

SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

SOUTH BAY WATER RECLAMATION PLANT

NPDES Permit No. CA0109045
SDRWQCB Order No. R9-2013-0006

FEBRUARY 2019

Environmental Monitoring and Technical Services
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March 31, 2019

Mr. David W. Gibson, Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attention: POTW Compliance Unit

Dear Mr. Gibson:

Enclosed is the February 2019 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2013-0006 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, NPDES Permit No. CA0109045.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the South Bay outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan. These data are also presented in the monthly report submitted by the International Boundary and Water Commission, U.S. Section for discharge from the South Bay International Wastewater Treatment Plant (Order No. R9-2014-0009 as amended Order Nos. R9-2014-0094 and R9-2017-0024, NPDES Permit No. CA0108928).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Peter S. Vroom, Ph.D.
Deputy Director, Public Utilities Department

TS/amw

cc: U.S. Environmental Protection Agency, Region 9

INTRODUCTION

Monthly reports of water quality and ocean conditions from Playa Blanco, Mexico to Coronado, USA are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2013-0006 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, NPDES Permit No. CA0109045, for the South Bay Water Reclamation Plant (SBWRP), South Bay Ocean Outfall (SBOO). This report includes receiving waters monitoring data collected from all shore, kelp and offshore stations specified in the above order. Data for influent and effluent monitoring activities for the SBWRP are presented in separate reports.

MATERIALS AND METHODS

Shore Stations

Water quality monitoring was conducted at 11 stations located along the shore from Playa Blanca, Mexico to Coronado, USA (see station locations map). Three sites are located south of the international border (stations S0, S2, S3), while eight sites are in the United States (stations S4–S6 and S8–S12).

Seawater samples were collected from the surf zone at each station on a weekly basis. These samples were subsequently transported to the City's Marine Microbiology Laboratory and analyzed for the presence of total coliform, fecal coliform, and *Enterococcus* bacteria. Visual observations of water color and clarity, surf height, human or animal activity, and weather conditions were recorded at the time of sample collection. Wind speed and direction were measured using a hand-held anemometer with a compass.

Kelp Bed Stations

Seven kelp bed and other nearshore stations (I19, I24, I25, I26, I32, I39, I40; collectively referred to as “kelp” stations herein) were sampled four times during the month according to NPDES permit specifications. Six stations (I19, I24, I25, I26, I32, I40) are located along the 9- m depth contour, and one (I39) is located along the 18-m depth contour. Three of these stations, I25, I26, and I39, were selected based on their proximity to suitable substrates for the Imperial Beach kelp bed (see station locations map); however, this kelp bed has been historically transient and variable in terms of size and density. Thus, these three stations are only occasionally located within an area where kelp is actually found.

The seven kelp stations are sampled on a weekly basis during the month. Routine monitoring at each kelp site consists of collecting seawater samples at three discrete depths for bacteriological analyses (total coliforms, fecal coliforms, and *Enterococcus* bacteria) and generating water column profiles of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, and transmissivity. Visual observations of weather and water conditions are also recorded at all stations.

Seawater samples at the kelp bed stations are primarily collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for bacteriological analyses were drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column profiles of the various physical/chemical parameters were taken using a CTD. The CTD collected these physical/chemical data at a rate ≥ 4 scans per second. The data were then internally averaged using the CTD proprietary software, Seasoft, to create water column profiles equivalent

to one reading per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

Offshore Stations

Quarterly offshore water quality sampling is typically conducted over three days during February, May, August, and November for a total of 40 stations during each month (see station locations map). These offshore stations (I1–I40) are arranged in a grid surrounding the discharge site, and are generally located along the 9, 19, 28, 38, and 55-m depth contours. The seven offshore sites designated as kelp bed stations (described above) are included as part of the monthly offshore water quality sampling, however the data from these seven stations are reported within the kelp bed station section of the report with the other four days of kelp bed water quality sampling. Monitoring at all sites included measurements of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, and chromomorphous dissolved organic matter (CDOM). Visual observations of weather and water conditions were also recorded at all stations. Seawater samples for the analysis of indicator bacteria, suspended solids, and oil and grease concentrations were collected at 28 of the stations.

At these offshore stations, water samples for bacteriological analyses were collected using a rosette sampler with Niskin bottles. Measurements of the physical/chemical parameters listed above were taken using a Sea-Bird CTD. Additionally, CTD profile data for depths closest to those at which bacteriological samples were collected were extracted from the CTD profiles and are presented with the bacteriological data.

Bacteriological Reporting and Quality Assurance

Estimated values for bacteriological analyses are denoted by greater than (>), less than (<), or estimated (e) qualifiers and result from plates with colony counts above or below the permissible counting limits established in Bordner et al. (1978)^[1]. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

Results of the bacteriological analysis of seawater samples collected from each of the shore, kelp bed, and offshore stations located within State waters are assessed relative to the geometric mean and single sample maximum water-contact standards specified in the California Ocean Plan (Ocean Plan). The seven standards are defined as follows:

30-day Geometric Mean: The following standards are based on the geometric mean of the five most recent samples from each site.

- (1) Total coliform density shall not exceed 1000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 200 CFU/100 mL;
- (3) *Enterococcus* density shall not exceed 35 CFU/100 mL.

^[1]Bordner, R., J. Winter, and P. Scarpino (eds.). (1978). Microbiological Methods for Monitoring the Environment: Water and Wastes, EPA Research and Development, EPA-600/8-78-017. 337 p.

Single Sample Maximums:

- (1) Total coliform density shall not exceed 10,000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 400 CFU/100 mL;
- (3) *Enterococcus* density shall not exceed 104 CFU/100 mL;
- (4) Total coliform density shall not exceed 1,000 CFU/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Compliance with the seven Ocean Plan standards are summarized below for the stations located in USA waters. In contrast, no such compliance summaries are presented for the three shore stations located in Mexican waters south of the International Border (i.e., S0, S2, and S3) since this region is not subject to the Ocean Plan standards.

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated exactly the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2019 Quality Assurance Report, which will be completed in March 2020.

SUMMARY OF RESULTS

➤ **Shoreline Water Quality Sampling**

- Because of site access restrictions in Mexico, the South Bay shoreline sampling is typically carried out on the same day each week (i.e., Tuesday) in order to coordinate sampling between the Mexican and USA based stations. Seawater samples at the three shore stations located south of the USA/Mexico border (i.e., stations S0, S2 and S3) are presently collected by the Comisión Internacional de Límites y Aguas (CILA) and transported to the IBWC for subsequent delivery to the City's Marine Microbiology Lab, while samples from the eight stations located in USA waters are sampled by City staff.
- During February, six of the eight shore stations located north of the border were out of compliance with various California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows (these standards do not apply to stations located in Mexican waters):
 - The 30-day geometric mean standard for total coliform densities was exceeded at stations S4, S5, S6, S10, and S11.
 - The 30-day geometric mean standard for fecal coliform densities was exceeded at stations S4, S5, S6, S10, and S11.
 - The 30-day geometric mean standard for *Enterococcus* bacteria was exceeded at stations S4, S5, S6, S10, S11, and S12.

- The single sample maximum (SSM) standard for total coliform densities was exceeded at stations S4, S5, S6, S10, and S11.
 - The SSM standard for fecal coliform densities was exceeded at stations S4, S5, S6, S10, and S11.
 - The SSM standard for *Enterococcus* bacteria was exceeded at stations S4, S5, S6, S10, and S11.
 - The SSM standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 was exceeded at stations S4, S5, S6, S10, and S11.
 - Per permit requirements, resamples were collected in response to these SSM exceedances (see Table 2.8 for details).
- Although the Ocean Plan standards do not apply to these stations, bacteria densities exceeded one or more benchmark levels (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; *Enterococcus* >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1) in seawater samples collected at stations S0, S2, and S3 on one or more days during February.
- Historical analyses of Ocean Plan compliance rates for the South Bay outfall shore and kelp monitoring stations, combined with the results of satellite imagery data, suggest that outflows from the Tijuana River and Los Buenos Creek, as well as surface runoff during or after rain events (storms), are likely to be the cause of impacted water quality along the shore and in near shore recreational waters in the South Bay region. See the City of San Diego’s most recent *Biennial Receiving Waters Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls* for details (<http://www.sandiego.gov/mwwd/environment/oceanmonitor/reports/index.shtml>).
- Notable observations for February included a sewage-like odor at station S4 on February 8, 16, and 22, station S5 on February 1, 3, 5, 12, 14, 16, 18, 19, 24, 26, and 28, station S6 on February 14 and 16, station S10 on February 1, 3, 5, 16, 19, and 22, and station S11 on February 3, 5, 14, 16, 18, and 28.

➤ **Kelp Bed Water Quality Sampling**

- The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled four times during the month (i.e. February 7, 11, 19, 25).
- During February, six of seven stations were out of compliance with various Ocean Plan water contact standards on one or more days as follows:
 - The 30-day geometric mean standard for total coliform densities was exceeded at stations I24 and I40.
 - The 30-day geometric mean standard for fecal coliform densities was exceeded at stations I24 and I40.
 - The 30-day geometric mean standard for *Enterococcus* bacteria was exceeded at stations I19, I24, I26, and I40.
 - The single sample maximum (SSM) standard for total coliform densities was exceeded at station I40.
 - The SSM standard for fecal coliform densities was exceeded at stations I19, I25, and I40.
 - The SSM standard for *Enterococcus* bacteria was exceeded at stations I19, I24, I25, I26, I32, and I40.

- The SSM standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 was exceeded at stations I19, I24, I25, and I40.
- Water column temperatures ranged from 12.08 to 15.62°C. The difference between surface and bottom waters ranged from 0.06 to 1.79°C, indicating the water column was stratified at some of these sites during the month.
- Chlorophyll *a* concentrations ranged from 0.42 to 4.76 µg/L at the kelp bed stations, suggesting the absence of phytoplankton blooms during the month.
- Notable observations for February included foam at station I40 on February 19.

➤ **Offshore Water Quality Sampling**

- Quarterly offshore water quality sampling was conducted over three days during the month (i.e., February 12, 13, 15).
- During February, two offshore stations located within State jurisdictional waters (i.e., I12, I14, I16, I18, I22, I23, I33, I36–I38) were out of compliance with the relevant Ocean Plan single sample maximum standards on one or more days as follows:
 - The SSM standard for total coliform densities was exceeded at stations I36 and I38.
 - The SSM standard for fecal coliform densities was exceeded at stations I36 and I38.
 - The SSM standard for *Enterococcus* bacteria was exceeded at stations I36 and I38.
 - The SSM standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 was exceeded at station I38.
- Although the Ocean Plan standards do not apply to stations outside State jurisdictional waters, bacteria densities at stations I11 and I30 exceeded benchmark levels on one or more days (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; *Enterococcus* >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1).
- Water column temperatures ranged from 13.29 to 15.47°C at the offshore sites. The difference between surface and bottom waters ranged from 0.07 to 2.18°C, indicating that the water column was stratified at some of the offshore stations during the month.
- Chlorophyll *a* concentrations ranged from 0.3 to 2.26 µg/L at the offshore sites, suggesting the absence of phytoplankton blooms during the month.
- CDOM data are available upon request.
- Nothing of sewage origin was observed at any of the offshore stations.



TABLES AND FIGURES

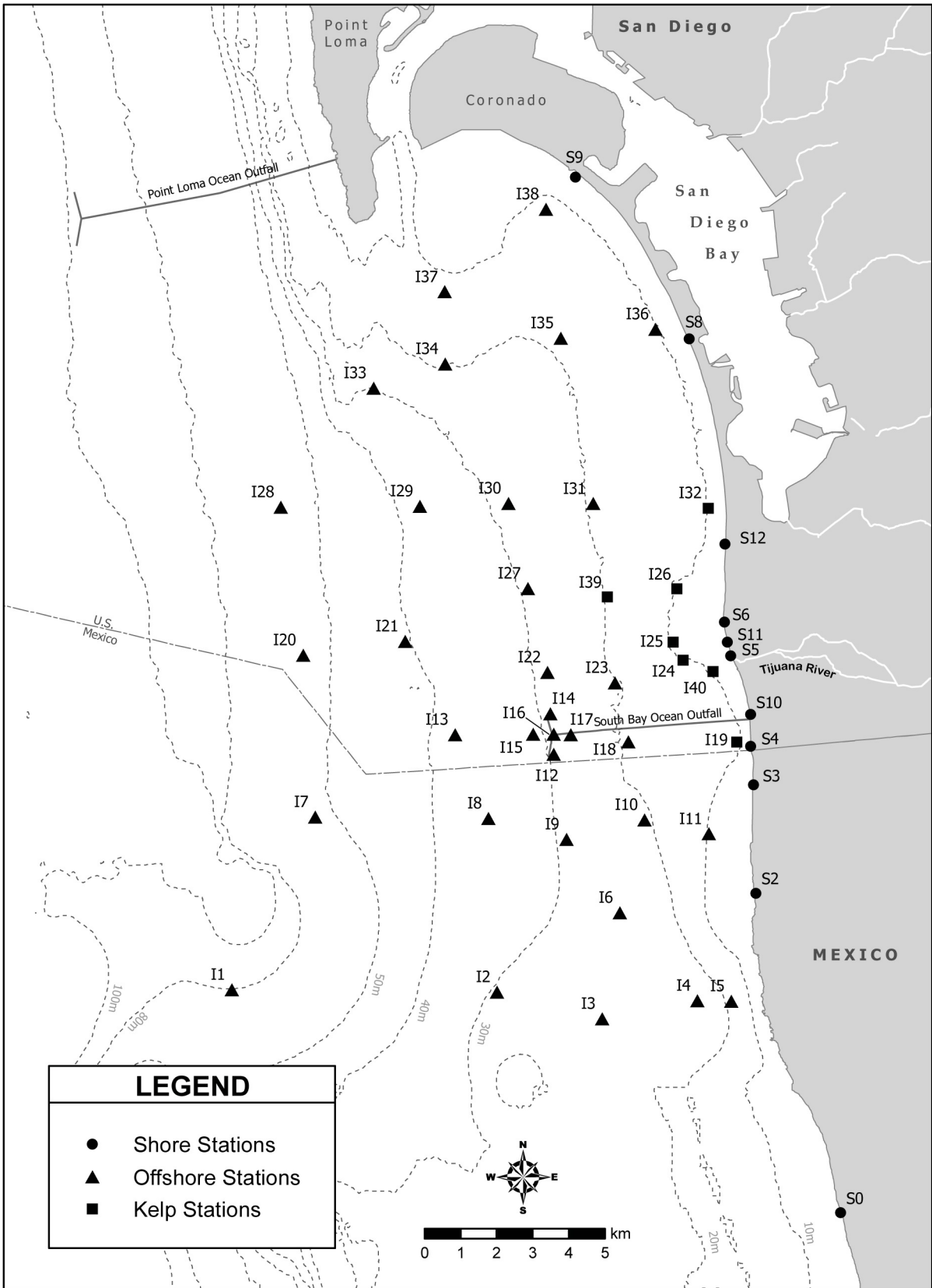


Figure 1.1 Station Map

Shore Stations

Table 2.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1,000 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	3091	3527	374	30	6*	1802	687	255
02 Feb 2019	3091	3527	374	30	6*	1802	687	255
03 Feb 2019	3091	4687	374	30	6*	2461	1018	255
04 Feb 2019	3091	4687	374	30	6*	2461	1018	255
05 Feb 2019	3091	5192	374	30	6*	3110	1383	255
06 Feb 2019	3400	4786	399	28	8	3731	1272	245
07 Feb 2019	3071	4802	656	47	11*	3461	2017	404
08 Feb 2019	3386	5242	656	47	11*	4103	2017	404
09 Feb 2019	3284	6279	656	47	11*	4920	2017	404
10 Feb 2019	2711	6748	656	47	11*	5609	2017	404
11 Feb 2019	2711	6748	656	47	11*	5609	2017	404
12 Feb 2019	2125	7177	745	41	13	5108	2297	167
13 Feb 2019	2125	7177	745	41	13	5108	2297	167
14 Feb 2019	2553	7177	745	19	11*	5667	2297	68
15 Feb 2019	2553	7177	745	19	11*	5667	2297	68
16 Feb 2019	3462	7177	866	11*	11*	7738	2385	39*
17 Feb 2019	3462	6748	1204	11*	11*	7738	2982	39*
18 Feb 2019	3170	5677	866	11*	11*	6625	2276	39*
19 Feb 2019	3122	4698	701	12	8	7090	1840	53
20 Feb 2019	3122	4698	701	12	8	7090	1840	53
21 Feb 2019	3071	6571	1056	10*	6*	6744	2892	38*
22 Feb 2019	3071	6571	1056	10*	6*	6744	2892	38*
23 Feb 2019	2774	6571	1056	10*	6*	6744	2892	38*
24 Feb 2019	2328	6571	1056	10*	6*	6744	2892	38*
25 Feb 2019	2328	6571	1056	10*	6*	6744	2892	38*
26 Feb 2019	1393	7002	643	12	12	5725	3379	24
27 Feb 2019	1393	7002	643	12	12	5725	3379	24
28 Feb 2019	2410	7002	710	18*	18*	5885	4006	23*

* Geometric mean calculated using n<5

Table 2.2

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	607	1182	81	12	5*	215	231	60
02 Feb 2019	607	1182	81	12	5*	215	231	60
03 Feb 2019	607	1864	81	12	5*	264	374	60
04 Feb 2019	607	1864	81	12	5*	264	374	60
05 Feb 2019	607	2177	81	12	5*	425	550	60
06 Feb 2019	629	1904	79	12	5	499	468	54
07 Feb 2019	550	2019	121	17	5*	467	858	86
08 Feb 2019	591	1927	121	17	5*	608	858	86
09 Feb 2019	581	2552	121	17	5*	823	858	86
10 Feb 2019	453	2875	121	17	5*	1001	858	86
11 Feb 2019	453	2875	121	17	5*	1001	858	86
12 Feb 2019	363	3184	147	15	4	951	991	54
13 Feb 2019	363	3184	147	15	4	951	991	54
14 Feb 2019	431	3184	180	8	3*	1018	1117	32
15 Feb 2019	431	3184	180	8	3*	1018	1117	32
16 Feb 2019	571	3184	196	5*	3*	1588	1158	20
17 Feb 2019	571	2875	255	5*	3*	1588	1520	11
18 Feb 2019	488	2245	149	5*	3*	1311	986	11
19 Feb 2019	435	1745	111	4	3	1280	670	12
20 Feb 2019	435	1745	111	4	3	1280	670	12
21 Feb 2019	434	2503	179	5*	2*	1193	1117	11*
22 Feb 2019	434	2503	179	5*	2*	1193	1117	11*
23 Feb 2019	372	2503	179	5*	2*	1193	1117	11*
24 Feb 2019	296	2503	179	5*	2*	1193	1117	11*
25 Feb 2019	296	2503	179	5*	2*	1193	1117	11*
26 Feb 2019	158	2800	102	4	2	984	1387	8
27 Feb 2019	158	2800	102	4	2	984	1387	8
28 Feb 2019	238	2800	104	5*	2*	987	1099	8*

* Geometric mean calculated using n<5

Table 2.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	66	778	44	6*	4*	164	77	22
02 Feb 2019	66	778	44	6*	4*	164	77	22
03 Feb 2019	66	1085	44	6*	4*	252	136	22
04 Feb 2019	66	1085	44	6*	4*	252	136	22
05 Feb 2019	66	1581	44	6*	4*	379	198	22
06 Feb 2019	90	1411	52	8	4	426	200	27
07 Feb 2019	70	1555	82	11*	5*	458	317	41
08 Feb 2019	97	1721	94	11*	5*	509	301	41
09 Feb 2019	94	2311	94	11*	5*	678	301	41
10 Feb 2019	87	2623	101	11*	5*	705	286	41
11 Feb 2019	87	2623	101	11*	5*	705	286	41
12 Feb 2019	86	2924	106	11	5	590	307	31
13 Feb 2019	86	2924	106	11	5	590	307	31
14 Feb 2019	86	2924	129	7*	4*	590	352	20
15 Feb 2019	86	2924	129	7*	4*	590	352	20
16 Feb 2019	74	2924	164	7*	4*	721	420	15
17 Feb 2019	95	2623	208	7*	4*	721	574	15
18 Feb 2019	95	2104	190	7*	4*	721	489	15
19 Feb 2019	106	2211	173	6	4	677	433	20
20 Feb 2019	106	2211	173	6	4	677	433	20
21 Feb 2019	135	2698	270	8*	4*	787	578	13
22 Feb 2019	236	2770	270	8*	4*	987	578	13
23 Feb 2019	236	2770	270	8*	4*	987	578	21*
24 Feb 2019	262	3019	270	8*	4*	995	578	21*
25 Feb 2019	262	3019	270	8*	4*	995	578	21*
26 Feb 2019	198	3275	173	6	4	802	669	13
27 Feb 2019	198	3275	173	6	4	802	669	13
28 Feb 2019	283	3275	181	7*	3*	874	623	17*

* Geometric mean calculated using n<5

Table 2.4

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	ns	E	ns	ns	ns	ND	E	ns
03 Feb 2019	ns	E	ns	ns	ns	E	E	ns
05 Feb 2019	ns	E	ns	ns	ns	E	E	ns
06 Feb 2019	IC	IC	IC	IC	IC	E	IC	IC
08 Feb 2019	IC	E	ns	ns	ns	E	ns	ns
10 Feb 2019	IC	E	ns	ns	ns	E	ns	ns
12 Feb 2019	IC	E	IC	IC	IC	IC	IC	IC
14 Feb 2019	E	E	E	ns	ns	E	E	ns
16 Feb 2019	E	E	E	ns	ns	E	E	ns
18 Feb 2019	IC	IC	IC	ns	ns	IC	IC	ns
19 Feb 2019	IC	IC	IC	IC	IC	E	IC	IC
21 Feb 2019	ns	ns	ns	ns	ns	IC	ns	ns
26 Feb 2019	IC	E	IC	IC	IC	IC	E	IC
28 Feb 2019	ns	E	ns	ns	ns	ns	IC	ns

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.5

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	ns	E	ns	ns	ns	ND	E	ns
03 Feb 2019	ns	E	ns	ns	ns	E	E	ns
05 Feb 2019	ns	E	ns	ns	ns	E	E	ns
06 Feb 2019	E	IC	IC	IC	IC	E	IC	IC
08 Feb 2019	E	E	ns	ns	ns	E	ns	ns
10 Feb 2019	IC	E	ns	ns	ns	E	ns	ns
12 Feb 2019	IC	E	E	IC	IC	E	E	IC
14 Feb 2019	E	E	E	ns	ns	E	E	ns
16 Feb 2019	E	E	E	ns	ns	E	E	ns
18 Feb 2019	IC	IC	IC	ns	ns	IC	IC	ns
19 Feb 2019	IC	IC	IC	IC	IC	E	IC	IC
21 Feb 2019	ns	ns	ns	ns	ns	IC	ns	ns
26 Feb 2019	IC	E	IC	IC	IC	IC	E	IC
28 Feb 2019	ns	E	ns	ns	ns	ns	IC	ns

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.6

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	ns	E	ns	ns	ns	E	E	ns
03 Feb 2019	ns	E	ns	ns	ns	E	E	ns
05 Feb 2019	ns	E	ns	ns	ns	E	E	ns
06 Feb 2019	E	E	E	IC	IC	E	E	IC
08 Feb 2019	E	E	E	ns	ns	E	E	ns
10 Feb 2019	IC	E	E	ns	ns	E	E	ns
12 Feb 2019	IC	E	E	IC	IC	IC	E	IC
14 Feb 2019	ns	E	E	ns	ns	ns	E	ns
16 Feb 2019	ns	E	E	ns	ns	ns	E	ns
18 Feb 2019	ns	E	IC	ns	ns	ns	IC	ns
19 Feb 2019	E	E	IC	IC	IC	E	IC	IC
21 Feb 2019	E	E	ns	ns	ns	E	ns	ns
22 Feb 2019	E	E	ns	ns	ns	E	ns	ns
24 Feb 2019	E	E	ns	ns	ns	E	ns	ns
26 Feb 2019	IC	E	IC	IC	IC	IC	E	IC
28 Feb 2019	ns	E	ns	ns	ns	ns	IC	ns

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table 2.7

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Feb 2019	ns	E	ns	ns	ns	ns	E	ns
03 Feb 2019	ns	E	ns	ns	ns	IC	E	ns
05 Feb 2019	ns	E	ns	ns	ns	E	E	ns
06 Feb 2019	E	E	IC	IC	IC	E	IC	IC
08 Feb 2019	E	IC	ns	ns	ns	E	ns	ns
10 Feb 2019	IC	E	ns	ns	ns	E	ns	ns
12 Feb 2019	E	E	E	IC	IC	E	E	IC
14 Feb 2019	E	E	E	ns	ns	E	E	ns
16 Feb 2019	E	E	E	ns	ns	E	E	ns
18 Feb 2019	IC	IC	IC	ns	ns	E	IC	ns
19 Feb 2019	IC	IC	IC	IC	IC	IC	IC	IC
21 Feb 2019	ns	ns	ns	ns	ns	IC	ns	ns
26 Feb 2019	IC	E	IC	IC	IC	IC	E	IC
28 Feb 2019	ns	E	ns	ns	ns	ns	IC	ns

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.8

Summary of water quality parameters at the SBOO shore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL. The fecal:total coliform ratio (F:T) is unitless. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero	F:T
S0	06 Feb 2019	1135	>16000	9200	5200	0.57
S0	12 Feb 2019	1110	6400	560	500	0.09
S0	19 Feb 2019	1050	>16000	6800	7200	0.42
S0	26 Feb 2019	1055	1000e	44	160e	0.04
S2	06 Feb 2019	1300	4600	440	260e	0.10
S2	12 Feb 2019	1040	2e	6e	2e	3.00
S2	19 Feb 2019	1015	6400	280e	400	0.04
S2	26 Feb 2019	1210	<20	<2	4e	0.10
S3	06 Feb 2019	1230	6000	380e	240e	0.06
S3	12 Feb 2019	955	540	48	14e	0.09
S3	19 Feb 2019	940	9200	380e	440	0.04
S3	26 Feb 2019	1130	<200	<2	2e	0.01
S4	06 Feb 2019	906	8800	900	820	0.10
S4	08 Feb 2019	929	9000	1200	880	0.13
S4	10 Feb 2019	758	440	40e	40	0.09
S4	12 Feb 2019	840	1400e	260e	80	0.19
S4	14 Feb 2019	854	>16000	2400e	ns	0.15
S4	16 Feb 2019	933	12000	1600e	ns	0.13
S4	18 Feb 2019	901	1200e	86	ns	0.07
S4	19 Feb 2019	1120	2600e	110	200e	0.04
S4	21 Feb 2019	932	ns	ns	220e	ns
S4	22 Feb 2019	920	ns	ns	>12000	ns
S4	24 Feb 2019	856	ns	ns	600	ns
S4	26 Feb 2019	818	94	6e	16e	0.06
S5	01 Feb 2019	1136	>16000	5800	7200	0.36
S5	03 Feb 2019	907	>16000	>12000	>12000	0.75
S5	05 Feb 2019	1002	>16000	>12000	11000	0.75
S5	06 Feb 2019	1025	1800e	380e	360e	0.21
S5	08 Feb 2019	816	15000	1100	5800	0.07
S5	10 Feb 2019	905	>16000	>12000	>12000	0.75
S5	12 Feb 2019	948	>16000	>12000	>12000	0.75
S5	14 Feb 2019	1008	>16000	>12000	>12000	0.75
S5	16 Feb 2019	1102	>16000	>12000	>12000	0.75
S5	18 Feb 2019	1037	600	90	120e	0.15
S5	19 Feb 2019	900	340e	44	320e	0.13
S5	21 Feb 2019	944	ns	ns	260e	ns
S5	22 Feb 2019	934	ns	ns	4000	ns
S5	24 Feb 2019	740	ns	ns	11000	ns
S5	26 Feb 2019	921	>16000	>12000	>12000	0.75
S5	28 Feb 2019	824	>16000	>12000	>12000	0.75
S6	06 Feb 2019	1040	580	68	160e	0.12
S6	08 Feb 2019	832	ns	ns	240e	ns
S6	10 Feb 2019	939	ns	ns	180e	ns
S6	12 Feb 2019	1001	1600e	480	160e	0.30

Station	Date	Time	Total	Fecal	Entero	F:T
S6	14 Feb 2019	1020	>16000	>12000	>12000	0.75
S6	16 Feb 2019	1147	>16000	2000e	4400	0.12
S6	18 Feb 2019	1112	120e	6e	84	0.05
S6	19 Feb 2019	927	160e	14e	68	0.09
S6	26 Feb 2019	931	20e	<2	<2	0.10
S8	06 Feb 2019	1209	20e	14e	32e	0.70
S8	12 Feb 2019	1121	20e	8e	10e	0.40
S8	19 Feb 2019	1230	14e	<2	4e	0.14
S8	26 Feb 2019	1047	<20	<2	<2	0.10
S9	06 Feb 2019	1232	20e	4e	6e	0.20
S9	12 Feb 2019	1151	20e	<2	4e	0.10
S9	19 Feb 2019	1304	<2	<2	2e	1.00
S9	26 Feb 2019	1118	140	<2	<2	0.01
S10	01 Feb 2019	1033	ND	ND	2800e	ND
S10	03 Feb 2019	752	>16000	900	5200	0.06
S10	05 Feb 2019	912	>16000	>12000	10000	0.75
S10	06 Feb 2019	859	>16000	1800e	1200	0.11
S10	08 Feb 2019	923	>16000	5000	1300e	0.31
S10	10 Feb 2019	733	>16000	4800	1000e	0.30
S10	12 Feb 2019	834	2200e	600	100e	0.27
S10	14 Feb 2019	848	>16000	2000e	ns	0.12
S10	16 Feb 2019	949	>16000	>12000	ns	0.75
S10	18 Feb 2019	920	1200e	160e	ns	0.13
S10	19 Feb 2019	1114	16000	960	360e	0.06
S10	21 Feb 2019	938	940	64	240e	0.07
S10	22 Feb 2019	927	ns	ns	>12000	ns
S10	24 Feb 2019	840	ns	ns	1100	ns
S10	26 Feb 2019	814	680	80	48	0.12
S11	01 Feb 2019	1140	>16000	>12000	200e	0.75
S11	03 Feb 2019	923	>16000	11000	12000	0.69
S11	05 Feb 2019	1010	>16000	>12000	6000	0.75
S11	06 Feb 2019	1033	600e	110	220e	0.18
S11	08 Feb 2019	824	ns	ns	180e	ns
S11	10 Feb 2019	923	ns	ns	160e	ns
S11	12 Feb 2019	956	7400	3600e	720	0.49
S11	14 Feb 2019	1013	>16000	>12000	>12000	0.75
S11	16 Feb 2019	1126	>16000	4000	5800	0.25
S11	18 Feb 2019	1053	200e	20e	72	0.10
S11	19 Feb 2019	914	220e	14e	88	0.06
S11	26 Feb 2019	926	>16000	>12000	4400	0.75
S11	28 Feb 2019	840	1300	28e	74	0.02
S12	06 Feb 2019	1050	200e	24e	92	0.12
S12	12 Feb 2019	1018	2e	<2	6e	1.00
S12	19 Feb 2019	1009	180e	34e	80e	0.19
S12	26 Feb 2019	945	4e	<2	<2	0.50

ns = not sampled

ND = no data

Comments

Station	Date	Depth	Parameter	Comments
S11	01 Feb 2019			Resample for 1/29/19; Unintentionally analyzed total and fecal coliforms; Reported to CDEH
S10	01 Feb 2019			Resample for 1/29/19; Lab accident; Total and fecal membrane filtration not run
S5	01 Feb 2019			Resample for 1/29/19
S5	03 Feb 2019			Resample
S10	03 Feb 2019			Resample
S11	03 Feb 2019			Resample
S5	05 Feb 2019			Resample
S10	05 Feb 2019			Resample
S11	05 Feb 2019			Resample
S4	08 Feb 2019			Resample
S5	08 Feb 2019			Resample
S6	08 Feb 2019			Resample
S10	08 Feb 2019			Resample
S11	08 Feb 2019			Resample
S4	10 Feb 2019			Resample
S5	10 Feb 2019			Resample
S6	10 Feb 2019			Resample
S10	10 Feb 2019			Resample
S11	10 Feb 2019			Resample
S4	14 Feb 2019			Resample
S5	14 Feb 2019			Resample
S6	14 Feb 2019			Resample
S10	14 Feb 2019			Resample
S11	14 Feb 2019			Resample
S4	16 Feb 2019			Resample
S5	16 Feb 2019			Resample
S6	16 Feb 2019			Resample
S10	16 Feb 2019			Resample
S11	16 Feb 2019			Resample
S4	18 Feb 2019			Resample
S5	18 Feb 2019			Resample
S6	18 Feb 2019			Resample
S10	18 Feb 2019			Resample
S11	18 Feb 2019			Resample
S4	21 Feb 2019			Resample
S5	21 Feb 2019			Resample
S10	21 Feb 2019			Resample
S4	22 Feb 2019			Resample
S5	22 Feb 2019			Resample
S10	22 Feb 2019			Resample
S4	24 Feb 2019			Resample

Station	Date	Depth	Parameter	Comments
S5	24 Feb 2019			Resample
S10	24 Feb 2019			Resample
S11	28 Feb 2019			Resample
S5	28 Feb 2019			Resample

Table 2.9

Summary of visual observations made during the month for each SBOO shore station by sample date.

Station	Date	Parameter	Value
S0	06 Feb 2019	Arrive Time	1135
S0	06 Feb 2019	Weather	Sunny
S0	06 Feb 2019	Wind Speed (kts)	3.6
S0	06 Feb 2019	Wind Dir	SW
S0	06 Feb 2019	Animal Life	5 Birds
S0	06 Feb 2019	Floatables	None
S0	06 Feb 2019	Water Color	Green
S0	06 Feb 2019	Current Direction	N
S0	06 Feb 2019	Water Temp (C)	15
S0	06 Feb 2019	Wave Height Low (ft)	2
S0	06 Feb 2019	High Tide (ft)	5.3
S0	06 Feb 2019	High Tide Time	923
S0	06 Feb 2019	Low Tide (ft)	-0.4
S0	06 Feb 2019	Low Tide Time	1620
S0	06 Feb 2019	Comments	Kelp; Algae; Water turbid; 1.0 L/s Water flowing from storm drain
S0	12 Feb 2019	Arrive Time	1110
S0	12 Feb 2019	Weather	Sunny
S0	12 Feb 2019	Wind Speed (kts)	0.8
S0	12 Feb 2019	Wind Dir	SW
S0	12 Feb 2019	Animal Life	20 Birds; 5 Dogs
S0	12 Feb 2019	Floatables	None
S0	12 Feb 2019	Water Color	Green
S0	12 Feb 2019	Current Direction	N
S0	12 Feb 2019	Water Temp (C)	13
S0	12 Feb 2019	Wave Height Low (ft)	2
S0	12 Feb 2019	High Tide (ft)	2.5
S0	12 Feb 2019	High Tide Time	1453
S0	12 Feb 2019	Low Tide (ft)	1.4
S0	12 Feb 2019	Low Tide Time	909
S0	12 Feb 2019	Comments	5 Persons; Water clear; 0.5 L/s water flowing from stormdrain
S0	19 Feb 2019	Arrive Time	1050
S0	19 Feb 2019	Weather	Sunny
S0	19 Feb 2019	Wind Speed (kts)	1.2
S0	19 Feb 2019	Wind Dir	SW
S0	19 Feb 2019	Animal Life	5 Birds
S0	19 Feb 2019	Floatables	None
S0	19 Feb 2019	Water Color	Green
S0	19 Feb 2019	Current Direction	N
S0	19 Feb 2019	Water Temp (C)	13
S0	19 Feb 2019	Wave Height Low (ft)	3
S0	19 Feb 2019	High Tide (ft)	6.6
S0	19 Feb 2019	High Tide Time	824
S0	19 Feb 2019	Low Tide (ft)	-1.7
S0	19 Feb 2019	Low Tide Time	1519
S0	19 Feb 2019	Comments	Water clear; Rough sea; 1.5 L/s water flowing from storm drain
S0	26 Feb 2019	Arrive Time	1055
S0	26 Feb 2019	Weather	Cloudy
S0	26 Feb 2019	Wind Speed (kts)	2.1

Station	Date	Parameter	Value
S0	26 Feb 2019	Wind Dir	SW
S0	26 Feb 2019	Animal Life	2 Dogs; 20 Seagulls
S0	26 Feb 2019	Floatables	None
S0	26 Feb 2019	Water Color	Green
S0	26 Feb 2019	Current Direction	N
S0	26 Feb 2019	Water Temp (C)	13
S0	26 Feb 2019	Wave Height Low (ft)	2
S0	26 Feb 2019	High Tide (ft)	2.8
S0	26 Feb 2019	High Tide Time	1644
S0	26 Feb 2019	Low Tide (ft)	0.7
S0	26 Feb 2019	Low Tide Time	1003
S0	26 Feb 2019	Comments	Kelp; Algae; Water turbid; 1.0 L/s water flowing from storm drain
S2	06 Feb 2019	Arrive Time	1300
S2	06 Feb 2019	Weather	Sunny
S2	06 Feb 2019	Wind Speed (kts)	6
S2	06 Feb 2019	Wind Dir	SW
S2	06 Feb 2019	Animal Life	5 Birds
S2	06 Feb 2019	Floatables	None
S2	06 Feb 2019	Water Color	Green
S2	06 Feb 2019	Current Direction	N
S2	06 Feb 2019	Water Temp (C)	16
S2	06 Feb 2019	Wave Height Low (ft)	2
S2	06 Feb 2019	High Tide (ft)	5.3
S2	06 Feb 2019	High Tide Time	923
S2	06 Feb 2019	Low Tide (ft)	-0.4
S2	06 Feb 2019	Low Tide Time	1620
S2	06 Feb 2019	Comments	Kelp; Algae; Water turbid; No flow from storm drain.
S2	12 Feb 2019	Arrive Time	1040
S2	12 Feb 2019	Weather	Sunny
S2	12 Feb 2019	Wind Speed (kts)	1.2
S2	12 Feb 2019	Wind Dir	SW
S2	12 Feb 2019	Animal Life	15 Birds
S2	12 Feb 2019	Floatables	None
S2	12 Feb 2019	Water Color	Green
S2	12 Feb 2019	Current Direction	N
S2	12 Feb 2019	Water Temp (C)	13
S2	12 Feb 2019	Wave Height Low (ft)	2
S2	12 Feb 2019	High Tide (ft)	2.5
S2	12 Feb 2019	High Tide Time	1453
S2	12 Feb 2019	Low Tide (ft)	1.4
S2	12 Feb 2019	Low Tide Time	909
S2	12 Feb 2019	Comments	5 Persons; Water clear; No flow from stormdrain
S2	19 Feb 2019	Arrive Time	1015
S2	19 Feb 2019	Weather	Sunny
S2	19 Feb 2019	Wind Speed (kts)	0.8
S2	19 Feb 2019	Wind Dir	SW
S2	19 Feb 2019	Animal Life	15 Birds
S2	19 Feb 2019	Floatables	None
S2	19 Feb 2019	Water Color	Green
S2	19 Feb 2019	Current Direction	N
S2	19 Feb 2019	Water Temp (C)	13
S2	19 Feb 2019	Wave Height Low (ft)	3

Station	Date	Parameter	Value
S2	19 Feb 2019	High Tide (ft)	6.6
S2	19 Feb 2019	High Tide Time	824
S2	19 Feb 2019	Low Tide (ft)	-1.7
S2	19 Feb 2019	Low Tide Time	1519
S2	19 Feb 2019	Comments	Water clear; Rough sea; No flow from storm drain
S2	26 Feb 2019	Arrive Time	1210
S2	26 Feb 2019	Weather	Cloudy
S2	26 Feb 2019	Wind Speed (kts)	1
S2	26 Feb 2019	Wind Dir	SW
S2	26 Feb 2019	Animal Life	4 Dogs; 20 Seagulls
S2	26 Feb 2019	Floatables	None
S2	26 Feb 2019	Water Color	Green
S2	26 Feb 2019	Current Direction	N
S2	26 Feb 2019	Water Temp (C)	14
S2	26 Feb 2019	Wave Height Low (ft)	2
S2	26 Feb 2019	High Tide (ft)	2.8
S2	26 Feb 2019	High Tide Time	1644
S2	26 Feb 2019	Low Tide (ft)	0.7
S2	26 Feb 2019	Low Tide Time	1003
S2	26 Feb 2019	Comments	Kelp; Algae; Water turbid; No flow from storm drain
S3	06 Feb 2019	Arrive Time	1230
S3	06 Feb 2019	Weather	Sunny
S3	06 Feb 2019	Wind Speed (kts)	3.6
S3	06 Feb 2019	Wind Dir	SW
S3	06 Feb 2019	Animal Life	20 Birds
S3	06 Feb 2019	Floatables	None
S3	06 Feb 2019	Water Color	Green
S3	06 Feb 2019	Current Direction	N
S3	06 Feb 2019	Water Temp (C)	16
S3	06 Feb 2019	Wave Height Low (ft)	2
S3	06 Feb 2019	High Tide (ft)	5.3
S3	06 Feb 2019	High Tide Time	923
S3	06 Feb 2019	Low Tide (ft)	-0.4
S3	06 Feb 2019	Low Tide Time	1620
S3	06 Feb 2019	Comments	Kelp; Algae; Water turbid; No flow from storm drain.
S3	12 Feb 2019	Arrive Time	955
S3	12 Feb 2019	Weather	Sunny
S3	12 Feb 2019	Wind Speed (kts)	1.1
S3	12 Feb 2019	Wind Dir	SW
S3	12 Feb 2019	Animal Life	15 Birds; 5 Dogs
S3	12 Feb 2019	Floatables	None
S3	12 Feb 2019	Water Color	Green
S3	12 Feb 2019	Current Direction	N
S3	12 Feb 2019	Water Temp (C)	13
S3	12 Feb 2019	Wave Height Low (ft)	2
S3	12 Feb 2019	High Tide (ft)	2.5
S3	12 Feb 2019	High Tide Time	1453
S3	12 Feb 2019	Low Tide (ft)	1.4
S3	12 Feb 2019	Low Tide Time	909
S3	12 Feb 2019	Comments	20 Persons; Water clear; No flow from stormdrain
S3	19 Feb 2019	Arrive Time	940

Station	Date	Parameter	Value
S3	19 Feb 2019	Weather	Sunny
S3	19 Feb 2019	Wind Speed (kts)	0.7
S3	19 Feb 2019	Wind Dir	SW
S3	19 Feb 2019	Animal Life	5 Birds
S3	19 Feb 2019	Floatables	None
S3	19 Feb 2019	Water Color	Green
S3	19 Feb 2019	Current Direction	N
S3	19 Feb 2019	Water Temp (C)	13
S3	19 Feb 2019	Wave Height Low (ft)	3
S3	19 Feb 2019	High Tide (ft)	6.6
S3	19 Feb 2019	High Tide Time	824
S3	19 Feb 2019	Low Tide (ft)	-1.7
S3	19 Feb 2019	Low Tide Time	1519
S3	19 Feb 2019	Comments	Water clear; Rough sea; No flow from storm drain
S3	26 Feb 2019	Arrive Time	1130
S3	26 Feb 2019	Weather	Cloudy
S3	26 Feb 2019	Wind Speed (kts)	1.1
S3	26 Feb 2019	Wind Dir	SW
S3	26 Feb 2019	Animal Life	3 Dogs; 20 Seagulls
S3	26 Feb 2019	Floatables	None
S3	26 Feb 2019	Water Color	Green
S3	26 Feb 2019	Current Direction	N
S3	26 Feb 2019	Water Temp (C)	14
S3	26 Feb 2019	Wave Height Low (ft)	2
S3	26 Feb 2019	High Tide (ft)	2.8
S3	26 Feb 2019	High Tide Time	1644
S3	26 Feb 2019	Low Tide (ft)	0.7
S3	26 Feb 2019	Low Tide Time	1003
S3	26 Feb 2019	Comments	Kelp; Algae; Water turbid; No flow from stormdrain
S4	06 Feb 2019	Arrive Time	906
S4	06 Feb 2019	Weather	Sunny
S4	06 Feb 2019	Wind Speed (kts)	3.6
S4	06 Feb 2019	Wind Dir	E
S4	06 Feb 2019	Animal Life	None
S4	06 Feb 2019	Floatables	None
S4	06 Feb 2019	Water Color	Green
S4	06 Feb 2019	Current Direction	S
S4	06 Feb 2019	Water Temp (C)	15.1
S4	06 Feb 2019	Wave Height Low (ft)	4
S4	06 Feb 2019	High Tide (ft)	5.3
S4	06 Feb 2019	High Tide Time	923
S4	06 Feb 2019	Low Tide (ft)	1.5
S4	06 Feb 2019	Low Tide Time	325
S4	06 Feb 2019	Comments	Kelp; Seagrass; Debris; Water clear
S4	08 Feb 2019	Arrive Time	929
S4	08 Feb 2019	Weather	Sunny
S4	08 Feb 2019	Wind Speed (kts)	3.4
S4	08 Feb 2019	Wind Dir	W
S4	08 Feb 2019	Animal Life	12 Birds
S4	08 Feb 2019	Floatables	None
S4	08 Feb 2019	Water Color	Green
S4	08 Feb 2019	Current Direction	N

Station	Date	Parameter	Value
S4	08 Feb 2019	Water Temp (C)	15.2
S4	08 Feb 2019	Wave Height Low (ft)	2
S4	08 Feb 2019	High Tide (ft)	4.6
S4	08 Feb 2019	High Tide Time	1024
S4	08 Feb 2019	Low Tide (ft)	1.5
S4	08 Feb 2019	Low Tide Time	434
S4	08 Feb 2019	Comments	Resample; Seagrass; Sewage-like odor; Water clear
S4	10 Feb 2019	Arrive Time	758
S4	10 Feb 2019	Weather	Partly Cloudy
S4	10 Feb 2019	Wind Speed (kts)	4.1
S4	10 Feb 2019	Wind Dir	E
S4	10 Feb 2019	Animal Life	None
S4	10 Feb 2019	Floatables	None
S4	10 Feb 2019	Water Color	Green
S4	10 Feb 2019	Current Direction	N
S4	10 Feb 2019	Water Temp (C)	15.8
S4	10 Feb 2019	Wave Height Low (ft)	3
S4	10 Feb 2019	High Tide (ft)	3.5
S4	10 Feb 2019	High Tide Time	1141
S4	10 Feb 2019	Low Tide (ft)	1.7
S4	10 Feb 2019	Low Tide Time	612
S4	10 Feb 2019	Comments	Resample; Kelp; Debris; Water clear
S4	12 Feb 2019	Arrive Time	840
S4	12 Feb 2019	Weather	Sunny
S4	12 Feb 2019	Wind Speed (kts)	3.6
S4	12 Feb 2019	Wind Dir	N
S4	12 Feb 2019	Animal Life	3 Birds
S4	12 Feb 2019	Floatables	None
S4	12 Feb 2019	Water Color	Green
S4	12 Feb 2019	Current Direction	N
S4	12 Feb 2019	Water Temp (C)	13.7
S4	12 Feb 2019	Wave Height Low (ft)	2
S4	12 Feb 2019	High Tide (ft)	2.5
S4	12 Feb 2019	High Tide Time	1453
S4	12 Feb 2019	Low Tide (ft)	1.4
S4	12 Feb 2019	Low Tide Time	909
S4	12 Feb 2019	Comments	Water clear
S4	14 Feb 2019	Arrive Time	854
S4	14 Feb 2019	Weather	Moderate Rain
S4	14 Feb 2019	Wind Speed (kts)	23.6
S4	14 Feb 2019	Wind Dir	S
S4	14 Feb 2019	Animal Life	None
S4	14 Feb 2019	Floatables	None
S4	14 Feb 2019	Water Color	Brown
S4	14 Feb 2019	Current Direction	N
S4	14 Feb 2019	Water Temp (C)	17.2
S4	14 Feb 2019	Wave Height Low (ft)	2
S4	14 Feb 2019	High Tide (ft)	4.8
S4	14 Feb 2019	High Tide Time	403
S4	14 Feb 2019	Low Tide (ft)	0.2
S4	14 Feb 2019	Low Tide Time	1147
S4	14 Feb 2019	Comments	Resample; Water turbid

Station	Date	Parameter	Value
S4	16 Feb 2019	Arrive Time	933
S4	16 Feb 2019	Weather	Partly Cloudy
S4	16 Feb 2019	Wind Speed (kts)	9.3
S4	16 Feb 2019	Wind Dir	W
S4	16 Feb 2019	Animal Life	None
S4	16 Feb 2019	Floatables	None
S4	16 Feb 2019	Water Color	Brown
S4	16 Feb 2019	Current Direction	N
S4	16 Feb 2019	Water Temp (C)	16.8
S4	16 Feb 2019	Wave Height Low (ft)	4
S4	16 Feb 2019	High Tide (ft)	5.8
S4	16 Feb 2019	High Tide Time	600
S4	16 Feb 2019	Low Tide (ft)	-1.1
S4	16 Feb 2019	Low Tide Time	1320
S4	16 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S4	18 Feb 2019	Arrive Time	901
S4	18 Feb 2019	Weather	Partly Cloudy
S4	18 Feb 2019	Wind Speed (kts)	5.8
S4	18 Feb 2019	Wind Dir	E
S4	18 Feb 2019	Animal Life	None
S4	18 Feb 2019	Floatables	None
S4	18 Feb 2019	Water Color	Green
S4	18 Feb 2019	Current Direction	S
S4	18 Feb 2019	Water Temp (C)	14.4
S4	18 Feb 2019	Wave Height Low (ft)	4
S4	18 Feb 2019	High Tide (ft)	6.5
S4	18 Feb 2019	High Tide Time	737
S4	18 Feb 2019	Low Tide (ft)	-1.7
S4	18 Feb 2019	Low Tide Time	1440
S4	18 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Water clear
S4	19 Feb 2019	Arrive Time	1120
S4	19 Feb 2019	Weather	Sunny
S4	19 Feb 2019	Wind Speed (kts)	3.5
S4	19 Feb 2019	Wind Dir	N
S4	19 Feb 2019	Animal Life	None
S4	19 Feb 2019	Floatables	None
S4	19 Feb 2019	Water Color	Green
S4	19 Feb 2019	Current Direction	N
S4	19 Feb 2019	Water Temp (C)	16.9
S4	19 Feb 2019	Wave Height Low (ft)	4
S4	19 Feb 2019	High Tide (ft)	6.6
S4	19 Feb 2019	High Tide Time	824
S4	19 Feb 2019	Low Tide (ft)	-1.7
S4	19 Feb 2019	Low Tide Time	1519
S4	19 Feb 2019	Comments	4 Persons; Water clear
S4	21 Feb 2019	Arrive Time	932
S4	21 Feb 2019	Weather	Cloudy
S4	21 Feb 2019	Wind Speed (kts)	20.4
S4	21 Feb 2019	Wind Dir	SW
S4	21 Feb 2019	Animal Life	None
S4	21 Feb 2019	Floatables	None

Station	Date	Parameter	Value
S4	21 Feb 2019	Water Color	Green
S4	21 Feb 2019	Current Direction	N
S4	21 Feb 2019	Water Temp (C)	12.2
S4	21 Feb 2019	Wave Height Low (ft)	5
S4	21 Feb 2019	High Tide (ft)	5.9
S4	21 Feb 2019	High Tide Time	956
S4	21 Feb 2019	Low Tide (ft)	0.4
S4	21 Feb 2019	Low Tide Time	357
S4	21 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Water clear
S4	22 Feb 2019	Arrive Time	920
S4	22 Feb 2019	Weather	Sunny
S4	22 Feb 2019	Wind Speed (kts)	3.3
S4	22 Feb 2019	Wind Dir	NW
S4	22 Feb 2019	Animal Life	None
S4	22 Feb 2019	Floatables	None
S4	22 Feb 2019	Water Color	Brown
S4	22 Feb 2019	Current Direction	N
S4	22 Feb 2019	Water Temp (C)	14.4
S4	22 Feb 2019	Wave Height Low (ft)	2
S4	22 Feb 2019	High Tide (ft)	5.2
S4	22 Feb 2019	High Tide Time	1045
S4	22 Feb 2019	Low Tide (ft)	0.4
S4	22 Feb 2019	Low Tide Time	449
S4	22 Feb 2019	Comments	Resample; Sewage-like odor; Water turbid
S4	24 Feb 2019	Arrive Time	856
S4	24 Feb 2019	Weather	Sunny
S4	24 Feb 2019	Wind Speed (kts)	3.3
S4	24 Feb 2019	Wind Dir	N
S4	24 Feb 2019	Animal Life	None
S4	24 Feb 2019	Floatables	None
S4	24 Feb 2019	Water Color	Green
S4	24 Feb 2019	Current Direction	N
S4	24 Feb 2019	Water Temp (C)	15
S4	24 Feb 2019	Wave Height Low (ft)	2
S4	24 Feb 2019	High Tide (ft)	3.5
S4	24 Feb 2019	High Tide Time	1244
S4	24 Feb 2019	Low Tide (ft)	0.8
S4	24 Feb 2019	Low Tide Time	655
S4	24 Feb 2019	Comments	Resample; Water clear
S4	26 Feb 2019	Arrive Time	818
S4	26 Feb 2019	Weather	Overcast
S4	26 Feb 2019	Wind Speed (kts)	0.1
S4	26 Feb 2019	Wind Dir	S
S4	26 Feb 2019	Animal Life	17 Birds
S4	26 Feb 2019	Floatables	None
S4	26 Feb 2019	Water Color	Green
S4	26 Feb 2019	Current Direction	N
S4	26 Feb 2019	Water Temp (C)	13.3
S4	26 Feb 2019	Wave Height Low (ft)	1
S4	26 Feb 2019	High Tide (ft)	4.5
S4	26 Feb 2019	High Tide Time	218
S4	26 Feb 2019	Low Tide (ft)	0.7

Station	Date	Parameter	Value
S4	26 Feb 2019	Low Tide Time	1003
S4	26 Feb 2019	Comments	Water clear
S5	01 Feb 2019	Arrive Time	1136
S5	01 Feb 2019	Weather	Partly Cloudy
S5	01 Feb 2019	Wind Speed (kts)	6.6
S5	01 Feb 2019	Wind Dir	S
S5	01 Feb 2019	Animal Life	None
S5	01 Feb 2019	Floatables	Foam
S5	01 Feb 2019	Water Color	Green
S5	01 Feb 2019	Current Direction	N
S5	01 Feb 2019	Water Temp (C)	17
S5	01 Feb 2019	Wave Height Low (ft)	2
S5	01 Feb 2019	High Tide (ft)	5.5
S5	01 Feb 2019	High Tide Time	642
S5	01 Feb 2019	Low Tide (ft)	-0.6
S5	01 Feb 2019	Low Tide Time	1400
S5	01 Feb 2019	Comments	Resample; Sewage-like odor; Water clear
S5	03 Feb 2019	Arrive Time	939
S5	03 Feb 2019	Weather	Partly Cloudy
S5	03 Feb 2019	Wind Speed (kts)	1.9
S5	03 Feb 2019	Wind Dir	N
S5	03 Feb 2019	Animal Life	None
S5	03 Feb 2019	Floatables	None
S5	03 Feb 2019	Water Color	Brown
S5	03 Feb 2019	Current Direction	N
S5	03 Feb 2019	Water Temp (C)	18.5
S5	03 Feb 2019	Wave Height Low (ft)	5
S5	03 Feb 2019	High Tide (ft)	5.6
S5	03 Feb 2019	High Tide Time	751
S5	03 Feb 2019	Low Tide (ft)	-0.8
S5	03 Feb 2019	Low Tide Time	1458
S5	03 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; 1 Person; Water clear
S5	05 Feb 2019	Arrive Time	1002
S5	05 Feb 2019	Weather	Partly Cloudy
S5	05 Feb 2019	Wind Speed (kts)	3.8
S5	05 Feb 2019	Wind Dir	NW
S5	05 Feb 2019	Animal Life	None
S5	05 Feb 2019	Floatables	None
S5	05 Feb 2019	Water Color	Brown
S5	05 Feb 2019	Current Direction	N
S5	05 Feb 2019	Water Temp (C)	13
S5	05 Feb 2019	Wave Height Low (ft)	2
S5	05 Feb 2019	High Tide (ft)	5.5
S5	05 Feb 2019	High Tide Time	853
S5	05 Feb 2019	Low Tide (ft)	-0.6
S5	05 Feb 2019	Low Tide Time	1553
S5	05 Feb 2019	Comments	Resample; Debris; Sewage-like odor; Water turbid
S5	06 Feb 2019	Arrive Time	1025
S5	06 Feb 2019	Weather	Sunny
S5	06 Feb 2019	Wind Speed (kts)	2.9

Station	Date	Parameter	Value
S5	06 Feb 2019	Wind Dir	W
S5	06 Feb 2019	Animal Life	None
S5	06 Feb 2019	Floatables	None
S5	06 Feb 2019	Water Color	Green
S5	06 Feb 2019	Current Direction	S
S5	06 Feb 2019	Water Temp (C)	16.7
S5	06 Feb 2019	Wave Height Low (ft)	4
S5	06 Feb 2019	High Tide (ft)	5.3
S5	06 Feb 2019	High Tide Time	923
S5	06 Feb 2019	Low Tide (ft)	-0.4
S5	06 Feb 2019	Low Tide Time	1620
S5	06 Feb 2019	Comments	Kelp; Seagrass; Debris; Water clear
S5	08 Feb 2019	Arrive Time	816
S5	08 Feb 2019	Weather	Sunny
S5	08 Feb 2019	Wind Speed (kts)	5.7
S5	08 Feb 2019	Wind Dir	SE
S5	08 Feb 2019	Animal Life	None
S5	08 Feb 2019	Floatables	None
S5	08 Feb 2019	Water Color	Green
S5	08 Feb 2019	Current Direction	N
S5	08 Feb 2019	Water Temp (C)	14.1
S5	08 Feb 2019	Wave Height Low (ft)	2
S5	08 Feb 2019	High Tide (ft)	4.6
S5	08 Feb 2019	High Tide Time	1024
S5	08 Feb 2019	Low Tide (ft)	1.5
S5	08 Feb 2019	Low Tide Time	434
S5	08 Feb 2019	Comments	Resample; Water clear
S5	10 Feb 2019	Arrive Time	905
S5	10 Feb 2019	Weather	Partly Cloudy
S5	10 Feb 2019	Wind Speed (kts)	6.2
S5	10 Feb 2019	Wind Dir	E
S5	10 Feb 2019	Animal Life	None
S5	10 Feb 2019	Floatables	None
S5	10 Feb 2019	Water Color	Green
S5	10 Feb 2019	Current Direction	N
S5	10 Feb 2019	Water Temp (C)	15.4
S5	10 Feb 2019	Wave Height Low (ft)	2
S5	10 Feb 2019	High Tide (ft)	3.5
S5	10 Feb 2019	High Tide Time	1141
S5	10 Feb 2019	Low Tide (ft)	1.7
S5	10 Feb 2019	Low Tide Time	612
S5	10 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; 2 Persons; Water clear
S5	12 Feb 2019	Arrive Time	948
S5	12 Feb 2019	Weather	Sunny
S5	12 Feb 2019	Wind Speed (kts)	5.8
S5	12 Feb 2019	Wind Dir	SW
S5	12 Feb 2019	Animal Life	None
S5	12 Feb 2019	Floatables	None
S5	12 Feb 2019	Water Color	Brown
S5	12 Feb 2019	Current Direction	N
S5	12 Feb 2019	Water Temp (C)	13.8
S5	12 Feb 2019	Wave Height Low (ft)	1

Station	Date	Parameter	Value
S5	12 Feb 2019	High Tide (ft)	2.5
S5	12 Feb 2019	High Tide Time	1453
S5	12 Feb 2019	Low Tide (ft)	1.4
S5	12 Feb 2019	Low Tide Time	909
S5	12 Feb 2019	Comments	Debris; Sewage-like odor; Water turbid
S5	14 Feb 2019	Arrive Time	1008
S5	14 Feb 2019	Weather	Heavy Rain
S5	14 Feb 2019	Wind Speed (kts)	24.9
S5	14 Feb 2019	Wind Dir	S
S5	14 Feb 2019	Animal Life	None
S5	14 Feb 2019	Floatables	Foam
S5	14 Feb 2019	Water Color	Blue
S5	14 Feb 2019	Current Direction	N
S5	14 Feb 2019	Water Temp (C)	16.644
S5	14 Feb 2019	Wave Height Low (ft)	2
S5	14 Feb 2019	High Tide (ft)	4.8
S5	14 Feb 2019	High Tide Time	403
S5	14 Feb 2019	Low Tide (ft)	0.2
S5	14 Feb 2019	Low Tide Time	1147
S5	14 Feb 2019	Comments	Resample; Sewage-like odor; Water turbid
S5	16 Feb 2019	Arrive Time	1102
S5	16 Feb 2019	Weather	Partly Cloudy
S5	16 Feb 2019	Wind Speed (kts)	12.4
S5	16 Feb 2019	Wind Dir	W
S5	16 Feb 2019	Animal Life	None
S5	16 Feb 2019	Floatables	None
S5	16 Feb 2019	Water Color	Brown
S5	16 Feb 2019	Current Direction	N
S5	16 Feb 2019	Water Temp (C)	16.1
S5	16 Feb 2019	Wave Height Low (ft)	3
S5	16 Feb 2019	High Tide (ft)	5.8
S5	16 Feb 2019	High Tide Time	600
S5	16 Feb 2019	Low Tide (ft)	-1.1
S5	16 Feb 2019	Low Tide Time	1320
S5	16 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; 2 Persons; Water clear
S5	18 Feb 2019	Arrive Time	1037
S5	18 Feb 2019	Weather	Partly Cloudy
S5	18 Feb 2019	Wind Speed (kts)	5.8
S5	18 Feb 2019	Wind Dir	W
S5	18 Feb 2019	Animal Life	None
S5	18 Feb 2019	Floatables	None
S5	18 Feb 2019	Water Color	Green
S5	18 Feb 2019	Current Direction	S
S5	18 Feb 2019	Water Temp (C)	14.9
S5	18 Feb 2019	Wave Height Low (ft)	4
S5	18 Feb 2019	High Tide (ft)	6.5
S5	18 Feb 2019	High Tide Time	737
S5	18 Feb 2019	Low Tide (ft)	-1.7
S5	18 Feb 2019	Low Tide Time	1440
S5	18 Feb 2019	Comments	Resample; Kelp; Seagrass; Sewage-like odor; Water clear

Station	Date	Parameter	Value
S5	19 Feb 2019	Arrive Time	900
S5	19 Feb 2019	Weather	Sunny
S5	19 Feb 2019	Wind Speed (kts)	4.3
S5	19 Feb 2019	Wind Dir	SE
S5	19 Feb 2019	Animal Life	None
S5	19 Feb 2019	Floatables	None
S5	19 Feb 2019	Water Color	Brown
S5	19 Feb 2019	Current Direction	SE
S5	19 Feb 2019	Water Temp (C)	17
S5	19 Feb 2019	Wave Height Low (ft)	2
S5	19 Feb 2019	High Tide (ft)	6.6
S5	19 Feb 2019	High Tide Time	824
S5	19 Feb 2019	Low Tide (ft)	-1.7
S5	19 Feb 2019	Low Tide Time	1519
S5	19 Feb 2019	Comments	Debris; Sewage-like odor; Water turbid
S5	21 Feb 2019	Arrive Time	944
S5	21 Feb 2019	Weather	Cloudy
S5	21 Feb 2019	Wind Speed (kts)	20.1
S5	21 Feb 2019	Wind Dir	W
S5	21 Feb 2019	Animal Life	None
S5	21 Feb 2019	Floatables	None
S5	21 Feb 2019	Water Color	Green
S5	21 Feb 2019	Current Direction	N
S5	21 Feb 2019	Water Temp (C)	13.1
S5	21 Feb 2019	Wave Height Low (ft)	5
S5	21 Feb 2019	High Tide (ft)	5.9
S5	21 Feb 2019	High Tide Time	956
S5	21 Feb 2019	Low Tide (ft)	0.4
S5	21 Feb 2019	Low Tide Time	357
S5	21 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Water clear
S5	22 Feb 2019	Arrive Time	934
S5	22 Feb 2019	Weather	Sunny
S5	22 Feb 2019	Wind Speed (kts)	5.4
S5	22 Feb 2019	Wind Dir	N
S5	22 Feb 2019	Animal Life	None
S5	22 Feb 2019	Floatables	None
S5	22 Feb 2019	Water Color	Green
S5	22 Feb 2019	Current Direction	N
S5	22 Feb 2019	Water Temp (C)	14.1
S5	22 Feb 2019	Wave Height Low (ft)	2
S5	22 Feb 2019	High Tide (ft)	5.2
S5	22 Feb 2019	High Tide Time	1045
S5	22 Feb 2019	Low Tide (ft)	0.4
S5	22 Feb 2019	Low Tide Time	449
S5	22 Feb 2019	Comments	Resample; Water clear
S5	24 Feb 2019	Arrive Time	740
S5	24 Feb 2019	Weather	Partly Cloudy
S5	24 Feb 2019	Wind Speed (kts)	5.2
S5	24 Feb 2019	Wind Dir	N
S5	24 Feb 2019	Animal Life	None
S5	24 Feb 2019	Floatables	Foam
S5	24 Feb 2019	Water Color	Brown

Station	Date	Parameter	Value
S5	24 Feb 2019	Current Direction	N
S5	24 Feb 2019	Water Temp (C)	14.2
S5	24 Feb 2019	Wave Height Low (ft)	3
S5	24 Feb 2019	High Tide (ft)	3.5
S5	24 Feb 2019	High Tide Time	1244
S5	24 Feb 2019	Low Tide (ft)	0.8
S5	24 Feb 2019	Low Tide Time	655
S5	24 Feb 2019	Comments	Resample; Debris; Sewage-like odor; Water turbid
S5	26 Feb 2019	Arrive Time	921
S5	26 Feb 2019	Weather	Overcast
S5	26 Feb 2019	Wind Speed (kts)	0.2
S5	26 Feb 2019	Wind Dir	NE
S5	26 Feb 2019	Animal Life	None
S5	26 Feb 2019	Floatables	None
S5	26 Feb 2019	Water Color	Brown
S5	26 Feb 2019	Current Direction	N
S5	26 Feb 2019	Water Temp (C)	14.6
S5	26 Feb 2019	Wave Height Low (ft)	2
S5	26 Feb 2019	High Tide (ft)	4.5
S5	26 Feb 2019	High Tide Time	218
S5	26 Feb 2019	Low Tide (ft)	0.7
S5	26 Feb 2019	Low Tide Time	1003
S5	26 Feb 2019	Comments	Sewage-like odor; Water turbid
S5	28 Feb 2019	Arrive Time	824
S5	28 Feb 2019	Weather	Partly Cloudy
S5	28 Feb 2019	Wind Speed (kts)	2.1
S5	28 Feb 2019	Wind Dir	E
S5	28 Feb 2019	Animal Life	20 Pelicans
S5	28 Feb 2019	Floatables	Foam
S5	28 Feb 2019	Water Color	Brown
S5	28 Feb 2019	Current Direction	E
S5	28 Feb 2019	Water Temp (C)	20.1
S5	28 Feb 2019	Wave Height Low (ft)	1
S5	28 Feb 2019	High Tide (ft)	4.6
S5	28 Feb 2019	High Tide Time	447
S5	28 Feb 2019	Low Tide (ft)	0
S5	28 Feb 2019	Low Tide Time	1224
S5	28 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S6	06 Feb 2019	Arrive Time	1040
S6	06 Feb 2019	Weather	Sunny
S6	06 Feb 2019	Wind Speed (kts)	2.2
S6	06 Feb 2019	Wind Dir	W
S6	06 Feb 2019	Animal Life	None
S6	06 Feb 2019	Floatables	None
S6	06 Feb 2019	Water Color	Green
S6	06 Feb 2019	Current Direction	S
S6	06 Feb 2019	Water Temp (C)	17.8
S6	06 Feb 2019	Wave Height Low (ft)	3
S6	06 Feb 2019	High Tide (ft)	5.3
S6	06 Feb 2019	High Tide Time	923
S6	06 Feb 2019	Low Tide (ft)	-0.4
S6	06 Feb 2019	Low Tide Time	1620

Station	Date	Parameter	Value
S6	06 Feb 2019	Comments	Kelp; Seagrass; Debris; Water clear
S6	08 Feb 2019	Arrive Time	832
S6	08 Feb 2019	Weather	Sunny
S6	08 Feb 2019	Wind Speed (kts)	3.1
S6	08 Feb 2019	Wind Dir	E
S6	08 Feb 2019	Animal Life	None
S6	08 Feb 2019	Floatables	None
S6	08 Feb 2019	Water Color	Green
S6	08 Feb 2019	Current Direction	N
S6	08 Feb 2019	Water Temp (C)	13.4
S6	08 Feb 2019	Wave Height Low (ft)	3
S6	08 Feb 2019	High Tide (ft)	4.6
S6	08 Feb 2019	High Tide Time	1024
S6	08 Feb 2019	Low Tide (ft)	1.5
S6	08 Feb 2019	Low Tide Time	434
S6	08 Feb 2019	Comments	Resample; 3 Persons; Water clear
S6	10 Feb 2019	Arrive Time	939
S6	10 Feb 2019	Weather	Partly Cloudy
S6	10 Feb 2019	Wind Speed (kts)	4.7
S6	10 Feb 2019	Wind Dir	E
S6	10 Feb 2019	Animal Life	None
S6	10 Feb 2019	Floatables	None
S6	10 Feb 2019	Water Color	Green
S6	10 Feb 2019	Current Direction	N
S6	10 Feb 2019	Water Temp (C)	15.2
S6	10 Feb 2019	Wave Height Low (ft)	3
S6	10 Feb 2019	High Tide (ft)	3.5
S6	10 Feb 2019	High Tide Time	1141
S6	10 Feb 2019	Low Tide (ft)	1.7
S6	10 Feb 2019	Low Tide Time	612
S6	10 Feb 2019	Comments	Resample; Kelp; Seagrass; 2 Persons; Water clear
S6	12 Feb 2019	Arrive Time	1001
S6	12 Feb 2019	Weather	Sunny
S6	12 Feb 2019	Wind Speed (kts)	3.1
S6	12 Feb 2019	Wind Dir	E
S6	12 Feb 2019	Animal Life	None
S6	12 Feb 2019	Floatables	None
S6	12 Feb 2019	Water Color	Green
S6	12 Feb 2019	Current Direction	N
S6	12 Feb 2019	Water Temp (C)	14.6
S6	12 Feb 2019	Wave Height Low (ft)	2
S6	12 Feb 2019	High Tide (ft)	2.5
S6	12 Feb 2019	High Tide Time	1453
S6	12 Feb 2019	Low Tide (ft)	1.4
S6	12 Feb 2019	Low Tide Time	909
S6	12 Feb 2019	Comments	Kelp; 1 Person; 1 Tractor; Water clear
S6	14 Feb 2019	Arrive Time	1020
S6	14 Feb 2019	Weather	Heavy Rain
S6	14 Feb 2019	Wind Speed (kts)	25.1
S6	14 Feb 2019	Wind Dir	S
S6	14 Feb 2019	Animal Life	None

Station	Date	Parameter	Value
S6	14 Feb 2019	Floatables	Foam
S6	14 Feb 2019	Water Color	Brown
S6	14 Feb 2019	Current Direction	N
S6	14 Feb 2019	Water Temp (C)	17.2
S6	14 Feb 2019	Wave Height Low (ft)	4
S6	14 Feb 2019	High Tide (ft)	4.8
S6	14 Feb 2019	High Tide Time	403
S6	14 Feb 2019	Low Tide (ft)	0.2
S6	14 Feb 2019	Low Tide Time	1147
S6	14 Feb 2019	Comments	Resample; Sewage-like odor; Water turbid
S6	16 Feb 2019	Arrive Time	1147
S6	16 Feb 2019	Weather	Partly Cloudy
S6	16 Feb 2019	Wind Speed (kts)	12
S6	16 Feb 2019	Wind Dir	W
S6	16 Feb 2019	Animal Life	None
S6	16 Feb 2019	Floatables	None
S6	16 Feb 2019	Water Color	Brown
S6	16 Feb 2019	Current Direction	N
S6	16 Feb 2019	Water Temp (C)	15.7
S6	16 Feb 2019	Wave Height Low (ft)	4
S6	16 Feb 2019	High Tide (ft)	5.8
S6	16 Feb 2019	High Tide Time	600
S6	16 Feb 2019	Low Tide (ft)	-1.1
S6	16 Feb 2019	Low Tide Time	1320
S6	16 Feb 2019	Comments	Resample; Kelp; Seagrass; Sewage-like odor; 2 Persons; Water clear
S6	18 Feb 2019	Arrive Time	1112
S6	18 Feb 2019	Weather	Partly Cloudy
S6	18 Feb 2019	Wind Speed (kts)	6.6
S6	18 Feb 2019	Wind Dir	W
S6	18 Feb 2019	Animal Life	None
S6	18 Feb 2019	Floatables	None
S6	18 Feb 2019	Water Color	Green
S6	18 Feb 2019	Current Direction	S
S6	18 Feb 2019	Water Temp (C)	14.6
S6	18 Feb 2019	Wave Height Low (ft)	4
S6	18 Feb 2019	High Tide (ft)	6.5
S6	18 Feb 2019	High Tide Time	737
S6	18 Feb 2019	Low Tide (ft)	-1.7
S6	18 Feb 2019	Low Tide Time	1440
S6	18 Feb 2019	Comments	Resample; Kelp; Seagrass; 3 Persons; Water clear
S6	19 Feb 2019	Arrive Time	927
S6	19 Feb 2019	Weather	Sunny
S6	19 Feb 2019	Wind Speed (kts)	4.6
S6	19 Feb 2019	Wind Dir	SE
S6	19 Feb 2019	Animal Life	1 Dog
S6	19 Feb 2019	Floatables	None
S6	19 Feb 2019	Water Color	Green
S6	19 Feb 2019	Current Direction	N
S6	19 Feb 2019	Water Temp (C)	17.1
S6	19 Feb 2019	Wave Height Low (ft)	2
S6	19 Feb 2019	High Tide (ft)	6.6

Station	Date	Parameter	Value
S6	19 Feb 2019	High Tide Time	824
S6	19 Feb 2019	Low Tide (ft)	-1.7
S6	19 Feb 2019	Low Tide Time	1519
S6	19 Feb 2019	Comments	1 Person; Water clear
S6	26 Feb 2019	Arrive Time	931
S6	26 Feb 2019	Weather	Overcast
S6	26 Feb 2019	Wind Speed (kts)	1.3
S6	26 Feb 2019	Wind Dir	N
S6	26 Feb 2019	Animal Life	None
S6	26 Feb 2019	Floatables	None
S6	26 Feb 2019	Water Color	Green
S6	26 Feb 2019	Current Direction	N
S6	26 Feb 2019	Water Temp (C)	14.6
S6	26 Feb 2019	Wave Height Low (ft)	2
S6	26 Feb 2019	High Tide (ft)	4.5
S6	26 Feb 2019	High Tide Time	218
S6	26 Feb 2019	Low Tide (ft)	0.7
S6	26 Feb 2019	Low Tide Time	1003
S6	26 Feb 2019	Comments	2 Persons; Water clear
S8	06 Feb 2019	Arrive Time	1209
S8	06 Feb 2019	Weather	Sunny
S8	06 Feb 2019	Wind Speed (kts)	4.2
S8	06 Feb 2019	Wind Dir	W
S8	06 Feb 2019	Animal Life	None
S8	06 Feb 2019	Floatables	None
S8	06 Feb 2019	Water Color	Green
S8	06 Feb 2019	Current Direction	S
S8	06 Feb 2019	Water Temp (C)	17.2
S8	06 Feb 2019	Wave Height Low (ft)	3
S8	06 Feb 2019	High Tide (ft)	5.3
S8	06 Feb 2019	High Tide Time	923
S8	06 Feb 2019	Low Tide (ft)	-0.4
S8	06 Feb 2019	Low Tide Time	1620
S8	06 Feb 2019	Comments	Kelp; Debris; Water clear
S8	12 Feb 2019	Arrive Time	1121
S8	12 Feb 2019	Weather	Sunny
S8	12 Feb 2019	Wind Speed (kts)	0.1
S8	12 Feb 2019	Wind Dir	N
S8	12 Feb 2019	Animal Life	None
S8	12 Feb 2019	Floatables	None
S8	12 Feb 2019	Water Color	Green
S8	12 Feb 2019	Current Direction	N
S8	12 Feb 2019	Water Temp (C)	15.1
S8	12 Feb 2019	Wave Height Low (ft)	2
S8	12 Feb 2019	High Tide (ft)	2.5
S8	12 Feb 2019	High Tide Time	1453
S8	12 Feb 2019	Low Tide (ft)	1.4
S8	12 Feb 2019	Low Tide Time	909
S8	12 Feb 2019	Comments	Kelp; Seagrass; 1 Person; Water clear
S8	19 Feb 2019	Arrive Time	1230
S8	19 Feb 2019	Weather	Sunny

Station	Date	Parameter	Value
S8	19 Feb 2019	Wind Speed (kts)	3.6
S8	19 Feb 2019	Wind Dir	W
S8	19 Feb 2019	Animal Life	None
S8	19 Feb 2019	Floatables	None
S8	19 Feb 2019	Water Color	Green
S8	19 Feb 2019	Current Direction	N
S8	19 Feb 2019	Water Temp (C)	16
S8	19 Feb 2019	Wave Height Low (ft)	2
S8	19 Feb 2019	High Tide (ft)	6.6
S8	19 Feb 2019	High Tide Time	824
S8	19 Feb 2019	Low Tide (ft)	-1.7
S8	19 Feb 2019	Low Tide Time	1519
S8	19 Feb 2019	Comments	Water clear
S8	26 Feb 2019	Arrive Time	1047
S8	26 Feb 2019	Weather	Overcast
S8	26 Feb 2019	Wind Speed (kts)	3.1
S8	26 Feb 2019	Wind Dir	W
S8	26 Feb 2019	Animal Life	None
S8	26 Feb 2019	Floatables	None
S8	26 Feb 2019	Water Color	Green
S8	26 Feb 2019	Current Direction	N
S8	26 Feb 2019	Water Temp (C)	15
S8	26 Feb 2019	Wave Height Low (ft)	1
S8	26 Feb 2019	High Tide (ft)	2.8
S8	26 Feb 2019	High Tide Time	1644
S8	26 Feb 2019	Low Tide (ft)	0.7
S8	26 Feb 2019	Low Tide Time	1003
S8	26 Feb 2019	Comments	Water clear
S9	06 Feb 2019	Arrive Time	1232
S9	06 Feb 2019	Weather	Sunny
S9	06 Feb 2019	Wind Speed (kts)	8.5
S9	06 Feb 2019	Wind Dir	W
S9	06 Feb 2019	Animal Life	None
S9	06 Feb 2019	Floatables	None
S9	06 Feb 2019	Water Color	Green
S9	06 Feb 2019	Current Direction	S
S9	06 Feb 2019	Water Temp (C)	16.8
S9	06 Feb 2019	Wave Height Low (ft)	3
S9	06 Feb 2019	High Tide (ft)	5.3
S9	06 Feb 2019	High Tide Time	923
S9	06 Feb 2019	Low Tide (ft)	-0.4
S9	06 Feb 2019	Low Tide Time	1620
S9	06 Feb 2019	Comments	2 Persons; Water clear
S9	12 Feb 2019	Arrive Time	1151
S9	12 Feb 2019	Weather	Sunny
S9	12 Feb 2019	Wind Speed (kts)	1.7
S9	12 Feb 2019	Wind Dir	N
S9	12 Feb 2019	Animal Life	4 Birds
S9	12 Feb 2019	Floatables	None
S9	12 Feb 2019	Water Color	Green
S9	12 Feb 2019	Current Direction	N
S9	12 Feb 2019	Water Temp (C)	18

Station	Date	Parameter	Value
S9	12 Feb 2019	Wave Height Low (ft)	2
S9	12 Feb 2019	High Tide (ft)	2.5
S9	12 Feb 2019	High Tide Time	1453
S9	12 Feb 2019	Low Tide (ft)	1.4
S9	12 Feb 2019	Low Tide Time	909
S9	12 Feb 2019	Comments	2 Joggers; 3 Persons; Water clear
S9	19 Feb 2019	Arrive Time	1304
S9	19 Feb 2019	Weather	Sunny
S9	19 Feb 2019	Wind Speed (kts)	5.4
S9	19 Feb 2019	Wind Dir	N
S9	19 Feb 2019	Animal Life	None
S9	19 Feb 2019	Floatables	None
S9	19 Feb 2019	Water Color	Green
S9	19 Feb 2019	Current Direction	N
S9	19 Feb 2019	Water Temp (C)	17.1
S9	19 Feb 2019	Wave Height Low (ft)	3
S9	19 Feb 2019	High Tide (ft)	6.6
S9	19 Feb 2019	High Tide Time	824
S9	19 Feb 2019	Low Tide (ft)	-1.7
S9	19 Feb 2019	Low Tide Time	1519
S9	19 Feb 2019	Comments	9 Joggers; 5 Persons; Water clear
S9	26 Feb 2019	Arrive Time	1118
S9	26 Feb 2019	Weather	Overcast
S9	26 Feb 2019	Wind Speed (kts)	2.7
S9	26 Feb 2019	Wind Dir	W
S9	26 Feb 2019	Animal Life	None
S9	26 Feb 2019	Floatables	None
S9	26 Feb 2019	Water Color	Green
S9	26 Feb 2019	Current Direction	N
S9	26 Feb 2019	Water Temp (C)	14.6
S9	26 Feb 2019	Wave Height Low (ft)	1
S9	26 Feb 2019	High Tide (ft)	2.8
S9	26 Feb 2019	High Tide Time	1644
S9	26 Feb 2019	Low Tide (ft)	0.7
S9	26 Feb 2019	Low Tide Time	1003
S9	26 Feb 2019	Comments	5 Persons; 4 Surfers; Water clear
S10	01 Feb 2019	Arrive Time	1033
S10	01 Feb 2019	Weather	Partly Cloudy
S10	01 Feb 2019	Wind Speed (kts)	6.5
S10	01 Feb 2019	Wind Dir	S
S10	01 Feb 2019	Animal Life	None
S10	01 Feb 2019	Floatables	None
S10	01 Feb 2019	Water Color	Green
S10	01 Feb 2019	Current Direction	N
S10	01 Feb 2019	Water Temp (C)	16
S10	01 Feb 2019	Wave Height Low (ft)	2
S10	01 Feb 2019	High Tide (ft)	5.5
S10	01 Feb 2019	High Tide Time	642
S10	01 Feb 2019	Low Tide (ft)	-0.6
S10	01 Feb 2019	Low Tide Time	1400
S10	01 Feb 2019	Comments	Resample; Sewage-like odor; Water clear

Station	Date	Parameter	Value
S10	03 Feb 2019	Arrive Time	752
S10	03 Feb 2019	Weather	Partly Cloudy
S10	03 Feb 2019	Wind Speed (kts)	1.3
S10	03 Feb 2019	Wind Dir	W
S10	03 Feb 2019	Animal Life	4 Cormorants; 1 Seagull
S10	03 Feb 2019	Floatables	None
S10	03 Feb 2019	Water Color	Brown
S10	03 Feb 2019	Current Direction	W
S10	03 Feb 2019	Water Temp (C)	16.5
S10	03 Feb 2019	Wave Height Low (ft)	4
S10	03 Feb 2019	High Tide (ft)	5.6
S10	03 Feb 2019	High Tide Time	751
S10	03 Feb 2019	Low Tide (ft)	1.7
S10	03 Feb 2019	Low Tide Time	149
S10	03 Feb 2019	Comments	Resample; Debris; Sewage-like odor; Water clear
S10	05 Feb 2019	Arrive Time	912
S10	05 Feb 2019	Weather	Partly Cloudy
S10	05 Feb 2019	Wind Speed (kts)	10.3
S10	05 Feb 2019	Wind Dir	N
S10	05 Feb 2019	Animal Life	None
S10	05 Feb 2019	Floatables	None
S10	05 Feb 2019	Water Color	Brown
S10	05 Feb 2019	Current Direction	N
S10	05 Feb 2019	Water Temp (C)	14
S10	05 Feb 2019	Wave Height Low (ft)	3
S10	05 Feb 2019	High Tide (ft)	5.5
S10	05 Feb 2019	High Tide Time	853
S10	05 Feb 2019	Low Tide (ft)	1.5
S10	05 Feb 2019	Low Tide Time	1553
S10	05 Feb 2019	Comments	Resample; Sewage-like odor; Water turbid
S10	06 Feb 2019	Arrive Time	859
S10	06 Feb 2019	Weather	Sunny
S10	06 Feb 2019	Wind Speed (kts)	0.7
S10	06 Feb 2019	Wind Dir	E
S10	06 Feb 2019	Animal Life	None
S10	06 Feb 2019	Floatables	None
S10	06 Feb 2019	Water Color	Green
S10	06 Feb 2019	Current Direction	S
S10	06 Feb 2019	Water Temp (C)	15.1
S10	06 Feb 2019	Wave Height Low (ft)	4
S10	06 Feb 2019	High Tide (ft)	5.3
S10	06 Feb 2019	High Tide Time	923
S10	06 Feb 2019	Low Tide (ft)	-0.4
S10	06 Feb 2019	Low Tide Time	1620
S10	06 Feb 2019	Comments	Water clear
S10	08 Feb 2019	Arrive Time	923
S10	08 Feb 2019	Weather	Sunny
S10	08 Feb 2019	Wind Speed (kts)	1.9
S10	08 Feb 2019	Wind Dir	N
S10	08 Feb 2019	Animal Life	None
S10	08 Feb 2019	Floatables	None
S10	08 Feb 2019	Water Color	Green

Station	Date	Parameter	Value
S10	08 Feb 2019	Current Direction	N
S10	08 Feb 2019	Water Temp (C)	15.1
S10	08 Feb 2019	Wave Height Low (ft)	2
S10	08 Feb 2019	High Tide (ft)	4.6
S10	08 Feb 2019	High Tide Time	1024
S10	08 Feb 2019	Low Tide (ft)	1.5
S10	08 Feb 2019	Low Tide Time	434
S10	08 Feb 2019	Comments	Resample; Water clear
S10	10 Feb 2019	Arrive Time	733
S10	10 Feb 2019	Weather	Partly Cloudy
S10	10 Feb 2019	Wind Speed (kts)	4.6
S10	10 Feb 2019	Wind Dir	E
S10	10 Feb 2019	Animal Life	None
S10	10 Feb 2019	Floatables	None
S10	10 Feb 2019	Water Color	Green
S10	10 Feb 2019	Current Direction	N
S10	10 Feb 2019	Water Temp (C)	15.7
S10	10 Feb 2019	Wave Height Low (ft)	3
S10	10 Feb 2019	High Tide (ft)	3.5
S10	10 Feb 2019	High Tide Time	1141
S10	10 Feb 2019	Low Tide (ft)	1.7
S10	10 Feb 2019	Low Tide Time	612
S10	10 Feb 2019	Comments	Resample; Water clear
S10	12 Feb 2019	Arrive Time	834
S10	12 Feb 2019	Weather	Sunny
S10	12 Feb 2019	Wind Speed (kts)	2.1
S10	12 Feb 2019	Wind Dir	E
S10	12 Feb 2019	Animal Life	None
S10	12 Feb 2019	Floatables	None
S10	12 Feb 2019	Water Color	Green
S10	12 Feb 2019	Current Direction	N
S10	12 Feb 2019	Water Temp (C)	13.5
S10	12 Feb 2019	Wave Height Low (ft)	2
S10	12 Feb 2019	High Tide (ft)	2.5
S10	12 Feb 2019	High Tide Time	1453
S10	12 Feb 2019	Low Tide (ft)	1.4
S10	12 Feb 2019	Low Tide Time	909
S10	12 Feb 2019	Comments	Water clear
S10	14 Feb 2019	Arrive Time	848
S10	14 Feb 2019	Weather	Heavy Rain
S10	14 Feb 2019	Wind Speed (kts)	27.4
S10	14 Feb 2019	Wind Dir	S
S10	14 Feb 2019	Animal Life	None
S10	14 Feb 2019	Floatables	None
S10	14 Feb 2019	Water Color	Brown
S10	14 Feb 2019	Current Direction	N
S10	14 Feb 2019	Water Temp (C)	17.4
S10	14 Feb 2019	Wave Height Low (ft)	3
S10	14 Feb 2019	High Tide (ft)	4.8
S10	14 Feb 2019	High Tide Time	403
S10	14 Feb 2019	Low Tide (ft)	0.2
S10	14 Feb 2019	Low Tide Time	1147

Station	Date	Parameter	Value
S10	14 Feb 2019	Comments	Resample; Water turbid
S10	16 Feb 2019	Arrive Time	949
S10	16 Feb 2019	Weather	Partly Cloudy
S10	16 Feb 2019	Wind Speed (kts)	11.2
S10	16 Feb 2019	Wind Dir	W
S10	16 Feb 2019	Animal Life	None
S10	16 Feb 2019	Floatables	None
S10	16 Feb 2019	Water Color	Brown
S10	16 Feb 2019	Current Direction	N
S10	16 Feb 2019	Water Temp (C)	16.4
S10	16 Feb 2019	Wave Height Low (ft)	4
S10	16 Feb 2019	High Tide (ft)	5.8
S10	16 Feb 2019	High Tide Time	600
S10	16 Feb 2019	Low Tide (ft)	-1.1
S10	16 Feb 2019	Low Tide Time	1320
S10	16 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; 5 Persons; Water clear
S10	18 Feb 2019	Arrive Time	920
S10	18 Feb 2019	Weather	Partly Cloudy
S10	18 Feb 2019	Wind Speed (kts)	4.7
S10	18 Feb 2019	Wind Dir	E
S10	18 Feb 2019	Animal Life	None
S10	18 Feb 2019	Floatables	None
S10	18 Feb 2019	Water Color	Green
S10	18 Feb 2019	Current Direction	S
S10	18 Feb 2019	Water Temp (C)	14.8
S10	18 Feb 2019	Wave Height Low (ft)	4
S10	18 Feb 2019	High Tide (ft)	6.5
S10	18 Feb 2019	High Tide Time	737
S10	18 Feb 2019	Low Tide (ft)	-1.7
S10	18 Feb 2019	Low Tide Time	1440
S10	18 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Water clear
S10	19 Feb 2019	Arrive Time	1114
S10	19 Feb 2019	Weather	Sunny
S10	19 Feb 2019	Wind Speed (kts)	6
S10	19 Feb 2019	Wind Dir	N
S10	19 Feb 2019	Animal Life	1 Dog
S10	19 Feb 2019	Floatables	None
S10	19 Feb 2019	Water Color	Green
S10	19 Feb 2019	Current Direction	N
S10	19 Feb 2019	Water Temp (C)	16.1
S10	19 Feb 2019	Wave Height Low (ft)	2
S10	19 Feb 2019	High Tide (ft)	6.6
S10	19 Feb 2019	High Tide Time	824
S10	19 Feb 2019	Low Tide (ft)	-1.7
S10	19 Feb 2019	Low Tide Time	1519
S10	19 Feb 2019	Comments	Sewage-like odor; 1 Person; Water clear
S10	21 Feb 2019	Arrive Time	938
S10	21 Feb 2019	Weather	Cloudy
S10	21 Feb 2019	Wind Speed (kts)	20.8
S10	21 Feb 2019	Wind Dir	W

Station	Date	Parameter	Value
S10	21 Feb 2019	Animal Life	None
S10	21 Feb 2019	Floatables	None
S10	21 Feb 2019	Water Color	Green
S10	21 Feb 2019	Current Direction	N
S10	21 Feb 2019	Water Temp (C)	12.2
S10	21 Feb 2019	Wave Height Low (ft)	5
S10	21 Feb 2019	High Tide (ft)	5.9
S10	21 Feb 2019	High Tide Time	956
S10	21 Feb 2019	Low Tide (ft)	0.4
S10	21 Feb 2019	Low Tide Time	357
S10	21 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Water clear
S10	22 Feb 2019	Arrive Time	927
S10	22 Feb 2019	Weather	Sunny
S10	22 Feb 2019	Wind Speed (kts)	2.9
S10	22 Feb 2019	Wind Dir	N
S10	22 Feb 2019	Animal Life	None
S10	22 Feb 2019	Floatables	None
S10	22 Feb 2019	Water Color	Brown
S10	22 Feb 2019	Current Direction	N
S10	22 Feb 2019	Water Temp (C)	15.2
S10	22 Feb 2019	Wave Height Low (ft)	3
S10	22 Feb 2019	High Tide (ft)	5.2
S10	22 Feb 2019	High Tide Time	1045
S10	22 Feb 2019	Low Tide (ft)	0.4
S10	22 Feb 2019	Low Tide Time	449
S10	22 Feb 2019	Comments	Resample; Kelp; Sewage-like odor; Water turbid
S10	24 Feb 2019	Arrive Time	840
S10	24 Feb 2019	Weather	Partly Cloudy
S10	24 Feb 2019	Wind Speed (kts)	2.3
S10	24 Feb 2019	Wind Dir	N
S10	24 Feb 2019	Animal Life	None
S10	24 Feb 2019	Floatables	None
S10	24 Feb 2019	Water Color	Green
S10	24 Feb 2019	Current Direction	N
S10	24 Feb 2019	Water Temp (C)	14.8
S10	24 Feb 2019	Wave Height Low (ft)	4
S10	24 Feb 2019	High Tide (ft)	3.5
S10	24 Feb 2019	High Tide Time	1244
S10	24 Feb 2019	Low Tide (ft)	0.8
S10	24 Feb 2019	Low Tide Time	655
S10	24 Feb 2019	Comments	Resample; Seagrass; Water clear
S10	26 Feb 2019	Arrive Time	814
S10	26 Feb 2019	Weather	Overcast
S10	26 Feb 2019	Wind Speed (kts)	0.7
S10	26 Feb 2019	Wind Dir	SE
S10	26 Feb 2019	Animal Life	None
S10	26 Feb 2019	Floatables	None
S10	26 Feb 2019	Water Color	Green
S10	26 Feb 2019	Current Direction	N
S10	26 Feb 2019	Water Temp (C)	13.7
S10	26 Feb 2019	Wave Height Low (ft)	2
S10	26 Feb 2019	High Tide (ft)	4.5

Station	Date	Parameter	Value
S10	26 Feb 2019	High Tide Time	218
S10	26 Feb 2019	Low Tide (ft)	0.7
S10	26 Feb 2019	Low Tide Time	1003
S10	26 Feb 2019	Comments	Water clear
S11	01 Feb 2019	Arrive Time	1140
S11	01 Feb 2019	Weather	Partly Cloudy
S11	01 Feb 2019	Wind Speed (kts)	5.4
S11	01 Feb 2019	Wind Dir	S
S11	01 Feb 2019	Animal Life	None
S11	01 Feb 2019	Floatables	None
S11	01 Feb 2019	Water Color	Green
S11	01 Feb 2019	Current Direction	N
S11	01 Feb 2019	Water Temp (C)	17
S11	01 Feb 2019	Wave Height Low (ft)	2
S11	01 Feb 2019	High Tide (ft)	5.5
S11	01 Feb 2019	High Tide Time	642
S11	01 Feb 2019	Low Tide (ft)	-0.6
S11	01 Feb 2019	Low Tide Time	1400
S11	01 Feb 2019	Comments	Resample; 2 Persons; Water clear
S11	03 Feb 2019	Arrive Time	941
S11	03 Feb 2019	Weather	Partly Cloudy
S11	03 Feb 2019	Wind Speed (kts)	4.4
S11	03 Feb 2019	Wind Dir	W
S11	03 Feb 2019	Animal Life	None
S11	03 Feb 2019	Floatables	None
S11	03 Feb 2019	Water Color	Brown
S11	03 Feb 2019	Current Direction	W
S11	03 Feb 2019	Water Temp (C)	18.4
S11	03 Feb 2019	Wave Height Low (ft)	5
S11	03 Feb 2019	High Tide (ft)	5.6
S11	03 Feb 2019	High Tide Time	751
S11	03 Feb 2019	Low Tide (ft)	-0.8
S11	03 Feb 2019	Low Tide Time	1458
S11	03 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S11	05 Feb 2019	Arrive Time	1010
S11	05 Feb 2019	Weather	Partly Cloudy
S11	05 Feb 2019	Wind Speed (kts)	4
S11	05 Feb 2019	Wind Dir	W
S11	05 Feb 2019	Animal Life	None
S11	05 Feb 2019	Floatables	None
S11	05 Feb 2019	Water Color	Blue
S11	05 Feb 2019	Current Direction	N
S11	05 Feb 2019	Water Temp (C)	15
S11	05 Feb 2019	Wave Height Low (ft)	3
S11	05 Feb 2019	High Tide (ft)	5.5
S11	05 Feb 2019	High Tide Time	853
S11	05 Feb 2019	Low Tide (ft)	-0.6
S11	05 Feb 2019	Low Tide Time	1553
S11	05 Feb 2019	Comments	Resample; Kelp; Seagrass; Sewage-like odor; Water turbid
S11	06 Feb 2019	Arrive Time	1033
S11	06 Feb 2019	Weather	Sunny

Station	Date	Parameter	Value
S11	06 Feb 2019	Wind Speed (kts)	2.1
S11	06 Feb 2019	Wind Dir	W
S11	06 Feb 2019	Animal Life	None
S11	06 Feb 2019	Floatables	None
S11	06 Feb 2019	Water Color	Green
S11	06 Feb 2019	Current Direction	S
S11	06 Feb 2019	Water Temp (C)	17.8
S11	06 Feb 2019	Wave Height Low (ft)	4
S11	06 Feb 2019	High Tide (ft)	5.3
S11	06 Feb 2019	High Tide Time	923
S11	06 Feb 2019	Low Tide (ft)	-0.4
S11	06 Feb 2019	Low Tide Time	1620
S11	06 Feb 2019	Comments	Kelp; Seagrass; Debris; Water clear
S11	08 Feb 2019	Arrive Time	824
S11	08 Feb 2019	Weather	Sunny
S11	08 Feb 2019	Wind Speed (kts)	6.4
S11	08 Feb 2019	Wind Dir	E
S11	08 Feb 2019	Animal Life	None
S11	08 Feb 2019	Floatables	None
S11	08 Feb 2019	Water Color	Green
S11	08 Feb 2019	Current Direction	N
S11	08 Feb 2019	Water Temp (C)	13.9
S11	08 Feb 2019	Wave Height Low (ft)	4
S11	08 Feb 2019	High Tide (ft)	4.6
S11	08 Feb 2019	High Tide Time	1024
S11	08 Feb 2019	Low Tide (ft)	1.5
S11	08 Feb 2019	Low Tide Time	434
S11	08 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; 1 Person; Water clear
S11	10 Feb 2019	Arrive Time	923
S11	10 Feb 2019	Weather	Partly Cloudy
S11	10 Feb 2019	Wind Speed (kts)	5.8
S11	10 Feb 2019	Wind Dir	E
S11	10 Feb 2019	Animal Life	None
S11	10 Feb 2019	Floatables	None
S11	10 Feb 2019	Water Color	Green
S11	10 Feb 2019	Current Direction	N
S11	10 Feb 2019	Water Temp (C)	16.2
S11	10 Feb 2019	Wave Height Low (ft)	3
S11	10 Feb 2019	High Tide (ft)	3.5
S11	10 Feb 2019	High Tide Time	1141
S11	10 Feb 2019	Low Tide (ft)	1.7
S11	10 Feb 2019	Low Tide Time	612
S11	10 Feb 2019	Comments	Resample; Kelp; Seagrass; 1 Person; Water clear
S11	12 Feb 2019	Arrive Time	956
S11	12 Feb 2019	Weather	Sunny
S11	12 Feb 2019	Wind Speed (kts)	5
S11	12 Feb 2019	Wind Dir	E
S11	12 Feb 2019	Animal Life	1 Seal
S11	12 Feb 2019	Floatables	None
S11	12 Feb 2019	Water Color	Brown
S11	12 Feb 2019	Current Direction	N
S11	12 Feb 2019	Water Temp (C)	13.9

Station	Date	Parameter	Value
S11	12 Feb 2019	Wave Height Low (ft)	2
S11	12 Feb 2019	High Tide (ft)	2.5
S11	12 Feb 2019	High Tide Time	1453
S11	12 Feb 2019	Low Tide (ft)	1.4
S11	12 Feb 2019	Low Tide Time	909
S11	12 Feb 2019	Comments	1 Surfer; Water clear
S11	14 Feb 2019	Arrive Time	1013
S11	14 Feb 2019	Weather	Heavy Rain
S11	14 Feb 2019	Wind Speed (kts)	24.5
S11	14 Feb 2019	Wind Dir	S
S11	14 Feb 2019	Animal Life	None
S11	14 Feb 2019	Floatables	Foam
S11	14 Feb 2019	Water Color	Brown
S11	14 Feb 2019	Current Direction	S
S11	14 Feb 2019	Water Temp (C)	16.4
S11	14 Feb 2019	Wave Height Low (ft)	2
S11	14 Feb 2019	High Tide (ft)	4.8
S11	14 Feb 2019	High Tide Time	403
S11	14 Feb 2019	Low Tide (ft)	0.2
S11	14 Feb 2019	Low Tide Time	1147
S11	14 Feb 2019	Comments	Resample; Sewage-like odor; Water turbid
S11	16 Feb 2019	Arrive Time	1126
S11	16 Feb 2019	Weather	Partly Cloudy
S11	16 Feb 2019	Wind Speed (kts)	10.7
S11	16 Feb 2019	Wind Dir	W
S11	16 Feb 2019	Animal Life	None
S11	16 Feb 2019	Floatables	None
S11	16 Feb 2019	Water Color	Brown
S11	16 Feb 2019	Current Direction	N
S11	16 Feb 2019	Water Temp (C)	16.3
S11	16 Feb 2019	Wave Height Low (ft)	4
S11	16 Feb 2019	High Tide (ft)	5.8
S11	16 Feb 2019	High Tide Time	600
S11	16 Feb 2019	Low Tide (ft)	-1.1
S11	16 Feb 2019	Low Tide Time	1320
S11	16 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; 5 Persons; Water clear
S11	18 Feb 2019	Arrive Time	1053
S11	18 Feb 2019	Weather	Partly Cloudy
S11	18 Feb 2019	Wind Speed (kts)	6.3
S11	18 Feb 2019	Wind Dir	W
S11	18 Feb 2019	Animal Life	None
S11	18 Feb 2019	Floatables	None
S11	18 Feb 2019	Water Color	Green
S11	18 Feb 2019	Current Direction	S
S11	18 Feb 2019	Water Temp (C)	15
S11	18 Feb 2019	Wave Height Low (ft)	4
S11	18 Feb 2019	High Tide (ft)	6.5
S11	18 Feb 2019	High Tide Time	737
S11	18 Feb 2019	Low Tide (ft)	-1.7
S11	18 Feb 2019	Low Tide Time	1440
S11	18 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; Water clear

Station	Date	Parameter	Value
S11	19 Feb 2019	Arrive Time	914
S11	19 Feb 2019	Weather	Sunny
S11	19 Feb 2019	Wind Speed (kts)	4.3
S11	19 Feb 2019	Wind Dir	SE
S11	19 Feb 2019	Animal Life	None
S11	19 Feb 2019	Floatables	None
S11	19 Feb 2019	Water Color	Green
S11	19 Feb 2019	Current Direction	SE
S11	19 Feb 2019	Water Temp (C)	16.9
S11	19 Feb 2019	Wave Height Low (ft)	2
S11	19 Feb 2019	High Tide (ft)	6.6
S11	19 Feb 2019	High Tide Time	824
S11	19 Feb 2019	Low Tide (ft)	-1.7
S11	19 Feb 2019	Low Tide Time	1519
S11	19 Feb 2019	Comments	Kelp; Seagrass; Water clear
S11	26 Feb 2019	Arrive Time	926
S11	26 Feb 2019	Weather	Overcast
S11	26 Feb 2019	Wind Speed (kts)	0.1
S11	26 Feb 2019	Wind Dir	N
S11	26 Feb 2019	Animal Life	None
S11	26 Feb 2019	Floatables	None
S11	26 Feb 2019	Water Color	Green
S11	26 Feb 2019	Current Direction	N
S11	26 Feb 2019	Water Temp (C)	13.7
S11	26 Feb 2019	Wave Height Low (ft)	1
S11	26 Feb 2019	High Tide (ft)	4.5
S11	26 Feb 2019	High Tide Time	218
S11	26 Feb 2019	Low Tide (ft)	0.7
S11	26 Feb 2019	Low Tide Time	1003
S11	26 Feb 2019	Comments	2 Persons; Water clear
S11	28 Feb 2019	Arrive Time	840
S11	28 Feb 2019	Weather	Partly Cloudy
S11	28 Feb 2019	Wind Speed (kts)	1.1
S11	28 Feb 2019	Wind Dir	N
S11	28 Feb 2019	Animal Life	1 Cormorant
S11	28 Feb 2019	Floatables	None
S11	28 Feb 2019	Water Color	Brown
S11	28 Feb 2019	Current Direction	N
S11	28 Feb 2019	Water Temp (C)	18.2
S11	28 Feb 2019	Wave Height Low (ft)	2
S11	28 Feb 2019	High Tide (ft)	4.6
S11	28 Feb 2019	High Tide Time	447
S11	28 Feb 2019	Low Tide (ft)	0
S11	28 Feb 2019	Low Tide Time	1224
S11	28 Feb 2019	Comments	Resample; Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S12	06 Feb 2019	Arrive Time	1050
S12	06 Feb 2019	Weather	Sunny
S12	06 Feb 2019	Wind Speed (kts)	3.1
S12	06 Feb 2019	Wind Dir	W
S12	06 Feb 2019	Animal Life	None
S12	06 Feb 2019	Floatables	None

Station	Date	Parameter	Value
S12	06 Feb 2019	Water Color	Green
S12	06 Feb 2019	Current Direction	S
S12	06 Feb 2019	Water Temp (C)	17.3
S12	06 Feb 2019	Wave Height Low (ft)	3
S12	06 Feb 2019	High Tide (ft)	5.3
S12	06 Feb 2019	High Tide Time	923
S12	06 Feb 2019	Low Tide (ft)	-0.4
S12	06 Feb 2019	Low Tide Time	1620
S12	06 Feb 2019	Comments	Kelp; Seagrass; Debris; Water clear
S12	12 Feb 2019	Arrive Time	1018
S12	12 Feb 2019	Weather	Sunny
S12	12 Feb 2019	Wind Speed (kts)	6
S12	12 Feb 2019	Wind Dir	N
S12	12 Feb 2019	Animal Life	None
S12	12 Feb 2019	Floatables	None
S12	12 Feb 2019	Water Color	Green
S12	12 Feb 2019	Current Direction	N
S12	12 Feb 2019	Water Temp (C)	15.8
S12	12 Feb 2019	Wave Height Low (ft)	2
S12	12 Feb 2019	High Tide (ft)	2.5
S12	12 Feb 2019	High Tide Time	1453
S12	12 Feb 2019	Low Tide (ft)	1.4
S12	12 Feb 2019	Low Tide Time	909
S12	12 Feb 2019	Comments	2 Persons; Water clear
S12	19 Feb 2019	Arrive Time	1009
S12	19 Feb 2019	Weather	Sunny
S12	19 Feb 2019	Wind Speed (kts)	2.2
S12	19 Feb 2019	Wind Dir	N
S12	19 Feb 2019	Animal Life	None
S12	19 Feb 2019	Floatables	None
S12	19 Feb 2019	Water Color	Green
S12	19 Feb 2019	Current Direction	N
S12	19 Feb 2019	Water Temp (C)	15.2
S12	19 Feb 2019	Wave Height Low (ft)	4
S12	19 Feb 2019	High Tide (ft)	6.6
S12	19 Feb 2019	High Tide Time	824
S12	19 Feb 2019	Low Tide (ft)	-1.7
S12	19 Feb 2019	Low Tide Time	1519
S12	19 Feb 2019	Comments	Kelp; Seagrass; Water clear
S12	26 Feb 2019	Arrive Time	945
S12	26 Feb 2019	Weather	Overcast
S12	26 Feb 2019	Wind Speed (kts)	1.1
S12	26 Feb 2019	Wind Dir	N
S12	26 Feb 2019	Animal Life	2 Dogs
S12	26 Feb 2019	Floatables	None
S12	26 Feb 2019	Water Color	Green
S12	26 Feb 2019	Current Direction	N
S12	26 Feb 2019	Water Temp (C)	14.1
S12	26 Feb 2019	Wave Height Low (ft)	2
S12	26 Feb 2019	High Tide (ft)	2.8
S12	26 Feb 2019	High Tide Time	1644
S12	26 Feb 2019	Low Tide (ft)	0.7

Station	Date	Parameter	Value
S12	26 Feb 2019	Low Tide Time	1003
S12	26 Feb 2019	Comments	3 Persons; Water clear

Kelp Stations

Table 3.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1,000 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Feb 2019	856*	1080*	111*	115*	37*	149*	2993*
02 Feb 2019	856*	1080*	111*	115*	37*	149*	2993*
03 Feb 2019	856*	1080*	111*	115*	37*	149*	2993*
04 Feb 2019	856*	1080*	111*	115*	37*	149*	2993*
05 Feb 2019	856*	1080*	111*	115*	37*	149*	2993*
06 Feb 2019	694*	1324*	61*	446*	78*	65*	4044*
07 Feb 2019	704*	1191*	69*	302*	92*	27*	3334*
08 Feb 2019	704*	1191*	69*	302*	92*	27*	3334*
09 Feb 2019	704*	1191*	69*	302*	92*	27*	3334*
10 Feb 2019	704*	1191*	69*	302*	92*	27*	3334*
11 Feb 2019	966	529	60	151	63	21	1733
12 Feb 2019	966	529	60	151	63	21	1733
13 Feb 2019	781*	628*	45*	47*	30*	11*	1159*
14 Feb 2019	781*	628*	45*	47*	30*	11*	1159*
15 Feb 2019	781*	628*	45*	47*	30*	11*	1159*
16 Feb 2019	781*	628*	45*	47*	30*	11*	1159*
17 Feb 2019	781*	628*	45*	47*	30*	11*	1159*
18 Feb 2019	781*	628*	45*	47*	30*	11*	1159*
19 Feb 2019	810	374	46	56	37	15	1616
20 Feb 2019	810	374	46	56	37	15	1616
21 Feb 2019	810	374	46	56	37	15	1616
22 Feb 2019	678*	160*	74*	75*	60*	15*	1004*
23 Feb 2019	678*	160*	74*	75*	60*	15*	1004*
24 Feb 2019	678*	160*	74*	75*	60*	15*	1004*
25 Feb 2019	495	181	119	40	54	14	667
26 Feb 2019	495	181	119	40	54	14	667
27 Feb 2019	759*	126*	108*	24*	50*	10*	658*
28 Feb 2019	759*	126*	108*	24*	50*	10*	658*

* Geometric mean calculated using n<5

Table 3.2

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Feb 2019	131*	173*	16*	30*	12*	16*	371*
02 Feb 2019	131*	173*	16*	30*	12*	16*	371*
03 Feb 2019	131*	173*	16*	30*	12*	16*	371*
04 Feb 2019	131*	173*	16*	30*	12*	16*	371*
05 Feb 2019	131*	173*	16*	30*	12*	16*	371*
06 Feb 2019	118*	222*	11*	75*	21*	7*	576*
07 Feb 2019	135*	189*	11*	47*	21*	5*	490*
08 Feb 2019	135*	189*	11*	47*	21*	5*	490*
09 Feb 2019	135*	189*	11*	47*	21*	5*	490*
10 Feb 2019	135*	189*	11*	47*	21*	5*	490*
11 Feb 2019	166	90	9	25	13	5	215
12 Feb 2019	166	90	9	25	13	5	215
13 Feb 2019	163*	120*	7*	8*	7*	3*	153*
14 Feb 2019	163*	120*	7*	8*	7*	3*	153*
15 Feb 2019	163*	120*	7*	8*	7*	3*	153*
16 Feb 2019	163*	120*	7*	8*	7*	3*	153*
17 Feb 2019	163*	120*	7*	8*	7*	3*	153*
18 Feb 2019	163*	120*	7*	8*	7*	3*	153*
19 Feb 2019	137	75	7	9	6	3	194
20 Feb 2019	137	75	7	9	6	3	194
21 Feb 2019	137	75	7	9	6	3	194
22 Feb 2019	119*	36*	9*	13*	8*	4*	118*
23 Feb 2019	119*	36*	9*	13*	8*	4*	118*
24 Feb 2019	119*	36*	9*	13*	8*	4*	118*
25 Feb 2019	70	35	16	9	7	4	90
26 Feb 2019	70	35	16	9	7	4	90
27 Feb 2019	81*	21*	15*	5*	5*	4*	78*
28 Feb 2019	81*	21*	15*	5*	5*	4*	78*

* Geometric mean calculated using n<5

Table 3.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Feb 2019	50*	123*	14*	15*	9*	14*	126*
02 Feb 2019	50*	123*	14*	15*	9*	14*	126*
03 Feb 2019	50*	123*	14*	15*	9*	14*	126*
04 Feb 2019	50*	123*	14*	15*	9*	14*	126*
05 Feb 2019	50*	123*	14*	15*	9*	14*	126*
06 Feb 2019	42*	133*	9*	28*	14*	6*	119*
07 Feb 2019	49*	140*	15*	42*	20*	4*	122*
08 Feb 2019	49*	140*	15*	42*	20*	4*	122*
09 Feb 2019	49*	140*	15*	42*	20*	4*	122*
10 Feb 2019	49*	140*	15*	42*	20*	4*	122*
11 Feb 2019	50	90	17	35	14	4	71
12 Feb 2019	50	90	17	35	14	4	71
13 Feb 2019	37*	106*	14*	18*	9*	2*	54*
14 Feb 2019	37*	106*	14*	18*	9*	2*	54*
15 Feb 2019	37*	106*	14*	18*	9*	2*	54*
16 Feb 2019	37*	106*	14*	18*	9*	2*	54*
17 Feb 2019	37*	106*	14*	18*	9*	2*	54*
18 Feb 2019	37*	106*	14*	18*	9*	2*	54*
19 Feb 2019	45	79	13	18	11	3	85
20 Feb 2019	45	79	13	18	11	3	85
21 Feb 2019	45	79	13	18	11	3	85
22 Feb 2019	43*	63*	21*	31*	16*	3*	72*
23 Feb 2019	43*	63*	21*	31*	16*	3*	72*
24 Feb 2019	43*	63*	21*	31*	16*	3*	72*
25 Feb 2019	42	47	20	18	13	3	67
26 Feb 2019	42	47	20	18	13	3	67
27 Feb 2019	61*	30*	24*	17*	13*	3*	72*
28 Feb 2019	61*	30*	24*	17*	13*	3*	72*

* Geometric mean calculated using n<5

Table 3.4

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
07 Feb 2019	IC	IC	IC	IC	IC	IC	IC
11 Feb 2019	IC	IC	IC	IC	IC	IC	IC
19 Feb 2019	IC	IC	IC	IC	IC	IC	E
25 Feb 2019	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.5

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
07 Feb 2019	E	IC	IC	IC	IC	IC	E
11 Feb 2019	E	IC	IC	IC	IC	IC	IC
19 Feb 2019	IC	IC	IC	IC	IC	IC	E
25 Feb 2019	IC	IC	E	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.6

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	I19	I24	I25	I26	I32	I39	I40
07 Feb 2019	IC	E	E	E	E	IC	E
11 Feb 2019	IC	IC	IC	IC	IC	IC	IC
19 Feb 2019	E	IC	IC	IC	IC	IC	E
25 Feb 2019	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.7

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	I19	I24	I25	I26	I32	I39	I40
07 Feb 2019	E	E	IC	IC	IC	IC	E
11 Feb 2019	E	IC	IC	IC	IC	IC	IC
19 Feb 2019	IC	IC	IC	IC	IC	IC	IC
25 Feb 2019	IC	IC	E	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.8

Summary of water quality parameters at the SBOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal) and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; the fecal:total coliform ratio (F:T) is unitless; values for temperature (Temp, °C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I19	07 Feb 2019	1052	2	1200e	460	52	0.383	15.4	53.68	8.1	33.36	8.2
I19	07 Feb 2019	1052	6	800e	100e	100	0.125	15.3	57.02	7.9	33.44	8.2
I19	07 Feb 2019	1052	11	200e	40	82	0.200	15.4	56.00	7.8	33.49	8.2
I19	11 Feb 2019	1056	2	7200	1000e	100e	0.139	15.1	31.11	8.4	33.45	8.2
I19	11 Feb 2019	1056	6	3000e	160e	44	0.053	15.0	56.62	8.1	33.58	8.2
I19	11 Feb 2019	1056	11	80e	12e	18e	0.150	14.9	42.05	7.9	33.59	8.2
I19	19 Feb 2019	1036	2	1200e	120e	80e	0.100	13.1	33.41	6.5	33.56	8.0
I19	19 Feb 2019	1036	6	620	24e	50	0.039	12.8	67.08	6.0	33.59	8.0
I19	19 Feb 2019	1036	11	1000e	62	140e	0.062	12.7	28.75	5.8	33.59	8.0
I19	25 Feb 2019	1118	2	400	<2	<2	0.005	14.0	69.72	8.2	33.50	8.1
I19	25 Feb 2019	1118	6	20e	8e	46	0.400	12.7	63.46	6.5	33.65	8.1
I19	25 Feb 2019	1118	11	<2	14e	62	7.000	12.4	70.39	6.0	33.63	8.0
I24	07 Feb 2019	1119	2	200e	24e	16e	0.120	15.3	47.06	8.1	33.40	8.2
I24	07 Feb 2019	1119	6	2000e	280e	140e	0.140	15.2	34.54	7.9	33.51	8.2
I24	07 Feb 2019	1119	11	400	48	340e	0.120	15.2	15.34	7.7	33.57	8.2
I24	11 Feb 2019	1117	2	2e	<2	<2	1.000	15.1	56.90	8.3	33.62	8.2
I24	11 Feb 2019	1117	6	20e	<2	22e	0.100	14.9	53.79	8.2	33.61	8.2
I24	11 Feb 2019	1117	11	40e	10e	22e	0.250	14.9	36.84	8.1	33.62	8.2
I24	19 Feb 2019	1058	2	40e	<2	10e	0.050	14.1	44.85	7.6	33.55	8.1
I24	19 Feb 2019	1058	6	<20	8e	24e	0.400	13.8	49.09	7.3	33.56	8.1
I24	19 Feb 2019	1058	11	80e	24e	38e	0.300	13.1	45.45	6.1	33.57	8.0
I24	25 Feb 2019	1140	2	660	60e	26e	0.091	13.8	68.27	8.3	33.25	8.2
I24	25 Feb 2019	1140	6	80e	18e	4e	0.225	12.9	79.76	6.7	33.60	8.1
I24	25 Feb 2019	1140	11	160e	22e	12e	0.138	12.7	72.91	6.1	33.62	8.0
I25	07 Feb 2019	1126	2	<20	<2	20e	0.100	15.5	53.97	8.1	33.60	8.2
I25	07 Feb 2019	1126	6	80e	4e	86	0.050	15.3	44.26	7.8	33.60	8.2
I25	07 Feb 2019	1126	9	200e	34e	120e	0.170	15.3	30.98	7.8	33.59	8.2
I25	11 Feb 2019	1125	2	2e	<2	6e	1.000	15.0	62.82	8.4	33.62	8.2
I25	11 Feb 2019	1125	6	40e	<2	28e	0.050	14.9	56.24	8.2	33.61	8.2
I25	11 Feb 2019	1125	9	60e	8e	48	0.133	14.9	46.51	8.1	33.61	8.2
I25	19 Feb 2019	1104	2	16e	<2	4e	0.125	14.2	59.24	7.8	33.55	8.2
I25	19 Feb 2019	1104	6	40e	4e	6e	0.100	13.9	61.23	7.6	33.54	8.2
I25	19 Feb 2019	1104	9	100e	12e	18e	0.120	13.0	66.09	6.2	33.58	8.0
I25	25 Feb 2019	1148	2	2200e	420	46	0.191	13.8	68.22	8.2	33.12	8.1
I25	25 Feb 2019	1148	6	96	6e	<2	0.062	12.8	75.98	6.8	33.63	8.1
I25	25 Feb 2019	1148	9	<20	4e	2e	0.200	12.7	82.33	6.4	33.61	8.1

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I26	07 Feb 2019	1139	2	20e	4e	4e	0.200	15.5	58.67	8.1	33.60	8.2
I26	07 Feb 2019	1139	6	120e	12e	200e	0.100	15.3	49.28	7.9	33.60	8.2
I26	07 Feb 2019	1139	9	140e	18e	220e	0.129	15.3	44.13	7.9	33.60	8.2
I26	11 Feb 2019	1133	2	<2	<2	<2	1.000	15.2	60.41	8.3	33.63	8.2
I26	11 Feb 2019	1133	6	6e	<2	4e	0.333	14.9	69.30	8.4	33.60	8.2
I26	11 Feb 2019	1133	9	<20	<2	46	0.100	14.9	63.34	8.3	33.60	8.2
I26	19 Feb 2019	1114	2	34e	<2	14e	0.059	14.2	46.45	7.8	33.55	8.1
I26	19 Feb 2019	1114	6	200e	20e	22e	0.100	12.8	71.34	6.2	33.62	8.1
I26	19 Feb 2019	1114	9	100e	20e	18e	0.200	12.7	72.15	5.9	33.59	8.0
I26	25 Feb 2019	1159	2	4e	<2	<2	0.500	13.4	73.27	8.1	33.55	8.2
I26	25 Feb 2019	1159	6	4e	<2	<2	0.500	12.5	83.02	6.4	33.61	8.0
I26	25 Feb 2019	1159	9	2e	<2	<2	1.000	12.5	83.44	6.4	33.61	8.0
I32	07 Feb 2019	1151	2	60e	4e	28e	0.067	15.6	41.61	8.0	33.61	8.2
I32	07 Feb 2019	1151	6	<200	22e	20e	0.110	15.2	26.84	7.9	33.59	8.2
I32	07 Feb 2019	1151	9	200e	32e	110	0.160	15.2	31.57	8.0	33.60	8.2
I32	11 Feb 2019	1145	2	<2	<2	<2	1.000	15.2	57.52	8.4	33.61	8.2
I32	11 Feb 2019	1145	6	<20	<2	<2	0.100	15.0	60.16	8.4	33.61	8.2
I32	11 Feb 2019	1145	9	<20	2e	6e	0.100	14.9	59.97	8.4	33.61	8.2
I32	19 Feb 2019	1130	2	8e	2e	2e	0.250	13.8	50.37	7.2	33.57	8.1
I32	19 Feb 2019	1130	6	40e	2e	14e	0.050	13.3	59.95	6.5	33.58	8.1
I32	19 Feb 2019	1130	9	200e	10e	56	0.050	13.2	54.76	6.2	33.59	8.0
I32	25 Feb 2019	1212	2	4e	<2	<2	0.500	12.9	66.78	6.6	33.62	8.1
I32	25 Feb 2019	1212	6	48	4e	<2	0.083	12.6	70.71	6.1	33.62	8.0
I32	25 Feb 2019	1212	9	52	4e	14e	0.077	12.6	62.79	6.0	33.62	8.0
I39	07 Feb 2019	1029	2	<2	<2	<2	1.000	15.3	83.72	8.0	33.62	8.2
I39	07 Feb 2019	1029	12	<2	<2	<2	1.000	15.2	83.50	7.8	33.62	8.2
I39	07 Feb 2019	1029	18	<2	<2	<2	1.000	15.2	83.17	7.9	33.62	8.2
I39	11 Feb 2019	1033	2	<2	<2	<2	1.000	15.1	82.81	8.1	33.58	8.2
I39	11 Feb 2019	1033	12	<20	<2	<2	0.100	14.9	81.74	7.6	33.60	8.2
I39	11 Feb 2019	1033	18	2e	4e	2e	2.000	14.7	80.95	7.3	33.61	8.2
I39	19 Feb 2019	1014	2	2e	<2	2e	1.000	14.2	76.00	7.8	33.52	8.2
I39	19 Feb 2019	1014	12	20e	2e	4e	0.100	13.2	84.83	6.5	33.57	8.1
I39	19 Feb 2019	1014	18	160	18e	12e	0.112	12.7	84.83	6.0	33.59	8.0
I39	25 Feb 2019	1048	2	24e	8e	2e	0.333	13.7	73.91	8.3	33.32	8.1
I39	25 Feb 2019	1048	12	<2	<2	2e	1.000	13.4	76.30	8.1	33.54	8.2
I39	25 Feb 2019	1048	18	2e	2e	<2	1.000	12.1	85.70	5.8	33.63	8.0
I40	07 Feb 2019	1111	2	2600e	440	110	0.169	15.1	38.51	8.1	33.35	8.2
I40	07 Feb 2019	1111	6	2600e	240e	100e	0.092	15.1	23.74	8.0	33.50	8.2
I40	07 Feb 2019	1111	9	400e	220e	180e	0.550	15.2	18.04	7.9	33.54	8.2
I40	11 Feb 2019	1109	2	80e	4e	<2	0.050	15.1	57.58	8.3	33.61	8.2
I40	11 Feb 2019	1109	6	120e	6e	10e	0.050	14.9	50.02	8.3	33.60	8.2

Station	Date	Time	Depth	Total	Fecal	Enteroc	F:T	Temp	XMS	DO	Sal	pH
I40	11 Feb 2019	1109	9	180e	14e	12e	0.078	14.8	51.43	8.2	33.61	8.2
I40	19 Feb 2019	1049	2	> 16000	1400e	1200e	0.087	13.9	7.65	7.6	33.11	8.1
I40	19 Feb 2019	1049	6	1300	36e	180e	0.028	13.6	17.84	7.0	33.58	8.1
I40	19 Feb 2019	1049	9	1000	64	180e	0.064	13.4	23.77	6.8	33.58	8.1
I40	25 Feb 2019	1131	2	50	38e	12e	0.760	14.2	67.70	8.2	33.22	8.1
I40	25 Feb 2019	1131	6	20e	34e	70	1.700	12.7	66.81	6.1	33.63	8.0
I40	25 Feb 2019	1131	9	320e	22e	64	0.069	12.5	47.97	5.9	33.63	8.0

ns = not sampled

ND = no data

Table 3.9

Summary of visual observations made during the month for each SBOO kelp station by sample date.

Station	Date	Parameter	Value
I19	07 Feb 2019	Depth (m)	12
I19	07 Feb 2019	Arrive Time	1052
I19	07 Feb 2019	Depart Time	1059
I19	07 Feb 2019	Air Temp (C)	12
I19	07 Feb 2019	Weather	Haze
I19	07 Feb 2019	Visibility (mi)	14
I19	07 Feb 2019	Wind Speed (kts)	6
I19	07 Feb 2019	Wind Dir	N
I19	07 Feb 2019	Water Color	Bluish-Green
I19	07 Feb 2019	Wave Ht Low (ft)	2
I19	07 Feb 2019	Wave Period (sec)	7
I19	07 Feb 2019	Sea State	Calm
I19	07 Feb 2019	High Tide (ft)	5.03
I19	07 Feb 2019	High Tide Time	953
I19	07 Feb 2019	Low Tide (ft)	1.49
I19	07 Feb 2019	Low Tide Time	358
I19	07 Feb 2019	Comments	none
I19	11 Feb 2019	Depth (m)	11
I19	11 Feb 2019	Arrive Time	1056
I19	11 Feb 2019	Depart Time	1059
I19	11 Feb 2019	Air Temp (C)	12
I19	11 Feb 2019	Weather	Haze
I19	11 Feb 2019	Visibility (mi)	13
I19	11 Feb 2019	Wind Speed (kts)	8
I19	11 Feb 2019	Wind Dir	NW
I19	11 Feb 2019	Water Color	Green
I19	11 Feb 2019	Wave Ht Low (ft)	6
I19	11 Feb 2019	Wave Period (sec)	7
I19	11 Feb 2019	Sea State	Confused swell
I19	11 Feb 2019	High Tide (ft)	2.93
I19	11 Feb 2019	High Tide Time	1249
I19	11 Feb 2019	Low Tide (ft)	1.68
I19	11 Feb 2019	Low Tide Time	728
I19	11 Feb 2019	Comments	none
I19	19 Feb 2019	Depth (m)	12
I19	19 Feb 2019	Arrive Time	1036
I19	19 Feb 2019	Depart Time	1041
I19	19 Feb 2019	Air Temp (C)	11
I19	19 Feb 2019	Weather	Haze
I19	19 Feb 2019	Visibility (mi)	15
I19	19 Feb 2019	Wind Speed (kts)	5
I19	19 Feb 2019	Wind Dir	W
I19	19 Feb 2019	Water Color	Brownish-Green
I19	19 Feb 2019	Wave Ht Low (ft)	5
I19	19 Feb 2019	Wave Period (sec)	11
I19	19 Feb 2019	Sea State	Light chop
I19	19 Feb 2019	High Tide (ft)	6.59
I19	19 Feb 2019	High Tide Time	824
I19	19 Feb 2019	Low Tide (ft)	-1.68

Station	Date	Parameter	Value
I19	19 Feb 2019	Low Tide Time	1519
I19	19 Feb 2019	Comments	none
I19	25 Feb 2019	Depth (m)	11
I19	25 Feb 2019	Arrive Time	1118
I19	25 Feb 2019	Depart Time	1121
I19	25 Feb 2019	Air Temp (C)	13
I19	25 Feb 2019	Weather	Haze
I19	25 Feb 2019	Visibility (mi)	9
I19	25 Feb 2019	Wind Speed (kts)	5
I19	25 Feb 2019	Wind Dir	W
I19	25 Feb 2019	Water Color	Greenish-Brown
I19	25 Feb 2019	Wave Ht Low (ft)	3
I19	25 Feb 2019	Wave Period (sec)	11
I19	25 Feb 2019	Sea State	Light chop
I19	25 Feb 2019	High Tide (ft)	2.86
I19	25 Feb 2019	High Tide Time	1418
I19	25 Feb 2019	Low Tide (ft)	0.88
I19	25 Feb 2019	Low Tide Time	821
I19	25 Feb 2019	Comments	none
I24	07 Feb 2019	Depth (m)	11
I24	07 Feb 2019	Arrive Time	1119
I24	07 Feb 2019	Depart Time	1123
I24	07 Feb 2019	Air Temp (C)	13
I24	07 Feb 2019	Weather	Haze
I24	07 Feb 2019	Visibility (mi)	14
I24	07 Feb 2019	Wind Speed (kts)	12
I24	07 Feb 2019	Wind Dir	NW
I24	07 Feb 2019	Water Color	Green
I24	07 Feb 2019	Wave Ht Low (ft)	2
I24	07 Feb 2019	Wave Period (sec)	7
I24	07 Feb 2019	Sea State	Calm
I24	07 Feb 2019	High Tide (ft)	5.03
I24	07 Feb 2019	High Tide Time	953
I24	07 Feb 2019	Low Tide (ft)	1.49
I24	07 Feb 2019	Low Tide Time	358
I24	07 Feb 2019	Comments	none
I24	11 Feb 2019	Depth (m)	11
I24	11 Feb 2019	Arrive Time	1117
I24	11 Feb 2019	Depart Time	1119
I24	11 Feb 2019	Air Temp (C)	12
I24	11 Feb 2019	Weather	Clear
I24	11 Feb 2019	Visibility (mi)	13
I24	11 Feb 2019	Wind Speed (kts)	6
I24	11 Feb 2019	Wind Dir	NW
I24	11 Feb 2019	Water Color	Green
I24	11 Feb 2019	Wave Ht Low (ft)	6
I24	11 Feb 2019	Wave Period (sec)	7
I24	11 Feb 2019	Sea State	Confused swell
I24	11 Feb 2019	High Tide (ft)	2.93
I24	11 Feb 2019	High Tide Time	1249
I24	11 Feb 2019	Low Tide (ft)	1.68
I24	11 Feb 2019	Low Tide Time	728

Station	Date	Parameter	Value
I24	11 Feb 2019	Comments	none
I24	19 Feb 2019	Depth (m)	11
I24	19 Feb 2019	Arrive Time	1058
I24	19 Feb 2019	Depart Time	1101
I24	19 Feb 2019	Air Temp (C)	11
I24	19 Feb 2019	Weather	Haze
I24	19 Feb 2019	Visibility (mi)	15
I24	19 Feb 2019	Wind Speed (kts)	7
I24	19 Feb 2019	Wind Dir	W
I24	19 Feb 2019	Water Color	Brownish-Green
I24	19 Feb 2019	Wave Ht Low (ft)	5
I24	19 Feb 2019	Wave Period (sec)	11
I24	19 Feb 2019	Sea State	Light chop
I24	19 Feb 2019	High Tide (ft)	6.59
I24	19 Feb 2019	High Tide Time	824
I24	19 Feb 2019	Low Tide (ft)	-1.68
I24	19 Feb 2019	Low Tide Time	1519
I24	19 Feb 2019	Comments	Runoff plume on station
I24	25 Feb 2019	Depth (m)	11
I24	25 Feb 2019	Arrive Time	1140
I24	25 Feb 2019	Depart Time	1143
I24	25 Feb 2019	Air Temp (C)	14
I24	25 Feb 2019	Weather	Haze
I24	25 Feb 2019	Visibility (mi)	9
I24	25 Feb 2019	Wind Speed (kts)	5
I24	25 Feb 2019	Wind Dir	NW
I24	25 Feb 2019	Water Color	Greenish-Brown
I24	25 Feb 2019	Wave Ht Low (ft)	3
I24	25 Feb 2019	Wave Period (sec)	11
I24	25 Feb 2019	Sea State	Light chop
I24	25 Feb 2019	High Tide (ft)	2.86
I24	25 Feb 2019	High Tide Time	1418
I24	25 Feb 2019	Low Tide (ft)	0.88
I24	25 Feb 2019	Low Tide Time	821
I24	25 Feb 2019	Comments	Appears to be a fresh water lens at surface (low salinity and high CDOM)
I25	07 Feb 2019	Depth (m)	10
I25	07 Feb 2019	Arrive Time	1128
I25	07 Feb 2019	Depart Time	1131
I25	07 Feb 2019	Air Temp (C)	13
I25	07 Feb 2019	Weather	Haze
I25	07 Feb 2019	Visibility (mi)	14
I25	07 Feb 2019	Wind Speed (kts)	7
I25	07 Feb 2019	Wind Dir	NW
I25	07 Feb 2019	Water Color	Green
I25	07 Feb 2019	Wave Ht Low (ft)	2
I25	07 Feb 2019	Wave Period (sec)	7
I25	07 Feb 2019	Sea State	Calm
I25	07 Feb 2019	High Tide (ft)	5.03
I25	07 Feb 2019	High Tide Time	953
I25	07 Feb 2019	Low Tide (ft)	1.49
I25	07 Feb 2019	Low Tide Time	358

Station	Date	Parameter	Value
I25	07 Feb 2019	Comments	none
I25	11 Feb 2019	Depth (m)	9
I25	11 Feb 2019	Arrive Time	1125
I25	11 Feb 2019	Depart Time	1126
I25	11 Feb 2019	Air Temp (C)	12
I25	11 Feb 2019	Weather	Clear
I25	11 Feb 2019	Visibility (mi)	13
I25	11 Feb 2019	Wind Speed (kts)	8
I25	11 Feb 2019	Wind Dir	NW
I25	11 Feb 2019	Water Color	Green
I25	11 Feb 2019	Wave Ht Low (ft)	6
I25	11 Feb 2019	Wave Period (sec)	7
I25	11 Feb 2019	Sea State	Confused swell
I25	11 Feb 2019	High Tide (ft)	2.93
I25	11 Feb 2019	High Tide Time	1249
I25	11 Feb 2019	Low Tide (ft)	1.68
I25	11 Feb 2019	Low Tide Time	728
I25	11 Feb 2019	Comments	none
I25	19 Feb 2019	Depth (m)	10
I25	19 Feb 2019	Arrive Time	1104
I25	19 Feb 2019	Depart Time	1108
I25	19 Feb 2019	Air Temp (C)	11
I25	19 Feb 2019	Weather	Haze
I25	19 Feb 2019	Visibility (mi)	15
I25	19 Feb 2019	Wind Speed (kts)	8
I25	19 Feb 2019	Wind Dir	W
I25	19 Feb 2019	Water Color	Brownish-Green
I25	19 Feb 2019	Wave Ht Low (ft)	5
I25	19 Feb 2019	Wave Period (sec)	11
I25	19 Feb 2019	Sea State	Light chop
I25	19 Feb 2019	High Tide (ft)	6.59
I25	19 Feb 2019	High Tide Time	824
I25	19 Feb 2019	Low Tide (ft)	-1.68
I25	19 Feb 2019	Low Tide Time	1519
I25	19 Feb 2019	Comments	Runoff plume on station
I25	25 Feb 2019	Depth (m)	9
I25	25 Feb 2019	Arrive Time	1148
I25	25 Feb 2019	Depart Time	1150
I25	25 Feb 2019	Air Temp (C)	13
I25	25 Feb 2019	Weather	Haze
I25	25 Feb 2019	Visibility (mi)	9
I25	25 Feb 2019	Wind Speed (kts)	5
I25	25 Feb 2019	Wind Dir	NW
I25	25 Feb 2019	Water Color	Greenish-Brown
I25	25 Feb 2019	Wave Ht Low (ft)	3
I25	25 Feb 2019	Wave Period (sec)	11
I25	25 Feb 2019	Sea State	Light chop
I25	25 Feb 2019	High Tide (ft)	2.86
I25	25 Feb 2019	High Tide Time	1418
I25	25 Feb 2019	Low Tide (ft)	0.88
I25	25 Feb 2019	Low Tide Time	821
I25	25 Feb 2019	Comments	Appears to be a fresh water lens at surface (low salinity and high CDOM)

Station	Date	Parameter	Value
I26	07 Feb 2019	Depth (m)	10
I26	07 Feb 2019	Arrive Time	1139
I26	07 Feb 2019	Depart Time	1141
I26	07 Feb 2019	Air Temp (C)	13
I26	07 Feb 2019	Weather	Haze
I26	07 Feb 2019	Visibility (mi)	14
I26	07 Feb 2019	Wind Speed (kts)	8
I26	07 Feb 2019	Wind Dir	NW
I26	07 Feb 2019	Water Color	Greenish-Blue
I26	07 Feb 2019	Wave Ht Low (ft)	2
I26	07 Feb 2019	Wave Period (sec)	7
I26	07 Feb 2019	Sea State	Light chop
I26	07 Feb 2019	High Tide (ft)	5.03
I26	07 Feb 2019	High Tide Time	953
I26	07 Feb 2019	Low Tide (ft)	1.49
I26	07 Feb 2019	Low Tide Time	358
I26	07 Feb 2019	Comments	none
I26	11 Feb 2019	Depth (m)	10
I26	11 Feb 2019	Arrive Time	1133
I26	11 Feb 2019	Depart Time	1136
I26	11 Feb 2019	Air Temp (C)	12
I26	11 Feb 2019	Weather	Clear
I26	11 Feb 2019	Visibility (mi)	13
I26	11 Feb 2019	Wind Speed (kts)	9
I26	11 Feb 2019	Wind Dir	W
I26	11 Feb 2019	Water Color	Green
I26	11 Feb 2019	Wave Ht Low (ft)	6
I26	11 Feb 2019	Wave Period (sec)	7
I26	11 Feb 2019	Sea State	Confused swell
I26	11 Feb 2019	High Tide (ft)	2.93
I26	11 Feb 2019	High Tide Time	1249
I26	11 Feb 2019	Low Tide (ft)	1.68
I26	11 Feb 2019	Low Tide Time	728
I26	11 Feb 2019	Comments	none
I26	19 Feb 2019	Depth (m)	10
I26	19 Feb 2019	Arrive Time	1114
I26	19 Feb 2019	Depart Time	1117
I26	19 Feb 2019	Air Temp (C)	11
I26	19 Feb 2019	Weather	Haze
I26	19 Feb 2019	Visibility (mi)	15
I26	19 Feb 2019	Wind Speed (kts)	9
I26	19 Feb 2019	Wind Dir	W
I26	19 Feb 2019	Water Color	Brownish-Green
I26	19 Feb 2019	Wave Ht Low (ft)	5
I26	19 Feb 2019	Wave Period (sec)	11
I26	19 Feb 2019	Sea State	Light chop
I26	19 Feb 2019	High Tide (ft)	6.59
I26	19 Feb 2019	High Tide Time	824
I26	19 Feb 2019	Low Tide (ft)	-1.68
I26	19 Feb 2019	Low Tide Time	1519
I26	19 Feb 2019	Comments	Runoff plume present

Station	Date	Parameter	Value
I26	25 Feb 2019	Depth (m)	10
I26	25 Feb 2019	Arrive Time	1159
I26	25 Feb 2019	Depart Time	1202
I26	25 Feb 2019	Air Temp (C)	13
I26	25 Feb 2019	Weather	Haze
I26	25 Feb 2019	Visibility (mi)	9
I26	25 Feb 2019	Wind Speed (kts)	5
I26	25 Feb 2019	Wind Dir	NW
I26	25 Feb 2019	Water Color	Greenish-Brown
I26	25 Feb 2019	Wave Ht Low (ft)	3
I26	25 Feb 2019	Wave Period (sec)	11
I26	25 Feb 2019	Sea State	Light chop
I26	25 Feb 2019	High Tide (ft)	2.86
I26	25 Feb 2019	High Tide Time	1418
I26	25 Feb 2019	Low Tide (ft)	0.88
I26	25 Feb 2019	Low Tide Time	821
I26	25 Feb 2019	Comments	none
I32	07 Feb 2019	Depth (m)	11
I32	07 Feb 2019	Arrive Time	1151
I32	07 Feb 2019	Depart Time	1153
I32	07 Feb 2019	Air Temp (C)	13
I32	07 Feb 2019	Weather	Haze
I32	07 Feb 2019	Visibility (mi)	14
I32	07 Feb 2019	Wind Speed (kts)	7
I32	07 Feb 2019	Wind Dir	NW
I32	07 Feb 2019	Water Color	Greenish-Blue
I32	07 Feb 2019	Wave Ht Low (ft)	2
I32	07 Feb 2019	Wave Period (sec)	7
I32	07 Feb 2019	Sea State	Light chop
I32	07 Feb 2019	High Tide (ft)	5.03
I32	07 Feb 2019	High Tide Time	953
I32	07 Feb 2019	Low Tide (ft)	1.49
I32	07 Feb 2019	Low Tide Time	358
I32	07 Feb 2019	Comments	none
I32	11 Feb 2019	Depth (m)	11
I32	11 Feb 2019	Arrive Time	1145
I32	11 Feb 2019	Depart Time	1148
I32	11 Feb 2019	Air Temp (C)	13
I32	11 Feb 2019	Weather	Clear
I32	11 Feb 2019	Visibility (mi)	13
I32	11 Feb 2019	Wind Speed (kts)	6
I32	11 Feb 2019	Wind Dir	NW
I32	11 Feb 2019	Water Color	Green
I32	11 Feb 2019	Wave Ht Low (ft)	6
I32	11 Feb 2019	Wave Period (sec)	7
I32	11 Feb 2019	Sea State	Confused swell
I32	11 Feb 2019	High Tide (ft)	2.93
I32	11 Feb 2019	High Tide Time	1249
I32	11 Feb 2019	Low Tide (ft)	1.68
I32	11 Feb 2019	Low Tide Time	728
I32	11 Feb 2019	Comments	none
I32	19 Feb 2019	Depth (m)	11

Station	Date	Parameter	Value
I32	19 Feb 2019	Arrive Time	1130
I32	19 Feb 2019	Depart Time	1134
I32	19 Feb 2019	Air Temp (C)	11
I32	19 Feb 2019	Weather	Haze
I32	19 Feb 2019	Visibility (mi)	15
I32	19 Feb 2019	Wind Speed (kts)	5
I32	19 Feb 2019	Wind Dir	NW
I32	19 Feb 2019	Water Color	Brownish-Green
I32	19 Feb 2019	Wave Ht Low (ft)	5
I32	19 Feb 2019	Wave Period (sec)	11
I32	19 Feb 2019	Sea State	Light chop
I32	19 Feb 2019	High Tide (ft)	6.59
I32	19 Feb 2019	High Tide Time	824
I32	19 Feb 2019	Low Tide (ft)	-1.68
I32	19 Feb 2019	Low Tide Time	1519
I32	19 Feb 2019	Comments	none
I32	25 Feb 2019	Depth (m)	11
I32	25 Feb 2019	Arrive Time	1212
I32	25 Feb 2019	Depart Time	1216
I32	25 Feb 2019	Air Temp (C)	13
I32	25 Feb 2019	Weather	Haze
I32	25 Feb 2019	Visibility (mi)	9
I32	25 Feb 2019	Wind Speed (kts)	6
I32	25 Feb 2019	Wind Dir	NW
I32	25 Feb 2019	Water Color	Greenish-Brown
I32	25 Feb 2019	Wave Ht Low (ft)	3
I32	25 Feb 2019	Wave Period (sec)	11
I32	25 Feb 2019	Sea State	Light chop
I32	25 Feb 2019	High Tide (ft)	2.86
I32	25 Feb 2019	High Tide Time	1418
I32	25 Feb 2019	Low Tide (ft)	0.88
I32	25 Feb 2019	Low Tide Time	821
I32	25 Feb 2019	Comments	none
I39	07 Feb 2019	Depth (m)	20
I39	07 Feb 2019	Arrive Time	1029
I39	07 Feb 2019	Depart Time	1035
I39	07 Feb 2019	Air Temp (C)	12
I39	07 Feb 2019	Weather	Haze
I39	07 Feb 2019	Visibility (mi)	14
I39	07 Feb 2019	Wind Speed (kts)	1
I39	07 Feb 2019	Wind Dir	W
I39	07 Feb 2019	Water Color	Bluish-Green
I39	07 Feb 2019	Wave Ht Low (ft)	2
I39	07 Feb 2019	Wave Period (sec)	7
I39	07 Feb 2019	Sea State	Calm
I39	07 Feb 2019	High Tide (ft)	5.03
I39	07 Feb 2019	High Tide Time	953
I39	07 Feb 2019	Low Tide (ft)	1.49
I39	07 Feb 2019	Low Tide Time	358
I39	07 Feb 2019	Comments	Lobster floats
I39	11 Feb 2019	Depth (m)	19
I39	11 Feb 2019	Arrive Time	1033

Station	Date	Parameter	Value
I39	11 Feb 2019	Depart Time	1036
I39	11 Feb 2019	Air Temp (C)	11
I39	11 Feb 2019	Weather	Haze
I39	11 Feb 2019	Visibility (mi)	13
I39	11 Feb 2019	Wind Speed (kts)	4
I39	11 Feb 2019	Wind Dir	N
I39	11 Feb 2019	Water Color	Greenish-Blue
I39	11 Feb 2019	Wave Ht Low (ft)	6
I39	11 Feb 2019	Wave Period (sec)	7
I39	11 Feb 2019	Sea State	Confused swell
I39	11 Feb 2019	High Tide (ft)	2.93
I39	11 Feb 2019	High Tide Time	1249
I39	11 Feb 2019	Low Tide (ft)	1.68
I39	11 Feb 2019	Low Tide Time	728
I39	11 Feb 2019	Comments	Lobster floats
I39	19 Feb 2019	Depth (m)	20
I39	19 Feb 2019	Arrive Time	1014
I39	19 Feb 2019	Depart Time	1017
I39	19 Feb 2019	Air Temp (C)	11
I39	19 Feb 2019	Weather	Haze
I39	19 Feb 2019	Visibility (mi)	15
I39	19 Feb 2019	Wind Speed (kts)	1
I39	19 Feb 2019	Wind Dir	E
I39	19 Feb 2019	Water Color	Brownish-Green
I39	19 Feb 2019	Wave Ht Low (ft)	5
I39	19 Feb 2019	Wave Period (sec)	11
I39	19 Feb 2019	Sea State	Light chop
I39	19 Feb 2019	High Tide (ft)	6.59
I39	19 Feb 2019	High Tide Time	824
I39	19 Feb 2019	Low Tide (ft)	-1.68
I39	19 Feb 2019	Low Tide Time	1519
I39	19 Feb 2019	Comments	none
I39	25 Feb 2019	Depth (m)	19
I39	25 Feb 2019	Arrive Time	1048
I39	25 Feb 2019	Depart Time	1101
I39	25 Feb 2019	Air Temp (C)	13
I39	25 Feb 2019	Weather	Haze
I39	25 Feb 2019	Visibility (mi)	9
I39	25 Feb 2019	Wind Speed (kts)	6
I39	25 Feb 2019	Wind Dir	W
I39	25 Feb 2019	Water Color	Green
I39	25 Feb 2019	Wave Ht Low (ft)	3
I39	25 Feb 2019	Wave Period (sec)	11
I39	25 Feb 2019	Sea State	Light chop
I39	25 Feb 2019	High Tide (ft)	2.86
I39	25 Feb 2019	High Tide Time	1418
I39	25 Feb 2019	Low Tide (ft)	0.88
I39	25 Feb 2019	Low Tide Time	821
I39	25 Feb 2019	Comments	Appears to be a fresh water lens at surface (low salinity and high CDOM); Multiple casts were made with same results
I40	07 Feb 2019	Depth (m)	11
I40	07 Feb 2019	Arrive Time	1111

Station	Date	Parameter	Value
I40	07 Feb 2019	Depart Time	1115
I40	07 Feb 2019	Air Temp (C)	13
I40	07 Feb 2019	Weather	Haze
I40	07 Feb 2019	Visibility (mi)	14
I40	07 Feb 2019	Wind Speed (kts)	8
I40	07 Feb 2019	Wind Dir	N
I40	07 Feb 2019	Water Color	Bluish-Green
I40	07 Feb 2019	Wave Ht Low (ft)	2
I40	07 Feb 2019	Wave Period (sec)	7
I40	07 Feb 2019	Sea State	Calm
I40	07 Feb 2019	High Tide (ft)	5.03
I40	07 Feb 2019	High Tide Time	953
I40	07 Feb 2019	Low Tide (ft)	1.49
I40	07 Feb 2019	Low Tide Time	358
I40	07 Feb 2019	Comments	Tijuana River plume present
I40	11 Feb 2019	Depth (m)	10
I40	11 Feb 2019	Arrive Time	1109
I40	11 Feb 2019	Depart Time	1111
I40	11 Feb 2019	Air Temp (C)	12
I40	11 Feb 2019	Weather	Clear
I40	11 Feb 2019	Visibility (mi)	13
I40	11 Feb 2019	Wind Speed (kts)	7
I40	11 Feb 2019	Wind Dir	NW
I40	11 Feb 2019	Water Color	Green
I40	11 Feb 2019	Wave Ht Low (ft)	6
I40	11 Feb 2019	Wave Period (sec)	7
I40	11 Feb 2019	Sea State	Confused swell
I40	11 Feb 2019	High Tide (ft)	2.93
I40	11 Feb 2019	High Tide Time	1249
I40	11 Feb 2019	Low Tide (ft)	1.68
I40	11 Feb 2019	Low Tide Time	728
I40	11 Feb 2019	Comments	none
I40	19 Feb 2019	Depth (m)	11
I40	19 Feb 2019	Arrive Time	1049
I40	19 Feb 2019	Depart Time	1053
I40	19 Feb 2019	Air Temp (C)	11
I40	19 Feb 2019	Weather	Haze
I40	19 Feb 2019	Visibility (mi)	15
I40	19 Feb 2019	Wind Speed (kts)	10
I40	19 Feb 2019	Wind Dir	W
I40	19 Feb 2019	Water Color	Brownish-Green
I40	19 Feb 2019	Wave Ht Low (ft)	5
I40	19 Feb 2019	Wave Period (sec)	11
I40	19 Feb 2019	Sea State	Light chop
I40	19 Feb 2019	High Tide (ft)	6.59
I40	19 Feb 2019	High Tide Time	824
I40	19 Feb 2019	Low Tide (ft)	-1.68
I40	19 Feb 2019	Low Tide Time	1519
I40	19 Feb 2019	Comments	Runoff plume on station; Foam
I40	25 Feb 2019	Depth (m)	10
I40	25 Feb 2019	Arrive Time	1131
I40	25 Feb 2019	Depart Time	1133

Station	Date	Parameter	Value
I40	25 Feb 2019	Air Temp (C)	14
I40	25 Feb 2019	Weather	Haze
I40	25 Feb 2019	Visibility (mi)	9
I40	25 Feb 2019	Wind Speed (kts)	6
I40	25 Feb 2019	Wind Dir	W
I40	25 Feb 2019	Water Color	Greenish-Brown
I40	25 Feb 2019	Wave Ht Low (ft)	3
I40	25 Feb 2019	Wave Period (sec)	11
I40	25 Feb 2019	Sea State	Light chop
I40	25 Feb 2019	High Tide (ft)	2.86
I40	25 Feb 2019	High Tide Time	1418
I40	25 Feb 2019	Low Tide (ft)	0.88
I40	25 Feb 2019	Low Tide Time	821
I40	25 Feb 2019	Comments	Appears to be a fresh water lens at surface (low salinity and high CDOM)

Table 3.10

Summary of CTD profile data from the SBOO kelp stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I19	07 Feb 2019	1	15.37	54.00	8.1	33.36	8.2	24.6	0.71
I19	07 Feb 2019	2	15.37	53.68	8.1	33.36	8.2	24.6	0.72
I19	07 Feb 2019	3	15.38	53.17	8.0	33.35	8.2	24.6	0.88
I19	07 Feb 2019	4	15.34	53.76	8.0	33.40	8.2	24.7	1.18
I19	07 Feb 2019	5	15.34	56.42	8.0	33.42	8.2	24.7	1.37
I19	07 Feb 2019	6	15.35	57.02	7.9	33.44	8.2	24.7	1.42
I19	07 Feb 2019	7	15.35	56.22	7.9	33.44	8.2	24.7	1.40
I19	07 Feb 2019	8	15.36	54.85	7.8	33.45	8.2	24.7	1.38
I19	07 Feb 2019	9	15.40	54.28	7.8	33.46	8.2	24.7	1.41
I19	07 Feb 2019	10	15.43	56.00	7.8	33.49	8.2	24.7	1.42
I19	11 Feb 2019	1	15.15	32.37	8.4	33.42	8.2	24.7	1.21
I19	11 Feb 2019	2	15.12	31.11	8.4	33.45	8.2	24.8	1.49
I19	11 Feb 2019	3	15.05	34.05	8.2	33.52	8.2	24.8	2.22
I19	11 Feb 2019	4	15.01	40.39	8.1	33.55	8.2	24.9	2.75
I19	11 Feb 2019	5	14.97	51.91	8.1	33.57	8.2	24.9	2.84
I19	11 Feb 2019	6	14.97	56.62	8.1	33.58	8.2	24.9	2.69
I19	11 Feb 2019	7	14.96	53.72	7.9	33.58	8.2	24.9	2.50
I19	11 Feb 2019	8	14.94	51.65	8.0	33.59	8.2	24.9	2.31
I19	11 Feb 2019	9	14.95	51.29	7.9	33.59	8.2	24.9	2.29
I19	11 Feb 2019	10	14.94	42.05	7.9	33.59	8.2	24.9	2.05
I19	19 Feb 2019	1	13.12	34.16	6.5	33.56	8.0	25.3	0.51
I19	19 Feb 2019	2	13.13	33.41	6.5	33.56	8.0	25.3	0.56
I19	19 Feb 2019	3	12.97	39.81	6.2	33.59	8.0	25.3	0.60
I19	19 Feb 2019	4	12.86	58.50	6.0	33.59	8.0	25.3	0.54
I19	19 Feb 2019	5	12.85	64.88	6.0	33.58	8.0	25.3	0.51
I19	19 Feb 2019	6	12.82	67.08	6.0	33.59	8.0	25.3	0.53
I19	19 Feb 2019	7	12.79	68.02	6.0	33.59	8.0	25.3	0.55
I19	19 Feb 2019	8	12.79	61.84	6.0	33.59	8.0	25.3	0.60
I19	19 Feb 2019	9	12.76	31.98	5.8	33.59	8.0	25.3	0.80
I19	19 Feb 2019	10	12.70	28.75	5.8	33.59	8.0	25.4	0.83
I19	25 Feb 2019	1	14.03	70.66	8.3	33.49	8.1	25.0	0.82
I19	25 Feb 2019	2	14.01	69.72	8.2	33.50	8.1	25.0	0.84
I19	25 Feb 2019	3	13.90	70.03	8.1	33.52	8.1	25.1	0.90
I19	25 Feb 2019	4	13.62	69.87	7.8	33.56	8.1	25.2	1.14
I19	25 Feb 2019	5	13.15	69.22	7.1	33.61	8.1	25.3	1.88
I19	25 Feb 2019	6	12.72	63.46	6.5	33.65	8.1	25.4	2.11
I19	25 Feb 2019	7	12.61	60.52	6.2	33.63	8.0	25.4	2.29
I19	25 Feb 2019	8	12.55	66.07	6.2	33.63	8.0	25.4	2.69
I19	25 Feb 2019	9	12.50	73.47	6.1	33.63	8.0	25.4	2.78
I19	25 Feb 2019	10	12.45	70.39	6.0	33.63	8.0	25.4	2.69
I24	07 Feb 2019	1	15.35	47.78	8.1	33.40	8.2	24.7	0.66
I24	07 Feb 2019	2	15.34	47.06	8.1	33.40	8.2	24.7	0.71
I24	07 Feb 2019	3	15.32	46.47	8.0	33.41	8.2	24.7	0.93
I24	07 Feb 2019	4	15.20	45.60	8.0	33.42	8.2	24.7	1.33
I24	07 Feb 2019	5	15.11	40.77	8.0	33.45	8.2	24.8	1.52
I24	07 Feb 2019	6	15.21	34.54	7.9	33.51	8.2	24.8	1.54
I24	07 Feb 2019	7	15.28	35.88	7.8	33.55	8.2	24.8	1.55

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I24	07 Feb 2019	8	15.28	38.26	7.8	33.59	8.2	24.8	1.59
I24	07 Feb 2019	9	15.23	28.78	7.7	33.58	8.2	24.8	1.51
I24	07 Feb 2019	10	15.21	18.65	7.7	33.57	8.2	24.8	1.52
I24	07 Feb 2019	11	15.20	15.34	7.7	33.57	8.2	24.8	1.48
I24	11 Feb 2019	1	15.13	57.66	8.4	33.62	8.2	24.9	0.91
I24	11 Feb 2019	2	15.11	56.90	8.3	33.62	8.2	24.9	1.02
I24	11 Feb 2019	3	14.96	56.06	8.3	33.62	8.2	24.9	1.64
I24	11 Feb 2019	4	14.94	55.95	8.3	33.62	8.2	24.9	2.09
I24	11 Feb 2019	5	14.91	55.72	8.2	33.62	8.2	24.9	2.31
I24	11 Feb 2019	6	14.89	53.79	8.2	33.61	8.2	24.9	2.27
I24	11 Feb 2019	7	14.89	52.70	8.1	33.61	8.2	24.9	2.24
I24	11 Feb 2019	8	14.88	49.01	8.1	33.61	8.2	24.9	2.19
I24	11 Feb 2019	9	14.87	44.04	8.1	33.62	8.2	24.9	2.22
I24	11 Feb 2019	10	14.87	40.07	8.2	33.62	8.2	24.9	2.15
I24	11 Feb 2019	11	14.87	36.84	8.1	33.62	8.2	24.9	2.14
I24	19 Feb 2019	1	14.12	45.57	7.6	33.55	8.1	25.0	0.53
I24	19 Feb 2019	2	14.14	44.85	7.6	33.55	8.1	25.0	0.53
I24	19 Feb 2019	3	14.10	45.17	7.5	33.55	8.1	25.1	0.58
I24	19 Feb 2019	4	13.94	44.55	7.5	33.56	8.1	25.1	0.84
I24	19 Feb 2019	5	13.91	46.31	7.4	33.55	8.1	25.1	1.18
I24	19 Feb 2019	6	13.80	49.09	7.3	33.56	8.1	25.1	1.32
I24	19 Feb 2019	7	13.70	53.24	7.1	33.55	8.1	25.1	1.40
I24	19 Feb 2019	8	13.29	56.54	6.6	33.59	8.1	25.2	1.12
I24	19 Feb 2019	9	13.06	54.94	6.2	33.58	8.0	25.3	0.92
I24	19 Feb 2019	10	13.05	50.47	6.1	33.57	8.0	25.3	0.86
I24	19 Feb 2019	11	13.05	45.45	6.1	33.57	8.0	25.3	0.80
I24	25 Feb 2019	1	13.98	68.37	8.4	32.98	8.1	24.6	0.99
I24	25 Feb 2019	2	13.77	68.27	8.3	33.25	8.2	24.9	1.15
I24	25 Feb 2019	3	13.64	68.90	8.2	33.37	8.1	25.0	1.45
I24	25 Feb 2019	4	13.39	70.92	7.6	33.50	8.1	25.2	1.89
I24	25 Feb 2019	5	13.07	76.61	7.0	33.59	8.1	25.3	1.68
I24	25 Feb 2019	6	12.92	79.76	6.7	33.60	8.1	25.3	1.64
I24	25 Feb 2019	7	12.75	79.21	6.3	33.61	8.1	25.4	1.51
I24	25 Feb 2019	8	12.71	75.28	6.1	33.61	8.0	25.4	1.73
I24	25 Feb 2019	9	12.65	71.31	6.0	33.62	8.0	25.4	1.96
I24	25 Feb 2019	10	12.64	71.73	6.0	33.62	8.0	25.4	1.94
I24	25 Feb 2019	11	12.66	72.91	6.1	33.62	8.0	25.4	1.73
I25	07 Feb 2019	1	15.52	54.65	8.0	33.59	8.2	24.8	0.66
I25	07 Feb 2019	2	15.52	53.97	8.1	33.60	8.2	24.8	0.70
I25	07 Feb 2019	3	15.45	53.92	8.0	33.60	8.2	24.8	1.00
I25	07 Feb 2019	4	15.37	53.66	8.0	33.60	8.2	24.8	1.44
I25	07 Feb 2019	5	15.30	51.15	7.9	33.60	8.2	24.8	1.75
I25	07 Feb 2019	6	15.29	44.26	7.8	33.60	8.2	24.8	1.79
I25	07 Feb 2019	7	15.28	41.88	7.8	33.60	8.2	24.8	1.78
I25	07 Feb 2019	8	15.28	38.72	7.8	33.59	8.2	24.8	1.71
I25	07 Feb 2019	9	15.28	30.98	7.8	33.59	8.2	24.8	1.68
I25	11 Feb 2019	1	15.08	63.08	8.4	33.61	8.2	24.9	0.91
I25	11 Feb 2019	2	15.02	62.82	8.4	33.62	8.2	24.9	0.96
I25	11 Feb 2019	3	14.95	63.09	8.3	33.62	8.2	24.9	1.26
I25	11 Feb 2019	4	14.90	61.30	8.2	33.61	8.2	24.9	1.75

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I25	11 Feb 2019	5	14.90	60.28	8.2	33.61	8.2	24.9	2.20
I25	11 Feb 2019	6	14.89	56.24	8.2	33.61	8.2	24.9	2.19
I25	11 Feb 2019	7	14.88	52.02	8.2	33.61	8.2	24.9	2.25
I25	11 Feb 2019	8	14.88	49.28	8.1	33.61	8.2	24.9	2.16
I25	11 Feb 2019	9	14.88	46.51	8.1	33.61	8.2	24.9	2.19
I25	19 Feb 2019	1	14.23	59.51	7.8	33.52	8.2	25.0	0.50
I25	19 Feb 2019	2	14.19	59.24	7.8	33.55	8.2	25.0	0.52
I25	19 Feb 2019	3	14.11	58.75	7.8	33.55	8.2	25.0	0.69
I25	19 Feb 2019	4	14.05	59.56	7.8	33.54	8.2	25.1	1.12
I25	19 Feb 2019	5	14.01	60.97	7.8	33.54	8.2	25.1	1.50
I25	19 Feb 2019	6	13.95	61.23	7.6	33.54	8.2	25.1	1.58
I25	19 Feb 2019	7	13.48	64.00	6.9	33.60	8.1	25.2	1.30
I25	19 Feb 2019	8	13.02	69.01	6.3	33.58	8.1	25.3	0.86
I25	19 Feb 2019	9	13.00	66.09	6.2	33.58	8.0	25.3	0.77
I25	25 Feb 2019	1	13.88	68.64	8.4	32.96	8.1	24.6	1.13
I25	25 Feb 2019	2	13.75	68.22	8.2	33.12	8.1	24.8	1.22
I25	25 Feb 2019	3	13.47	69.50	8.1	33.44	8.1	25.1	1.51
I25	25 Feb 2019	4	13.35	71.94	7.9	33.54	8.1	25.2	1.95
I25	25 Feb 2019	5	13.23	74.04	7.4	33.57	8.1	25.2	2.46
I25	25 Feb 2019	6	12.81	75.98	6.8	33.63	8.1	25.4	2.58
I25	25 Feb 2019	7	12.68	80.97	6.5	33.62	8.1	25.4	2.08
I25	25 Feb 2019	8	12.66	82.45	6.4	33.61	8.1	25.4	1.61
I25	25 Feb 2019	9	12.66	82.33	6.4	33.61	8.1	25.4	1.55
I26	07 Feb 2019	1	15.54	59.09	8.1	33.60	8.2	24.8	0.63
I26	07 Feb 2019	2	15.53	58.67	8.1	33.60	8.2	24.8	0.64
I26	07 Feb 2019	3	15.47	58.47	8.1	33.60	8.2	24.8	0.82
I26	07 Feb 2019	4	15.36	60.37	8.0	33.60	8.2	24.8	1.21
I26	07 Feb 2019	5	15.33	55.91	8.0	33.60	8.2	24.8	1.63
I26	07 Feb 2019	6	15.31	49.28	7.9	33.60	8.2	24.8	1.79
I26	07 Feb 2019	7	15.31	45.93	7.9	33.60	8.2	24.8	1.75
I26	07 Feb 2019	8	15.31	46.21	7.9	33.60	8.2	24.8	1.72
I26	07 Feb 2019	9	15.31	44.13	7.9	33.60	8.2	24.8	1.69
I26	11 Feb 2019	1	15.30	60.93	8.4	33.61	8.2	24.8	0.64
I26	11 Feb 2019	2	15.25	60.41	8.3	33.63	8.2	24.9	0.68
I26	11 Feb 2019	3	15.02	63.04	8.4	33.61	8.2	24.9	0.90
I26	11 Feb 2019	4	15.00	67.22	8.4	33.61	8.2	24.9	1.16
I26	11 Feb 2019	5	14.92	68.98	8.4	33.61	8.2	24.9	1.56
I26	11 Feb 2019	6	14.89	69.30	8.4	33.60	8.2	24.9	1.92
I26	11 Feb 2019	7	14.88	66.85	8.3	33.60	8.2	24.9	2.15
I26	11 Feb 2019	8	14.88	66.21	8.3	33.60	8.2	24.9	2.18
I26	11 Feb 2019	9	14.88	63.34	8.3	33.60	8.2	24.9	2.07
I26	19 Feb 2019	1	14.16	44.82	7.9	33.55	8.1	25.0	0.83
I26	19 Feb 2019	2	14.15	46.45	7.8	33.55	8.1	25.0	1.01
I26	19 Feb 2019	3	14.10	52.99	7.8	33.55	8.1	25.1	1.33
I26	19 Feb 2019	4	13.97	60.26	7.5	33.55	8.2	25.1	1.66
I26	19 Feb 2019	5	13.41	63.14	6.7	33.62	8.1	25.2	1.31
I26	19 Feb 2019	6	12.75	71.34	6.2	33.62	8.1	25.4	0.83
I26	19 Feb 2019	7	12.67	74.72	5.9	33.59	8.0	25.4	0.64
I26	19 Feb 2019	8	12.66	74.13	5.9	33.58	8.0	25.4	0.60
I26	19 Feb 2019	9	12.66	72.15	5.9	33.59	8.0	25.4	0.58

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I26	25 Feb 2019	1	13.48	73.60	8.4	33.54	8.2	25.2	1.34
I26	25 Feb 2019	2	13.39	73.27	8.1	33.55	8.2	25.2	1.45
I26	25 Feb 2019	3	12.95	73.43	7.3	33.62	8.1	25.3	1.67
I26	25 Feb 2019	4	12.65	75.88	6.7	33.62	8.1	25.4	1.73
I26	25 Feb 2019	5	12.54	81.81	6.4	33.61	8.1	25.4	1.48
I26	25 Feb 2019	6	12.50	83.02	6.4	33.61	8.0	25.4	1.28
I26	25 Feb 2019	7	12.49	83.58	6.4	33.61	8.0	25.4	1.23
I26	25 Feb 2019	8	12.49	83.59	6.4	33.61	8.0	25.4	1.19
I26	25 Feb 2019	9	12.50	83.44	6.4	33.61	8.0	25.4	1.18
I32	07 Feb 2019	1	15.62	43.08	8.0	33.60	8.2	24.8	0.73
I32	07 Feb 2019	2	15.58	41.61	8.0	33.61	8.2	24.8	0.85
I32	07 Feb 2019	3	15.39	39.61	7.9	33.61	8.2	24.8	1.24
I32	07 Feb 2019	4	15.31	33.68	7.9	33.60	8.2	24.8	1.80
I32	07 Feb 2019	5	15.27	26.33	7.8	33.60	8.2	24.8	1.91
I32	07 Feb 2019	6	15.23	26.84	7.9	33.59	8.2	24.8	1.72
I32	07 Feb 2019	7	15.22	30.83	7.8	33.59	8.2	24.8	1.66
I32	07 Feb 2019	8	15.20	30.82	7.8	33.59	8.2	24.8	1.66
I32	07 Feb 2019	9	15.15	31.57	8.0	33.60	8.2	24.9	1.65
I32	07 Feb 2019	10	15.13	28.25	8.1	33.59	8.2	24.9	1.64
I32	11 Feb 2019	1	15.21	57.66	8.4	33.61	8.2	24.9	0.74
I32	11 Feb 2019	2	15.21	57.52	8.4	33.61	8.2	24.9	0.77
I32	11 Feb 2019	3	15.14	57.62	8.4	33.62	8.2	24.9	1.00
I32	11 Feb 2019	4	15.06	58.86	8.4	33.62	8.2	24.9	1.36
I32	11 Feb 2019	5	15.00	59.13	8.3	33.61	8.2	24.9	2.01
I32	11 Feb 2019	6	14.98	60.16	8.4	33.61	8.2	24.9	2.49
I32	11 Feb 2019	7	14.96	59.76	8.3	33.61	8.2	24.9	2.59
I32	11 Feb 2019	8	14.94	58.86	8.3	33.61	8.2	24.9	2.48
I32	11 Feb 2019	9	14.94	59.97	8.4	33.61	8.2	24.9	2.39
I32	11 Feb 2019	10	14.90	59.08	8.4	33.62	8.2	24.9	2.18
I32	19 Feb 2019	1	13.92	51.02	7.4	33.56	8.1	25.1	0.42
I32	19 Feb 2019	2	13.83	50.37	7.2	33.57	8.1	25.1	0.45
I32	19 Feb 2019	3	13.68	48.98	7.1	33.58	8.1	25.2	0.62
I32	19 Feb 2019	4	13.55	42.98	7.0	33.57	8.1	25.2	0.95
I32	19 Feb 2019	5	13.44	44.42	6.8	33.58	8.1	25.2	1.12
I32	19 Feb 2019	6	13.27	59.95	6.5	33.58	8.1	25.2	1.13
I32	19 Feb 2019	7	13.26	64.70	6.4	33.58	8.1	25.2	1.16
I32	19 Feb 2019	8	13.21	61.40	6.3	33.58	8.1	25.3	1.07
I32	19 Feb 2019	9	13.17	54.76	6.2	33.59	8.0	25.3	1.10
I32	19 Feb 2019	10	13.11	50.09	6.1	33.59	8.0	25.3	1.20
I32	25 Feb 2019	1	13.41	67.96	7.5	33.57	8.1	25.2	1.12
I32	25 Feb 2019	2	12.89	66.78	6.6	33.62	8.1	25.3	1.23
I32	25 Feb 2019	3	12.75	65.58	6.3	33.61	8.0	25.4	1.26
I32	25 Feb 2019	4	12.68	67.43	6.2	33.61	8.0	25.4	1.29
I32	25 Feb 2019	5	12.64	69.92	6.1	33.61	8.0	25.4	1.45
I32	25 Feb 2019	6	12.62	70.71	6.1	33.62	8.0	25.4	1.79
I32	25 Feb 2019	7	12.62	68.75	6.1	33.61	8.0	25.4	2.06
I32	25 Feb 2019	8	12.62	65.73	6.0	33.62	8.0	25.4	2.83
I32	25 Feb 2019	9	12.61	62.79	6.0	33.62	8.0	25.4	3.03
I32	25 Feb 2019	10	12.61	61.58	6.0	33.62	8.0	25.4	3.11

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I39	07 Feb 2019	1	15.31	83.73	8.0	33.62	8.2	24.8	0.51
I39	07 Feb 2019	2	15.30	83.72	8.0	33.62	8.2	24.8	0.52
I39	07 Feb 2019	3	15.30	83.43	8.0	33.62	8.2	24.8	0.50
I39	07 Feb 2019	4	15.28	83.57	8.0	33.62	8.2	24.8	0.54
I39	07 Feb 2019	5	15.26	83.46	7.9	33.62	8.2	24.9	0.62
I39	07 Feb 2019	6	15.25	83.34	7.9	33.62	8.2	24.9	0.67
I39	07 Feb 2019	7	15.25	83.53	7.9	33.62	8.2	24.9	0.72
I39	07 Feb 2019	8	15.25	83.62	8.0	33.62	8.2	24.9	0.82
I39	07 Feb 2019	9	15.24	83.60	7.9	33.62	8.2	24.9	0.87
I39	07 Feb 2019	10	15.24	83.54	7.9	33.62	8.2	24.9	0.94
I39	07 Feb 2019	11	15.24	83.63	7.9	33.62	8.2	24.9	1.01
I39	07 Feb 2019	12	15.24	83.50	7.8	33.62	8.2	24.9	1.07
I39	07 Feb 2019	13	15.24	83.29	7.8	33.62	8.2	24.9	1.11
I39	07 Feb 2019	14	15.24	83.47	7.9	33.62	8.2	24.9	1.16
I39	07 Feb 2019	15	15.24	83.51	7.9	33.62	8.2	24.9	1.16
I39	07 Feb 2019	16	15.23	83.42	8.0	33.62	8.2	24.9	1.21
I39	07 Feb 2019	17	15.23	83.32	7.9	33.62	8.2	24.9	1.19
I39	07 Feb 2019	18	15.23	83.17	7.9	33.62	8.2	24.9	1.18
I39	11 Feb 2019	1	15.05	82.52	8.1	33.58	8.2	24.9	0.78
I39	11 Feb 2019	2	15.05	82.81	8.1	33.58	8.2	24.9	0.79
I39	11 Feb 2019	3	15.05	82.94	8.1	33.58	8.2	24.9	0.80
I39	11 Feb 2019	4	15.02	82.86	8.1	33.59	8.2	24.9	0.87
I39	11 Feb 2019	5	14.99	82.41	8.1	33.58	8.2	24.9	1.04
I39	11 Feb 2019	6	14.98	82.30	8.0	33.58	8.2	24.9	1.17
I39	11 Feb 2019	7	14.97	82.17	8.0	33.59	8.2	24.9	1.26
I39	11 Feb 2019	8	14.94	81.78	7.9	33.59	8.2	24.9	1.42
I39	11 Feb 2019	9	14.92	80.93	7.8	33.59	8.2	24.9	1.36
I39	11 Feb 2019	10	14.91	80.96	7.8	33.59	8.2	24.9	1.41
I39	11 Feb 2019	11	14.90	81.36	7.7	33.59	8.2	24.9	1.43
I39	11 Feb 2019	12	14.89	81.74	7.6	33.60	8.2	24.9	1.53
I39	11 Feb 2019	13	14.77	82.28	7.4	33.62	8.2	25.0	1.44
I39	11 Feb 2019	14	14.70	82.33	7.3	33.61	8.2	25.0	1.11
I39	11 Feb 2019	15	14.70	81.86	7.2	33.61	8.2	25.0	1.09
I39	11 Feb 2019	16	14.68	81.37	7.3	33.61	8.2	25.0	1.01
I39	11 Feb 2019	17	14.68	81.20	7.3	33.61	8.2	25.0	0.98
I39	11 Feb 2019	18	14.68	80.95	7.3	33.61	8.2	25.0	1.00
I39	19 Feb 2019	1	14.20	76.70	7.8	33.52	8.2	25.0	0.52
I39	19 Feb 2019	2	14.16	76.00	7.8	33.52	8.2	25.0	0.55
I39	19 Feb 2019	3	14.09	75.78	7.8	33.52	8.2	25.0	0.63
I39	19 Feb 2019	4	14.06	76.26	7.8	33.52	8.2	25.0	0.80
I39	19 Feb 2019	5	14.05	77.71	7.8	33.52	8.2	25.0	0.88
I39	19 Feb 2019	6	14.04	77.84	7.7	33.52	8.2	25.0	1.01
I39	19 Feb 2019	7	13.99	78.21	7.6	33.52	8.2	25.0	1.10
I39	19 Feb 2019	8	13.85	79.57	7.3	33.53	8.1	25.1	0.92
I39	19 Feb 2019	9	13.64	82.41	7.0	33.55	8.1	25.1	0.78
I39	19 Feb 2019	10	13.48	84.03	6.8	33.56	8.1	25.2	0.80
I39	19 Feb 2019	11	13.31	84.52	6.6	33.57	8.1	25.2	0.71
I39	19 Feb 2019	12	13.19	84.83	6.5	33.57	8.1	25.2	0.68
I39	19 Feb 2019	13	13.11	85.49	6.4	33.57	8.1	25.3	0.68
I39	19 Feb 2019	14	13.00	85.62	6.4	33.58	8.1	25.3	0.59
I39	19 Feb 2019	15	12.94	85.91	6.3	33.57	8.1	25.3	0.53
I39	19 Feb 2019	16	12.88	86.26	6.2	33.58	8.1	25.3	0.51
I39	19 Feb 2019	17	12.82	86.30	6.1	33.58	8.0	25.3	0.47

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I39	19 Feb 2019	18	12.72	84.83	6.0	33.59	8.0	25.4	0.47
I39	25 Feb 2019	1	13.87	72.56	8.3	32.90	8.1	24.6	0.89
I39	25 Feb 2019	2	13.72	73.91	8.3	33.32	8.1	24.9	0.99
I39	25 Feb 2019	3	13.53	75.65	8.4	33.54	8.2	25.2	1.19
I39	25 Feb 2019	4	13.45	75.22	8.4	33.53	8.2	25.2	1.59
I39	25 Feb 2019	5	13.41	74.83	8.4	33.53	8.2	25.2	2.10
I39	25 Feb 2019	6	13.40	74.51	8.4	33.53	8.2	25.2	2.51
I39	25 Feb 2019	7	13.39	74.37	8.4	33.53	8.2	25.2	2.93
I39	25 Feb 2019	8	13.39	75.26	8.3	33.53	8.2	25.2	3.36
I39	25 Feb 2019	9	13.39	76.05	8.3	33.54	8.2	25.2	3.57
I39	25 Feb 2019	10	13.39	75.78	8.2	33.54	8.2	25.2	3.79
I39	25 Feb 2019	11	13.39	76.54	8.1	33.54	8.2	25.2	3.85
I39	25 Feb 2019	12	13.39	76.30	8.1	33.54	8.2	25.2	3.85
I39	25 Feb 2019	13	13.38	76.66	8.0	33.54	8.2	25.2	4.76
I39	25 Feb 2019	14	13.22	76.47	7.5	33.58	8.1	25.2	4.57
I39	25 Feb 2019	15	12.74	81.52	6.7	33.61	8.1	25.4	3.77
I39	25 Feb 2019	16	12.30	84.79	6.2	33.64	8.0	25.5	2.45
I39	25 Feb 2019	17	12.09	85.98	5.9	33.63	8.0	25.5	1.55
I39	25 Feb 2019	18	12.08	85.70	5.8	33.63	8.0	25.5	1.23
I40	07 Feb 2019	1	15.16	39.99	8.1	33.34	8.2	24.7	0.66
I40	07 Feb 2019	2	15.14	38.51	8.1	33.35	8.2	24.7	0.77
I40	07 Feb 2019	3	15.12	37.79	8.1	33.38	8.2	24.7	1.05
I40	07 Feb 2019	4	15.17	31.61	8.0	33.49	8.2	24.8	1.36
I40	07 Feb 2019	5	15.14	27.13	8.0	33.49	8.2	24.8	1.55
I40	07 Feb 2019	6	15.12	23.74	8.0	33.50	8.2	24.8	1.55
I40	07 Feb 2019	7	15.11	22.05	8.0	33.50	8.2	24.8	1.56
I40	07 Feb 2019	8	15.14	21.65	8.0	33.51	8.2	24.8	1.53
I40	07 Feb 2019	9	15.17	18.04	7.9	33.54	8.2	24.8	1.56
I40	07 Feb 2019	10	15.14	17.47	8.0	33.56	8.2	24.8	1.60
I40	11 Feb 2019	1	15.15	59.02	8.2	33.61	8.2	24.9	0.79
I40	11 Feb 2019	2	15.06	57.58	8.3	33.61	8.2	24.9	1.13
I40	11 Feb 2019	3	14.97	55.77	8.4	33.61	8.2	24.9	1.97
I40	11 Feb 2019	4	14.93	52.28	8.4	33.60	8.2	24.9	3.22
I40	11 Feb 2019	5	14.92	49.97	8.3	33.60	8.2	24.9	3.41
I40	11 Feb 2019	6	14.89	50.02	8.3	33.60	8.2	24.9	3.08
I40	11 Feb 2019	7	14.87	51.48	8.3	33.60	8.2	24.9	2.66
I40	11 Feb 2019	8	14.84	52.48	8.2	33.61	8.2	24.9	2.55
I40	11 Feb 2019	9	14.79	51.43	8.2	33.61	8.2	24.9	2.15
I40	11 Feb 2019	10	14.73	49.87	8.2	33.61	8.2	25.0	1.92
I40	19 Feb 2019	1	13.88	6.50	8.0	31.84	8.1	23.8	1.00
I40	19 Feb 2019	2	13.93	7.65	7.6	33.11	8.1	24.7	1.04
I40	19 Feb 2019	3	13.88	12.60	7.4	33.49	8.1	25.0	1.13
I40	19 Feb 2019	4	13.85	14.48	7.3	33.55	8.1	25.1	1.24
I40	19 Feb 2019	5	13.77	14.70	7.2	33.56	8.1	25.1	1.26
I40	19 Feb 2019	6	13.62	17.84	7.0	33.58	8.1	25.2	1.18
I40	19 Feb 2019	7	13.46	19.46	6.9	33.58	8.1	25.2	1.09
I40	19 Feb 2019	8	13.45	20.77	6.9	33.56	8.1	25.2	1.03
I40	19 Feb 2019	9	13.39	23.77	6.8	33.58	8.1	25.2	0.99
I40	19 Feb 2019	10	13.22	30.95	6.4	33.58	8.1	25.3	0.94
I40	25 Feb 2019	1	14.21	67.85	8.3	33.20	8.1	24.8	0.84

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I40	25 Feb 2019	2	14.17	67.70	8.2	33.22	8.1	24.8	0.85
I40	25 Feb 2019	3	13.67	67.31	7.7	33.49	8.1	25.1	1.12
I40	25 Feb 2019	4	13.23	64.04	6.9	33.60	8.1	25.3	1.65
I40	25 Feb 2019	5	13.09	61.68	6.6	33.60	8.1	25.3	2.27
I40	25 Feb 2019	6	12.68	66.81	6.1	33.63	8.0	25.4	2.41
I40	25 Feb 2019	7	12.64	50.04	5.9	33.62	8.0	25.4	2.80
I40	25 Feb 2019	8	12.61	38.41	5.8	33.62	8.0	25.4	3.03
I40	25 Feb 2019	9	12.53	47.97	5.9	33.63	8.0	25.4	3.04
I40	25 Feb 2019	10	12.47	60.52	5.9	33.63	8.0	25.4	2.54

NA = not available

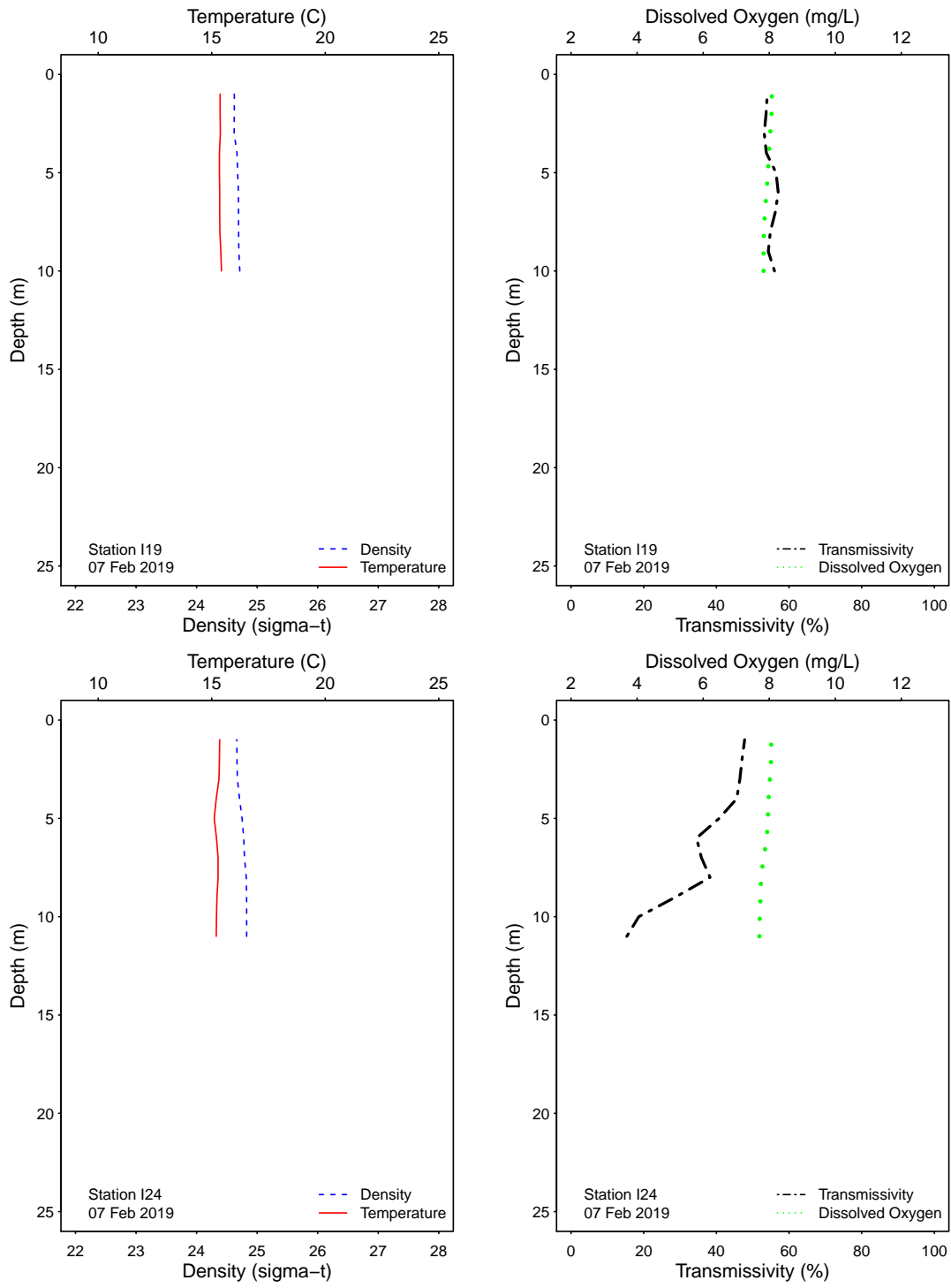


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

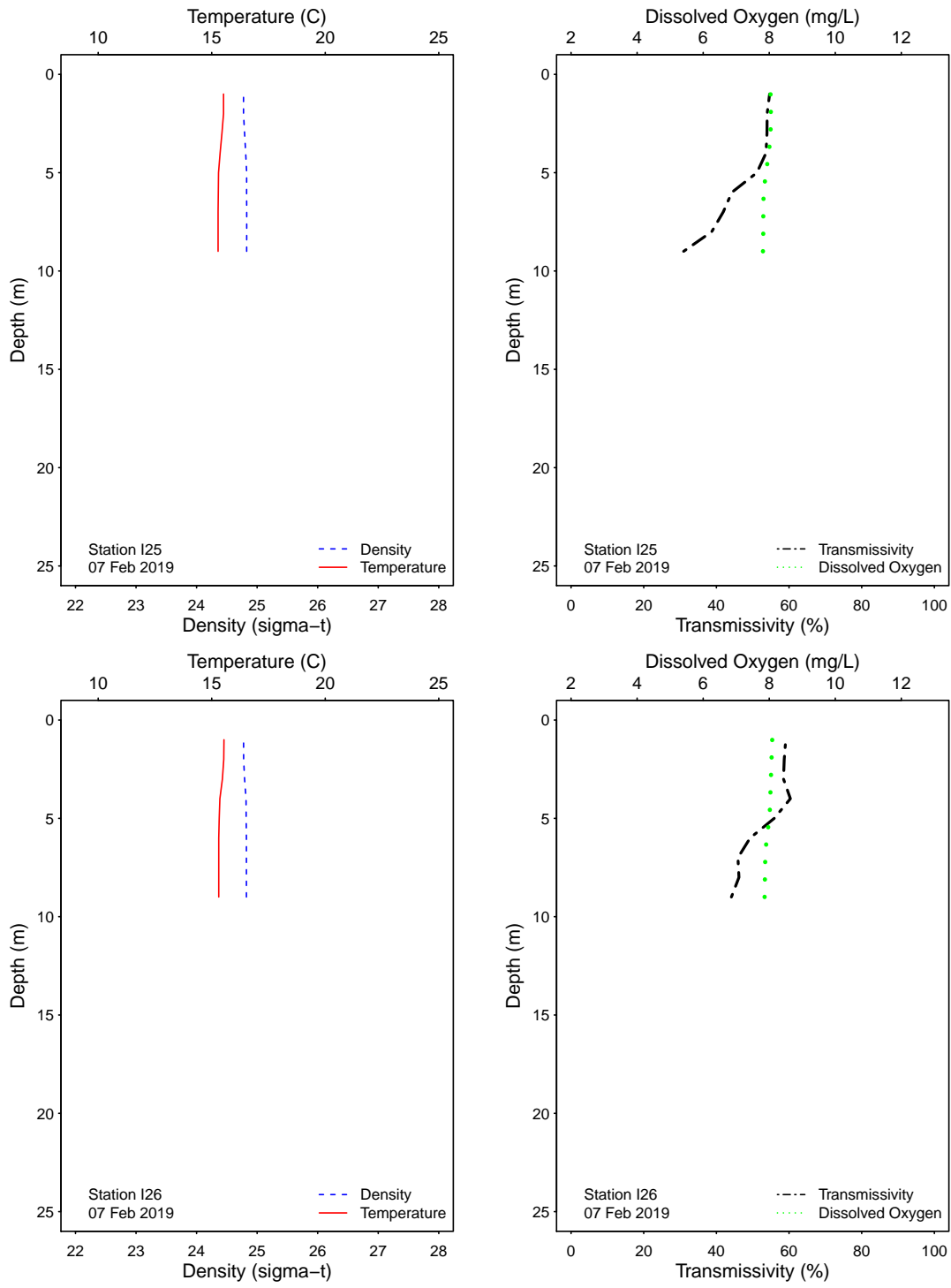


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

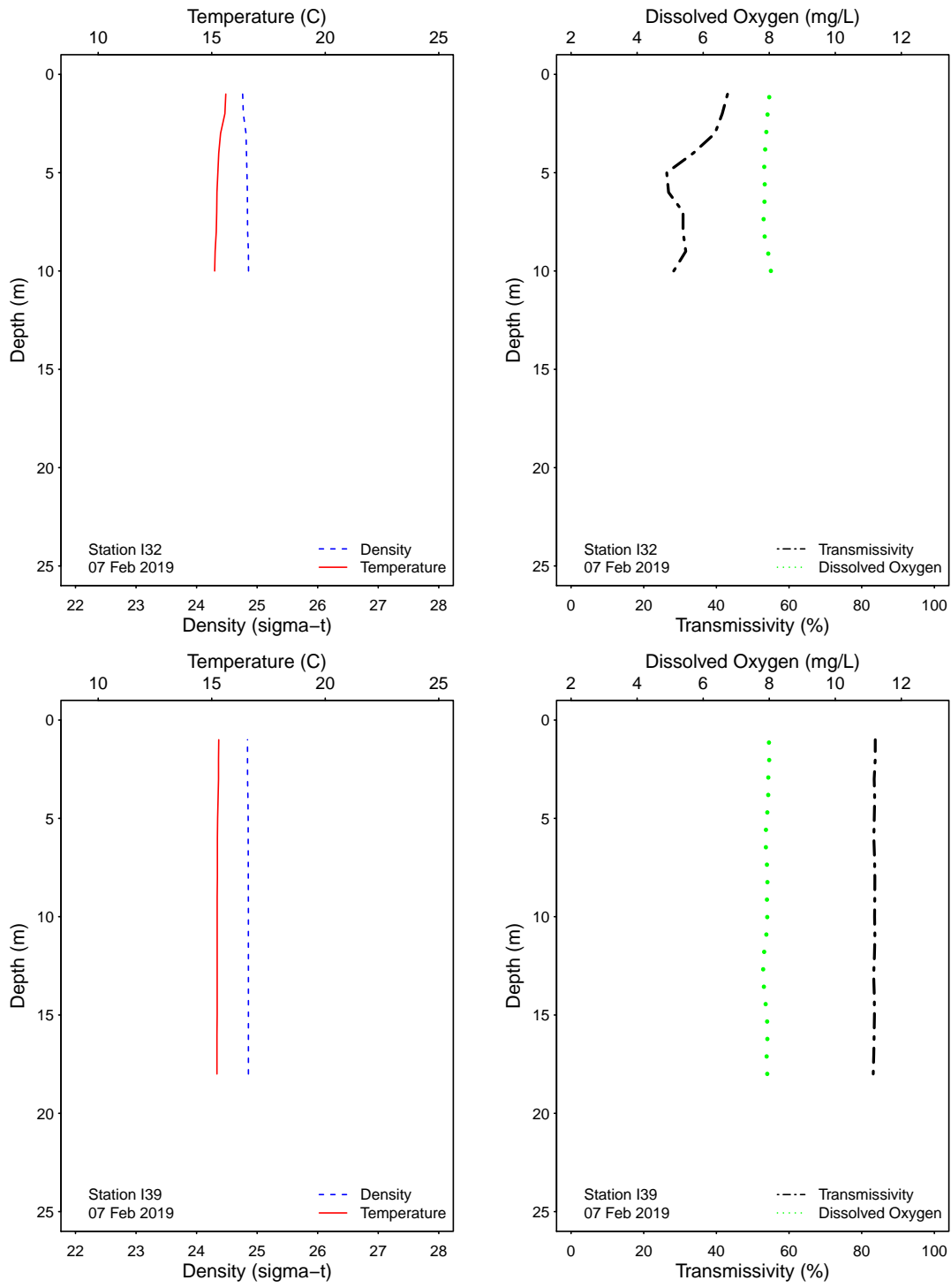


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

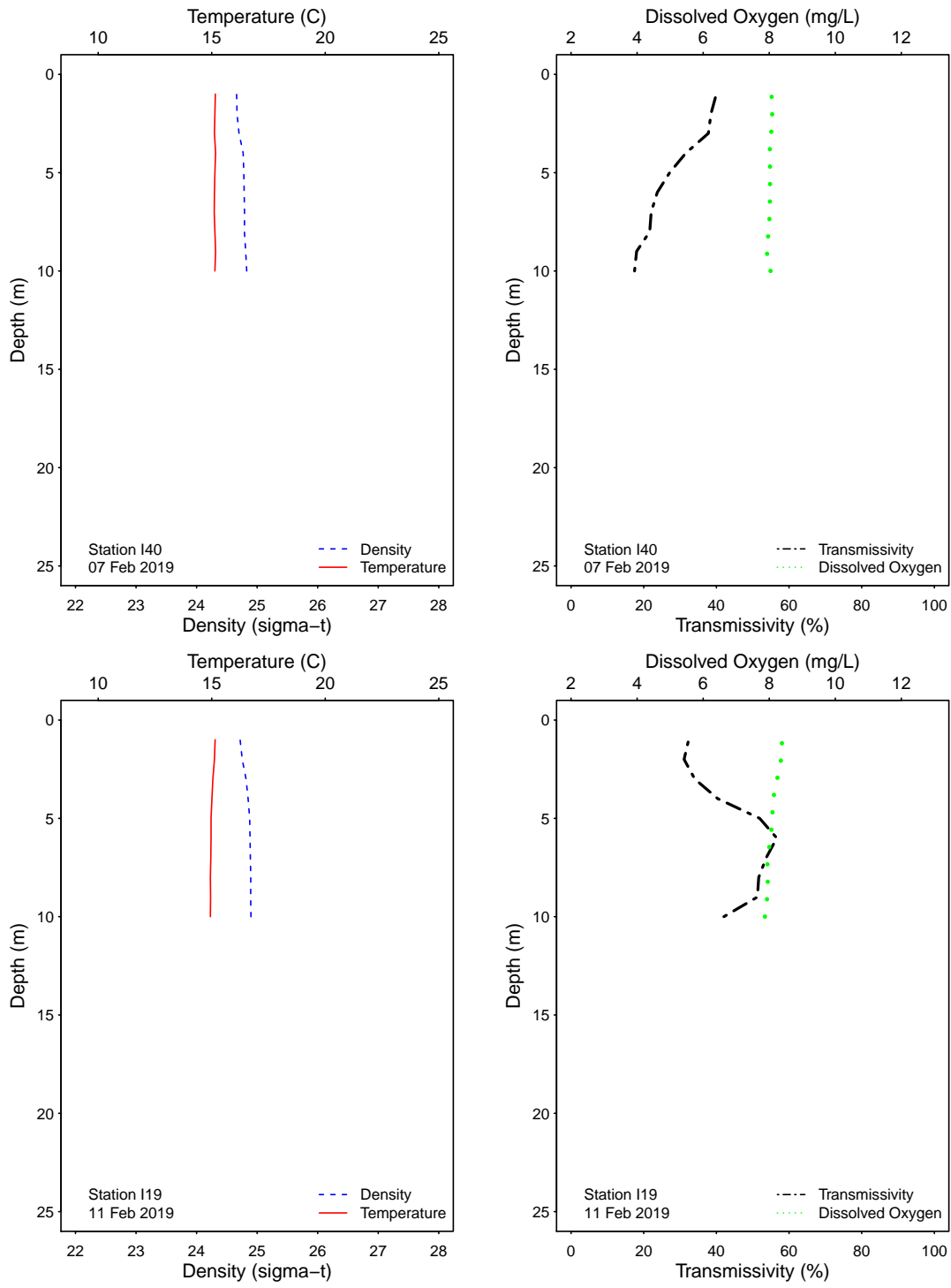


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

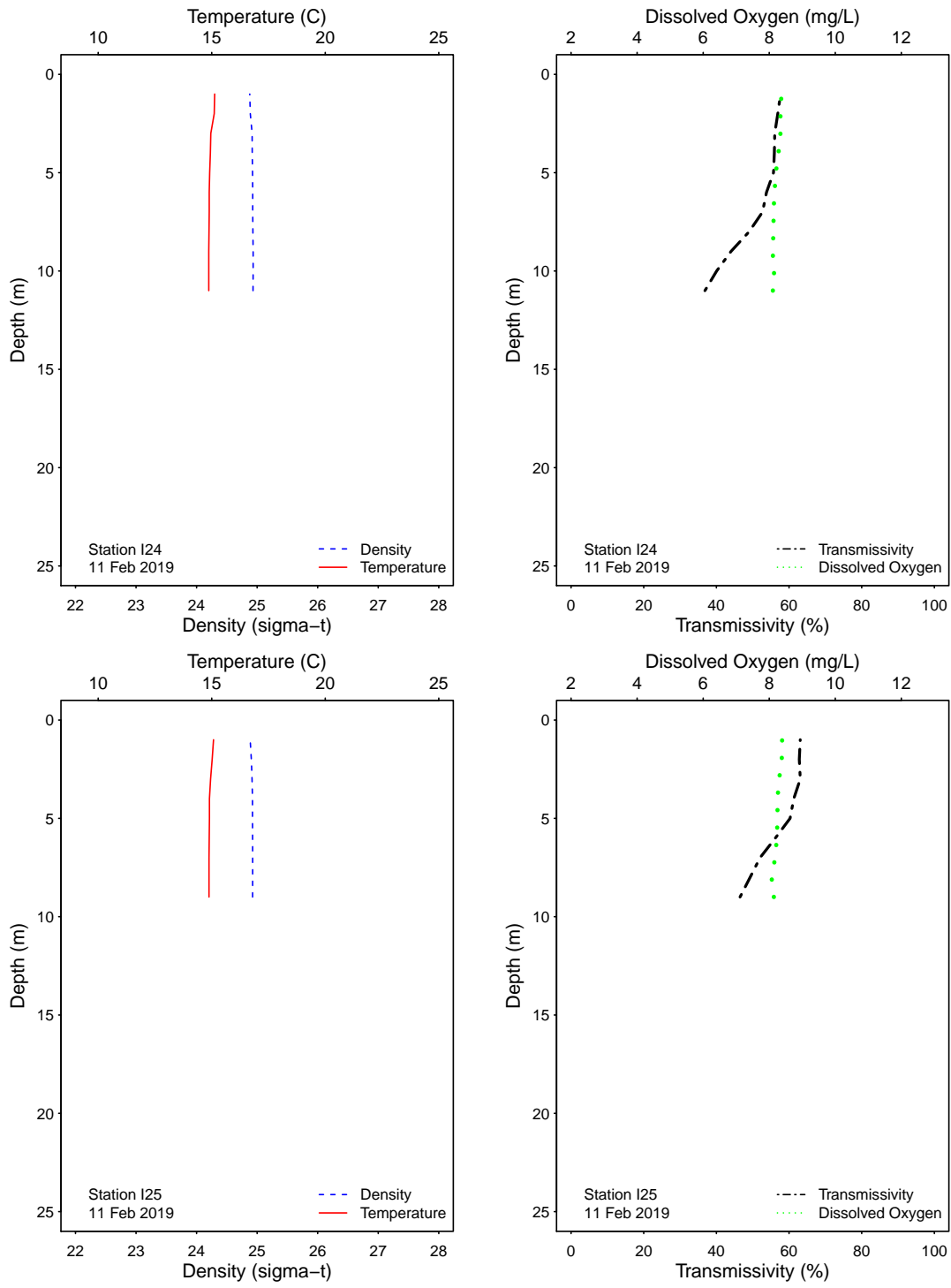


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

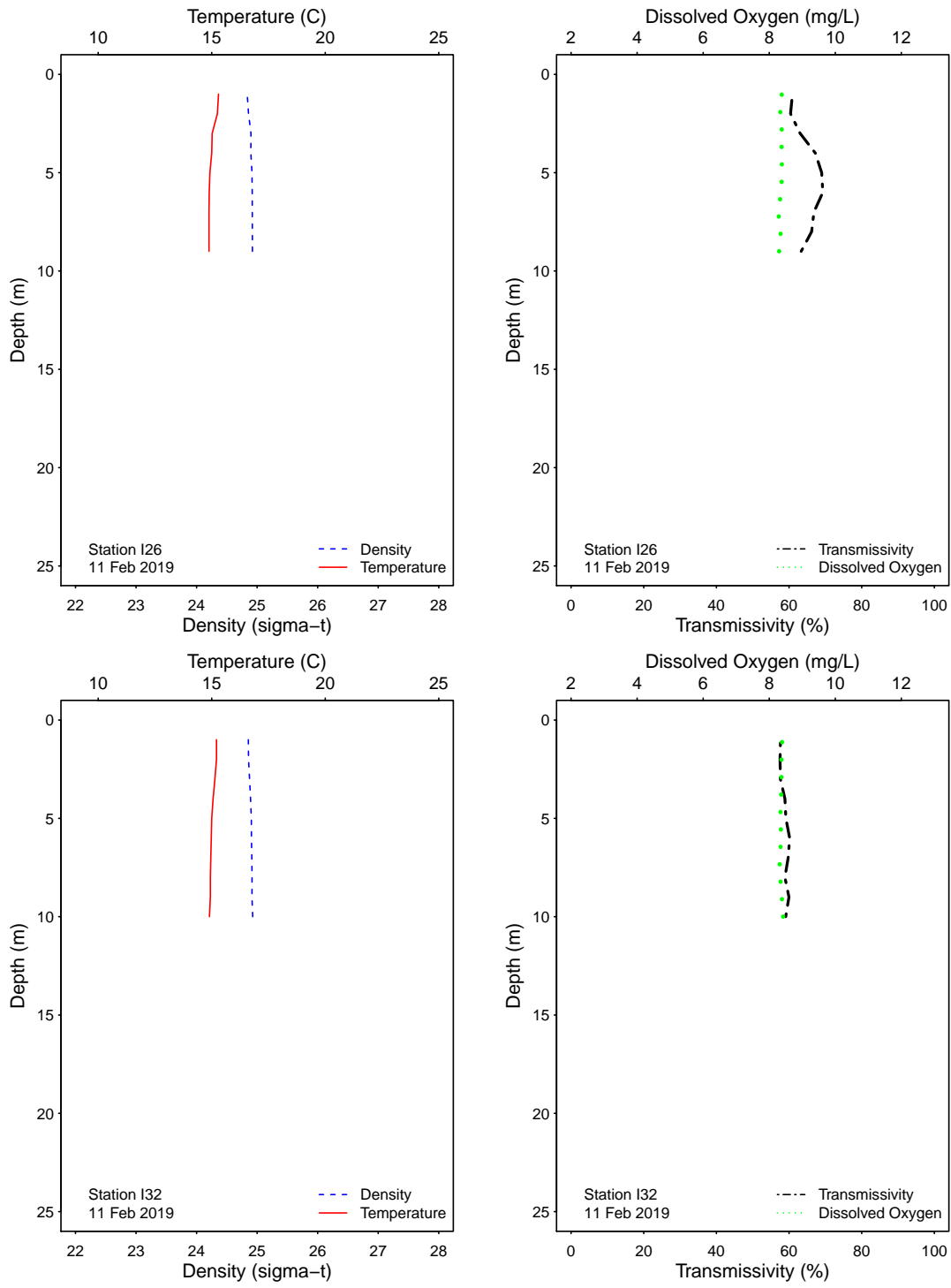


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

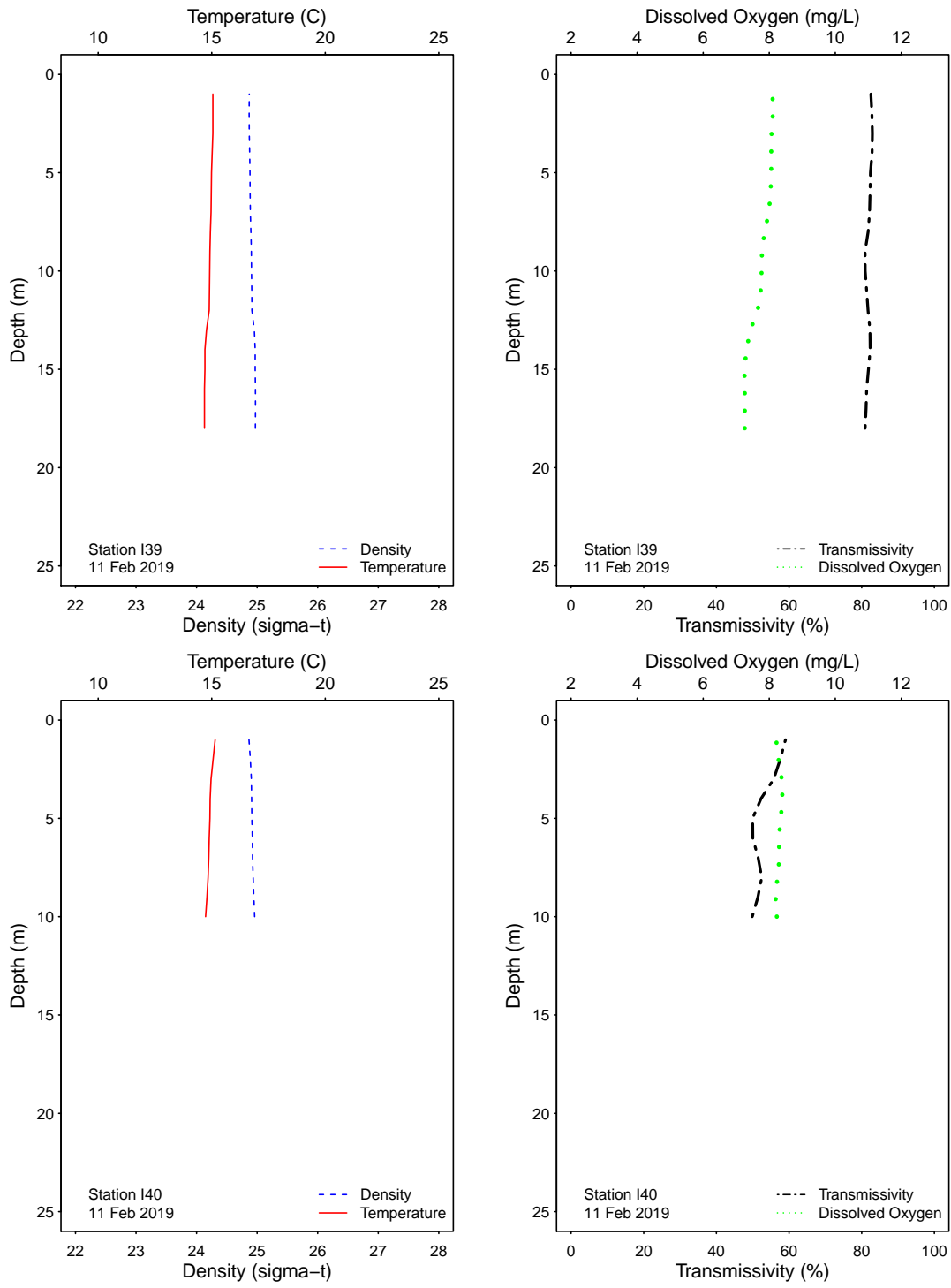


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

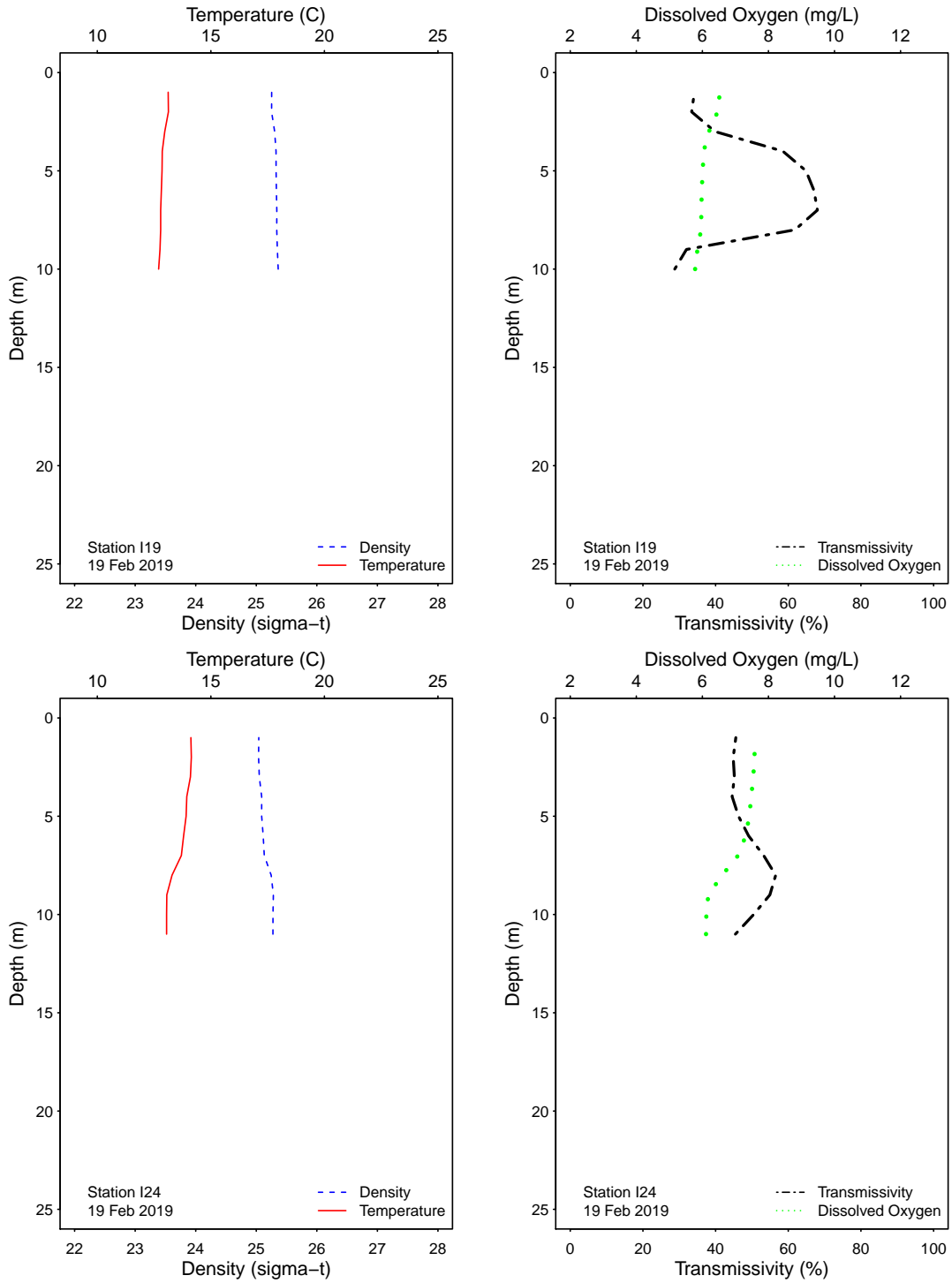


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

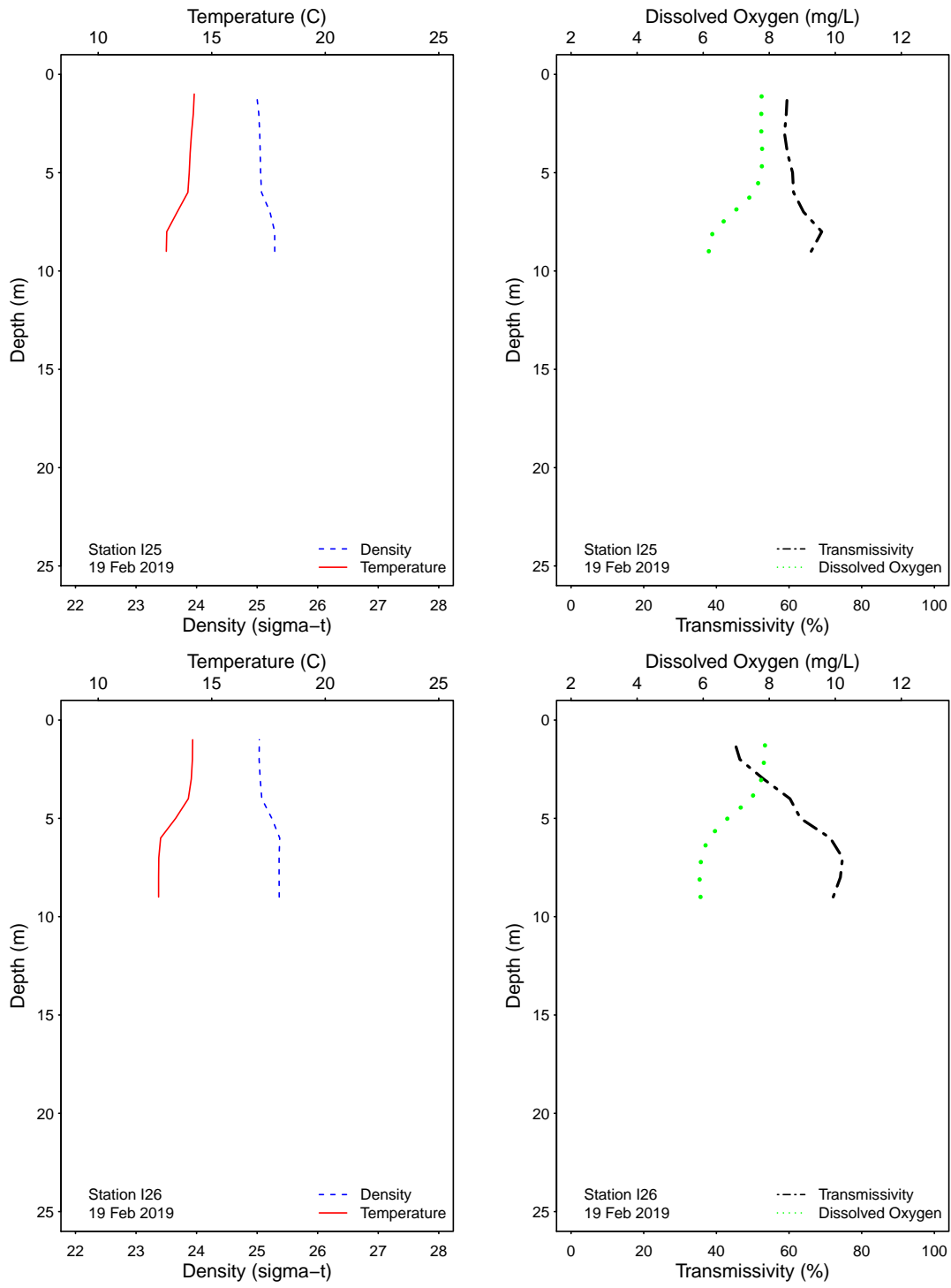


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

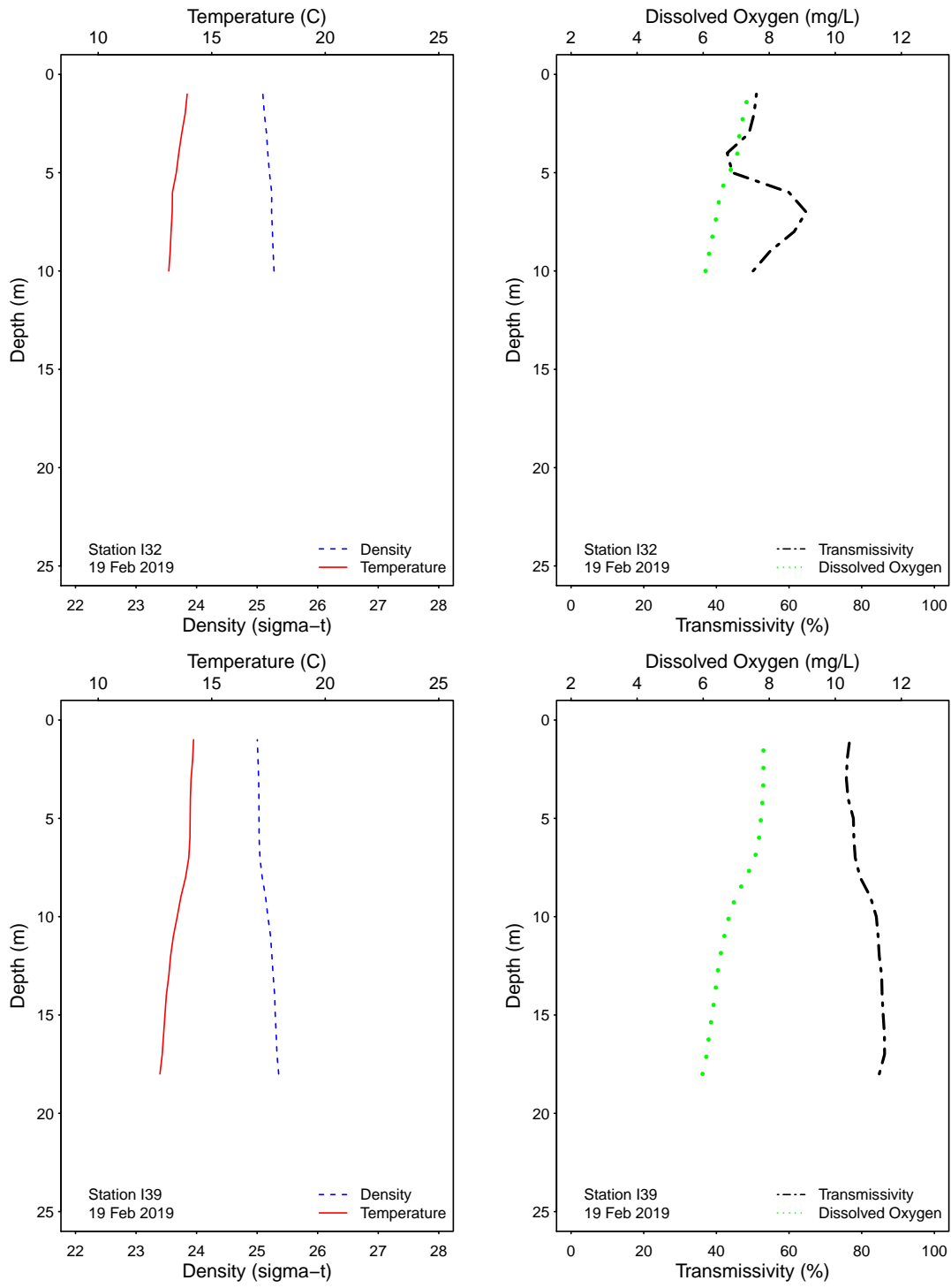


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

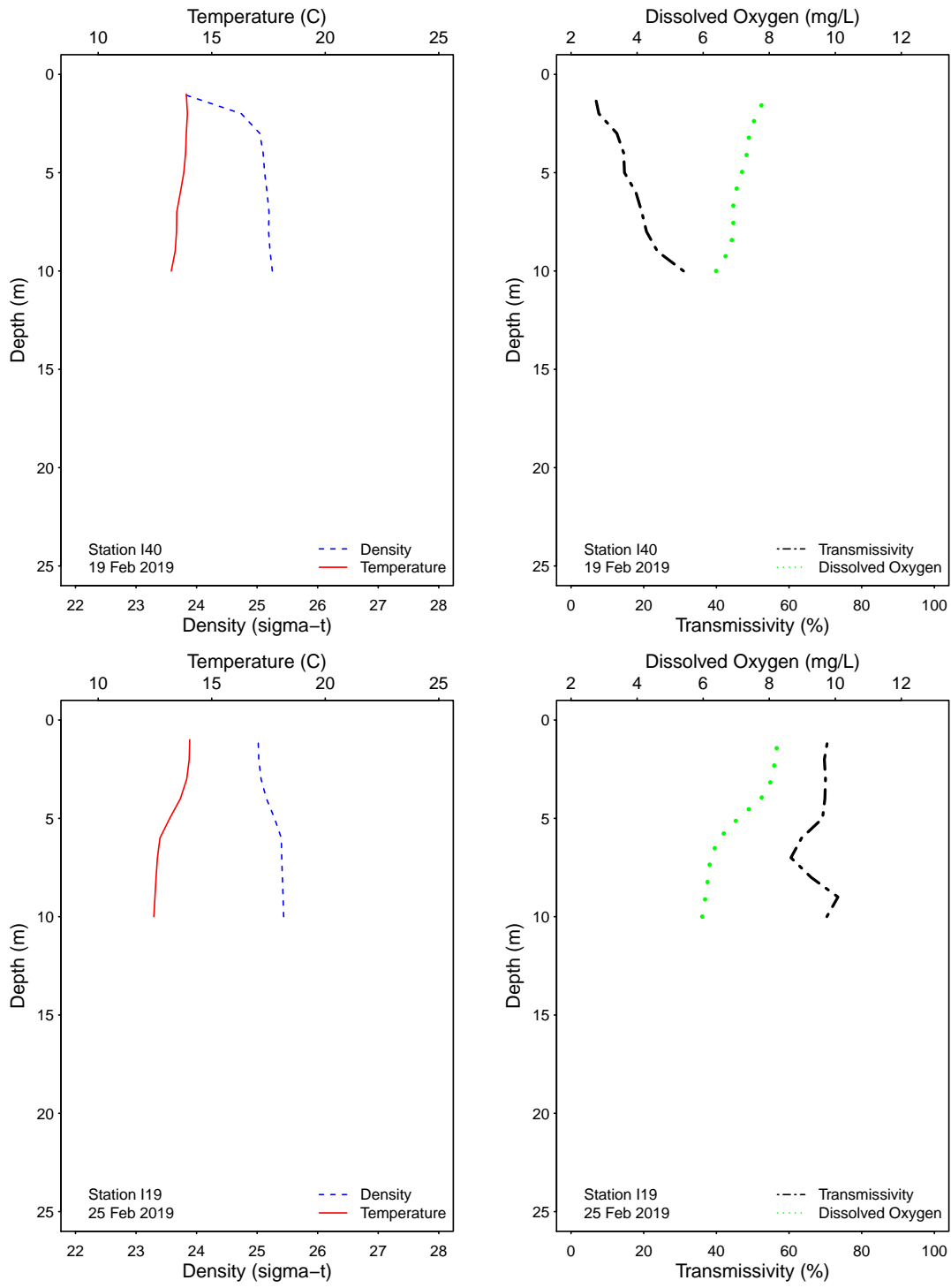


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

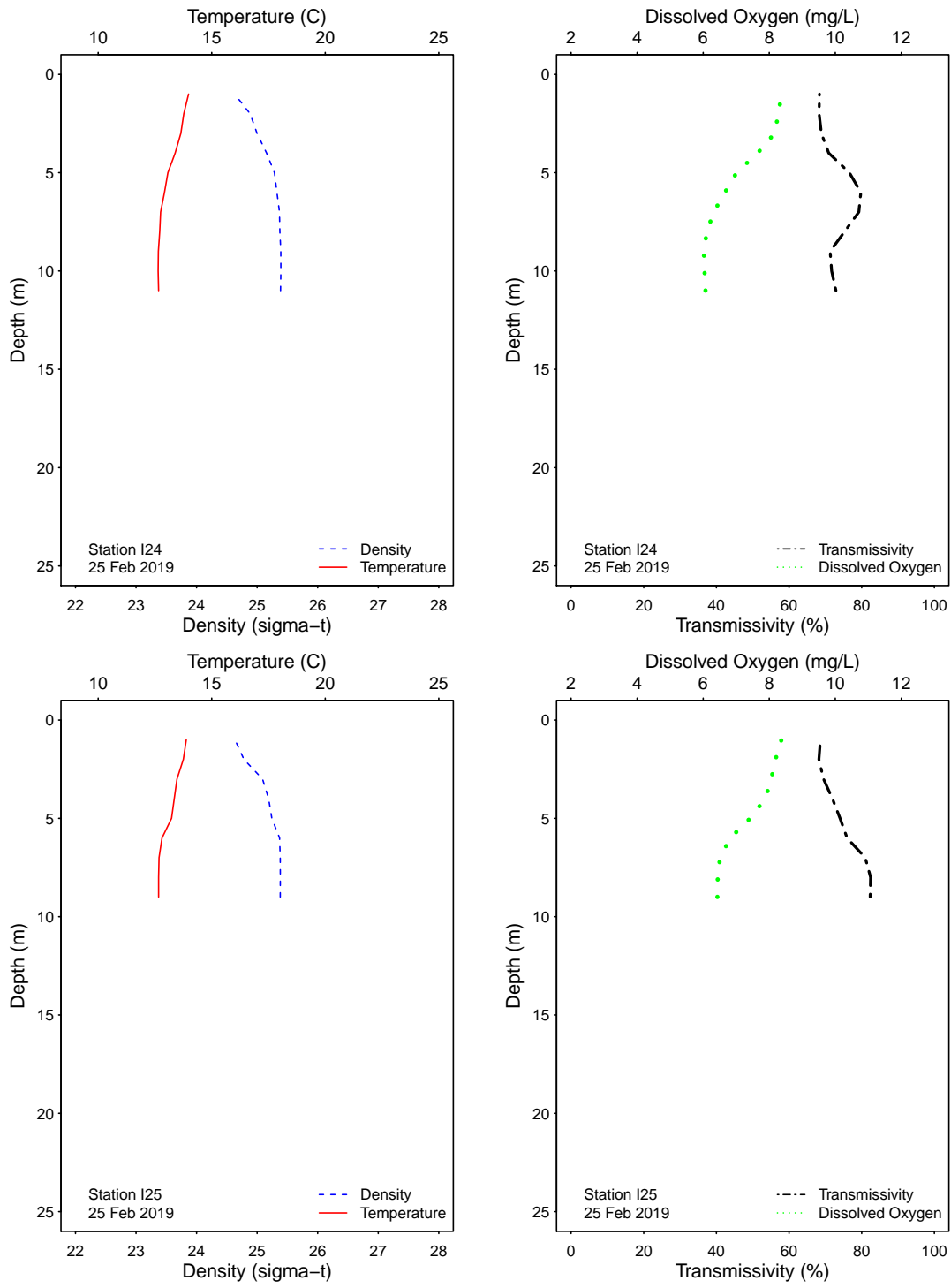


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

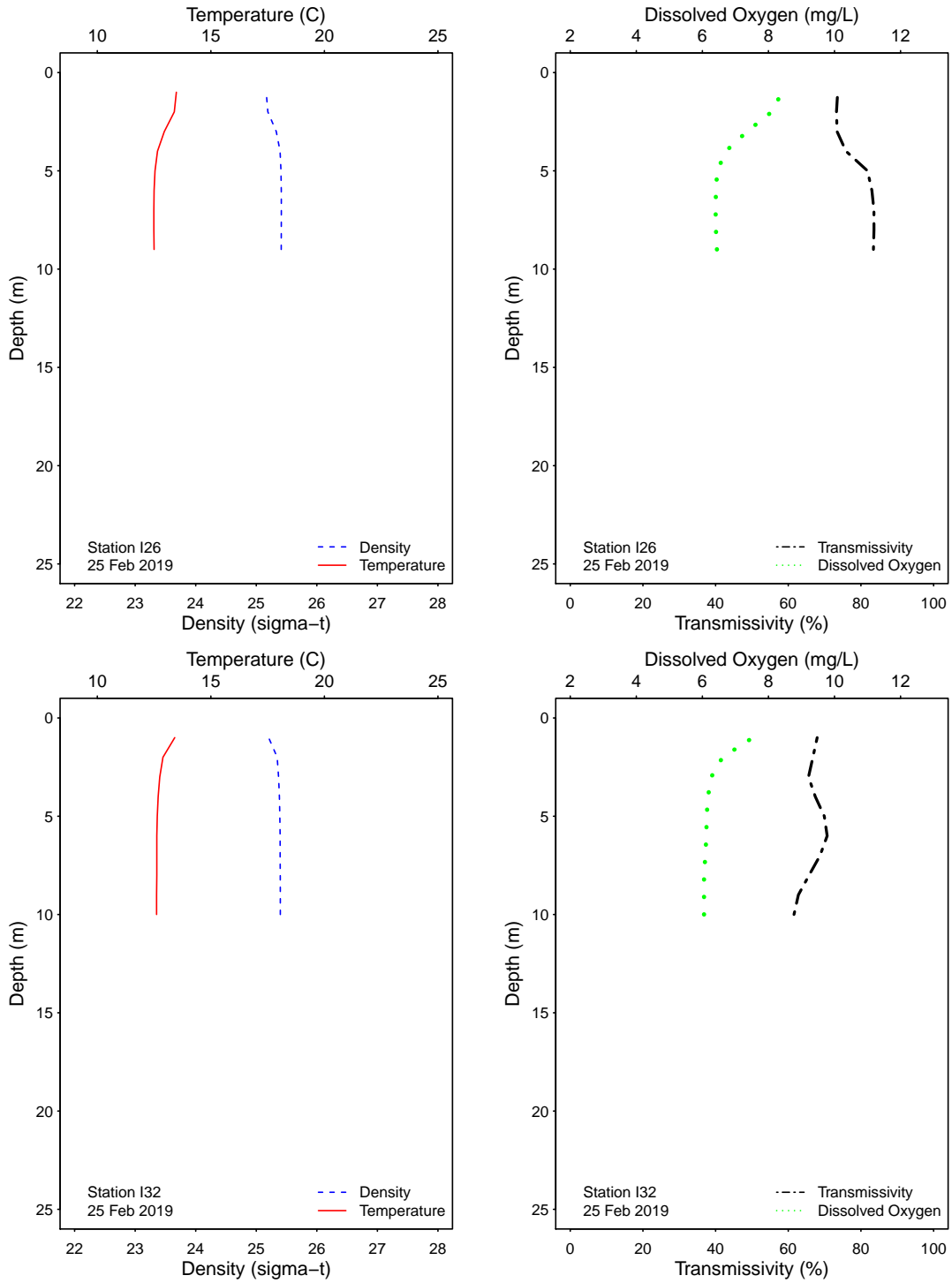


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

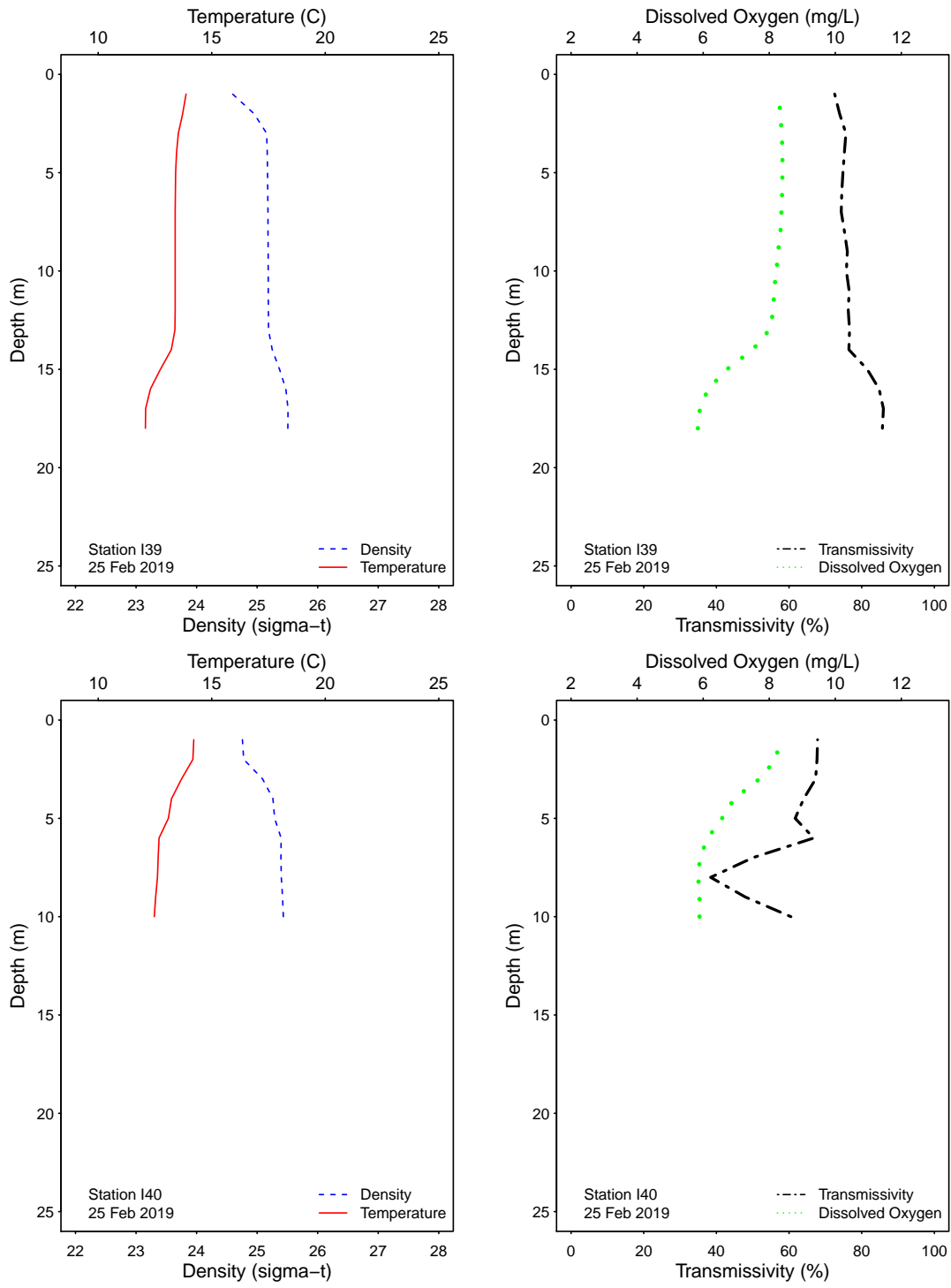


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

Offshore Stations

Table 4.1

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria at the SBOO offshore stations within three nautical miles of shore. Total coliform density shall not exceed 10,000 CFU/100 mL.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
13 Feb 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
15 Feb 2019	ns	ns	ns	ns	ns	ns	IC	E	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.2

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria at the SBOO offshore stations within three nautical miles of shore. Fecal coliform density shall not exceed 400 CFU/100 mL.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
13 Feb 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
15 Feb 2019	ns	ns	ns	ns	ns	ns	IC	E	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.3

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria at the SBOO offshore stations within three nautical miles of shore. *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
13 Feb 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
15 Feb 2019	ns	ns	ns	ns	ns	ns	IC	E	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.4

Summary of compliance with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T) at the SBOO offshore stations within three nautical miles of shore. Total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	I12	I14	I16	I18	I22	I23	I33	I36	I37	I38
13 Feb 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
15 Feb 2019	ns	ns	ns	ns	ns	ns	IC	IC	IC	E

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 4.5

Summary of water quality parameters at the SBOO offshore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal) and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; the fecal:total coliform ratio (F:T) is unitless; values for temperature (Temp, °C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I10	12 Feb 2019	1126	2	<2	<2	<2	1.00	14.9	82.96	8.0	33.60	8.1
I10	12 Feb 2019	1126	12	4e	<2	<2	0.50	14.7	82.32	8.0	33.60	8.1
I10	12 Feb 2019	1126	18	4e	2e	2e	0.50	14.5	83.63	7.2	33.61	8.1
I11	12 Feb 2019	1115	2	54	20e	4e	0.37	14.8	71.65	8.2	33.60	8.1
I11	12 Feb 2019	1115	6	1100	180e	26e	0.16	14.8	74.74	8.1	33.59	8.1
I11	12 Feb 2019	1115	11	380e	54	12e	0.14	14.6	77.89	7.6	33.60	8.1
I12	13 Feb 2019	1126	2	240e	18e	6e	0.07	15.0	85.70	7.9	33.52	8.1
I12	13 Feb 2019	1126	18	48	<2	2e	0.04	14.7	85.11	7.6	33.56	8.1
I12	13 Feb 2019	1126	27	56	<2	2e	0.04	13.8	86.87	6.7	33.60	8.0
I13	13 Feb 2019	1149	2	<2	<2	<2	1.00	15.2	87.22	8.1	33.65	8.1
I13	13 Feb 2019	1149	18	<2	<2	<2	1.00	15.2	87.39	8.0	33.65	8.1
I13	13 Feb 2019	1149	37	88	8e	4e	0.09	13.7	87.68	6.8	33.59	8.0
I14	13 Feb 2019	1206	2	<2	<2	<2	1.00	15.2	86.11	8.1	33.62	8.1
I14	13 Feb 2019	1206	18	2e	<2	<2	1.00	14.6	84.16	7.5	33.61	8.1
I14	13 Feb 2019	1206	27	52	2e	<2	0.04	13.7	86.64	6.6	33.59	8.0
I16	13 Feb 2019	1117	2	<2	<2	<2	1.00	15.2	80.84	8.1	33.62	8.1
I16	13 Feb 2019	1117	18	<2	<2	<2	1.00	14.5	84.06	7.4	33.61	8.1
I16	13 Feb 2019	1117	27	46	6e	2e	0.13	13.7	86.61	6.6	33.60	8.0
I18	13 Feb 2019	1056	2	<2	<2	<2	1.00	14.8	83.94	7.9	33.60	8.1
I18	13 Feb 2019	1056	12	<2	<2	<2	1.00	14.4	85.84	7.4	33.61	8.1
I18	13 Feb 2019	1056	18	8e	<2	<2	0.25	13.9	86.23	6.7	33.62	8.0
I20	13 Feb 2019	940	2	<2	<2	<2	1.00	15.3	87.04	8.0	33.65	8.1
I20	13 Feb 2019	940	18	<2	<2	<2	1.00	15.3	87.57	7.8	33.65	8.1
I20	13 Feb 2019	940	55	280e	36e	16e	0.13	13.4	87.99	6.5	33.59	8.0
I21	13 Feb 2019	957	2	<2	<2	<2	1.00	15.2	87.38	8.0	33.65	8.1
I21	13 Feb 2019	957	18	<2	<2	<2	1.00	15.2	87.46	7.9	33.65	8.1
I21	13 Feb 2019	957	37	110	26e	10e	0.24	13.5	87.87	6.5	33.59	8.0
I22	13 Feb 2019	1029	2	<2	<2	<2	1.00	15.1	85.16	8.1	33.60	8.1
I22	13 Feb 2019	1029	18	4e	2e	<2	0.50	14.3	84.82	7.1	33.60	8.1
I22	13 Feb 2019	1029	27	36e	<2	2e	0.06	13.6	86.67	6.5	33.59	8.0
I23	13 Feb 2019	1044	2	<2	<2	<2	1.00	14.8	80.47	8.3	33.62	8.1
I23	13 Feb 2019	1044	12	<2	<2	<2	1.00	14.5	84.16	7.5	33.61	8.1
I23	13 Feb 2019	1044	18	6e	<2	<2	0.33	13.8	85.53	6.6	33.61	8.0
I3	12 Feb 2019	1001	2	6e	2e	<2	0.33	15.0	84.21	8.0	33.59	8.1
I3	12 Feb 2019	1001	18	2e	<2	<2	1.00	14.8	86.22	7.5	33.62	8.1
I3	12 Feb 2019	1001	27	<2	<2	<2	1.00	14.8	86.15	7.5	33.62	8.1

Station	Date	Time	Depth	Total	Fecal	Enterococci	F:T	Temp	XMS	DO	Sal	pH
I30	15 Feb 2019	907	2	12e	<2	2e	0.17	15.0	75.89	8.1	33.43	8.2
I30	15 Feb 2019	907	18	8000	1100	800	0.14	15.0	82.15	8.0	33.55	8.2
I30	15 Feb 2019	907	27	<2	<2	<2	1.00	15.0	78.97	8.0	33.56	8.2
I33	15 Feb 2019	815	2	2e	<2	<2	1.00	14.8	82.67	7.9	33.56	8.2
I33	15 Feb 2019	815	18	2e	2e	<2	1.00	14.8	80.99	7.7	33.56	8.1
I33	15 Feb 2019	815	27	4e	2e	<2	0.50	14.7	80.43	7.7	33.56	8.1
I36	15 Feb 2019	945	2	760	100	150e	0.13	15.1	11.55	8.2	32.64	8.2
I36	15 Feb 2019	945	6	10000	800	1400e	0.08	14.9	38.68	7.8	33.44	8.2
I36	15 Feb 2019	945	11	> 16000	1400e	2200e	0.09	14.8	26.24	7.6	33.46	8.1
I37	15 Feb 2019	748	2	2e	2e	2e	1.00	14.6	78.00	7.8	33.53	8.2
I37	15 Feb 2019	748	6	4e	<2	<2	0.50	14.6	79.42	7.8	33.54	8.1
I37	15 Feb 2019	748	11	6e	2e	2e	0.33	14.7	79.50	7.7	33.55	8.1
I38	15 Feb 2019	1017	2	> 16000	3000e	3200e	0.19	14.7	42.06	8.2	32.56	8.2
I38	15 Feb 2019	1017	6	13000	520	1600e	0.04	14.7	51.26	7.8	33.45	8.1
I38	15 Feb 2019	1017	11	4800	300e	480	0.06	14.7	38.60	7.7	33.50	8.1
I5	12 Feb 2019	1039	2	34e	2e	2e	0.06	14.9	65.81	8.1	33.60	8.1
I5	12 Feb 2019	1039	6	220e	22e	16e	0.10	14.8	65.94	8.0	33.60	8.1
I5	12 Feb 2019	1039	11	260e	12e	6e	0.05	14.7	69.14	7.4	33.61	8.1
I7	12 Feb 2019	851	2	<2	<2	<2	1.00	15.3	88.12	8.0	33.65	8.1
I7	12 Feb 2019	851	18	<2	<2	<2	1.00	15.3	88.18	7.9	33.65	8.1
I7	12 Feb 2019	851	52	80e	28e	4e	0.35	13.4	87.70	6.4	33.60	8.0
I8	12 Feb 2019	1153	2	<2	<2	<2	1.00	15.2	86.38	8.0	33.65	8.1
I8	12 Feb 2019	1153	18	6e	<2	<2	0.33	15.0	86.35	7.8	33.64	8.1
I8	12 Feb 2019	1153	37	70	6e	2e	0.09	14.0	87.25	6.9	33.61	8.0
I9	12 Feb 2019	1139	2	2e	4e	<2	2.00	14.7	85.17	7.7	33.56	8.1
I9	12 Feb 2019	1139	18	10e	<2	<2	0.20	14.4	85.05	7.4	33.60	8.1
I9	12 Feb 2019	1139	27	30e	8e	<2	0.27	14.1	86.53	6.8	33.60	8.0

ns = not sampled

ND = no data

Table 4.6

Summary of visual observations made during the month for each SBOO offshore station by sample date.

Station	Date	Parameter	Value
I1	12 Feb 2019	Depth (m)	61
I1	12 Feb 2019	Arrive Time	916
I1	12 Feb 2019	Depart Time	920
I1	12 Feb 2019	Air Temp (C)	14
I1	12 Feb 2019	Weather	Haze
I1	12 Feb 2019	Visibility (mi)	20
I1	12 Feb 2019	Wind Speed (kts)	5
I1	12 Feb 2019	Wind Dir	NE
I1	12 Feb 2019	Water Color	Blue
I1	12 Feb 2019	Wave Ht Low (ft)	3
I1	12 Feb 2019	Wave Period (sec)	13
I1	12 Feb 2019	Sea State	Wind ripples
I1	12 Feb 2019	High Tide (ft)	2.53
I1	12 Feb 2019	High Tide Time	1453
I1	12 Feb 2019	Low Tide (ft)	1.43
I1	12 Feb 2019	Low Tide Time	909
I1	12 Feb 2019	Comments	none
I10	12 Feb 2019	Depth (m)	21
I10	12 Feb 2019	Arrive Time	1126
I10	12 Feb 2019	Depart Time	1132
I10	12 Feb 2019	Air Temp (C)	15
I10	12 Feb 2019	Weather	Haze
I10	12 Feb 2019	Visibility (mi)	20
I10	12 Feb 2019	Wind Speed (kts)	10
I10	12 Feb 2019	Wind Dir	N
I10	12 Feb 2019	Water Color	Bluish-Green
I10	12 Feb 2019	Wave Ht Low (ft)	3
I10	12 Feb 2019	Wave Period (sec)	13
I10	12 Feb 2019	Sea State	Wind ripples
I10	12 Feb 2019	High Tide (ft)	2.53
I10	12 Feb 2019	High Tide Time	1453
I10	12 Feb 2019	Low Tide (ft)	1.43
I10	12 Feb 2019	Low Tide Time	909
I10	12 Feb 2019	Comments	none
I11	12 Feb 2019	Depth (m)	14
I11	12 Feb 2019	Arrive Time	1115
I11	12 Feb 2019	Depart Time	1120
I11	12 Feb 2019	Air Temp (C)	18
I11	12 Feb 2019	Weather	Haze
I11	12 Feb 2019	Visibility (mi)	20
I11	12 Feb 2019	Wind Speed (kts)	2
I11	12 Feb 2019	Wind Dir	N
I11	12 Feb 2019	Water Color	Green
I11	12 Feb 2019	Wave Ht Low (ft)	3
I11	12 Feb 2019	Wave Period (sec)	13
I11	12 Feb 2019	Sea State	Wind ripples
I11	12 Feb 2019	High Tide (ft)	2.53
I11	12 Feb 2019	High Tide Time	1453
I11	12 Feb 2019	Low Tide (ft)	1.43

Station	Date	Parameter	Value
I11	12 Feb 2019	Low Tide Time	909
I11	12 Feb 2019	Comments	none
I12	13 Feb 2019	Depth (m)	29
I12	13 Feb 2019	Arrive Time	1126
I12	13 Feb 2019	Depart Time	1133
I12	13 Feb 2019	Air Temp (C)	16
I12	13 Feb 2019	Weather	Partly Cloudy
I12	13 Feb 2019	Visibility (mi)	15
I12	13 Feb 2019	Wind Speed (kts)	16
I12	13 Feb 2019	Wind Dir	SE
I12	13 Feb 2019	Water Color	Greenish-Blue
I12	13 Feb 2019	Wave Ht Low (ft)	3
I12	13 Feb 2019	Wave Period (sec)	13
I12	13 Feb 2019	Sea State	Heavy chop
I12	13 Feb 2019	High Tide (ft)	2.62
I12	13 Feb 2019	High Tide Time	1704
I12	13 Feb 2019	Low Tide (ft)	0.88
I12	13 Feb 2019	Low Tide Time	1041
I12	13 Feb 2019	Comments	none
I14	13 Feb 2019	Depth (m)	38
I14	13 Feb 2019	Arrive Time	1149
I14	13 Feb 2019	Depart Time	1155
I14	13 Feb 2019	Air Temp (C)	16
I14	13 Feb 2019	Weather	Continuous layer of clouds
I14	13 Feb 2019	Visibility (mi)	15
I14	13 Feb 2019	Wind Speed (kts)	14
I14	13 Feb 2019	Wind Dir	SE
I14	13 Feb 2019	Water Color	Greenish-Blue
I14	13 Feb 2019	Wave Ht Low (ft)	5
I14	13 Feb 2019	Wave Period (sec)	13
I14	13 Feb 2019	Sea State	Heavy chop
I14	13 Feb 2019	High Tide (ft)	2.62
I14	13 Feb 2019	High Tide Time	1704
I14	13 Feb 2019	Low Tide (ft)	0.88
I14	13 Feb 2019	Low Tide Time	1041
I14	13 Feb 2019	Comments	none
I15	13 Feb 2019	Depth (m)	32
I15	13 Feb 2019	Arrive Time	1136
I15	13 Feb 2019	Depart Time	1139
I15	13 Feb 2019	Air Temp (C)	16
I15	13 Feb 2019	Weather	Continuous layer of clouds
I15	13 Feb 2019	Visibility (mi)	15
I15	13 Feb 2019	Wind Speed (kts)	16
I15	13 Feb 2019	Wind Dir	SE
I15	13 Feb 2019	Water Color	Greenish-Blue
I15	13 Feb 2019	Wave Ht Low (ft)	5
I15	13 Feb 2019	Wave Period (sec)	13
I15	13 Feb 2019	Sea State	Heavy chop
I15	13 Feb 2019	High Tide (ft)	2.62
I15	13 Feb 2019	High Tide Time	1704
I15	13 Feb 2019	Low Tide (ft)	0.88
I15	13 Feb 2019	Low Tide Time	1041

Station	Date	Parameter	Value
I15	13 Feb 2019	Comments	none
I16	13 Feb 2019	Depth (m)	27
I16	13 Feb 2019	Arrive Time	1117
I16	13 Feb 2019	Depart Time	1122
I16	13 Feb 2019	Air Temp (C)	16
I16	13 Feb 2019	Weather	Partly Cloudy
I16	13 Feb 2019	Visibility (mi)	15
I16	13 Feb 2019	Wind Speed (kts)	16
I16	13 Feb 2019	Wind Dir	SE
I16	13 Feb 2019	Water Color	Greenish-Blue
I16	13 Feb 2019	Wave Ht Low (ft)	3
I16	13 Feb 2019	Wave Period (sec)	13
I16	13 Feb 2019	Sea State	Light chop
I16	13 Feb 2019	High Tide (ft)	2.62
I16	13 Feb 2019	High Tide Time	1704
I16	13 Feb 2019	Low Tide (ft)	0.88
I16	13 Feb 2019	Low Tide Time	1041
I16	13 Feb 2019	Comments	none
I17	13 Feb 2019	Depth (m)	26
I17	13 Feb 2019	Arrive Time	1109
I17	13 Feb 2019	Depart Time	1114
I17	13 Feb 2019	Air Temp (C)	16
I17	13 Feb 2019	Weather	Partly Cloudy
I17	13 Feb 2019	Visibility (mi)	15
I17	13 Feb 2019	Wind Speed (kts)	14
I17	13 Feb 2019	Wind Dir	SE
I17	13 Feb 2019	Water Color	Bluish-Green
I17	13 Feb 2019	Wave Ht Low (ft)	3
I17	13 Feb 2019	Wave Period (sec)	13
I17	13 Feb 2019	Sea State	Light chop
I17	13 Feb 2019	High Tide (ft)	2.62
I17	13 Feb 2019	High Tide Time	1704
I17	13 Feb 2019	Low Tide (ft)	0.88
I17	13 Feb 2019	Low Tide Time	1041
I17	13 Feb 2019	Comments	none
I18	13 Feb 2019	Depth (m)	21
I18	13 Feb 2019	Arrive Time	1056
I18	13 Feb 2019	Depart Time	1103
I18	13 Feb 2019	Air Temp (C)	16
I18	13 Feb 2019	Weather	Partly Cloudy
I18	13 Feb 2019	Visibility (mi)	15
I18	13 Feb 2019	Wind Speed (kts)	9
I18	13 Feb 2019	Wind Dir	SE
I18	13 Feb 2019	Water Color	Bluish-Green
I18	13 Feb 2019	Wave Ht Low (ft)	3
I18	13 Feb 2019	Wave Period (sec)	13
I18	13 Feb 2019	Sea State	Light chop
I18	13 Feb 2019	High Tide (ft)	2.62
I18	13 Feb 2019	High Tide Time	1704
I18	13 Feb 2019	Low Tide (ft)	0.88
I18	13 Feb 2019	Low Tide Time	1041
I18	13 Feb 2019	Comments	none

Station	Date	Parameter	Value
I2	12 Feb 2019	Depth (m)	34
I2	12 Feb 2019	Arrive Time	947
I2	12 Feb 2019	Depart Time	950
I2	12 Feb 2019	Air Temp (C)	14
I2	12 Feb 2019	Weather	Haze
I2	12 Feb 2019	Visibility (mi)	20
I2	12 Feb 2019	Wind Speed (kts)	4
I2	12 Feb 2019	Wind Dir	N
I2	12 Feb 2019	Water Color	Blue
I2	12 Feb 2019	Wave Ht Low (ft)	3
I2	12 Feb 2019	Wave Period (sec)	13
I2	12 Feb 2019	Sea State	Wind ripples
I2	12 Feb 2019	High Tide (ft)	2.53
I2	12 Feb 2019	High Tide Time	1453
I2	12 Feb 2019	Low Tide (ft)	1.43
I2	12 Feb 2019	Low Tide Time	909
I2	12 Feb 2019	Comments	none
I20	13 Feb 2019	Depth (m)	55
I20	13 Feb 2019	Arrive Time	940
I20	13 Feb 2019	Depart Time	946
I20	13 Feb 2019	Air Temp (C)	15
I20	13 Feb 2019	Weather	Partly Cloudy
I20	13 Feb 2019	Visibility (mi)	15
I20	13 Feb 2019	Wind Speed (kts)	8
I20	13 Feb 2019	Wind Dir	SE
I20	13 Feb 2019	Water Color	Blue
I20	13 Feb 2019	Wave Ht Low (ft)	3
I20	13 Feb 2019	Wave Period (sec)	13
I20	13 Feb 2019	Sea State	Wind ripples
I20	13 Feb 2019	High Tide (ft)	2.62
I20	13 Feb 2019	High Tide Time	1704
I20	13 Feb 2019	Low Tide (ft)	0.88
I20	13 Feb 2019	Low Tide Time	1041
I20	13 Feb 2019	Comments	none
I21	13 Feb 2019	Depth (m)	42
I21	13 Feb 2019	Arrive Time	957
I21	13 Feb 2019	Depart Time	1002
I21	13 Feb 2019	Air Temp (C)	16
I21	13 Feb 2019	Weather	Partly Cloudy
I21	13 Feb 2019	Visibility (mi)	15
I21	13 Feb 2019	Wind Speed (kts)	11
I21	13 Feb 2019	Wind Dir	SE
I21	13 Feb 2019	Water Color	Blue
I21	13 Feb 2019	Wave Ht Low (ft)	3
I21	13 Feb 2019	Wave Period (sec)	13
I21	13 Feb 2019	Sea State	Wind ripples
I21	13 Feb 2019	High Tide (ft)	2.62
I21	13 Feb 2019	High Tide Time	1704
I21	13 Feb 2019	Low Tide (ft)	0.88
I21	13 Feb 2019	Low Tide Time	1041
I21	13 Feb 2019	Comments	none

Station	Date	Parameter	Value
I22	13 Feb 2019	Depth (m)	29
I22	13 Feb 2019	Arrive Time	1029
I22	13 Feb 2019	Depart Time	1034
I22	13 Feb 2019	Air Temp (C)	16
I22	13 Feb 2019	Weather	Partly Cloudy
I22	13 Feb 2019	Visibility (mi)	15
I22	13 Feb 2019	Wind Speed (kts)	14
I22	13 Feb 2019	Wind Dir	SE
I22	13 Feb 2019	Water Color	Blue
I22	13 Feb 2019	Wave Ht Low (ft)	3
I22	13 Feb 2019	Wave Period (sec)	13
I22	13 Feb 2019	Sea State	Wind ripples
I22	13 Feb 2019	High Tide (ft)	2.62
I22	13 Feb 2019	High Tide Time	1704
I22	13 Feb 2019	Low Tide (ft)	0.88
I22	13 Feb 2019	Low Tide Time	1041
I22	13 Feb 2019	Comments	none
I23	13 Feb 2019	Depth (m)	22
I23	13 Feb 2019	Arrive Time	1044
I23	13 Feb 2019	Depart Time	1049
I23	13 Feb 2019	Air Temp (C)	16
I23	13 Feb 2019	Weather	Partly Cloudy
I23	13 Feb 2019	Visibility (mi)	15
I23	13 Feb 2019	Wind Speed (kts)	8
I23	13 Feb 2019	Wind Dir	SE
I23	13 Feb 2019	Water Color	Bluish-Green
I23	13 Feb 2019	Wave Ht Low (ft)	3
I23	13 Feb 2019	Wave Period (sec)	13
I23	13 Feb 2019	Sea State	Wind ripples
I23	13 Feb 2019	High Tide (ft)	2.62
I23	13 Feb 2019	High Tide Time	1704
I23	13 Feb 2019	Low Tide (ft)	0.88
I23	13 Feb 2019	Low Tide Time	1041
I23	13 Feb 2019	Comments	none
I27	13 Feb 2019	Depth (m)	29
I27	13 Feb 2019	Arrive Time	1015
I27	13 Feb 2019	Depart Time	1020
I27	13 Feb 2019	Air Temp (C)	16
I27	13 Feb 2019	Weather	Partly Cloudy
I27	13 Feb 2019	Visibility (mi)	15
I27	13 Feb 2019	Wind Speed (kts)	13
I27	13 Feb 2019	Wind Dir	SE
I27	13 Feb 2019	Water Color	Bluish-Green
I27	13 Feb 2019	Wave Ht Low (ft)	3
I27	13 Feb 2019	Wave Period (sec)	13
I27	13 Feb 2019	Sea State	Wind ripples
I27	13 Feb 2019	High Tide (ft)	2.62
I27	13 Feb 2019	High Tide Time	1704
I27	13 Feb 2019	Low Tide (ft)	0.88
I27	13 Feb 2019	Low Tide Time	1041
I27	13 Feb 2019	Comments	none
I28	15 Feb 2019	Depth (m)	57

Station	Date	Parameter	Value
I28	15 Feb 2019	Arrive Time	834
I28	15 Feb 2019	Depart Time	838
I28	15 Feb 2019	Air Temp (C)	14
I28	15 Feb 2019	Weather	Partly Cloudy
I28	15 Feb 2019	Visibility (mi)	5
I28	15 Feb 2019	Wind Speed (kts)	3
I28	15 Feb 2019	Wind Dir	NW
I28	15 Feb 2019	Water Color	Brownish-Green
I28	15 Feb 2019	Wave Ht Low (ft)	7
I28	15 Feb 2019	Wave Period (sec)	11
I28	15 Feb 2019	Sea State	Confused swell
I28	15 Feb 2019	High Tide (ft)	5.26
I28	15 Feb 2019	High Tide Time	505
I28	15 Feb 2019	Low Tide (ft)	-0.52
I28	15 Feb 2019	Low Tide Time	1236
I28	15 Feb 2019	Comments	none
I29	15 Feb 2019	Depth (m)	38
I29	15 Feb 2019	Arrive Time	855
I29	15 Feb 2019	Depart Time	858
I29	15 Feb 2019	Air Temp (C)	14
I29	15 Feb 2019	Weather	Partly Cloudy
I29	15 Feb 2019	Visibility (mi)	5
I29	15 Feb 2019	Wind Speed (kts)	6
I29	15 Feb 2019	Wind Dir	NE
I29	15 Feb 2019	Water Color	Brownish-Green
I29	15 Feb 2019	Wave Ht Low (ft)	7
I29	15 Feb 2019	Wave Period (sec)	11
I29	15 Feb 2019	Sea State	Confused swell
I29	15 Feb 2019	High Tide (ft)	5.26
I29	15 Feb 2019	High Tide Time	505
I29	15 Feb 2019	Low Tide (ft)	-0.52
I29	15 Feb 2019	Low Tide Time	1236
I29	15 Feb 2019	Comments	none
I3	12 Feb 2019	Depth (m)	28
I3	12 Feb 2019	Arrive Time	1001
I3	12 Feb 2019	Depart Time	1020
I3	12 Feb 2019	Air Temp (C)	14
I3	12 Feb 2019	Weather	Haze
I3	12 Feb 2019	Visibility (mi)	20
I3	12 Feb 2019	Wind Speed (kts)	5
I3	12 Feb 2019	Wind Dir	N
I3	12 Feb 2019	Water Color	Blue
I3	12 Feb 2019	Wave Ht Low (ft)	3
I3	12 Feb 2019	Wave Period (sec)	13
I3	12 Feb 2019	Sea State	Wind ripples
I3	12 Feb 2019	High Tide (ft)	2.53
I3	12 Feb 2019	High Tide Time	1453
I3	12 Feb 2019	Low Tide (ft)	1.43
I3	12 Feb 2019	Low Tide Time	909
I3	12 Feb 2019	Comments	Surface CTD data not recorded on first cast; Had to return to station to re-cast.
I30	15 Feb 2019	Depth (m)	29

Station	Date	Parameter	Value
I30	15 Feb 2019	Arrive Time	907
I30	15 Feb 2019	Depart Time	911
I30	15 Feb 2019	Air Temp (C)	14
I30	15 Feb 2019	Weather	Partly Cloudy
I30	15 Feb 2019	Visibility (mi)	5
I30	15 Feb 2019	Wind Speed (kts)	6
I30	15 Feb 2019	Wind Dir	E
I30	15 Feb 2019	Water Color	Brownish-Green
I30	15 Feb 2019	Wave Ht Low (ft)	7
I30	15 Feb 2019	Wave Period (sec)	11
I30	15 Feb 2019	Sea State	Confused swell
I30	15 Feb 2019	High Tide (ft)	5.26
I30	15 Feb 2019	High Tide Time	505
I30	15 Feb 2019	Low Tide (ft)	-0.52
I30	15 Feb 2019	Low Tide Time	1236
I30	15 Feb 2019	Comments	none
I31	15 Feb 2019	Depth (m)	20
I31	15 Feb 2019	Arrive Time	920
I31	15 Feb 2019	Depart Time	926
I31	15 Feb 2019	Air Temp (C)	14
I31	15 Feb 2019	Weather	Partly Cloudy
I31	15 Feb 2019	Visibility (mi)	5
I31	15 Feb 2019	Wind Speed (kts)	2
I31	15 Feb 2019	Wind Dir	S
I31	15 Feb 2019	Water Color	Brownish-Green
I31	15 Feb 2019	Wave Ht Low (ft)	7
I31	15 Feb 2019	Wave Period (sec)	11
I31	15 Feb 2019	Sea State	Confused swell
I31	15 Feb 2019	High Tide (ft)	5.26
I31	15 Feb 2019	High Tide Time	505
I31	15 Feb 2019	Low Tide (ft)	-0.52
I31	15 Feb 2019	Low Tide Time	1236
I31	15 Feb 2019	Comments	runoff plume present
I33	15 Feb 2019	Depth (m)	32
I33	15 Feb 2019	Arrive Time	815
I33	15 Feb 2019	Depart Time	819
I33	15 Feb 2019	Air Temp (C)	13
I33	15 Feb 2019	Weather	Partly Cloudy
I33	15 Feb 2019	Visibility (mi)	5
I33	15 Feb 2019	Wind Speed (kts)	6
I33	15 Feb 2019	Wind Dir	E
I33	15 Feb 2019	Water Color	Brownish-Green
I33	15 Feb 2019	Wave Ht Low (ft)	5
I33	15 Feb 2019	Wave Period (sec)	11
I33	15 Feb 2019	Sea State	Confused swell
I33	15 Feb 2019	High Tide (ft)	5.26
I33	15 Feb 2019	High Tide Time	505
I33	15 Feb 2019	Low Tide (ft)	-0.52
I33	15 Feb 2019	Low Tide Time	1236
I33	15 Feb 2019	Comments	none
I34	15 Feb 2019	Depth (m)	21
I34	15 Feb 2019	Arrive Time	802

Station	Date	Parameter	Value
I34	15 Feb 2019	Depart Time	806
I34	15 Feb 2019	Air Temp (C)	13
I34	15 Feb 2019	Weather	Partly Cloudy
I34	15 Feb 2019	Visibility (mi)	5
I34	15 Feb 2019	Wind Speed (kts)	6
I34	15 Feb 2019	Wind Dir	E
I34	15 Feb 2019	Water Color	Brownish-Green
I34	15 Feb 2019	Wave Ht Low (ft)	5
I34	15 Feb 2019	Wave Period (sec)	11
I34	15 Feb 2019	Sea State	Confused swell
I34	15 Feb 2019	High Tide (ft)	5.26
I34	15 Feb 2019	High Tide Time	505
I34	15 Feb 2019	Low Tide (ft)	-0.52
I34	15 Feb 2019	Low Tide Time	1236
I34	15 Feb 2019	Comments	none
I35	15 Feb 2019	Depth (m)	20
I35	15 Feb 2019	Arrive Time	1000
I35	15 Feb 2019	Depart Time	1004
I35	15 Feb 2019	Air Temp (C)	14
I35	15 Feb 2019	Weather	Partly Cloudy
I35	15 Feb 2019	Visibility (mi)	5
I35	15 Feb 2019	Wind Speed (kts)	2
I35	15 Feb 2019	Wind Dir	SW
I35	15 Feb 2019	Water Color	Brownish-Green
I35	15 Feb 2019	Wave Ht Low (ft)	7
I35	15 Feb 2019	Wave Period (sec)	11
I35	15 Feb 2019	Sea State	Confused swell
I35	15 Feb 2019	High Tide (ft)	5.26
I35	15 Feb 2019	High Tide Time	505
I35	15 Feb 2019	Low Tide (ft)	-0.52
I35	15 Feb 2019	Low Tide Time	1236
I35	15 Feb 2019	Comments	runoff plume present
I36	15 Feb 2019	Depth (m)	12
I36	15 Feb 2019	Arrive Time	945
I36	15 Feb 2019	Depart Time	949
I36	15 Feb 2019	Air Temp (C)	14
I36	15 Feb 2019	Weather	Partly Cloudy
I36	15 Feb 2019	Visibility (mi)	5
I36	15 Feb 2019	Wind Speed (kts)	3
I36	15 Feb 2019	Wind Dir	S
I36	15 Feb 2019	Water Color	Brownish-Green
I36	15 Feb 2019	Wave Ht Low (ft)	7
I36	15 Feb 2019	Wave Period (sec)	11
I36	15 Feb 2019	Sea State	Confused swell
I36	15 Feb 2019	High Tide (ft)	5.26
I36	15 Feb 2019	High Tide Time	505
I36	15 Feb 2019	Low Tide (ft)	-0.52
I36	15 Feb 2019	Low Tide Time	1236
I36	15 Feb 2019	Comments	runoff plume present
I37	15 Feb 2019	Depth (m)	13
I37	15 Feb 2019	Arrive Time	748
I37	15 Feb 2019	Depart Time	752

Station	Date	Parameter	Value
I37	15 Feb 2019	Air Temp (C)	12
I37	15 Feb 2019	Weather	Partly Cloudy
I37	15 Feb 2019	Visibility (mi)	5
I37	15 Feb 2019	Wind Speed (kts)	7
I37	15 Feb 2019	Wind Dir	SE
I37	15 Feb 2019	Water Color	Brownish-Green
I37	15 Feb 2019	Wave Ht Low (ft)	5
I37	15 Feb 2019	Wave Period (sec)	11
I37	15 Feb 2019	Sea State	Confused swell
I37	15 Feb 2019	High Tide (ft)	5.26
I37	15 Feb 2019	High Tide Time	505
I37	15 Feb 2019	Low Tide (ft)	-0.52
I37	15 Feb 2019	Low Tide Time	1236
I37	15 Feb 2019	Comments	none
I38	15 Feb 2019	Depth (m)	12
I38	15 Feb 2019	Arrive Time	1017
I38	15 Feb 2019	Depart Time	1020
I38	15 Feb 2019	Air Temp (C)	14
I38	15 Feb 2019	Weather	Partly Cloudy
I38	15 Feb 2019	Visibility (mi)	5
I38	15 Feb 2019	Wind Speed (kts)	3
I38	15 Feb 2019	Wind Dir	W
I38	15 Feb 2019	Water Color	Brownish-Green
I38	15 Feb 2019	Wave Ht Low (ft)	7
I38	15 Feb 2019	Wave Period (sec)	11
I38	15 Feb 2019	Sea State	Confused swell
I38	15 Feb 2019	High Tide (ft)	5.26
I38	15 Feb 2019	High Tide Time	505
I38	15 Feb 2019	Low Tide (ft)	-0.52
I38	15 Feb 2019	Low Tide Time	1236
I38	15 Feb 2019	Comments	runoff plume present
I4	12 Feb 2019	Depth (m)	20
I4	12 Feb 2019	Arrive Time	1031
I4	12 Feb 2019	Depart Time	1036
I4	12 Feb 2019	Air Temp (C)	15
I4	12 Feb 2019	Weather	Haze
I4	12 Feb 2019	Visibility (mi)	20
I4	12 Feb 2019	Wind Speed (kts)	4
I4	12 Feb 2019	Wind Dir	N
I4	12 Feb 2019	Water Color	Blue
I4	12 Feb 2019	Wave Ht Low (ft)	3
I4	12 Feb 2019	Wave Period (sec)	13
I4	12 Feb 2019	Sea State	Wind ripples
I4	12 Feb 2019	High Tide (ft)	2.53
I4	12 Feb 2019	High Tide Time	1453
I4	12 Feb 2019	Low Tide (ft)	1.43
I4	12 Feb 2019	Low Tide Time	909
I4	12 Feb 2019	Comments	none
I5	12 Feb 2019	Depth (m)	14
I5	12 Feb 2019	Arrive Time	1039
I5	12 Feb 2019	Depart Time	1044
I5	12 Feb 2019	Air Temp (C)	15

Station	Date	Parameter	Value
15	12 Feb 2019	Weather	Haze
15	12 Feb 2019	Visibility (mi)	20
15	12 Feb 2019	Wind Speed (kts)	4
15	12 Feb 2019	Wind Dir	NW
15	12 Feb 2019	Water Color	Green
15	12 Feb 2019	Wave Ht Low (ft)	3
15	12 Feb 2019	Wave Period (sec)	13
15	12 Feb 2019	Sea State	Wind ripples
15	12 Feb 2019	High Tide (ft)	2.53
15	12 Feb 2019	High Tide Time	1453
15	12 Feb 2019	Low Tide (ft)	1.43
15	12 Feb 2019	Low Tide Time	909
15	12 Feb 2019	Comments	none
16	12 Feb 2019	Depth (m)	26
16	12 Feb 2019	Arrive Time	1058
16	12 Feb 2019	Depart Time	1102
16	12 Feb 2019	Air Temp (C)	15
16	12 Feb 2019	Weather	Haze
16	12 Feb 2019	Visibility (mi)	20
16	12 Feb 2019	Wind Speed (kts)	6
16	12 Feb 2019	Wind Dir	N
16	12 Feb 2019	Water Color	Green
16	12 Feb 2019	Wave Ht Low (ft)	3
16	12 Feb 2019	Wave Period (sec)	13
16	12 Feb 2019	Sea State	Wind ripples
16	12 Feb 2019	High Tide (ft)	2.53
16	12 Feb 2019	High Tide Time	1453
16	12 Feb 2019	Low Tide (ft)	1.43
16	12 Feb 2019	Low Tide Time	909
16	12 Feb 2019	Comments	none
17	12 Feb 2019	Depth (m)	51
17	12 Feb 2019	Arrive Time	851
17	12 Feb 2019	Depart Time	856
17	12 Feb 2019	Air Temp (C)	13
17	12 Feb 2019	Weather	Haze
17	12 Feb 2019	Visibility (mi)	20
17	12 Feb 2019	Wind Speed (kts)	5
17	12 Feb 2019	Wind Dir	NE
17	12 Feb 2019	Water Color	Blue
17	12 Feb 2019	Wave Ht Low (ft)	3
17	12 Feb 2019	Wave Period (sec)	13
17	12 Feb 2019	Sea State	Wind ripples
17	12 Feb 2019	High Tide (ft)	2.53
17	12 Feb 2019	High Tide Time	1453
17	12 Feb 2019	Low Tide (ft)	1.43
17	12 Feb 2019	Low Tide Time	909
17	12 Feb 2019	Comments	none
18	12 Feb 2019	Depth (m)	36
18	12 Feb 2019	Arrive Time	1153
18	12 Feb 2019	Depart Time	1159
18	12 Feb 2019	Air Temp (C)	15
18	12 Feb 2019	Weather	Haze

Station	Date	Parameter	Value
18	12 Feb 2019	Visibility (mi)	20
18	12 Feb 2019	Wind Speed (kts)	6
18	12 Feb 2019	Wind Dir	N
18	12 Feb 2019	Water Color	Blue
18	12 Feb 2019	Wave Ht Low (ft)	3
18	12 Feb 2019	Wave Period (sec)	13
18	12 Feb 2019	Sea State	Light chop
18	12 Feb 2019	High Tide (ft)	2.53
18	12 Feb 2019	High Tide Time	1453
18	12 Feb 2019	Low Tide (ft)	1.43
18	12 Feb 2019	Low Tide Time	909
18	12 Feb 2019	Comments	none
19	12 Feb 2019	Depth (m)	30
19	12 Feb 2019	Arrive Time	1139
19	12 Feb 2019	Depart Time	1145
19	12 Feb 2019	Air Temp (C)	15
19	12 Feb 2019	Weather	Haze
19	12 Feb 2019	Visibility (mi)	20
19	12 Feb 2019	Wind Speed (kts)	8
19	12 Feb 2019	Wind Dir	N
19	12 Feb 2019	Water Color	Bluish-Green
19	12 Feb 2019	Wave Ht Low (ft)	3
19	12 Feb 2019	Wave Period (sec)	13
19	12 Feb 2019	Sea State	Light chop
19	12 Feb 2019	High Tide (ft)	2.53
19	12 Feb 2019	High Tide Time	1453
19	12 Feb 2019	Low Tide (ft)	1.43
19	12 Feb 2019	Low Tide Time	909
19	12 Feb 2019	Comments	none

Table 4.7

Summary of CTD profile data from the SBOO offshore stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I1	12 Feb 2019	1	15.47	88.00	8.0	33.66	8.1	24.8	0.30
I1	12 Feb 2019	2	15.47	88.05	8.0	33.66	8.1	24.8	0.32
I1	12 Feb 2019	3	15.46	88.08	8.0	33.66	8.1	24.8	0.32
I1	12 Feb 2019	4	15.46	88.00	7.9	33.66	8.1	24.8	0.33
I1	12 Feb 2019	5	15.46	88.03	8.0	33.66	8.1	24.8	0.33
I1	12 Feb 2019	6	15.46	88.04	7.9	33.66	8.1	24.8	0.34
I1	12 Feb 2019	7	15.46	88.04	7.9	33.66	8.1	24.8	0.35
I1	12 Feb 2019	8	15.46	87.99	7.8	33.66	8.1	24.8	0.35
I1	12 Feb 2019	9	15.46	87.99	7.9	33.66	8.1	24.8	0.37
I1	12 Feb 2019	10	15.46	88.02	7.9	33.66	8.1	24.8	0.37
I1	12 Feb 2019	11	15.46	88.07	7.8	33.66	8.1	24.8	0.39
I1	12 Feb 2019	12	15.46	87.96	7.8	33.66	8.1	24.8	0.41
I1	12 Feb 2019	13	15.46	88.02	7.9	33.66	8.1	24.8	0.42
I1	12 Feb 2019	14	15.46	88.06	7.9	33.66	8.1	24.8	0.45
I1	12 Feb 2019	15	15.46	88.05	7.9	33.66	8.1	24.8	0.48
I1	12 Feb 2019	16	15.46	88.04	7.9	33.66	8.1	24.8	0.49
I1	12 Feb 2019	17	15.46	87.97	7.9	33.65	8.1	24.8	0.49
I1	12 Feb 2019	18	15.46	87.99	7.9	33.66	8.1	24.8	0.53
I1	12 Feb 2019	19	15.46	88.06	7.9	33.66	8.1	24.8	0.53
I1	12 Feb 2019	20	15.46	88.07	7.9	33.66	8.1	24.8	0.57
I1	12 Feb 2019	21	15.46	88.07	7.8	33.66	8.1	24.8	0.60
I1	12 Feb 2019	22	15.46	88.06	7.9	33.66	8.1	24.8	0.61
I1	12 Feb 2019	23	15.46	88.07	7.9	33.66	8.1	24.8	0.60
I1	12 Feb 2019	24	15.46	88.08	7.8	33.66	8.1	24.8	0.59
I1	12 Feb 2019	25	15.46	88.07	7.9	33.66	8.1	24.8	0.61
I1	12 Feb 2019	26	15.46	88.07	7.9	33.66	8.1	24.8	0.62
I1	12 Feb 2019	27	15.46	88.01	7.8	33.66	8.1	24.8	0.66
I1	12 Feb 2019	28	15.46	88.05	7.8	33.66	8.1	24.8	0.62
I1	12 Feb 2019	29	15.46	88.06	7.8	33.66	8.1	24.8	0.64
I1	12 Feb 2019	30	15.46	88.04	7.8	33.66	8.1	24.8	0.65
I1	12 Feb 2019	31	15.45	88.05	7.9	33.66	8.1	24.8	0.64
I1	12 Feb 2019	32	15.45	88.13	7.8	33.66	8.1	24.8	0.66
I1	12 Feb 2019	33	15.45	88.13	7.8	33.66	8.1	24.8	0.67
I1	12 Feb 2019	34	15.45	88.14	7.8	33.66	8.1	24.8	0.65
I1	12 Feb 2019	35	15.45	88.16	7.8	33.66	8.1	24.8	0.66
I1	12 Feb 2019	36	15.45	88.14	7.8	33.66	8.1	24.8	0.66
I1	12 Feb 2019	37	15.46	88.07	7.8	33.66	8.1	24.8	0.67
I1	12 Feb 2019	38	15.45	88.12	7.8	33.66	8.1	24.8	0.68
I1	12 Feb 2019	39	15.45	88.19	7.8	33.66	8.1	24.8	0.67
I1	12 Feb 2019	40	15.45	88.17	7.8	33.66	8.1	24.8	0.66
I1	12 Feb 2019	41	15.45	88.16	7.9	33.66	8.1	24.8	0.66
I1	12 Feb 2019	42	15.45	88.13	7.8	33.66	8.1	24.8	0.65
I1	12 Feb 2019	43	15.45	88.21	7.8	33.66	8.1	24.8	0.67
I1	12 Feb 2019	44	15.45	88.16	7.9	33.66	8.1	24.8	0.67
I1	12 Feb 2019	45	15.45	88.16	7.9	33.66	8.1	24.8	0.67
I1	12 Feb 2019	46	15.45	88.18	7.8	33.66	8.1	24.8	0.67
I1	12 Feb 2019	47	15.45	88.06	7.8	33.66	8.1	24.8	0.68
I1	12 Feb 2019	48	15.44	88.20	7.9	33.66	8.1	24.8	0.68
I1	12 Feb 2019	49	15.43	88.24	7.9	33.66	8.1	24.8	0.68
I1	12 Feb 2019	50	15.43	88.16	7.8	33.66	8.1	24.8	0.68
I1	12 Feb 2019	51	15.41	88.20	7.8	33.66	8.1	24.8	0.68

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I1	12 Feb 2019	52	15.30	88.28	7.6	33.66	8.1	24.9	0.67
I1	12 Feb 2019	53	15.08	88.30	7.5	33.65	8.1	24.9	0.69
I1	12 Feb 2019	54	14.87	88.37	7.3	33.64	8.1	25.0	0.71
I1	12 Feb 2019	55	14.43	88.45	7.1	33.65	8.1	25.0	0.66
I1	12 Feb 2019	56	14.09	88.35	6.9	33.63	8.1	25.1	0.69
I1	12 Feb 2019	57	13.79	88.01	6.7	33.62	8.0	25.2	0.57
I1	12 Feb 2019	58	13.67	87.66	6.6	33.62	8.0	25.2	0.52
I1	12 Feb 2019	59	13.53	87.55	6.5	33.63	8.0	25.2	0.48
I1	12 Feb 2019	60	13.29	87.31	6.4	33.63	8.0	25.3	0.44
I10	12 Feb 2019	1	14.89	82.89	8.0	33.60	8.1	24.9	0.67
I10	12 Feb 2019	2	14.87	82.96	8.0	33.60	8.1	24.9	0.70
I10	12 Feb 2019	3	14.81	82.89	8.0	33.60	8.1	24.9	0.78
I10	12 Feb 2019	4	14.76	82.56	8.0	33.60	8.1	24.9	0.92
I10	12 Feb 2019	5	14.74	82.52	8.0	33.60	8.1	24.9	1.05
I10	12 Feb 2019	6	14.73	82.23	8.0	33.60	8.1	24.9	1.17
I10	12 Feb 2019	7	14.71	82.20	8.0	33.60	8.1	25.0	1.34
I10	12 Feb 2019	8	14.71	82.11	7.9	33.60	8.1	25.0	1.47
I10	12 Feb 2019	9	14.70	82.20	7.9	33.60	8.1	25.0	1.61
I10	12 Feb 2019	10	14.69	82.26	8.0	33.60	8.1	25.0	1.67
I10	12 Feb 2019	11	14.69	82.32	8.0	33.60	8.1	25.0	1.82
I10	12 Feb 2019	12	14.68	82.32	8.0	33.60	8.1	25.0	1.90
I10	12 Feb 2019	13	14.68	82.37	8.0	33.60	8.1	25.0	1.98
I10	12 Feb 2019	14	14.67	82.62	7.9	33.60	8.1	25.0	2.11
I10	12 Feb 2019	15	14.67	82.73	7.9	33.60	8.1	25.0	2.03
I10	12 Feb 2019	16	14.65	83.27	7.7	33.60	8.1	25.0	1.94
I10	12 Feb 2019	17	14.53	84.19	7.4	33.62	8.1	25.0	1.50
I10	12 Feb 2019	18	14.48	83.63	7.2	33.61	8.1	25.0	1.18
I10	12 Feb 2019	19	14.48	83.67	7.2	33.61	8.1	25.0	1.12
I11	12 Feb 2019	1	14.97	72.90	8.2	33.60	8.1	24.9	0.82
I11	12 Feb 2019	2	14.84	71.65	8.2	33.60	8.1	24.9	0.93
I11	12 Feb 2019	3	14.80	72.33	8.2	33.59	8.1	24.9	1.07
I11	12 Feb 2019	4	14.77	72.56	8.2	33.59	8.1	24.9	1.35
I11	12 Feb 2019	5	14.76	73.96	8.2	33.59	8.1	24.9	1.72
I11	12 Feb 2019	6	14.76	74.74	8.1	33.59	8.1	24.9	2.07
I11	12 Feb 2019	7	14.75	75.46	8.1	33.59	8.1	24.9	2.19
I11	12 Feb 2019	8	14.75	76.07	8.1	33.60	8.1	24.9	2.23
I11	12 Feb 2019	9	14.73	77.05	8.1	33.60	8.1	25.0	2.21
I11	12 Feb 2019	10	14.67	77.95	7.8	33.61	8.1	25.0	1.96
I11	12 Feb 2019	11	14.62	77.89	7.6	33.60	8.1	25.0	1.63
I11	12 Feb 2019	12	14.61	77.52	7.5	33.60	8.1	25.0	1.54
I11	12 Feb 2019	13	14.61	76.79	7.5	33.60	8.1	25.0	1.46
I12	13 Feb 2019	1	14.95	85.49	7.9	33.50	8.1	24.8	0.62
I12	13 Feb 2019	2	14.98	85.70	7.9	33.52	8.1	24.8	0.62
I12	13 Feb 2019	3	14.98	85.97	7.9	33.52	8.1	24.8	0.63
I12	13 Feb 2019	4	14.99	85.98	7.9	33.52	8.1	24.8	0.68
I12	13 Feb 2019	5	14.98	85.92	7.8	33.52	8.1	24.8	0.71
I12	13 Feb 2019	6	14.98	85.94	7.9	33.52	8.1	24.8	0.71
I12	13 Feb 2019	7	15.06	86.15	8.0	33.54	8.1	24.8	0.71
I12	13 Feb 2019	8	15.16	86.19	8.0	33.60	8.1	24.9	0.72
I12	13 Feb 2019	9	15.17	86.13	8.1	33.61	8.1	24.9	0.71
I12	13 Feb 2019	10	15.17	86.23	8.1	33.62	8.1	24.9	0.75
I12	13 Feb 2019	11	15.17	86.18	8.1	33.62	8.1	24.9	0.86

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I12	13 Feb 2019	12	15.17	86.18	8.1	33.62	8.1	24.9	0.83
I12	13 Feb 2019	13	15.15	85.99	8.0	33.62	8.1	24.9	0.90
I12	13 Feb 2019	14	15.12	85.90	8.0	33.62	8.1	24.9	0.99
I12	13 Feb 2019	15	15.05	85.49	7.9	33.61	8.1	24.9	1.17
I12	13 Feb 2019	16	15.04	85.44	7.8	33.62	8.1	24.9	1.23
I12	13 Feb 2019	17	14.75	85.12	7.7	33.59	8.1	24.9	1.20
I12	13 Feb 2019	18	14.73	85.11	7.6	33.56	8.1	24.9	1.27
I12	13 Feb 2019	19	14.61	84.83	7.4	33.58	8.1	25.0	1.38
I12	13 Feb 2019	20	14.38	84.75	7.2	33.59	8.1	25.0	1.31
I12	13 Feb 2019	21	14.30	85.92	7.1	33.60	8.1	25.0	1.07
I12	13 Feb 2019	22	14.09	86.90	6.9	33.62	8.1	25.1	0.91
I12	13 Feb 2019	23	13.81	86.84	6.7	33.60	8.0	25.1	0.76
I12	13 Feb 2019	24	13.79	86.88	6.7	33.60	8.0	25.1	0.73
I12	13 Feb 2019	25	13.79	86.88	6.7	33.60	8.0	25.1	0.73
I12	13 Feb 2019	26	13.79	86.83	6.6	33.60	8.0	25.1	0.68
I12	13 Feb 2019	27	13.79	86.87	6.7	33.60	8.0	25.1	0.75
I12	13 Feb 2019	28	13.79	86.87	6.7	33.60	8.0	25.1	0.72
I13	13 Feb 2019	1	15.22	87.31	8.1	33.65	8.1	24.9	0.41
I13	13 Feb 2019	2	15.22	87.22	8.1	33.65	8.1	24.9	0.43
I13	13 Feb 2019	3	15.22	87.42	8.1	33.65	8.1	24.9	0.45
I13	13 Feb 2019	4	15.22	87.46	8.1	33.65	8.1	24.9	0.46
I13	13 Feb 2019	5	15.22	87.44	8.0	33.65	8.1	24.9	0.48
I13	13 Feb 2019	6	15.22	87.47	8.0	33.65	8.1	24.9	0.51
I13	13 Feb 2019	7	15.22	87.45	8.1	33.65	8.1	24.9	0.51
I13	13 Feb 2019	8	15.22	87.43	8.0	33.65	8.1	24.9	0.51
I13	13 Feb 2019	9	15.21	87.38	8.0	33.65	8.1	24.9	0.55
I13	13 Feb 2019	10	15.21	87.42	8.0	33.65	8.1	24.9	0.58
I13	13 Feb 2019	11	15.21	87.39	8.0	33.65	8.1	24.9	0.63
I13	13 Feb 2019	12	15.21	87.43	8.0	33.65	8.1	24.9	0.61
I13	13 Feb 2019	13	15.22	87.42	7.9	33.65	8.1	24.9	0.67
I13	13 Feb 2019	14	15.22	87.44	8.0	33.65	8.1	24.9	0.62
I13	13 Feb 2019	15	15.21	87.40	8.0	33.65	8.1	24.9	0.62
I13	13 Feb 2019	16	15.21	87.42	8.0	33.65	8.1	24.9	0.66
I13	13 Feb 2019	17	15.21	87.39	8.0	33.65	8.1	24.9	0.66
I13	13 Feb 2019	18	15.21	87.39	8.0	33.65	8.1	24.9	0.69
I13	13 Feb 2019	19	15.21	87.42	8.0	33.65	8.1	24.9	0.68
I13	13 Feb 2019	20	15.21	87.39	8.0	33.65	8.1	24.9	0.68
I13	13 Feb 2019	21	15.20	87.37	7.9	33.65	8.1	24.9	0.71
I13	13 Feb 2019	22	15.20	87.41	8.0	33.65	8.1	24.9	0.69
I13	13 Feb 2019	23	15.19	87.32	8.0	33.65	8.1	24.9	0.71
I13	13 Feb 2019	24	15.19	87.43	8.0	33.65	8.1	24.9	0.72
I13	13 Feb 2019	25	15.19	87.41	7.9	33.65	8.1	24.9	0.73
I13	13 Feb 2019	26	15.17	87.37	7.8	33.65	8.1	24.9	0.76
I13	13 Feb 2019	27	15.02	87.37	7.8	33.64	8.1	24.9	0.94
I13	13 Feb 2019	28	14.87	87.42	7.6	33.65	8.1	25.0	1.04
I13	13 Feb 2019	29	14.64	87.64	7.4	33.63	8.1	25.0	1.06
I13	13 Feb 2019	30	14.49	87.77	7.3	33.61	8.1	25.0	0.98
I13	13 Feb 2019	31	14.34	87.78	7.0	33.63	8.1	25.1	0.90
I13	13 Feb 2019	32	13.80	87.61	6.8	33.61	8.0	25.2	0.80
I13	13 Feb 2019	33	13.85	87.63	6.7	33.59	8.0	25.1	0.74
I13	13 Feb 2019	34	13.74	87.65	6.7	33.59	8.0	25.2	0.72
I13	13 Feb 2019	35	13.73	87.66	6.7	33.59	8.0	25.2	0.75
I13	13 Feb 2019	36	13.73	87.62	6.7	33.59	8.0	25.2	0.70
I13	13 Feb 2019	37	13.73	87.68	6.8	33.59	8.0	25.2	0.74

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I13	13 Feb 2019	38	13.74	87.64	6.7	33.60	8.0	25.2	0.69
I14	13 Feb 2019	1	15.18	85.66	7.5	33.61	8.1	24.9	0.77
I14	13 Feb 2019	2	15.17	86.11	8.1	33.62	8.1	24.9	0.81
I14	13 Feb 2019	3	15.17	86.13	8.1	33.62	8.1	24.9	0.80
I14	13 Feb 2019	4	15.17	86.07	8.1	33.62	8.1	24.9	0.82
I14	13 Feb 2019	5	15.17	86.06	8.1	33.62	8.1	24.9	0.87
I14	13 Feb 2019	6	15.17	86.08	8.1	33.62	8.1	24.9	0.88
I14	13 Feb 2019	7	15.17	86.09	8.1	33.62	8.1	24.9	0.93
I14	13 Feb 2019	8	15.17	86.11	8.0	33.62	8.1	24.9	0.88
I14	13 Feb 2019	9	15.16	85.97	8.1	33.62	8.1	24.9	0.91
I14	13 Feb 2019	10	15.15	85.91	8.0	33.62	8.1	24.9	0.96
I14	13 Feb 2019	11	15.12	85.80	8.0	33.62	8.1	24.9	1.02
I14	13 Feb 2019	12	15.07	85.47	8.0	33.62	8.1	24.9	1.10
I14	13 Feb 2019	13	15.03	85.05	8.0	33.61	8.1	24.9	1.28
I14	13 Feb 2019	14	14.95	84.68	7.9	33.61	8.1	24.9	1.41
I14	13 Feb 2019	15	14.85	84.41	7.8	33.60	8.1	24.9	1.54
I14	13 Feb 2019	16	14.88	84.32	7.9	33.60	8.1	24.9	1.61
I14	13 Feb 2019	17	14.76	83.91	7.7	33.60	8.1	24.9	1.68
I14	13 Feb 2019	18	14.58	84.16	7.5	33.61	8.1	25.0	1.61
I14	13 Feb 2019	19	14.50	84.37	7.3	33.60	8.1	25.0	1.41
I14	13 Feb 2019	20	14.21	86.02	7.0	33.62	8.1	25.1	1.14
I14	13 Feb 2019	21	13.90	86.95	6.8	33.62	8.0	25.1	0.93
I14	13 Feb 2019	22	13.93	86.58	6.8	33.59	8.0	25.1	0.82
I14	13 Feb 2019	23	13.74	86.92	6.6	33.60	8.0	25.2	0.73
I14	13 Feb 2019	24	13.73	86.79	6.6	33.59	8.0	25.2	0.71
I14	13 Feb 2019	25	13.73	86.80	6.6	33.59	8.0	25.2	0.72
I14	13 Feb 2019	26	13.73	86.77	6.6	33.59	8.0	25.2	0.75
I14	13 Feb 2019	27	13.72	86.64	6.6	33.59	8.0	25.2	0.76
I14	13 Feb 2019	28	13.73	86.77	6.7	33.60	8.0	25.2	0.75
I15	13 Feb 2019	1	15.23	85.03	8.1	33.64	8.1	24.9	0.43
I15	13 Feb 2019	2	15.23	83.17	8.1	33.64	8.1	24.9	0.44
I15	13 Feb 2019	3	15.23	86.76	8.1	33.64	8.1	24.9	0.46
I15	13 Feb 2019	4	15.22	86.89	8.0	33.64	8.1	24.9	0.48
I15	13 Feb 2019	5	15.22	86.82	8.1	33.64	8.1	24.9	0.50
I15	13 Feb 2019	6	15.22	86.82	8.1	33.64	8.1	24.9	0.52
I15	13 Feb 2019	7	15.22	86.85	8.0	33.64	8.1	24.9	0.53
I15	13 Feb 2019	8	15.22	86.81	8.1	33.64	8.1	24.9	0.56
I15	13 Feb 2019	9	15.22	86.83	8.0	33.64	8.1	24.9	0.56
I15	13 Feb 2019	10	15.22	86.83	8.0	33.64	8.1	24.9	0.59
I15	13 Feb 2019	11	15.22	86.82	8.0	33.64	8.1	24.9	0.62
I15	13 Feb 2019	12	15.22	86.84	8.0	33.64	8.1	24.9	0.65
I15	13 Feb 2019	13	15.20	86.85	8.0	33.64	8.1	24.9	0.70
I15	13 Feb 2019	14	15.20	86.78	8.0	33.63	8.1	24.9	0.76
I15	13 Feb 2019	15	15.18	86.81	8.0	33.63	8.1	24.9	0.79
I15	13 Feb 2019	16	15.15	86.93	7.9	33.63	8.1	24.9	0.85
I15	13 Feb 2019	17	15.01	86.78	7.7	33.64	8.1	24.9	0.91
I15	13 Feb 2019	18	14.93	86.40	7.6	33.63	8.1	24.9	1.03
I15	13 Feb 2019	19	14.80	85.72	7.6	33.63	8.1	25.0	1.14
I15	13 Feb 2019	20	14.74	85.24	7.5	33.61	8.1	25.0	1.28
I15	13 Feb 2019	21	14.64	84.96	7.4	33.62	8.1	25.0	1.30
I15	13 Feb 2019	22	14.53	84.63	7.4	33.60	8.1	25.0	1.30
I15	13 Feb 2019	23	14.34	84.77	7.1	33.61	8.1	25.0	1.23
I15	13 Feb 2019	24	14.10	86.43	7.0	33.60	8.1	25.1	0.96

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I15	13 Feb 2019	25	13.88	87.14	6.8	33.61	8.0	25.1	0.84
I15	13 Feb 2019	26	13.77	87.19	6.7	33.60	8.0	25.2	0.76
I15	13 Feb 2019	27	13.77	87.20	6.7	33.60	8.0	25.1	0.72
I15	13 Feb 2019	28	13.76	87.15	6.7	33.60	8.0	25.2	0.73
I15	13 Feb 2019	29	13.77	87.14	6.7	33.60	8.0	25.2	0.70
I15	13 Feb 2019	30	13.76	87.17	6.6	33.60	8.0	25.2	0.72
I15	13 Feb 2019	31	13.76	87.15	6.7	33.60	8.0	25.2	0.73
I16	13 Feb 2019	1	15.18	74.68	8.1	33.61	8.1	24.9	0.48
I16	13 Feb 2019	2	15.18	80.84	8.1	33.62	8.1	24.9	0.47
I16	13 Feb 2019	3	15.18	86.13	8.1	33.62	8.1	24.9	0.49
I16	13 Feb 2019	4	15.18	86.14	8.1	33.62	8.1	24.9	0.51
I16	13 Feb 2019	5	15.18	86.16	8.1	33.62	8.1	24.9	0.55
I16	13 Feb 2019	6	15.18	86.17	8.1	33.62	8.1	24.9	0.57
I16	13 Feb 2019	7	15.15	85.79	8.1	33.62	8.1	24.9	0.68
I16	13 Feb 2019	8	15.13	85.55	8.1	33.62	8.1	24.9	0.80
I16	13 Feb 2019	9	15.08	85.42	8.0	33.61	8.1	24.9	0.95
I16	13 Feb 2019	10	15.07	85.39	8.0	33.61	8.1	24.9	1.07
I16	13 Feb 2019	11	15.07	85.21	8.0	33.61	8.1	24.9	1.11
I16	13 Feb 2019	12	15.05	84.99	8.0	33.61	8.1	24.9	1.14
I16	13 Feb 2019	13	15.02	84.84	8.0	33.61	8.1	24.9	1.27
I16	13 Feb 2019	14	14.99	84.60	8.0	33.60	8.1	24.9	1.40
I16	13 Feb 2019	15	14.93	84.44	8.0	33.60	8.1	24.9	1.52
I16	13 Feb 2019	16	14.87	84.24	7.9	33.60	8.1	24.9	1.55
I16	13 Feb 2019	17	14.73	84.20	7.7	33.60	8.1	25.0	1.65
I16	13 Feb 2019	18	14.54	84.06	7.4	33.61	8.1	25.0	1.51
I16	13 Feb 2019	19	14.33	84.85	7.2	33.60	8.1	25.0	1.26
I16	13 Feb 2019	20	14.28	86.66	7.0	33.60	8.1	25.0	1.06
I16	13 Feb 2019	21	13.91	87.06	6.8	33.63	8.1	25.1	0.86
I16	13 Feb 2019	22	13.77	87.04	6.7	33.60	8.0	25.2	0.75
I16	13 Feb 2019	23	13.77	86.91	6.7	33.60	8.0	25.1	0.69
I16	13 Feb 2019	24	13.76	86.85	6.6	33.60	8.0	25.2	0.66
I16	13 Feb 2019	25	13.75	86.69	6.6	33.60	8.0	25.2	0.69
I16	13 Feb 2019	26	13.75	86.75	6.6	33.60	8.0	25.2	0.67
I16	13 Feb 2019	27	13.74	86.61	6.6	33.60	8.0	25.2	0.68
I16	13 Feb 2019	28	13.75	86.70	6.6	33.60	8.0	25.2	0.69
I17	13 Feb 2019	1	15.08	80.36	8.1	33.59	8.1	24.9	0.58
I17	13 Feb 2019	2	15.08	84.45	8.1	33.60	8.1	24.9	0.61
I17	13 Feb 2019	3	15.08	84.55	8.1	33.60	8.1	24.9	0.66
I17	13 Feb 2019	4	15.08	84.62	8.1	33.60	8.1	24.9	0.71
I17	13 Feb 2019	5	15.06	84.62	8.1	33.60	8.1	24.9	0.78
I17	13 Feb 2019	6	15.05	84.54	8.1	33.60	8.1	24.9	0.84
I17	13 Feb 2019	7	15.05	84.31	8.1	33.60	8.1	24.9	0.85
I17	13 Feb 2019	8	15.00	83.99	8.0	33.59	8.1	24.9	0.99
I17	13 Feb 2019	9	15.00	84.08	8.0	33.59	8.1	24.9	1.19
I17	13 Feb 2019	10	14.97	83.85	8.0	33.59	8.1	24.9	1.36
I17	13 Feb 2019	11	14.95	83.73	8.0	33.59	8.1	24.9	1.39
I17	13 Feb 2019	12	14.93	83.65	8.0	33.59	8.1	24.9	1.43
I17	13 Feb 2019	13	14.92	83.39	8.0	33.59	8.1	24.9	1.56
I17	13 Feb 2019	14	14.90	83.33	8.0	33.58	8.1	24.9	1.70
I17	13 Feb 2019	15	14.84	83.32	7.9	33.59	8.1	24.9	1.74
I17	13 Feb 2019	16	14.79	83.34	7.8	33.59	8.1	24.9	1.81
I17	13 Feb 2019	17	14.69	83.91	7.6	33.60	8.1	25.0	1.62
I17	13 Feb 2019	18	14.56	84.47	7.5	33.60	8.1	25.0	1.40

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I17	13 Feb 2019	19	14.53	84.82	7.4	33.60	8.1	25.0	1.31
I17	13 Feb 2019	20	14.37	85.56	7.2	33.61	8.1	25.0	1.13
I17	13 Feb 2019	21	14.31	86.78	7.1	33.61	8.1	25.0	0.95
I17	13 Feb 2019	22	14.10	87.05	6.8	33.63	8.1	25.1	0.84
I17	13 Feb 2019	23	13.74	86.91	6.6	33.60	8.0	25.2	0.75
I17	13 Feb 2019	24	13.75	86.87	6.6	33.59	8.0	25.2	0.72
I17	13 Feb 2019	25	13.71	86.80	6.6	33.59	8.0	25.2	0.67
I18	13 Feb 2019	1	14.82	74.73	7.9	33.41	8.1	24.8	0.83
I18	13 Feb 2019	2	14.82	83.94	7.9	33.60	8.1	24.9	0.82
I18	13 Feb 2019	3	14.82	83.98	7.8	33.60	8.1	24.9	0.88
I18	13 Feb 2019	4	14.81	84.11	7.8	33.60	8.1	24.9	1.03
I18	13 Feb 2019	5	14.79	84.10	7.8	33.60	8.1	24.9	1.10
I18	13 Feb 2019	6	14.79	84.06	7.9	33.60	8.1	24.9	1.17
I18	13 Feb 2019	7	14.79	84.50	7.9	33.61	8.1	24.9	1.22
I18	13 Feb 2019	8	14.76	84.60	7.8	33.61	8.1	25.0	1.24
I18	13 Feb 2019	9	14.71	84.85	7.7	33.61	8.1	25.0	1.21
I18	13 Feb 2019	10	14.64	85.24	7.6	33.62	8.1	25.0	1.25
I18	13 Feb 2019	11	14.50	85.57	7.4	33.61	8.1	25.0	1.22
I18	13 Feb 2019	12	14.45	85.84	7.4	33.61	8.1	25.0	1.10
I18	13 Feb 2019	13	14.41	85.90	7.3	33.61	8.1	25.0	1.05
I18	13 Feb 2019	14	14.35	85.97	7.2	33.61	8.1	25.0	1.06
I18	13 Feb 2019	15	14.33	86.28	7.2	33.61	8.1	25.0	0.99
I18	13 Feb 2019	16	14.16	86.67	7.0	33.62	8.1	25.1	0.91
I18	13 Feb 2019	17	14.07	86.99	6.9	33.61	8.0	25.1	0.78
I18	13 Feb 2019	18	13.87	86.23	6.7	33.62	8.0	25.1	0.76
I18	13 Feb 2019	19	13.78	85.78	6.7	33.60	8.0	25.2	0.78
I2	12 Feb 2019	1	15.20	87.27	7.8	33.65	8.1	24.9	0.35
I2	12 Feb 2019	2	15.20	87.26	7.8	33.65	8.1	24.9	0.35
I2	12 Feb 2019	3	15.19	87.28	7.8	33.65	8.1	24.9	0.37
I2	12 Feb 2019	4	15.18	87.24	7.9	33.65	8.1	24.9	0.40
I2	12 Feb 2019	5	15.17	87.12	7.9	33.65	8.1	24.9	0.44
I2	12 Feb 2019	6	15.16	87.05	7.9	33.65	8.1	24.9	0.48
I2	12 Feb 2019	7	15.15	87.10	7.8	33.64	8.1	24.9	0.51
I2	12 Feb 2019	8	15.15	87.18	7.8	33.64	8.1	24.9	0.52
I2	12 Feb 2019	9	15.15	87.10	7.8	33.64	8.1	24.9	0.55
I2	12 Feb 2019	10	15.14	87.07	7.8	33.64	8.1	24.9	0.56
I2	12 Feb 2019	11	15.12	87.08	7.8	33.64	8.1	24.9	0.61
I2	12 Feb 2019	12	15.12	87.02	7.8	33.64	8.1	24.9	0.64
I2	12 Feb 2019	13	15.11	87.10	7.8	33.64	8.1	24.9	0.66
I2	12 Feb 2019	14	15.11	87.12	7.8	33.64	8.1	24.9	0.82
I2	12 Feb 2019	15	15.10	87.13	7.8	33.64	8.1	24.9	0.80
I2	12 Feb 2019	16	15.09	87.13	7.8	33.64	8.1	24.9	0.75
I2	12 Feb 2019	17	15.08	87.20	7.8	33.64	8.1	24.9	0.83
I2	12 Feb 2019	18	15.08	87.26	7.7	33.64	8.1	24.9	0.82
I2	12 Feb 2019	19	15.06	87.11	7.8	33.64	8.1	24.9	0.85
I2	12 Feb 2019	20	15.04	87.13	7.7	33.64	8.1	24.9	0.85
I2	12 Feb 2019	21	14.98	87.25	7.6	33.64	8.1	24.9	0.88
I2	12 Feb 2019	22	14.74	87.34	7.4	33.64	8.1	25.0	0.78
I2	12 Feb 2019	23	14.65	87.43	7.3	33.63	8.1	25.0	0.76
I2	12 Feb 2019	24	14.62	87.39	7.3	33.62	8.1	25.0	0.77
I2	12 Feb 2019	25	14.61	87.38	7.3	33.62	8.1	25.0	0.86
I2	12 Feb 2019	26	14.61	87.38	7.3	33.62	8.1	25.0	0.84
I2	12 Feb 2019	27	14.61	87.36	7.3	33.62	8.1	25.0	0.82

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I2	12 Feb 2019	28	14.61	87.36	7.3	33.62	8.1	25.0	0.81
I2	12 Feb 2019	29	14.61	87.38	7.3	33.62	8.1	25.0	0.80
I2	12 Feb 2019	30	14.60	87.31	7.3	33.62	8.1	25.0	0.82
I2	12 Feb 2019	31	14.61	87.28	7.3	33.62	8.1	25.0	0.84
I2	12 Feb 2019	32	14.61	87.39	7.3	33.62	8.1	25.0	0.81
I20	13 Feb 2019	1	15.27	87.45	8.0	33.65	8.1	24.9	0.40
I20	13 Feb 2019	2	15.27	87.04	8.0	33.65	8.1	24.9	0.42
I20	13 Feb 2019	3	15.27	87.60	8.0	33.65	8.1	24.9	0.43
I20	13 Feb 2019	4	15.27	87.58	8.0	33.65	8.1	24.9	0.45
I20	13 Feb 2019	5	15.27	87.58	8.0	33.65	8.1	24.9	0.46
I20	13 Feb 2019	6	15.27	87.58	8.0	33.65	8.1	24.9	0.47
I20	13 Feb 2019	7	15.27	87.59	8.0	33.65	8.1	24.9	0.49
I20	13 Feb 2019	8	15.26	87.58	8.0	33.65	8.1	24.9	0.51
I20	13 Feb 2019	9	15.26	87.59	7.9	33.65	8.1	24.9	0.54
I20	13 Feb 2019	10	15.26	87.58	7.9	33.65	8.1	24.9	0.55
I20	13 Feb 2019	11	15.26	87.61	7.9	33.65	8.1	24.9	0.58
I20	13 Feb 2019	12	15.26	87.55	7.9	33.65	8.1	24.9	0.58
I20	13 Feb 2019	13	15.26	87.59	7.9	33.65	8.1	24.9	0.59
I20	13 Feb 2019	14	15.26	87.58	7.9	33.65	8.1	24.9	0.64
I20	13 Feb 2019	15	15.26	87.58	8.0	33.65	8.1	24.9	0.65
I20	13 Feb 2019	16	15.26	87.55	7.9	33.65	8.1	24.9	0.64
I20	13 Feb 2019	17	15.26	87.57	7.9	33.65	8.1	24.9	0.65
I20	13 Feb 2019	18	15.26	87.57	7.8	33.65	8.1	24.9	0.67
I20	13 Feb 2019	19	15.26	87.63	7.9	33.65	8.1	24.9	0.68
I20	13 Feb 2019	20	15.26	87.61	7.9	33.65	8.1	24.9	0.66
I20	13 Feb 2019	21	15.26	87.61	7.9	33.65	8.1	24.9	0.66
I20	13 Feb 2019	22	15.26	87.63	7.9	33.65	8.1	24.9	0.67
I20	13 Feb 2019	23	15.26	87.64	7.9	33.65	8.1	24.9	0.67
I20	13 Feb 2019	24	15.26	87.61	7.9	33.65	8.1	24.9	0.68
I20	13 Feb 2019	25	15.26	87.67	7.9	33.65	8.1	24.9	0.68
I20	13 Feb 2019	26	15.25	87.67	7.9	33.65	8.1	24.9	0.72
I20	13 Feb 2019	27	15.25	87.68	7.9	33.65	8.1	24.9	0.75
I20	13 Feb 2019	28	15.25	87.63	7.9	33.65	8.1	24.9	0.73
I20	13 Feb 2019	29	15.19	87.64	7.8	33.65	8.1	24.9	0.81
I20	13 Feb 2019	30	14.95	87.83	7.5	33.65	8.1	24.9	0.93
I20	13 Feb 2019	31	14.66	88.08	7.3	33.63	8.1	25.0	0.95
I20	13 Feb 2019	32	14.52	88.14	7.2	33.61	8.1	25.0	0.96
I20	13 Feb 2019	33	14.47	88.20	7.2	33.60	8.1	25.0	0.90
I20	13 Feb 2019	34	14.46	88.20	7.2	33.60	8.1	25.0	0.94
I20	13 Feb 2019	35	14.44	88.20	7.2	33.60	8.1	25.0	0.93
I20	13 Feb 2019	36	14.41	88.25	7.2	33.60	8.1	25.0	0.90
I20	13 Feb 2019	37	14.37	88.26	7.1	33.60	8.1	25.0	0.92
I20	13 Feb 2019	38	14.34	88.24	7.1	33.60	8.0	25.0	0.91
I20	13 Feb 2019	39	14.33	88.25	7.1	33.60	8.0	25.0	0.93
I20	13 Feb 2019	40	14.32	88.27	7.1	33.60	8.0	25.0	0.85
I20	13 Feb 2019	41	14.31	88.28	7.1	33.60	8.0	25.0	0.84
I20	13 Feb 2019	42	14.29	88.18	7.1	33.60	8.0	25.0	0.86
I20	13 Feb 2019	43	14.24	88.33	7.1	33.60	8.0	25.1	0.82
I20	13 Feb 2019	44	14.23	88.36	7.0	33.60	8.0	25.1	0.81
I20	13 Feb 2019	45	14.22	88.31	7.0	33.60	8.0	25.1	0.96
I20	13 Feb 2019	46	14.15	88.30	7.0	33.61	8.0	25.1	0.85
I20	13 Feb 2019	47	14.04	88.20	6.9	33.60	8.0	25.1	0.76
I20	13 Feb 2019	48	13.72	88.31	6.7	33.62	8.0	25.2	0.68
I20	13 Feb 2019	49	13.47	88.14	6.5	33.59	8.0	25.2	0.62

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I20	13 Feb 2019	50	13.45	88.19	6.5	33.59	8.0	25.2	0.58
I20	13 Feb 2019	51	13.43	88.12	6.4	33.59	8.0	25.2	0.57
I20	13 Feb 2019	52	13.42	88.08	6.4	33.59	8.0	25.2	0.62
I20	13 Feb 2019	53	13.41	88.08	6.4	33.59	8.0	25.2	0.62
I20	13 Feb 2019	54	13.38	87.96	6.4	33.59	8.0	25.2	0.55
I20	13 Feb 2019	55	13.38	87.99	6.5	33.59	8.0	25.2	0.53
I21	13 Feb 2019	1	15.21	87.22	8.0	33.63	8.1	24.9	0.45
I21	13 Feb 2019	2	15.21	87.38	8.0	33.65	8.1	24.9	0.46
I21	13 Feb 2019	3	15.21	87.42	8.0	33.65	8.1	24.9	0.48
I21	13 Feb 2019	4	15.21	87.45	8.0	33.65	8.1	24.9	0.49
I21	13 Feb 2019	5	15.21	87.42	8.0	33.65	8.1	24.9	0.53
I21	13 Feb 2019	6	15.21	87.48	8.0	33.65	8.1	24.9	0.54
I21	13 Feb 2019	7	15.21	87.45	8.0	33.65	8.1	24.9	0.58
I21	13 Feb 2019	8	15.21	87.41	8.0	33.65	8.1	24.9	0.61
I21	13 Feb 2019	9	15.20	87.42	7.9	33.65	8.1	24.9	0.64
I21	13 Feb 2019	10	15.20	87.42	7.9	33.65	8.1	24.9	0.66
I21	13 Feb 2019	11	15.21	87.44	8.0	33.65	8.1	24.9	0.66
I21	13 Feb 2019	12	15.20	87.42	7.9	33.65	8.1	24.9	0.68
I21	13 Feb 2019	13	15.20	87.42	8.0	33.65	8.1	24.9	0.74
I21	13 Feb 2019	14	15.20	87.44	8.0	33.65	8.1	24.9	0.73
I21	13 Feb 2019	15	15.20	87.43	7.9	33.65	8.1	24.9	0.74
I21	13 Feb 2019	16	15.20	87.36	7.9	33.65	8.1	24.9	0.76
I21	13 Feb 2019	17	15.20	87.45	7.9	33.65	8.1	24.9	0.77
I21	13 Feb 2019	18	15.20	87.46	7.9	33.65	8.1	24.9	0.77
I21	13 Feb 2019	19	15.20	87.44	7.9	33.65	8.1	24.9	0.79
I21	13 Feb 2019	20	15.20	87.44	7.9	33.65	8.1	24.9	0.79
I21	13 Feb 2019	21	15.20	87.50	7.9	33.65	8.1	24.9	0.78
I21	13 Feb 2019	22	15.20	87.51	7.9	33.65	8.1	24.9	0.82
I21	13 Feb 2019	23	15.20	87.51	7.9	33.65	8.1	24.9	0.80
I21	13 Feb 2019	24	15.20	87.49	7.9	33.65	8.1	24.9	0.80
I21	13 Feb 2019	25	15.20	87.40	7.9	33.65	8.1	24.9	0.82
I21	13 Feb 2019	26	15.19	87.48	7.8	33.65	8.1	24.9	0.82
I21	13 Feb 2019	27	15.19	87.51	7.8	33.65	8.1	24.9	0.84
I21	13 Feb 2019	28	15.19	87.45	7.9	33.65	8.1	24.9	0.87
I21	13 Feb 2019	29	15.19	87.50	7.8	33.65	8.1	24.9	0.89
I21	13 Feb 2019	30	15.16	87.49	7.8	33.65	8.1	24.9	0.93
I21	13 Feb 2019	31	14.90	87.56	7.5	33.66	8.1	25.0	0.99
I21	13 Feb 2019	32	14.56	87.92	7.3	33.62	8.1	25.0	1.00
I21	13 Feb 2019	33	14.44	88.00	7.2	33.63	8.1	25.0	0.89
I21	13 Feb 2019	34	14.24	88.05	7.0	33.60	8.1	25.1	0.85
I21	13 Feb 2019	35	13.93	87.89	6.7	33.64	8.0	25.1	0.77
I21	13 Feb 2019	36	13.50	87.86	6.5	33.59	8.0	25.2	0.64
I21	13 Feb 2019	37	13.50	87.87	6.5	33.59	8.0	25.2	0.59
I21	13 Feb 2019	38	13.48	87.89	6.5	33.58	8.0	25.2	0.60
I21	13 Feb 2019	39	13.48	87.82	6.4	33.59	8.0	25.2	0.59
I21	13 Feb 2019	40	13.48	87.87	6.5	33.59	8.0	25.2	0.60
I21	13 Feb 2019	41	13.47	87.88	6.5	33.59	8.0	25.2	0.57
I22	13 Feb 2019	1	15.06	85.13	8.1	33.60	8.1	24.9	0.57
I22	13 Feb 2019	2	15.06	85.16	8.1	33.60	8.1	24.9	0.65
I22	13 Feb 2019	3	15.06	85.17	8.1	33.60	8.1	24.9	0.69
I22	13 Feb 2019	4	15.05	85.09	8.1	33.60	8.1	24.9	0.73
I22	13 Feb 2019	5	15.04	85.04	8.1	33.60	8.1	24.9	0.76
I22	13 Feb 2019	6	15.05	85.07	8.0	33.60	8.1	24.9	0.85

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I22	13 Feb 2019	7	15.03	84.73	8.0	33.60	8.1	24.9	0.93
I22	13 Feb 2019	8	15.02	84.90	8.0	33.60	8.1	24.9	0.98
I22	13 Feb 2019	9	14.99	84.48	8.0	33.60	8.1	24.9	1.13
I22	13 Feb 2019	10	14.95	84.29	8.0	33.60	8.1	24.9	1.21
I22	13 Feb 2019	11	14.93	83.95	8.0	33.59	8.1	24.9	1.36
I22	13 Feb 2019	12	14.89	83.69	7.9	33.59	8.1	24.9	1.52
I22	13 Feb 2019	13	14.84	83.52	7.9	33.59	8.1	24.9	1.64
I22	13 Feb 2019	14	14.79	83.73	7.9	33.59	8.1	24.9	1.66
I22	13 Feb 2019	15	14.76	83.71	7.8	33.59	8.1	24.9	1.76
I22	13 Feb 2019	16	14.69	83.93	7.6	33.60	8.1	25.0	1.74
I22	13 Feb 2019	17	14.55	84.42	7.4	33.61	8.1	25.0	1.57
I22	13 Feb 2019	18	14.34	84.82	7.1	33.60	8.1	25.0	1.17
I22	13 Feb 2019	19	14.23	85.54	7.0	33.60	8.1	25.1	0.98
I22	13 Feb 2019	20	14.16	86.75	7.0	33.61	8.1	25.1	0.82
I22	13 Feb 2019	21	14.09	87.03	6.8	33.61	8.0	25.1	0.74
I22	13 Feb 2019	22	13.78	87.08	6.7	33.62	8.0	25.2	0.74
I22	13 Feb 2019	23	13.68	86.91	6.6	33.60	8.0	25.2	0.68
I22	13 Feb 2019	24	13.63	86.76	6.5	33.59	8.0	25.2	0.65
I22	13 Feb 2019	25	13.63	86.73	6.5	33.59	8.0	25.2	0.62
I22	13 Feb 2019	26	13.62	86.69	6.5	33.59	8.0	25.2	0.63
I22	13 Feb 2019	27	13.62	86.67	6.5	33.59	8.0	25.2	0.63
I22	13 Feb 2019	28	13.62	86.59	6.5	33.59	8.0	25.2	0.65
I23	13 Feb 2019	1	14.85	80.63	8.3	33.62	8.1	24.9	1.06
I23	13 Feb 2019	2	14.85	80.47	8.3	33.62	8.1	24.9	1.11
I23	13 Feb 2019	3	14.85	80.36	8.3	33.62	8.1	24.9	1.24
I23	13 Feb 2019	4	14.85	80.45	8.3	33.62	8.1	24.9	1.33
I23	13 Feb 2019	5	14.84	80.29	8.2	33.62	8.1	24.9	1.58
I23	13 Feb 2019	6	14.84	80.29	8.2	33.62	8.1	24.9	1.73
I23	13 Feb 2019	7	14.83	80.45	8.2	33.62	8.1	24.9	1.70
I23	13 Feb 2019	8	14.80	80.89	8.2	33.62	8.1	24.9	1.90
I23	13 Feb 2019	9	14.78	81.25	8.1	33.62	8.1	25.0	2.02
I23	13 Feb 2019	10	14.65	82.15	7.9	33.61	8.1	25.0	2.01
I23	13 Feb 2019	11	14.63	84.04	7.7	33.61	8.1	25.0	2.01
I23	13 Feb 2019	12	14.53	84.16	7.5	33.61	8.1	25.0	1.67
I23	13 Feb 2019	13	14.52	84.56	7.5	33.60	8.1	25.0	1.51
I23	13 Feb 2019	14	14.44	84.88	7.4	33.61	8.1	25.0	1.57
I23	13 Feb 2019	15	14.38	85.59	7.3	33.60	8.1	25.0	1.45
I23	13 Feb 2019	16	14.20	86.03	7.0	33.62	8.1	25.1	1.17
I23	13 Feb 2019	17	14.01	85.92	6.7	33.61	8.0	25.1	0.89
I23	13 Feb 2019	18	13.82	85.53	6.6	33.61	8.0	25.1	0.72
I23	13 Feb 2019	19	13.81	85.46	6.5	33.60	8.0	25.1	0.62
I23	13 Feb 2019	20	13.80	85.49	6.6	33.60	8.0	25.1	0.61
I23	13 Feb 2019	21	13.80	85.37	6.6	33.60	8.0	25.1	0.59
I27	13 Feb 2019	1	14.93	83.86	8.0	33.59	8.1	24.9	0.77
I27	13 Feb 2019	2	14.93	84.03	8.0	33.59	8.1	24.9	0.80
I27	13 Feb 2019	3	14.92	84.07	8.0	33.59	8.1	24.9	0.92
I27	13 Feb 2019	4	14.92	84.09	8.0	33.59	8.1	24.9	0.99
I27	13 Feb 2019	5	14.91	83.83	8.0	33.59	8.1	24.9	1.07
I27	13 Feb 2019	6	14.90	83.65	8.0	33.59	8.1	24.9	1.19
I27	13 Feb 2019	7	14.86	83.66	7.9	33.59	8.1	24.9	1.34
I27	13 Feb 2019	8	14.83	83.36	7.9	33.59	8.1	24.9	1.41
I27	13 Feb 2019	9	14.82	83.30	8.0	33.59	8.1	24.9	1.52
I27	13 Feb 2019	10	14.80	83.10	7.9	33.59	8.1	24.9	1.64

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I27	13 Feb 2019	11	14.79	83.10	7.9	33.59	8.1	24.9	1.82
I27	13 Feb 2019	12	14.78	83.12	7.9	33.59	8.1	24.9	1.85
I27	13 Feb 2019	13	14.77	83.32	7.8	33.59	8.1	24.9	1.87
I27	13 Feb 2019	14	14.75	83.56	7.7	33.59	8.1	24.9	1.83
I27	13 Feb 2019	15	14.69	84.03	7.6	33.60	8.1	25.0	1.73
I27	13 Feb 2019	16	14.57	84.58	7.5	33.61	8.1	25.0	1.52
I27	13 Feb 2019	17	14.41	84.85	7.3	33.60	8.1	25.0	1.35
I27	13 Feb 2019	18	14.37	85.09	7.2	33.60	8.1	25.0	1.19
I27	13 Feb 2019	19	14.24	85.23	7.0	33.60	8.1	25.1	1.11
I27	13 Feb 2019	20	14.18	85.66	7.0	33.60	8.0	25.1	0.98
I27	13 Feb 2019	21	14.12	86.16	6.9	33.61	8.0	25.1	0.92
I27	13 Feb 2019	22	14.00	86.46	6.8	33.61	8.0	25.1	0.81
I27	13 Feb 2019	23	13.91	86.81	6.6	33.61	8.0	25.1	0.73
I27	13 Feb 2019	24	13.64	86.79	6.5	33.62	8.0	25.2	0.64
I27	13 Feb 2019	25	13.47	86.45	6.4	33.60	8.0	25.2	0.60
I27	13 Feb 2019	26	13.47	86.46	6.3	33.59	8.0	25.2	0.59
I27	13 Feb 2019	27	13.46	86.33	6.3	33.59	8.0	25.2	0.56
I27	13 Feb 2019	28	13.46	86.23	6.4	33.59	8.0	25.2	0.56
I28	15 Feb 2019	1	15.15	87.85	7.9	33.63	8.2	24.9	0.42
I28	15 Feb 2019	2	15.15	86.56	7.9	33.62	8.2	24.9	0.43
I28	15 Feb 2019	3	15.15	88.27	7.9	33.62	8.2	24.9	0.44
I28	15 Feb 2019	4	15.15	88.30	7.9	33.63	8.2	24.9	0.46
I28	15 Feb 2019	5	15.15	88.37	7.8	33.63	8.2	24.9	0.45
I28	15 Feb 2019	6	15.15	88.38	7.8	33.63	8.2	24.9	0.48
I28	15 Feb 2019	7	15.14	88.38	7.8	33.63	8.2	24.9	0.48
I28	15 Feb 2019	8	15.14	88.36	7.9	33.62	8.2	24.9	0.51
I28	15 Feb 2019	9	15.14	88.32	7.8	33.62	8.2	24.9	0.52
I28	15 Feb 2019	10	15.14	88.35	7.9	33.62	8.2	24.9	0.51
I28	15 Feb 2019	11	15.14	88.36	7.8	33.62	8.2	24.9	0.54
I28	15 Feb 2019	12	15.14	88.25	7.8	33.62	8.2	24.9	0.53
I28	15 Feb 2019	13	15.14	88.37	7.8	33.62	8.2	24.9	0.55
I28	15 Feb 2019	14	15.14	88.39	7.8	33.62	8.2	24.9	0.56
I28	15 Feb 2019	15	15.14	88.34	7.8	33.62	8.2	24.9	0.58
I28	15 Feb 2019	16	15.14	88.34	7.8	33.62	8.2	24.9	0.59
I28	15 Feb 2019	17	15.14	88.34	7.9	33.62	8.2	24.9	0.63
I28	15 Feb 2019	18	15.14	88.31	7.8	33.62	8.2	24.9	0.63
I28	15 Feb 2019	19	15.14	88.33	7.8	33.62	8.2	24.9	0.64
I28	15 Feb 2019	20	15.14	88.37	7.9	33.62	8.2	24.9	0.67
I28	15 Feb 2019	21	15.13	88.33	7.8	33.62	8.2	24.9	0.66
I28	15 Feb 2019	22	15.13	88.36	7.8	33.62	8.2	24.9	0.69
I28	15 Feb 2019	23	15.13	88.34	7.8	33.62	8.2	24.9	0.71
I28	15 Feb 2019	24	15.13	88.36	7.8	33.62	8.2	24.9	0.71
I28	15 Feb 2019	25	15.13	88.26	7.8	33.62	8.2	24.9	0.74
I28	15 Feb 2019	26	15.13	88.32	7.8	33.62	8.2	24.9	0.71
I28	15 Feb 2019	27	15.12	88.26	7.8	33.62	8.2	24.9	0.77
I28	15 Feb 2019	28	15.12	88.30	7.7	33.62	8.2	24.9	0.78
I28	15 Feb 2019	29	15.11	88.27	7.6	33.62	8.2	24.9	0.75
I28	15 Feb 2019	30	15.11	88.33	7.8	33.62	8.2	24.9	0.78
I28	15 Feb 2019	31	15.11	88.34	7.8	33.62	8.2	24.9	0.72
I28	15 Feb 2019	32	15.11	88.33	7.8	33.63	8.2	24.9	0.73
I28	15 Feb 2019	33	15.11	88.33	7.8	33.63	8.2	24.9	0.73
I28	15 Feb 2019	34	15.10	88.32	7.8	33.63	8.2	24.9	0.75
I28	15 Feb 2019	35	15.10	88.31	7.7	33.62	8.2	24.9	0.73
I28	15 Feb 2019	36	15.10	88.30	7.7	33.63	8.2	24.9	0.73

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I28	15 Feb 2019	37	15.08	88.29	7.8	33.63	8.2	24.9	0.75
I28	15 Feb 2019	38	15.08	88.27	7.7	33.62	8.2	24.9	0.73
I28	15 Feb 2019	39	15.07	88.29	7.7	33.63	8.2	24.9	0.72
I28	15 Feb 2019	40	15.04	88.27	7.6	33.63	8.2	24.9	0.71
I28	15 Feb 2019	41	15.00	88.20	7.6	33.63	8.2	24.9	0.68
I28	15 Feb 2019	42	14.94	88.21	7.5	33.63	8.1	24.9	0.70
I28	15 Feb 2019	43	14.85	88.09	7.5	33.62	8.1	24.9	0.73
I28	15 Feb 2019	44	14.82	87.77	7.5	33.62	8.1	24.9	0.75
I28	15 Feb 2019	45	14.81	87.77	7.5	33.61	8.1	24.9	0.75
I28	15 Feb 2019	46	14.82	87.84	7.5	33.62	8.1	24.9	0.78
I28	15 Feb 2019	47	14.81	87.87	7.5	33.62	8.1	24.9	0.77
I28	15 Feb 2019	48	14.80	87.91	7.4	33.62	8.1	25.0	0.78
I28	15 Feb 2019	49	14.81	87.95	7.5	33.62	8.1	24.9	0.75
I28	15 Feb 2019	50	14.77	88.02	7.5	33.62	8.1	25.0	0.70
I28	15 Feb 2019	51	14.73	88.05	7.4	33.62	8.1	25.0	0.70
I28	15 Feb 2019	52	14.72	88.14	7.4	33.62	8.1	25.0	0.67
I28	15 Feb 2019	53	14.71	88.03	7.4	33.62	8.1	25.0	0.67
I28	15 Feb 2019	54	14.70	88.15	7.3	33.62	8.1	25.0	0.67
I28	15 Feb 2019	55	14.66	88.14	7.3	33.62	8.1	25.0	0.68
I29	15 Feb 2019	1	14.84	83.37	8.0	33.56	8.2	24.9	0.94
I29	15 Feb 2019	2	14.81	83.67	8.0	33.56	8.2	24.9	0.94
I29	15 Feb 2019	3	14.81	83.79	7.9	33.56	8.2	24.9	0.95
I29	15 Feb 2019	4	14.76	84.25	7.9	33.58	8.2	24.9	1.13
I29	15 Feb 2019	5	14.75	84.67	7.8	33.58	8.2	24.9	1.37
I29	15 Feb 2019	6	14.75	85.26	7.8	33.58	8.2	24.9	1.40
I29	15 Feb 2019	7	14.75	85.60	7.8	33.58	8.2	24.9	1.42
I29	15 Feb 2019	8	14.75	85.77	7.8	33.58	8.2	24.9	1.47
I29	15 Feb 2019	9	14.75	85.80	7.8	33.58	8.2	24.9	1.39
I29	15 Feb 2019	10	14.75	85.93	7.8	33.58	8.2	24.9	1.38
I29	15 Feb 2019	11	14.75	85.97	7.7	33.58	8.1	24.9	1.46
I29	15 Feb 2019	12	14.75	85.88	7.7	33.58	8.1	24.9	1.54
I29	15 Feb 2019	13	14.75	85.98	7.7	33.58	8.1	24.9	1.58
I29	15 Feb 2019	14	14.75	85.87	7.8	33.58	8.1	24.9	1.46
I29	15 Feb 2019	15	14.74	86.07	7.8	33.58	8.1	24.9	1.46
I29	15 Feb 2019	16	14.74	86.04	7.8	33.58	8.1	24.9	1.37
I29	15 Feb 2019	17	14.74	85.97	7.8	33.58	8.1	24.9	1.58
I29	15 Feb 2019	18	14.74	86.03	7.7	33.58	8.1	24.9	1.50
I29	15 Feb 2019	19	14.74	86.05	7.7	33.58	8.1	24.9	1.48
I29	15 Feb 2019	20	14.74	85.96	7.6	33.58	8.1	24.9	1.41
I29	15 Feb 2019	21	14.74	86.04	7.6	33.58	8.1	24.9	1.36
I29	15 Feb 2019	22	14.74	86.07	7.8	33.58	8.1	24.9	1.39
I29	15 Feb 2019	23	14.74	86.07	7.8	33.58	8.1	24.9	1.33
I29	15 Feb 2019	24	14.74	86.04	7.7	33.58	8.1	24.9	1.44
I29	15 Feb 2019	25	14.74	85.92	7.6	33.58	8.1	24.9	1.46
I29	15 Feb 2019	26	14.73	85.96	7.6	33.58	8.1	24.9	1.35
I29	15 Feb 2019	27	14.73	85.95	7.6	33.58	8.1	24.9	1.36
I29	15 Feb 2019	28	14.73	85.96	7.7	33.58	8.1	24.9	1.44
I29	15 Feb 2019	29	14.73	85.95	7.7	33.58	8.1	24.9	1.46
I29	15 Feb 2019	30	14.73	85.74	7.7	33.58	8.1	24.9	1.37
I29	15 Feb 2019	31	14.73	85.37	7.6	33.58	8.1	24.9	1.36
I29	15 Feb 2019	32	14.72	85.15	7.7	33.58	8.1	24.9	1.34
I29	15 Feb 2019	33	14.72	85.63	7.6	33.58	8.1	24.9	1.48
I29	15 Feb 2019	34	14.72	85.04	7.7	33.58	8.1	24.9	1.50
I29	15 Feb 2019	35	14.71	84.60	7.6	33.57	8.1	24.9	1.39

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I29	15 Feb 2019	36	14.71	84.16	7.6	33.57	8.1	24.9	1.34
I29	15 Feb 2019	37	14.71	84.37	7.6	33.57	8.1	24.9	1.45
I29	15 Feb 2019	38	14.71	84.09	7.6	33.57	8.1	24.9	1.47
I3	12 Feb 2019	1	14.98	84.31	8.0	33.59	8.1	24.9	0.67
I3	12 Feb 2019	2	14.97	84.21	8.0	33.59	8.1	24.9	0.64
I3	12 Feb 2019	3	14.95	84.20	8.0	33.59	8.1	24.9	0.72
I3	12 Feb 2019	4	14.93	83.89	8.0	33.59	8.1	24.9	0.82
I3	12 Feb 2019	5	14.92	83.77	8.0	33.59	8.1	24.9	0.94
I3	12 Feb 2019	6	14.92	83.70	8.0	33.59	8.1	24.9	1.04
I3	12 Feb 2019	7	14.91	83.77	8.0	33.59	8.1	24.9	1.19
I3	12 Feb 2019	8	14.91	83.86	7.9	33.59	8.1	24.9	1.20
I3	12 Feb 2019	9	14.91	83.85	7.9	33.60	8.1	24.9	1.27
I3	12 Feb 2019	10	14.90	84.33	7.9	33.60	8.1	24.9	1.34
I3	12 Feb 2019	11	14.87	84.65	7.7	33.61	8.1	24.9	1.17
I3	12 Feb 2019	12	14.83	85.34	7.6	33.62	8.1	24.9	1.03
I3	12 Feb 2019	13	14.79	85.86	7.5	33.62	8.1	25.0	0.94
I3	12 Feb 2019	14	14.78	86.05	7.5	33.62	8.1	25.0	0.94
I3	12 Feb 2019	15	14.78	86.25	7.5	33.62	8.1	25.0	0.93
I3	12 Feb 2019	16	14.78	86.08	7.5	33.62	8.1	25.0	0.93
I3	12 Feb 2019	17	14.78	86.26	7.5	33.62	8.1	25.0	0.96
I3	12 Feb 2019	18	14.78	86.22	7.5	33.62	8.1	25.0	0.98
I3	12 Feb 2019	19	14.78	86.23	7.5	33.62	8.1	25.0	0.95
I3	12 Feb 2019	20	14.78	86.15	7.5	33.62	8.1	25.0	0.99
I3	12 Feb 2019	21	14.78	86.21	7.4	33.62	8.1	25.0	1.03
I3	12 Feb 2019	22	14.78	86.27	7.5	33.62	8.1	25.0	1.02
I3	12 Feb 2019	23	14.78	86.25	7.5	33.62	8.1	25.0	0.99
I3	12 Feb 2019	24	14.78	86.26	7.5	33.62	8.1	25.0	1.03
I3	12 Feb 2019	25	14.78	86.29	7.5	33.62	8.1	25.0	1.01
I3	12 Feb 2019	26	14.79	86.21	7.5	33.62	8.1	25.0	1.04
I3	12 Feb 2019	27	14.79	86.15	7.5	33.62	8.1	25.0	1.02
I30	15 Feb 2019	1	14.89	67.70	8.1	33.23	8.2	24.6	0.86
I30	15 Feb 2019	2	15.00	75.89	8.1	33.43	8.2	24.8	0.92
I30	15 Feb 2019	3	15.04	80.56	8.1	33.55	8.2	24.8	1.08
I30	15 Feb 2019	4	15.03	81.50	8.1	33.55	8.2	24.9	1.31
I30	15 Feb 2019	5	15.03	81.88	8.0	33.55	8.2	24.9	1.48
I30	15 Feb 2019	6	15.03	81.93	8.0	33.55	8.2	24.9	1.44
I30	15 Feb 2019	7	15.02	82.09	8.0	33.55	8.2	24.9	1.53
I30	15 Feb 2019	8	15.02	82.24	8.0	33.55	8.2	24.9	1.55
I30	15 Feb 2019	9	15.02	82.26	8.0	33.55	8.2	24.9	1.45
I30	15 Feb 2019	10	15.02	82.36	8.0	33.55	8.2	24.9	1.52
I30	15 Feb 2019	11	15.02	82.31	7.9	33.55	8.2	24.9	1.65
I30	15 Feb 2019	12	15.01	82.22	7.9	33.55	8.2	24.9	1.53
I30	15 Feb 2019	13	15.01	82.31	8.0	33.55	8.2	24.9	1.55
I30	15 Feb 2019	14	15.01	82.39	8.0	33.55	8.2	24.9	1.51
I30	15 Feb 2019	15	15.01	82.32	7.9	33.55	8.2	24.9	1.46
I30	15 Feb 2019	16	15.01	82.24	7.9	33.55	8.2	24.9	1.51
I30	15 Feb 2019	17	15.01	82.23	7.9	33.55	8.2	24.9	1.51
I30	15 Feb 2019	18	15.01	82.15	8.0	33.55	8.2	24.9	1.52
I30	15 Feb 2019	19	15.01	81.99	7.9	33.55	8.2	24.9	1.54
I30	15 Feb 2019	20	15.01	81.73	7.9	33.56	8.2	24.9	1.51
I30	15 Feb 2019	21	15.01	81.60	7.9	33.56	8.2	24.9	1.47
I30	15 Feb 2019	22	15.01	81.20	7.9	33.56	8.2	24.9	1.58
I30	15 Feb 2019	23	15.01	80.97	7.8	33.56	8.2	24.9	1.55

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I30	15 Feb 2019	24	15.01	79.82	7.8	33.56	8.2	24.9	1.48
I30	15 Feb 2019	25	15.01	80.19	7.9	33.56	8.2	24.9	1.53
I30	15 Feb 2019	26	15.01	79.94	7.9	33.56	8.2	24.9	1.51
I30	15 Feb 2019	27	15.00	78.97	8.0	33.56	8.2	24.9	1.45
I30	15 Feb 2019	28	14.98	77.40	7.9	33.56	8.2	24.9	1.38
I31	15 Feb 2019	1	15.07	19.35	8.4	31.74	8.2	23.4	1.68
I31	15 Feb 2019	2	15.03	18.80	8.3	32.23	8.2	23.8	1.88
I31	15 Feb 2019	3	14.95	33.67	8.0	33.46	8.2	24.8	2.15
I31	15 Feb 2019	4	14.93	46.16	8.0	33.51	8.2	24.8	2.07
I31	15 Feb 2019	5	14.91	55.62	8.0	33.52	8.2	24.8	1.96
I31	15 Feb 2019	6	14.90	62.45	7.9	33.52	8.2	24.9	1.86
I31	15 Feb 2019	7	14.90	66.22	8.0	33.52	8.2	24.9	1.87
I31	15 Feb 2019	8	14.90	66.97	8.0	33.52	8.2	24.9	1.86
I31	15 Feb 2019	9	14.90	67.99	7.9	33.52	8.2	24.9	1.81
I31	15 Feb 2019	10	14.89	69.19	7.9	33.52	8.2	24.9	1.67
I31	15 Feb 2019	11	14.89	69.75	7.9	33.52	8.2	24.9	1.64
I31	15 Feb 2019	12	14.89	70.61	7.8	33.53	8.2	24.9	1.65
I31	15 Feb 2019	13	14.89	71.86	7.9	33.53	8.2	24.9	1.72
I31	15 Feb 2019	14	14.88	72.88	7.9	33.53	8.2	24.9	1.65
I31	15 Feb 2019	15	14.88	72.83	7.9	33.53	8.2	24.9	1.69
I31	15 Feb 2019	16	14.88	73.07	7.9	33.53	8.2	24.9	1.73
I31	15 Feb 2019	17	14.87	71.09	7.9	33.53	8.2	24.9	1.66
I31	15 Feb 2019	18	14.87	64.79	7.8	33.54	8.2	24.9	1.67
I31	15 Feb 2019	19	14.87	61.36	7.8	33.54	8.2	24.9	1.70
I33	15 Feb 2019	1	14.82	82.31	7.9	33.53	8.2	24.9	1.71
I33	15 Feb 2019	2	14.81	82.67	7.9	33.56	8.2	24.9	1.68
I33	15 Feb 2019	3	14.81	82.47	7.9	33.56	8.2	24.9	1.72
I33	15 Feb 2019	4	14.82	82.53	7.9	33.56	8.2	24.9	1.79
I33	15 Feb 2019	5	14.81	82.61	7.8	33.56	8.1	24.9	1.77
I33	15 Feb 2019	6	14.80	82.63	7.7	33.56	8.1	24.9	1.75
I33	15 Feb 2019	7	14.80	82.51	7.8	33.56	8.1	24.9	1.74
I33	15 Feb 2019	8	14.80	82.62	7.8	33.56	8.1	24.9	1.66
I33	15 Feb 2019	9	14.80	82.44	7.8	33.56	8.1	24.9	1.70
I33	15 Feb 2019	10	14.79	82.61	7.7	33.56	8.1	24.9	1.61
I33	15 Feb 2019	11	14.78	82.42	7.7	33.56	8.1	24.9	1.60
I33	15 Feb 2019	12	14.78	82.10	7.7	33.56	8.1	24.9	1.60
I33	15 Feb 2019	13	14.78	81.95	7.6	33.56	8.1	24.9	1.72
I33	15 Feb 2019	14	14.77	81.91	7.7	33.56	8.1	24.9	1.56
I33	15 Feb 2019	15	14.76	81.50	7.7	33.56	8.1	24.9	1.57
I33	15 Feb 2019	16	14.76	81.40	7.7	33.56	8.1	24.9	1.60
I33	15 Feb 2019	17	14.77	81.52	7.7	33.56	8.1	24.9	1.61
I33	15 Feb 2019	18	14.76	80.99	7.7	33.56	8.1	24.9	1.60
I33	15 Feb 2019	19	14.75	80.45	7.7	33.56	8.1	24.9	1.66
I33	15 Feb 2019	20	14.75	80.72	7.7	33.56	8.1	24.9	1.63
I33	15 Feb 2019	21	14.75	80.64	7.6	33.56	8.1	24.9	1.61
I33	15 Feb 2019	22	14.75	80.46	7.7	33.56	8.1	24.9	1.57
I33	15 Feb 2019	23	14.75	80.57	7.6	33.56	8.1	24.9	1.54
I33	15 Feb 2019	24	14.74	80.39	7.7	33.56	8.1	24.9	1.54
I33	15 Feb 2019	25	14.74	80.34	7.7	33.56	8.1	24.9	1.49
I33	15 Feb 2019	26	14.74	80.09	7.6	33.56	8.1	24.9	1.55
I33	15 Feb 2019	27	14.73	80.43	7.7	33.56	8.1	24.9	1.57
I33	15 Feb 2019	28	14.73	80.53	7.7	33.56	8.1	24.9	1.55
I33	15 Feb 2019	29	14.73	81.08	7.7	33.56	8.1	24.9	1.57

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I33	15 Feb 2019	30	14.72	80.75	7.6	33.56	8.1	24.9	1.59
I34	15 Feb 2019	1	14.80	79.23	7.9	33.55	8.1	24.9	1.72
I34	15 Feb 2019	2	14.82	79.96	7.9	33.55	8.1	24.9	1.71
I34	15 Feb 2019	3	14.82	80.39	7.9	33.56	8.1	24.9	1.70
I34	15 Feb 2019	4	14.83	80.86	7.8	33.55	8.1	24.9	1.75
I34	15 Feb 2019	5	14.83	80.95	7.8	33.56	8.1	24.9	2.02
I34	15 Feb 2019	6	14.83	80.91	7.9	33.56	8.1	24.9	1.96
I34	15 Feb 2019	7	14.83	80.95	7.8	33.56	8.1	24.9	1.94
I34	15 Feb 2019	8	14.83	81.02	7.8	33.56	8.1	24.9	1.98
I34	15 Feb 2019	9	14.83	80.94	7.8	33.56	8.1	24.9	1.93
I34	15 Feb 2019	10	14.83	81.14	7.9	33.56	8.1	24.9	2.03
I34	15 Feb 2019	11	14.83	81.23	7.8	33.56	8.1	24.9	1.89
I34	15 Feb 2019	12	14.83	81.19	7.7	33.56	8.1	24.9	1.87
I34	15 Feb 2019	13	14.82	81.23	7.7	33.56	8.1	24.9	1.93
I34	15 Feb 2019	14	14.82	80.33	7.8	33.56	8.1	24.9	1.97
I34	15 Feb 2019	15	14.78	78.93	7.8	33.55	8.1	24.9	1.80
I34	15 Feb 2019	16	14.76	77.77	7.6	33.55	8.1	24.9	1.75
I34	15 Feb 2019	17	14.76	76.34	7.7	33.55	8.1	24.9	1.73
I34	15 Feb 2019	18	14.76	75.75	7.7	33.55	8.1	24.9	1.77
I34	15 Feb 2019	19	14.76	75.12	7.7	33.55	8.1	24.9	1.64
I35	15 Feb 2019	1	14.77	61.72	8.1	32.83	8.2	24.3	1.17
I35	15 Feb 2019	2	14.75	63.35	8.1	32.94	8.2	24.4	1.26
I35	15 Feb 2019	3	14.68	70.08	8.0	33.38	8.2	24.8	1.53
I35	15 Feb 2019	4	14.66	76.84	7.9	33.53	8.2	24.9	1.71
I35	15 Feb 2019	5	14.65	77.79	7.9	33.53	8.2	24.9	1.78
I35	15 Feb 2019	6	14.65	78.33	7.9	33.54	8.2	24.9	1.83
I35	15 Feb 2019	7	14.65	78.39	7.9	33.54	8.2	24.9	1.86
I35	15 Feb 2019	8	14.65	78.59	7.9	33.54	8.2	24.9	1.96
I35	15 Feb 2019	9	14.66	78.80	7.8	33.54	8.2	24.9	1.70
I35	15 Feb 2019	10	14.66	78.93	7.8	33.54	8.2	24.9	1.70
I35	15 Feb 2019	11	14.66	78.94	7.8	33.54	8.2	24.9	1.77
I35	15 Feb 2019	12	14.66	78.82	7.7	33.54	8.2	24.9	1.63
I35	15 Feb 2019	13	14.66	77.94	7.8	33.55	8.2	24.9	1.59
I35	15 Feb 2019	14	14.66	77.45	7.8	33.55	8.2	24.9	1.65
I35	15 Feb 2019	15	14.66	77.04	7.8	33.55	8.1	24.9	1.60
I35	15 Feb 2019	16	14.66	76.57	7.7	33.55	8.1	24.9	1.68
I35	15 Feb 2019	17	14.66	75.11	7.6	33.55	8.1	24.9	1.62
I35	15 Feb 2019	18	14.67	74.59	7.7	33.55	8.1	24.9	1.59
I35	15 Feb 2019	19	14.67	65.63	7.8	33.55	8.1	24.9	1.77
I37	15 Feb 2019	1	14.60	78.23	7.8	33.53	8.2	24.9	1.37
I37	15 Feb 2019	2	14.62	78.00	7.8	33.53	8.2	24.9	1.42
I37	15 Feb 2019	3	14.64	78.51	7.8	33.54	8.1	24.9	1.57
I37	15 Feb 2019	4	14.64	79.10	7.8	33.54	8.1	24.9	1.59
I37	15 Feb 2019	5	14.65	79.40	7.8	33.54	8.1	24.9	1.63
I37	15 Feb 2019	6	14.65	79.42	7.8	33.54	8.1	24.9	1.63
I37	15 Feb 2019	7	14.66	79.72	7.7	33.54	8.1	24.9	1.63
I37	15 Feb 2019	8	14.66	80.21	7.7	33.54	8.1	24.9	1.63
I37	15 Feb 2019	9	14.67	80.27	7.7	33.55	8.1	24.9	1.55
I37	15 Feb 2019	10	14.67	80.13	7.7	33.55	8.1	24.9	1.58
I37	15 Feb 2019	11	14.67	79.50	7.7	33.55	8.1	24.9	1.55
I37	15 Feb 2019	12	14.66	77.18	7.6	33.55	8.1	24.9	1.50

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I38	15 Feb 2019	1	14.76	42.66	8.2	31.77	8.2	23.5	0.93
I38	15 Feb 2019	2	14.74	42.06	8.2	32.56	8.2	24.2	1.22
I38	15 Feb 2019	3	14.97	37.25	8.0	33.00	8.2	24.4	1.68
I38	15 Feb 2019	4	14.89	32.60	7.9	33.32	8.1	24.7	1.81
I38	15 Feb 2019	5	14.76	43.40	7.8	33.43	8.1	24.8	1.64
I38	15 Feb 2019	6	14.71	51.26	7.8	33.45	8.1	24.8	1.51
I38	15 Feb 2019	7	14.70	51.90	7.7	33.48	8.1	24.9	1.46
I38	15 Feb 2019	8	14.70	48.23	7.7	33.49	8.1	24.9	1.39
I38	15 Feb 2019	9	14.70	44.76	7.7	33.49	8.1	24.9	1.48
I38	15 Feb 2019	10	14.70	41.49	7.7	33.49	8.1	24.9	1.39
I38	15 Feb 2019	11	14.70	38.60	7.7	33.50	8.1	24.9	1.44
I4	12 Feb 2019	1	14.90	78.49	8.1	33.59	8.1	24.9	0.93
I4	12 Feb 2019	2	14.90	78.55	8.1	33.59	8.1	24.9	0.90
I4	12 Feb 2019	3	14.84	78.09	8.1	33.59	8.1	24.9	1.00
I4	12 Feb 2019	4	14.81	77.37	8.0	33.59	8.1	24.9	1.15
I4	12 Feb 2019	5	14.80	76.92	8.0	33.59	8.1	24.9	1.52
I4	12 Feb 2019	6	14.79	76.62	8.0	33.59	8.1	24.9	2.05
I4	12 Feb 2019	7	14.78	76.33	8.0	33.59	8.1	24.9	2.04
I4	12 Feb 2019	8	14.77	76.18	7.9	33.59	8.1	24.9	2.13
I4	12 Feb 2019	9	14.76	76.18	7.8	33.59	8.1	24.9	2.06
I4	12 Feb 2019	10	14.73	76.57	7.7	33.60	8.1	24.9	1.90
I4	12 Feb 2019	11	14.69	77.99	7.6	33.60	8.1	25.0	1.72
I4	12 Feb 2019	12	14.67	79.56	7.5	33.60	8.1	25.0	1.58
I4	12 Feb 2019	13	14.66	80.42	7.5	33.60	8.1	25.0	1.52
I4	12 Feb 2019	14	14.65	80.89	7.5	33.60	8.1	25.0	1.48
I4	12 Feb 2019	15	14.65	81.31	7.4	33.60	8.1	25.0	1.42
I4	12 Feb 2019	16	14.63	81.39	7.4	33.60	8.1	25.0	1.44
I4	12 Feb 2019	17	14.63	81.28	7.3	33.60	8.1	25.0	1.33
I4	12 Feb 2019	18	14.63	81.38	7.3	33.60	8.1	25.0	1.35
I5	12 Feb 2019	1	14.92	66.79	8.1	33.60	8.1	24.9	1.00
I5	12 Feb 2019	2	14.88	65.81	8.1	33.60	8.1	24.9	1.07
I5	12 Feb 2019	3	14.83	65.45	8.1	33.60	8.1	24.9	1.29
I5	12 Feb 2019	4	14.81	65.95	8.1	33.60	8.1	24.9	1.68
I5	12 Feb 2019	5	14.80	65.95	8.0	33.60	8.1	24.9	2.00
I5	12 Feb 2019	6	14.80	65.94	8.0	33.60	8.1	24.9	2.24
I5	12 Feb 2019	7	14.79	66.17	8.0	33.60	8.1	24.9	2.26
I5	12 Feb 2019	8	14.78	66.73	7.9	33.60	8.1	24.9	2.19
I5	12 Feb 2019	9	14.76	67.33	7.8	33.60	8.1	24.9	2.10
I5	12 Feb 2019	10	14.73	69.00	7.6	33.61	8.1	25.0	1.88
I5	12 Feb 2019	11	14.72	69.14	7.4	33.61	8.1	25.0	1.85
I5	12 Feb 2019	12	14.72	68.12	7.4	33.61	8.1	25.0	1.82
I5	12 Feb 2019	13	14.71	68.60	7.3	33.61	8.1	25.0	1.80
I5	12 Feb 2019	14	14.70	67.79	7.3	33.61	8.1	25.0	1.83
I6	12 Feb 2019	1	15.01	84.04	8.0	33.61	8.1	24.9	0.72
I6	12 Feb 2019	2	15.00	84.07	8.0	33.61	8.1	24.9	0.74
I6	12 Feb 2019	3	14.97	84.15	8.0	33.61	8.1	24.9	0.75
I6	12 Feb 2019	4	14.92	84.05	8.0	33.61	8.1	24.9	0.85
I6	12 Feb 2019	5	14.90	83.63	8.0	33.60	8.1	24.9	0.95
I6	12 Feb 2019	6	14.89	83.63	8.0	33.60	8.1	24.9	1.08
I6	12 Feb 2019	7	14.89	83.55	8.0	33.60	8.1	24.9	1.24
I6	12 Feb 2019	8	14.88	83.66	7.9	33.60	8.1	24.9	1.30
I6	12 Feb 2019	9	14.88	83.77	7.9	33.60	8.1	24.9	1.35

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
16	12 Feb 2019	10	14.87	83.95	7.9	33.61	8.1	24.9	1.43
16	12 Feb 2019	11	14.83	84.33	7.8	33.61	8.1	24.9	1.36
16	12 Feb 2019	12	14.79	84.96	7.6	33.61	8.1	24.9	1.31
16	12 Feb 2019	13	14.64	85.41	7.4	33.62	8.1	25.0	1.15
16	12 Feb 2019	14	14.58	85.80	7.3	33.62	8.1	25.0	1.01
16	12 Feb 2019	15	14.58	85.80	7.3	33.62	8.1	25.0	1.03
16	12 Feb 2019	16	14.56	85.54	7.3	33.62	8.1	25.0	1.00
16	12 Feb 2019	17	14.57	85.65	7.3	33.62	8.1	25.0	0.94
16	12 Feb 2019	18	14.57	85.55	7.3	33.62	8.1	25.0	0.95
16	12 Feb 2019	19	14.57	85.59	7.3	33.62	8.1	25.0	1.00
16	12 Feb 2019	20	14.56	85.52	7.2	33.62	8.1	25.0	1.10
16	12 Feb 2019	21	14.57	85.46	7.2	33.62	8.1	25.0	1.17
16	12 Feb 2019	22	14.57	85.50	7.3	33.62	8.1	25.0	1.02
16	12 Feb 2019	23	14.57	85.52	7.3	33.62	8.1	25.0	1.01
16	12 Feb 2019	24	14.57	85.50	7.3	33.62	8.1	25.0	1.01
16	12 Feb 2019	25	14.57	85.48	7.3	33.62	8.1	25.0	1.06
17	12 Feb 2019	1	15.29	88.22	8.0	33.65	8.1	24.9	0.35
17	12 Feb 2019	2	15.29	88.12	8.0	33.65	8.1	24.9	0.34
17	12 Feb 2019	3	15.29	87.83	8.0	33.65	8.1	24.9	0.37
17	12 Feb 2019	4	15.29	88.22	7.9	33.65	8.1	24.9	0.37
17	12 Feb 2019	5	15.29	88.17	8.0	33.65	8.1	24.9	0.36
17	12 Feb 2019	6	15.29	88.19	7.9	33.65	8.1	24.9	0.36
17	12 Feb 2019	7	15.29	88.19	7.9	33.65	8.1	24.9	0.37
17	12 Feb 2019	8	15.29	88.18	7.9	33.65	8.1	24.9	0.40
17	12 Feb 2019	9	15.29	88.19	7.9	33.65	8.1	24.9	0.39
17	12 Feb 2019	10	15.29	88.15	7.9	33.65	8.1	24.9	0.41
17	12 Feb 2019	11	15.29	88.17	8.0	33.65	8.1	24.9	0.42
17	12 Feb 2019	12	15.29	88.21	7.9	33.65	8.1	24.9	0.42
17	12 Feb 2019	13	15.29	88.12	7.9	33.65	8.1	24.9	0.47
17	12 Feb 2019	14	15.29	88.18	7.9	33.65	8.1	24.9	0.48
17	12 Feb 2019	15	15.29	88.12	7.9	33.65	8.1	24.9	0.50
17	12 Feb 2019	16	15.29	88.20	7.9	33.65	8.1	24.9	0.52
17	12 Feb 2019	17	15.29	88.13	7.9	33.65	8.1	24.9	0.51
17	12 Feb 2019	18	15.29	88.18	7.9	33.65	8.1	24.9	0.56
17	12 Feb 2019	19	15.29	88.21	7.9	33.65	8.1	24.9	0.57
17	12 Feb 2019	20	15.29	88.12	7.9	33.65	8.1	24.9	0.60
17	12 Feb 2019	21	15.28	88.12	7.9	33.65	8.1	24.9	0.57
17	12 Feb 2019	22	15.28	88.09	7.9	33.65	8.1	24.9	0.59
17	12 Feb 2019	23	15.28	88.20	7.9	33.65	8.1	24.9	0.59
17	12 Feb 2019	24	15.29	88.22	7.8	33.65	8.1	24.9	0.61
17	12 Feb 2019	25	15.28	88.21	7.9	33.65	8.1	24.9	0.59
17	12 Feb 2019	26	15.28	88.20	7.9	33.65	8.1	24.9	0.60
17	12 Feb 2019	27	15.28	88.22	7.9	33.65	8.1	24.9	0.65
17	12 Feb 2019	28	15.28	88.18	7.9	33.65	8.1	24.9	0.59
17	12 Feb 2019	29	15.28	88.16	7.9	33.65	8.1	24.9	0.62
17	12 Feb 2019	30	15.28	88.25	7.8	33.65	8.1	24.9	0.61
17	12 Feb 2019	31	15.28	88.23	7.9	33.65	8.1	24.9	0.64
17	12 Feb 2019	32	15.28	88.20	7.9	33.65	8.1	24.9	0.63
17	12 Feb 2019	33	15.28	88.23	7.9	33.65	8.1	24.9	0.64
17	12 Feb 2019	34	15.27	88.29	7.8	33.65	8.1	24.9	0.66
17	12 Feb 2019	35	15.27	88.27	7.9	33.65	8.1	24.9	0.66
17	12 Feb 2019	36	15.27	88.24	7.8	33.65	8.1	24.9	0.65
17	12 Feb 2019	37	15.27	88.28	7.8	33.65	8.1	24.9	0.64
17	12 Feb 2019	38	15.27	88.29	7.9	33.65	8.1	24.9	0.65

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
17	12 Feb 2019	39	15.27	88.26	7.9	33.65	8.1	24.9	0.65
17	12 Feb 2019	40	15.26	88.25	7.8	33.65	8.1	24.9	0.67
17	12 Feb 2019	41	15.26	88.28	7.8	33.65	8.1	24.9	0.68
17	12 Feb 2019	42	15.21	88.28	7.8	33.65	8.1	24.9	0.66
17	12 Feb 2019	43	15.07	88.33	7.6	33.64	8.1	24.9	0.70
17	12 Feb 2019	44	14.86	88.44	7.4	33.64	8.1	25.0	0.66
17	12 Feb 2019	45	14.62	88.50	7.2	33.63	8.1	25.0	0.82
17	12 Feb 2019	46	14.46	88.47	7.1	33.62	8.1	25.0	0.71
17	12 Feb 2019	47	14.19	88.43	7.0	33.62	8.1	25.1	0.69
17	12 Feb 2019	48	13.93	88.36	6.8	33.62	8.1	25.1	0.64
17	12 Feb 2019	49	13.57	88.25	6.5	33.62	8.0	25.2	0.55
17	12 Feb 2019	50	13.38	88.03	6.4	33.61	8.0	25.2	0.48
17	12 Feb 2019	51	13.36	87.82	6.4	33.60	8.0	25.2	0.46
17	12 Feb 2019	52	13.37	87.70	6.4	33.60	8.0	25.2	0.45
18	12 Feb 2019	1	15.24	86.28	8.0	33.64	8.1	24.9	0.43
18	12 Feb 2019	2	15.22	86.38	8.0	33.65	8.1	24.9	0.42
18	12 Feb 2019	3	15.18	86.44	8.0	33.64	8.1	24.9	0.46
18	12 Feb 2019	4	15.19	86.54	8.0	33.64	8.1	24.9	0.50
18	12 Feb 2019	5	15.17	86.51	8.0	33.64	8.1	24.9	0.52
18	12 Feb 2019	6	15.15	86.38	8.0	33.64	8.1	24.9	0.53
18	12 Feb 2019	7	15.14	86.34	8.0	33.64	8.1	24.9	0.58
18	12 Feb 2019	8	15.13	86.36	7.9	33.64	8.1	24.9	0.61
18	12 Feb 2019	9	15.13	86.30	8.0	33.64	8.1	24.9	0.66
18	12 Feb 2019	10	15.13	86.32	7.9	33.64	8.1	24.9	0.65
18	12 Feb 2019	11	15.12	86.36	7.9	33.64	8.1	24.9	0.69
18	12 Feb 2019	12	15.12	86.37	7.9	33.64	8.1	24.9	0.75
18	12 Feb 2019	13	15.11	86.20	7.9	33.64	8.1	24.9	0.79
18	12 Feb 2019	14	15.09	86.47	7.9	33.64	8.1	24.9	0.84
18	12 Feb 2019	15	15.07	86.46	7.7	33.64	8.1	24.9	0.86
18	12 Feb 2019	16	15.06	86.28	7.8	33.64	8.1	24.9	0.93
18	12 Feb 2019	17	15.05	86.25	7.8	33.64	8.1	24.9	0.95
18	12 Feb 2019	18	15.01	86.35	7.8	33.64	8.1	24.9	1.01
18	12 Feb 2019	19	14.98	86.33	7.8	33.64	8.1	24.9	0.99
18	12 Feb 2019	20	14.95	86.35	7.6	33.63	8.1	24.9	1.05
18	12 Feb 2019	21	14.92	86.34	7.6	33.64	8.1	24.9	1.05
18	12 Feb 2019	22	14.80	86.41	7.5	33.63	8.1	25.0	1.05
18	12 Feb 2019	23	14.58	86.23	7.4	33.62	8.1	25.0	1.03
18	12 Feb 2019	24	14.43	86.35	7.2	33.62	8.1	25.0	0.95
18	12 Feb 2019	25	14.18	86.60	7.1	33.62	8.1	25.1	0.89
18	12 Feb 2019	26	14.08	87.04	6.9	33.61	8.1	25.1	0.78
18	12 Feb 2019	27	14.04	87.22	6.9	33.60	8.0	25.1	0.69
18	12 Feb 2019	28	14.03	87.27	6.9	33.60	8.0	25.1	0.68
18	12 Feb 2019	29	14.02	87.34	6.9	33.60	8.0	25.1	0.67
18	12 Feb 2019	30	14.02	87.31	6.9	33.60	8.0	25.1	0.65
18	12 Feb 2019	31	14.02	87.32	6.9	33.60	8.0	25.1	0.69
18	12 Feb 2019	32	14.02	87.35	6.9	33.61	8.0	25.1	0.71
18	12 Feb 2019	33	14.02	87.31	6.9	33.61	8.0	25.1	0.70
18	12 Feb 2019	34	14.02	87.26	6.9	33.61	8.0	25.1	0.70
18	12 Feb 2019	35	14.02	87.35	6.9	33.61	8.0	25.1	0.72
18	12 Feb 2019	36	14.02	87.25	6.9	33.61	8.0	25.1	0.72
19	12 Feb 2019	1	14.68	85.18	7.7	33.56	8.1	24.9	0.48
19	12 Feb 2019	2	14.68	85.17	7.7	33.56	8.1	24.9	0.47
19	12 Feb 2019	3	14.68	85.26	7.6	33.56	8.1	24.9	0.47

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
19	12 Feb 2019	4	14.68	85.25	7.6	33.56	8.1	24.9	0.49
19	12 Feb 2019	5	14.68	84.83	7.6	33.57	8.1	24.9	0.54
19	12 Feb 2019	6	14.68	84.46	7.7	33.58	8.1	24.9	0.67
19	12 Feb 2019	7	14.68	84.29	7.8	33.58	8.1	24.9	0.80
19	12 Feb 2019	8	14.67	84.02	7.8	33.59	8.1	25.0	0.92
19	12 Feb 2019	9	14.64	83.76	7.8	33.59	8.1	25.0	1.05
19	12 Feb 2019	10	14.63	83.56	7.8	33.59	8.1	25.0	1.12
19	12 Feb 2019	11	14.60	83.07	7.8	33.59	8.1	25.0	1.20
19	12 Feb 2019	12	14.58	83.62	7.7	33.59	8.1	25.0	1.33
19	12 Feb 2019	13	14.55	84.05	7.6	33.59	8.1	25.0	1.46
19	12 Feb 2019	14	14.53	84.37	7.6	33.59	8.1	25.0	1.34
19	12 Feb 2019	15	14.50	84.94	7.5	33.60	8.1	25.0	1.34
19	12 Feb 2019	16	14.46	84.94	7.4	33.60	8.1	25.0	1.24
19	12 Feb 2019	17	14.46	85.01	7.4	33.60	8.1	25.0	1.31
19	12 Feb 2019	18	14.44	85.05	7.4	33.60	8.1	25.0	1.27
19	12 Feb 2019	19	14.43	85.16	7.4	33.60	8.1	25.0	1.25
19	12 Feb 2019	20	14.42	85.28	7.3	33.60	8.1	25.0	1.13
19	12 Feb 2019	21	14.42	85.22	7.3	33.60	8.1	25.0	1.16
19	12 Feb 2019	22	14.41	85.46	7.3	33.60	8.1	25.0	1.09
19	12 Feb 2019	23	14.39	85.70	7.2	33.60	8.1	25.0	1.17
19	12 Feb 2019	24	14.35	86.01	7.2	33.60	8.1	25.0	1.05
19	12 Feb 2019	25	14.28	86.44	7.1	33.60	8.1	25.1	0.97
19	12 Feb 2019	26	14.15	86.63	6.9	33.61	8.1	25.1	0.86
19	12 Feb 2019	27	14.05	86.53	6.8	33.60	8.0	25.1	0.79
19	12 Feb 2019	28	14.05	86.44	6.9	33.60	8.0	25.1	0.81
19	12 Feb 2019	29	14.02	86.32	6.8	33.60	8.0	25.1	0.73

NA = not available

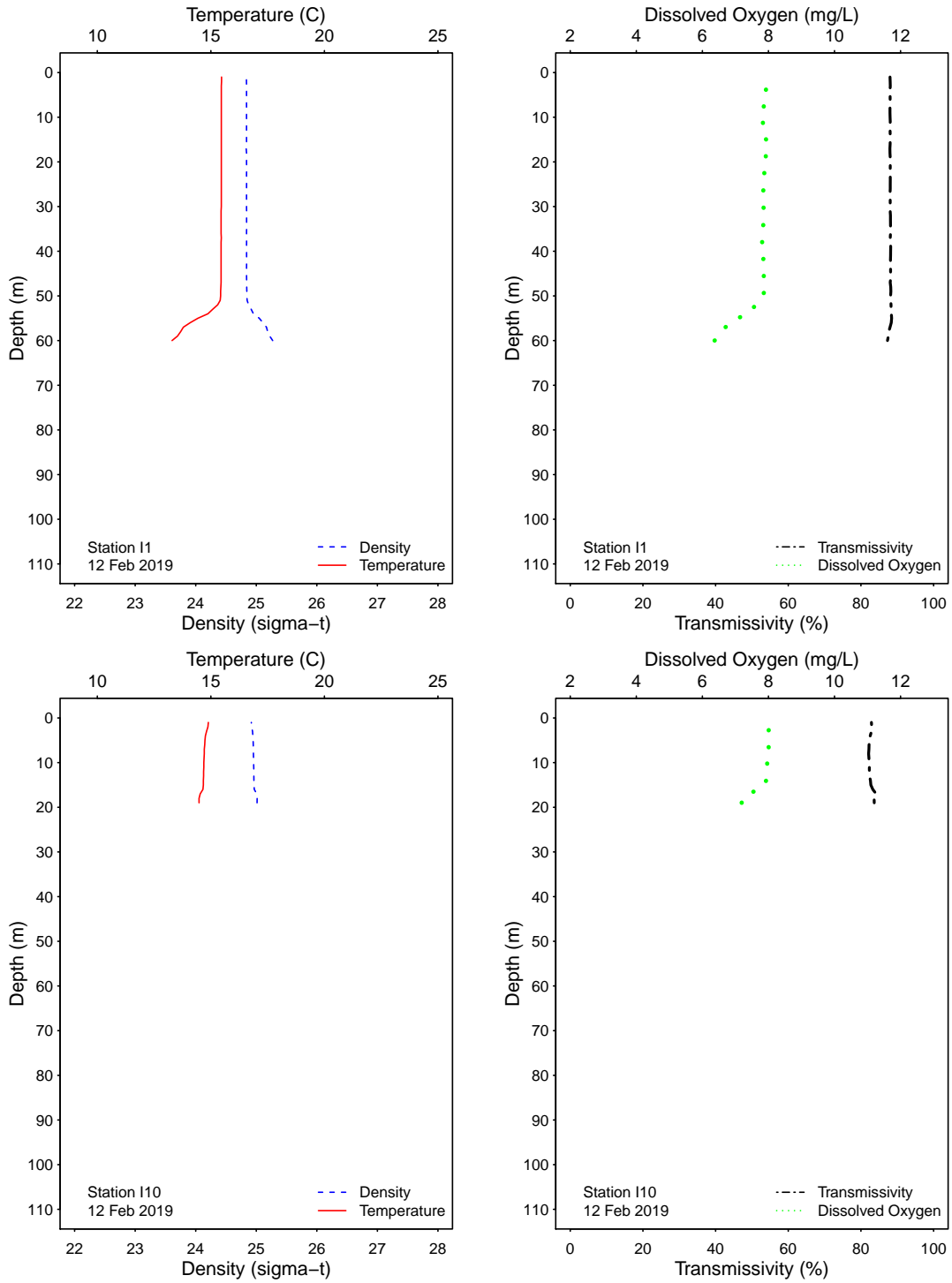


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

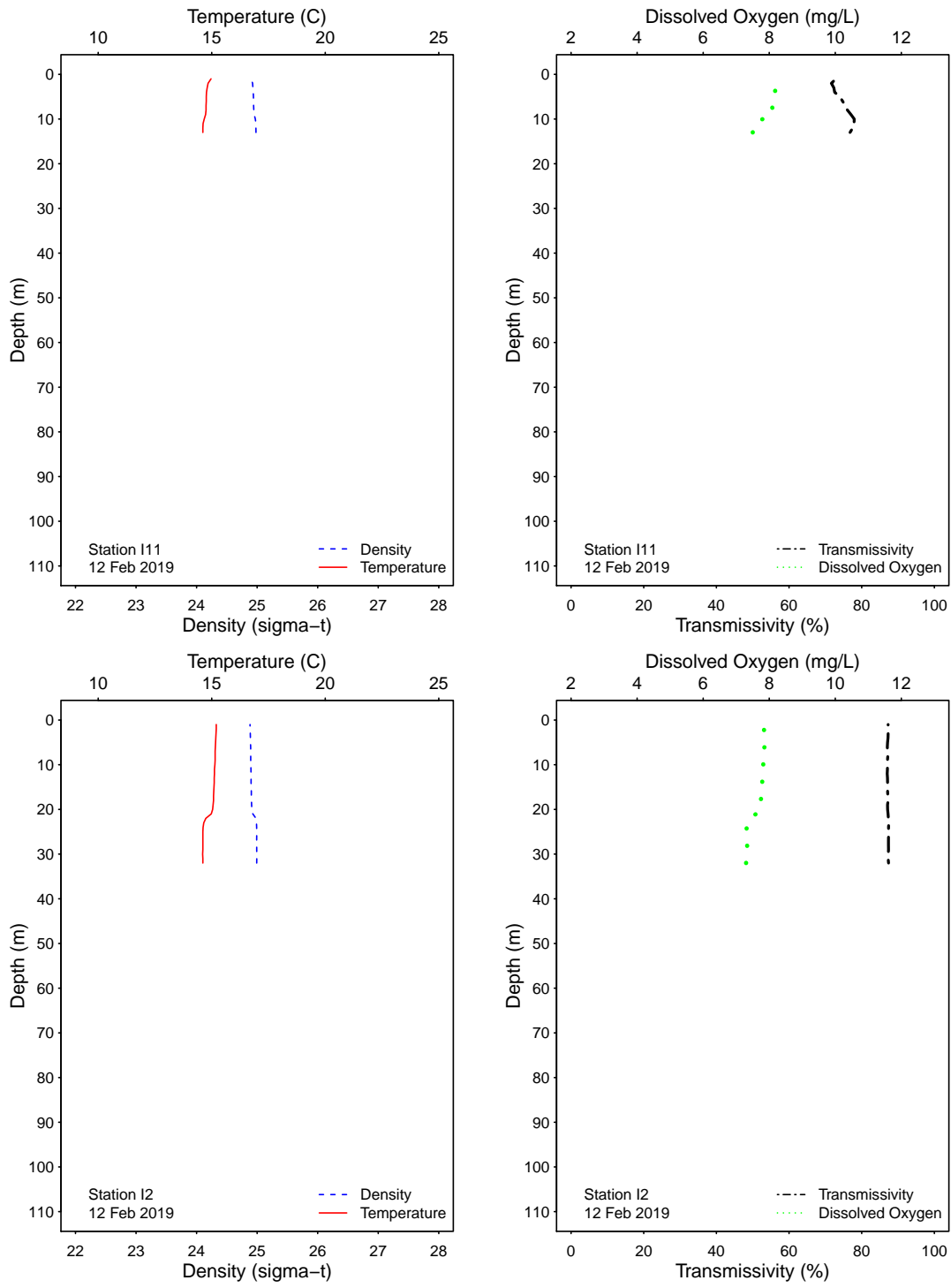


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

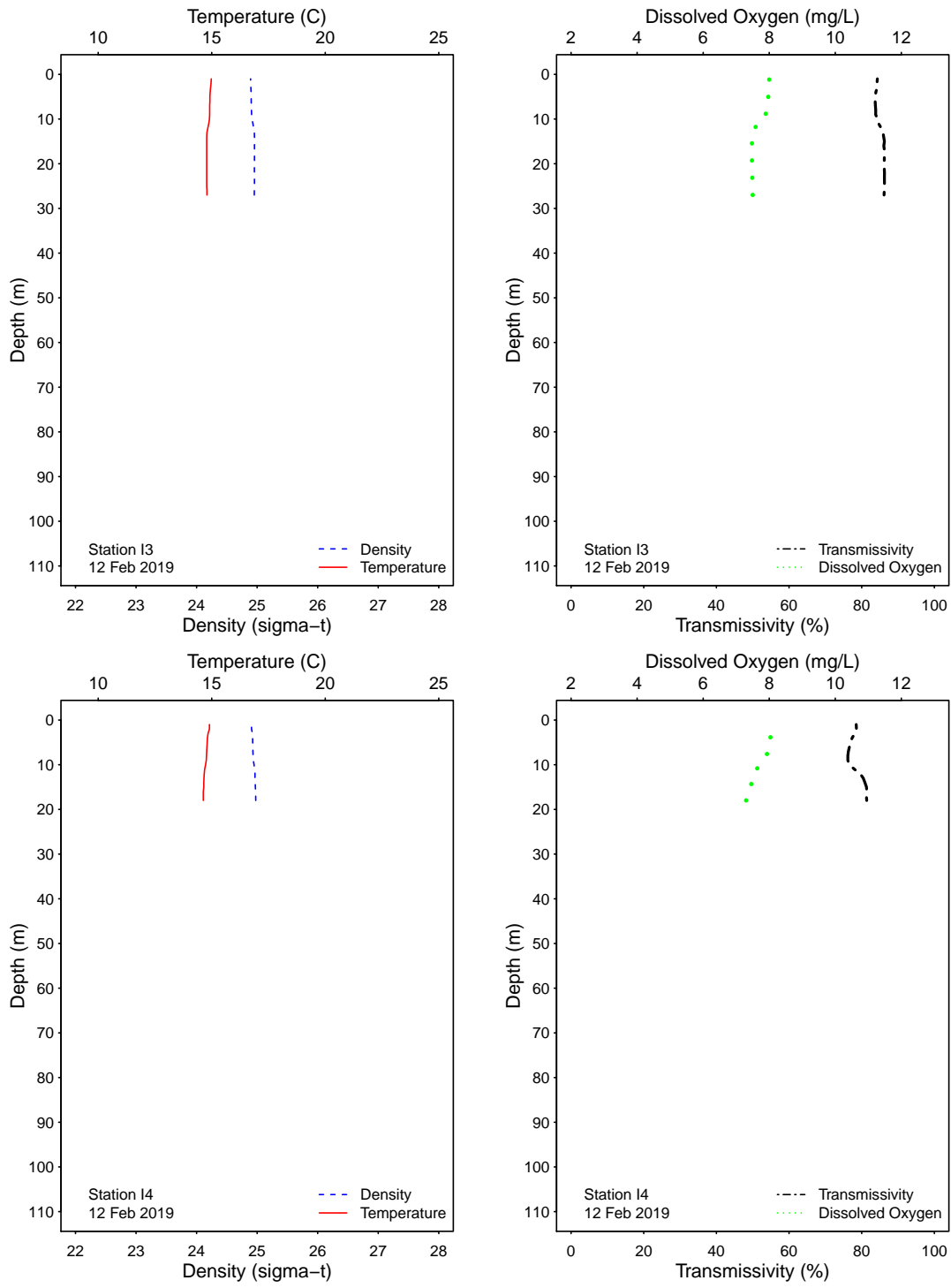


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

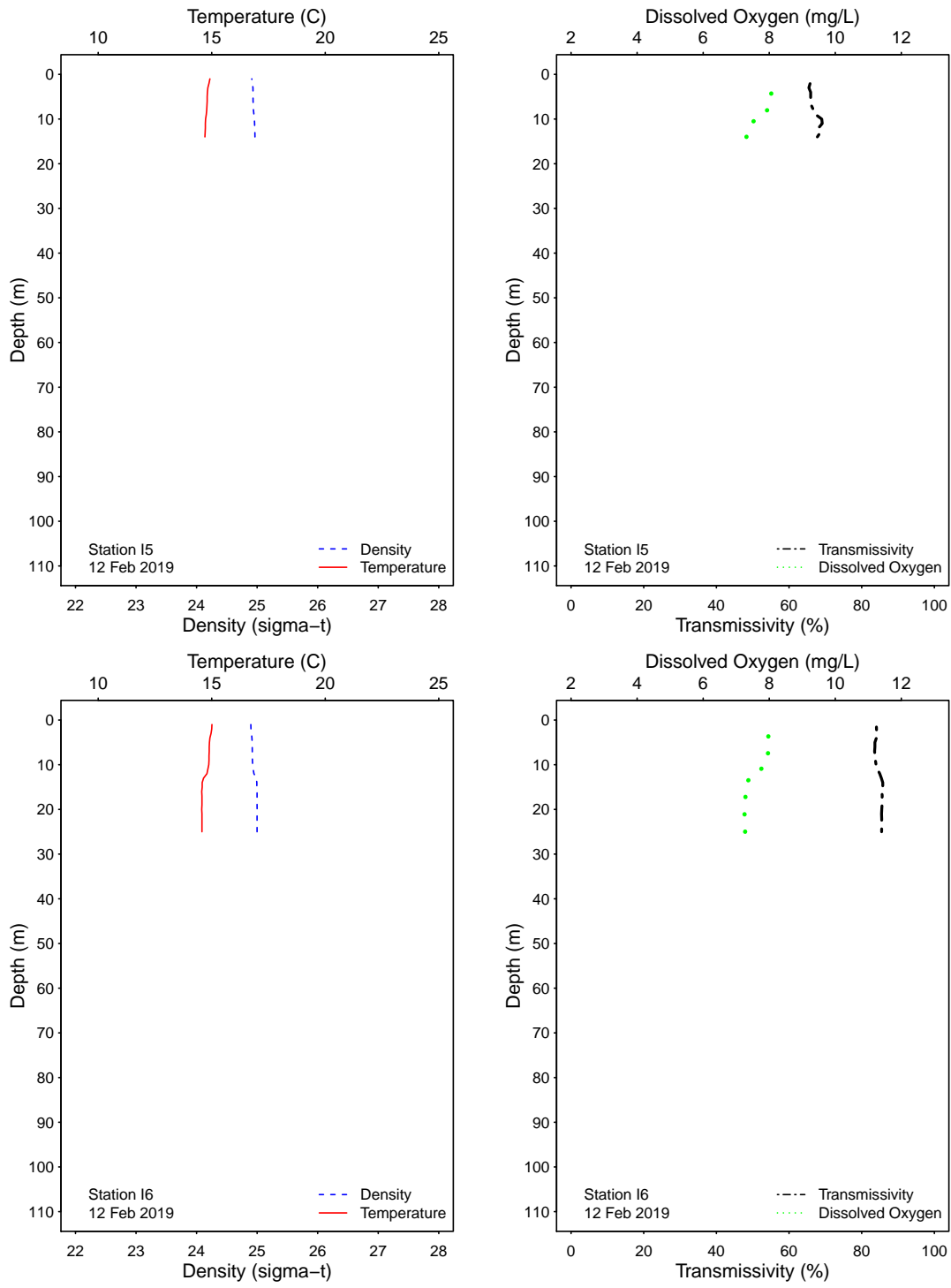


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

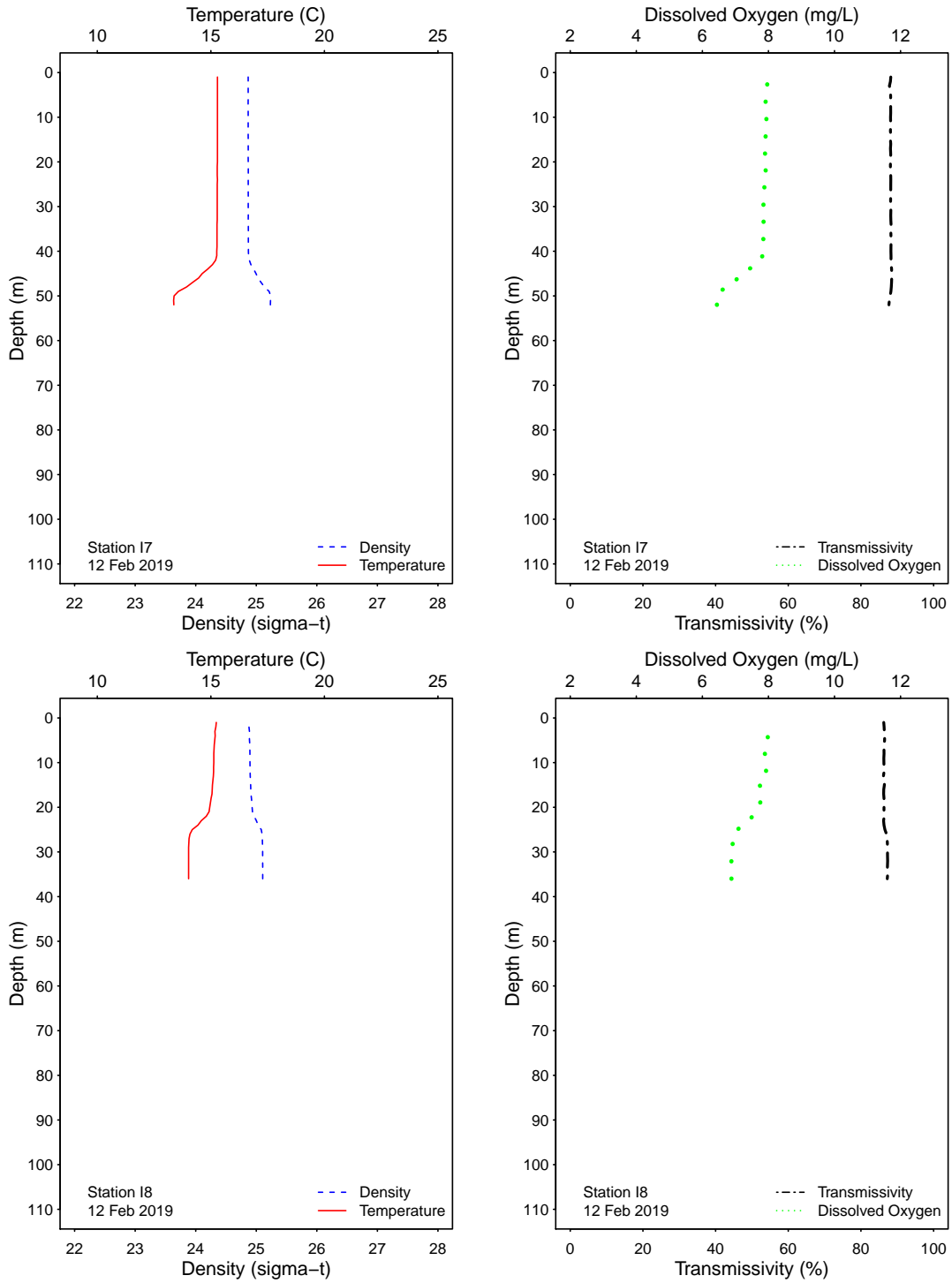


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

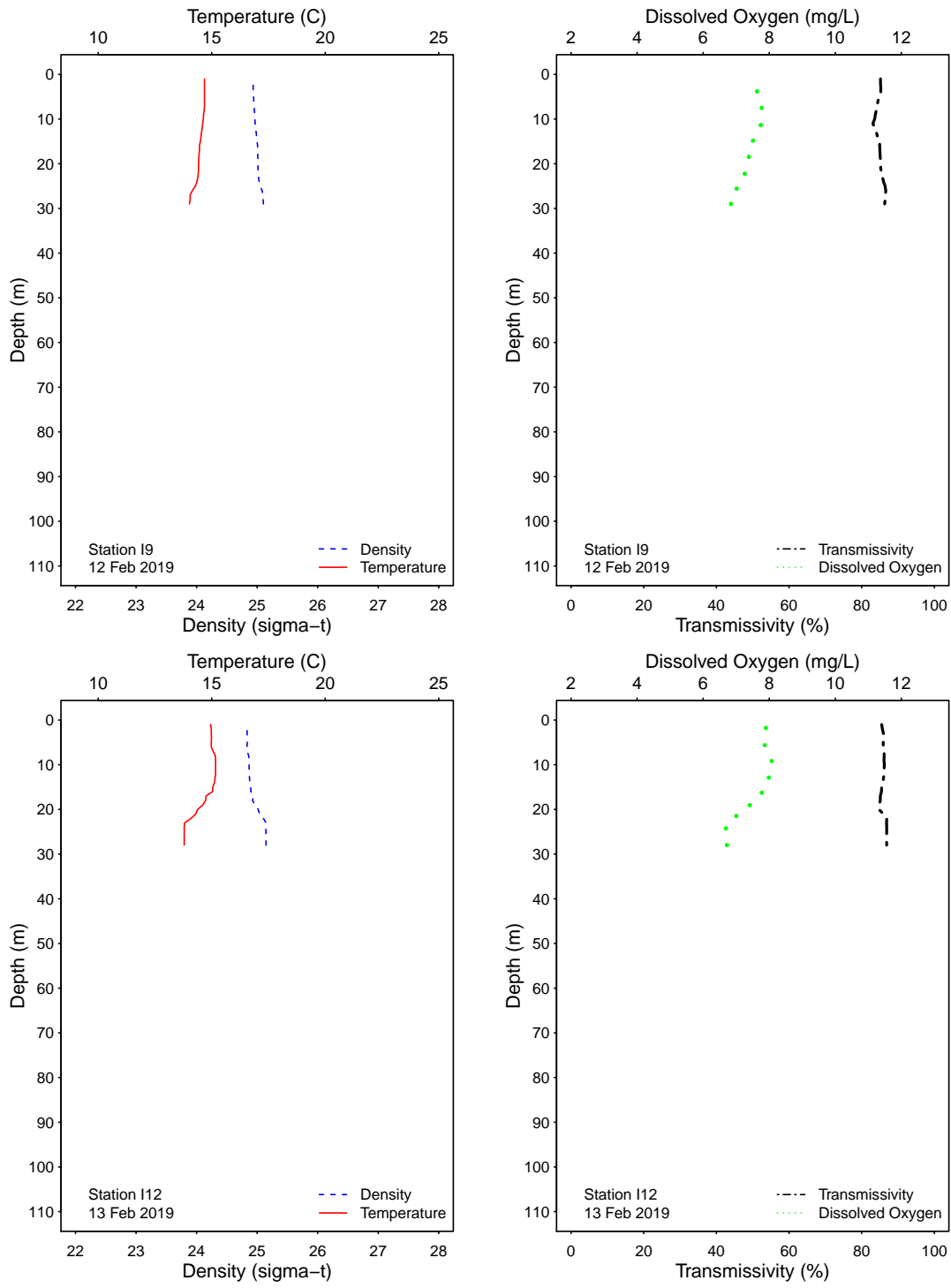


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

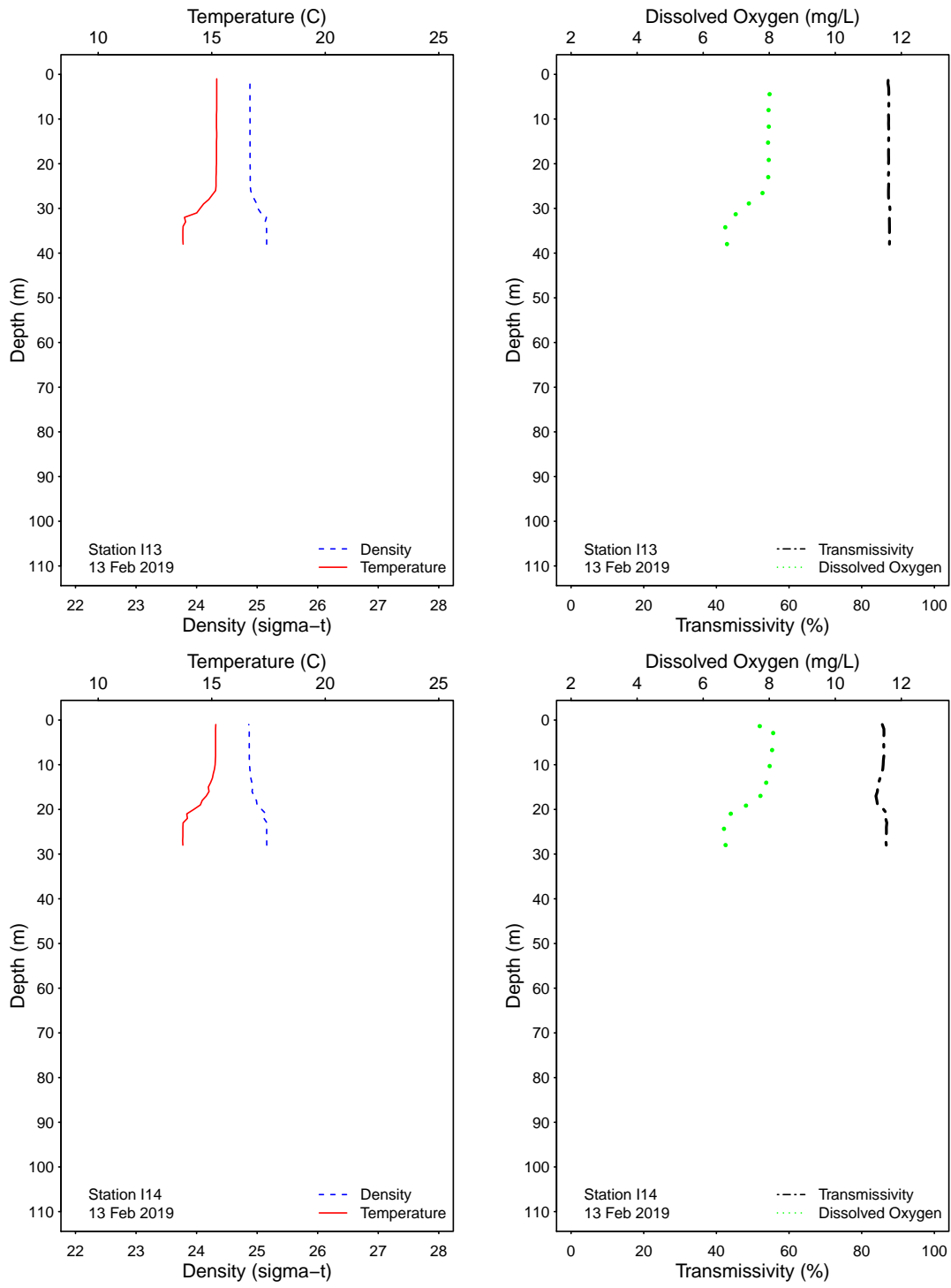


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

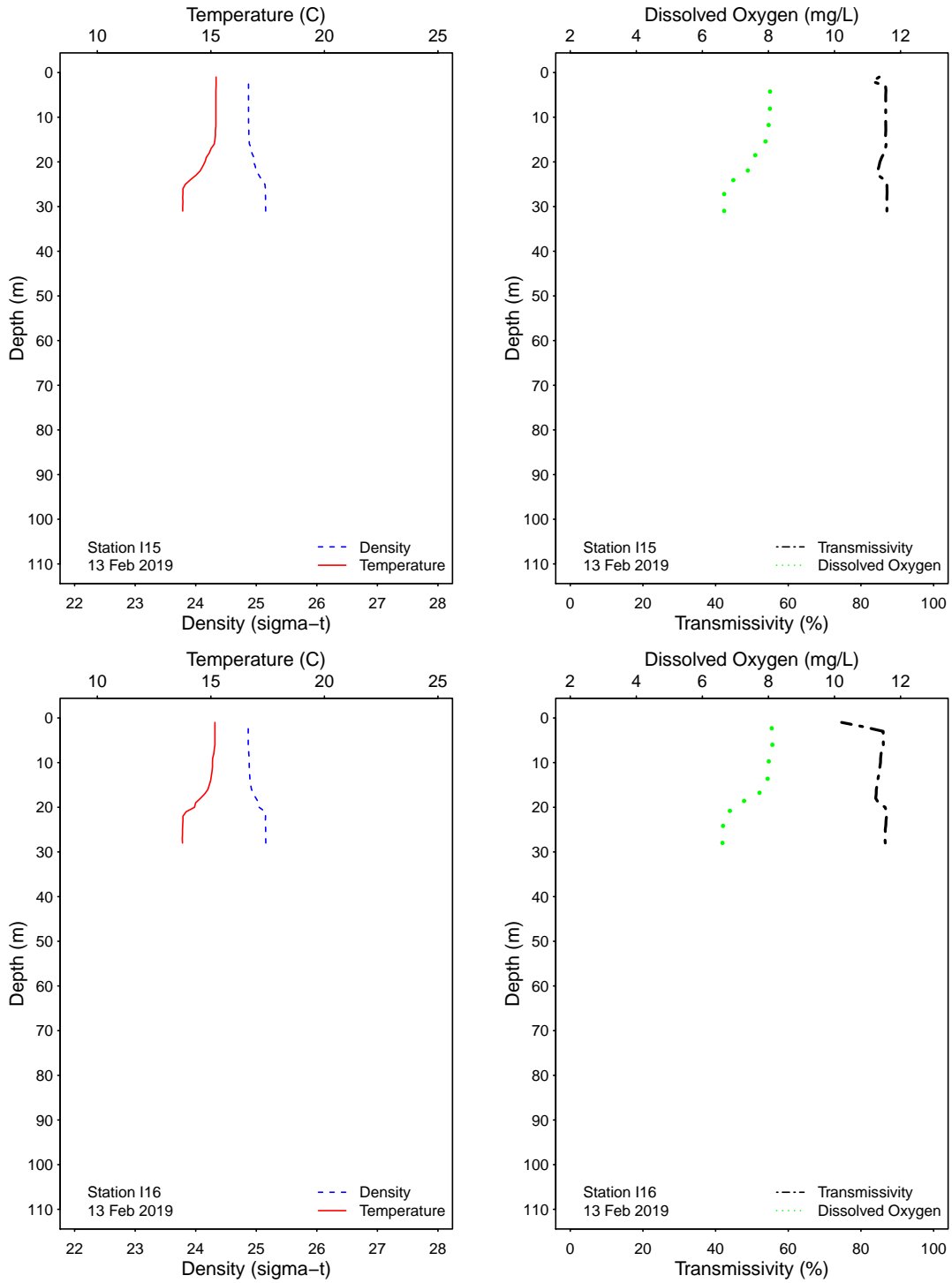


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

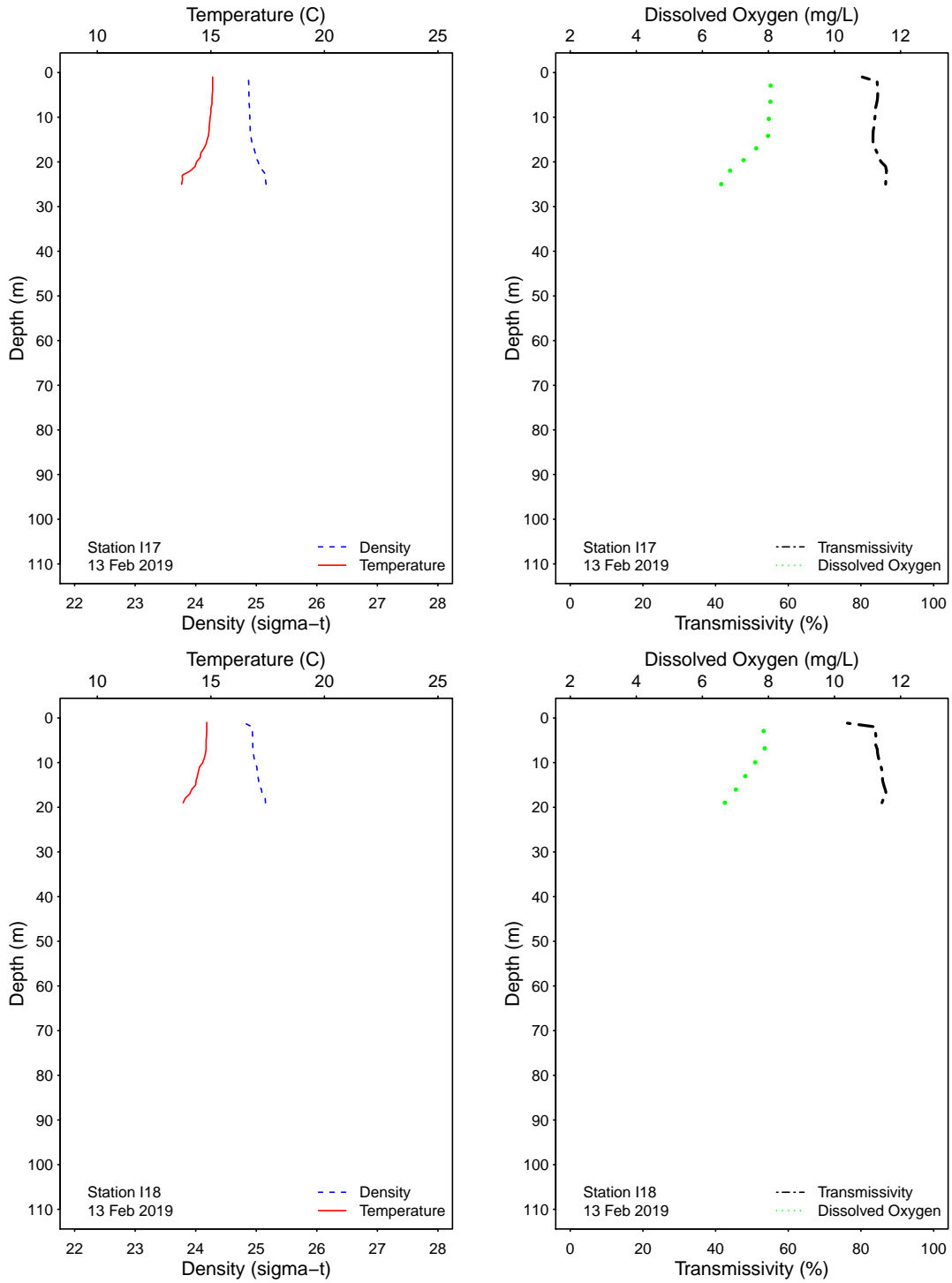


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

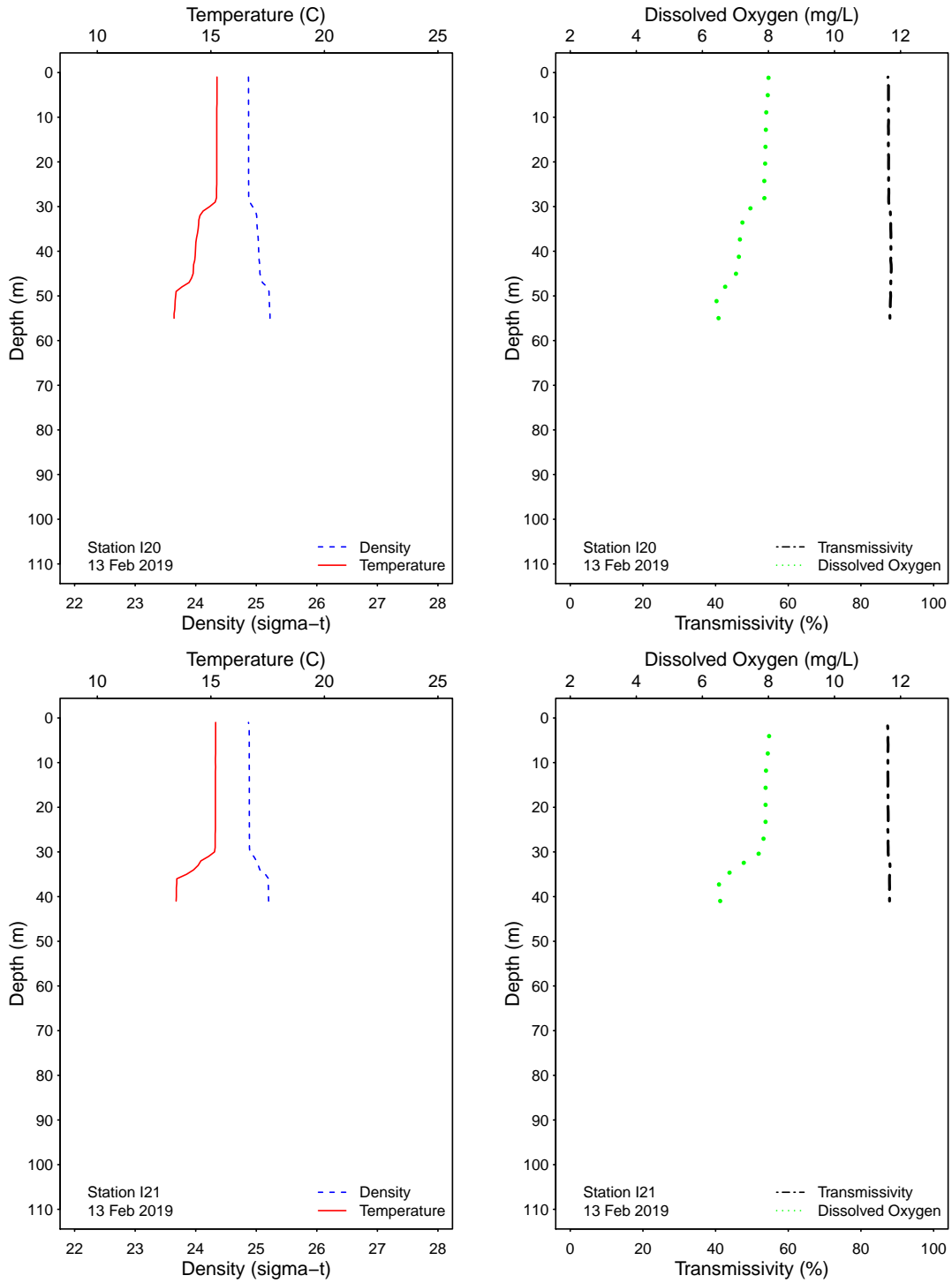


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

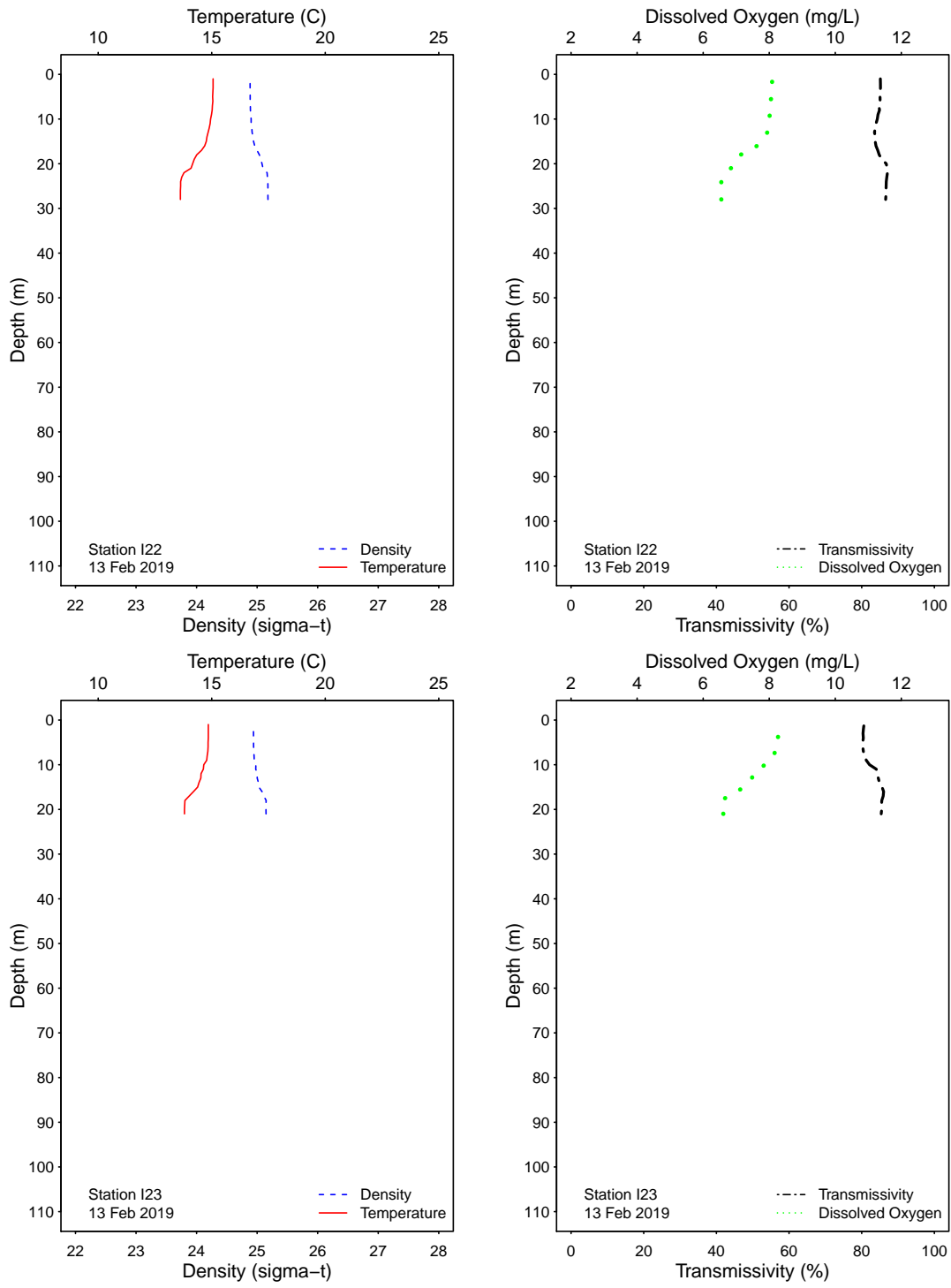


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

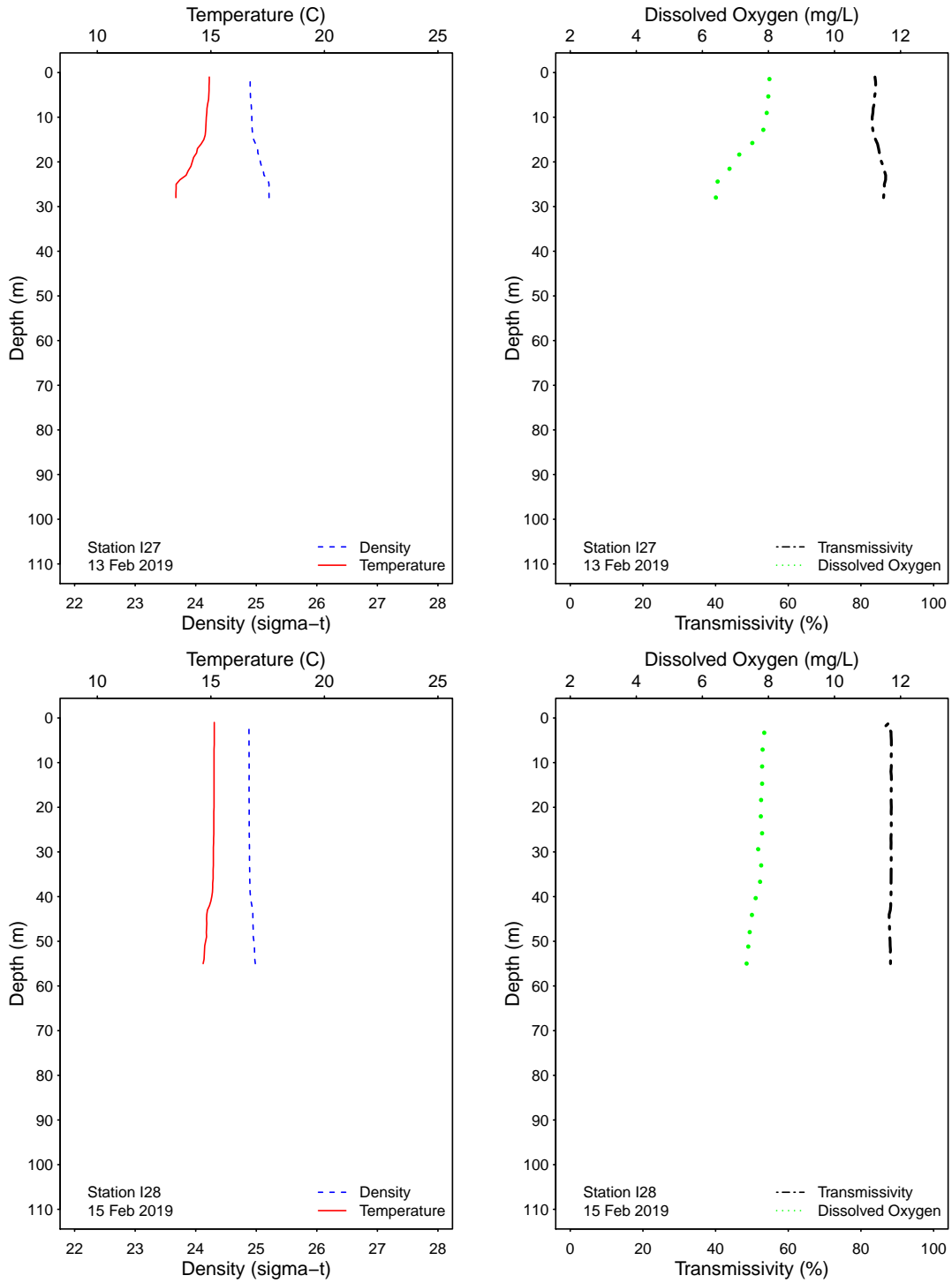


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

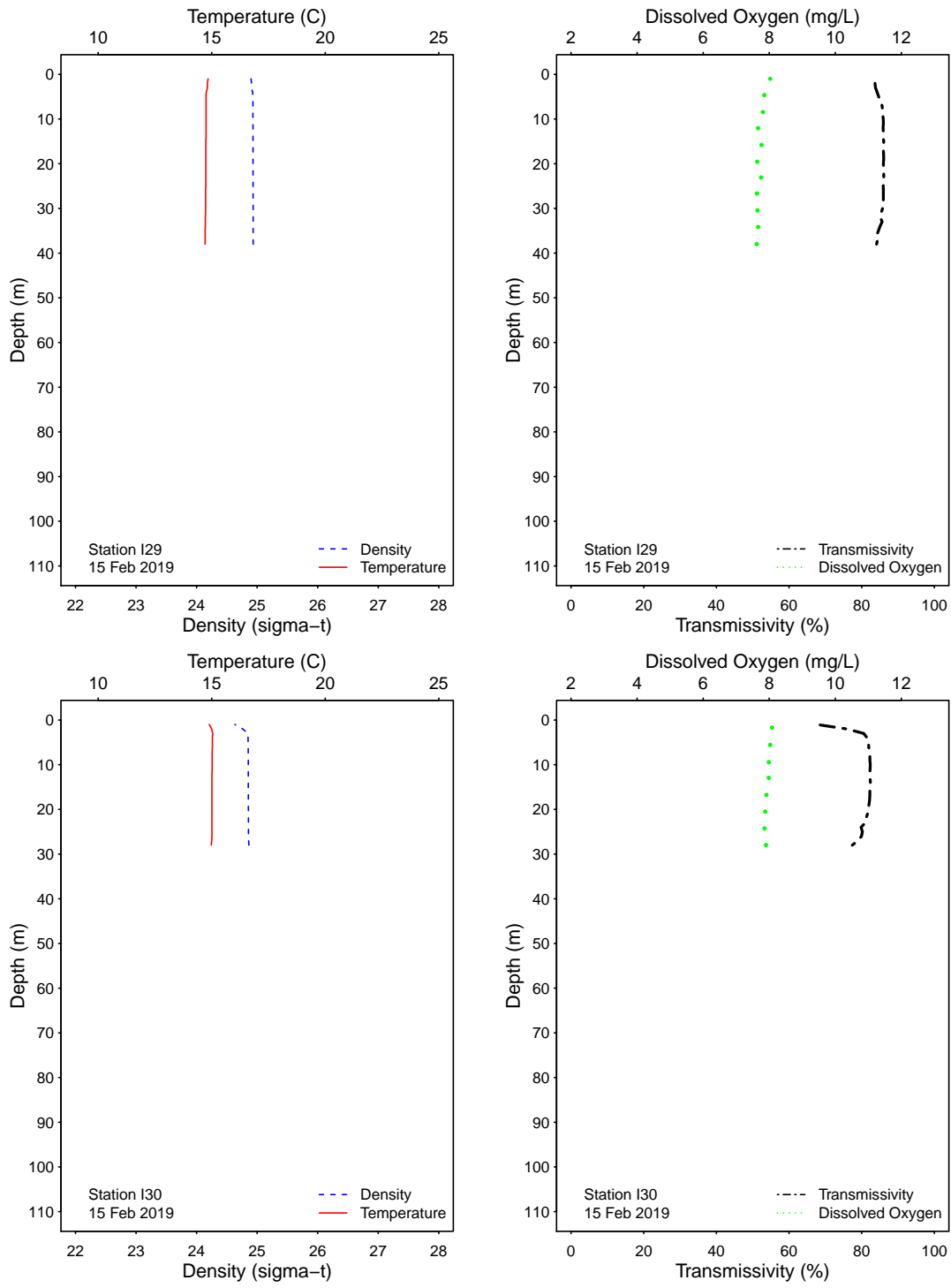


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

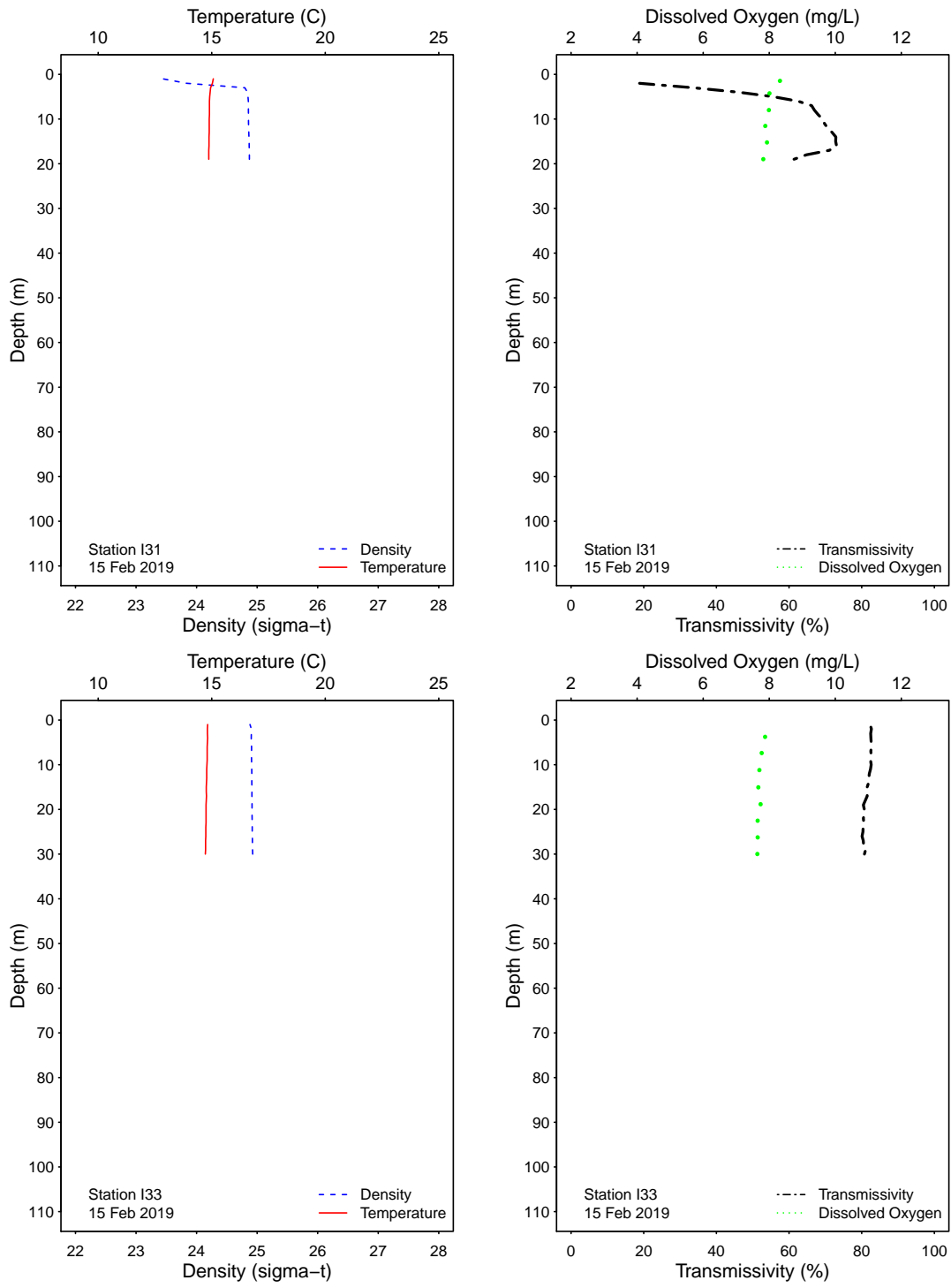


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

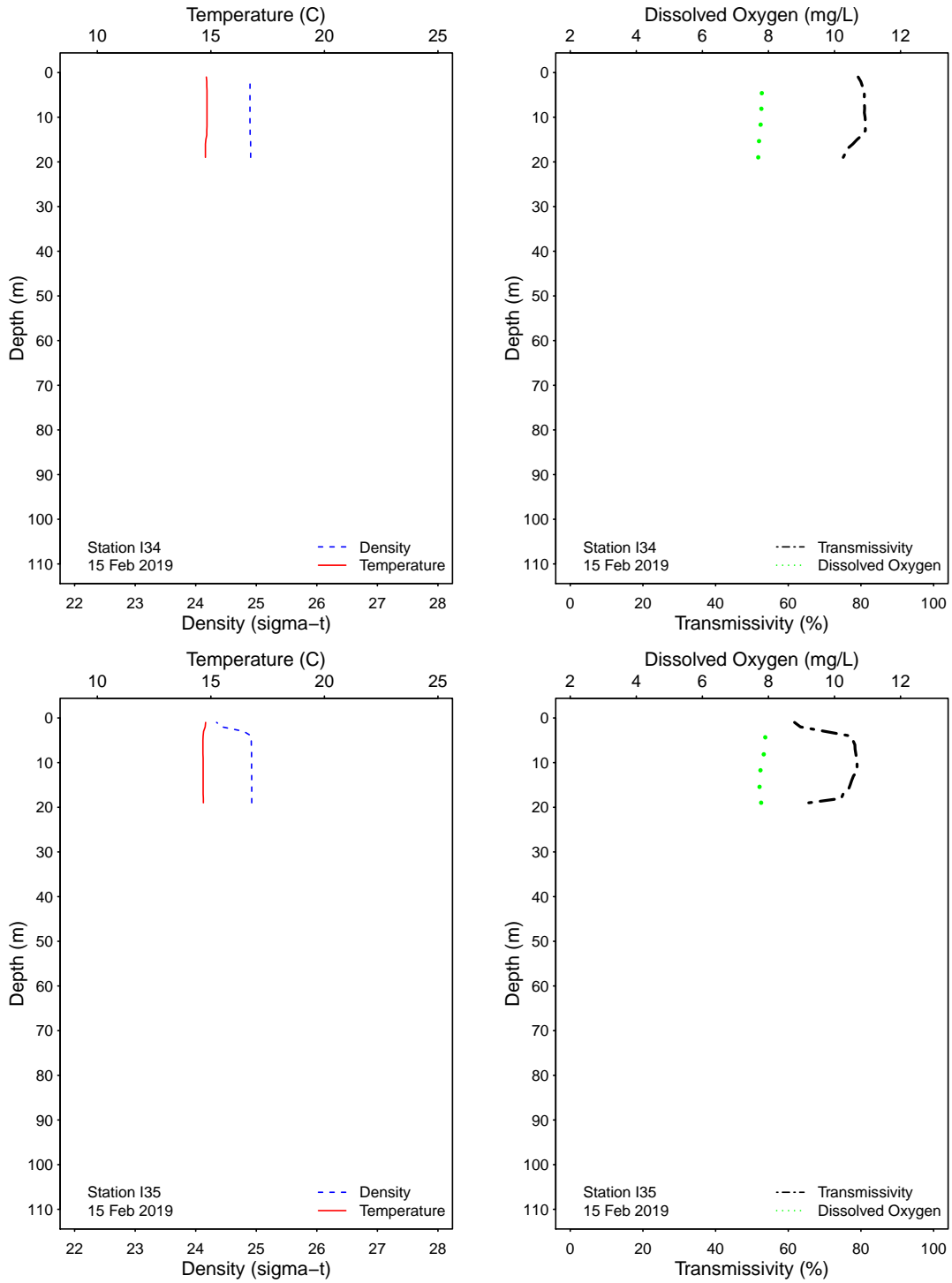


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

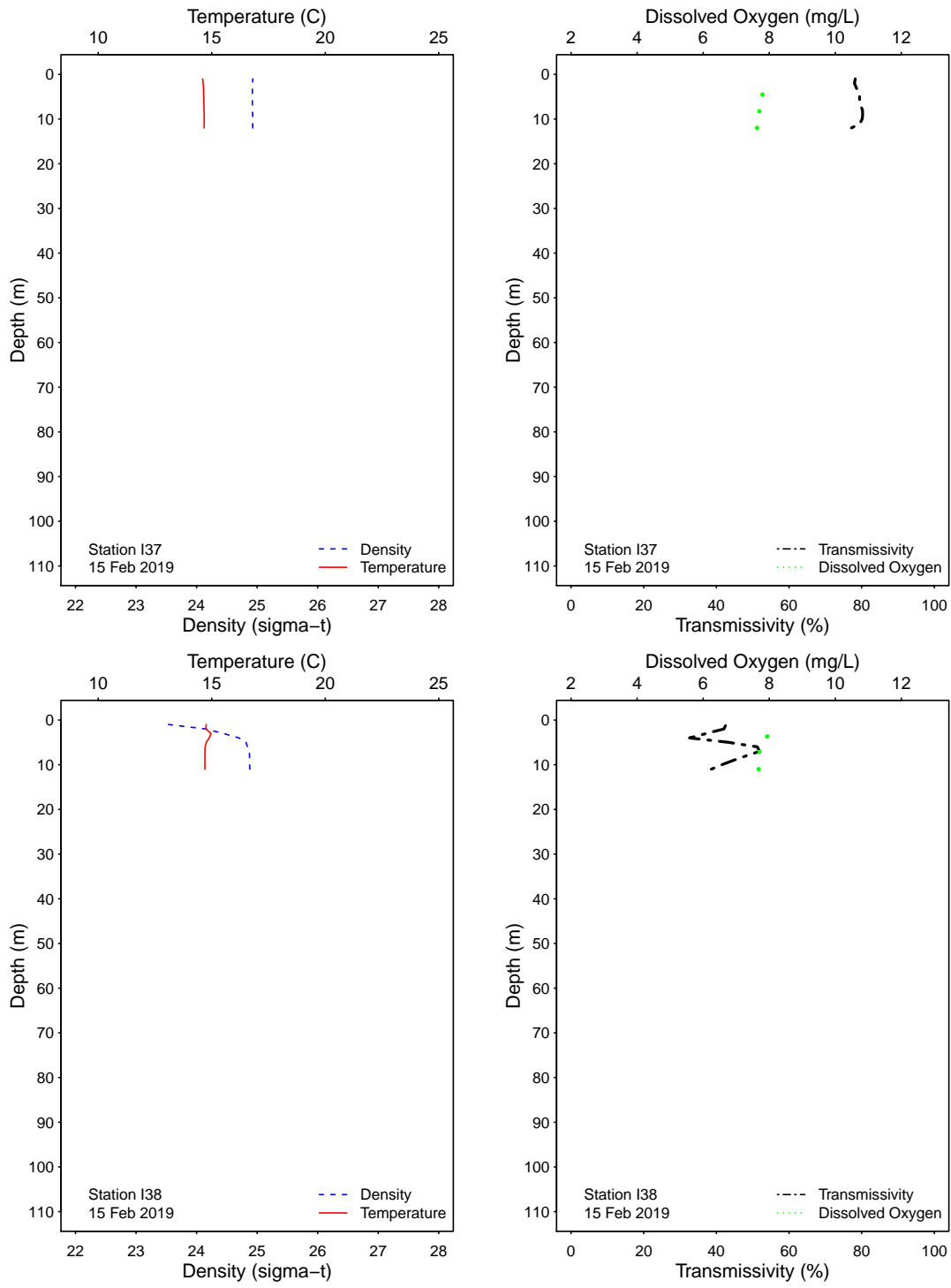


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

APPENDIX A

Quality Assurance

Table A.1

Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected SBOO stations. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
I3	12 Feb 2019	18	AE	LAB DUPLICATE	6e	<2	<2
I8	12 Feb 2019	37	AE	LAB DUPLICATE	94	12e	2e
I9	12 Feb 2019	27	AE	LAB DUPLICATE	52	6e	<2
I12	13 Feb 2019	18	AR	LAB DUPLICATE	26e	2e	<2
I13	13 Feb 2019	18	AR	LAB DUPLICATE	<2	<2	<2
I14	13 Feb 2019	2	AE	LAB DUPLICATE	<2	<2	<2
I16	13 Feb 2019	18	AR	LAB DUPLICATE	4e	<2	<2
I19	07 Feb 2019	6	AR	LAB DUPLICATE	1600e	88	120
I19	11 Feb 2019	6	AE	LAB DUPLICATE	2800e	80e	36e
I19	19 Feb 2019	6	AE	LAB DUPLICATE	400	38e	ns
I19	19 Feb 2019	6	JLT	LAB DUPLICATE	ns	ns	26e
I19	25 Feb 2019	6	JLT	LAB DUPLICATE	<20	8e	66
I20	13 Feb 2019	55	JLT	LAB DUPLICATE	260e	34e	14e
I30	15 Feb 2019	27	JLT	LAB DUPLICATE	4e	<2	<2
I36	15 Feb 2019	11	LMA	FIELD DUPLICATE	9600	1200e	3200e
I36	15 Feb 2019	11	LMA	LAB DUPLICATE	12000	1000	1400e
I40	07 Feb 2019	6	AR	LAB DUPLICATE	1200e	500	220e
I40	11 Feb 2019	6	JT	LAB DUPLICATE	76	6e	10e
I40	19 Feb 2019	6	AE	LAB DUPLICATE	1200	80e	ns
I40	19 Feb 2019	6	JLT	LAB DUPLICATE	ns	ns	140e
I40	25 Feb 2019	6	JLT	LAB DUPLICATE	60e	30e	40
S12	06 Feb 2019		AE	FIELD DUPLICATE	300e	64	60e
S12	06 Feb 2019		AE	LAB DUPLICATE	320e	32e	100
S12	12 Feb 2019		AR	FIELD DUPLICATE	<2	<2	2e
S12	12 Feb 2019		AR	LAB DUPLICATE	2e	<2	<2
S12	19 Feb 2019		JLT	FIELD DUPLICATE	72	40	100e
S12	19 Feb 2019		JLT	LAB DUPLICATE	320e	38e	120e
S12	26 Feb 2019		AE	FIELD DUPLICATE	<20	<2	<2
S12	26 Feb 2019		AE	LAB DUPLICATE	<2	<2	2e

ns = not sampled

ND = no data

