

SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

SOUTH BAY WATER RECLAMATION PLANT

NPDES Permit No. CA0109045
SDRWQCB Order No. R9-2021-0011

SEPTEMBER 2024

Environmental Monitoring and Technical Services
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October 31, 2024

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 September 2024 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2021-0011, 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. R9-2021-0001, 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. R9-2021-0011, 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 weekly 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.

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 quarterly 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 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 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 water-contact standards specified in the 2019 California Ocean Plan (Ocean Plan). The six standards are defined as follows:

Water-Contact Objectives

Fecal coliform:

- (1) The 30-day geometric mean (GM) of fecal coliform density not to exceed 200 CFU/100 mL, calculated based on the five most recent samples from each site
- (2) The single sample maximum (SSM) not to exceed 400 CFU/100 mL

Enterococci:

- (1) The six-week rolling GM of *Enterococci* not to exceed 30 CFU/100 mL, calculated weekly
- (2) The statistical threshold value (STV) of 110 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner

Shellfish Harvesting Standards

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.

Total coliform:

- (1) The median total coliform density shall not exceed 70 CFU/100 mL
- (2) The STV of 230 CFU/100 mL not to be exceeded by more than 10 percent of the samples collected in a calendar month, calculated in a static manner

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 2024 Quality Assurance Report, which will be completed in March 2025.

SUMMARY OF RESULTS

➤ 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 September, each of the eight shore stations located north of the border was out of compliance with the 2019 California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
 - The 30-day running geometric mean standard for fecal coliforms was exceeded at stations S5, S10, and S11.
 - The single sample maximum (SSM) standard for fecal coliforms was exceeded at stations S5 and S10.
 - The 6-week running geometric mean standard for *Enterococcus* was exceeded at stations S4, S5, S6, S10, S11, and S12.
 - The statistical threshold value (STV) standard for *Enterococcus* was exceeded at stations S4, S5, and S10.

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

- The 30-day running median standard for total coliforms was exceeded at stations S4, S5, S6, S8, S9, S10, S11, and S12.
 - The STV standard for total coliforms was exceeded at stations S4, S5, and S10.
- Nothing of sewage origin was observed at SBOO shore stations in September.
- 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 September 3, 10, 17, 24, and 30.
- During September, two of the seven kelp bed stations were out of compliance with the various 2019 Ocean Plan water contact standards on one or more days as follows:
 - The 6-week running geometric mean standard for *Enterococcus* was exceeded at station I40.
 - The 30-day running median standard for total coliforms was exceeded at stations I19 and I40.
 - The STV standard for total coliforms was exceeded at station I40.
- Water column temperatures ranged from 13.11 to 21.79°C. The difference between surface and bottom waters ranged from 1.80 to 6.29°C.
- Concentrations of chlorophyll *a* ranged from 0.18 to 6.64 µg/L at the kelp bed stations.
- Nothing of sewage origin was observed at SBOO kelp stations in September.

➤ **Offshore Water Quality Sampling**

- Quarterly sampling was not conducted during September at the offshore stations. The next quarterly sampling is scheduled for November 2024.



TABLES AND FIGURES

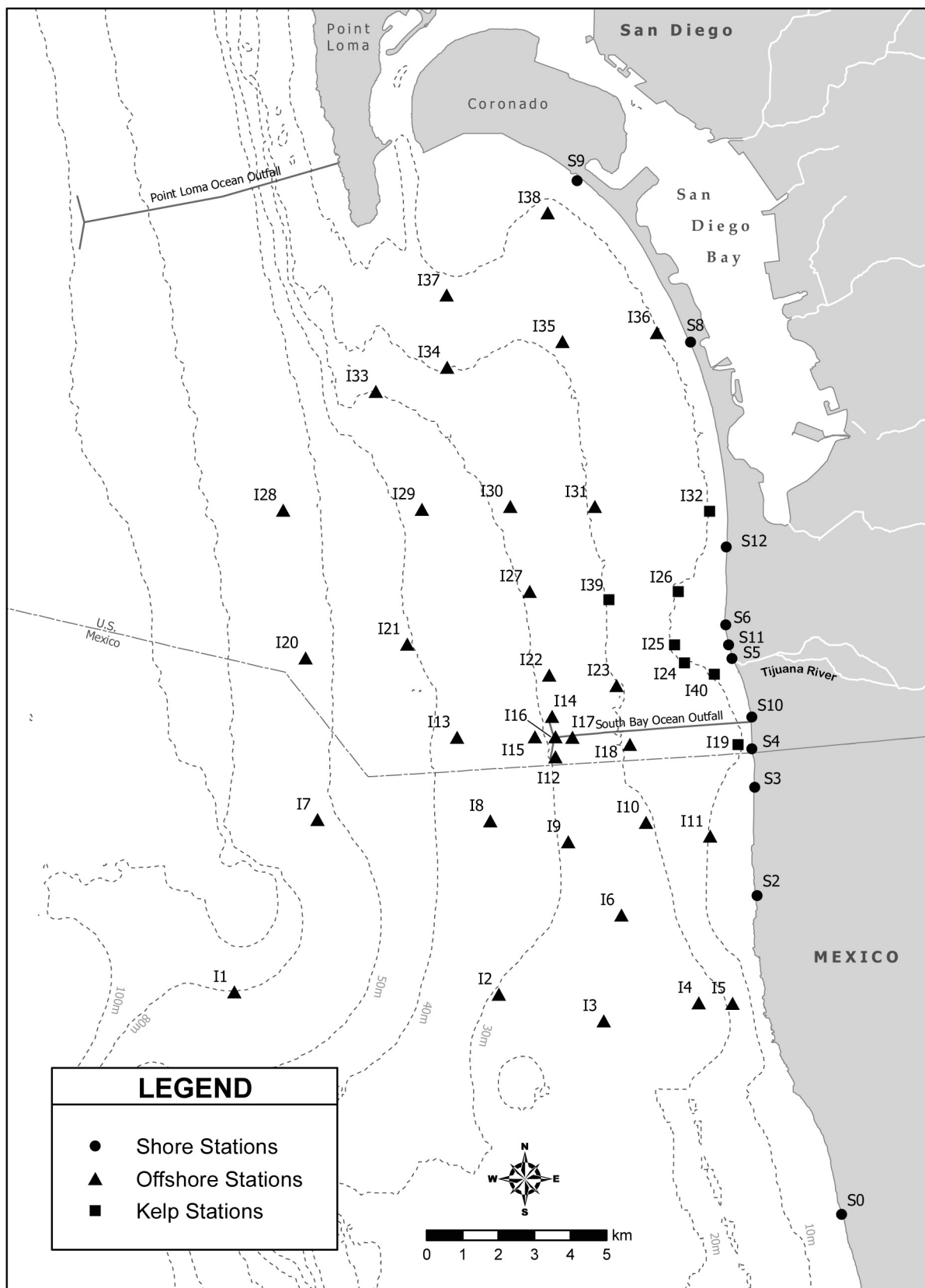


Figure 1.1 Station Map

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Shore Stations

Table 2.1

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 Sep 2024	*24	*2072	*53	*3	*7	*51	*280	*10
02 Sep 2024	*24	*2072	*53	*3	*7	*51	*280	*10
03 Sep 2024	18	1368	44	2	5	55	165	7
04 Sep 2024	18	1368	44	2	5	55	165	7
05 Sep 2024	*21	*1316	*14	*3	*5	*81	*63	*6
06 Sep 2024	*21	*1316	*14	*3	*5	*81	*63	*6
07 Sep 2024	*21	*1316	*14	*3	*5	*81	*63	*6
08 Sep 2024	*21	*1316	*14	*3	*5	*81	*63	*6
09 Sep 2024	*21	*1316	*14	*3	*5	*81	*63	*6
10 Sep 2024	24	1458	15	4	5	112	45	5
11 Sep 2024	24	1458	15	4	5	112	45	5
12 Sep 2024	*45	*861	*9	*5	*6	*259	*23	*2
13 Sep 2024	*45	*861	*9	*5	*6	*259	*23	*2
14 Sep 2024	*45	*861	*9	*5	*6	*259	*23	*2
15 Sep 2024	*45	*861	*9	*5	*6	*259	*23	*2
16 Sep 2024	*45	*861	*9	*5	*6	*259	*23	*2
17 Sep 2024	33	353	7	4	5	140	14	2
18 Sep 2024	33	353	7	4	5	140	14	2
19 Sep 2024	*56	*512	*8	*4	*3	*259	*23	*2
20 Sep 2024	*56	*512	*8	*4	*3	*259	*23	*2
21 Sep 2024	*56	*512	*8	*4	*3	*259	*23	*2
22 Sep 2024	*56	*512	*8	*4	*3	*259	*23	*2
23 Sep 2024	*56	*512	*8	*4	*3	*259	*23	*2
24 Sep 2024	*56	*512	*8	*4	*3	*259	*23	*2
25 Sep 2024	29	268	6	3	2	241	14	2
26 Sep 2024	*8	*103	*6	*4	*3	*91	*6	*2
27 Sep 2024	*8	*103	*6	*4	*3	*91	*6	*2
28 Sep 2024	*8	*103	*6	*4	*3	*91	*6	*2
29 Sep 2024	*8	*103	*6	*4	*3	*91	*6	*2
30 Sep 2024	*8	*103	*6	*4	*3	*91	*6	*2

* Geometric mean calculated using n<5

Table 2.2

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
03 Sep 2024	IC	IC	IC	IC	IC	IC	IC	IC
10 Sep 2024	IC	E	IC	IC	IC	E	IC	IC
17 Sep 2024	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2024	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.3

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 Sep 2024	21	2488	419	2	7	64	908	50
02 Sep 2024	21	2488	419	2	7	64	908	50
03 Sep 2024	22	1970	179	2	7	92	376	19
04 Sep 2024	22	1970	179	2	7	92	376	19
05 Sep 2024	22	1970	179	2	7	92	376	19
06 Sep 2024	22	1970	179	2	7	92	376	19
07 Sep 2024	22	1970	179	2	7	92	376	19
08 Sep 2024	22	1970	179	2	7	92	376	19
09 Sep 2024	22	1970	179	2	7	92	376	19
10 Sep 2024	24	1249	101	3	9	103	196	7
11 Sep 2024	24	1249	101	3	9	103	196	7
12 Sep 2024	24	1249	101	3	9	103	196	7
13 Sep 2024	24	1249	101	3	9	103	196	7
14 Sep 2024	24	1249	101	3	9	103	196	7
15 Sep 2024	24	1249	101	3	9	103	196	7
16 Sep 2024	24	1249	101	3	9	103	196	7
17 Sep 2024	29	758	37	3	9	119	62	7
18 Sep 2024	29	758	37	3	9	119	62	7
19 Sep 2024	29	758	37	3	9	119	62	7
20 Sep 2024	29	758	37	3	9	119	62	7
21 Sep 2024	29	758	37	3	9	119	62	7
22 Sep 2024	29	758	37	3	9	119	62	7
23 Sep 2024	29	758	37	3	9	119	62	7
24 Sep 2024	49	436	24	4	9	195	34	4
25 Sep 2024	29	313	23	3	7	233	21	4
26 Sep 2024	29	313	23	3	7	233	21	4
27 Sep 2024	29	313	23	3	7	233	21	4
28 Sep 2024	29	313	23	3	7	233	21	4
29 Sep 2024	29	313	23	3	7	233	21	4
30 Sep 2024	29	313	23	3	7	233	21	4

* Geometric mean calculated using n<5

Table 2.4

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
September	E	E	IC	IC	IC	E	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.5

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the SBOO shore stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >70 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Sep 2024	*220	*10600	*370	*110	*200	*200	*10400	*140
02 Sep 2024	*220	*10600	*370	*110	*200	*200	*10400	*140
03 Sep 2024	200	5200	200	200	200	200	4800	200
04 Sep 2024	200	5200	200	200	200	200	4800	200
05 Sep 2024	*300	*8500	*200	*200	*200	*200	*2500	*200
06 Sep 2024	*300	*8500	*200	*200	*200	*200	*2500	*200
07 Sep 2024	*300	*8500	*200	*200	*200	*200	*2500	*200
08 Sep 2024	*300	*8500	*200	*200	*200	*200	*2500	*200
09 Sep 2024	*300	*8500	*200	*200	*200	*200	*2500	*200
10 Sep 2024	240	10000	200	200	200	200	200	200
11 Sep 2024	240	10000	200	200	200	200	200	200
12 Sep 2024	*320	*5500	*200	*200	*200	*900	*200	*120
13 Sep 2024	*320	*5500	*200	*200	*200	*900	*200	*120
14 Sep 2024	*320	*5500	*200	*200	*200	*900	*200	*120
15 Sep 2024	*320	*5500	*200	*200	*200	*900	*200	*120
16 Sep 2024	*320	*5500	*200	*200	*200	*900	*200	*120
17 Sep 2024	240	1000	200	200	200	200	200	40
18 Sep 2024	240	1000	200	200	200	200	200	40
19 Sep 2024	*220	*5100	*200	*200	*200	*900	*200	*30
20 Sep 2024	*220	*5100	*200	*200	*200	*900	*200	*30
21 Sep 2024	*220	*5100	*200	*200	*200	*900	*200	*30
22 Sep 2024	*220	*5100	*200	*200	*200	*900	*200	*30
23 Sep 2024	*220	*5100	*200	*200	*200	*900	*200	*30
24 Sep 2024	*220	*5100	*200	*200	*200	*900	*200	*30
25 Sep 2024	200	200	200	200	200	400	200	20
26 Sep 2024	*140	*190	*200	*110	*110	*300	*180	*30
27 Sep 2024	*140	*190	*200	*110	*110	*300	*180	*30
28 Sep 2024	*140	*190	*200	*110	*110	*300	*180	*30
29 Sep 2024	*140	*190	*200	*110	*110	*300	*180	*30
30 Sep 2024	*140	*190	*200	*110	*110	*300	*180	*30

* Median calculated using n<5

Table 2.6

Summary of compliance at the SBOO shore stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10% of samples per month.

Date	S4	S5	S6	S8	S9	S10	S11	S12
September	E	E	IC	IC	IC	E	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.7

Summary of water quality parameters at the SBOO shore stations for each sample date. Densities of fecal coliform (Fecal) and *Enterococcus* (Entero) are reported as CFU/100 mL. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero
S0	03 Sep 2024	940	8600	2000e	680
S0	10 Sep 2024	920	>16000	11000	10000
S0	17 Sep 2024	955	>16000	8000	4600
S0	25 Sep 2024	905	4000	1400e	600
S10	03 Sep 2024	845	<200	74	140e
S10	10 Sep 2024	828	1600e	420	120
S10	17 Sep 2024	844	<20	12e	110
S10	25 Sep 2024	837	400e	180e	560
S11	03 Sep 2024	1033	200e	20e	60e
S11	10 Sep 2024	933	160e	12e	24e
S11	17 Sep 2024	1029	<200	<2	6e
S11	25 Sep 2024	1018	20e	2e	<2
S12	03 Sep 2024	1104	<200	<2	10e
S12	10 Sep 2024	950	40e	<2	22e
S12	17 Sep 2024	1104	<20	<2	<2
S12	25 Sep 2024	1049	20e	<2	<2
S2	03 Sep 2024	1040	<20	2e	2e
S2	10 Sep 2024	1020	<20	2e	<2
S2	17 Sep 2024	1100	<20	<2	4e
S2	25 Sep 2024	1005	<20	4e	2e
S3	03 Sep 2024	1015	20e	8e	4e
S3	10 Sep 2024	950	200e	40	12e
S3	17 Sep 2024	1030	<20	4e	10e
S3	25 Sep 2024	940	20e	4e	<2
S4	03 Sep 2024	908	<200	6e	8e
S4	10 Sep 2024	849	240e	40e	40e
S4	17 Sep 2024	911	80e	10e	140e
S4	25 Sep 2024	859	60e	<2	2e
S5	03 Sep 2024	1010	200e	260e	640
S5	10 Sep 2024	927	10000	2200e	780
S5	17 Sep 2024	1008	20e	10e	24e
S5	25 Sep 2024	959	180e	<20	60e
S6	03 Sep 2024	1045	<200	<20	72
S6	10 Sep 2024	938	200e	<20	96
S6	17 Sep 2024	1044	<200	2e	12e
S6	25 Sep 2024	1031	<20	<2	<20
S8	03 Sep 2024	1124	<200	<2	<2
S8	10 Sep 2024	1004	<200	<20	12e
S8	17 Sep 2024	1128	<20	<2	<2
S8	25 Sep 2024	1108	<2	<2	<2
S9	03 Sep 2024	1143	<200	<2	<2
S9	10 Sep 2024	1022	<200	6e	12e
S9	17 Sep 2024	1151	20e	<2	6e
S9	25 Sep 2024	1127	<20	<2	<2

ns = not sampled

ND = no data

Comments

date	station	depth	parmcode	comments
17-Sep-2024	S4			LA OF 50ML FILTER WAS RIPPED INTO THE FILTERING AREA, AMOUNT OF COLONIES COULD NOT BE COUNTED AT THIS VOLUME. COUNTED AT 5ML VOLUME INSTEAD.

Table 2.8

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

Station	Date	Parameter	Value
S0	03 Sep 2024	Arrive Time	940
S0	03 Sep 2024	Wind Speed (kts)	2.4
S0	03 Sep 2024	Wind Dir	NE
S0	03 Sep 2024	Animal Life	Bird-10; Dog-2;
S0	03 Sep 2024	Floatables	None
S0	03 Sep 2024	Current Direction	N
S0	03 Sep 2024	Water Temp (C)	19
S0	03 Sep 2024	High Tide Time	1011
S0	03 Sep 2024	Low Tide Time	408
S0	03 Sep 2024	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-6; 0.5 L/sec water flowing from storm drain
S0	10 Sep 2024	Arrive Time	920
S0	10 Sep 2024	Wind Speed (kts)	4.7
S0	10 Sep 2024	Wind Dir	NE
S0	10 Sep 2024	Animal Life	Dog-2; Seagull-10;
S0	10 Sep 2024	Floatables	None
S0	10 Sep 2024	Current Direction	N
S0	10 Sep 2024	Water Temp (C)	19
S0	10 Sep 2024	High Tide Time	1324
S0	10 Sep 2024	Low Tide Time	2252
S0	10 Sep 2024	Comments	Water clear; Trash-0; Kelp;Algae; Person/Walker/Jogger-5; 0.5 L/sec water flowing from storm drain
S0	17 Sep 2024	Arrive Time	955
S0	17 Sep 2024	Wind Speed (kts)	2.4
S0	17 Sep 2024	Wind Dir	NE
S0	17 Sep 2024	Animal Life	Dog-2; Seagull-10;
S0	17 Sep 2024	Floatables	None
S0	17 Sep 2024	Current Direction	N
S0	17 Sep 2024	Water Temp (C)	14
S0	17 Sep 2024	High Tide Time	918
S0	17 Sep 2024	Low Tide Time	315
S0	17 Sep 2024	Comments	Water clear; Trash-0; Algae;Kelp; Person/Walker/Jogger-5; 0.5 L/sec water flowing from storm drain
S0	25 Sep 2024	Arrive Time	905
S0	25 Sep 2024	Wind Speed (kts)	3.9
S0	25 Sep 2024	Wind Dir	NE
S0	25 Sep 2024	Animal Life	Dog-1; Seagull-10;
S0	25 Sep 2024	Floatables	None
S0	25 Sep 2024	Current Direction	N
S0	25 Sep 2024	Water Temp (C)	15
S0	25 Sep 2024	High Tide Time	648
S0	25 Sep 2024	Low Tide Time	1032
S0	25 Sep 2024	Comments	Water clear; Trash-0; Algae;Kelp; Person/Walker/Jogger-5; 0.5 L/sec water flowing from storm drain
S2	03 Sep 2024	Arrive Time	1040
S2	03 Sep 2024	Wind Speed (kts)	1.7
S2	03 Sep 2024	Wind Dir	NE
S2	03 Sep 2024	Animal Life	Bird-10; Dog-4;
S2	03 Sep 2024	Floatables	None
S2	03 Sep 2024	Current Direction	N
S2	03 Sep 2024	Water Temp (C)	19
S2	03 Sep 2024	High Tide Time	1011

Station	Date	Parameter	Value
S2	03 Sep 2024	Low Tide Time	408
S2	03 Sep 2024	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-10; No water flowing from storm drain
S2	10 Sep 2024	Arrive Time	1020
S2	10 Sep 2024	Wind Speed (kts)	2.7
S2	10 Sep 2024	Wind Dir	NE
S2	10 Sep 2024	Animal Life	Dog-2; Seagull-10;
S2	10 Sep 2024	Floatables	None
S2	10 Sep 2024	Current Direction	N
S2	10 Sep 2024	Water Temp (C)	19
S2	10 Sep 2024	High Tide Time	1324
S2	10 Sep 2024	Low Tide Time	2252
S2	10 Sep 2024	Comments	Water clear; Trash-0; Kelp;Algae; Person/Walker/Jogger-10; No water flow from storm drain
S2	17 Sep 2024	Arrive Time	1100
S2	17 Sep 2024	Wind Speed (kts)	2.1
S2	17 Sep 2024	Wind Dir	NE
S2	17 Sep 2024	Animal Life	Dog-2; Seagull-10;
S2	17 Sep 2024	Floatables	None
S2	17 Sep 2024	Current Direction	N
S2	17 Sep 2024	Water Temp (C)	14
S2	17 Sep 2024	High Tide Time	918
S2	17 Sep 2024	Low Tide Time	315
S2	17 Sep 2024	Comments	Water clear; Trash-0; Kelp;Algae; Person/Walker/Jogger-10; No water flow from storm drain
S2	25 Sep 2024	Arrive Time	1005
S2	25 Sep 2024	Wind Speed (kts)	4.1
S2	25 Sep 2024	Wind Dir	NE
S2	25 Sep 2024	Animal Life	Dog-2; Seagull-10;
S2	25 Sep 2024	Floatables	None
S2	25 Sep 2024	Current Direction	N
S2	25 Sep 2024	Water Temp (C)	15
S2	25 Sep 2024	High Tide Time	648
S2	25 Sep 2024	Low Tide Time	1032
S2	25 Sep 2024	Comments	Water clear; Trash-0; Kelp;Algae; Person/Walker/Jogger-5; No water flow from storm drain
S3	03 Sep 2024	Arrive Time	1015
S3	03 Sep 2024	Wind Speed (kts)	1.9
S3	03 Sep 2024	Wind Dir	NE
S3	03 Sep 2024	Animal Life	Bird-10; Dog-3;
S3	03 Sep 2024	Floatables	None
S3	03 Sep 2024	Current Direction	N
S3	03 Sep 2024	Water Temp (C)	19
S3	03 Sep 2024	High Tide Time	1011
S3	03 Sep 2024	Low Tide Time	408
S3	03 Sep 2024	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-10; No water flowing from storm drain
S3	10 Sep 2024	Arrive Time	950
S3	10 Sep 2024	Wind Speed (kts)	3.8
S3	10 Sep 2024	Wind Dir	NE
S3	10 Sep 2024	Animal Life	Dog-4; Seagull-10;
S3	10 Sep 2024	Floatables	None
S3	10 Sep 2024	Current Direction	N
S3	10 Sep 2024	Water Temp (C)	19
S3	10 Sep 2024	High Tide Time	1324
S3	10 Sep 2024	Low Tide Time	2252

Station	Date	Parameter	Value
S3	10 Sep 2024	Comments	Water clear; Trash-0; Kelp;Algae; Person/Walker/Jogger-10; No water flow from storm drain
S3	17 Sep 2024	Arrive Time	1030
S3	17 Sep 2024	Wind Speed (kts)	2.7
S3	17 Sep 2024	Wind Dir	NE
S3	17 Sep 2024	Animal Life	Dog-4; Seagull-10;
S3	17 Sep 2024	Floatables	None
S3	17 Sep 2024	Current Direction	N
S3	17 Sep 2024	Water Temp (C)	14
S3	17 Sep 2024	High Tide Time	918
S3	17 Sep 2024	Low Tide Time	315
S3	17 Sep 2024	Comments	Water clear; Trash-0; Algae;Kelp; Person/Walker/Jogger-10; No water flow from storm drain
S3	25 Sep 2024	Arrive Time	940
S3	25 Sep 2024	Wind Speed (kts)	3.6
S3	25 Sep 2024	Wind Dir	NE
S3	25 Sep 2024	Animal Life	Dog-3; Seagull-10;
S3	25 Sep 2024	Floatables	None
S3	25 Sep 2024	Current Direction	N
S3	25 Sep 2024	Water Temp (C)	15
S3	25 Sep 2024	High Tide Time	648
S3	25 Sep 2024	Low Tide Time	1032
S3	25 Sep 2024	Comments	Water clear; Trash-0; Algae;Kelp; Person/Walker/Jogger-10; No water flow from storm drain
S4	03 Sep 2024	Arrive Time	908
S4	03 Sep 2024	Wind Speed (kts)	4.1
S4	03 Sep 2024	Wind Dir	NW
S4	03 Sep 2024	Animal Life	
S4	03 Sep 2024	Floatables	None
S4	03 Sep 2024	Current Direction	S
S4	03 Sep 2024	Water Temp (C)	16.7
S4	03 Sep 2024	High Tide Time	1011
S4	03 Sep 2024	Low Tide Time	408
S4	03 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp
S4	10 Sep 2024	Arrive Time	849
S4	10 Sep 2024	Wind Speed (kts)	2.5
S4	10 Sep 2024	Wind Dir	NW
S4	10 Sep 2024	Animal Life	
S4	10 Sep 2024	Floatables	None
S4	10 Sep 2024	Current Direction	S
S4	10 Sep 2024	Water Temp (C)	17.9
S4	10 Sep 2024	High Tide Time	1324
S4	10 Sep 2024	Low Tide Time	2252
S4	10 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S4	17 Sep 2024	Arrive Time	911
S4	17 Sep 2024	Wind Speed (kts)	1.5
S4	17 Sep 2024	Wind Dir	W
S4	17 Sep 2024	Animal Life	
S4	17 Sep 2024	Floatables	None
S4	17 Sep 2024	Current Direction	S
S4	17 Sep 2024	Water Temp (C)	16.4
S4	17 Sep 2024	High Tide Time	918
S4	17 Sep 2024	Low Tide Time	315
S4	17 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S4	25 Sep 2024	Arrive Time	859

Station	Date	Parameter	Value
S4	25 Sep 2024	Wind Speed (kts)	6.4
S4	25 Sep 2024	Wind Dir	NW
S4	25 Sep 2024	Animal Life	
S4	25 Sep 2024	Floatables	None
S4	25 Sep 2024	Current Direction	S
S4	25 Sep 2024	Water Temp (C)	16
S4	25 Sep 2024	High Tide Time	648
S4	25 Sep 2024	Low Tide Time	1032
S4	25 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S10	03 Sep 2024	Arrive Time	845
S10	03 Sep 2024	Wind Speed (kts)	4.7
S10	03 Sep 2024	Wind Dir	NW
S10	03 Sep 2024	Animal Life	
S10	03 Sep 2024	Floatables	None
S10	03 Sep 2024	Current Direction	S
S10	03 Sep 2024	Water Temp (C)	16.5
S10	03 Sep 2024	High Tide Time	1011
S10	03 Sep 2024	Low Tide Time	408
S10	03 Sep 2024	Comments	Water clear; Trash-0; Kelp;Seagrass
S10	10 Sep 2024	Arrive Time	828
S10	10 Sep 2024	Wind Speed (kts)	1.8
S10	10 Sep 2024	Wind Dir	NW
S10	10 Sep 2024	Animal Life	
S10	10 Sep 2024	Floatables	None
S10	10 Sep 2024	Current Direction	S
S10	10 Sep 2024	Water Temp (C)	16.9
S10	10 Sep 2024	High Tide Time	1324
S10	10 Sep 2024	Low Tide Time	2252
S10	10 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S10	17 Sep 2024	Arrive Time	844
S10	17 Sep 2024	Wind Speed (kts)	0.9
S10	17 Sep 2024	Wind Dir	W
S10	17 Sep 2024	Animal Life	
S10	17 Sep 2024	Floatables	None
S10	17 Sep 2024	Current Direction	S
S10	17 Sep 2024	Water Temp (C)	15.3
S10	17 Sep 2024	High Tide Time	918
S10	17 Sep 2024	Low Tide Time	315
S10	17 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S10	25 Sep 2024	Arrive Time	837
S10	25 Sep 2024	Wind Speed (kts)	5.4
S10	25 Sep 2024	Wind Dir	NW
S10	25 Sep 2024	Animal Life	
S10	25 Sep 2024	Floatables	None
S10	25 Sep 2024	Current Direction	S
S10	25 Sep 2024	Water Temp (C)	15.3
S10	25 Sep 2024	High Tide Time	648
S10	25 Sep 2024	Low Tide Time	1032
S10	25 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S5	03 Sep 2024	Arrive Time	1010
S5	03 Sep 2024	Wind Speed (kts)	7.5
S5	03 Sep 2024	Wind Dir	NW
S5	03 Sep 2024	Animal Life	
S5	03 Sep 2024	Floatables	None
S5	03 Sep 2024	Current Direction	S
S5	03 Sep 2024	Water Temp (C)	20.4

Station	Date	Parameter	Value
S5	03 Sep 2024	High Tide Time	1011
S5	03 Sep 2024	Low Tide Time	408
S5	03 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp; Person/Walker/Jogger-1
S5	10 Sep 2024	Arrive Time	927
S5	10 Sep 2024	Wind Speed (kts)	1.5
S5	10 Sep 2024	Wind Dir	W
S5	10 Sep 2024	Animal Life	
S5	10 Sep 2024	Floatables	None
S5	10 Sep 2024	Current Direction	S
S5	10 Sep 2024	Water Temp (C)	19.9
S5	10 Sep 2024	High Tide Time	1324
S5	10 Sep 2024	Low Tide Time	2252
S5	10 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S5	17 Sep 2024	Arrive Time	1008
S5	17 Sep 2024	Wind Speed (kts)	1.5
S5	17 Sep 2024	Wind Dir	W
S5	17 Sep 2024	Animal Life	
S5	17 Sep 2024	Floatables	None
S5	17 Sep 2024	Current Direction	S
S5	17 Sep 2024	Water Temp (C)	15.8
S5	17 Sep 2024	High Tide Time	918
S5	17 Sep 2024	Low Tide Time	315
S5	17 Sep 2024	Comments	Water clear; Boater/Kayaker-2; Trash-1; Seagrass;Kelp
S5	25 Sep 2024	Arrive Time	959
S5	25 Sep 2024	Wind Speed (kts)	8
S5	25 Sep 2024	Wind Dir	NW
S5	25 Sep 2024	Animal Life	
S5	25 Sep 2024	Floatables	None
S5	25 Sep 2024	Current Direction	S
S5	25 Sep 2024	Water Temp (C)	15
S5	25 Sep 2024	High Tide Time	648
S5	25 Sep 2024	Low Tide Time	1032
S5	25 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp
S11	03 Sep 2024	Arrive Time	1033
S11	03 Sep 2024	Wind Speed (kts)	6.9
S11	03 Sep 2024	Wind Dir	NW
S11	03 Sep 2024	Animal Life	
S11	03 Sep 2024	Floatables	None
S11	03 Sep 2024	Current Direction	S
S11	03 Sep 2024	Water Temp (C)	15.6
S11	03 Sep 2024	High Tide Time	1011
S11	03 Sep 2024	Low Tide Time	408
S11	03 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp; Person/Walker/Jogger-1
S11	10 Sep 2024	Arrive Time	933
S11	10 Sep 2024	Wind Speed (kts)	2.5
S11	10 Sep 2024	Wind Dir	W
S11	10 Sep 2024	Animal Life	
S11	10 Sep 2024	Floatables	None
S11	10 Sep 2024	Current Direction	S
S11	10 Sep 2024	Water Temp (C)	17.8
S11	10 Sep 2024	High Tide Time	1324
S11	10 Sep 2024	Low Tide Time	2252
S11	10 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp

Station	Date	Parameter	Value
S11	17 Sep 2024	Arrive Time	1029
S11	17 Sep 2024	Wind Speed (kts)	1.5
S11	17 Sep 2024	Wind Dir	W
S11	17 Sep 2024	Animal Life	
S11	17 Sep 2024	Floatables	None
S11	17 Sep 2024	Current Direction	S
S11	17 Sep 2024	Water Temp (C)	15.8
S11	17 Sep 2024	High Tide Time	918
S11	17 Sep 2024	Low Tide Time	315
S11	17 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp
S11	25 Sep 2024	Arrive Time	1018
S11	25 Sep 2024	Wind Speed (kts)	8.3
S11	25 Sep 2024	Wind Dir	NW
S11	25 Sep 2024	Animal Life	
S11	25 Sep 2024	Floatables	Red algae
S11	25 Sep 2024	Current Direction	S
S11	25 Sep 2024	Water Temp (C)	15.1
S11	25 Sep 2024	High Tide Time	648
S11	25 Sep 2024	Low Tide Time	1032
S11	25 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp
S6	03 Sep 2024	Arrive Time	1045
S6	03 Sep 2024	Wind Speed (kts)	6.8
S6	03 Sep 2024	Wind Dir	NW
S6	03 Sep 2024	Animal Life	
S6	03 Sep 2024	Floatables	None
S6	03 Sep 2024	Current Direction	S
S6	03 Sep 2024	Water Temp (C)	188
S6	03 Sep 2024	High Tide Time	1011
S6	03 Sep 2024	Low Tide Time	408
S6	03 Sep 2024	Comments	Water clear; Fisherpersion-1; Trash-1; Kelp;Algae;Seagrass
S6	10 Sep 2024	Arrive Time	938
S6	10 Sep 2024	Wind Speed (kts)	2.5
S6	10 Sep 2024	Wind Dir	NW
S6	10 Sep 2024	Animal Life	
S6	10 Sep 2024	Floatables	None
S6	10 Sep 2024	Current Direction	S
S6	10 Sep 2024	Water Temp (C)	16.3
S6	10 Sep 2024	High Tide Time	1324
S6	10 Sep 2024	Low Tide Time	2252
S6	10 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S6	17 Sep 2024	Arrive Time	1044
S6	17 Sep 2024	Wind Speed (kts)	2.9
S6	17 Sep 2024	Wind Dir	W
S6	17 Sep 2024	Animal Life	
S6	17 Sep 2024	Floatables	None
S6	17 Sep 2024	Current Direction	S
S6	17 Sep 2024	Water Temp (C)	15.8
S6	17 Sep 2024	High Tide Time	918
S6	17 Sep 2024	Low Tide Time	315
S6	17 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S6	25 Sep 2024	Arrive Time	1031
S6	25 Sep 2024	Wind Speed (kts)	6.6
S6	25 Sep 2024	Wind Dir	NW
S6	25 Sep 2024	Animal Life	
S6	25 Sep 2024	Floatables	None
S6	25 Sep 2024	Current Direction	S

Station	Date	Parameter	Value
S6	25 Sep 2024	Water Temp (C)	15.3
S6	25 Sep 2024	High Tide Time	648
S6	25 Sep 2024	Low Tide Time	1032
S6	25 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-4
S12	03 Sep 2024	Arrive Time	1104
S12	03 Sep 2024	Wind Speed (kts)	7.5
S12	03 Sep 2024	Wind Dir	W
S12	03 Sep 2024	Animal Life	
S12	03 Sep 2024	Floatables	None
S12	03 Sep 2024	Current Direction	S
S12	03 Sep 2024	Water Temp (C)	15.9
S12	03 Sep 2024	High Tide Time	1011
S12	03 Sep 2024	Low Tide Time	408
S12	03 Sep 2024	Comments	Water clear; Trash-1
S12	10 Sep 2024	Arrive Time	950
S12	10 Sep 2024	Wind Speed (kts)	3.3
S12	10 Sep 2024	Wind Dir	W
S12	10 Sep 2024	Animal Life	
S12	10 Sep 2024	Floatables	None
S12	10 Sep 2024	Current Direction	S
S12	10 Sep 2024	Water Temp (C)	17.8
S12	10 Sep 2024	High Tide Time	1324
S12	10 Sep 2024	Low Tide Time	2252
S12	10 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp
S12	17 Sep 2024	Arrive Time	1104
S12	17 Sep 2024	Wind Speed (kts)	3
S12	17 Sep 2024	Wind Dir	W
S12	17 Sep 2024	Animal Life	
S12	17 Sep 2024	Floatables	None
S12	17 Sep 2024	Current Direction	S
S12	17 Sep 2024	Water Temp (C)	19.1
S12	17 Sep 2024	High Tide Time	918
S12	17 Sep 2024	Low Tide Time	315
S12	17 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S12	25 Sep 2024	Arrive Time	1049
S12	25 Sep 2024	Wind Speed (kts)	7.1
S12	25 Sep 2024	Wind Dir	W
S12	25 Sep 2024	Animal Life	
S12	25 Sep 2024	Floatables	None
S12	25 Sep 2024	Current Direction	S
S12	25 Sep 2024	Water Temp (C)	15
S12	25 Sep 2024	High Tide Time	648
S12	25 Sep 2024	Low Tide Time	1032
S12	25 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp
S8	03 Sep 2024	Arrive Time	1124
S8	03 Sep 2024	Wind Speed (kts)	6.2
S8	03 Sep 2024	Wind Dir	W
S8	03 Sep 2024	Animal Life	
S8	03 Sep 2024	Floatables	None
S8	03 Sep 2024	Current Direction	S
S8	03 Sep 2024	Water Temp (C)	21
S8	03 Sep 2024	High Tide Time	1011
S8	03 Sep 2024	Low Tide Time	408
S8	03 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-2

Station	Date	Parameter	Value
S8	10 Sep 2024	Arrive Time	1004
S8	10 Sep 2024	Wind Speed (kts)	5.2
S8	10 Sep 2024	Wind Dir	S
S8	10 Sep 2024	Animal Life	
S8	10 Sep 2024	Floatables	None
S8	10 Sep 2024	Current Direction	S
S8	10 Sep 2024	Water Temp (C)	20
S8	10 Sep 2024	High Tide Time	1324
S8	10 Sep 2024	Low Tide Time	2252
S8	10 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S8	17 Sep 2024	Arrive Time	1128
S8	17 Sep 2024	Wind Speed (kts)	4.7
S8	17 Sep 2024	Wind Dir	W
S8	17 Sep 2024	Animal Life	
S8	17 Sep 2024	Floatables	None
S8	17 Sep 2024	Current Direction	S
S8	17 Sep 2024	Water Temp (C)	18.4
S8	17 Sep 2024	High Tide Time	918
S8	17 Sep 2024	Low Tide Time	315
S8	17 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S8	25 Sep 2024	Arrive Time	1108
S8	25 Sep 2024	Wind Speed (kts)	7.5
S8	25 Sep 2024	Wind Dir	N
S8	25 Sep 2024	Animal Life	
S8	25 Sep 2024	Floatables	None
S8	25 Sep 2024	Current Direction	S
S8	25 Sep 2024	Water Temp (C)	15.3
S8	25 Sep 2024	High Tide Time	648
S8	25 Sep 2024	Low Tide Time	1032
S8	25 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp; Person/Walker/Jogger-8
S9	03 Sep 2024	Arrive Time	1143
S9	03 Sep 2024	Wind Speed (kts)	5.7
S9	03 Sep 2024	Wind Dir	W
S9	03 Sep 2024	Animal Life	
S9	03 Sep 2024	Floatables	None
S9	03 Sep 2024	Current Direction	S
S9	03 Sep 2024	Water Temp (C)	19.8
S9	03 Sep 2024	High Tide Time	1011
S9	03 Sep 2024	Low Tide Time	408
S9	03 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass
S9	10 Sep 2024	Arrive Time	1022
S9	10 Sep 2024	Wind Speed (kts)	3.8
S9	10 Sep 2024	Wind Dir	W
S9	10 Sep 2024	Animal Life	
S9	10 Sep 2024	Floatables	None
S9	10 Sep 2024	Current Direction	S
S9	10 Sep 2024	Water Temp (C)	18.3
S9	10 Sep 2024	High Tide Time	1324
S9	10 Sep 2024	Low Tide Time	2252
S9	10 Sep 2024	Comments	Water clear; Trash-1; Seagrass;Kelp; Person/Walker/Jogger-2
S9	17 Sep 2024	Arrive Time	1151
S9	17 Sep 2024	Wind Speed (kts)	6
S9	17 Sep 2024	Wind Dir	W

Station	Date	Parameter	Value
S9	17 Sep 2024	Animal Life	
S9	17 Sep 2024	Floatables	None
S9	17 Sep 2024	Current Direction	S
S9	17 Sep 2024	Water Temp (C)	17.5
S9	17 Sep 2024	High Tide Time	918
S9	17 Sep 2024	Low Tide Time	315
S9	17 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-3
S9	25 Sep 2024	Arrive Time	1127
S9	25 Sep 2024	Wind Speed (kts)	8.5
S9	25 Sep 2024	Wind Dir	N
S9	25 Sep 2024	Animal Life	
S9	25 Sep 2024	Floatables	None
S9	25 Sep 2024	Current Direction	S
S9	25 Sep 2024	Water Temp (C)	16
S9	25 Sep 2024	High Tide Time	648
S9	25 Sep 2024	Low Tide Time	1032
S9	25 Sep 2024	Comments	Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-10

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Kelp Stations

Table 3.1

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 Sep 2024	*18	*3	*3	*3	*2	*2	*126
02 Sep 2024	*18	*3	*3	*3	*2	*2	*126
03 Sep 2024	13	3	2	2	2	2	63
04 Sep 2024	*12	*3	*3	*3	*2	*2	*34
05 Sep 2024	*12	*3	*3	*3	*2	*2	*34
06 Sep 2024	*12	*3	*3	*3	*2	*2	*34
07 Sep 2024	*12	*3	*3	*3	*2	*2	*34
08 Sep 2024	*12	*3	*3	*3	*2	*2	*34
09 Sep 2024	*12	*3	*3	*3	*2	*2	*34
10 Sep 2024	9	3	3	2	2	2	38
11 Sep 2024	*8	*3	*2	*2	*2	*2	*46
12 Sep 2024	*8	*3	*2	*2	*2	*2	*46
13 Sep 2024	*8	*3	*2	*2	*2	*2	*46
14 Sep 2024	*8	*3	*2	*2	*2	*2	*46
15 Sep 2024	*8	*3	*2	*2	*2	*2	*46
16 Sep 2024	*8	*3	*2	*2	*2	*2	*46
17 Sep 2024	7	3	2	2	2	2	26
18 Sep 2024	7	3	2	2	2	2	26
19 Sep 2024	*9	*2	*2	*2	*2	*2	*13
20 Sep 2024	*9	*2	*2	*2	*2	*2	*13
21 Sep 2024	*9	*2	*2	*2	*2	*2	*13
22 Sep 2024	*9	*2	*2	*2	*2	*2	*13
23 Sep 2024	*9	*2	*2	*2	*2	*2	*13
24 Sep 2024	7	2	2	2	2	2	9
25 Sep 2024	7	2	2	2	2	2	9
26 Sep 2024	*3	*2	*2	*2	*2	*2	*6
27 Sep 2024	*3	*2	*2	*2	*2	*2	*6
28 Sep 2024	*3	*2	*2	*2	*2	*2	*6
29 Sep 2024	*3	*2	*2	*2	*2	*2	*6
30 Sep 2024	3	2	2	2	2	2	5

* Geometric mean calculated using n<5

Table 3.2

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
03 Sep 2024	IC	IC	IC	IC	IC	IC	IC
10 Sep 2024	IC	IC	IC	IC	IC	IC	IC
17 Sep 2024	IC	IC	IC	IC	IC	IC	IC
24 Sep 2024	IC	IC	IC	IC	IC	IC	IC
30 Sep 2024	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.3

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 Sep 2024	11	3	3	3	9	3	29
02 Sep 2024	11	3	3	3	9	3	29
03 Sep 2024	12	3	3	3	4	3	28
04 Sep 2024	12	3	3	3	4	3	28
05 Sep 2024	12	3	3	3	4	3	28
06 Sep 2024	12	3	3	3	4	3	28
07 Sep 2024	12	3	3	3	4	3	28
08 Sep 2024	12	3	3	3	4	3	28
09 Sep 2024	12	3	3	3	4	3	28
10 Sep 2024	12	4	3	4	4	3	33
11 Sep 2024	17	3	2	4	3	3	44
12 Sep 2024	17	3	2	4	3	3	44
13 Sep 2024	17	3	2	4	3	3	44
14 Sep 2024	17	3	2	4	3	3	44
15 Sep 2024	17	3	2	4	3	3	44
16 Sep 2024	15	3	3	4	3	4	31
17 Sep 2024	11	3	2	4	3	3	28
18 Sep 2024	11	3	2	4	3	3	28
19 Sep 2024	11	3	2	4	3	3	28
20 Sep 2024	11	3	2	4	3	3	28
21 Sep 2024	11	3	2	4	3	3	28
22 Sep 2024	11	3	2	4	3	3	28
23 Sep 2024	14	3	2	3	3	2	44
24 Sep 2024	10	3	2	3	3	2	26
25 Sep 2024	10	3	2	3	3	2	26
26 Sep 2024	10	3	2	3	3	2	26
27 Sep 2024	10	3	2	3	3	2	26
28 Sep 2024	10	3	2	3	3	2	26
29 Sep 2024	10	3	2	3	3	2	26
30 Sep 2024	8	3	2	3	2	2	18

* Geometric mean calculated using n<5

Table 3.4

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
September	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.5

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the SBOO kelp stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >70 CFU/100 mL exceed the standard.

Date	I19		I24			I25			I26			I32			I39			I40		
	2m	6m	2m	6m	11m	2m	6m	9m	2m	6m	9m	2m	6m	9m	2m	6m	9m	2m	6m	9m
01 Sep 2024	*300	*140	*3	*20	*20	*2	*3	*5	*2	*2	*11	*12	*20	*20	*2	*3	*2	*200	*3020	*400
02 Sep 2024	*300	*140	*3	*20	*20	*2	*3	*5	*2	*2	*11	*12	*20	*20	*2	*3	*2	*200	*3020	*400
03 Sep 2024	200	40	180	2	20	2	2	2	2	2	2	4	20	20	2	2	200	440	200	
04 Sep 2024	*102	*130	*2	*20	*11	*2	*3	*5	*11	*2	*11	*3	*20	*20	*2	*3	*200	*320	*140	
05 Sep 2024	*102	*130	*2	*20	*11	*2	*3	*5	*11	*2	*11	*3	*20	*20	*2	*3	*200	*320	*140	
06 Sep 2024	*102	*130	*2	*20	*11	*2	*3	*5	*11	*2	*11	*3	*20	*20	*2	*3	*200	*320	*140	
07 Sep 2024	*102	*130	*2	*20	*11	*2	*3	*5	*11	*2	*11	*3	*20	*20	*2	*3	*200	*320	*140	
08 Sep 2024	*102	*130	*2	*20	*11	*2	*3	*5	*11	*2	*11	*3	*20	*20	*2	*3	*200	*320	*140	
09 Sep 2024	*102	*130	*2	*20	*11	*2	*3	*5	*11	*2	*11	*3	*20	*20	*2	*3	*200	*320	*140	
10 Sep 2024	4	20	180	2	20	2	4	2	2	2	20	4	20	20	2	2	200	440	200	
11 Sep 2024	*102	*11	*100	*2	*20	*11	*2	*3	*2	*2	*11	*17	*16	*16	*2	*2	*110	*470	*310	
12 Sep 2024	*102	*11	*100	*2	*20	*11	*2	*3	*2	*2	*11	*17	*16	*16	*2	*2	*110	*470	*310	
13 Sep 2024	*102	*11	*100	*2	*20	*11	*2	*3	*2	*2	*11	*17	*16	*16	*2	*2	*110	*470	*310	
14 Sep 2024	*102	*11	*100	*2	*20	*11	*2	*3	*2	*2	*11	*17	*16	*16	*2	*2	*110	*470	*310	
15 Sep 2024	*102	*11	*100	*2	*20	*11	*2	*3	*2	*2	*11	*17	*16	*16	*2	*2	*110	*470	*310	
16 Sep 2024	*102	*11	*100	*2	*20	*11	*2	*3	*2	*2	*11	*17	*16	*16	*2	*2	*110	*470	*310	
17 Sep 2024	200	20	20	2	20	2	2	2	2	2	2	14	12	2	2	20	440	200	200	
18 Sep 2024	200	20	20	2	20	2	2	2	2	2	2	14	12	2	2	20	440	200	200	
19 Sep 2024	*102	*20	*100	*2	*11	*2	*2	*2	*2	*2	*2	*8	*11	*11	*2	*20	*240	*114	*114	
20 Sep 2024	*102	*20	*100	*2	*11	*2	*2	*2	*2	*2	*2	*8	*11	*11	*2	*20	*240	*114	*114	
21 Sep 2024	*102	*20	*100	*2	*11	*2	*2	*2	*2	*2	*2	*8	*11	*11	*2	*20	*240	*114	*114	
22 Sep 2024	*102	*20	*100	*2	*11	*2	*2	*2	*2	*2	*2	*8	*11	*11	*2	*20	*240	*114	*114	
23 Sep 2024	*102	*20	*100	*2	*11	*2	*2	*2	*2	*2	*2	*8	*11	*11	*2	*20	*240	*114	*114	
24 Sep 2024	4	20	20	2	2	2	2	2	2	2	2	2	2	10	2	20	40	28	28	
25 Sep 2024	4	20	20	2	2	2	2	2	2	2	2	2	2	10	2	20	40	28	28	
26 Sep 2024	*3	*11	*20	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*6	*2	*11	*30	*24	*24	
27 Sep 2024	*3	*11	*20	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*6	*2	*11	*30	*24	*24	
28 Sep 2024	*3	*11	*20	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*6	*2	*11	*30	*24	*24	
29 Sep 2024	*3	*11	*20	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*6	*2	*11	*30	*24	*24	
30 Sep 2024	4	2	20	2	2	2	2	2	2	2	2	2	2	2	2	8	20	20	20	

* Median calculated using n<5

Table 3.6

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10% of samples per month.

	I19			I24			I25			I26			I32			I39			I40		
Date	2m	6m	11m	2m	6m	11m	2m	6m	9m	2m	6m	9m	2m	6m	9m	2m	12m	18m	2m	6m	9m
September	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	E	E

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 3.7

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; 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
I19	03 Sep 2024	1042	2	<2	<2	2e
I19	03 Sep 2024	1042	6	20e	6e	40
I19	03 Sep 2024	1042	11	180e	2e	42
I19	10 Sep 2024	1057	2	4e	<2	20e
I19	10 Sep 2024	1057	6	2e	<2	14e
I19	10 Sep 2024	1057	11	20e	4e	2e
I19	17 Sep 2024	1058	2	<200	8e	2e
I19	17 Sep 2024	1058	6	<20	<2	<2
I19	17 Sep 2024	1058	11	<20	<2	<2
I19	24 Sep 2024	1057	2	2e	<2	2e
I19	24 Sep 2024	1057	6	<2	<2	<2
I19	24 Sep 2024	1057	11	<2	<2	2e
I19	30 Sep 2024	1048	2	<20	2e	<2
I19	30 Sep 2024	1048	6	<2	<2	<2
I19	30 Sep 2024	1048	11	<20	<2	2e
I24	03 Sep 2024	1100	2	<2	<2	6e
I24	03 Sep 2024	1100	6	<2	<2	<2
I24	03 Sep 2024	1100	11	2e	<2	2e
I24	10 Sep 2024	1116	2	<2	<2	2e
I24	10 Sep 2024	1116	6	24e	8e	14e
I24	10 Sep 2024	1116	11	<20	<2	4e
I24	17 Sep 2024	1118	2	<2	<2	<2
I24	17 Sep 2024	1118	6	<2	<2	<2
I24	17 Sep 2024	1118	11	<2	<2	<2
I24	24 Sep 2024	113	2	<2	<2	<2
I24	24 Sep 2024	113	6	<2	<2	<2
I24	24 Sep 2024	113	11	<2	<2	<2
I24	30 Sep 2024	1108	2	<2	<2	<2
I24	30 Sep 2024	1108	6	<2	<2	<2
I24	30 Sep 2024	1108	11	<2	<2	<2
I25	03 Sep 2024	1106	2	<2	<2	<2
I25	03 Sep 2024	1106	6	<2	<2	<2
I25	03 Sep 2024	1106	9	<2	<2	<2
I25	10 Sep 2024	1120	2	<2	<2	<2
I25	10 Sep 2024	1120	6	6e	4e	4e
I25	10 Sep 2024	1120	9	<2	<2	2e
I25	17 Sep 2024	1125	2	<2	<2	<2
I25	17 Sep 2024	1125	6	<2	<2	<2
I25	17 Sep 2024	1125	9	<2	<2	<2

Station	Date	Time	Depth	Total	Fecal	Entero
I25	24 Sep 2024	1119	2	<2	<2	<2
I25	24 Sep 2024	1119	6	<2	<2	<2
I25	24 Sep 2024	1119	9	<2	<2	<2
I25	30 Sep 2024	1115	2	<2	<2	<2
I25	30 Sep 2024	1115	6	<2	<2	<2
I25	30 Sep 2024	1115	9	<2	<2	<2
I26	03 Sep 2024	1114	2	<20	<2	16e
I26	03 Sep 2024	1114	6	<2	<2	<2
I26	03 Sep 2024	1114	9	<2	<2	<2
I26	10 Sep 2024	1133	2	<2	<2	4e
I26	10 Sep 2024	1133	6	2e	<2	2e
I26	10 Sep 2024	1133	9	20e	2e	8e
I26	17 Sep 2024	1135	2	<2	<2	<2
I26	17 Sep 2024	1135	6	<2	<2	<2
I26	17 Sep 2024	1135	9	<2	<2	<2
I26	24 Sep 2024	1129	2	<2	<2	<2
I26	24 Sep 2024	1129	6	<2	<2	<2
I26	24 Sep 2024	1129	9	<2	<2	<2
I26	30 Sep 2024	1125	2	<2	<2	<2
I26	30 Sep 2024	1125	6	<2	<2	<2
I26	30 Sep 2024	1125	9	<2	<2	<2
I32	03 Sep 2024	1125	2	<2	2e	6e
I32	03 Sep 2024	1125	6	14e	<2	2e
I32	03 Sep 2024	1125	9	10e	<2	4e
I32	10 Sep 2024	1145	2	<20	<2	<2
I32	10 Sep 2024	1145	6	2e	<2	<2
I32	10 Sep 2024	1145	9	12e	<2	10e
I32	17 Sep 2024	1148	2	<2	<2	<2
I32	17 Sep 2024	1148	6	<2	<2	<2
I32	17 Sep 2024	1148	9	<2	<2	<2
I32	24 Sep 2024	1141	2	<2	<2	<2
I32	24 Sep 2024	1141	6	<2	<2	<2
I32	24 Sep 2024	1141	9	<2	<2	<2
I32	30 Sep 2024	1135	2	<20	<2	<2
I32	30 Sep 2024	1135	6	<2	<2	<2
I32	30 Sep 2024	1135	9	<2	<2	<2
I39	03 Sep 2024	1021	2	<2	<2	<2
I39	03 Sep 2024	1021	12	<2	<2	<2
I39	03 Sep 2024	1021	18	<20	2e	<2
I39	10 Sep 2024	1032	2	<2	<2	2e
I39	10 Sep 2024	1032	12	<2	<2	<2
I39	10 Sep 2024	1032	18	<2	<2	<2
I39	17 Sep 2024	1033	2	<2	<2	<2
I39	17 Sep 2024	1033	12	<2	<2	<2
I39	17 Sep 2024	1033	18	<2	<2	<2

Station	Date	Time	Depth	Total	Fecal	Entero
I39	24 Sep 2024	1013	2	<2	<2	<2
I39	24 Sep 2024	1013	12	<2	<2	<2
I39	24 Sep 2024	1013	18	<2	<2	<2
I39	30 Sep 2024	1018	2	<2	<2	<2
I39	30 Sep 2024	1018	12	<2	<2	<2
I39	30 Sep 2024	1018	18	<2	<2	<2
I40	03 Sep 2024	1053	2	<2	<2	36e
I40	03 Sep 2024	1053	6	40e	4e	2e
I40	03 Sep 2024	1053	9	28e	6e	6e
I40	10 Sep 2024	1106	2	<20	<2	14e
I40	10 Sep 2024	1106	6	500	96	180e
I40	10 Sep 2024	1106	9	420	76	94
I40	17 Sep 2024	1109	2	<20	<2	4e
I40	17 Sep 2024	1109	6	<20	4e	32e
I40	17 Sep 2024	1109	9	<20	<2	10e
I40	24 Sep 2024	1104	2	<2	<2	<2
I40	24 Sep 2024	1104	6	<2	<2	<2
I40	24 Sep 2024	1104	9	4e	<2	<2
I40	30 Sep 2024	1101	2	8e	<2	2e
I40	30 Sep 2024	1101	6	20e	<2	<2
I40	30 Sep 2024	1101	9	<20	<2	<2

ns = not sampled
ND = no data

Table 3.8

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

Station	Date	Parameter	Value
119	03 Sep 2024	Arrive Time	1042
119	03 Sep 2024	Depart Time	1045
119	03 Sep 2024	Air Temp (C)	20.9
119	03 Sep 2024	Visibility (mi)	10
119	03 Sep 2024	Wind Speed (kts)	5.6
119	03 Sep 2024	Wind Dir	NW
119	03 Sep 2024	Sea State	Regular Swell
119	03 Sep 2024	High Tide Time	2154
119	03 Sep 2024	Low Tide Time	400
119	03 Sep 2024	Comments	
119	10 Sep 2024	Arrive Time	1057
119	10 Sep 2024	Depart Time	1059
119	10 Sep 2024	Air Temp (C)	22.3
119	10 Sep 2024	Visibility (mi)	8
119	10 Sep 2024	Wind Speed (kts)	9.4
119	10 Sep 2024	Wind Dir	NW
119	10 Sep 2024	Sea State	Confused Swell
119	10 Sep 2024	High Tide Time	1324
119	10 Sep 2024	Low Tide Time	2254
119	10 Sep 2024	Comments	
119	17 Sep 2024	Arrive Time	1058
119	17 Sep 2024	Depart Time	1107
119	17 Sep 2024	Air Temp (C)	19
119	17 Sep 2024	Visibility (mi)	10
119	17 Sep 2024	Wind Speed (kts)	4.8
119	17 Sep 2024	Wind Dir	W
119	17 Sep 2024	Sea State	Confused Swell
119	17 Sep 2024	High Tide Time	2112
119	17 Sep 2024	Low Tide Time	306
119	17 Sep 2024	Comments	
119	24 Sep 2024	Arrive Time	1054
119	24 Sep 2024	Depart Time	1057
119	24 Sep 2024	Air Temp (C)	18.4
119	24 Sep 2024	Visibility (mi)	10
119	24 Sep 2024	Wind Speed (kts)	4.4
119	24 Sep 2024	Wind Dir	NW
119	24 Sep 2024	Sea State	Wind Ripples
119	24 Sep 2024	High Tide Time	1430
119	24 Sep 2024	Low Tide Time	2306
119	24 Sep 2024	Comments	
119	30 Sep 2024	Arrive Time	1048
119	30 Sep 2024	Depart Time	1052
119	30 Sep 2024	Air Temp (C)	15.6
119	30 Sep 2024	Visibility (mi)	7
119	30 Sep 2024	Wind Speed (kts)	1.9
119	30 Sep 2024	Wind Dir	N
119	30 Sep 2024	Sea State	Regular Swell
119	30 Sep 2024	High Tide Time	2036
119	30 Sep 2024	Low Tide Time	230
119	30 Sep 2024	Comments	
140	03 Sep 2024	Arrive Time	1053

Station	Date	Parameter	Value
140	03 Sep 2024	Depart Time	1056
140	03 Sep 2024	Air Temp (C)	20.6
140	03 Sep 2024	Visibility (mi)	10
140	03 Sep 2024	Wind Speed (kts)	7.9
140	03 Sep 2024	Wind Dir	NW
140	03 Sep 2024	Sea State	Regular Swell
140	03 Sep 2024	High Tide Time	2154
140	03 Sep 2024	Low Tide Time	400
140	03 Sep 2024	Comments	
140	10 Sep 2024	Arrive Time	1106
140	10 Sep 2024	Depart Time	1115
140	10 Sep 2024	Air Temp (C)	22.2
140	10 Sep 2024	Visibility (mi)	8
140	10 Sep 2024	Wind Speed (kts)	7.4
140	10 Sep 2024	Wind Dir	NW
140	10 Sep 2024	Sea State	Confused Swell
140	10 Sep 2024	High Tide Time	1324
140	10 Sep 2024	Low Tide Time	2254
140	10 Sep 2024	Comments	
140	17 Sep 2024	Arrive Time	1109
140	17 Sep 2024	Depart Time	1116
140	17 Sep 2024	Air Temp (C)	18.8
140	17 Sep 2024	Visibility (mi)	10
140	17 Sep 2024	Wind Speed (kts)	1.3
140	17 Sep 2024	Wind Dir	W
140	17 Sep 2024	Sea State	Confused Swell
140	17 Sep 2024	High Tide Time	2112
140	17 Sep 2024	Low Tide Time	306
140	17 Sep 2024	Comments	
140	24 Sep 2024	Arrive Time	1104
140	24 Sep 2024	Depart Time	1108
140	24 Sep 2024	Air Temp (C)	18.3
140	24 Sep 2024	Visibility (mi)	10
140	24 Sep 2024	Wind Speed (kts)	13.2
140	24 Sep 2024	Wind Dir	NW
140	24 Sep 2024	Sea State	Wind Ripples
140	24 Sep 2024	High Tide Time	1430
140	24 Sep 2024	Low Tide Time	2306
140	24 Sep 2024	Comments	
140	30 Sep 2024	Arrive Time	1101
140	30 Sep 2024	Depart Time	1104
140	30 Sep 2024	Air Temp (C)	15.9
140	30 Sep 2024	Visibility (mi)	7
140	30 Sep 2024	Wind Speed (kts)	4.1
140	30 Sep 2024	Wind Dir	W
140	30 Sep 2024	Sea State	Regular Swell
140	30 Sep 2024	High Tide Time	2036
140	30 Sep 2024	Low Tide Time	230
140	30 Sep 2024	Comments	
124	03 Sep 2024	Arrive Time	1100
124	03 Sep 2024	Depart Time	1103
124	03 Sep 2024	Air Temp (C)	20.7
124	03 Sep 2024	Visibility (mi)	10
124	03 Sep 2024	Wind Speed (kts)	6.6
124	03 Sep 2024	Wind Dir	NW
124	03 Sep 2024	Sea State	Regular Swell

Station	Date	Parameter	Value
I24	03 Sep 2024	High Tide Time	2154
I24	03 Sep 2024	Low Tide Time	400
I24	03 Sep 2024	Comments	
I24	10 Sep 2024	Arrive Time	1116
I24	10 Sep 2024	Depart Time	1118
I24	10 Sep 2024	Air Temp (C)	22.2
I24	10 Sep 2024	Visibility (mi)	8
I24	10 Sep 2024	Wind Speed (kts)	8.8
I24	10 Sep 2024	Wind Dir	NW
I24	10 Sep 2024	Sea State	Confused Swell
I24	10 Sep 2024	High Tide Time	1324
I24	10 Sep 2024	Low Tide Time	2254
I24	10 Sep 2024	Comments	
I24	17 Sep 2024	Arrive Time	1118
I24	17 Sep 2024	Depart Time	1124
I24	17 Sep 2024	Air Temp (C)	18.8
I24	17 Sep 2024	Visibility (mi)	10
I24	17 Sep 2024	Wind Speed (kts)	3.8
I24	17 Sep 2024	Wind Dir	W
I24	17 Sep 2024	Sea State	Confused Swell
I24	17 Sep 2024	High Tide Time	2112
I24	17 Sep 2024	Low Tide Time	306
I24	17 Sep 2024	Comments	
I24	24 Sep 2024	Arrive Time	1113
I24	24 Sep 2024	Depart Time	1116
I24	24 Sep 2024	Air Temp (C)	18.5
I24	24 Sep 2024	Visibility (mi)	10
I24	24 Sep 2024	Wind Speed (kts)	7.4
I24	24 Sep 2024	Wind Dir	NW
I24	24 Sep 2024	Sea State	Wind Ripples
I24	24 Sep 2024	High Tide Time	1430
I24	24 Sep 2024	Low Tide Time	2306
I24	24 Sep 2024	Comments	
I24	30 Sep 2024	Arrive Time	1108
I24	30 Sep 2024	Depart Time	1111
I24	30 Sep 2024	Air Temp (C)	15.9
I24	30 Sep 2024	Visibility (mi)	7
I24	30 Sep 2024	Wind Speed (kts)	6.5
I24	30 Sep 2024	Wind Dir	NW
I24	30 Sep 2024	Sea State	Regular Swell
I24	30 Sep 2024	High Tide Time	2036
I24	30 Sep 2024	Low Tide Time	230
I24	30 Sep 2024	Comments	
I25	03 Sep 2024	Arrive Time	1106
I25	03 Sep 2024	Depart Time	1109
I25	03 Sep 2024	Air Temp (C)	20.8
I25	03 Sep 2024	Visibility (mi)	10
I25	03 Sep 2024	Wind Speed (kts)	6.6
I25	03 Sep 2024	Wind Dir	NW
I25	03 Sep 2024	Sea State	Regular Swell
I25	03 Sep 2024	High Tide Time	2154
I25	03 Sep 2024	Low Tide Time	400
I25	03 Sep 2024	Comments	
I25	10 Sep 2024	Arrive Time	1120
I25	10 Sep 2024	Depart Time	1125

Station	Date	Parameter	Value
I25	10 Sep 2024	Air Temp (C)	22.2
I25	10 Sep 2024	Visibility (mi)	8
I25	10 Sep 2024	Wind Speed (kts)	16.3
I25	10 Sep 2024	Wind Dir	W
I25	10 Sep 2024	Sea State	Confused Swell
I25	10 Sep 2024	High Tide Time	1324
I25	10 Sep 2024	Low Tide Time	2254
I25	10 Sep 2024	Comments	
I25	17 Sep 2024	Arrive Time	1125
I25	17 Sep 2024	Depart Time	1128
I25	17 Sep 2024	Air Temp (C)	18.8
I25	17 Sep 2024	Visibility (mi)	10
I25	17 Sep 2024	Wind Speed (kts)	9.6
I25	17 Sep 2024	Wind Dir	W
I25	17 Sep 2024	Sea State	Confused Swell
I25	17 Sep 2024	High Tide Time	2112
I25	17 Sep 2024	Low Tide Time	306
I25	17 Sep 2024	Comments	
I25	24 Sep 2024	Arrive Time	1119
I25	24 Sep 2024	Depart Time	1122
I25	24 Sep 2024	Air Temp (C)	18.7
I25	24 Sep 2024	Visibility (mi)	10
I25	24 Sep 2024	Wind Speed (kts)	15.8
I25	24 Sep 2024	Wind Dir	W
I25	24 Sep 2024	Sea State	Light Chop
I25	24 Sep 2024	High Tide Time	1430
I25	24 Sep 2024	Low Tide Time	2306
I25	24 Sep 2024	Comments	
I25	30 Sep 2024	Arrive Time	1115
I25	30 Sep 2024	Depart Time	1118
I25	30 Sep 2024	Air Temp (C)	16
I25	30 Sep 2024	Visibility (mi)	7
I25	30 Sep 2024	Wind Speed (kts)	4.2
I25	30 Sep 2024	Wind Dir	NW
I25	30 Sep 2024	Sea State	Regular Swell
I25	30 Sep 2024	High Tide Time	2036
I25	30 Sep 2024	Low Tide Time	230
I25	30 Sep 2024	Comments	
I39	03 Sep 2024	Arrive Time	1021
I39	03 Sep 2024	Depart Time	1024
I39	03 Sep 2024	Air Temp (C)	20.6
I39	03 Sep 2024	Visibility (mi)	10
I39	03 Sep 2024	Wind Speed (kts)	8.2
I39	03 Sep 2024	Wind Dir	NW
I39	03 Sep 2024	Sea State	Regular Swell
I39	03 Sep 2024	High Tide Time	2154
I39	03 Sep 2024	Low Tide Time	400
I39	03 Sep 2024	Comments	Kelp Debris; Seagrass
I39	10 Sep 2024	Arrive Time	1032
I39	10 Sep 2024	Depart Time	1051
I39	10 Sep 2024	Air Temp (C)	22.3
I39	10 Sep 2024	Visibility (mi)	8
I39	10 Sep 2024	Wind Speed (kts)	9
I39	10 Sep 2024	Wind Dir	NW
I39	10 Sep 2024	Sea State	Confused Swell
I39	10 Sep 2024	High Tide Time	1324

Station	Date	Parameter	Value
I39	10 Sep 2024	Low Tide Time	2254
I39	10 Sep 2024	Comments	
I39	17 Sep 2024	Arrive Time	1033
I39	17 Sep 2024	Depart Time	1045
I39	17 Sep 2024	Air Temp (C)	18.9
I39	17 Sep 2024	Visibility (mi)	10
I39	17 Sep 2024	Wind Speed (kts)	2.1
I39	17 Sep 2024	Wind Dir	N
I39	17 Sep 2024	Sea State	Confused Swell
I39	17 Sep 2024	High Tide Time	2112
I39	17 Sep 2024	Low Tide Time	306
I39	17 Sep 2024	Comments	
I39	24 Sep 2024	Arrive Time	1013
I39	24 Sep 2024	Depart Time	1016
I39	24 Sep 2024	Air Temp (C)	18.5
I39	24 Sep 2024	Visibility (mi)	10
I39	24 Sep 2024	Wind Speed (kts)	7.1
I39	24 Sep 2024	Wind Dir	W
I39	24 Sep 2024	Sea State	Calm
I39	24 Sep 2024	High Tide Time	1430
I39	24 Sep 2024	Low Tide Time	2306
I39	24 Sep 2024	Comments	
I39	30 Sep 2024	Arrive Time	1018
I39	30 Sep 2024	Depart Time	1022
I39	30 Sep 2024	Air Temp (C)	15.8
I39	30 Sep 2024	Visibility (mi)	7
I39	30 Sep 2024	Wind Speed (kts)	4.5
I39	30 Sep 2024	Wind Dir	W
I39	30 Sep 2024	Sea State	Regular Swell
I39	30 Sep 2024	High Tide Time	2036
I39	30 Sep 2024	Low Tide Time	230
I39	30 Sep 2024	Comments	
I26	03 Sep 2024	Arrive Time	1114
I26	03 Sep 2024	Depart Time	1117
I26	03 Sep 2024	Air Temp (C)	20.8
I26	03 Sep 2024	Visibility (mi)	10
I26	03 Sep 2024	Wind Speed (kts)	6
I26	03 Sep 2024	Wind Dir	NW
I26	03 Sep 2024	Sea State	Regular Swell
I26	03 Sep 2024	High Tide Time	2154
I26	03 Sep 2024	Low Tide Time	400
I26	03 Sep 2024	Comments	
I26	10 Sep 2024	Arrive Time	1133
I26	10 Sep 2024	Depart Time	1144
I26	10 Sep 2024	Air Temp (C)	22.2
I26	10 Sep 2024	Visibility (mi)	8
I26	10 Sep 2024	Wind Speed (kts)	9.9
I26	10 Sep 2024	Wind Dir	NW
I26	10 Sep 2024	Sea State	Confused Swell
I26	10 Sep 2024	High Tide Time	1324
I26	10 Sep 2024	Low Tide Time	2254
I26	10 Sep 2024	Comments	
I26	17 Sep 2024	Arrive Time	1135
I26	17 Sep 2024	Depart Time	1140
I26	17 Sep 2024	Air Temp (C)	19

Station	Date	Parameter	Value
I26	17 Sep 2024	Visibility (mi)	10
I26	17 Sep 2024	Wind Speed (kts)	1.6
I26	17 Sep 2024	Wind Dir	NW
I26	17 Sep 2024	Sea State	Confused Swell
I26	17 Sep 2024	High Tide Time	2112
I26	17 Sep 2024	Low Tide Time	306
I26	17 Sep 2024	Comments	
I26	24 Sep 2024	Arrive Time	1129
I26	24 Sep 2024	Depart Time	1132
I26	24 Sep 2024	Air Temp (C)	18.7
I26	24 Sep 2024	Visibility (mi)	10
I26	24 Sep 2024	Wind Speed (kts)	16.5
I26	24 Sep 2024	Wind Dir	NW
I26	24 Sep 2024	Sea State	Light Chop
I26	24 Sep 2024	High Tide Time	1430
I26	24 Sep 2024	Low Tide Time	2306
I26	24 Sep 2024	Comments	
I26	30 Sep 2024	Arrive Time	1125
I26	30 Sep 2024	Depart Time	1128
I26	30 Sep 2024	Air Temp (C)	15.9
I26	30 Sep 2024	Visibility (mi)	7
I26	30 Sep 2024	Wind Speed (kts)	4.1
I26	30 Sep 2024	Wind Dir	NW
I26	30 Sep 2024	Sea State	Regular Swell
I26	30 Sep 2024	High Tide Time	2036
I26	30 Sep 2024	Low Tide Time	230
I26	30 Sep 2024	Comments	
I32	03 Sep 2024	Arrive Time	1125
I32	03 Sep 2024	Depart Time	1128
I32	03 Sep 2024	Air Temp (C)	21
I32	03 Sep 2024	Visibility (mi)	10
I32	03 Sep 2024	Wind Speed (kts)	7
I32	03 Sep 2024	Wind Dir	W
I32	03 Sep 2024	Sea State	Regular Swell
I32	03 Sep 2024	High Tide Time	2154
I32	03 Sep 2024	Low Tide Time	400
I32	03 Sep 2024	Comments	
I32	10 Sep 2024	Arrive Time	1145
I32	10 Sep 2024	Depart Time	1152
I32	10 Sep 2024	Air Temp (C)	22.2
I32	10 Sep 2024	Visibility (mi)	8
I32	10 Sep 2024	Wind Speed (kts)	9.2
I32	10 Sep 2024	Wind Dir	NW
I32	10 Sep 2024	Sea State	Confused Swell
I32	10 Sep 2024	High Tide Time	1324
I32	10 Sep 2024	Low Tide Time	2254
I32	10 Sep 2024	Comments	
I32	17 Sep 2024	Arrive Time	1148
I32	17 Sep 2024	Depart Time	1155
I32	17 Sep 2024	Air Temp (C)	19.2
I32	17 Sep 2024	Visibility (mi)	10
I32	17 Sep 2024	Wind Speed (kts)	3.3
I32	17 Sep 2024	Wind Dir	W
I32	17 Sep 2024	Sea State	Confused Swell
I32	17 Sep 2024	High Tide Time	2112
I32	17 Sep 2024	Low Tide Time	306

Station	Date	Parameter	Value
I32	17 Sep 2024	Comments	
I32	24 Sep 2024	Arrive Time	1141
I32	24 Sep 2024	Depart Time	1144
I32	24 Sep 2024	Air Temp (C)	18.5
I32	24 Sep 2024	Visibility (mi)	10
I32	24 Sep 2024	Wind Speed (kts)	9
I32	24 Sep 2024	Wind Dir	NW
I32	24 Sep 2024	Sea State	Light Chop
I32	24 Sep 2024	High Tide Time	1430
I32	24 Sep 2024	Low Tide Time	2306
I32	24 Sep 2024	Comments	
I32	30 Sep 2024	Arrive Time	1135
I32	30 Sep 2024	Depart Time	1139
I32	30 Sep 2024	Air Temp (C)	15.8
I32	30 Sep 2024	Visibility (mi)	7
I32	30 Sep 2024	Wind Speed (kts)	16.8
I32	30 Sep 2024	Wind Dir	W
I32	30 Sep 2024	Sea State	Regular Swell
I32	30 Sep 2024	High Tide Time	2036
I32	30 Sep 2024	Low Tide Time	230
I32	30 Sep 2024	Comments	

Comments

date	station	depth	parmcode	comments
03-Sep-2024	I24	2		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected
03-Sep-2024	I24	6		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected
03-Sep-2024	I24	11		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected
03-Sep-2024	I25	2		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected
03-Sep-2024	I25	6		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected
03-Sep-2024	I25	9		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected
03-Sep-2024	I39	2		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected.
03-Sep-2024	I39	12		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected.
03-Sep-2024	I39	18		Colonies found on the entero nonselective media but no colonies found on entero selective media. From this the analysis results are not affected.
17-Sep-2024	I39	2		no POST PLATES FOR MENDO OR MFC, BECAUSE A SECOND SET WAS NEVER RUN FOR THIS FILTRA-TION SERIES
17-Sep-2024	I39	12		no POST PLATES FOR MENDO OR MFC, BECAUSE A SECOND SET WAS NEVER RUN FOR THIS FILTRA-TION SERIES
17-Sep-2024	I39	18		no POST PLATES FOR MENDO OR MFC, BECAUSE A SECOND SET WAS NEVER RUN FOR THIS FILTRA-TION SERIES
24-Sep-2024	I24	2		mFC samples were taken out from water bath after 21.6 hour incubation. It is 20min short from the minimum requirement.
24-Sep-2024	I24	6		mFC samples were taken out from water bath after 21.6 hour incubation. It is 20min short from the minimum requirement.
24-Sep-2024	I24	11		mFC samples were taken out from water bath after 21.6 hour incubation. It is 20min short from the minimum requirement.

date	station	depth	parmcode	comments
24-Sep-2024	I25	2		mFC samples were taken out from water bath after 21.6 hour incubation. It is 20min short from the minimum requirement.
24-Sep-2024	I25	6		mFC samples were taken out from water bath after 21.6 hour incubation. It is 20min short from the minimum requirement.
24-Sep-2024	I25	9		mFC samples were taken out from water bath after 21.6 hour incubation. It is 20min short from the minimum requirement.
30-Sep-2024	I19	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I19	6		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I19	11		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I24	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I24	6		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I24	11		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I25	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I25	6		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I25	9		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I26	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I26	6		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I26	9		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I32	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.

date	station	depth	parmcode	comments
30-Sep-2024	I32	6		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I32	9		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I39	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I39	12		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I39	18		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I40	2		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I40	6		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.
30-Sep-2024	I40	9		MM-WBTH-006 for mFC was lower than acceptable range in the morning of 10/1/24. mFC Daily QC passed, so the results not likely affected.

Table 3.9

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 (s-t)	Chlor (µg/L)
I19	03 Sep 2024	1	21.02	92.42	7.7	33.49	8.2	23.3	0.48
I19	03 Sep 2024	2	20.70	89.39	7.9	33.48	8.2	23.4	0.49
I19	03 Sep 2024	3	20.54	91.38	8.1	33.45	8.2	23.4	0.71
I19	03 Sep 2024	4	20.43	88.13	8.3	33.43	8.2	23.5	1.27
I19	03 Sep 2024	5	20.39	83.94	8.3	33.42	8.2	23.5	2.03
I19	03 Sep 2024	6	20.37	81.94	8.3	33.41	8.2	23.5	2.70
I19	03 Sep 2024	7	20.36	80.90	8.3	33.41	8.2	23.5	3.05
I19	03 Sep 2024	8	20.27	80.59	8.1	33.40	8.2	23.5	3.39
I19	03 Sep 2024	9	18.93	79.03	7.9	33.43	8.2	23.8	3.38
I19	03 Sep 2024	10	17.24	74.94	8.3	33.36	8.1	24.2	3.37
I19	10 Sep 2024	1	20.33	76.13	8.9	33.30	8.2	23.4	1.95
I19	10 Sep 2024	2	20.08	76.06	8.9	33.30	8.2	23.4	2.12
I19	10 Sep 2024	3	19.79	76.60	9.1	33.30	8.2	23.5	2.57
I19	10 Sep 2024	4	19.72	77.02	9.1	33.30	8.2	23.5	3.05
I19	10 Sep 2024	5	19.54	76.89	9.2	33.30	8.2	23.6	3.37
I19	10 Sep 2024	6	19.36	76.85	9.2	33.29	8.2	23.6	3.55
I19	10 Sep 2024	7	18.94	76.15	9.2	33.30	8.2	23.7	4.08
I19	10 Sep 2024	8	18.75	72.59	9.1	33.29	8.2	23.8	4.93
I19	10 Sep 2024	9	18.57	68.49	9.0	33.29	8.2	23.8	5.72
I19	10 Sep 2024	10	18.53	67.33	8.9	33.29	8.2	23.8	5.95
I19	17 Sep 2024	1	20.25	75.99	7.7	33.45	8.1	23.5	1.82
I19	17 Sep 2024	2	19.92	78.56	7.7	33.44	8.1	23.6	1.65
I19	17 Sep 2024	3	19.56	84.75	7.6	33.43	8.1	23.7	1.45
I19	17 Sep 2024	4	17.75	86.82	7.8	33.38	8.1	24.1	1.37
I19	17 Sep 2024	5	16.23	87.97	8.3	33.25	8.1	24.3	1.40
I19	17 Sep 2024	6	15.30	86.10	8.5	33.19	8.1	24.5	1.73
I19	17 Sep 2024	7	15.53	76.10	8.3	33.18	8.1	24.5	2.00
I19	17 Sep 2024	8	14.80	70.41	8.5	33.19	8.1	24.6	2.75
I19	17 Sep 2024	9	14.87	77.21	8.5	33.17	8.1	24.6	3.97
I19	17 Sep 2024	10	14.45	76.04	8.3	33.21	8.1	24.7	5.62
I19	24 Sep 2024	1	18.06	85.01	7.8	33.24	8.1	23.9	0.89
I19	24 Sep 2024	2	17.58	84.68	7.8	33.29	8.1	24.1	0.82
I19	24 Sep 2024	3	16.21	86.26	8.1	33.27	8.1	24.4	0.76
I19	24 Sep 2024	4	15.89	88.67	8.2	33.22	8.1	24.4	0.82
I19	24 Sep 2024	5	15.34	89.53	8.2	33.21	8.1	24.5	0.87
I19	24 Sep 2024	6	14.84	89.45	8.2	33.19	8.1	24.6	1.02
I19	24 Sep 2024	7	14.66	88.46	8.1	33.17	8.1	24.6	1.25
I19	24 Sep 2024	8	14.57	87.86	8.1	33.17	8.1	24.7	1.39
I19	24 Sep 2024	9	14.55	87.86	8.0	33.17	8.1	24.7	1.55
I19	24 Sep 2024	10	14.54	87.14	7.9	33.17	8.1	24.7	1.79
I19	30 Sep 2024	1	15.13	66.44	7.9	33.16	8.0	24.5	0.73
I19	30 Sep 2024	2	14.46	66.40	7.9	33.18	8.0	24.7	0.86
I19	30 Sep 2024	3	14.07	68.79	8.0	33.16	8.0	24.7	1.01
I19	30 Sep 2024	4	13.82	78.57	7.9	33.14	8.0	24.8	1.05
I19	30 Sep 2024	5	13.61	84.10	7.8	33.14	8.0	24.8	1.16
I19	30 Sep 2024	6	13.47	83.19	7.6	33.14	8.0	24.9	1.35
I19	30 Sep 2024	7	13.26	83.80	7.5	33.15	8.0	24.9	1.65
I19	30 Sep 2024	8	13.22	77.62	7.4	33.15	8.0	24.9	2.14
I19	30 Sep 2024	9	13.22	69.28	7.3	33.15	8.0	24.9	2.71
I19	30 Sep 2024	10	13.21	63.79	7.3	33.15	8.0	24.9	2.95

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I40	03 Sep 2024	1	21.01	87.34	7.7	33.34	8.1	23.2	0.54
I40	03 Sep 2024	2	20.38	87.48	7.9	33.43	8.2	23.5	0.62
I40	03 Sep 2024	3	19.98	88.55	8.1	33.41	8.2	23.6	0.94
I40	03 Sep 2024	4	19.62	85.87	8.2	33.40	8.2	23.6	1.37
I40	03 Sep 2024	5	19.40	84.07	8.4	33.38	8.2	23.7	1.82
I40	03 Sep 2024	6	19.12	83.24	8.3	33.37	8.2	23.7	2.41
I40	03 Sep 2024	7	18.65	81.93	8.3	33.36	8.2	23.9	2.79
I40	03 Sep 2024	8	18.50	82.19	8.3	33.35	8.2	23.9	3.04
I40	03 Sep 2024	9	18.08	82.91	7.9	33.36	8.1	24.0	2.57
I40	03 Sep 2024	10	17.06	84.82	7.4	33.33	8.1	24.2	1.80
I40	10 Sep 2024	1	21.25	84.15	8.4	33.30	8.2	23.1	1.07
I40	10 Sep 2024	2	20.08	82.75	8.8	33.32	8.2	23.5	1.30
I40	10 Sep 2024	3	19.45	80.99	9.1	33.28	8.2	23.6	1.58
I40	10 Sep 2024	4	19.45	79.94	9.1	33.27	8.2	23.6	1.84
I40	10 Sep 2024	5	18.99	79.09	9.1	33.27	8.2	23.7	2.50
I40	10 Sep 2024	6	19.02	77.71	9.1	33.27	8.2	23.7	3.11
I40	10 Sep 2024	7	18.92	75.54	8.9	33.28	8.2	23.7	3.46
I40	10 Sep 2024	8	18.91	73.55	8.7	33.28	8.2	23.7	3.66
I40	10 Sep 2024	9	18.35	72.48	8.4	33.30	8.1	23.9	3.23
I40	10 Sep 2024	10	18.09	67.29	8.4	33.28	8.1	23.9	2.82
I40	17 Sep 2024	1	20.31	81.51	7.6	33.44	8.1	23.5	1.17
I40	17 Sep 2024	2	20.08	82.64	7.5	33.43	8.1	23.5	1.31
I40	17 Sep 2024	3	19.86	80.92	7.4	33.41	8.1	23.6	1.87
I40	17 Sep 2024	4	19.60	75.10	7.2	33.40	8.1	23.6	2.23
I40	17 Sep 2024	5	18.16	73.06	7.2	33.38	8.1	24.0	2.55
I40	17 Sep 2024	6	16.33	70.23	7.9	33.29	8.1	24.4	4.10
I40	17 Sep 2024	7	15.22	75.08	8.5	33.21	8.1	24.5	6.09
I40	17 Sep 2024	8	15.01	78.29	8.4	33.19	8.1	24.6	5.04
I40	17 Sep 2024	9	14.86	76.63	8.2	33.19	8.1	24.6	3.54
I40	17 Sep 2024	10	14.54	62.00	8.0	33.20	8.1	24.7	2.78
I40	24 Sep 2024	1	17.54	86.14	7.7	33.29	8.1	24.1	0.56
I40	24 Sep 2024	2	17.62	86.07	7.5	33.29	8.1	24.1	0.57
I40	24 Sep 2024	3	16.26	86.51	7.5	33.29	8.1	24.4	0.56
I40	24 Sep 2024	4	15.43	87.51	7.8	33.23	8.1	24.5	0.67
I40	24 Sep 2024	5	15.21	86.54	8.1	33.21	8.1	24.5	0.92
I40	24 Sep 2024	6	14.89	85.60	8.1	33.19	8.1	24.6	1.06
I40	24 Sep 2024	7	14.68	87.16	8.1	33.18	8.1	24.6	1.24
I40	24 Sep 2024	8	14.67	86.05	8.0	33.17	8.1	24.6	1.56
I40	24 Sep 2024	9	14.66	77.56	7.9	33.18	8.1	24.6	1.96
I40	24 Sep 2024	10	14.65	72.38	7.9	33.18	8.1	24.6	2.18
I40	30 Sep 2024	1	16.04	79.65	7.5	33.21	8.0	24.4	0.51
I40	30 Sep 2024	2	15.56	78.67	7.6	33.20	8.0	24.5	0.59
I40	30 Sep 2024	3	14.68	78.73	7.8	33.20	8.0	24.7	0.82
I40	30 Sep 2024	4	14.18	78.77	7.9	33.16	8.1	24.7	1.16
I40	30 Sep 2024	5	13.81	79.70	7.7	33.13	8.0	24.8	1.64
I40	30 Sep 2024	6	13.73	70.17	7.4	33.13	8.0	24.8	2.36
I40	30 Sep 2024	7	13.69	53.89	7.3	33.13	8.0	24.8	2.80
I40	30 Sep 2024	8	13.65	54.94	7.2	33.13	8.0	24.8	2.84
I40	30 Sep 2024	9	13.57	50.61	7.2	33.14	8.0	24.8	2.78
I40	30 Sep 2024	10	13.36	52.32	7.1	33.15	8.0	24.9	2.62
I24	03 Sep 2024	1	21.23	90.77	7.5	33.40	8.1	23.2	0.33
I24	03 Sep 2024	2	19.57	90.84	8.0	33.48	8.2	23.7	0.30
I24	03 Sep 2024	3	18.71	91.71	8.5	33.38	8.2	23.9	0.41
I24	03 Sep 2024	4	18.55	89.76	8.7	33.34	8.2	23.9	0.68
I24	03 Sep 2024	5	18.43	85.83	8.6	33.34	8.2	23.9	1.07
I24	03 Sep 2024	6	18.08	84.14	8.6	33.33	8.2	24.0	1.71

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I24	03 Sep 2024	7	17.68	80.74	8.4	33.31	8.2	24.1	2.63
I24	03 Sep 2024	8	17.62	77.95	8.4	33.30	8.1	24.1	3.60
I24	03 Sep 2024	9	17.54	77.13	8.4	33.31	8.1	24.1	4.18
I24	03 Sep 2024	10	17.50	79.05	8.5	33.31	8.1	24.1	3.54
I24	10 Sep 2024	1	21.22	85.95	8.2	33.35	8.2	23.2	0.52
I24	10 Sep 2024	2	20.53	90.44	8.4	33.37	8.2	23.4	0.57
I24	10 Sep 2024	3	18.61	90.42	9.3	33.35	8.2	23.9	0.73
I24	10 Sep 2024	4	18.49	86.42	9.6	33.29	8.2	23.8	1.13
I24	10 Sep 2024	5	18.36	82.44	9.5	33.28	8.2	23.9	1.52
I24	10 Sep 2024	6	18.20	81.09	9.2	33.28	8.2	23.9	2.03
I24	10 Sep 2024	7	17.81	77.49	8.9	33.29	8.2	24.0	2.75
I24	10 Sep 2024	8	17.62	72.93	8.7	33.28	8.2	24.0	3.02
I24	10 Sep 2024	9	17.00	72.35	8.5	33.28	8.1	24.2	3.39
I24	10 Sep 2024	10	16.96	68.81	8.4	33.27	8.1	24.2	3.52
I24	17 Sep 2024	1	20.24	55.18	7.8	33.37	8.2	23.5	0.95
I24	17 Sep 2024	2	20.18	66.03	7.6	33.43	8.2	23.5	0.99
I24	17 Sep 2024	3	18.85	83.34	7.7	33.43	8.2	23.9	1.02
I24	17 Sep 2024	4	17.22	86.04	8.0	33.30	8.1	24.2	0.86
I24	17 Sep 2024	5	16.58	91.11	8.1	33.23	8.1	24.3	0.79
I24	17 Sep 2024	6	15.98	92.19	8.2	33.21	8.1	24.4	0.83
I24	17 Sep 2024	7	15.81	91.26	8.1	33.19	8.1	24.4	0.78
I24	17 Sep 2024	8	15.56	90.47	8.0	33.19	8.1	24.5	0.83
I24	17 Sep 2024	9	15.00	87.95	8.0	33.20	8.1	24.6	1.29
I24	17 Sep 2024	10	14.86	80.84	8.0	33.20	8.1	24.6	2.10
I24	24 Sep 2024	1	18.04	89.63	8.0	33.33	8.2	24.0	0.64
I24	24 Sep 2024	2	17.64	89.56	8.1	33.31	8.2	24.1	0.65
I24	24 Sep 2024	3	17.53	89.80	8.1	33.30	8.1	24.1	0.67
I24	24 Sep 2024	4	17.41	89.96	8.0	33.30	8.1	24.1	0.71
I24	24 Sep 2024	5	17.15	89.72	7.9	33.29	8.1	24.2	0.74
I24	24 Sep 2024	6	16.22	89.32	7.9	33.28	8.1	24.4	0.78
I24	24 Sep 2024	7	15.37	89.19	8.1	33.22	8.1	24.5	0.78
I24	24 Sep 2024	8	15.07	90.09	8.1	33.19	8.1	24.6	0.78
I24	24 Sep 2024	9	14.83	91.07	8.2	33.18	8.1	24.6	0.84
I24	24 Sep 2024	10	14.79	91.29	8.2	33.17	8.1	24.6	0.90
I24	24 Sep 2024	11	14.78	91.34	8.2	33.17	8.1	24.6	0.92
I24	30 Sep 2024	1	16.27	85.88	7.9	33.22	8.1	24.3	0.45
I24	30 Sep 2024	2	16.16	84.91	7.8	33.23	8.1	24.3	0.46
I24	30 Sep 2024	3	15.86	85.50	7.8	33.22	8.1	24.4	0.53
I24	30 Sep 2024	4	15.45	84.63	7.8	33.23	8.1	24.5	0.64
I24	30 Sep 2024	5	15.13	83.25	7.7	33.20	8.1	24.6	0.74
I24	30 Sep 2024	6	14.41	82.43	7.7	33.21	8.1	24.7	0.82
I24	30 Sep 2024	7	13.82	83.47	7.5	33.16	8.0	24.8	0.88
I24	30 Sep 2024	8	13.49	86.85	7.5	33.16	8.0	24.9	0.93
I24	30 Sep 2024	9	13.42	89.21	7.4	33.15	8.0	24.9	0.96
I24	30 Sep 2024	10	13.42	89.25	7.5	33.15	8.0	24.9	1.02
I25	03 Sep 2024	1	21.20	93.42	7.6	33.48	8.1	23.3	0.28
I25	03 Sep 2024	2	19.77	93.08	8.0	33.48	8.1	23.7	0.28
I25	03 Sep 2024	3	19.06	92.00	8.2	33.41	8.1	23.8	0.31
I25	03 Sep 2024	4	18.66	91.79	8.3	33.38	8.1	23.9	0.36
I25	03 Sep 2024	5	18.32	91.33	8.3	33.37	8.1	23.9	0.38
I25	03 Sep 2024	6	17.84	91.47	8.4	33.35	8.1	24.0	0.42
I25	03 Sep 2024	7	17.37	91.47	8.4	33.33	8.1	24.1	0.57
I25	03 Sep 2024	8	16.98	90.20	8.5	33.30	8.1	24.2	0.83
I25	03 Sep 2024	9	16.94	87.35	8.4	33.30	8.1	24.2	1.06
I25	10 Sep 2024	1	20.96	91.81	8.3	33.35	8.2	23.2	0.40

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I25	10 Sep 2024	2	20.48	86.79	8.5	33.37	8.2	23.4	0.44
I25	10 Sep 2024	3	19.88	90.74	8.7	33.36	8.2	23.5	0.53
I25	10 Sep 2024	4	18.64	90.67	9.1	33.32	8.2	23.8	0.73
I25	10 Sep 2024	5	18.10	87.22	9.1	33.29	8.2	23.9	1.25
I25	10 Sep 2024	6	17.80	80.41	9.0	33.28	8.2	24.0	1.42
I25	10 Sep 2024	7	17.73	80.68	8.8	33.27	8.2	24.0	1.40
I25	10 Sep 2024	8	17.55	79.47	8.8	33.27	8.1	24.1	1.54
I25	10 Sep 2024	9	17.54	78.87	8.8	33.27	8.1	24.1	1.62
I25	17 Sep 2024	1	20.45	83.02	7.8	33.44	8.2	23.5	1.36
I25	17 Sep 2024	2	20.17	83.02	7.6	33.45	8.2	23.5	1.22
I25	17 Sep 2024	3	18.65	85.64	7.7	33.44	8.2	23.9	0.95
I25	17 Sep 2024	4	16.65	89.06	8.1	33.29	8.1	24.3	0.71
I25	17 Sep 2024	5	16.19	92.99	8.1	33.22	8.1	24.3	0.59
I25	17 Sep 2024	6	15.41	94.45	8.2	33.19	8.1	24.5	0.59
I25	17 Sep 2024	7	15.26	93.59	8.2	33.15	8.1	24.5	0.60
I25	17 Sep 2024	8	15.25	92.63	8.2	33.15	8.1	24.5	0.64
I25	17 Sep 2024	9	15.27	92.12	8.2	33.15	8.1	24.5	0.63
I25	24 Sep 2024	1	19.21	95.91	8.0	33.42	8.2	23.8	0.21
I25	24 Sep 2024	2	19.05	95.65	8.0	33.41	8.2	23.8	0.25
I25	24 Sep 2024	3	19.07	95.52	8.0	33.41	8.2	23.8	0.28
I25	24 Sep 2024	4	18.82	95.52	7.9	33.40	8.2	23.8	0.36
I25	24 Sep 2024	5	18.36	94.67	7.9	33.37	8.2	23.9	0.54
I25	24 Sep 2024	6	17.95	92.66	7.9	33.34	8.2	24.0	0.76
I25	24 Sep 2024	7	17.14	90.78	7.9	33.30	8.2	24.2	0.87
I25	24 Sep 2024	8	15.50	90.50	8.1	33.23	8.2	24.5	0.85
I25	24 Sep 2024	9	14.72	91.48	8.3	33.17	8.1	24.6	0.76
I25	30 Sep 2024	1	16.14	85.38	8.0	33.22	8.1	24.3	0.51
I25	30 Sep 2024	2	16.08	85.35	8.0	33.23	8.1	24.4	0.52
I25	30 Sep 2024	3	15.86	85.33	8.1	33.23	8.1	24.4	0.57
I25	30 Sep 2024	4	15.65	85.25	8.1	33.23	8.1	24.5	0.70
I25	30 Sep 2024	5	15.25	85.52	8.2	33.23	8.1	24.6	0.88
I25	30 Sep 2024	6	14.75	85.45	8.1	33.21	8.1	24.6	1.10
I25	30 Sep 2024	7	14.50	86.01	7.8	33.17	8.1	24.7	1.16
I25	30 Sep 2024	8	13.41	87.24	7.6	33.20	8.0	24.9	1.19
I25	30 Sep 2024	9	13.26	89.29	7.5	33.15	8.0	24.9	1.02
I39	03 Sep 2024	1	20.15	83.08	8.3	33.42	8.2	23.5	0.72
I39	03 Sep 2024	2	20.03	84.39	8.1	33.42	8.2	23.5	0.74
I39	03 Sep 2024	3	18.91	86.47	8.2	33.45	8.2	23.9	0.76
I39	03 Sep 2024	4	17.33	88.09	8.5	33.40	8.1	24.2	0.84
I39	03 Sep 2024	5	16.80	88.41	8.6	33.34	8.1	24.3	1.02
I39	03 Sep 2024	6	16.43	89.45	8.6	33.32	8.1	24.4	1.39
I39	03 Sep 2024	7	16.08	88.39	8.5	33.30	8.1	24.4	2.01
I39	03 Sep 2024	8	15.64	86.38	8.4	33.29	8.1	24.5	2.79
I39	03 Sep 2024	9	15.12	84.11	8.3	33.28	8.1	24.6	3.47
I39	03 Sep 2024	10	14.98	83.70	8.4	33.25	8.1	24.6	3.95
I39	03 Sep 2024	11	14.84	84.61	8.5	33.26	8.1	24.7	4.43
I39	03 Sep 2024	12	14.73	85.18	8.5	33.25	8.1	24.7	4.53
I39	03 Sep 2024	13	14.48	85.76	8.4	33.24	8.1	24.7	4.71
I39	03 Sep 2024	14	14.28	85.84	8.2	33.23	8.1	24.8	4.52
I39	03 Sep 2024	15	14.05	86.13	8.2	33.24	8.1	24.8	4.13
I39	03 Sep 2024	16	13.89	87.80	8.1	33.23	8.1	24.8	3.58
I39	03 Sep 2024	17	13.86	89.49	8.0	33.23	8.1	24.8	3.21
I39	03 Sep 2024	18	13.86	90.20	8.0	33.23	8.0	24.9	2.82
I39	10 Sep 2024	1	21.33	91.62	8.2	33.40	8.2	23.2	0.44
I39	10 Sep 2024	2	20.99	91.56	8.2	33.40	8.2	23.3	0.42
I39	10 Sep 2024	3	20.82	92.47	8.2	33.38	8.1	23.3	0.36

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I39	10 Sep 2024	4	20.73	93.86	8.2	33.38	8.1	23.3	0.35
I39	10 Sep 2024	5	20.19	94.19	8.1	33.40	8.1	23.5	0.37
I39	10 Sep 2024	6	19.31	94.95	8.2	33.37	8.1	23.7	0.40
I39	10 Sep 2024	7	18.47	93.93	8.6	33.35	8.1	23.9	0.59
I39	10 Sep 2024	8	17.75	90.81	9.0	33.30	8.2	24.0	0.97
I39	10 Sep 2024	9	17.52	87.79	9.0	33.28	8.2	24.1	1.40
I39	10 Sep 2024	10	17.00	85.25	8.7	33.30	8.2	24.2	1.78
I39	10 Sep 2024	11	16.25	83.84	8.5	33.27	8.1	24.4	2.68
I39	10 Sep 2024	12	16.22	83.26	8.4	33.27	8.1	24.4	3.57
I39	10 Sep 2024	13	15.80	80.62	8.4	33.27	8.1	24.5	6.27
I39	10 Sep 2024	14	15.68	77.54	8.4	33.27	8.1	24.5	6.64
I39	10 Sep 2024	15	15.67	82.75	8.3	33.27	8.1	24.5	5.71
I39	10 Sep 2024	16	15.42	84.54	8.2	33.27	8.1	24.5	4.61
I39	10 Sep 2024	17	15.35	85.35	8.2	33.27	8.1	24.6	3.64
I39	10 Sep 2024	18	15.35	86.25	8.2	33.27	8.1	24.6	3.14
I39	17 Sep 2024	1	20.30	90.03	7.8	33.47	8.2	23.5	0.68
I39	17 Sep 2024	2	19.93	85.36	7.7	33.46	8.2	23.6	0.68
I39	17 Sep 2024	3	19.31	88.90	7.7	33.43	8.1	23.7	0.73
I39	17 Sep 2024	4	19.20	91.25	7.5	33.41	8.1	23.8	0.67
I39	17 Sep 2024	5	17.62	92.72	7.8	33.34	8.1	24.1	0.46
I39	17 Sep 2024	6	16.43	95.88	8.2	33.20	8.1	24.3	0.24
I39	17 Sep 2024	7	16.47	97.98	8.2	33.20	8.1	24.3	0.19
I39	17 Sep 2024	8	15.81	98.29	8.3	33.15	8.1	24.4	0.20
I39	17 Sep 2024	9	15.45	98.21	8.4	33.11	8.1	24.4	0.25
I39	17 Sep 2024	10	15.23	97.89	8.4	33.12	8.1	24.5	0.30
I39	17 Sep 2024	11	15.02	97.68	8.3	33.13	8.1	24.5	0.35
I39	17 Sep 2024	12	14.79	97.51	8.3	33.12	8.1	24.6	0.41
I39	17 Sep 2024	13	14.57	97.24	8.2	33.12	8.1	24.6	0.47
I39	17 Sep 2024	14	14.46	96.84	8.2	33.11	8.1	24.6	0.50
I39	17 Sep 2024	15	14.38	96.61	8.2	33.12	8.1	24.7	0.54
I39	17 Sep 2024	16	14.39	96.47	8.1	33.12	8.1	24.7	0.58
I39	17 Sep 2024	17	14.26	96.29	8.1	33.12	8.1	24.7	0.62
I39	17 Sep 2024	18	14.11	96.21	8.0	33.12	8.1	24.7	0.67
I39	24 Sep 2024	1	19.85	96.94	7.9	33.47	8.2	23.6	0.19
I39	24 Sep 2024	2	19.85	96.89	7.9	33.47	8.2	23.6	0.18
I39	24 Sep 2024	3	19.78	96.94	7.9	33.47	8.2	23.6	0.20
I39	24 Sep 2024	4	19.71	97.11	7.9	33.46	8.2	23.7	0.22
I39	24 Sep 2024	5	19.25	97.07	8.0	33.44	8.2	23.8	0.25
I39	24 Sep 2024	6	18.95	96.98	8.1	33.39	8.2	23.8	0.29
I39	24 Sep 2024	7	18.73	96.71	8.0	33.42	8.2	23.9	0.37
I39	24 Sep 2024	8	18.14	96.15	8.1	33.36	8.2	24.0	0.62
I39	24 Sep 2024	9	18.00	94.69	8.1	33.35	8.2	24.0	0.92
I39	24 Sep 2024	10	17.92	93.59	8.0	33.34	8.2	24.0	1.12
I39	24 Sep 2024	11	17.80	92.77	8.0	33.33	8.1	24.0	1.23
I39	24 Sep 2024	12	17.68	92.72	8.1	33.33	8.1	24.1	1.25
I39	24 Sep 2024	13	17.48	93.54	8.1	33.32	8.1	24.1	1.20
I39	24 Sep 2024	14	17.40	94.17	8.2	33.31	8.1	24.1	1.21
I39	24 Sep 2024	15	17.35	93.97	8.1	33.31	8.1	24.1	1.24
I39	24 Sep 2024	16	16.98	93.89	8.0	33.30	8.1	24.2	1.25
I39	24 Sep 2024	17	16.13	94.30	8.1	33.27	8.1	24.4	1.28
I39	24 Sep 2024	18	15.15	94.32	8.2	33.22	8.1	24.6	1.31
I39	30 Sep 2024	1	16.48	94.88	8.4	33.27	8.1	24.3	0.34
I39	30 Sep 2024	2	16.33	94.66	8.4	33.27	8.1	24.3	0.43
I39	30 Sep 2024	3	16.23	93.67	8.4	33.27	8.1	24.4	0.62
I39	30 Sep 2024	4	15.96	92.32	8.3	33.27	8.1	24.4	0.95
I39	30 Sep 2024	5	15.43	90.21	8.4	33.26	8.1	24.5	1.53
I39	30 Sep 2024	6	15.15	87.86	8.4	33.23	8.1	24.6	1.88
I39	30 Sep 2024	7	14.77	87.79	8.6	33.22	8.1	24.6	1.67

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I39	30 Sep 2024	8	14.62	90.37	8.7	33.21	8.1	24.7	1.46
I39	30 Sep 2024	9	14.56	92.07	8.7	33.21	8.1	24.7	1.41
I39	30 Sep 2024	10	14.49	92.70	8.7	33.20	8.1	24.7	1.44
I39	30 Sep 2024	11	14.44	93.00	8.7	33.20	8.1	24.7	1.56
I39	30 Sep 2024	12	14.42	93.09	8.7	33.20	8.1	24.7	1.62
I39	30 Sep 2024	13	14.41	93.16	8.6	33.20	8.1	24.7	1.65
I39	30 Sep 2024	14	14.41	93.20	8.6	33.20	8.1	24.7	1.72
I39	30 Sep 2024	15	14.41	93.15	8.6	33.20	8.1	24.7	1.74
I39	30 Sep 2024	16	14.35	93.23	8.5	33.21	8.1	24.7	1.72
I39	30 Sep 2024	17	13.95	93.24	8.1	33.21	8.1	24.8	1.60
I39	30 Sep 2024	18	13.11	93.57	7.6	33.19	8.0	25.0	1.34
I26	03 Sep 2024	1	21.34	86.25	7.4	33.31	8.1	23.1	0.40
I26	03 Sep 2024	2	19.97	88.64	7.9	33.48	8.2	23.6	0.34
I26	03 Sep 2024	3	19.06	92.03	8.3	33.40	8.2	23.8	0.42
I26	03 Sep 2024	4	18.60	90.09	8.3	33.38	8.1	23.9	0.57
I26	03 Sep 2024	5	18.15	88.99	8.4	33.35	8.1	24.0	0.67
I26	03 Sep 2024	6	17.68	87.78	8.4	33.34	8.1	24.1	0.88
I26	03 Sep 2024	7	16.87	86.49	8.4	33.32	8.1	24.3	1.17
I26	03 Sep 2024	8	16.73	85.98	8.3	33.30	8.1	24.3	1.37
I26	03 Sep 2024	9	16.70	86.17	8.3	33.29	8.1	24.3	1.56
I26	10 Sep 2024	1	21.28	89.63	8.1	33.27	8.2	23.1	0.44
I26	10 Sep 2024	2	20.58	89.80	8.2	33.37	8.2	23.4	0.38
I26	10 Sep 2024	3	19.85	93.26	8.4	33.37	8.1	23.6	0.36
I26	10 Sep 2024	4	19.66	93.25	8.6	33.34	8.2	23.6	0.48
I26	10 Sep 2024	5	19.26	89.89	8.9	33.32	8.2	23.7	0.74
I26	10 Sep 2024	6	18.67	84.84	9.0	33.30	8.2	23.8	1.29
I26	10 Sep 2024	7	18.50	82.59	8.8	33.29	8.2	23.8	1.62
I26	10 Sep 2024	8	18.38	82.20	8.7	33.29	8.2	23.9	1.61
I26	10 Sep 2024	9	18.34	82.57	8.6	33.29	8.1	23.9	1.31
I26	17 Sep 2024	1	19.66	78.27	7.8	33.34	8.2	23.6	1.05
I26	17 Sep 2024	2	18.51	80.70	7.8	33.40	8.2	23.9	0.96
I26	17 Sep 2024	3	16.64	87.31	8.1	33.28	8.1	24.3	0.76
I26	17 Sep 2024	4	15.90	90.88	8.1	33.22	8.1	24.4	0.63
I26	17 Sep 2024	5	15.44	92.95	8.2	33.19	8.1	24.5	0.58
I26	17 Sep 2024	6	15.03	94.17	8.2	33.16	8.1	24.5	0.58
I26	17 Sep 2024	7	14.99	93.32	8.2	33.15	8.1	24.5	0.62
I26	17 Sep 2024	8	14.94	92.54	8.2	33.15	8.1	24.6	0.60
I26	17 Sep 2024	9	14.92	91.93	8.1	33.15	8.1	24.6	0.62
I26	24 Sep 2024	1	19.39	95.95	7.9	33.43	8.2	23.7	0.23
I26	24 Sep 2024	2	19.32	95.93	7.8	33.43	8.2	23.7	0.23
I26	24 Sep 2024	3	18.84	95.82	8.0	33.41	8.2	23.8	0.33
I26	24 Sep 2024	4	18.65	94.95	8.0	33.39	8.2	23.9	0.44
I26	24 Sep 2024	5	18.28	93.95	8.0	33.37	8.2	24.0	0.56
I26	24 Sep 2024	6	17.95	92.56	8.0	33.34	8.2	24.0	0.74
I26	24 Sep 2024	7	17.20	91.16	7.9	33.31	8.2	24.2	0.85
I26	24 Sep 2024	8	15.38	90.86	8.1	33.22	8.1	24.5	0.87
I26	24 Sep 2024	9	14.55	91.35	8.3	33.17	8.1	24.7	0.78
I26	30 Sep 2024	1	16.25	90.64	8.3	33.24	8.1	24.3	0.42
I26	30 Sep 2024	2	16.15	90.56	8.2	33.25	8.1	24.4	0.43
I26	30 Sep 2024	3	15.51	89.11	8.2	33.25	8.1	24.5	0.45
I26	30 Sep 2024	4	15.36	84.57	8.2	33.20	8.1	24.5	0.67
I26	30 Sep 2024	5	15.05	83.10	8.1	33.22	8.1	24.6	0.82
I26	30 Sep 2024	6	14.53	82.87	8.2	33.20	8.1	24.7	0.99
I26	30 Sep 2024	7	14.40	85.51	8.2	33.17	8.1	24.7	1.23
I26	30 Sep 2024	8	14.02	86.68	8.2	33.17	8.1	24.8	1.35
I26	30 Sep 2024	9	13.63	87.81	7.8	33.16	8.1	24.8	1.35

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I32	03 Sep 2024	1	20.90	86.55	7.8	33.42	8.2	23.3	0.87
I32	03 Sep 2024	2	20.14	85.84	7.9	33.46	8.2	23.6	0.92
I32	03 Sep 2024	3	19.71	84.11	8.1	33.42	8.2	23.6	1.09
I32	03 Sep 2024	4	19.39	83.85	8.1	33.43	8.2	23.7	1.27
I32	03 Sep 2024	5	18.80	85.12	8.2	33.43	8.2	23.9	1.44
I32	03 Sep 2024	6	18.23	85.81	8.2	33.39	8.2	24.0	1.69
I32	03 Sep 2024	7	17.68	85.04	8.3	33.37	8.1	24.1	2.15
I32	03 Sep 2024	8	17.44	84.28	8.3	33.34	8.1	24.1	2.80
I32	03 Sep 2024	9	17.28	83.24	8.3	33.33	8.1	24.2	3.41
I32	03 Sep 2024	10	17.24	82.55	8.3	33.32	8.1	24.2	3.55
I32	10 Sep 2024	1	21.79	83.97	8.5	33.31	8.2	23.0	0.86
I32	10 Sep 2024	2	21.46	84.23	8.5	33.35	8.2	23.1	0.93
I32	10 Sep 2024	3	21.17	85.87	8.5	33.35	8.2	23.2	1.07
I32	10 Sep 2024	4	20.95	85.44	8.4	33.34	8.2	23.2	1.55
I32	10 Sep 2024	5	20.90	82.36	8.4	33.34	8.2	23.3	2.22
I32	10 Sep 2024	6	20.88	79.13	8.3	33.33	8.2	23.3	2.68
I32	10 Sep 2024	7	20.81	78.68	8.3	33.33	8.2	23.3	2.94
I32	10 Sep 2024	8	20.72	78.41	8.3	33.33	8.2	23.3	3.16
I32	10 Sep 2024	9	20.58	77.98	8.1	33.33	8.2	23.3	3.30
I32	10 Sep 2024	10	19.82	75.99	8.0	33.36	8.2	23.6	3.27
I32	17 Sep 2024	1	20.78	73.67	7.4	33.47	8.2	23.4	2.08
I32	17 Sep 2024	2	18.49	72.32	7.7	33.44	8.1	23.9	1.82
I32	17 Sep 2024	3	16.68	75.03	8.4	33.27	8.1	24.3	1.19
I32	17 Sep 2024	4	16.30	85.95	8.4	33.22	8.1	24.3	1.08
I32	17 Sep 2024	5	15.66	89.45	8.4	33.20	8.1	24.4	1.18
I32	17 Sep 2024	6	15.43	89.72	8.4	33.18	8.1	24.5	1.33
I32	17 Sep 2024	7	15.36	86.89	8.4	33.17	8.1	24.5	1.57
I32	17 Sep 2024	8	15.36	84.81	8.4	33.17	8.1	24.5	1.75
I32	17 Sep 2024	9	15.31	83.90	8.3	33.18	8.1	24.5	1.92
I32	17 Sep 2024	10	15.27	82.95	8.3	33.18	8.1	24.5	1.86
I32	24 Sep 2024	1	17.69	89.29	8.1	33.30	8.2	24.0	0.59
I32	24 Sep 2024	2	17.53	89.27	8.1	33.30	8.2	24.1	0.61
I32	24 Sep 2024	3	17.42	88.93	8.1	33.29	8.1	24.1	0.68
I32	24 Sep 2024	4	17.26	88.45	8.0	33.29	8.1	24.1	0.75
I32	24 Sep 2024	5	16.35	87.71	8.0	33.28	8.1	24.3	0.86
I32	24 Sep 2024	6	15.31	86.60	8.3	33.23	8.1	24.5	1.03
I32	24 Sep 2024	7	15.07	84.99	8.4	33.20	8.1	24.6	1.28
I32	24 Sep 2024	8	15.01	83.83	8.3	33.19	8.1	24.6	1.79
I32	24 Sep 2024	9	14.96	81.54	8.3	33.19	8.1	24.6	2.53
I32	24 Sep 2024	10	14.93	81.52	8.3	33.19	8.1	24.6	2.87
I32	30 Sep 2024	1	15.44	73.47	8.0	33.18	8.1	24.5	0.67
I32	30 Sep 2024	2	14.81	73.64	7.9	33.23	8.1	24.6	0.74
I32	30 Sep 2024	3	14.14	74.08	8.0	33.17	8.1	24.7	0.98
I32	30 Sep 2024	4	13.96	74.65	8.0	33.15	8.1	24.8	1.20
I32	30 Sep 2024	5	13.88	76.40	7.9	33.15	8.0	24.8	1.43
I32	30 Sep 2024	6	13.80	78.08	7.8	33.15	8.0	24.8	1.64
I32	30 Sep 2024	7	13.68	78.70	7.7	33.15	8.0	24.8	1.98
I32	30 Sep 2024	8	13.50	79.16	7.6	33.15	8.0	24.9	2.28
I32	30 Sep 2024	9	13.28	80.39	7.4	33.16	8.0	24.9	2.34
I32	30 Sep 2024	10	13.25	75.57	7.3	33.15	8.0	24.9	2.32

NA = not available

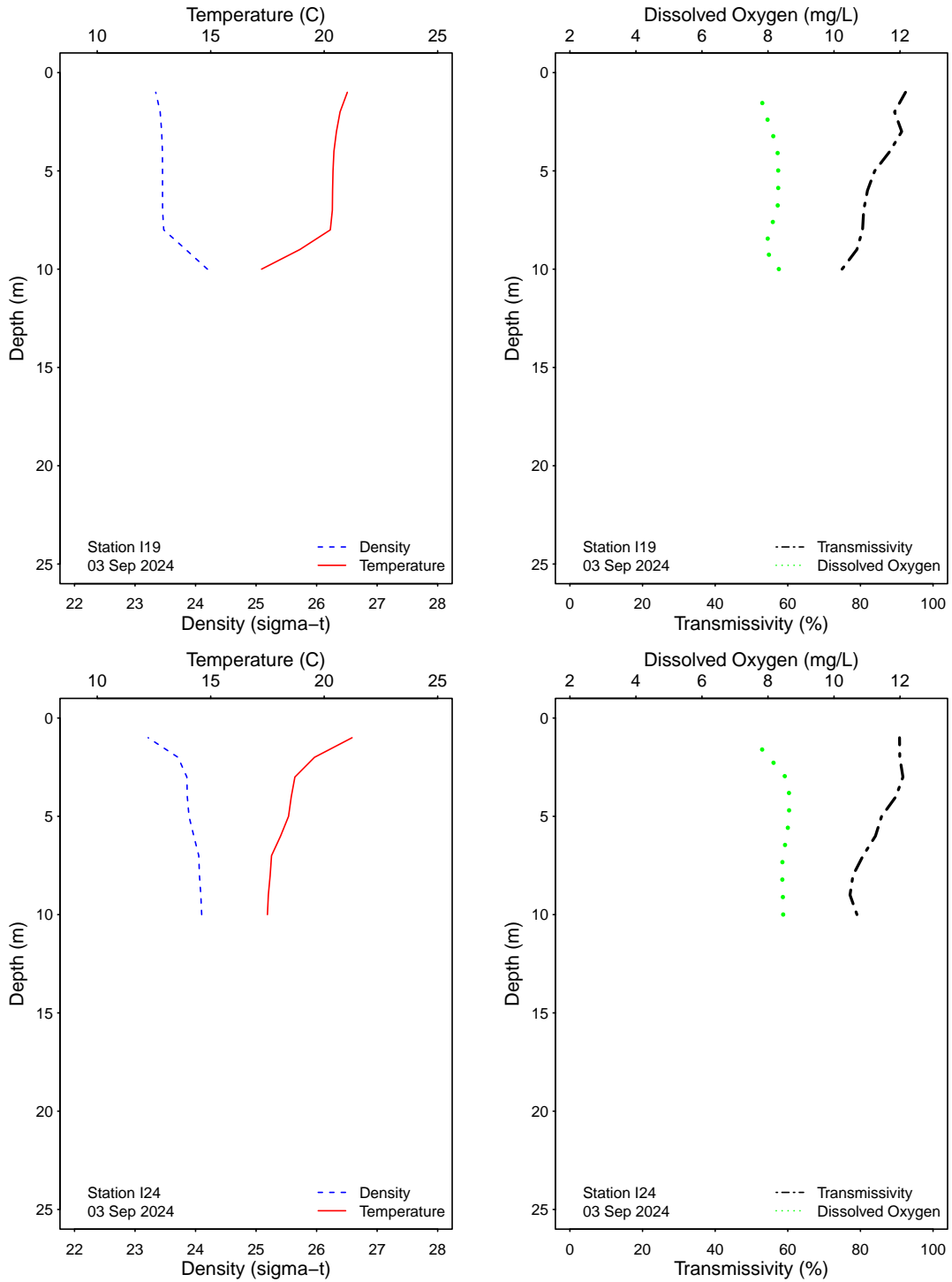


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

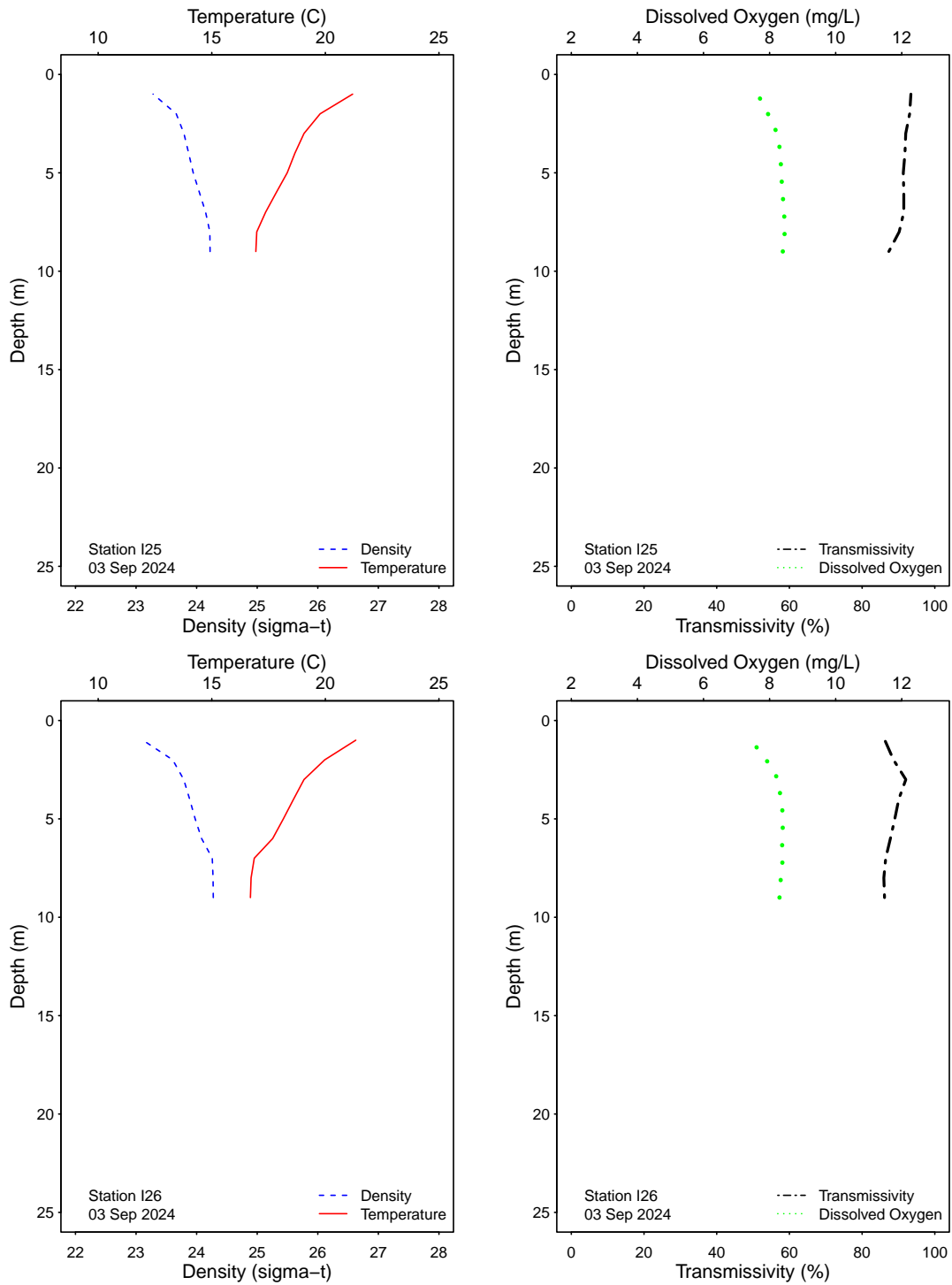


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

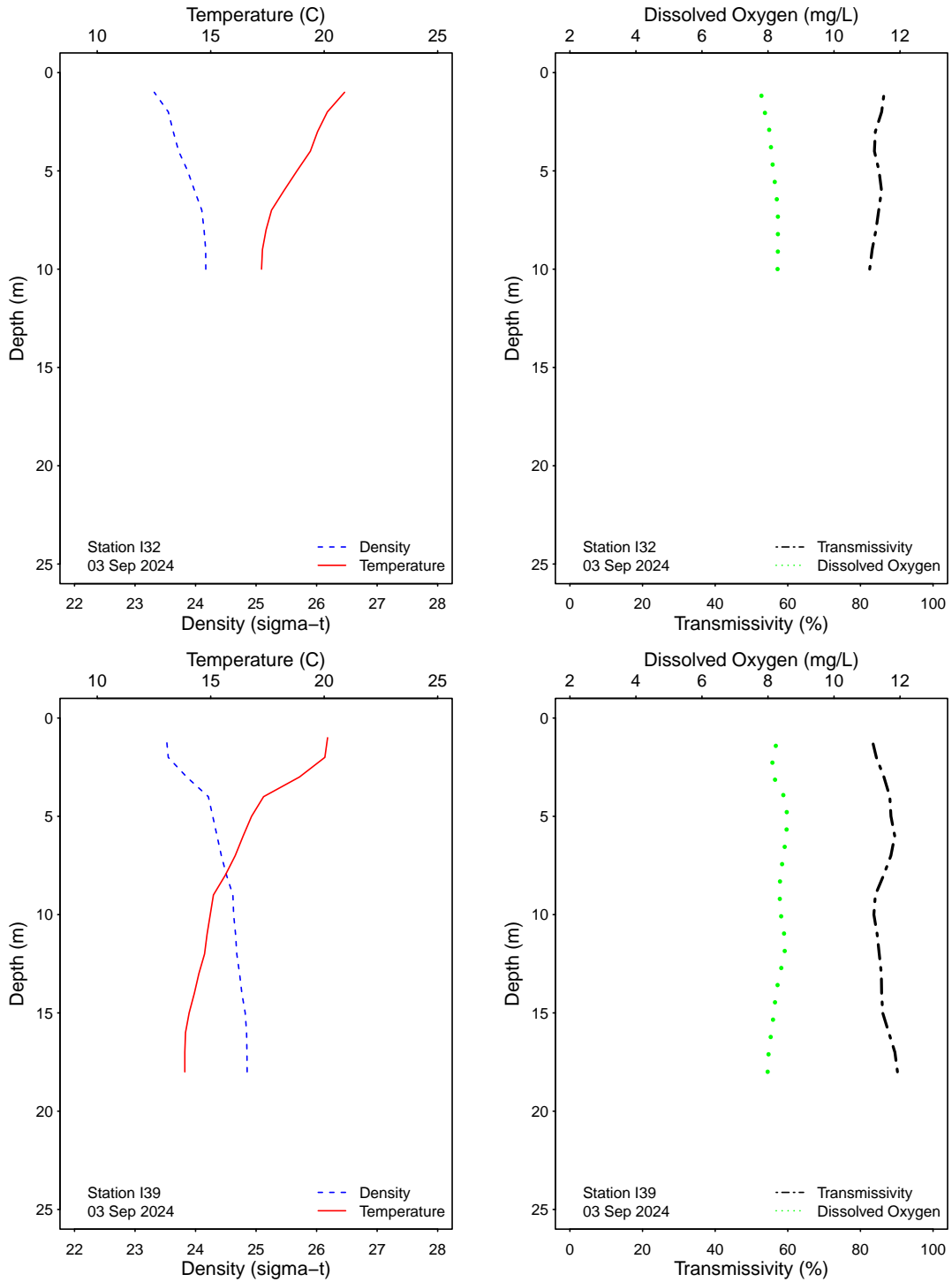


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

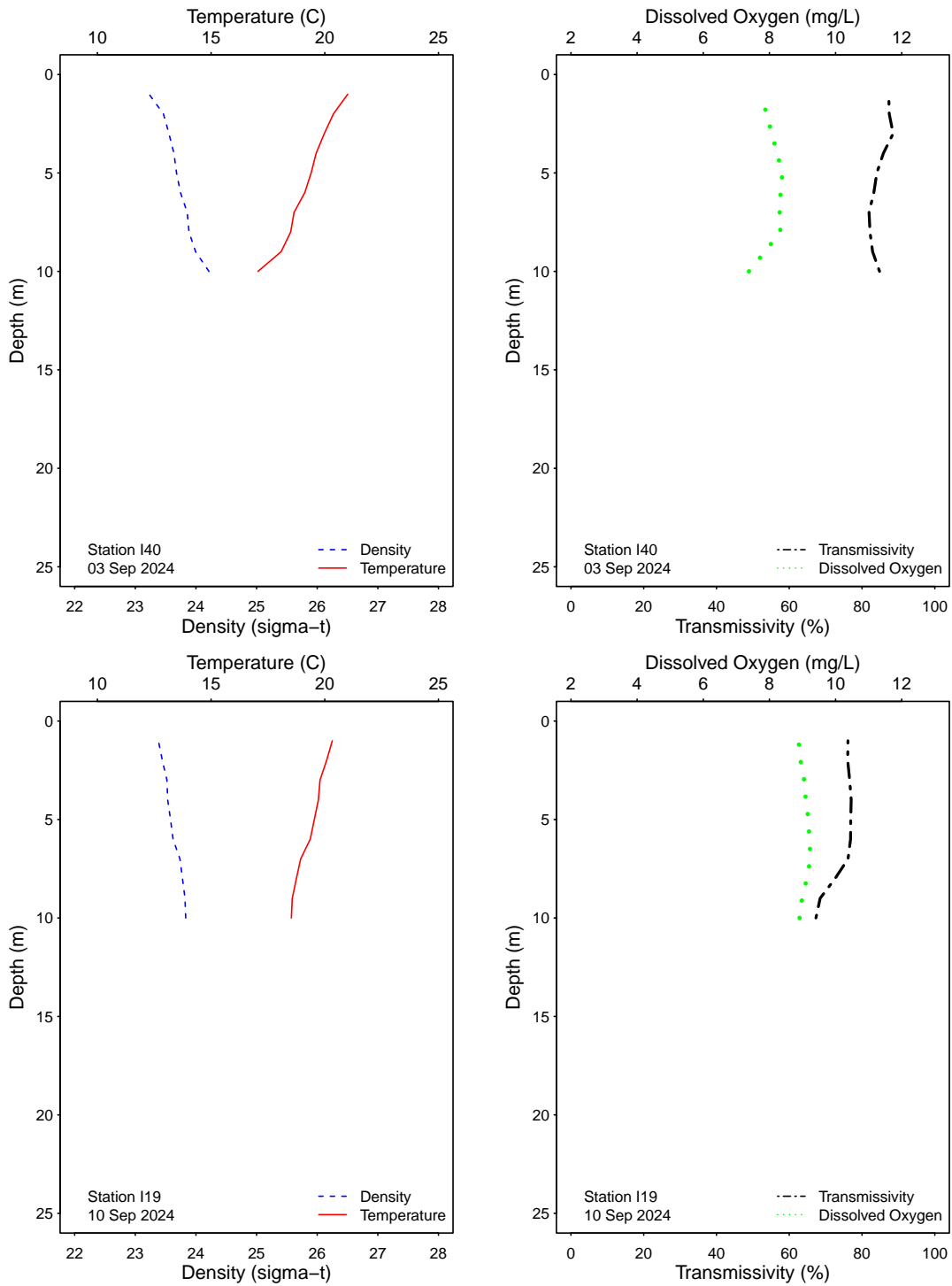


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

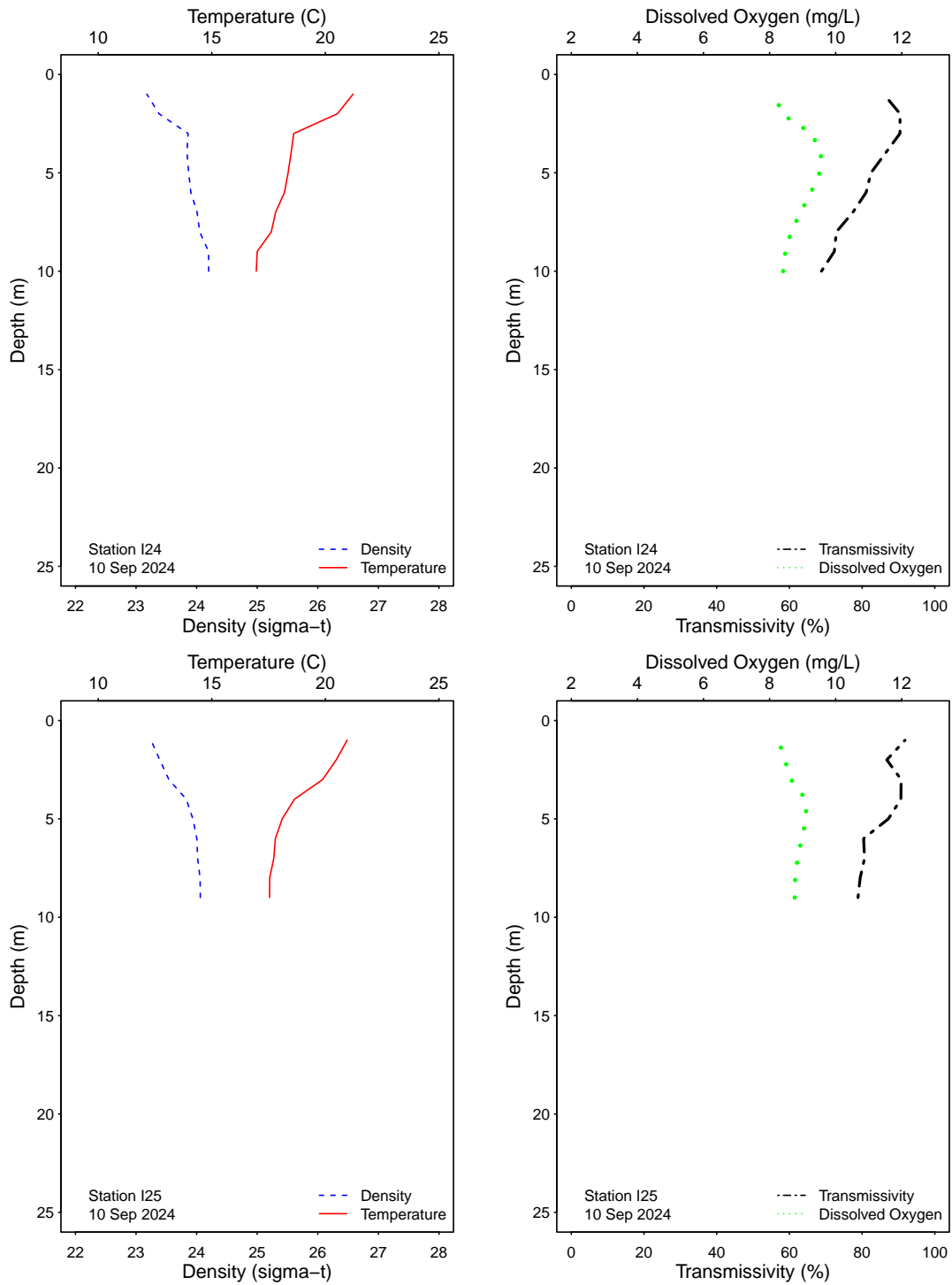


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

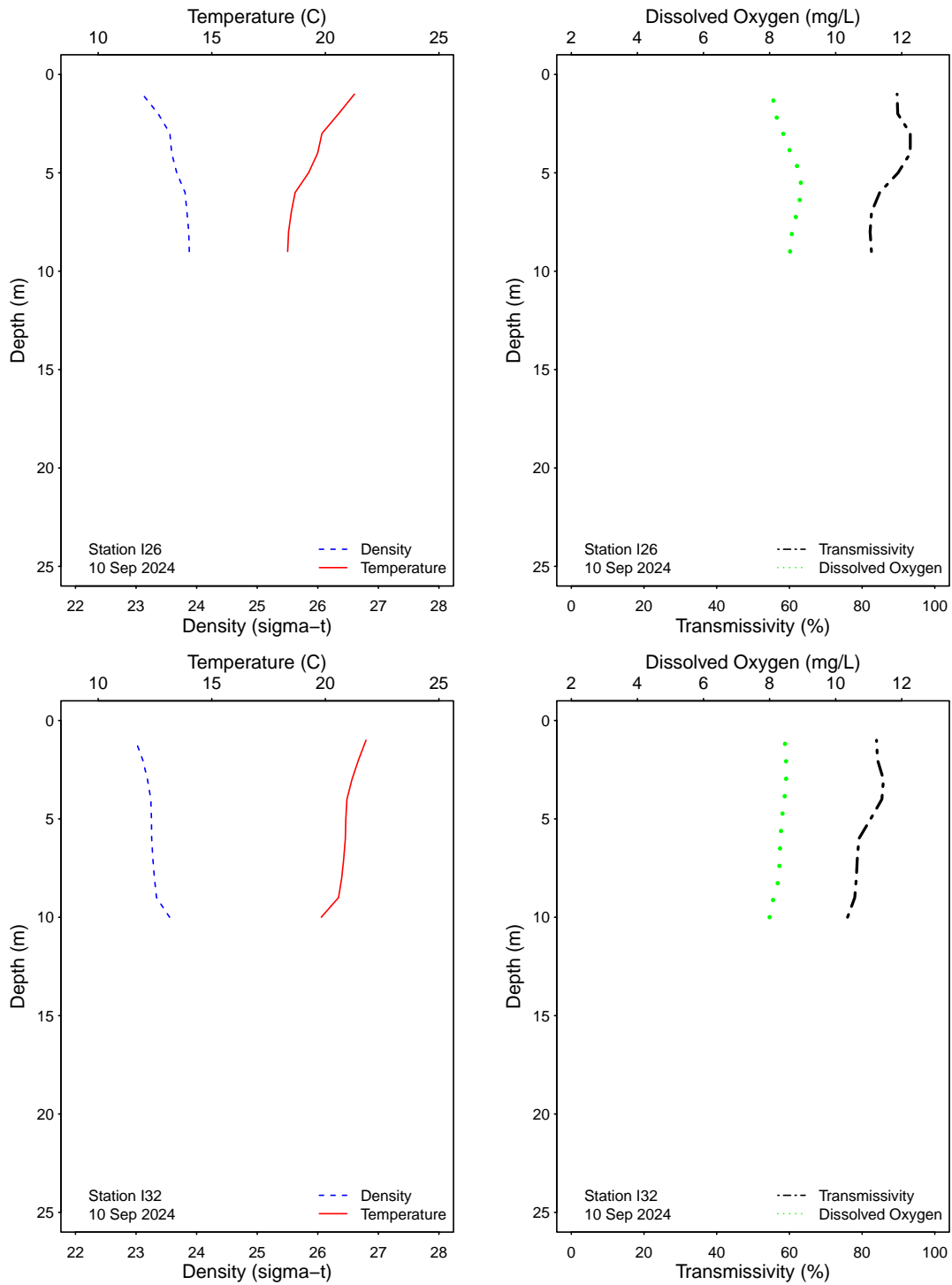


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

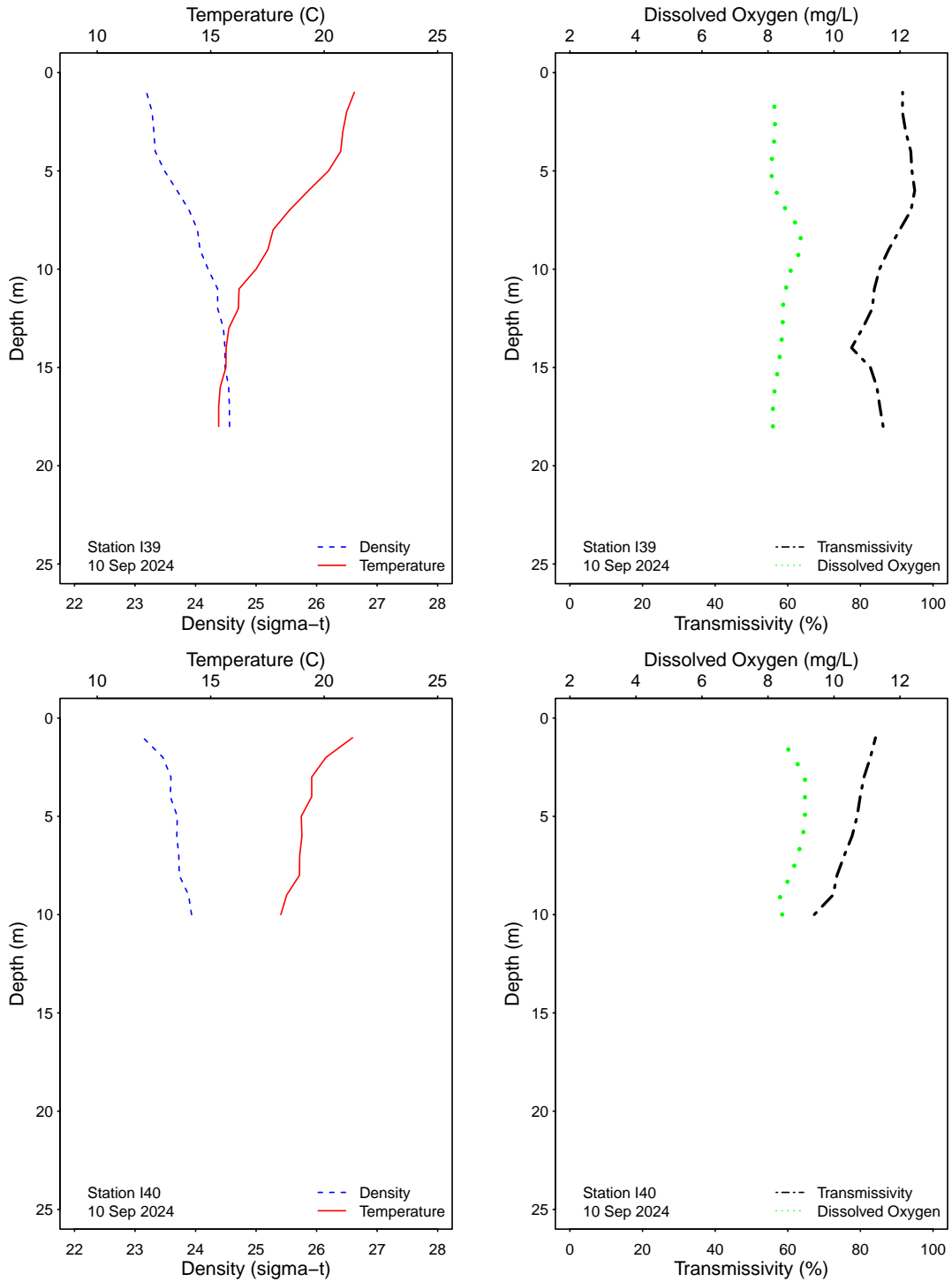


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

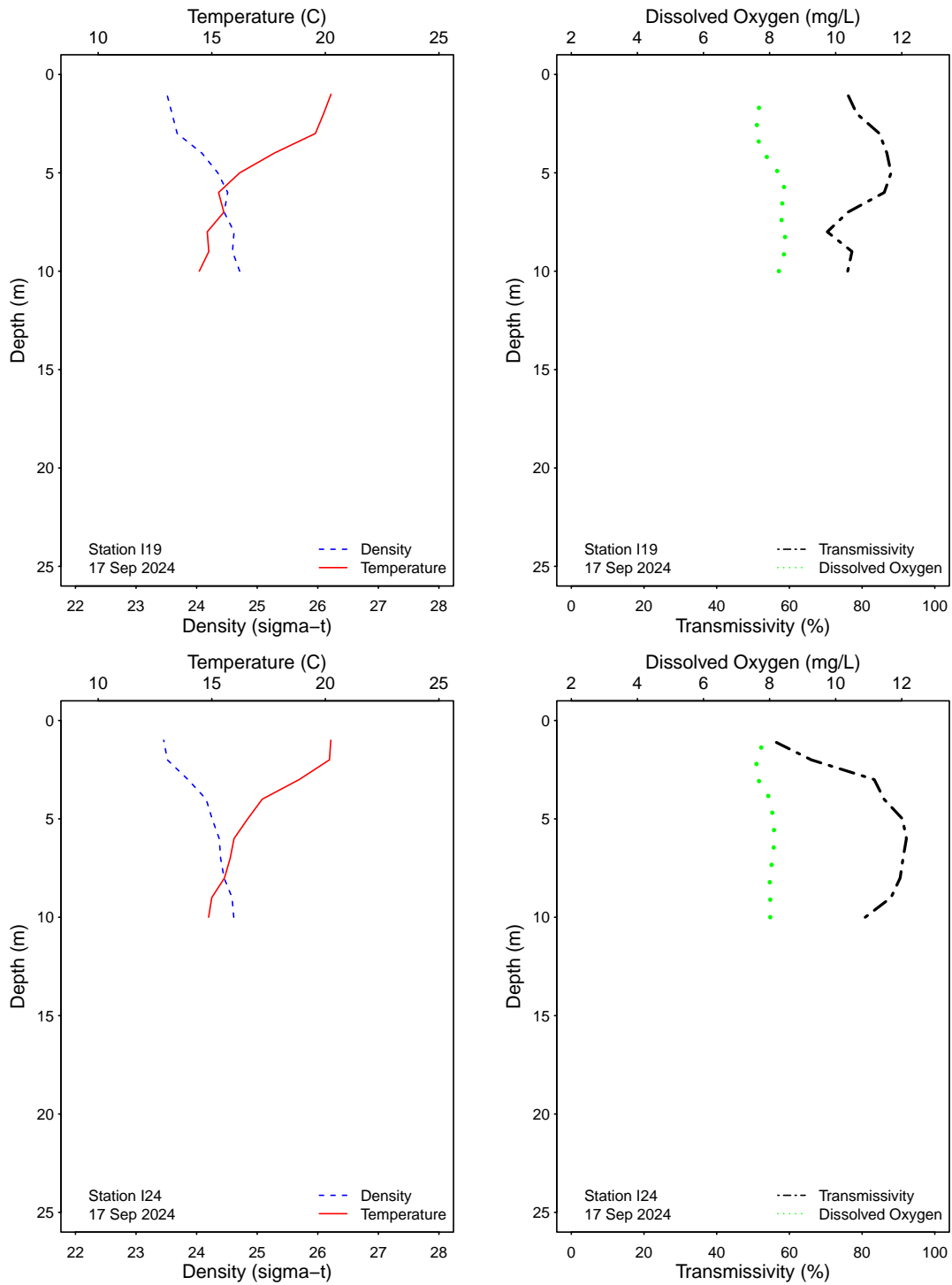


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

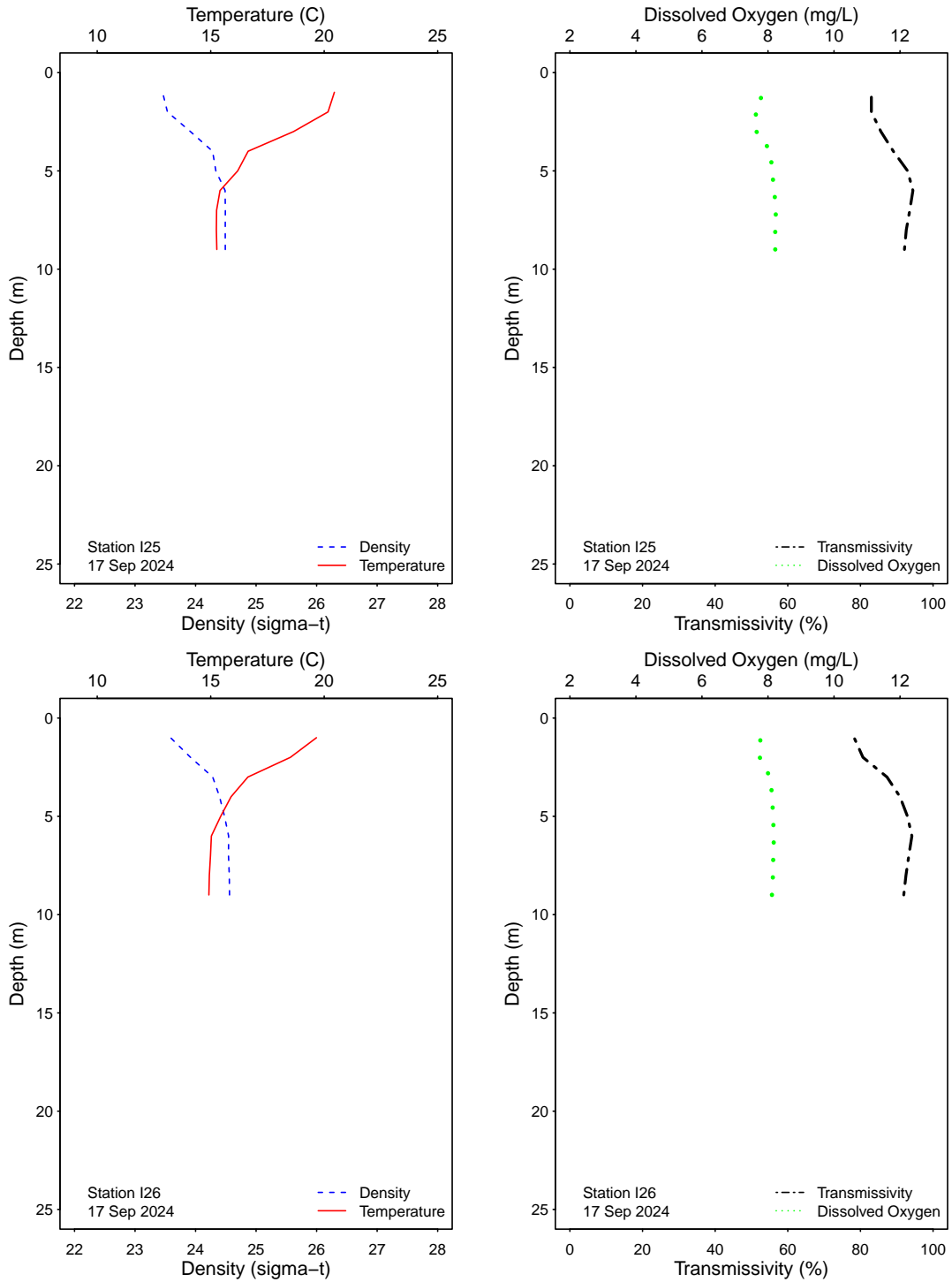


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

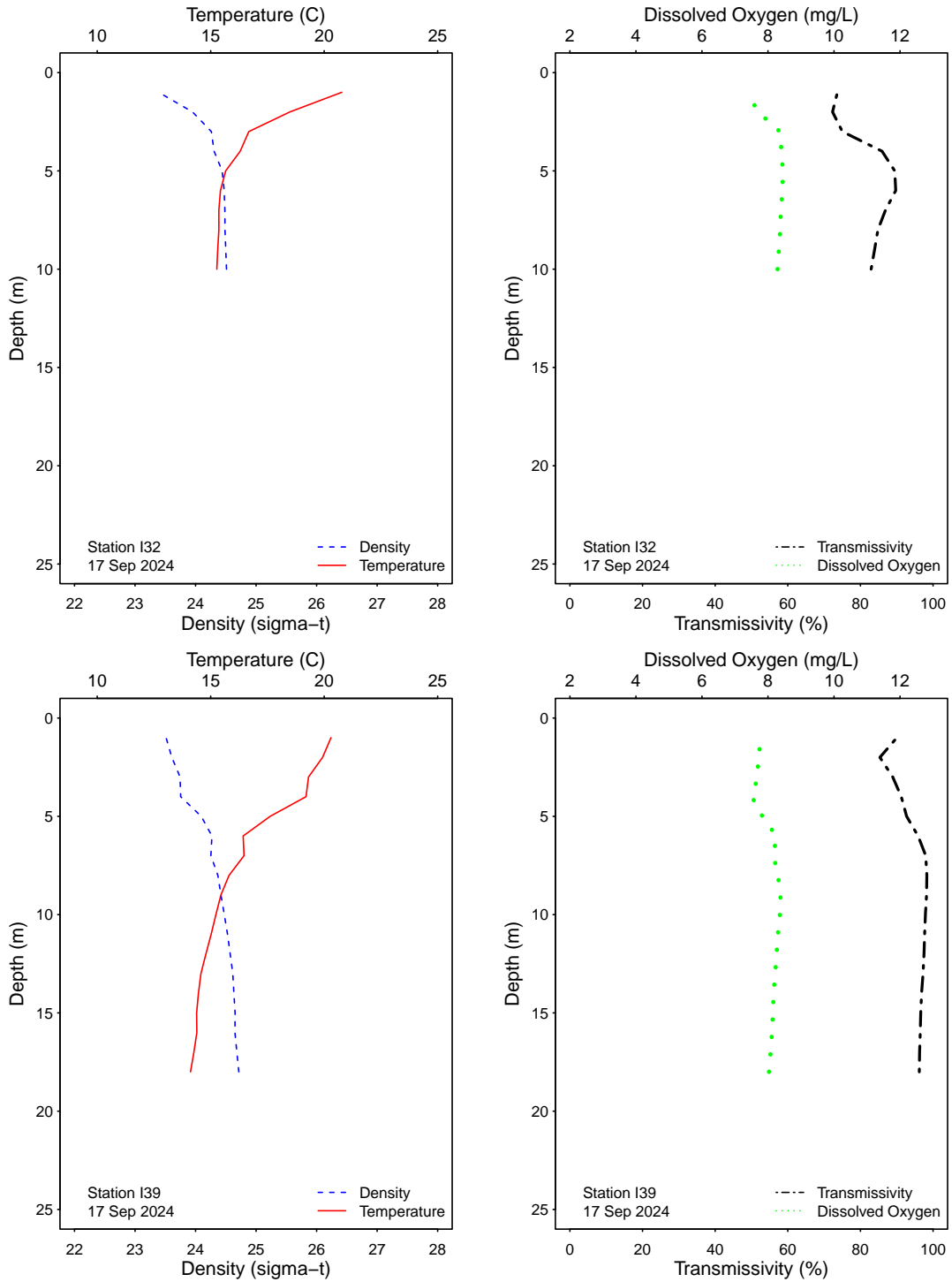


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

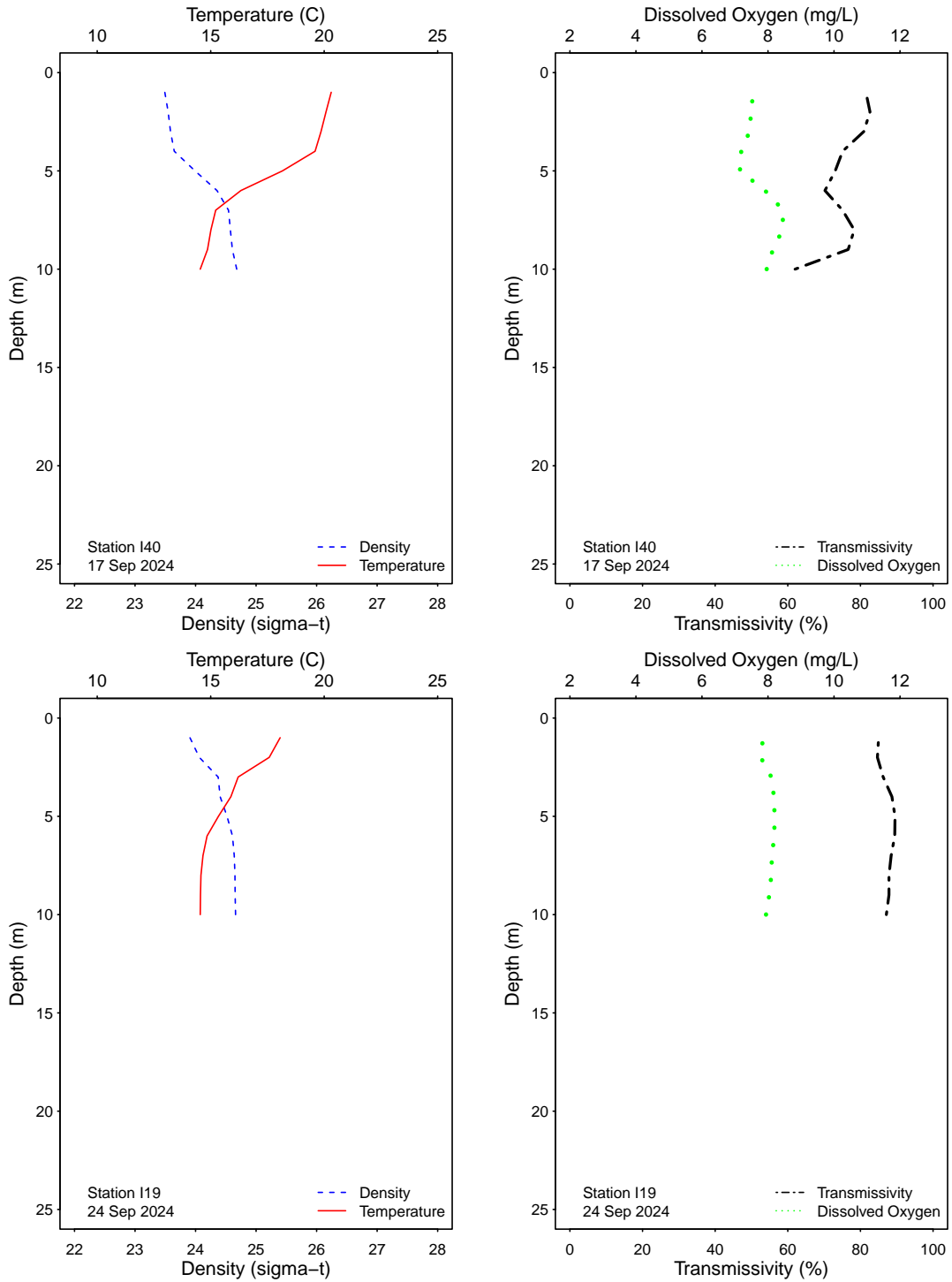


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

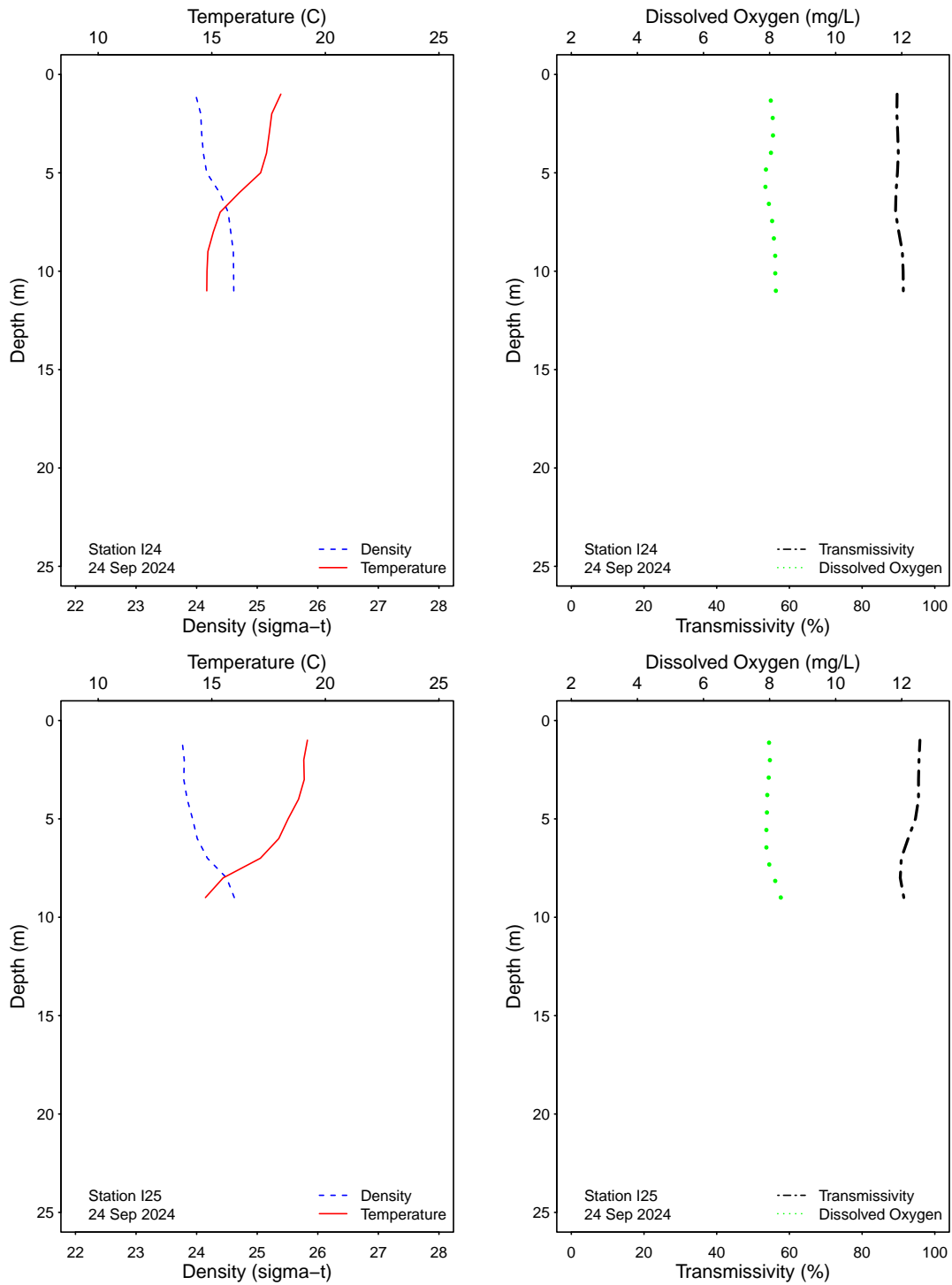


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

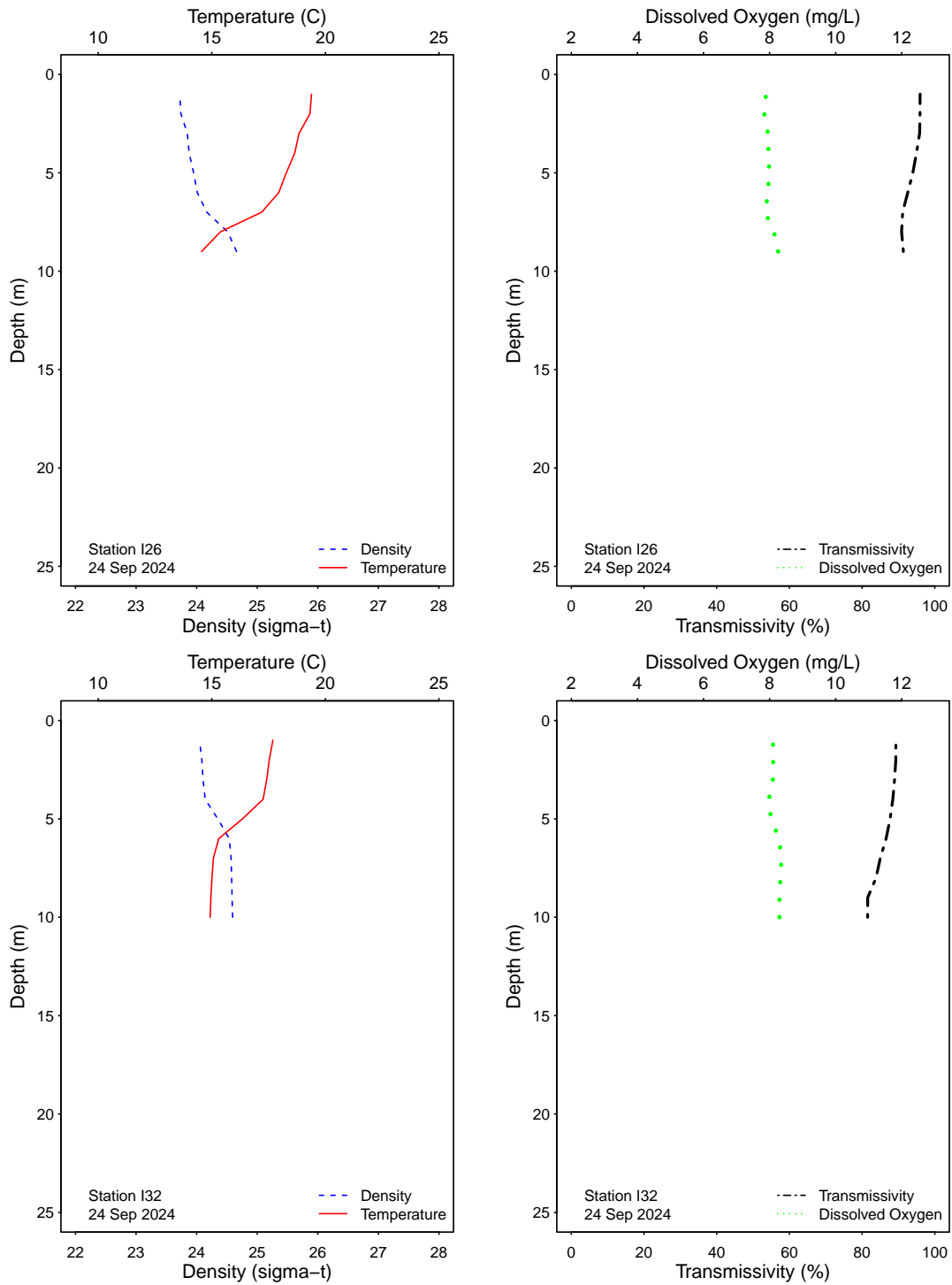


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

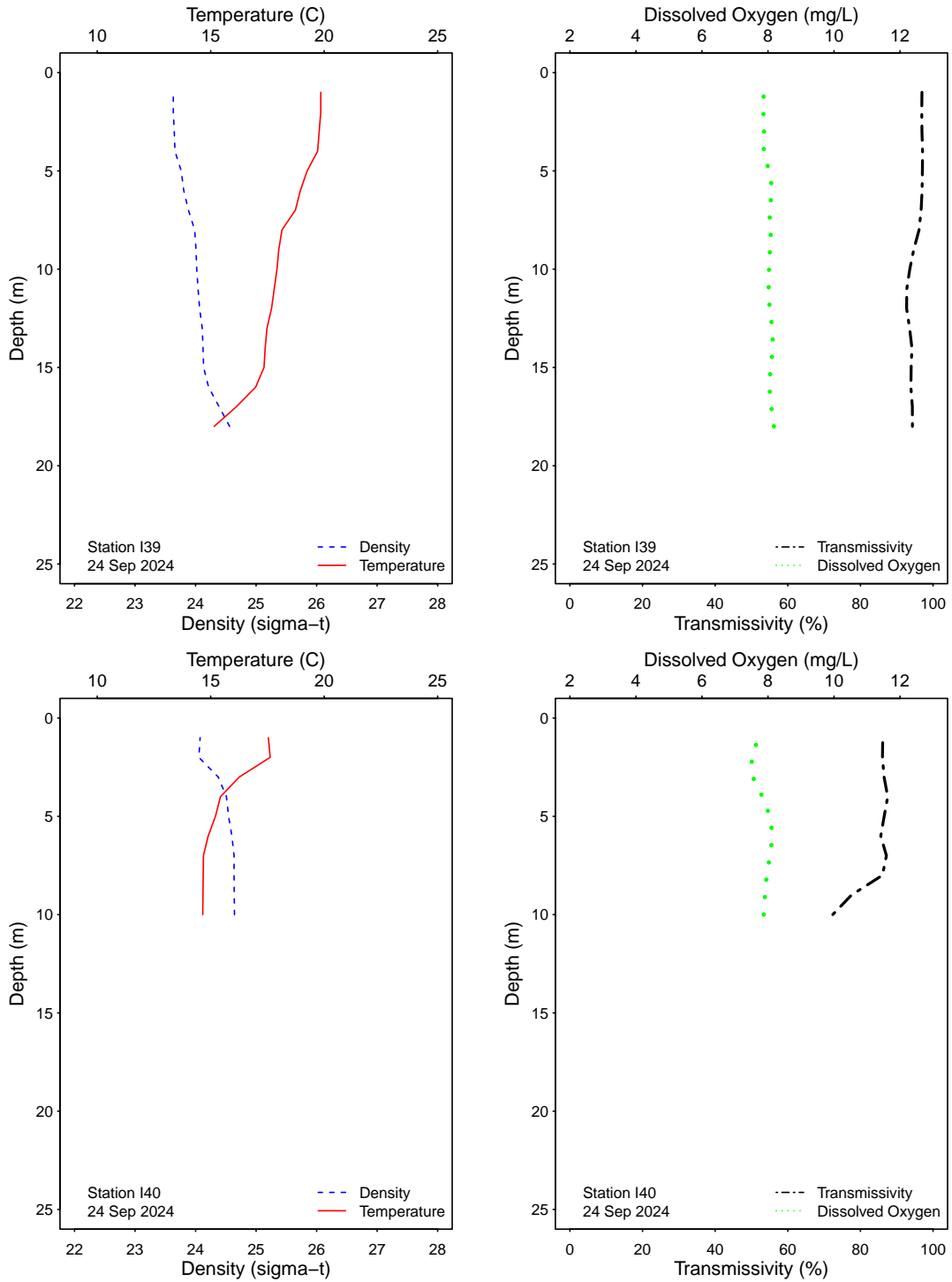


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

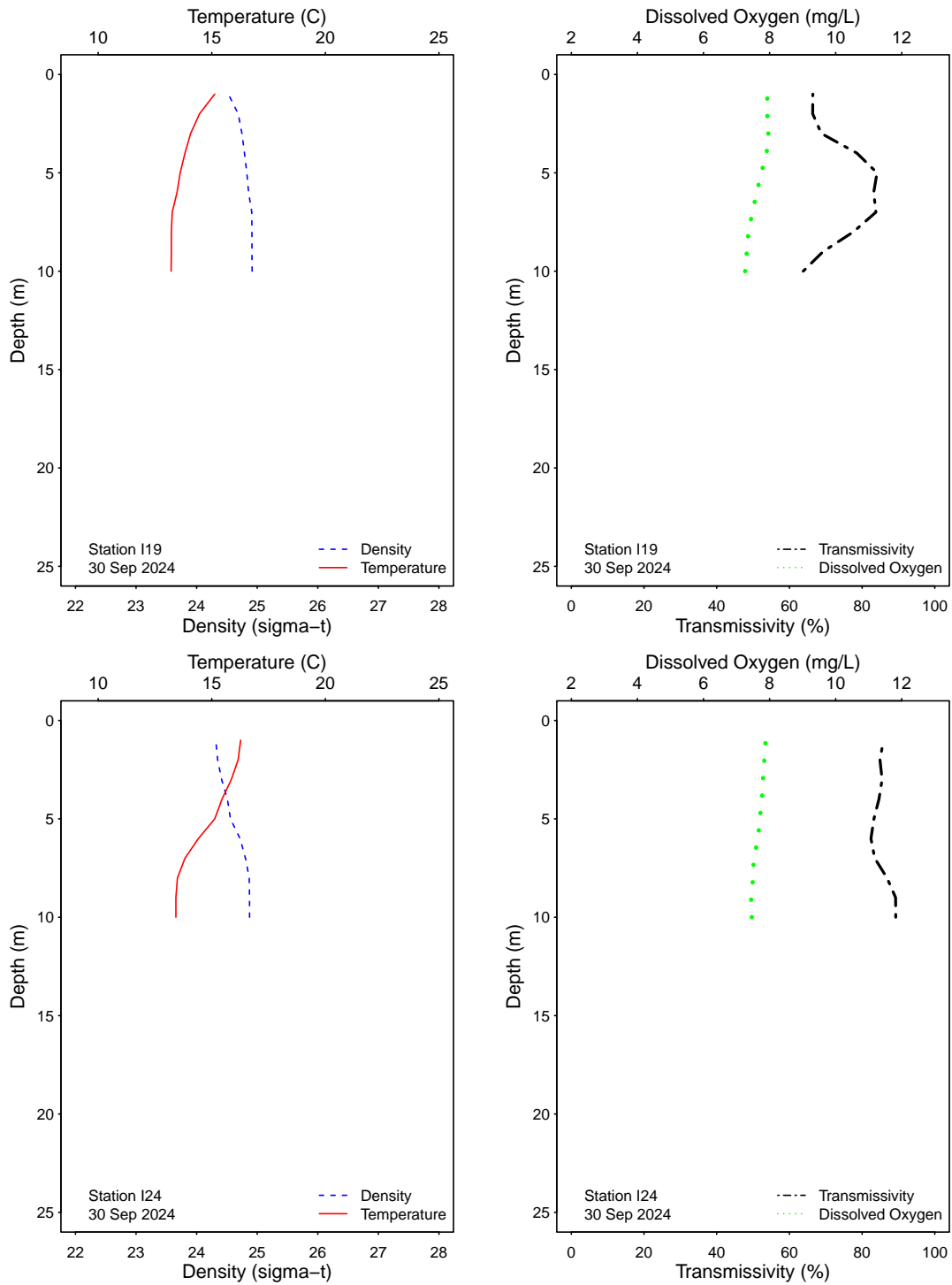


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

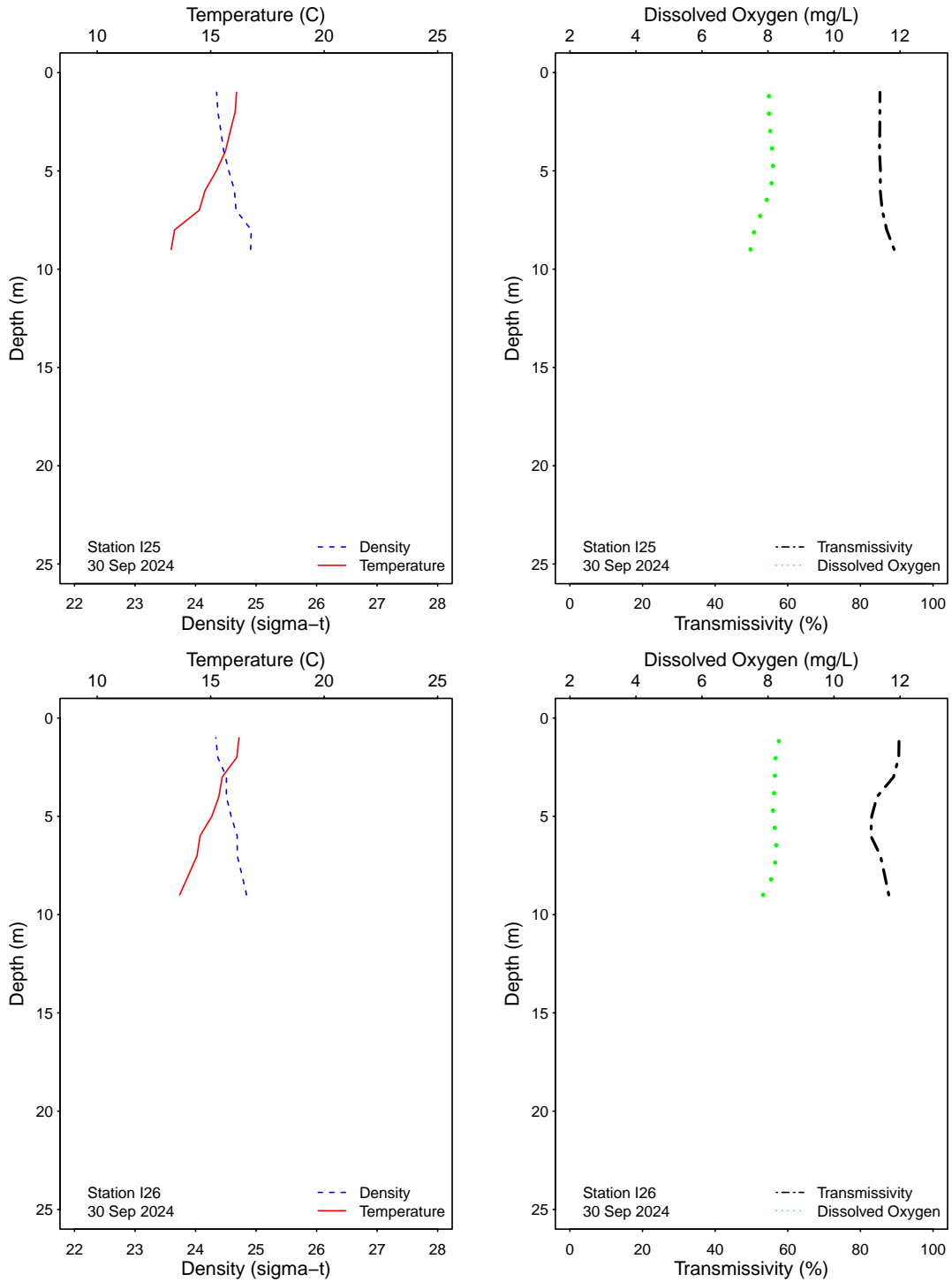


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

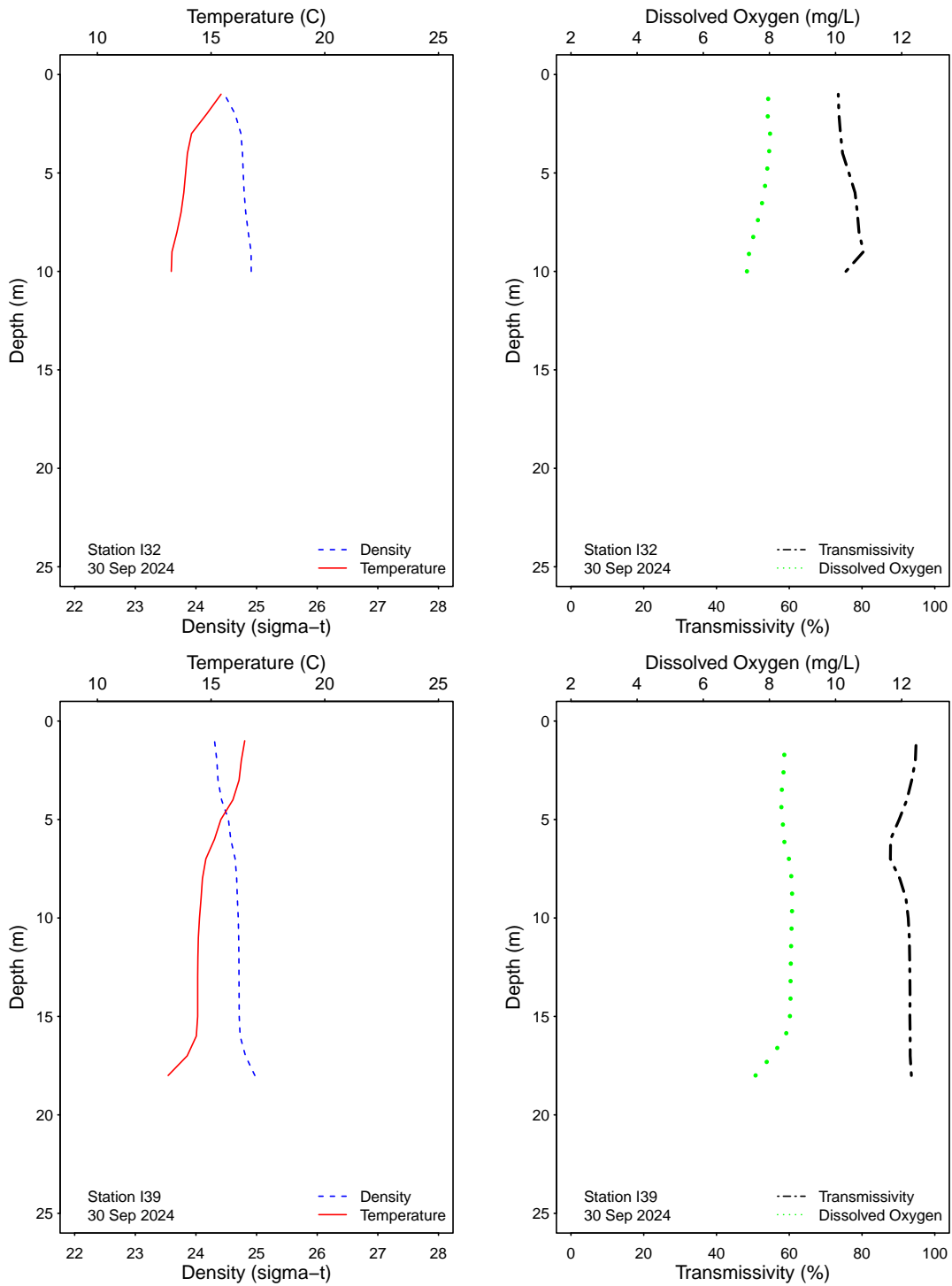


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

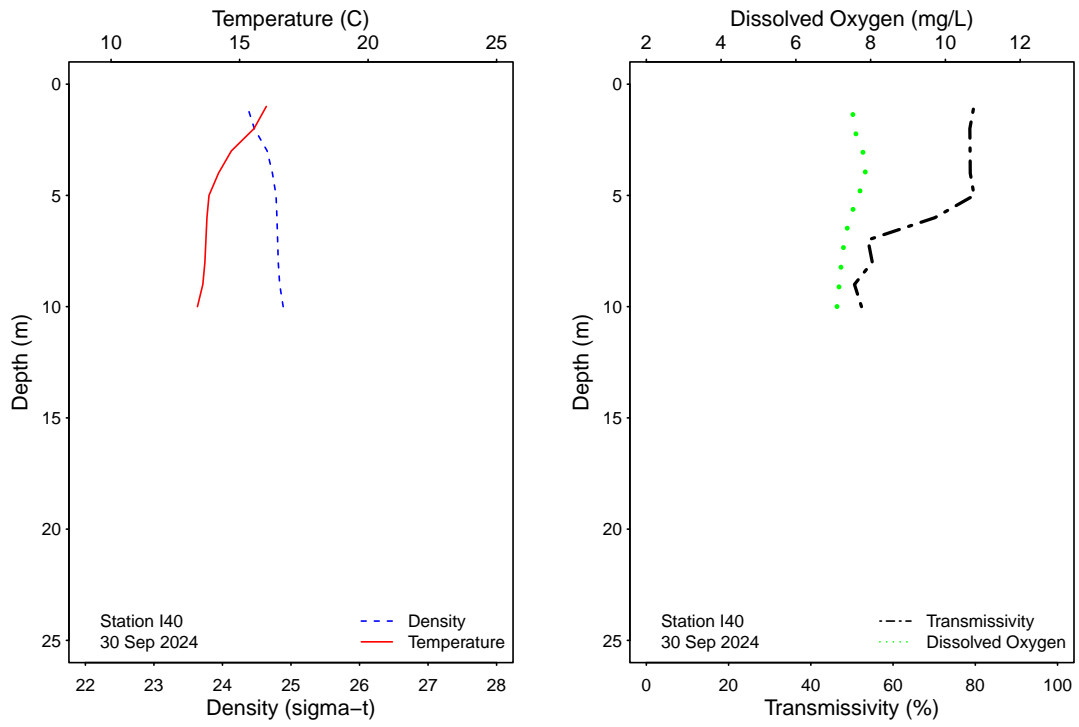


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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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	03 Sep 2024	6	JF	LAB DUPLICATE	200	2	60
I19	10 Sep 2024	6	KT	LAB DUPLICATE	2	2	14
I19	17 Sep 2024	6	ADG	LAB DUPLICATE	20	2	2
I19	24 Sep 2024	6	KA	LAB DUPLICATE	2	2	2
I19	30 Sep 2024	6	KA	LAB DUPLICATE	2	2	2
I40	03 Sep 2024	6	JF	LAB DUPLICATE	14	2	2
I40	10 Sep 2024	6	KT	LAB DUPLICATE	520	130	160
I40	17 Sep 2024	6	ADG	LAB DUPLICATE	20	16	12
I40	24 Sep 2024	6	KA	LAB DUPLICATE	2	2	2
I40	30 Sep 2024	6	KA	LAB DUPLICATE	20	2	2
S12	03 Sep 2024		KT	LAB DUPLICATE	200	2	20
S12	03 Sep 2024		KT	FIELD DUPLICATE	200	20	20
S12	10 Sep 2024		KT	FIELD DUPLICATE	20	2	30
S12	10 Sep 2024		KT	LAB DUPLICATE	40	2	44
S12	17 Sep 2024		ND	FIELD DUPLICATE	20	2	2
S12	17 Sep 2024		ND	LAB DUPLICATE	20	2	2
S12	25 Sep 2024		ADG	FIELD DUPLICATE	20	2	2
S12	25 Sep 2024		ADG	LAB DUPLICATE	20	2	2

ns = not sampled

ND = no data

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