

Coastal Systems Group
SMAST
 Umass Dartmouth
 706 Rodney French Blvd
 New Bedford, Ma 02747

Key
 NA=Not Applicable
 NES = Not Enough Sample
 NS = No Sample
 NC = No Chain Of Custody
 ND = No Data Available
BDL = Below Detection Limit

Weather

Original Order	By Station	PROJECT	Sample ID	Station #	Depth	QC	Date	VOLUNTEER
1	1	ORLEANS	WMO	15	M		7/7/2016	ANN FIGUE
2	6	ORLEANS	WMO	19	M		7/7/2016	KEN, SUZAI
3	11	ORLEANS	WMO	22	M		7/7/2016	KEN, SUZAI
4	17	ORLEANS	WMO	25	S		7/7/2016	KATHRYN, C
5	18	ORLEANS	WMO	25	B		7/7/2016	KATHRYN, C
6	27	ORLEANS	WMO	26	M		7/7/2016	PHIL, TIM, .
7	32	ORLEANS	WMO	27	M		7/7/2016	PHIL, TIM, .
8	37	ORLEANS	WMO	28	M		7/7/2016	SCOTT, SUZ
9	42	ORLEANS	WMO	29	M		7/7/2016	SCOTT, SUZ
10	47	ORLEANS	WMO	30	M		7/7/2016	DAVE, SUE
11	51	ORLEANS	WMO	31	M		7/7/2016	WALTER, JI
12	56	ORLEANS	WMO	32	S		7/7/2016	DAVE, SUE
13	57	ORLEANS	WMO	32	B		7/7/2016	DAVE, SUE
14	64	ORLEANS	WMO	33	M		7/7/2016	MERRITT, F
15	69	ORLEANS	WMO	34	S		7/7/2016	SWIFT, TRA
16	70	ORLEANS	WMO	34	B		7/7/2016	SWIFT, TRA
17	79	ORLEANS	WMO	35	M		7/7/2016	SWIFT, TRA
18	84	ORLEANS	WMO	36	M		7/7/2016	AIMEE, JOA
19	89	ORLEANS	WMO	37	M		7/7/2016	JOANNA, S'
20	93	ORLEANS	WMO	38	S		7/7/2016	SUE, CHARI
21	94	ORLEANS	WMO	38	B		7/7/2016	SUE, CHARI
22	103	ORLEANS	WMO	39	M		7/7/2016	DELANEY &
23	2	ORLEANS	WMO	15	M		7/25/2016	JOANN
24	7	ORLEANS	WMO	19	M		7/25/2016	SUZANNE. I
25	12	ORLEANS	WMO	22	M		7/25/2016	SUZANNE. I
26	16	ORLEANS	WMO	23	M		7/25/2016	SUZANNE. I
27	19	ORLEANS	WMO	25	S		7/25/2016	KATHRYN, C
28	20	ORLEANS	WMO	25	B		7/25/2016	KATHRYN, C
29	28	ORLEANS	WMO	26	M		7/25/2016	JOHN, TIM
30	33	ORLEANS	WMO	27	M		7/25/2016	JOHN, TIM
31	38	ORLEANS	WMO	28	M		7/25/2016	FRAN, SCO'

32	43 ORLEANS	WMO	29	M	7/25/2016 FRAN, SCO
33	48 ORLEANS	WMO	30	M	7/25/2016 DOUG, SUE
34	52 ORLEANS	WMO	31	M	7/25/2016 BRUCE, JUI
35	58 ORLEANS	WMO	32	S	7/25/2016 DOUG, SUE
36	59 ORLEANS	WMO	32	B	7/25/2016 DOUG, SUE
37	65 ORLEANS	WMO	33	M	7/25/2016 MERRITT, F
38	71 ORLEANS	WMO	34	S	7/25/2016 PETE, HARF
39	72 ORLEANS	WMO	34	B	7/25/2016 PETE, HARF
40	80 ORLEANS	WMO	35	M	7/25/2016 PETE, HARF
41	85 ORLEANS	WMO	36	M	7/25/2016 JOANNA, S
42	90 ORLEANS	WMO	37	M	7/25/2016 JOANNA, S
43	95 ORLEANS	WMO	38	S	7/25/2016 SUE, CHARI
44	96 ORLEANS	WMO	38	B	7/25/2016 SUE, CHARI
45	104 ORLEANS	WMO	39	M	7/25/2016 MICHEAL, I
46	3 ORLEANS	WMO	15	M	8/8/2016 JOANN
47	8 ORLEANS	WMO	19	M	8/8/2016 SUZANNE. I
48	13 ORLEANS	WMO	22	M	8/8/2016 SUZANNE. I
49	21 ORLEANS	WMO	25	S	8/8/2016 KATHRYN, C
50	22 ORLEANS	WMO	25	B	8/8/2016 KATHRYN, C
51	29 ORLEANS	WMO	26	M	8/8/2016 JOHN, TIM
52	34 ORLEANS	WMO	27	M	8/8/2016 JOHN, TIM
53	39 ORLEANS	WMO	28	M	8/8/2016 SCOTT, FRA
54	44 ORLEANS	WMO	29	M	8/8/2016 SCOTT, FRA
55	49 ORLEANS	WMO	30	M	8/8/2016 DEAN, DOU
56	53 ORLEANS	WMO	31	M	8/8/2016 JUDY, BRUC
57	60 ORLEANS	WMO	32	S	8/8/2016 DEAN, DOU
58	61 ORLEANS	WMO	32	B	8/8/2016 DEAN, DOU
59	66 ORLEANS	WMO	33	M	8/8/2016 MERRITT, F
60	73 ORLEANS	WMO	34	S	8/8/2016 PETER, DEE
61	74 ORLEANS	WMO	34	B	8/8/2016 PETER, DEE
62	81 ORLEANS	WMO	35	M	8/8/2016 PETER, DEE
63	86 ORLEANS	WMO	36	M	8/8/2016 AIMEE, JOA
64	91 ORLEANS	WMO	37	M	8/8/2016 KLEMBURG
65	97 ORLEANS	WMO	38	S	8/8/2016 CHARLES, C
66	98 ORLEANS	WMO	38	B	8/8/2016 CHARLES, C
67	105 ORLEANS	WMO	39	M	8/8/2016 KELLY, HOL
68	4 ORLEANS	WMO	15	M	8/23/2016 JOANN
69	9 ORLEANS	WMO	19	M	8/23/2016 SUZANNE. I
70	14 ORLEANS	WMO	22	M	8/23/2016 SUZANNE. I
71	23 ORLEANS	WMO	25	S	8/23/2016 KATHRYN, C
72	24 ORLEANS	WMO	25	B	8/23/2016 KATHRYN, C
73	30 ORLEANS	WMO	26	M	8/23/2016 TIM, JOHN,
74	35 ORLEANS	WMO	27	M	8/23/2016 TIM, JOHN,
75	40 ORLEANS	WMO	28	M	8/23/2016 SCOTT, FRA
76	45 ORLEANS	WMO	29	M	8/23/2016 SCOTT, FRA
77	50 ORLEANS	WMO	30	M	8/23/2016 DOUG, SUE
78	54 ORLEANS	WMO	31	M	8/23/2016 JJ, BRUCE, V

79	62 ORLEANS	WMO	32	S	8/23/2016 DOUG, SUE
80	63 ORLEANS	WMO	32	B	8/23/2016 DOUG, SUE
81	67 ORLEANS	WMO	33	M	8/23/2016 MERRITT, F
82	75 ORLEANS	WMO	34	S	8/23/2016 PETE, HARF
83	76 ORLEANS	WMO	34	B	8/23/2016 PETE, HARF
84	82 ORLEANS	WMO	35	M	8/23/2016 PETE, HARF
85	87 ORLEANS	WMO	36	M	8/23/2016 AIMEE, JOA
86	92 ORLEANS	WMO	37	M	8/23/2016 KLEINBURY
87	99 ORLEANS	WMO	38	S	8/23/2016 SUSAN, CH.
88	100 ORLEANS	WMO	38	B	8/23/2016 SUSAN, CH.
89	106 ORLEANS	WMO	39	M	8/23/2016 MICHAEL L
90	5 ORLEANS	WMO	15	M	9/7/2016 JOANN
91	10 ORLEANS	WMO	19	M	9/7/2016 SUZANNE. I
92	15 ORLEANS	WMO	22	M	9/7/2016 SUZANNE. I
93	25 ORLEANS	WMO	25	S	9/7/2016 S., N., J.
94	26 ORLEANS	WMO	25	B	9/7/2016 S., N., J.
95	31 ORLEANS	WMO	26	M	9/7/2016 JOHN, TIM,
96	36 ORLEANS	WMO	27	M	9/7/2016 JOHN, TIM,
97	41 ORLEANS	WMO	28	M	9/7/2016 FRAN, SCO
98	46 ORLEANS	WMO	29	M	9/7/2016 FRAN, SCO
99	55 ORLEANS	WMO	31	M	9/7/2016 JUDY, BRUC
100	68 ORLEANS	WMO	33	M	9/7/2016 MERRITT, M
101	77 ORLEANS	WMO	34	S	9/7/2016 PETE, HARF
102	78 ORLEANS	WMO	34	B	9/7/2016 PETE, HARF
103	83 ORLEANS	WMO	35	M	9/7/2016 PETE, HARF
104	88 ORLEANS	WMO	36	M	9/7/2016 AIMEE, JOA
105	101 ORLEANS	WMO	38	S	9/7/2016 SUE, CHARI
106	102 ORLEANS	WMO	38	B	9/7/2016 SUE, CHARI
107	107 ORLEANS	WMO	39	M	9/7/2016 MICHAEL

Weather Conditions:

24 hour Precipitation

1	Clear	1	None
2	Partly Cloudy	2	Light
3	Overcast	3	Heavy
4	Fog/Haze		
5	Drizzle		
6	Intermittent Rain		

WEATHER	WIND FORCE	WIND DIRECTION	Water Condition	Secchi isappear	Secchi (m)	Secchi Average	Total depth (m)	% Secchi Depth
1	2	W	PARTLY CLOUDY	0.50	0.50	0.50	0.50	100%
2	0	W	CLOUDY	1.20	1.20	0.50	0.50	100%
2	0	W	CLEAR	1.60	1.60	1.60	1.60	100%
1	0	SW	CLOUDY	1.30	1.35	1.33	5.15	26%
1	0	SW	CLOUDY	1.30	1.35	1.33	5.15	26%
1	2	S	CLOUDY	1.40	1.35	1.38	1.80	76%
1	2	S	CLOUDY	1.20	1.10	1.15	1.40	82%
4	2	SW	CLOUDY	1.40	1.25	1.32	2.30	57%
4	2	SW	CLEAR	1.10	1.10	1.10	1.10	100%
1	0	SW	CLEAR	1.25	1.25	1.25	1.25	100%
1	1	CALM	CLEAR	1.16	1.20	1.18	1.44	82%
1	0	SW	CLOUDY	3.04	3.04	3.04	3.04	100%
1	0	SW	CLOUDY	3.04	3.04	3.04	3.04	100%
4	2	W	ND	1.00	1.00	1.00	1.00	100%
1	1	SW	CLEAR	1.65	1.70	1.68	9.07	18%
1	1	SW	CLEAR	1.65	1.70	1.68	9.07	18%
1	0	NA	CLEAR	1.70	1.70	1.70	1.79	95%
1	1	SW	CLEAR	0.65	0.65	0.65	0.65	100%
1	0	NA	CLOUDY	1.00	1.00	1.00	1.00	100%
1	1	SW	ALGAE/PLA	1.90	1.60	1.75	4.40	40%
1	1	SW	ALGAE/PLA	1.90	1.60	1.75	4.40	40%
4	0	NE	CLEAR, ALC	0.42	0.42	0.42	0.42	100%
1	1	CALM	CLEAR	0.51	0.51	0.51	0.51	100%
2	1	W	CLEAR	0.16	0.16	0.16	0.16	100%
1	2	NW	CLEAR	0.30	0.30	0.30	0.30	100%
2	1	W	CLEAR	0.24	0.24	0.24	0.24	100%
1	0	S	CLEAR	1.30	1.20	1.25	5.10	25%
1	0	S	CLEAR	1.30	1.20	1.25	5.10	25%
2	0	S	CLEAR	1.60	1.60	1.60	4.20	38%
2	0	S	CLEAR	1.60	1.60	1.60	1.60	100%
1	0	CALM	CLEAR	1.50	1.50	1.50	2.40	63%

2	0 CALM	CLEAR	1.70	1.70	1.70	2.10	81%
1	0 CALM	CLEAR	1.80	1.80	1.80	1.80	100%
2	1 CALM	CLEAR	1.23	0.85	1.04	1.41	74%
1	0 CALM	CLEAR	2.85	2.85	2.85	2.85	100%
1	0 CALM	CLEAR	2.85	2.85	2.85	2.85	100%
1	0 CALM	CLEAR	1.67	1.67	1.67	1.67	100%
1	1 SW	CLEAR	1.81	1.86	1.84	8.58	21%
1	1 SW	CLEAR	1.81	1.86	1.84	8.58	21%
1	0 CALM	CLEAR	1.60	1.53	1.57	1.78	88%
2	0 CALM	CLEAR	0.76	0.76	0.76	0.76	100%
2	0 SW	CLEAR	1.06	1.06	1.06	1.06	100%
1	0 CALM	CLEAR	1.50	1.50	1.50	4.00	38%
1	0 CALM	CLEAR	1.50	1.50	1.50	4.00	38%
1	1 CALM	CLEAR	0.60	0.60	0.60	0.60	100%
1	3 W	CLEAR	0.63	0.63	0.63	0.63	100%
1	2 NW	CLEAR	0.25	0.25	0.25	0.25	100%
1	2 NW	CLEAR	0.30	0.30	0.30	0.30	100%
1	1 NW	ALGAE/PLA	1.55	1.50	1.52	4.85	31%
1	1 NW	ALGAE/PLA	1.55	1.50	1.52	4.85	31%
1	1 NW	CLOUDY	1.80	1.85	1.82	3.90	47%
1	1 NW	CLOUDY	1.10	1.10	1.10	1.10	100%
1	0 CALM	CLEAR	1.50	1.80	1.65	2.30	72%
1	0 CALM	CLEAR	1.90	1.70	1.80	2.00	90%
1	2 N	CLEAR	1.08	1.08	1.08	1.08	100%
1	1 N	CLOUDY	1.22	1.22	1.22	1.22	100%
1	2 N	CLEAR	2.80	2.80	2.80	2.80	100%
1	2 N	CLEAR	2.80	2.80	2.80	2.80	100%
1	1 N	CLEAR	1.50	1.50	1.50	1.50	100%
1	1 SW	CLEAR	2.28	3.57	2.93	8.40	35%
1	1 SW	CLEAR	2.28	3.57	2.93	8.40	35%
1	0 CALM	CLEAR	1.59	1.59	1.59	1.59	100%
1	2 N	CLEAR	0.60	0.60	0.60	0.60	100%
1	2 NE	CLEAR	0.45	0.45	0.45	0.91	49%
1	0 NW	ALGAE/PLA	1.20	1.10	1.15	4.55	25%
1	0 NW	ALGAE/PLA	1.20	1.10	1.15	4.55	25%
1	1 CALM	CLEAR	0.53	0.53	0.53	0.53	100%
1	5 N	CLEAR	0.70	0.70	0.70	0.70	100%
1	3 NE	CLEAR	0.18	0.18	0.18	0.18	100%
1	3 NE	CLEAR	0.20	0.20	0.20	0.20	100%
1	2 N	CLEAR	2.07	2.00	2.03	5.00	41%
1	2 N	CLEAR	2.07	2.00	2.03	5.00	41%
1	3 NW	CLOUDY	1.50	1.25	1.34	4.00	34%
1	3 NW	CLOUDY	1.10	1.10	1.10	1.10	100%
1	3 SW	CLEAR	1.90	1.80	1.85	2.25	82%
1	3 SW	CLEAR	1.50	1.50	1.50	1.50	100%
1	3 NW	CLEAR	1.20	1.20	1.20	1.20	100%
1	2 NE	CLEAR	1.26	1.26	1.26	1.26	100%

1	3 NW	CLEAR	2.70	2.70	2.70	2.70	100%
1	3 NW	CLEAR	2.70	2.70	2.70	2.70	100%
1	2 NW	CLEAR	1.40	1.40	1.40	1.40	100%
1	1 NW	CLEAR	1.88	2.04	1.96	8.44	23%
1	1 NW	CLEAR	1.88	2.04	1.96	8.44	23%
1 0-1	NW	CLEAR	1.57	1.57	1.57	1.57	100%
1	2 N	CLEAR	0.74	0.74	0.74	0.74	100%
1	2 N	CLEAR	1.00	1.00	1.00	1.00	100%
1	2 NW	CLOUDY	1.80	1.80	1.80	4.70	38%
1	2 NW	CLOUDY	1.80	1.80	1.80	4.70	38%
1	2 NE	CLEAR	0.67	0.67	0.67	0.67	100%
1	3 S	CLEAR	0.50	0.50	0.50	0.50	100%
1	3 E / NE	CLEAR	0.15	0.15	0.15	0.15	100%
2	3 E / NE	CLOUDY	0.30	0.30	0.30	0.30	100%
1	1 SE	CLEAR	2.50	2.00	2.25	5.00	45%
1	1 SE	CLEAR	2.50	2.00	2.25	5.00	45%
2	3 S / SE	CLEAR	1.90	1.80	1.85	4.00	46%
2	3 S / SE	CLEAR	1.30	1.30	1.30	1.30	100%
1	3 E	CLOUDY	1.85	1.85	1.85	1.85	100%
1	3 E / S	CLOUDY	2.05	2.05	2.05	2.20	93%
2	4 SE	CLOUDY	1.20	1.20	1.20	1.20	100%
2	1 SE	CLEAR	1.40	1.40	1.40	1.40	100%
1	2 SE	CLEAR	2.10	2.09	2.10	8.45	25%
1	2 SE	CLEAR	2.10	2.09	2.10	8.45	25%
1	2 E	CLEAR	1.55	1.55	1.55	1.55	100%
2	2 SE	CLOUDY	0.90	0.90	0.90	0.90	100%
1	2 E	CLOUDY	1.70	1.70	1.70	4.20	40%
1	2 E	CLOUDY	1.70	1.70	1.70	4.20	40%
4	4 E	CLEAR	0.60	0.60	0.60	0.60	100%

DI Salinity	Surface Salinity	Field Corrected Salinity	Sample Time	Sample Depth (m)	Field DO (mg/L)	Field DO % Saturation	Salinity Corrected D.O. (mg/L)	Field Temp (c)
ND	ND	ND	7:24	0.25	4.25	52.00	3.60	23.4
ND	ND	ND	8:05	0.60	6.05	72.00	5.12	24.1
ND	ND	ND	7:30	0.80	5.64	65.30	4.81	22.8
ND	ND	ND	6:45	0.50	8.40	97.60	7.03	23.0
ND	ND	ND	7:10	4.60	2.27	25.00	1.89	20.1
ND	ND	ND	6:45	0.90	8.00	94.00	6.69	23.3
ND	ND	ND	6:30	0.70	8.00	93.00	6.70	22.7
ND	ND	ND	6:15	1.15	8.42	94.80	7.02	21.0
ND	ND	ND	6:45	0.50	8.30	93.60	6.91	21.2
ND	ND	ND	5:30	0.50	9.06	96.40	7.49	17.8
ND	ND	ND	6:07	0.50	6.48	71.50	5.38	19.9
ND	ND	ND	5:40	0.50	8.90	92.00	7.34	17.0
ND	ND	ND	5:40	1.50	9.22	94.00	7.61	16.8
ND	ND	ND	6:57	0.50	8.37	94.90	6.98	21.2
ND	ND	ND	6:55	0.15	9.15	106.40	7.65	22.6
ND	ND	ND	7:05	8.50	NA	NA	ND	9.5
ND	ND	ND	6:25	0.90	7.80	88.10	6.53	22.7
ND	ND	ND	7:01	0.33	8.22	89.10	6.82	19.4
ND	ND	ND	6:50	0.50	7.40	79.50	6.12	18.4
ND	ND	ND	7:45	0.50	8.10	91.20	6.81	23.1
ND	ND	ND	7:50	3.50	5.18	57.90	4.31	20.1
ND	ND	ND	7:58	0.21	6.79	9.60	5.64	20.3
ND	ND	ND	7:45	0.25	4.58	54.10	3.84	23.7
ND	ND	ND	8:05	0.16	4.76	56.70	4.00	23.8
ND	ND	ND	7:35	0.15	6.32	72.60	5.29	22.0
ND	ND	ND	7:35	0.12	5.61	65.20	ND	22.8
ND	ND	ND	6:57	0.50	8.30	102.50	6.97	24.5
ND	ND	ND	7:02	4.40	3.10	35.00	2.59	22.4
ND	ND	ND	7:50	2.10	7.60	93.60	6.37	24.0
ND	ND	ND	8:00	1.60	8.35	100.00	7.00	24.5
ND	ND	ND	7:30	1.20	7.11	81.09	5.93	22.6

ND	ND	ND	8:00	1.05	7.25	83.90	6.05	22.4
ND	ND	ND	7:30	0.90	7.94	87.80	6.60	20.5
ND	ND	ND	7:35	0.75	6.77	71.00	5.62	22.0
ND	ND	ND	7:55	0.50	8.00	89.30	6.63	19.7
ND	ND	ND	7:50	2.00	8.04	90.50	6.67	19.5
ND	ND	ND	7:12	0.70	6.94	81.30	5.81	23.1
ND	ND	ND	7:40	0.15	8.40	97.00	7.03	23.8
ND	ND	ND	7:59	8.00	ND	ND	ND	10.0
ND	ND	ND	7:05	0.90	6.63	79.70	5.57	24.5
ND	ND	ND	7:30	0.38	7.88	89.10	6.55	20.3
ND	ND	ND	8:00	0.50	6.70	75.30	5.57	20.9
ND	ND	ND	7:45	0.50	6.70	79.90	5.61	23.5
ND	ND	ND	7:47	3.00	2.54	30.50	2.12	21.5
ND	ND	ND	9:15	0.30	6.50	89.80	5.41	21.5
ND	ND	ND	8:53	0.32	4.71	56.50	3.93	23.4
ND	ND	ND	8:10	0.12	5.40	64.40	4.52	23.4
ND	ND	ND	7:35	0.15	6.32	72.60	5.27	22.0
ND	ND	ND	7:20	0.50	7.30	96.00	6.10	24.0
ND	ND	ND	7:26	4.30	4.30	45.00	3.58	23.3
ND	ND	ND	8:00	0.93	6.51	78.00	5.43	23.9
ND	ND	ND	7:45	0.55	7.83	90.80	6.54	24.2
ND	ND	ND	7:20	1.15	7.30	81.80	6.05	21.2
ND	ND	ND	7:43	1.00	7.38	82.30	6.11	20.9
ND	ND	ND	7:30	0.50	7.92	88.20	6.54	19.9
ND	ND	ND	7:30	0.61	7.00	74.40	5.79	20.6
ND	ND	ND	7:58	0.15	7.60	83.50	6.27	19.5
ND	ND	ND	7:50	2.30	7.50	83.00	6.20	19.4
ND	ND	ND	7:03	0.75	7.30	86.00	6.08	22.5
ND	ND	ND	7:15	0.15	8.87	103.70	7.39	23.2
ND	ND	ND	7:30	7.90	ND	ND	ND	10.5
ND	ND	ND	6:50	0.80	7.81	89.50	6.53	23.8
ND	ND	ND	7:25	0.30	7.80	85.90	6.45	19.8
ND	ND	ND	8:00	0.45	7.15	78.80	5.92	20.4
ND	ND	ND	7:35	0.50	7.24	82.90	6.04	23.0
ND	ND	ND	7:40	4.00	3.22	35.50	2.67	21.3
ND	ND	ND	8:42	0.20	7.36	99.60	6.09	20.7
ND	ND	ND	7:56	0.35	5.25	57.80	4.38	19.7
ND	ND	ND	8:14	0.18	6.64	72.50	5.53	19.5
ND	ND	ND	7:38	0.20	7.44	79.10	6.21	18.5
ND	ND	ND	7:44	0.50	7.70	91.40	6.42	23.9
ND	ND	ND	7:20	4.50	3.10	34.00	2.58	22.0
ND	ND	ND	8:00	2.00	6.84	78.00	5.70	23.4
ND	ND	ND	7:45	0.50	7.13	80.50	5.93	22.0
ND	ND	ND	7:25	1.10	6.60	70.50	5.45	19.8
ND	ND	ND	7:55	0.75	6.86	74.40	5.67	19.1
ND	ND	ND	7:25	0.60	8.12	86.30	6.70	18.1
ND	ND	ND	7:27	0.63	6.90	71.00	5.70	18.9

ND	ND	ND	7:53	0.50	7.90	80.20	6.51	17.9
ND	ND	ND	7:48	2.00	7.42	77.80	6.11	17.8
ND	ND	ND	7:14	0.70	6.64	76.60	5.52	22.5
ND	ND	ND	8:15	0.15	6.92	80.20	5.76	22.5
ND	ND	ND	8:30	7.94	0.00	0.00	0.00	11.0
ND	ND	ND	7:51	0.80	5.76	65.20	4.80	22.8
ND	ND	ND	7:20	0.37	8.02	86.00	6.62	17.8
ND	ND	ND	8:00	0.50	7.17	75.30	5.91	17.7
ND	ND	ND	7:40	0.15	5.35	64.10	4.46	22.0
ND	ND	ND	7:50	4.00	5.22	56.40	4.33	20.2
ND	ND	ND	8:15	0.30	7.52	91.50	6.19	17.0
ND	ND	ND	8:00	0.25	5.75	63.80	4.79	20.4
ND	ND	ND	8:05	0.13	6.50	72.70	5.45	20.8
ND	ND	ND	7:30	0.30	7.05	77.60	5.87	20.1
ND	ND	ND	7:15	0.50	8.05	92.40	6.70	21.3
ND	ND	ND	7:16	4.50	6.40	70.00	5.31	20.7
ND	ND	ND	7:30	2.00	6.11	77.00	5.08	20.7
ND	ND	ND	7:30	0.60	6.62	71.90	5.49	20.3
ND	ND	ND	7:55	0.90	6.04	66.60	5.00	20.1
ND	ND	ND	8:10	1.00	6.81	75.60	5.64	19.9
ND	ND	ND	7:35	0.60	6.20	67.00	5.15	20.5
ND	ND	ND	7:10	0.70	6.80	75.10	5.65	20.5
ND	ND	ND	7:25	0.15	7.71	85.90	6.41	20.8
ND	ND	ND	7:40	7.95	ND	ND	ND	16.7
ND	ND	ND	7:00	0.80	6.14	68.90	5.15	21.3
ND	ND	ND	7:15	0.45	7.30	78.00	6.04	19.0
ND	ND	ND	7:49	0.50	7.41	86.50	6.19	20.9
ND	ND	ND	7:52	4.00	3.24	42.10	2.69	19.5
ND	ND	ND	7:55	0.30	7.15	92.80	5.90	18.5

Lab Salinities (ppt)	Lab Conductivity ms/cm	uM PO4	uM NH4	uM NOX	uM DIN	uM DON	uM TDN	POC uM C
28.9	44.8	1.3	1.0	0.81	1.80	28.82	30.62	92.37
29.2	45.2	1.2	3.0	1.17	4.13	25.34	29.47	64.12
27.6	43.0	1.4	2.6	0.69	3.29	24.74	28.03	56.85
30.8	47.3	1.2	0.4	0.18	0.57	22.71	23.28	110.49
31.4	48.3	1.7	0.3	0.28	0.63	21.21	21.84	2209.73
31.0	47.7	1.0	0.4	0.21	0.60	17.70	18.29	89.73
30.8	47.4	0.9	1.8	0.19	2.03	32.91	34.94	82.43
31.0	47.8	0.9	0.1	0.19	0.25	32.96	33.21	69.52
31.3	48.1	0.8	0.3	0.22	0.53	17.74	18.27	65.88
31.7	48.7	0.3	0.8	0.24	1.03	30.17	31.20	61.07
31.6	48.6	0.6	2.9	0.23	3.11	19.85	22.96	57.92
32.0	49.1	0.3	1.2	0.24	1.43	32.35	33.79	56.85
31.8	48.9	0.3	1.0	0.24	1.27	19.51	20.78	47.10
31.0	47.7	0.4	0.2	0.16	0.38	14.17	14.55	68.68
30.9	47.6	0.3	0.1	0.22	0.27	15.55	15.82	62.89
31.6	48.5	32.3	255.2	0.03	255.19	44.21	299.40	97.28
30.7	47.3	0.6	0.3	0.21	0.52	24.19	24.71	76.92
31.5	48.4	0.6	0.1	0.14	0.28	14.99	15.27	52.45
31.7	48.7	0.5	0.1	0.13	0.20	18.56	18.76	44.63
30.2	46.7	0.7	0.1	0.20	0.34	18.12	18.47	74.53
31.2	48.1	1.0	0.2	0.15	0.38	20.22	20.60	74.53
31.6	48.5	1.0	0.3	0.40	0.71	33.94	34.65	64.03
30.8	47.9	1.1	4.7	0.61	5.28	23.79	29.07	61.67
30.5	47.2	1.2	3.8	0.82	4.61	34.02	38.63	82.69
30.5	47.3	1.0	2.6	0.77	3.37	33.52	36.89	91.35
ND	ND	1.1	2.5	0.71	3.17	22.25	25.42	ND
30.7	47.7	1.2	2.9	3.78	6.65	22.42	29.07	133.12
31.1	48.2	1.6	3.8	0.28	4.11	26.85	30.96	130.27
30.8	47.8	1.3	0.6	0.23	0.87	31.67	32.55	96.47
30.8	47.7	1.3	1.0	0.63	1.67	33.19	34.87	66.51
31.3	48.4	1.0	1.8	0.58	2.42	17.35	19.77	56.93

31.2	48.2	1.1	2.3	0.57	2.90	14.93	17.83	60.48
31.4	48.6	0.5	1.8	0.16	2.01	14.57	16.58	42.05
31.9	49.1	0.6	1.6	0.61	2.19	30.94	33.13	49.87
31.8	49.0	0.3	2.1	0.61	2.72	13.60	16.32	32.87
31.5	48.7	0.3	1.8	0.18	1.93	11.72	13.65	32.63
30.7	47.7	0.7	1.3	0.18	1.49	23.23	24.72	67.09
31.0	47.9	0.7	0.3	0.23	0.48	17.41	17.88	68.65
31.4	48.5	37.4	298.2	0.03	298.20	35.23	333.42	144.94
30.4	47.1	1.2	0.8	0.76	1.59	19.40	20.99	80.17
31.4	48.5	0.5	1.8	0.16	1.92	12.32	14.23	44.25
31.6	48.9	0.6	1.6	0.14	1.72	13.99	15.71	43.39
30.9	47.8	1.0	0.7	0.33	1.03	20.13	21.16	69.11
31.1	47.9	1.6	1.3	0.03	1.34	28.02	29.36	492.80
31.5	48.8	1.0	2.1	0.21	2.28	19.14	21.42	65.98
31.4	48.2	1.6	6.6	0.70	7.35	25.57	32.92	57.77
31.0	47.6	1.7	7.9	0.79	8.65	31.58	40.23	98.03
31.3	48.0	1.7	2.4	0.59	2.96	28.09	31.05	78.99
31.4	48.3	0.7	1.1	0.16	1.28	30.92	32.20	117.79
31.8	48.7	1.5	0.9	0.51	1.37	33.12	34.49	120.96
31.6	48.5	0.8	0.6	0.16	0.80	40.58	41.38	88.40
31.5	48.4	0.8	0.4	0.05	0.49	31.71	32.20	89.32
32.0	49.0	0.8	1.5	0.37	1.84	18.05	19.89	70.09
32.2	49.3	0.7	1.8	0.38	2.19	16.96	19.14	57.05
32.3	49.5	0.5	2.1	0.24	2.31	14.77	17.07	48.12
32.2	49.2	0.6	0.9	0.60	1.55	32.99	34.54	78.14
32.5	49.6	0.4	3.4	0.42	3.86	17.15	21.01	44.63
32.2	49.2	0.4	3.0	0.30	3.27	31.80	35.07	49.79
31.7	48.6	0.6	0.5	0.31	0.83	16.59	17.42	81.65
31.6	48.4	0.4	0.5	0.41	0.93	25.56	26.49	95.02
31.7	48.6	17.2	354.7	0.03	354.70	bdl	277.63	173.57
31.3	48.0	0.7	0.6	0.26	0.86	19.51	20.37	98.22
32.2	49.3	0.4	1.6	0.33	1.92	17.14	19.05	55.02
32.2	49.2	0.5	0.9	0.71	1.57	16.08	17.65	53.72
31.4	48.2	0.4	0.6	0.47	1.07	17.18	18.25	132.17
31.8	48.7	1.2	0.8	0.51	1.29	17.11	18.40	137.58
32.2	49.2	1.0	1.0	0.47	1.46	32.46	33.92	62.78
30.6	47.1	1.4	8.3	0.88	9.19	29.32	38.51	77.14
30.8	47.3	1.2	8.1	0.72	8.87	21.32	30.19	135.54
30.4	46.7	1.2	6.1	0.79	6.91	25.58	32.49	100.21
31.7	48.6	0.9	1.4	0.44	1.88	37.49	39.37	119.46
31.9	48.8	1.3	1.4	0.36	1.80	41.59	43.39	166.69
31.6	48.4	0.7	1.9	0.44	2.37	32.42	34.78	167.35
31.8	48.7	0.7	2.4	0.41	2.81	33.98	36.79	87.68
32.4	49.5	0.7	1.8	0.06	1.82	24.38	26.20	61.45
32.1	49.1	0.6	2.6	0.07	2.63	18.20	20.83	56.56
32.0	49.0	0.4	2.6	0.09	2.65	20.13	22.79	44.89
32.0	48.9	0.5	2.6	0.30	2.94	31.84	34.78	60.69

32.2	49.3	0.3	1.9	0.07	1.99	13.27	15.27	38.54
32.3	49.5	0.3	2.2	0.17	2.41	27.78	30.19	64.89
31.8	48.7	0.7	1.6	0.07	1.63	24.19	25.83	70.12
31.8	48.7	0.6	1.4	0.27	1.63	16.04	17.68	90.48
31.7	48.7	38.6	395.4	0.03	395.47	bdl	333.42	176.19
31.4	48.2	0.4	1.4	0.16	1.60	23.16	24.77	93.32
32.0	49.0	0.3	2.2	0.24	2.48	15.29	17.76	50.40
32.1	49.1	0.6	2.7	0.38	3.10	14.86	17.96	45.01
31.5	48.3	0.9	3.2	0.25	3.45	21.23	24.68	87.16
31.7	48.6	1.0	3.4	0.34	3.78	23.26	27.03	86.33
32.2	49.3	0.4	1.0	0.34	1.38	19.80	21.18	49.37
31.1	47.7	1.4	10.9	1.11	12.01	19.40	31.41	70.85
30.0	46.2	1.7	9.7	1.07	10.77	25.82	36.59	109.64
31.0	47.6	1.3	6.1	0.66	6.81	21.43	28.24	115.13
31.3	48.0	0.9	6.0	0.61	6.60	15.95	22.55	60.74
31.9	48.8	1.0	6.6	0.58	7.20	11.07	18.27	61.58
31.6	48.5	0.7	5.0	0.71	5.72	34.03	39.75	59.25
31.9	48.9	0.7	5.3	0.84	6.12	36.31	42.43	57.49
32.0	48.9	0.8	6.5	0.49	7.03	15.52	22.55	47.89
31.9	48.8	0.7	5.4	0.47	5.91	16.49	22.41	43.44
31.7	48.6	0.6	8.5	0.59	9.09	16.48	25.57	47.07
31.6	48.5	1.1	5.4	0.61	6.05	14.86	20.91	80.73
31.4	48.2	1.2	5.4	1.08	6.48	19.69	26.17	77.04
31.9	48.9	14.6	117.3	0.03	117.37	bdl	85.77	105.08
30.2	46.5	1.2	3.63	2.65	6.28	20.04	26.32	100.73
31.9	49.4	0.5	3.5	0.47	3.97	12.37	16.34	40.50
30.8	48.0	0.5	4.3	0.87	5.12	14.35	19.47	65.27
31.5	48.9	1.3	11.9	0.59	12.50	9.74	22.23	75.09
32.1	49.7	0.4	3.9	0.56	4.46	17.29	21.75	39.05

PON	C/N						Total
uM N	Ratio	uM TON	uM TN	ug/L Chla	ug/L Phaeo	Ratio	Pigments
							ug/L
16.95	5.45	45.76	47.57	7.56	3.17	70%	10.73
8.85	7.25	34.18	38.32	1.37	2.49	35%	3.86
7.96	7.14	32.70	35.99	1.31	1.79	42%	3.09
14.39	7.68	37.10	37.67	9.65	2.30	81%	11.95
176.99	12.49	198.20	198.82	84.99	<0.05	100%	73.47
12.74	7.04	30.44	31.04	9.82	4.11	71%	13.93
12.12	6.80	45.03	47.06	10.07	2.83	78%	12.90
10.49	6.63	43.45	43.70	8.02	3.46	70%	11.47
10.10	6.52	27.84	28.37	6.45	3.25	66%	9.70
9.99	6.11	40.16	41.19	5.58	2.11	73%	7.69
9.41	6.16	29.26	32.37	4.63	2.79	62%	7.42
9.42	6.03	41.78	43.21	3.56	1.69	68%	5.25
7.23	6.52	26.74	28.01	3.59	1.95	65%	5.54
11.62	5.91	25.79	26.18	6.78	2.48	73%	9.26
10.72	5.87	26.27	26.53	7.45	2.07	78%	9.52
16.22	6.00	60.43	315.62	5.25	9.29	36%	14.54
12.50	6.15	36.70	37.21	7.25	5.21	58%	12.46
8.27	6.34	23.26	23.54	5.21	2.06	72%	7.27
7.01	6.37	25.57	25.77	7.78	1.81	81%	9.60
13.08	5.70	31.20	31.55	8.25	2.30	78%	10.55
13.08	5.70	33.30	33.68	13.60	2.43	85%	16.03
10.24	6.26	44.18	44.89	5.60	2.39	70%	7.99
9.17	6.72	32.96	38.24	3.63	1.43	72%	5.06
11.69	7.07	45.71	50.32	3.29	2.31	59%	5.60
10.83	8.44	44.35	47.72	3.35	2.44	58%	5.79
ND	ND	ND	ND	ND	ND	ND	ND
22.64	5.88	45.06	51.71	13.45	3.94	77%	17.39
21.47	6.07	48.32	52.43	11.62	7.36	61%	18.98
16.77	5.75	48.44	49.31	12.45	3.22	79%	15.67
13.72	4.85	46.91	48.59	6.01	2.64	69%	8.65
8.72	6.53	26.07	28.49	5.16	1.70	75%	6.86

10.74	5.63	25.67	28.57	4.74	1.32	78%	6.06
6.48	6.49	21.05	23.06	2.61	1.11	70%	3.72
7.39	6.75	38.33	40.52	4.31	3.09	58%	7.39
5.12	6.42	18.73	21.44	1.87	0.87	68%	2.73
4.10	7.96	15.82	17.76	1.83	0.74	71%	2.57
11.87	5.65	35.10	36.59	6.21	2.99	68%	9.20
11.38	6.03	28.78	29.26	6.11	2.67	70%	8.79
26.23	5.53	61.45	359.65	4.93	34.94	12%	39.87
14.77	5.43	34.16	35.75	6.44	3.59	64%	10.03
6.38	6.94	18.69	20.61	2.41	0.51	83%	2.92
7.36	5.89	21.35	23.07	2.48	0.93	73%	3.41
11.97	5.77	32.10	33.13	5.88	2.65	69%	8.53
49.61	9.93	77.63	78.97	144.33	2.43	98%	147.44
8.96	7.36	28.11	30.38	3.53	1.23	74%	4.76
8.16	7.08	33.74	41.08	2.71	2.01	57%	4.72
12.98	7.55	44.57	53.22	3.91	3.29	54%	7.20
10.81	7.31	38.90	41.86	2.80	1.85	60%	4.64
19.83	5.94	50.75	52.03	9.32	2.54	79%	11.86
18.22	6.64	51.34	52.71	10.43	6.75	61%	17.17
15.70	5.63	56.28	57.08	9.08	0.47	95%	9.56
14.30	6.25	46.01	46.49	7.13	2.85	71%	9.98
10.33	6.79	28.38	30.21	4.75	1.78	73%	6.53
8.15	7.00	25.11	27.29	3.35	1.25	73%	4.60
5.82	8.27	20.59	22.89	2.68	2.33	53%	5.01
12.66	6.17	45.65	47.20	5.78	3.02	66%	8.80
6.30	7.08	23.45	27.31	2.23	1.73	56%	3.96
7.35	6.78	39.15	42.42	1.98	1.90	51%	3.88
12.58	6.49	29.17	30.00	6.55	3.01	69%	9.56
13.87	6.85	39.43	40.36	7.33	3.21	70%	10.54
28.06	6.19	ND	305.69	24.29	107.61	18%	131.90
16.45	5.97	35.96	36.82	6.73	4.39	61%	11.13
8.15	6.75	25.29	27.21	2.87	0.46	86%	3.33
8.39	6.40	24.47	26.04	3.81	0.23	94%	4.04
18.17	7.27	35.35	36.42	14.53	5.01	74%	19.54
24.82	5.54	41.93	43.21	22.21	6.30	77%	27.49
8.96	7.01	41.42	42.88	3.46	2.56	58%	6.02
10.02	7.70	39.34	48.54	2.40	3.48	41%	5.88
15.42	8.79	36.74	45.61	2.47	4.13	37%	6.60
13.32	7.53	38.89	45.80	5.05	6.59	43%	11.64
17.63	6.78	55.12	57.00	15.45	2.19	88%	17.64
26.74	6.23	68.33	70.13	27.08	5.06	87%	38.72
23.23	7.20	55.64	58.01	25.12	2.69	91%	29.25
14.19	6.18	48.17	50.98	16.02	1.93	89%	17.95
10.10	6.08	34.49	36.31	6.70	3.62	65%	10.32
9.05	6.25	27.26	29.89	5.03	3.21	61%	8.24
6.67	6.73	26.81	29.46	3.69	2.54	59%	6.22
10.30	5.89	42.14	45.08	5.57	3.26	63%	8.83

5.95	6.48	19.22	21.21	2.49	1.82	58%	4.30
9.83	6.60	37.61	40.02	2.50	1.63	60%	4.13
12.89	5.44	37.08	38.71	7.46	6.59	53%	14.05
15.96	5.67	32.00	33.64	11.90	7.65	61%	19.55
30.13	5.85	ND	363.56	<0.05	119.77	-3%	119.79
16.00	5.83	39.17	40.77	7.73	5.97	56%	13.71
9.31	5.41	24.60	27.07	3.58	1.61	69%	5.20
7.21	6.24	22.08	25.18	3.64	2.45	60%	6.09
16.54	5.27	37.77	41.22	17.69	5.30	77%	24.32
15.23	5.67	38.48	42.26	10.56	6.80	61%	17.36
8.38	5.89	28.18	29.55	3.00	3.50	46%	6.50
10.14	6.98	29.54	41.55	1.39	2.70	34%	4.09
14.32	7.66	40.13	50.90	3.72	4.41	46%	8.13
14.97	7.69	36.41	43.22	3.69	6.15	37%	9.83
11.10	5.47	27.05	33.65	6.44	6.88	48%	13.32
10.14	6.08	21.20	28.40	3.70	8.16	31%	11.86
10.53	5.63	44.55	50.28	5.85	7.89	43%	13.75
10.41	5.52	46.71	52.84	5.33	7.26	42%	12.59
7.47	6.41	22.99	30.02	2.59	4.47	37%	7.06
6.87	6.32	23.37	29.28	2.35	4.21	36%	6.56
7.48	6.29	23.96	33.05	2.01	4.12	33%	6.13
13.93	5.80	28.79	34.84	3.57	5.42	40%	9.00
14.42	5.34	34.11	40.60	7.33	3.91	65%	11.24
19.43	5.41	ND	105.20	<0.05	20.95	-31%	20.97
18.37	5.48	38.41	44.69	9.76	7.40	57%	17.17
6.39	6.34	18.76	22.73	2.71	3.31	45%	6.03
11.02	5.92	25.37	30.49	4.00	4.73	46%	8.73
12.99	5.78	22.73	35.23	3.58	4.68	43%	8.26
5.78	6.76	23.06	27.52	3.00	1.89	61%	4.90

Sulfide interference

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