

SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

SOUTH BAY WATER RECLAMATION PLANT

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

OCTOBER 2020

Environmental Monitoring and Technical Services
2392 Kincaid Road • Mail Station 45A • San Diego, CA 92101
Tel (619) 758-2300 Fax (619) 758-2309



November 30, 2020

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

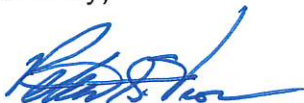
Dear Mr. Gibson:

Enclosed is the October 2020 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2013-0006 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, NPDES Permit No. CA0109045.

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

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 chromomorphic 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, 1987²) 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 2020 Quality Assurance Report, which will be completed in March 2021.

SUMMARY OF RESULTS

As of October 2020, new 2019 Ocean Plan Water Quality Objectives are included for a six-week rolling geometric mean of *Enterococcus* density, which shall not to exceed 30 cfu/100 ml, and a Statistical Threshold Value (STV) for *Enterococcus*, which shall not exceed 110 cfu/100 ml for more than 10% of samples per month (see Appendix B).

➤ Shoreline Water Quality Sampling

- Due to site access restrictions in Mexico, the South Bay shoreline sampling is typically carried out on the same day each week (i.e., Tuesday) 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.
- During October, each of the shore stations was in compliance with the 2015 California Ocean Plan (Ocean Plan) water contact standards.

² Gilbert, R.O. (1987). Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold Co., New York.

- Although the Ocean Plan standards do not apply to these stations, bacteria densities exceeded one or more benchmark levels (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; *Enterococcus* >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1) in the seawater samples collected from stations S0 and S3 on one or more days during October.
- Nothing of sewage origin was observed at any of the shoreline stations.
- 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 (<https://www.sandiego.gov/public-utilities/sustainability/ocean-monitoring/reports>).

➤ **Kelp Bed Water Quality Sampling**

- The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled on October 5, 13, 20, and 28.
- During October, each of the kelp bed stations was in compliance with the 2015 California Ocean Plan (Ocean Plan) water contact standards.
- Water column temperatures ranged from 14 to 20.7°C. The difference between surface and bottom waters ranged from 0.37 to 5.45°C.
- Concentrations of chlorophyll *a* ranged from 0.63 to 8.93 µg/L at the kelp bed stations.
- Nothing of sewage origin was observed at any of these kelp stations.

➤ **Offshore Water Quality Sampling**

- Quarterly sampling was not conducted during October at the offshore stations. The next quarterly sampling is scheduled for November 2020.



TABLES AND FIGURES

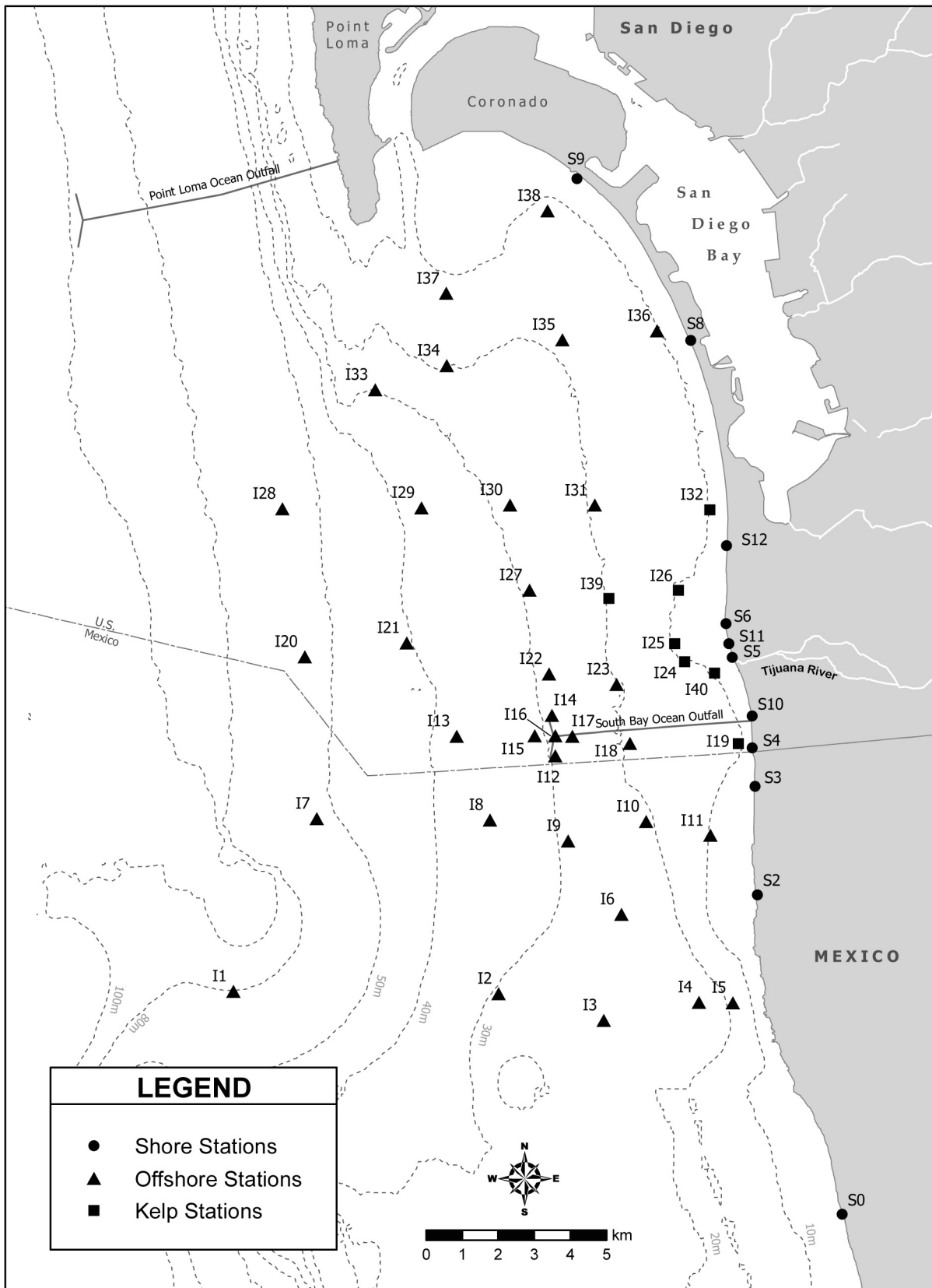


Figure 1.1 Station Map

This page intentionally left blank

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 Oct 2020	93	51	65	20*	28*	55	50	52
02 Oct 2020	93	51	65	20*	28*	55	50	52
03 Oct 2020	93	51	65	20*	28*	55	50	52
04 Oct 2020	93	51	65	20*	28*	55	50	52
05 Oct 2020	93	51	65	20*	28*	55	50	52
06 Oct 2020	116	78	80	20	26	68	62	50
07 Oct 2020	116	78	80	20	26	68	62	50
08 Oct 2020	49	29	32	17*	24*	29	25	23
09 Oct 2020	49	29	32	17*	24*	29	25	23
10 Oct 2020	41*	27*	36*	17*	24*	20*	20*	24*
11 Oct 2020	41*	27*	36*	17*	24*	20*	20*	24*
12 Oct 2020	41*	27*	36*	17*	24*	20*	20*	24*
13 Oct 2020	40	29	51	17	23	20	20	23
14 Oct 2020	40	29	51	17	23	20	20	23
15 Oct 2020	48*	32*	65*	17*	24*	20*	20*	24*
16 Oct 2020	48*	32*	65*	17*	24*	20*	20*	24*
17 Oct 2020	48*	32*	65*	17*	24*	20*	20*	24*
18 Oct 2020	48*	32*	65*	17*	24*	20*	20*	24*
19 Oct 2020	48*	32*	65*	17*	24*	20*	20*	24*
20 Oct 2020	40	29	51	17	23	20	20	26
21 Oct 2020	40	29	51	17	23	20	20	26
22 Oct 2020	48*	32*	65*	20*	20*	36*	36*	28*
23 Oct 2020	48*	32*	65*	20*	20*	36*	36*	28*
24 Oct 2020	48*	32*	65*	20*	20*	36*	36*	28*
25 Oct 2020	48*	32*	65*	20*	20*	36*	36*	28*
26 Oct 2020	48*	32*	65*	20*	20*	36*	36*	28*
27 Oct 2020	29	29	51	20	20	20	32	26
28 Oct 2020	29	29	51	20	20	20	32	26
29 Oct 2020	32*	56*	65*	20*	20*	20*	36*	28*
30 Oct 2020	32*	56*	65*	20*	20*	20*	36*	28*
31 Oct 2020	32*	56*	65*	20*	20*	20*	36*	28*

* 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 Oct 2020	23	16	13	3*	4*	13	14	27
02 Oct 2020	23	16	13	3*	4*	13	14	27
03 Oct 2020	23	16	13	3*	4*	13	14	27
04 Oct 2020	23	16	13	3*	4*	13	14	27
05 Oct 2020	23	16	13	3*	4*	13	14	27
06 Oct 2020	25	16	14	3	4	12	15	21
07 Oct 2020	25	16	14	3	4	12	15	21
08 Oct 2020	10	5	5	3*	3*	4	5	11
09 Oct 2020	10	5	5	3*	3*	4	5	11
10 Oct 2020	9*	5*	6*	3*	3*	3*	4*	15*
11 Oct 2020	9*	5*	6*	3*	3*	3*	4*	15*
12 Oct 2020	9*	5*	6*	3*	3*	3*	4*	15*
13 Oct 2020	7	5	6	3	3	3	5	10
14 Oct 2020	7	5	6	3	3	3	5	10
15 Oct 2020	7*	4*	4*	3*	3*	3*	5*	8*
16 Oct 2020	7*	4*	4*	3*	3*	3*	5*	8*
17 Oct 2020	7*	4*	4*	3*	3*	3*	5*	8*
18 Oct 2020	7*	4*	4*	3*	3*	3*	5*	8*
19 Oct 2020	7*	4*	4*	3*	3*	3*	5*	8*
20 Oct 2020	6	4	4	3	3	3	4	6
21 Oct 2020	6	4	4	3	3	3	4	6
22 Oct 2020	4*	4*	4*	2*	3*	4*	5*	5*
23 Oct 2020	4*	4*	4*	2*	3*	4*	5*	5*
24 Oct 2020	4*	4*	4*	2*	3*	4*	5*	5*
25 Oct 2020	4*	4*	4*	2*	3*	4*	5*	5*
26 Oct 2020	4*	4*	4*	2*	3*	4*	5*	5*
27 Oct 2020	3	4	4	2	3	3	4	6
28 Oct 2020	3	4	4	2	3	3	4	6
29 Oct 2020	4*	4*	4*	2*	4*	4*	5*	5*
30 Oct 2020	4*	4*	4*	2*	4*	4*	5*	5*
31 Oct 2020	4*	4*	4*	2*	4*	4*	5*	5*

* 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 Oct 2020	22	9	16	4*	4*	7	22	5
02 Oct 2020	22	9	16	4*	4*	7	22	5
03 Oct 2020	22	9	16	4*	4*	7	22	5
04 Oct 2020	22	9	16	4*	4*	7	22	5
05 Oct 2020	22	9	16	4*	4*	7	22	5
06 Oct 2020	22	9	13	4	5	6	17	4
07 Oct 2020	22	9	13	4	5	6	17	4
08 Oct 2020	11	4	6	3*	4*	2	8	2
09 Oct 2020	11	4	6	3*	4*	2	8	2
10 Oct 2020	9*	4*	6*	3*	4*	2*	9*	2*
11 Oct 2020	9*	4*	6*	3*	4*	2*	9*	2*
12 Oct 2020	9*	4*	6*	3*	4*	2*	9*	2*
13 Oct 2020	7	3	5	3	4	2	7	2
14 Oct 2020	7	3	5	3	4	2	7	2
15 Oct 2020	4*	3*	3*	2*	5*	2*	3*	2*
16 Oct 2020	4*	3*	3*	2*	5*	2*	3*	2*
17 Oct 2020	4*	3*	3*	2*	5*	2*	3*	2*
18 Oct 2020	4*	3*	3*	2*	5*	2*	3*	2*
19 Oct 2020	4*	3*	3*	2*	5*	2*	3*	2*
20 Oct 2020	4	3	3	2	6	2	3	2
21 Oct 2020	4	3	3	2	6	2	3	2
22 Oct 2020	5*	3*	3*	2*	5*	2*	3*	2*
23 Oct 2020	5*	3*	3*	2*	5*	2*	3*	2*
24 Oct 2020	5*	3*	3*	2*	5*	2*	3*	2*
25 Oct 2020	5*	3*	3*	2*	5*	2*	3*	2*
26 Oct 2020	5*	3*	3*	2*	5*	2*	3*	2*
27 Oct 2020	4	3	3	2	5	2	5	2
28 Oct 2020	4	3	3	2	5	2	5	2
29 Oct 2020	5*	3*	3*	2*	6*	2*	4*	2*
30 Oct 2020	5*	3*	3*	2*	6*	2*	4*	2*
31 Oct 2020	5*	3*	3*	2*	6*	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
27 Oct 2020	IC	IC	IC	IC	IC	IC	IC	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
27 Oct 2020	IC	IC	IC	IC	IC	IC	IC	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
27 Oct 2020	IC	IC	IC	IC	IC	IC	IC	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC	IC
27 Oct 2020	IC	IC	IC	IC	IC	IC	IC	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 Oct 2020	1015	240e	46	16e	0.19
S0	13 Oct 2020	910	>16000	3200e	800e	0.20
S0	20 Oct 2020	1215	20e	<2	6e	0.10
S0	27 Oct 2020	820	8200	1400e	960	0.17
S2	06 Oct 2020	937	1600e	44	32e	0.03
S2	13 Oct 2020	1025	<20	<2	<2	0.10
S2	20 Oct 2020	1200	<20	8e	6e	0.40
S2	27 Oct 2020	1010	320e	320e	60e	1.00
S3	06 Oct 2020	925	600e	46	12e	0.08
S3	13 Oct 2020	950	<20	<2	<2	0.10
S3	20 Oct 2020	1115	>16000	7000	>1200	0.44
S3	27 Oct 2020	920	20e	2e	4e	0.10
S4	06 Oct 2020	851	340e	32e	24e	0.09
S4	13 Oct 2020	1021	40e	<2	<2	0.05
S4	20 Oct 2020	1009	20e	<2	6e	0.10
S4	27 Oct 2020	1051	4e	<2	<2	0.50
S5	06 Oct 2020	725	620	20e	12e	0.03
S5	13 Oct 2020	926	40e	4e	<2	0.10
S5	20 Oct 2020	832	<20	<2	<2	0.10
S5	27 Oct 2020	944	<20	2e	<2	0.10
S6	06 Oct 2020	738	220e	<20	6e	0.09
S6	13 Oct 2020	942	<200	4e	<2	0.02
S6	20 Oct 2020	852	20e	<2	<2	0.10
S6	27 Oct 2020	1007	20e	2e	<2	0.10
S8	06 Oct 2020	931	<20	<2	<2	0.10
S8	13 Oct 2020	834	20e	<2	<2	0.10
S8	20 Oct 2020	1052	<20	<2	<2	0.10
S8	27 Oct 2020	827	<20	<2	<2	0.10
S9	06 Oct 2020	954	<20	8e	8e	0.40
S9	13 Oct 2020	811	<20	2e	4e	0.10
S9	20 Oct 2020	1115	<20	2e	10e	0.10
S9	27 Oct 2020	805	<20	6e	4e	0.30
S10	06 Oct 2020	841	200e	10e	2e	0.05
S10	13 Oct 2020	1014	20e	<2	<2	0.10
S10	20 Oct 2020	1002	<20	6e	2e	0.30
S10	27 Oct 2020	1043	<2	2e	<2	1.00
S11	06 Oct 2020	733	<200	22e	4e	0.11
S11	13 Oct 2020	935	<20	10e	2e	0.50
S11	20 Oct 2020	843	20e	2e	2e	0.10
S11	27 Oct 2020	959	20e	2e	16e	0.10
S12	06 Oct 2020	752	40e	6e	<2	0.15
S12	13 Oct 2020	900	<20	<2	<2	0.10
S12	20 Oct 2020	903	40e	2e	<2	0.05
S12	27 Oct 2020	925	<20	<20	4e	1.00

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 Oct 2020	Arrive Time	1015
S0	06 Oct 2020	Weather	Cloudy
S0	06 Oct 2020	Wind Speed (kts)	2.4
S0	06 Oct 2020	Wind Dir	NE
S0	06 Oct 2020	Animal Life	20 Shorebirds
S0	06 Oct 2020	Floatables	None
S0	06 Oct 2020	Water Color	Grey
S0	06 Oct 2020	Current Direction	N
S0	06 Oct 2020	Water Temp (C)	15
S0	06 Oct 2020	Wave Height Low (ft)	3
S0	06 Oct 2020	High Tide (ft)	5
S0	06 Oct 2020	High Tide Time	1125
S0	06 Oct 2020	Low Tide (ft)	2.2
S0	06 Oct 2020	Low Tide Time	508
S0	06 Oct 2020	Comments	Kelp; Water turbid; 0.5 L/sec water flowing from storm drain
S0	13 Oct 2020	Arrive Time	910
S0	13 Oct 2020	Weather	Sunny
S0	13 Oct 2020	Wind Speed (kts)	1
S0	13 Oct 2020	Wind Dir	NE
S0	13 Oct 2020	Animal Life	10 Shorebirds
S0	13 Oct 2020	Floatables	None
S0	13 Oct 2020	Water Color	Green
S0	13 Oct 2020	Current Direction	N
S0	13 Oct 2020	Water Temp (C)	17
S0	13 Oct 2020	Wave Height Low (ft)	3
S0	13 Oct 2020	High Tide (ft)	4.8
S0	13 Oct 2020	High Tide Time	740
S0	13 Oct 2020	Low Tide (ft)	1.5
S0	13 Oct 2020	Low Tide Time	1325
S0	13 Oct 2020	Comments	Kelp; Seagrass; 3 Persons; Water clear; 0.5 L/sec water flowing from storm drain
S0	20 Oct 2020	Arrive Time	1215
S0	20 Oct 2020	Weather	Sunny
S0	20 Oct 2020	Wind Speed (kts)	3.1
S0	20 Oct 2020	Wind Dir	NE
S0	20 Oct 2020	Animal Life	10 Shorebirds
S0	20 Oct 2020	Floatables	None
S0	20 Oct 2020	Water Color	Green
S0	20 Oct 2020	Current Direction	N
S0	20 Oct 2020	Water Temp (C)	15
S0	20 Oct 2020	Wave Height Low (ft)	3
S0	20 Oct 2020	High Tide (ft)	6
S0	20 Oct 2020	High Tide Time	1145
S0	20 Oct 2020	Low Tide (ft)	2
S0	20 Oct 2020	Low Tide Time	530
S0	20 Oct 2020	Comments	Kelp; 1 Person; Water turbid; 0.5 L/sec water flowing from storm drain
S0	27 Oct 2020	Arrive Time	820
S0	27 Oct 2020	Weather	Sunny
S0	27 Oct 2020	Wind Speed (kts)	1.6
S0	27 Oct 2020	Wind Dir	NE
S0	27 Oct 2020	Animal Life	20 Shorebirds
S0	27 Oct 2020	Floatables	None

Station	Date	Parameter	Value
S0	27 Oct 2020	Water Color	Green
S0	27 Oct 2020	Current Direction	NE
S0	27 Oct 2020	Water Temp (C)	14
S0	27 Oct 2020	Wave Height Low (ft)	3
S0	27 Oct 2020	High Tide (ft)	5
S0	27 Oct 2020	High Tide Time	748
S0	27 Oct 2020	Low Tide (ft)	1.3
S0	27 Oct 2020	Low Tide Time	1356
S0	27 Oct 2020	Comments	3 Persons; Water clear; Flow from storm drain is 0.5 L/sec
S2	06 Oct 2020	Arrive Time	937
S2	06 Oct 2020	Weather	Cloudy
S2	06 Oct 2020	Wind Speed (kts)	1.5
S2	06 Oct 2020	Wind Dir	NE
S2	06 Oct 2020	Animal Life	15 Shorebirds; 2 Dogs
S2	06 Oct 2020	Floatables	None
S2	06 Oct 2020	Water Color	Grey
S2	06 Oct 2020	Current Direction	N
S2	06 Oct 2020	Water Temp (C)	15
S2	06 Oct 2020	Wave Height Low (ft)	3
S2	06 Oct 2020	High Tide (ft)	5
S2	06 Oct 2020	High Tide Time	1125
S2	06 Oct 2020	Low Tide (ft)	2.2
S2	06 Oct 2020	Low Tide Time	508
S2	06 Oct 2020	Comments	Kelp; Water turbid; No flow from storm drain
S2	13 Oct 2020	Arrive Time	1025
S2	13 Oct 2020	Weather	Sunny
S2	13 Oct 2020	Wind Speed (kts)	0.8
S2	13 Oct 2020	Wind Dir	NE
S2	13 Oct 2020	Animal Life	10 Shorebirds; 1 Dog
S2	13 Oct 2020	Floatables	None
S2	13 Oct 2020	Water Color	Green
S2	13 Oct 2020	Current Direction	N
S2	13 Oct 2020	Water Temp (C)	17
S2	13 Oct 2020	Wave Height Low (ft)	3
S2	13 Oct 2020	High Tide (ft)	4.8
S2	13 Oct 2020	High Tide Time	740
S2	13 Oct 2020	Low Tide (ft)	1.5
S2	13 Oct 2020	Low Tide Time	1325
S2	13 Oct 2020	Comments	Kelp; 10 Persons; Water clear; No flow from storm drain
S2	20 Oct 2020	Arrive Time	1200
S2	20 Oct 2020	Weather	Sunny
S2	20 Oct 2020	Wind Speed (kts)	6.2
S2	20 Oct 2020	Wind Dir	NE
S2	20 Oct 2020	Animal Life	10 Shorebirds; 2 Dogs
S2	20 Oct 2020	Floatables	None
S2	20 Oct 2020	Water Color	Green
S2	20 Oct 2020	Current Direction	N
S2	20 Oct 2020	Water Temp (C)	15
S2	20 Oct 2020	Wave Height Low (ft)	3
S2	20 Oct 2020	High Tide (ft)	6
S2	20 Oct 2020	High Tide Time	1145
S2	20 Oct 2020	Low Tide (ft)	2
S2	20 Oct 2020	Low Tide Time	530
S2	20 Oct 2020	Comments	Kelp; 5 Persons; Water turbid; No flow from storm drain
S2	27 Oct 2020	Arrive Time	1010
S2	27 Oct 2020	Weather	Sunny
S2	27 Oct 2020	Wind Speed (kts)	1.4

Station	Date	Parameter	Value
S2	27 Oct 2020	Wind Dir	NE
S2	27 Oct 2020	Animal Life	20 Shorebirds; 2 Dogs
S2	27 Oct 2020	Floatables	None
S2	27 Oct 2020	Water Color	Green
S2	27 Oct 2020	Current Direction	
S2	27 Oct 2020	Water Temp (C)	14
S2	27 Oct 2020	Wave Height Low (ft)	3
S2	27 Oct 2020	High Tide (ft)	5
S2	27 Oct 2020	High Tide Time	748
S2	27 Oct 2020	Low Tide (ft)	1.3
S2	27 Oct 2020	Low Tide Time	1356
S2	27 Oct 2020	Comments	Kelp; 4 Persons; Water clear; No flow from storm drain
S3	06 Oct 2020	Arrive Time	925
S3	06 Oct 2020	Weather	Cloudy
S3	06 Oct 2020	Wind Speed (kts)	1.3
S3	06 Oct 2020	Wind Dir	NE
S3	06 Oct 2020	Animal Life	15 Shorebirds; 5 Dogs
S3	06 Oct 2020	Floatables	None
S3	06 Oct 2020	Water Color	Grey
S3	06 Oct 2020	Current Direction	N
S3	06 Oct 2020	Water Temp (C)	15
S3	06 Oct 2020	Wave Height Low (ft)	3
S3	06 Oct 2020	High Tide (ft)	5
S3	06 Oct 2020	High Tide Time	1125
S3	06 Oct 2020	Low Tide (ft)	2.2
S3	06 Oct 2020	Low Tide Time	508
S3	06 Oct 2020	Comments	Kelp; Water turbid; 0.5 L/sec water flowing from storm drain
S3	13 Oct 2020	Arrive Time	950
S3	13 Oct 2020	Weather	Sunny
S3	13 Oct 2020	Wind Speed (kts)	0.6
S3	13 Oct 2020	Wind Dir	NE
S3	13 Oct 2020	Animal Life	10 Shorebirds; 1 Dog
S3	13 Oct 2020	Floatables	None
S3	13 Oct 2020	Water Color	Green
S3	13 Oct 2020	Current Direction	N
S3	13 Oct 2020	Water Temp (C)	17
S3	13 Oct 2020	Wave Height Low (ft)	3
S3	13 Oct 2020	High Tide (ft)	4.8
S3	13 Oct 2020	High Tide Time	740
S3	13 Oct 2020	Low Tide (ft)	1.5
S3	13 Oct 2020	Low Tide Time	1325
S3	13 Oct 2020	Comments	Kelp; 10 Persons; Water clear; 0.5 L/sec water flowing from storm drain
S3	20 Oct 2020	Arrive Time	1115
S3	20 Oct 2020	Weather	Sunny
S3	20 Oct 2020	Wind Speed (kts)	2.9
S3	20 Oct 2020	Wind Dir	NE
S3	20 Oct 2020	Animal Life	10 Shorebirds
S3	20 Oct 2020	Floatables	None
S3	20 Oct 2020	Water Color	Green
S3	20 Oct 2020	Current Direction	N
S3	20 Oct 2020	Water Temp (C)	15
S3	20 Oct 2020	Wave Height Low (ft)	3
S3	20 Oct 2020	High Tide (ft)	6
S3	20 Oct 2020	High Tide Time	1145
S3	20 Oct 2020	Low Tide (ft)	2
S3	20 Oct 2020	Low Tide Time	530
S3	20 Oct 2020	Comments	Kelp; Water turbid; 2.0 L/sec water flowing from storm drain

Station	Date	Parameter	Value
S3	27 Oct 2020	Arrive Time	920
S3	27 Oct 2020	Weather	Sunny
S3	27 Oct 2020	Wind Speed (kts)	1.1
S3	27 Oct 2020	Wind Dir	NE
S3	27 Oct 2020	Animal Life	20 Shorebirds; 2 Dogs
S3	27 Oct 2020	Floatables	None
S3	27 Oct 2020	Water Color	Green
S3	27 Oct 2020	Current Direction	
S3	27 Oct 2020	Water Temp (C)	14
S3	27 Oct 2020	Wave Height Low (ft)	3
S3	27 Oct 2020	High Tide (ft)	5
S3	27 Oct 2020	High Tide Time	748
S3	27 Oct 2020	Low Tide (ft)	1.3
S3	27 Oct 2020	Low Tide Time	1356
S3	27 Oct 2020	Comments	Kelp; 4 Persons; Water clear; Flow from storm drain is 0.5 L/sec
S4	06 Oct 2020	Arrive Time	851
S4	06 Oct 2020	Weather	Partly Cloudy
S4	06 Oct 2020	Wind Speed (kts)	3.4
S4	06 Oct 2020	Wind Dir	W
S4	06 Oct 2020	Animal Life	2 Pelicans; 4 Seagulls; 30 Terns
S4	06 Oct 2020	Floatables	Foam
S4	06 Oct 2020	Water Color	Green
S4	06 Oct 2020	Current Direction	S
S4	06 Oct 2020	Water Temp (C)	18.2
S4	06 Oct 2020	Wave Height Low (ft)	3
S4	06 Oct 2020	High Tide (ft)	5
S4	06 Oct 2020	High Tide Time	1125
S4	06 Oct 2020	Low Tide (ft)	2.2
S4	06 Oct 2020	Low Tide Time	508
S4	06 Oct 2020	Comments	Kelp; Seagrass; Debris; Water clear; Debris 1
S4	13 Oct 2020	Arrive Time	1021
S4	13 Oct 2020	Weather	Sunny
S4	13 Oct 2020	Wind Speed (kts)	6.4
S4	13 Oct 2020	Wind Dir	NE
S4	13 Oct 2020	Animal Life	5 Godwits; 29 Seagulls; 30 Terns
S4	13 Oct 2020	Floatables	None
S4	13 Oct 2020	Water Color	Green
S4	13 Oct 2020	Current Direction	S
S4	13 Oct 2020	Water Temp (C)	20.2
S4	13 Oct 2020	Wave Height Low (ft)	2
S4	13 Oct 2020	High Tide (ft)	4.8
S4	13 Oct 2020	High Tide Time	740
S4	13 Oct 2020	Low Tide (ft)	1.5
S4	13 Oct 2020	Low Tide Time	1325
S4	13 Oct 2020	Comments	Kelp; Seagrass; Water clear; Debris-1
S4	20 Oct 2020	Arrive Time	1009
S4	20 Oct 2020	Weather	Sunny
S4	20 Oct 2020	Wind Speed (kts)	4.8
S4	20 Oct 2020	Wind Dir	NW
S4	20 Oct 2020	Animal Life	70 Godwits; 60 Grebes; 10 Seagulls
S4	20 Oct 2020	Floatables	None
S4	20 Oct 2020	Water Color	Green
S4	20 Oct 2020	Current Direction	S
S4	20 Oct 2020	Water Temp (C)	18.6
S4	20 Oct 2020	Wave Height Low (ft)	2
S4	20 Oct 2020	High Tide (ft)	6

Station	Date	Parameter	Value
S4	20 Oct 2020	High Tide Time	1145
S4	20 Oct 2020	Low Tide (ft)	2
S4	20 Oct 2020	Low Tide Time	530
S4	20 Oct 2020	Comments	Kelp; Seagrass; Water clear; Debris-1
S4	27 Oct 2020	Arrive Time	1051
S4	27 Oct 2020	Weather	Sunny
S4	27 Oct 2020	Wind Speed (kts)	1.3
S4	27 Oct 2020	Wind Dir	W
S4	27 Oct 2020	Animal Life	80 Cormorants; 100 Godwits; 20 Grebes; 1 Pelican; 3 Seagulls
S4	27 Oct 2020	Floatables	None
S4	27 Oct 2020	Water Color	Green
S4	27 Oct 2020	Current Direction	S
S4	27 Oct 2020	Water Temp (C)	17
S4	27 Oct 2020	Wave Height Low (ft)	1
S4	27 Oct 2020	High Tide (ft)	5
S4	27 Oct 2020	High Tide Time	748
S4	27 Oct 2020	Low Tide (ft)	1.3
S4	27 Oct 2020	Low Tide Time	1356
S4	27 Oct 2020	Comments	Kelp; Water clear; Debris-1
S5	06 Oct 2020	Arrive Time	725
S5	06 Oct 2020	Weather	Partly Cloudy
S5	06 Oct 2020	Wind Speed (kts)	4.6
S5	06 Oct 2020	Wind Dir	E
S5	06 Oct 2020	Animal Life	1 Godwit; 1 Grebe; 1 Plover
S5	06 Oct 2020	Floatables	Foam
S5	06 Oct 2020	Water Color	Green
S5	06 Oct 2020	Current Direction	S
S5	06 Oct 2020	Water Temp (C)	19.3
S5	06 Oct 2020	Wave Height Low (ft)	3
S5	06 Oct 2020	High Tide (ft)	5
S5	06 Oct 2020	High Tide Time	1125
S5	06 Oct 2020	Low Tide (ft)	2.2
S5	06 Oct 2020	Low Tide Time	508
S5	06 Oct 2020	Comments	Kelp; Seagrass; Algae; Debris; 1 Person; Water clear; Debris 1
S5	13 Oct 2020	Arrive Time	926
S5	13 Oct 2020	Weather	Sunny
S5	13 Oct 2020	Wind Speed (kts)	6
S5	13 Oct 2020	Wind Dir	E
S5	13 Oct 2020	Animal Life	1 Cormorant; 11 Godwits; 14 Seagulls; 25 Terns
S5	13 Oct 2020	Floatables	None
S5	13 Oct 2020	Water Color	Green
S5	13 Oct 2020	Current Direction	S
S5	13 Oct 2020	Water Temp (C)	2
S5	13 Oct 2020	Wave Height Low (ft)	1
S5	13 Oct 2020	High Tide (ft)	4.8
S5	13 Oct 2020	High Tide Time	740
S5	13 Oct 2020	Low Tide (ft)	1.5
S5	13 Oct 2020	Low Tide Time	1325
S5	13 Oct 2020	Comments	Kelp; Seagrass; Water clear
S5	20 Oct 2020	Arrive Time	832
S5	20 Oct 2020	Weather	Cloudy
S5	20 Oct 2020	Wind Speed (kts)	5.6
S5	20 Oct 2020	Wind Dir	E
S5	20 Oct 2020	Animal Life	3 Cormorants; 1 Dog; 25 Pelicans; 20 Seagulls; 4 Terns
S5	20 Oct 2020	Floatables	None

Station	Date	Parameter	Value
S5	20 Oct 2020	Water Color	Grey
S5	20 Oct 2020	Current Direction	S
S5	20 Oct 2020	Water Temp (C)	18.4
S5	20 Oct 2020	Wave Height Low (ft)	2
S5	20 Oct 2020	High Tide (ft)	6
S5	20 Oct 2020	High Tide Time	1145
S5	20 Oct 2020	Low Tide (ft)	2
S5	20 Oct 2020	Low Tide Time	530
S5	20 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; Water turbid
S5	27 Oct 2020	Arrive Time	944
S5	27 Oct 2020	Weather	Sunny
S5	27 Oct 2020	Wind Speed (kts)	2.5
S5	27 Oct 2020	Wind Dir	NW
S5	27 Oct 2020	Animal Life	4 Pelicans; 4 Seagulls; 3 Terns
S5	27 Oct 2020	Floatables	None
S5	27 Oct 2020	Water Color	Green
S5	27 Oct 2020	Current Direction	N
S5	27 Oct 2020	Water Temp (C)	19
S5	27 Oct 2020	Wave Height Low (ft)	1
S5	27 Oct 2020	High Tide (ft)	5
S5	27 Oct 2020	High Tide Time	748
S5	27 Oct 2020	Low Tide (ft)	1.3
S5	27 Oct 2020	Low Tide Time	1356
S5	27 Oct 2020	Comments	Kelp; Seagrass; 4 Persons; Water clear
S6	06 Oct 2020	Arrive Time	738
S6	06 Oct 2020	Weather	Partly Cloudy
S6	06 Oct 2020	Wind Speed (kts)	0.5
S6	06 Oct 2020	Wind Dir	E
S6	06 Oct 2020	Animal Life	None
S6	06 Oct 2020	Floatables	Foam
S6	06 Oct 2020	Water Color	Green
S6	06 Oct 2020	Current Direction	S
S6	06 Oct 2020	Water Temp (C)	20.4
S6	06 Oct 2020	Wave Height Low (ft)	2
S6	06 Oct 2020	High Tide (ft)	5
S6	06 Oct 2020	High Tide Time	1125
S6	06 Oct 2020	Low Tide (ft)	2.2
S6	06 Oct 2020	Low Tide Time	508
S6	06 Oct 2020	Comments	Kelp; Seagrass; 10 Surfers; Water clear
S6	13 Oct 2020	Arrive Time	942
S6	13 Oct 2020	Weather	Sunny
S6	13 Oct 2020	Wind Speed (kts)	5.4
S6	13 Oct 2020	Wind Dir	N
S6	13 Oct 2020	Animal Life	1 Fish; 2 Godwits
S6	13 Oct 2020	Floatables	None
S6	13 Oct 2020	Water Color	Green
S6	13 Oct 2020	Current Direction	S
S6	13 Oct 2020	Water Temp (C)	17.2
S6	13 Oct 2020	Wave Height Low (ft)	2
S6	13 Oct 2020	High Tide (ft)	4.8
S6	13 Oct 2020	High Tide Time	740
S6	13 Oct 2020	Low Tide (ft)	1.5
S6	13 Oct 2020	Low Tide Time	1325
S6	13 Oct 2020	Comments	Kelp; Seagrass; 3 Persons; 1 Fisherman; Water clear
S6	20 Oct 2020	Arrive Time	852
S6	20 Oct 2020	Weather	Cloudy
S6	20 Oct 2020	Wind Speed (kts)	3.6

Station	Date	Parameter	Value
S6	20 Oct 2020	Wind Dir	E
S6	20 Oct 2020	Animal Life	5 Godwits; 1 Tern
S6	20 Oct 2020	Floatables	None
S6	20 Oct 2020	Water Color	Brown
S6	20 Oct 2020	Current Direction	S
S6	20 Oct 2020	Water Temp (C)	18.6
S6	20 Oct 2020	Wave Height Low (ft)	3
S6	20 Oct 2020	High Tide (ft)	6
S6	20 Oct 2020	High Tide Time	1145
S6	20 Oct 2020	Low Tide (ft)	2
S6	20 Oct 2020	Low Tide Time	530
S6	20 Oct 2020	Comments	Kelp; Seagrass; 8 Persons; 8 Surfers; Water turbid
S6	27 Oct 2020	Arrive Time	1007
S6	27 Oct 2020	Weather	Sunny
S6	27 Oct 2020	Wind Speed (kts)	1.9
S6	27 Oct 2020	Wind Dir	W
S6	27 Oct 2020	Animal Life	1 Grebe; 3 Pelicans; 2 Seagulls
S6	27 Oct 2020	Floatables	None
S6	27 Oct 2020	Water Color	Green
S6	27 Oct 2020	Current Direction	
S6	27 Oct 2020	Water Temp (C)	1.9
S6	27 Oct 2020	Wave Height Low (ft)	2
S6	27 Oct 2020	High Tide (ft)	5
S6	27 Oct 2020	High Tide Time	748
S6	27 Oct 2020	Low Tide (ft)	1.3
S6	27 Oct 2020	Low Tide Time	1356
S6	27 Oct 2020	Comments	Kelp; 5 Surfers; Water clear
S8	06 Oct 2020	Arrive Time	931
S8	06 Oct 2020	Weather	Partly Cloudy
S8	06 Oct 2020	Wind Speed (kts)	2.5
S8	06 Oct 2020	Wind Dir	W
S8	06 Oct 2020	Animal Life	2 Pelicans; 3 Plovers; 2 Seagulls
S8	06 Oct 2020	Floatables	Foam
S8	06 Oct 2020	Water Color	Green
S8	06 Oct 2020	Current Direction	S
S8	06 Oct 2020	Water Temp (C)	21.2
S8	06 Oct 2020	Wave Height Low (ft)	3
S8	06 Oct 2020	High Tide (ft)	5
S8	06 Oct 2020	High Tide Time	1125
S8	06 Oct 2020	Low Tide (ft)	2.2
S8	06 Oct 2020	Low Tide Time	508
S8	06 Oct 2020	Comments	Kelp; Seagrass; 21 Persons; 1 Boat; 3 Swimmers; Water clear
S8	13 Oct 2020	Arrive Time	834
S8	13 Oct 2020	Weather	Sunny
S8	13 Oct 2020	Wind Speed (kts)	2.1
S8	13 Oct 2020	Wind Dir	E
S8	13 Oct 2020	Animal Life	2 Cormorants; 11 Pelicans; 13 Seagulls; 2 Terns
S8	13 Oct 2020	Floatables	None
S8	13 Oct 2020	Water Color	Green
S8	13 Oct 2020	Current Direction	E
S8	13 Oct 2020	Water Temp (C)	18.4
S8	13 Oct 2020	Wave Height Low (ft)	2
S8	13 Oct 2020	High Tide (ft)	4.8
S8	13 Oct 2020	High Tide Time	740
S8	13 Oct 2020	Low Tide (ft)	1.5
S8	13 Oct 2020	Low Tide Time	1325
S8	13 Oct 2020	Comments	Kelp; Seagrass; 11 Persons; Water clear

Station	Date	Parameter	Value
S8	20 Oct 2020	Arrive Time	1052
S8	20 Oct 2020	Weather	Sunny
S8	20 Oct 2020	Wind Speed (kts)	5.2
S8	20 Oct 2020	Wind Dir	W
S8	20 Oct 2020	Animal Life	1 Cormorant; 30 Grebes; 5 Seagulls
S8	20 Oct 2020	Floatables	None
S8	20 Oct 2020	Water Color	Green
S8	20 Oct 2020	Current Direction	S
S8	20 Oct 2020	Water Temp (C)	18.9
S8	20 Oct 2020	Wave Height Low (ft)	2
S8	20 Oct 2020	High Tide (ft)	6
S8	20 Oct 2020	High Tide Time	1145
S8	20 Oct 2020	Low Tide (ft)	2
S8	20 Oct 2020	Low Tide Time	530
S8	20 Oct 2020	Comments	Kelp; Seagrass; 9 Persons; 1 Fisherman; Water clear
S8	27 Oct 2020	Arrive Time	827
S8	27 Oct 2020	Weather	Sunny
S8	27 Oct 2020	Wind Speed (kts)	4
S8	27 Oct 2020	Wind Dir	E
S8	27 Oct 2020	Animal Life	2 Godwits; 60 Grebes; 1 Seagull
S8	27 Oct 2020	Floatables	None
S8	27 Oct 2020	Water Color	Green
S8	27 Oct 2020	Current Direction	N
S8	27 Oct 2020	Water Temp (C)	14
S8	27 Oct 2020	Wave Height Low (ft)	1
S8	27 Oct 2020	High Tide (ft)	5
S8	27 Oct 2020	High Tide Time	748
S8	27 Oct 2020	Low Tide (ft)	1.3
S8	27 Oct 2020	Low Tide Time	1356
S8	27 Oct 2020	Comments	Kelp; Seagrass; 3 Persons; Water turbid
S9	06 Oct 2020	Arrive Time	954
S9	06 Oct 2020	Weather	Partly Cloudy
S9	06 Oct 2020	Wind Speed (kts)	2.1
S9	06 Oct 2020	Wind Dir	NW
S9	06 Oct 2020	Animal Life	2 Cormorants; 2 Seagulls
S9	06 Oct 2020	Floatables	None
S9	06 Oct 2020	Water Color	Green
S9	06 Oct 2020	Current Direction	S
S9	06 Oct 2020	Water Temp (C)	21
S9	06 Oct 2020	Wave Height Low (ft)	2
S9	06 Oct 2020	High Tide (ft)	5
S9	06 Oct 2020	High Tide Time	1125
S9	06 Oct 2020	Low Tide (ft)	2.2
S9	06 Oct 2020	Low Tide Time	508
S9	06 Oct 2020	Comments	Kelp; Seagrass; 1 Jogger; 6 Persons; 2 Surfers; 2 Swimmers; Water clear
S9	13 Oct 2020	Arrive Time	811
S9	13 Oct 2020	Weather	Sunny
S9	13 Oct 2020	Wind Speed (kts)	2.5
S9	13 Oct 2020	Wind Dir	E
S9	13 Oct 2020	Animal Life	2 Cormorants; 3 Dolphins; 2 Pelicans; 18 Seagulls
S9	13 Oct 2020	Floatables	None
S9	13 Oct 2020	Water Color	Green
S9	13 Oct 2020	Current Direction	S
S9	13 Oct 2020	Water Temp (C)	17.5
S9	13 Oct 2020	Wave Height Low (ft)	1
S9	13 Oct 2020	High Tide (ft)	4.8
S9	13 Oct 2020	High Tide Time	740

Station	Date	Parameter	Value
S9	13 Oct 2020	Low Tide (ft)	1.5
S9	13 Oct 2020	Low Tide Time	1325
S9	13 Oct 2020	Comments	Kelp; 2 Joggers; 2 Persons; Water clear
S9	20 Oct 2020	Arrive Time	1115
S9	20 Oct 2020	Weather	Sunny
S9	20 Oct 2020	Wind Speed (kts)	5.4
S9	20 Oct 2020	Wind Dir	W
S9	20 Oct 2020	Animal Life	1 Cormorant; 1 Pelican; 5 Seagulls; 1 Tern
S9	20 Oct 2020	Floatables	None
S9	20 Oct 2020	Water Color	Brown
S9	20 Oct 2020	Current Direction	S
S9	20 Oct 2020	Water Temp (C)	20.3
S9	20 Oct 2020	Wave Height Low (ft)	1
S9	20 Oct 2020	High Tide (ft)	6
S9	20 Oct 2020	High Tide Time	1145
S9	20 Oct 2020	Low Tide (ft)	2
S9	20 Oct 2020	Low Tide Time	530
S9	20 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; Water turbid
S9	27 Oct 2020	Arrive Time	805
S9	27 Oct 2020	Weather	Sunny
S9	27 Oct 2020	Wind Speed (kts)	0
S9	27 Oct 2020	Wind Dir	
S9	27 Oct 2020	Animal Life	1 Cormorant; 3 Pelicans; 4 Seagulls; 2 Terns
S9	27 Oct 2020	Floatables	None
S9	27 Oct 2020	Water Color	Brown
S9	27 Oct 2020	Current Direction	N
S9	27 Oct 2020	Water Temp (C)	13
S9	27 Oct 2020	Wave Height Low (ft)	1
S9	27 Oct 2020	High Tide (ft)	5
S9	27 Oct 2020	High Tide Time	748
S9	27 Oct 2020	Low Tide (ft)	1.3
S9	27 Oct 2020	Low Tide Time	1356
S9	27 Oct 2020	Comments	Kelp; 1 Jogger; 2 Persons; Water turbid
S10	06 Oct 2020	Arrive Time	841
S10	06 Oct 2020	Weather	Partly Cloudy
S10	06 Oct 2020	Wind Speed (kts)	3.4
S10	06 Oct 2020	Wind Dir	W
S10	06 Oct 2020	Animal Life	None
S10	06 Oct 2020	Floatables	Foam
S10	06 Oct 2020	Water Color	Green
S10	06 Oct 2020	Current Direction	S
S10	06 Oct 2020	Water Temp (C)	18.8
S10	06 Oct 2020	Wave Height Low (ft)	3
S10	06 Oct 2020	High Tide (ft)	5
S10	06 Oct 2020	High Tide Time	1125
S10	06 Oct 2020	Low Tide (ft)	2.2
S10	06 Oct 2020	Low Tide Time	508
S10	06 Oct 2020	Comments	Kelp; Seagrass; Debris; Water clear; Debris 1
S10	13 Oct 2020	Arrive Time	1014
S10	13 Oct 2020	Weather	Sunny
S10	13 Oct 2020	Wind Speed (kts)	5.8
S10	13 Oct 2020	Wind Dir	NE
S10	13 Oct 2020	Animal Life	2 Godwits; 8 Grebes; 6 Pelicans; 3 Seagulls; 120 Terns
S10	13 Oct 2020	Floatables	None
S10	13 Oct 2020	Water Color	Green
S10	13 Oct 2020	Current Direction	S
S10	13 Oct 2020	Water Temp (C)	20.8

Station	Date	Parameter	Value
S10	13 Oct 2020	Wave Height Low (ft)	3
S10	13 Oct 2020	High Tide (ft)	4.8
S10	13 Oct 2020	High Tide Time	740
S10	13 Oct 2020	Low Tide (ft)	1.5
S10	13 Oct 2020	Low Tide Time	1325
S10	13 Oct 2020	Comments	Kelp; Seagrass; Debris; Water clear; Debris-1
S10	20 Oct 2020	Arrive Time	1002
S10	20 Oct 2020	Weather	Sunny
S10	20 Oct 2020	Wind Speed (kts)	2.9
S10	20 Oct 2020	Wind Dir	NW
S10	20 Oct 2020	Animal Life	1 Pelican; 1 Seagull; 2 Terns
S10	20 Oct 2020	Floatables	None
S10	20 Oct 2020	Water Color	Green
S10	20 Oct 2020	Current Direction	S
S10	20 Oct 2020	Water Temp (C)	18.9
S10	20 Oct 2020	Wave Height Low (ft)	3
S10	20 Oct 2020	High Tide (ft)	6
S10	20 Oct 2020	High Tide Time	1145
S10	20 Oct 2020	Low Tide (ft)	2
S10	20 Oct 2020	Low Tide Time	530
S10	20 Oct 2020	Comments	Kelp; Seagrass; Water clear; Debris-1
S10	27 Oct 2020	Arrive Time	1043
S10	27 Oct 2020	Weather	Sunny
S10	27 Oct 2020	Wind Speed (kts)	2.9
S10	27 Oct 2020	Wind Dir	W
S10	27 Oct 2020	Animal Life	10 Godwits; 2 Pelicans
S10	27 Oct 2020	Floatables	None
S10	27 Oct 2020	Water Color	Green
S10	27 Oct 2020	Current Direction	S
S10	27 Oct 2020	Water Temp (C)	17
S10	27 Oct 2020	Wave Height Low (ft)	2
S10	27 Oct 2020	High Tide (ft)	5
S10	27 Oct 2020	High Tide Time	748
S10	27 Oct 2020	Low Tide (ft)	1.3
S10	27 Oct 2020	Low Tide Time	1356
S10	27 Oct 2020	Comments	Kelp; Water clear; Debris 1
S11	06 Oct 2020	Arrive Time	733
S11	06 Oct 2020	Weather	Partly Cloudy
S11	06 Oct 2020	Wind Speed (kts)	4
S11	06 Oct 2020	Wind Dir	E
S11	06 Oct 2020	Animal Life	1 Dog
S11	06 Oct 2020	Floatables	Foam
S11	06 Oct 2020	Water Color	Green
S11	06 Oct 2020	Current Direction	S
S11	06 Oct 2020	Water Temp (C)	19.7
S11	06 Oct 2020	Wave Height Low (ft)	3
S11	06 Oct 2020	High Tide (ft)	5
S11	06 Oct 2020	High Tide Time	1125
S11	06 Oct 2020	Low Tide (ft)	2.2
S11	06 Oct 2020	Low Tide Time	508
S11	06 Oct 2020	Comments	Kelp; Seagrass; 4 Persons; Water clear
S11	13 Oct 2020	Arrive Time	935
S11	13 Oct 2020	Weather	Sunny
S11	13 Oct 2020	Wind Speed (kts)	7.9
S11	13 Oct 2020	Wind Dir	N
S11	13 Oct 2020	Animal Life	1 Cormorant; 4 Godwits
S11	13 Oct 2020	Floatables	None

Station	Date	Parameter	Value
S11	13 Oct 2020	Water Color	Green
S11	13 Oct 2020	Current Direction	S
S11	13 Oct 2020	Water Temp (C)	17.9
S11	13 Oct 2020	Wave Height Low (ft)	3
S11	13 Oct 2020	High Tide (ft)	4.8
S11	13 Oct 2020	High Tide Time	740
S11	13 Oct 2020	Low Tide (ft)	1.5
S11	13 Oct 2020	Low Tide Time	1325
S11	13 Oct 2020	Comments	Kelp; Seagrass; 4 Persons; Water clear
S11	20 Oct 2020	Arrive Time	843
S11	20 Oct 2020	Weather	Cloudy
S11	20 Oct 2020	Wind Speed (kts)	2.3
S11	20 Oct 2020	Wind Dir	E
S11	20 Oct 2020	Animal Life	2 Godwits; 1 Pelican; 1 Seagull
S11	20 Oct 2020	Floatables	None
S11	20 Oct 2020	Water Color	Grey
S11	20 Oct 2020	Current Direction	S
S11	20 Oct 2020	Water Temp (C)	18.3
S11	20 Oct 2020	Wave Height Low (ft)	1
S11	20 Oct 2020	High Tide (ft)	6
S11	20 Oct 2020	High Tide Time	1145
S11	20 Oct 2020	Low Tide (ft)	2
S11	20 Oct 2020	Low Tide Time	530
S11	20 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; Water clear
S11	27 Oct 2020	Arrive Time	959
S11	27 Oct 2020	Weather	Sunny
S11	27 Oct 2020	Wind Speed (kts)	1.5
S11	27 Oct 2020	Wind Dir	W
S11	27 Oct 2020	Animal Life	2 Cormorants; 3 Pelicans; 1 Seagull
S11	27 Oct 2020	Floatables	None
S11	27 Oct 2020	Water Color	Green
S11	27 Oct 2020	Current Direction	
S11	27 Oct 2020	Water Temp (C)	18
S11	27 Oct 2020	Wave Height Low (ft)	2
S11	27 Oct 2020	High Tide (ft)	5
S11	27 Oct 2020	High Tide Time	748
S11	27 Oct 2020	Low Tide (ft)	1.3
S11	27 Oct 2020	Low Tide Time	1356
S11	27 Oct 2020	Comments	Kelp; 2 Persons; Water turbid
S12	06 Oct 2020	Arrive Time	752
S12	06 Oct 2020	Weather	Sunny
S12	06 Oct 2020	Wind Speed (kts)	0
S12	06 Oct 2020	Wind Dir	
S12	06 Oct 2020	Animal Life	1 Dog; 9 Godwits
S12	06 Oct 2020	Floatables	Foam
S12	06 Oct 2020	Water Color	Green
S12	06 Oct 2020	Current Direction	S
S12	06 Oct 2020	Water Temp (C)	20.4
S12	06 Oct 2020	Wave Height Low (ft)	2
S12	06 Oct 2020	High Tide (ft)	5
S12	06 Oct 2020	High Tide Time	1125
S12	06 Oct 2020	Low Tide (ft)	2.2
S12	06 Oct 2020	Low Tide Time	508
S12	06 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; Water clear
S12	13 Oct 2020	Arrive Time	900
S12	13 Oct 2020	Weather	Sunny
S12	13 Oct 2020	Wind Speed (kts)	2.5

Station	Date	Parameter	Value
S12	13 Oct 2020	Wind Dir	N
S12	13 Oct 2020	Animal Life	1 Cormorant; 1 Godwit; 2 Seagulls; 1 Tern
S12	13 Oct 2020	Floatables	None
S12	13 Oct 2020	Water Color	Green
S12	13 Oct 2020	Current Direction	S
S12	13 Oct 2020	Water Temp (C)	18.5
S12	13 Oct 2020	Wave Height Low (ft)	2
S12	13 Oct 2020	High Tide (ft)	4.8
S12	13 Oct 2020	High Tide Time	740
S12	13 Oct 2020	Low Tide (ft)	1.5
S12	13 Oct 2020	Low Tide Time	1325
S12	13 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; 3 Surfers; Water clear
S12	20 Oct 2020	Arrive Time	903
S12	20 Oct 2020	Weather	Cloudy
S12	20 Oct 2020	Wind Speed (kts)	0.7
S12	20 Oct 2020	Wind Dir	N
S12	20 Oct 2020	Animal Life	2 Godwits; 1 Pelican; 2 Seagulls
S12	20 Oct 2020	Floatables	None
S12	20 Oct 2020	Water Color	Grey
S12	20 Oct 2020	Current Direction	N
S12	20 Oct 2020	Water Temp (C)	19
S12	20 Oct 2020	Wave Height Low (ft)	2
S12	20 Oct 2020	High Tide (ft)	6
S12	20 Oct 2020	High Tide Time	1145
S12	20 Oct 2020	Low Tide (ft)	2
S12	20 Oct 2020	Low Tide Time	530
S12	20 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; 1 Fisherman; Water clear
S12	27 Oct 2020	Arrive Time	925
S12	27 Oct 2020	Weather	Sunny
S12	27 Oct 2020	Wind Speed (kts)	1.3
S12	27 Oct 2020	Wind Dir	S
S12	27 Oct 2020	Animal Life	1 Dog; 1 Godwit; 1 Pelican; 3 Seagulls
S12	27 Oct 2020	Floatables	None
S12	27 Oct 2020	Water Color	Green
S12	27 Oct 2020	Current Direction	N
S12	27 Oct 2020	Water Temp (C)	15
S12	27 Oct 2020	Wave Height Low (ft)	2
S12	27 Oct 2020	High Tide (ft)	5
S12	27 Oct 2020	High Tide Time	748
S12	27 Oct 2020	Low Tide (ft)	1.3
S12	27 Oct 2020	Low Tide Time	1356
S12	27 Oct 2020	Comments	Kelp; Seagrass; 2 Persons; Water clear

Kelp Stations

Table 3.1

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

Date	I19	I24	I25	I26	I32	I39	I40
01 Oct 2020	28*	31*	25*	18*	25*	10*	25*
02 Oct 2020	28*	31*	25*	18*	25*	10*	25*
03 Oct 2020	28*	31*	25*	18*	25*	10*	25*
04 Oct 2020	28*	31*	25*	18*	25*	10*	25*
05 Oct 2020	32	34	29	19	24	12	27
06 Oct 2020	32	34	29	19	24	12	27
07 Oct 2020	32	34	29	19	24	12	27
08 Oct 2020	8*	9*	7*	4*	9*	5*	6*
09 Oct 2020	8*	9*	7*	4*	9*	5*	6*
10 Oct 2020	8*	9*	7*	4*	9*	5*	6*
11 Oct 2020	8*	9*	7*	4*	9*	5*	6*
12 Oct 2020	8*	9*	7*	4*	9*	5*	6*
13 Oct 2020	9	14	8	7	11	6	10
14 Oct 2020	14*	22*	11*	9*	11*	8*	15*
15 Oct 2020	14*	22*	11*	9*	11*	8*	15*
16 Oct 2020	14*	22*	11*	9*	11*	8*	15*
17 Oct 2020	14*	22*	11*	9*	11*	8*	15*
18 Oct 2020	14*	22*	11*	9*	11*	8*	15*
19 Oct 2020	14*	22*	11*	9*	11*	8*	15*
20 Oct 2020	13	19	10	7	11	12	15
21 Oct 2020	20*	23*	14*	9*	11*	18*	24*
22 Oct 2020	20*	23*	14*	9*	11*	18*	24*
23 Oct 2020	20*	23*	14*	9*	11*	18*	24*
24 Oct 2020	20*	23*	14*	9*	11*	18*	24*
25 Oct 2020	20*	23*	14*	9*	11*	18*	24*
26 Oct 2020	20*	23*	14*	9*	11*	18*	24*
27 Oct 2020	20*	23*	14*	9*	11*	18*	24*
28 Oct 2020	20*	16*	24*	9*	10*	12*	26*
29 Oct 2020	20*	16*	24*	9*	10*	12*	26*
30 Oct 2020	20*	16*	24*	9*	10*	12*	26*
31 Oct 2020	20*	16*	24*	9*	10*	12*	26*

* 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 Oct 2020	13*	9*	11*	14*	3*	6*	11*
02 Oct 2020	13*	9*	11*	14*	3*	6*	11*
03 Oct 2020	13*	9*	11*	14*	3*	6*	11*
04 Oct 2020	13*	9*	11*	14*	3*	6*	11*
05 Oct 2020	11	7	9	9	3	5	9
06 Oct 2020	11	7	9	9	3	5	9
07 Oct 2020	11	7	9	9	3	5	9
08 Oct 2020	2*	2*	2*	2*	2*	2*	2*
09 Oct 2020	2*	2*	2*	2*	2*	2*	2*
10 Oct 2020	2*	2*	2*	2*	2*	2*	2*
11 Oct 2020	2*	2*	2*	2*	2*	2*	2*
12 Oct 2020	2*	2*	2*	2*	2*	2*	2*
13 Oct 2020	3	2	2	2	2	2	2
14 Oct 2020	3*	2*	2*	2*	2*	2*	2*
15 Oct 2020	3*	2*	2*	2*	2*	2*	2*
16 Oct 2020	3*	2*	2*	2*	2*	2*	2*
17 Oct 2020	3*	2*	2*	2*	2*	2*	2*
18 Oct 2020	3*	2*	2*	2*	2*	2*	2*
19 Oct 2020	3*	2*	2*	2*	2*	2*	2*
20 Oct 2020	3	2	2	2	2	2	3
21 Oct 2020	3*	2*	2*	2*	2*	2*	3*
22 Oct 2020	3*	2*	2*	2*	2*	2*	3*
23 Oct 2020	3*	2*	2*	2*	2*	2*	3*
24 Oct 2020	3*	2*	2*	2*	2*	2*	3*
25 Oct 2020	3*	2*	2*	2*	2*	2*	3*
26 Oct 2020	3*	2*	2*	2*	2*	2*	3*
27 Oct 2020	3*	2*	2*	2*	2*	2*	3*
28 Oct 2020	3*	2*	2*	2*	2*	2*	3*
29 Oct 2020	3*	2*	2*	2*	2*	2*	3*
30 Oct 2020	3*	2*	2*	2*	2*	2*	3*
31 Oct 2020	3*	2*	2*	2*	2*	2*	3*

* 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 Oct 2020	11*	8*	9*	10*	3*	6*	10*
02 Oct 2020	11*	8*	9*	10*	3*	6*	10*
03 Oct 2020	11*	8*	9*	10*	3*	6*	10*
04 Oct 2020	11*	8*	9*	10*	3*	6*	10*
05 Oct 2020	12	7	6	7	3	5	8
06 Oct 2020	12	7	6	7	3	5	8
07 Oct 2020	12	7	6	7	3	5	8
08 Oct 2020	3*	2*	2*	2*	2*	2*	2*
09 Oct 2020	3*	2*	2*	2*	2*	2*	2*
10 Oct 2020	3*	2*	2*	2*	2*	2*	2*
11 Oct 2020	3*	2*	2*	2*	2*	2*	2*
12 Oct 2020	3*	2*	2*	2*	2*	2*	2*
13 Oct 2020	3	2	2	2	2	2	2
14 Oct 2020	3*	2*	2*	2*	2*	2*	2*
15 Oct 2020	3*	2*	2*	2*	2*	2*	2*
16 Oct 2020	3*	2*	2*	2*	2*	2*	2*
17 Oct 2020	3*	2*	2*	2*	2*	2*	2*
18 Oct 2020	3*	2*	2*	2*	2*	2*	2*
19 Oct 2020	3*	2*	2*	2*	2*	2*	2*
20 Oct 2020	3	2	2	2	2	2	2
21 Oct 2020	3*	2*	2*	2*	2*	2*	2*
22 Oct 2020	3*	2*	2*	2*	2*	2*	2*
23 Oct 2020	3*	2*	2*	2*	2*	2*	2*
24 Oct 2020	3*	2*	2*	2*	2*	2*	2*
25 Oct 2020	3*	2*	2*	2*	2*	2*	2*
26 Oct 2020	3*	2*	2*	2*	2*	2*	2*
27 Oct 2020	3*	2*	2*	2*	2*	2*	2*
28 Oct 2020	3*	2*	2*	2*	2*	2*	2*
29 Oct 2020	3*	2*	2*	2*	2*	2*	2*
30 Oct 2020	3*	2*	2*	2*	2*	2*	2*
31 Oct 2020	3*	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC
28 Oct 2020	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC
28 Oct 2020	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC
28 Oct 2020	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 Oct 2020	IC	IC	IC	IC	IC	IC	IC
13 Oct 2020	IC	IC	IC	IC	IC	IC	IC
20 Oct 2020	IC	IC	IC	IC	IC	IC	IC
28 Oct 2020	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 Oct 2020	1050	2	20e	2e	<2	0.10	19.7	73.80	8.3	33.48	8.1
I19	05 Oct 2020	1050	6	80e	4e	12e	0.05	19.5	72.84	8.2	33.47	8.1
I19	05 Oct 2020	1050	11	80e	8e	26e	0.10	19.4	75.88	8.1	33.47	8.1
I19	13 Oct 2020	1152	2	<20	4e	<2	0.20	17.0	68.10	7.5	33.47	8.0
I19	13 Oct 2020	1152	6	<20	<2	<2	0.10	16.7	66.11	7.5	33.47	8.0
I19	13 Oct 2020	1152	11	<20	<2	<2	0.10	16.5	67.93	7.2	33.47	8.0
I19	20 Oct 2020	1134	2	2e	<2	<2	1.00	17.6	71.73	7.8	33.44	8.1
I19	20 Oct 2020	1134	6	6e	<2	<2	0.33	16.5	72.68	6.7	33.45	8.0
I19	20 Oct 2020	1134	11	20e	4e	2e	0.20	15.7	59.74	5.8	33.44	7.9
I19	28 Oct 2020	1052	2	<20	<2	<2	0.10	16.7	74.48	7.3	33.47	8.1
I19	28 Oct 2020	1052	6	<2	<2	<2	1.00	16.1	73.66	6.2	33.46	8.0
I19	28 Oct 2020	1052	11	20e	2e	2e	0.10	15.7	69.72	5.8	33.45	7.9
I24	05 Oct 2020	1109	2	<20	<2	<2	0.10	18.9	75.12	8.3	33.47	8.1
I24	05 Oct 2020	1109	6	40e	4e	2e	0.10	18.4	65.79	7.8	33.46	8.1
I24	05 Oct 2020	1109	11	80e	2e	6e	0.02	17.3	40.72	7.4	33.46	8.1
I24	13 Oct 2020	1218	2	<20	<2	<2	0.10	18.6	81.00	8.3	33.49	8.1
I24	13 Oct 2020	1218	6	2e	<2	<2	1.00	16.1	69.09	6.7	33.47	8.0
I24	13 Oct 2020	1218	11	<200	2e	<2	0.01	14.7	57.01	5.6	33.48	7.9
I24	20 Oct 2020	1202	2	2e	<2	<2	1.00	18.2	81.59	8.3	33.43	8.1
I24	20 Oct 2020	1202	6	<20	<2	<2	0.10	16.6	75.21	6.8	33.43	8.0
I24	20 Oct 2020	1202	11	8e	<2	<2	0.25	15.6	79.19	6.0	33.45	7.9
I24	28 Oct 2020	1115	2	<2	2e	<2	1.00	16.6	72.89	6.5	33.47	8.0
I24	28 Oct 2020	1115	6	<2	<2	<2	1.00	15.8	74.18	5.8	33.46	7.9
I24	28 Oct 2020	1115	11	2e	4e	<2	2.00	15.5	79.84	5.8	33.46	7.9
I25	05 Oct 2020	1118	2	<20	<2	<2	0.10	19.2	77.37	8.4	33.48	8.1
I25	05 Oct 2020	1118	6	80e	<2	<2	0.02	17.8	67.49	7.8	33.48	8.1
I25	05 Oct 2020	1118	9	40e	4e	<2	0.10	17.3	57.85	7.4	33.45	8.0
I25	13 Oct 2020	1229	2	<20	<2	<2	0.10	18.1	80.54	8.2	33.50	8.1
I25	13 Oct 2020	1229	6	<20	<2	<2	0.10	15.7	68.81	6.7	33.46	8.0
I25	13 Oct 2020	1229	9	<20	2e	<2	0.10	15.2	79.81	6.2	33.45	7.9
I25	20 Oct 2020	1211	2	<2	<2	<2	1.00	18.0	80.86	8.4	33.44	8.1
I25	20 Oct 2020	1211	6	<2	<2	<2	1.00	16.4	80.42	6.1	33.44	7.9
I25	20 Oct 2020	1211	9	12e	4e	<2	0.33	15.8	80.45	5.6	33.45	7.9
I25	28 Oct 2020	1122	2	<200	<2	<2	0.01	16.8	71.58	6.8	33.48	8.0
I25	28 Oct 2020	1122	6	<2	<2	<2	1.00	15.7	79.45	5.7	33.45	7.9
I25	28 Oct 2020	1122	9	2e	<2	<2	1.00	15.6	79.59	5.6	33.45	7.9
I26	05 Oct 2020	1127	2	<20	<2	<2	0.10	20.2	74.94	8.4	33.48	8.2
I26	05 Oct 2020	1127	6	20e	<2	<2	0.10	18.9	75.88	8.4	33.47	8.1
I26	05 Oct 2020	1127	9	<20	2e	<2	0.10	18.2	72.94	7.8	33.48	8.1

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	pH
I26	13 Oct 2020	1238	2	<20	<2	<2	0.10	17.5	80.31	8.1	33.49	8.1
I26	13 Oct 2020	1238	6	20e	<2	<2	0.10	16.1	65.29	7.0	33.46	8.0
I26	13 Oct 2020	1238	9	<200	<2	<2	0.01	15.0	80.64	6.5	33.45	7.9
I26	20 Oct 2020	1221	2	<2	<2	<2	1.00	18.4	82.58	8.1	33.46	8.1
I26	20 Oct 2020	1221	6	<2	2e	<2	1.00	16.7	72.04	7.8	33.43	8.1
I26	20 Oct 2020	1221	9	<2	<2	<2	1.00	15.8	81.12	6.2	33.45	8.0
I26	28 Oct 2020	1131	2	2e	<2	<2	1.00	16.6	64.93	7.1	33.49	8.0
I26	28 Oct 2020	1131	6	2e	<2	<2	1.00	15.2	71.37	6.2	33.46	7.9
I26	28 Oct 2020	1131	9	2e	<2	<2	1.00	15.2	84.25	6.1	33.45	7.9
I32	05 Oct 2020	1138	2	<20	<2	<2	0.10	20.7	77.18	8.1	33.49	8.2
I32	05 Oct 2020	1138	6	<20	<2	<2	0.10	19.9	73.94	8.1	33.50	8.2
I32	05 Oct 2020	1138	9	<20	<2	<2	0.10	19.8	72.69	8.0	33.49	8.1
I32	13 Oct 2020	1252	2	<20	<2	<2	0.10	18.9	76.49	8.1	33.48	8.1
I32	13 Oct 2020	1252	6	<20	<2	<2	0.10	17.1	64.85	7.6	33.47	8.0
I32	13 Oct 2020	1252	9	<20	<2	<2	0.10	15.8	60.47	6.8	33.46	7.9
I32	20 Oct 2020	1234	2	<2	<2	<2	1.00	18.3	80.14	8.1	33.46	8.1
I32	20 Oct 2020	1234	6	<20	<2	<2	0.10	16.5	72.07	7.6	33.45	8.1
I32	20 Oct 2020	1234	9	<2	<2	<2	1.00	16.0	71.41	6.5	33.45	8.0
I32	28 Oct 2020	1147	2	<2	<2	<2	1.00	16.1	69.96	6.3	33.48	8.0
I32	28 Oct 2020	1147	6	2e	<2	<2	1.00	15.5	69.62	5.8	33.46	7.9
I32	28 Oct 2020	1147	9	4e	6e	2e	1.50	15.4	78.10	5.9	33.46	7.9
I39	05 Oct 2020	1033	2	<20	<2	<2	0.10	20.4	75.96	8.3	33.48	8.2
I39	05 Oct 2020	1033	12	<20	2e	<2	0.10	16.5	80.42	7.8	33.46	8.1
I39	05 Oct 2020	1033	18	<20	<2	<2	0.10	15.4	80.38	6.9	33.47	8.0
I39	13 Oct 2020	1131	2	<2	<2	<2	1.00	19.0	83.07	8.3	33.52	8.1
I39	13 Oct 2020	1131	12	2e	<2	<2	1.00	14.7	84.05	6.5	33.48	7.9
I39	13 Oct 2020	1131	18	<20	<2	<2	0.10	14.0	85.68	5.4	33.49	7.8
I39	20 Oct 2020	1108	2	<2	<2	<2	1.00	19.4	84.93	8.1	33.49	8.1
I39	20 Oct 2020	1108	12	6e	<2	<2	0.33	15.5	82.13	6.3	33.45	7.9
I39	20 Oct 2020	1108	18	<200	<2	<2	0.01	14.6	85.77	5.5	33.47	7.9
I39	28 Oct 2020	1029	2	<2	<2	<2	1.00	17.0	77.09	7.6	33.51	8.1
I39	28 Oct 2020	1029	12	2e	2e	<2	1.00	15.6	77.42	6.8	33.51	8.0
I39	28 Oct 2020	1029	18	2e	<2	<2	1.00	15.2	85.56	6.2	33.45	7.9
I40	05 Oct 2020	1102	2	<20	<2	<2	0.10	19.4	76.63	8.3	33.48	8.1
I40	05 Oct 2020	1102	6	60e	4e	<2	0.07	18.8	71.10	8.0	33.47	8.1
I40	05 Oct 2020	1102	9	40e	6e	4e	0.15	18.1	71.30	7.8	33.47	8.1
I40	13 Oct 2020	1208	2	<20	<2	<2	0.10	17.4	77.19	7.7	33.48	8.1
I40	13 Oct 2020	1208	6	<20	<2	<2	0.10	15.5	53.37	5.9	33.46	7.9
I40	13 Oct 2020	1208	9	<200	<2	<2	0.01	15.0	43.97	5.8	33.45	7.9
I40	20 Oct 2020	1149	2	8e	4e	2e	0.50	17.6	78.17	7.4	33.46	8.1
I40	20 Oct 2020	1149	6	10e	2e	<2	0.20	16.3	78.45	6.8	33.44	8.0
I40	20 Oct 2020	1149	9	<20	4e	<2	0.20	15.8	80.07	6.1	33.45	7.9
I40	28 Oct 2020	1106	2	4e	<2	<2	0.50	16.3	72.27	6.6	33.47	8.0
I40	28 Oct 2020	1106	6	8e	<2	<2	0.25	15.6	80.40	6.1	33.46	7.9
I40	28 Oct 2020	1106	9	<20	<2	<2	0.10	15.4	80.30	5.9	33.46	7.9

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 Oct 2020	Depth (m)	9
I19	05 Oct 2020	Arrive Time	1050
I19	05 Oct 2020	Depart Time	1052
I19	05 Oct 2020	Air Temp (C)	21
I19	05 Oct 2020	Weather	Haze
I19	05 Oct 2020	Visibility (mi)	11
I19	05 Oct 2020	Wind Speed (kts)	1
I19	05 Oct 2020	Wind Dir	NE
I19	05 Oct 2020	Water Color	Greenish-Brown
I19	05 Oct 2020	Wave Ht Low (ft)	2
I19	05 Oct 2020	Wave Period (sec)	13
I19	05 Oct 2020	Sea State	Light chop
I19	05 Oct 2020	High Tide (ft)	5.16
I19	05 Oct 2020	High Tide Time	1101
I19	05 Oct 2020	Low Tide (ft)	1.77
I19	05 Oct 2020	Low Tide Time	453
I19	05 Oct 2020	Comments	none
I19	13 Oct 2020	Depth (m)	11
I19	13 Oct 2020	Arrive Time	1152
I19	13 Oct 2020	Depart Time	1155
I19	13 Oct 2020	Air Temp (C)	22
I19	13 Oct 2020	Weather	Clear
I19	13 Oct 2020	Visibility (mi)	15
I19	13 Oct 2020	Wind Speed (kts)	1
I19	13 Oct 2020	Wind Dir	S
I19	13 Oct 2020	Water Color	Brownish-Green
I19	13 Oct 2020	Wave Ht Low (ft)	1
I19	13 Oct 2020	Wave Period (sec)	13
I19	13 Oct 2020	Sea State	Light chop
I19	13 Oct 2020	High Tide (ft)	4.81
I19	13 Oct 2020	High Tide Time	740
I19	13 Oct 2020	Low Tide (ft)	1.46
I19	13 Oct 2020	Low Tide Time	1325
I19	13 Oct 2020	Comments	none
I19	20 Oct 2020	Depth (m)	11
I19	20 Oct 2020	Arrive Time	1134
I19	20 Oct 2020	Depart Time	1141
I19	20 Oct 2020	Air Temp (C)	20
I19	20 Oct 2020	Weather	Partly Cloudy
I19	20 Oct 2020	Visibility (mi)	12
I19	20 Oct 2020	Wind Speed (kts)	5.2
I19	20 Oct 2020	Wind Dir	SW
I19	20 Oct 2020	Water Color	Green
I19	20 Oct 2020	Wave Ht Low (ft)	3
I19	20 Oct 2020	Wave Period (sec)	15
I19	20 Oct 2020	Sea State	Light Chop
I19	20 Oct 2020	High Tide (ft)	5.97
I19	20 Oct 2020	High Tide Time	1145
I19	20 Oct 2020	Low Tide (ft)	-0.24
I19	20 Oct 2020	Low Tide Time	1914
I19	20 Oct 2020	Comments	none
I19	28 Oct 2020	Depth (m)	12
I19	28 Oct 2020	Arrive Time	1052

Station	Date	Parameter	Value
I19	28 Oct 2020	Depart Time	1057
I19	28 Oct 2020	Air Temp (C)	18
I19	28 Oct 2020	Weather	Clear
I19	28 Oct 2020	Visibility (mi)	10
I19	28 Oct 2020	Wind Speed (kts)	2
I19	28 Oct 2020	Wind Dir	SW
I19	28 Oct 2020	Water Color	Green
I19	28 Oct 2020	Wave Ht Low (ft)	3
I19	28 Oct 2020	Wave Period (sec)	13
I19	28 Oct 2020	Sea State	Calm
I19	28 Oct 2020	High Tide (ft)	6.33
I19	28 Oct 2020	High Tide Time	2106
I19	28 Oct 2020	Low Tide (ft)	-0.71
I19	28 Oct 2020	Low Tide Time	405
I19	28 Oct 2020	Comments	none
I24	05 Oct 2020	Depth (m)	10
I24	05 Oct 2020	Arrive Time	1109
I24	05 Oct 2020	Depart Time	1111
I24	05 Oct 2020	Air Temp (C)	21
I24	05 Oct 2020	Weather	Haze
I24	05 Oct 2020	Visibility (mi)	11
I24	05 Oct 2020	Wind Speed (kts)	7
I24	05 Oct 2020	Wind Dir	W
I24	05 Oct 2020	Water Color	Green
I24	05 Oct 2020	Wave Ht Low (ft)	2
I24	05 Oct 2020	Wave Period (sec)	13
I24	05 Oct 2020	Sea State	Light chop
I24	05 Oct 2020	High Tide (ft)	5.16
I24	05 Oct 2020	High Tide Time	1101
I24	05 Oct 2020	Low Tide (ft)	1.77
I24	05 Oct 2020	Low Tide Time	453
I24	05 Oct 2020	Comments	none
I24	13 Oct 2020	Depth (m)	10
I24	13 Oct 2020	Arrive Time	1218
I24	13 Oct 2020	Depart Time	1221
I24	13 Oct 2020	Air Temp (C)	22
I24	13 Oct 2020	Weather	Haze
I24	13 Oct 2020	Visibility (mi)	15
I24	13 Oct 2020	Wind Speed (kts)	6
I24	13 Oct 2020	Wind Dir	W
I24	13 Oct 2020	Water Color	Brownish-Green
I24	13 Oct 2020	Wave Ht Low (ft)	1
I24	13 Oct 2020	Wave Period (sec)	13
I24	13 Oct 2020	Sea State	Light chop
I24	13 Oct 2020	High Tide (ft)	4.81
I24	13 Oct 2020	High Tide Time	740
I24	13 Oct 2020	Low Tide (ft)	1.46
I24	13 Oct 2020	Low Tide Time	1325
I24	13 Oct 2020	Comments	none
I24	20 Oct 2020	Depth (m)	10
I24	20 Oct 2020	Arrive Time	1202
I24	20 Oct 2020	Depart Time	1207
I24	20 Oct 2020	Air Temp (C)	19
I24	20 Oct 2020	Weather	Clear
I24	20 Oct 2020	Visibility (mi)	14
I24	20 Oct 2020	Wind Speed (kts)	4
I24	20 Oct 2020	Wind Dir	W
I24	20 Oct 2020	Water Color	Green

Station	Date	Parameter	Value
I24	20 Oct 2020	Wave Ht Low (ft)	3
I24	20 Oct 2020	Wave Period (sec)	15
I24	20 Oct 2020	Sea State	Light Chop
I24	20 Oct 2020	High Tide (ft)	5.97
I24	20 Oct 2020	High Tide Time	1145
I24	20 Oct 2020	Low Tide (ft)	-0.24
I24	20 Oct 2020	Low Tide Time	1914
I24	20 Oct 2020	Comments	none
I24	28 Oct 2020	Depth (m)	11
I24	28 Oct 2020	Arrive Time	1115
I24	28 Oct 2020	Depart Time	1118
I24	28 Oct 2020	Air Temp (C)	18
I24	28 Oct 2020	Weather	Clear
I24	28 Oct 2020	Visibility (mi)	10
I24	28 Oct 2020	Wind Speed (kts)	4
I24	28 Oct 2020	Wind Dir	S
I24	28 Oct 2020	Water Color	Green
I24	28 Oct 2020	Wave Ht Low (ft)	3
I24	28 Oct 2020	Wave Period (sec)	13
I24	28 Oct 2020	Sea State	Calm
I24	28 Oct 2020	High Tide (ft)	6.33
I24	28 Oct 2020	High Tide Time	2106
I24	28 Oct 2020	Low Tide (ft)	-0.71
I24	28 Oct 2020	Low Tide Time	405
I24	28 Oct 2020	Comments	none
I25	05 Oct 2020	Depth (m)	9
I25	05 Oct 2020	Arrive Time	1118
I25	05 Oct 2020	Depart Time	1120
I25	05 Oct 2020	Air Temp (C)	21
I25	05 Oct 2020	Weather	Haze
I25	05 Oct 2020	Visibility (mi)	11
I25	05 Oct 2020	Wind Speed (kts)	2
I25	05 Oct 2020	Wind Dir	W
I25	05 Oct 2020	Water Color	Green
I25	05 Oct 2020	Wave Ht Low (ft)	2
I25	05 Oct 2020	Wave Period (sec)	13
I25	05 Oct 2020	Sea State	Light chop
I25	05 Oct 2020	High Tide (ft)	5.16
I25	05 Oct 2020	High Tide Time	1101
I25	05 Oct 2020	Low Tide (ft)	1.77
I25	05 Oct 2020	Low Tide Time	453
I25	05 Oct 2020	Comments	none
I25	13 Oct 2020	Depth (m)	9
I25	13 Oct 2020	Arrive Time	1229
I25	13 Oct 2020	Depart Time	1230
I25	13 Oct 2020	Air Temp (C)	21
I25	13 Oct 2020	Weather	Haze
I25	13 Oct 2020	Visibility (mi)	15
I25	13 Oct 2020	Wind Speed (kts)	7
I25	13 Oct 2020	Wind Dir	W
I25	13 Oct 2020	Water Color	Brownish-Green
I25	13 Oct 2020	Wave Ht Low (ft)	1
I25	13 Oct 2020	Wave Period (sec)	13
I25	13 Oct 2020	Sea State	Light chop
I25	13 Oct 2020	High Tide (ft)	4.81
I25	13 Oct 2020	High Tide Time	740
I25	13 Oct 2020	Low Tide (ft)	1.46
I25	13 Oct 2020	Low Tide Time	1325

Station	Date	Parameter	Value
I25	13 Oct 2020	Comments	none
I25	20 Oct 2020	Depth (m)	10
I25	20 Oct 2020	Arrive Time	1211
I25	20 Oct 2020	Depart Time	1214
I25	20 Oct 2020	Air Temp (C)	19
I25	20 Oct 2020	Weather	Clear
I25	20 Oct 2020	Visibility (mi)	14
I25	20 Oct 2020	Wind Speed (kts)	7
I25	20 Oct 2020	Wind Dir	SW
I25	20 Oct 2020	Water Color	Green
I25	20 Oct 2020	Wave Ht Low (ft)	3
I25	20 Oct 2020	Wave Period (sec)	15
I25	20 Oct 2020	Sea State	Light Chop
I25	20 Oct 2020	High Tide (ft)	5.97
I25	20 Oct 2020	High Tide Time	1145
I25	20 Oct 2020	Low Tide (ft)	-0.24
I25	20 Oct 2020	Low Tide Time	1914
I25	20 Oct 2020	Comments	none
I25	28 Oct 2020	Depth (m)	10
I25	28 Oct 2020	Arrive Time	1122
I25	28 Oct 2020	Depart Time	1124
I25	28 Oct 2020	Air Temp (C)	18
I25	28 Oct 2020	Weather	Clear
I25	28 Oct 2020	Visibility (mi)	10
I25	28 Oct 2020	Wind Speed (kts)	3
I25	28 Oct 2020	Wind Dir	S
I25	28 Oct 2020	Water Color	Green
I25	28 Oct 2020	Wave Ht Low (ft)	3
I25	28 Oct 2020	Wave Period (sec)	13
I25	28 Oct 2020	Sea State	Calm
I25	28 Oct 2020	High Tide (ft)	6.33
I25	28 Oct 2020	High Tide Time	2106
I25	28 Oct 2020	Low Tide (ft)	-0.71
I25	28 Oct 2020	Low Tide Time	405
I25	28 Oct 2020	Comments	none
I26	05 Oct 2020	Depth (m)	9
I26	05 Oct 2020	Arrive Time	1127
I26	05 Oct 2020	Depart Time	1129
I26	05 Oct 2020	Air Temp (C)	21
I26	05 Oct 2020	Weather	Haze
I26	05 Oct 2020	Visibility (mi)	13
I26	05 Oct 2020	Wind Speed (kts)	8
I26	05 Oct 2020	Wind Dir	W
I26	05 Oct 2020	Water Color	Green
I26	05 Oct 2020	Wave Ht Low (ft)	2
I26	05 Oct 2020	Wave Period (sec)	13
I26	05 Oct 2020	Sea State	Light chop
I26	05 Oct 2020	High Tide (ft)	5.16
I26	05 Oct 2020	High Tide Time	1101
I26	05 Oct 2020	Low Tide (ft)	1.77
I26	05 Oct 2020	Low Tide Time	453
I26	05 Oct 2020	Comments	none
I26	13 Oct 2020	Depth (m)	9
I26	13 Oct 2020	Arrive Time	1238
I26	13 Oct 2020	Depart Time	1241
I26	13 Oct 2020	Air Temp (C)	21
I26	13 Oct 2020	Weather	Haze

Station	Date	Parameter	Value
I26	13 Oct 2020	Visibility (mi)	15
I26	13 Oct 2020	Wind Speed (kts)	9
I26	13 Oct 2020	Wind Dir	SW
I26	13 Oct 2020	Water Color	Brownish-Green
I26	13 Oct 2020	Wave Ht Low (ft)	1
I26	13 Oct 2020	Wave Period (sec)	13
I26	13 Oct 2020	Sea State	Light chop
I26	13 Oct 2020	High Tide (ft)	4.81
I26	13 Oct 2020	High Tide Time	740
I26	13 Oct 2020	Low Tide (ft)	1.46
I26	13 Oct 2020	Low Tide Time	1325
I26	13 Oct 2020	Comments	none
I26	20 Oct 2020	Depth (m)	10
I26	20 Oct 2020	Arrive Time	1221
I26	20 Oct 2020	Depart Time	1224
I26	20 Oct 2020	Air Temp (C)	19
I26	20 Oct 2020	Weather	Clear
I26	20 Oct 2020	Visibility (mi)	14
I26	20 Oct 2020	Wind Speed (kts)	10
I26	20 Oct 2020	Wind Dir	SW
I26	20 Oct 2020	Water Color	Green
I26	20 Oct 2020	Wave Ht Low (ft)	3
I26	20 Oct 2020	Wave Period (sec)	15
I26	20 Oct 2020	Sea State	Light Chop
I26	20 Oct 2020	High Tide (ft)	5.97
I26	20 Oct 2020	High Tide Time	1145
I26	20 Oct 2020	Low Tide (ft)	-0.24
I26	20 Oct 2020	Low Tide Time	1914
I26	20 Oct 2020	Comments	none
I26	28 Oct 2020	Depth (m)	10
I26	28 Oct 2020	Arrive Time	1131
I26	28 Oct 2020	Depart Time	1147
I26	28 Oct 2020	Air Temp (C)	18
I26	28 Oct 2020	Weather	Clear
I26	28 Oct 2020	Visibility (mi)	10
I26	28 Oct 2020	Wind Speed (kts)	4
I26	28 Oct 2020	Wind Dir	SW
I26	28 Oct 2020	Water Color	Green
I26	28 Oct 2020	Wave Ht Low (ft)	3
I26	28 Oct 2020	Wave Period (sec)	13
I26	28 Oct 2020	Sea State	Calm
I26	28 Oct 2020	High Tide (ft)	6.33
I26	28 Oct 2020	High Tide Time	2106
I26	28 Oct 2020	Low Tide (ft)	-0.71
I26	28 Oct 2020	Low Tide Time	405
I26	28 Oct 2020	Comments	none
I32	05 Oct 2020	Depth (m)	10
I32	05 Oct 2020	Arrive Time	1138
I32	05 Oct 2020	Depart Time	1141
I32	05 Oct 2020	Air Temp (C)	22
I32	05 Oct 2020	Weather	Haze
I32	05 Oct 2020	Visibility (mi)	13
I32	05 Oct 2020	Wind Speed (kts)	4
I32	05 Oct 2020	Wind Dir	W
I32	05 Oct 2020	Water Color	Green
I32	05 Oct 2020	Wave Ht Low (ft)	2
I32	05 Oct 2020	Wave Period (sec)	13
I32	05 Oct 2020	Sea State	Light chop

Station	Date	Parameter	Value
I32	05 Oct 2020	High Tide (ft)	5.16
I32	05 Oct 2020	High Tide Time	1101
I32	05 Oct 2020	Low Tide (ft)	1.77
I32	05 Oct 2020	Low Tide Time	453
I32	05 Oct 2020	Comments	none
I32	13 Oct 2020	Depth (m)	10
I32	13 Oct 2020	Arrive Time	1252
I32	13 Oct 2020	Depart Time	1256
I32	13 Oct 2020	Air Temp (C)	21
I32	13 Oct 2020	Weather	Haze
I32	13 Oct 2020	Visibility (mi)	15
I32	13 Oct 2020	Wind Speed (kts)	11
I32	13 Oct 2020	Wind Dir	SW
I32	13 Oct 2020	Water Color	Brownish-Green
I32	13 Oct 2020	Wave Ht Low (ft)	1
I32	13 Oct 2020	Wave Period (sec)	13
I32	13 Oct 2020	Sea State	Light chop
I32	13 Oct 2020	High Tide (ft)	4.81
I32	13 Oct 2020	High Tide Time	740
I32	13 Oct 2020	Low Tide (ft)	1.46
I32	13 Oct 2020	Low Tide Time	1325
I32	13 Oct 2020	Comments	none
I32	20 Oct 2020	Depth (m)	11
I32	20 Oct 2020	Arrive Time	1234
I32	20 Oct 2020	Depart Time	1237
I32	20 Oct 2020	Air Temp (C)	19
I32	20 Oct 2020	Weather	Clear
I32	20 Oct 2020	Visibility (mi)	14
I32	20 Oct 2020	Wind Speed (kts)	2
I32	20 Oct 2020	Wind Dir	SW
I32	20 Oct 2020	Water Color	Green
I32	20 Oct 2020	Wave Ht Low (ft)	3
I32	20 Oct 2020	Wave Period (sec)	15
I32	20 Oct 2020	Sea State	Light Chop
I32	20 Oct 2020	High Tide (ft)	5.97
I32	20 Oct 2020	High Tide Time	1145
I32	20 Oct 2020	Low Tide (ft)	-0.24
I32	20 Oct 2020	Low Tide Time	1914
I32	20 Oct 2020	Comments	none
I32	28 Oct 2020	Depth (m)	11
I32	28 Oct 2020	Arrive Time	1147
I32	28 Oct 2020	Depart Time	1152
I32	28 Oct 2020	Air Temp (C)	18
I32	28 Oct 2020	Weather	Clear
I32	28 Oct 2020	Visibility (mi)	10
I32	28 Oct 2020	Wind Speed (kts)	5
I32	28 Oct 2020	Wind Dir	SW
I32	28 Oct 2020	Water Color	Green
I32	28 Oct 2020	Wave Ht Low (ft)	3
I32	28 Oct 2020	Wave Period (sec)	13
I32	28 Oct 2020	Sea State	Calm
I32	28 Oct 2020	High Tide (ft)	6.33
I32	28 Oct 2020	High Tide Time	2106
I32	28 Oct 2020	Low Tide (ft)	-0.71
I32	28 Oct 2020	Low Tide Time	405
I32	28 Oct 2020	Comments	none
I39	05 Oct 2020	Depth (m)	18

Station	Date	Parameter	Value
I39	05 Oct 2020	Arrive Time	1033
I39	05 Oct 2020	Depart Time	1034
I39	05 Oct 2020	Air Temp (C)	21
I39	05 Oct 2020	Weather	Haze
I39	05 Oct 2020	Visibility (mi)	11
I39	05 Oct 2020	Wind Speed (kts)	6
I39	05 Oct 2020	Wind Dir	W
I39	05 Oct 2020	Water Color	Greenish-Brown
I39	05 Oct 2020	Wave Ht Low (ft)	2
I39	05 Oct 2020	Wave Period (sec)	13
I39	05 Oct 2020	Sea State	Light chop
I39	05 Oct 2020	High Tide (ft)	5.16
I39	05 Oct 2020	High Tide Time	1101
I39	05 Oct 2020	Low Tide (ft)	1.77
I39	05 Oct 2020	Low Tide Time	453
I39	05 Oct 2020	Comments	Kelp
I39	13 Oct 2020	Depth (m)	18
I39	13 Oct 2020	Arrive Time	1131
I39	13 Oct 2020	Depart Time	1135
I39	13 Oct 2020	Air Temp (C)	21
I39	13 Oct 2020	Weather	Clear
I39	13 Oct 2020	Visibility (mi)	15
I39	13 Oct 2020	Wind Speed (kts)	7
I39	13 Oct 2020	Wind Dir	W
I39	13 Oct 2020	Water Color	Greenish-Blue
I39	13 Oct 2020	Wave Ht Low (ft)	1
I39	13 Oct 2020	Wave Period (sec)	13
I39	13 Oct 2020	Sea State	Light chop
I39	13 Oct 2020	High Tide (ft)	4.81
I39	13 Oct 2020	High Tide Time	740
I39	13 Oct 2020	Low Tide (ft)	1.46
I39	13 Oct 2020	Low Tide Time	1325
I39	13 Oct 2020	Comments	none
I39	20 Oct 2020	Depth (m)	20
I39	20 Oct 2020	Arrive Time	1108
I39	20 Oct 2020	Depart Time	1122
I39	20 Oct 2020	Air Temp (C)	20
I39	20 Oct 2020	Weather	Partly Cloudy
I39	20 Oct 2020	Visibility (mi)	12
I39	20 Oct 2020	Wind Speed (kts)	2
I39	20 Oct 2020	Wind Dir	SW
I39	20 Oct 2020	Water Color	Green
I39	20 Oct 2020	Wave Ht Low (ft)	3
I39	20 Oct 2020	Wave Period (sec)	15
I39	20 Oct 2020	Sea State	Light Chop
I39	20 Oct 2020	High Tide (ft)	5.97
I39	20 Oct 2020	High Tide Time	1145
I39	20 Oct 2020	Low Tide (ft)	-0.24
I39	20 Oct 2020	Low Tide Time	1914
I39	20 Oct 2020	Comments	none
I39	28 Oct 2020	Depth (m)	20
I39	28 Oct 2020	Arrive Time	1029
I39	28 Oct 2020	Depart Time	1031
I39	28 Oct 2020	Air Temp (C)	17
I39	28 Oct 2020	Weather	Clear
I39	28 Oct 2020	Visibility (mi)	10
I39	28 Oct 2020	Wind Speed (kts)	3
I39	28 Oct 2020	Wind Dir	NE

Station	Date	Parameter	Value
I39	28 Oct 2020	Water Color	Green
I39	28 Oct 2020	Wave Ht Low (ft)	3
I39	28 Oct 2020	Wave Period (sec)	13
I39	28 Oct 2020	Sea State	Calm
I39	28 Oct 2020	High Tide (ft)	6.33
I39	28 Oct 2020	High Tide Time	2106
I39	28 Oct 2020	Low Tide (ft)	-0.71
I39	28 Oct 2020	Low Tide Time	405
I39	28 Oct 2020	Comments	none
I40	05 Oct 2020	Depth (m)	11
I40	05 Oct 2020	Arrive Time	1102
I40	05 Oct 2020	Depart Time	1103
I40	05 Oct 2020	Air Temp (C)	21
I40	05 Oct 2020	Weather	Haze
I40	05 Oct 2020	Visibility (mi)	11
I40	05 Oct 2020	Wind Speed (kts)	1
I40	05 Oct 2020	Wind Dir	W
I40	05 Oct 2020	Water Color	Greenish-Brown
I40	05 Oct 2020	Wave Ht Low (ft)	2
I40	05 Oct 2020	Wave Period (sec)	13
I40	05 Oct 2020	Sea State	Light chop
I40	05 Oct 2020	High Tide (ft)	5.16
I40	05 Oct 2020	High Tide Time	1101
I40	05 Oct 2020	Low Tide (ft)	1.77
I40	05 Oct 2020	Low Tide Time	453
I40	05 Oct 2020	Comments	none
I40	13 Oct 2020	Depth (m)	10
I40	13 Oct 2020	Arrive Time	1208
I40	13 Oct 2020	Depart Time	1210
I40	13 Oct 2020	Air Temp (C)	22
I40	13 Oct 2020	Weather	Haze
I40	13 Oct 2020	Visibility (mi)	15
I40	13 Oct 2020	Wind Speed (kts)	7
I40	13 Oct 2020	Wind Dir	W
I40	13 Oct 2020	Water Color	Brownish-Green
I40	13 Oct 2020	Wave Ht Low (ft)	1
I40	13 Oct 2020	Wave Period (sec)	13
I40	13 Oct 2020	Sea State	Light chop
I40	13 Oct 2020	High Tide (ft)	4.81
I40	13 Oct 2020	High Tide Time	740
I40	13 Oct 2020	Low Tide (ft)	1.46
I40	13 Oct 2020	Low Tide Time	1325
I40	13 Oct 2020	Comments	none
I40	20 Oct 2020	Depth (m)	11
I40	20 Oct 2020	Arrive Time	1149
I40	20 Oct 2020	Depart Time	1157
I40	20 Oct 2020	Air Temp (C)	19
I40	20 Oct 2020	Weather	Clear
I40	20 Oct 2020	Visibility (mi)	14
I40	20 Oct 2020	Wind Speed (kts)	6
I40	20 Oct 2020	Wind Dir	SW
I40	20 Oct 2020	Water Color	Green
I40	20 Oct 2020	Wave Ht Low (ft)	3
I40	20 Oct 2020	Wave Period (sec)	15
I40	20 Oct 2020	Sea State	Light Chop
I40	20 Oct 2020	High Tide (ft)	5.97
I40	20 Oct 2020	High Tide Time	1145
I40	20 Oct 2020	Low Tide (ft)	-0.24

Station	Date	Parameter	Value
I40	20 Oct 2020	Low Tide Time	1914
I40	20 Oct 2020	Comments	none
I40	28 Oct 2020	Depth (m)	11
I40	28 Oct 2020	Arrive Time	1106
I40	28 Oct 2020	Depart Time	1110
I40	28 Oct 2020	Air Temp (C)	18
I40	28 Oct 2020	Weather	Clear
I40	28 Oct 2020	Visibility (mi)	10
I40	28 Oct 2020	Wind Speed (kts)	2
I40	28 Oct 2020	Wind Dir	SW
I40	28 Oct 2020	Water Color	Green
I40	28 Oct 2020	Wave Ht Low (ft)	3
I40	28 Oct 2020	Wave Period (sec)	13
I40	28 Oct 2020	Sea State	Calm
I40	28 Oct 2020	High Tide (ft)	6.33
I40	28 Oct 2020	High Tide Time	2106
I40	28 Oct 2020	Low Tide (ft)	-0.71
I40	28 Oct 2020	Low Tide Time	405
I40	28 Oct 2020	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 (μ g/L)
I19	05 Oct 2020	1	19.81	73.65	8.2	33.47	8.1	23.6	2.72
I19	05 Oct 2020	2	19.67	73.80	8.3	33.48	8.1	23.7	2.76
I19	05 Oct 2020	3	19.57	73.49	8.3	33.47	8.1	23.7	3.50
I19	05 Oct 2020	4	19.55	72.49	8.3	33.47	8.1	23.7	4.32
I19	05 Oct 2020	5	19.51	72.57	8.3	33.47	8.1	23.7	4.76
I19	05 Oct 2020	6	19.49	72.84	8.2	33.47	8.1	23.7	4.88
I19	05 Oct 2020	7	19.48	73.36	8.1	33.47	8.1	23.7	4.91
I19	05 Oct 2020	8	19.47	74.11	8.1	33.47	8.1	23.7	4.62
I19	05 Oct 2020	9	19.45	75.27	8.1	33.47	8.1	23.7	4.53
I19	05 Oct 2020	10	19.44	75.88	8.1	33.47	8.1	23.7	4.50
I19	13 Oct 2020	1	17.11	67.49	7.6	33.47	8.0	24.3	2.31
I19	13 Oct 2020	2	17.01	68.10	7.5	33.47	8.0	24.3	2.57
I19	13 Oct 2020	3	17.00	68.15	7.5	33.47	8.0	24.3	2.74
I19	13 Oct 2020	4	16.83	67.69	7.5	33.47	8.0	24.4	3.14
I19	13 Oct 2020	5	16.89	66.88	7.5	33.47	8.0	24.4	3.37
I19	13 Oct 2020	6	16.74	66.11	7.5	33.47	8.0	24.4	4.00
I19	13 Oct 2020	7	16.70	66.80	7.4	33.47	8.0	24.4	4.32
I19	13 Oct 2020	8	16.66	67.13	7.4	33.47	8.0	24.4	4.48
I19	13 Oct 2020	9	16.55	67.41	7.3	33.47	8.0	24.4	4.43
I19	13 Oct 2020	10	16.46	67.93	7.2	33.47	8.0	24.5	4.45
I19	20 Oct 2020	1	17.59	71.67	7.8	33.44	8.1	24.2	2.45
I19	20 Oct 2020	2	17.61	71.73	7.8	33.44	8.1	24.2	2.46
I19	20 Oct 2020	3	17.59	72.47	7.8	33.45	8.1	24.2	2.59
I19	20 Oct 2020	4	17.36	70.43	7.7	33.44	8.1	24.2	3.50
I19	20 Oct 2020	5	17.05	72.76	7.4	33.45	8.0	24.3	3.57
I19	20 Oct 2020	6	16.47	72.68	6.7	33.45	8.0	24.4	2.70
I19	20 Oct 2020	7	16.27	69.73	6.4	33.44	8.0	24.5	2.29
I19	20 Oct 2020	8	15.89	69.60	6.1	33.45	7.9	24.6	1.99
I19	20 Oct 2020	9	15.80	64.90	5.9	33.44	7.9	24.6	1.86
I19	20 Oct 2020	10	15.74	59.74	5.8	33.44	7.9	24.6	1.87
I19	28 Oct 2020	1	16.78	74.54	7.4	33.47	8.1	24.4	3.40
I19	28 Oct 2020	2	16.66	74.48	7.3	33.47	8.1	24.4	4.40
I19	28 Oct 2020	3	16.63	74.36	7.2	33.47	8.0	24.4	4.78
I19	28 Oct 2020	4	16.59	74.22	7.0	33.47	8.0	24.4	4.40
I19	28 Oct 2020	5	16.25	74.06	6.6	33.47	8.0	24.5	3.22
I19	28 Oct 2020	6	16.07	73.66	6.2	33.46	8.0	24.5	2.38
I19	28 Oct 2020	7	15.86	72.55	6.0	33.46	7.9	24.6	1.80
I19	28 Oct 2020	8	15.84	71.30	5.8	33.45	7.9	24.6	1.61
I19	28 Oct 2020	9	15.80	70.60	5.8	33.45	7.9	24.6	1.52
I19	28 Oct 2020	10	15.68	69.72	5.8	33.45	7.9	24.6	1.49
I24	05 Oct 2020	1	19.18	75.71	8.3	33.47	8.1	23.8	1.78
I24	05 Oct 2020	2	18.85	75.12	8.3	33.47	8.1	23.9	2.15
I24	05 Oct 2020	3	18.72	73.84	8.2	33.47	8.1	23.9	2.92
I24	05 Oct 2020	4	18.62	70.02	8.1	33.46	8.1	23.9	3.92
I24	05 Oct 2020	5	18.49	67.23	8.0	33.47	8.1	24.0	4.56
I24	05 Oct 2020	6	18.40	65.79	7.8	33.46	8.1	24.0	4.76
I24	05 Oct 2020	7	18.11	64.93	7.6	33.48	8.1	24.1	4.69
I24	05 Oct 2020	8	17.48	57.34	7.5	33.47	8.1	24.2	4.30
I24	05 Oct 2020	9	17.22	51.28	7.5	33.46	8.1	24.3	4.12
I24	05 Oct 2020	10	17.24	45.49	7.4	33.45	8.0	24.3	4.04
I24	05 Oct 2020	11	17.31	40.72	7.4	33.46	8.1	24.3	4.10

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I24	13 Oct 2020	1	18.95	81.22	8.5	33.48	8.1	23.9	0.85
I24	13 Oct 2020	2	18.57	81.00	8.3	33.49	8.1	24.0	0.94
I24	13 Oct 2020	3	17.67	78.07	8.1	33.48	8.1	24.2	1.50
I24	13 Oct 2020	4	17.23	72.68	7.7	33.48	8.1	24.3	2.19
I24	13 Oct 2020	5	16.98	70.63	7.3	33.47	8.0	24.3	2.89
I24	13 Oct 2020	6	16.06	69.09	6.7	33.47	8.0	24.6	4.04
I24	13 Oct 2020	7	15.63	69.37	6.3	33.47	7.9	24.6	3.98
I24	13 Oct 2020	8	15.35	72.37	6.1	33.45	7.9	24.7	3.16
I24	13 Oct 2020	9	15.24	75.13	5.9	33.46	7.9	24.7	2.40
I24	13 Oct 2020	10	14.85	70.71	5.7	33.47	7.9	24.8	1.56
I24	13 Oct 2020	11	14.67	57.01	5.6	33.48	7.9	24.9	1.46
I24	20 Oct 2020	1	18.90	79.80	8.2	33.45	8.1	23.9	0.95
I24	20 Oct 2020	2	18.19	81.59	8.3	33.43	8.1	24.0	1.15
I24	20 Oct 2020	3	17.31	79.31	7.5	33.47	8.1	24.3	1.65
I24	20 Oct 2020	4	16.70	74.74	6.9	33.43	8.0	24.4	2.50
I24	20 Oct 2020	5	16.67	73.56	6.8	33.42	8.0	24.4	3.30
I24	20 Oct 2020	6	16.58	75.21	6.8	33.43	8.0	24.4	4.01
I24	20 Oct 2020	7	16.50	77.21	6.8	33.43	8.0	24.4	4.14
I24	20 Oct 2020	8	16.49	77.57	7.1	33.44	8.0	24.4	4.67
I24	20 Oct 2020	9	16.33	76.71	7.1	33.45	8.0	24.5	5.09
I24	20 Oct 2020	10	15.68	79.08	6.2	33.46	8.0	24.6	2.50
I24	20 Oct 2020	11	15.55	79.19	6.0	33.45	7.9	24.7	1.50
I24	28 Oct 2020	1	16.71	72.97	6.7	33.47	8.0	24.4	2.63
I24	28 Oct 2020	2	16.56	72.89	6.5	33.47	8.0	24.4	2.84
I24	28 Oct 2020	3	16.17	71.06	6.0	33.47	8.0	24.5	2.25
I24	28 Oct 2020	4	16.12	71.47	5.9	33.46	7.9	24.5	2.04
I24	28 Oct 2020	5	16.01	72.56	5.8	33.46	7.9	24.6	2.07
I24	28 Oct 2020	6	15.81	74.18	5.8	33.46	7.9	24.6	1.82
I24	28 Oct 2020	7	15.57	77.43	5.9	33.46	7.9	24.7	1.59
I24	28 Oct 2020	8	15.53	80.32	5.9	33.46	7.9	24.7	1.43
I24	28 Oct 2020	9	15.52	80.95	5.8	33.45	7.9	24.7	1.32
I24	28 Oct 2020	10	15.51	79.84	5.8	33.46	7.9	24.7	1.16
I25	05 Oct 2020	1	19.69	77.59	8.3	33.48	8.1	23.7	1.58
I25	05 Oct 2020	2	19.19	77.37	8.4	33.48	8.1	23.8	1.65
I25	05 Oct 2020	3	18.76	76.45	8.4	33.47	8.1	23.9	2.12
I25	05 Oct 2020	4	18.66	74.55	8.4	33.47	8.1	23.9	3.01
I25	05 Oct 2020	5	18.55	73.14	8.2	33.47	8.1	24.0	4.05
I25	05 Oct 2020	6	17.77	67.49	7.8	33.48	8.1	24.2	4.66
I25	05 Oct 2020	7	17.36	59.83	7.5	33.46	8.1	24.2	4.30
I25	05 Oct 2020	8	17.28	58.03	7.4	33.45	8.1	24.3	4.07
I25	05 Oct 2020	9	17.28	57.85	7.4	33.45	8.0	24.3	3.92
I25	13 Oct 2020	1	18.87	81.38	8.3	33.48	8.1	23.9	0.80
I25	13 Oct 2020	2	18.06	80.54	8.2	33.50	8.1	24.1	1.09
I25	13 Oct 2020	3	17.33	77.24	8.0	33.47	8.1	24.3	1.97
I25	13 Oct 2020	4	17.06	72.23	7.6	33.47	8.1	24.3	2.83
I25	13 Oct 2020	5	16.48	70.60	7.1	33.48	8.0	24.5	4.02
I25	13 Oct 2020	6	15.71	68.81	6.7	33.46	8.0	24.6	5.36
I25	13 Oct 2020	7	15.37	72.73	6.4	33.47	7.9	24.7	4.72
I25	13 Oct 2020	8	15.20	79.64	6.2	33.45	7.9	24.7	2.53
I25	13 Oct 2020	9	15.20	79.81	6.2	33.45	7.9	24.7	1.87
I25	20 Oct 2020	1	18.69	81.99	8.3	33.45	8.1	23.9	1.10
I25	20 Oct 2020	2	17.97	80.86	8.4	33.44	8.1	24.1	1.61
I25	20 Oct 2020	3	17.34	77.74	8.0	33.44	8.1	24.2	2.29
I25	20 Oct 2020	4	16.90	76.91	7.1	33.43	8.0	24.3	2.94
I25	20 Oct 2020	5	16.60	78.50	6.5	33.43	8.0	24.4	2.97
I25	20 Oct 2020	6	16.40	80.42	6.1	33.44	7.9	24.5	2.26

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I25	20 Oct 2020	7	16.13	82.76	6.0	33.44	7.9	24.5	1.54
I25	20 Oct 2020	8	16.01	82.87	5.9	33.44	7.9	24.5	1.30
I25	20 Oct 2020	9	15.84	80.45	5.6	33.45	7.9	24.6	0.97
I25	28 Oct 2020	1	16.98	71.47	7.0	33.48	8.0	24.4	2.85
I25	28 Oct 2020	2	16.84	71.58	6.8	33.48	8.0	24.4	3.37
I25	28 Oct 2020	3	16.03	71.63	6.2	33.48	8.0	24.6	3.41
I25	28 Oct 2020	4	15.84	74.92	5.9	33.46	7.9	24.6	3.06
I25	28 Oct 2020	5	15.72	77.45	5.8	33.46	7.9	24.6	2.54
I25	28 Oct 2020	6	15.66	79.45	5.7	33.45	7.9	24.6	2.03
I25	28 Oct 2020	7	15.62	80.24	5.6	33.45	7.9	24.6	1.68
I25	28 Oct 2020	8	15.61	79.91	5.6	33.45	7.9	24.6	1.47
I25	28 Oct 2020	9	15.61	79.59	5.6	33.45	7.9	24.6	1.38
I26	05 Oct 2020	1	20.38	74.71	8.4	33.47	8.2	23.5	1.76
I26	05 Oct 2020	2	20.17	74.94	8.4	33.48	8.2	23.6	1.91
I26	05 Oct 2020	3	19.73	74.67	8.4	33.47	8.2	23.7	2.34
I26	05 Oct 2020	4	19.39	77.08	8.4	33.48	8.1	23.8	2.58
I26	05 Oct 2020	5	18.97	76.91	8.5	33.47	8.1	23.9	3.24
I26	05 Oct 2020	6	18.85	75.88	8.4	33.47	8.1	23.9	4.13
I26	05 Oct 2020	7	18.81	76.02	8.4	33.47	8.1	23.9	4.53
I26	05 Oct 2020	8	18.76	75.96	8.3	33.47	8.1	23.9	4.61
I26	05 Oct 2020	9	18.24	72.94	7.8	33.48	8.1	24.0	3.96
I26	13 Oct 2020	1	18.73	80.73	8.3	33.47	8.1	23.9	0.89
I26	13 Oct 2020	2	17.51	80.31	8.1	33.49	8.1	24.2	1.30
I26	13 Oct 2020	3	16.90	75.31	7.7	33.46	8.0	24.4	2.12
I26	13 Oct 2020	4	16.65	71.75	7.5	33.46	8.0	24.4	2.80
I26	13 Oct 2020	5	16.52	70.88	7.3	33.46	8.0	24.4	3.62
I26	13 Oct 2020	6	16.09	65.29	7.0	33.46	8.0	24.5	5.45
I26	13 Oct 2020	7	15.17	71.15	6.6	33.47	7.9	24.8	4.78
I26	13 Oct 2020	8	15.06	79.79	6.5	33.45	7.9	24.8	3.11
I26	13 Oct 2020	9	15.04	80.64	6.5	33.45	7.9	24.8	2.51
I26	20 Oct 2020	1	18.81	82.40	8.2	33.46	8.1	23.9	1.29
I26	20 Oct 2020	2	18.41	82.58	8.1	33.46	8.1	24.0	1.36
I26	20 Oct 2020	3	17.50	81.76	8.2	33.45	8.1	24.2	1.97
I26	20 Oct 2020	4	17.12	74.55	8.2	33.43	8.1	24.3	3.28
I26	20 Oct 2020	5	16.84	72.32	8.0	33.43	8.1	24.3	5.04
I26	20 Oct 2020	6	16.71	72.04	7.8	33.43	8.1	24.4	6.58
I26	20 Oct 2020	7	16.43	74.01	7.3	33.44	8.0	24.5	6.48
I26	20 Oct 2020	8	15.98	77.54	6.6	33.46	8.0	24.6	4.61
I26	20 Oct 2020	9	15.82	81.12	6.2	33.45	8.0	24.6	2.60
I26	28 Oct 2020	1	16.78	64.65	7.1	33.49	8.0	24.4	3.73
I26	28 Oct 2020	2	16.65	64.93	7.1	33.49	8.0	24.4	5.72
I26	28 Oct 2020	3	16.43	63.07	7.1	33.49	8.0	24.5	8.93
I26	28 Oct 2020	4	16.20	63.25	6.8	33.49	8.0	24.5	8.70
I26	28 Oct 2020	5	15.62	65.77	6.4	33.48	8.0	24.7	6.45
I26	28 Oct 2020	6	15.24	71.37	6.2	33.46	7.9	24.7	4.24
I26	28 Oct 2020	7	15.23	79.48	6.1	33.45	7.9	24.7	3.14
I26	28 Oct 2020	8	15.23	83.35	6.1	33.45	7.9	24.7	2.58
I26	28 Oct 2020	9	15.23	84.25	6.1	33.45	7.9	24.7	2.43
I32	05 Oct 2020	1	20.57	76.90	8.2	33.49	8.2	23.5	1.83
I32	05 Oct 2020	2	20.70	77.18	8.1	33.49	8.2	23.4	1.77
I32	05 Oct 2020	3	20.28	77.45	8.1	33.51	8.2	23.6	2.09
I32	05 Oct 2020	4	20.02	76.06	8.2	33.50	8.2	23.6	2.86
I32	05 Oct 2020	5	19.97	74.43	8.1	33.50	8.2	23.6	3.44
I32	05 Oct 2020	6	19.95	73.94	8.1	33.50	8.2	23.6	3.90
I32	05 Oct 2020	7	19.91	73.44	8.1	33.50	8.1	23.6	4.23

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
I32	05 Oct 2020	8	19.83	72.57	8.0	33.50	8.1	23.7	4.33
I32	05 Oct 2020	9	19.78	72.69	8.0	33.49	8.1	23.7	4.46
I32	05 Oct 2020	10	19.69	73.57	7.9	33.50	8.1	23.7	4.08
I32	13 Oct 2020	1	18.96	76.02	8.2	33.48	8.1	23.9	1.17
I32	13 Oct 2020	2	18.88	76.49	8.1	33.48	8.1	23.9	1.22
I32	13 Oct 2020	3	18.65	75.53	8.2	33.48	8.1	23.9	1.52
I32	13 Oct 2020	4	18.40	72.90	8.0	33.49	8.1	24.0	1.91
I32	13 Oct 2020	5	17.43	67.05	7.8	33.50	8.1	24.3	3.60
I32	13 Oct 2020	6	17.11	64.85	7.6	33.47	8.0	24.3	5.76
I32	13 Oct 2020	7	16.77	64.61	7.4	33.47	8.0	24.4	6.66
I32	13 Oct 2020	8	16.60	66.11	7.2	33.47	8.0	24.4	6.67
I32	13 Oct 2020	9	15.84	60.47	6.8	33.46	7.9	24.6	6.31
I32	20 Oct 2020	1	18.41	80.77	8.2	33.46	8.1	24.0	0.95
I32	20 Oct 2020	2	18.31	80.14	8.1	33.46	8.1	24.0	1.06
I32	20 Oct 2020	3	17.54	74.16	7.8	33.47	8.1	24.2	1.69
I32	20 Oct 2020	4	17.22	68.85	7.8	33.45	8.1	24.3	2.47
I32	20 Oct 2020	5	16.67	73.59	7.9	33.45	8.1	24.4	3.65
I32	20 Oct 2020	6	16.49	72.07	7.6	33.45	8.1	24.4	5.01
I32	20 Oct 2020	7	16.21	67.48	6.8	33.45	8.0	24.5	5.68
I32	20 Oct 2020	8	16.05	68.97	6.6	33.45	8.0	24.5	5.04
I32	20 Oct 2020	9	15.98	71.41	6.5	33.45	8.0	24.6	4.43
I32	20 Oct 2020	10	15.88	69.90	6.4	33.45	8.0	24.6	3.76
I32	28 Oct 2020	1	16.21	70.16	6.4	33.48	8.0	24.5	4.20
I32	28 Oct 2020	2	16.05	69.96	6.3	33.48	8.0	24.6	4.72
I32	28 Oct 2020	3	15.89	68.90	6.1	33.47	7.9	24.6	5.78
I32	28 Oct 2020	4	15.72	67.38	5.9	33.46	7.9	24.6	6.01
I32	28 Oct 2020	5	15.64	67.26	5.8	33.46	7.9	24.6	5.53
I32	28 Oct 2020	6	15.54	69.62	5.8	33.46	7.9	24.7	4.94
I32	28 Oct 2020	7	15.47	72.45	5.9	33.46	7.9	24.7	4.42
I32	28 Oct 2020	8	15.42	75.61	5.9	33.46	7.9	24.7	3.82
I32	28 Oct 2020	9	15.41	78.10	5.9	33.46	7.9	24.7	3.43
I32	28 Oct 2020	10	15.42	78.45	5.9	33.46	7.9	24.7	3.25
I39	05 Oct 2020	1	20.59	76.10	8.3	33.48	8.2	23.4	2.03
I39	05 Oct 2020	2	20.35	75.96	8.3	33.48	8.2	23.5	2.34
I39	05 Oct 2020	3	20.12	76.47	8.3	33.49	8.2	23.6	2.76
I39	05 Oct 2020	4	18.78	79.43	8.3	33.52	8.2	23.9	2.61
I39	05 Oct 2020	5	17.01	80.97	8.5	33.50	8.1	24.4	2.37
I39	05 Oct 2020	6	16.79	81.45	8.3	33.46	8.1	24.4	2.76
I39	05 Oct 2020	7	16.69	80.20	8.1	33.45	8.1	24.4	3.29
I39	05 Oct 2020	8	16.63	79.55	8.0	33.45	8.1	24.4	3.70
I39	05 Oct 2020	9	16.60	79.72	8.0	33.45	8.1	24.4	3.90
I39	05 Oct 2020	10	16.55	80.40	8.0	33.46	8.1	24.4	3.88
I39	05 Oct 2020	11	16.54	80.60	7.9	33.46	8.1	24.4	3.86
I39	05 Oct 2020	12	16.47	80.42	7.8	33.46	8.1	24.5	3.74
I39	05 Oct 2020	13	16.12	79.33	7.5	33.47	8.1	24.5	3.51
I39	05 Oct 2020	14	15.71	79.64	7.3	33.47	8.0	24.6	3.29
I39	05 Oct 2020	15	15.51	80.77	7.1	33.47	8.0	24.7	3.16
I39	05 Oct 2020	16	15.43	81.50	7.0	33.47	8.0	24.7	2.86
I39	05 Oct 2020	17	15.43	80.70	7.0	33.47	8.0	24.7	2.78
I39	05 Oct 2020	18	15.44	80.38	6.9	33.47	8.0	24.7	2.65
I39	13 Oct 2020	1	19.45	83.08	8.4	33.50	8.1	23.8	0.63
I39	13 Oct 2020	2	18.98	83.07	8.3	33.52	8.1	23.9	0.66
I39	13 Oct 2020	3	17.95	82.93	8.4	33.51	8.1	24.1	0.81
I39	13 Oct 2020	4	17.30	82.63	8.1	33.48	8.1	24.3	1.07
I39	13 Oct 2020	5	16.02	82.00	8.0	33.49	8.1	24.6	1.46
I39	13 Oct 2020	6	15.41	82.38	7.6	33.45	8.0	24.7	2.02

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I39	13 Oct 2020	7	15.41	82.34	7.4	33.43	8.0	24.7	2.44
I39	13 Oct 2020	8	15.24	82.27	7.2	33.45	8.0	24.7	2.78
I39	13 Oct 2020	9	15.21	82.70	7.1	33.45	8.0	24.7	3.12
I39	13 Oct 2020	10	15.06	83.25	6.9	33.46	8.0	24.8	3.39
I39	13 Oct 2020	11	15.01	83.88	6.8	33.45	8.0	24.8	3.60
I39	13 Oct 2020	12	14.68	84.05	6.5	33.48	7.9	24.9	3.52
I39	13 Oct 2020	13	14.39	84.76	6.1	33.47	7.9	24.9	2.62
I39	13 Oct 2020	14	14.28	85.50	5.9	33.48	7.9	25.0	2.21
I39	13 Oct 2020	15	14.12	86.58	5.7	33.48	7.9	25.0	1.66
I39	13 Oct 2020	16	14.02	87.04	5.5	33.48	7.8	25.0	1.47
I39	13 Oct 2020	17	14.00	86.24	5.4	33.48	7.8	25.0	1.08
I39	13 Oct 2020	18	14.01	85.68	5.4	33.49	7.8	25.0	0.99
I39	20 Oct 2020	1	19.57	84.98	8.2	33.49	8.1	23.7	1.14
I39	20 Oct 2020	2	19.38	84.93	8.1	33.49	8.1	23.8	1.27
I39	20 Oct 2020	3	17.88	84.26	8.4	33.52	8.1	24.2	1.73
I39	20 Oct 2020	4	17.47	83.67	8.4	33.47	8.1	24.2	2.18
I39	20 Oct 2020	5	17.03	80.45	8.3	33.44	8.1	24.3	3.19
I39	20 Oct 2020	6	16.78	79.78	8.2	33.45	8.1	24.4	3.63
I39	20 Oct 2020	7	16.70	79.63	8.0	33.44	8.1	24.4	3.94
I39	20 Oct 2020	8	16.27	78.86	7.7	33.45	8.1	24.5	4.55
I39	20 Oct 2020	9	15.77	79.67	7.4	33.46	8.0	24.6	4.51
I39	20 Oct 2020	10	15.70	80.17	7.1	33.45	8.0	24.6	4.43
I39	20 Oct 2020	11	15.55	80.76	6.5	33.45	8.0	24.7	4.12
I39	20 Oct 2020	12	15.53	82.13	6.3	33.45	7.9	24.7	3.73
I39	20 Oct 2020	13	15.45	82.89	6.2	33.45	7.9	24.7	3.31
I39	20 Oct 2020	14	15.29	83.46	6.1	33.46	7.9	24.7	2.69
I39	20 Oct 2020	15	15.14	84.29	6.0	33.46	7.9	24.8	2.10
I39	20 Oct 2020	16	15.05	85.05	5.8	33.46	7.9	24.8	1.62
I39	20 Oct 2020	17	14.71	85.51	5.6	33.47	7.9	24.9	1.26
I39	20 Oct 2020	18	14.65	85.77	5.5	33.47	7.9	24.9	1.20
I39	28 Oct 2020	1	16.97	76.82	7.6	33.51	8.1	24.4	4.34
I39	28 Oct 2020	2	17.03	77.09	7.6	33.51	8.1	24.4	4.22
I39	28 Oct 2020	3	16.90	76.48	7.6	33.51	8.1	24.4	5.38
I39	28 Oct 2020	4	16.86	75.85	7.5	33.50	8.1	24.4	6.51
I39	28 Oct 2020	5	16.81	74.90	7.5	33.50	8.1	24.4	6.86
I39	28 Oct 2020	6	16.80	75.10	7.5	33.50	8.1	24.4	6.96
I39	28 Oct 2020	7	16.79	75.53	7.4	33.50	8.1	24.4	6.97
I39	28 Oct 2020	8	16.78	75.71	7.4	33.50	8.1	24.4	7.04
I39	28 Oct 2020	9	16.75	75.77	7.4	33.50	8.1	24.4	7.00
I39	28 Oct 2020	10	16.73	75.82	7.3	33.50	8.1	24.4	6.72
I39	28 Oct 2020	11	16.61	76.35	7.1	33.50	8.1	24.5	6.03
I39	28 Oct 2020	12	15.65	77.42	6.8	33.51	8.0	24.7	4.51
I39	28 Oct 2020	13	15.26	80.91	6.5	33.46	8.0	24.7	3.28
I39	28 Oct 2020	14	15.19	84.60	6.4	33.45	8.0	24.7	2.78
I39	28 Oct 2020	15	15.16	85.34	6.3	33.45	7.9	24.7	2.55
I39	28 Oct 2020	16	15.17	85.55	6.2	33.45	7.9	24.7	2.42
I39	28 Oct 2020	17	15.16	85.62	6.2	33.45	7.9	24.7	2.39
I39	28 Oct 2020	18	15.15	85.56	6.2	33.45	7.9	24.7	2.27
I40	05 Oct 2020	1	19.92	76.99	8.3	33.48	8.1	23.6	1.67
I40	05 Oct 2020	2	19.41	76.63	8.3	33.48	8.1	23.8	1.90
I40	05 Oct 2020	3	19.34	75.32	8.3	33.47	8.1	23.8	2.69
I40	05 Oct 2020	4	19.29	73.65	8.3	33.47	8.1	23.8	3.70
I40	05 Oct 2020	5	19.14	72.37	8.2	33.47	8.1	23.8	4.27
I40	05 Oct 2020	6	18.75	71.10	8.0	33.47	8.1	23.9	4.55
I40	05 Oct 2020	7	18.47	70.03	7.9	33.47	8.1	24.0	4.76
I40	05 Oct 2020	8	18.20	70.14	7.9	33.47	8.1	24.0	4.86
I40	05 Oct 2020	9	18.08	71.30	7.8	33.47	8.1	24.1	4.86
I40	05 Oct 2020	10	17.77	66.04	7.6	33.47	8.1	24.2	4.58

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ -t)	Chlor (μ g/L)
I40	13 Oct 2020	1	18.10	77.90	8.0	33.46	8.1	24.1	1.19
I40	13 Oct 2020	2	17.41	77.19	7.7	33.48	8.1	24.3	1.39
I40	13 Oct 2020	3	16.92	73.20	7.2	33.47	8.0	24.4	1.48
I40	13 Oct 2020	4	16.31	67.98	6.5	33.47	8.0	24.5	1.76
I40	13 Oct 2020	5	15.91	58.47	6.2	33.46	7.9	24.6	2.25
I40	13 Oct 2020	6	15.47	53.37	5.9	33.46	7.9	24.7	1.96
I40	13 Oct 2020	7	15.38	52.41	5.7	33.45	7.9	24.7	1.78
I40	13 Oct 2020	8	15.12	51.70	5.7	33.46	7.9	24.8	1.87
I40	13 Oct 2020	9	15.03	43.97	5.8	33.45	7.9	24.8	2.05
I40	13 Oct 2020	10	15.05	39.23	5.8	33.45	7.9	24.8	2.13
I40	20 Oct 2020	1	18.16	78.50	7.6	33.44	8.1	24.0	1.29
I40	20 Oct 2020	2	17.55	78.17	7.4	33.46	8.1	24.2	1.54
I40	20 Oct 2020	3	16.75	76.02	7.2	33.44	8.0	24.4	2.01
I40	20 Oct 2020	4	16.62	76.28	7.4	33.44	8.0	24.4	2.60
I40	20 Oct 2020	5	16.56	77.82	7.2	33.44	8.0	24.4	2.84
I40	20 Oct 2020	6	16.26	78.45	6.8	33.44	8.0	24.5	2.96
I40	20 Oct 2020	7	16.09	77.88	6.4	33.44	8.0	24.5	2.72
I40	20 Oct 2020	8	15.91	75.54	6.2	33.44	7.9	24.6	2.33
I40	20 Oct 2020	9	15.79	80.07	6.1	33.45	7.9	24.6	2.06
I40	20 Oct 2020	10	15.71	80.53	6.1	33.45	7.9	24.6	1.77
I40	28 Oct 2020	1	16.60	73.42	6.8	33.46	8.0	24.4	2.49
I40	28 Oct 2020	2	16.29	72.27	6.6	33.47	8.0	24.5	2.76
I40	28 Oct 2020	3	16.07	71.27	6.4	33.46	8.0	24.5	2.56
I40	28 Oct 2020	4	15.94	74.72	6.3	33.46	8.0	24.6	2.40
I40	28 Oct 2020	5	15.84	78.91	6.2	33.46	7.9	24.6	2.39
I40	28 Oct 2020	6	15.61	80.40	6.1	33.46	7.9	24.7	2.17
I40	28 Oct 2020	7	15.51	81.32	6.0	33.46	7.9	24.7	1.80
I40	28 Oct 2020	8	15.44	81.97	6.0	33.46	7.9	24.7	1.59
I40	28 Oct 2020	9	15.41	80.30	5.9	33.46	7.9	24.7	1.45
I40	28 Oct 2020	10	15.40	78.47	5.9	33.45	7.9	24.7	1.45

NA = not available

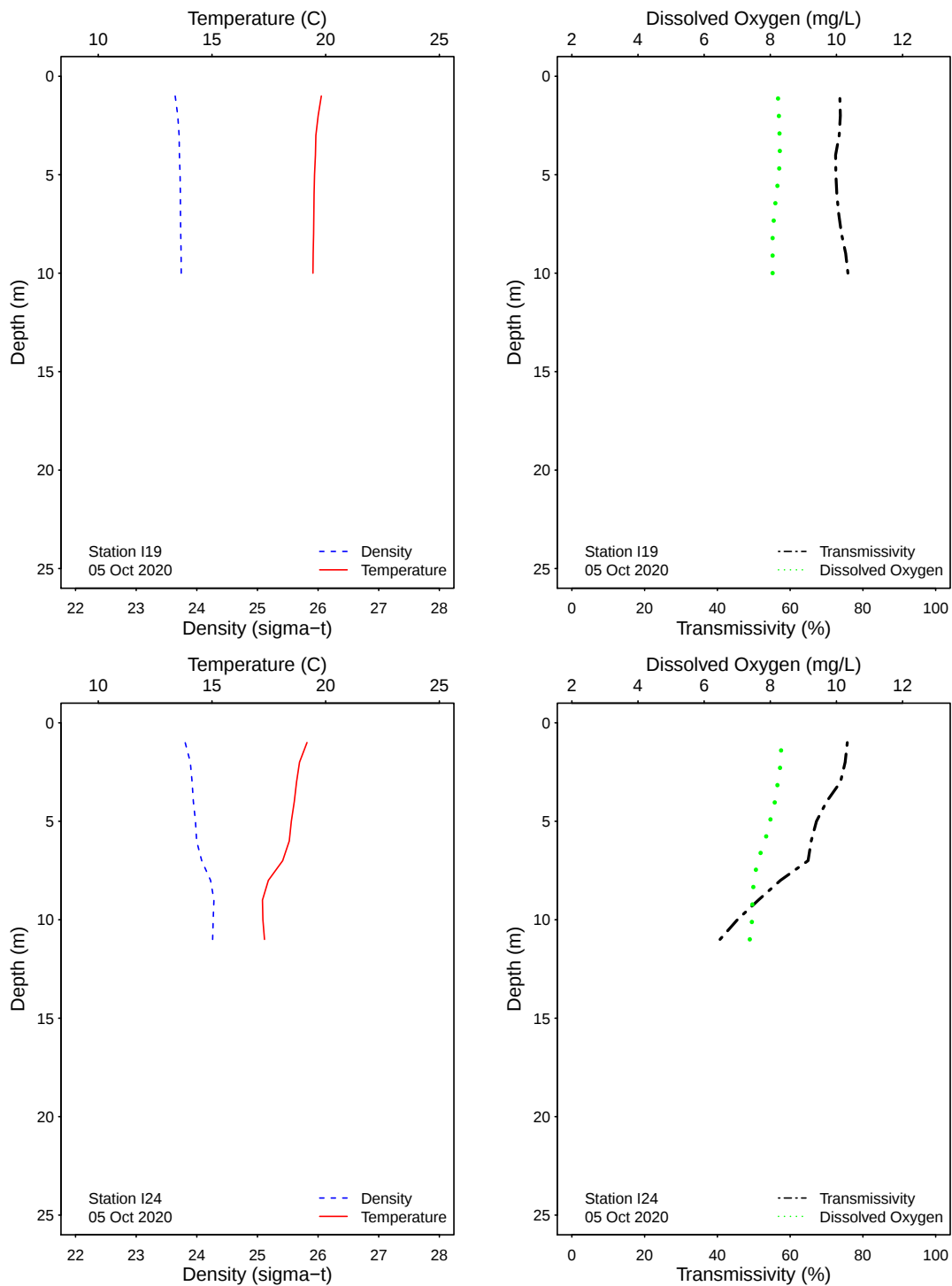


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

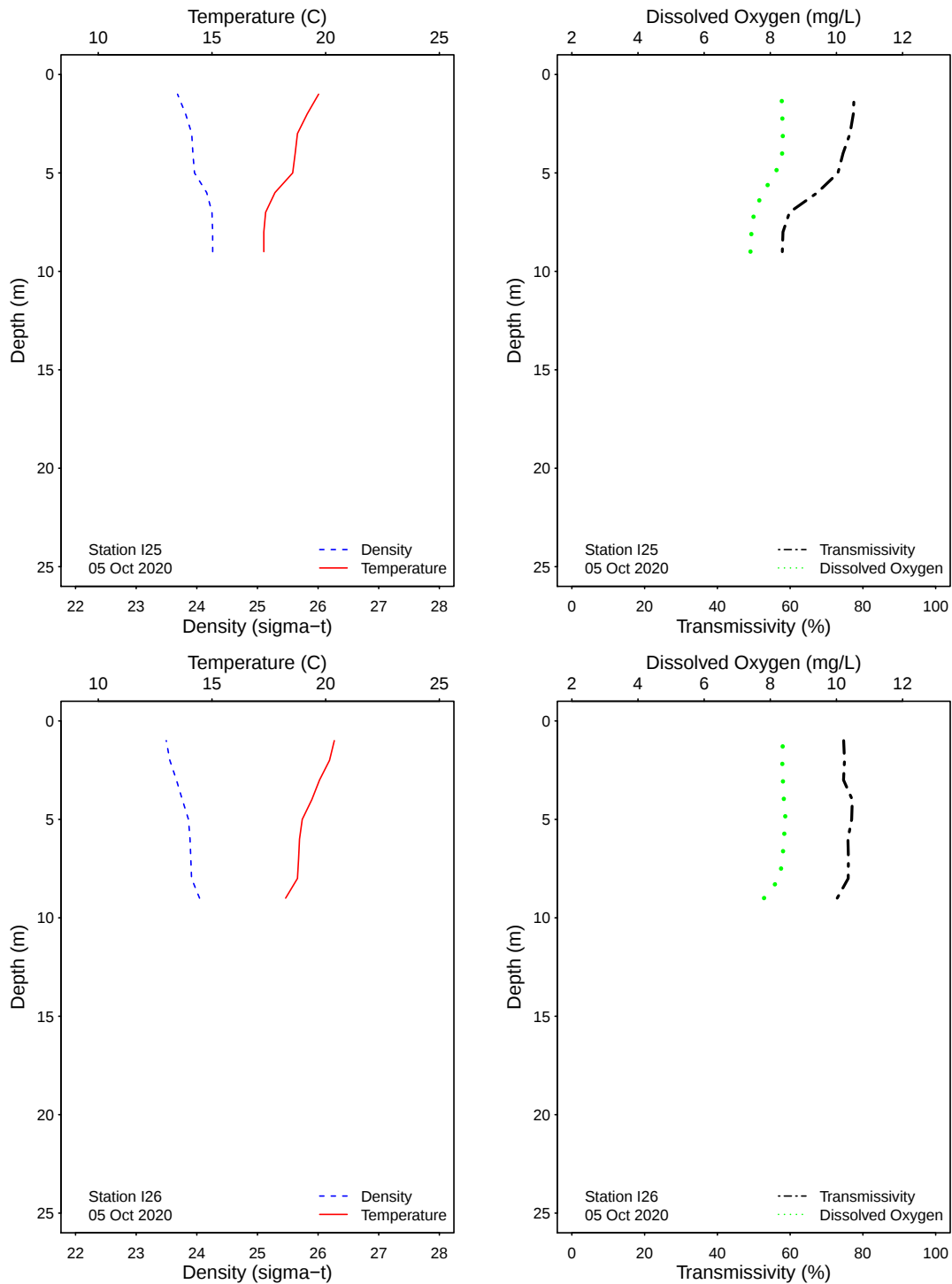


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

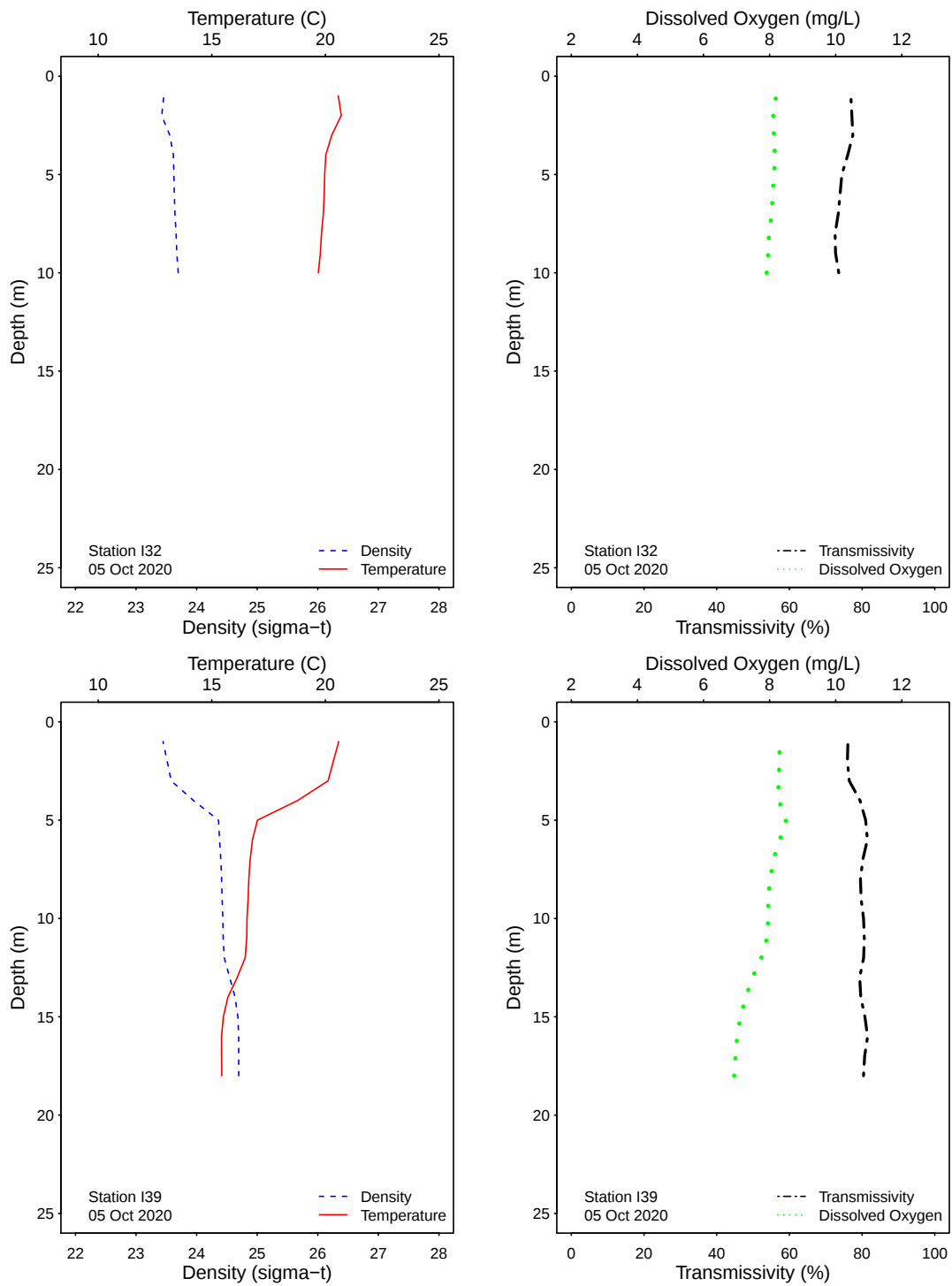


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

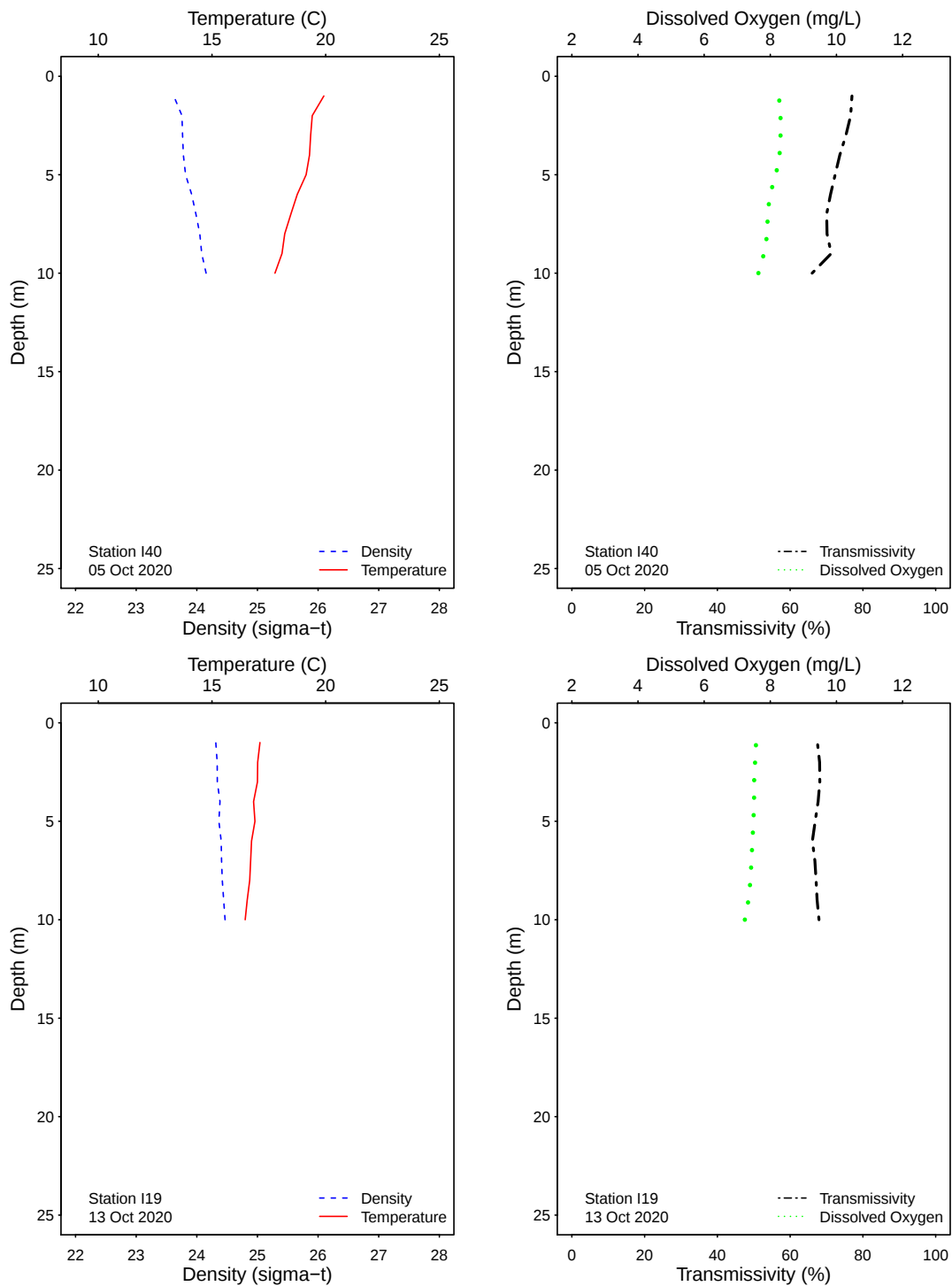


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

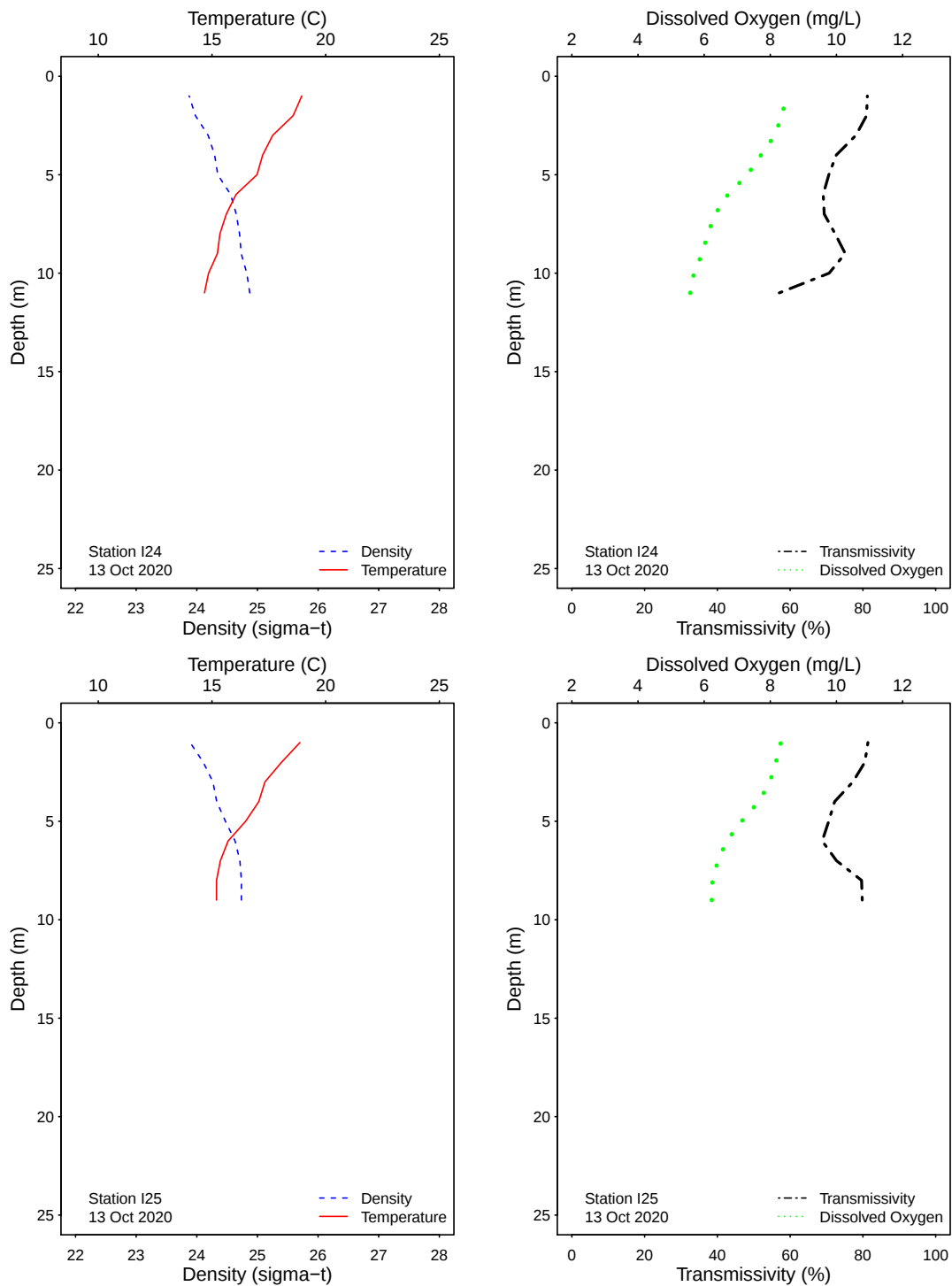


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

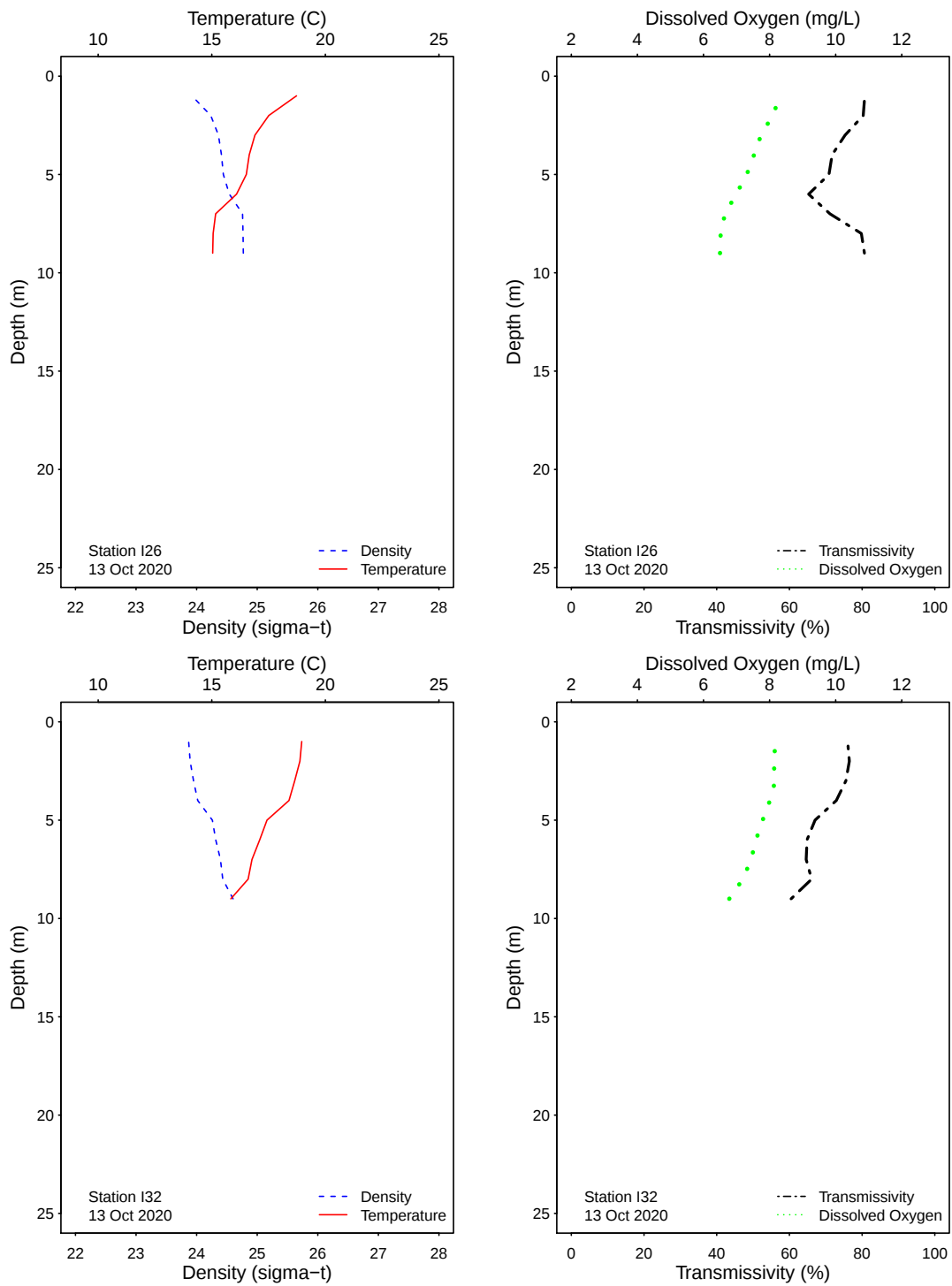


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

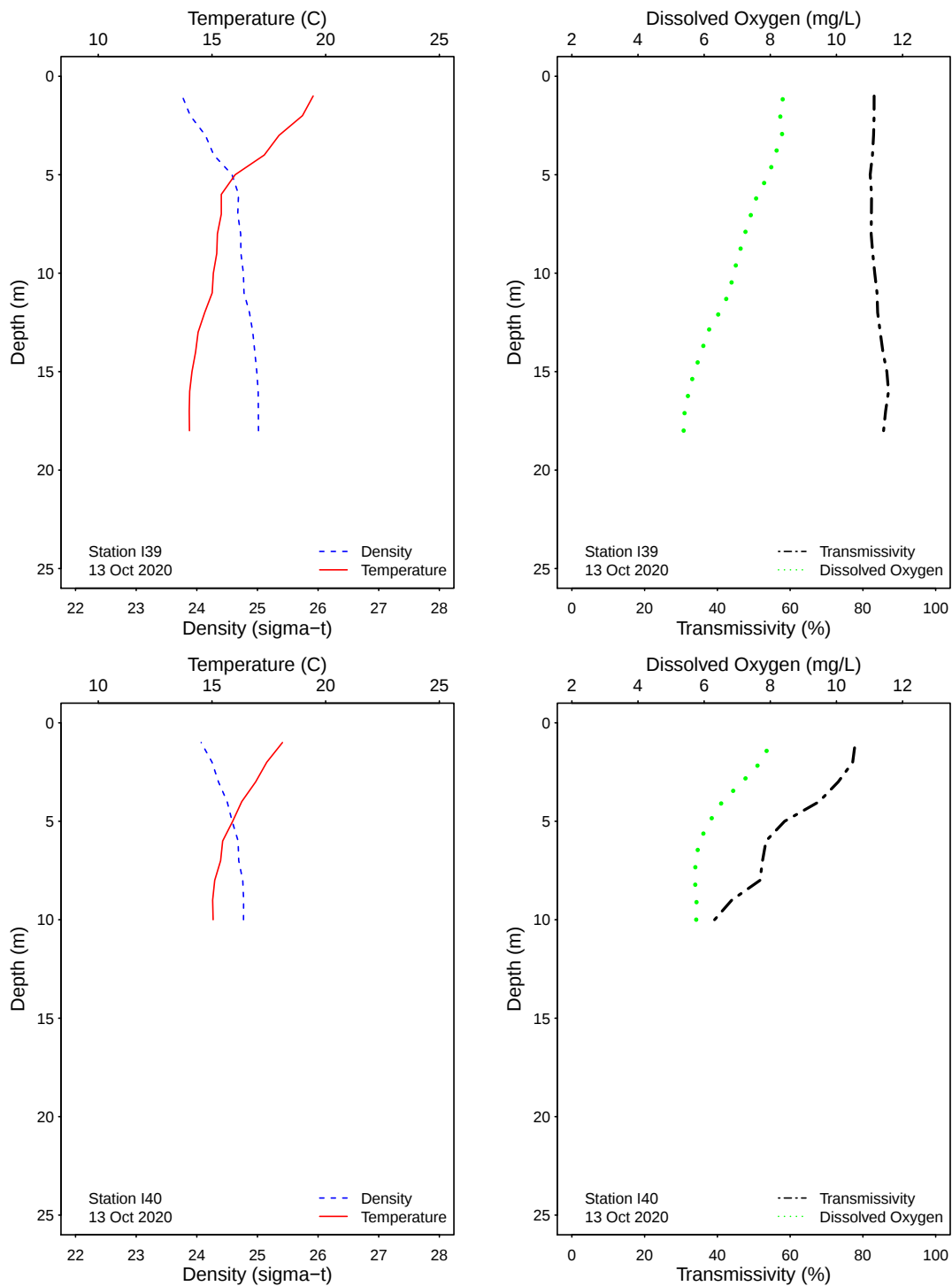


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

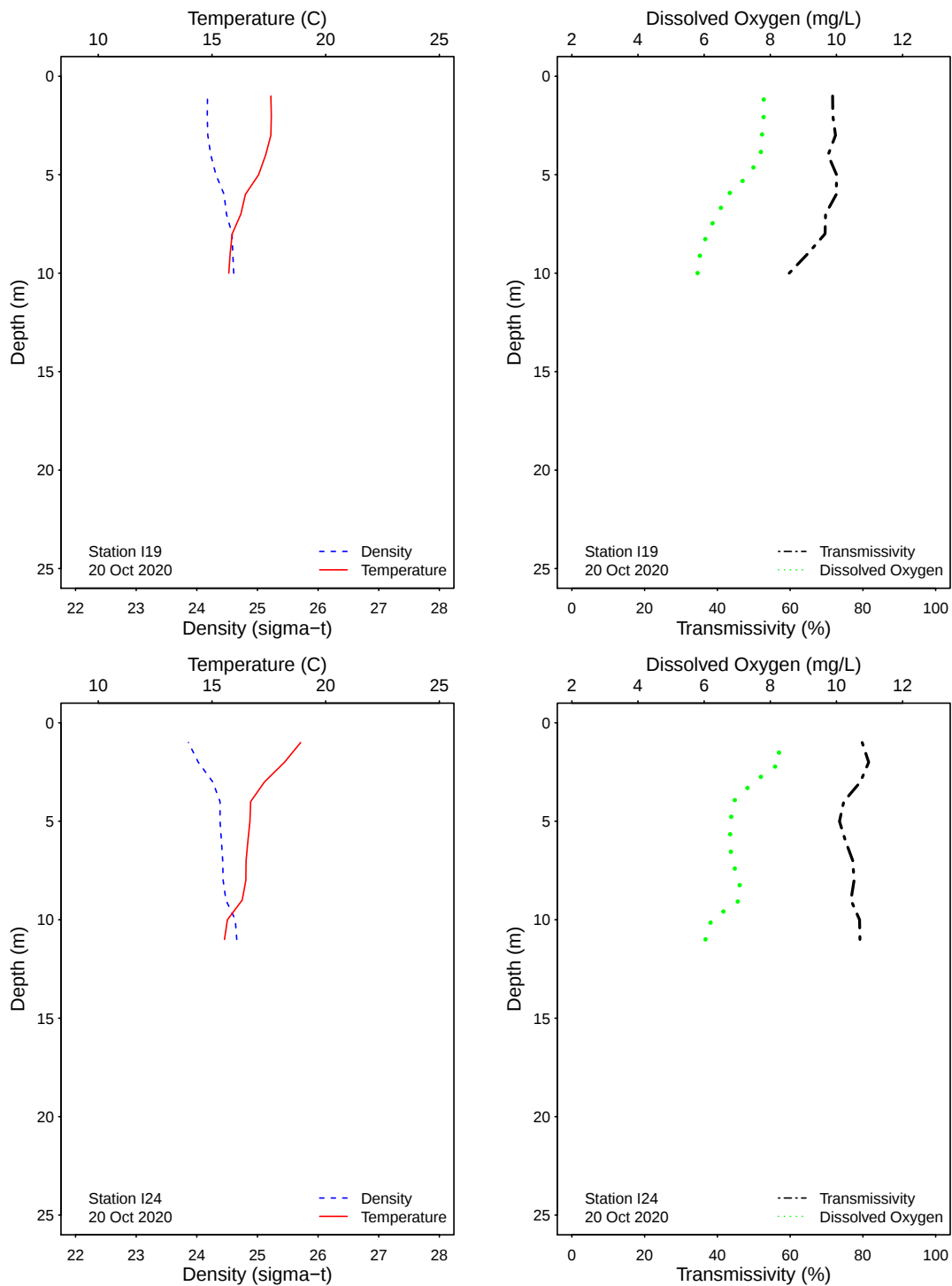


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

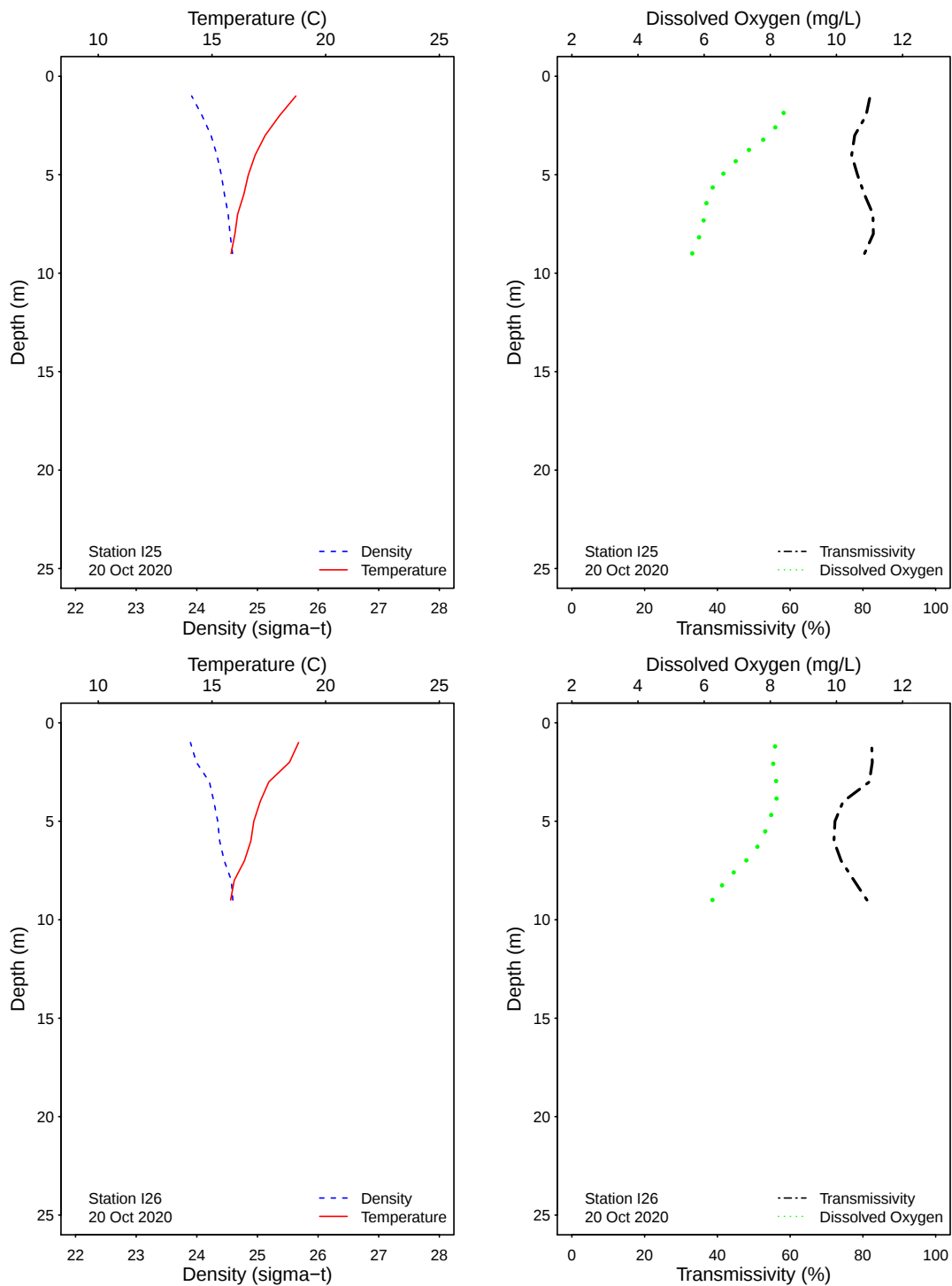


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

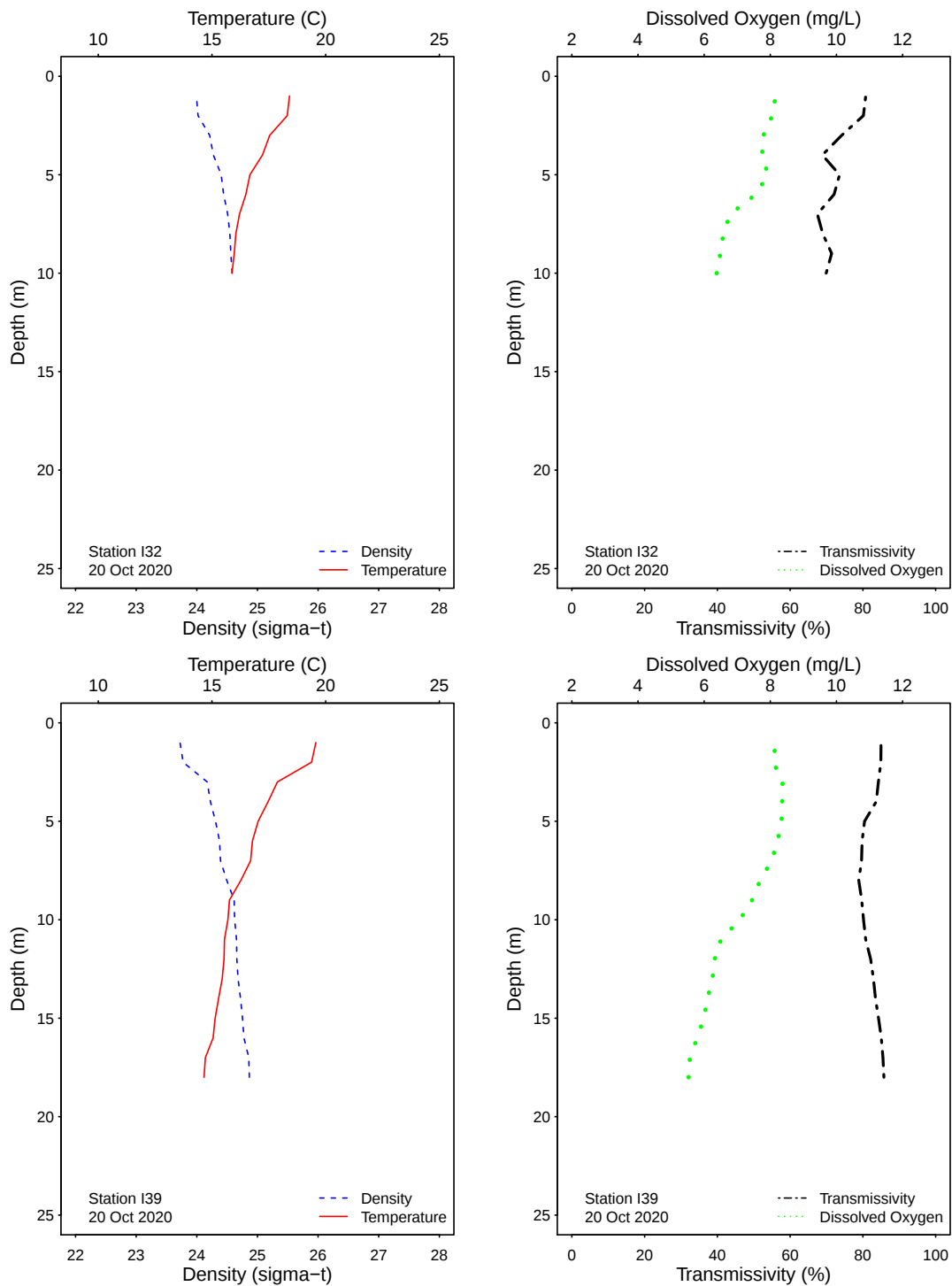


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

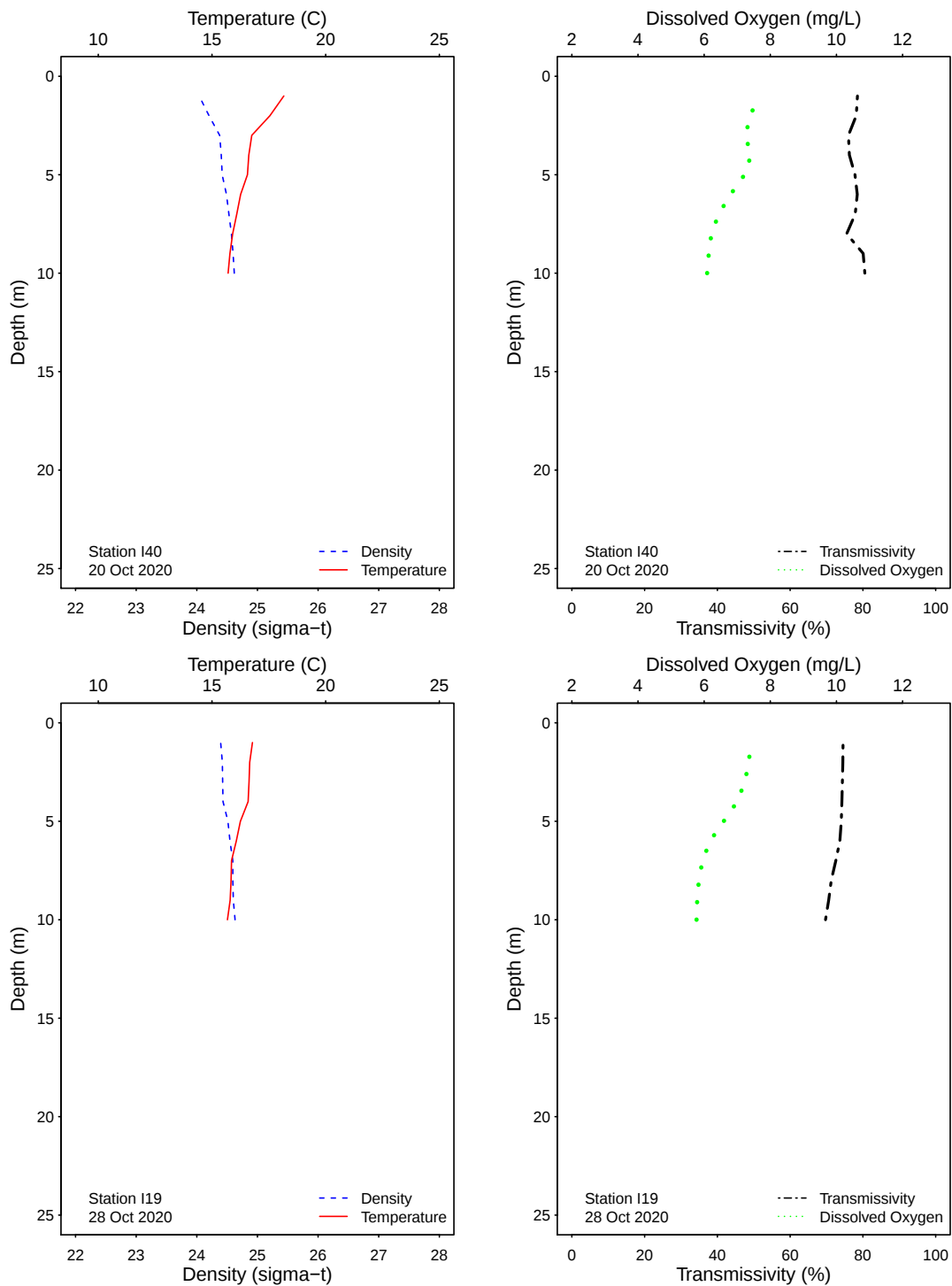


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

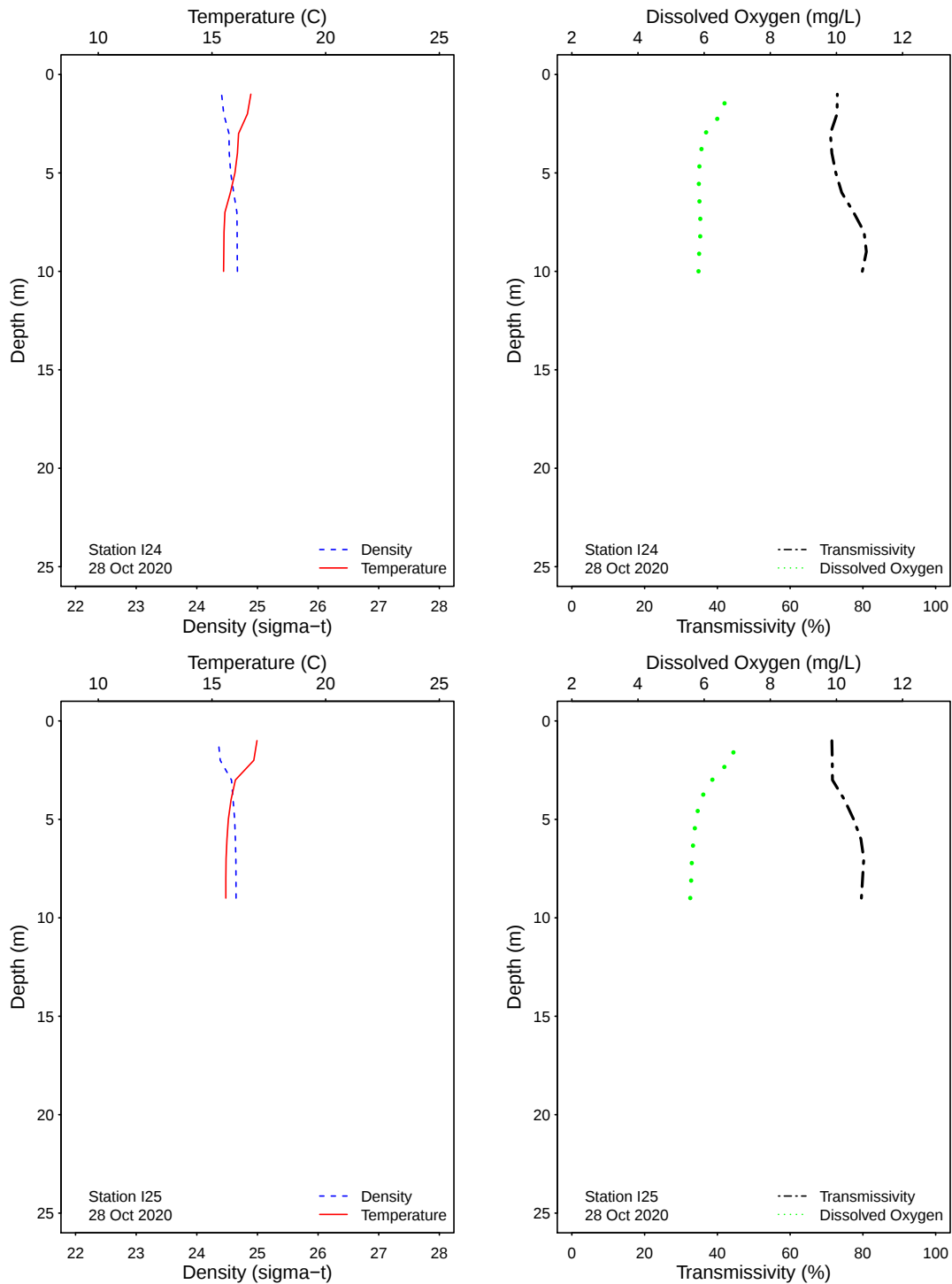


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

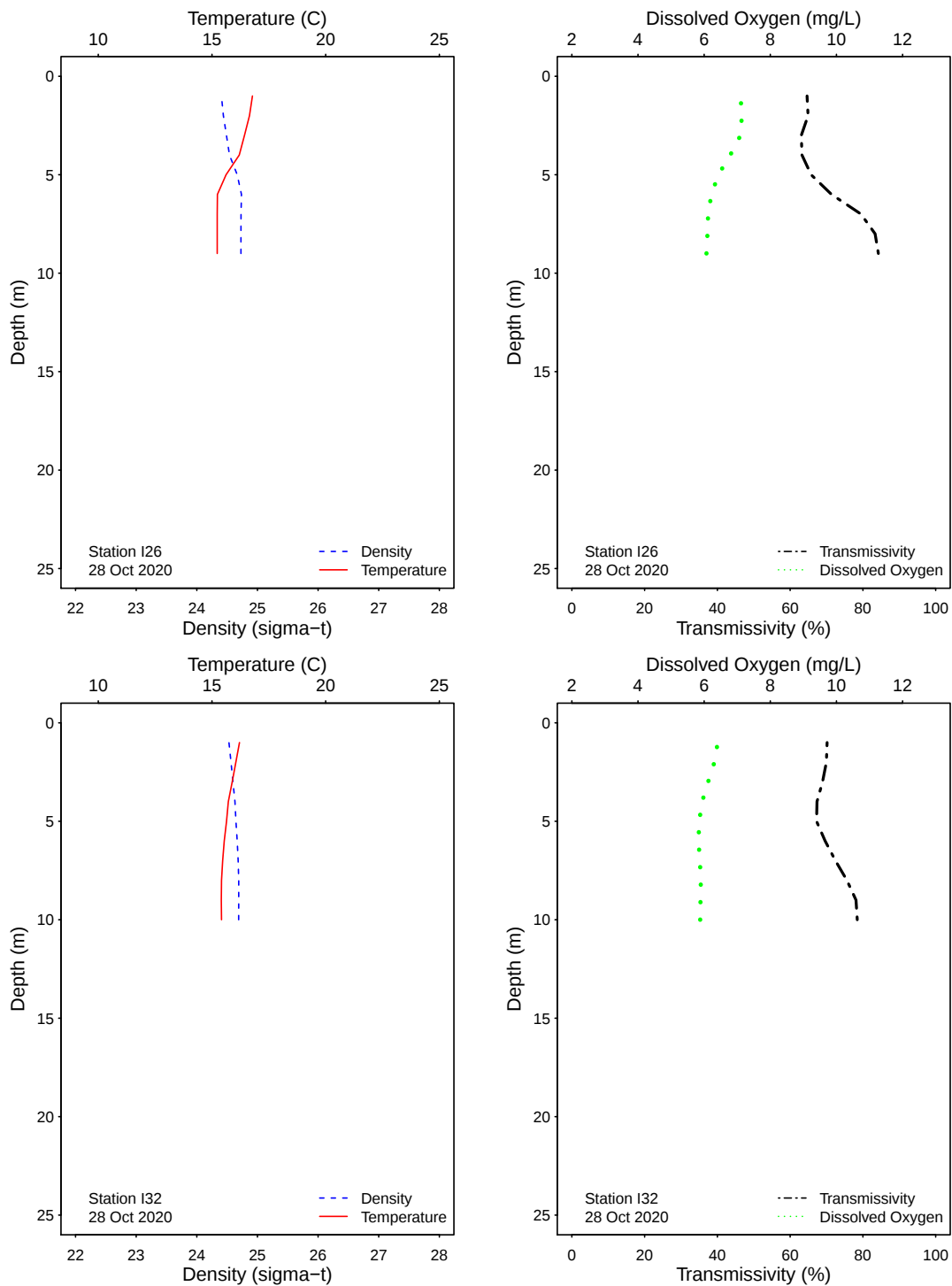


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

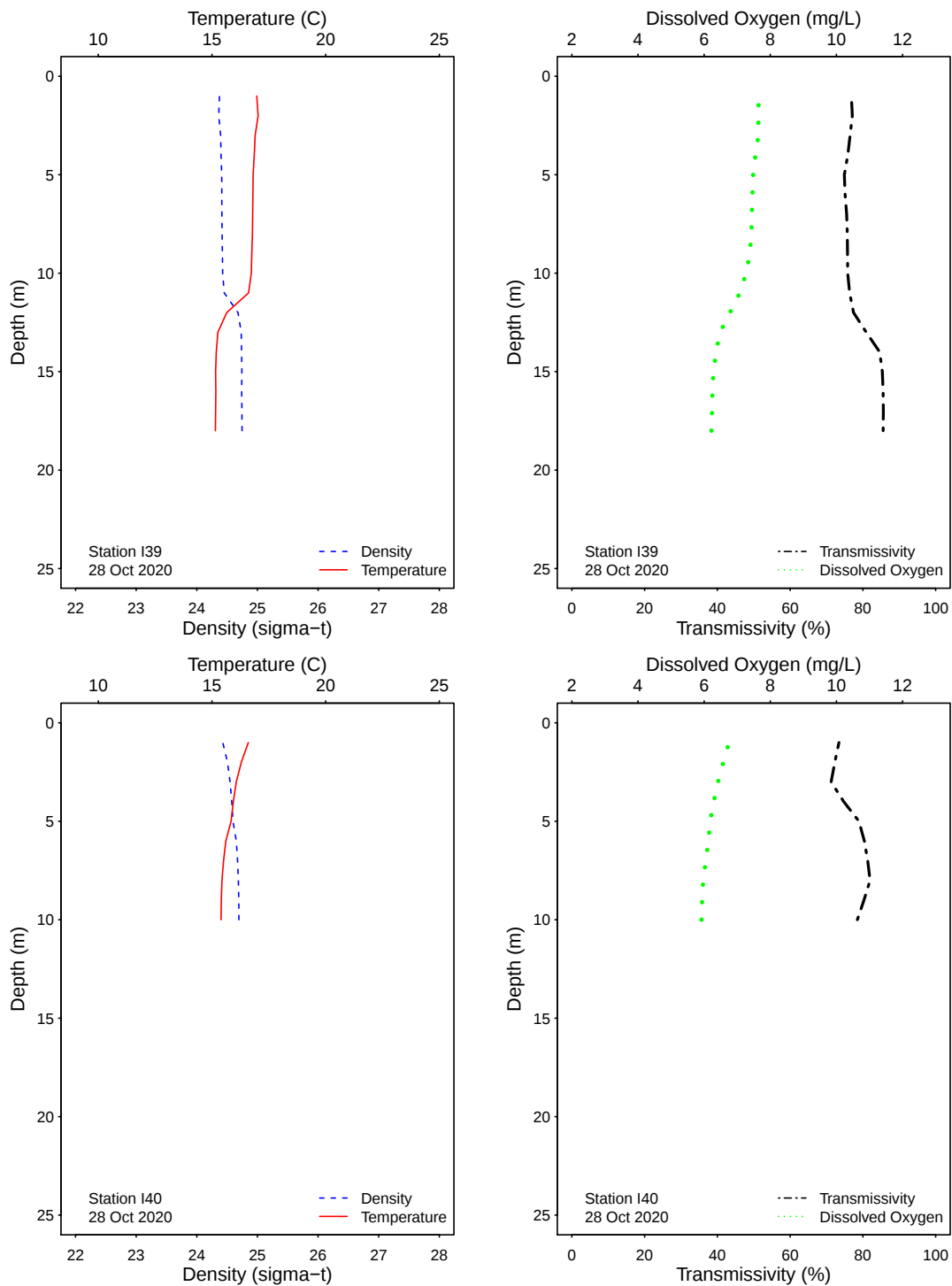


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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
I19	05 Oct 2020	6	AE	LAB DUPLICATE	60e	4e	2e
I19	13 Oct 2020	6	AE	LAB DUPLICATE	<20	2e	<2
I19	20 Oct 2020	6	AE	LAB DUPLICATE	20e	2e	<2
I19	28 Oct 2020	6	AE	LAB DUPLICATE	<20	<2	<2
I40	05 Oct 2020	6	AE	LAB DUPLICATE	<20	4e	<2
I40	13 Oct 2020	6	AE	LAB DUPLICATE	<20	<2	<2
I40	20 Oct 2020	6	AE	LAB DUPLICATE	8e	<2	<2
I40	28 Oct 2020	6	AE	LAB DUPLICATE	6e	2e	ns
S12	06 Oct 2020		AR	FIELD DUPLICATE	60e	<2	2e
S12	06 Oct 2020		AR	LAB DUPLICATE	60e	<2	2e
S12	13 Oct 2020		JF	FIELD DUPLICATE	<20	2e	<2
S12	13 Oct 2020		JF	LAB DUPLICATE	<20	2e	2e
S12	20 Oct 2020		AE	FIELD DUPLICATE	<20	<20	<2
S12	20 Oct 2020		AE	LAB DUPLICATE	80e	4e	ns
S12	27 Oct 2020		AE	FIELD DUPLICATE	<20	2e	<2
S12	27 Oct 2020		AE	LAB DUPLICATE	<20	4e	2e

ns = not sampled

ND = no data

This page intentionally left blank

APPENDIX B

New 2019 Ocean Plan Water Quality Objectives

Shore Stations

Table B.1

Summary of compliance with the Ocean Plan's 6-week 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 6 weeks unless otherwise noted (*). Values >30 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Oct 2020	15	12	14	3	3	5	17	5
02 Oct 2020	15	12	14	3	3	5	17	5
03 Oct 2020	15	12	14	3	3	5	17	5
04 Oct 2020	15	12	14	3	3	5	17	5
05 Oct 2020	15	12	14	3	3	5	17	5
06 Oct 2020	18	12	16	3	4	5	19	5
07 Oct 2020	18	12	16	3	4	5	19	5
08 Oct 2020	18	12	16	3	4	5	19	5
09 Oct 2020	18	12	16	3	4	5	19	5
10 Oct 2020	18	12	16	3	4	5	19	5
11 Oct 2020	18	12	16	3	4	5	19	5
12 Oct 2020	18	12	16	3	4	5	19	5
13 Oct 2020	16	7	10	3	5	5	12	4
14 Oct 2020	16	7	10	3	5	5	12	4
15 Oct 2020	16	7	10	3	5	5	12	4
16 Oct 2020	16	7	10	3	5	5	12	4
17 Oct 2020	16	7	10	3	5	5	12	4
18 Oct 2020	16	7	10	3	5	5	12	4
19 Oct 2020	16	7	10	3	5	5	12	4
20 Oct 2020	8	3	4	3	5	2	6	2
21 Oct 2020	8	3	4	3	5	2	6	2
22 Oct 2020	7	3	4	3	5	2	5	2
23 Oct 2020	7	3	4	3	5	2	5	2
24 Oct 2020	7	3	4	3	5	2	5	2
25 Oct 2020	7	3	4	3	5	2	5	2
26 Oct 2020	7	3	4	3	5	2	5	2
27 Oct 2020	4	3	3	2	6	2	4	2
28 Oct 2020	4	3	3	2	6	2	4	2
29 Oct 2020	4	3	3	2	6	2	4	2
30 Oct 2020	4	3	3	2	6	2	4	2
31 Oct 2020	4	3	3	2	6	2	4	2

* Geometric mean calculated using $n < 5$

Table B.2

Summary of compliance at the SBOO shore stations with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	S4	S5	S6	S8	S9	S10	S11	S12
October	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Kelp Stations

Table B.3

Summary of compliance with the Ocean Plan's 6-week 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 6 weeks unless otherwise noted (*). Values >30 CFU/100 mL exceed the standard.

Date	I19	I24	I25	I26	I32	I39	I40
01 Oct 2020	6	5	5	6	3	4	6
02 Oct 2020	6	5	5	6	3	4	6
03 Oct 2020	6	5	5	6	3	4	6
04 Oct 2020	6	5	5	6	3	4	6
05 Oct 2020	7	5	5	5	2	4	5
06 Oct 2020	7	5	5	5	2	4	5
07 Oct 2020	7	5	5	5	2	4	5
08 Oct 2020	9	6	5	6	3	4	6
09 Oct 2020	9	6	5	6	3	4	6
10 Oct 2020	9	6	5	6	3	4	6
11 Oct 2020	9	6	5	6	3	4	6
12 Oct 2020	12	7	6	7	3	5	8
13 Oct 2020	9	6	5	6	3	4	6
14 Oct 2020	9	6	5	6	3	4	6
15 Oct 2020	9	6	5	6	3	4	6
16 Oct 2020	9	6	5	6	3	4	6
17 Oct 2020	9	6	5	6	3	4	6
18 Oct 2020	9	6	5	6	3	4	6
19 Oct 2020	9	6	5	6	3	4	6
20 Oct 2020	3	2	2	2	2	2	2
21 Oct 2020	3	2	2	2	2	2	2
22 Oct 2020	3	2	2	2	2	2	2
23 Oct 2020	3	2	2	2	2	2	2
24 Oct 2020	3	2	2	2	2	2	2
25 Oct 2020	3	2	2	2	2	2	2
26 Oct 2020	3	2	2	2	2	2	2
27 Oct 2020	3	2	2	2	2	2	2
28 Oct 2020	3	2	2	2	2	2	2
29 Oct 2020	3	2	2	2	2	2	2
30 Oct 2020	3	2	2	2	2	2	2
31 Oct 2020	3	2	2	2	2	2	2

* Geometric mean calculated using n<5

Table B.4

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Statistical Threshold Value standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 110 CFU/100 mL in more than 10% of samples per month.

Date	I19	I24	I25	I26	I32	I39	I40
October	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data