



# **SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT**

## **SOUTH BAY WATER RECLAMATION PLANT**

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

## **JULY 2025**

Environmental Monitoring and Technical Services  
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August 31, 2025

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 July 2025 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  $\geq$  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)<sup>1</sup>. 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**

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<sup>1</sup> 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, 1987<sup>2</sup>) 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 2025 Quality Assurance Report, which will be completed in March 2026.

## 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 July, seven of the eight shore stations located north of the border were 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 station S5.
  - The single sample maximum (SSM) standard for fecal coliforms was exceeded at stations S4, S5, S10, and S11.
  - The 6-week running geometric mean standard for *Enterococcus* was exceeded at stations S5, S6, and S11.
  - The statistical threshold value (STV) standard for *Enterococcus* was exceeded at stations S4, S5, S6, S10, S11, and S12.

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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, S9, S10, S11, and S12.
- The STV standard for total coliforms was exceeded at stations S4, S5, S6, S10, S11, and S12.
- A sewage-like odor was observed at stations S5, S10, S11, and S12 on one or more days in July.
- 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 July 7, 15, 22, and 31.
- During July, five 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 30-day running median standard for total coliforms was exceeded at stations I19, I24, I26, and I40.
  - The STV standard for total coliforms was exceeded at stations I19, I24, I25, and I32.
- Water column temperatures ranged from 11.58 to 20.08°C. The difference between surface and bottom waters ranged from 0.47 to 6.70°C.
- Concentrations of chlorophyll *a* ranged from 0.64 to 39.83 µg/L at the kelp bed stations.
- A sewage-like odor was observed at station I32 on one or more days in July.

➤ **Offshore Water Quality Sampling**

- Quarterly sampling was not conducted during July at the offshore stations. The next quarterly sampling is scheduled for August 2025.



## TABLES AND FIGURES



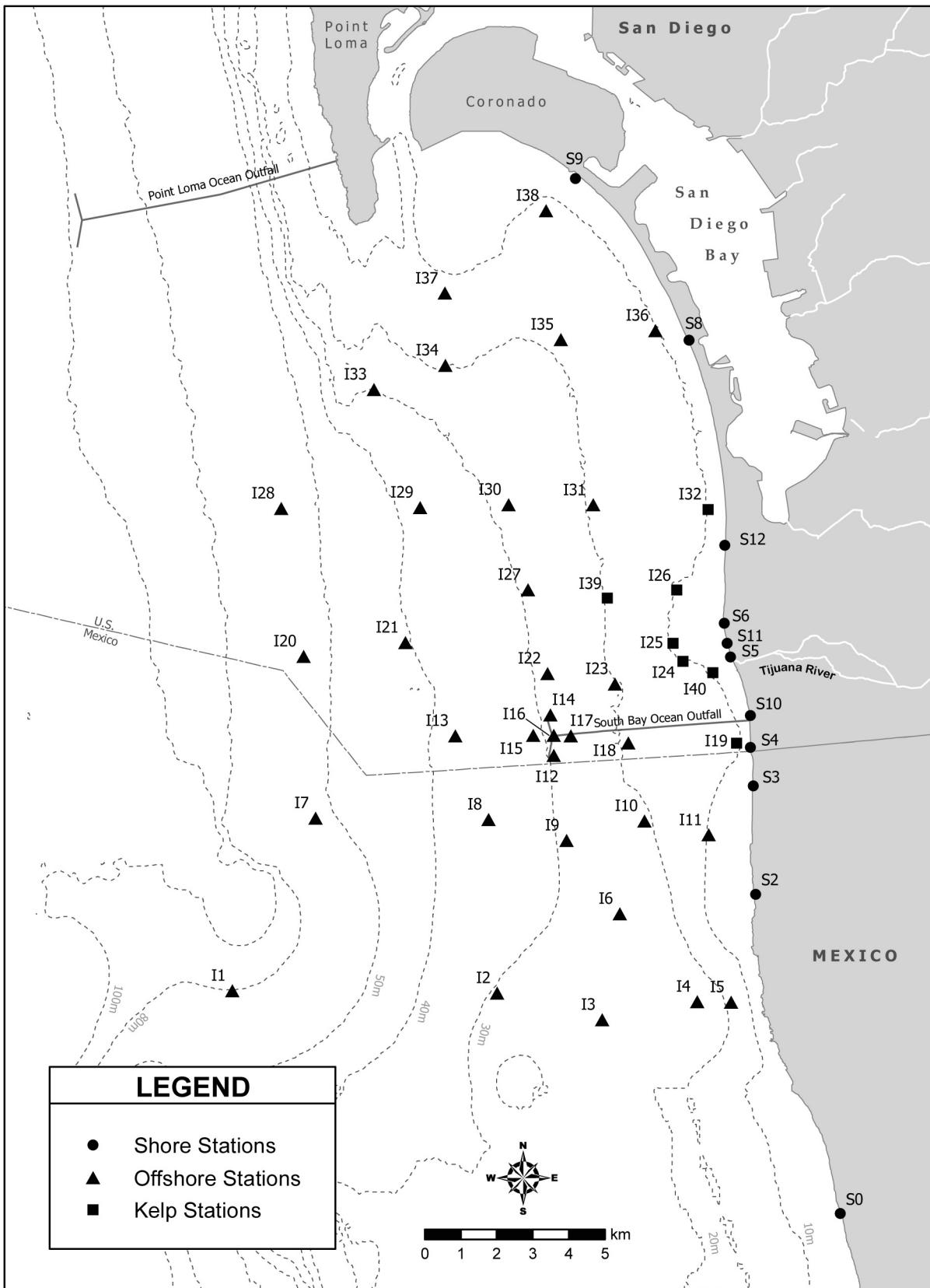


Figure 1.1 Station Map

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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 Jul 2025	8	<b>839</b>	30	4	6	8	135	8
02 Jul 2025	8	<b>839</b>	30	4	6	8	135	8
03 Jul 2025	7	<b>493</b>	10	2	6	6	55	2
04 Jul 2025	7	<b>493</b>	10	2	6	6	55	2
05 Jul 2025	7	<b>493</b>	10	2	6	6	55	2
06 Jul 2025	7	<b>493</b>	10	2	6	6	55	2
07 Jul 2025	7	<b>493</b>	10	2	6	6	55	2
08 Jul 2025	6	<b>248</b>	8	2	7	5	32	3
09 Jul 2025	6	<b>248</b>	8	2	7	5	32	3
10 Jul 2025	6	<b>248</b>	8	2	7	5	32	3
11 Jul 2025	6	<b>248</b>	8	2	7	5	32	3
12 Jul 2025	6	114	4	2	7	5	17	3
13 Jul 2025	6	114	4	2	7	5	17	3
14 Jul 2025	6	114	4	2	7	5	17	3
15 Jul 2025	15	<b>229</b>	8	2	6	15	33	5
16 Jul 2025	15	<b>229</b>	8	2	6	15	33	5
17 Jul 2025	11	70	12	2	6	8	37	8
18 Jul 2025	11	70	12	2	6	8	37	8
19 Jul 2025	11	70	12	2	6	8	37	8
20 Jul 2025	11	70	12	2	6	8	37	8
21 Jul 2025	11	70	12	2	6	8	37	8
22 Jul 2025	12	55	15	2	10	7	37	12
23 Jul 2025	12	55	15	2	10	7	37	12
24 Jul 2025	17	70	15	2	9	9	37	17
25 Jul 2025	17	70	15	2	9	9	37	17
26 Jul 2025	17	84	23	2	8	13	33	25
27 Jul 2025	17	84	23	2	8	13	33	25
28 Jul 2025	17	84	23	2	8	13	33	25
29 Jul 2025	12	69	15	2	6	13	21	17
30 Jul 2025	12	69	15	2	6	13	21	17
31 Jul 2025	17	45	15	2	8	19	14	25

\* 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
01 Jul 2025	IC	E	IC	IC	IC	IC	IC	IC
08 Jul 2025	IC	IC	IC	IC	IC	IC	IC	IC
15 Jul 2025	E	E	IC	IC	IC	E	E	IC
17 Jul 2025	IC	IC	IC	IC	IC	IC	IC	IC
22 Jul 2025	IC	IC	IC	IC	IC	IC	IC	IC
29 Jul 2025	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.

<b>Date</b>	<b>S4</b>	<b>S5</b>	<b>S6</b>	<b>S8</b>	<b>S9</b>	<b>S10</b>	<b>S11</b>	<b>S12</b>
01 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
02 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
03 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
04 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
05 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
06 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
07 Jul 2025	10	<b>1843</b>	<b>235</b>	3	10	7	<b>514</b>	10
08 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
09 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
10 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
11 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
12 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
13 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
14 Jul 2025	7	<b>985</b>	<b>90</b>	3	11	5	<b>140</b>	14
15 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
16 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
17 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
18 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
19 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
20 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
21 Jul 2025	10	<b>813</b>	<b>58</b>	2	7	10	<b>90</b>	10
22 Jul 2025	8	<b>420</b>	<b>64</b>	2	9	8	<b>98</b>	16
23 Jul 2025	8	<b>420</b>	<b>64</b>	2	9	8	<b>98</b>	16
24 Jul 2025	7	<b>240</b>	<b>44</b>	2	9	8	<b>57</b>	18
25 Jul 2025	7	<b>240</b>	<b>44</b>	2	9	8	<b>57</b>	18
26 Jul 2025	7	<b>240</b>	<b>44</b>	2	9	8	<b>57</b>	18
27 Jul 2025	7	<b>240</b>	<b>44</b>	2	9	8	<b>57</b>	18
28 Jul 2025	7	<b>240</b>	<b>44</b>	2	9	8	<b>57</b>	18
29 Jul 2025	8	<b>85</b>	<b>39</b>	2	9	11	<b>68</b>	18
30 Jul 2025	8	<b>85</b>	<b>39</b>	2	9	11	<b>68</b>	18
31 Jul 2025	8	<b>85</b>	<b>39</b>	2	9	11	<b>68</b>	18

\* 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
July	E	E	E	IC	IC	E	E	E

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 Jul 2025	20	<b>16000</b>	800	20	<b>200</b>	80	<b>8800</b>	200
02 Jul 2025	20	<b>16000</b>	800	20	<b>200</b>	80	<b>8800</b>	200
03 Jul 2025	*20	<b>*16000</b>	*700	*20	<b>*200</b>	*50	<b>*4600</b>	*110
04 Jul 2025	*20	<b>*16000</b>	*700	*20	<b>*200</b>	*50	<b>*4600</b>	*110
05 Jul 2025	*20	<b>*16000</b>	*700	*20	<b>*200</b>	*50	<b>*4600</b>	*110
06 Jul 2025	*20	<b>*16000</b>	*700	*20	<b>*200</b>	*50	<b>*4600</b>	*110
07 Jul 2025	*20	<b>*16000</b>	*700	*20	<b>*200</b>	*50	<b>*4600</b>	*110
08 Jul 2025	20	<b>16000</b>	600	20	<b>200</b>	20	<b>400</b>	200
09 Jul 2025	20	<b>16000</b>	600	20	<b>200</b>	20	<b>400</b>	200
10 Jul 2025	20	<b>16000</b>	600	20	<b>200</b>	20	<b>400</b>	200
11 Jul 2025	20	<b>16000</b>	600	20	<b>200</b>	20	<b>400</b>	200
12 Jul 2025	*20	<b>*8060</b>	*310	*20	<b>*200</b>	*20	<b>*300</b>	*110
13 Jul 2025	*20	<b>*8060</b>	*310	*20	<b>*200</b>	*20	<b>*300</b>	*110
14 Jul 2025	*20	<b>*8060</b>	*310	*20	<b>*200</b>	*20	<b>*300</b>	*110
15 Jul 2025	20	<b>16000</b>	600	20	<b>200</b>	20	<b>400</b>	200
16 Jul 2025	20	<b>16000</b>	600	20	<b>200</b>	20	<b>400</b>	200
17 Jul 2025	*20	<b>*8060</b>	*700	*20	<b>*200</b>	*20	<b>*5100</b>	*700
18 Jul 2025	*20	<b>*8060</b>	*700	*20	<b>*200</b>	*20	<b>*5100</b>	*700
19 Jul 2025	*20	<b>*8060</b>	*700	*20	<b>*200</b>	*20	<b>*5100</b>	*700
20 Jul 2025	*20	<b>*8060</b>	*700	*20	<b>*200</b>	*20	<b>*5100</b>	*700
21 Jul 2025	*20	<b>*8060</b>	*700	*20	<b>*200</b>	*20	<b>*5100</b>	*700
22 Jul 2025	20	<b>140</b>	800	20	<b>200</b>	20	<b>6600</b>	1200
23 Jul 2025	20	<b>140</b>	800	20	<b>200</b>	20	<b>6600</b>	1200
24 Jul 2025	<b>*110</b>	<b>*8070</b>	<b>*2000</b>	*20	<b>*200</b>	<b>*110</b>	<b>*8200</b>	<b>*1400</b>
25 Jul 2025	<b>*110</b>	<b>*8070</b>	<b>*2000</b>	*20	<b>*200</b>	<b>*110</b>	<b>*8200</b>	<b>*1400</b>
26 Jul 2025	<b>*110</b>	<b>*8070</b>	<b>*2000</b>	*20	<b>*200</b>	<b>*110</b>	<b>*8200</b>	<b>*1400</b>
27 Jul 2025	<b>*110</b>	<b>*8070</b>	<b>*2000</b>	*20	<b>*200</b>	<b>*110</b>	<b>*8200</b>	<b>*1400</b>
28 Jul 2025	<b>*110</b>	<b>*8070</b>	<b>*2000</b>	*20	<b>*200</b>	<b>*110</b>	<b>*8200</b>	<b>*1400</b>
29 Jul 2025	<b>200</b>	<b>200</b>	800	20	<b>200</b>	200	<b>6600</b>	1200
30 Jul 2025	<b>200</b>	<b>200</b>	800	20	<b>200</b>	200	<b>6600</b>	1200
31 Jul 2025	*390	*170	<b>*1610</b>	*20	<b>*200</b>	*2100	<b>*3400</b>	<b>*1400</b>

\* 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
July	E	E	E	IC	IC	E	E	E

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* (Enter) are reported as CFU/100 mL. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Enter
S0	01 Jul 2025	935	>16000	4600	2800e
S0	08 Jul 2025	1130	9800	4600	1800e
S0	15 Jul 2025	1040	>16000	>12000	6200
S0	22 Jul 2025	840	220e	40e	10e
S0	29 Jul 2025	830	>16000	7000	7200
S10	01 Jul 2025	831	<20	2e	2e
S10	08 Jul 2025	1059	<20	2e	<2
S10	15 Jul 2025	1111	>16000	5000	2200e
S10	17 Jul 2025	1133		4e	
S10	22 Jul 2025	1033	<200	4e	2e
S10	29 Jul 2025	1059	4000	14e	48
S11	01 Jul 2025	1039	11000	160e	540
S11	08 Jul 2025	1002	<200	2e	2e
S11	15 Jul 2025	936	9800	800	880
S11	17 Jul 2025	1024		4e	
S11	22 Jul 2025	919	>=6600	40e	160e
S11	29 Jul 2025	1011	<2	<2	6e
S12	01 Jul 2025	1113	<20	2e	<2
S12	08 Jul 2025	857	1200e	8e	160e
S12	15 Jul 2025	809	1600e	160e	140e
S12	17 Jul 2025	916		<20	
S12	22 Jul 2025	802	>=4200	200e	200e
S12	29 Jul 2025	903	60e	<2	<2
S2	01 Jul 2025	1040	<20	<2	<2
S2	08 Jul 2025	1200	<20	<2	<2
S2	15 Jul 2025	1210	>16000	3600e	1000
S2	22 Jul 2025	950	60e	6e	<2
S2	29 Jul 2025	935	<2	<2	6e
S3	01 Jul 2025	1015	<200	8e	20e
S3	08 Jul 2025	1225	<20	<2	<2
S3	15 Jul 2025	1136	>16000	1200e	860
S3	22 Jul 2025	930	80e	10e	42
S3	29 Jul 2025	910	<20	6e	8e
S4	01 Jul 2025	850	<20	<2	2e
S4	08 Jul 2025	1117	<20	2e	<2
S4	15 Jul 2025	1132	>16000	2200e	720
S4	17 Jul 2025	1151		8e	
S4	22 Jul 2025	1054	<200	20e	<2
S4	29 Jul 2025	1114	580	<2	20e
S5	01 Jul 2025	1022	>16000	600e	1200e
S5	08 Jul 2025	947	40e	8e	20e
S5	15 Jul 2025	908	>16000	7400	3800e
S5	17 Jul 2025	1004		10e	
S5	22 Jul 2025	853	140e	12e	8e
S5	29 Jul 2025	954	200e	26e	24e
S6	01 Jul 2025	1053	800e	18e	110
S6	08 Jul 2025	1015	20e	<2	10e

<b>Station</b>	<b>Date</b>	<b>Time</b>	<b>Total</b>	<b>Fecal</b>	<b>Enteric</b>
S6	15 Jul 2025	955	7200	200e	860
S6	17 Jul 2025	1038		16e	
S6	22 Jul 2025	935	>=3200	60e	120e
S6	29 Jul 2025	1022	<20	<2	<2
S8	01 Jul 2025	1134	<20	<2	<2
S8	08 Jul 2025	834	<20	<2	<2
S8	15 Jul 2025	744	<20	<2	4e
S8	17 Jul 2025	852		2e	
S8	22 Jul 2025	743	<200	<2	<2
S8	29 Jul 2025	840	<20	<2	2e
S9	01 Jul 2025	1156	<200	<2	24e
S9	08 Jul 2025	813	<200	20e	20e
S9	15 Jul 2025	723	<200	<2	2e
S9	17 Jul 2025	828		2e	
S9	22 Jul 2025	723	<200	<200	20e
S9	29 Jul 2025	819	<20	<2	<2

ns = not sampled

ND = no data

### Comments

date	station	depth	parmcode	comments
22-Jul-2025	S6			qualifier and the value for this station is >= 3,200e
22-Jul-2025				Qualifier and the value for S12 LD/A2station is >=3,800e

**Table 2.8**

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

Station	Date	Parameter	Value
S0	01 Jul 2025	Arrive Time	935
	01 Jul 2025	Wind Speed (kts)	0
	01 Jul 2025	Wind Dir	XX
	01 Jul 2025	Animal Life	Bird-10; Dog-2;
	01 Jul 2025	Floatables	
	01 Jul 2025	Current Direction	N
	01 Jul 2025	Water Temp (C)	14
	01 Jul 2025	High Tide Time	
	01 Jul 2025	Low Tide Time	
	01 Jul 2025	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-5; 0.5 L/s water flowing from storm drain
S0	08 Jul 2025	Arrive Time	1130
	08 Jul 2025	Wind Speed (kts)	6
	08 Jul 2025	Wind Dir	NE
	08 Jul 2025	Animal Life	
	08 Jul 2025	Floatables	
	08 Jul 2025	Current Direction	N
	08 Jul 2025	Water Temp (C)	21
	08 Jul 2025	High Tide Time	
	08 Jul 2025	Low Tide Time	
	08 Jul 2025	Comments	Water clear; Trash-0; Kelp; 1.0 L/s water flowing from storm drain
S0	15 Jul 2025	Arrive Time	1040
	15 Jul 2025	Wind Speed (kts)	3
	15 Jul 2025	Wind Dir	SE
	15 Jul 2025	Animal Life	
	15 Jul 2025	Floatables	
	15 Jul 2025	Current Direction	S
	15 Jul 2025	Water Temp (C)	15
	15 Jul 2025	High Tide Time	
	15 Jul 2025	Low Tide Time	
	15 Jul 2025	Comments	Water clear; Trash-0; Person/Walker/Jogger-2; 3.0 L/s water flowing from storm drain
S0	22 Jul 2025	Arrive Time	840
	22 Jul 2025	Wind Speed (kts)	0
	22 Jul 2025	Wind Dir	XX
	22 Jul 2025	Animal Life	Bird-20; Dog-5;
	22 Jul 2025	Floatables	
	22 Jul 2025	Current Direction	N
	22 Jul 2025	Water Temp (C)	14
	22 Jul 2025	High Tide Time	
	22 Jul 2025	Low Tide Time	
	22 Jul 2025	Comments	Water turbid; Trash-0; Kelp; 1.0 L/s water flowing from storm drain
S0	29 Jul 2025	Arrive Time	830
	29 Jul 2025	Wind Speed (kts)	3
	29 Jul 2025	Wind Dir	NE
	29 Jul 2025	Animal Life	Bird-10; Dog-2;
	29 Jul 2025	Floatables	
	29 Jul 2025	Current Direction	N
	29 Jul 2025	Water Temp (C)	15
	29 Jul 2025	High Tide Time	
	29 Jul 2025	Comments	

Station	Date	Parameter	Value
S0	29 Jul 2025	Low Tide Time	
S0	29 Jul 2025	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-2; 0.5 L/s water flowing from storm drain
S2	01 Jul 2025	Arrive Time	1040
S2	01 Jul 2025	Wind Speed (kts)	0
S2	01 Jul 2025	Wind Dir	XX
S2	01 Jul 2025	Animal Life	Bird-10; Dog-3;
S2	01 Jul 2025	Floatables	
S2	01 Jul 2025	Current Direction	N
S2	01 Jul 2025	Water Temp (C)	14
S2	01 Jul 2025	High Tide Time	
S2	01 Jul 2025	Low Tide Time	
S2	01 Jul 2025	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-5; No flow from storm drain
S2	08 Jul 2025	Arrive Time	1200
S2	08 Jul 2025	Wind Speed (kts)	4
S2	08 Jul 2025	Wind Dir	NE
S2	08 Jul 2025	Animal Life	Bird-15;
S2	08 Jul 2025	Floatables	
S2	08 Jul 2025	Current Direction	N
S2	08 Jul 2025	Water Temp (C)	19
S2	08 Jul 2025	High Tide Time	
S2	08 Jul 2025	Low Tide Time	
S2	08 Jul 2025	Comments	Water clear; Trash-0; Kelp; No flow from storm drain
S2	15 Jul 2025	Arrive Time	1210
S2	15 Jul 2025	Wind Speed (kts)	5
S2	15 Jul 2025	Wind Dir	N
S2	15 Jul 2025	Animal Life	
S2	15 Jul 2025	Floatables	
S2	15 Jul 2025	Current Direction	N
S2	15 Jul 2025	Water Temp (C)	15
S2	15 Jul 2025	High Tide Time	
S2	15 Jul 2025	Low Tide Time	
S2	15 Jul 2025	Comments	Water clear; Trash-0; Person/Walker/Jogger-20; No flow from storm drain
S2	22 Jul 2025	Arrive Time	950
S2	22 Jul 2025	Wind Speed (kts)	0
S2	22 Jul 2025	Wind Dir	XX
S2	22 Jul 2025	Animal Life	Bird-20;
S2	22 Jul 2025	Floatables	
S2	22 Jul 2025	Current Direction	N
S2	22 Jul 2025	Water Temp (C)	0
S2	22 Jul 2025	High Tide Time	
S2	22 Jul 2025	Low Tide Time	
S2	22 Jul 2025	Comments	Water turbid; Trash-0; Kelp; No flow from storm drain
S2	29 Jul 2025	Arrive Time	935
S2	29 Jul 2025	Wind Speed (kts)	0
S2	29 Jul 2025	Wind Dir	NE
S2	29 Jul 2025	Animal Life	Bird-10; Dog-4;
S2	29 Jul 2025	Floatables	
S2	29 Jul 2025	Current Direction	N
S2	29 Jul 2025	Water Temp (C)	15
S2	29 Jul 2025	High Tide Time	
S2	29 Jul 2025	Low Tide Time	
S2	29 Jul 2025	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-10; No flow from storm drain

Station	Date	Parameter	Value
S3	01 Jul 2025	Arrive Time	1015
	01 Jul 2025	Wind Speed (kts)	0
	01 Jul 2025	Wind Dir	XX
	01 Jul 2025	Animal Life	Bird-10; Dog-4;
	01 Jul 2025	Floatables	
	01 Jul 2025	Current Direction	N
	01 Jul 2025	Water Temp (C)	14
	01 Jul 2025	High Tide Time	
	01 Jul 2025	Low Tide Time	
	01 Jul 2025	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-10; No flow from storm drain
S3	08 Jul 2025	Arrive Time	1225
	08 Jul 2025	Wind Speed (kts)	4
	08 Jul 2025	Wind Dir	NE
	08 Jul 2025	Animal Life	Bird-20; Dog-15;
	08 Jul 2025	Floatables	
	08 Jul 2025	Current Direction	N
	08 Jul 2025	Water Temp (C)	19
	08 Jul 2025	High Tide Time	
	08 Jul 2025	Low Tide Time	
	08 Jul 2025	Comments	Water clear; Trash-0; Kelp; No flow from storm drain
S3	15 Jul 2025	Arrive Time	1136
	15 Jul 2025	Wind Speed (kts)	6
	15 Jul 2025	Wind Dir	S
	15 Jul 2025	Animal Life	
	15 Jul 2025	Floatables	
	15 Jul 2025	Current Direction	N
	15 Jul 2025	Water Temp (C)	15
	15 Jul 2025	High Tide Time	
	15 Jul 2025	Low Tide Time	
	15 Jul 2025	Comments	Water clear; Trash-0; Person/Walker/Jogger-5; No flow from storm drain
S3	22 Jul 2025	Arrive Time	2130
	22 Jul 2025	Wind Speed (kts)	0
	22 Jul 2025	Wind Dir	XX
	22 Jul 2025	Animal Life	Bird-20; Dog-2;
	22 Jul 2025	Floatables	
	22 Jul 2025	Current Direction	N
	22 Jul 2025	Water Temp (C)	14
	22 Jul 2025	High Tide Time	
	22 Jul 2025	Low Tide Time	
	22 Jul 2025	Comments	Water turbid; Trash-0; Kelp; Person/Walker/Jogger-2; No flow from storm drain
S3	29 Jul 2025	Arrive Time	910
	29 Jul 2025	Wind Speed (kts)	0
	29 Jul 2025	Wind Dir	NE
	29 Jul 2025	Animal Life	Bird-10; Dog-2;
	29 Jul 2025	Floatables	
	29 Jul 2025	Current Direction	N
	29 Jul 2025	Water Temp (C)	15
	29 Jul 2025	High Tide Time	
	29 Jul 2025	Low Tide Time	
	29 Jul 2025	Comments	Water clear; Trash-0; Kelp; Person/Walker/Jogger-5; No flow from storm drain
S4	01 Jul 2025	Arrive Time	852

Station	Date	Parameter	Value
S4	01 Jul 2025	Wind Speed (kts)	5
S4	01 Jul 2025	Wind Dir	W
S4	01 Jul 2025	Animal Life	
S4	01 Jul 2025	Floatables	
S4	01 Jul 2025	Current Direction	S
S4	01 Jul 2025	Water Temp (C)	16.6
S4	01 Jul 2025	High Tide Time	
S4	01 Jul 2025	Low Tide Time	
S4	01 Jul 2025	Comments	Water clear; Trash-3; Kelp;Seagrass
S4	08 Jul 2025	Arrive Time	1117
S4	08 Jul 2025	Wind Speed (kts)	8.4
S4	08 Jul 2025	Wind Dir	W
S4	08 Jul 2025	Animal Life	
S4	08 Jul 2025	Floatables	
S4	08 Jul 2025	Current Direction	S
S4	08 Jul 2025	Water Temp (C)	16.8
S4	08 Jul 2025	High Tide Time	
S4	08 Jul 2025	Low Tide Time	
S4	08 Jul 2025	Comments	Water clear; Trash-3; Kelp;Seagrass;Debris
S4	15 Jul 2025	Arrive Time	1132
S4	15 Jul 2025	Wind Speed (kts)	4.3
S4	15 Jul 2025	Wind Dir	SW
S4	15 Jul 2025	Animal Life	Dolphin-6;
S4	15 Jul 2025	Floatables	
S4	15 Jul 2025	Current Direction	E
S4	15 Jul 2025	Water Temp (C)	17.1
S4	15 Jul 2025	High Tide Time	
S4	15 Jul 2025	Low Tide Time	
S4	15 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris
S4	17 Jul 2025	Arrive Time	1151
S4	17 Jul 2025	Wind Speed (kts)	4.6
S4	17 Jul 2025	Wind Dir	SW
S4	17 Jul 2025	Animal Life	
S4	17 Jul 2025	Floatables	
S4	17 Jul 2025	Current Direction	N
S4	17 Jul 2025	Water Temp (C)	20.4
S4	17 Jul 2025	High Tide Time	
S4	17 Jul 2025	Low Tide Time	
S4	17 Jul 2025	Comments	Water clear; Trash-4; Kelp;Seagrass;Debris
S4	22 Jul 2025	Arrive Time	1054
S4	22 Jul 2025	Wind Speed (kts)	6
S4	22 Jul 2025	Wind Dir	SW
S4	22 Jul 2025	Animal Life	
S4	22 Jul 2025	Floatables	
S4	22 Jul 2025	Current Direction	E
S4	22 Jul 2025	Water Temp (C)	18.8
S4	22 Jul 2025	High Tide Time	
S4	22 Jul 2025	Low Tide Time	
S4	22 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris
S4	29 Jul 2025	Arrive Time	1114
S4	29 Jul 2025	Wind Speed (kts)	5
S4	29 Jul 2025	Wind Dir	W
S4	29 Jul 2025	Animal Life	Bird-10;
S4	29 Jul 2025	Floatables	
S4	29 Jul 2025	Current Direction	S
S4	29 Jul 2025	Water Temp (C)	17.6

Station	Date	Parameter	Value
S4	29 Jul 2025	High Tide Time	
S4	29 Jul 2025	Low Tide Time	
S4	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S10	01 Jul 2025	Arrive Time	831
S10	01 Jul 2025	Wind Speed (kts)	4.8
S10	01 Jul 2025	Wind Dir	W
S10	01 Jul 2025	Animal Life	
S10	01 Jul 2025	Floatables	Foam
S10	01 Jul 2025	Current Direction	S
S10	01 Jul 2025	Water Temp (C)	16.1
S10	01 Jul 2025	High Tide Time	
S10	01 Jul 2025	Low Tide Time	
S10	01 Jul 2025	Comments	Water clear; Trash-1; Seagrass;Kelp
S10	08 Jul 2025	Arrive Time	1059
S10	08 Jul 2025	Wind Speed (kts)	4.7
S10	08 Jul 2025	Wind Dir	W
S10	08 Jul 2025	Animal Life	
S10	08 Jul 2025	Floatables	
S10	08 Jul 2025	Current Direction	S
S10	08 Jul 2025	Water Temp (C)	16.9
S10	08 Jul 2025	High Tide Time	
S10	08 Jul 2025	Low Tide Time	
S10	08 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass
S10	15 Jul 2025	Arrive Time	1111
S10	15 Jul 2025	Wind Speed (kts)	3.3
S10	15 Jul 2025	Wind Dir	SW
S10	15 Jul 2025	Animal Life	
S10	15 Jul 2025	Floatables	
S10	15 Jul 2025	Current Direction	E
S10	15 Jul 2025	Water Temp (C)	17.8
S10	15 Jul 2025	High Tide Time	
S10	15 Jul 2025	Low Tide Time	
S10	15 Jul 2025	Comments	Water clear; Fisherman-1; Trash-1; Kelp;Seagrass;Debris
S10	17 Jul 2025	Arrive Time	1133
S10	17 Jul 2025	Wind Speed (kts)	6.2
S10	17 Jul 2025	Wind Dir	SW
S10	17 Jul 2025	Animal Life	
S10	17 Jul 2025	Floatables	
S10	17 Jul 2025	Current Direction	N
S10	17 Jul 2025	Water Temp (C)	19.8
S10	17 Jul 2025	High Tide Time	
S10	17 Jul 2025	Low Tide Time	
S10	17 Jul 2025	Comments	Water clear; Trash-2; Seagrass;Kelp;Debris
S10	22 Jul 2025	Arrive Time	1033
S10	22 Jul 2025	Wind Speed (kts)	4.8
S10	22 Jul 2025	Wind Dir	W
S10	22 Jul 2025	Animal Life	Dolphin-3;
S10	22 Jul 2025	Floatables	
S10	22 Jul 2025	Current Direction	E
S10	22 Jul 2025	Water Temp (C)	18.7
S10	22 Jul 2025	High Tide Time	
S10	22 Jul 2025	Low Tide Time	
S10	22 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris
S10	29 Jul 2025	Arrive Time	1059
S10	29 Jul 2025	Wind Speed (kts)	5.7

Station	Date	Parameter	Value
S10	29 Jul 2025	Wind Dir	W
S10	29 Jul 2025	Animal Life	
S10	29 Jul 2025	Floatables	
S10	29 Jul 2025	Current Direction	S
S10	29 Jul 2025	Water Temp (C)	16.6
S10	29 Jul 2025	High Tide Time	
S10	29 Jul 2025	Low Tide Time	
S10	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass; Sewage-like odor
S5	01 Jul 2025	Arrive Time	1022
S5	01 Jul 2025	Wind Speed (kts)	6
S5	01 Jul 2025	Wind Dir	W
S5	01 Jul 2025	Animal Life	
S5	01 Jul 2025	Floatables	
S5	01 Jul 2025	Current Direction	S
S5	01 Jul 2025	Water Temp (C)	16.9
S5	01 Jul 2025	High Tide Time	
S5	01 Jul 2025	Low Tide Time	
S5	01 Jul 2025	Comments	Water clear; Trash-1; Kelp
S5	08 Jul 2025	Arrive Time	942
S5	08 Jul 2025	Wind Speed (kts)	4.9
S5	08 Jul 2025	Wind Dir	W
S5	08 Jul 2025	Animal Life	
S5	08 Jul 2025	Floatables	
S5	08 Jul 2025	Current Direction	S
S5	08 Jul 2025	Water Temp (C)	17.8
S5	08 Jul 2025	High Tide Time	
S5	08 Jul 2025	Low Tide Time	
S5	08 Jul 2025	Comments	Water clear; Trash-5; Kelp;Seagrass;Debris; Person/Walker/Jogger-1; Sewage-like odor
S5	15 Jul 2025	Arrive Time	908
S5	15 Jul 2025	Wind Speed (kts)	4.8
S5	15 Jul 2025	Wind Dir	W
S5	15 Jul 2025	Animal Life	
S5	15 Jul 2025	Floatables	Foam
S5	15 Jul 2025	Current Direction	E
S5	15 Jul 2025	Water Temp (C)	17.5
S5	15 Jul 2025	High Tide Time	
S5	15 Jul 2025	Low Tide Time	
S5	15 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
S5	17 Jul 2025	Arrive Time	1004
S5	17 Jul 2025	Wind Speed (kts)	3.6
S5	17 Jul 2025	Wind Dir	SW
S5	17 Jul 2025	Animal Life	
S5	17 Jul 2025	Floatables	
S5	17 Jul 2025	Current Direction	N
S5	17 Jul 2025	Water Temp (C)	19.3
S5	17 Jul 2025	High Tide Time	
S5	17 Jul 2025	Low Tide Time	
S5	17 Jul 2025	Comments	Water clear; Trash-4; Kelp;Algae;Debris
S5	22 Jul 2025	Arrive Time	853
S5	22 Jul 2025	Wind Speed (kts)	4.6
S5	22 Jul 2025	Wind Dir	W
S5	22 Jul 2025	Animal Life	
S5	22 Jul 2025	Floatables	
S5	22 Jul 2025	Current Direction	E
S5	22 Jul 2025	Water Temp (C)	19

Station	Date	Parameter	Value
S5	22 Jul 2025	High Tide Time	
S5	22 Jul 2025	Low Tide Time	
S5	22 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
S5	29 Jul 2025	Arrive Time	954
S5	29 Jul 2025	Wind Speed (kts)	4.4
S5	29 Jul 2025	Wind Dir	NW
S5	29 Jul 2025	Animal Life	
S5	29 Jul 2025	Floatables	
S5	29 Jul 2025	Current Direction	S
S5	29 Jul 2025	Water Temp (C)	14.6
S5	29 Jul 2025	High Tide Time	
S5	29 Jul 2025	Low Tide Time	
S5	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S11	01 Jul 2025	Arrive Time	1039
S11	01 Jul 2025	Wind Speed (kts)	4
S11	01 Jul 2025	Wind Dir	W
S11	01 Jul 2025	Animal Life	
S11	01 Jul 2025	Floatables	
S11	01 Jul 2025	Current Direction	S
S11	01 Jul 2025	Water Temp (C)	16.2
S11	01 Jul 2025	High Tide Time	
S11	01 Jul 2025	Low Tide Time	
S11	01 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass; Sewage-like odor
S11	08 Jul 2025	Arrive Time	1002
S11	08 Jul 2025	Wind Speed (kts)	7
S11	08 Jul 2025	Wind Dir	W
S11	08 Jul 2025	Animal Life	
S11	08 Jul 2025	Floatables	
S11	08 Jul 2025	Current Direction	S
S11	08 Jul 2025	Water Temp (C)	16.7
S11	08 Jul 2025	High Tide Time	
S11	08 Jul 2025	Low Tide Time	
S11	08 Jul 2025	Comments	Water clear; Trash-5; Kelp;Seagrass;Debris; Sewage-like odor
S11	15 Jul 2025	Arrive Time	936
S11	15 Jul 2025	Wind Speed (kts)	4
S11	15 Jul 2025	Wind Dir	SW
S11	15 Jul 2025	Animal Life	
S11	15 Jul 2025	Floatables	
S11	15 Jul 2025	Current Direction	E
S11	15 Jul 2025	Water Temp (C)	17
S11	15 Jul 2025	High Tide Time	
S11	15 Jul 2025	Low Tide Time	
S11	15 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
S11	17 Jul 2025	Arrive Time	1024
S11	17 Jul 2025	Wind Speed (kts)	4
S11	17 Jul 2025	Wind Dir	SW
S11	17 Jul 2025	Animal Life	
S11	17 Jul 2025	Floatables	
S11	17 Jul 2025	Current Direction	N
S11	17 Jul 2025	Water Temp (C)	19.9
S11	17 Jul 2025	High Tide Time	
S11	17 Jul 2025	Low Tide Time	
S11	17 Jul 2025	Comments	Water clear; Trash-4; Kelp;Seagrass;Debris
S11	22 Jul 2025	Arrive Time	919

Station	Date	Parameter	Value
S11	22 Jul 2025	Wind Speed (kts)	3.8
S11	22 Jul 2025	Wind Dir	SW
S11	22 Jul 2025	Animal Life	
S11	22 Jul 2025	Floatables	
S11	22 Jul 2025	Current Direction	E
S11	22 Jul 2025	Water Temp (C)	18.5
S11	22 Jul 2025	High Tide Time	
S11	22 Jul 2025	Low Tide Time	
S11	22 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
S11	29 Jul 2025	Arrive Time	1011
S11	29 Jul 2025	Wind Speed (kts)	5
S11	29 Jul 2025	Wind Dir	W
S11	29 Jul 2025	Animal Life	
S11	29 Jul 2025	Floatables	
S11	29 Jul 2025	Current Direction	S
S11	29 Jul 2025	Water Temp (C)	17
S11	29 Jul 2025	High Tide Time	
S11	29 Jul 2025	Low Tide Time	
S11	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S6	01 Jul 2025	Arrive Time	1053
S6	01 Jul 2025	Wind Speed (kts)	4.5
S6	01 Jul 2025	Wind Dir	W
S6	01 Jul 2025	Animal Life	
S6	01 Jul 2025	Floatables	
S6	01 Jul 2025	Current Direction	S
S6	01 Jul 2025	Water Temp (C)	15.7
S6	01 Jul 2025	High Tide Time	
S6	01 Jul 2025	Low Tide Time	
S6	01 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S6	08 Jul 2025	Arrive Time	1015
S6	08 Jul 2025	Wind Speed (kts)	6.4
S6	08 Jul 2025	Wind Dir	W
S6	08 Jul 2025	Animal Life	
S6	08 Jul 2025	Floatables	
S6	08 Jul 2025	Current Direction	S
S6	08 Jul 2025	Water Temp (C)	16.8
S6	08 Jul 2025	High Tide Time	
S6	08 Jul 2025	Low Tide Time	
S6	08 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass
S6	15 Jul 2025	Arrive Time	955
S6	15 Jul 2025	Wind Speed (kts)	2.8
S6	15 Jul 2025	Wind Dir	SW
S6	15 Jul 2025	Animal Life	
S6	15 Jul 2025	Floatables	
S6	15 Jul 2025	Current Direction	E
S6	15 Jul 2025	Water Temp (C)	17.1
S6	15 Jul 2025	High Tide Time	
S6	15 Jul 2025	Low Tide Time	
S6	15 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
S6	17 Jul 2025	Arrive Time	1038
S6	17 Jul 2025	Wind Speed (kts)	6
S6	17 Jul 2025	Wind Dir	SW
S6	17 Jul 2025	Animal Life	
S6	17 Jul 2025	Floatables	
S6	17 Jul 2025	Current Direction	N
S6	17 Jul 2025	Water Temp (C)	20.3

Station	Date	Parameter	Value
S6	17 Jul 2025	High Tide Time	
S6	17 Jul 2025	Low Tide Time	
S6	17 Jul 2025	Comments	Water clear; Trash-4; Seagrass;Algae;Debris
S6	22 Jul 2025	Arrive Time	935
S6	22 Jul 2025	Wind Speed (kts)	3.4
S6	22 Jul 2025	Wind Dir	SW
S6	22 Jul 2025	Animal Life	
S6	22 Jul 2025	Floatables	
S6	22 Jul 2025	Current Direction	E
S6	22 Jul 2025	Water Temp (C)	20.4
S6	22 Jul 2025	High Tide Time	
S6	22 Jul 2025	Low Tide Time	
S6	22 Jul 2025	Comments	Water clear; Trash-1; Seagrass;Kelp;Debris;Algae
S6	29 Jul 2025	Arrive Time	1022
S6	29 Jul 2025	Wind Speed (kts)	5
S6	29 Jul 2025	Wind Dir	W
S6	29 Jul 2025	Animal Life	
S6	29 Jul 2025	Floatables	
S6	29 Jul 2025	Current Direction	S
S6	29 Jul 2025	Water Temp (C)	17
S6	29 Jul 2025	High Tide Time	
S6	29 Jul 2025	Low Tide Time	
S6	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S12	01 Jul 2025	Arrive Time	1113
S12	01 Jul 2025	Wind Speed (kts)	6.5
S12	01 Jul 2025	Wind Dir	W
S12	01 Jul 2025	Animal Life	
S12	01 Jul 2025	Floatables	
S12	01 Jul 2025	Current Direction	S
S12	01 Jul 2025	Water Temp (C)	18.6
S12	01 Jul 2025	High Tide Time	
S12	01 Jul 2025	Low Tide Time	
S12	01 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S12	08 Jul 2025	Arrive Time	857
S12	08 Jul 2025	Wind Speed (kts)	4.4
S12	08 Jul 2025	Wind Dir	W
S12	08 Jul 2025	Animal Life	Bird-26; Dog-2;
S12	08 Jul 2025	Floatables	
S12	08 Jul 2025	Current Direction	S
S12	08 Jul 2025	Water Temp (C)	18
S12	08 Jul 2025	High Tide Time	
S12	08 Jul 2025	Low Tide Time	
S12	08 Jul 2025	Comments	Water clear; Trash-3; Seagrass;Kelp;Debris; Person/Walker/Jogger-6; Sewage-like odor
S12	15 Jul 2025	Arrive Time	809
S12	15 Jul 2025	Wind Speed (kts)	3
S12	15 Jul 2025	Wind Dir	SW
S12	15 Jul 2025	Animal Life	Bird-4;
S12	15 Jul 2025	Floatables	
S12	15 Jul 2025	Current Direction	E
S12	15 Jul 2025	Water Temp (C)	17.6
S12	15 Jul 2025	High Tide Time	
S12	15 Jul 2025	Low Tide Time	
S12	15 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
S12	17 Jul 2025	Arrive Time	916

Station	Date	Parameter	Value
S12	17 Jul 2025	Wind Speed (kts)	2.1
S12	17 Jul 2025	Wind Dir	SW
S12	17 Jul 2025	Animal Life	
S12	17 Jul 2025	Floatables	
S12	17 Jul 2025	Current Direction	N
S12	17 Jul 2025	Water Temp (C)	21.6
S12	17 Jul 2025	High Tide Time	
S12	17 Jul 2025	Low Tide Time	
S12	17 Jul 2025	Comments	Water clear; Trash-3; Seagrass;Kelp;Debris
S12	22 Jul 2025	Arrive Time	802
S12	22 Jul 2025	Wind Speed (kts)	4.6
S12	22 Jul 2025	Wind Dir	SW
S12	22 Jul 2025	Animal Life	Bird-5;
S12	22 Jul 2025	Floatables	
S12	22 Jul 2025	Current Direction	E
S12	22 Jul 2025	Water Temp (C)	19
S12	22 Jul 2025	High Tide Time	
S12	22 Jul 2025	Low Tide Time	
S12	22 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris
S12	29 Jul 2025	Arrive Time	903
S12	29 Jul 2025	Wind Speed (kts)	3
S12	29 Jul 2025	Wind Dir	W
S12	29 Jul 2025	Animal Life	
S12	29 Jul 2025	Floatables	
S12	29 Jul 2025	Current Direction	S
S12	29 Jul 2025	Water Temp (C)	16.6
S12	29 Jul 2025	High Tide Time	
S12	29 Jul 2025	Low Tide Time	
S12	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S8	01 Jul 2025	Arrive Time	1134
S8	01 Jul 2025	Wind Speed (kts)	6
S8	01 Jul 2025	Wind Dir	W
S8	01 Jul 2025	Animal Life	
S8	01 Jul 2025	Floatables	
S8	01 Jul 2025	Current Direction	S
S8	01 Jul 2025	Water Temp (C)	18.9
S8	01 Jul 2025	High Tide Time	
S8	01 Jul 2025	Low Tide Time	
S8	01 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S8	08 Jul 2025	Arrive Time	834
S8	08 Jul 2025	Wind Speed (kts)	2.6
S8	08 Jul 2025	Wind Dir	W
S8	08 Jul 2025	Animal Life	
S8	08 Jul 2025	Floatables	
S8	08 Jul 2025	Current Direction	S
S8	08 Jul 2025	Water Temp (C)	17.1
S8	08 Jul 2025	High Tide Time	
S8	08 Jul 2025	Low Tide Time	
S8	08 Jul 2025	Comments	Water clear; Trash-3; Kelp;Seagrass;Debris; Person/Walker/Jogger-3
S8	15 Jul 2025	Arrive Time	744
S8	15 Jul 2025	Wind Speed (kts)	4.3
S8	15 Jul 2025	Wind Dir	W
S8	15 Jul 2025	Animal Life	
S8	15 Jul 2025	Floatables	Foam
S8	15 Jul 2025	Current Direction	E

Station	Date	Parameter	Value
S8	15 Jul 2025	Water Temp (C)	18.4
S8	15 Jul 2025	High Tide Time	
S8	15 Jul 2025	Low Tide Time	
S8	15 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
S8	17 Jul 2025	Arrive Time	852
S8	17 Jul 2025	Wind Speed (kts)	1.5
S8	17 Jul 2025	Wind Dir	SW
S8	17 Jul 2025	Animal Life	
S8	17 Jul 2025	Floatables	
S8	17 Jul 2025	Current Direction	N
S8	17 Jul 2025	Water Temp (C)	19.3
S8	17 Jul 2025	High Tide Time	
S8	17 Jul 2025	Low Tide Time	
S8	17 Jul 2025	Comments	Water clear; Trash-2; Debris
S8	22 Jul 2025	Arrive Time	743
S8	22 Jul 2025	Wind Speed (kts)	3.6
S8	22 Jul 2025	Wind Dir	W
S8	22 Jul 2025	Animal Life	
S8	22 Jul 2025	Floatables	
S8	22 Jul 2025	Current Direction	E
S8	22 Jul 2025	Water Temp (C)	19.2
S8	22 Jul 2025	High Tide Time	
S8	22 Jul 2025	Low Tide Time	
S8	22 Jul 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris
S8	29 Jul 2025	Arrive Time	840
S8	29 Jul 2025	Wind Speed (kts)	3.1
S8	29 Jul 2025	Wind Dir	W
S8	29 Jul 2025	Animal Life	
S8	29 Jul 2025	Floatables	
S8	29 Jul 2025	Current Direction	S
S8	29 Jul 2025	Water Temp (C)	16.2
S8	29 Jul 2025	High Tide Time	
S8	29 Jul 2025	Low Tide Time	
S8	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass
S9	01 Jul 2025	Arrive Time	1156
S9	01 Jul 2025	Wind Speed (kts)	4.1
S9	01 Jul 2025	Wind Dir	W
S9	01 Jul 2025	Animal Life	
S9	01 Jul 2025	Floatables	
S9	01 Jul 2025	Current Direction	S
S9	01 Jul 2025	Water Temp (C)	18.7
S9	01 Jul 2025	High Tide Time	
S9	01 Jul 2025	Low Tide Time	
S9	01 Jul 2025	Comments	Water clear; Boogie boarder/Swimmer-2; Surfer/Paddle boarder-3; Trash-1; Kelp;Seagrass
S9	08 Jul 2025	Arrive Time	813
S9	08 Jul 2025	Wind Speed (kts)	1.5
S9	08 Jul 2025	Wind Dir	W
S9	08 Jul 2025	Animal Life	Bird-4;
S9	08 Jul 2025	Floatables	
S9	08 Jul 2025	Current Direction	S
S9	08 Jul 2025	Water Temp (C)	16.4
S9	08 Jul 2025	High Tide Time	
S9	08 Jul 2025	Low Tide Time	
S9	08 Jul 2025	Comments	Water clear; Trash-4; Kelp;Seagrass;Debris

Station	Date	Parameter	Value
S9	15 Jul 2025	Arrive Time	723
S9	15 Jul 2025	Wind Speed (kts)	3.4
S9	15 Jul 2025	Wind Dir	W
S9	15 Jul 2025	Animal Life	
S9	15 Jul 2025	Floatables	
S9	15 Jul 2025	Current Direction	E
S9	15 Jul 2025	Water Temp (C)	18.5
S9	15 Jul 2025	High Tide Time	
S9	15 Jul 2025	Low Tide Time	
S9	15 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Debris
S9	17 Jul 2025	Arrive Time	828
S9	17 Jul 2025	Wind Speed (kts)	1.5
S9	17 Jul 2025	Wind Dir	S
S9	17 Jul 2025	Animal Life	
S9	17 Jul 2025	Floatables	
S9	17 Jul 2025	Current Direction	S
S9	17 Jul 2025	Water Temp (C)	18.9
S9	17 Jul 2025	High Tide Time	
S9	17 Jul 2025	Low Tide Time	
S9	17 Jul 2025	Comments	Water clear; Trash-3; Kelp;Seagrass;Debris; Person/Walker/Jogger-12
S9	22 Jul 2025	Arrive Time	723
S9	22 Jul 2025	Wind Speed (kts)	4.6
S9	22 Jul 2025	Wind Dir	NW
S9	22 Jul 2025	Animal Life	Bird-2;
S9	22 Jul 2025	Floatables	
S9	22 Jul 2025	Current Direction	E
S9	22 Jul 2025	Water Temp (C)	19.5
S9	22 Jul 2025	High Tide Time	
S9	22 Jul 2025	Low Tide Time	
S9	22 Jul 2025	Comments	Water clear; Trash-1; Seagrass;Kelp;Algae;Debris
S9	29 Jul 2025	Arrive Time	819
S9	29 Jul 2025	Wind Speed (kts)	2.7
S9	29 Jul 2025	Wind Dir	NW
S9	29 Jul 2025	Animal Life	
S9	29 Jul 2025	Floatables	
S9	29 Jul 2025	Current Direction	S
S9	29 Jul 2025	Water Temp (C)	15.6
S9	29 Jul 2025	High Tide Time	
S9	29 Jul 2025	Low Tide Time	
S9	29 Jul 2025	Comments	Water clear; Trash-1; Kelp;Seagrass

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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 Jul 2025	5	6	2	2	5	2	9
02 Jul 2025	*4	*3	*2	*2	*2	*2	*7
03 Jul 2025	*4	*3	*2	*2	*2	*2	*7
04 Jul 2025	*4	*3	*2	*2	*2	*2	*7
05 Jul 2025	*4	*3	*2	*2	*2	*2	*7
06 Jul 2025	*4	*3	*2	*2	*2	*2	*7
07 Jul 2025	4	4	2	2	3	2	6
08 Jul 2025	4	4	2	2	3	2	6
09 Jul 2025	*5	*3	*2	*2	*3	*2	*5
10 Jul 2025	*5	*3	*2	*2	*3	*2	*5
11 Jul 2025	*5	*3	*2	*2	*3	*2	*5
12 Jul 2025	*5	*3	*2	*2	*3	*2	*5
13 Jul 2025	*5	*3	*2	*2	*3	*2	*5
14 Jul 2025	*5	*3	*2	*2	*3	*2	*5
15 Jul 2025	7	3	3	2	2	2	5
16 Jul 2025	7	3	3	2	2	2	5
17 Jul 2025	*5	*4	*3	*2	*3	*2	*4
18 Jul 2025	*5	*4	*3	*2	*3	*2	*4
19 Jul 2025	*5	*4	*3	*2	*3	*2	*4
20 Jul 2025	*5	*4	*3	*2	*3	*2	*4
21 Jul 2025	*5	*4	*3	*2	*3	*2	*4
22 Jul 2025	6	4	3	2	2	2	5
23 Jul 2025	6	4	3	2	2	2	5
24 Jul 2025	*7	*5	*3	*3	*3	*2	*5
25 Jul 2025	*7	*5	*3	*3	*3	*2	*5
26 Jul 2025	*7	*5	*3	*3	*3	*2	*5
27 Jul 2025	*7	*5	*3	*3	*3	*2	*5
28 Jul 2025	*7	*5	*3	*3	*3	*2	*5
29 Jul 2025	*7	*5	*3	*3	*3	*2	*5
30 Jul 2025	*12	*6	*4	*3	*3	*3	*6
31 Jul 2025	*7	*5	*3	*3	*3	*4	*4

\* 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
07 Jul 2025	IC						
15 Jul 2025	IC						
22 Jul 2025	IC						
31 Jul 2025	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 Jul 2025	7	9	3	2	5	2	13
02 Jul 2025	7	9	3	2	5	2	13
03 Jul 2025	7	9	3	2	5	2	13
04 Jul 2025	7	9	3	2	5	2	13
05 Jul 2025	7	9	3	2	5	2	13
06 Jul 2025	7	9	3	2	5	2	13
07 Jul 2025	6	8	3	3	5	2	10
08 Jul 2025	5	9	3	2	5	2	8
09 Jul 2025	5	9	3	2	5	2	8
10 Jul 2025	5	9	3	2	5	2	8
11 Jul 2025	5	9	3	2	5	2	8
12 Jul 2025	5	9	3	2	5	2	8
13 Jul 2025	5	9	3	2	5	2	8
14 Jul 2025	5	6	3	3	3	2	7
15 Jul 2025	6	7	4	3	3	2	7
16 Jul 2025	6	7	4	3	3	2	7
17 Jul 2025	6	7	4	3	3	2	7
18 Jul 2025	6	7	4	3	3	2	7
19 Jul 2025	6	7	4	3	3	2	7
20 Jul 2025	6	7	4	3	3	2	7
21 Jul 2025	6	4	3	3	3	3	5
22 Jul 2025	5	4	3	3	3	2	4
23 Jul 2025	5	4	3	3	3	2	4
24 Jul 2025	5	4	3	3	3	2	4
25 Jul 2025	5	4	3	3	3	2	4
26 Jul 2025	5	4	3	3	3	2	4
27 Jul 2025	5	4	3	3	3	2	4
28 Jul 2025	5	4	3	3	3	2	4
29 Jul 2025	3	4	3	3	3	3	4
30 Jul 2025	3	4	3	3	3	3	4
31 Jul 2025	3	3	3	3	3	3	3

\* 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
July	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.

		I40																								
		I39						I40																		
Date	I15	I16	I17	I18	I19	I20	I21	I22	I23	I24	I25	I26	I27	I28	I29	I30	I31	I32	I33	I34	I35	I36	I37	I38	I39	I40
01 Jul 2025	20	20	40	80	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
02 Jul 2025	*20	*20	*40	*60	*14	*14	*12	*9	*9	*11	*14	*2	*5	*20	*11	*20	*20	*2	*2	*2	*9	*200	*200	*120	*120	
03 Jul 2025	*20	*20	*40	*60	*14	*14	*12	*9	*9	*11	*14	*2	*5	*20	*11	*20	*20	*2	*2	*2	*9	*200	*200	*120	*120	
04 Jul 2025	*20	*20	*40	*60	*14	*14	*12	*9	*9	*11	*14	*2	*5	*20	*11	*20	*20	*2	*2	*2	*9	*200	*200	*120	*120	
05 Jul 2025	*20	*20	*40	*60	*14	*14	*12	*9	*9	*11	*14	*2	*5	*20	*11	*20	*20	*2	*2	*2	*9	*200	*200	*120	*120	
06 Jul 2025	*20	*20	*40	*60	*14	*14	*12	*9	*9	*11	*14	*2	*5	*20	*11	*20	*20	*2	*2	*2	*9	*200	*200	*120	*120	
07 Jul 2025	20	20	40	40	20	20	2	2	2	2	6	20	20	20	20	20	20	2	2	16	200	200	200	40		
08 Jul 2025	20	20	40	40	20	20	2	2	2	2	6	20	20	20	20	20	20	2	2	16	200	200	200	40		
09 Jul 2025	*20	*30	*50	*30	*20	*30	*2	*11	*20	*2	*13	*20	*2	*13	*20	*20	*20	*2	*2	*2	*9	*200	*200	*20	*80	
10 Jul 2025	*20	*20	*30	*50	*30	*20	*30	*2	*11	*20	*2	*11	*20	*2	*11	*20	*20	*2	*2	*2	*9	*200	*200	*20	*80	
11 Jul 2025	*20	*30	*50	*30	*20	*30	*2	*11	*20	*2	*13	*20	*2	*13	*20	*20	*20	*2	*2	*2	*9	*200	*200	*20	*80	
12 Jul 2025	*20	*30	*50	*30	*20	*30	*2	*11	*20	*2	*13	*20	*2	*13	*20	*20	*20	*2	*2	*2	*9	*200	*200	*20	*80	
13 Jul 2025	*20	*30	*50	*30	*20	*30	*2	*11	*20	*2	*13	*20	*2	*13	*20	*20	*20	*2	*2	*2	*9	*200	*200	*20	*80	
14 Jul 2025	*20	*30	*50	*30	*20	*30	*2	*11	*20	*2	*13	*20	*2	*13	*20	*20	*20	*2	*2	*2	*9	*200	*200	*20	*80	
15 Jul 2025	20	20	60	40	20	20	2	2	2	2	20	20	20	20	20	20	20	2	2	16	200	200	200	40		
16 Jul 2025	20	20	60	40	20	20	2	2	2	2	20	20	20	20	20	20	20	2	2	16	200	200	200	40		
17 Jul 2025	*20	*20	*50	*10	*30	*10	*11	*11	*20	*2	*20	*20	*2	*20	*20	*20	*20	*43	*2	*2	*11	*200	*200	*110	*30	
18 Jul 2025	*20	*20	*50	*10	*10	*10	*11	*11	*20	*2	*20	*60	*20	*43	*20	*20	*20	*43	*2	*2	*11	*200	*200	*110	*30	
19 Jul 2025	*20	*20	*50	*10	*10	*10	*11	*11	*20	*2	*20	*60	*20	*43	*20	*20	*20	*43	*2	*2	*11	*200	*200	*110	*30	
20 Jul 2025	*20	*20	*50	*10	*10	*10	*11	*11	*20	*2	*20	*60	*20	*43	*20	*20	*20	*43	*2	*2	*11	*200	*200	*110	*30	
21 Jul 2025	*20	*20	*50	*10	*10	*10	*11	*11	*20	*2	*20	*60	*20	*43	*20	*20	*20	*43	*2	*2	*11	*200	*200	*110	*30	
22 Jul 2025	20	20	60	40	20	20	2	2	2	2	20	20	20	20	20	20	20	2	2	2	200	200	200	40		
23 Jul 2025	20	20	60	40	20	20	2	2	2	2	20	20	20	20	20	20	20	2	2	2	200	200	200	40		
24 Jul 2025	*20	*20	*70	*20	*130	*50	*11	*31	*20	*2	*20	*60	*20	*34	*20	*20	*20	*34	*2	*2	*11	*110	*110	*100	*30	
25 Jul 2025	*20	*20	*70	*20	*130	*20	*30	*11	*31	*20	*2	*20	*60	*20	*34	*20	*20	*34	*2	*2	*11	*110	*110	*100	*30	
26 Jul 2025	*20	*20	*70	*20	*130	*50	*11	*31	*20	*2	*20	*60	*20	*34	*20	*20	*34	*2	*2	*11	*110	*110	*100	*30		
27 Jul 2025	*20	*20	*70	*20	*130	*50	*11	*31	*20	*2	*20	*60	*20	*34	*20	*20	*34	*2	*2	*11	*110	*110	*100	*30		
28 Jul 2025	*20	*20	*70	*20	*130	*50	*11	*31	*20	*2	*20	*60	*20	*34	*20	*20	*34	*2	*2	*11	*110	*110	*100	*30		
29 Jul 2025	*20	*20	*70	*20	*200	*60	*20	*60	*20	*2	*20	*60	*20	*66	*20	*20	*66	*2	*2	*20	*180	*180	*180	*40		
30 Jul 2025	*20	*20	*70	*20	*200	*80	*20	*80	*20	*2	*20	*80	*20	*80	*20	*20	*80	*2	*2	*20	*180	*180	*180	*40		
31 Jul 2025	*20	*20	*70	*20	*130	*50	*11	*31	*20	*2	*20	*60	*20	*34	*20	*20	*34	*2	*2	*11	*110	*110	*100	*30		

\* 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.

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

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* (Enter) 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	Enter
I19	07 Jul 2025	1020	2	<20	<2	2e
I19	07 Jul 2025	1020	6	40e	4e	<2
I19	07 Jul 2025	1020	11	60e	10e	2e
I19	15 Jul 2025	1038	2	28e	2e	10e
I19	15 Jul 2025	1038	6	20e	2e	20e
I19	15 Jul 2025	1038	11	660	82	38e
I19	22 Jul 2025	1037	2	6e	2e	<2
I19	22 Jul 2025	1037	6	20e	2e	<2
I19	22 Jul 2025	1037	11	80e	26e	2e
I19	31 Jul 2025	1046	2	10e	<2	<2
I19	31 Jul 2025	1046	6	<2	<2	<2
I19	31 Jul 2025	1046	11	<2	<2	<2
I24	07 Jul 2025	1043	2	<20	<2	<2
I24	07 Jul 2025	1043	6	<200	8e	10e
I24	07 Jul 2025	1043	11	40e	8e	<2
I24	15 Jul 2025	1058	2	600e	2e	8e
I24	15 Jul 2025	1058	6	1000e	2e	14e
I24	15 Jul 2025	1058	11	1800e	14e	38e
I24	22 Jul 2025	1059	2	<20	<2	<2
I24	22 Jul 2025	1059	6	60e	2e	<2
I24	22 Jul 2025	1059	11	60e	16e	<2
I24	31 Jul 2025	1111	2	<2	<2	<2
I24	31 Jul 2025	1111	6	<2	<2	<2
I24	31 Jul 2025	1111	11	2e	<2	<2
I25	07 Jul 2025	1052	2	<2	<2	<2
I25	07 Jul 2025	1052	6	<2	<2	<2
I25	07 Jul 2025	1052	9	<20	<2	<2
I25	15 Jul 2025	1107	2	2200e	2e	<2
I25	15 Jul 2025	1107	6	80e	8e	14e
I25	15 Jul 2025	1107	9	200e	16e	28e
I25	22 Jul 2025	1106	2	20e	<2	<2
I25	22 Jul 2025	1106	6	60e	6e	<2
I25	22 Jul 2025	1106	9	20e	2e	<2
I25	31 Jul 2025	1119	2	<2	<2	<2
I25	31 Jul 2025	1119	6	<2	<2	<2
I25	31 Jul 2025	1119	9	<2	<2	<2
I26	07 Jul 2025	1105	2	<2	<2	<2
I26	07 Jul 2025	1105	6	200e	<2	8e
I26	07 Jul 2025	1105	9	160e	2e	12e

Station	Date	Time	Depth	Total	Fecal	Enteric
I26	15 Jul 2025	1117	2	2e	<2	2e
I26	15 Jul 2025	1117	6	<20	2e	2e
I26	15 Jul 2025	1117	9	100e	6e	8e
I26	22 Jul 2025	1119	2	<20	6e	<2
I26	22 Jul 2025	1119	6	20e	<2	<2
I26	22 Jul 2025	1119	9	20e	2e	<2
I26	31 Jul 2025	1129	2	<2	<2	<2
I26	31 Jul 2025	1129	6	<2	<2	<2
I26	31 Jul 2025	1129	9	2e	<2	<2
I32	07 Jul 2025	1118	2	<20	<2	<2
I32	07 Jul 2025	1118	6	580	14e	34e
I32	07 Jul 2025	1118	9	200e	<2	6e
I32	15 Jul 2025	1129	2	<2	<2	2e
I32	15 Jul 2025	1129	6	4e	<2	2e
I32	15 Jul 2025	1129	9	66	<2	8e
I32	22 Jul 2025	1129	2	<20	<2	<2
I32	22 Jul 2025	1129	6	<20	<2	2e
I32	22 Jul 2025	1129	9	<2	<2	<2
I32	31 Jul 2025	1150	2	<2	<2	<2
I32	31 Jul 2025	1150	6	<2	<2	<2
I32	31 Jul 2025	1150	9	<2	<2	<2
I39	07 Jul 2025	954	2	<2	<2	<2
I39	07 Jul 2025	954	12	<2	2e	<2
I39	07 Jul 2025	954	18	20e	<2	<2
I39	15 Jul 2025	1015	2	<20	<2	<2
I39	15 Jul 2025	1015	12	100e	10e	16e
I39	15 Jul 2025	1015	18	<20	<2	<2
I39	22 Jul 2025	1014	2	<2	<2	<2
I39	22 Jul 2025	1014	12	2e	<2	<2
I39	22 Jul 2025	1014	18	2e	<2	<2
I39	31 Jul 2025	1022	2	2e	<2	2e
I39	31 Jul 2025	1022	12	80e	26e	36e
I39	31 Jul 2025	1022	18	2e	<2	<2
I40	07 Jul 2025	1033	2	<200	2e	<2
I40	07 Jul 2025	1033	6	<200	<2	2e
I40	07 Jul 2025	1033	9	40e	<2	<2
I40	15 Jul 2025	1050	2	<2	<2	<2
I40	15 Jul 2025	1050	6	20e	2e	8e
I40	15 Jul 2025	1050	9	<20	14e	10e
I40	22 Jul 2025	1051	2	<20	6e	<2
I40	22 Jul 2025	1051	6	180e	18e	<2
I40	22 Jul 2025	1051	9	80e	18e	<2
I40	31 Jul 2025	1059	2	<2	<2	<2
I40	31 Jul 2025	1059	6	<2	<2	<2
I40	31 Jul 2025	1059	9	<2	<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
I19	07 Jul 2025	Arrive Time	1020
I19	07 Jul 2025	Depart Time	1024
I19	07 Jul 2025	Air Temp (C)	18
I19	07 Jul 2025	Visibility (mi)	5
I19	07 Jul 2025	Wind Speed (kts)	3.1
I19	07 Jul 2025	Wind Dir	W
I19	07 Jul 2025	Sea State	Regular Swell
I19	07 Jul 2025	High Tide Time	1936
I19	07 Jul 2025	Low Tide Time	230
I19	07 Jul 2025	Comments	
I19	15 Jul 2025	Arrive Time	1038
I19	15 Jul 2025	Depart Time	1042
I19	15 Jul 2025	Air Temp (C)	19
I19	15 Jul 2025	Visibility (mi)	6
I19	15 Jul 2025	Wind Speed (kts)	3.4
I19	15 Jul 2025	Wind Dir	S
I19	15 Jul 2025	Sea State	Calm
I19	15 Jul 2025	High Tide Time	6
I19	15 Jul 2025	Low Tide Time	700
I19	15 Jul 2025	Comments	
I19	22 Jul 2025	Arrive Time	1037
I19	22 Jul 2025	Depart Time	1043
I19	22 Jul 2025	Air Temp (C)	21.4
I19	22 Jul 2025	Visibility (mi)	8
I19	22 Jul 2025	Wind Speed (kts)	1.8
I19	22 Jul 2025	Wind Dir	W
I19	22 Jul 2025	Sea State	light chop
I19	22 Jul 2025	High Tide Time	2000
I19	22 Jul 2025	Low Tide Time	236
I19	22 Jul 2025	Comments	
I19	31 Jul 2025	Arrive Time	1046
I19	31 Jul 2025	Depart Time	1051
I19	31 Jul 2025	Air Temp (C)	19.9
I19	31 Jul 2025	Visibility (mi)	6
I19	31 Jul 2025	Wind Speed (kts)	3.8
I19	31 Jul 2025	Wind Dir	NW
I19	31 Jul 2025	Sea State	Light Chop
I19	31 Jul 2025	High Tide Time	1442
I19	31 Jul 2025	Low Tide Time	730
I19	31 Jul 2025	Comments	
I40	07 Jul 2025	Arrive Time	1033
I40	07 Jul 2025	Depart Time	1039
I40	07 Jul 2025	Air Temp (C)	18.1
I40	07 Jul 2025	Visibility (mi)	5
I40	07 Jul 2025	Wind Speed (kts)	14.9
I40	07 Jul 2025	Wind Dir	SW
I40	07 Jul 2025	Sea State	Regular Swell
I40	07 Jul 2025	High Tide Time	1936
I40	07 Jul 2025	Low Tide Time	230
I40	07 Jul 2025	Comments	
I40	15 Jul 2025	Arrive Time	1050

Station	Date	Parameter	Value
I40	15 Jul 2025	Depart Time	1054
I40	15 Jul 2025	Air Temp (C)	19.6
I40	15 Jul 2025	Visibility (mi)	6
I40	15 Jul 2025	Wind Speed (kts)	3.7
I40	15 Jul 2025	Wind Dir	S
I40	15 Jul 2025	Sea State	Calm
I40	15 Jul 2025	High Tide Time	6
I40	15 Jul 2025	Low Tide Time	700
I40	15 Jul 2025	Comments	Color change of water
I40	22 Jul 2025	Arrive Time	1051
I40	22 Jul 2025	Depart Time	1054
I40	22 Jul 2025	Air Temp (C)	22.2
I40	22 Jul 2025	Visibility (mi)	8
I40	22 Jul 2025	Wind Speed (kts)	4.5
I40	22 Jul 2025	Wind Dir	NW
I40	22 Jul 2025	Sea State	light chop
I40	22 Jul 2025	High Tide Time	2000
I40	22 Jul 2025	Low Tide Time	236
I40	22 Jul 2025	Comments	
I40	31 Jul 2025	Arrive Time	1059
I40	31 Jul 2025	Depart Time	1105
I40	31 Jul 2025	Air Temp (C)	19.4
I40	31 Jul 2025	Visibility (mi)	6
I40	31 Jul 2025	Wind Speed (kts)	3.1
I40	31 Jul 2025	Wind Dir	W
I40	31 Jul 2025	Sea State	Light Chop
I40	31 Jul 2025	High Tide Time	1442
I40	31 Jul 2025	Low Tide Time	730
I40	31 Jul 2025	Comments	possible TJ river plume
I24	07 Jul 2025	Arrive Time	1043
I24	07 Jul 2025	Depart Time	1047
I24	07 Jul 2025	Air Temp (C)	18.2
I24	07 Jul 2025	Visibility (mi)	5
I24	07 Jul 2025	Wind Speed (kts)	11
I24	07 Jul 2025	Wind Dir	NW
I24	07 Jul 2025	Sea State	Regular Swell
I24	07 Jul 2025	High Tide Time	1936
I24	07 Jul 2025	Low Tide Time	230
I24	07 Jul 2025	Comments	lots of foam on surface
I24	15 Jul 2025	Arrive Time	1058
I24	15 Jul 2025	Depart Time	1104
I24	15 Jul 2025	Air Temp (C)	19.2
I24	15 Jul 2025	Visibility (mi)	6
I24	15 Jul 2025	Wind Speed (kts)	3.4
I24	15 Jul 2025	Wind Dir	S
I24	15 Jul 2025	Sea State	Calm
I24	15 Jul 2025	High Tide Time	6
I24	15 Jul 2025	Low Tide Time	700
I24	15 Jul 2025	Comments	
I24	22 Jul 2025	Arrive Time	1059
I24	22 Jul 2025	Depart Time	1102
I24	22 Jul 2025	Air Temp (C)	20.4
I24	22 Jul 2025	Visibility (mi)	8
I24	22 Jul 2025	Wind Speed (kts)	5.9
I24	22 Jul 2025	Wind Dir	NW
I24	22 Jul 2025	Sea State	Light Chop

Station	Date	Parameter	Value
I24	22 Jul 2025	High Tide Time	2000
I24	22 Jul 2025	Low Tide Time	236
I24	22 Jul 2025	Comments	
I24	31 Jul 2025	Arrive Time	1111
I24	31 Jul 2025	Depart Time	1115
I24	31 Jul 2025	Air Temp (C)	19.8
I24	31 Jul 2025	Visibility (mi)	6
I24	31 Jul 2025	Wind Speed (kts)	3.9
I24	31 Jul 2025	Wind Dir	NW
I24	31 Jul 2025	Sea State	Light Chop
I24	31 Jul 2025	High Tide Time	1442
I24	31 Jul 2025	Low Tide Time	730
I24	31 Jul 2025	Comments	
I25	07 Jul 2025	Arrive Time	1052
I25	07 Jul 2025	Depart Time	1057
I25	07 Jul 2025	Air Temp (C)	18.3
I25	07 Jul 2025	Visibility (mi)	5
I25	07 Jul 2025	Wind Speed (kts)	4.8
I25	07 Jul 2025	Wind Dir	W
I25	07 Jul 2025	Sea State	Regular Swell
I25	07 Jul 2025	High Tide Time	1936
I25	07 Jul 2025	Low Tide Time	230
I25	07 Jul 2025	Comments	
I25	15 Jul 2025	Arrive Time	1107
I25	15 Jul 2025	Depart Time	1110
I25	15 Jul 2025	Air Temp (C)	19.2
I25	15 Jul 2025	Visibility (mi)	6
I25	15 Jul 2025	Wind Speed (kts)	3.1
I25	15 Jul 2025	Wind Dir	S
I25	15 Jul 2025	Sea State	Calm
I25	15 Jul 2025	High Tide Time	6
I25	15 Jul 2025	Low Tide Time	700
I25	15 Jul 2025	Comments	
I25	22 Jul 2025	Arrive Time	1106
I25	22 Jul 2025	Depart Time	1110
I25	22 Jul 2025	Air Temp (C)	20.5
I25	22 Jul 2025	Visibility (mi)	8
I25	22 Jul 2025	Wind Speed (kts)	4.2
I25	22 Jul 2025	Wind Dir	W
I25	22 Jul 2025	Sea State	Light Chop
I25	22 Jul 2025	High Tide Time	2000
I25	22 Jul 2025	Low Tide Time	236
I25	22 Jul 2025	Comments	
I25	31 Jul 2025	Arrive Time	1119
I25	31 Jul 2025	Depart Time	1124
I25	31 Jul 2025	Air Temp (C)	19.4
I25	31 Jul 2025	Visibility (mi)	6
I25	31 Jul 2025	Wind Speed (kts)	5
I25	31 Jul 2025	Wind Dir	W
I25	31 Jul 2025	Sea State	Light Chop
I25	31 Jul 2025	High Tide Time	1442
I25	31 Jul 2025	Low Tide Time	730
I25	31 Jul 2025	Comments	
I39	07 Jul 2025	Arrive Time	954
I39	07 Jul 2025	Depart Time	1002

Station	Date	Parameter	Value
I39	07 Jul 2025	Air Temp (C)	18.1
I39	07 Jul 2025	Visibility (mi)	5
I39	07 Jul 2025	Wind Speed (kts)	2.6
I39	07 Jul 2025	Wind Dir	NW
I39	07 Jul 2025	Sea State	Regular Swell
I39	07 Jul 2025	High Tide Time	1936
I39	07 Jul 2025	Low Tide Time	230
I39	07 Jul 2025	Comments	
I39	15 Jul 2025	Arrive Time	1015
I39	15 Jul 2025	Depart Time	1020
I39	15 Jul 2025	Air Temp (C)	19.1
I39	15 Jul 2025	Visibility (mi)	6
I39	15 Jul 2025	Wind Speed (kts)	2.6
I39	15 Jul 2025	Wind Dir	S
I39	15 Jul 2025	Sea State	Calm
I39	15 Jul 2025	High Tide Time	6
I39	15 Jul 2025	Low Tide Time	700
I39	15 Jul 2025	Comments	fishing boat
I39	22 Jul 2025	Arrive Time	1014
I39	22 Jul 2025	Depart Time	1019
I39	22 Jul 2025	Air Temp (C)	21.4
I39	22 Jul 2025	Visibility (mi)	8
I39	22 Jul 2025	Wind Speed (kts)	3.6
I39	22 Jul 2025	Wind Dir	NW
I39	22 Jul 2025	Sea State	light chop
I39	22 Jul 2025	High Tide Time	2000
I39	22 Jul 2025	Low Tide Time	236
I39	22 Jul 2025	Comments	
I39	31 Jul 2025	Arrive Time	1022
I39	31 Jul 2025	Depart Time	1028
I39	31 Jul 2025	Air Temp (C)	20.7
I39	31 Jul 2025	Visibility (mi)	6
I39	31 Jul 2025	Wind Speed (kts)	2.3
I39	31 Jul 2025	Wind Dir	W
I39	31 Jul 2025	Sea State	Calm
I39	31 Jul 2025	High Tide Time	1442
I39	31 Jul 2025	Low Tide Time	730
I39	31 Jul 2025	Comments	
I26	07 Jul 2025	Arrive Time	1105
I26	07 Jul 2025	Depart Time	1109
I26	07 Jul 2025	Air Temp (C)	18.2
I26	07 Jul 2025	Visibility (mi)	5
I26	07 Jul 2025	Wind Speed (kts)	7.1
I26	07 Jul 2025	Wind Dir	SW
I26	07 Jul 2025	Sea State	Regular Swell
I26	07 Jul 2025	High Tide Time	1936
I26	07 Jul 2025	Low Tide Time	230
I26	07 Jul 2025	Comments	
I26	15 Jul 2025	Arrive Time	1117
I26	15 Jul 2025	Depart Time	1120
I26	15 Jul 2025	Air Temp (C)	19.7
I26	15 Jul 2025	Visibility (mi)	6
I26	15 Jul 2025	Wind Speed (kts)	3.4
I26	15 Jul 2025	Wind Dir	SW
I26	15 Jul 2025	Sea State	Calm
I26	15 Jul 2025	High Tide Time	6

Station	Date	Parameter	Value
I26	15 Jul 2025	Low Tide Time	700
I26	15 Jul 2025	Comments	
I26	22 Jul 2025	Arrive Time	1119
I26	22 Jul 2025	Depart Time	1121
I26	22 Jul 2025	Air Temp (C)	21.3
I26	22 Jul 2025	Visibility (mi)	8
I26	22 Jul 2025	Wind Speed (kts)	5.1
I26	22 Jul 2025	Wind Dir	NW
I26	22 Jul 2025	Sea State	Light Chop
I26	22 Jul 2025	High Tide Time	2000
I26	22 Jul 2025	Low Tide Time	236
I26	22 Jul 2025	Comments	
I26	31 Jul 2025	Arrive Time	1129
I26	31 Jul 2025	Depart Time	1135
I26	31 Jul 2025	Air Temp (C)	19.8
I26	31 Jul 2025	Visibility (mi)	10
I26	31 Jul 2025	Wind Speed (kts)	3.4
I26	31 Jul 2025	Wind Dir	W
I26	31 Jul 2025	Sea State	Light Chop
I26	31 Jul 2025	High Tide Time	1442
I26	31 Jul 2025	Low Tide Time	730
I26	31 Jul 2025	Comments	
I32	07 Jul 2025	Arrive Time	1118
I32	07 Jul 2025	Depart Time	1128
I32	07 Jul 2025	Air Temp (C)	18.3
I32	07 Jul 2025	Visibility (mi)	5
I32	07 Jul 2025	Wind Speed (kts)	9.8
I32	07 Jul 2025	Wind Dir	W
I32	07 Jul 2025	Sea State	Regular Swell
I32	07 Jul 2025	High Tide Time	1936
I32	07 Jul 2025	Low Tide Time	230
I32	07 Jul 2025	Comments	
I32	15 Jul 2025	Arrive Time	1129
I32	15 Jul 2025	Depart Time	1135
I32	15 Jul 2025	Air Temp (C)	19.8
I32	15 Jul 2025	Visibility (mi)	6
I32	15 Jul 2025	Wind Speed (kts)	3.9
I32	15 Jul 2025	Wind Dir	SW
I32	15 Jul 2025	Sea State	Calm
I32	15 Jul 2025	High Tide Time	6
I32	15 Jul 2025	Low Tide Time	700
I32	15 Jul 2025	Comments	Sewage-like odor; Sample from 2m bottle had diverse dinoflagellate and other plankton population: >3 spp Ceratium; Protoperidinium; Polykrikos; Alexandrium; Gyrodinium
I32	22 Jul 2025	Arrive Time	1129
I32	22 Jul 2025	Depart Time	1133
I32	22 Jul 2025	Air Temp (C)	20.7
I32	22 Jul 2025	Visibility (mi)	8
I32	22 Jul 2025	Wind Speed (kts)	6.7
I32	22 Jul 2025	Wind Dir	NW
I32	22 Jul 2025	Sea State	Light Chop
I32	22 Jul 2025	High Tide Time	2000
I32	22 Jul 2025	Low Tide Time	236
I32	22 Jul 2025	Comments	
I32	31 Jul 2025	Arrive Time	1150

Station	Date	Parameter	Value
I32	31 Jul 2025	Depart Time	1153
I32	31 Jul 2025	Air Temp (C)	20.1
I32	31 Jul 2025	Visibility (mi)	10
I32	31 Jul 2025	Wind Speed (kts)	4.3
I32	31 Jul 2025	Wind Dir	NW
I32	31 Jul 2025	Sea State	Light Chop
I32	31 Jul 2025	High Tide Time	1442
I32	31 Jul 2025	Low Tide Time	730
I32	31 Jul 2025	Comments	NAVY ops on station; sample taken at closest allowable point.

**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	07 Jul 2025	1	15.89	70.76	8.5	33.54	8.1	24.6	1.21
I19	07 Jul 2025	2	15.68	70.36	8.4	33.54	8.1	24.7	1.33
I19	07 Jul 2025	3	14.87	66.35	8.5	33.55	8.1	24.9	2.07
I19	07 Jul 2025	4	14.57	66.32	8.7	33.55	8.1	24.9	5.00
I19	07 Jul 2025	5	14.11	70.49	8.3	33.56	8.0	25.0	5.71
I19	07 Jul 2025	6	13.52	74.14	7.2	33.56	8.0	25.2	5.77
I19	07 Jul 2025	7	13.15	69.43	6.0	33.58	7.9	25.3	3.78
I19	07 Jul 2025	8	13.01	65.96	5.6	33.57	7.8	25.3	3.57
I19	07 Jul 2025	9	12.95	58.49	5.4	33.57	7.8	25.3	3.85
I19	07 Jul 2025	10	12.92	52.11	5.3	33.58	7.8	25.3	3.85
I19	15 Jul 2025	1	17.89	86.40	9.0	33.55	8.1	24.2	1.35
I19	15 Jul 2025	2	17.86	86.27	9.0	33.55	8.1	24.2	1.40
I19	15 Jul 2025	3	17.75	85.90	8.9	33.55	8.1	24.2	2.29
I19	15 Jul 2025	4	17.57	84.55	8.9	33.54	8.1	24.3	4.73
I19	15 Jul 2025	5	17.45	77.21	8.8	33.54	8.1	24.3	8.85
I19	15 Jul 2025	6	17.38	70.22	8.7	33.54	8.1	24.3	11.90
I19	15 Jul 2025	7	17.34	67.17	8.6	33.53	8.1	24.3	11.15
I19	15 Jul 2025	8	17.34	66.81	8.6	33.53	8.1	24.3	10.80
I19	15 Jul 2025	9	17.31	66.85	8.5	33.53	8.1	24.3	10.61
I19	15 Jul 2025	10	17.18	67.05	8.3	33.52	8.1	24.3	10.05
I19	22 Jul 2025	1	19.46	79.21	9.3	33.49	8.2	23.7	2.20
I19	22 Jul 2025	2	19.46	79.10	9.4	33.51	8.2	23.8	2.41
I19	22 Jul 2025	3	19.47	79.50	9.5	33.51	8.2	23.8	2.63
I19	22 Jul 2025	4	19.48	81.07	9.5	33.52	8.2	23.8	2.87
I19	22 Jul 2025	5	19.49	80.77	9.5	33.52	8.2	23.8	2.96
I19	22 Jul 2025	6	19.45	81.55	9.5	33.52	8.2	23.8	2.96
I19	22 Jul 2025	7	19.40	81.62	9.5	33.51	8.2	23.8	3.13
I19	22 Jul 2025	8	19.37	80.86	9.5	33.51	8.2	23.8	3.77
I19	22 Jul 2025	9	19.33	80.35	9.4	33.51	8.2	23.8	3.91
I19	22 Jul 2025	10	19.02	80.33	8.9	33.48	8.2	23.9	3.91
I19	31 Jul 2025	1	14.97	72.06	8.9	33.47	8.1	24.8	1.91
I19	31 Jul 2025	2	13.70	71.40	8.7	33.51	8.1	25.1	2.55
I19	31 Jul 2025	3	13.11	66.89	7.8	33.50	8.0	25.2	4.35
I19	31 Jul 2025	4	12.39	70.06	5.9	33.52	7.8	25.4	3.14
I19	31 Jul 2025	5	12.28	78.60	5.6	33.52	7.8	25.4	2.43
I19	31 Jul 2025	6	12.27	82.42	5.5	33.52	7.8	25.4	1.82
I19	31 Jul 2025	7	12.17	83.60	5.4	33.53	7.8	25.4	1.88
I19	31 Jul 2025	8	12.12	85.69	5.4	33.53	7.8	25.4	1.76
I19	31 Jul 2025	9	12.06	87.43	5.4	33.53	7.8	25.4	1.75
I19	31 Jul 2025	10	12.05	84.84	5.4	33.53	7.8	25.4	1.88
I40	07 Jul 2025	1	16.88	67.31	9.1	33.53	8.1	24.4	2.39
I40	07 Jul 2025	2	16.81	67.69	9.0	33.52	8.1	24.4	2.09
I40	07 Jul 2025	3	15.77	67.12	9.5	33.55	8.2	24.7	3.08
I40	07 Jul 2025	4	15.32	66.11	9.3	33.54	8.1	24.8	5.60
I40	07 Jul 2025	5	14.83	62.43	8.4	33.55	8.1	24.9	8.16
I40	07 Jul 2025	6	14.60	59.20	7.7	33.55	8.0	24.9	5.57
I40	07 Jul 2025	7	14.54	66.46	7.6	33.54	8.0	24.9	4.57
I40	07 Jul 2025	8	14.28	70.51	7.6	33.54	8.0	25.0	5.37
I40	07 Jul 2025	9	13.64	75.77	7.0	33.55	7.9	25.1	3.45
I40	07 Jul 2025	10	13.29	77.92	6.5	33.56	7.9	25.2	2.10
I40	15 Jul 2025	1	17.68	77.44	9.0	33.54	8.1	24.2	3.33
I40	15 Jul 2025	2	17.67	77.60	9.0	33.54	8.1	24.2	3.37
I40	15 Jul 2025	3	17.52	76.51	8.9	33.53	8.1	24.3	6.85
I40	15 Jul 2025	4	17.44	71.39	8.7	33.53	8.1	24.3	15.53
I40	15 Jul 2025	5	17.43	60.99	8.6	33.53	8.1	24.3	19.53
I40	15 Jul 2025	6	17.36	57.99	8.5	33.52	8.1	24.3	20.00
I40	15 Jul 2025	7	17.14	58.55	8.2	33.52	8.1	24.3	16.03
I40	15 Jul 2025	8	16.79	63.15	7.9	33.53	8.1	24.4	11.48
I40	15 Jul 2025	9	16.25	66.41	7.7	33.55	8.0	24.6	5.23
I40	15 Jul 2025	10	15.93	72.05	7.7	33.54	8.0	24.6	1.64
I40	22 Jul 2025	1	19.70	63.08	9.4	33.40	8.2	23.6	5.91
I40	22 Jul 2025	2	19.69	63.36	9.5	33.40	8.2	23.6	5.70

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I40	22 Jul 2025	3	19.53	62.48	9.6	33.41	8.2	23.7	8.70
I40	22 Jul 2025	4	19.50	61.50	9.6	33.41	8.2	23.7	11.35
I40	22 Jul 2025	5	19.38	62.60	9.4	33.46	8.2	23.7	9.63
I40	22 Jul 2025	6	19.31	71.51	9.3	33.49	8.2	23.8	5.82
I40	22 Jul 2025	7	19.12	77.88	9.2	33.50	8.2	23.8	4.88
I40	22 Jul 2025	8	18.83	81.93	8.8	33.47	8.2	23.9	3.54
I40	22 Jul 2025	9	18.11	83.71	8.0	33.46	8.2	24.1	2.22
I40	22 Jul 2025	10	17.77	77.90	7.6	33.45	8.1	24.1	2.02
I40	31 Jul 2025	1	15.57	70.01	8.5	33.50	8.1	24.7	1.51
I40	31 Jul 2025	2	15.57	74.46	8.4	33.50	8.1	24.7	1.53
I40	31 Jul 2025	3	14.70	74.98	7.9	33.50	8.0	24.9	1.90
I40	31 Jul 2025	4	13.45	70.72	7.1	33.52	7.9	25.2	4.52
I40	31 Jul 2025	5	13.09	75.69	6.5	33.49	7.9	25.2	4.46
I40	31 Jul 2025	6	12.48	84.21	6.2	33.52	7.9	25.3	1.74
I40	31 Jul 2025	7	12.28	87.26	5.8	33.52	7.8	25.4	1.38
I40	31 Jul 2025	8	12.15	89.06	5.4	33.52	7.8	25.4	1.11
I40	31 Jul 2025	9	12.01	89.50	5.4	33.53	7.8	25.4	1.19
I40	31 Jul 2025	10	12.02	84.60	5.3	33.53	7.8	25.4	1.29
I24	07 Jul 2025	1	18.70	63.83	10.1	33.58	8.2	24.0	3.20
I24	07 Jul 2025	2	18.64	63.66	10.1	33.58	8.2	24.0	3.26
I24	07 Jul 2025	3	18.28	59.38	10.3	33.57	8.2	24.1	7.03
I24	07 Jul 2025	4	17.72	53.24	10.1	33.55	8.2	24.2	14.77
I24	07 Jul 2025	5	16.39	46.92	9.7	33.54	8.2	24.5	21.16
I24	07 Jul 2025	6	15.81	50.27	9.2	33.54	8.1	24.7	15.33
I24	07 Jul 2025	7	15.19	59.90	8.7	33.52	8.1	24.8	12.81
I24	07 Jul 2025	8	14.17	68.87	8.2	33.54	8.1	25.0	8.49
I24	07 Jul 2025	9	13.67	76.44	7.5	33.55	8.0	25.1	5.00
I24	07 Jul 2025	10	13.59	79.07	6.8	33.55	7.9	25.2	2.21
I24	07 Jul 2025	11	13.85	78.57	7.0	33.55	8.0	25.1	3.19
I24	15 Jul 2025	1	17.03	75.35	8.5	33.54	8.1	24.4	3.02
I24	15 Jul 2025	2	17.12	73.33	8.5	33.54	8.1	24.4	2.81
I24	15 Jul 2025	3	16.88	77.73	8.4	33.53	8.1	24.4	3.79
I24	15 Jul 2025	4	16.80	75.84	8.1	33.53	8.1	24.4	5.64
I24	15 Jul 2025	5	16.57	76.91	8.0	33.53	8.0	24.5	4.44
I24	15 Jul 2025	6	16.01	80.93	8.3	33.55	8.1	24.6	2.16
I24	15 Jul 2025	7	15.89	84.74	8.1	33.54	8.1	24.7	1.73
I24	15 Jul 2025	8	15.81	82.91	8.0	33.55	8.0	24.7	1.24
I24	15 Jul 2025	9	15.78	82.11	7.7	33.55	8.0	24.7	1.20
I24	22 Jul 2025	1	19.66	69.95	9.8	33.46	8.3	23.7	3.41
I24	22 Jul 2025	2	19.66	69.73	9.8	33.46	8.3	23.7	3.28
I24	22 Jul 2025	3	19.48	69.58	9.9	33.48	8.3	23.7	3.55
I24	22 Jul 2025	4	19.17	71.77	9.9	33.50	8.3	23.8	5.42
I24	22 Jul 2025	5	18.94	73.37	9.6	33.49	8.2	23.9	8.52
I24	22 Jul 2025	6	18.62	74.09	9.0	33.47	8.2	24.0	7.57
I24	22 Jul 2025	7	18.28	82.18	8.6	33.47	8.2	24.0	3.60
I24	22 Jul 2025	8	17.95	86.00	8.5	33.47	8.2	24.1	2.42
I24	22 Jul 2025	9	17.90	87.82	8.4	33.47	8.2	24.1	2.23
I24	22 Jul 2025	10	17.65	88.23	7.6	33.46	8.1	24.2	1.68
I24	22 Jul 2025	11	17.01	85.51	6.7	33.48	8.0	24.3	1.04
I24	31 Jul 2025	1	16.22	80.40	9.3	33.50	8.1	24.5	1.06
I24	31 Jul 2025	2	16.13	80.23	9.2	33.49	8.1	24.6	1.06
I24	31 Jul 2025	3	14.91	79.19	9.5	33.49	8.1	24.8	1.27
I24	31 Jul 2025	4	14.27	78.47	9.3	33.50	8.1	25.0	2.38
I24	31 Jul 2025	5	13.46	73.47	8.5	33.49	8.1	25.1	4.52
I24	31 Jul 2025	6	12.60	73.87	7.4	33.51	8.0	25.3	5.45
I24	31 Jul 2025	7	12.45	77.87	6.8	33.50	7.9	25.3	6.65
I24	31 Jul 2025	8	12.20	79.48	6.3	33.50	7.9	25.4	6.56
I24	31 Jul 2025	9	12.14	86.25	5.8	33.52	7.8	25.4	2.33
I24	31 Jul 2025	10	12.26	87.56	5.8	33.51	7.8	25.4	2.78
I25	07 Jul 2025	1	18.96	70.50	10.0	33.58	8.2	23.9	1.56
I25	07 Jul 2025	2	18.95	70.39	10.0	33.58	8.2	23.9	1.52
I25	07 Jul 2025	3	18.82	70.30	10.0	33.58	8.2	24.0	2.32
I25	07 Jul 2025	4	18.71	67.74	10.1	33.58	8.2	24.0	5.18
I25	07 Jul 2025	5	18.52	63.20	10.2	33.56	8.2	24.0	8.87
I25	07 Jul 2025	6	17.68	54.08	10.6	33.56	8.2	24.2	26.03
I25	07 Jul 2025	7	16.75	39.19	10.1	33.53	8.2	24.4	37.65
I25	07 Jul 2025	8	14.55	60.72	9.2	33.56	8.1	25.0	13.57
I25	07 Jul 2025	9	15.55	75.09	9.2	33.52	8.1	24.7	10.48

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I25	15 Jul 2025	1	17.55	89.74	9.0	33.53	8.1	24.3	0.85
I25	15 Jul 2025	2	16.97	89.16	8.9	33.54	8.1	24.4	1.11
I25	15 Jul 2025	3	16.76	84.49	8.7	33.53	8.1	24.4	3.16
I25	15 Jul 2025	4	16.67	79.38	8.4	33.53	8.1	24.5	4.11
I25	15 Jul 2025	5	16.53	79.48	8.1	33.53	8.0	24.5	2.91
I25	15 Jul 2025	6	16.20	82.14	8.0	33.53	8.0	24.6	1.96
I25	15 Jul 2025	7	15.94	84.24	8.1	33.55	8.0	24.6	1.34
I25	15 Jul 2025	8	15.94	84.62	8.0	33.54	8.0	24.6	1.12
I25	15 Jul 2025	9	15.94	84.92	7.9	33.54	8.0	24.6	1.07
I25	22 Jul 2025	1	19.73	69.73	9.8	33.46	8.2	23.7	3.34
I25	22 Jul 2025	2	19.37	69.92	9.8	33.48	8.2	23.8	3.80
I25	22 Jul 2025	3	19.24	72.54	9.8	33.49	8.2	23.8	5.43
I25	22 Jul 2025	4	19.16	73.64	9.7	33.49	8.2	23.8	6.24
I25	22 Jul 2025	5	18.95	74.58	9.4	33.48	8.2	23.9	6.02
I25	22 Jul 2025	6	18.53	77.35	8.7	33.48	8.2	24.0	4.12
I25	22 Jul 2025	7	17.82	84.15	7.7	33.47	8.1	24.1	2.90
I25	22 Jul 2025	8	17.52	85.17	7.1	33.47	8.0	24.2	1.25
I25	22 Jul 2025	9	17.20	81.81	6.3	33.48	8.0	24.3	1.07
I25	31 Jul 2025	1	15.96	77.84	9.5	33.48	8.1	24.6	1.39
I25	31 Jul 2025	2	15.81	80.68	9.4	33.48	8.1	24.6	1.26
I25	31 Jul 2025	3	14.65	80.75	9.7	33.49	8.1	24.9	1.48
I25	31 Jul 2025	4	14.16	79.49	9.8	33.50	8.1	25.0	1.99
I25	31 Jul 2025	5	13.72	72.62	9.2	33.50	8.1	25.1	5.83
I25	31 Jul 2025	6	13.11	62.75	7.9	33.50	8.0	25.2	11.35
I25	31 Jul 2025	7	12.33	78.92	6.7	33.52	7.9	25.4	5.55
I25	31 Jul 2025	8	12.11	87.21	5.7	33.52	7.8	25.4	1.76
I25	31 Jul 2025	9	12.15	88.22	5.5	33.52	7.8	25.4	1.35
I39	07 Jul 2025	1	18.83	77.89	9.7	33.58	8.2	24.0	1.16
I39	07 Jul 2025	2	18.88	74.88	9.6	33.58	8.2	24.0	1.04
I39	07 Jul 2025	3	18.84	77.66	9.6	33.58	8.2	24.0	1.03
I39	07 Jul 2025	4	18.78	78.10	9.6	33.57	8.2	24.0	1.25
I39	07 Jul 2025	5	18.44	78.30	9.9	33.57	8.2	24.1	1.56
I39	07 Jul 2025	6	18.24	77.55	10.2	33.56	8.2	24.1	2.39
I39	07 Jul 2025	7	18.12	76.01	10.4	33.56	8.2	24.1	3.85
I39	07 Jul 2025	8	18.02	74.18	10.5	33.56	8.2	24.2	5.21
I39	07 Jul 2025	9	17.75	72.67	10.7	33.54	8.2	24.2	5.93
I39	07 Jul 2025	10	17.13	70.96	11.1	33.55	8.2	24.4	7.95
I39	07 Jul 2025	11	16.92	67.86	11.0	33.55	8.2	24.4	9.93
I39	07 Jul 2025	12	16.40	67.29	10.4	33.53	8.2	24.5	10.44
I39	07 Jul 2025	13	14.72	65.96	9.5	33.55	8.2	24.9	10.93
I39	07 Jul 2025	14	13.73	71.58	8.1	33.55	8.0	25.1	7.21
I39	07 Jul 2025	15	12.61	80.57	7.0	33.58	8.0	25.4	6.46
I39	07 Jul 2025	16	12.39	81.47	6.2	33.57	7.9	25.4	5.08
I39	07 Jul 2025	17	12.29	81.95	5.8	33.58	7.9	25.4	4.67
I39	07 Jul 2025	18	12.18	82.45	5.5	33.58	7.8	25.5	4.02
I39	15 Jul 2025	1	17.75	83.35	9.2	33.54	8.1	24.2	2.15
I39	15 Jul 2025	2	17.72	83.37	9.2	33.54	8.1	24.2	2.30
I39	15 Jul 2025	3	17.42	83.11	9.1	33.54	8.1	24.3	2.89
I39	15 Jul 2025	4	16.38	82.64	9.2	33.54	8.1	24.5	3.60
I39	15 Jul 2025	5	15.96	82.28	9.2	33.54	8.1	24.6	4.49
I39	15 Jul 2025	6	15.82	82.89	9.1	33.53	8.1	24.7	4.24
I39	15 Jul 2025	7	15.77	83.75	9.0	33.53	8.1	24.7	3.36
I39	15 Jul 2025	8	15.76	84.54	8.8	33.54	8.1	24.7	3.03
I39	15 Jul 2025	9	15.74	85.04	8.5	33.54	8.1	24.7	2.32
I39	15 Jul 2025	10	15.71	85.19	8.2	33.55	8.0	24.7	1.88
I39	15 Jul 2025	11	15.41	84.99	7.8	33.55	8.0	24.8	1.78
I39	15 Jul 2025	12	14.77	85.13	7.5	33.55	8.0	24.9	1.35
I39	15 Jul 2025	13	14.30	84.60	7.2	33.56	8.0	25.0	1.19
I39	15 Jul 2025	14	13.86	85.52	7.0	33.56	7.9	25.1	1.11
I39	15 Jul 2025	15	13.66	86.01	6.9	33.56	7.9	25.1	1.15
I39	15 Jul 2025	16	13.62	85.69	6.8	33.56	7.9	25.2	1.11
I39	15 Jul 2025	17	13.62	84.19	6.8	33.56	7.9	25.2	1.08
I39	15 Jul 2025	18	13.62	83.48	6.8	33.56	7.9	25.2	1.07
I39	22 Jul 2025	1	19.35	86.67	9.3	33.54	8.2	23.8	1.09
I39	22 Jul 2025	2	19.33	86.46	9.4	33.54	8.2	23.8	1.21
I39	22 Jul 2025	3	19.21	86.35	9.4	33.53	8.2	23.8	1.68
I39	22 Jul 2025	4	19.18	85.71	9.4	33.53	8.2	23.9	2.07
I39	22 Jul 2025	5	18.77	84.38	9.6	33.51	8.2	23.9	2.57

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I39	22 Jul 2025	6	19.19	85.10	9.4	33.52	8.2	23.8	2.66
I39	22 Jul 2025	7	18.59	85.84	9.4	33.52	8.2	24.0	2.04
I39	22 Jul 2025	8	18.24	86.15	9.4	33.51	8.2	24.1	2.35
I39	22 Jul 2025	9	17.70	87.01	9.5	33.50	8.2	24.2	2.61
I39	22 Jul 2025	10	17.13	86.48	9.6	33.49	8.2	24.3	2.60
I39	22 Jul 2025	11	16.86	85.25	9.5	33.49	8.2	24.4	2.69
I39	22 Jul 2025	12	16.70	84.97	9.2	33.48	8.2	24.4	2.77
I39	22 Jul 2025	13	15.57	84.50	8.1	33.46	8.1	24.7	3.08
I39	22 Jul 2025	14	14.57	85.33	7.1	33.48	8.0	24.9	2.10
I39	22 Jul 2025	15	14.32	88.22	6.8	33.47	8.0	24.9	1.49
I39	22 Jul 2025	16	14.23	89.28	6.6	33.47	8.0	25.0	1.08
I39	22 Jul 2025	17	14.19	89.34	6.6	33.47	8.0	25.0	1.04
I39	22 Jul 2025	18	14.16	89.65	6.6	33.47	8.0	25.0	0.89
I39	31 Jul 2025	1	16.38	85.55	9.4	33.52	8.1	24.5	1.01
I39	31 Jul 2025	2	15.96	84.85	9.2	33.50	8.1	24.6	0.64
I39	31 Jul 2025	3	13.88	83.53	9.1	33.54	8.1	25.1	3.29
I39	31 Jul 2025	4	12.76	70.70	8.0	33.47	8.0	25.3	6.90
I39	31 Jul 2025	5	12.36	72.17	7.0	33.46	7.9	25.3	4.72
I39	31 Jul 2025	6	12.36	86.21	6.5	33.45	7.9	25.3	2.16
I39	31 Jul 2025	7	12.20	92.53	6.3	33.42	7.9	25.3	2.66
I39	31 Jul 2025	8	11.91	94.09	6.1	33.48	7.9	25.4	1.34
I39	31 Jul 2025	9	11.92	95.94	5.9	33.49	7.9	25.4	0.92
I39	31 Jul 2025	10	11.71	97.22	5.7	33.53	7.8	25.5	1.03
I39	31 Jul 2025	11	11.60	97.15	5.5	33.55	7.8	25.5	0.89
I39	31 Jul 2025	12	11.58	96.79	5.3	33.55	7.8	25.5	0.88
I39	31 Jul 2025	13	11.58	96.17	5.2	33.55	7.8	25.5	0.80
I39	31 Jul 2025	14	11.58	95.67	5.2	33.56	7.8	25.5	0.79
I39	31 Jul 2025	15	11.58	95.31	5.1	33.56	7.8	25.5	0.71
I39	31 Jul 2025	16	11.58	94.22	5.0	33.56	7.8	25.5	0.67
I39	31 Jul 2025	17	11.59	93.95	5.0	33.56	7.8	25.5	0.68
I39	31 Jul 2025	18	11.58	93.91	5.0	33.56	7.8	25.5	0.69
I26	07 Jul 2025	1	18.99	71.66	10.1	33.58	8.2	23.9	1.58
I26	07 Jul 2025	2	18.94	72.07	10.1	33.58	8.2	24.0	1.64
I26	07 Jul 2025	3	18.84	71.83	10.1	33.58	8.2	24.0	1.92
I26	07 Jul 2025	4	18.75	69.49	10.1	33.58	8.2	24.0	3.35
I26	07 Jul 2025	5	18.52	65.51	10.2	33.57	8.2	24.1	6.41
I26	07 Jul 2025	6	17.95	56.96	9.8	33.54	8.2	24.2	13.14
I26	07 Jul 2025	7	16.05	44.84	9.2	33.55	8.1	24.6	25.15
I26	07 Jul 2025	8	15.30	63.91	8.8	33.53	8.1	24.8	16.27
I26	07 Jul 2025	9	13.83	77.20	7.6	33.55	8.0	25.1	6.36
I26	15 Jul 2025	1	17.68	77.97	9.2	33.52	8.1	24.2	3.35
I26	15 Jul 2025	2	17.54	78.09	9.2	33.52	8.1	24.3	3.98
I26	15 Jul 2025	3	17.11	75.17	9.1	33.53	8.1	24.4	6.88
I26	15 Jul 2025	4	17.01	73.57	9.1	33.53	8.1	24.4	6.04
I26	15 Jul 2025	5	16.97	77.52	8.8	33.53	8.1	24.4	5.53
I26	15 Jul 2025	6	16.94	78.44	8.3	33.53	8.1	24.4	6.31
I26	15 Jul 2025	7	16.85	77.40	7.6	33.53	8.0	24.4	5.30
I26	15 Jul 2025	8	16.56	79.30	7.6	33.53	8.0	24.5	2.89
I26	15 Jul 2025	9	16.16	84.50	7.6	33.54	8.0	24.6	1.36
I26	22 Jul 2025	1	19.72	60.65	10.2	33.42	8.3	23.6	6.35
I26	22 Jul 2025	2	19.66	60.66	10.2	33.42	8.3	23.6	6.69
I26	22 Jul 2025	3	19.50	59.88	10.0	33.42	8.3	23.7	9.74
I26	22 Jul 2025	4	19.44	60.54	9.7	33.46	8.2	23.7	10.04
I26	22 Jul 2025	5	19.46	71.44	9.5	33.50	8.2	23.8	6.35
I26	22 Jul 2025	6	19.45	77.13	9.4	33.52	8.2	23.8	5.38
I26	22 Jul 2025	7	19.43	78.73	9.4	33.52	8.2	23.8	4.86
I26	22 Jul 2025	8	19.43	80.06	9.3	33.53	8.2	23.8	4.15
I26	22 Jul 2025	9	19.04	82.45	8.6	33.52	8.2	23.9	3.26
I26	31 Jul 2025	1	16.66	81.96	9.4	33.49	8.1	24.4	0.92
I26	31 Jul 2025	2	16.17	82.03	9.4	33.48	8.1	24.5	1.07
I26	31 Jul 2025	3	15.05	79.14	9.6	33.50	8.1	24.8	1.71
I26	31 Jul 2025	4	14.07	76.26	9.7	33.46	8.1	25.0	2.12
I26	31 Jul 2025	5	13.24	69.93	9.4	33.49	8.1	25.2	8.70
I26	31 Jul 2025	6	12.83	60.33	8.1	33.49	8.0	25.3	18.22
I26	31 Jul 2025	7	12.43	80.80	6.7	33.50	7.9	25.3	6.92
I26	31 Jul 2025	8	12.31	88.08	6.1	33.51	7.9	25.4	1.42
I26	31 Jul 2025	9	12.30	89.06	5.8	33.51	7.8	25.4	1.25
I32	07 Jul 2025	1	18.26	63.93	9.3	33.56	8.2	24.1	2.69

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
I32	07 Jul 2025	2	17.79	61.79	9.2	33.54	8.2	24.2	3.77
I32	07 Jul 2025	3	17.72	60.33	9.0	33.53	8.2	24.2	4.92
I32	07 Jul 2025	4	17.00	59.20	8.5	33.51	8.1	24.4	7.04
I32	07 Jul 2025	5	15.21	55.39	7.5	33.49	8.0	24.8	8.46
I32	07 Jul 2025	6	14.28	61.94	7.2	33.54	8.0	25.0	5.27
I32	07 Jul 2025	7	13.88	70.98	7.3	33.55	8.0	25.1	4.91
I32	07 Jul 2025	8	13.66	76.35	7.2	33.55	8.0	25.1	4.81
I32	07 Jul 2025	9	13.58	77.54	7.0	33.55	8.0	25.1	4.57
I32	07 Jul 2025	10	13.47	76.05	6.7	33.56	7.9	25.2	4.06
I32	15 Jul 2025	1	18.51	43.10	12.3	33.53	8.4	24.0	25.48
I32	15 Jul 2025	2	18.39	42.76	12.2	33.53	8.4	24.0	29.71
I32	15 Jul 2025	3	18.20	30.08	11.5	33.53	8.3	24.1	39.83
I32	15 Jul 2025	4	18.14	30.67	10.7	33.54	8.3	24.1	34.57
I32	15 Jul 2025	5	18.11	38.36	10.2	33.55	8.2	24.1	37.33
I32	15 Jul 2025	6	18.11	37.78	10.0	33.55	8.2	24.1	37.60
I32	15 Jul 2025	7	18.08	37.51	9.5	33.55	8.2	24.1	36.47
I32	15 Jul 2025	8	18.03	40.73	9.1	33.55	8.2	24.2	30.43
I32	15 Jul 2025	9	18.00	44.09	8.8	33.55	8.2	24.2	19.29
I32	15 Jul 2025	10	17.60	52.58	7.9	33.52	8.1	24.2	16.11
I32	22 Jul 2025	1	20.08	71.64	9.1	33.53	8.2	23.6	2.18
I32	22 Jul 2025	2	20.04	71.52	9.1	33.53	8.2	23.6	2.33
I32	22 Jul 2025	3	19.95	70.38	8.9	33.52	8.2	23.6	2.99
I32	22 Jul 2025	4	19.81	68.82	8.7	33.52	8.2	23.7	3.84
I32	22 Jul 2025	5	19.67	70.01	8.7	33.52	8.2	23.7	4.24
I32	22 Jul 2025	6	19.60	72.03	9.0	33.53	8.2	23.7	5.01
I32	22 Jul 2025	7	19.56	75.53	9.2	33.54	8.2	23.8	4.34
I32	22 Jul 2025	8	19.48	79.35	9.3	33.54	8.2	23.8	3.57
I32	22 Jul 2025	9	19.44	81.57	9.3	33.54	8.2	23.8	3.46
I32	22 Jul 2025	10	19.39	82.89	9.3	33.54	8.2	23.8	3.03
I32	31 Jul 2025	1	15.86	78.22	9.1	33.50	8.1	24.6	1.16
I32	31 Jul 2025	2	15.81	78.21	9.1	33.50	8.1	24.6	1.09
I32	31 Jul 2025	3	15.61	77.91	9.1	33.50	8.1	24.7	1.22
I32	31 Jul 2025	4	15.17	77.02	9.2	33.50	8.1	24.8	1.58
I32	31 Jul 2025	5	14.24	75.57	9.6	33.48	8.1	25.0	2.11
I32	31 Jul 2025	6	12.98	70.81	9.0	33.51	8.1	25.2	6.17
I32	31 Jul 2025	7	13.09	69.48	7.8	33.48	8.0	25.2	7.70
I32	31 Jul 2025	8	12.52	76.22	6.7	33.51	7.9	25.3	5.82
I32	31 Jul 2025	9	12.37	80.34	6.0	33.51	7.9	25.4	2.78
I32	31 Jul 2025	10	12.28	80.14	5.8	33.52	7.9	25.4	2.02

NA = not available

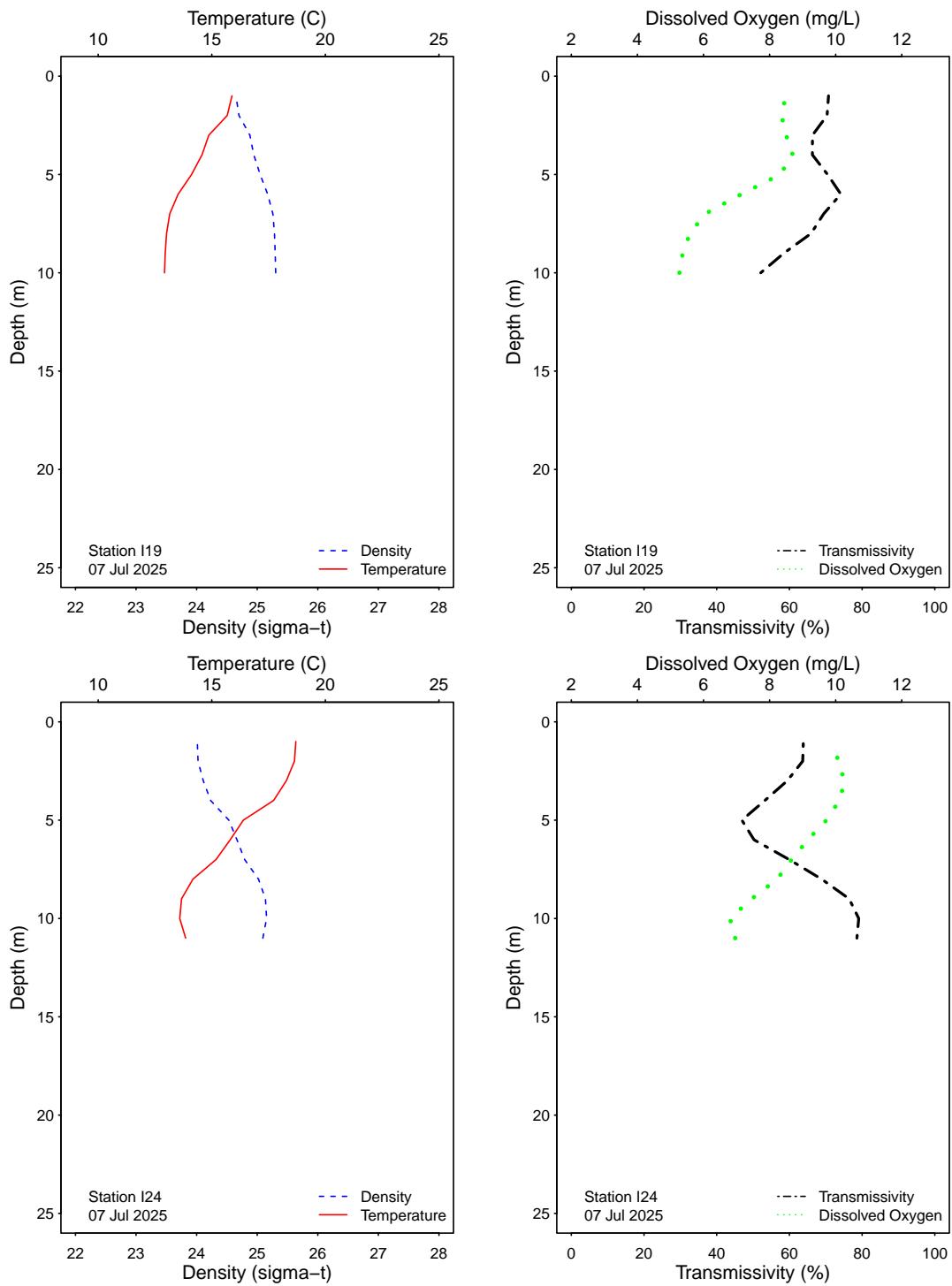


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

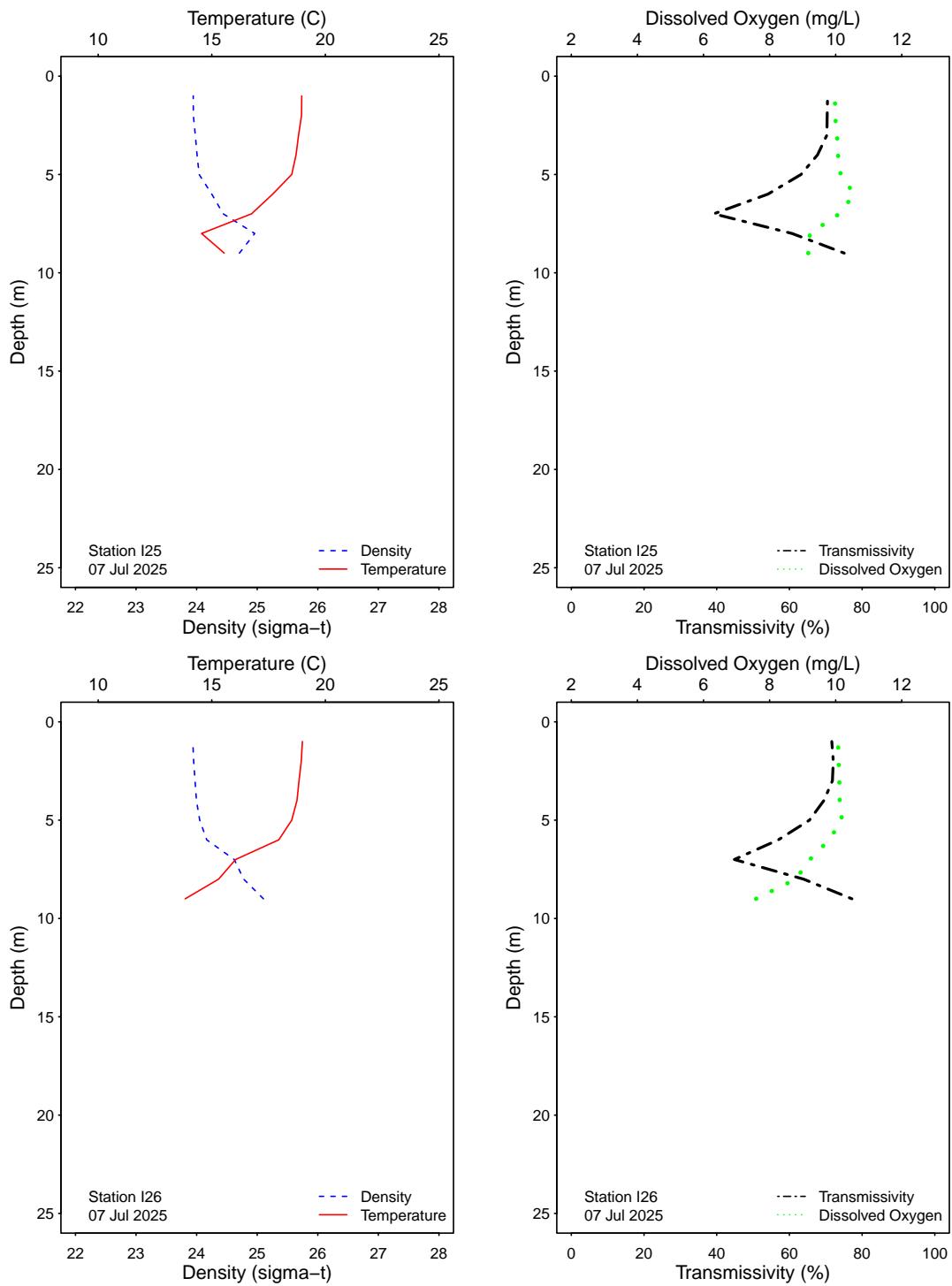


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

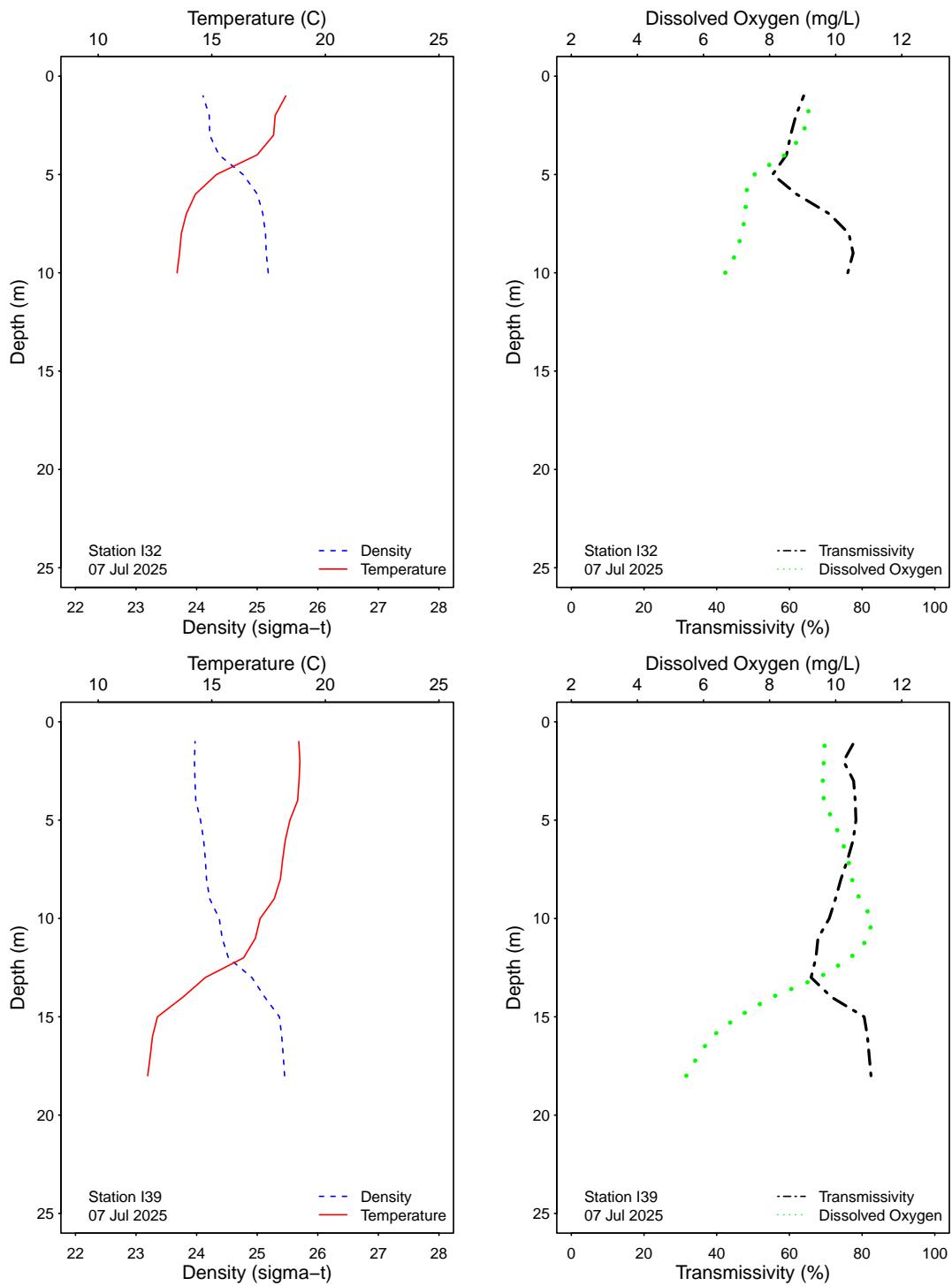


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

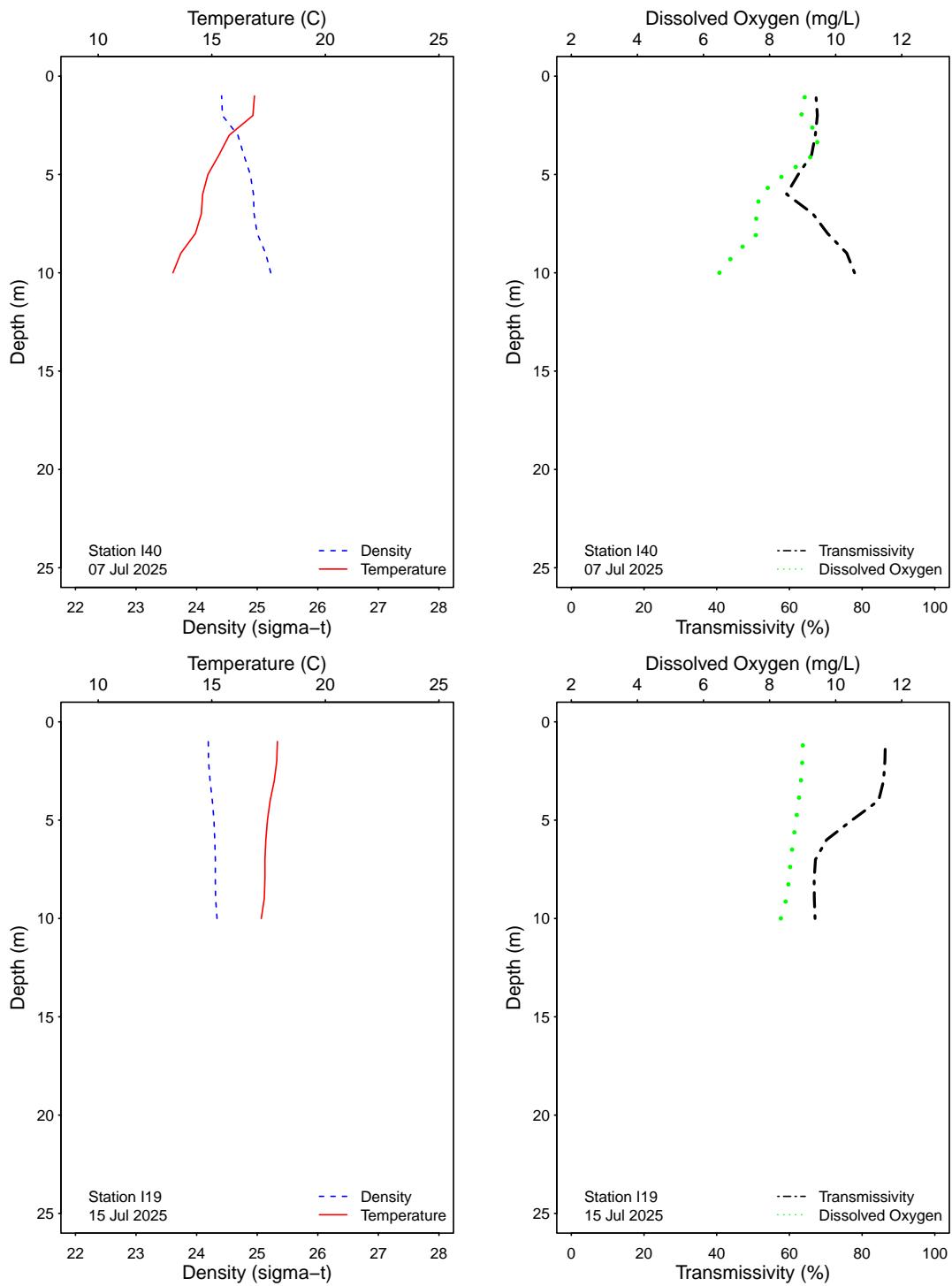


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

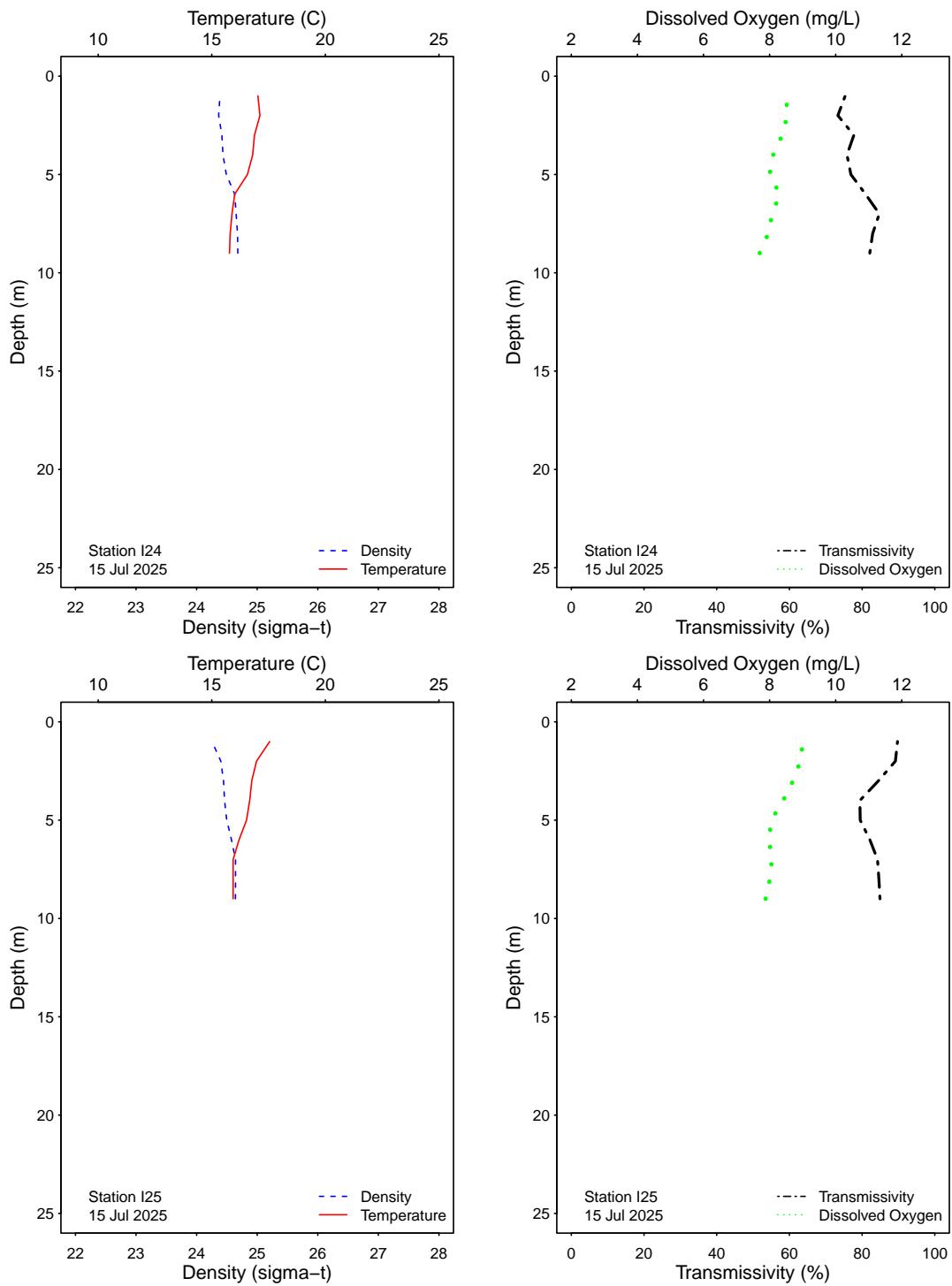


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

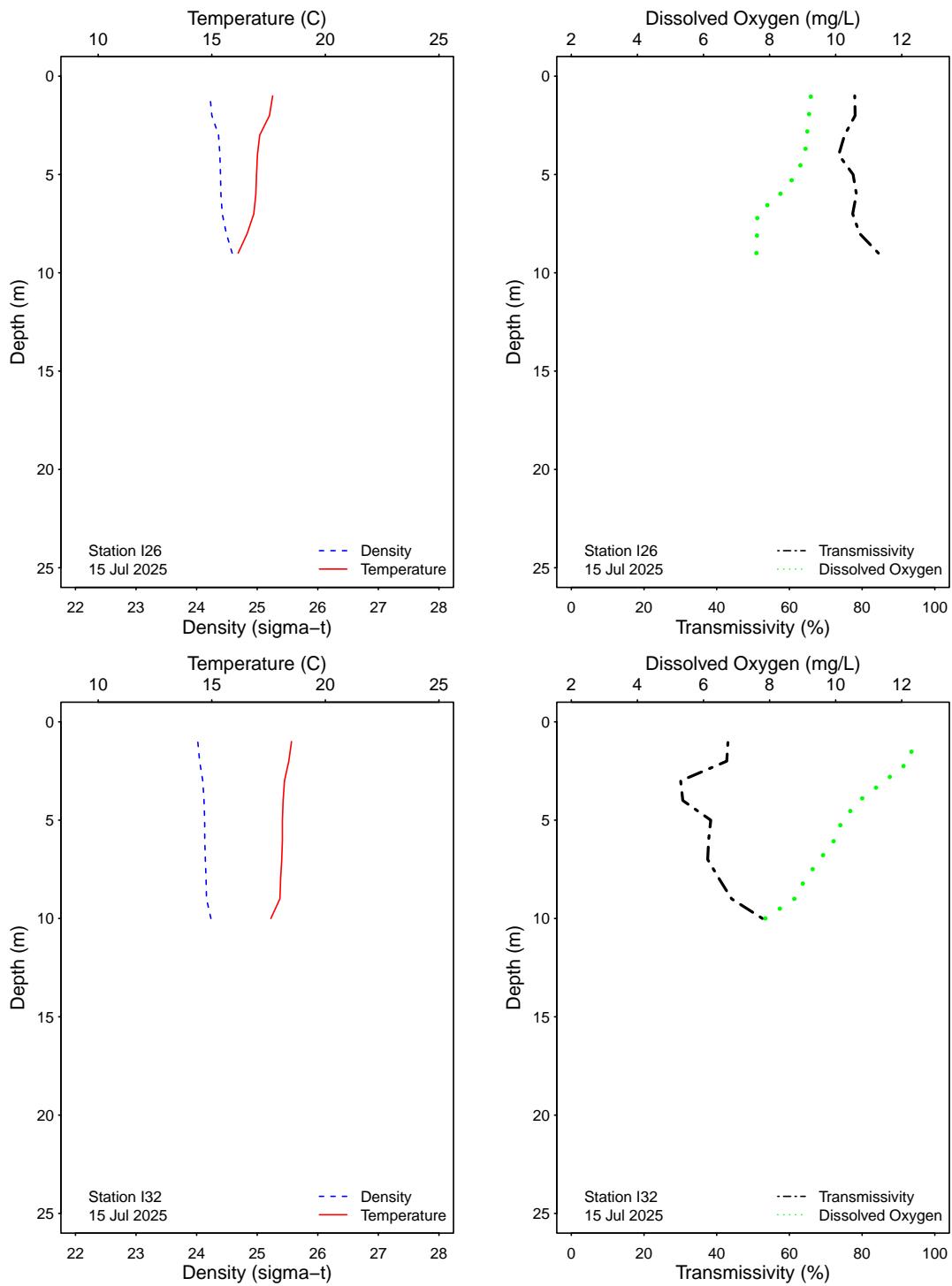


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

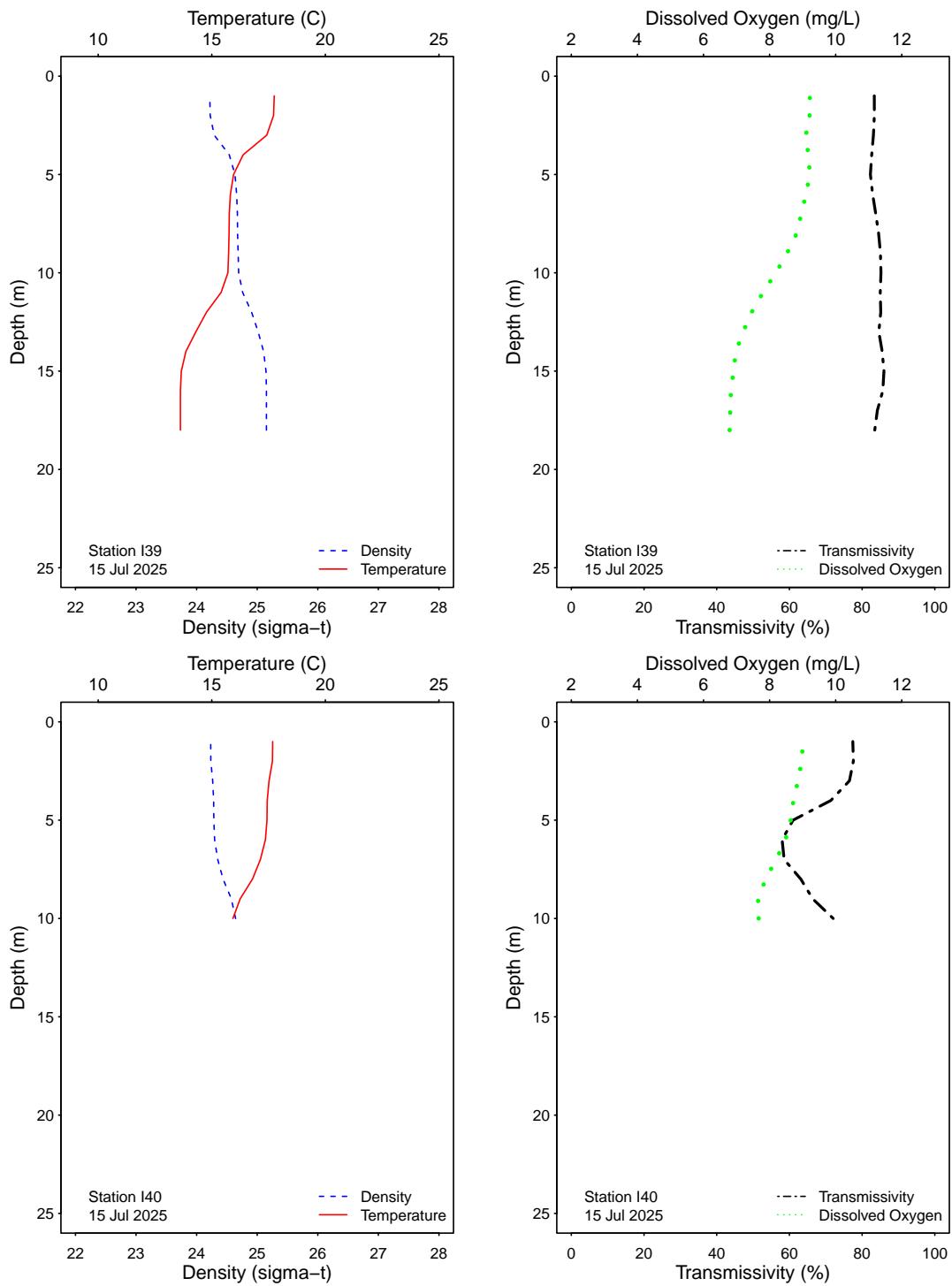


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

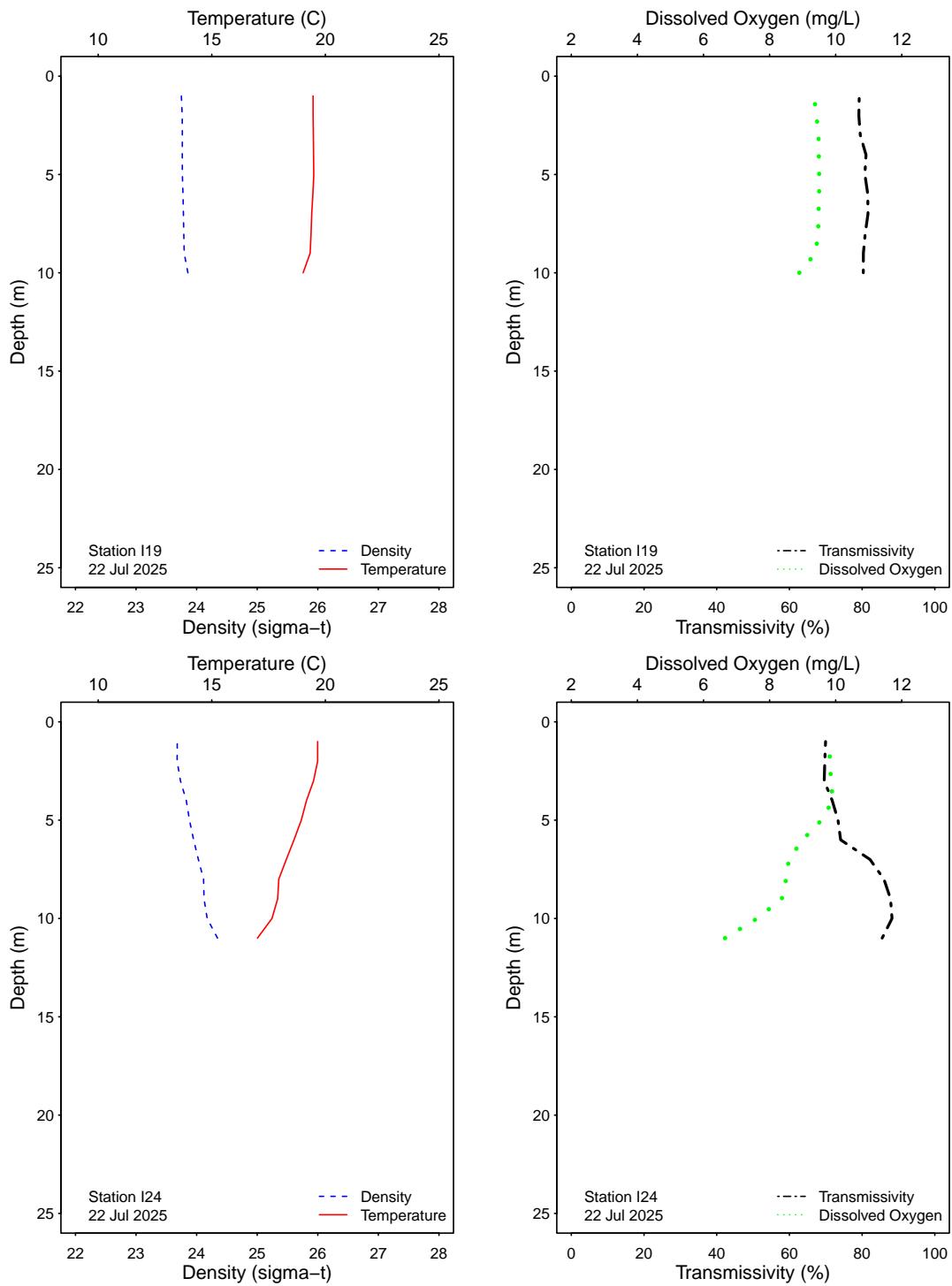


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

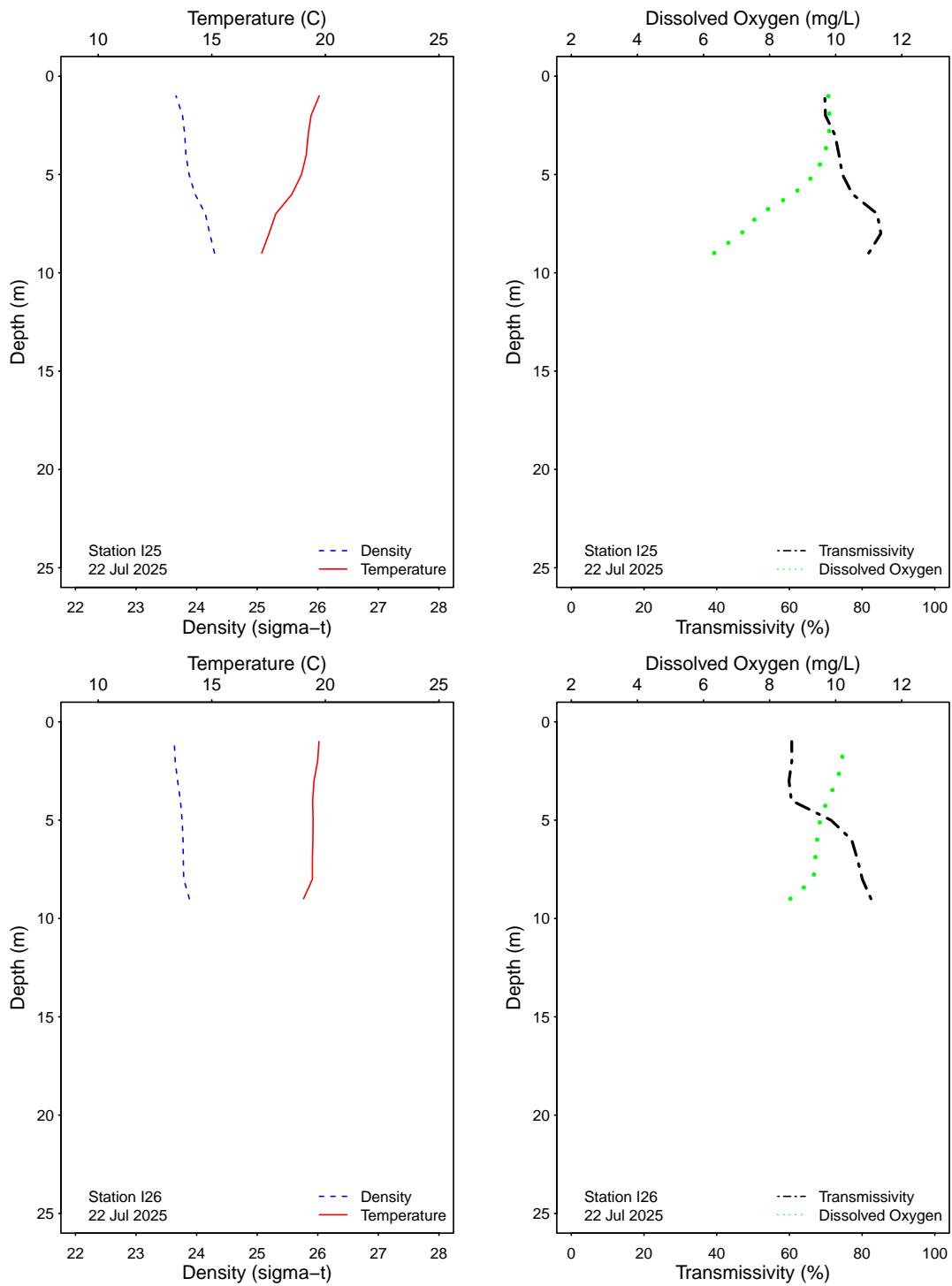


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

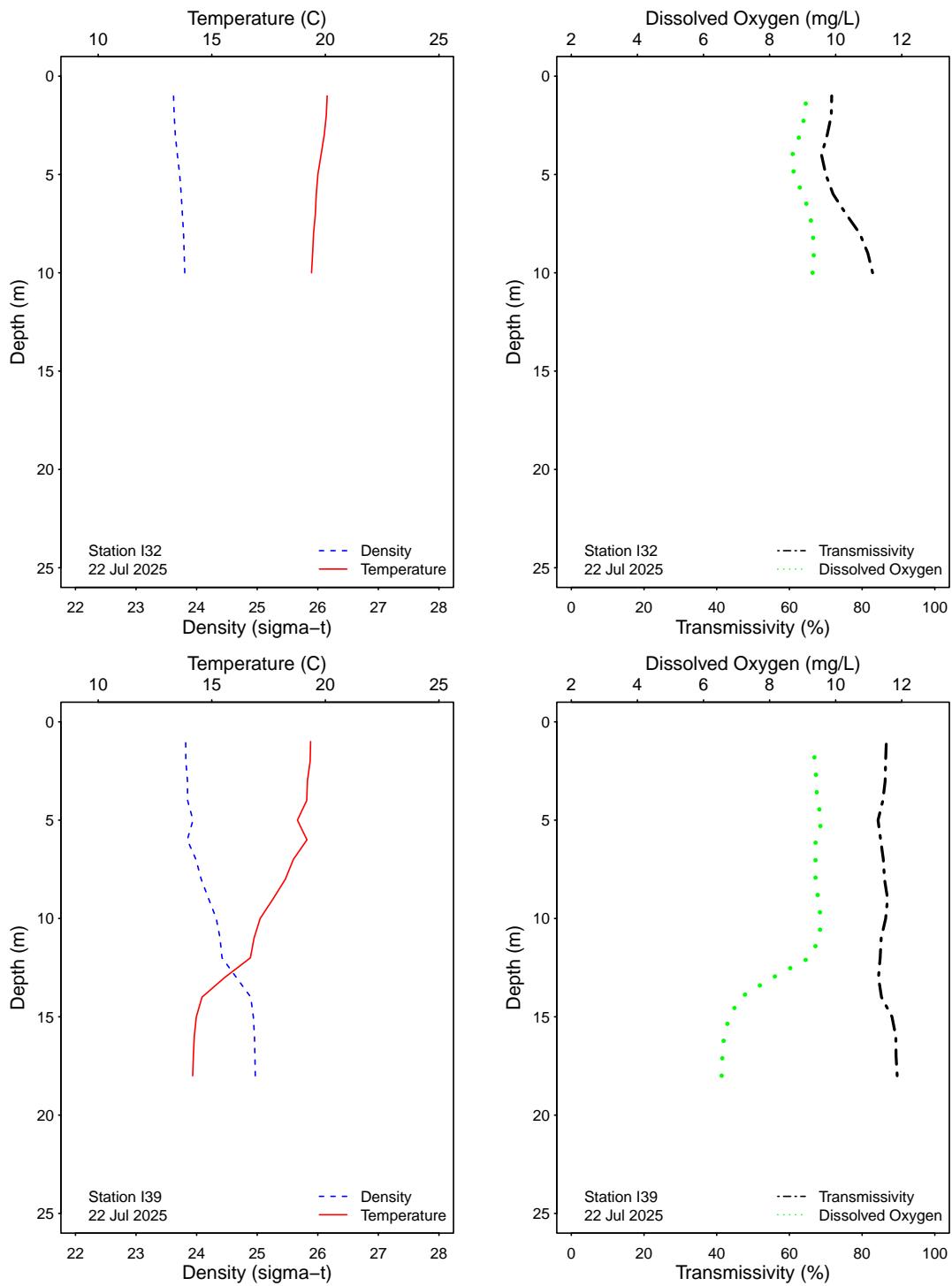


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

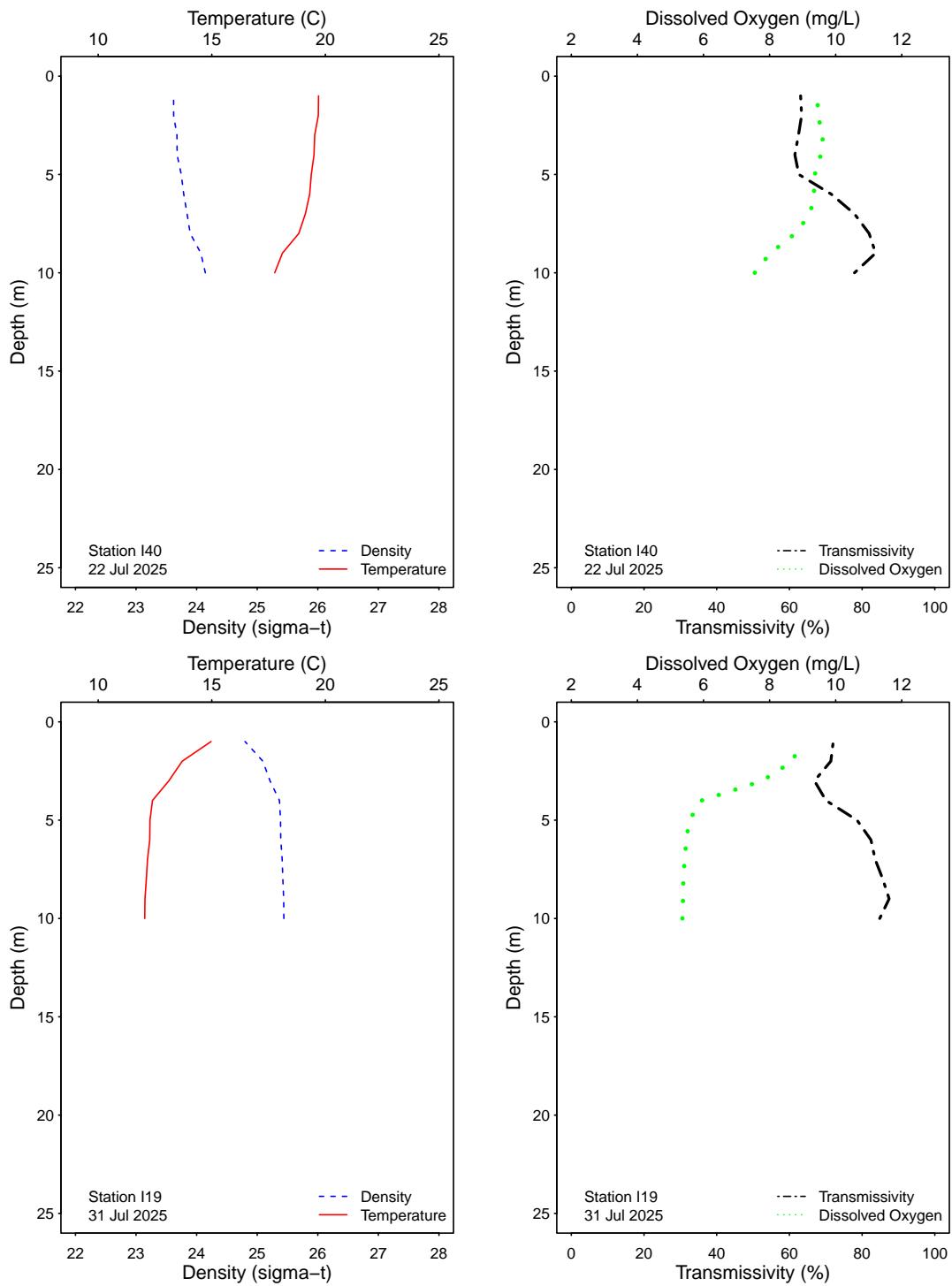


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

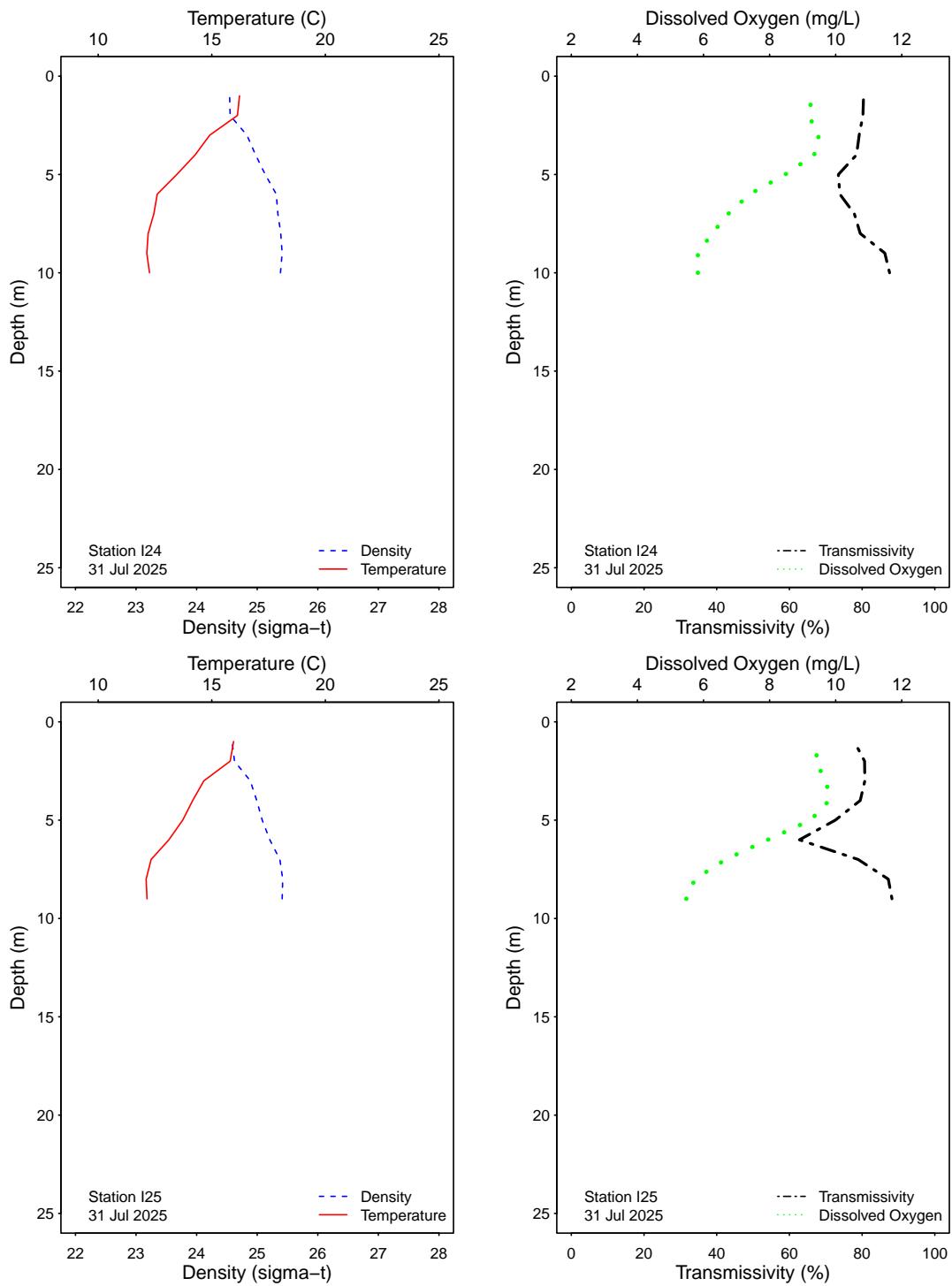


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

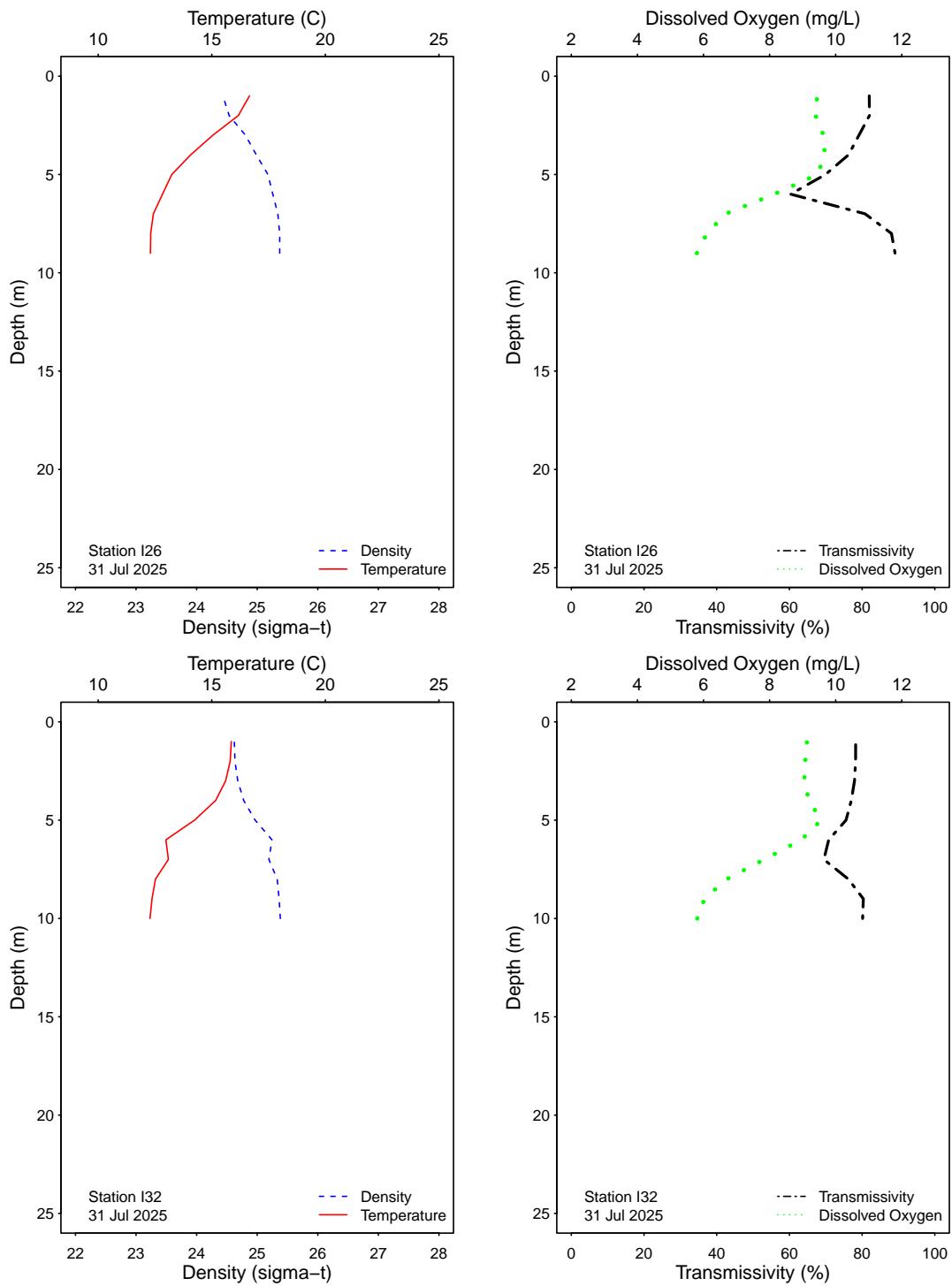


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

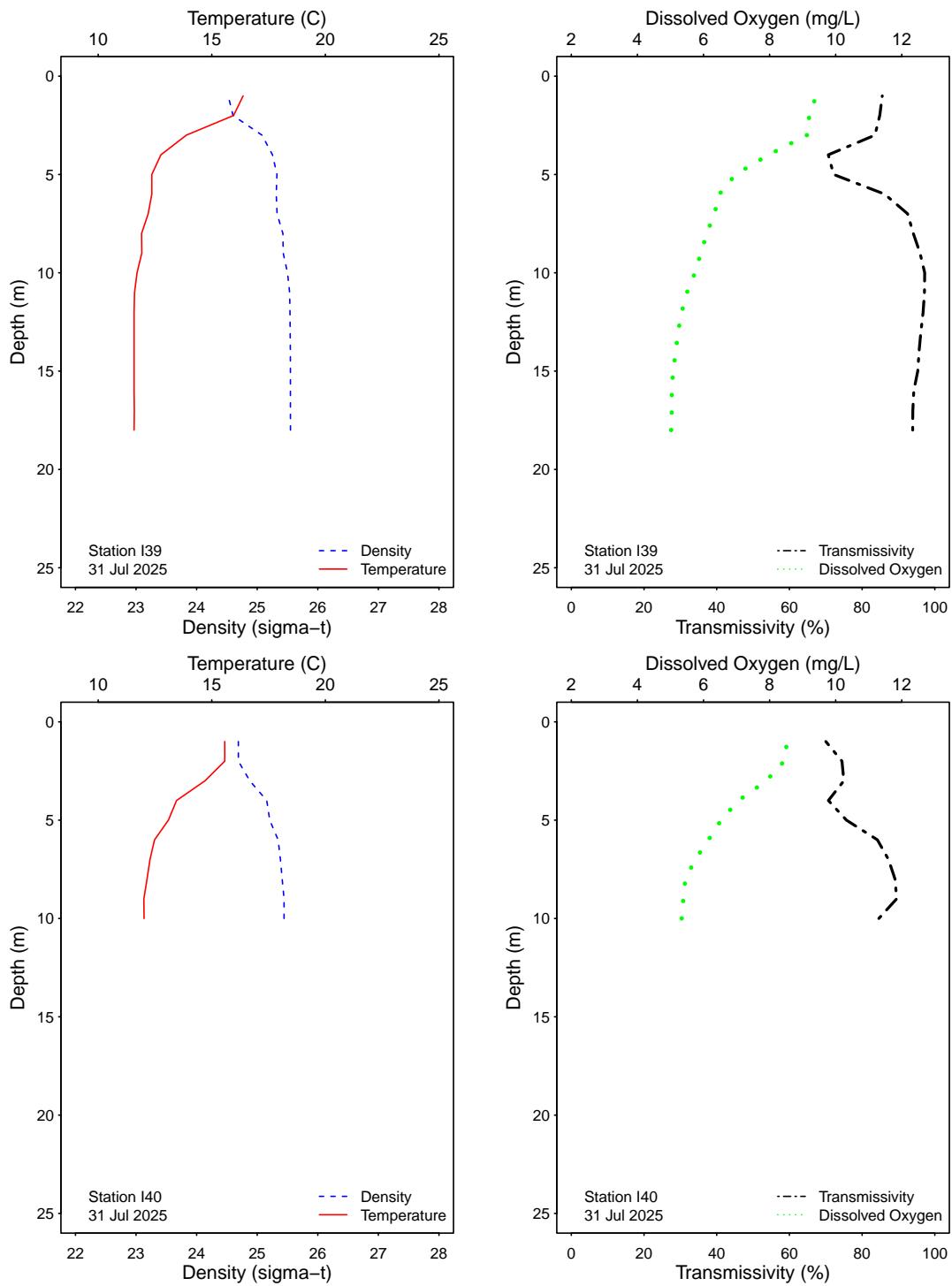


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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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* (Enter) are reported as CFU/100 mL.

<b>Station</b>	<b>Date</b>	<b>Depth</b>	<b>Analyst</b>	<b>Procedure</b>	<b>Total</b>	<b>Fecal</b>	<b>Enter</b>
I19	07 Jul 2025	6	NCD	LAB DUPLICATE	20	4	2
I19	15 Jul 2025	6	WT	LAB DUPLICATE	20	12	12
I19	22 Jul 2025	6	WT	LAB DUPLICATE	10	2	2
I19	31 Jul 2025	6	KT	LAB DUPLICATE	2	2	2
I40	07 Jul 2025	6	NCD	LAB DUPLICATE	200	10	4
I40	15 Jul 2025	6	WT	LAB DUPLICATE	20	2	6
I40	22 Jul 2025	6	WT	LAB DUPLICATE	200	24	2
I40	31 Jul 2025	6	KT	LAB DUPLICATE	2	2	2
S12	01 Jul 2025		JF	FIELD DUPLICATE	20	2	2
S12	01 Jul 2025		JF	LAB DUPLICATE	20	2	2
S12	08 Jul 2025		ADG	LAB DUPLICATE	1400	20	80
S12	08 Jul 2025		ADG	FIELD DUPLICATE	600	20	140
S12	15 Jul 2025		KT	FIELD DUPLICATE	5400	140	120
S12	15 Jul 2025		KT	LAB DUPLICATE	2600	180	100
S12	17 Jul 2025		JF	LAB DUPLICATE	ns	20	ns
S12	17 Jul 2025		JF	FIELD DUPLICATE	ns	20	ns
S12	22 Jul 2025		WT	LAB DUPLICATE	3800	120	180
S12	22 Jul 2025		WT	FIELD DUPLICATE	3200	60	90
S12	29 Jul 2025		KT	FIELD DUPLICATE	20	2	2
S12	29 Jul 2025		KT	LAB DUPLICATE	80	6	2

ns = not sampled

ND = no data

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