EEL	04/02/01 18:50		H2O	Blake, Rooney		T	5		Calm	8.34	17.3	103.3	86.92990937

## MORro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTHL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310GRI	07/12/00 09:30		H2O	St. John, Fall	Normal	M	9.45		Calm	6.1	16.3	81.3	62.26202224
DAWN	31020	310GRI	07/12/00 09:30		H2O	St. John, Fall	Normal	T	3.15		Calm	6.47	16.5	77.2	66.31854555
DAWN	31020	310GRI	07/12/00 09:30		H2O	St. John, Fall	Normal	B	15.75		Calm	6.7	16.3	82.6	68.38615557
DAWN	31020	310GRI	07/25/00 12:20		H2O	St. John, Fall	Nothing unusal	T	14		Calm, marine layer	5.33	17.7	63.1	56.01704898
DAWN	31020	310GRI	07/25/00 12:20		H2O	St. John, Fall	Nothing unusal	B	70		Calm, marine layer	5.35	17.6	67.3	56.11154816
DAWN	31020	310GRI	07/25/00 12:20		H2O	St. John, Fall	Nothing unusal	M	42		Calm, marine layer	5.5	17.7	68.7	57.80370908
DAWN	31020	310IDR	07/12/00 10:25		H2O	St. John, Fall	Normal	B	32.5		Calm	3.64	17.6	44.7	38.17682903
DAWN	31020	310IDR	07/12/00 10:25		H2O	St. John, Fall	Normal	M	19.5		Calm	4.77	17.8	57.6	50.23472147
DAWN	31020	310IDR	07/12/00 10:25		H2O	St. John, Fall	Normal	T	6.5		Calm	5.52	18.1	70	58.49123791
DAWN	31020	310IDR	07/25/00 09:50		H2O	St. John, Fall	Taken across from southern end of MBS marina boat dock	B	80		Calm, marine layer	4.81	17.3	59.6	50.13583502
DAWN	31020	310IDR	07/25/00 09:50		H2O	St. John, Fall	Taken across from southern end of MBS marina boat dock	T	16		Calm, marine layer	5.08	17	63	52.62040284
DAWN	31020	310IDR	07/25/00 09:50		H2O	St. John, Fall	Taken across from southern end of MBS marina boat dock	M	48		Calm, marine layer	5.25	17	65.1	54.38132183
DAWN	31020	310IDR	08/01/00 10:30		H2O	Tanner, Newman		B	50		Calm day, little wind.	5.55	15.7	65.01	55.92791933
DAWN	31020	310IDR	08/01/00 10:30		H2O	Tanner, Newman		T	10		Calm day, little wind.	5.72	16.3	66	58.38340446
DAWN	31020	310IDR	08/01/00 10:30		H2O	Tanner, Newman		M	30		Calm day, little wind.	5.83	16.1	67.9	59.25390521
DAWN	31020	310IDR	08/09/01 07:17		H2O	St.John, Pardo		B	72.5			2.96	37.3	17.8	42.9379656
DAWN	31020	310IDR	08/09/01 07:17		H2O	St.John, Pardo		T	14.5			3.13	17.9	36.5	33.0309156
DAWN	31020	310IDR	08/09/01 07:17		H2O	St.John, Pardo		M	43.5			3.14	17.8	39	33.06855879

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTHL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31023	310LO1	07/21/01 06:17		H2O	Dodson, St. John, Wilson		B	1.5		Overcast, calm	3.2	16.9	25	33.07747373
DAWN	31023	310LO1	07/21/01 06:17		H2O	Dodson, St. John, Wilson		T	0.3		Overcast, calm	3.21	17.1	26	33.31974438
DAWN	31023	310LO1	07/21/01 06:17		H2O	Dodson, St. John, Wilson		M	0.9		Overcast, calm	3.26	16.8	26	33.62713964
DAWN	31023	310LO2	07/21/01 06:23		H2O	Dodson, St. John, Wilson		B	4		Overcast, calm	2.45	16.8	34	25.27193009
DAWN	31023	310LO2	07/21/01 06:23		H2O	Dodson, St. John, Wilson		T	0.8		Overcast, calm	2.49	16.9	35	25.73840925
DAWN	31023	310LO2	07/21/01 06:23		H2O	Dodson, St. John, Wilson		M	2.4		Overcast, calm	2.57	16.9	36	26.56534609
DAWN	31023	310LO2	07/18/02 06:00		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; 3 ft below surface; incoming tide; tide 3.2 ft.				clear, wind (10-15 knots SW)	7.7	17.3	88.4	80.25902903
DAWN	31023	310LO2	07/18/02 06:00		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; incoming tide; tide 3.2 ft. ; surface				clear, wind (10-15 knots SW)	8.1	17.2	86.9	84.25309981
DAWN	31023	310LO2	08/14/02 05:30		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 5; 3 ft below surface				med to heavy fog	7.08		74	
DAWN	31023	310LO2	08/14/02 05:30		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 5; surface				med to heavy fog	7.35		75.8	
DAWN	31020	310LO2	09/13/02 05:25		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	5.55	16.1	64.1	
DAWN	31020	310LO2	09/13/02 05:25		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	5.67	16.1	66	
DAWN	31020	310LO2	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.7	15.7	79.6	
DAWN	31020	310LO2	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.92	15.7	81.7	

## MORro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPHTL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310LO2	11/11/02 06:05		H2O	Newman	Incoming tide, 3.8; surface				clear, calm (rain previous week)	8.75	15	88	
DAWN	31020	310LO2	11/11/02 06:05		H2O	Newman	incoming tide 3.8 depth				clear, calm (rain previous week)	9.23	14.2	90.3	
DAWN	31020	310LO2	12/13/02 06:00		H2O	Newman	Incoming tide, 4.6; surface				wind about 10mph, water somewhat choppy	7.7	13.6	87.7	
DAWN	31020	310LO2	12/13/02 06:00		H2O	Newman	incoming tide 4.6 depth				wind about 10mph, water somewhat choppy	7.84	13.6	88.4	
DAWN	31020	310MPP	07/25/00 08:45		H2O	St. John, Fall	Taken at southern most post in beach across from floating dock.	B	20		Calm, marine layer	6.7	12.7	75	63.18547487
DAWN	31020	310MPP	07/25/00 08:45		H2O	St. John, Fall	Taken at southern most post in beach across from floating dock.	T	4		Calm, marine layer	6.76	12.8	76.5	63.89622708
DAWN	31020	310MPP	07/25/00 08:45		H2O	St. John, Fall	Taken at southern most post in beach across from floating dock.	M	12		Calm, marine layer	6.8	12.7	76	64.12854166
DAWN	31020	310MPP	08/01/00 07:55		H2O	Tanner, Newman	Low tide, big barge at pier and eelgrass	B	16.75		Calm day, little wind.	4.69	15.6	55.3	47.16019601
DAWN	31020	310MPP	08/01/00 07:55		H2O	Tanner, Newman	Low tide, big barge at pier and eelgrass	M	10.05		Calm day, little wind.	5.14	15.6	62.1	51.68516151
DAWN	31020	310MPP	08/01/00 07:55		H2O	Tanner, Newman	Low tide, big barge at pier and eelgrass	T	3.35		Calm day, little wind.	5.29	15.6	63.4	53.19348334
DAWN	31020	310MPP	08/09/01 05:50		H2O	St. John, Pardo		M	54			6.57	13.6	75.7	63.22928289
DAWN	31020	310MPP	08/09/01 05:50		H2O	St. John, Pardo		T	18			6.62	13.7	76.2	63.85293007
DAWN	31020	310MPP	08/09/01 05:50		H2O	St. John, Pardo		B	90			6.78	13.5	78	65.10447143
DAWN	31020	310MRK	07/25/00 08:10		H2O	St. John, Fall	Large barge nearby, sample taken left side of target rock	B	20		Calm, marine layer	6.3	12.83	72	59.5887868
DAWN	31020	310MRK	07/25/00 08:10		H2O	St. John, Fall	Large barge nearby, sample taken left side of target rock	M	12		Calm, marine layer	6.33	12.8	72.4	59.83182211

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTHL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310MRK	07/25/00 08:10		H2O	St. John, Fall	Large barge nearby, sample taken left side of target rock	T	4		Calm, marine layer	6.33	12.8	71.5	59.83182211
DAWN	31020	310MRK	08/01/00 08:15		H2O	Tanner, Newman	Weird foam in water, lots of kelp and eelgrass	B	23.25		Calm day, little wind.	5.66	15	64.7	56.1800541
DAWN	31020	310MRK	08/01/00 08:15		H2O	Tanner, Newman	Weird foam in water, lots of kelp and eelgrass	M	13.95		Calm day, little wind.	5.9	15.1	70.3	58.68970489
DAWN	31020	310MRK	08/01/00 08:15		H2O	Tanner, Newman	Weird foam in water, lots of kelp and eelgrass	T	4.65		Calm day, little wind.	5.9	15.2	69.7	58.81718677
DAWN	31020	310MRK	08/09/01 05:30		H2O	St. John, Pardo	Salinity Meter not working	T	8.5			5.02	14.7	63	49.50233464
DAWN	31020	310MRK	08/09/01 05:30		H2O	St. John, Pardo	Salinity Meter not working	M	25.5			6.49	13.5	75.3	62.3197669
DAWN	31020	310MRK	08/09/01 05:30		H2O	St. John, Pardo	Salinity Meter not working	B	42.5			6.64	13.3	75.4	63.47464317
DAWN	31020	310OY1	07/25/00 10:10		H2O	St. John, Fall	Oyster #13 post	M	15		Calm, marine layer	4.08	17.4	52.5	42.61511942
DAWN	31020	310OY1	07/25/00 10:10		H2O	St. John, Fall	Oyster #13 post	B	25		Calm, marine layer	4.7	17.4	50.5	49.09094639
DAWN	31020	310OY1	07/25/00 10:10		H2O	St. John, Fall	Oyster #13 post	T	5		Calm, marine layer	6.23	17.4	53	65.07161617
DAWN	31020	310OY1	08/01/00 09:45		H2O	Tanner, Newman		B	20.75		Calm day, little wind.	5.41	16.9	66.7	55.92160403
DAWN	31020	310OY1	08/01/00 09:45		H2O	Tanner, Newman		M	12.45		Calm day, little wind.	6.05	16.01	71.3	61.37211344
DAWN	31020	310OY1	08/01/00 09:45		H2O	Tanner, Newman		T	4.15		Calm day, little wind.	6.25	17	80	64.73966884
DAWN	31020	310OY1	08/09/01 07:33		H2O	St. John, Pardo		B	32.5			5.39	17.2	66.8	56.06471703
DAWN	31020	310OY1	08/09/01 07:33		H2O	St. John, Pardo		M	19.5			5.56	17.2	68.4	57.83299197
DAWN	31020	310OY1	08/09/01 07:33		H2O	St. John, Pardo		T	6.5			5.57	17.2	68.7	57.93700814
DAWN	31020	310PSP	07/18/02 06:15		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; 3 ft below surface; incoming tide; tide 3.2 ft.				clear, wind (10-15 knots SW)	7.75	17.2	82.5	80.61253377
DAWN	31020	310PSP	07/18/02 06:15		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; incoming tide; tide 3.2 ft. ; surface				clear, wind (10-15 knots SW)	8.27	17.2	88.5	86.02137474

## MORro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPHTL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310PSP	08/14/02 05:50		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 5 surface				med to heavy fog	6.3		66.6	
DAWN	31020	310PSP	08/14/02 05:50		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 5; 3 ft below surface				med to heavy fog	6.4		68.1	
DAWN	31020	310PSP	09/13/02 05:40		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	5.65	16	65.6	
DAWN	31020	310PSP	09/13/02 05:40		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	6.1	16	70.8	
DAWN	31020	310PSP	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.52	15.5	77.1	
DAWN	31020	310PSP	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.65	15.5	78.5	
DAWN	31020	310PSP	11/11/02 05:50		H2O	Newman	Incoming tide, 3.8; surface				clear, calm (rain previous week)	8.5	13.5	88.5	
DAWN	31020	310PSP	11/11/02 05:50		H2O	Newman	incoming tide 3.8 depth				clear, calm (rain previous week)	9.2	13.5	88.1	
DAWN	31020	310PSP	12/13/02 06:20		H2O	Newman	Incoming tide, 4.6; surface				wind about 10mph, water somewhat choppy	8.34	13.8	95.3	
DAWN	31020	310PSP	12/13/02 06:20		H2O	Newman	incoming tide 4.6 depth				wind about 10mph, water somewhat choppy	8.36	13.8	95.5	
DAWN	31020	310RSS	07/25/00 09:00		H2O	St. John, Fall	Taken at Roses's boat dock	B		80	Calm, marine layer	5.46	14	63.9	53.01691492
DAWN	31020	310RSS	07/25/00 09:00		H2O	St. John, Fall	Taken at Roses's boat dock	M		48	Calm, marine layer	5.53	14.2	64	53.93497272
DAWN	31020	310RSS	07/25/00 09:00		H2O	St. John, Fall	Taken at Roses's boat dock	T		16	Calm, marine layer	5.54	14.2	64.5	54.03250432
DAWN	31020	310RSS	08/01/00 09:00		H2O	Tanner, Newman	Oily film on top of water, found garbage with oily slot in it. Smells odd.	B		47.5	Calm day, little wind.	5.28	15.6	62.3	53.09292855
DAWN	31020	310RSS	08/01/00 09:00		H2O	Tanner, Newman	Oily film on top of water, found garbage with oily slot in it. Smells odd.	M		28.5	Calm day, little wind.	5.54	15.9	66.4	56.0667795

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTRL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310RSS	08/01/00 09:00		H2O	Tanner, Newman	Oily film on top of water, found garbage with oily slot in it. Smells odd.	T	9.5		Calm day, little wind.	5.78	15.8	66.5	58.37065251
DAWN	31020	310RSS	08/09/01 06:03		H2O	St.John, Pardo	Salinity Meter not working	B	47.5			5.98	13.9	69.5	57.93733187
DAWN	31020	310RSS	08/09/01 06:03		H2O	St.John, Pardo	Salinity Meter not working	T	9.5			6.16	13.8	71.3	59.54861915
DAWN	31020	310RSS	08/09/01 06:03		H2O	St.John, Pardo	Salinity Meter not working	M	28.5			6.32	13.8	72.9	61.09533653
DAWN	31020	310SC1	10/01/98 05:50		H2O	Blake, Rooney						5.65			
DAWN	31020	310SC10	05/17/97 06:24		H2O	Blake, Rooney				36	foggy	3.87	19.4		42.09322403
DAWN	31020	310SC10	07/27/97 06:41		H2O	Blake, Rooney				42		5.74	19.7		62.80366949
DAWN	31020	310SC10	08/26/97 06:56		H2O	Blake, Rooney				30		5.35	21.2		60.25870289
DAWN	31020	310SC10	04/17/98 06:45		H2O	Blake, Rooney					foggy	4.2	17		43.50505746
DAWN	31020	310SC10	06/05/98 00:00		H2O	Blake, Rooney				15		5.56	19.4		60.47501953
DAWN	31020	310SC11	05/17/97 06:24		H2O	Blake, Rooney									
DAWN	31020	310SC11	07/27/97 06:48		H2O	Blake, Rooney				36	calm	4.72	19.5		51.44018206
DAWN	31020	310SC11	08/26/97 07:01		H2O	Blake, Rooney				39		5.07	20.8		56.67079913
DAWN	31020	310SC11	04/17/98 06:45		H2O	Blake, Rooney									
DAWN	31020	310SC11	06/05/98 00:00		H2O	Blake, Rooney				24		4.44	19		47.91013612
DAWN	31020	310SC12	05/17/97 06:34		H2O	Blake, Rooney				48	foggy	4.49	19.4		48.83684131
DAWN	31020	310SC12	07/27/97 06:50		H2O	Blake, Rooney				36		4.7	19.6		51.3234281
DAWN	31020	310SC12	08/26/97 07:04		H2O	Blake, Rooney				36	algae	5.29	20.6		58.90306328
DAWN	31020	310SC12	04/17/98 06:45		H2O	Blake, Rooney									



ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPHTL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310SC2	05/17/97 05:40		H2O	Blake, Rooney				20	foggy	3.67	20.6		40.86469608
DAWN	31020	310SC2	07/27/97 06:00		H2O	Blake, Rooney				60	clear and calm	5.82	19.5		63.42836008
DAWN	31020	310SC2	08/26/97 06:09		H2O	Blake, Rooney				38		3.87	18		40.92379925
DAWN	31020	310SC2	04/17/98 06:00		H2O	Blake, Rooney					foggy	4.39	17		45.4731434
DAWN	31020	310SC2	06/05/98 06:09		H2O	Blake, Rooney				36		5.02	19.3		54.4933741
DAWN	31020	310SC3	05/17/97 05:45		H2O	Blake, Rooney				20	foggy	4.09	20.7		45.62901457
DAWN	31020	310SC3	07/27/97 06:05		H2O	Blake, Rooney				30	foggy	6.09	19.8		66.76421917
DAWN	31020	310SC3	08/26/97 06:15		H2O	Blake, Rooney				22	foggy	4.95	20.9		55.43552893
DAWN	31020	310SC3	04/17/98 06:05		H2O	Blake, Rooney					foggy	4.6	16.7		47.34980638
DAWN	31020	310SC3	06/05/98 06:19		H2O	Blake, Rooney				18	clear and calm	5.18	19.4		56.34183474
DAWN	31020	310SC4	05/17/97 05:54		H2O	Blake, Rooney				24	foggy	3.59	19.8		39.35690424
DAWN	31020	310SC4	07/27/97 06:10		H2O	Blake, Rooney				30	foggy	6.83	19.7		74.72980185
DAWN	31020	310SC4	08/26/97 06:20		H2O	Blake, Rooney				27	foggy	5.37	21		60.25414458
DAWN	31020	310SC4	04/17/98 06:08		H2O	Blake, Rooney					foggy	3.86	17.1		40.06673312
DAWN	31020	310SC4	06/05/98 06:23		H2O	Blake, Rooney				42		5.16	19.3		56.01310963
DAWN	31020	310SC5	05/17/97 05:58		H2O	Blake, Rooney				24	foggy	2.98	19.7		32.60538939
DAWN	31020	310SC5	07/27/97 06:15		H2O	Blake, Rooney	50 feet off shore			30		4.85	19.7		53.06581829
DAWN	31020	310SC5	08/26/97 06:22		H2O	Blake, Rooney				27	clear	5.3	21		59.4687088
DAWN	31020	310SC5	04/17/98 06:13		H2O	Blake, Rooney					foggy	4.02	17.1		41.72753034
DAWN	31020	310SC5	06/05/98 06:28		H2O	Blake, Rooney				42		5.57	19.4		60.58378755

## Morro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTH OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310SC6	05/17/97 06:02		H2O	Blake, Rooney				24	foggy	3.08	20.1		33.96451477
DAWN	31020	310SC6	07/27/97 06:18		H2O	Blake, Rooney	oil slick, muddy			30		5.28	19.8		57.88424913
DAWN	31020	310SC6	08/26/97 06:28		H2O	Blake, Rooney				27		5.4	20.8		60.35943102
DAWN	31020	310SC6	04/17/98 06:20		H2O	Blake, Rooney					foggy	2.37	16.7		24.39544372
DAWN	31020	310SC6	06/05/98 06:35		H2O	Blake, Rooney				42		5.69	19.5		62.0115754
DAWN	31020	310SC7	05/17/97 06:06		H2O	Blake, Rooney				18	foggy	2.77	19.1		29.94962263
DAWN	31020	310SC7	07/27/97 06:25		H2O	Blake, Rooney	25 feet offshore			22		3.37	19.6		36.79998994
DAWN	31020	310SC7	08/26/97 06:36		H2O	Blake, Rooney	Muddy, oily slick			24		4.89	20.4		54.23928964
DAWN	31020	310SC7	04/17/98 06:24		H2O	Blake, Rooney					foggy	2.66	17		27.55320306
DAWN	31020	310SC7	06/05/98 06:42		H2O	Blake, Rooney	Thick green surface algae, w/ flies (more than ever observed by samplers)			30		4.49	18.9		48.35280333
DAWN	31020	310SC8	05/17/97 06:13		H2O	Blake, Rooney				24	foggy	3.82	20.4		42.37097882
DAWN	31020	310SC8	07/27/97 06:28		H2O	Blake, Rooney				24		3.87	19.4		42.09322403
DAWN	31020	310SC8	08/26/97 06:40		H2O	Blake, Rooney	sunrise			30		3.94	19.2		42.68477437
DAWN	31020	310SC8	04/17/98 06:30		H2O	Blake, Rooney					foggy	4.17	17.1		43.28452774
DAWN	31020	310SC8	06/05/98 06:45		H2O	Blake, Rooney				12	foggy	5.16	19		55.67934739
DAWN	31020	310SC9	05/17/97 06:18		H2O	Blake, Rooney				36		3.98	19.6		43.46111571
DAWN	31020	310SC9	07/27/97 06:36		H2O	Blake, Rooney				18		4.32	19.6		47.17387434
DAWN	31020	310SC9	08/26/97 06:50		H2O	Blake, Rooney				24		5.08	20.5		56.4557748
DAWN	31020	310SC9	04/17/98 06:36		H2O	Blake, Rooney					foggy	4.76	16.5		48.79076922

Morro Bay Dawn Patrol DO

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPHTL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310SC9	06/05/98 06:52		H2O	Blake, Rooney				18		4.88	19.1		52.76323409
DAWN	31020	310SHI	10/23/00 06:23		H2O	St. John, Wilson, Dalton		B	22		Windy	4.99	16.2	65.23	50.82441686
DAWN	31020	310SHI	10/23/00 06:23		H2O	St. John, Wilson, Dalton		M	14		Windy	4.99	16.2	65.4	50.82441686
DAWN	31020	310SHI	10/23/00 06:23		H2O	St. John, Wilson, Dalton		T	50		Windy	5.23	16.3	67	53.3820289
DAWN	31020	310SHI	10/23/00 17:12		H2O	St. John, Wilson, Dalton		B	20		Windy	10.12	16.2	122.8	103.0747693
DAWN	31020	310SHI	10/23/00 17:12		H2O	St. John, Wilson, Dalton		M	12		Windy	10.16	16.2	124.1	103.4821794
DAWN	31020	310SHI	10/23/00 17:12		H2O	St. John, Wilson, Dalton		T	48		Windy	10.17	16.3	124.1	103.80406
DAWN	31020	310SHI	08/14/02 06:35		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; surface				med to heavy fog	4.44		54.1	
DAWN	31020	310SHI	09/13/02 06:35		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	4.95	15.3	58.9	
DAWN	31020	310SHI	09/13/02 06:35		H2O	Daross, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	5	15.3	59.8	
DAWN	31020	310SHI	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	5.34	14.9	64.4	
DAWN	31020	310SHI	10/16/02 05:55		H2O	Daross, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	5.78	15.2	68.2	
DAWN	31020	310SHI	11/13/02 06:30		H2O	Daross	Incoming tide 4 ft ; clear, no wind; depth				clear, no wind	6.4	14.2	74.6	
DAWN	31020	310SHI	11/13/02 06:30		H2O	Daross	Incoming tide 4 ft ; clear, no wind; surface				clear, no wind	6.49	14.2	75.6	
DAWN	31020	310SHI	12/13/02 07:15		H2O	Thackery	Outgoing; 4.5 ft, surface				clear, cool, slight breeze	8.51	12.9	96.8	
DAWN	31020	310SHI	12/13/02 07:15		H2O	Thackery	Outgoing; 4.5 ft depth				clear, cool, slight breeze	8.61	12.8	98.7	

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTH OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31020	310SPM	07/18/02 05:40		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; 3 ft below surface; incoming tide; tide 3.2 ft.				clear, wind (10-15 knots SW)	5.3	17	82.6	54.89923918
DAWN	31020	310SPM	07/18/02 05:40		H2O	DaRoss	difficulty calibrating meter/ lost 1/2 hr; incoming tide; tide 3.2 ft. ; surface				clear, wind (10-15 knots SW)	6.2	17.4	76.8	64.7582697
DAWN	31020	310SPM	08/14/02 05:00		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; surface				med to heavy fog	5.64		68.5	
DAWN	31020	310SPM	08/14/02 05:00		H2O	DaRoss	Outgoing tide--at start, 3 ft/finish 2.5 ft; salinity 29; 3 ft below surface				med to heavy fog	6.09		72.3	
DAWN	31020	310STM	09/13/02 05:00		H2O	DaRoss, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	5.28	16.3	61.7	
DAWN	31020	310STM	09/13/02 05:00		H2O	DaRoss, Newman	Outgoing tide ; 3.2 at 5:21 am				clear/wind 10k	5.86	16.6	66.7	
DAWN	31020	310STM	10/15/02 05:00		H2O	DaRoss, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.15	16.4	76.5	
DAWN	31020	310STM	10/15/02 05:00		H2O	DaRoss, Newman	incoming tide 2.4-2.7 ft				clear/light wind 5mph	6.95	16.4	84	
DAWN	31020	310STM	11/11/02 05:15		H2O	Newman	incoming tide 3.8 depth				clear, calm (rain previous week)	9.1	13.6	89.5	
DAWN	31020	310STM	11/11/02 05:15		H2O	Newman	Incoming tide, 3.8; surface				clear, calm (rain previous week)	9.45	13.5	91.5	
DAWN	31020	310STM	12/13/02 05:35		H2O	Newman	Incoming tide, 4.6; surface				wind about 10mph, water somewhat choppy	7.97	13.6	90.1	
DAWN	31020	310STM	12/13/02 05:35		H2O	Newman	incoming tide 4.6 depth				wind about 10mph, water somewhat choppy	8.04	13.6	92.3	
DAWN	31023	310SYB	07/21/01 06:00		H2O	Dodson, St. John, Wilson	Sunrise	B		16	Overcast, calm	2.91	13.5	4.39	27.9430696
DAWN	31023	310SYB	07/21/01 06:00		H2O	Dodson, St. John, Wilson	Sunrise	T		5.4	Overcast, calm	2.96	13.3	39	28.29592527

ProjId	Shed	SiteTag	DateTime	Purpose	Matrix	Sampler	Notes	DEPLOC N	DEPTHL OC	Depth	Weather	DO_PPM	H2O_TE MP	DO_SAT	DO_SAT_CAL C
DAWN	31023	310SYB	07/21/01 06:00		H2O	Dodson, St. John, Wilson	Sunrise	M	11		Overcast, calm	3.09	13.3	43	29.53865172
DAWN	31022	310TWB	07/21/01 05:05		H2O	Dodson, St. John, Wilson		B	14.25		Overcast, calm	5.93	12.1	69	55.16248307
DAWN	31022	310TWB	07/21/01 05:05		H2O	Dodson, St. John, Wilson		T	2.85		Overcast, calm	6.38	12.1	67	59.34850624
DAWN	31022	310TWB	07/21/01 05:05		H2O	Dodson, St. John, Wilson		M	8.55		Overcast, calm	6.89	12.1	73	64.09266583