

SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

SOUTH BAY WATER RECLAMATION PLANT

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

AUGUST 2019

REVISED MARCH 2021

Environmental Monitoring and Technical Services
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April 1, 2021

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 revised August 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 revised report is being submitted to address data integrity issues identified to the Board in the letter dated October 22, 2020, subject: "San Diego NPDES Shoreline Sampling Program Report."

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 by Order Nos. R9-2014-0094, R9-2017-0024, R9-2019-0012, 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 Public Utilities Director

PV/rk

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 chromomorphpic 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 USIBWC 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.
- The 11 shore stations (S0, S2, S3, S4, S5, S6, S8, S9, S10, S11, S12) were sampled four times during August (i.e. August 6, 13, 20, 27). Subsequent to initial reporting, samples collected at station S5 on August 13, and at stations S6, S8, and S11 on August 27, were determined to be problematic. The results from these samples have been removed from this report.
- All remaining samples collected in August from stations located north of the border were in compliance with various California Ocean Plan (Ocean Plan) water contact standards (these standards do not apply to stations located in Mexican waters).

- Although the Ocean Plan standards do not apply to this station, 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 the seawater samples collected at station S0 on August 6 and 20.
- 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 August included a sewage-like odor on August 6 at S5, S6, and S10.

➤ **Kelp Bed Water Quality Sampling**

- The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled four times during August (i.e. August 5, 15, 19, 28).
- Each of these stations was in compliance with various Ocean Plan water contact standards.
- Water column temperatures ranged from 13.0 to 22.6°C. The difference between surface and bottom waters ranged from 2.0 to 8.5°C, indicating the water column was stratified at the kelp bed stations during the month.
- Chlorophyll *a* concentrations ranged from 1.05 to 9.73 µg/L, suggesting the presence of phytoplankton blooms during the month.
- Nothing of sewage origin was observed at any of the kelp stations.

➤ **Offshore Water Quality Sampling**

- Quarterly offshore water quality sampling was conducted over three days during the month (i.e., August 12, 13, 14).
- During August, all offshore stations located within State jurisdictional waters (i.e., I12, I14, I16, I18, I22, I23, I33, I36–I38) were in compliance with the relevant Ocean Plan single sample maximum standards.
- Although the Ocean Plan standards do not apply to stations outside State jurisdictional waters, station I5 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 11.3 to 20.2°C at the offshore sites. The difference between surface and bottom waters ranged from 2.9 to 8.3°C, indicating that the water column was stratified at the offshore stations during the month.
- Chlorophyll *a* concentrations ranged from 0.41 to 12.09 µg/L at the offshore sites, suggesting the presence 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

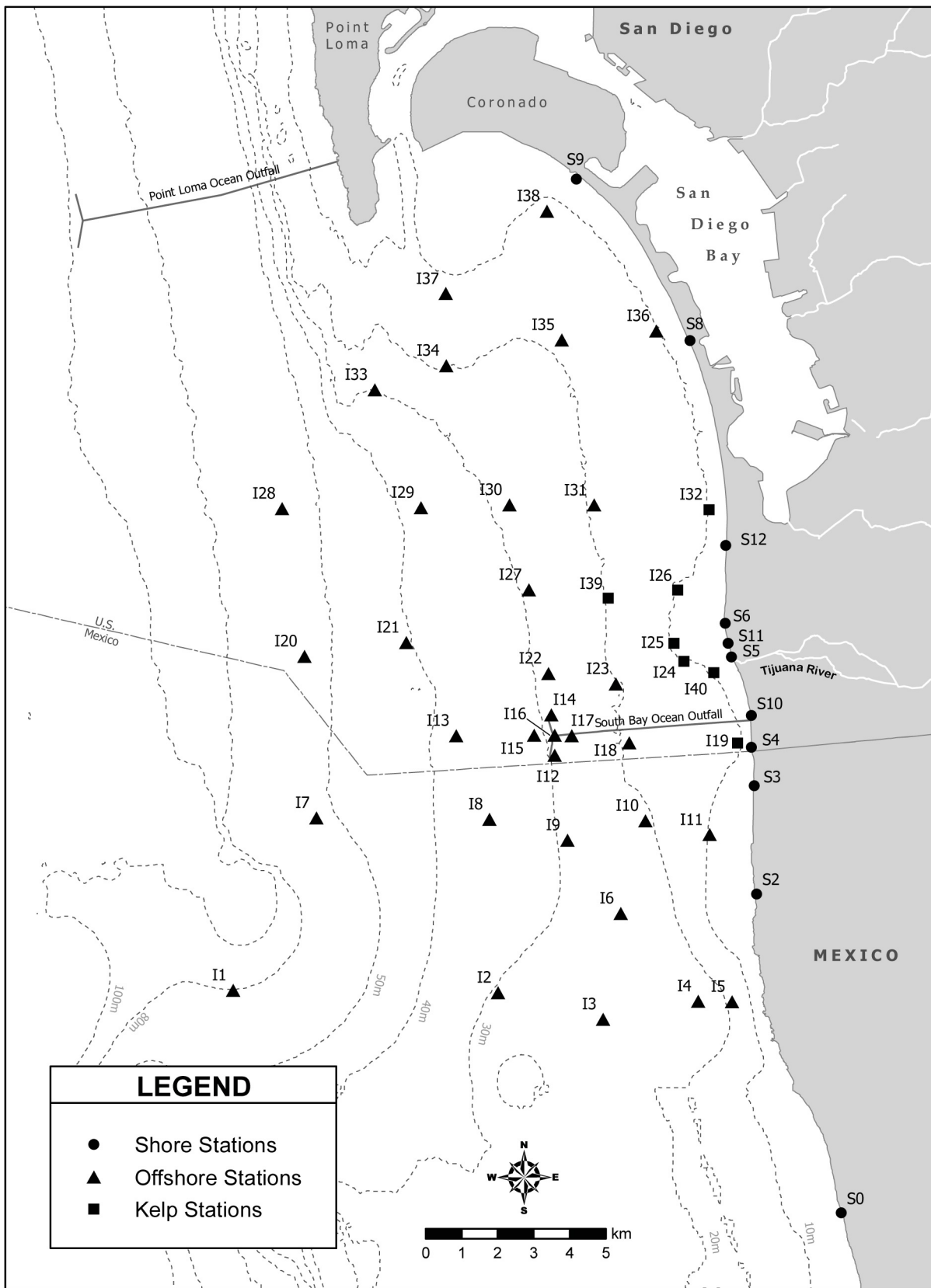


Figure 1.1 Station Map

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 Aug 2019	15	54	20	63	63	8	44	36
02 Aug 2019	15	54	20	63	63	8	44	36
03 Aug 2019	15	54	20	63	63	8	44	36
04 Aug 2019	15	54	20	63	63	8	44	36
05 Aug 2019	15	54	20	63	63	8	44	36
06 Aug 2019	28	75	43	80	80	18	65	32
07 Aug 2019	28	75	43	80	80	18	65	32
08 Aug 2019	25	54	43	63	63	9	43	20
09 Aug 2019	25	54	43	63	63	9	43	20
10 Aug 2019	25	54	43	63	63	9	43	20
11 Aug 2019	25	54	43	63	63	9	43	20
12 Aug 2019	25	54	43	63	63	9	43	20
13 Aug 2019	31	54	24	50	50	11	36	20
14 Aug 2019	31	54	24	50	50	11	36	20
15 Aug 2019	78	89	25	63	63	20	43	20
16 Aug 2019	78	89	25	63	63	20	43	20
17 Aug 2019	78	89	25	63	63	20	43	20
18 Aug 2019	78	89	25	63	63	20	43	20
19 Aug 2019	78	89	25	63	63	20	43	20
20 Aug 2019	56	54	24	32	32	20	36	20
21 Aug 2019	56	54	24	32	32	20	36	20
22 Aug 2019	62	54	25	36	36	43	43	36
23 Aug 2019	62	54	25	36	36	43	43	36
24 Aug 2019	62	54	25	36	36	43	43	36
25 Aug 2019	62	54	25	36	36	43	43	36
26 Aug 2019	62	54	25	36	36	43	43	36
27 Aug 2019	47	42	25	36	32	36	43	32
28 Aug 2019	47	42	25	36	32	36	43	32
29 Aug 2019	47	43	25	20	20	36	43	20
30 Aug 2019	47	43	25	20	20	36	43	20
31 Aug 2019	47	43	25	20	20	36	43	20

* 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 Aug 2019	8	9	2	3	4	3	6	8
02 Aug 2019	8	9	2	3	4	3	6	8
03 Aug 2019	8	9	2	3	4	3	6	8
04 Aug 2019	8	9	2	3	4	3	6	8
05 Aug 2019	8	9	2	3	4	3	6	8
06 Aug 2019	10	6	2	3	4	3	4	6
07 Aug 2019	10	6	2	3	4	3	4	6
08 Aug 2019	8	4	2	3	4	2	3	5
09 Aug 2019	8	4	2	3	4	2	3	5
10 Aug 2019	8	4	2	3	4	2	3	5
11 Aug 2019	8	4	2	3	4	2	3	5
12 Aug 2019	8	4	2	3	4	2	3	5
13 Aug 2019	5	4	3	3	3	2	3	5
14 Aug 2019	5	4	3	3	3	2	3	5
15 Aug 2019	8	5	3	3	4	2	3	4
16 Aug 2019	8	5	3	3	4	2	3	4
17 Aug 2019	8	5	3	3	4	2	3	4
18 Aug 2019	8	5	3	3	4	2	3	4
19 Aug 2019	8	5	3	3	4	2	3	4
20 Aug 2019	6	4	3	3	3	2	2	5
21 Aug 2019	6	4	3	3	3	2	2	5
22 Aug 2019	5	4	3	3	4	2	3	6
23 Aug 2019	5	4	3	3	4	2	3	6
24 Aug 2019	5	4	3	3	4	2	3	6
25 Aug 2019	5	4	3	3	4	2	3	6
26 Aug 2019	5	4	3	3	4	2	3	6
27 Aug 2019	5	3	3	3	3	2	3	5
28 Aug 2019	5	3	3	3	3	2	3	5
29 Aug 2019	5	2	3	2	2	2	3	4
30 Aug 2019	5	2	3	2	2	2	3	4
31 Aug 2019	5	2	3	2	2	2	3	4

* 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 Aug 2019	11	8	15	3	8	3	5	3
02 Aug 2019	11	8	15	3	8	3	5	3
03 Aug 2019	11	8	15	3	8	3	5	3
04 Aug 2019	11	8	15	3	8	3	5	3
05 Aug 2019	11	8	15	3	8	3	5	3
06 Aug 2019	13	5	8	3	6	3	4	3
07 Aug 2019	13	5	8	3	6	3	4	3
08 Aug 2019	12	4	8	3	5	2	3	3
09 Aug 2019	12	4	8	3	5	2	3	3
10 Aug 2019	12	4	8	3	5	2	3	3
11 Aug 2019	12	4	8	3	5	2	3	3
12 Aug 2019	12	4	8	3	5	2	3	3
13 Aug 2019	11	4	6	3	4	2	5	3
14 Aug 2019	11	4	6	3	4	2	5	3
15 Aug 2019	19	4	4	3	4	2	4	2
16 Aug 2019	19	4	4	3	4	2	4	2
17 Aug 2019	19	4	4	3	4	2	4	2
18 Aug 2019	19	4	4	3	4	2	4	2
19 Aug 2019	19	4	4	3	4	2	4	2
20 Aug 2019	11	5	5	3	3	2	3	2
21 Aug 2019	11	5	5	3	3	2	3	2
22 Aug 2019	7	5	3	3	3	2	4	2
23 Aug 2019	7	5	3	3	3	2	4	2
24 Aug 2019	7	5	3	3	3	2	4	2
25 Aug 2019	7	5	3	3	3	2	4	2
26 Aug 2019	7	5	3	3	3	2	4	2
27 Aug 2019	5	7	3	3	4	2	4	2
28 Aug 2019	5	7	3	3	4	2	4	2
29 Aug 2019	5	7	3	3	3	2	4	2
30 Aug 2019	5	7	3	3	3	2	4	2
31 Aug 2019	5	7	3	3	3	2	4	2

* 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
06 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
13 Aug 2019	IC	ns	IC	IC	IC	IC	IC	IC
20 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
27 Aug 2019	IC	IC	ns	ns	IC	IC	ns	IC

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
06 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
13 Aug 2019	IC	ns	IC	IC	IC	IC	IC	IC
20 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
27 Aug 2019	IC	IC	ns	ns	IC	IC	ns	IC

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
06 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
13 Aug 2019	IC	ns	IC	IC	IC	IC	IC	IC
20 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
27 Aug 2019	IC	IC	ns	ns	IC	IC	ns	IC

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
06 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
13 Aug 2019	IC	ns	IC	IC	IC	IC	IC	IC
20 Aug 2019	IC	IC	IC	IC	IC	IC	IC	IC
27 Aug 2019	IC	IC	ns	ns	IC	IC	ns	IC

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 Aug 2019	1037	5800	640	220	0.11
S0	13 Aug 2019	1040	60e	4e	16e	0.07
S0	20 Aug 2019	955	>16000	1000	6400	0.06
S0	27 Aug 2019	1010	140e	10e	20e	0.07
S2	06 Aug 2019	1126	<20	<2	<2	0.10
S2	13 Aug 2019	1140	20e	14e	<2	0.70
S2	20 Aug 2019	1200	20e	<2	14e	0.10
S2	27 Aug 2019	1055	<20	<2	<2	0.10
S3	06 Aug 2019	1155	<2	<2	<2	1.00
S3	13 Aug 2019	1210	80e	2e	<2	0.02
S3	20 Aug 2019	1125	<20	<2	<2	0.10
S3	27 Aug 2019	1040	<20	<2	<2	0.10
S4	06 Aug 2019	958	<200	18e	22e	0.09
S4	13 Aug 2019	907	60e	2e	8e	0.03
S4	20 Aug 2019	949	<20	4e	2e	0.20
S4	27 Aug 2019	1101	<20	4e	<2	0.20
S5	06 Aug 2019	816	<200	2e	2e	0.01
S5	13 Aug 2019		ns	ns	ns	ns
S5	20 Aug 2019	759	<20	2e	8e	0.10
S5	27 Aug 2019	954	<20	<2	<20	0.10
S6	06 Aug 2019	838	<200	<2	<2	0.01
S6	13 Aug 2019	1054	4e	6e	<2	1.50
S6	20 Aug 2019	811	<20	<2	8e	0.10
S6	27 Aug 2019		ns	ns	ns	ns
S8	06 Aug 2019	734	<200	<2	4e	0.01
S8	13 Aug 2019	1213	<20	<2	<2	0.10
S8	20 Aug 2019	734	<2	<2	<2	1.00
S8	27 Aug 2019		ns	ns	ns	ns
S9	06 Aug 2019	717	<200	<2	<2	0.01
S9	13 Aug 2019	1256	<20	<2	<2	0.10
S9	20 Aug 2019	715	<2	<2	<2	1.00
S9	27 Aug 2019	813	<20	<2	8e	0.10
S10	06 Aug 2019	944	<200	2e	<2	0.01
S10	13 Aug 2019	919	<20	2e	<2	0.10
S10	20 Aug 2019	931	<20	<2	<2	0.10
S10	27 Aug 2019	1118	<20	2e	2e	0.10
S11	06 Aug 2019	824	<200	2e	2e	0.01
S11	13 Aug 2019	1038	<20	4e	12e	0.20
S11	20 Aug 2019	804	<20	<2	<2	0.10
S11	27 Aug 2019		ns	ns	ns	ns
S12	06 Aug 2019	755	<20	<2	2e	0.10
S12	13 Aug 2019	1105	<20	6e	2e	0.30
S12	20 Aug 2019	841	<20	8e	4e	0.40
S12	27 Aug 2019	938	<20	4e	2e	0.20

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 Aug 2019	Arrive Time	1037
S0	06 Aug 2019	Weather	Cloudy
S0	06 Aug 2019	Wind Speed (kts)	4.3
S0	06 Aug 2019	Wind Dir	E
S0	06 Aug 2019	Animal Life	>20 Shorebirds
S0	06 Aug 2019	Floatables	None
S0	06 Aug 2019	Water Color	Green
S0	06 Aug 2019	Current Direction	N
S0	06 Aug 2019	Water Temp (C)	19
S0	06 Aug 2019	Wave Height Low (ft)	2
S0	06 Aug 2019	High Tide (ft)	5
S0	06 Aug 2019	High Tide Time	1433
S0	06 Aug 2019	Low Tide (ft)	0.8
S0	06 Aug 2019	Low Tide Time	757
S0	06 Aug 2019	Comments	Kelp; Seagrass; Algae; Debris; 9 Persons; Water turbid; No flow from storm drain
S0	13 Aug 2019	Arrive Time	1040
S0	13 Aug 2019	Weather	Cloudy
S0	13 Aug 2019	Wind Speed (kts)	1.2
S0	13 Aug 2019	Wind Dir	NW
S0	13 Aug 2019	Animal Life	>20 Shorebirds
S0	13 Aug 2019	Floatables	None
S0	13 Aug 2019	Water Color	Green
S0	13 Aug 2019	Current Direction	NW
S0	13 Aug 2019	Water Temp (C)	22.2
S0	13 Aug 2019	Wave Height Low (ft)	2
S0	13 Aug 2019	High Tide (ft)	4.1
S0	13 Aug 2019	High Tide Time	932
S0	13 Aug 2019	Low Tide (ft)	2
S0	13 Aug 2019	Low Tide Time	1437
S0	13 Aug 2019	Comments	Kelp; Seagrass; Algae; Water turbid; 1.0 L/sec water flowing from storm drain
S0	20 Aug 2019	Arrive Time	955
S0	20 Aug 2019	Weather	Sunny
S0	20 Aug 2019	Wind Speed (kts)	3
S0	20 Aug 2019	Wind Dir	NW
S0	20 Aug 2019	Animal Life	None
S0	20 Aug 2019	Floatables	None
S0	20 Aug 2019	Water Color	Blue
S0	20 Aug 2019	Current Direction	N
S0	20 Aug 2019	Water Temp (C)	17
S0	20 Aug 2019	Wave Height Low (ft)	3
S0	20 Aug 2019	High Tide (ft)	4.4
S0	20 Aug 2019	High Tide Time	1246
S0	20 Aug 2019	Low Tide (ft)	1.1
S0	20 Aug 2019	Low Tide Time	625
S0	20 Aug 2019	Comments	Kelp; Algae; Water turbid; 0.5L/sec water flowing from storm drain
S0	27 Aug 2019	Arrive Time	1010
S0	27 Aug 2019	Weather	Sunny
S0	27 Aug 2019	Wind Speed (kts)	3.6
S0	27 Aug 2019	Wind Dir	SW
S0	27 Aug 2019	Animal Life	>20 Seagulls

Station	Date	Parameter	Value
S0	27 Aug 2019	Floatables	None
S0	27 Aug 2019	Water Color	Green
S0	27 Aug 2019	Current Direction	N
S0	27 Aug 2019	Water Temp (C)	17
S0	27 Aug 2019	Wave Height Low (ft)	2
S0	27 Aug 2019	High Tide (ft)	4.1
S0	27 Aug 2019	High Tide Time	817
S0	27 Aug 2019	Low Tide (ft)	2
S0	27 Aug 2019	Low Tide Time	1321
S0	27 Aug 2019	Comments	Kelp; Algae; Water turbid; 0.5L/sec water flowing from storm drain
S2	06 Aug 2019	Arrive Time	1126
S2	06 Aug 2019	Weather	Cloudy
S2	06 Aug 2019	Wind Speed (kts)	4.8
S2	06 Aug 2019	Wind Dir	E
S2	06 Aug 2019	Animal Life	15 Shorebirds
S2	06 Aug 2019	Floatables	None
S2	06 Aug 2019	Water Color	Green
S2	06 Aug 2019	Current Direction	N
S2	06 Aug 2019	Water Temp (C)	20
S2	06 Aug 2019	Wave Height Low (ft)	2
S2	06 Aug 2019	High Tide (ft)	5
S2	06 Aug 2019	High Tide Time	1433
S2	06 Aug 2019	Low Tide (ft)	0.8
S2	06 Aug 2019	Low Tide Time	757
S2	06 Aug 2019	Comments	Kelp; Seagrass; Algae; 10 Persons; Water turbid; No flow from storm drain
S2	13 Aug 2019	Arrive Time	1140
S2	13 Aug 2019	Weather	Cloudy
S2	13 Aug 2019	Wind Speed (kts)	1.1
S2	13 Aug 2019	Wind Dir	NW
S2	13 Aug 2019	Animal Life	15 Shorebirds
S2	13 Aug 2019	Floatables	None
S2	13 Aug 2019	Water Color	Green
S2	13 Aug 2019	Current Direction	NW
S2	13 Aug 2019	Water Temp (C)	22.9
S2	13 Aug 2019	Wave Height Low (ft)	2
S2	13 Aug 2019	High Tide (ft)	4.1
S2	13 Aug 2019	High Tide Time	932
S2	13 Aug 2019	Low Tide (ft)	2
S2	13 Aug 2019	Low Tide Time	1437
S2	13 Aug 2019	Comments	Kelp; Seagrass; Algae; 5 Persons; Water turbid; 0.5 L/sec water flowing from storm drain
S2	20 Aug 2019	Arrive Time	1200
S2	20 Aug 2019	Weather	Sunny
S2	20 Aug 2019	Wind Speed (kts)	3.6
S2	20 Aug 2019	Wind Dir	NW
S2	20 Aug 2019	Animal Life	<5 Shorebirds
S2	20 Aug 2019	Floatables	None
S2	20 Aug 2019	Water Color	Blue
S2	20 Aug 2019	Current Direction	N
S2	20 Aug 2019	Water Temp (C)	17
S2	20 Aug 2019	Wave Height Low (ft)	3
S2	20 Aug 2019	High Tide (ft)	4.4
S2	20 Aug 2019	High Tide Time	1246
S2	20 Aug 2019	Low Tide (ft)	1.1
S2	20 Aug 2019	Low Tide Time	625
S2	20 Aug 2019	Comments	Kelp; Algae; 5 Persons; Water clear; No flow from storm drain

Station	Date	Parameter	Value
S2	27 Aug 2019	Arrive Time	1055
S2	27 Aug 2019	Weather	Sunny
S2	27 Aug 2019	Wind Speed (kts)	1.1
S2	27 Aug 2019	Wind Dir	SW
S2	27 Aug 2019	Animal Life	5 Dogs; >20 Seagulls
S2	27 Aug 2019	Floatables	None
S2	27 Aug 2019	Water Color	Green
S2	27 Aug 2019	Current Direction	N
S2	27 Aug 2019	Water Temp (C)	17
S2	27 Aug 2019	Wave Height Low (ft)	2
S2	27 Aug 2019	High Tide (ft)	4.1
S2	27 Aug 2019	High Tide Time	817
S2	27 Aug 2019	Low Tide (ft)	2
S2	27 Aug 2019	Low Tide Time	1321
S2	27 Aug 2019	Comments	Kelp; Algae; >20 Swimmers; Water turbid; No flow from storm drain
S3	06 Aug 2019	Arrive Time	1155
S3	06 Aug 2019	Weather	Cloudy
S3	06 Aug 2019	Wind Speed (kts)	4.8
S3	06 Aug 2019	Wind Dir	E
S3	06 Aug 2019	Animal Life	5 Shorebirds
S3	06 Aug 2019	Floatables	None
S3	06 Aug 2019	Water Color	Green
S3	06 Aug 2019	Current Direction	N
S3	06 Aug 2019	Water Temp (C)	20
S3	06 Aug 2019	Wave Height Low (ft)	2
S3	06 Aug 2019	High Tide (ft)	5
S3	06 Aug 2019	High Tide Time	1433
S3	06 Aug 2019	Low Tide (ft)	0.8
S3	06 Aug 2019	Low Tide Time	757
S3	06 Aug 2019	Comments	Kelp; Seagrass; Algae; 50 Persons; Water turbid; No flow from storm drain
S3	13 Aug 2019	Arrive Time	1210
S3	13 Aug 2019	Weather	Cloudy
S3	13 Aug 2019	Wind Speed (kts)	1.8
S3	13 Aug 2019	Wind Dir	NW
S3	13 Aug 2019	Animal Life	15 Shorebirds; 5 Dogs
S3	13 Aug 2019	Floatables	None
S3	13 Aug 2019	Water Color	Green
S3	13 Aug 2019	Current Direction	NW
S3	13 Aug 2019	Water Temp (C)	22.8
S3	13 Aug 2019	Wave Height Low (ft)	2
S3	13 Aug 2019	High Tide (ft)	4.1
S3	13 Aug 2019	High Tide Time	932
S3	13 Aug 2019	Low Tide (ft)	2
S3	13 Aug 2019	Low Tide Time	1437
S3	13 Aug 2019	Comments	Kelp; Seagrass; Algae; Water turbid; No flow from storm drain
S3	20 Aug 2019	Arrive Time	1125
S3	20 Aug 2019	Weather	Sunny
S3	20 Aug 2019	Wind Speed (kts)	3.6
S3	20 Aug 2019	Wind Dir	NW
S3	20 Aug 2019	Animal Life	<5 Shorebirds
S3	20 Aug 2019	Floatables	None
S3	20 Aug 2019	Water Color	Blue
S3	20 Aug 2019	Current Direction	N
S3	20 Aug 2019	Water Temp (C)	17
S3	20 Aug 2019	Wave Height Low (ft)	3

Station	Date	Parameter	Value
S3	20 Aug 2019	High Tide (ft)	4.4
S3	20 Aug 2019	High Tide Time	1246
S3	20 Aug 2019	Low Tide (ft)	1.1
S3	20 Aug 2019	Low Tide Time	625
S3	20 Aug 2019	Comments	Kelp; Algae; 1 Person; Water clear; No flow from storm drain
S3	27 Aug 2019	Arrive Time	1040
S3	27 Aug 2019	Weather	Sunny
S3	27 Aug 2019	Wind Speed (kts)	2.1
S3	27 Aug 2019	Wind Dir	SW
S3	27 Aug 2019	Animal Life	1 Dog; >20 Seagulls
S3	27 Aug 2019	Floatables	None
S3	27 Aug 2019	Water Color	Green
S3	27 Aug 2019	Current Direction	N
S3	27 Aug 2019	Water Temp (C)	17
S3	27 Aug 2019	Wave Height Low (ft)	2
S3	27 Aug 2019	High Tide (ft)	4.1
S3	27 Aug 2019	High Tide Time	817
S3	27 Aug 2019	Low Tide (ft)	2
S3	27 Aug 2019	Low Tide Time	1321
S3	27 Aug 2019	Comments	Kelp; Algae; >20 Swimmers; Water turbid; No flow from storm drain
S4	06 Aug 2019	Arrive Time	958
S4	06 Aug 2019	Weather	Partly Cloudy
S4	06 Aug 2019	Wind Speed (kts)	4
S4	06 Aug 2019	Wind Dir	E
S4	06 Aug 2019	Animal Life	70 Godwits; 75 Seagulls
S4	06 Aug 2019	Floatables	Foam; Film
S4	06 Aug 2019	Water Color	Green
S4	06 Aug 2019	Current Direction	E
S4	06 Aug 2019	Water Temp (C)	20
S4	06 Aug 2019	Wave Height Low (ft)	2
S4	06 Aug 2019	High Tide (ft)	5
S4	06 Aug 2019	High Tide Time	1433
S4	06 Aug 2019	Low Tide (ft)	0.8
S4	06 Aug 2019	Low Tide Time	757
S4	06 Aug 2019	Comments	Kelp; Seagrass; Debris; Water clear
S4	13 Aug 2019	Arrive Time	907
S4	13 Aug 2019	Weather	Cloudy
S4	13 Aug 2019	Wind Speed (kts)	5.8
S4	13 Aug 2019	Wind Dir	W
S4	13 Aug 2019	Animal Life	None
S4	13 Aug 2019	Floatables	None
S4	13 Aug 2019	Water Color	Green
S4	13 Aug 2019	Current Direction	N
S4	13 Aug 2019	Water Temp (C)	21.1
S4	13 Aug 2019	Wave Height Low (ft)	2
S4	13 Aug 2019	High Tide (ft)	4.1
S4	13 Aug 2019	High Tide Time	932
S4	13 Aug 2019	Low Tide (ft)	2
S4	13 Aug 2019	Low Tide Time	1437
S4	13 Aug 2019	Comments	Kelp; Seagrass; Debris; Water clear
S4	20 Aug 2019	Arrive Time	949
S4	20 Aug 2019	Weather	Partly Cloudy
S4	20 Aug 2019	Wind Speed (kts)	2.9
S4	20 Aug 2019	Wind Dir	S
S4	20 Aug 2019	Animal Life	200 Godwits; 400 Seagulls
S4	20 Aug 2019	Floatables	None

Station	Date	Parameter	Value
S4	20 Aug 2019	Water Color	Green
S4	20 Aug 2019	Current Direction	S
S4	20 Aug 2019	Water Temp (C)	20.5
S4	20 Aug 2019	Wave Height Low (ft)	3
S4	20 Aug 2019	High Tide (ft)	4.4
S4	20 Aug 2019	High Tide Time	1246
S4	20 Aug 2019	Low Tide (ft)	1.1
S4	20 Aug 2019	Low Tide Time	625
S4	20 Aug 2019	Comments	Kelp; Seagrass; Debris; Water clear
S4	27 Aug 2019	Arrive Time	1101
S4	27 Aug 2019	Weather	Sunny
S4	27 Aug 2019	Wind Speed (kts)	2.4
S4	27 Aug 2019	Wind Dir	W
S4	27 Aug 2019	Animal Life	None
S4	27 Aug 2019	Floatables	None
S4	27 Aug 2019	Water Color	Green
S4	27 Aug 2019	Current Direction	N
S4	27 Aug 2019	Water Temp (C)	22.5
S4	27 Aug 2019	Wave Height Low (ft)	3
S4	27 Aug 2019	High Tide (ft)	4.1
S4	27 Aug 2019	High Tide Time	817
S4	27 Aug 2019	Low Tide (ft)	2
S4	27 Aug 2019	Low Tide Time	1321
S4	27 Aug 2019	Comments	Kelp; Seagrass; Water clear
S5	06 Aug 2019	Arrive Time	816
S5	06 Aug 2019	Weather	Partly Cloudy
S5	06 Aug 2019	Wind Speed (kts)	6
S5	06 Aug 2019	Wind Dir	S
S5	06 Aug 2019	Animal Life	1 Shorebird; 11 Grebes
S5	06 Aug 2019	Floatables	Foam
S5	06 Aug 2019	Water Color	Green
S5	06 Aug 2019	Current Direction	S
S5	06 Aug 2019	Water Temp (C)	22.2
S5	06 Aug 2019	Wave Height Low (ft)	2
S5	06 Aug 2019	High Tide (ft)	5
S5	06 Aug 2019	High Tide Time	1433
S5	06 Aug 2019	Low Tide (ft)	0.8
S5	06 Aug 2019	Low Tide Time	757
S5	06 Aug 2019	Comments	Kelp; Seagrass; Debris; Sewage-like odor; 1 Jogger; 2 Persons; Water clear
S5	20 Aug 2019	Arrive Time	759
S5	20 Aug 2019	Weather	Overcast
S5	20 Aug 2019	Wind Speed (kts)	4
S5	20 Aug 2019	Wind Dir	S
S5	20 Aug 2019	Animal Life	12 Pelicans; 5 Seagulls
S5	20 Aug 2019	Floatables	Foam; Film
S5	20 Aug 2019	Water Color	Green
S5	20 Aug 2019	Current Direction	S
S5	20 Aug 2019	Water Temp (C)	20.4
S5	20 Aug 2019	Wave Height Low (ft)	1
S5	20 Aug 2019	High Tide (ft)	4.4
S5	20 Aug 2019	High Tide Time	1246
S5	20 Aug 2019	Low Tide (ft)	1.1
S5	20 Aug 2019	Low Tide Time	625
S5	20 Aug 2019	Comments	Kelp; Seagrass; Debris; Water clear
S5	27 Aug 2019	Arrive Time	954
S5	27 Aug 2019	Weather	Sunny

Station	Date	Parameter	Value
S5	27 Aug 2019	Wind Speed (kts)	2.7
S5	27 Aug 2019	Wind Dir	W
S5	27 Aug 2019	Animal Life	None
S5	27 Aug 2019	Floatables	None
S5	27 Aug 2019	Water Color	Green
S5	27 Aug 2019	Current Direction	N
S5	27 Aug 2019	Water Temp (C)	23.3
S5	27 Aug 2019	Wave Height Low (ft)	3
S5	27 Aug 2019	High Tide (ft)	4.1
S5	27 Aug 2019	High Tide Time	817
S5	27 Aug 2019	Low Tide (ft)	2
S5	27 Aug 2019	Low Tide Time	1321
S5	27 Aug 2019	Comments	Kelp; Seagrass; Water clear
S6	06 Aug 2019	Arrive Time	838
S6	06 Aug 2019	Weather	Partly Cloudy
S6	06 Aug 2019	Wind Speed (kts)	6.6
S6	06 Aug 2019	Wind Dir	S
S6	06 Aug 2019	Animal Life	7 Godwits
S6	06 Aug 2019	Floatables	Foam; Film
S6	06 Aug 2019	Water Color	Green
S6	06 Aug 2019	Current Direction	S
S6	06 Aug 2019	Water Temp (C)	20.1
S6	06 Aug 2019	Wave Height Low (ft)	2
S6	06 Aug 2019	High Tide (ft)	5
S6	06 Aug 2019	High Tide Time	1433
S6	06 Aug 2019	Low Tide (ft)	0.8
S6	06 Aug 2019	Low Tide Time	757
S6	06 Aug 2019	Comments	Kelp; Seagrass; Debris; Sewage-like odor; 3 Persons; Water clear
S6	13 Aug 2019	Arrive Time	1054
S6	13 Aug 2019	Weather	Cloudy
S6	13 Aug 2019	Wind Speed (kts)	4.2
S6	13 Aug 2019	Wind Dir	W
S6	13 Aug 2019	Animal Life	None
S6	13 Aug 2019	Floatables	None
S6	13 Aug 2019	Water Color	Green
S6	13 Aug 2019	Current Direction	N
S6	13 Aug 2019	Water Temp (C)	20.8
S6	13 Aug 2019	Wave Height Low (ft)	3
S6	13 Aug 2019	High Tide (ft)	4.1
S6	13 Aug 2019	High Tide Time	932
S6	13 Aug 2019	Low Tide (ft)	2
S6	13 Aug 2019	Low Tide Time	1437
S6	13 Aug 2019	Comments	Kelp; Seagrass; 1 Person; 1 Surfer; Water clear
S6	20 Aug 2019	Arrive Time	811
S6	20 Aug 2019	Weather	Overcast
S6	20 Aug 2019	Wind Speed (kts)	4.8
S6	20 Aug 2019	Wind Dir	S
S6	20 Aug 2019	Animal Life	1 Dog
S6	20 Aug 2019	Floatables	Foam; Film
S6	20 Aug 2019	Water Color	Green
S6	20 Aug 2019	Current Direction	S
S6	20 Aug 2019	Water Temp (C)	19.2
S6	20 Aug 2019	Wave Height Low (ft)	2
S6	20 Aug 2019	High Tide (ft)	4.4
S6	20 Aug 2019	High Tide Time	1246
S6	20 Aug 2019	Low Tide (ft)	1.1
S6	20 Aug 2019	Low Tide Time	625

Station	Date	Parameter	Value
S6	20 Aug 2019	Comments	Kelp; Seagrass; Debris; 4 Persons; Water clear
S8	06 Aug 2019	Arrive Time	734
S8	06 Aug 2019	Weather	Partly Cloudy
S8	06 Aug 2019	Wind Speed (kts)	4.8
S8	06 Aug 2019	Wind Dir	E
S8	06 Aug 2019	Animal Life	20 Godwits; 45 Grebes; 8 Seagulls
S8	06 Aug 2019	Floatables	Foam
S8	06 Aug 2019	Water Color	Green
S8	06 Aug 2019	Current Direction	E
S8	06 Aug 2019	Water Temp (C)	20.1
S8	06 Aug 2019	Wave Height Low (ft)	1
S8	06 Aug 2019	High Tide (ft)	4.4
S8	06 Aug 2019	High Tide Time	131
S8	06 Aug 2019	Low Tide (ft)	0.8
S8	06 Aug 2019	Low Tide Time	757
S8	06 Aug 2019	Comments	Kelp; Seagrass; 11 Persons; Water clear
S8	13 Aug 2019	Arrive Time	1213
S8	13 Aug 2019	Weather	Sunny
S8	13 Aug 2019	Wind Speed (kts)	3.3
S8	13 Aug 2019	Wind Dir	W
S8	13 Aug 2019	Animal Life	None
S8	13 Aug 2019	Floatables	None
S8	13 Aug 2019	Water Color	Green
S8	13 Aug 2019	Current Direction	N
S8	13 Aug 2019	Water Temp (C)	21
S8	13 Aug 2019	Wave Height Low (ft)	3
S8	13 Aug 2019	High Tide (ft)	4.1
S8	13 Aug 2019	High Tide Time	932
S8	13 Aug 2019	Low Tide (ft)	2
S8	13 Aug 2019	Low Tide Time	1437
S8	13 Aug 2019	Comments	Kelp; Seagrass; 18 Persons; 3 Swimmers; Water clear
S8	20 Aug 2019	Arrive Time	734
S8	20 Aug 2019	Weather	Overcast
S8	20 Aug 2019	Wind Speed (kts)	1.1
S8	20 Aug 2019	Wind Dir	S
S8	20 Aug 2019	Animal Life	6 Godwits; 30 Seagulls
S8	20 Aug 2019	Floatables	Foam
S8	20 Aug 2019	Water Color	Green
S8	20 Aug 2019	Current Direction	S
S8	20 Aug 2019	Water Temp (C)	20.1
S8	20 Aug 2019	Wave Height Low (ft)	1
S8	20 Aug 2019	High Tide (ft)	4.4
S8	20 Aug 2019	High Tide Time	1246
S8	20 Aug 2019	Low Tide (ft)	1.1
S8	20 Aug 2019	Low Tide Time	625
S8	20 Aug 2019	Comments	Kelp; Seagrass; 7 Persons; Water clear
S9	06 Aug 2019	Arrive Time	717
S9	06 Aug 2019	Weather	Partly Cloudy
S9	06 Aug 2019	Wind Speed (kts)	5.6
S9	06 Aug 2019	Wind Dir	S
S9	06 Aug 2019	Animal Life	9 Godwits
S9	06 Aug 2019	Floatables	Foam
S9	06 Aug 2019	Water Color	Green
S9	06 Aug 2019	Current Direction	S
S9	06 Aug 2019	Water Temp (C)	18
S9	06 Aug 2019	Wave Height Low (ft)	2
S9	06 Aug 2019	High Tide (ft)	4.4

Station	Date	Parameter	Value
S9	06 Aug 2019	High Tide Time	131
S9	06 Aug 2019	Low Tide (ft)	0.8
S9	06 Aug 2019	Low Tide Time	757
S9	06 Aug 2019	Comments	Kelp; Seagrass; 8 Persons; 1 Swimmer; Water clear
S9	13 Aug 2019	Arrive Time	1256
S9	13 Aug 2019	Weather	Sunny
S9	13 Aug 2019	Wind Speed (kts)	2.2
S9	13 Aug 2019	Wind Dir	W
S9	13 Aug 2019	Animal Life	None
S9	13 Aug 2019	Floatables	None
S9	13 Aug 2019	Water Color	Green
S9	13 Aug 2019	Current Direction	N
S9	13 Aug 2019	Water Temp (C)	21.7
S9	13 Aug 2019	Wave Height Low (ft)	2
S9	13 Aug 2019	High Tide (ft)	4.1
S9	13 Aug 2019	High Tide Time	932
S9	13 Aug 2019	Low Tide (ft)	2
S9	13 Aug 2019	Low Tide Time	1437
S9	13 Aug 2019	Comments	Kelp; Seagrass; 3 Joggers; 28 Persons; 6 Surfers; 4 Swimmers; Water clear
S9	20 Aug 2019	Arrive Time	715
S9	20 Aug 2019	Weather	Overcast
S9	20 Aug 2019	Wind Speed (kts)	2.3
S9	20 Aug 2019	Wind Dir	S
S9	20 Aug 2019	Animal Life	4 Godwits; 6 Seagulls
S9	20 Aug 2019	Floatables	Foam
S9	20 Aug 2019	Water Color	Green
S9	20 Aug 2019	Current Direction	S
S9	20 Aug 2019	Water Temp (C)	20.1
S9	20 Aug 2019	Wave Height Low (ft)	1
S9	20 Aug 2019	High Tide (ft)	4.4
S9	20 Aug 2019	High Tide Time	1246
S9	20 Aug 2019	Low Tide (ft)	1.1
S9	20 Aug 2019	Low Tide Time	625
S9	20 Aug 2019	Comments	Kelp; Seagrass; 3 Persons; 2 Surfers; Water clear
S9	27 Aug 2019	Arrive Time	813
S9	27 Aug 2019	Weather	Cloudy
S9	27 Aug 2019	Wind Speed (kts)	1.2
S9	27 Aug 2019	Wind Dir	W
S9	27 Aug 2019	Animal Life	None
S9	27 Aug 2019	Floatables	None
S9	27 Aug 2019	Water Color	Green
S9	27 Aug 2019	Current Direction	N
S9	27 Aug 2019	Water Temp (C)	22.4
S9	27 Aug 2019	Wave Height Low (ft)	2
S9	27 Aug 2019	High Tide (ft)	4.1
S9	27 Aug 2019	High Tide Time	817
S9	27 Aug 2019	Low Tide (ft)	2
S9	27 Aug 2019	Low Tide Time	1321
S9	27 Aug 2019	Comments	Kelp; Seagrass; 3 Joggers; Water clear
S10	06 Aug 2019	Arrive Time	944
S10	06 Aug 2019	Weather	Partly Cloudy
S10	06 Aug 2019	Wind Speed (kts)	7.1
S10	06 Aug 2019	Wind Dir	E
S10	06 Aug 2019	Animal Life	1 Godwit; 1 Grebe; 1 Seagull
S10	06 Aug 2019	Floatables	Foam; Film
S10	06 Aug 2019	Water Color	Green

Station	Date	Parameter	Value
S10	06 Aug 2019	Current Direction	E
S10	06 Aug 2019	Water Temp (C)	20.3
S10	06 Aug 2019	Wave Height Low (ft)	2
S10	06 Aug 2019	High Tide (ft)	5
S10	06 Aug 2019	High Tide Time	1433
S10	06 Aug 2019	Low Tide (ft)	0.8
S10	06 Aug 2019	Low Tide Time	757
S10	06 Aug 2019	Comments	Kelp; Seagrass; Debris; Sewage-like odor; Water clear
S10	13 Aug 2019	Arrive Time	919
S10	13 Aug 2019	Weather	Cloudy
S10	13 Aug 2019	Wind Speed (kts)	4.2
S10	13 Aug 2019	Wind Dir	W
S10	13 Aug 2019	Animal Life	None
S10	13 Aug 2019	Floatables	None
S10	13 Aug 2019	Water Color	Green
S10	13 Aug 2019	Current Direction	N
S10	13 Aug 2019	Water Temp (C)	20.8
S10	13 Aug 2019	Wave Height Low (ft)	3
S10	13 Aug 2019	High Tide (ft)	4.1
S10	13 Aug 2019	High Tide Time	932
S10	13 Aug 2019	Low Tide (ft)	2
S10	13 Aug 2019	Low Tide Time	1437
S10	13 Aug 2019	Comments	Kelp; Seagrass; Debris; Water clear
S10	20 Aug 2019	Arrive Time	931
S10	20 Aug 2019	Weather	Partly Cloudy
S10	20 Aug 2019	Wind Speed (kts)	3.8
S10	20 Aug 2019	Wind Dir	E
S10	20 Aug 2019	Animal Life	12 Godwits; 5 Horses
S10	20 Aug 2019	Floatables	None
S10	20 Aug 2019	Water Color	Green
S10	20 Aug 2019	Current Direction	E
S10	20 Aug 2019	Water Temp (C)	20.7
S10	20 Aug 2019	Wave Height Low (ft)	3
S10	20 Aug 2019	High Tide (ft)	4.4
S10	20 Aug 2019	High Tide Time	1246
S10	20 Aug 2019	Low Tide (ft)	1.1
S10	20 Aug 2019	Low Tide Time	625
S10	20 Aug 2019	Comments	Kelp; Seagrass; Debris; 5 Persons; Water clear
S10	27 Aug 2019	Arrive Time	1118
S10	27 Aug 2019	Weather	Sunny
S10	27 Aug 2019	Wind Speed (kts)	1.8
S10	27 Aug 2019	Wind Dir	W
S10	27 Aug 2019	Animal Life	None
S10	27 Aug 2019	Floatables	None
S10	27 Aug 2019	Water Color	Green
S10	27 Aug 2019	Current Direction	N
S10	27 Aug 2019	Water Temp (C)	23.2
S10	27 Aug 2019	Wave Height Low (ft)	3
S10	27 Aug 2019	High Tide (ft)	4.1
S10	27 Aug 2019	High Tide Time	817
S10	27 Aug 2019	Low Tide (ft)	2
S10	27 Aug 2019	Low Tide Time	1321
S10	27 Aug 2019	Comments	Kelp; Seagrass; Water clear
S11	06 Aug 2019	Arrive Time	824
S11	06 Aug 2019	Weather	Partly Cloudy
S11	06 Aug 2019	Wind Speed (kts)	6.6
S11	06 Aug 2019	Wind Dir	S

Station	Date	Parameter	Value
S11	06 Aug 2019	Animal Life	7 Seagulls
S11	06 Aug 2019	Floatables	Foam; Film
S11	06 Aug 2019	Water Color	Green
S11	06 Aug 2019	Current Direction	S
S11	06 Aug 2019	Water Temp (C)	18.5
S11	06 Aug 2019	Wave Height Low (ft)	2
S11	06 Aug 2019	High Tide (ft)	5
S11	06 Aug 2019	High Tide Time	1433
S11	06 Aug 2019	Low Tide (ft)	0.8
S11	06 Aug 2019	Low Tide Time	757
S11	06 Aug 2019	Comments	Kelp; Seagrass; Debris; 1 Jogger; Water clear
S11	13 Aug 2019	Arrive Time	1038
S11	13 Aug 2019	Weather	Cloudy
S11	13 Aug 2019	Wind Speed (kts)	3.8
S11	13 Aug 2019	Wind Dir	W
S11	13 Aug 2019	Animal Life	None
S11	13 Aug 2019	Floatables	None
S11	13 Aug 2019	Water Color	Green
S11	13 Aug 2019	Current Direction	N
S11	13 Aug 2019	Water Temp (C)	20.4
S11	13 Aug 2019	Wave Height Low (ft)	3
S11	13 Aug 2019	High Tide (ft)	4.1
S11	13 Aug 2019	High Tide Time	932
S11	13 Aug 2019	Low Tide (ft)	2
S11	13 Aug 2019	Low Tide Time	1437
S11	13 Aug 2019	Comments	Kelp; Seagrass; Water clear
S11	20 Aug 2019	Arrive Time	804
S11	20 Aug 2019	Weather	Overcast
S11	20 Aug 2019	Wind Speed (kts)	3.6
S11	20 Aug 2019	Wind Dir	S
S11	20 Aug 2019	Animal Life	3 Godwits
S11	20 Aug 2019	Floatables	Foam; Film
S11	20 Aug 2019	Water Color	Green
S11	20 Aug 2019	Current Direction	S
S11	20 Aug 2019	Water Temp (C)	18.9
S11	20 Aug 2019	Wave Height Low (ft)	2
S11	20 Aug 2019	High Tide (ft)	4.4
S11	20 Aug 2019	High Tide Time	1246
S11	20 Aug 2019	Low Tide (ft)	1.1
S11	20 Aug 2019	Low Tide Time	625
S11	20 Aug 2019	Comments	Kelp; Seagrass; Debris; 2 Persons; Water clear
S12	06 Aug 2019	Arrive Time	755
S12	06 Aug 2019	Weather	Partly Cloudy
S12	06 Aug 2019	Wind Speed (kts)	3.8
S12	06 Aug 2019	Wind Dir	E
S12	06 Aug 2019	Animal Life	5 Dogs; 1 Seagull
S12	06 Aug 2019	Floatables	Foam
S12	06 Aug 2019	Water Color	Green
S12	06 Aug 2019	Current Direction	E
S12	06 Aug 2019	Water Temp (C)	21
S12	06 Aug 2019	Wave Height Low (ft)	2
S12	06 Aug 2019	High Tide (ft)	4.4
S12	06 Aug 2019	High Tide Time	131
S12	06 Aug 2019	Low Tide (ft)	0.8
S12	06 Aug 2019	Low Tide Time	757
S12	06 Aug 2019	Comments	Kelp; Seagrass; 9 Persons; 1 Fisherman; Water clear
S12	13 Aug 2019	Arrive Time	1105

Station	Date	Parameter	Value
S12	13 Aug 2019	Weather	Partly Cloudy
S12	13 Aug 2019	Wind Speed (kts)	3.8
S12	13 Aug 2019	Wind Dir	W
S12	13 Aug 2019	Animal Life	None
S12	13 Aug 2019	Floatables	None
S12	13 Aug 2019	Water Color	Green
S12	13 Aug 2019	Current Direction	N
S12	13 Aug 2019	Water Temp (C)	21
S12	13 Aug 2019	Wave Height Low (ft)	2
S12	13 Aug 2019	High Tide (ft)	4.1
S12	13 Aug 2019	High Tide Time	932
S12	13 Aug 2019	Low Tide (ft)	2
S12	13 Aug 2019	Low Tide Time	1437
S12	13 Aug 2019	Comments	Seagrass; 2 Joggers; 2 Persons; Water clear
S12	20 Aug 2019	Arrive Time	841
S12	20 Aug 2019	Weather	Overcast
S12	20 Aug 2019	Wind Speed (kts)	5.8
S12	20 Aug 2019	Wind Dir	E
S12	20 Aug 2019	Animal Life	13 Godwits; 11 Seagulls
S12	20 Aug 2019	Floatables	Foam; Film
S12	20 Aug 2019	Water Color	Green
S12	20 Aug 2019	Current Direction	E
S12	20 Aug 2019	Water Temp (C)	21.2
S12	20 Aug 2019	Wave Height Low (ft)	2
S12	20 Aug 2019	High Tide (ft)	4.4
S12	20 Aug 2019	High Tide Time	1246
S12	20 Aug 2019	Low Tide (ft)	1.1
S12	20 Aug 2019	Low Tide Time	625
S12	20 Aug 2019	Comments	Kelp; Seagrass; Debris; 5 Persons; 2 Fishermen; Water clear
S12	27 Aug 2019	Arrive Time	938
S12	27 Aug 2019	Weather	Sunny
S12	27 Aug 2019	Wind Speed (kts)	0.6
S12	27 Aug 2019	Wind Dir	W
S12	27 Aug 2019	Animal Life	None
S12	27 Aug 2019	Floatables	None
S12	27 Aug 2019	Water Color	Green
S12	27 Aug 2019	Current Direction	N
S12	27 Aug 2019	Water Temp (C)	22.5
S12	27 Aug 2019	Wave Height Low (ft)	3
S12	27 Aug 2019	High Tide (ft)	4.1
S12	27 Aug 2019	High Tide Time	817
S12	27 Aug 2019	Low Tide (ft)	2
S12	27 Aug 2019	Low Tide Time	1321
S12	27 Aug 2019	Comments	Kelp; Seagrass; 1 Person; Water clear

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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 Aug 2019	33	4	3	8	7	3	70
02 Aug 2019	33	4	3	8	7	3	70
03 Aug 2019	33	4	3	8	7	3	70
04 Aug 2019	33	4	3	8	7	3	70
05 Aug 2019	26	5	4	6	6	3	46
06 Aug 2019	26	5	4	6	6	3	46
07 Aug 2019	16	5	4	3	5	3	18
08 Aug 2019	16	5	4	3	5	3	18
09 Aug 2019	16	5	4	3	5	3	18
10 Aug 2019	16	5	4	3	5	3	18
11 Aug 2019	16	5	4	3	5	3	18
12 Aug 2019	16	5	4	3	5	3	18
13 Aug 2019	16	5	4	3	5	3	18
14 Aug 2019	15*	4*	3*	2*	2*	3*	11*
15 Aug 2019	13	5	5	4	5	5	10
16 Aug 2019	13	5	5	4	5	5	10
17 Aug 2019	13	5	5	4	5	5	10
18 Aug 2019	13	5	5	4	5	5	10
19 Aug 2019	17	8	6	5	6	4	12
20 Aug 2019	17	8	6	5	6	4	12
21 Aug 2019	17	8	6	5	6	4	12
22 Aug 2019	17	8	6	5	6	4	12
23 Aug 2019	27	11	8	6	8	3	13
24 Aug 2019	27	11	8	6	8	3	13
25 Aug 2019	27	11	8	6	8	3	13
26 Aug 2019	27	11	8	6	8	3	13
27 Aug 2019	27	11	8	6	8	3	13
28 Aug 2019	25	17	9	7	10	3	14
29 Aug 2019	17	28	12	10	15	3	12
30 Aug 2019	17	28	12	10	15	3	12
31 Aug 2019	17	28	12	10	15	3	12

* 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 Aug 2019	7	2	2	3	2	2	8
02 Aug 2019	7	2	2	3	2	2	8
03 Aug 2019	7	2	2	3	2	2	8
04 Aug 2019	7	2	2	3	2	2	8
05 Aug 2019	5	2	2	3	2	2	6
06 Aug 2019	5	2	2	3	2	2	6
07 Aug 2019	3	2	2	2	2	2	2
08 Aug 2019	3	2	2	2	2	2	2
09 Aug 2019	3	2	2	2	2	2	2
10 Aug 2019	3	2	2	2	2	2	2
11 Aug 2019	3	2	2	2	2	2	2
12 Aug 2019	3	2	2	2	2	2	2
13 Aug 2019	3	2	2	2	2	2	2
14 Aug 2019	4*	2*	2*	2*	2*	2*	3*
15 Aug 2019	3	2	2	2	2	2	2
16 Aug 2019	3	2	2	2	2	2	2
17 Aug 2019	3	2	2	2	2	2	2
18 Aug 2019	3	2	2	2	2	2	2
19 Aug 2019	4	2	2	2	2	2	2
20 Aug 2019	4	2	2	2	2	2	2
21 Aug 2019	4	2	2	2	2	2	2
22 Aug 2019	4	2	2	2	2	2	2
23 Aug 2019	4	2	2	2	2	2	2
24 Aug 2019	4	2	2	2	2	2	2
25 Aug 2019	4	2	2	2	2	2	2
26 Aug 2019	4	2	2	2	2	2	2
27 Aug 2019	4	2	2	2	2	2	2
28 Aug 2019	4	2	2	2	2	2	2
29 Aug 2019	2	2	2	2	2	2	2
30 Aug 2019	2	2	2	2	2	2	2
31 Aug 2019	2	2	2	2	2	2	2

* 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 Aug 2019	5	2	2	2	2	2	7
02 Aug 2019	5	2	2	2	2	2	7
03 Aug 2019	5	2	2	2	2	2	7
04 Aug 2019	5	2	2	2	2	2	7
05 Aug 2019	4	2	2	2	2	2	5
06 Aug 2019	4	2	2	2	2	2	5
07 Aug 2019	3	2	2	2	2	2	3
08 Aug 2019	3	2	2	2	2	2	3
09 Aug 2019	3	2	2	2	2	2	3
10 Aug 2019	3	2	2	2	2	2	3
11 Aug 2019	3	2	2	2	2	2	3
12 Aug 2019	3	2	2	2	2	2	3
13 Aug 2019	3	2	2	2	2	2	3
14 Aug 2019	3*	2*	2*	2*	2*	2*	3*
15 Aug 2019	3	2	2	2	2	2	3
16 Aug 2019	3	2	2	2	2	2	3
17 Aug 2019	3	2	2	2	2	2	3
18 Aug 2019	3	2	2	2	2	2	3
19 Aug 2019	2	2	2	2	2	2	3
20 Aug 2019	2	2	2	2	2	2	3
21 Aug 2019	2	2	2	2	2	2	3
22 Aug 2019	2	2	2	2	2	2	3
23 Aug 2019	3	2	2	2	2	2	3
24 Aug 2019	3	2	2	2	2	2	3
25 Aug 2019	3	2	2	2	2	2	3
26 Aug 2019	3	2	2	2	2	2	3
27 Aug 2019	3	2	2	2	2	2	3
28 Aug 2019	3	2	2	2	2	2	3
29 Aug 2019	2	2	2	2	2	2	2
30 Aug 2019	2	2	2	2	2	2	2
31 Aug 2019	2	2	2	2	2	2	2

* 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
05 Aug 2019	IC	IC	IC	IC	IC	IC	IC
15 Aug 2019	IC	IC	IC	IC	IC	IC	IC
19 Aug 2019	IC	IC	IC	IC	IC	IC	IC
28 Aug 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
05 Aug 2019	IC	IC	IC	IC	IC	IC	IC
15 Aug 2019	IC	IC	IC	IC	IC	IC	IC
19 Aug 2019	IC	IC	IC	IC	IC	IC	IC
28 Aug 2019	IC	IC	IC	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
05 Aug 2019	IC	IC	IC	IC	IC	IC	IC
15 Aug 2019	IC	IC	IC	IC	IC	IC	IC
19 Aug 2019	IC	IC	IC	IC	IC	IC	IC
28 Aug 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
05 Aug 2019	IC	IC	IC	IC	IC	IC	IC
15 Aug 2019	IC	IC	IC	IC	IC	IC	IC
19 Aug 2019	IC	IC	IC	IC	IC	IC	IC
28 Aug 2019	IC	IC	IC	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	05 Aug 2019	1028	2	<2	<2	<2	1.00	17.5	69.38	8.4	33.61	8.2
I19	05 Aug 2019	1028	6	<20	<2	<2	0.10	14.7	66.19	8.9	33.57	8.3
I19	05 Aug 2019	1028	11	6e	<2	2e	0.33	14.0	63.91	7.9	33.59	8.2
I19	15 Aug 2019	1053	2	4e	<2	<2	0.50	15.7	65.57	8.3	33.59	8.1
I19	15 Aug 2019	1053	6	<2	<2	<2	1.00	14.0	66.01	6.6	33.59	8.0
I19	15 Aug 2019	1053	11	<20	<2	<2	0.10	13.8	53.87	5.5	33.59	8.0
I19	19 Aug 2019	1027	2	<20	<2	2e	0.10	19.3	50.50	9.1	33.55	8.2
I19	19 Aug 2019	1027	6	60e	8e	2e	0.13	16.4	69.61	7.9	33.59	8.1
I19	19 Aug 2019	1027	11	60e	4e	2e	0.07	15.2	67.10	7.3	33.55	8.1
I19	28 Aug 2019	1022	2	<20	2e	4e	0.10	22.3	68.84	8.2	33.67	8.3
I19	28 Aug 2019	1022	6	20e	<2	<2	0.10	16.4	68.16	5.6	33.59	8.0
I19	28 Aug 2019	1022	11	<20	<2	<2	0.10	15.1	72.79	4.8	33.54	7.9
I24	05 Aug 2019	1047	2	<2	<2	<2	1.00	18.1	69.92	9.3	33.62	8.3
I24	05 Aug 2019	1047	6	<20	<2	<2	0.10	14.4	67.52	7.6	33.59	8.2
I24	05 Aug 2019	1047	11	<20	<2	<2	0.10	13.8	75.82	6.7	33.58	8.2
I24	15 Aug 2019	1118	2	<20	<2	<2	0.10	16.0	69.12	8.3	33.62	8.1
I24	15 Aug 2019	1118	6	4e	2e	<2	0.50	14.3	63.55	8.4	33.57	8.1
I24	15 Aug 2019	1118	11	<20	<2	<2	0.10	13.8	68.37	6.0	33.56	8.0
I24	19 Aug 2019	1047	2	<20	<2	<2	0.10	18.9	65.16	9.4	33.58	8.2
I24	19 Aug 2019	1047	6	60e	<2	4e	0.03	15.9	62.21	9.1	33.55	8.2
I24	19 Aug 2019	1047	11	40e	<2	<2	0.05	14.3	68.39	6.1	33.57	8.0
I24	28 Aug 2019	1039	2	<20	<2	<2	0.10	22.3	70.20	9.5	33.66	8.3
I24	28 Aug 2019	1039	6	<200	<2	<2	0.01	17.7	68.75	8.1	33.63	8.2
I24	28 Aug 2019	1039	11	<20	<2	<2	0.10	15.2	72.38	4.9	33.53	7.9
I25	05 Aug 2019	1054	2	<2	<2	<2	1.00	18.4	73.23	9.6	33.66	8.3
I25	05 Aug 2019	1054	6	<2	<2	<2	1.00	14.8	67.31	8.2	33.59	8.3
I25	05 Aug 2019	1054	9	<20	<2	2e	0.10	13.7	76.92	6.9	33.59	8.2
I25	15 Aug 2019	1128	2	<20	<2	<2	0.10	16.9	66.81	8.7	33.63	8.1
I25	15 Aug 2019	1128	6	<20	<2	<2	0.10	14.3	64.11	8.3	33.58	8.1
I25	15 Aug 2019	1128	9	<2	<2	<2	1.00	13.9	70.48	6.1	33.58	8.0
I25	19 Aug 2019	1054	2	<2	<2	<2	1.00	19.4	68.54	9.8	33.58	8.3
I25	19 Aug 2019	1054	6	18e	<2	2e	0.11	16.4	65.25	9.6	33.56	8.2
I25	19 Aug 2019	1054	9	20e	<2	2e	0.10	15.2	67.14	8.8	33.55	8.2
I25	28 Aug 2019	1046	2	<20	<2	<2	0.10	22.4	69.68	9.4	33.66	8.3
I25	28 Aug 2019	1046	6	<20	<2	<2	0.10	17.8	69.63	8.1	33.59	8.2
I25	28 Aug 2019	1046	9	<2	<2	<2	1.00	16.1	72.38	5.8	33.60	8.0
I26	05 Aug 2019	1103	2	<2	<2	<2	1.00	18.7	72.83	9.5	33.66	8.3
I26	05 Aug 2019	1103	6	<2	<2	<2	1.00	14.8	70.12	8.8	33.59	8.3
I26	05 Aug 2019	1103	9	<2	<2	<2	1.00	13.7	74.01	7.0	33.57	8.3

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I26	15 Aug 2019	1141	2	<20	<2	<2	0.10	17.1	66.78	8.8	33.62	8.1
I26	15 Aug 2019	1141	6	<20	<2	<2	0.10	14.4	70.69	6.7	33.59	8.1
I26	15 Aug 2019	1141	9	<20	<2	<2	0.10	14.0	73.83	6.6	33.58	8.0
I26	19 Aug 2019	1103	2	<2	<2	<2	1.00	18.8	66.13	9.5	33.57	8.2
I26	19 Aug 2019	1103	6	<20	<2	<2	0.10	18.1	62.94	8.3	33.56	8.2
I26	19 Aug 2019	1103	9	20e	<2	<2	0.10	15.4	73.90	6.4	33.56	8.0
I26	28 Aug 2019	1054	2	<20	<2	<2	0.10	20.7	69.50	9.5	33.70	8.3
I26	28 Aug 2019	1054	6	<20	<2	<2	0.10	16.4	75.70	8.0	33.56	8.1
I26	28 Aug 2019	1054	9	<20	<2	<2	0.10	15.5	78.56	6.6	33.55	8.0
I32	05 Aug 2019	1114	2	<2	<2	<2	1.00	18.9	69.50	8.7	33.63	8.3
I32	05 Aug 2019	1114	6	<2	<2	<2	1.00	14.4	69.74	8.3	33.57	8.2
I32	05 Aug 2019	1114	9	<2	<2	<2	1.00	13.8	66.01	7.4	33.58	8.2
I32	15 Aug 2019	1153	2	<20	2e	<2	0.10	16.1	65.22	8.5	33.67	8.1
I32	15 Aug 2019	1153	6	<20	<2	<2	0.10	14.1	70.17	6.5	33.59	8.0
I32	15 Aug 2019	1153	9	<200	<2	<2	0.01	14.0	69.27	6.3	33.59	8.0
I32	19 Aug 2019	1114	2	<20	<2	<2	0.10	19.0	61.07	9.4	33.58	8.2
I32	19 Aug 2019	1114	6	<2	<2	<2	1.00	18.5	62.04	9.0	33.58	8.2
I32	19 Aug 2019	1114	9	<20	2e	2e	0.10	14.7	63.02	6.1	33.67	8.0
I32	28 Aug 2019	1106	2	<20	<2	<2	0.10	22.6	66.53	9.5	33.67	8.3
I32	28 Aug 2019	1106	6	<20	2e	<2	0.10	17.5	70.74	7.6	33.59	8.1
I32	28 Aug 2019	1106	9	<20	<2	<2	0.10	15.8	77.57	6.7	33.54	8.1
I39	05 Aug 2019	1011	2	<2	<2	<2	1.00	18.2	74.41	9.6	33.67	8.3
I39	05 Aug 2019	1011	12	<2	<2	<2	1.00	13.2	74.26	7.1	33.59	8.2
I39	05 Aug 2019	1011	18	<2	2e	<2	1.00	13.0	78.71	6.3	33.59	8.2
I39	15 Aug 2019	1034	2	<20	<2	<2	0.10	18.0	71.64	9.9	33.62	8.2
I39	15 Aug 2019	1034	12	2e	<2	<2	1.00	13.5	73.48	6.8	33.59	8.1
I39	15 Aug 2019	1034	18	<20	<2	<2	0.10	13.0	77.59	4.3	33.61	7.9
I39	19 Aug 2019	1006	2	2e	<2	<2	1.00	18.5	67.08	9.3	33.57	8.2
I39	19 Aug 2019	1006	12	2e	<2	2e	1.00	13.8	73.47	5.5	33.58	8.0
I39	19 Aug 2019	1006	18	2e	<2	<2	1.00	13.4	80.01	5.3	33.59	7.9
I39	28 Aug 2019	1004	2	<2	<2	<2	1.00	22.0	75.37	8.9	33.68	8.3
I39	28 Aug 2019	1004	12	<2	<2	<2	1.00	15.0	80.72	7.6	33.52	8.1
I39	28 Aug 2019	1004	18	<2	<2	<2	1.00	13.6	84.08	6.5	33.51	8.0
I40	05 Aug 2019	1039	2	<2	<2	<2	1.00	17.3	68.23	8.6	33.67	8.2
I40	05 Aug 2019	1039	6	<20	<2	<2	0.10	14.4	61.13	8.2	33.59	8.2
I40	05 Aug 2019	1039	9	<2	<2	<2	1.00	14.1	63.67	7.5	33.59	8.2
I40	15 Aug 2019	1108	2	<2	<2	<2	1.00	15.6	65.60	8.6	33.61	8.1
I40	15 Aug 2019	1108	6	<20	<2	<2	0.10	14.3	67.06	7.9	33.58	8.1
I40	15 Aug 2019	1108	9	<2	2e	<2	1.00	13.8	63.46	6.1	33.59	8.0
I40	19 Aug 2019	1039	2	<20	<2	<2	0.10	19.0	57.19	8.7	33.55	8.2
I40	19 Aug 2019	1039	6	40e	<2	4e	0.05	16.2	63.59	7.7	33.57	8.1
I40	19 Aug 2019	1039	9	10e	2e	<2	0.20	15.0	66.31	7.9	33.56	8.1
I40	28 Aug 2019	1032	2	<20	<2	<2	0.10	22.4	67.44	9.1	33.67	8.3
I40	28 Aug 2019	1032	6	<2	<2	<2	1.00	16.8	65.58	5.2	33.62	8.0
I40	28 Aug 2019	1032	9	<20	<2	<2	0.10	15.3	66.83	4.3	33.55	7.8

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	05 Aug 2019	Depth (m)	11
I19	05 Aug 2019	Arrive Time	1028
I19	05 Aug 2019	Depart Time	1031
I19	05 Aug 2019	Air Temp (C)	19
I19	05 Aug 2019	Weather	Haze
I19	05 Aug 2019	Visibility (mi)	8
I19	05 Aug 2019	Wind Speed (kts)	4
I19	05 Aug 2019	Wind Dir	SW
I19	05 Aug 2019	Water Color	Brownish-Green
I19	05 Aug 2019	Wave Ht Low (ft)	3
I19	05 Aug 2019	Wave Period (sec)	13
I19	05 Aug 2019	Sea State	Calm
I19	05 Aug 2019	High Tide (ft)	6.33
I19	05 Aug 2019	High Tide Time	2106
I19	05 Aug 2019	Low Tide (ft)	-0.71
I19	05 Aug 2019	Low Tide Time	405
I19	05 Aug 2019	Comments	none
I19	15 Aug 2019	Depth (m)	11
I19	15 Aug 2019	Arrive Time	1053
I19	15 Aug 2019	Depart Time	1100
I19	15 Aug 2019	Air Temp (C)	18
I19	15 Aug 2019	Weather	Overcast
I19	15 Aug 2019	Visibility (mi)	7
I19	15 Aug 2019	Wind Speed (kts)	6
I19	15 Aug 2019	Wind Dir	SW
I19	15 Aug 2019	Water Color	Green
I19	15 Aug 2019	Wave Ht Low (ft)	3
I19	15 Aug 2019	Wave Period (sec)	13
I19	15 Aug 2019	Sea State	Wind ripples
I19	15 Aug 2019	High Tide (ft)	6.33
I19	15 Aug 2019	High Tide Time	2106
I19	15 Aug 2019	Low Tide (ft)	-0.71
I19	15 Aug 2019	Low Tide Time	405
I19	15 Aug 2019	Comments	none
I19	19 Aug 2019	Depth (m)	11
I19	19 Aug 2019	Arrive Time	1027
I19	19 Aug 2019	Depart Time	1029
I19	19 Aug 2019	Air Temp (C)	19
I19	19 Aug 2019	Weather	Partly Cloudy
I19	19 Aug 2019	Visibility (mi)	9
I19	19 Aug 2019	Wind Speed (kts)	7
I19	19 Aug 2019	Wind Dir	SW
I19	19 Aug 2019	Water Color	Brown
I19	19 Aug 2019	Wave Ht Low (ft)	1
I19	19 Aug 2019	Wave Period (sec)	13
I19	19 Aug 2019	Sea State	Calm
I19	19 Aug 2019	High Tide (ft)	6.33
I19	19 Aug 2019	High Tide Time	2106
I19	19 Aug 2019	Low Tide (ft)	-0.71
I19	19 Aug 2019	Low Tide Time	405
I19	19 Aug 2019	Comments	none
I19	28 Aug 2019	Depth (m)	12
I19	28 Aug 2019	Arrive Time	1022

Station	Date	Parameter	Value
I19	28 Aug 2019	Depart Time	1027
I19	28 Aug 2019	Air Temp (C)	20
I19	28 Aug 2019	Weather	Overcast
I19	28 Aug 2019	Visibility (mi)	7
I19	28 Aug 2019	Wind Speed (kts)	7
I19	28 Aug 2019	Wind Dir	SE
I19	28 Aug 2019	Water Color	Green
I19	28 Aug 2019	Wave Ht Low (ft)	4
I19	28 Aug 2019	Wave Period (sec)	13
I19	28 Aug 2019	Sea State	Light chop
I19	28 Aug 2019	High Tide (ft)	6.33
I19	28 Aug 2019	High Tide Time	2106
I19	28 Aug 2019	Low Tide (ft)	-0.71
I19	28 Aug 2019	Low Tide Time	405
I19	28 Aug 2019	Comments	none
I24	05 Aug 2019	Depth (m)	10
I24	05 Aug 2019	Arrive Time	1047
I24	05 Aug 2019	Depart Time	1049
I24	05 Aug 2019	Air Temp (C)	19
I24	05 Aug 2019	Weather	Haze
I24	05 Aug 2019	Visibility (mi)	8
I24	05 Aug 2019	Wind Speed (kts)	8
I24	05 Aug 2019	Wind Dir	SW
I24	05 Aug 2019	Water Color	Brownish-Green
I24	05 Aug 2019	Wave Ht Low (ft)	3
I24	05 Aug 2019	Wave Period (sec)	13
I24	05 Aug 2019	Sea State	Calm
I24	05 Aug 2019	High Tide (ft)	6.33
I24	05 Aug 2019	High Tide Time	2106
I24	05 Aug 2019	Low Tide (ft)	-0.71
I24	05 Aug 2019	Low Tide Time	405
I24	05 Aug 2019	Comments	none
I24	15 Aug 2019	Depth (m)	12
I24	15 Aug 2019	Arrive Time	1118
I24	15 Aug 2019	Depart Time	1123
I24	15 Aug 2019	Air Temp (C)	18
I24	15 Aug 2019	Weather	Partly Cloudy
I24	15 Aug 2019	Visibility (mi)	8
I24	15 Aug 2019	Wind Speed (kts)	4
I24	15 Aug 2019	Wind Dir	S
I24	15 Aug 2019	Water Color	Green
I24	15 Aug 2019	Wave Ht Low (ft)	3
I24	15 Aug 2019	Wave Period (sec)	13
I24	15 Aug 2019	Sea State	Light chop
I24	15 Aug 2019	High Tide (ft)	6.33
I24	15 Aug 2019	High Tide Time	2106
I24	15 Aug 2019	Low Tide (ft)	-0.71
I24	15 Aug 2019	Low Tide Time	405
I24	15 Aug 2019	Comments	none
I24	19 Aug 2019	Depth (m)	10
I24	19 Aug 2019	Arrive Time	1047
I24	19 Aug 2019	Depart Time	1049
I24	19 Aug 2019	Air Temp (C)	20
I24	19 Aug 2019	Weather	Partly Cloudy
I24	19 Aug 2019	Visibility (mi)	9
I24	19 Aug 2019	Wind Speed (kts)	8
I24	19 Aug 2019	Wind Dir	SW
I24	19 Aug 2019	Water Color	Greenish-Brown

Station	Date	Parameter	Value
I24	19 Aug 2019	Wave Ht Low (ft)	1
I24	19 Aug 2019	Wave Period (sec)	13
I24	19 Aug 2019	Sea State	Calm
I24	19 Aug 2019	High Tide (ft)	6.33
I24	19 Aug 2019	High Tide Time	2106
I24	19 Aug 2019	Low Tide (ft)	-0.71
I24	19 Aug 2019	Low Tide Time	405
I24	19 Aug 2019	Comments	none
I24	28 Aug 2019	Depth (m)	12
I24	28 Aug 2019	Arrive Time	1039
I24	28 Aug 2019	Depart Time	1044
I24	28 Aug 2019	Air Temp (C)	20
I24	28 Aug 2019	Weather	Overcast
I24	28 Aug 2019	Visibility (mi)	7
I24	28 Aug 2019	Wind Speed (kts)	6
I24	28 Aug 2019	Wind Dir	E
I24	28 Aug 2019	Water Color	Green
I24	28 Aug 2019	Wave Ht Low (ft)	4
I24	28 Aug 2019	Wave Period (sec)	13
I24	28 Aug 2019	Sea State	Light chop
I24	28 Aug 2019	High Tide (ft)	6.33
I24	28 Aug 2019	High Tide Time	2106
I24	28 Aug 2019	Low Tide (ft)	-0.71
I24	28 Aug 2019	Low Tide Time	405
I24	28 Aug 2019	Comments	none
I25	05 Aug 2019	Depth (m)	9
I25	05 Aug 2019	Arrive Time	1054
I25	05 Aug 2019	Depart Time	1056
I25	05 Aug 2019	Air Temp (C)	19
I25	05 Aug 2019	Weather	Haze
I25	05 Aug 2019	Visibility (mi)	8
I25	05 Aug 2019	Wind Speed (kts)	7
I25	05 Aug 2019	Wind Dir	SW
I25	05 Aug 2019	Water Color	Brownish-Green
I25	05 Aug 2019	Wave Ht Low (ft)	3
I25	05 Aug 2019	Wave Period (sec)	13
I25	05 Aug 2019	Sea State	Calm
I25	05 Aug 2019	High Tide (ft)	6.33
I25	05 Aug 2019	High Tide Time	2106
I25	05 Aug 2019	Low Tide (ft)	-0.71
I25	05 Aug 2019	Low Tide Time	405
I25	05 Aug 2019	Comments	none
I25	15 Aug 2019	Depth (m)	9
I25	15 Aug 2019	Arrive Time	1128
I25	15 Aug 2019	Depart Time	1133
I25	15 Aug 2019	Air Temp (C)	18
I25	15 Aug 2019	Weather	Partly Cloudy
I25	15 Aug 2019	Visibility (mi)	8
I25	15 Aug 2019	Wind Speed (kts)	9
I25	15 Aug 2019	Wind Dir	SW
I25	15 Aug 2019	Water Color	Green
I25	15 Aug 2019	Wave Ht Low (ft)	3
I25	15 Aug 2019	Wave Period (sec)	13
I25	15 Aug 2019	Sea State	Light chop
I25	15 Aug 2019	High Tide (ft)	6.33
I25	15 Aug 2019	High Tide Time	2106
I25	15 Aug 2019	Low Tide (ft)	-0.71
I25	15 Aug 2019	Low Tide Time	405

Station	Date	Parameter	Value
I25	15 Aug 2019	Comments	none
I25	19 Aug 2019	Depth (m)	9
I25	19 Aug 2019	Arrive Time	1054
I25	19 Aug 2019	Depart Time	1056
I25	19 Aug 2019	Air Temp (C)	19
I25	19 Aug 2019	Weather	Partly Cloudy
I25	19 Aug 2019	Visibility (mi)	9
I25	19 Aug 2019	Wind Speed (kts)	7
I25	19 Aug 2019	Wind Dir	SW
I25	19 Aug 2019	Water Color	Greenish-Brown
I25	19 Aug 2019	Wave Ht Low (ft)	1
I25	19 Aug 2019	Wave Period (sec)	13
I25	19 Aug 2019	Sea State	Calm
I25	19 Aug 2019	High Tide (ft)	6.33
I25	19 Aug 2019	High Tide Time	2106
I25	19 Aug 2019	Low Tide (ft)	-0.71
I25	19 Aug 2019	Low Tide Time	405
I25	19 Aug 2019	Comments	none
I25	28 Aug 2019	Depth (m)	10
I25	28 Aug 2019	Arrive Time	1046
I25	28 Aug 2019	Depart Time	1051
I25	28 Aug 2019	Air Temp (C)	20
I25	28 Aug 2019	Weather	Overcast
I25	28 Aug 2019	Visibility (mi)	7
I25	28 Aug 2019	Wind Speed (kts)	7
I25	28 Aug 2019	Wind Dir	SE
I25	28 Aug 2019	Water Color	Green
I25	28 Aug 2019	Wave Ht Low (ft)	4
I25	28 Aug 2019	Wave Period (sec)	13
I25	28 Aug 2019	Sea State	Light chop
I25	28 Aug 2019	High Tide (ft)	6.33
I25	28 Aug 2019	High Tide Time	2106
I25	28 Aug 2019	Low Tide (ft)	-0.71
I25	28 Aug 2019	Low Tide Time	405
I25	28 Aug 2019	Comments	none
I26	05 Aug 2019	Depth (m)	10
I26	05 Aug 2019	Arrive Time	1103
I26	05 Aug 2019	Depart Time	1105
I26	05 Aug 2019	Air Temp (C)	19
I26	05 Aug 2019	Weather	Haze
I26	05 Aug 2019	Visibility (mi)	8
I26	05 Aug 2019	Wind Speed (kts)	8
I26	05 Aug 2019	Wind Dir	SW
I26	05 Aug 2019	Water Color	Brownish-Green
I26	05 Aug 2019	Wave Ht Low (ft)	3
I26	05 Aug 2019	Wave Period (sec)	13
I26	05 Aug 2019	Sea State	Calm
I26	05 Aug 2019	High Tide (ft)	6.33
I26	05 Aug 2019	High Tide Time	2106
I26	05 Aug 2019	Low Tide (ft)	-0.71
I26	05 Aug 2019	Low Tide Time	405
I26	05 Aug 2019	Comments	none
I26	15 Aug 2019	Depth (m)	10
I26	15 Aug 2019	Arrive Time	1141
I26	15 Aug 2019	Depart Time	1146
I26	15 Aug 2019	Air Temp (C)	18
I26	15 Aug 2019	Weather	Partly Cloudy

Station	Date	Parameter	Value
I26	15 Aug 2019	Visibility (mi)	8
I26	15 Aug 2019	Wind Speed (kts)	6
I26	15 Aug 2019	Wind Dir	SW
I26	15 Aug 2019	Water Color	Green
I26	15 Aug 2019	Wave Ht Low (ft)	4
I26	15 Aug 2019	Wave Period (sec)	13
I26	15 Aug 2019	Sea State	Light chop
I26	15 Aug 2019	High Tide (ft)	6.33
I26	15 Aug 2019	High Tide Time	2106
I26	15 Aug 2019	Low Tide (ft)	-0.71
I26	15 Aug 2019	Low Tide Time	405
I26	15 Aug 2019	Comments	none
I26	19 Aug 2019	Depth (m)	9
I26	19 Aug 2019	Arrive Time	1103
I26	19 Aug 2019	Depart Time	1106
I26	19 Aug 2019	Air Temp (C)	19
I26	19 Aug 2019	Weather	Partly Cloudy
I26	19 Aug 2019	Visibility (mi)	9
I26	19 Aug 2019	Wind Speed (kts)	9
I26	19 Aug 2019	Wind Dir	SW
I26	19 Aug 2019	Water Color	Greenish-Brown
I26	19 Aug 2019	Wave Ht Low (ft)	1
I26	19 Aug 2019	Wave Period (sec)	13
I26	19 Aug 2019	Sea State	Calm
I26	19 Aug 2019	High Tide (ft)	6.33
I26	19 Aug 2019	High Tide Time	2106
I26	19 Aug 2019	Low Tide (ft)	-0.71
I26	19 Aug 2019	Low Tide Time	405
I26	19 Aug 2019	Comments	none
I26	28 Aug 2019	Depth (m)	10
I26	28 Aug 2019	Arrive Time	1054
I26	28 Aug 2019	Depart Time	1101
I26	28 Aug 2019	Air Temp (C)	20
I26	28 Aug 2019	Weather	Overcast
I26	28 Aug 2019	Visibility (mi)	8
I26	28 Aug 2019	Wind Speed (kts)	6
I26	28 Aug 2019	Wind Dir	SE
I26	28 Aug 2019	Water Color	Brownish-Green
I26	28 Aug 2019	Wave Ht Low (ft)	4
I26	28 Aug 2019	Wave Period (sec)	13
I26	28 Aug 2019	Sea State	Light chop
I26	28 Aug 2019	High Tide (ft)	6.33
I26	28 Aug 2019	High Tide Time	2106
I26	28 Aug 2019	Low Tide (ft)	-0.71
I26	28 Aug 2019	Low Tide Time	405
I26	28 Aug 2019	Comments	none
I32	05 Aug 2019	Depth (m)	11
I32	05 Aug 2019	Arrive Time	1114
I32	05 Aug 2019	Depart Time	1116
I32	05 Aug 2019	Air Temp (C)	19
I32	05 Aug 2019	Weather	Haze
I32	05 Aug 2019	Visibility (mi)	8
I32	05 Aug 2019	Wind Speed (kts)	8
I32	05 Aug 2019	Wind Dir	SW
I32	05 Aug 2019	Water Color	Brownish-Green
I32	05 Aug 2019	Wave Ht Low (ft)	3
I32	05 Aug 2019	Wave Period (sec)	13
I32	05 Aug 2019	Sea State	Calm

Station	Date	Parameter	Value
I32	05 Aug 2019	High Tide (ft)	6.33
I32	05 Aug 2019	High Tide Time	2106
I32	05 Aug 2019	Low Tide (ft)	-0.71
I32	05 Aug 2019	Low Tide Time	405
I32	05 Aug 2019	Comments	none
I32	15 Aug 2019	Depth (m)	10
I32	15 Aug 2019	Arrive Time	1153
I32	15 Aug 2019	Depart Time	1159
I32	15 Aug 2019	Air Temp (C)	18
I32	15 Aug 2019	Weather	Partly Cloudy
I32	15 Aug 2019	Visibility (mi)	8
I32	15 Aug 2019	Wind Speed (kts)	11
I32	15 Aug 2019	Wind Dir	SW
I32	15 Aug 2019	Water Color	Green
I32	15 Aug 2019	Wave Ht Low (ft)	4
I32	15 Aug 2019	Wave Period (sec)	13
I32	15 Aug 2019	Sea State	Light chop
I32	15 Aug 2019	High Tide (ft)	6.33
I32	15 Aug 2019	High Tide Time	2106
I32	15 Aug 2019	Low Tide (ft)	-0.71
I32	15 Aug 2019	Low Tide Time	405
I32	15 Aug 2019	Comments	none
I32	19 Aug 2019	Depth (m)	10
I32	19 Aug 2019	Arrive Time	1114
I32	19 Aug 2019	Depart Time	1118
I32	19 Aug 2019	Air Temp (C)	19
I32	19 Aug 2019	Weather	Haze
I32	19 Aug 2019	Visibility (mi)	9
I32	19 Aug 2019	Wind Speed (kts)	4
I32	19 Aug 2019	Wind Dir	SW
I32	19 Aug 2019	Water Color	Green
I32	19 Aug 2019	Wave Ht Low (ft)	1
I32	19 Aug 2019	Wave Period (sec)	13
I32	19 Aug 2019	Sea State	Calm
I32	19 Aug 2019	High Tide (ft)	6.33
I32	19 Aug 2019	High Tide Time	2106
I32	19 Aug 2019	Low Tide (ft)	-0.71
I32	19 Aug 2019	Low Tide Time	405
I32	19 Aug 2019	Comments	none
I32	28 Aug 2019	Depth (m)	12
I32	28 Aug 2019	Arrive Time	1106
I32	28 Aug 2019	Depart Time	1111
I32	28 Aug 2019	Air Temp (C)	20
I32	28 Aug 2019	Weather	Overcast
I32	28 Aug 2019	Visibility (mi)	8
I32	28 Aug 2019	Wind Speed (kts)	8
I32	28 Aug 2019	Wind Dir	SE
I32	28 Aug 2019	Water Color	Brownish-Green
I32	28 Aug 2019	Wave Ht Low (ft)	4
I32	28 Aug 2019	Wave Period (sec)	13
I32	28 Aug 2019	Sea State	Light chop
I32	28 Aug 2019	High Tide (ft)	6.33
I32	28 Aug 2019	High Tide Time	2106
I32	28 Aug 2019	Low Tide (ft)	-0.71
I32	28 Aug 2019	Low Tide Time	405
I32	28 Aug 2019	Comments	none
I39	05 Aug 2019	Depth (m)	19

Station	Date	Parameter	Value
I39	05 Aug 2019	Arrive Time	1011
I39	05 Aug 2019	Depart Time	1012
I39	05 Aug 2019	Air Temp (C)	19
I39	05 Aug 2019	Weather	Haze
I39	05 Aug 2019	Visibility (mi)	8
I39	05 Aug 2019	Wind Speed (kts)	7
I39	05 Aug 2019	Wind Dir	SW
I39	05 Aug 2019	Water Color	Green
I39	05 Aug 2019	Wave Ht Low (ft)	3
I39	05 Aug 2019	Wave Period (sec)	13
I39	05 Aug 2019	Sea State	Calm
I39	05 Aug 2019	High Tide (ft)	6.33
I39	05 Aug 2019	High Tide Time	2106
I39	05 Aug 2019	Low Tide (ft)	-0.71
I39	05 Aug 2019	Low Tide Time	405
I39	05 Aug 2019	Comments	none
I39	15 Aug 2019	Depth (m)	20
I39	15 Aug 2019	Arrive Time	1034
I39	15 Aug 2019	Depart Time	1039
I39	15 Aug 2019	Air Temp (C)	18
I39	15 Aug 2019	Weather	Overcast
I39	15 Aug 2019	Visibility (mi)	7
I39	15 Aug 2019	Wind Speed (kts)	7
I39	15 Aug 2019	Wind Dir	SW
I39	15 Aug 2019	Water Color	Green
I39	15 Aug 2019	Wave Ht Low (ft)	3
I39	15 Aug 2019	Wave Period (sec)	13
I39	15 Aug 2019	Sea State	Wind ripples
I39	15 Aug 2019	High Tide (ft)	6.33
I39	15 Aug 2019	High Tide Time	2106
I39	15 Aug 2019	Low Tide (ft)	-0.71
I39	15 Aug 2019	Low Tide Time	405
I39	15 Aug 2019	Comments	none
I39	19 Aug 2019	Depth (m)	20
I39	19 Aug 2019	Arrive Time	1006
I39	19 Aug 2019	Depart Time	1009
I39	19 Aug 2019	Air Temp (C)	19
I39	19 Aug 2019	Weather	Partly Cloudy
I39	19 Aug 2019	Visibility (mi)	8
I39	19 Aug 2019	Wind Speed (kts)	5
I39	19 Aug 2019	Wind Dir	SW
I39	19 Aug 2019	Water Color	Green
I39	19 Aug 2019	Wave Ht Low (ft)	1
I39	19 Aug 2019	Wave Period (sec)	13
I39	19 Aug 2019	Sea State	Calm
I39	19 Aug 2019	High Tide (ft)	6.33
I39	19 Aug 2019	High Tide Time	2106
I39	19 Aug 2019	Low Tide (ft)	-0.71
I39	19 Aug 2019	Low Tide Time	405
I39	19 Aug 2019	Comments	none
I39	28 Aug 2019	Depth (m)	19
I39	28 Aug 2019	Arrive Time	1004
I39	28 Aug 2019	Depart Time	1009
I39	28 Aug 2019	Air Temp (C)	20
I39	28 Aug 2019	Weather	Overcast
I39	28 Aug 2019	Visibility (mi)	7
I39	28 Aug 2019	Wind Speed (kts)	5
I39	28 Aug 2019	Wind Dir	E

Station	Date	Parameter	Value
I39	28 Aug 2019	Water Color	Green
I39	28 Aug 2019	Wave Ht Low (ft)	4
I39	28 Aug 2019	Wave Period (sec)	13
I39	28 Aug 2019	Sea State	Light chop
I39	28 Aug 2019	High Tide (ft)	6.33
I39	28 Aug 2019	High Tide Time	2106
I39	28 Aug 2019	Low Tide (ft)	-0.71
I39	28 Aug 2019	Low Tide Time	405
I39	28 Aug 2019	Comments	none
I40	05 Aug 2019	Depth (m)	10
I40	05 Aug 2019	Arrive Time	1039
I40	05 Aug 2019	Depart Time	1041
I40	05 Aug 2019	Air Temp (C)	19
I40	05 Aug 2019	Weather	Haze
I40	05 Aug 2019	Visibility (mi)	8
I40	05 Aug 2019	Wind Speed (kts)	7
I40	05 Aug 2019	Wind Dir	SW
I40	05 Aug 2019	Water Color	Brownish-Green
I40	05 Aug 2019	Wave Ht Low (ft)	3
I40	05 Aug 2019	Wave Period (sec)	13
I40	05 Aug 2019	Sea State	Calm
I40	05 Aug 2019	High Tide (ft)	6.33
I40	05 Aug 2019	High Tide Time	2106
I40	05 Aug 2019	Low Tide (ft)	-0.71
I40	05 Aug 2019	Low Tide Time	405
I40	05 Aug 2019	Comments	none
I40	15 Aug 2019	Depth (m)	12
I40	15 Aug 2019	Arrive Time	1108
I40	15 Aug 2019	Depart Time	1113
I40	15 Aug 2019	Air Temp (C)	18
I40	15 Aug 2019	Weather	Overcast
I40	15 Aug 2019	Visibility (mi)	7
I40	15 Aug 2019	Wind Speed (kts)	8
I40	15 Aug 2019	Wind Dir	SW
I40	15 Aug 2019	Water Color	Green
I40	15 Aug 2019	Wave Ht Low (ft)	3
I40	15 Aug 2019	Wave Period (sec)	13
I40	15 Aug 2019	Sea State	Wind ripples
I40	15 Aug 2019	High Tide (ft)	6.33
I40	15 Aug 2019	High Tide Time	2106
I40	15 Aug 2019	Low Tide (ft)	-0.71
I40	15 Aug 2019	Low Tide Time	405
I40	15 Aug 2019	Comments	none
I40	19 Aug 2019	Depth (m)	11
I40	19 Aug 2019	Arrive Time	1039
I40	19 Aug 2019	Depart Time	1041
I40	19 Aug 2019	Air Temp (C)	19
I40	19 Aug 2019	Weather	Partly Cloudy
I40	19 Aug 2019	Visibility (mi)	9
I40	19 Aug 2019	Wind Speed (kts)	8
I40	19 Aug 2019	Wind Dir	SW
I40	19 Aug 2019	Water Color	Brown
I40	19 Aug 2019	Wave Ht Low (ft)	1
I40	19 Aug 2019	Wave Period (sec)	13
I40	19 Aug 2019	Sea State	Calm
I40	19 Aug 2019	High Tide (ft)	6.33
I40	19 Aug 2019	High Tide Time	2106
I40	19 Aug 2019	Low Tide (ft)	-0.71

Station	Date	Parameter	Value
I40	19 Aug 2019	Low Tide Time	405
I40	19 Aug 2019	Comments	none
I40	28 Aug 2019	Depth (m)	10
I40	28 Aug 2019	Arrive Time	1032
I40	28 Aug 2019	Depart Time	1036
I40	28 Aug 2019	Air Temp (C)	20
I40	28 Aug 2019	Weather	Overcast
I40	28 Aug 2019	Visibility (mi)	7
I40	28 Aug 2019	Wind Speed (kts)	7
I40	28 Aug 2019	Wind Dir	SE
I40	28 Aug 2019	Water Color	Green
I40	28 Aug 2019	Wave Ht Low (ft)	4
I40	28 Aug 2019	Wave Period (sec)	13
I40	28 Aug 2019	Sea State	Light chop
I40	28 Aug 2019	High Tide (ft)	6.33
I40	28 Aug 2019	High Tide Time	2106
I40	28 Aug 2019	Low Tide (ft)	-0.71
I40	28 Aug 2019	Low Tide Time	405
I40	28 Aug 2019	Comments	none

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 (µg/L)
I19	05 Aug 2019	1	17.53	69.65	8.5	33.60	8.2	24.3	1.22
I19	05 Aug 2019	2	17.51	69.38	8.4	33.61	8.2	24.3	1.24
I19	05 Aug 2019	3	16.79	68.10	8.3	33.65	8.2	24.5	1.36
I19	05 Aug 2019	4	15.55	67.90	8.7	33.64	8.2	24.8	1.50
I19	05 Aug 2019	5	14.87	67.75	8.9	33.59	8.2	24.9	1.80
I19	05 Aug 2019	6	14.70	66.19	8.9	33.57	8.3	24.9	2.42
I19	05 Aug 2019	7	14.27	64.27	8.8	33.59	8.3	25.0	3.89
I19	05 Aug 2019	8	14.11	63.42	8.5	33.57	8.2	25.1	5.93
I19	05 Aug 2019	9	14.09	63.68	8.3	33.57	8.2	25.1	7.03
I19	05 Aug 2019	10	13.98	63.91	7.9	33.59	8.2	25.1	7.03
I19	15 Aug 2019	1	15.85	67.86	8.7	33.59	8.1	24.7	1.33
I19	15 Aug 2019	2	15.68	65.57	8.3	33.59	8.1	24.7	1.55
I19	15 Aug 2019	3	14.93	61.89	7.8	33.61	8.1	24.9	2.07
I19	15 Aug 2019	4	14.57	63.06	7.5	33.56	8.1	25.0	2.38
I19	15 Aug 2019	5	14.45	66.20	7.2	33.61	8.1	25.0	2.52
I19	15 Aug 2019	6	14.03	66.01	6.6	33.59	8.0	25.1	2.57
I19	15 Aug 2019	7	14.05	63.87	6.2	33.58	8.0	25.1	2.44
I19	15 Aug 2019	8	13.86	63.12	5.7	33.59	8.0	25.1	2.49
I19	15 Aug 2019	9	13.81	58.85	5.5	33.59	8.0	25.1	2.89
I19	15 Aug 2019	10	13.80	53.87	5.5	33.59	8.0	25.1	3.11
I19	19 Aug 2019	1	19.55	53.82	9.4	33.54	8.2	23.8	4.61
I19	19 Aug 2019	2	19.28	50.50	9.1	33.55	8.2	23.8	7.92
I19	19 Aug 2019	3	18.78	54.99	8.5	33.54	8.2	24.0	7.30
I19	19 Aug 2019	4	18.19	63.31	8.5	33.54	8.2	24.1	5.38
I19	19 Aug 2019	5	17.79	67.31	8.6	33.55	8.2	24.2	4.45
I19	19 Aug 2019	6	16.41	69.61	7.9	33.59	8.1	24.6	3.69
I19	19 Aug 2019	7	15.76	68.22	7.7	33.56	8.1	24.7	3.70
I19	19 Aug 2019	8	15.44	67.71	7.5	33.55	8.1	24.8	3.65
I19	19 Aug 2019	9	15.29	67.50	7.4	33.55	8.1	24.8	3.45
I19	19 Aug 2019	10	15.20	67.10	7.3	33.55	8.1	24.8	3.36
I19	28 Aug 2019	1	22.35	68.45	8.8	33.66	8.3	23.1	3.29
I19	28 Aug 2019	2	22.30	68.84	8.2	33.67	8.3	23.1	3.90
I19	28 Aug 2019	3	20.27	68.67	7.7	33.77	8.2	23.7	5.98
I19	28 Aug 2019	4	18.51	64.33	7.4	33.67	8.2	24.1	6.70
I19	28 Aug 2019	5	17.38	66.87	6.2	33.64	8.1	24.4	5.56
I19	28 Aug 2019	6	16.39	68.16	5.6	33.59	8.0	24.6	4.72
I19	28 Aug 2019	7	15.71	70.77	5.6	33.58	8.0	24.7	4.52
I19	28 Aug 2019	8	15.27	71.39	5.6	33.54	8.0	24.8	5.08
I19	28 Aug 2019	9	15.17	70.94	5.2	33.53	7.9	24.8	4.74
I19	28 Aug 2019	10	15.12	72.79	4.8	33.54	7.9	24.8	3.70
I24	05 Aug 2019	1	18.15	69.75	9.4	33.62	8.3	24.2	1.45
I24	05 Aug 2019	2	18.14	69.92	9.3	33.62	8.3	24.2	1.49
I24	05 Aug 2019	3	17.19	69.55	8.8	33.69	8.3	24.5	1.54
I24	05 Aug 2019	4	15.64	67.85	8.5	33.67	8.3	24.8	1.92
I24	05 Aug 2019	5	14.55	64.18	8.2	33.60	8.3	25.0	3.63
I24	05 Aug 2019	6	14.43	67.52	7.6	33.59	8.2	25.0	4.89
I24	05 Aug 2019	7	13.91	70.67	7.1	33.60	8.2	25.1	5.61
I24	05 Aug 2019	8	13.90	74.99	6.9	33.58	8.2	25.1	5.27
I24	05 Aug 2019	9	13.78	75.66	6.7	33.58	8.2	25.1	3.39
I24	05 Aug 2019	10	13.78	75.82	6.7	33.58	8.2	25.1	2.53
I24	15 Aug 2019	1	16.57	69.79	8.5	33.58	8.1	24.5	1.29

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I24	15 Aug 2019	2	16.04	69.12	8.3	33.62	8.1	24.7	1.65
I24	15 Aug 2019	3	14.69	66.42	8.6	33.62	8.1	25.0	2.83
I24	15 Aug 2019	4	14.50	62.31	8.6	33.56	8.1	25.0	3.59
I24	15 Aug 2019	5	14.47	62.39	8.5	33.56	8.1	25.0	4.21
I24	15 Aug 2019	6	14.29	63.55	8.4	33.57	8.1	25.0	4.98
I24	15 Aug 2019	7	14.16	67.06	7.9	33.58	8.1	25.1	5.46
I24	15 Aug 2019	8	13.93	71.41	6.9	33.59	8.1	25.1	5.05
I24	15 Aug 2019	9	13.63	71.72	5.9	33.59	8.1	25.2	3.78
I24	15 Aug 2019	10	13.59	70.20	5.5	33.58	8.0	25.2	2.21
I24	15 Aug 2019	11	13.78	68.37	6.0	33.56	8.0	25.1	2.06
I24	19 Aug 2019	1	19.50	65.48	9.7	33.55	8.2	23.8	2.23
I24	19 Aug 2019	2	18.91	65.16	9.4	33.58	8.2	24.0	2.48
I24	19 Aug 2019	3	17.18	64.73	9.5	33.54	8.2	24.4	2.41
I24	19 Aug 2019	4	16.62	64.69	9.7	33.54	8.2	24.5	2.71
I24	19 Aug 2019	5	16.17	63.35	9.6	33.54	8.2	24.6	3.62
I24	19 Aug 2019	6	15.95	62.21	9.1	33.55	8.2	24.6	4.41
I24	19 Aug 2019	7	15.61	64.59	8.9	33.55	8.2	24.7	4.96
I24	19 Aug 2019	8	15.51	66.62	8.8	33.55	8.2	24.7	4.99
I24	19 Aug 2019	9	14.71	67.89	8.0	33.56	8.1	24.9	4.60
I24	19 Aug 2019	10	14.44	67.61	6.7	33.58	8.1	25.0	4.10
I24	19 Aug 2019	11	14.33	68.39	6.1	33.57	8.0	25.0	3.45
I24	28 Aug 2019	1	22.30	69.83	9.5	33.66	8.3	23.1	2.85
I24	28 Aug 2019	2	22.29	70.20	9.5	33.66	8.3	23.1	3.14
I24	28 Aug 2019	3	22.28	70.09	9.1	33.66	8.3	23.1	3.62
I24	28 Aug 2019	4	21.24	68.71	8.9	33.73	8.3	23.5	5.20
I24	28 Aug 2019	5	19.18	66.36	9.2	33.67	8.3	24.0	7.25
I24	28 Aug 2019	6	17.71	68.75	8.1	33.63	8.2	24.3	6.80
I24	28 Aug 2019	7	17.16	69.76	6.4	33.59	8.1	24.4	6.20
I24	28 Aug 2019	8	16.52	67.36	5.4	33.59	8.0	24.5	5.89
I24	28 Aug 2019	9	15.71	70.58	5.3	33.59	8.0	24.7	4.98
I24	28 Aug 2019	10	15.18	72.38	4.9	33.53	7.9	24.8	3.31
I25	05 Aug 2019	1	18.69	73.50	9.7	33.64	8.3	24.1	1.09
I25	05 Aug 2019	2	18.45	73.23	9.6	33.66	8.3	24.1	1.15
I25	05 Aug 2019	3	17.61	70.86	9.2	33.67	8.3	24.3	1.34
I25	05 Aug 2019	4	15.42	67.85	8.6	33.64	8.3	24.8	1.79
I25	05 Aug 2019	5	15.12	66.69	8.4	33.61	8.3	24.9	2.35
I25	05 Aug 2019	6	14.85	67.31	8.2	33.59	8.3	24.9	3.35
I25	05 Aug 2019	7	14.68	66.84	7.8	33.60	8.3	25.0	4.78
I25	05 Aug 2019	8	13.86	70.42	7.1	33.62	8.2	25.1	6.00
I25	05 Aug 2019	9	13.71	76.92	6.9	33.59	8.2	25.2	3.38
I25	15 Aug 2019	1	17.22	67.05	9.2	33.60	8.1	24.4	1.74
I25	15 Aug 2019	2	16.90	66.81	8.7	33.63	8.1	24.5	1.77
I25	15 Aug 2019	3	15.29	65.64	8.1	33.68	8.1	24.9	2.15
I25	15 Aug 2019	4	14.57	67.88	7.8	33.62	8.1	25.0	2.83
I25	15 Aug 2019	5	14.41	65.18	8.3	33.58	8.1	25.0	3.63
I25	15 Aug 2019	6	14.35	64.11	8.3	33.58	8.1	25.0	4.68
I25	15 Aug 2019	7	14.09	69.38	7.3	33.59	8.1	25.1	4.96
I25	15 Aug 2019	8	13.96	72.40	6.4	33.59	8.1	25.1	3.22
I25	15 Aug 2019	9	13.94	70.48	6.1	33.58	8.0	25.1	1.96
I25	19 Aug 2019	1	19.46	68.86	9.7	33.57	8.3	23.8	1.61
I25	19 Aug 2019	2	19.37	68.54	9.8	33.58	8.3	23.8	1.85
I25	19 Aug 2019	3	19.23	67.19	9.7	33.58	8.3	23.9	2.38
I25	19 Aug 2019	4	18.73	66.22	9.7	33.60	8.3	24.0	2.84
I25	19 Aug 2019	5	17.07	65.75	10.1	33.60	8.3	24.4	3.06
I25	19 Aug 2019	6	16.36	65.25	9.6	33.56	8.2	24.6	3.35
I25	19 Aug 2019	7	15.45	66.52	9.2	33.56	8.2	24.8	4.02

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I25	19 Aug 2019	8	15.32	66.65	8.9	33.54	8.2	24.8	4.35
I25	19 Aug 2019	9	15.24	67.14	8.8	33.55	8.2	24.8	4.18
I25	28 Aug 2019	1	22.38	69.46	9.4	33.66	8.3	23.1	2.90
I25	28 Aug 2019	2	22.37	69.68	9.4	33.66	8.3	23.1	3.23
I25	28 Aug 2019	3	22.34	69.59	9.2	33.67	8.3	23.1	3.79
I25	28 Aug 2019	4	20.82	67.38	9.1	33.72	8.3	23.6	6.05
I25	28 Aug 2019	5	18.87	65.89	8.7	33.68	8.2	24.0	7.48
I25	28 Aug 2019	6	17.75	69.63	8.1	33.59	8.2	24.3	6.70
I25	28 Aug 2019	7	17.54	69.81	7.8	33.58	8.2	24.3	6.06
I25	28 Aug 2019	8	17.20	71.37	7.0	33.58	8.1	24.4	5.40
I25	28 Aug 2019	9	16.10	72.38	5.8	33.60	8.0	24.6	4.25
I26	05 Aug 2019	1	18.93	73.04	9.8	33.64	8.3	24.0	1.05
I26	05 Aug 2019	2	18.66	72.83	9.5	33.66	8.3	24.1	1.09
I26	05 Aug 2019	3	16.52	72.38	9.7	33.72	8.3	24.6	1.27
I26	05 Aug 2019	4	15.74	72.09	9.4	33.62	8.3	24.7	1.43
I26	05 Aug 2019	5	14.89	70.87	9.0	33.62	8.3	24.9	1.83
I26	05 Aug 2019	6	14.79	70.12	8.8	33.59	8.3	24.9	2.17
I26	05 Aug 2019	7	14.16	69.70	8.4	33.60	8.3	25.1	3.13
I26	05 Aug 2019	8	13.70	68.06	7.3	33.59	8.3	25.2	3.70
I26	05 Aug 2019	9	13.69	74.01	7.0	33.57	8.3	25.1	2.68
I26	15 Aug 2019	1	17.34	66.80	9.2	33.59	8.1	24.4	1.56
I26	15 Aug 2019	2	17.14	66.78	8.8	33.62	8.1	24.4	1.64
I26	15 Aug 2019	3	15.59	64.29	8.3	33.65	8.1	24.8	2.50
I26	15 Aug 2019	4	15.15	62.46	7.9	33.58	8.1	24.8	3.18
I26	15 Aug 2019	5	14.82	68.27	7.3	33.61	8.1	24.9	3.26
I26	15 Aug 2019	6	14.40	70.69	6.7	33.59	8.1	25.0	3.44
I26	15 Aug 2019	7	14.28	71.59	6.7	33.58	8.0	25.0	4.21
I26	15 Aug 2019	8	14.12	72.20	6.6	33.59	8.0	25.1	4.38
I26	15 Aug 2019	9	14.01	73.83	6.6	33.58	8.0	25.1	3.48
I26	19 Aug 2019	1	19.07	66.94	9.6	33.56	8.2	23.9	1.80
I26	19 Aug 2019	2	18.83	66.13	9.5	33.57	8.2	24.0	2.05
I26	19 Aug 2019	3	18.66	62.35	9.4	33.55	8.2	24.0	3.02
I26	19 Aug 2019	4	18.56	59.76	9.1	33.55	8.2	24.0	4.43
I26	19 Aug 2019	5	18.33	61.17	8.6	33.55	8.2	24.1	5.12
I26	19 Aug 2019	6	18.11	62.94	8.3	33.56	8.2	24.1	4.94
I26	19 Aug 2019	7	16.27	68.58	7.8	33.56	8.1	24.6	3.95
I26	19 Aug 2019	8	15.86	72.42	7.0	33.58	8.1	24.7	3.10
I26	19 Aug 2019	9	15.39	73.90	6.4	33.56	8.0	24.8	1.92
I26	28 Aug 2019	1	21.62	69.55	9.6	33.64	8.3	23.3	3.14
I26	28 Aug 2019	2	20.73	69.50	9.5	33.70	8.3	23.6	3.54
I26	28 Aug 2019	3	20.15	70.02	9.3	33.61	8.3	23.7	4.06
I26	28 Aug 2019	4	18.41	70.43	8.8	33.68	8.2	24.2	4.57
I26	28 Aug 2019	5	17.42	73.88	8.2	33.60	8.2	24.3	4.40
I26	28 Aug 2019	6	16.45	75.70	8.0	33.56	8.1	24.5	4.10
I26	28 Aug 2019	7	16.11	76.47	7.8	33.52	8.1	24.6	4.12
I26	28 Aug 2019	8	15.98	77.00	7.3	33.52	8.1	24.6	3.96
I26	28 Aug 2019	9	15.48	78.56	6.6	33.55	8.0	24.7	2.79
I32	05 Aug 2019	1	19.24	69.67	9.0	33.61	8.3	23.9	1.37
I32	05 Aug 2019	2	18.95	69.50	8.7	33.63	8.3	24.0	1.44
I32	05 Aug 2019	3	17.34	69.27	8.1	33.71	8.3	24.4	1.53
I32	05 Aug 2019	4	14.97	69.43	8.2	33.65	8.2	24.9	1.62
I32	05 Aug 2019	5	14.48	68.81	8.3	33.60	8.2	25.0	2.02
I32	05 Aug 2019	6	14.37	69.74	8.3	33.57	8.2	25.0	2.59
I32	05 Aug 2019	7	14.08	70.01	8.1	33.58	8.2	25.1	3.26
I32	05 Aug 2019	8	13.91	67.78	7.7	33.58	8.2	25.1	5.31

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I32	05 Aug 2019	9	13.85	66.01	7.4	33.58	8.2	25.1	8.14
I32	05 Aug 2019	10	13.83	67.16	7.1	33.59	8.2	25.1	7.77
I32	15 Aug 2019	1	17.20	66.83	8.9	33.59	8.1	24.4	1.67
I32	15 Aug 2019	2	16.13	65.22	8.5	33.67	8.1	24.7	1.92
I32	15 Aug 2019	3	15.19	61.68	7.7	33.61	8.1	24.9	2.76
I32	15 Aug 2019	4	14.31	65.95	7.0	33.64	8.1	25.1	3.31
I32	15 Aug 2019	5	14.09	69.81	6.6	33.59	8.1	25.1	3.24
I32	15 Aug 2019	6	14.08	70.17	6.5	33.59	8.0	25.1	3.35
I32	15 Aug 2019	7	13.99	69.68	6.4	33.58	8.0	25.1	3.75
I32	15 Aug 2019	8	13.97	69.48	6.3	33.58	8.0	25.1	4.16
I32	15 Aug 2019	9	13.98	69.27	6.3	33.59	8.0	25.1	4.37
I32	15 Aug 2019	10	13.97	69.67	6.3	33.59	8.0	25.1	4.15
I32	19 Aug 2019	1	19.16	60.94	9.5	33.56	8.2	23.9	2.74
I32	19 Aug 2019	2	18.97	61.07	9.4	33.58	8.2	23.9	3.12
I32	19 Aug 2019	3	18.75	63.46	9.2	33.59	8.2	24.0	3.40
I32	19 Aug 2019	4	18.60	63.62	9.2	33.59	8.2	24.0	4.40
I32	19 Aug 2019	5	18.59	62.03	9.1	33.58	8.2	24.0	5.16
I32	19 Aug 2019	6	18.53	62.04	9.0	33.58	8.2	24.1	6.03
I32	19 Aug 2019	7	18.51	63.44	8.8	33.58	8.2	24.1	6.02
I32	19 Aug 2019	8	17.98	66.06	7.4	33.64	8.1	24.2	4.93
I32	19 Aug 2019	9	14.68	63.02	6.1	33.67	8.0	25.0	4.10
I32	19 Aug 2019	10	14.38	62.85	6.2	33.57	8.0	25.0	4.11
I32	28 Aug 2019	1	22.60	66.05	9.5	33.67	8.3	23.0	3.85
I32	28 Aug 2019	2	22.59	66.53	9.5	33.67	8.3	23.0	4.28
I32	28 Aug 2019	3	22.49	67.18	8.7	33.67	8.3	23.1	4.38
I32	28 Aug 2019	4	19.73	69.29	8.3	33.73	8.2	23.9	4.68
I32	28 Aug 2019	5	19.00	70.35	7.8	33.64	8.2	24.0	4.76
I32	28 Aug 2019	6	17.48	70.74	7.6	33.59	8.1	24.3	4.84
I32	28 Aug 2019	7	16.55	73.22	7.6	33.58	8.1	24.5	4.75
I32	28 Aug 2019	8	16.03	76.55	7.2	33.53	8.1	24.6	3.96
I32	28 Aug 2019	9	15.83	77.57	6.7	33.54	8.1	24.7	2.86
I32	28 Aug 2019	10	15.55	74.73	6.6	33.54	8.0	24.7	2.02
I39	05 Aug 2019	1	18.56	75.56	9.8	33.64	8.3	24.1	1.06
I39	05 Aug 2019	2	18.20	74.41	9.6	33.67	8.3	24.2	1.12
I39	05 Aug 2019	3	15.93	73.82	9.9	33.69	8.3	24.8	1.41
I39	05 Aug 2019	4	15.18	72.75	9.9	33.59	8.3	24.8	1.82
I39	05 Aug 2019	5	14.79	72.50	9.4	33.61	8.3	24.9	1.99
I39	05 Aug 2019	6	14.18	71.13	9.1	33.61	8.3	25.1	2.52
I39	05 Aug 2019	7	13.73	70.11	8.8	33.57	8.3	25.1	3.62
I39	05 Aug 2019	8	13.37	71.67	7.9	33.59	8.3	25.2	4.60
I39	05 Aug 2019	9	13.28	72.65	7.4	33.58	8.3	25.2	5.29
I39	05 Aug 2019	10	13.23	73.24	7.2	33.58	8.3	25.2	5.69
I39	05 Aug 2019	11	13.21	74.19	7.1	33.58	8.3	25.2	5.87
I39	05 Aug 2019	12	13.18	74.26	7.1	33.59	8.2	25.3	5.93
I39	05 Aug 2019	13	13.11	75.02	7.0	33.59	8.2	25.3	5.85
I39	05 Aug 2019	14	13.13	74.91	6.8	33.59	8.2	25.3	5.82
I39	05 Aug 2019	15	13.08	75.25	6.7	33.60	8.2	25.3	5.75
I39	05 Aug 2019	16	13.01	76.06	6.4	33.59	8.2	25.3	5.47
I39	05 Aug 2019	17	13.01	77.46	6.3	33.59	8.2	25.3	5.04
I39	05 Aug 2019	18	13.00	78.71	6.3	33.59	8.2	25.3	4.29
I39	15 Aug 2019	1	17.98	71.45	9.9	33.61	8.2	24.2	1.40
I39	15 Aug 2019	2	17.97	71.64	9.9	33.62	8.2	24.2	1.37
I39	15 Aug 2019	3	17.92	71.22	9.8	33.62	8.2	24.2	1.44
I39	15 Aug 2019	4	17.25	70.49	10.0	33.68	8.2	24.4	1.84
I39	15 Aug 2019	5	16.43	65.13	10.1	33.63	8.2	24.6	2.91
I39	15 Aug 2019	6	15.44	58.62	9.1	33.65	8.2	24.8	4.18

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I39	15 Aug 2019	7	14.73	60.35	8.4	33.60	8.2	25.0	5.64
I39	15 Aug 2019	8	14.59	63.86	8.1	33.59	8.2	25.0	6.37
I39	15 Aug 2019	9	14.38	65.86	7.8	33.58	8.1	25.0	6.64
I39	15 Aug 2019	10	14.26	68.24	7.5	33.59	8.1	25.0	6.77
I39	15 Aug 2019	11	13.85	69.32	7.2	33.60	8.1	25.1	6.75
I39	15 Aug 2019	12	13.51	73.48	6.8	33.59	8.1	25.2	5.29
I39	15 Aug 2019	13	13.43	76.20	5.7	33.59	8.1	25.2	4.09
I39	15 Aug 2019	14	13.43	76.69	5.3	33.59	8.0	25.2	3.40
I39	15 Aug 2019	15	13.33	76.68	5.0	33.60	8.0	25.2	2.60
I39	15 Aug 2019	16	13.23	74.72	4.6	33.60	8.0	25.3	2.07
I39	15 Aug 2019	17	13.16	69.91	4.4	33.61	8.0	25.3	1.74
I39	15 Aug 2019	18	12.98	77.59	4.3	33.61	7.9	25.3	1.39
I39	19 Aug 2019	1	18.78	68.22	9.4	33.57	8.2	24.0	1.96
I39	19 Aug 2019	2	18.48	67.08	9.3	33.57	8.2	24.1	2.32
I39	19 Aug 2019	3	16.79	66.27	9.6	33.61	8.2	24.5	2.66
I39	19 Aug 2019	4	16.02	68.52	9.9	33.55	8.2	24.6	2.70
I39	19 Aug 2019	5	15.43	69.90	9.9	33.54	8.2	24.8	3.01
I39	19 Aug 2019	6	14.87	69.11	8.6	33.56	8.2	24.9	3.75
I39	19 Aug 2019	7	14.86	67.31	7.9	33.55	8.1	24.9	4.43
I39	19 Aug 2019	8	14.70	69.39	6.8	33.56	8.0	24.9	4.34
I39	19 Aug 2019	9	14.34	69.92	6.1	33.59	8.0	25.0	3.93
I39	19 Aug 2019	10	13.89	70.17	5.7	33.58	8.0	25.1	3.51
I39	19 Aug 2019	11	13.88	72.37	5.6	33.58	8.0	25.1	3.26
I39	19 Aug 2019	12	13.83	73.47	5.5	33.58	8.0	25.1	2.93
I39	19 Aug 2019	13	13.74	75.30	5.6	33.59	8.0	25.1	2.60
I39	19 Aug 2019	14	13.70	77.18	5.6	33.58	8.0	25.2	2.52
I39	19 Aug 2019	15	13.66	77.37	5.6	33.59	8.0	25.2	2.44
I39	19 Aug 2019	16	13.63	77.93	5.6	33.59	8.0	25.2	2.33
I39	19 Aug 2019	17	13.50	79.33	5.4	33.59	8.0	25.2	1.75
I39	19 Aug 2019	18	13.44	80.01	5.3	33.59	7.9	25.2	1.37
I39	28 Aug 2019	1	22.09	75.10	9.0	33.67	8.3	23.2	2.01
I39	28 Aug 2019	2	22.00	75.37	8.9	33.68	8.3	23.2	2.18
I39	28 Aug 2019	3	20.19	72.35	9.2	33.72	8.3	23.7	2.91
I39	28 Aug 2019	4	18.97	71.50	8.9	33.63	8.2	24.0	3.72
I39	28 Aug 2019	5	17.71	77.23	8.7	33.57	8.2	24.2	2.95
I39	28 Aug 2019	6	16.67	82.81	8.7	33.50	8.2	24.4	1.96
I39	28 Aug 2019	7	16.53	83.79	8.6	33.47	8.2	24.4	1.64
I39	28 Aug 2019	8	15.96	83.39	8.5	33.48	8.1	24.6	1.80
I39	28 Aug 2019	9	15.77	81.18	8.2	33.49	8.1	24.6	2.30
I39	28 Aug 2019	10	15.57	80.80	7.9	33.51	8.1	24.7	2.70
I39	28 Aug 2019	11	15.33	80.71	7.7	33.52	8.1	24.8	2.87
I39	28 Aug 2019	12	15.04	80.72	7.6	33.52	8.1	24.8	3.03
I39	28 Aug 2019	13	14.69	81.51	7.5	33.51	8.1	24.9	2.96
I39	28 Aug 2019	14	14.39	82.16	7.5	33.51	8.1	25.0	2.77
I39	28 Aug 2019	15	13.98	82.74	7.5	33.52	8.1	25.0	2.76
I39	28 Aug 2019	16	13.65	83.34	7.5	33.49	8.1	25.1	2.59
I39	28 Aug 2019	17	13.64	83.30	7.3	33.48	8.0	25.1	2.43
I39	28 Aug 2019	18	13.62	84.08	6.5	33.51	8.0	25.1	1.77
I40	05 Aug 2019	1	17.81	68.13	8.8	33.62	8.2	24.3	1.58
I40	05 Aug 2019	2	17.30	68.23	8.6	33.67	8.2	24.4	1.64
I40	05 Aug 2019	3	15.94	67.87	8.8	33.64	8.2	24.7	1.83
I40	05 Aug 2019	4	15.35	66.77	8.7	33.64	8.2	24.8	2.16
I40	05 Aug 2019	5	14.59	65.11	8.5	33.62	8.2	25.0	3.11
I40	05 Aug 2019	6	14.38	61.13	8.2	33.59	8.2	25.0	4.83
I40	05 Aug 2019	7	14.20	57.86	7.9	33.59	8.2	25.1	7.76
I40	05 Aug 2019	8	14.14	60.40	7.7	33.58	8.2	25.1	9.73
I40	05 Aug 2019	9	14.06	63.67	7.5	33.59	8.2	25.1	9.04
I40	05 Aug 2019	10	13.92	61.94	7.3	33.59	8.2	25.1	8.05

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I40	15 Aug 2019	1	15.97	66.37	8.5	33.59	8.1	24.7	1.52
I40	15 Aug 2019	2	15.56	65.60	8.6	33.61	8.1	24.8	1.96
I40	15 Aug 2019	3	14.88	63.18	8.4	33.61	8.1	24.9	2.85
I40	15 Aug 2019	4	14.58	63.86	8.1	33.59	8.1	25.0	3.42
I40	15 Aug 2019	5	14.43	66.01	8.1	33.58	8.1	25.0	4.63
I40	15 Aug 2019	6	14.28	67.06	7.9	33.58	8.1	25.0	5.69
I40	15 Aug 2019	7	14.08	71.44	7.3	33.59	8.1	25.1	5.38
I40	15 Aug 2019	8	13.93	70.76	6.7	33.59	8.0	25.1	4.99
I40	15 Aug 2019	9	13.75	63.46	6.1	33.59	8.0	25.1	4.01
I40	15 Aug 2019	10	13.77	61.29	6.0	33.58	8.0	25.1	3.09
I40	19 Aug 2019	1	18.98	56.18	9.0	33.52	8.2	23.9	3.90
I40	19 Aug 2019	2	18.97	57.19	8.7	33.55	8.2	23.9	4.11
I40	19 Aug 2019	3	18.13	59.37	8.3	33.54	8.2	24.1	4.06
I40	19 Aug 2019	4	17.49	62.93	8.1	33.56	8.1	24.3	4.16
I40	19 Aug 2019	5	16.77	64.29	8.0	33.51	8.1	24.4	4.54
I40	19 Aug 2019	6	16.20	63.59	7.7	33.57	8.1	24.6	4.84
I40	19 Aug 2019	7	15.21	63.01	7.9	33.56	8.1	24.8	5.02
I40	19 Aug 2019	8	15.14	65.33	8.2	33.55	8.1	24.8	4.84
I40	19 Aug 2019	9	14.97	66.31	7.9	33.56	8.1	24.9	4.74
I40	19 Aug 2019	10	14.78	65.20	7.4	33.56	8.1	24.9	4.58
I40	28 Aug 2019	1	22.39	67.46	9.3	33.67	8.3	23.1	4.26
I40	28 Aug 2019	2	22.40	67.44	9.1	33.67	8.3	23.1	4.58
I40	28 Aug 2019	3	21.83	67.11	8.6	33.75	8.3	23.3	5.74
I40	28 Aug 2019	4	19.05	63.55	8.3	33.71	8.3	24.0	8.52
I40	28 Aug 2019	5	17.64	64.91	6.4	33.64	8.1	24.3	6.90
I40	28 Aug 2019	6	16.75	65.58	5.2	33.62	8.0	24.5	6.35
I40	28 Aug 2019	7	15.95	64.64	4.6	33.60	7.9	24.7	5.68
I40	28 Aug 2019	8	15.42	65.28	4.5	33.57	7.9	24.8	5.45
I40	28 Aug 2019	9	15.28	66.83	4.3	33.55	7.8	24.8	4.76
I40	28 Aug 2019	10	15.05	68.22	4.2	33.55	7.8	24.8	3.58

NA = not available

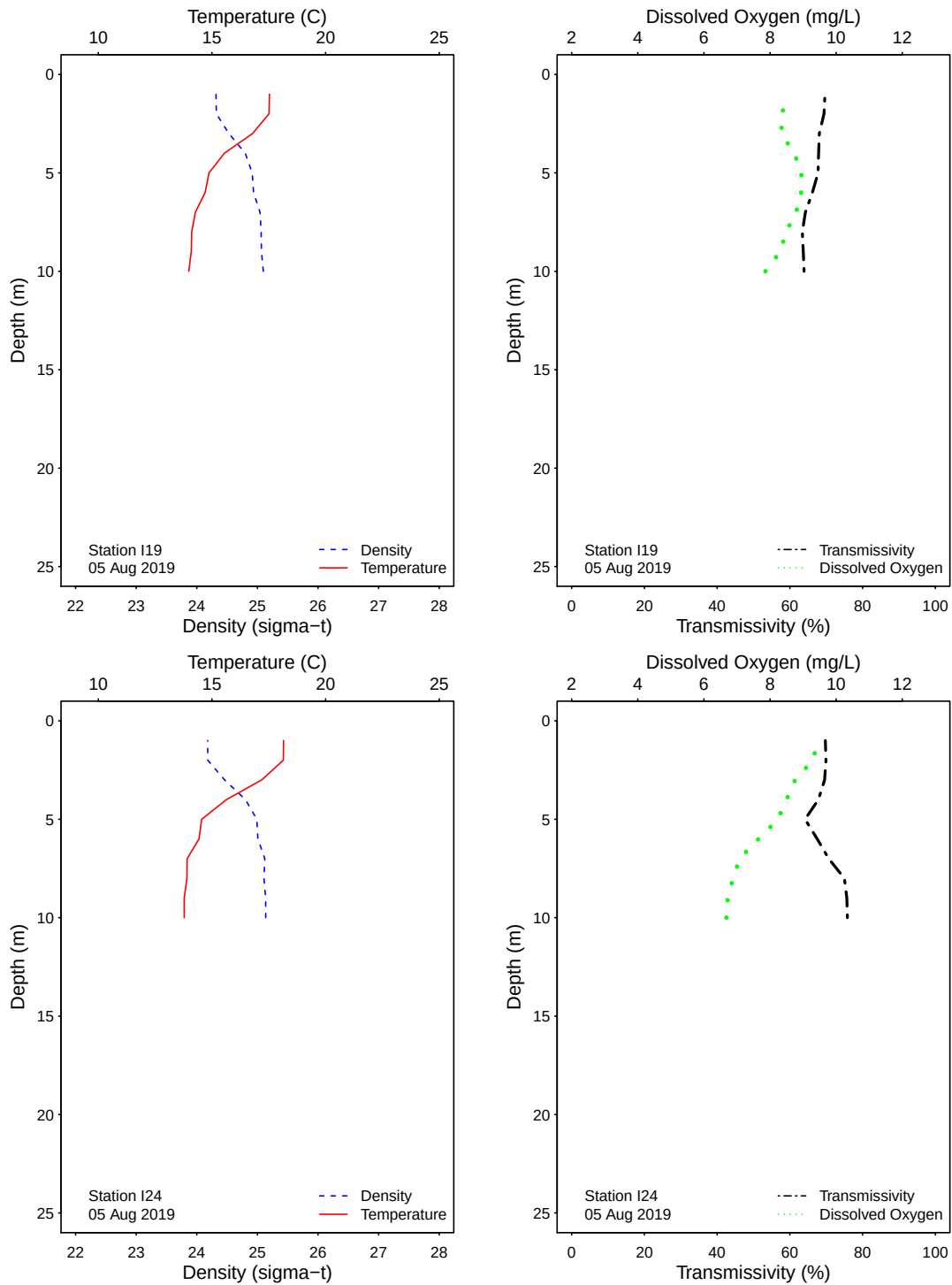


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

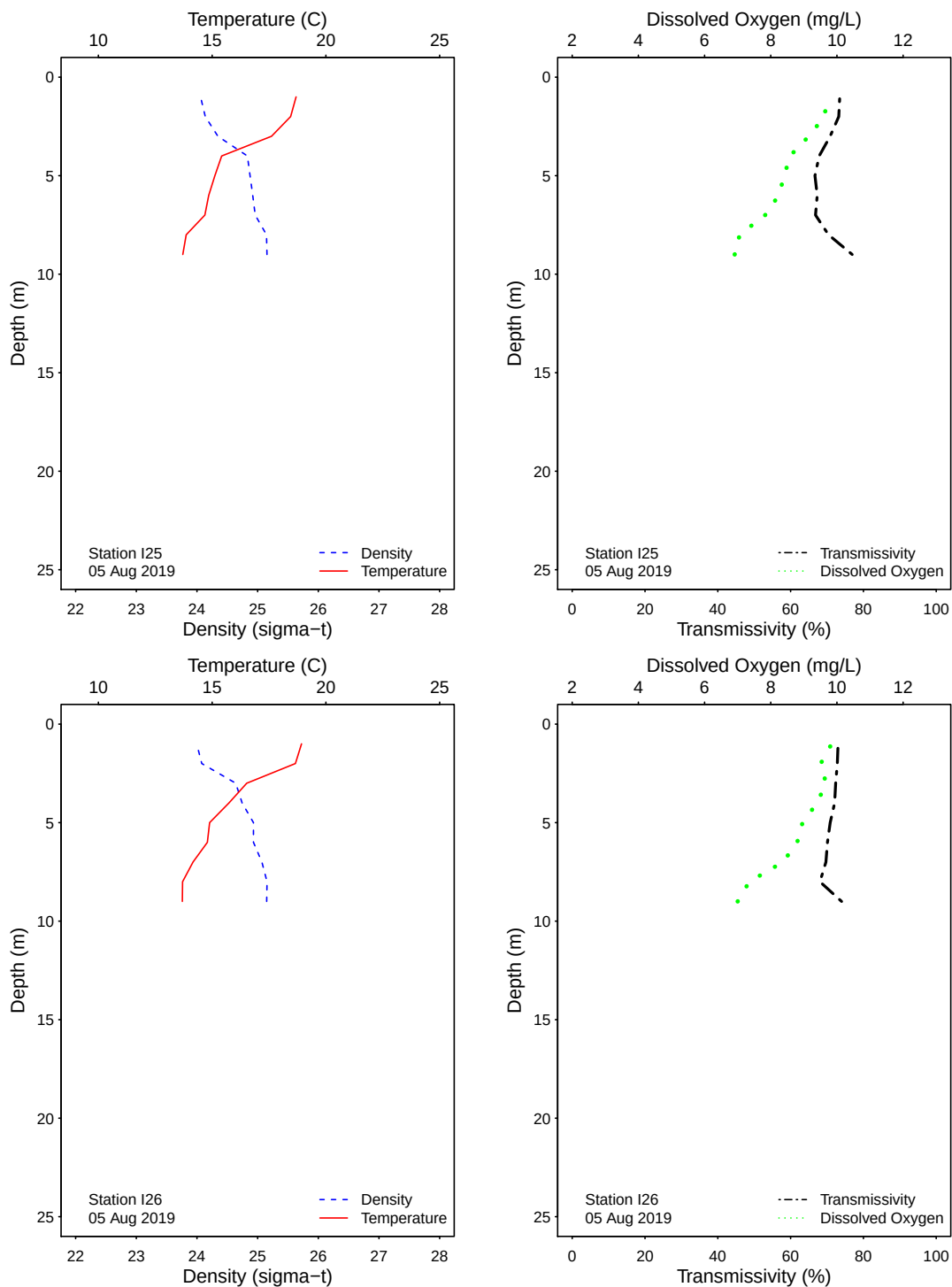


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

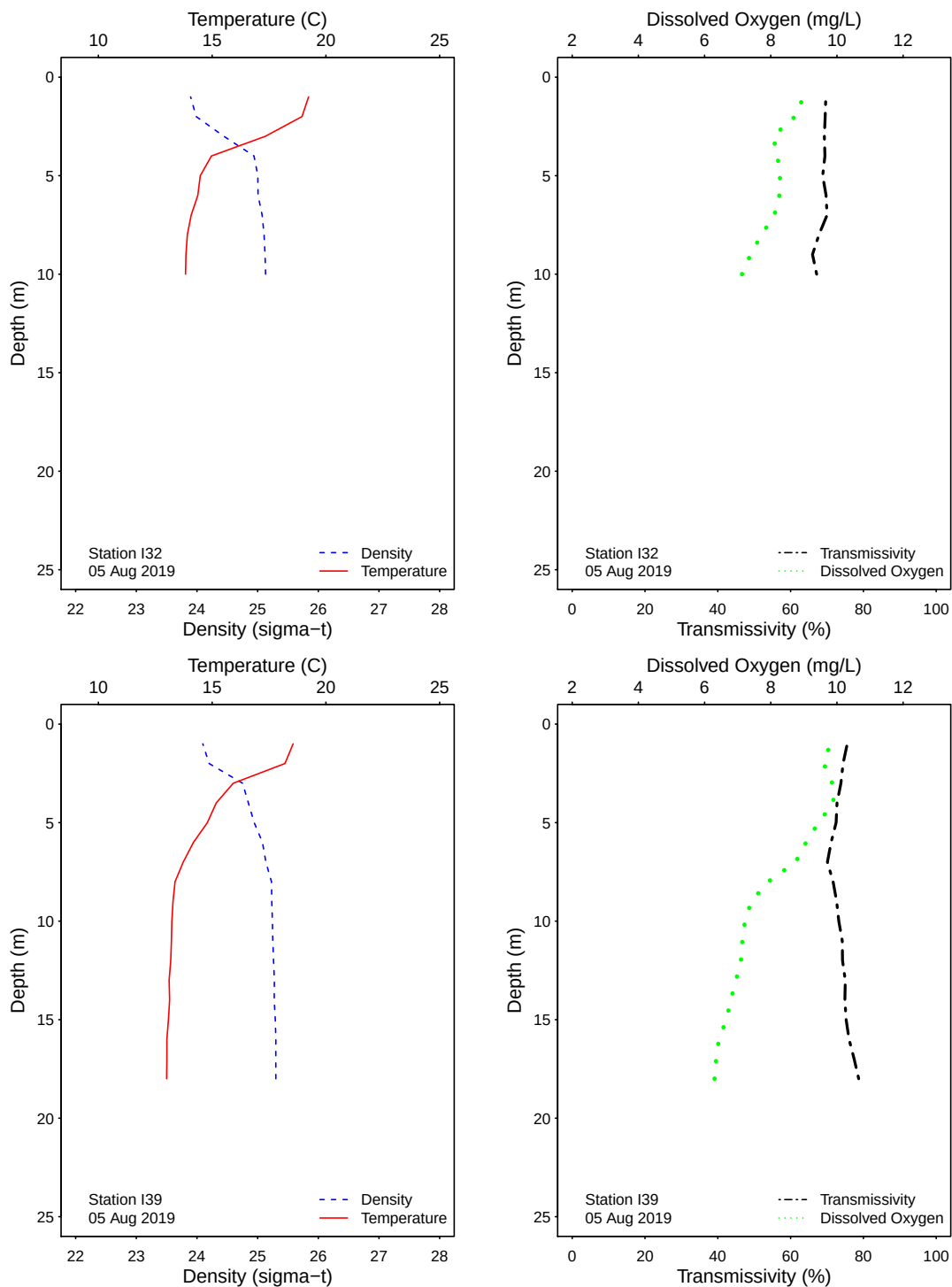


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

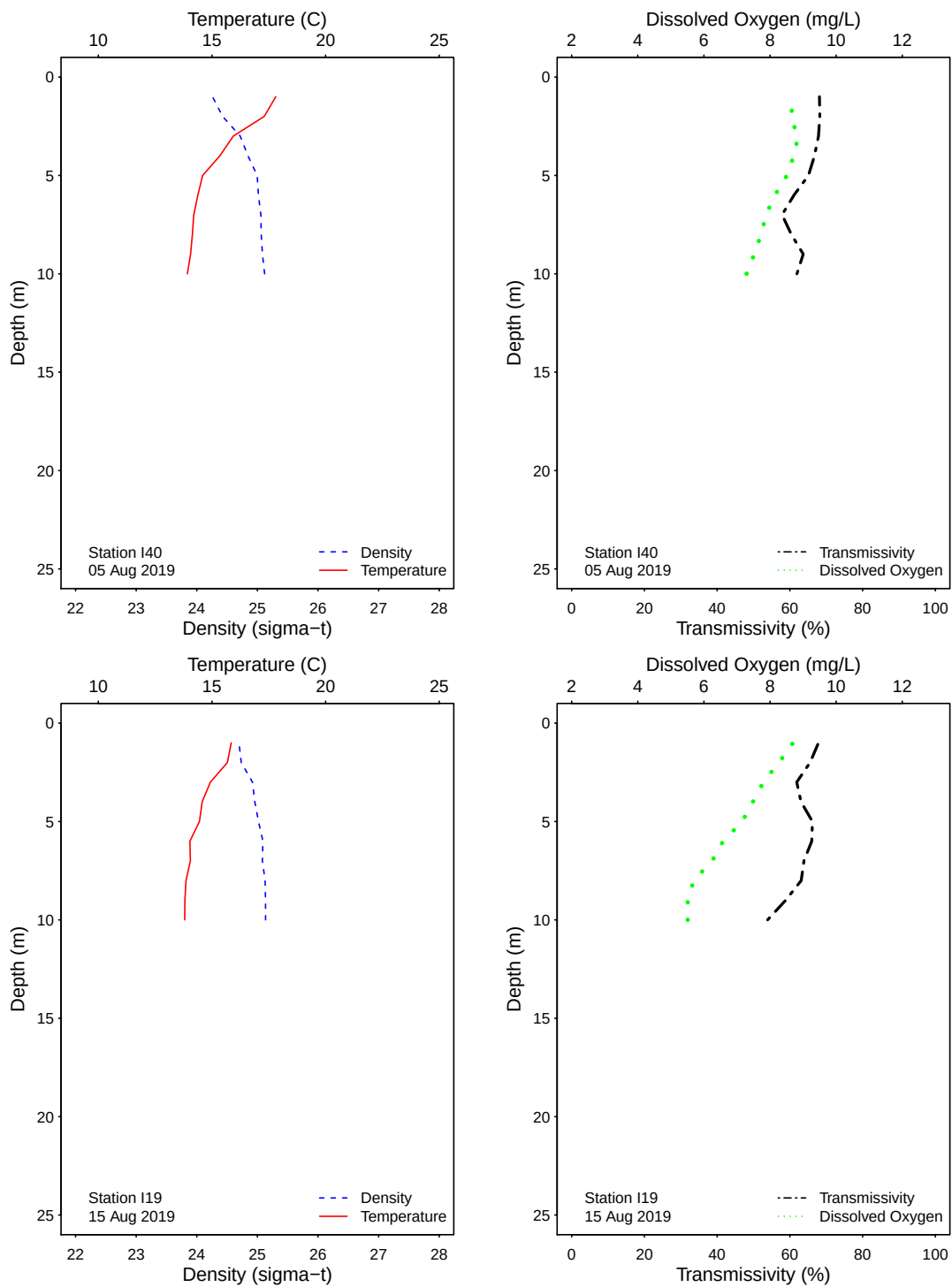


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

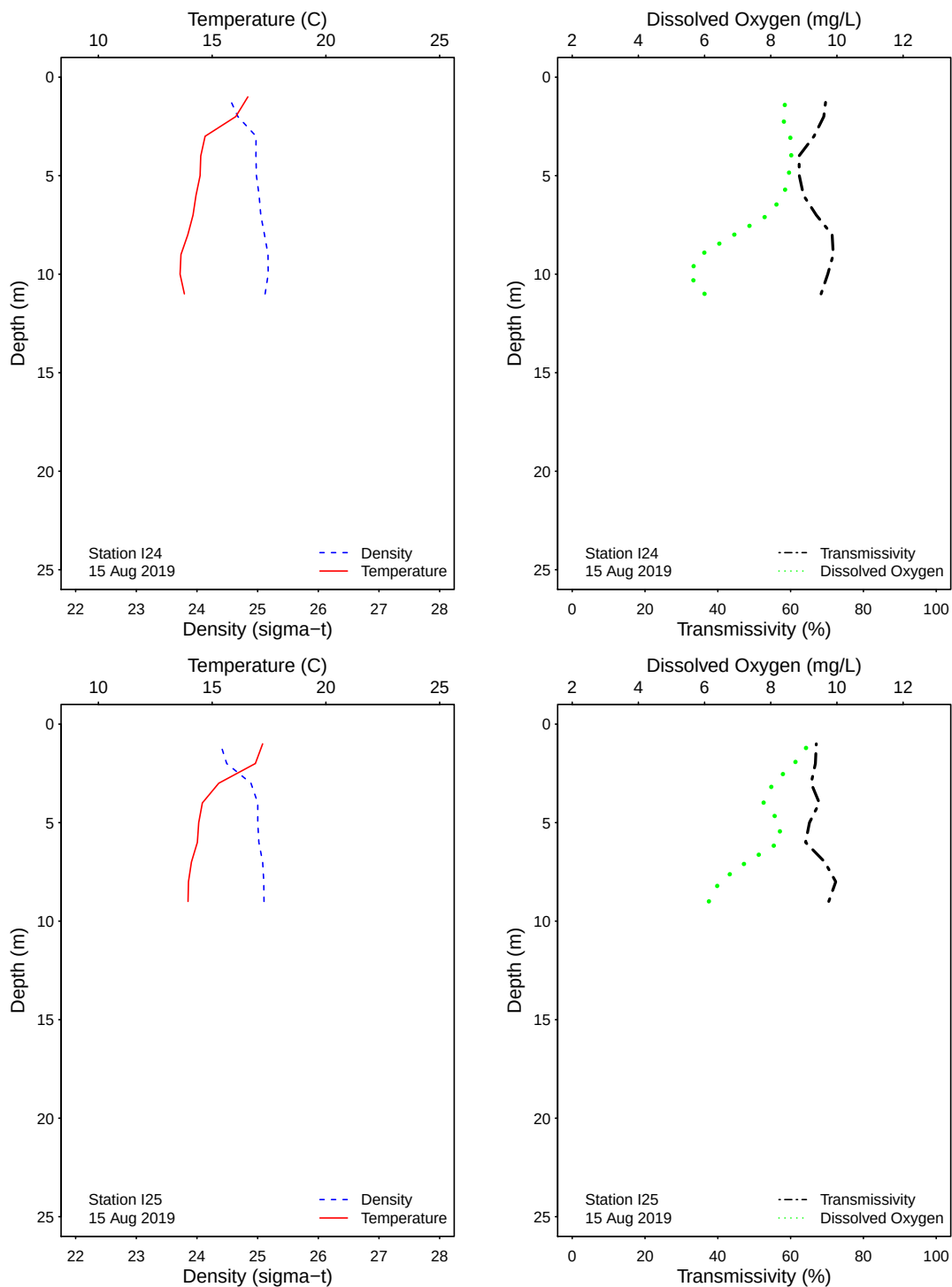


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

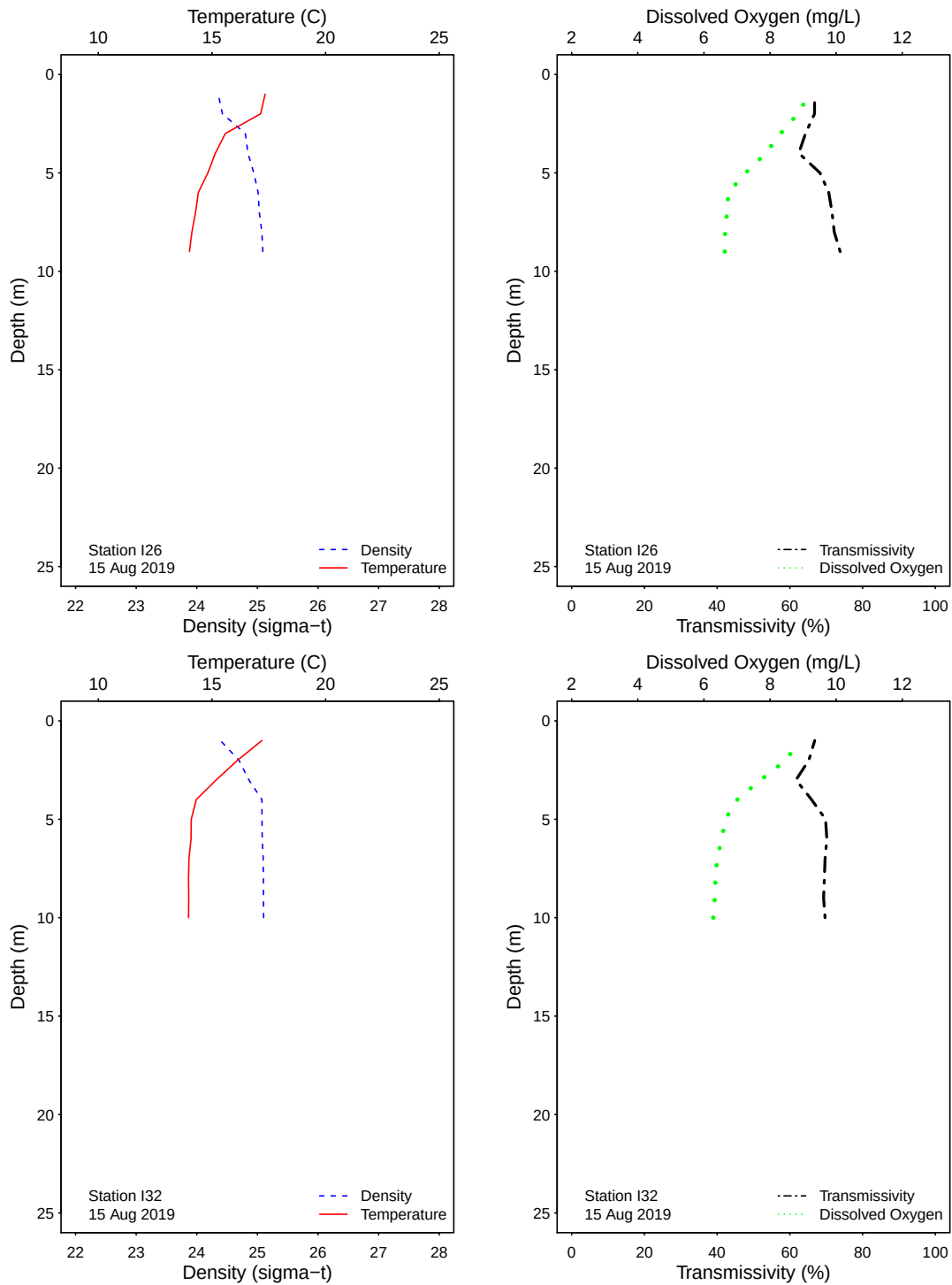


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

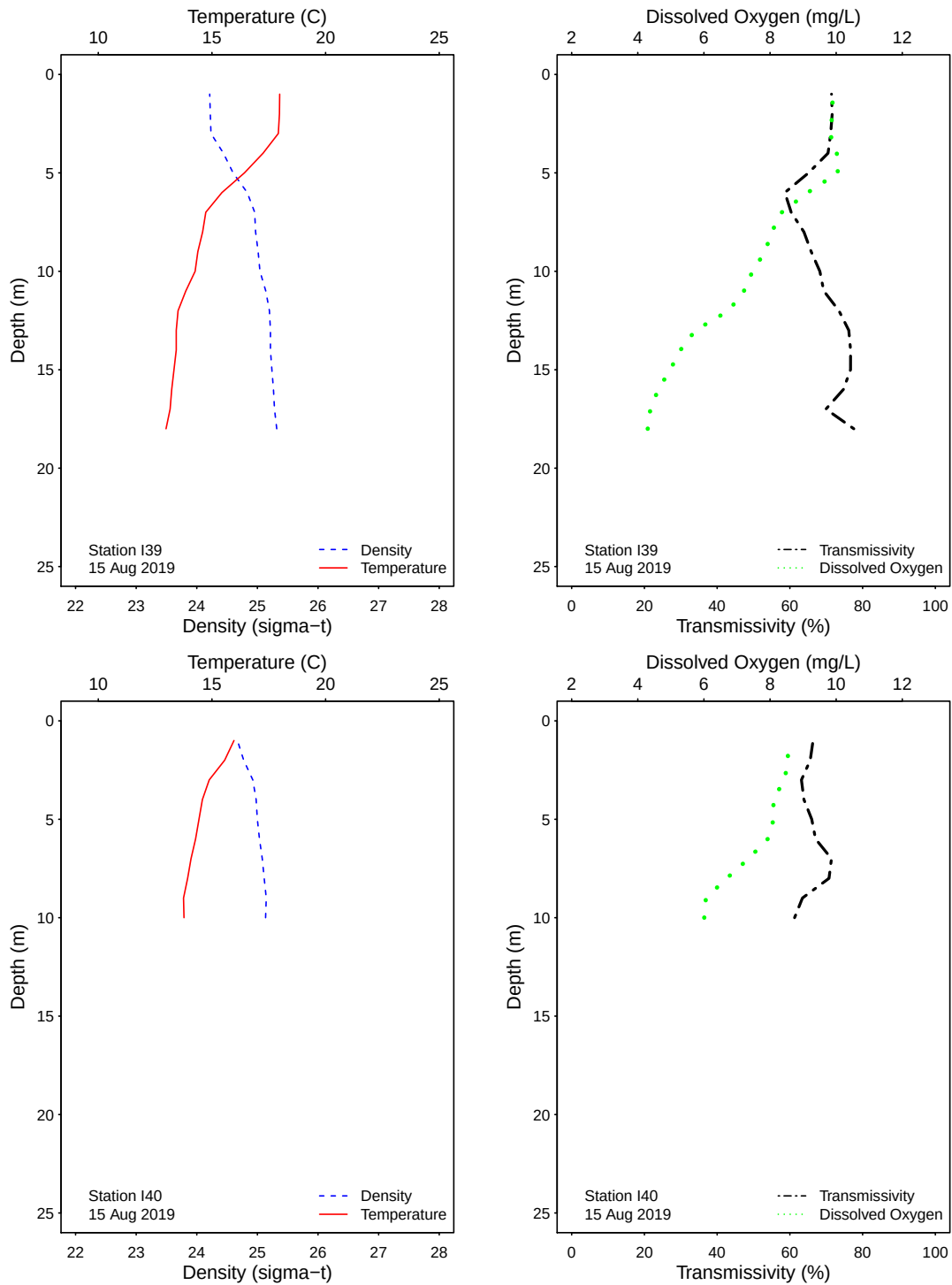


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

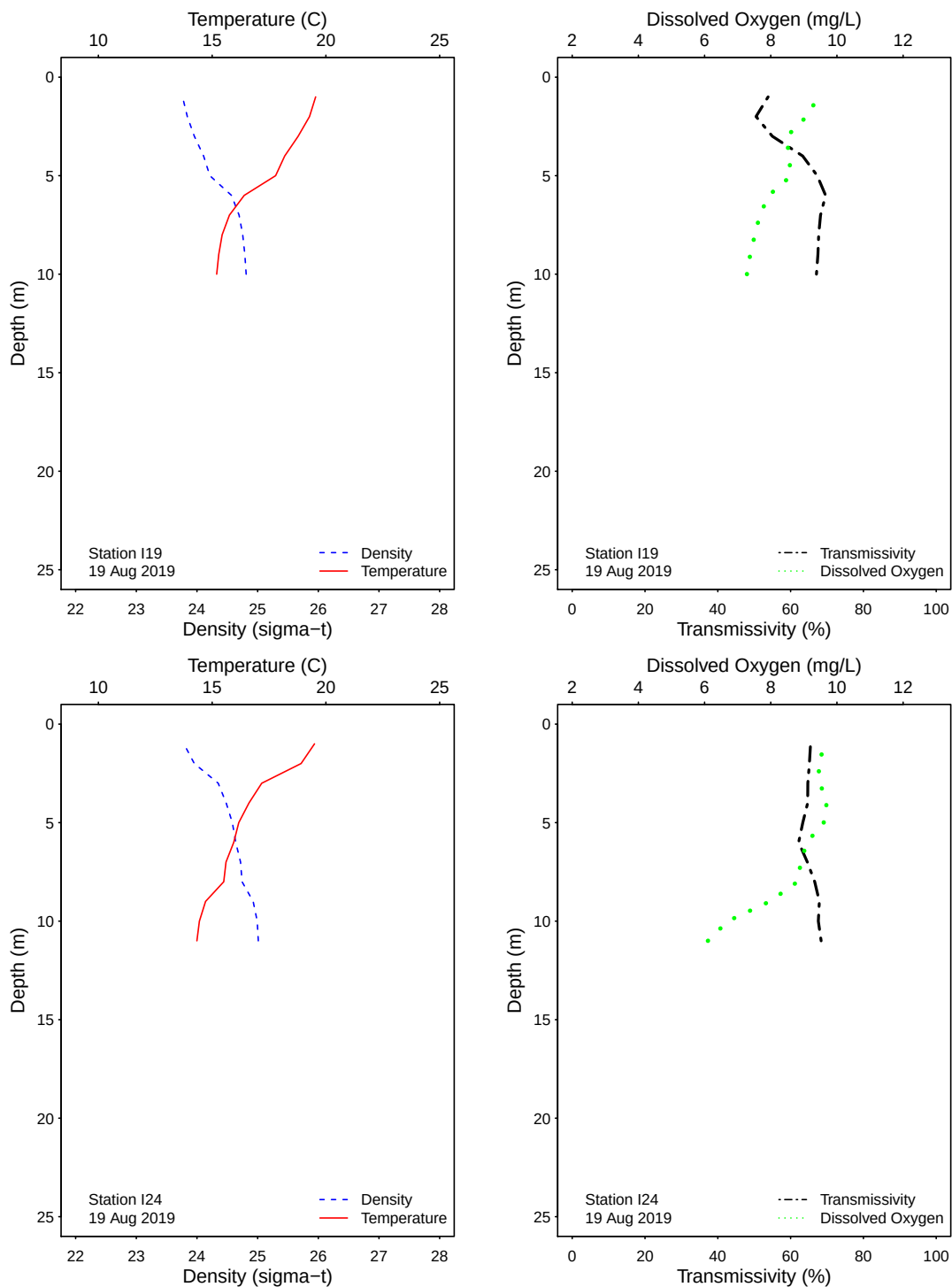


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

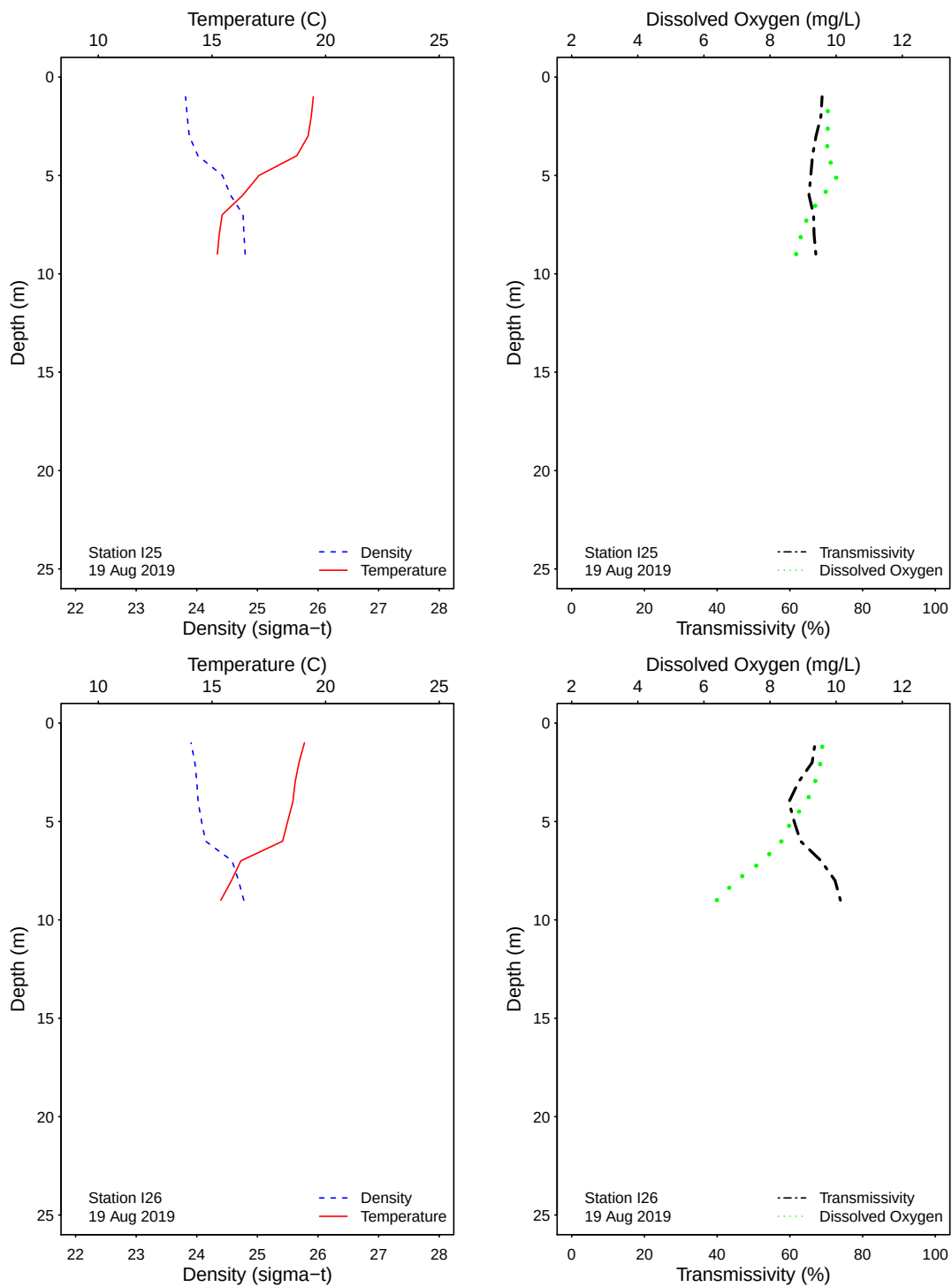


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

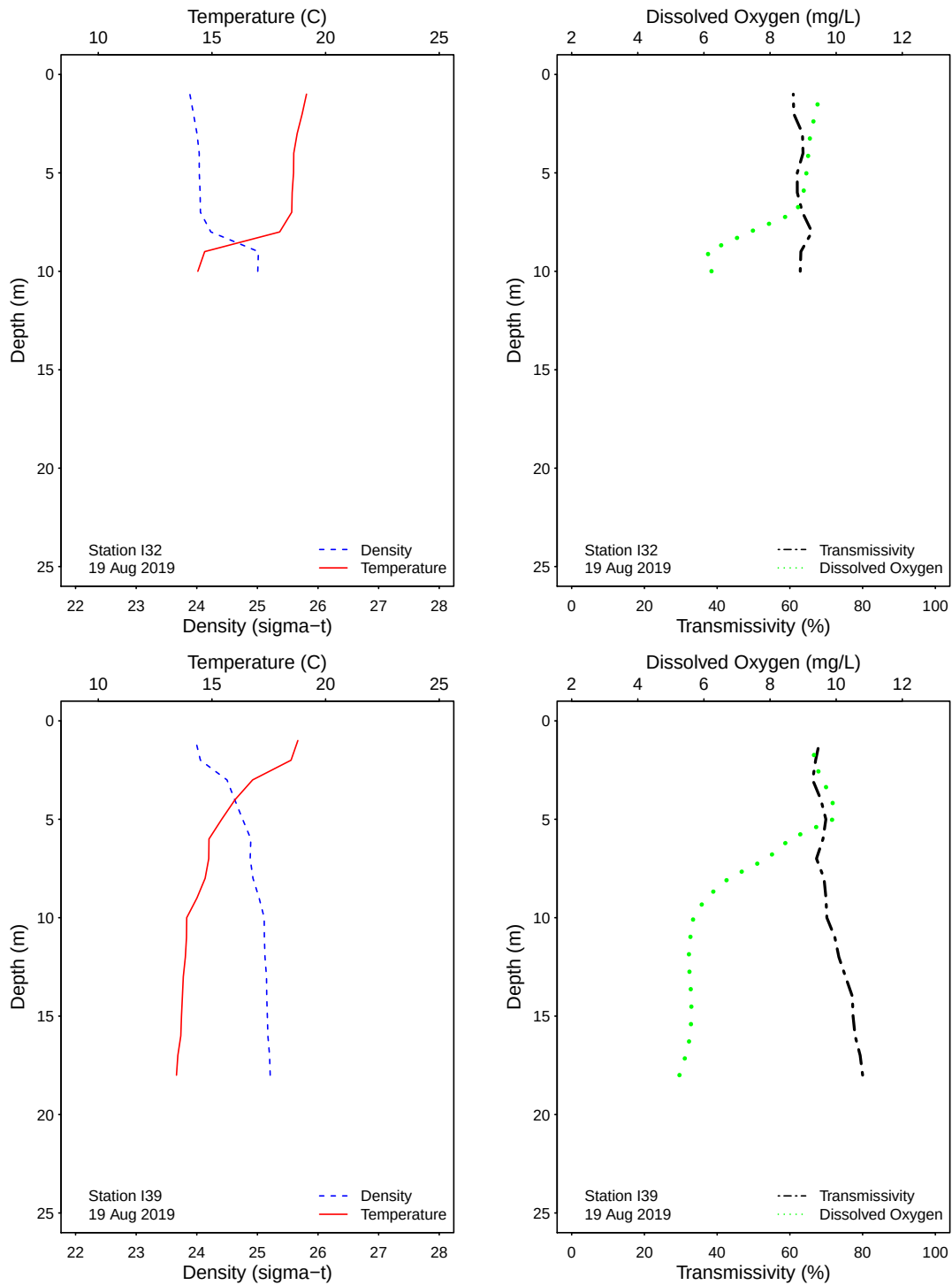


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

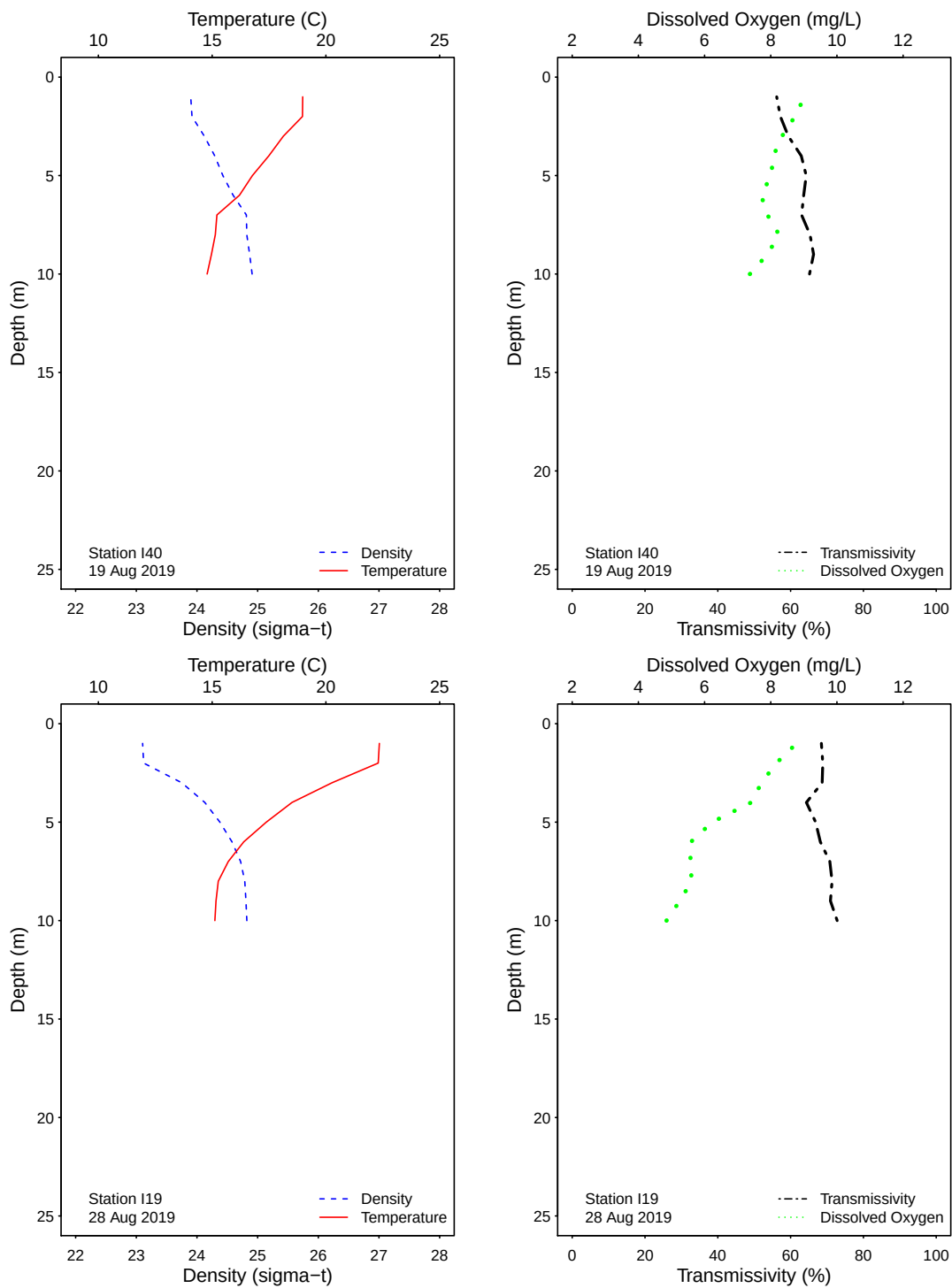


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

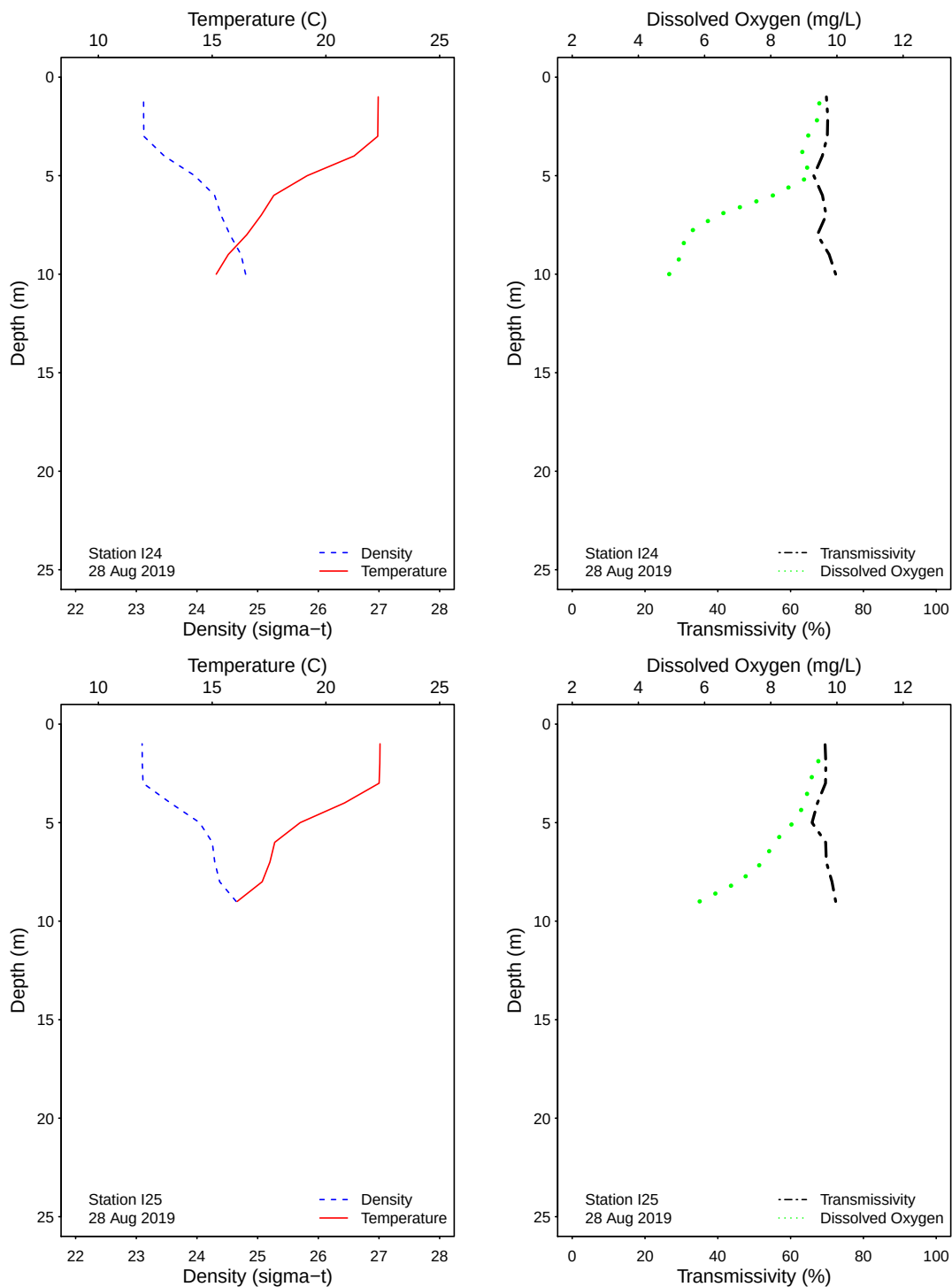


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

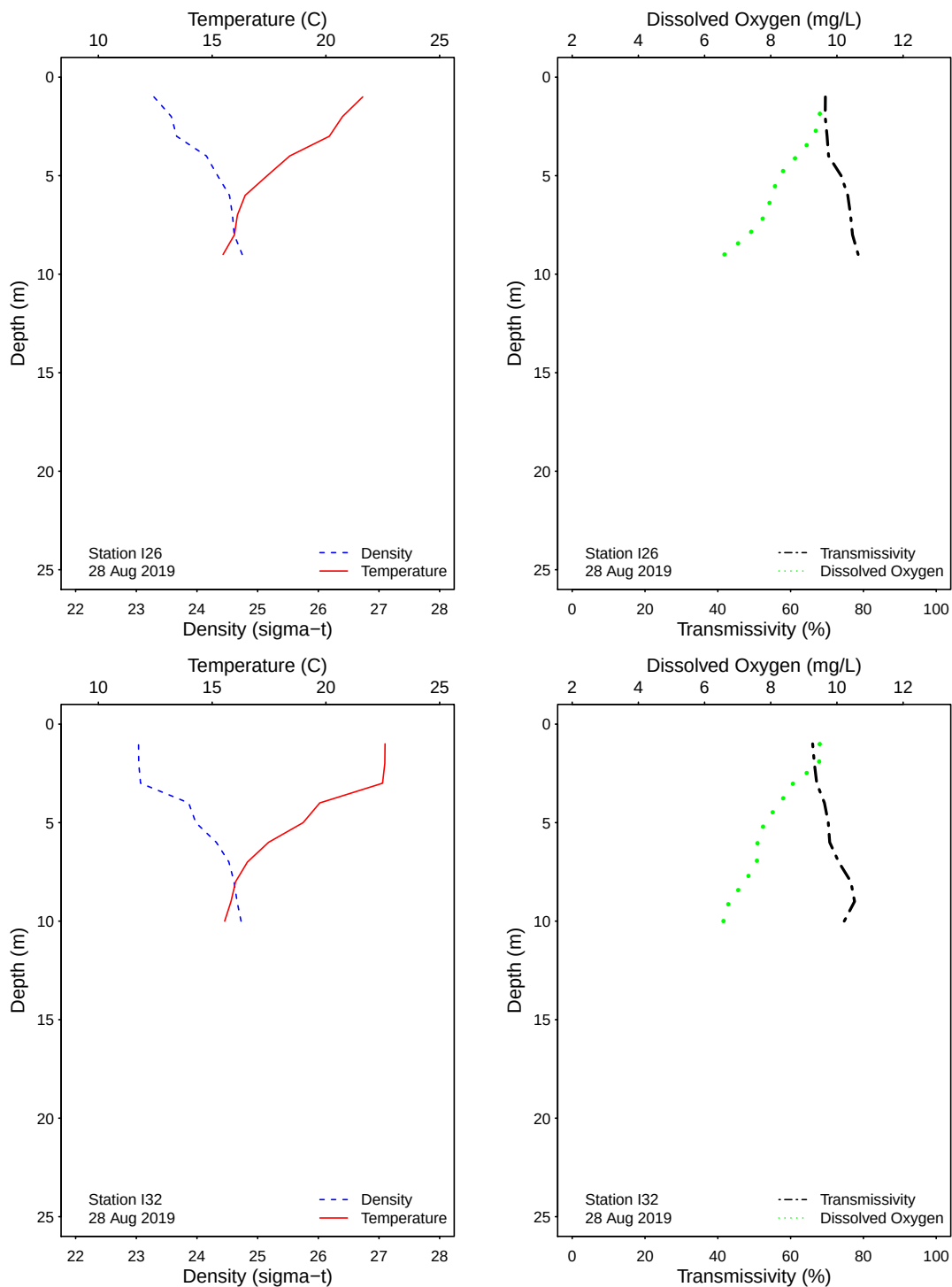


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

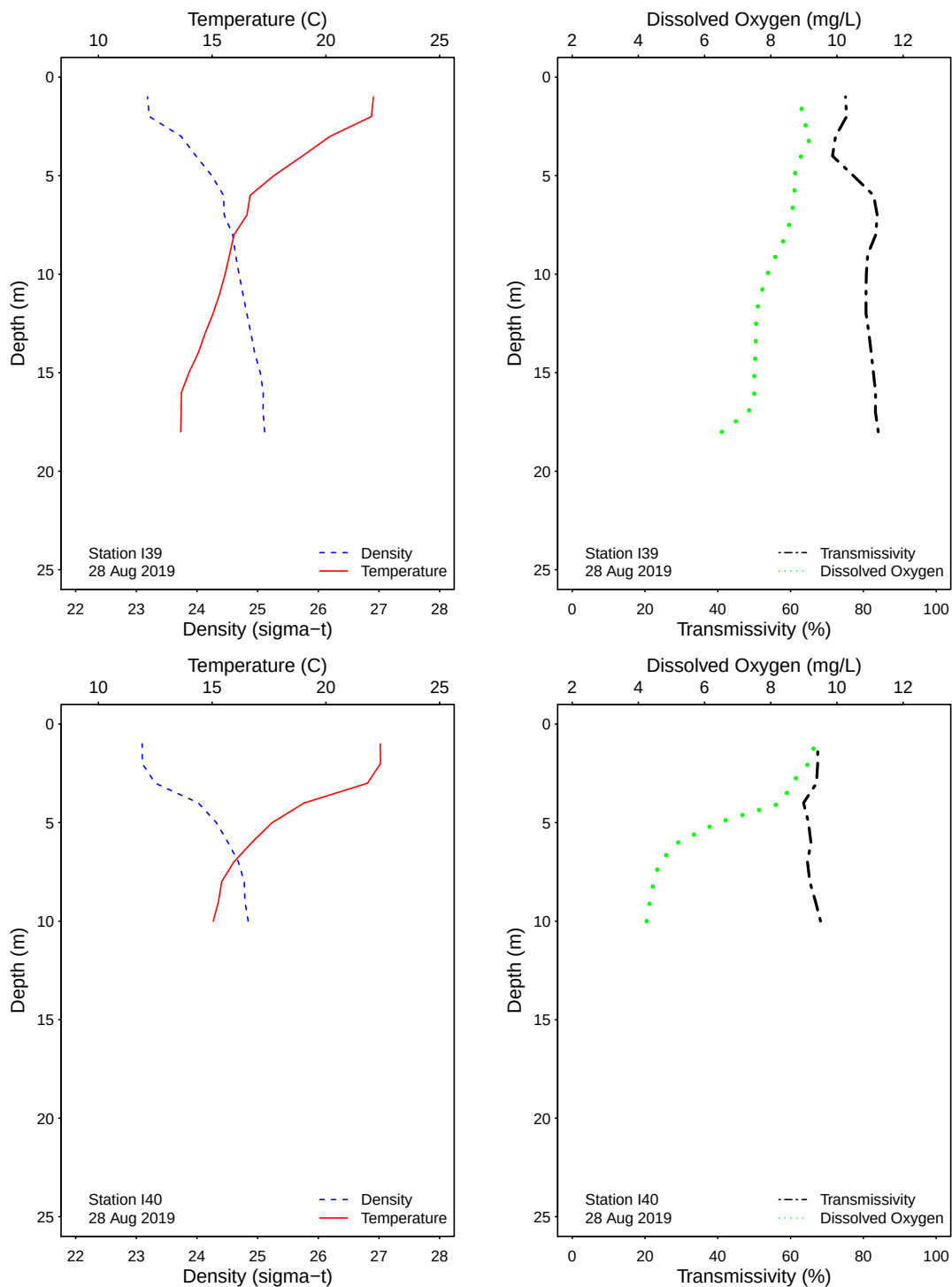


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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 Aug 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
14 Aug 2019	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

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 Aug 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
14 Aug 2019	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

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 Aug 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
14 Aug 2019	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

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 Aug 2019	IC	IC	IC	IC	IC	IC	ns	ns	ns	ns
14 Aug 2019	ns	ns	ns	ns	ns	ns	IC	IC	IC	IC

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 Aug 2019	1034	2	<2	<2	<2	1.00	19.9	66.35	9.6	33.63	8.2
I10	12 Aug 2019	1034	12	24e	<2	2e	0.08	13.3	74.99	6.4	33.59	8.1
I10	12 Aug 2019	1034	18	54	<2	12e	0.04	13.1	75.05	4.6	33.61	7.9
I11	12 Aug 2019	1021	2	60	12e	8e	0.20	16.8	50.34	10.0	33.61	8.2
I11	12 Aug 2019	1021	6	94	22e	10e	0.23	14.3	66.46	8.4	33.59	8.1
I11	12 Aug 2019	1021	11	42	2e	2e	0.05	13.8	73.23	6.8	33.59	8.0
I12	13 Aug 2019	940	2	2e	<2	<2	1.00	20.1	66.25	9.8	33.62	8.2
I12	13 Aug 2019	940	18	4e	<2	<2	0.50	12.9	77.88	5.8	33.59	8.0
I12	13 Aug 2019	940	27	<2	<2	<2	1.00	12.7	80.16	4.6	33.62	7.9
I13	13 Aug 2019	1000	2	<2	<2	<2	1.00	19.9	74.48	9.1	33.65	8.2
I13	13 Aug 2019	1000	18	<2	2e	<2	1.00	13.8	76.01	9.0	33.58	8.2
I13	13 Aug 2019	1000	37	<2	<2	<2	1.00	12.4	86.40	6.0	33.62	8.0
I14	13 Aug 2019	1014	2	<2	<2	<2	1.00	19.9	65.80	9.8	33.62	8.2
I14	13 Aug 2019	1014	18	<2	<2	2e	1.00	12.9	76.99	5.5	33.60	8.0
I14	13 Aug 2019	1014	27	<2	<2	<2	1.00	12.7	79.61	4.5	33.62	7.9
I16	13 Aug 2019	933	2	<2	<2	<2	1.00	19.9	66.47	9.8	33.62	8.2
I16	13 Aug 2019	933	18	4e	<2	<2	0.50	12.9	77.78	5.8	33.60	8.0
I16	13 Aug 2019	933	27	<2	<2	<2	1.00	12.7	81.48	4.8	33.62	7.9
I18	13 Aug 2019	914	2	<2	<2	<2	1.00	19.2	54.61	10.5	33.62	8.2
I18	13 Aug 2019	914	12	14e	<2	2e	0.14	13.6	76.03	6.8	33.59	8.1
I18	13 Aug 2019	914	18	6e	<2	2e	0.33	13.2	76.38	5.9	33.60	8.0
I20	13 Aug 2019	805	2	<2	<2	<2	1.00	19.8	78.60	9.0	33.65	8.2
I20	13 Aug 2019	805	18	<2	<2	<2	1.00	13.4	80.14	8.2	33.52	8.2
I20	13 Aug 2019	805	55	2e	<2	<2	1.00	11.5	87.52	5.1	33.69	7.9
I21	13 Aug 2019	821	2	<2	<2	<2	1.00	18.1	77.52	9.1	33.70	8.2
I21	13 Aug 2019	821	18	<2	<2	<2	1.00	13.1	79.27	7.7	33.56	8.1
I21	13 Aug 2019	821	37	<2	<2	<2	1.00	12.2	85.78	5.7	33.63	8.0
I22	13 Aug 2019	854	2	<2	<2	<2	1.00	19.8	67.29	9.4	33.63	8.2
I22	13 Aug 2019	854	18	6e	<2	<2	0.33	13.1	76.36	5.0	33.60	8.0
I22	13 Aug 2019	854	27	6e	<2	<2	0.33	12.8	79.36	4.3	33.62	7.9
I23	13 Aug 2019	904	2	<2	<2	<2	1.00	19.4	60.36	10.1	33.62	8.2
I23	13 Aug 2019	904	12	<2	<2	2e	1.00	13.8	71.59	6.8	33.59	8.1
I23	13 Aug 2019	904	18	6e	<2	2e	0.33	13.3	74.65	5.2	33.61	8.0
I3	12 Aug 2019	922	2	6e	2e	<2	0.33	19.2	60.11	10.7	33.56	8.2
I3	12 Aug 2019	922	18	<2	<2	<2	1.00	12.6	75.63	4.9	33.60	8.0
I3	12 Aug 2019	922	27	2e	<2	<2	1.00	12.6	76.05	4.7	33.62	7.9
I30	14 Aug 2019	855	2	<2	<2	<2	1.00	19.2	75.29	8.9	33.64	8.2
I30	14 Aug 2019	855	18	2e	<2	<2	1.00	13.2	74.23	4.5	33.61	8.0
I30	14 Aug 2019	855	27	<2	<2	<2	1.00	12.9	79.45	4.2	33.62	7.9

Station	Date	Time	Depth	Total	Fecal	Enteroc	F:T	Temp	XMS	DO	Sal	pH
I33	14 Aug 2019	806	2	<20	<2	<2	0.10	17.0	72.07	7.9	33.66	8.1
I33	14 Aug 2019	806	18	2e	<2	<2	1.00	12.9	75.64	4.6	33.60	8.0
I33	14 Aug 2019	806	27	<2	<2	<2	1.00	12.7	80.33	4.8	33.61	7.9
I36	14 Aug 2019	925	2	<20	<2	<2	0.10	17.3	65.79	9.6	33.63	8.2
I36	14 Aug 2019	925	6	<2	<2	<2	1.00	14.7	62.21	9.1	33.60	8.2
I36	14 Aug 2019	925	11	<2	<2	<2	1.00	14.0	65.64	7.2	33.60	8.1
I37	14 Aug 2019	734	2	2e	<2	<2	1.00	16.5	70.57	7.8	33.63	8.1
I37	14 Aug 2019	734	6	<2	<2	<2	1.00	15.3	71.93	8.1	33.64	8.1
I37	14 Aug 2019	734	11	<2	<2	<2	1.00	13.7	69.50	6.8	33.59	8.1
I38	14 Aug 2019	955	2	<2	<2	<2	1.00	17.5	69.65	9.3	33.62	8.2
I38	14 Aug 2019	955	6	<2	<2	<2	1.00	14.9	74.71	10.2	33.56	8.2
I38	14 Aug 2019	955	11	2e	4e	4e	2.00	13.8	68.07	6.2	33.58	8.1
I5	12 Aug 2019	944	2	5000	760	420	0.15	16.2	62.90	9.7	33.56	8.1
I5	12 Aug 2019	944	6	160	22e	16e	0.14	14.3	63.65	8.4	33.59	8.1
I5	12 Aug 2019	944	11	140e	18e	12e	0.13	13.6	74.26	7.1	33.57	8.1
I7	12 Aug 2019	815	2	<2	<2	<2	1.00	18.5	80.14	9.0	33.64	8.2
I7	12 Aug 2019	815	18	<2	<2	<2	1.00	13.4	79.58	8.1	33.53	8.1
I7	12 Aug 2019	815	52	<2	<2	<2	1.00	11.4	86.56	5.1	33.69	7.9
I8	12 Aug 2019	1100	2	<2	<2	<2	1.00	20.1	77.61	9.0	33.65	8.2
I8	12 Aug 2019	1100	18	<2	<2	<2	1.00	12.9	79.49	7.7	33.56	8.1
I8	12 Aug 2019	1100	37	6e	<2	<2	0.33	12.4	85.27	6.2	33.61	7.9
I9	12 Aug 2019	1045	2	<2	<2	<2	1.00	19.9	76.29	9.0	33.64	8.1
I9	12 Aug 2019	1045	18	<2	<2	<2	1.00	12.7	77.98	4.8	33.61	8.0
I9	12 Aug 2019	1045	27	<2	<2	<2	1.00	12.6	79.44	4.7	33.62	7.9

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 Aug 2019	Depth (m)	61
I1	12 Aug 2019	Arrive Time	838
I1	12 Aug 2019	Depart Time	850
I1	12 Aug 2019	Air Temp (C)	17
I1	12 Aug 2019	Weather	Cloudy
I1	12 Aug 2019	Visibility (mi)	2
I1	12 Aug 2019	Wind Speed (kts)	0
I1	12 Aug 2019	Wind Dir	
I1	12 Aug 2019	Water Color	Brownish-Green
I1	12 Aug 2019	Wave Ht Low (ft)	3
I1	12 Aug 2019	Wave Period (sec)	13
I1	12 Aug 2019	Sea State	Calm
I1	12 Aug 2019	High Tide (ft)	6.33
I1	12 Aug 2019	High Tide Time	2106
I1	12 Aug 2019	Low Tide (ft)	-0.71
I1	12 Aug 2019	Low Tide Time	405
I1	12 Aug 2019	Comments	none
I10	12 Aug 2019	Depth (m)	20
I10	12 Aug 2019	Arrive Time	1034
I10	12 Aug 2019	Depart Time	1036
I10	12 Aug 2019	Air Temp (C)	17
I10	12 Aug 2019	Weather	Cloudy
I10	12 Aug 2019	Visibility (mi)	4
I10	12 Aug 2019	Wind Speed (kts)	3
I10	12 Aug 2019	Wind Dir	SE
I10	12 Aug 2019	Water Color	Brownish-Green
I10	12 Aug 2019	Wave Ht Low (ft)	3
I10	12 Aug 2019	Wave Period (sec)	13
I10	12 Aug 2019	Sea State	Calm
I10	12 Aug 2019	High Tide (ft)	6.33
I10	12 Aug 2019	High Tide Time	2106
I10	12 Aug 2019	Low Tide (ft)	-0.71
I10	12 Aug 2019	Low Tide Time	405
I10	12 Aug 2019	Comments	none
I11	12 Aug 2019	Depth (m)	13
I11	12 Aug 2019	Arrive Time	1021
I11	12 Aug 2019	Depart Time	1025
I11	12 Aug 2019	Air Temp (C)	18
I11	12 Aug 2019	Weather	Cloudy
I11	12 Aug 2019	Visibility (mi)	4
I11	12 Aug 2019	Wind Speed (kts)	2
I11	12 Aug 2019	Wind Dir	SW
I11	12 Aug 2019	Water Color	Brownish-Green
I11	12 Aug 2019	Wave Ht Low (ft)	3
I11	12 Aug 2019	Wave Period (sec)	13
I11	12 Aug 2019	Sea State	Calm
I11	12 Aug 2019	High Tide (ft)	6.33
I11	12 Aug 2019	High Tide Time	2106
I11	12 Aug 2019	Low Tide (ft)	-0.71
I11	12 Aug 2019	Low Tide Time	405
I11	12 Aug 2019	Comments	none
I12	13 Aug 2019	Depth (m)	30
I12	13 Aug 2019	Arrive Time	940

Station	Date	Parameter	Value
I12	13 Aug 2019	Depart Time	946
I12	13 Aug 2019	Air Temp (C)	18
I12	13 Aug 2019	Weather	Overcast
I12	13 Aug 2019	Visibility (mi)	7
I12	13 Aug 2019	Wind Speed (kts)	3
I12	13 Aug 2019	Wind Dir	W
I12	13 Aug 2019	Water Color	Green
I12	13 Aug 2019	Wave Ht Low (ft)	3
I12	13 Aug 2019	Wave Period (sec)	13
I12	13 Aug 2019	Sea State	Calm
I12	13 Aug 2019	High Tide (ft)	6.33
I12	13 Aug 2019	High Tide Time	2106
I12	13 Aug 2019	Low Tide (ft)	-0.71
I12	13 Aug 2019	Low Tide Time	405
I12	13 Aug 2019	Comments	none
I13	13 Aug 2019	Depth (m)	38
I13	13 Aug 2019	Arrive Time	1000
I13	13 Aug 2019	Depart Time	1006
I13	13 Aug 2019	Air Temp (C)	18
I13	13 Aug 2019	Weather	Overcast
I13	13 Aug 2019	Visibility (mi)	7
I13	13 Aug 2019	Wind Speed (kts)	3
I13	13 Aug 2019	Wind Dir	W
I13	13 Aug 2019	Water Color	Green
I13	13 Aug 2019	Wave Ht Low (ft)	3
I13	13 Aug 2019	Wave Period (sec)	13
I13	13 Aug 2019	Sea State	Calm
I13	13 Aug 2019	High Tide (ft)	6.33
I13	13 Aug 2019	High Tide Time	2106
I13	13 Aug 2019	Low Tide (ft)	-0.71
I13	13 Aug 2019	Low Tide Time	405
I13	13 Aug 2019	Comments	none
I14	13 Aug 2019	Depth (m)	29
I14	13 Aug 2019	Arrive Time	1014
I14	13 Aug 2019	Depart Time	1019
I14	13 Aug 2019	Air Temp (C)	18
I14	13 Aug 2019	Weather	Overcast
I14	13 Aug 2019	Visibility (mi)	7
I14	13 Aug 2019	Wind Speed (kts)	2
I14	13 Aug 2019	Wind Dir	W
I14	13 Aug 2019	Water Color	Green
I14	13 Aug 2019	Wave Ht Low (ft)	3
I14	13 Aug 2019	Wave Period (sec)	13
I14	13 Aug 2019	Sea State	Calm
I14	13 Aug 2019	High Tide (ft)	6.33
I14	13 Aug 2019	High Tide Time	2106
I14	13 Aug 2019	Low Tide (ft)	-0.71
I14	13 Aug 2019	Low Tide Time	405
I14	13 Aug 2019	Comments	none
I15	13 Aug 2019	Depth (m)	32
I15	13 Aug 2019	Arrive Time	949
I15	13 Aug 2019	Depart Time	954
I15	13 Aug 2019	Air Temp (C)	18
I15	13 Aug 2019	Weather	Overcast
I15	13 Aug 2019	Visibility (mi)	7
I15	13 Aug 2019	Wind Speed (kts)	1
I15	13 Aug 2019	Wind Dir	SW
I15	13 Aug 2019	Water Color	Green

Station	Date	Parameter	Value
I15	13 Aug 2019	Wave Ht Low (ft)	3
I15	13 Aug 2019	Wave Period (sec)	13
I15	13 Aug 2019	Sea State	Calm
I15	13 Aug 2019	High Tide (ft)	6.33
I15	13 Aug 2019	High Tide Time	2106
I15	13 Aug 2019	Low Tide (ft)	-0.71
I15	13 Aug 2019	Low Tide Time	405
I15	13 Aug 2019	Comments	none
I16	13 Aug 2019	Depth (m)	29
I16	13 Aug 2019	Arrive Time	933
I16	13 Aug 2019	Depart Time	938
I16	13 Aug 2019	Air Temp (C)	18
I16	13 Aug 2019	Weather	Overcast
I16	13 Aug 2019	Visibility (mi)	7
I16	13 Aug 2019	Wind Speed (kts)	5
I16	13 Aug 2019	Wind Dir	SW
I16	13 Aug 2019	Water Color	Green
I16	13 Aug 2019	Wave Ht Low (ft)	3
I16	13 Aug 2019	Wave Period (sec)	13
I16	13 Aug 2019	Sea State	Calm
I16	13 Aug 2019	High Tide (ft)	6.33
I16	13 Aug 2019	High Tide Time	2106
I16	13 Aug 2019	Low Tide (ft)	-0.71
I16	13 Aug 2019	Low Tide Time	405
I16	13 Aug 2019	Comments	none
I17	13 Aug 2019	Depth (m)	26
I17	13 Aug 2019	Arrive Time	925
I17	13 Aug 2019	Depart Time	930
I17	13 Aug 2019	Air Temp (C)	18
I17	13 Aug 2019	Weather	Overcast
I17	13 Aug 2019	Visibility (mi)	7
I17	13 Aug 2019	Wind Speed (kts)	3
I17	13 Aug 2019	Wind Dir	SW
I17	13 Aug 2019	Water Color	Green
I17	13 Aug 2019	Wave Ht Low (ft)	3
I17	13 Aug 2019	Wave Period (sec)	13
I17	13 Aug 2019	Sea State	Calm
I17	13 Aug 2019	High Tide (ft)	6.33
I17	13 Aug 2019	High Tide Time	2106
I17	13 Aug 2019	Low Tide (ft)	-0.71
I17	13 Aug 2019	Low Tide Time	405
I17	13 Aug 2019	Comments	none
I18	13 Aug 2019	Depth (m)	21
I18	13 Aug 2019	Arrive Time	914
I18	13 Aug 2019	Depart Time	920
I18	13 Aug 2019	Air Temp (C)	18
I18	13 Aug 2019	Weather	Overcast
I18	13 Aug 2019	Visibility (mi)	7
I18	13 Aug 2019	Wind Speed (kts)	0
I18	13 Aug 2019	Wind Dir	
I18	13 Aug 2019	Water Color	Green
I18	13 Aug 2019	Wave Ht Low (ft)	3
I18	13 Aug 2019	Wave Period (sec)	13
I18	13 Aug 2019	Sea State	Calm
I18	13 Aug 2019	High Tide (ft)	6.33
I18	13 Aug 2019	High Tide Time	2106
I18	13 Aug 2019	Low Tide (ft)	-0.71
I18	13 Aug 2019	Low Tide Time	405

Station	Date	Parameter	Value
I18	13 Aug 2019	Comments	none
I2	12 Aug 2019	Depth (m)	34
I2	12 Aug 2019	Arrive Time	907
I2	12 Aug 2019	Depart Time	910
I2	12 Aug 2019	Air Temp (C)	17
I2	12 Aug 2019	Weather	Cloudy
I2	12 Aug 2019	Visibility (mi)	4
I2	12 Aug 2019	Wind Speed (kts)	2
I2	12 Aug 2019	Wind Dir	SE
I2	12 Aug 2019	Water Color	Brownish-Green
I2	12 Aug 2019	Wave Ht Low (ft)	3
I2	12 Aug 2019	Wave Period (sec)	13
I2	12 Aug 2019	Sea State	Calm
I2	12 Aug 2019	High Tide (ft)	6.33
I2	12 Aug 2019	High Tide Time	2106
I2	12 Aug 2019	Low Tide (ft)	-0.71
I2	12 Aug 2019	Low Tide Time	405
I2	12 Aug 2019	Comments	none
I20	13 Aug 2019	Depth (m)	55
I20	13 Aug 2019	Arrive Time	805
I20	13 Aug 2019	Depart Time	812
I20	13 Aug 2019	Air Temp (C)	18
I20	13 Aug 2019	Weather	Overcast
I20	13 Aug 2019	Visibility (mi)	7
I20	13 Aug 2019	Wind Speed (kts)	1
I20	13 Aug 2019	Wind Dir	W
I20	13 Aug 2019	Water Color	Bluish-Green
I20	13 Aug 2019	Wave Ht Low (ft)	3
I20	13 Aug 2019	Wave Period (sec)	13
I20	13 Aug 2019	Sea State	Calm
I20	13 Aug 2019	High Tide (ft)	6.33
I20	13 Aug 2019	High Tide Time	2106
I20	13 Aug 2019	Low Tide (ft)	-0.71
I20	13 Aug 2019	Low Tide Time	405
I20	13 Aug 2019	Comments	none
I21	13 Aug 2019	Depth (m)	41
I21	13 Aug 2019	Arrive Time	821
I21	13 Aug 2019	Depart Time	833
I21	13 Aug 2019	Air Temp (C)	18
I21	13 Aug 2019	Weather	Overcast
I21	13 Aug 2019	Visibility (mi)	7
I21	13 Aug 2019	Wind Speed (kts)	2
I21	13 Aug 2019	Wind Dir	SW
I21	13 Aug 2019	Water Color	Bluish-Green
I21	13 Aug 2019	Wave Ht Low (ft)	3
I21	13 Aug 2019	Wave Period (sec)	13
I21	13 Aug 2019	Sea State	Calm
I21	13 Aug 2019	High Tide (ft)	6.33
I21	13 Aug 2019	High Tide Time	2106
I21	13 Aug 2019	Low Tide (ft)	-0.71
I21	13 Aug 2019	Low Tide Time	405
I21	13 Aug 2019	Comments	none
I22	13 Aug 2019	Depth (m)	29
I22	13 Aug 2019	Arrive Time	854
I22	13 Aug 2019	Depart Time	859
I22	13 Aug 2019	Air Temp (C)	18
I22	13 Aug 2019	Weather	Overcast

Station	Date	Parameter	Value
I22	13 Aug 2019	Visibility (mi)	7
I22	13 Aug 2019	Wind Speed (kts)	6
I22	13 Aug 2019	Wind Dir	W
I22	13 Aug 2019	Water Color	Bluish-Green
I22	13 Aug 2019	Wave Ht Low (ft)	3
I22	13 Aug 2019	Wave Period (sec)	13
I22	13 Aug 2019	Sea State	Calm
I22	13 Aug 2019	High Tide (ft)	6.33
I22	13 Aug 2019	High Tide Time	2106
I22	13 Aug 2019	Low Tide (ft)	-0.71
I22	13 Aug 2019	Low Tide Time	405
I22	13 Aug 2019	Comments	none
I23	13 Aug 2019	Depth (m)	21
I23	13 Aug 2019	Arrive Time	904
I23	13 Aug 2019	Depart Time	912
I23	13 Aug 2019	Air Temp (C)	18
I23	13 Aug 2019	Weather	Overcast
I23	13 Aug 2019	Visibility (mi)	7
I23	13 Aug 2019	Wind Speed (kts)	4
I23	13 Aug 2019	Wind Dir	W
I23	13 Aug 2019	Water Color	Green
I23	13 Aug 2019	Wave Ht Low (ft)	3
I23	13 Aug 2019	Wave Period (sec)	13
I23	13 Aug 2019	Sea State	Calm
I23	13 Aug 2019	High Tide (ft)	6.33
I23	13 Aug 2019	High Tide Time	2106
I23	13 Aug 2019	Low Tide (ft)	-0.71
I23	13 Aug 2019	Low Tide Time	405
I23	13 Aug 2019	Comments	none
I27	13 Aug 2019	Depth (m)	29
I27	13 Aug 2019	Arrive Time	842
I27	13 Aug 2019	Depart Time	848
I27	13 Aug 2019	Air Temp (C)	18
I27	13 Aug 2019	Weather	Overcast
I27	13 Aug 2019	Visibility (mi)	7
I27	13 Aug 2019	Wind Speed (kts)	0
I27	13 Aug 2019	Wind Dir	
I27	13 Aug 2019	Water Color	Bluish-Green
I27	13 Aug 2019	Wave Ht Low (ft)	3
I27	13 Aug 2019	Wave Period (sec)	13
I27	13 Aug 2019	Sea State	Calm
I27	13 Aug 2019	High Tide (ft)	6.33
I27	13 Aug 2019	High Tide Time	2106
I27	13 Aug 2019	Low Tide (ft)	-0.71
I27	13 Aug 2019	Low Tide Time	405
I27	13 Aug 2019	Comments	none
I28	14 Aug 2019	Depth (m)	58
I28	14 Aug 2019	Arrive Time	823
I28	14 Aug 2019	Depart Time	833
I28	14 Aug 2019	Air Temp (C)	18
I28	14 Aug 2019	Weather	Overcast
I28	14 Aug 2019	Visibility (mi)	7
I28	14 Aug 2019	Wind Speed (kts)	3
I28	14 Aug 2019	Wind Dir	NW
I28	14 Aug 2019	Water Color	Green
I28	14 Aug 2019	Wave Ht Low (ft)	3
I28	14 Aug 2019	Wave Period (sec)	9
I28	14 Aug 2019	Sea State	Calm

Station	Date	Parameter	Value
I28	14 Aug 2019	High Tide (ft)	6.33
I28	14 Aug 2019	High Tide Time	2106
I28	14 Aug 2019	Low Tide (ft)	-0.71
I28	14 Aug 2019	Low Tide Time	405
I28	14 Aug 2019	Comments	none
I29	14 Aug 2019	Depth (m)	38
I29	14 Aug 2019	Arrive Time	843
I29	14 Aug 2019	Depart Time	848
I29	14 Aug 2019	Air Temp (C)	18
I29	14 Aug 2019	Weather	Overcast
I29	14 Aug 2019	Visibility (mi)	7
I29	14 Aug 2019	Wind Speed (kts)	7
I29	14 Aug 2019	Wind Dir	W
I29	14 Aug 2019	Water Color	Green
I29	14 Aug 2019	Wave Ht Low (ft)	3
I29	14 Aug 2019	Wave Period (sec)	9
I29	14 Aug 2019	Sea State	Calm
I29	14 Aug 2019	High Tide (ft)	6.33
I29	14 Aug 2019	High Tide Time	2106
I29	14 Aug 2019	Low Tide (ft)	-0.71
I29	14 Aug 2019	Low Tide Time	405
I29	14 Aug 2019	Comments	none
I3	12 Aug 2019	Depth (m)	28
I3	12 Aug 2019	Arrive Time	922
I3	12 Aug 2019	Depart Time	926
I3	12 Aug 2019	Air Temp (C)	17
I3	12 Aug 2019	Weather	Cloudy
I3	12 Aug 2019	Visibility (mi)	4
I3	12 Aug 2019	Wind Speed (kts)	2
I3	12 Aug 2019	Wind Dir	SE
I3	12 Aug 2019	Water Color	Brownish-Green
I3	12 Aug 2019	Wave Ht Low (ft)	3
I3	12 Aug 2019	Wave Period (sec)	13
I3	12 Aug 2019	Sea State	Calm
I3	12 Aug 2019	High Tide (ft)	6.33
I3	12 Aug 2019	High Tide Time	2106
I3	12 Aug 2019	Low Tide (ft)	-0.71
I3	12 Aug 2019	Low Tide Time	405
I3	12 Aug 2019	Comments	none
I30	14 Aug 2019	Depth (m)	28
I30	14 Aug 2019	Arrive Time	855
I30	14 Aug 2019	Depart Time	859
I30	14 Aug 2019	Air Temp (C)	18
I30	14 Aug 2019	Weather	Overcast
I30	14 Aug 2019	Visibility (mi)	7
I30	14 Aug 2019	Wind Speed (kts)	5
I30	14 Aug 2019	Wind Dir	W
I30	14 Aug 2019	Water Color	Green
I30	14 Aug 2019	Wave Ht Low (ft)	3
I30	14 Aug 2019	Wave Period (sec)	9
I30	14 Aug 2019	Sea State	Calm
I30	14 Aug 2019	High Tide (ft)	6.33
I30	14 Aug 2019	High Tide Time	2106
I30	14 Aug 2019	Low Tide (ft)	-0.71
I30	14 Aug 2019	Low Tide Time	405
I30	14 Aug 2019	Comments	none
I31	14 Aug 2019	Depth (m)	20

Station	Date	Parameter	Value
I31	14 Aug 2019	Arrive Time	908
I31	14 Aug 2019	Depart Time	911
I31	14 Aug 2019	Air Temp (C)	19
I31	14 Aug 2019	Weather	Overcast
I31	14 Aug 2019	Visibility (mi)	7
I31	14 Aug 2019	Wind Speed (kts)	8
I31	14 Aug 2019	Wind Dir	SW
I31	14 Aug 2019	Water Color	Green
I31	14 Aug 2019	Wave Ht Low (ft)	3
I31	14 Aug 2019	Wave Period (sec)	9
I31	14 Aug 2019	Sea State	Calm
I31	14 Aug 2019	High Tide (ft)	6.33
I31	14 Aug 2019	High Tide Time	2106
I31	14 Aug 2019	Low Tide (ft)	-0.71
I31	14 Aug 2019	Low Tide Time	405
I31	14 Aug 2019	Comments	none
I33	14 Aug 2019	Depth (m)	31
I33	14 Aug 2019	Arrive Time	806
I33	14 Aug 2019	Depart Time	811
I33	14 Aug 2019	Air Temp (C)	18
I33	14 Aug 2019	Weather	Overcast
I33	14 Aug 2019	Visibility (mi)	7
I33	14 Aug 2019	Wind Speed (kts)	5
I33	14 Aug 2019	Wind Dir	W
I33	14 Aug 2019	Water Color	Green
I33	14 Aug 2019	Wave Ht Low (ft)	3
I33	14 Aug 2019	Wave Period (sec)	9
I33	14 Aug 2019	Sea State	Calm
I33	14 Aug 2019	High Tide (ft)	6.33
I33	14 Aug 2019	High Tide Time	2106
I33	14 Aug 2019	Low Tide (ft)	-0.71
I33	14 Aug 2019	Low Tide Time	405
I33	14 Aug 2019	Comments	none
I34	14 Aug 2019	Depth (m)	20
I34	14 Aug 2019	Arrive Time	744
I34	14 Aug 2019	Depart Time	759
I34	14 Aug 2019	Air Temp (C)	18
I34	14 Aug 2019	Weather	Overcast
I34	14 Aug 2019	Visibility (mi)	7
I34	14 Aug 2019	Wind Speed (kts)	2
I34	14 Aug 2019	Wind Dir	SW
I34	14 Aug 2019	Water Color	Green
I34	14 Aug 2019	Wave Ht Low (ft)	3
I34	14 Aug 2019	Wave Period (sec)	9
I34	14 Aug 2019	Sea State	Calm
I34	14 Aug 2019	High Tide (ft)	6.33
I34	14 Aug 2019	High Tide Time	2106
I34	14 Aug 2019	Low Tide (ft)	-0.71
I34	14 Aug 2019	Low Tide Time	405
I34	14 Aug 2019	Comments	none
I35	14 Aug 2019	Depth (m)	19
I35	14 Aug 2019	Arrive Time	940
I35	14 Aug 2019	Depart Time	944
I35	14 Aug 2019	Air Temp (C)	19
I35	14 Aug 2019	Weather	Overcast
I35	14 Aug 2019	Visibility (mi)	8
I35	14 Aug 2019	Wind Speed (kts)	4
I35	14 Aug 2019	Wind Dir	SW

Station	Date	Parameter	Value
I35	14 Aug 2019	Water Color	Green
I35	14 Aug 2019	Wave Ht Low (ft)	3
I35	14 Aug 2019	Wave Period (sec)	9
I35	14 Aug 2019	Sea State	Calm
I35	14 Aug 2019	High Tide (ft)	6.33
I35	14 Aug 2019	High Tide Time	2106
I35	14 Aug 2019	Low Tide (ft)	-0.71
I35	14 Aug 2019	Low Tide Time	405
I35	14 Aug 2019	Comments	none
I36	14 Aug 2019	Depth (m)	13
I36	14 Aug 2019	Arrive Time	925
I36	14 Aug 2019	Depart Time	932
I36	14 Aug 2019	Air Temp (C)	19
I36	14 Aug 2019	Weather	Overcast
I36	14 Aug 2019	Visibility (mi)	7
I36	14 Aug 2019	Wind Speed (kts)	5
I36	14 Aug 2019	Wind Dir	SW
I36	14 Aug 2019	Water Color	Green
I36	14 Aug 2019	Wave Ht Low (ft)	3
I36	14 Aug 2019	Wave Period (sec)	9
I36	14 Aug 2019	Sea State	Calm
I36	14 Aug 2019	High Tide (ft)	6.33
I36	14 Aug 2019	High Tide Time	2106
I36	14 Aug 2019	Low Tide (ft)	-0.71
I36	14 Aug 2019	Low Tide Time	405
I36	14 Aug 2019	Comments	none
I37	14 Aug 2019	Depth (m)	12
I37	14 Aug 2019	Arrive Time	734
I37	14 Aug 2019	Depart Time	739
I37	14 Aug 2019	Air Temp (C)	18
I37	14 Aug 2019	Weather	Overcast
I37	14 Aug 2019	Visibility (mi)	7
I37	14 Aug 2019	Wind Speed (kts)	4
I37	14 Aug 2019	Wind Dir	W
I37	14 Aug 2019	Water Color	Green
I37	14 Aug 2019	Wave Ht Low (ft)	3
I37	14 Aug 2019	Wave Period (sec)	9
I37	14 Aug 2019	Sea State	Calm
I37	14 Aug 2019	High Tide (ft)	6.33
I37	14 Aug 2019	High Tide Time	2106
I37	14 Aug 2019	Low Tide (ft)	-0.71
I37	14 Aug 2019	Low Tide Time	405
I37	14 Aug 2019	Comments	none
I38	14 Aug 2019	Depth (m)	13
I38	14 Aug 2019	Arrive Time	955
I38	14 Aug 2019	Depart Time	959
I38	14 Aug 2019	Air Temp (C)	19
I38	14 Aug 2019	Weather	Overcast
I38	14 Aug 2019	Visibility (mi)	8
I38	14 Aug 2019	Wind Speed (kts)	6
I38	14 Aug 2019	Wind Dir	SW
I38	14 Aug 2019	Water Color	Green
I38	14 Aug 2019	Wave Ht Low (ft)	3
I38	14 Aug 2019	Wave Period (sec)	9
I38	14 Aug 2019	Sea State	Calm
I38	14 Aug 2019	High Tide (ft)	6.33
I38	14 Aug 2019	High Tide Time	2106
I38	14 Aug 2019	Low Tide (ft)	-0.71

Station	Date	Parameter	Value
I38	14 Aug 2019	Low Tide Time	405
I38	14 Aug 2019	Comments	none
14	12 Aug 2019	Depth (m)	20
14	12 Aug 2019	Arrive Time	936
14	12 Aug 2019	Depart Time	938
14	12 Aug 2019	Air Temp (C)	17
14	12 Aug 2019	Weather	Cloudy
14	12 Aug 2019	Visibility (mi)	5
14	12 Aug 2019	Wind Speed (kts)	2
14	12 Aug 2019	Wind Dir	SW
14	12 Aug 2019	Water Color	Green
14	12 Aug 2019	Wave Ht Low (ft)	3
14	12 Aug 2019	Wave Period (sec)	13
14	12 Aug 2019	Sea State	Calm
14	12 Aug 2019	High Tide (ft)	6.33
14	12 Aug 2019	High Tide Time	2106
14	12 Aug 2019	Low Tide (ft)	-0.71
14	12 Aug 2019	Low Tide Time	405
14	12 Aug 2019	Comments	none
15	12 Aug 2019	Depth (m)	13
15	12 Aug 2019	Arrive Time	944
15	12 Aug 2019	Depart Time	947
15	12 Aug 2019	Air Temp (C)	17
15	12 Aug 2019	Weather	Cloudy
15	12 Aug 2019	Visibility (mi)	5
15	12 Aug 2019	Wind Speed (kts)	2
15	12 Aug 2019	Wind Dir	SW
15	12 Aug 2019	Water Color	Brownish-Green
15	12 Aug 2019	Wave Ht Low (ft)	3
15	12 Aug 2019	Wave Period (sec)	13
15	12 Aug 2019	Sea State	Calm
15	12 Aug 2019	High Tide (ft)	6.33
15	12 Aug 2019	High Tide Time	2106
15	12 Aug 2019	Low Tide (ft)	-0.71
15	12 Aug 2019	Low Tide Time	405
15	12 Aug 2019	Comments	none
16	12 Aug 2019	Depth (m)	26
16	12 Aug 2019	Arrive Time	1001
16	12 Aug 2019	Depart Time	1010
16	12 Aug 2019	Air Temp (C)	17
16	12 Aug 2019	Weather	Cloudy
16	12 Aug 2019	Visibility (mi)	5
16	12 Aug 2019	Wind Speed (kts)	4
16	12 Aug 2019	Wind Dir	S
16	12 Aug 2019	Water Color	Brownish-Green
16	12 Aug 2019	Wave Ht Low (ft)	3
16	12 Aug 2019	Wave Period (sec)	13
16	12 Aug 2019	Sea State	Calm
16	12 Aug 2019	High Tide (ft)	6.33
16	12 Aug 2019	High Tide Time	2106
16	12 Aug 2019	Low Tide (ft)	-0.71
16	12 Aug 2019	Low Tide Time	405
16	12 Aug 2019	Comments	none
17	12 Aug 2019	Depth (m)	52
17	12 Aug 2019	Arrive Time	815
17	12 Aug 2019	Depart Time	821
17	12 Aug 2019	Air Temp (C)	17

Station	Date	Parameter	Value
17	12 Aug 2019	Weather	Cloudy
17	12 Aug 2019	Visibility (mi)	2
17	12 Aug 2019	Wind Speed (kts)	3
17	12 Aug 2019	Wind Dir	NW
17	12 Aug 2019	Water Color	Green
17	12 Aug 2019	Wave Ht Low (ft)	3
17	12 Aug 2019	Wave Period (sec)	13
17	12 Aug 2019	Sea State	Calm
17	12 Aug 2019	High Tide (ft)	6.33
17	12 Aug 2019	High Tide Time	2106
17	12 Aug 2019	Low Tide (ft)	-0.71
17	12 Aug 2019	Low Tide Time	405
17	12 Aug 2019	Comments	none
18	12 Aug 2019	Depth (m)	37
18	12 Aug 2019	Arrive Time	1100
18	12 Aug 2019	Depart Time	1103
18	12 Aug 2019	Air Temp (C)	18
18	12 Aug 2019	Weather	Cloudy
18	12 Aug 2019	Visibility (mi)	4
18	12 Aug 2019	Wind Speed (kts)	2
18	12 Aug 2019	Wind Dir	E
18	12 Aug 2019	Water Color	Greenish-Brown
18	12 Aug 2019	Wave Ht Low (ft)	3
18	12 Aug 2019	Wave Period (sec)	13
18	12 Aug 2019	Sea State	Calm
18	12 Aug 2019	High Tide (ft)	6.33
18	12 Aug 2019	High Tide Time	2106
18	12 Aug 2019	Low Tide (ft)	-0.71
18	12 Aug 2019	Low Tide Time	405
18	12 Aug 2019	Comments	none
19	12 Aug 2019	Depth (m)	30
19	12 Aug 2019	Arrive Time	1045
19	12 Aug 2019	Depart Time	1050
19	12 Aug 2019	Air Temp (C)	18
19	12 Aug 2019	Weather	Cloudy
19	12 Aug 2019	Visibility (mi)	4
19	12 Aug 2019	Wind Speed (kts)	0
19	12 Aug 2019	Wind Dir	
19	12 Aug 2019	Water Color	Greenish-Brown
19	12 Aug 2019	Wave Ht Low (ft)	3
19	12 Aug 2019	Wave Period (sec)	13
19	12 Aug 2019	Sea State	Calm
19	12 Aug 2019	High Tide (ft)	6.33
19	12 Aug 2019	High Tide Time	2106
19	12 Aug 2019	Low Tide (ft)	-0.71
19	12 Aug 2019	Low Tide Time	405
19	12 Aug 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 Aug 2019	1	18.86	78.73	9.1	33.62	8.2	24.0	1.15
I1	12 Aug 2019	2	18.89	78.49	9.1	33.62	8.2	24.0	1.23
I1	12 Aug 2019	3	18.83	78.93	9.0	33.63	8.2	24.0	1.25
I1	12 Aug 2019	4	17.86	78.90	9.1	33.63	8.2	24.3	1.46
I1	12 Aug 2019	5	17.40	79.04	9.0	33.61	8.2	24.4	1.74
I1	12 Aug 2019	6	16.26	79.31	8.9	33.62	8.2	24.6	1.99
I1	12 Aug 2019	7	14.61	79.98	8.9	33.55	8.2	24.9	1.96
I1	12 Aug 2019	8	14.35	81.42	8.7	33.50	8.2	25.0	2.13
I1	12 Aug 2019	9	14.25	81.12	8.6	33.49	8.2	25.0	2.57
I1	12 Aug 2019	10	14.21	80.67	8.6	33.49	8.2	25.0	2.87
I1	12 Aug 2019	11	14.19	80.69	8.5	33.49	8.2	25.0	2.87
I1	12 Aug 2019	12	14.08	80.94	8.4	33.51	8.2	25.0	2.95
I1	12 Aug 2019	13	13.72	80.87	8.1	33.53	8.1	25.1	3.29
I1	12 Aug 2019	14	13.54	80.82	7.8	33.54	8.1	25.2	3.35
I1	12 Aug 2019	15	13.43	81.39	7.6	33.55	8.1	25.2	3.26
I1	12 Aug 2019	16	13.33	81.67	7.5	33.55	8.1	25.2	3.03
I1	12 Aug 2019	17	13.26	82.06	7.4	33.56	8.1	25.2	2.82
I1	12 Aug 2019	18	13.24	82.59	7.4	33.56	8.1	25.2	2.61
I1	12 Aug 2019	19	13.21	82.84	7.3	33.56	8.1	25.2	2.51
I1	12 Aug 2019	20	13.12	83.11	7.2	33.58	8.1	25.3	2.37
I1	12 Aug 2019	21	12.95	83.53	7.0	33.59	8.1	25.3	2.14
I1	12 Aug 2019	22	12.82	84.14	6.9	33.58	8.1	25.3	2.05
I1	12 Aug 2019	23	12.71	85.12	6.8	33.61	8.1	25.4	1.95
I1	12 Aug 2019	24	12.56	85.37	6.7	33.60	8.1	25.4	1.76
I1	12 Aug 2019	25	12.50	85.71	6.6	33.60	8.0	25.4	1.61
I1	12 Aug 2019	26	12.48	85.90	6.5	33.60	8.0	25.4	1.50
I1	12 Aug 2019	27	12.37	86.16	6.4	33.61	8.0	25.4	1.43
I1	12 Aug 2019	28	12.31	86.37	6.3	33.61	8.0	25.5	1.37
I1	12 Aug 2019	29	12.29	86.51	6.3	33.62	8.0	25.5	1.34
I1	12 Aug 2019	30	12.27	86.57	6.2	33.62	8.0	25.5	1.25
I1	12 Aug 2019	31	12.25	86.66	6.2	33.62	8.0	25.5	1.27
I1	12 Aug 2019	32	12.26	86.61	6.2	33.62	8.0	25.5	1.21
I1	12 Aug 2019	33	12.24	86.69	6.2	33.62	8.0	25.5	1.14
I1	12 Aug 2019	34	12.17	86.67	6.0	33.63	8.0	25.5	1.10
I1	12 Aug 2019	35	11.98	86.93	5.8	33.66	8.0	25.6	1.01
I1	12 Aug 2019	36	11.84	87.37	5.5	33.66	8.0	25.6	0.82
I1	12 Aug 2019	37	11.66	87.59	5.4	33.68	8.0	25.6	0.70
I1	12 Aug 2019	38	11.68	87.68	5.3	33.67	8.0	25.6	0.63
I1	12 Aug 2019	39	11.57	87.78	5.2	33.68	8.0	25.6	0.59
I1	12 Aug 2019	40	11.53	87.77	5.2	33.68	7.9	25.7	0.56
I1	12 Aug 2019	41	11.51	87.77	5.2	33.68	7.9	25.7	0.53
I1	12 Aug 2019	42	11.50	87.84	5.2	33.68	7.9	25.7	0.53
I1	12 Aug 2019	43	11.50	87.92	5.2	33.68	7.9	25.7	0.50
I1	12 Aug 2019	44	11.49	87.84	5.1	33.68	7.9	25.7	0.50
I1	12 Aug 2019	45	11.48	87.87	5.1	33.69	7.9	25.7	0.51
I1	12 Aug 2019	46	11.48	87.90	5.1	33.69	7.9	25.7	0.50
I1	12 Aug 2019	47	11.46	87.89	5.1	33.69	7.9	25.7	0.48
I1	12 Aug 2019	48	11.46	87.88	5.1	33.69	7.9	25.7	0.47
I1	12 Aug 2019	49	11.45	87.86	5.1	33.69	7.9	25.7	0.49
I1	12 Aug 2019	50	11.45	87.87	5.0	33.69	7.9	25.7	0.47
I1	12 Aug 2019	51	11.45	87.80	5.0	33.69	7.9	25.7	0.47
I1	12 Aug 2019	52	11.43	87.84	5.0	33.69	7.9	25.7	0.47
I1	12 Aug 2019	53	11.42	87.86	5.0	33.69	7.9	25.7	0.47
I1	12 Aug 2019	54	11.40	87.81	4.9	33.70	7.9	25.7	0.45
I1	12 Aug 2019	55	11.39	87.84	5.0	33.70	7.9	25.7	0.44
I1	12 Aug 2019	56	11.39	87.89	5.0	33.70	7.9	25.7	0.42

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I1	12 Aug 2019	57	11.38	87.82	4.9	33.70	7.9	25.7	0.42
I1	12 Aug 2019	58	11.38	87.86	4.9	33.70	7.9	25.7	0.43
I1	12 Aug 2019	59	11.37	87.82	4.9	33.70	7.9	25.7	0.41
I1	12 Aug 2019	60	11.35	87.88	4.9	33.70	7.9	25.7	0.41
I10	12 Aug 2019	1	19.98	66.22	9.6	33.62	8.2	23.7	2.89
I10	12 Aug 2019	2	19.94	66.35	9.6	33.63	8.2	23.7	3.26
I10	12 Aug 2019	3	19.36	65.31	9.7	33.65	8.2	23.9	4.38
I10	12 Aug 2019	4	17.51	61.50	9.8	33.65	8.2	24.4	6.69
I10	12 Aug 2019	5	15.34	63.75	9.6	33.65	8.2	24.9	7.18
I10	12 Aug 2019	6	14.48	66.97	9.4	33.58	8.2	25.0	7.09
I10	12 Aug 2019	7	14.35	68.28	8.6	33.56	8.2	25.0	7.31
I10	12 Aug 2019	8	14.08	69.52	8.0	33.57	8.2	25.1	7.35
I10	12 Aug 2019	9	13.84	70.67	7.6	33.57	8.1	25.1	7.11
I10	12 Aug 2019	10	13.63	72.13	7.3	33.58	8.1	25.2	6.42
I10	12 Aug 2019	11	13.45	73.90	7.0	33.59	8.1	25.2	5.77
I10	12 Aug 2019	12	13.30	74.99	6.4	33.59	8.1	25.2	5.09
I10	12 Aug 2019	13	13.17	75.27	5.8	33.60	8.0	25.3	4.58
I10	12 Aug 2019	14	13.11	74.77	5.3	33.60	8.0	25.3	3.97
I10	12 Aug 2019	15	13.10	74.48	5.0	33.60	8.0	25.3	3.64
I10	12 Aug 2019	16	13.09	74.76	4.8	33.61	8.0	25.3	3.16
I10	12 Aug 2019	17	13.10	74.96	4.7	33.61	8.0	25.3	3.02
I10	12 Aug 2019	18	13.08	75.05	4.6	33.61	7.9	25.3	2.79
I10	12 Aug 2019	19	13.08	75.23	4.5	33.61	7.9	25.3	2.76
I11	12 Aug 2019	1	17.79	47.22	9.8	33.57	8.2	24.2	11.02
I11	12 Aug 2019	2	16.77	50.34	10.0	33.61	8.2	24.5	10.37
I11	12 Aug 2019	3	16.00	59.24	10.0	33.57	8.2	24.7	9.47
I11	12 Aug 2019	4	15.15	62.25	9.5	33.60	8.2	24.9	9.15
I11	12 Aug 2019	5	14.82	64.08	8.9	33.59	8.2	24.9	8.19
I11	12 Aug 2019	6	14.32	66.46	8.4	33.59	8.1	25.0	6.76
I11	12 Aug 2019	7	14.01	70.38	7.6	33.59	8.1	25.1	5.79
I11	12 Aug 2019	8	13.78	71.98	7.0	33.59	8.1	25.1	4.63
I11	12 Aug 2019	9	13.72	73.03	6.8	33.58	8.1	25.1	3.97
I11	12 Aug 2019	10	13.75	72.76	6.8	33.58	8.1	25.1	3.69
I11	12 Aug 2019	11	13.77	73.23	6.8	33.59	8.0	25.1	3.69
I11	12 Aug 2019	12	13.69	73.29	6.6	33.59	8.0	25.2	3.51
I11	12 Aug 2019	13	13.68	73.43	6.6	33.59	8.0	25.2	3.30
I12	13 Aug 2019	1	20.11	65.87	9.8	33.62	8.2	23.7	3.08
I12	13 Aug 2019	2	20.12	66.25	9.8	33.62	8.2	23.7	3.24
I12	13 Aug 2019	3	20.09	66.23	9.7	33.62	8.2	23.7	3.65
I12	13 Aug 2019	4	19.61	66.12	9.5	33.65	8.2	23.8	4.06
I12	13 Aug 2019	5	17.90	67.55	10.2	33.69	8.2	24.3	4.72
I12	13 Aug 2019	6	16.08	65.55	10.5	33.63	8.2	24.7	5.68
I12	13 Aug 2019	7	14.97	67.05	9.8	33.59	8.2	24.9	5.51
I12	13 Aug 2019	8	14.71	69.75	9.4	33.57	8.2	24.9	5.46
I12	13 Aug 2019	9	14.41	71.12	9.2	33.57	8.2	25.0	5.35
I12	13 Aug 2019	10	14.23	71.56	8.9	33.58	8.2	25.0	5.31
I12	13 Aug 2019	11	13.85	72.93	8.4	33.59	8.2	25.1	5.12
I12	13 Aug 2019	12	13.64	74.65	8.0	33.58	8.2	25.2	5.09
I12	13 Aug 2019	13	13.53	74.96	7.6	33.58	8.1	25.2	4.98
I12	13 Aug 2019	14	13.32	75.76	7.1	33.58	8.1	25.2	4.59
I12	13 Aug 2019	15	13.16	76.69	6.6	33.58	8.1	25.3	4.33
I12	13 Aug 2019	16	13.05	77.57	6.2	33.59	8.1	25.3	3.92
I12	13 Aug 2019	17	12.98	77.71	5.9	33.59	8.1	25.3	3.82
I12	13 Aug 2019	18	12.92	77.88	5.8	33.59	8.0	25.3	3.80
I12	13 Aug 2019	19	12.88	77.79	5.7	33.59	8.0	25.3	3.72
I12	13 Aug 2019	20	12.80	77.44	5.5	33.61	8.0	25.4	3.59
I12	13 Aug 2019	21	12.72	76.81	5.1	33.61	8.0	25.4	3.36
I12	13 Aug 2019	22	12.72	77.10	4.8	33.61	8.0	25.4	2.82

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I12	13 Aug 2019	23	12.69	78.33	4.7	33.61	8.0	25.4	2.50
I12	13 Aug 2019	24	12.69	79.03	4.6	33.62	7.9	25.4	2.24
I12	13 Aug 2019	25	12.67	79.71	4.6	33.62	7.9	25.4	2.07
I12	13 Aug 2019	26	12.66	80.01	4.6	33.62	7.9	25.4	2.14
I12	13 Aug 2019	27	12.66	80.16	4.6	33.62	7.9	25.4	2.06
I12	13 Aug 2019	28	12.66	80.07	4.6	33.62	7.9	25.4	2.09
I13	13 Aug 2019	1	19.89	74.64	9.1	33.65	8.2	23.8	1.98
I13	13 Aug 2019	2	19.89	74.48	9.1	33.65	8.2	23.8	2.01
I13	13 Aug 2019	3	19.88	74.44	9.1	33.65	8.2	23.8	2.12
I13	13 Aug 2019	4	19.87	74.46	9.1	33.65	8.2	23.8	2.21
I13	13 Aug 2019	5	18.97	74.34	9.5	33.70	8.2	24.0	2.49
I13	13 Aug 2019	6	18.32	74.11	9.9	33.63	8.2	24.1	3.07
I13	13 Aug 2019	7	18.29	73.56	10.0	33.61	8.2	24.1	3.41
I13	13 Aug 2019	8	18.34	73.44	9.8	33.60	8.2	24.1	3.42
I13	13 Aug 2019	9	17.59	73.45	10.1	33.65	8.2	24.3	3.63
I13	13 Aug 2019	10	16.76	73.08	10.6	33.62	8.2	24.5	4.32
I13	13 Aug 2019	11	16.05	72.74	10.9	33.58	8.2	24.6	4.28
I13	13 Aug 2019	12	15.83	72.96	10.7	33.57	8.2	24.7	4.03
I13	13 Aug 2019	13	15.18	72.24	10.3	33.53	8.2	24.8	4.35
I13	13 Aug 2019	14	15.04	71.19	9.8	33.51	8.2	24.8	4.92
I13	13 Aug 2019	15	14.44	69.90	9.3	33.54	8.2	25.0	5.71
I13	13 Aug 2019	16	14.24	71.89	9.2	33.56	8.2	25.0	5.60
I13	13 Aug 2019	17	14.08	73.58	9.2	33.58	8.2	25.1	4.90
I13	13 Aug 2019	18	13.79	76.01	9.0	33.58	8.2	25.1	4.19
I13	13 Aug 2019	19	13.54	78.18	8.7	33.56	8.2	25.2	3.59
I13	13 Aug 2019	20	13.34	79.36	8.4	33.57	8.2	25.2	3.25
I13	13 Aug 2019	21	13.11	80.40	8.1	33.56	8.1	25.3	3.02
I13	13 Aug 2019	22	13.00	81.16	7.8	33.56	8.1	25.3	2.96
I13	13 Aug 2019	23	12.88	81.18	7.5	33.56	8.1	25.3	3.18
I13	13 Aug 2019	24	12.76	81.77	7.2	33.57	8.1	25.3	3.21
I13	13 Aug 2019	25	12.64	82.21	6.8	33.59	8.1	25.4	2.93
I13	13 Aug 2019	26	12.53	84.86	6.5	33.60	8.1	25.4	2.09
I13	13 Aug 2019	27	12.44	86.06	6.3	33.61	8.0	25.4	1.64
I13	13 Aug 2019	28	12.43	86.23	6.2	33.61	8.0	25.4	1.33
I13	13 Aug 2019	29	12.42	86.14	6.2	33.61	8.0	25.4	1.22
I13	13 Aug 2019	30	12.42	86.20	6.1	33.62	8.0	25.4	1.20
I13	13 Aug 2019	31	12.41	86.36	6.1	33.62	8.0	25.4	1.13
I13	13 Aug 2019	32	12.41	86.36	6.1	33.62	8.0	25.4	1.15
I13	13 Aug 2019	33	12.41	86.41	6.1	33.62	8.0	25.4	1.22
I13	13 Aug 2019	34	12.40	86.39	6.1	33.62	8.0	25.4	1.16
I13	13 Aug 2019	35	12.39	86.48	6.1	33.62	8.0	25.4	1.15
I13	13 Aug 2019	36	12.37	86.52	6.0	33.62	8.0	25.4	1.11
I13	13 Aug 2019	37	12.37	86.40	6.0	33.62	8.0	25.4	1.12
I13	13 Aug 2019	38	12.37	86.36	6.0	33.62	7.9	25.4	1.11
I14	13 Aug 2019	1	19.89	65.78	9.8	33.62	8.2	23.7	2.89
I14	13 Aug 2019	2	19.88	65.80	9.8	33.62	8.2	23.7	3.23
I14	13 Aug 2019	3	19.86	65.54	9.8	33.62	8.2	23.7	3.63
I14	13 Aug 2019	4	19.65	65.98	9.6	33.63	8.2	23.8	3.94
I14	13 Aug 2019	5	18.41	67.66	9.2	33.68	8.2	24.2	3.93
I14	13 Aug 2019	6	16.08	68.79	9.1	33.60	8.2	24.7	4.44
I14	13 Aug 2019	7	15.11	68.85	8.4	33.53	8.2	24.8	4.64
I14	13 Aug 2019	8	14.67	71.19	8.6	33.50	8.2	24.9	4.47
I14	13 Aug 2019	9	14.41	70.64	8.3	33.54	8.2	25.0	4.59
I14	13 Aug 2019	10	13.79	72.50	7.3	33.49	8.1	25.1	4.34
I14	13 Aug 2019	11	13.75	73.73	7.0	33.49	8.1	25.1	4.34
I14	13 Aug 2019	12	13.55	73.48	6.9	33.52	8.1	25.1	4.35
I14	13 Aug 2019	13	13.47	74.64	7.0	33.53	8.1	25.2	4.34
I14	13 Aug 2019	14	13.51	74.76	7.1	33.55	8.1	25.2	4.45
I14	13 Aug 2019	15	13.31	75.83	7.0	33.60	8.1	25.2	4.34

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I14	13 Aug 2019	16	13.12	76.82	6.6	33.60	8.1	25.3	4.15
I14	13 Aug 2019	17	12.96	77.37	6.0	33.59	8.0	25.3	3.98
I14	13 Aug 2019	18	12.90	76.99	5.5	33.60	8.0	25.3	3.62
I14	13 Aug 2019	19	12.86	77.46	5.3	33.60	8.0	25.3	3.35
I14	13 Aug 2019	20	12.84	77.68	5.0	33.61	8.0	25.3	2.95
I14	13 Aug 2019	21	12.82	77.47	4.9	33.61	8.0	25.4	2.71
I14	13 Aug 2019	22	12.81	77.39	4.7	33.61	7.9	25.4	2.51
I14	13 Aug 2019	23	12.79	78.08	4.5	33.62	7.9	25.4	2.25
I14	13 Aug 2019	24	12.78	79.21	4.4	33.62	7.9	25.4	2.08
I14	13 Aug 2019	25	12.76	79.40	4.4	33.62	7.9	25.4	2.06
I14	13 Aug 2019	26	12.75	79.45	4.4	33.62	7.9	25.4	2.02
I14	13 Aug 2019	27	12.73	79.61	4.5	33.62	7.9	25.4	2.00
I14	13 Aug 2019	28	12.72	80.01	4.5	33.62	7.9	25.4	2.00
I15	13 Aug 2019	1	19.97	68.62	9.6	33.63	8.2	23.7	2.65
I15	13 Aug 2019	2	19.97	68.59	9.6	33.63	8.2	23.7	2.80
I15	13 Aug 2019	3	19.95	68.27	9.6	33.63	8.2	23.7	3.18
I15	13 Aug 2019	4	19.89	67.63	9.6	33.63	8.2	23.7	3.43
I15	13 Aug 2019	5	19.51	67.77	9.4	33.64	8.2	23.9	3.62
I15	13 Aug 2019	6	18.33	68.95	9.3	33.66	8.2	24.2	3.56
I15	13 Aug 2019	7	16.81	69.80	9.2	33.63	8.2	24.5	3.90
I15	13 Aug 2019	8	15.39	68.71	9.0	33.61	8.2	24.8	4.23
I15	13 Aug 2019	9	14.29	69.77	7.9	33.54	8.2	25.0	4.38
I15	13 Aug 2019	10	13.64	73.60	6.5	33.43	8.2	25.0	3.80
I15	13 Aug 2019	11	13.31	76.62	5.8	33.41	8.1	25.1	3.12
I15	13 Aug 2019	12	13.07	78.14	5.5	33.41	8.1	25.1	2.92
I15	13 Aug 2019	13	12.95	78.34	5.5	33.42	8.1	25.2	2.90
I15	13 Aug 2019	14	13.09	78.60	6.1	33.48	8.0	25.2	3.20
I15	13 Aug 2019	15	13.24	77.25	6.7	33.58	8.0	25.2	3.74
I15	13 Aug 2019	16	13.18	77.34	6.7	33.59	8.0	25.3	4.06
I15	13 Aug 2019	17	13.11	76.87	6.4	33.60	8.0	25.3	4.19
I15	13 Aug 2019	18	12.97	75.37	6.0	33.61	8.0	25.3	4.47
I15	13 Aug 2019	19	12.80	74.91	5.6	33.61	8.0	25.4	4.07
I15	13 Aug 2019	20	12.81	76.24	5.5	33.60	8.0	25.3	3.49
I15	13 Aug 2019	21	12.72	77.82	5.5	33.61	8.0	25.4	3.04
I15	13 Aug 2019	22	12.71	78.07	5.3	33.61	8.0	25.4	2.71
I15	13 Aug 2019	23	12.70	78.17	4.9	33.62	7.9	25.4	2.53
I15	13 Aug 2019	24	12.69	78.37	4.7	33.62	7.9	25.4	2.36
I15	13 Aug 2019	25	12.66	79.26	4.8	33.62	7.9	25.4	2.21
I15	13 Aug 2019	26	12.62	81.07	5.0	33.62	7.9	25.4	2.14
I15	13 Aug 2019	27	12.59	81.66	5.2	33.62	7.9	25.4	1.98
I15	13 Aug 2019	28	12.56	82.25	5.2	33.62	7.9	25.4	2.04
I15	13 Aug 2019	29	12.55	82.73	5.3	33.62	7.9	25.4	1.96
I15	13 Aug 2019	30	12.54	82.95	5.4	33.62	7.9	25.4	1.79
I15	13 Aug 2019	31	12.54	83.41	5.4	33.62	7.9	25.4	1.85
I16	13 Aug 2019	1	19.93	66.56	9.8	33.62	8.2	23.7	3.09
I16	13 Aug 2019	2	19.93	66.47	9.8	33.62	8.2	23.7	3.23
I16	13 Aug 2019	3	19.92	66.43	9.8	33.62	8.2	23.7	3.34
I16	13 Aug 2019	4	19.89	66.48	9.5	33.62	8.2	23.7	3.40
I16	13 Aug 2019	5	18.77	66.82	9.5	33.67	8.2	24.1	3.77
I16	13 Aug 2019	6	16.61	66.89	9.4	33.62	8.2	24.5	4.56
I16	13 Aug 2019	7	15.61	67.57	9.0	33.51	8.2	24.7	4.81
I16	13 Aug 2019	8	15.41	69.58	8.9	33.49	8.2	24.7	4.86
I16	13 Aug 2019	9	15.22	69.71	8.3	33.51	8.2	24.8	4.92
I16	13 Aug 2019	10	14.06	71.10	7.3	33.50	8.2	25.0	4.56
I16	13 Aug 2019	11	13.63	74.10	6.8	33.46	8.1	25.1	4.21
I16	13 Aug 2019	12	13.52	75.03	7.0	33.48	8.1	25.1	4.07
I16	13 Aug 2019	13	13.66	74.41	7.5	33.54	8.1	25.1	4.46
I16	13 Aug 2019	14	13.64	73.57	7.6	33.58	8.1	25.2	4.76
I16	13 Aug 2019	15	13.38	74.85	7.2	33.60	8.1	25.2	4.49

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I16	13 Aug 2019	16	13.20	76.16	6.7	33.59	8.1	25.3	4.16
I16	13 Aug 2019	17	13.03	77.39	6.3	33.60	8.1	25.3	3.90
I16	13 Aug 2019	18	12.91	77.78	5.8	33.60	8.0	25.3	3.73
I16	13 Aug 2019	19	12.82	77.24	5.4	33.60	8.0	25.3	3.58
I16	13 Aug 2019	20	12.79	77.28	5.2	33.60	8.0	25.4	3.27
I16	13 Aug 2019	21	12.77	77.37	5.0	33.61	8.0	25.4	2.99
I16	13 Aug 2019	22	12.76	77.46	4.9	33.61	8.0	25.4	2.73
I16	13 Aug 2019	23	12.68	79.04	4.8	33.62	8.0	25.4	2.48
I16	13 Aug 2019	24	12.68	80.65	4.8	33.62	7.9	25.4	2.17
I16	13 Aug 2019	25	12.67	80.88	4.8	33.62	7.9	25.4	2.06
I16	13 Aug 2019	26	12.66	81.30	4.8	33.62	7.9	25.4	1.97
I16	13 Aug 2019	27	12.66	81.48	4.8	33.62	7.9	25.4	1.89
I16	13 Aug 2019	28	12.66	81.39	4.8	33.62	7.9	25.4	1.87
I17	13 Aug 2019	1	19.92	63.11	10.0	33.61	8.2	23.7	3.99
I17	13 Aug 2019	2	19.92	63.21	10.0	33.61	8.2	23.7	4.19
I17	13 Aug 2019	3	19.78	63.25	9.7	33.63	8.2	23.8	4.67
I17	13 Aug 2019	4	18.17	63.96	10.2	33.67	8.2	24.2	5.36
I17	13 Aug 2019	5	16.50	65.21	10.6	33.66	8.2	24.6	6.18
I17	13 Aug 2019	6	15.20	64.65	10.3	33.63	8.2	24.9	5.97
I17	13 Aug 2019	7	14.55	67.65	9.7	33.59	8.2	25.0	5.78
I17	13 Aug 2019	8	14.25	70.19	9.1	33.58	8.2	25.0	5.60
I17	13 Aug 2019	9	13.86	71.56	8.4	33.58	8.2	25.1	5.62
I17	13 Aug 2019	10	13.65	73.05	7.8	33.58	8.2	25.2	5.48
I17	13 Aug 2019	11	13.40	74.82	7.2	33.58	8.2	25.2	5.09
I17	13 Aug 2019	12	13.29	75.43	6.6	33.57	8.1	25.2	4.77
I17	13 Aug 2019	13	13.20	76.41	6.3	33.58	8.1	25.2	4.48
I17	13 Aug 2019	14	13.08	76.80	6.1	33.58	8.1	25.3	4.17
I17	13 Aug 2019	15	12.98	77.09	5.9	33.59	8.1	25.3	4.01
I17	13 Aug 2019	16	12.91	77.44	5.8	33.59	8.0	25.3	3.90
I17	13 Aug 2019	17	12.90	77.44	5.7	33.59	8.0	25.3	3.85
I17	13 Aug 2019	18	12.89	77.39	5.4	33.60	8.0	25.3	3.63
I17	13 Aug 2019	19	12.86	77.14	5.2	33.60	8.0	25.3	3.35
I17	13 Aug 2019	20	12.85	77.23	5.1	33.60	8.0	25.3	3.10
I17	13 Aug 2019	21	12.82	77.26	5.0	33.61	8.0	25.4	2.85
I17	13 Aug 2019	22	12.80	77.21	4.8	33.61	8.0	25.4	2.57
I17	13 Aug 2019	23	12.79	77.41	4.7	33.61	7.9	25.4	2.43
I17	13 Aug 2019	24	12.79	77.53	4.6	33.62	7.9	25.4	2.44
I17	13 Aug 2019	25	12.78	77.62	4.5	33.62	7.9	25.4	2.32
I18	13 Aug 2019	1	19.60	55.01	10.3	33.60	8.2	23.8	7.57
I18	13 Aug 2019	2	19.22	54.61	10.5	33.62	8.2	23.9	8.35
I18	13 Aug 2019	3	17.78	57.41	11.2	33.59	8.3	24.2	8.38
I18	13 Aug 2019	4	16.49	60.30	11.0	33.63	8.3	24.6	8.37
I18	13 Aug 2019	5	15.18	65.58	10.8	33.59	8.3	24.8	7.24
I18	13 Aug 2019	6	14.80	69.84	10.2	33.57	8.3	24.9	6.39
I18	13 Aug 2019	7	14.64	70.66	9.5	33.57	8.2	24.9	6.05
I18	13 Aug 2019	8	14.19	72.05	8.6	33.59	8.2	25.1	5.91
I18	13 Aug 2019	9	13.99	73.47	8.0	33.57	8.2	25.1	5.65
I18	13 Aug 2019	10	13.80	73.83	7.5	33.59	8.2	25.1	5.50
I18	13 Aug 2019	11	13.68	75.16	7.0	33.59	8.1	25.2	4.66
I18	13 Aug 2019	12	13.56	76.03	6.8	33.59	8.1	25.2	4.22
I18	13 Aug 2019	13	13.51	76.07	6.6	33.59	8.1	25.2	4.14
I18	13 Aug 2019	14	13.49	75.57	6.5	33.59	8.1	25.2	4.21
I18	13 Aug 2019	15	13.48	75.50	6.4	33.60	8.1	25.2	4.15
I18	13 Aug 2019	16	13.40	76.01	6.3	33.60	8.0	25.2	3.95
I18	13 Aug 2019	17	13.27	77.02	6.2	33.60	8.0	25.3	3.72
I18	13 Aug 2019	18	13.21	76.38	5.9	33.60	8.0	25.3	3.48
I18	13 Aug 2019	19	13.21	76.84	5.8	33.60	8.0	25.3	3.09
I2	12 Aug 2019	1	20.20	75.59	9.1	33.64	8.2	23.7	1.72

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I2	12 Aug 2019	2	20.09	75.37	9.0	33.65	8.2	23.7	1.91
I2	12 Aug 2019	3	19.12	74.24	9.5	33.66	8.2	24.0	2.54
I2	12 Aug 2019	4	18.72	73.49	9.5	33.64	8.2	24.0	3.05
I2	12 Aug 2019	5	17.49	73.61	9.8	33.68	8.2	24.4	3.17
I2	12 Aug 2019	6	15.92	75.23	10.5	33.62	8.2	24.7	2.87
I2	12 Aug 2019	7	15.62	76.01	10.5	33.56	8.2	24.7	2.81
I2	12 Aug 2019	8	15.38	75.93	10.5	33.57	8.2	24.8	2.79
I2	12 Aug 2019	9	15.17	75.72	10.5	33.56	8.2	24.8	2.84
I2	12 Aug 2019	10	15.00	75.84	10.4	33.56	8.2	24.9	2.79
I2	12 Aug 2019	11	14.43	76.58	9.9	33.57	8.2	25.0	2.65
I2	12 Aug 2019	12	14.15	78.86	9.2	33.56	8.2	25.0	2.38
I2	12 Aug 2019	13	13.42	79.57	8.7	33.57	8.2	25.2	2.32
I2	12 Aug 2019	14	13.21	80.98	8.3	33.53	8.2	25.2	2.34
I2	12 Aug 2019	15	13.15	81.07	8.2	33.52	8.2	25.2	2.41
I2	12 Aug 2019	16	13.12	80.64	8.2	33.52	8.1	25.2	2.57
I2	12 Aug 2019	17	13.06	81.03	8.1	33.52	8.1	25.2	2.86
I2	12 Aug 2019	18	13.05	80.62	8.0	33.52	8.1	25.2	3.10
I2	12 Aug 2019	19	13.04	80.17	7.7	33.54	8.1	25.3	3.48
I2	12 Aug 2019	20	12.92	80.41	7.4	33.58	8.1	25.3	3.74
I2	12 Aug 2019	21	12.86	80.72	7.2	33.57	8.1	25.3	4.11
I2	12 Aug 2019	22	12.73	80.92	6.9	33.59	8.1	25.4	3.89
I2	12 Aug 2019	23	12.54	83.49	6.5	33.61	8.1	25.4	2.98
I2	12 Aug 2019	24	12.45	83.45	5.9	33.62	8.0	25.4	2.31
I2	12 Aug 2019	25	12.42	82.52	5.4	33.63	8.0	25.4	1.91
I2	12 Aug 2019	26	12.39	82.52	5.3	33.63	8.0	25.4	1.76
I2	12 Aug 2019	27	12.38	82.90	5.4	33.62	8.0	25.4	1.69
I2	12 Aug 2019	28	12.38	83.24	5.5	33.62	8.0	25.4	1.65
I2	12 Aug 2019	29	12.39	83.12	5.5	33.63	8.0	25.4	1.64
I2	12 Aug 2019	30	12.37	83.58	5.5	33.63	8.0	25.5	1.65
I2	12 Aug 2019	31	12.37	83.52	5.5	33.63	8.0	25.5	1.59
I2	12 Aug 2019	32	12.36	83.63	5.6	33.63	8.0	25.5	1.52
I20	13 Aug 2019	1	19.76	78.74	9.0	33.65	8.2	23.8	1.30
I20	13 Aug 2019	2	19.75	78.60	9.0	33.65	8.2	23.8	1.36
I20	13 Aug 2019	3	19.57	78.27	9.2	33.66	8.2	23.8	1.46
I20	13 Aug 2019	4	19.30	78.83	9.1	33.65	8.2	23.9	1.45
I20	13 Aug 2019	5	18.16	78.69	8.9	33.70	8.2	24.2	1.80
I20	13 Aug 2019	6	16.23	77.87	9.2	33.61	8.2	24.6	2.79
I20	13 Aug 2019	7	15.69	78.73	9.2	33.57	8.2	24.7	3.02
I20	13 Aug 2019	8	14.98	79.48	9.2	33.54	8.2	24.9	2.74
I20	13 Aug 2019	9	14.86	80.79	9.1	33.51	8.2	24.9	2.33
I20	13 Aug 2019	10	14.69	81.01	9.1	33.51	8.2	24.9	2.22
I20	13 Aug 2019	11	14.62	81.06	9.0	33.50	8.2	24.9	2.09
I20	13 Aug 2019	12	14.52	81.13	8.9	33.51	8.2	24.9	2.10
I20	13 Aug 2019	13	14.37	81.23	8.9	33.50	8.2	25.0	2.14
I20	13 Aug 2019	14	14.27	81.29	8.8	33.51	8.2	25.0	2.20
I20	13 Aug 2019	15	14.07	81.39	8.7	33.51	8.2	25.0	2.26
I20	13 Aug 2019	16	13.86	81.39	8.5	33.52	8.2	25.1	2.36
I20	13 Aug 2019	17	13.45	80.78	8.3	33.53	8.2	25.2	2.88
I20	13 Aug 2019	18	13.38	80.14	8.2	33.52	8.2	25.2	3.34
I20	13 Aug 2019	19	13.30	79.91	8.0	33.53	8.2	25.2	3.65
I20	13 Aug 2019	20	13.17	79.64	7.9	33.54	8.1	25.2	3.95
I20	13 Aug 2019	21	13.15	79.73	7.8	33.54	8.1	25.2	4.20
I20	13 Aug 2019	22	13.05	80.68	7.6	33.55	8.1	25.3	3.81
I20	13 Aug 2019	23	12.88	82.19	7.3	33.57	8.1	25.3	3.21
I20	13 Aug 2019	24	12.73	84.44	7.0	33.58	8.1	25.3	2.25
I20	13 Aug 2019	25	12.58	86.34	6.8	33.60	8.1	25.4	1.56
I20	13 Aug 2019	26	12.48	86.85	6.6	33.61	8.1	25.4	1.21
I20	13 Aug 2019	27	12.39	87.14	6.4	33.61	8.1	25.4	1.17
I20	13 Aug 2019	28	12.19	87.16	6.1	33.64	8.1	25.5	1.00
I20	13 Aug 2019	29	12.05	87.17	5.9	33.64	8.1	25.5	0.97

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I20	13 Aug 2019	30	12.01	87.17	5.8	33.64	8.0	25.5	0.94
I20	13 Aug 2019	31	11.94	86.94	5.7	33.64	8.0	25.5	0.85
I20	13 Aug 2019	32	11.93	86.92	5.7	33.64	8.0	25.5	0.84
I20	13 Aug 2019	33	11.93	87.00	5.7	33.64	8.0	25.5	0.83
I20	13 Aug 2019	34	11.92	87.05	5.7	33.65	8.0	25.6	0.84
I20	13 Aug 2019	35	11.90	86.85	5.6	33.65	8.0	25.6	0.84
I20	13 Aug 2019	36	11.86	86.93	5.6	33.65	8.0	25.6	0.81
I20	13 Aug 2019	37	11.82	87.02	5.5	33.66	8.0	25.6	0.82
I20	13 Aug 2019	38	11.79	87.28	5.5	33.66	8.0	25.6	0.78
I20	13 Aug 2019	39	11.77	87.40	5.5	33.66	8.0	25.6	0.78
I20	13 Aug 2019	40	11.76	87.16	5.5	33.66	8.0	25.6	0.78
I20	13 Aug 2019	41	11.73	87.47	5.5	33.66	8.0	25.6	0.67
I20	13 Aug 2019	42	11.72	87.51	5.5	33.66	8.0	25.6	0.67
I20	13 Aug 2019	43	11.72	87.68	5.5	33.67	8.0	25.6	0.65
I20	13 Aug 2019	44	11.71	87.73	5.4	33.67	8.0	25.6	0.67
I20	13 Aug 2019	45	11.68	87.69	5.4	33.67	8.0	25.6	0.66
I20	13 Aug 2019	46	11.65	87.66	5.4	33.67	7.9	25.6	0.66
I20	13 Aug 2019	47	11.64	87.60	5.4	33.67	7.9	25.6	0.62
I20	13 Aug 2019	48	11.63	87.56	5.3	33.67	7.9	25.6	0.59
I20	13 Aug 2019	49	11.61	87.48	5.3	33.67	7.9	25.6	0.64
I20	13 Aug 2019	50	11.60	87.49	5.3	33.68	7.9	25.6	0.57
I20	13 Aug 2019	51	11.58	87.53	5.2	33.68	7.9	25.6	0.56
I20	13 Aug 2019	52	11.55	87.61	5.2	33.68	7.9	25.7	0.53
I20	13 Aug 2019	53	11.50	87.62	5.2	33.69	7.9	25.7	0.53
I20	13 Aug 2019	54	11.48	87.48	5.1	33.69	7.9	25.7	0.49
I20	13 Aug 2019	55	11.48	87.52	5.1	33.69	7.9	25.7	0.47
I21	13 Aug 2019	1	19.68	77.30	9.1	33.65	8.2	23.8	1.63
I21	13 Aug 2019	2	18.07	77.52	9.1	33.70	8.2	24.3	1.75
I21	13 Aug 2019	3	15.51	78.23	9.0	33.62	8.2	24.8	2.07
I21	13 Aug 2019	4	14.56	80.27	8.8	33.52	8.2	24.9	2.05
I21	13 Aug 2019	5	14.32	81.06	8.8	33.50	8.2	25.0	2.03
I21	13 Aug 2019	6	14.18	81.14	8.8	33.49	8.2	25.0	2.15
I21	13 Aug 2019	7	14.09	81.06	8.7	33.49	8.2	25.0	2.21
I21	13 Aug 2019	8	14.07	81.56	8.7	33.49	8.2	25.0	2.22
I21	13 Aug 2019	9	13.96	81.66	8.6	33.50	8.2	25.0	2.28
I21	13 Aug 2019	10	13.85	81.45	8.6	33.50	8.2	25.1	2.34
I21	13 Aug 2019	11	13.81	81.29	8.5	33.51	8.2	25.1	2.51
I21	13 Aug 2019	12	13.80	81.00	8.5	33.51	8.1	25.1	2.66
I21	13 Aug 2019	13	13.80	81.09	8.5	33.51	8.1	25.1	2.73
I21	13 Aug 2019	14	13.66	81.00	8.4	33.53	8.1	25.1	2.90
I21	13 Aug 2019	15	13.45	80.40	8.3	33.53	8.1	25.2	3.32
I21	13 Aug 2019	16	13.22	79.79	8.1	33.55	8.1	25.2	3.54
I21	13 Aug 2019	17	13.05	79.63	7.9	33.55	8.1	25.3	3.71
I21	13 Aug 2019	18	13.06	79.27	7.7	33.56	8.1	25.3	3.76
I21	13 Aug 2019	19	12.99	79.11	7.5	33.59	8.1	25.3	3.50
I21	13 Aug 2019	20	12.76	80.14	7.2	33.59	8.1	25.3	3.43
I21	13 Aug 2019	21	12.61	80.16	6.8	33.59	8.1	25.4	3.77
I21	13 Aug 2019	22	12.55	81.17	6.6	33.59	8.1	25.4	3.30
I21	13 Aug 2019	23	12.50	82.21	6.4	33.60	8.1	25.4	2.61
I21	13 Aug 2019	24	12.42	83.95	6.2	33.60	8.1	25.4	2.03
I21	13 Aug 2019	25	12.40	84.77	6.1	33.61	8.0	25.4	1.63
I21	13 Aug 2019	26	12.39	84.78	6.0	33.61	8.0	25.4	1.54
I21	13 Aug 2019	27	12.39	84.79	5.9	33.61	8.0	25.4	1.71
I21	13 Aug 2019	28	12.36	84.42	5.9	33.61	8.0	25.4	1.58
I21	13 Aug 2019	29	12.34	84.81	5.9	33.61	8.0	25.4	1.46
I21	13 Aug 2019	30	12.33	84.93	5.9	33.61	8.0	25.4	1.30
I21	13 Aug 2019	31	12.31	85.17	5.8	33.62	8.0	25.5	1.36
I21	13 Aug 2019	32	12.29	85.13	5.8	33.62	8.0	25.5	1.29
I21	13 Aug 2019	33	12.27	85.19	5.8	33.62	8.0	25.5	1.22
I21	13 Aug 2019	34	12.26	85.37	5.8	33.62	8.0	25.5	1.26

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I21	13 Aug 2019	35	12.24	85.54	5.7	33.62	8.0	25.5	1.24
I21	13 Aug 2019	36	12.21	85.66	5.7	33.62	8.0	25.5	1.15
I21	13 Aug 2019	37	12.17	85.78	5.7	33.63	8.0	25.5	1.05
I21	13 Aug 2019	38	12.14	86.22	5.8	33.62	8.0	25.5	1.04
I21	13 Aug 2019	39	12.14	86.16	5.7	33.62	8.0	25.5	0.99
I21	13 Aug 2019	40	12.14	86.15	5.7	33.62	8.0	25.5	1.06
I21	13 Aug 2019	41	12.14	86.11	5.7	33.62	7.9	25.5	1.06
I22	13 Aug 2019	1	19.79	67.28	9.5	33.63	8.2	23.8	3.20
I22	13 Aug 2019	2	19.78	67.29	9.4	33.63	8.2	23.8	3.46
I22	13 Aug 2019	3	18.95	67.92	9.3	33.68	8.2	24.0	3.73
I22	13 Aug 2019	4	16.56	68.78	9.5	33.66	8.2	24.6	3.78
I22	13 Aug 2019	5	14.99	68.66	9.2	33.64	8.2	24.9	4.60
I22	13 Aug 2019	6	14.43	67.61	8.9	33.59	8.2	25.0	5.76
I22	13 Aug 2019	7	14.19	67.79	8.8	33.58	8.2	25.0	5.82
I22	13 Aug 2019	8	13.98	69.94	8.4	33.57	8.2	25.1	5.33
I22	13 Aug 2019	9	13.80	73.43	8.0	33.56	8.2	25.1	4.78
I22	13 Aug 2019	10	13.64	74.90	7.6	33.57	8.2	25.2	4.57
I22	13 Aug 2019	11	13.29	75.48	7.1	33.58	8.1	25.2	4.35
I22	13 Aug 2019	12	13.18	76.25	6.4	33.57	8.1	25.3	4.28
I22	13 Aug 2019	13	13.16	75.98	5.9	33.58	8.1	25.3	4.15
I22	13 Aug 2019	14	13.16	75.96	5.7	33.58	8.1	25.3	4.07
I22	13 Aug 2019	15	13.14	76.11	5.6	33.59	8.0	25.3	3.94
I22	13 Aug 2019	16	13.13	76.18	5.4	33.59	8.0	25.3	3.87
I22	13 Aug 2019	17	13.08	75.97	5.2	33.60	8.0	25.3	3.60
I22	13 Aug 2019	18	13.05	76.36	5.0	33.60	8.0	25.3	3.29
I22	13 Aug 2019	19	13.03	76.40	4.9	33.61	8.0	25.3	2.95
I22	13 Aug 2019	20	13.02	76.54	4.7	33.61	8.0	25.3	2.76
I22	13 Aug 2019	21	13.00	76.86	4.5	33.61	8.0	25.3	2.69
I22	13 Aug 2019	22	12.93	77.37	4.4	33.62	7.9	25.3	2.53
I22	13 Aug 2019	23	12.86	78.29	4.3	33.62	7.9	25.4	2.38
I22	13 Aug 2019	24	12.82	78.71	4.3	33.62	7.9	25.4	2.30
I22	13 Aug 2019	25	12.77	79.02	4.3	33.62	7.9	25.4	2.16
I22	13 Aug 2019	26	12.75	79.16	4.3	33.62	7.9	25.4	2.14
I22	13 Aug 2019	27	12.75	79.36	4.3	33.62	7.9	25.4	2.17
I22	13 Aug 2019	28	12.75	79.10	4.3	33.62	7.9	25.4	2.16
I23	13 Aug 2019	1	19.59	60.76	9.8	33.63	8.2	23.8	5.73
I23	13 Aug 2019	2	19.36	60.36	10.1	33.62	8.2	23.9	5.99
I23	13 Aug 2019	3	18.34	62.05	10.9	33.67	8.2	24.2	6.05
I23	13 Aug 2019	4	17.24	62.81	11.3	33.64	8.2	24.4	6.69
I23	13 Aug 2019	5	16.14	61.29	11.0	33.64	8.3	24.7	8.07
I23	13 Aug 2019	6	15.28	60.90	10.4	33.65	8.3	24.9	9.10
I23	13 Aug 2019	7	14.51	65.08	9.3	33.62	8.2	25.0	8.16
I23	13 Aug 2019	8	14.05	70.91	8.1	33.60	8.2	25.1	6.82
I23	13 Aug 2019	9	13.93	71.79	7.3	33.58	8.2	25.1	6.35
I23	13 Aug 2019	10	13.91	71.70	7.1	33.58	8.2	25.1	6.01
I23	13 Aug 2019	11	13.90	71.45	7.0	33.58	8.1	25.1	5.91
I23	13 Aug 2019	12	13.81	71.59	6.8	33.59	8.1	25.1	5.71
I23	13 Aug 2019	13	13.64	72.82	6.7	33.59	8.1	25.2	5.19
I23	13 Aug 2019	14	13.56	74.12	6.5	33.59	8.1	25.2	4.74
I23	13 Aug 2019	15	13.52	74.50	6.1	33.59	8.1	25.2	4.16
I23	13 Aug 2019	16	13.45	74.26	5.7	33.60	8.1	25.2	3.55
I23	13 Aug 2019	17	13.39	74.82	5.4	33.60	8.0	25.2	2.99
I23	13 Aug 2019	18	13.29	74.65	5.2	33.61	8.0	25.3	2.63
I23	13 Aug 2019	19	13.24	74.08	5.1	33.60	8.0	25.3	2.35
I23	13 Aug 2019	20	13.24	76.28	5.1	33.60	8.0	25.3	2.16
I23	13 Aug 2019	21	13.25	76.29	5.1	33.61	8.0	25.3	2.04
I27	13 Aug 2019	1	19.70	77.29	9.0	33.65	8.2	23.8	1.67
I27	13 Aug 2019	2	19.70	77.07	9.0	33.65	8.2	23.8	1.81

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I27	13 Aug 2019	3	19.69	76.80	9.0	33.65	8.2	23.8	1.93
I27	13 Aug 2019	4	19.69	76.78	9.0	33.65	8.2	23.8	2.07
I27	13 Aug 2019	5	19.57	75.98	9.1	33.65	8.2	23.8	2.51
I27	13 Aug 2019	6	19.08	74.47	9.3	33.65	8.2	24.0	2.78
I27	13 Aug 2019	7	17.91	72.65	9.8	33.65	8.2	24.3	3.30
I27	13 Aug 2019	8	16.31	67.83	10.1	33.63	8.2	24.6	4.54
I27	13 Aug 2019	9	15.20	65.57	9.9	33.61	8.2	24.9	4.85
I27	13 Aug 2019	10	14.42	68.87	9.2	33.59	8.2	25.0	5.10
I27	13 Aug 2019	11	14.03	68.25	8.1	33.59	8.2	25.1	5.51
I27	13 Aug 2019	12	13.86	69.63	7.9	33.58	8.2	25.1	5.70
I27	13 Aug 2019	13	13.83	70.13	7.2	33.60	8.2	25.1	5.69
I27	13 Aug 2019	14	13.34	70.97	6.1	33.60	8.1	25.2	5.20
I27	13 Aug 2019	15	13.27	72.62	5.6	33.59	8.1	25.2	4.62
I27	13 Aug 2019	16	13.24	73.27	5.4	33.60	8.1	25.3	4.38
I27	13 Aug 2019	17	13.17	74.46	5.1	33.60	8.0	25.3	3.66
I27	13 Aug 2019	18	13.11	75.42	4.9	33.60	8.0	25.3	3.15
I27	13 Aug 2019	19	13.06	75.18	4.7	33.60	8.0	25.3	2.86
I27	13 Aug 2019	20	13.03	77.12	4.6	33.61	8.0	25.3	2.63
I27	13 Aug 2019	21	13.01	77.53	4.5	33.61	8.0	25.3	2.43
I27	13 Aug 2019	22	12.99	77.71	4.5	33.61	8.0	25.3	2.39
I27	13 Aug 2019	23	12.95	77.54	4.5	33.62	7.9	25.3	2.38
I27	13 Aug 2019	24	12.92	77.78	4.5	33.62	7.9	25.3	2.35
I27	13 Aug 2019	25	12.88	78.34	4.5	33.62	7.9	25.3	2.28
I27	13 Aug 2019	26	12.85	78.67	4.5	33.62	7.9	25.4	2.26
I27	13 Aug 2019	27	12.83	78.87	4.4	33.62	7.9	25.4	2.16
I27	13 Aug 2019	28	12.83	79.04	4.4	33.62	7.9	25.4	2.07
I28	14 Aug 2019	1	17.51	77.62	9.0	33.61	8.2	24.3	1.35
I28	14 Aug 2019	2	17.51	77.65	9.0	33.61	8.2	24.3	1.41
I28	14 Aug 2019	3	17.50	77.30	9.0	33.61	8.2	24.3	1.53
I28	14 Aug 2019	4	17.21	76.69	9.0	33.66	8.2	24.4	1.91
I28	14 Aug 2019	5	15.35	77.33	9.2	33.66	8.2	24.9	2.50
I28	14 Aug 2019	6	14.66	79.47	9.0	33.54	8.2	24.9	2.55
I28	14 Aug 2019	7	14.40	79.69	8.7	33.55	8.2	25.0	2.56
I28	14 Aug 2019	8	13.66	79.82	8.4	33.53	8.2	25.1	2.99
I28	14 Aug 2019	9	13.52	79.90	8.2	33.54	8.2	25.2	3.32
I28	14 Aug 2019	10	13.30	79.92	8.1	33.52	8.1	25.2	3.61
I28	14 Aug 2019	11	13.28	80.16	8.0	33.52	8.1	25.2	3.75
I28	14 Aug 2019	12	13.19	80.39	7.9	33.52	8.1	25.2	3.82
I28	14 Aug 2019	13	13.18	80.43	7.8	33.53	8.1	25.2	3.94
I28	14 Aug 2019	14	13.14	80.58	7.7	33.53	8.1	25.2	3.95
I28	14 Aug 2019	15	13.04	80.86	7.6	33.55	8.1	25.3	3.80
I28	14 Aug 2019	16	12.98	81.40	7.4	33.55	8.1	25.3	3.80
I28	14 Aug 2019	17	12.73	81.15	7.0	33.58	8.1	25.3	4.15
I28	14 Aug 2019	18	12.70	80.58	6.9	33.57	8.1	25.3	4.50
I28	14 Aug 2019	19	12.60	81.86	6.8	33.59	8.1	25.4	3.68
I28	14 Aug 2019	20	12.54	85.34	6.6	33.59	8.0	25.4	2.13
I28	14 Aug 2019	21	12.44	86.79	6.5	33.61	8.0	25.4	1.35
I28	14 Aug 2019	22	12.40	87.16	6.4	33.60	8.0	25.4	1.18
I28	14 Aug 2019	23	12.37	87.23	6.4	33.61	8.0	25.4	1.11
I28	14 Aug 2019	24	12.36	87.10	6.3	33.61	8.0	25.4	1.07
I28	14 Aug 2019	25	12.35	87.27	6.3	33.61	8.0	25.4	1.06
I28	14 Aug 2019	26	12.34	87.29	6.3	33.61	8.0	25.4	1.09
I28	14 Aug 2019	27	12.33	87.38	6.3	33.61	8.0	25.4	1.04
I28	14 Aug 2019	28	12.30	87.34	6.3	33.62	8.0	25.5	1.02
I28	14 Aug 2019	29	12.29	87.32	6.2	33.62	8.0	25.5	1.03
I28	14 Aug 2019	30	12.12	87.35	6.0	33.64	8.0	25.5	1.06
I28	14 Aug 2019	31	12.07	87.48	5.9	33.63	8.0	25.5	0.96
I28	14 Aug 2019	32	12.00	87.38	5.9	33.64	8.0	25.5	0.96
I28	14 Aug 2019	33	11.92	87.53	5.8	33.65	8.0	25.6	0.88
I28	14 Aug 2019	34	11.90	87.75	5.7	33.65	8.0	25.6	0.83

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I28	14 Aug 2019	35	11.78	87.73	5.4	33.66	7.9	25.6	0.75
I28	14 Aug 2019	36	11.71	87.81	5.3	33.67	7.9	25.6	0.67
I28	14 Aug 2019	37	11.65	87.82	5.2	33.67	7.9	25.6	0.60
I28	14 Aug 2019	38	11.64	87.90	5.2	33.67	7.9	25.6	0.59
I28	14 Aug 2019	39	11.61	87.88	5.3	33.67	7.9	25.6	0.59
I28	14 Aug 2019	40	11.60	87.79	5.2	33.67	7.9	25.6	0.60
I28	14 Aug 2019	41	11.61	87.69	5.2	33.67	7.9	25.6	0.59
I28	14 Aug 2019	42	11.60	87.92	5.2	33.67	7.9	25.6	0.60
I28	14 Aug 2019	43	11.58	87.86	5.2	33.67	7.9	25.6	0.58
I28	14 Aug 2019	44	11.57	87.85	5.2	33.67	7.9	25.6	0.58
I28	14 Aug 2019	45	11.56	87.87	5.2	33.67	7.9	25.6	0.58
I28	14 Aug 2019	46	11.55	87.75	5.2	33.67	7.9	25.6	0.58
I28	14 Aug 2019	47	11.55	87.70	5.2	33.67	7.9	25.6	0.58
I28	14 Aug 2019	48	11.55	87.79	5.2	33.68	7.9	25.6	0.59
I28	14 Aug 2019	49	11.54	87.75	5.2	33.68	7.9	25.6	0.58
I28	14 Aug 2019	50	11.54	87.75	5.2	33.68	7.9	25.6	0.56
I28	14 Aug 2019	51	11.54	87.72	5.2	33.68	7.9	25.6	0.56
I28	14 Aug 2019	52	11.52	87.72	5.2	33.68	7.9	25.7	0.55
I28	14 Aug 2019	53	11.49	87.67	5.1	33.68	7.9	25.7	0.54
I28	14 Aug 2019	54	11.48	87.57	5.1	33.68	7.9	25.7	0.53
I28	14 Aug 2019	55	11.44	87.55	5.1	33.69	7.9	25.7	0.52
I29	14 Aug 2019	1	18.48	76.74	8.5	33.64	8.1	24.1	1.38
I29	14 Aug 2019	2	18.46	76.70	8.5	33.65	8.1	24.1	1.43
I29	14 Aug 2019	3	18.35	76.24	8.3	33.65	8.1	24.2	1.64
I29	14 Aug 2019	4	17.81	74.70	8.3	33.68	8.1	24.3	1.93
I29	14 Aug 2019	5	16.71	74.50	8.5	33.65	8.1	24.5	2.11
I29	14 Aug 2019	6	16.18	74.54	8.6	33.61	8.1	24.6	2.52
I29	14 Aug 2019	7	15.53	74.35	8.7	33.63	8.1	24.8	3.30
I29	14 Aug 2019	8	14.53	73.11	8.6	33.59	8.1	25.0	4.35
I29	14 Aug 2019	9	13.99	73.15	8.6	33.54	8.1	25.1	4.84
I29	14 Aug 2019	10	13.87	72.40	8.4	33.53	8.1	25.1	5.16
I29	14 Aug 2019	11	13.73	71.67	8.0	33.53	8.1	25.1	5.23
I29	14 Aug 2019	12	13.63	71.36	7.6	33.53	8.1	25.1	5.05
I29	14 Aug 2019	13	13.51	71.35	7.2	33.53	8.1	25.2	4.68
I29	14 Aug 2019	14	13.46	72.35	6.9	33.54	8.1	25.2	4.37
I29	14 Aug 2019	15	13.03	74.60	6.2	33.59	8.1	25.3	3.46
I29	14 Aug 2019	16	12.87	78.43	5.6	33.59	8.0	25.3	2.63
I29	14 Aug 2019	17	12.85	79.65	5.2	33.59	8.0	25.3	2.20
I29	14 Aug 2019	18	12.86	79.88	4.7	33.61	8.0	25.3	2.05
I29	14 Aug 2019	19	12.86	80.00	4.5	33.61	8.0	25.3	2.05
I29	14 Aug 2019	20	12.81	79.92	4.6	33.61	8.0	25.4	2.00
I29	14 Aug 2019	21	12.76	81.29	5.0	33.62	7.9	25.4	1.93
I29	14 Aug 2019	22	12.59	82.70	5.3	33.61	7.9	25.4	1.73
I29	14 Aug 2019	23	12.56	83.66	5.4	33.61	7.9	25.4	1.50
I29	14 Aug 2019	24	12.56	84.29	5.4	33.61	7.9	25.4	1.44
I29	14 Aug 2019	25	12.54	84.39	5.4	33.61	7.9	25.4	1.45
I29	14 Aug 2019	26	12.52	84.48	5.4	33.61	7.9	25.4	1.33
I29	14 Aug 2019	27	12.51	84.84	5.5	33.61	7.9	25.4	1.28
I29	14 Aug 2019	28	12.49	85.05	5.6	33.61	7.9	25.4	1.20
I29	14 Aug 2019	29	12.48	85.28	5.6	33.61	7.9	25.4	1.20
I29	14 Aug 2019	30	12.45	85.44	5.7	33.61	7.9	25.4	1.17
I29	14 Aug 2019	31	12.45	85.48	5.7	33.61	7.9	25.4	1.10
I29	14 Aug 2019	32	12.40	85.52	5.7	33.61	7.9	25.4	1.01
I29	14 Aug 2019	33	12.39	85.49	5.7	33.61	7.9	25.4	1.01
I29	14 Aug 2019	34	12.39	85.56	5.7	33.61	7.9	25.4	1.00
I29	14 Aug 2019	35	12.39	85.53	5.7	33.61	7.9	25.4	0.96
I29	14 Aug 2019	36	12.39	85.53	5.7	33.61	7.9	25.4	0.99
I29	14 Aug 2019	37	12.39	85.44	5.7	33.61	7.9	25.4	1.00
I29	14 Aug 2019	38	12.39	85.48	5.7	33.61	7.9	25.4	1.01

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I3	12 Aug 2019	1	19.24	60.10	10.7	33.56	8.2	23.9	5.64
I3	12 Aug 2019	2	19.23	60.11	10.7	33.56	8.2	23.9	6.18
I3	12 Aug 2019	3	19.14	60.09	10.6	33.57	8.2	23.9	6.51
I3	12 Aug 2019	4	18.71	60.70	10.4	33.58	8.2	24.0	6.92
I3	12 Aug 2019	5	18.05	61.80	10.3	33.56	8.2	24.2	7.08
I3	12 Aug 2019	6	17.56	63.01	9.9	33.62	8.2	24.3	7.11
I3	12 Aug 2019	7	16.11	63.90	9.9	33.64	8.2	24.7	6.70
I3	12 Aug 2019	8	15.26	66.30	9.7	33.62	8.2	24.9	6.01
I3	12 Aug 2019	9	14.66	68.84	9.2	33.60	8.2	25.0	5.31
I3	12 Aug 2019	10	14.21	70.17	8.2	33.60	8.2	25.1	4.91
I3	12 Aug 2019	11	13.83	70.58	7.3	33.60	8.2	25.1	4.53
I3	12 Aug 2019	12	13.74	70.44	6.6	33.60	8.1	25.2	4.54
I3	12 Aug 2019	13	13.44	69.43	6.2	33.60	8.1	25.2	4.96
I3	12 Aug 2019	14	13.29	70.40	6.1	33.60	8.1	25.3	5.01
I3	12 Aug 2019	15	13.02	71.76	5.9	33.62	8.1	25.3	5.02
I3	12 Aug 2019	16	12.97	72.75	5.5	33.61	8.0	25.3	4.89
I3	12 Aug 2019	17	12.63	74.85	5.1	33.61	8.0	25.4	4.00
I3	12 Aug 2019	18	12.60	75.63	4.9	33.60	8.0	25.4	3.20
I3	12 Aug 2019	19	12.60	75.85	4.8	33.61	8.0	25.4	2.79
I3	12 Aug 2019	20	12.60	75.77	4.8	33.61	8.0	25.4	2.65
I3	12 Aug 2019	21	12.60	75.87	4.8	33.61	8.0	25.4	2.60
I3	12 Aug 2019	22	12.59	75.95	4.8	33.61	8.0	25.4	2.55
I3	12 Aug 2019	23	12.60	75.88	4.7	33.62	7.9	25.4	2.47
I3	12 Aug 2019	24	12.59	76.15	4.7	33.62	7.9	25.4	2.45
I3	12 Aug 2019	25	12.59	75.97	4.7	33.62	7.9	25.4	2.41
I3	12 Aug 2019	26	12.59	76.09	4.7	33.62	7.9	25.4	2.36
I3	12 Aug 2019	27	12.59	76.05	4.7	33.62	7.9	25.4	2.32
I30	14 Aug 2019	1	19.18	75.38	8.9	33.64	8.2	23.9	1.50
I30	14 Aug 2019	2	19.18	75.29	8.9	33.64	8.2	23.9	1.59
I30	14 Aug 2019	3	19.15	75.06	8.9	33.65	8.2	23.9	1.77
I30	14 Aug 2019	4	18.65	75.21	8.7	33.69	8.2	24.1	1.96
I30	14 Aug 2019	5	17.46	75.30	8.9	33.65	8.2	24.4	2.18
I30	14 Aug 2019	6	16.64	74.61	9.3	33.67	8.2	24.6	2.48
I30	14 Aug 2019	7	15.42	74.02	10.2	33.59	8.2	24.8	3.14
I30	14 Aug 2019	8	15.25	70.46	9.8	33.60	8.2	24.8	3.92
I30	14 Aug 2019	9	14.67	68.79	9.2	33.59	8.2	25.0	4.78
I30	14 Aug 2019	10	14.52	68.48	8.9	33.57	8.2	25.0	5.34
I30	14 Aug 2019	11	14.34	70.55	8.9	33.59	8.2	25.0	5.24
I30	14 Aug 2019	12	14.13	71.98	8.8	33.59	8.2	25.1	4.99
I30	14 Aug 2019	13	13.79	74.04	8.0	33.60	8.2	25.2	4.64
I30	14 Aug 2019	14	13.38	75.02	6.5	33.60	8.1	25.2	4.45
I30	14 Aug 2019	15	13.30	75.84	5.5	33.60	8.1	25.2	3.79
I30	14 Aug 2019	16	13.27	76.13	5.0	33.60	8.0	25.3	3.23
I30	14 Aug 2019	17	13.21	74.71	4.6	33.61	8.0	25.3	3.12
I30	14 Aug 2019	18	13.18	74.23	4.5	33.61	8.0	25.3	3.10
I30	14 Aug 2019	19	13.14	74.95	4.8	33.61	8.0	25.3	3.18
I30	14 Aug 2019	20	13.08	75.77	4.8	33.61	8.0	25.3	3.11
I30	14 Aug 2019	21	13.06	76.60	4.6	33.61	7.9	25.3	2.77
I30	14 Aug 2019	22	13.06	76.95	4.4	33.62	7.9	25.3	2.60
I30	14 Aug 2019	23	13.04	77.08	4.3	33.62	7.9	25.3	2.53
I30	14 Aug 2019	24	13.03	77.14	4.4	33.62	7.9	25.3	2.56
I30	14 Aug 2019	25	13.02	77.93	4.3	33.62	7.9	25.3	2.50
I30	14 Aug 2019	26	12.95	78.67	4.2	33.62	7.9	25.3	2.10
I30	14 Aug 2019	27	12.90	79.45	4.2	33.62	7.9	25.3	1.74
I30	14 Aug 2019	28	12.91	79.53	4.1	33.62	7.9	25.3	1.67
I31	14 Aug 2019	1	19.41	71.84	9.2	33.64	8.2	23.9	2.35
I31	14 Aug 2019	2	19.39	71.88	9.2	33.64	8.2	23.9	2.49
I31	14 Aug 2019	3	19.28	71.40	9.2	33.65	8.2	23.9	2.79
I31	14 Aug 2019	4	18.72	71.29	9.4	33.68	8.2	24.1	3.27

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I31	14 Aug 2019	5	17.67	69.78	10.4	33.66	8.2	24.3	4.40
I31	14 Aug 2019	6	16.82	64.96	11.3	33.61	8.2	24.5	5.84
I31	14 Aug 2019	7	16.43	64.17	10.8	33.61	8.2	24.6	6.36
I31	14 Aug 2019	8	15.23	66.64	10.1	33.65	8.2	24.9	6.12
I31	14 Aug 2019	9	14.41	70.61	9.2	33.59	8.2	25.0	5.69
I31	14 Aug 2019	10	14.25	71.78	8.7	33.58	8.2	25.0	5.68
I31	14 Aug 2019	11	14.11	72.66	8.3	33.58	8.2	25.1	5.65
I31	14 Aug 2019	12	13.96	73.69	7.9	33.58	8.2	25.1	5.08
I31	14 Aug 2019	13	13.90	74.42	7.6	33.58	8.1	25.1	4.87
I31	14 Aug 2019	14	13.71	74.57	7.4	33.59	8.1	25.2	4.59
I31	14 Aug 2019	15	13.63	75.48	7.0	33.59	8.1	25.2	4.25
I31	14 Aug 2019	16	13.47	76.36	6.0	33.60	8.1	25.2	3.73
I31	14 Aug 2019	17	13.37	75.94	5.3	33.60	8.0	25.2	3.26
I31	14 Aug 2019	18	13.36	75.17	5.1	33.60	8.0	25.2	3.00
I31	14 Aug 2019	19	13.31	75.76	4.9	33.61	8.0	25.2	2.68
I33	14 Aug 2019	1	17.39	72.94	8.0	33.65	8.1	24.4	2.35
I33	14 Aug 2019	2	17.01	72.07	7.9	33.66	8.1	24.5	3.04
I33	14 Aug 2019	3	16.53	69.69	8.2	33.63	8.1	24.6	3.68
I33	14 Aug 2019	4	16.48	70.55	8.2	33.62	8.1	24.6	3.88
I33	14 Aug 2019	5	16.32	71.36	8.4	33.62	8.1	24.6	3.77
I33	14 Aug 2019	6	16.00	73.37	8.6	33.60	8.1	24.7	3.77
I33	14 Aug 2019	7	15.80	74.10	8.6	33.59	8.1	24.7	3.93
I33	14 Aug 2019	8	14.84	75.18	8.6	33.58	8.1	24.9	4.13
I33	14 Aug 2019	9	14.70	75.76	8.5	33.55	8.1	24.9	4.24
I33	14 Aug 2019	10	14.28	76.12	8.3	33.56	8.1	25.0	4.26
I33	14 Aug 2019	11	14.05	75.35	7.9	33.55	8.1	25.1	4.41
I33	14 Aug 2019	12	13.78	75.42	7.3	33.56	8.1	25.1	4.47
I33	14 Aug 2019	13	13.39	75.39	6.5	33.59	8.1	25.2	4.81
I33	14 Aug 2019	14	13.15	73.93	5.9	33.57	8.1	25.3	5.73
I33	14 Aug 2019	15	13.12	72.89	5.6	33.57	8.0	25.3	6.43
I33	14 Aug 2019	16	13.00	72.45	5.3	33.59	8.0	25.3	6.58
I33	14 Aug 2019	17	12.93	73.48	4.9	33.59	8.0	25.3	5.67
I33	14 Aug 2019	18	12.93	75.64	4.6	33.60	8.0	25.3	4.01
I33	14 Aug 2019	19	12.92	77.44	4.5	33.60	8.0	25.3	3.24
I33	14 Aug 2019	20	12.79	78.05	4.6	33.61	7.9	25.4	3.00
I33	14 Aug 2019	21	12.79	78.89	4.6	33.60	7.9	25.4	2.77
I33	14 Aug 2019	22	12.77	79.00	4.6	33.60	7.9	25.4	2.78
I33	14 Aug 2019	23	12.76	78.92	4.7	33.60	7.9	25.4	2.82
I33	14 Aug 2019	24	12.75	78.92	4.7	33.60	7.9	25.4	2.89
I33	14 Aug 2019	25	12.73	79.14	4.8	33.61	7.9	25.4	2.76
I33	14 Aug 2019	26	12.71	79.27	4.8	33.61	7.9	25.4	2.59
I33	14 Aug 2019	27	12.69	80.33	4.8	33.61	7.9	25.4	2.37
I33	14 Aug 2019	28	12.69	80.79	4.8	33.61	7.9	25.4	2.12
I33	14 Aug 2019	29	12.69	80.93	4.8	33.61	7.9	25.4	2.05
I33	14 Aug 2019	30	12.68	80.80	4.8	33.61	7.9	25.4	2.03
I34	14 Aug 2019	1	16.66	69.38	7.9	33.64	8.1	24.5	3.80
I34	14 Aug 2019	2	16.58	69.59	7.9	33.63	8.1	24.6	3.98
I34	14 Aug 2019	3	16.39	69.52	7.8	33.64	8.1	24.6	4.27
I34	14 Aug 2019	4	15.93	69.14	7.8	33.63	8.1	24.7	4.75
I34	14 Aug 2019	5	15.85	68.63	7.7	33.61	8.1	24.7	5.08
I34	14 Aug 2019	6	15.48	68.06	7.6	33.62	8.1	24.8	5.63
I34	14 Aug 2019	7	15.32	67.77	7.5	33.60	8.1	24.8	6.03
I34	14 Aug 2019	8	15.11	67.71	7.4	33.61	8.1	24.9	6.09
I34	14 Aug 2019	9	14.93	68.37	7.4	33.60	8.1	24.9	5.91
I34	14 Aug 2019	10	14.82	68.93	7.5	33.59	8.1	24.9	5.72
I34	14 Aug 2019	11	14.74	69.56	7.6	33.59	8.1	24.9	5.52
I34	14 Aug 2019	12	14.61	70.03	7.6	33.59	8.1	25.0	5.42
I34	14 Aug 2019	13	14.34	69.80	7.5	33.59	8.1	25.0	5.55
I34	14 Aug 2019	14	13.88	69.60	7.3	33.59	8.1	25.1	5.82

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I34	14 Aug 2019	15	13.71	69.35	7.1	33.58	8.1	25.1	6.30
I34	14 Aug 2019	16	13.52	69.22	6.8	33.58	8.0	25.2	6.63
I34	14 Aug 2019	17	13.21	69.93	6.2	33.59	8.0	25.3	6.68
I34	14 Aug 2019	18	13.05	71.65	5.5	33.58	8.0	25.3	6.39
I34	14 Aug 2019	19	13.05	73.39	5.3	33.58	8.0	25.3	5.68
I35	14 Aug 2019	1	19.36	74.45	8.9	33.63	8.1	23.9	1.27
I35	14 Aug 2019	2	18.28	74.52	8.9	33.68	8.2	24.2	1.38
I35	14 Aug 2019	3	16.12	75.22	10.0	33.63	8.2	24.7	1.51
I35	14 Aug 2019	4	15.09	73.42	10.5	33.59	8.2	24.9	2.56
I35	14 Aug 2019	5	14.73	64.70	9.6	33.59	8.2	24.9	4.30
I35	14 Aug 2019	6	13.97	67.03	7.8	33.58	8.2	25.1	5.07
I35	14 Aug 2019	7	13.82	68.82	7.1	33.58	8.1	25.1	5.56
I35	14 Aug 2019	8	13.72	69.76	6.8	33.58	8.1	25.1	5.99
I35	14 Aug 2019	9	13.61	70.45	6.5	33.58	8.1	25.2	6.09
I35	14 Aug 2019	10	13.55	71.95	6.1	33.59	8.0	25.2	5.62
I35	14 Aug 2019	11	13.57	72.41	6.0	33.59	8.0	25.2	5.57
I35	14 Aug 2019	12	13.50	72.99	5.9	33.60	8.0	25.2	5.41
I35	14 Aug 2019	13	13.49	73.32	5.8	33.60	8.0	25.2	5.18
I35	14 Aug 2019	14	13.44	73.91	5.9	33.60	8.0	25.2	4.95
I35	14 Aug 2019	15	13.41	74.15	5.9	33.60	8.0	25.2	4.86
I35	14 Aug 2019	16	13.40	74.32	5.9	33.60	8.0	25.2	4.75
I35	14 Aug 2019	17	13.38	74.73	5.9	33.60	8.0	25.2	4.48
I35	14 Aug 2019	18	13.29	74.99	5.7	33.60	8.0	25.2	4.64
I35	14 Aug 2019	19	13.25	73.44	5.6	33.59	7.9	25.3	4.46
I36	14 Aug 2019	1	17.72	68.10	9.4	33.62	8.2	24.3	2.29
I36	14 Aug 2019	2	17.34	65.79	9.6	33.63	8.2	24.4	2.91
I36	14 Aug 2019	3	16.38	62.74	10.6	33.64	8.2	24.6	4.01
I36	14 Aug 2019	4	15.46	58.88	10.3	33.62	8.2	24.8	6.01
I36	14 Aug 2019	5	15.14	59.23	9.6	33.59	8.2	24.9	7.54
I36	14 Aug 2019	6	14.69	62.21	9.1	33.60	8.2	25.0	7.35
I36	14 Aug 2019	7	14.42	65.25	8.8	33.59	8.2	25.0	7.81
I36	14 Aug 2019	8	14.34	64.04	8.1	33.59	8.1	25.0	8.32
I36	14 Aug 2019	9	14.22	64.67	7.7	33.59	8.1	25.1	8.36
I36	14 Aug 2019	10	14.16	65.10	7.5	33.59	8.1	25.1	8.55
I36	14 Aug 2019	11	14.01	65.64	7.2	33.60	8.1	25.1	8.00
I37	14 Aug 2019	1	16.50	70.80	7.8	33.63	8.1	24.6	3.28
I37	14 Aug 2019	2	16.49	70.57	7.8	33.63	8.1	24.6	3.50
I37	14 Aug 2019	3	16.49	70.64	7.8	33.63	8.1	24.6	3.68
I37	14 Aug 2019	4	16.49	70.47	7.8	33.63	8.1	24.6	3.80
I37	14 Aug 2019	5	16.28	70.58	7.9	33.64	8.1	24.6	3.88
I37	14 Aug 2019	6	15.31	71.93	8.1	33.64	8.1	24.9	4.02
I37	14 Aug 2019	7	14.85	74.18	8.0	33.59	8.1	24.9	4.20
I37	14 Aug 2019	8	14.71	74.23	7.8	33.58	8.1	24.9	4.60
I37	14 Aug 2019	9	14.38	73.28	7.4	33.60	8.1	25.0	5.05
I37	14 Aug 2019	10	14.06	71.83	7.0	33.59	8.1	25.1	5.92
I37	14 Aug 2019	11	13.67	69.50	6.8	33.59	8.1	25.2	6.34
I37	14 Aug 2019	12	13.60	68.62	6.6	33.58	8.1	25.2	5.67
I38	14 Aug 2019	1	17.87	70.69	9.3	33.63	8.2	24.3	1.26
I38	14 Aug 2019	2	17.51	69.65	9.3	33.62	8.2	24.3	1.38
I38	14 Aug 2019	3	16.76	69.54	9.5	33.65	8.2	24.5	1.51
I38	14 Aug 2019	4	15.89	70.78	9.9	33.62	8.2	24.7	1.47
I38	14 Aug 2019	5	15.22	74.07	10.3	33.59	8.2	24.8	1.45
I38	14 Aug 2019	6	14.87	74.71	10.2	33.56	8.2	24.9	1.62
I38	14 Aug 2019	7	14.38	73.41	9.3	33.58	8.2	25.0	2.27
I38	14 Aug 2019	8	14.12	68.37	7.9	33.57	8.2	25.1	3.59
I38	14 Aug 2019	9	13.95	68.11	7.3	33.56	8.1	25.1	4.54
I38	14 Aug 2019	10	13.88	67.84	6.6	33.57	8.1	25.1	5.15

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I38	14 Aug 2019	11	13.84	68.07	6.2	33.58	8.1	25.1	5.11
I4	12 Aug 2019	1	17.63	48.40	9.7	33.51	8.2	24.2	11.29
I4	12 Aug 2019	2	17.56	48.38	9.5	33.52	8.2	24.2	12.09
I4	12 Aug 2019	3	17.23	55.26	9.8	33.53	8.2	24.3	10.39
I4	12 Aug 2019	4	16.80	63.35	10.4	33.55	8.2	24.4	8.27
I4	12 Aug 2019	5	15.48	64.09	9.9	33.66	8.2	24.8	8.13
I4	12 Aug 2019	6	14.25	66.26	8.8	33.61	8.2	25.1	8.58
I4	12 Aug 2019	7	13.98	68.93	8.2	33.58	8.2	25.1	8.43
I4	12 Aug 2019	8	13.65	72.02	7.5	33.59	8.1	25.2	7.41
I4	12 Aug 2019	9	13.36	73.92	7.0	33.58	8.1	25.2	6.41
I4	12 Aug 2019	10	13.28	74.71	6.7	33.58	8.1	25.2	5.74
I4	12 Aug 2019	11	13.17	75.86	6.5	33.58	8.1	25.3	4.78
I4	12 Aug 2019	12	13.16	76.45	6.4	33.58	8.0	25.3	4.20
I4	12 Aug 2019	13	13.15	76.41	6.4	33.58	8.0	25.3	4.01
I4	12 Aug 2019	14	13.14	76.09	6.3	33.59	8.0	25.3	3.90
I4	12 Aug 2019	15	13.14	75.98	6.3	33.59	8.0	25.3	3.92
I4	12 Aug 2019	16	13.13	76.25	6.3	33.59	8.0	25.3	3.76
I4	12 Aug 2019	17	13.13	75.81	6.2	33.59	8.0	25.3	3.75
I4	12 Aug 2019	18	13.13	75.93	6.3	33.59	8.0	25.3	3.80
I5	12 Aug 2019	1	16.68	59.15	9.4	33.53	8.1	24.5	5.47
I5	12 Aug 2019	2	16.21	62.90	9.7	33.56	8.1	24.6	5.39
I5	12 Aug 2019	3	15.18	63.38	9.7	33.60	8.1	24.9	7.39
I5	12 Aug 2019	4	14.88	62.61	9.6	33.58	8.1	24.9	9.16
I5	12 Aug 2019	5	14.63	62.49	9.1	33.58	8.1	25.0	10.02
I5	12 Aug 2019	6	14.34	63.65	8.4	33.59	8.1	25.0	10.04
I5	12 Aug 2019	7	13.96	68.48	7.8	33.58	8.1	25.1	8.12
I5	12 Aug 2019	8	13.76	72.14	7.5	33.58	8.1	25.1	6.66
I5	12 Aug 2019	9	13.68	73.53	7.4	33.57	8.1	25.1	5.92
I5	12 Aug 2019	10	13.63	73.64	7.3	33.57	8.1	25.2	5.36
I5	12 Aug 2019	11	13.60	74.26	7.1	33.57	8.1	25.2	5.02
I5	12 Aug 2019	12	13.53	73.72	7.0	33.58	8.1	25.2	4.63
I5	12 Aug 2019	13	13.49	73.29	6.9	33.58	8.0	25.2	4.37
I5	12 Aug 2019	14	13.54	71.50	6.9	33.58	8.0	25.2	4.30
I6	12 Aug 2019	1	19.49	63.12	9.9	33.59	8.2	23.8	4.47
I6	12 Aug 2019	2	19.44	63.34	9.8	33.59	8.2	23.8	5.14
I6	12 Aug 2019	3	18.65	62.83	9.5	33.65	8.2	24.1	5.97
I6	12 Aug 2019	4	16.64	63.82	9.9	33.67	8.2	24.6	6.53
I6	12 Aug 2019	5	15.47	65.25	10.4	33.63	8.2	24.8	6.73
I6	12 Aug 2019	6	14.88	68.27	10.1	33.60	8.2	24.9	6.44
I6	12 Aug 2019	7	14.48	70.24	9.4	33.59	8.2	25.0	5.91
I6	12 Aug 2019	8	14.15	69.58	8.7	33.59	8.2	25.1	5.96
I6	12 Aug 2019	9	13.88	69.11	7.9	33.60	8.2	25.1	6.13
I6	12 Aug 2019	10	13.62	69.25	6.8	33.60	8.1	25.2	6.43
I6	12 Aug 2019	11	13.43	68.67	5.9	33.60	8.1	25.2	6.74
I6	12 Aug 2019	12	13.25	68.46	5.4	33.60	8.1	25.3	6.97
I6	12 Aug 2019	13	13.09	69.48	5.3	33.60	8.0	25.3	6.61
I6	12 Aug 2019	14	12.95	69.48	5.3	33.60	8.0	25.3	5.77
I6	12 Aug 2019	15	12.81	70.80	5.4	33.60	8.0	25.3	4.67
I6	12 Aug 2019	16	12.76	70.71	5.2	33.60	8.0	25.4	3.93
I6	12 Aug 2019	17	12.71	72.62	5.0	33.60	8.0	25.4	3.26
I6	12 Aug 2019	18	12.74	73.46	4.8	33.60	7.9	25.4	2.97
I6	12 Aug 2019	19	12.72	74.85	4.8	33.62	7.9	25.4	2.88
I6	12 Aug 2019	20	12.70	75.66	4.6	33.61	7.9	25.4	2.64
I6	12 Aug 2019	21	12.70	75.72	4.6	33.62	7.9	25.4	2.61
I6	12 Aug 2019	22	12.70	75.86	4.5	33.62	7.9	25.4	2.46
I6	12 Aug 2019	23	12.70	75.89	4.5	33.62	7.9	25.4	2.41
I6	12 Aug 2019	24	12.70	76.06	4.5	33.62	7.9	25.4	2.42
I6	12 Aug 2019	25	12.70	75.62	4.5	33.62	7.9	25.4	2.39

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I6	12 Aug 2019	26	12.71	75.78	4.5	33.62	7.9	25.4	2.47
I7	12 Aug 2019	1	19.08	80.21	9.1	33.64	8.1	24.0	1.13
I7	12 Aug 2019	2	18.46	80.14	9.0	33.64	8.2	24.1	1.20
I7	12 Aug 2019	3	17.24	79.92	8.9	33.66	8.2	24.4	1.50
I7	12 Aug 2019	4	16.19	79.48	9.2	33.55	8.2	24.6	1.96
I7	12 Aug 2019	5	15.92	79.76	9.2	33.54	8.2	24.6	2.13
I7	12 Aug 2019	6	15.56	79.94	9.1	33.55	8.2	24.7	2.26
I7	12 Aug 2019	7	15.32	80.39	9.0	33.51	8.2	24.8	2.12
I7	12 Aug 2019	8	15.11	80.65	8.9	33.52	8.2	24.8	2.08
I7	12 Aug 2019	9	14.76	80.96	8.9	33.51	8.2	24.9	2.01
I7	12 Aug 2019	10	14.60	81.54	8.9	33.49	8.2	24.9	2.00
I7	12 Aug 2019	11	14.39	82.14	8.8	33.50	8.2	24.9	1.89
I7	12 Aug 2019	12	14.22	82.28	8.7	33.50	8.2	25.0	1.92
I7	12 Aug 2019	13	13.96	82.13	8.6	33.50	8.2	25.0	2.07
I7	12 Aug 2019	14	13.83	81.95	8.5	33.49	8.1	25.1	2.23
I7	12 Aug 2019	15	13.69	81.71	8.4	33.49	8.1	25.1	2.43
I7	12 Aug 2019	16	13.63	81.48	8.4	33.50	8.1	25.1	2.62
I7	12 Aug 2019	17	13.57	80.66	8.2	33.51	8.1	25.1	2.90
I7	12 Aug 2019	18	13.42	79.58	8.1	33.53	8.1	25.2	3.56
I7	12 Aug 2019	19	13.37	80.03	8.0	33.52	8.1	25.2	3.92
I7	12 Aug 2019	20	13.32	80.62	8.0	33.52	8.1	25.2	3.86
I7	12 Aug 2019	21	13.24	79.81	7.9	33.53	8.1	25.2	4.01
I7	12 Aug 2019	22	13.18	80.02	7.8	33.53	8.1	25.2	4.12
I7	12 Aug 2019	23	13.15	80.26	7.8	33.53	8.1	25.2	4.12
I7	12 Aug 2019	24	13.15	80.15	7.7	33.53	8.1	25.2	4.05
I7	12 Aug 2019	25	13.12	79.67	7.7	33.54	8.1	25.2	4.29
I7	12 Aug 2019	26	13.08	80.32	7.6	33.55	8.1	25.2	4.48
I7	12 Aug 2019	27	13.04	81.73	7.5	33.55	8.1	25.3	4.10
I7	12 Aug 2019	28	12.99	82.69	7.4	33.55	8.1	25.3	3.41
I7	12 Aug 2019	29	12.96	83.54	7.4	33.55	8.1	25.3	2.92
I7	12 Aug 2019	30	12.92	84.94	7.1	33.56	8.1	25.3	2.46
I7	12 Aug 2019	31	12.80	85.91	7.2	33.58	8.1	25.3	1.95
I7	12 Aug 2019	32	12.72	86.01	6.9	33.58	8.1	25.4	1.73
I7	12 Aug 2019	33	12.62	86.01	6.8	33.59	8.0	25.4	1.60
I7	12 Aug 2019	34	12.59	86.33	6.7	33.59	8.0	25.4	1.52
I7	12 Aug 2019	35	12.56	86.42	6.6	33.60	8.0	25.4	1.45
I7	12 Aug 2019	36	12.49	86.38	6.5	33.60	8.0	25.4	1.42
I7	12 Aug 2019	37	12.38	86.78	6.4	33.61	8.0	25.4	1.27
I7	12 Aug 2019	38	12.20	86.90	6.2	33.62	8.0	25.5	1.16
I7	12 Aug 2019	39	12.14	87.13	6.1	33.63	8.0	25.5	1.04
I7	12 Aug 2019	40	12.11	87.22	6.0	33.63	8.0	25.5	0.99
I7	12 Aug 2019	41	11.94	87.35	5.8	33.65	8.0	25.6	0.95
I7	12 Aug 2019	42	11.91	87.51	5.7	33.65	8.0	25.6	0.87
I7	12 Aug 2019	43	11.83	87.65	5.6	33.66	8.0	25.6	0.81
I7	12 Aug 2019	44	11.66	87.74	5.4	33.67	8.0	25.6	0.71
I7	12 Aug 2019	45	11.55	87.82	5.3	33.68	8.0	25.6	0.60
I7	12 Aug 2019	46	11.48	87.85	5.2	33.69	8.0	25.7	0.54
I7	12 Aug 2019	47	11.44	87.86	5.2	33.69	8.0	25.7	0.50
I7	12 Aug 2019	48	11.43	87.80	5.1	33.69	7.9	25.7	0.47
I7	12 Aug 2019	49	11.42	87.76	5.1	33.69	7.9	25.7	0.46
I7	12 Aug 2019	50	11.41	87.82	5.1	33.69	7.9	25.7	0.46
I7	12 Aug 2019	51	11.41	87.78	5.1	33.69	7.9	25.7	0.46
I7	12 Aug 2019	52	11.42	86.56	5.1	33.69	7.9	25.7	0.46
I8	12 Aug 2019	1	20.16	77.79	9.1	33.65	8.2	23.7	0.92
I8	12 Aug 2019	2	20.13	77.61	9.0	33.65	8.2	23.7	0.97
I8	12 Aug 2019	3	19.23	77.39	9.1	33.69	8.2	24.0	1.08
I8	12 Aug 2019	4	16.87	76.84	10.1	33.65	8.2	24.5	1.54
I8	12 Aug 2019	5	16.34	74.77	10.3	33.55	8.2	24.6	2.26
I8	12 Aug 2019	6	15.68	75.78	10.1	33.56	8.2	24.7	2.63

Station	Date	Depth (m)	Temp (°C)	XMS (‰)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I8	12 Aug 2019	7	15.36	76.43	10.1	33.52	8.2	24.8	3.04
I8	12 Aug 2019	8	15.18	75.50	10.0	33.51	8.2	24.8	3.75
I8	12 Aug 2019	9	14.83	73.68	9.8	33.51	8.2	24.9	4.61
I8	12 Aug 2019	10	14.47	74.64	9.6	33.50	8.2	24.9	4.69
I8	12 Aug 2019	11	14.08	75.63	9.2	33.56	8.2	25.1	4.02
I8	12 Aug 2019	12	13.56	78.03	8.7	33.55	8.2	25.2	3.38
I8	12 Aug 2019	13	13.33	79.33	8.4	33.54	8.1	25.2	3.13
I8	12 Aug 2019	14	13.19	79.86	8.3	33.53	8.1	25.2	3.13
I8	12 Aug 2019	15	13.14	79.82	8.2	33.53	8.1	25.2	3.22
I8	12 Aug 2019	16	13.10	79.82	8.1	33.54	8.1	25.2	3.42
I8	12 Aug 2019	17	13.05	79.60	7.9	33.55	8.1	25.3	3.57
I8	12 Aug 2019	18	12.90	79.49	7.7	33.56	8.1	25.3	3.76
I8	12 Aug 2019	19	12.81	79.41	7.5	33.56	8.1	25.3	4.44
I8	12 Aug 2019	20	12.81	79.06	7.3	33.56	8.1	25.3	4.56
I8	12 Aug 2019	21	12.70	79.69	7.1	33.56	8.0	25.3	4.45
I8	12 Aug 2019	22	12.69	80.59	7.0	33.57	8.0	25.3	4.21
I8	12 Aug 2019	23	12.66	81.90	6.9	33.58	8.0	25.4	3.69
I8	12 Aug 2019	24	12.55	83.69	6.7	33.59	8.0	25.4	2.74
I8	12 Aug 2019	25	12.47	85.20	6.6	33.60	8.0	25.4	2.04
I8	12 Aug 2019	26	12.47	85.68	6.5	33.60	8.0	25.4	1.71
I8	12 Aug 2019	27	12.38	85.52	6.3	33.61	8.0	25.4	1.59
I8	12 Aug 2019	28	12.37	85.49	6.3	33.61	8.0	25.4	1.50
I8	12 Aug 2019	29	12.37	85.40	6.2	33.61	8.0	25.4	1.58
I8	12 Aug 2019	30	12.37	85.35	6.2	33.61	8.0	25.4	1.47
I8	12 Aug 2019	31	12.37	85.32	6.2	33.61	8.0	25.4	1.47
I8	12 Aug 2019	32	12.37	85.25	6.2	33.61	8.0	25.4	1.39
I8	12 Aug 2019	33	12.37	85.32	6.2	33.61	7.9	25.4	1.43
I8	12 Aug 2019	34	12.37	85.35	6.2	33.61	7.9	25.4	1.47
I8	12 Aug 2019	35	12.37	85.29	6.2	33.61	7.9	25.4	1.44
I8	12 Aug 2019	36	12.37	85.27	6.2	33.61	7.9	25.4	1.47
I9	12 Aug 2019	1	19.84	75.38	9.1	33.63	8.1	23.8	1.16
I9	12 Aug 2019	2	19.89	76.29	9.0	33.64	8.1	23.8	1.21
I9	12 Aug 2019	3	19.75	76.55	9.1	33.65	8.2	23.8	1.53
I9	12 Aug 2019	4	19.46	75.51	9.0	33.64	8.2	23.9	1.83
I9	12 Aug 2019	5	18.01	74.32	9.0	33.70	8.2	24.3	2.13
I9	12 Aug 2019	6	15.92	70.51	9.9	33.51	8.2	24.6	2.71
I9	12 Aug 2019	7	15.68	71.00	9.5	33.70	8.2	24.8	2.78
I9	12 Aug 2019	8	13.98	73.21	9.8	33.53	8.2	25.1	2.96
I9	12 Aug 2019	9	13.82	75.54	9.2	33.53	8.2	25.1	3.14
I9	12 Aug 2019	10	13.68	76.07	8.6	33.55	8.2	25.1	3.49
I9	12 Aug 2019	11	13.61	75.83	8.2	33.56	8.1	25.2	3.75
I9	12 Aug 2019	12	13.44	75.60	8.1	33.57	8.1	25.2	4.03
I9	12 Aug 2019	13	13.13	75.57	7.6	33.59	8.1	25.3	4.14
I9	12 Aug 2019	14	12.88	75.97	6.9	33.58	8.1	25.3	4.06
I9	12 Aug 2019	15	12.75	75.12	5.8	33.59	8.1	25.4	4.02
I9	12 Aug 2019	16	12.69	74.16	5.2	33.60	8.0	25.4	3.40
I9	12 Aug 2019	17	12.67	76.27	4.9	33.61	8.0	25.4	2.94
I9	12 Aug 2019	18	12.68	77.98	4.8	33.61	8.0	25.4	2.66
I9	12 Aug 2019	19	12.66	78.49	4.8	33.62	8.0	25.4	2.51
I9	12 Aug 2019	20	12.66	78.49	4.7	33.62	7.9	25.4	2.52
I9	12 Aug 2019	21	12.65	78.55	4.7	33.62	7.9	25.4	2.55
I9	12 Aug 2019	22	12.65	78.93	4.7	33.62	7.9	25.4	2.45
I9	12 Aug 2019	23	12.64	79.10	4.7	33.62	7.9	25.4	2.45
I9	12 Aug 2019	24	12.64	79.10	4.7	33.62	7.9	25.4	2.51
I9	12 Aug 2019	25	12.64	79.24	4.7	33.62	7.9	25.4	2.42
I9	12 Aug 2019	26	12.63	79.18	4.7	33.62	7.9	25.4	2.38
I9	12 Aug 2019	27	12.63	79.44	4.7	33.62	7.9	25.4	2.34
I9	12 Aug 2019	28	12.63	79.48	4.7	33.62	7.9	25.4	2.35
I9	12 Aug 2019	29	12.63	79.56	4.7	33.62	7.8	25.4	2.31

NA = not available

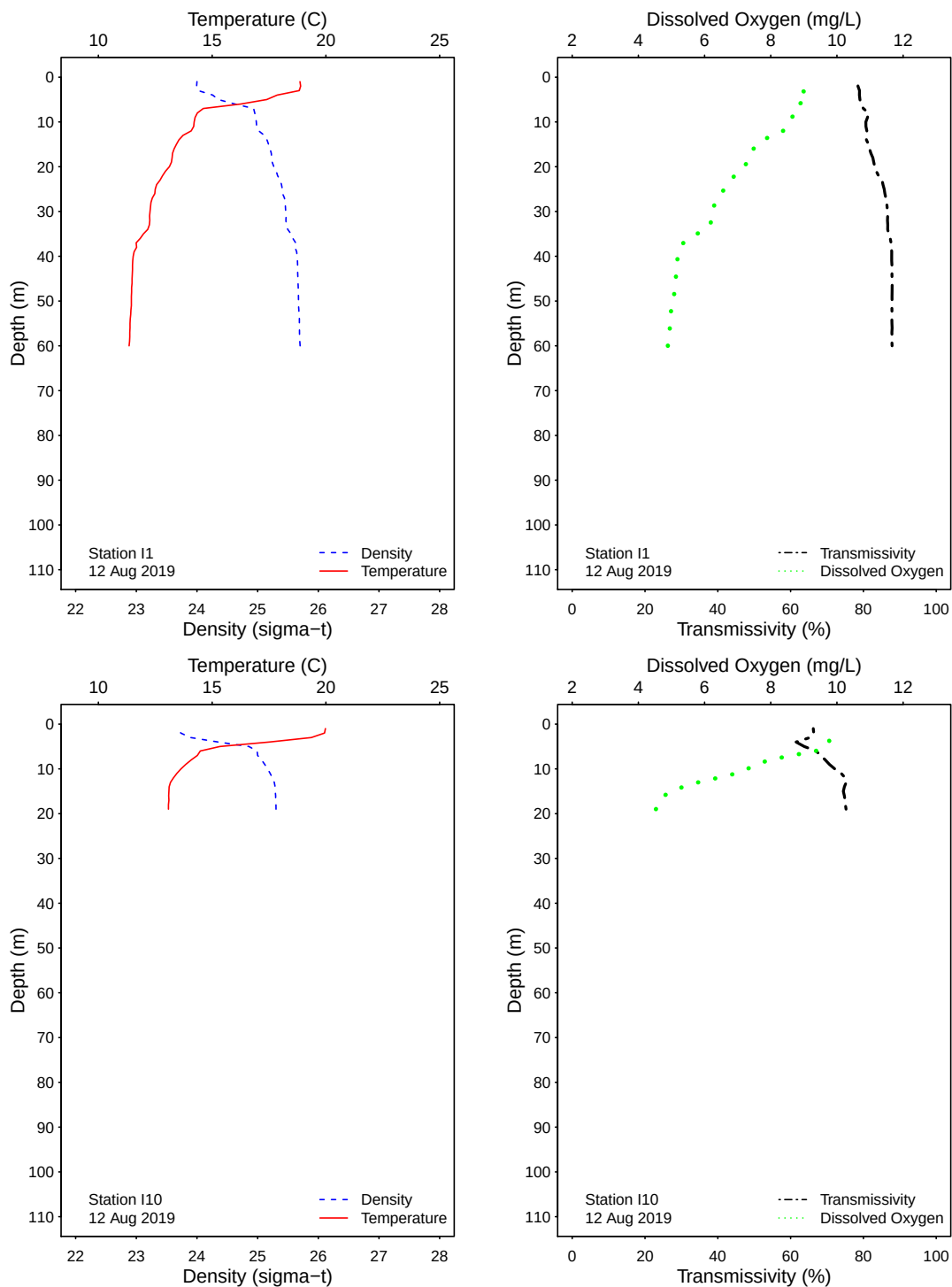


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

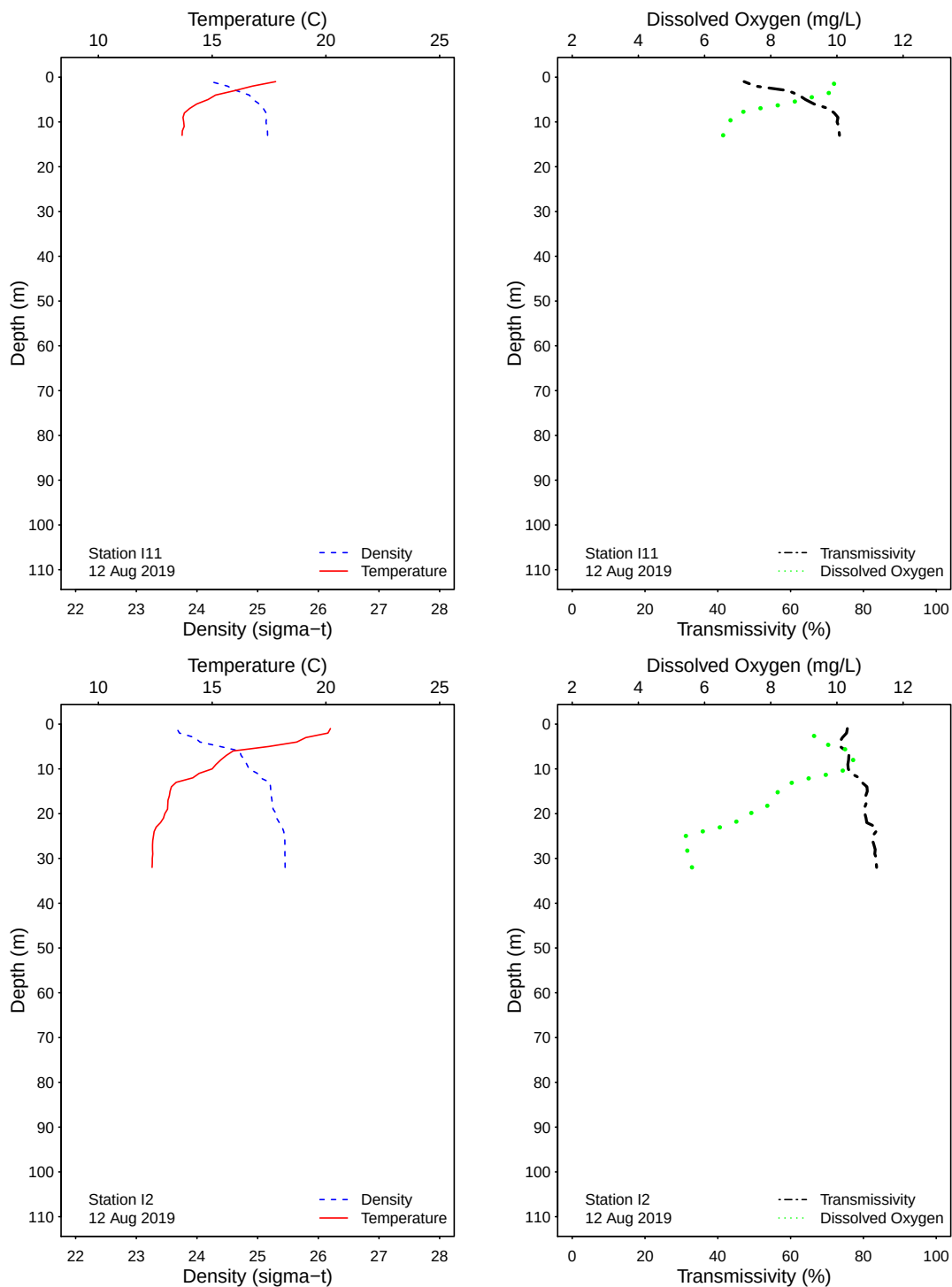


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

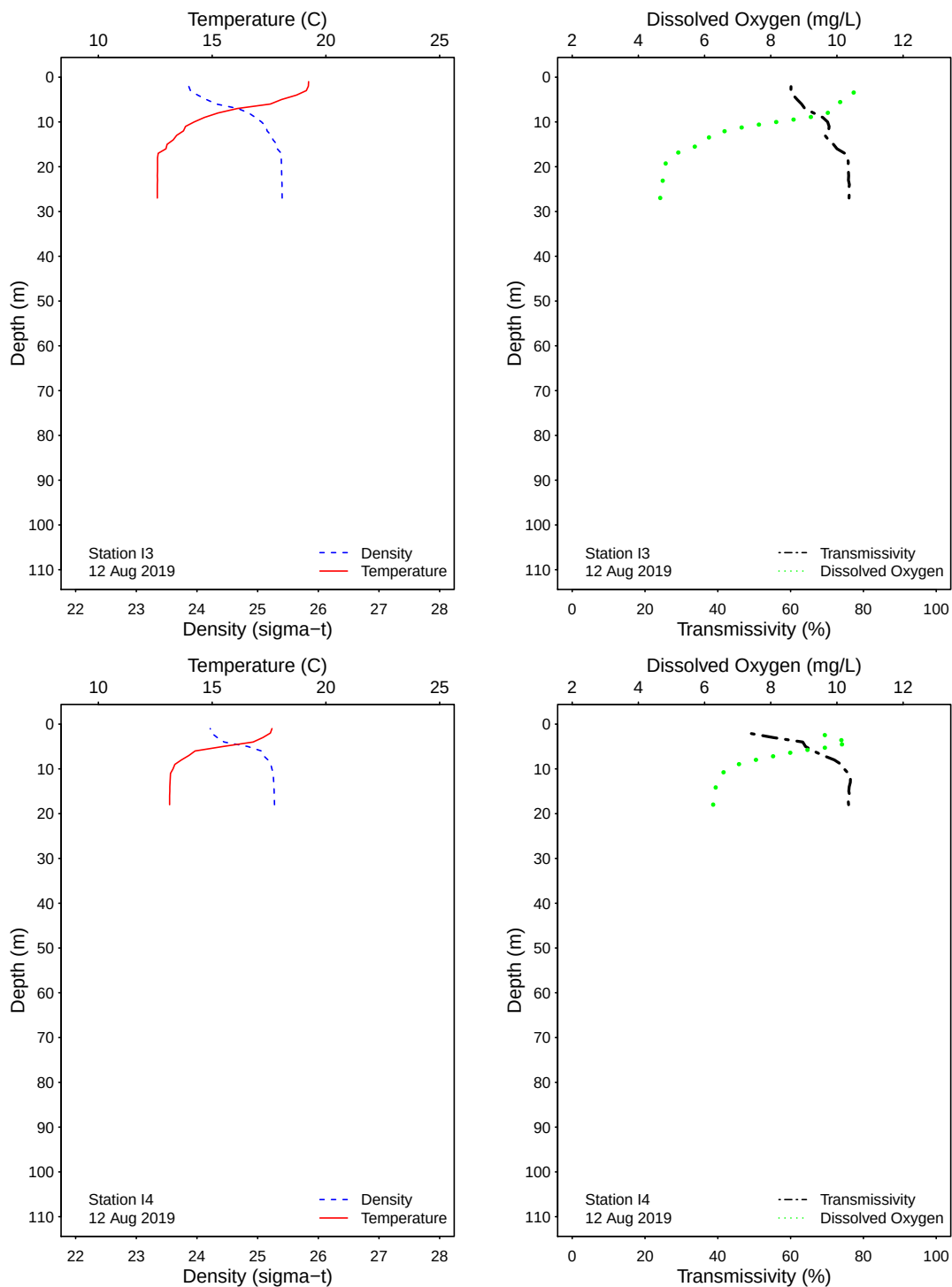


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

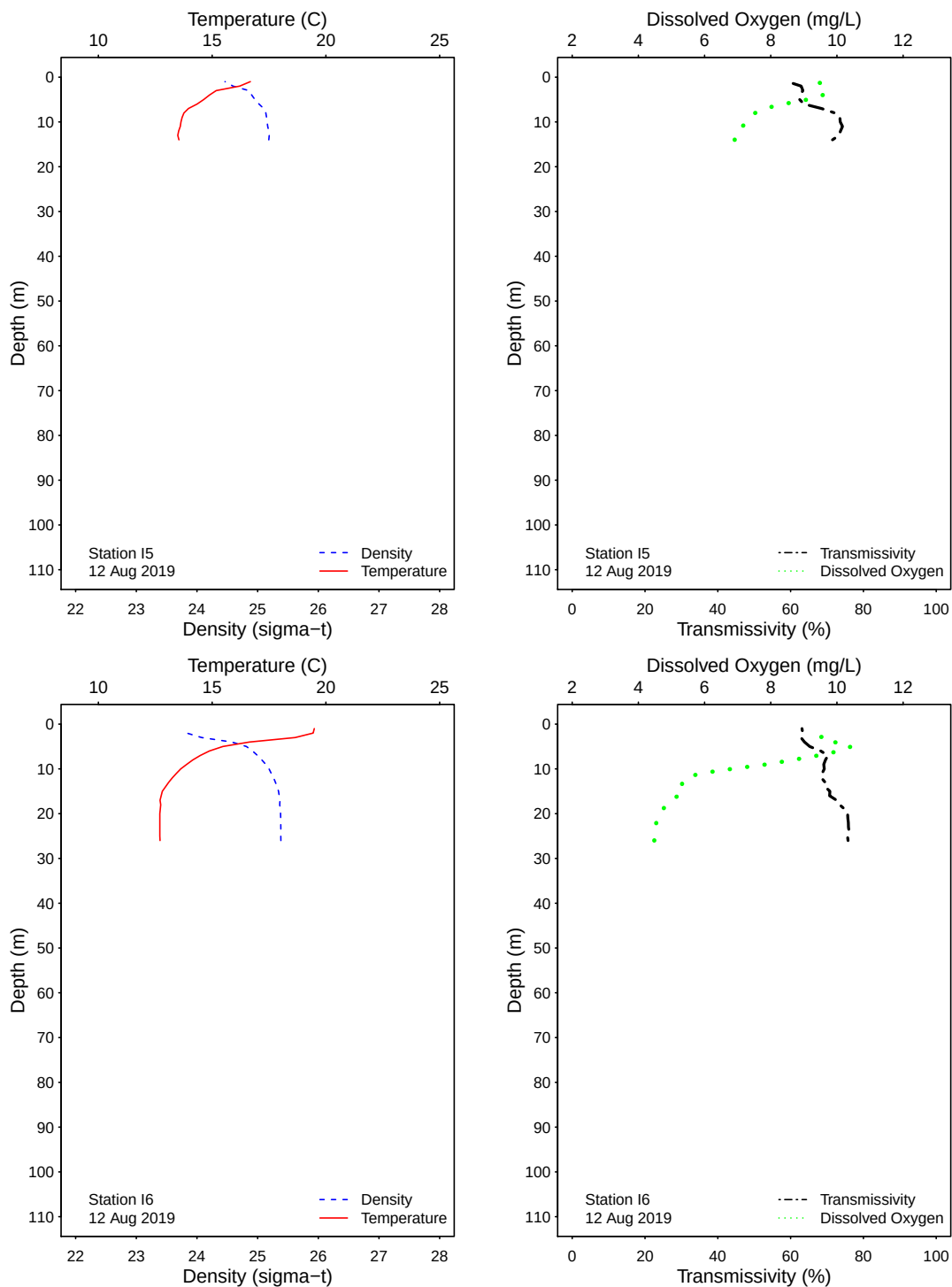


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

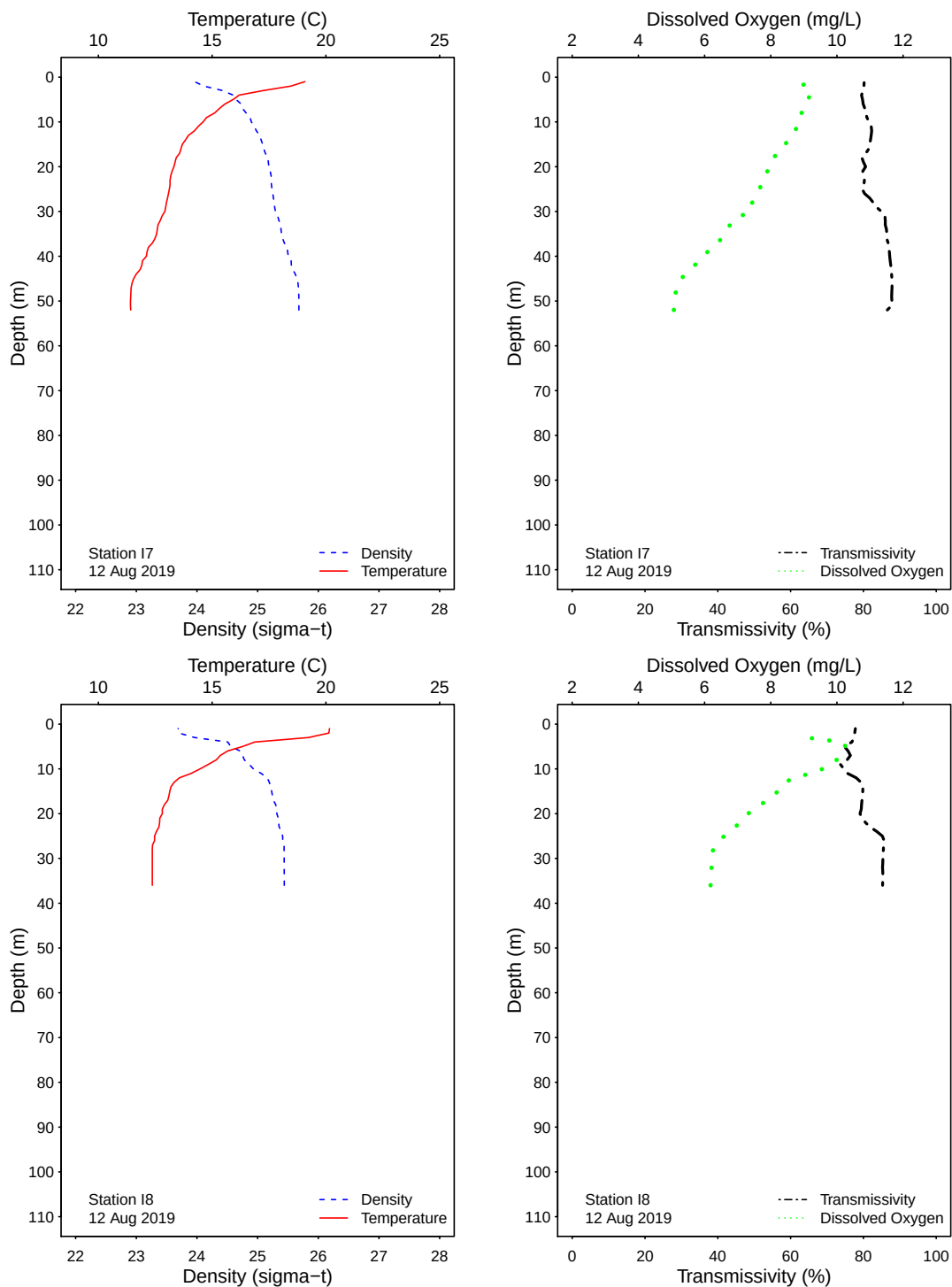


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

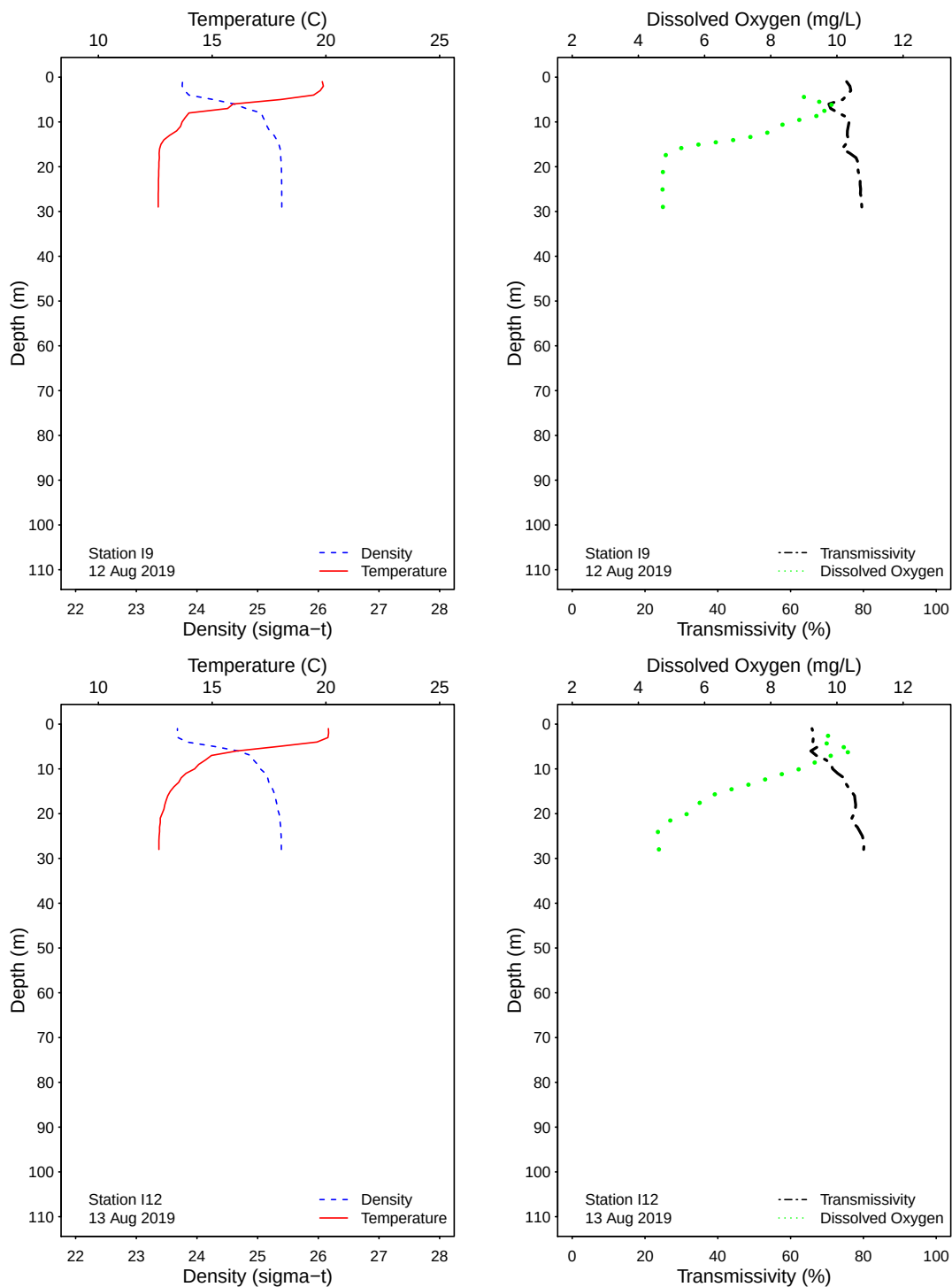


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

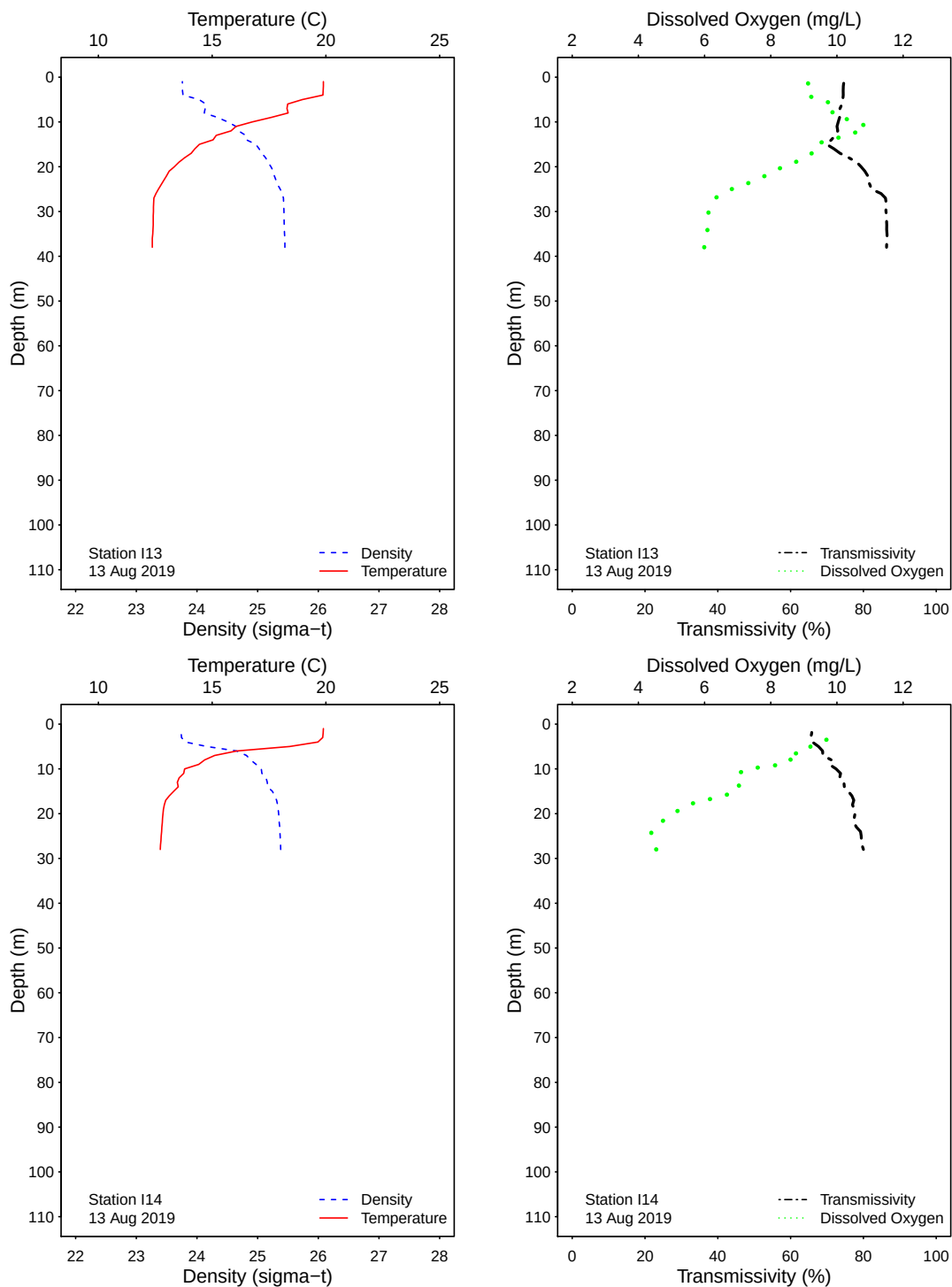


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

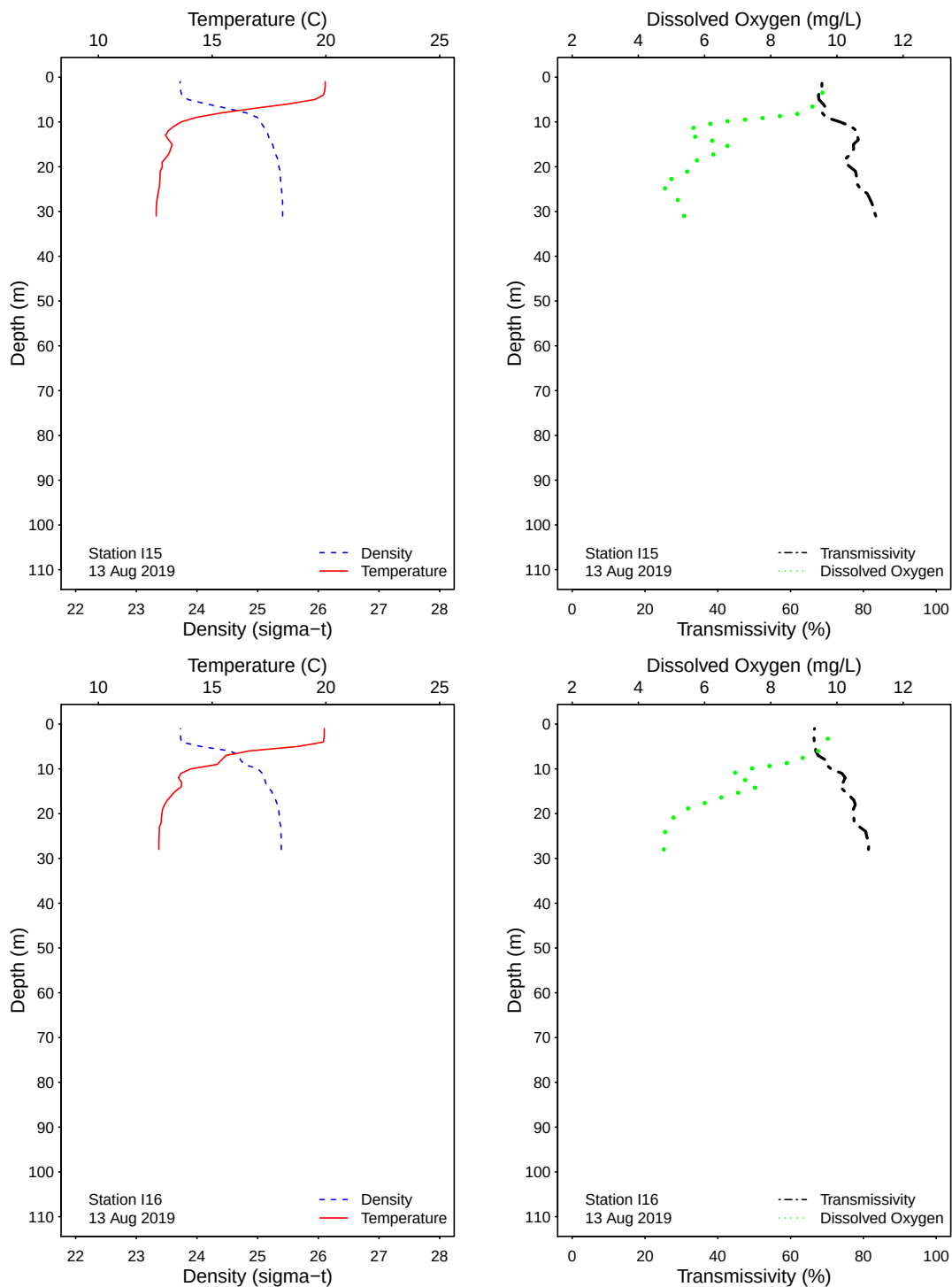


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

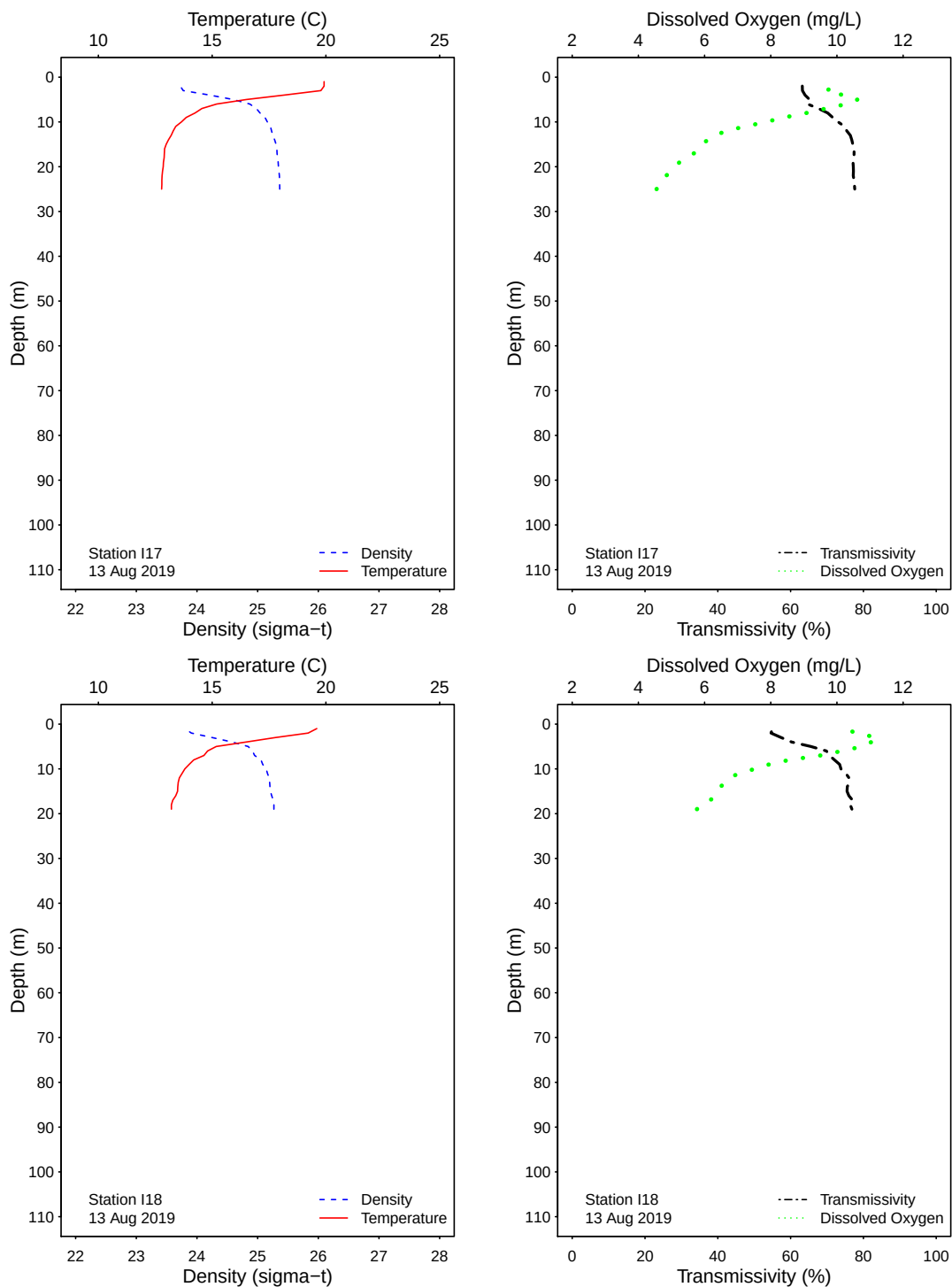


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

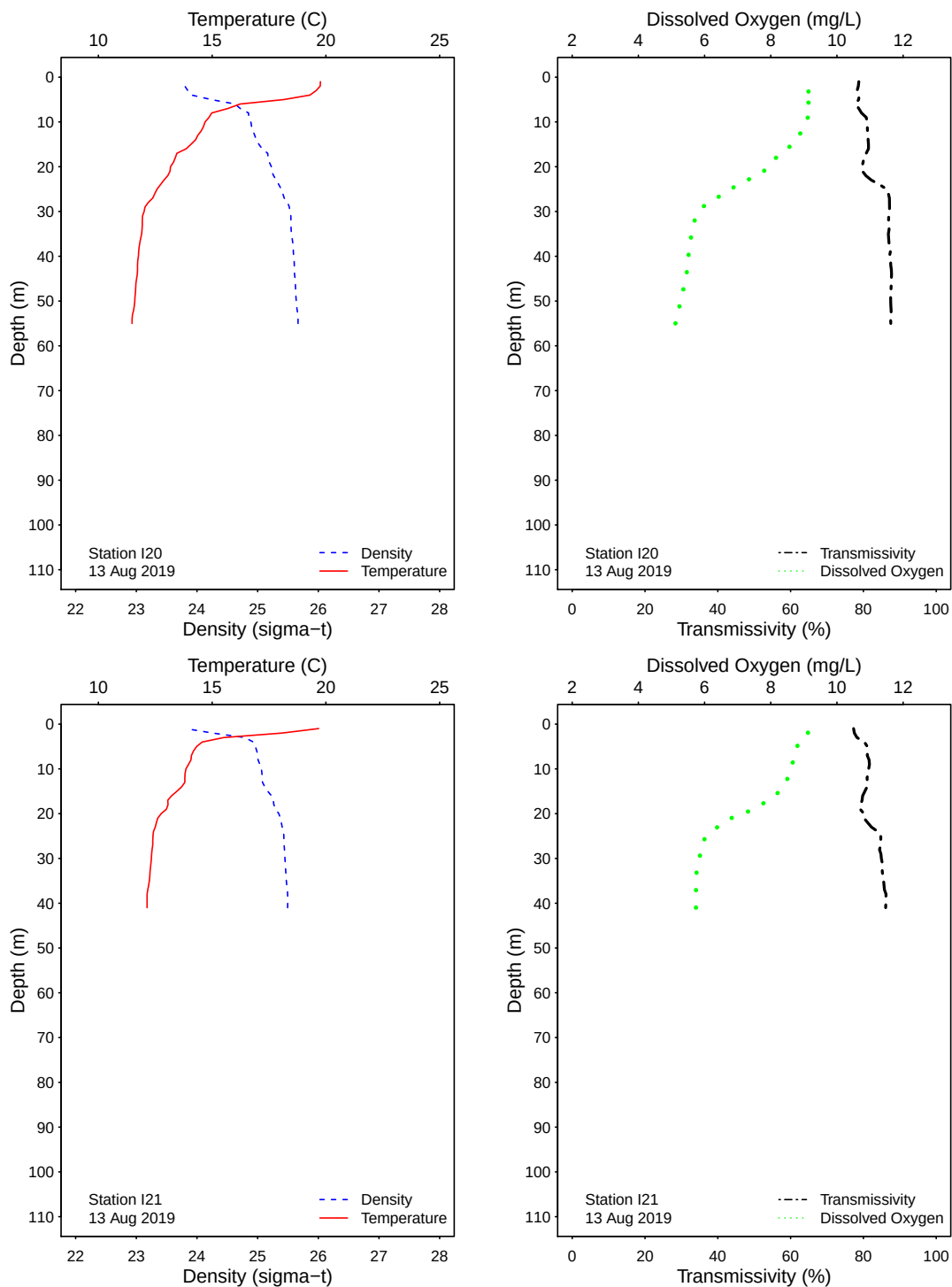


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

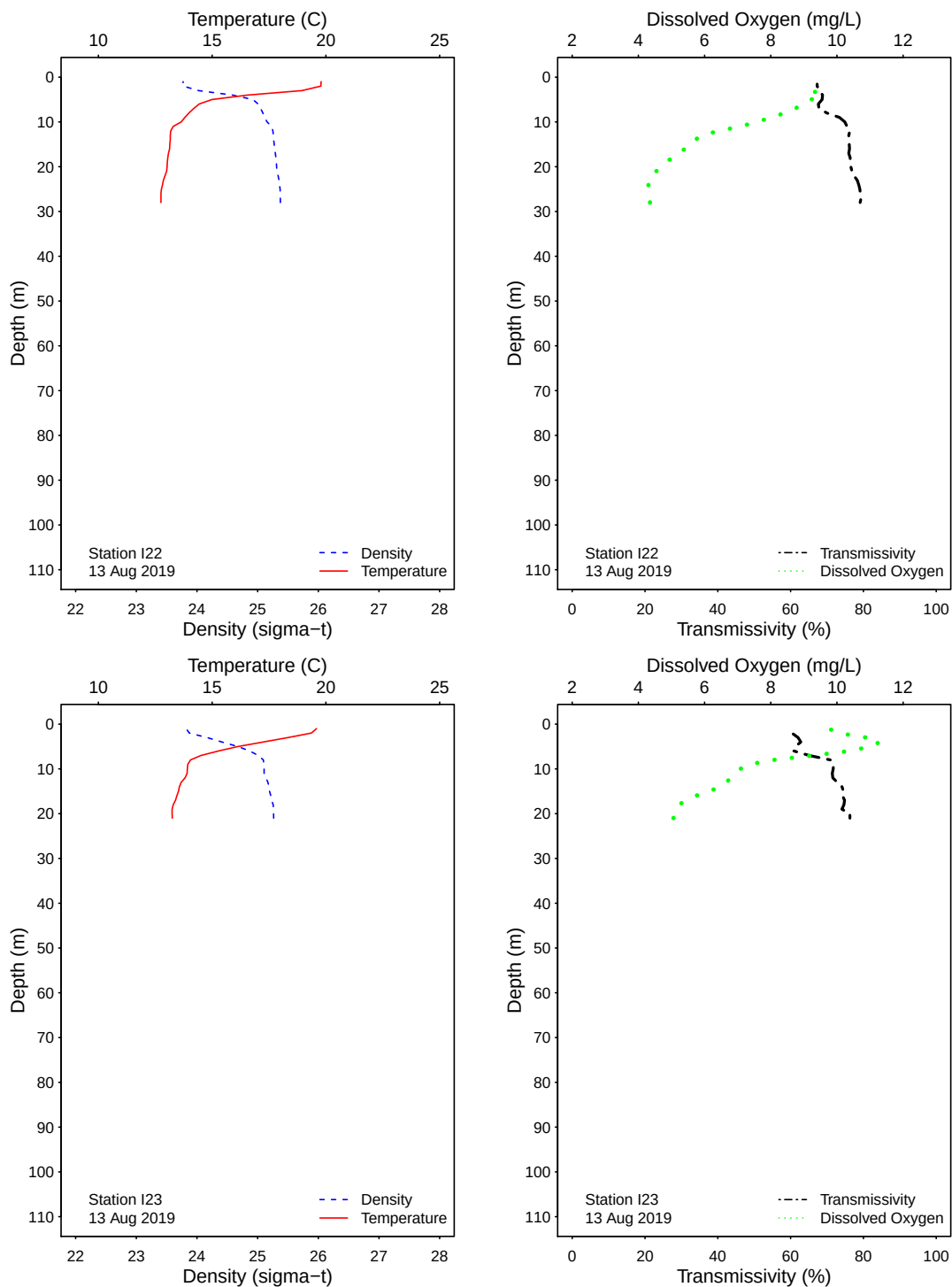


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

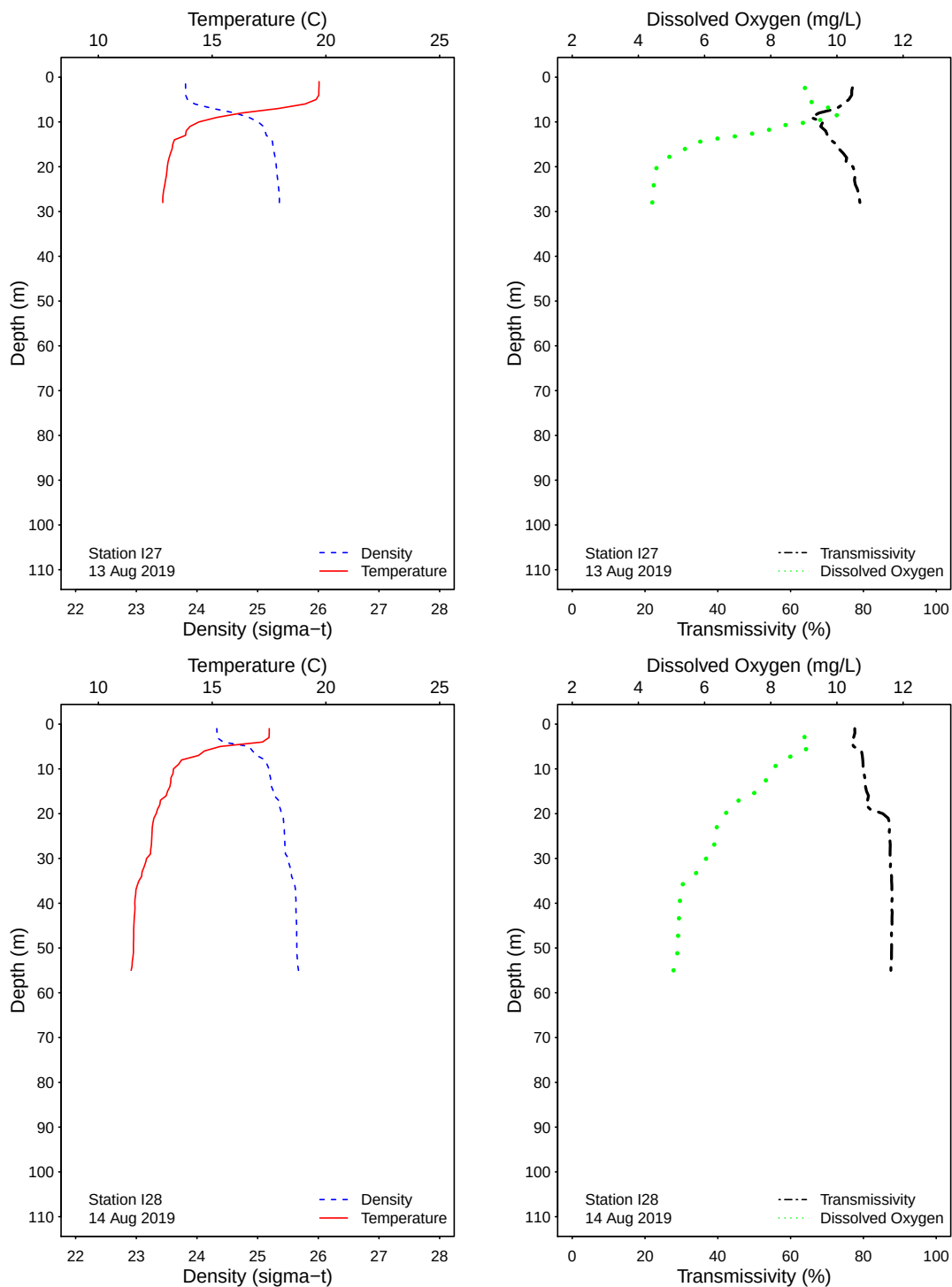


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

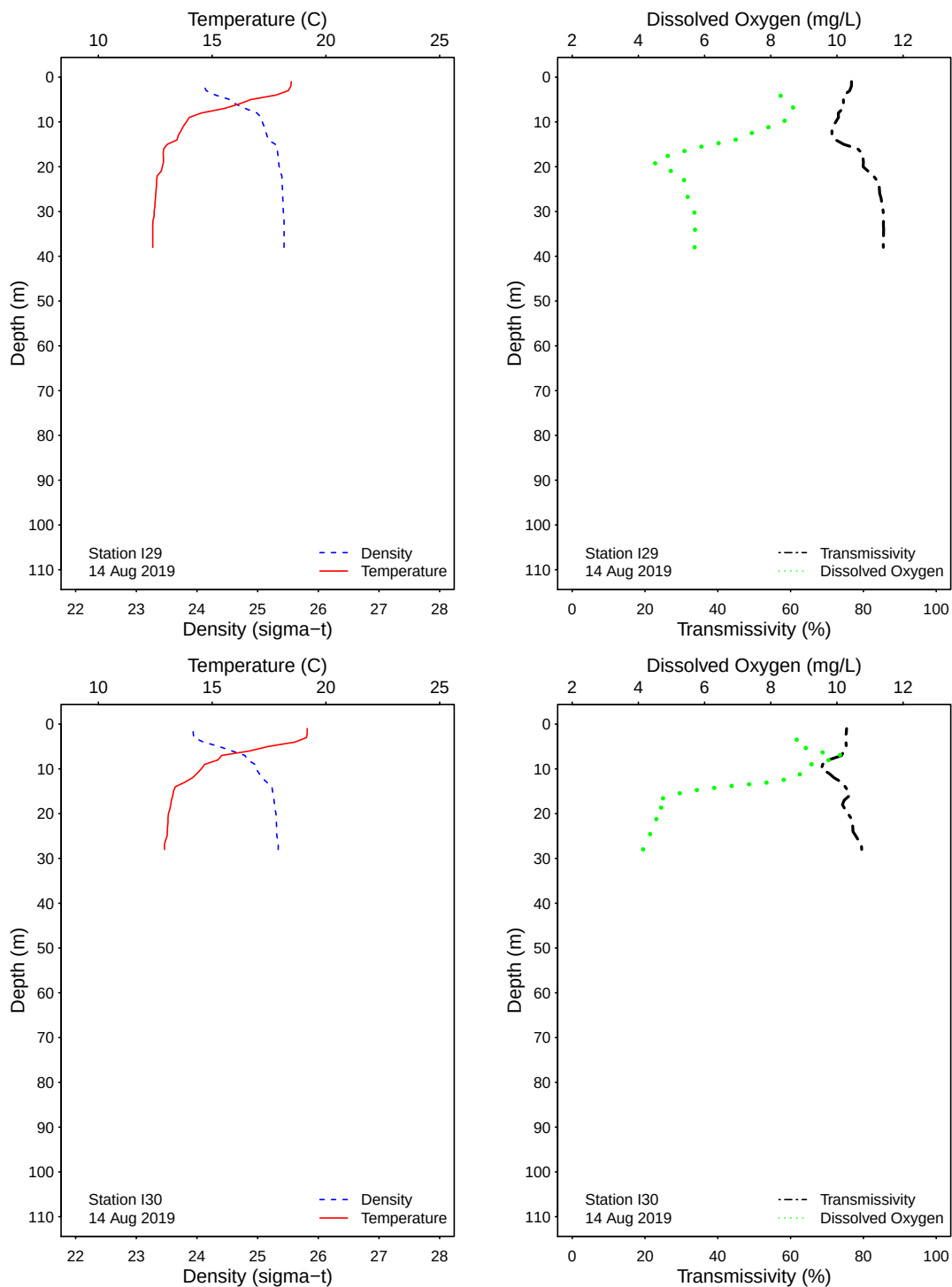


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

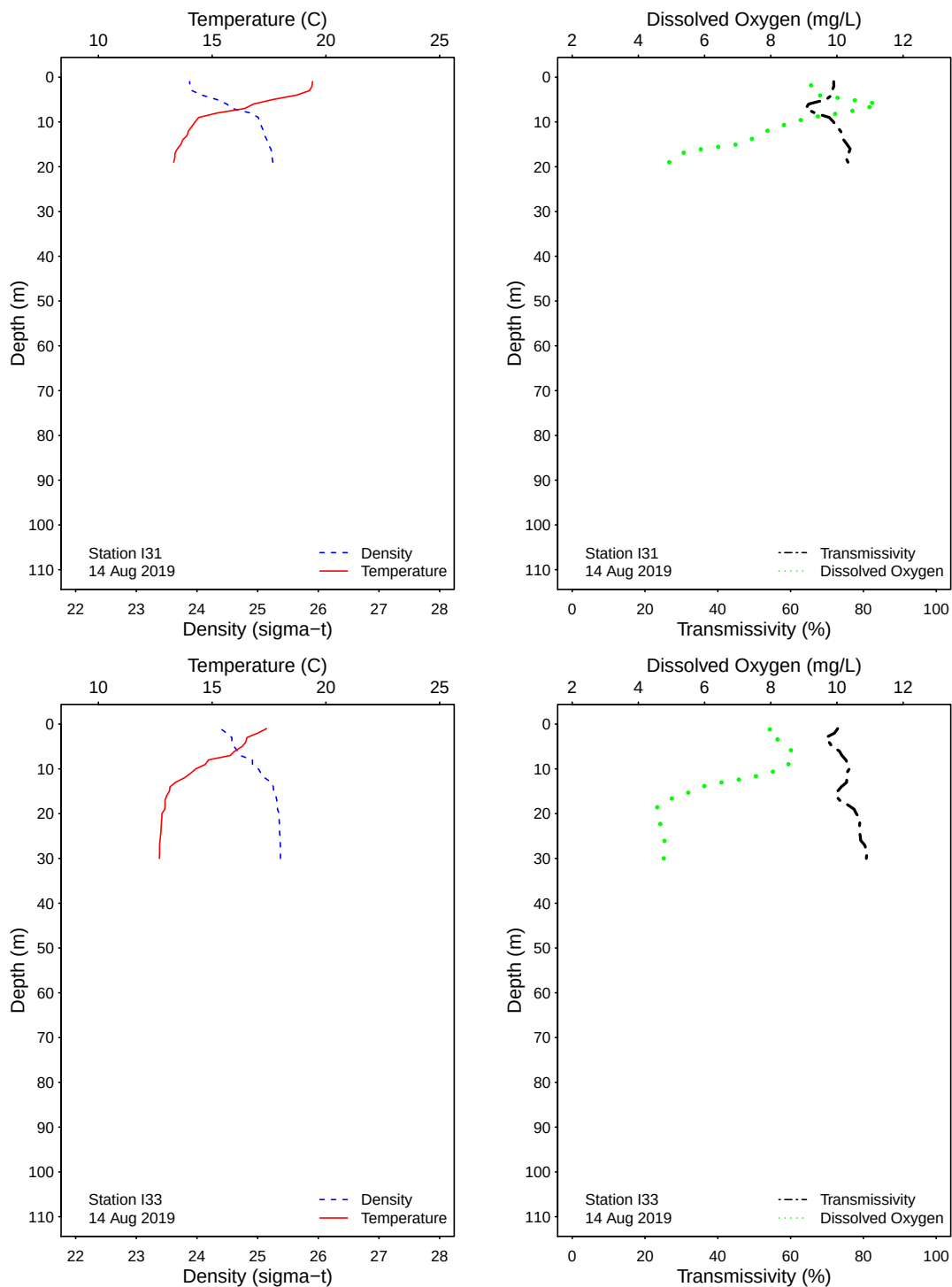


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

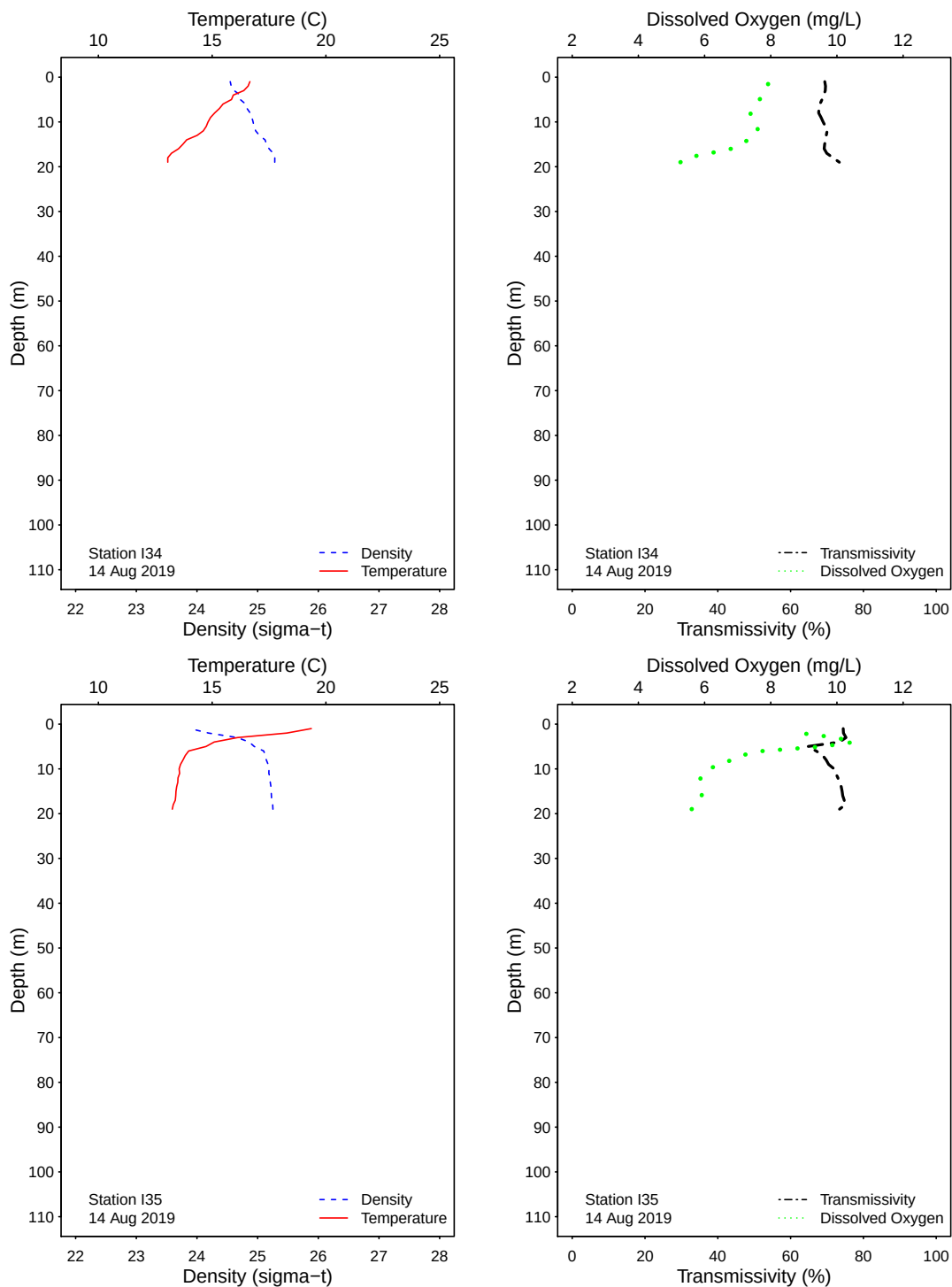


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

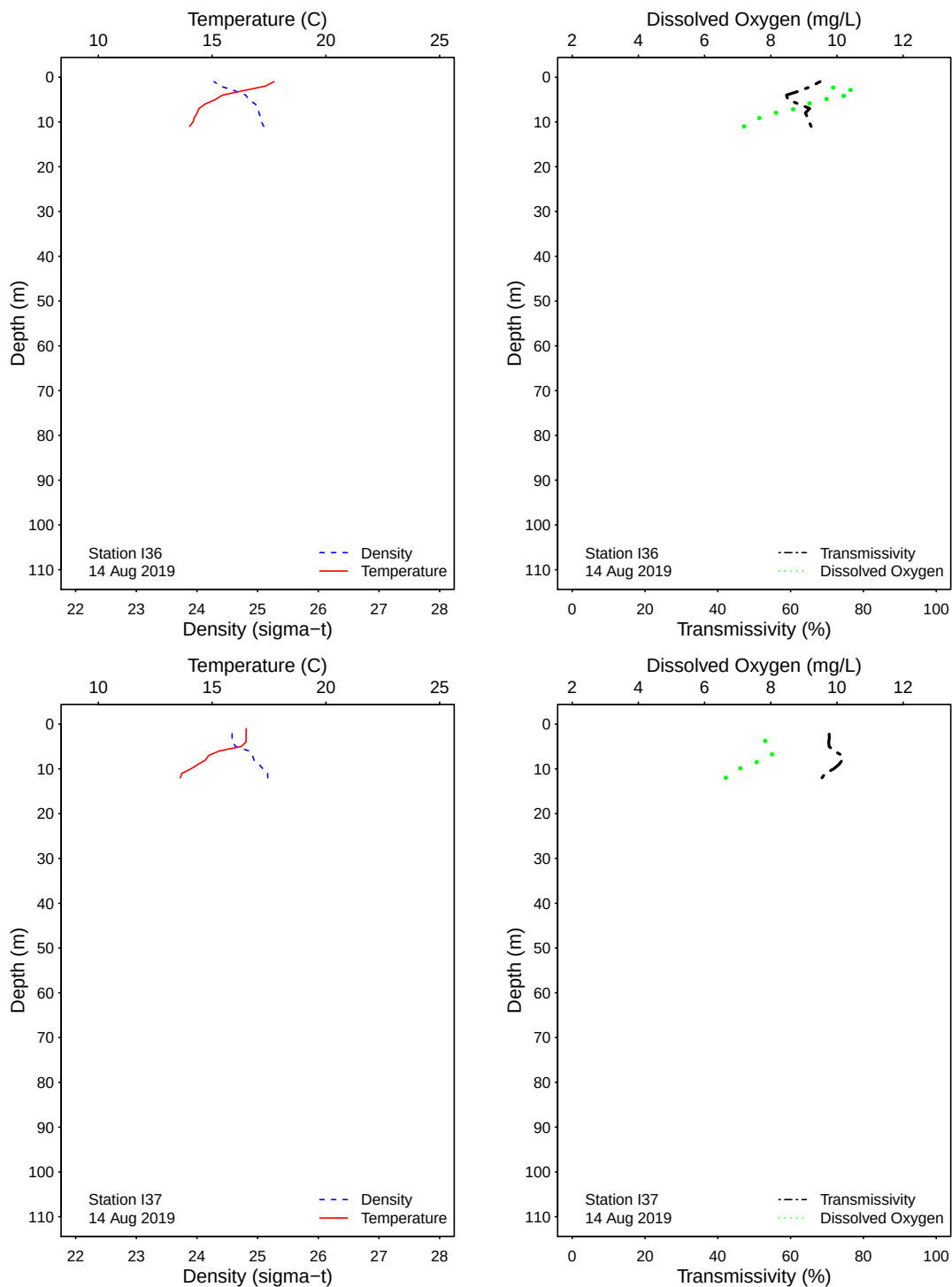


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

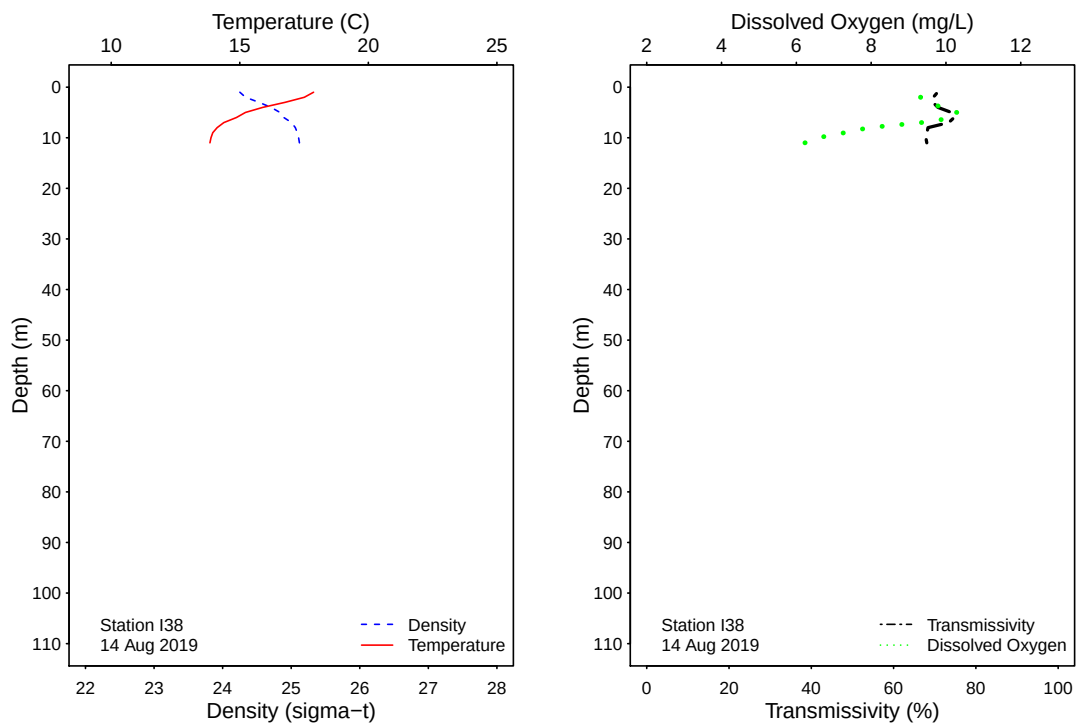


Figure 4.1: Graphics of CTD profile data from the SBOO offshore stations for each sample date.

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 Aug 2019	18	AE	LAB DUPLICATE	<2	<2	<2
I8	12 Aug 2019	37	BS	LAB DUPLICATE	2e	<2	<2
I9	12 Aug 2019	27	BS	LAB DUPLICATE	<2	<2	<2
I12	13 Aug 2019	18	JF	LAB DUPLICATE	2e	<2	<2
I13	13 Aug 2019	18	JF	LAB DUPLICATE	2e	<2	<2
I14	13 Aug 2019	2	AE	LAB DUPLICATE	<2	<2	<2
I16	13 Aug 2019	18	AR	LAB DUPLICATE	2e	<2	<2
I19	05 Aug 2019	6	JT	LAB DUPLICATE	<20	<2	<2
I19	15 Aug 2019	6	JF	LAB DUPLICATE	<20	<2	<2
I19	19 Aug 2019	6	JF	LAB DUPLICATE	100e	6e	2e
I19	28 Aug 2019	6	JT	LAB DUPLICATE	<20	<2	<2
I20	13 Aug 2019	55	AR	LAB DUPLICATE	4e	<2	<2
I30	14 Aug 2019	27	AR	LAB DUPLICATE	<2	<2	<2
I36	14 Aug 2019	11	JF	FIELD DUPLICATE	<2	<2	<2
I36	14 Aug 2019	11	JF	LAB DUPLICATE	<2	<2	<2
I40	05 Aug 2019	6	JT	LAB DUPLICATE	<20	<2	<2
I40	15 Aug 2019	6	JF	LAB DUPLICATE	<20	<2	<2
I40	19 Aug 2019	6	JF	LAB DUPLICATE	40e	4e	<2
I40	28 Aug 2019	6	JT	LAB DUPLICATE	<20	<2	<2
S12	06 Aug 2019		BS	FIELD DUPLICATE	<20	4e	<2
S12	06 Aug 2019		BS	LAB DUPLICATE	<20	2e	6e
S12	13 Aug 2019		AR	FIELD DUPLICATE	6e	4e	2e
S12	13 Aug 2019		AR	LAB DUPLICATE	<20	4e	2e
S12	20 Aug 2019		JT	FIELD DUPLICATE	<20	<2	2e
S12	20 Aug 2019		JT	LAB DUPLICATE	<20	6e	10e
S12	27 Aug 2019		AE	FIELD DUPLICATE	<20	ns	ns
S12	27 Aug 2019		BS	FIELD DUPLICATE	ns	2e	4e
S12	27 Aug 2019		BS	LAB DUPLICATE	<20	2e	2e

ns = not sampled

ND = no data

