



# **POINT LOMA OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT**

## **POINT LOMA WASTEWATER TREATMENT PLANT**

NPDES Permit No. CA0107409  
SDRWQCB Order No. R9-2017-0007

## **DECEMBER 2024**

Environmental Monitoring and Technical Services  
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Public Utilities Department

Environmental Monitoring & Technical Services Division

January 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 December 2024 Monthly Receiving Waters Monitoring Report for the Point Loma Ocean Outfall, Point Loma Wastewater Treatment Plant as required per Order No. R9-2017-0007, NPDES Permit No. CA0107409.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the Point Loma outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan.

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,

A handwritten signature in blue ink that reads "Peter S. Vroom".

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 for the San Diego coastal region surrounding the Point Loma Ocean Outfall are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2017-0007, NPDES Permit No. CA0107409 for the Point Loma Wastewater Treatment Plant (PLWTP), Point Loma Ocean Outfall (PLOO). 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 PLWTP are presented in separate reports.

## MATERIALS AND METHODS

### ***Shore Stations***

Water quality conditions are required to be monitored at eight shoreline stations, including D4, D5, D7, D8, D9, D10, D11 and D12, which range from the tip of the Point Loma Peninsula to west of Mission Bay (see station locations map). Over the past several years, due to increasing instability in several cliffside areas of Point Loma, City staff have been unable to safely access and sample several stations at various times. This has resulted in the following modifications:

- Station D8 was replaced by alternate station D8-A during July 2016, which was subsequently replaced by station D8-B in March 2018, after which sampling at station D8-A resumed in December 2020. Due to recent access issues at D8-A, sampling resumed at D8-B during February 2021.

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

### ***Kelp Bed Stations***

The eight kelp stations are sampled weekly according to permit specifications to monitor water quality conditions within the Point Loma kelp forest. These stations include three sites located along the inshore edge of the kelp bed paralleling the 9-m depth contour (i.e., stations C4, C5 and C6), and five sites located near the offshore edge of the kelp bed along the 18-m depth contour (i.e., stations A1, A6, A7, C7 and C8).

Routine weekly monitoring at each of the kelp bed sites consists primarily of collecting seawater samples at discrete depths to determine concentrations of fecal indicator bacteria (i.e., total coliforms, fecal coliforms, and *Enterococcus*). Water column profiles of various physical/chemical parameters are also generated during each sampling event, and visual observations of weather and water conditions are recorded at each station.

Seawater samples at the kelp bed stations are collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for bacteriological analyses are drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column

profiles of temperature, transmissivity, dissolved oxygen, pH, salinity, density, chlorophyll *a* are generated using a Sea-Bird conductivity, temperature and depth instrument (CTD), which collects these data at a rate of  $\geq 4$  scans per second. These scans are then internally averaged to create water column profiles with data readings at a rate of one per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

### ***Offshore Stations***

Offshore water quality sampling is conducted quarterly typically during the months of February, May, August, and November. A total of 36 offshore stations (F01–F36) are sampled during each survey usually over a 3-day period. Three of the stations (F01–F03) are located along the 18 m depth contour, while 11 stations are located along each of the following contours: 60 m (stations F04–F14), 80 m (stations F15–F25), and 98 m (stations F26–F36). Of these 36 stations, 15 (F01–F03, F06–F14, F18–F20) are located within State jurisdictional waters (i.e., within 3 nautical miles of shore) and are subject to the California Ocean Plan's compliance standards. Monitoring at all offshore sites includes measurements of *Enterococcus* bacteria, water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, chromomorphic dissolved organic matter (CDOM), and visual observations of weather and water conditions.

Seawater samples for bacteriological analyses at the offshore stations are collected using a CTD-integrated rosette sampler with Niskin bottles. Profiles of the various physical/chemical parameters (listed above) are taken using a Sea-Bird CTD. Additionally, data for depths closest to those at which bacteriological samples were collected are extracted from the CTD profiles and 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 geometric mean and single sample maximum water-contact standards specified in the California Ocean Plan. The seven standards are defined as follows:

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

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

### **Single Sample Maximums:**

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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.

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

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

## SUMMARY OF RESULTS

As of October 2020, new 2019 Ocean Plan Water Quality Objectives are included for *Enterococcus* and total coliforms, see Appendix B.

### ***Shore Stations***

- The eight shore stations (D4, D5, D7, D8-B, D9, D10, D11, D12) were sampled on December 4, 11, 18, and 26.
- During the December reporting period, one of the eight shore stations was out of compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
  - o The Single Sample Maximum standard for *Enterococcus* was exceeded at station D9.
- Nothing of sewage origin was observed at PLOO shore stations in December.
- Over the years, elevated bacteria levels at shore and kelp bed stations have tended to be associated with rainfall events, heavy recreational use, or the presence of seabirds or decaying kelp and surf grass. 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 Stations***

- The eight kelp bed water quality stations (A1, A6, A7, C4, C5, C6, C7, C8) were sampled on December 2, 11, 17, 26, and 30.

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

- During the December reporting period, each of the eight kelp stations was in compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards.
- Water column temperatures ranged from 11.41 to 13.81°C. The difference between surface and bottom waters ranged from 0.38 to 2.08°C.
- Chlorophyll *a* concentrations ranged from 0.26 to 4.85 µg/L.
- Nothing of sewage origin was observed at PLOO kelp stations in December.

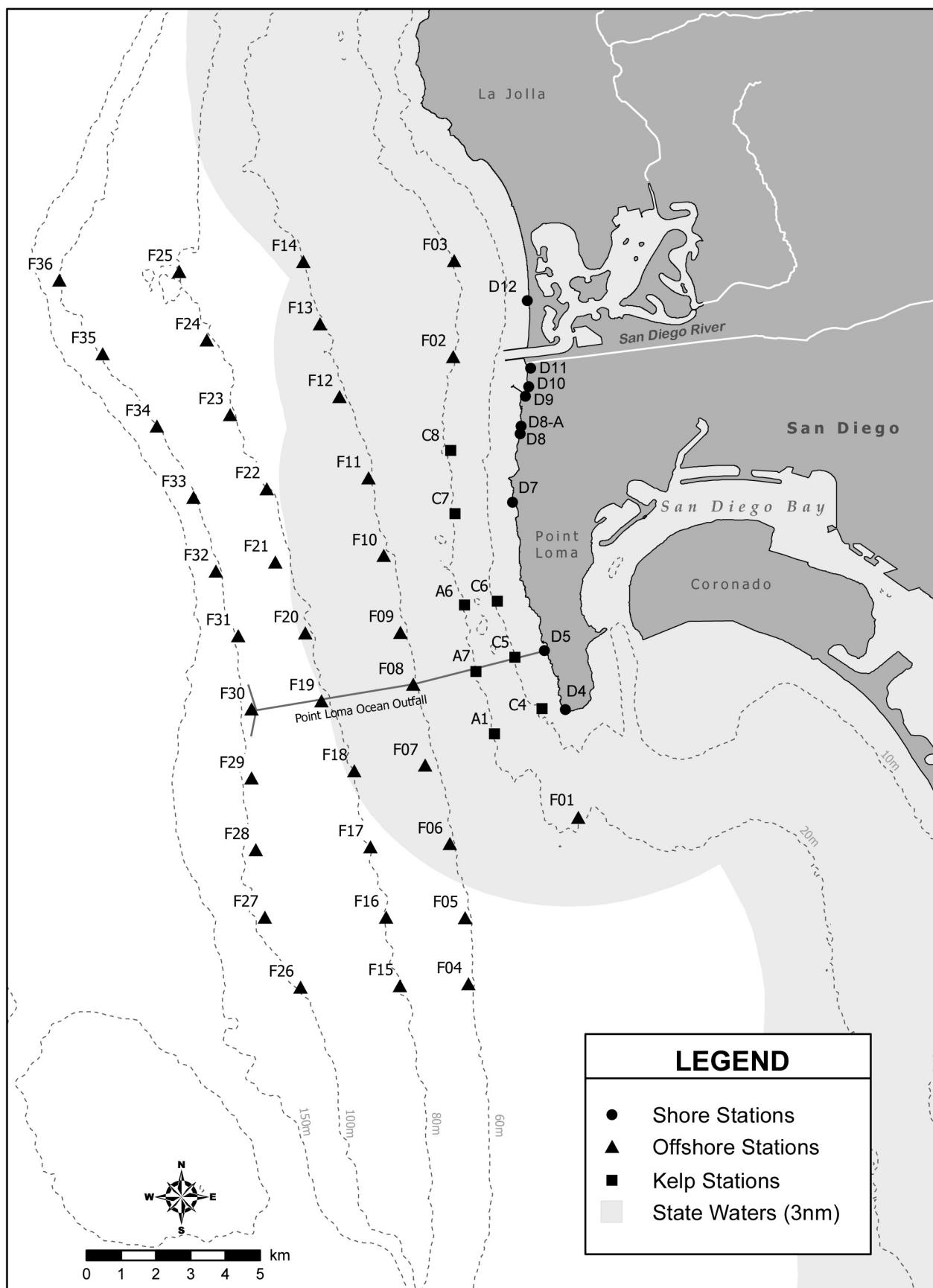
#### ***Offshore Stations***

- Quarterly water quality sampling was not conducted during December at the offshore stations. The next quarterly sampling is scheduled for February 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 PLOO 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        | D4 | D5 | D7 | D8-B | D9  | D10 | D11 | D12 |
|-------------|----|----|----|------|-----|-----|-----|-----|
| 01 Dec 2024 | *2 | *4 | *3 | *6   | *8  | *7  | *18 | *3  |
| 02 Dec 2024 | *2 | *4 | *3 | *6   | *8  | *7  | *18 | *3  |
| 03 Dec 2024 | *2 | *4 | *3 | *6   | *8  | *7  | *18 | *3  |
| 04 Dec 2024 | 2  | 6  | 2  | 8    | 7   | 7   | 16  | 3   |
| 05 Dec 2024 | 2  | 6  | 2  | 8    | 7   | 7   | 16  | 3   |
| 06 Dec 2024 | *2 | *4 | *3 | *8   | *9  | *7  | *18 | *3  |
| 07 Dec 2024 | *2 | *4 | *3 | *8   | *9  | *7  | *18 | *3  |
| 08 Dec 2024 | *2 | *4 | *3 | *8   | *9  | *7  | *18 | *3  |
| 09 Dec 2024 | *2 | *4 | *3 | *8   | *9  | *7  | *18 | *3  |
| 10 Dec 2024 | *2 | *4 | *3 | *8   | *9  | *7  | *18 | *3  |
| 11 Dec 2024 | 2  | 4  | 2  | 8    | 9   | 5   | 14  | 3   |
| 12 Dec 2024 | 2  | 4  | 2  | 8    | 9   | 5   | 14  | 3   |
| 13 Dec 2024 | *2 | *4 | *2 | *6   | *5  | *4  | *13 | *2  |
| 14 Dec 2024 | *2 | *4 | *2 | *6   | *5  | *4  | *13 | *2  |
| 15 Dec 2024 | *2 | *4 | *2 | *6   | *5  | *4  | *13 | *2  |
| 16 Dec 2024 | *2 | *4 | *2 | *6   | *5  | *4  | *13 | *2  |
| 17 Dec 2024 | *2 | *4 | *2 | *6   | *5  | *4  | *13 | *2  |
| 18 Dec 2024 | 2  | 3  | 2  | 7    | 8   | 4   | 12  | 4   |
| 19 Dec 2024 | 2  | 3  | 2  | 7    | 8   | 4   | 12  | 4   |
| 20 Dec 2024 | *2 | *4 | *2 | *7   | *8  | *4  | *10 | *4  |
| 21 Dec 2024 | *2 | *4 | *2 | *7   | *8  | *4  | *10 | *4  |
| 22 Dec 2024 | *2 | *4 | *2 | *7   | *8  | *4  | *10 | *4  |
| 23 Dec 2024 | *2 | *4 | *2 | *7   | *8  | *4  | *10 | *4  |
| 24 Dec 2024 | *2 | *4 | *2 | *7   | *8  | *4  | *10 | *4  |
| 25 Dec 2024 | *2 | *4 | *2 | *10  | *12 | *3  | *8  | *4  |
| 26 Dec 2024 | *2 | *4 | *2 | *7   | *12 | *5  | *7  | *4  |
| 27 Dec 2024 | *2 | *4 | *2 | *7   | *12 | *5  | *7  | *4  |
| 28 Dec 2024 | *2 | *4 | *2 | *7   | *12 | *5  | *7  | *4  |
| 29 Dec 2024 | *2 | *4 | *2 | *7   | *12 | *5  | *7  | *4  |
| 30 Dec 2024 | *2 | *4 | *2 | *7   | *12 | *5  | *7  | *4  |
| 31 Dec 2024 | *2 | *4 | *2 | *7   | *12 | *5  | *7  | *4  |

\* Geometric mean calculated using n<5

**Table 2.2**

Summary of compliance at the PLOO 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        | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|-------------|----|----|----|------|----|-----|-----|-----|
| 04 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 11 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 18 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 26 Dec 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 30-day Geometric Mean standard for *Enterococcus* at the PLOO 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 >35 CFU/100 mL exceed the standard.

| Date        | D4 | D5 | D7 | D8-B | D9  | D10 | D11 | D12 |
|-------------|----|----|----|------|-----|-----|-----|-----|
| 01 Dec 2024 | *2 | *4 | *2 | *5   | *7  | *11 | *5  | *4  |
| 02 Dec 2024 | *2 | *4 | *2 | *5   | *7  | *11 | *5  | *4  |
| 03 Dec 2024 | *2 | *4 | *2 | *5   | *7  | *11 | *5  | *4  |
| 04 Dec 2024 | 2  | 3  | 2  | 8    | 6   | 8   | 6   | 4   |
| 05 Dec 2024 | 2  | 3  | 2  | 8    | 6   | 8   | 6   | 4   |
| 06 Dec 2024 | *2 | *4 | *2 | *6   | *7  | *11 | *9  | *4  |
| 07 Dec 2024 | *2 | *4 | *2 | *6   | *7  | *11 | *9  | *4  |
| 08 Dec 2024 | *2 | *4 | *2 | *6   | *7  | *11 | *9  | *4  |
| 09 Dec 2024 | *2 | *4 | *2 | *6   | *7  | *11 | *9  | *4  |
| 10 Dec 2024 | *2 | *4 | *2 | *6   | *7  | *11 | *9  | *4  |
| 11 Dec 2024 | 2  | 3  | 2  | 8    | 5   | 8   | 6   | 4   |
| 12 Dec 2024 | 2  | 3  | 2  | 8    | 5   | 8   | 6   | 4   |
| 13 Dec 2024 | *2 | *2 | *2 | *8   | *3  | *5  | *4  | *2  |
| 14 Dec 2024 | *2 | *2 | *2 | *8   | *3  | *5  | *4  | *2  |
| 15 Dec 2024 | *2 | *2 | *2 | *8   | *3  | *5  | *4  | *2  |
| 16 Dec 2024 | *2 | *2 | *2 | *8   | *3  | *5  | *4  | *2  |
| 17 Dec 2024 | *2 | *2 | *2 | *8   | *3  | *5  | *4  | *2  |
| 18 Dec 2024 | 2  | 2  | 2  | 6    | 9   | 5   | 3   | 2   |
| 19 Dec 2024 | 2  | 2  | 2  | 6    | 9   | 5   | 3   | 2   |
| 20 Dec 2024 | *2 | *2 | *2 | *8   | *11 | *4  | *4  | *2  |
| 21 Dec 2024 | *2 | *2 | *2 | *8   | *11 | *4  | *4  | *2  |
| 22 Dec 2024 | *2 | *2 | *2 | *8   | *11 | *4  | *4  | *2  |
| 23 Dec 2024 | *2 | *2 | *2 | *8   | *11 | *4  | *4  | *2  |
| 24 Dec 2024 | *2 | *2 | *2 | *8   | *11 | *4  | *4  | *2  |
| 25 Dec 2024 | *2 | *2 | *2 | *13  | *19 | *3  | *4  | *3  |
| 26 Dec 2024 | *2 | *2 | *2 | *8   | *13 | *4  | *6  | *3  |
| 27 Dec 2024 | *2 | *2 | *2 | *8   | *13 | *4  | *6  | *3  |
| 28 Dec 2024 | *2 | *2 | *2 | *8   | *13 | *4  | *6  | *3  |
| 29 Dec 2024 | *2 | *2 | *2 | *8   | *13 | *4  | *6  | *3  |
| 30 Dec 2024 | *2 | *2 | *2 | *8   | *13 | *4  | *6  | *3  |
| 31 Dec 2024 | *2 | *2 | *2 | *8   | *13 | *4  | *6  | *3  |

\* Geometric mean calculated using n<5

**Table 2.4**

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

| Date        | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|-------------|----|----|----|------|----|-----|-----|-----|
| 04 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 11 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 18 Dec 2024 | IC | IC | IC | IC   | E  | IC  | IC  | IC  |
| 26 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.5**

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the PLOO 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 >1000 CFU/100 mL exceed the standard.

| Date        | D4  | D5  | D7 | D8-B | D9  | D10 | D11 | D12 |
|-------------|-----|-----|----|------|-----|-----|-----|-----|
| 01 Dec 2024 | *11 | *50 | *5 | *134 | *42 | *30 | *42 | *11 |
| 02 Dec 2024 | *11 | *50 | *5 | *134 | *42 | *30 | *42 | *11 |
| 03 Dec 2024 | *11 | *50 | *5 | *134 | *42 | *30 | *42 | *11 |
| 04 Dec 2024 | 13  | 55  | 4  | 167  | 36  | 28  | 36  | 13  |
| 05 Dec 2024 | 13  | 55  | 4  | 167  | 36  | 28  | 36  | 13  |
| 06 Dec 2024 | *11 | *71 | *4 | *159 | *42 | *20 | *42 | *11 |
| 07 Dec 2024 | *11 | *71 | *4 | *159 | *42 | *20 | *42 | *11 |
| 08 Dec 2024 | *11 | *71 | *4 | *159 | *42 | *20 | *42 | *11 |
| 09 Dec 2024 | *11 | *71 | *4 | *159 | *42 | *20 | *42 | *11 |
| 10 Dec 2024 | *11 | *71 | *4 | *159 | *42 | *20 | *42 | *11 |
| 11 Dec 2024 | 8   | 63  | 4  | 145  | 36  | 20  | 42  | 13  |
| 12 Dec 2024 | 8   | 63  | 4  | 145  | 36  | 20  | 42  | 13  |
| 13 Dec 2024 | *11 | *40 | *3 | *238 | *20 | *20 | *28 | *11 |
| 14 Dec 2024 | *11 | *40 | *3 | *238 | *20 | *20 | *28 | *11 |
| 15 Dec 2024 | *11 | *40 | *3 | *238 | *20 | *20 | *28 | *11 |
| 16 Dec 2024 | *11 | *40 | *3 | *238 | *20 | *20 | *28 | *11 |
| 17 Dec 2024 | *11 | *40 | *3 | *238 | *20 | *20 | *28 | *11 |
| 18 Dec 2024 | 11  | 35  | 2  | 145  | 38  | 20  | 26  | 13  |
| 19 Dec 2024 | 11  | 35  | 2  | 145  | 38  | 20  | 26  | 13  |
| 20 Dec 2024 | *10 | *40 | *3 | *112 | *44 | *20 | *24 | *11 |
| 21 Dec 2024 | *10 | *40 | *3 | *112 | *44 | *20 | *24 | *11 |
| 22 Dec 2024 | *10 | *40 | *3 | *112 | *44 | *20 | *24 | *11 |
| 23 Dec 2024 | *10 | *40 | *3 | *112 | *44 | *20 | *24 | *11 |
| 24 Dec 2024 | *10 | *40 | *3 | *112 | *44 | *20 | *24 | *11 |
| 25 Dec 2024 | *8  | *40 | *3 | *93  | *58 | *20 | *25 | *20 |
| 26 Dec 2024 | *6  | *34 | *3 | *63  | *53 | *20 | *24 | *20 |
| 27 Dec 2024 | *6  | *34 | *3 | *63  | *53 | *20 | *24 | *20 |
| 28 Dec 2024 | *6  | *34 | *3 | *63  | *53 | *20 | *24 | *20 |
| 29 Dec 2024 | *6  | *34 | *3 | *63  | *53 | *20 | *24 | *20 |
| 30 Dec 2024 | *6  | *34 | *3 | *63  | *53 | *20 | *24 | *20 |
| 31 Dec 2024 | *6  | *34 | *3 | *63  | *53 | *20 | *24 | *20 |

\* Median calculated using n<5

**Table 2.6**

Summary of compliance at the PLOO shore stations with the Ocean Plan's Single Sample Maximum for total coliform bacteria, which states that total coliform density shall not exceed  $10^4$  CFU/100 mL.

| Date        | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|-------------|----|----|----|------|----|-----|-----|-----|
| 04 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 11 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 18 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 26 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.7**

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

| Date        | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|-------------|----|----|----|------|----|-----|-----|-----|
| 04 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 11 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 18 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |
| 26 Dec 2024 | IC | IC | IC | IC   | IC | IC  | IC  | IC  |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.8**

Summary of water quality parameters at the PLOO 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.

| <b>Station</b> | <b>Date</b> | <b>Time</b> | <b>Total</b> | <b>Fecal</b> | <b>Enter</b> |
|----------------|-------------|-------------|--------------|--------------|--------------|
| D10            | 04 Dec 2024 | 953         | 20e          | 6e           | 2e           |
| D10            | 11 Dec 2024 | 849         | <20          | 2e           | 2e           |
| D10            | 18 Dec 2024 | 848         | <20          | 2e           | 6e           |
| D10            | 26 Dec 2024 | 930         | 20e          | 22e          | 8e           |
| D11            | 04 Dec 2024 | 1004        | 20e          | 12e          | 16e          |
| D11            | 11 Dec 2024 | 838         | 40e          | 6e           | <2           |
| D11            | 18 Dec 2024 | 837         | <20          | 8e           | 2e           |
| D11            | 26 Dec 2024 | 917         | <20          | 4e           | <20          |
| D12            | 04 Dec 2024 | 1026        | <20          | 2e           | 2e           |
| D12            | 11 Dec 2024 | 820         | <20          | <2           | 4e           |
| D12            | 18 Dec 2024 | 819         | 20e          | <20          | 2e           |
| D12            | 26 Dec 2024 | 848         | 20e          | 2e           | 4e           |
| D4             | 04 Dec 2024 | 835         | <20          | <2           | <2           |
| D4             | 11 Dec 2024 | 1005        | 2e           | <2           | <2           |
| D4             | 18 Dec 2024 | 1003        | 12e          | <2           | 2e           |
| D4             | 26 Dec 2024 | 1142        | <2           | 2e           | <2           |
| D5             | 04 Dec 2024 | 820         | 80e          | <20          | <2           |
| D5             | 11 Dec 2024 | 953         | 40e          | <2           | <2           |
| D5             | 18 Dec 2024 | 952         | <20          | <2           | <2           |
| D5             | 26 Dec 2024 | 1105        | <20          | 2e           | <2           |
| D7             | 04 Dec 2024 | 902         | <2           | <2           | <2           |
| D7             | 11 Dec 2024 | 927         | 6e           | <2           | <2           |
| D7             | 18 Dec 2024 | 926         | <2           | <2           | <2           |
| D7             | 26 Dec 2024 | 1029        | 2e           | 2e           | 2e           |
| D8-B           | 04 Dec 2024 | 923         | 400e         | 16e          | 50           |
| D8-B           | 11 Dec 2024 | 912         | 100e         | 8e           | <20          |
| D8-B           | 18 Dec 2024 | 909         | <20          | 8e           | <2           |
| D8-B           | 26 Dec 2024 | 1017        | 20e          | <2           | <2           |
| D9             | 04 Dec 2024 | 933         | 20e          | 4e           | 6e           |
| D9             | 11 Dec 2024 | 900         | <20          | 8e           | 2e           |
| D9             | 18 Dec 2024 | 859         | 480          | 60e          | 600          |
| D9             | 26 Dec 2024 | 955         | 40e          | 10e          | 4e           |

ns = not sampled

ND = no data

### Comments

| date        | station | depth | parmcode | comments  |
|-------------|---------|-------|----------|---|
| 04-Dec-2024 | D4      |       |          | Colonies found on nonselective media, but no colonies on selective media. Results should not be affected. |
| 04-Dec-2024 | D5      |       |          | Colonies found on nonselective media, but no colonies on selective media. Results should not be affected. |
| 04-Dec-2024 | D7      |       |          | Colonies found on nonselective media, but no colonies on selective media. Results should not be affected. |
| 04-Dec-2024 | D8-B    |       |          | Colonies found on nonselective media, but no colonies on selective media. Results should not be affected. |
| 04-Dec-2024 | D9      |       |          | Colonies found on nonselective media, but no colonies on selective media. Results should not be affected. |
| 04-Dec-2024 | D10     |       |          | Colonies found on nonselective media, but no colonies on selective media. Results should not be affected. |
| 19-Dec-2024 | D9      |       | ENTERO   | Resample  |
| 19-Dec-2024 | D9      |       |          | Resample  |

**Table 2.9**

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

| Station | Date        | Parameter         | Value  |
|---------|-------------|-------------------|--|
| D4      | 04 Dec 2024 | Arrive Time       | 835  |
| D4      | 04 Dec 2024 | Wind Speed (kts)  | 4  |
| D4      | 04 Dec 2024 | Wind Dir          | SW   |
| D4      | 04 Dec 2024 | Animal Life       |  |
| D4      | 04 Dec 2024 | Floatables        | None   |
| D4      | 04 Dec 2024 | Current Direction | E  |
| D4      | 04 Dec 2024 | Water Temp (C)    | 13.5   |
| D4      | 04 Dec 2024 | High Tide Time    | 943  |
| D4      | 04 Dec 2024 | Low Tide Time     | 321  |
| D4      | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris |
| D4      | 11 Dec 2024 | Arrive Time       | 1005   |
| D4      | 11 Dec 2024 | Wind Speed (kts)  | 2.5  |
| D4      | 11 Dec 2024 | Wind Dir          | N  |
| D4      | 11 Dec 2024 | Animal Life       |  |
| D4      | 11 Dec 2024 | Floatables        | None   |
| D4      | 11 Dec 2024 | Current Direction | S  |
| D4      | 11 Dec 2024 | Water Temp (C)    | 12.9   |
| D4      | 11 Dec 2024 | High Tide Time    | 520  |
| D4      | 11 Dec 2024 | Low Tide Time     | 1226   |
| D4      | 11 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae        |
| D4      | 18 Dec 2024 | Arrive Time       | 1003   |
| D4      | 18 Dec 2024 | Wind Speed (kts)  | 3.7  |
| D4      | 18 Dec 2024 | Wind Dir          | SW   |
| D4      | 18 Dec 2024 | Animal Life       |  |
| D4      | 18 Dec 2024 | Floatables        | None   |
| D4      | 18 Dec 2024 | Current Direction | E  |
| D4      | 18 Dec 2024 | Water Temp (C)    | 12.7   |
| D4      | 18 Dec 2024 | High Tide Time    | 1012   |
| D4      | 18 Dec 2024 | Low Tide Time     | 407  |
| D4      | 18 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris |
| D4      | 26 Dec 2024 | Arrive Time       | 1142   |
| D4      | 26 Dec 2024 | Wind Speed (kts)  | 0  |
| D4      | 26 Dec 2024 | Wind Dir          | XX   |
| D4      | 26 Dec 2024 | Animal Life       |  |
| D4      | 26 Dec 2024 | Floatables        | None   |
| D4      | 26 Dec 2024 | Current Direction | S  |
| D4      | 26 Dec 2024 | Water Temp (C)    | 13.2   |
| D4      | 26 Dec 2024 | High Tide Time    | 534  |
| D4      | 26 Dec 2024 | Low Tide Time     | 1304   |
| D4      | 26 Dec 2024 | Comments          | Water clear; Trash-3; Kelp;Seagrass;Algae        |
| D5      | 04 Dec 2024 | Arrive Time       | 820  |
| D5      | 04 Dec 2024 | Wind Speed (kts)  | 0  |
| D5      | 04 Dec 2024 | Wind Dir          | W  |
| D5      | 04 Dec 2024 | Animal Life       |  |
| D5      | 04 Dec 2024 | Floatables        | None   |
| D5      | 04 Dec 2024 | Current Direction | E  |
| D5      | 04 Dec 2024 | Water Temp (C)    | 12   |
| D5      | 04 Dec 2024 | High Tide Time    | 943  |
| D5      | 04 Dec 2024 | Low Tide Time     | 321  |
| D5      | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris |
| D5      | 11 Dec 2024 | Arrive Time       | 953  |

| Station | Date        | Parameter         | Value  |
|---------|-------------|-------------------|--|
| D5      | 11 Dec 2024 | Wind Speed (kts)  | 3  |
| D5      | 11 Dec 2024 | Wind Dir          | W  |
| D5      | 11 Dec 2024 | Animal Life       | Bird-15;   |
| D5      | 11 Dec 2024 | Floatables        | None   |
| D5      | 11 Dec 2024 | Current Direction | S  |
| D5      | 11 Dec 2024 | Water Temp (C)    | 13.6   |
| D5      | 11 Dec 2024 | High Tide Time    | 520  |
| D5      | 11 Dec 2024 | Low Tide Time     | 1226   |
| D5      | 11 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae                          |
| D5      | 18 Dec 2024 | Arrive Time       | 952  |
| D5      | 18 Dec 2024 | Wind Speed (kts)  | 0.4  |
| D5      | 18 Dec 2024 | Wind Dir          | W  |
| D5      | 18 Dec 2024 | Animal Life       |  |
| D5      | 18 Dec 2024 | Floatables        | None   |
| D5      | 18 Dec 2024 | Current Direction | E  |
| D5      | 18 Dec 2024 | Water Temp (C)    | 13.5   |
| D5      | 18 Dec 2024 | High Tide Time    | 1012   |
| D5      | 18 Dec 2024 | Low Tide Time     | 407  |
| D5      | 18 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris                   |
| D5      | 26 Dec 2024 | Arrive Time       | 1105   |
| D5      | 26 Dec 2024 | Wind Speed (kts)  | 0  |
| D5      | 26 Dec 2024 | Wind Dir          | XX   |
| D5      | 26 Dec 2024 | Animal Life       |  |
| D5      | 26 Dec 2024 | Floatables        | None   |
| D5      | 26 Dec 2024 | Current Direction | S  |
| D5      | 26 Dec 2024 | Water Temp (C)    | 12.6   |
| D5      | 26 Dec 2024 | High Tide Time    | 534  |
| D5      | 26 Dec 2024 | Low Tide Time     | 1304   |
| D5      | 26 Dec 2024 | Comments          | Water clear; Trash-3; Kelp;Seagrass;Algae                          |
| D7      | 04 Dec 2024 | Arrive Time       | 902  |
| D7      | 04 Dec 2024 | Wind Speed (kts)  | 0.3  |
| D7      | 04 Dec 2024 | Wind Dir          | W  |
| D7      | 04 Dec 2024 | Animal Life       |  |
| D7      | 04 Dec 2024 | Floatables        | None   |
| D7      | 04 Dec 2024 | Current Direction | E  |
| D7      | 04 Dec 2024 | Water Temp (C)    | 14.4   |
| D7      | 04 Dec 2024 | High Tide Time    | 943  |
| D7      | 04 Dec 2024 | Low Tide Time     | 321  |
| D7      | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris                   |
| D7      | 11 Dec 2024 | Arrive Time       | 927  |
| D7      | 11 Dec 2024 | Wind Speed (kts)  | 0  |
| D7      | 11 Dec 2024 | Wind Dir          | XX   |
| D7      | 11 Dec 2024 | Animal Life       |  |
| D7      | 11 Dec 2024 | Floatables        | None   |
| D7      | 11 Dec 2024 | Current Direction | S  |
| D7      | 11 Dec 2024 | Water Temp (C)    | 12.3   |
| D7      | 11 Dec 2024 | High Tide Time    | 520  |
| D7      | 11 Dec 2024 | Low Tide Time     | 1226   |
| D7      | 11 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-6; Trash-1; Seagrass;Kelp;Algae |
| D7      | 18 Dec 2024 | Arrive Time       | 926  |
| D7      | 18 Dec 2024 | Wind Speed (kts)  | 3  |
| D7      | 18 Dec 2024 | Wind Dir          | W  |
| D7      | 18 Dec 2024 | Animal Life       |  |
| D7      | 18 Dec 2024 | Floatables        | None   |
| D7      | 18 Dec 2024 | Current Direction | E  |

| Station | Date        | Parameter         | Value   |
|---------|-------------|-------------------|---|
| D7      | 18 Dec 2024 | Water Temp (C)    | 13.2  |
| D7      | 18 Dec 2024 | High Tide Time    | 1012  |
| D7      | 18 Dec 2024 | Low Tide Time     | 407   |
| D7      | 18 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp;Seagrass;Algae;Debris |
| D7      | 26 Dec 2024 | Arrive Time       | 1029  |
| D7      | 26 Dec 2024 | Wind Speed (kts)  | 0   |
| D7      | 26 Dec 2024 | Wind Dir          | XX  |
| D7      | 26 Dec 2024 | Animal Life       |   |
| D7      | 26 Dec 2024 | Floatables        | None  |
| D7      | 26 Dec 2024 | Current Direction | S   |
| D7      | 26 Dec 2024 | Water Temp (C)    | 12.8  |
| D7      | 26 Dec 2024 | High Tide Time    | 534   |
| D7      | 26 Dec 2024 | Low Tide Time     | 1304  |
| D7      | 26 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-8; Trash-1; Kelp;Seagrass;Algae        |
| D8-B    | 04 Dec 2024 | Arrive Time       | 923   |
| D8-B    | 04 Dec 2024 | Wind Speed (kts)  | 3.3   |
| D8-B    | 04 Dec 2024 | Wind Dir          | W   |
| D8-B    | 04 Dec 2024 | Animal Life       |   |
| D8-B    | 04 Dec 2024 | Floatables        | None; Foam  |
| D8-B    | 04 Dec 2024 | Current Direction | E   |
| D8-B    | 04 Dec 2024 | Water Temp (C)    | 13.3  |
| D8-B    | 04 Dec 2024 | High Tide Time    | 943   |
| D8-B    | 04 Dec 2024 | Low Tide Time     | 321   |
| D8-B    | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris                          |
| D8-B    | 11 Dec 2024 | Arrive Time       | 912   |
| D8-B    | 11 Dec 2024 | Wind Speed (kts)  | 0.3   |
| D8-B    | 11 Dec 2024 | Wind Dir          | NW  |
| D8-B    | 11 Dec 2024 | Animal Life       |   |
| D8-B    | 11 Dec 2024 | Floatables        | None  |
| D8-B    | 11 Dec 2024 | Current Direction | S   |
| D8-B    | 11 Dec 2024 | Water Temp (C)    | 11.9  |
| D8-B    | 11 Dec 2024 | High Tide Time    | 520   |
| D8-B    | 11 Dec 2024 | Low Tide Time     | 1226  |
| D8-B    | 11 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-4; Trash-1; Kelp;Seagrass;Algae        |
| D8-B    | 18 Dec 2024 | Arrive Time       | 909   |
| D8-B    | 18 Dec 2024 | Wind Speed (kts)  | 2   |
| D8-B    | 18 Dec 2024 | Wind Dir          | W   |
| D8-B    | 18 Dec 2024 | Animal Life       |   |
| D8-B    | 18 Dec 2024 | Floatables        | None  |
| D8-B    | 18 Dec 2024 | Current Direction | E   |
| D8-B    | 18 Dec 2024 | Water Temp (C)    | 12.7  |
| D8-B    | 18 Dec 2024 | High Tide Time    | 1012  |
| D8-B    | 18 Dec 2024 | Low Tide Time     | 407   |
| D8-B    | 18 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Debris;Algae                          |
| D8-B    | 26 Dec 2024 | Arrive Time       | 1016  |
| D8-B    | 26 Dec 2024 | Wind Speed (kts)  | 5   |
| D8-B    | 26 Dec 2024 | Wind Dir          | NW  |
| D8-B    | 26 Dec 2024 | Animal Life       |   |
| D8-B    | 26 Dec 2024 | Floatables        | None  |
| D8-B    | 26 Dec 2024 | Current Direction | S   |
| D8-B    | 26 Dec 2024 | Water Temp (C)    | 12.3  |
| D8-B    | 26 Dec 2024 | High Tide Time    | 534   |
| D8-B    | 26 Dec 2024 | Low Tide Time     | 1304  |

| Station | Date        | Parameter         | Value  |
|---------|-------------|-------------------|--|
| D8-B    | 26 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae                              |
| D9      | 04 Dec 2024 | Arrive Time       | 933  |
| D9      | 04 Dec 2024 | Wind Speed (kts)  | 2.5  |
| D9      | 04 Dec 2024 | Wind Dir          | W  |
| D9      | 04 Dec 2024 | Animal Life       |  |
| D9      | 04 Dec 2024 | Floatables        | None   |
| D9      | 04 Dec 2024 | Current Direction | E  |
| D9      | 04 Dec 2024 | Water Temp (C)    | 14.1   |
| D9      | 04 Dec 2024 | High Tide Time    | 943  |
| D9      | 04 Dec 2024 | Low Tide Time     | 321  |
| D9      | 04 Dec 2024 | Comments          | Water clear; Trash-1; Debris;Algae;Seagrass;Kelp                       |
| D9      | 11 Dec 2024 | Arrive Time       | 900  |
| D9      | 11 Dec 2024 | Wind Speed (kts)  | 0.3  |
| D9      | 11 Dec 2024 | Wind Dir          | NW   |
| D9      | 11 Dec 2024 | Animal Life       |  |
| D9      | 11 Dec 2024 | Floatables        | None   |
| D9      | 11 Dec 2024 | Current Direction | S  |
| D9      | 11 Dec 2024 | Water Temp (C)    | 13.1   |
| D9      | 11 Dec 2024 | High Tide Time    | 520  |
| D9      | 11 Dec 2024 | Low Tide Time     | 1226   |
| D9      | 11 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-6; Trash-1; Kelp;Seagrass;Algae; -1 |
| D9      | 18 Dec 2024 | Arrive Time       | 859  |
| D9      | 18 Dec 2024 | Wind Speed (kts)  | 0.1  |
| D9      | 18 Dec 2024 | Wind Dir          | W  |
| D9      | 18 Dec 2024 | Animal Life       |  |
| D9      | 18 Dec 2024 | Floatables        | None   |
| D9      | 18 Dec 2024 | Current Direction | E  |
| D9      | 18 Dec 2024 | Water Temp (C)    | 13.5   |
| D9      | 18 Dec 2024 | High Tide Time    | 1012   |
| D9      | 18 Dec 2024 | Low Tide Time     | 407  |
| D9      | 18 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris                       |
| D9      | 19 Dec 2024 | Arrive Time       | 854  |
| D9      | 19 Dec 2024 | Wind Speed (kts)  | 0  |
| D9      | 19 Dec 2024 | Wind Dir          | XX   |
| D9      | 19 Dec 2024 | Animal Life       |  |
| D9      | 19 Dec 2024 | Floatables        | None   |
| D9      | 19 Dec 2024 | Current Direction | S  |
| D9      | 19 Dec 2024 | Water Temp (C)    | 12.9   |
| D9      | 19 Dec 2024 | High Tide Time    | 26   |
| D9      | 19 Dec 2024 | Low Tide Time     | 500  |
| D9      | 19 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-3; Trash-1; Kelp;Seagrass;Algae; -1 |
| D9      | 26 Dec 2024 | Arrive Time       | 955  |
| D9      | 26 Dec 2024 | Wind Speed (kts)  | 2  |
| D9      | 26 Dec 2024 | Wind Dir          | NE   |
| D9      | 26 Dec 2024 | Animal Life       |  |
| D9      | 26 Dec 2024 | Floatables        | None   |
| D9      | 26 Dec 2024 | Current Direction | S  |
| D9      | 26 Dec 2024 | Water Temp (C)    | 12.7   |
| D9      | 26 Dec 2024 | High Tide Time    | 534  |
| D9      | 26 Dec 2024 | Low Tide Time     | 1304   |
| D9      | 26 Dec 2024 | Comments          | Water clear; Trash-1; Seagrass;Algae;Kelp; Person/Walker/Jogger-3      |
| D10     | 04 Dec 2024 | Arrive Time       | 953  |

| Station | Date        | Parameter         | Value   |
|---------|-------------|-------------------|---|
| D10     | 04 Dec 2024 | Wind Speed (kts)  | 1.8   |
| D10     | 04 Dec 2024 | Wind Dir          | W   |
| D10     | 04 Dec 2024 | Animal Life       |   |
| D10     | 04 Dec 2024 | Floatables        | None  |
| D10     | 04 Dec 2024 | Current Direction | E   |
| D10     | 04 Dec 2024 | Water Temp (C)    | 13.2  |
| D10     | 04 Dec 2024 | High Tide Time    | 943   |
| D10     | 04 Dec 2024 | Low Tide Time     | 321   |
| D10     | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-3                       |
| D10     | 11 Dec 2024 | Arrive Time       | 849   |
| D10     | 11 Dec 2024 | Wind Speed (kts)  | 0.4   |
| D10     | 11 Dec 2024 | Wind Dir          | W   |
| D10     | 11 Dec 2024 | Animal Life       |   |
| D10     | 11 Dec 2024 | Floatables        | None  |
| D10     | 11 Dec 2024 | Current Direction | S   |
| D10     | 11 Dec 2024 | Water Temp (C)    | 11.8  |
| D10     | 11 Dec 2024 | High Tide Time    | 520   |
| D10     | 11 Dec 2024 | Low Tide Time     | 1226  |
| D10     | 11 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-1; Trash-1; Kelp;Seagrass                      |
| D10     | 18 Dec 2024 | Arrive Time       | 848   |
| D10     | 18 Dec 2024 | Wind Speed (kts)  | 1.9   |
| D10     | 18 Dec 2024 | Wind Dir          | W   |
| D10     | 18 Dec 2024 | Animal Life       |   |
| D10     | 18 Dec 2024 | Floatables        | None  |
| D10     | 18 Dec 2024 | Current Direction | E   |
| D10     | 18 Dec 2024 | Water Temp (C)    | 13.3  |
| D10     | 18 Dec 2024 | High Tide Time    | 1012  |
| D10     | 18 Dec 2024 | Low Tide Time     | 407   |
| D10     | 18 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Debris  |
| D10     | 26 Dec 2024 | Arrive Time       | 930   |
| D10     | 26 Dec 2024 | Wind Speed (kts)  | 3.1   |
| D10     | 26 Dec 2024 | Wind Dir          | NE  |
| D10     | 26 Dec 2024 | Animal Life       | Dog-2;  |
| D10     | 26 Dec 2024 | Floatables        | None  |
| D10     | 26 Dec 2024 | Current Direction | S   |
| D10     | 26 Dec 2024 | Water Temp (C)    | 13  |
| D10     | 26 Dec 2024 | High Tide Time    | 534   |
| D10     | 26 Dec 2024 | Low Tide Time     | 1304  |
| D10     | 26 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp;Algae; Person/Walker/Jogger-2 |
| D11     | 04 Dec 2024 | Arrive Time       | 1004  |
| D11     | 04 Dec 2024 | Wind Speed (kts)  | 2.1   |
| D11     | 04 Dec 2024 | Wind Dir          | W   |
| D11     | 04 Dec 2024 | Animal Life       | Dog-2;  |
| D11     | 04 Dec 2024 | Floatables        | None  |
| D11     | 04 Dec 2024 | Current Direction | E   |
| D11     | 04 Dec 2024 | Water Temp (C)    | 13.6  |
| D11     | 04 Dec 2024 | High Tide Time    | 943   |
| D11     | 04 Dec 2024 | Low Tide Time     | 321   |
| D11     | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Algae;Debris; Person/Walker/Jogger-4          |
| D11     | 11 Dec 2024 | Arrive Time       | 838   |
| D11     | 11 Dec 2024 | Wind Speed (kts)  | 0.5   |
| D11     | 11 Dec 2024 | Wind Dir          | W   |

| Station | Date        | Parameter         | Value  |
|---------|-------------|-------------------|--|
| D11     | 11 Dec 2024 | Animal Life       | Dog-1;   |
| D11     | 11 Dec 2024 | Floatables        | None   |
| D11     | 11 Dec 2024 | Current Direction | S  |
| D11     | 11 Dec 2024 | Water Temp (C)    | 11.2   |
| D11     | 11 Dec 2024 | High Tide Time    | 520  |
| D11     | 11 Dec 2024 | Low Tide Time     | 1226   |
| D11     | 11 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-8; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-5   |
| D11     | 18 Dec 2024 | Arrive Time       | 837  |
| D11     | 18 Dec 2024 | Wind Speed (kts)  | 4  |
| D11     | 18 Dec 2024 | Wind Dir          | SW   |
| D11     | 18 Dec 2024 | Animal Life       |  |
| D11     | 18 Dec 2024 | Floatables        | None   |
| D11     | 18 Dec 2024 | Current Direction | E  |
| D11     | 18 Dec 2024 | Water Temp (C)    | 11.5   |
| D11     | 18 Dec 2024 | High Tide Time    | 1012   |
| D11     | 18 Dec 2024 | Low Tide Time     | 407  |
| D11     | 18 Dec 2024 | Comments          | Water clear; Surfer/Paddle boarder-1; Trash-1; Kelp;Seagrass;Algae;Debris                    |
| D11     | 26 Dec 2024 | Arrive Time       | 917  |
| D11     | 26 Dec 2024 | Wind Speed (kts)  | 4  |
| D11     | 26 Dec 2024 | Wind Dir          | NE   |
| D11     | 26 Dec 2024 | Animal Life       | Dog-3;   |
| D11     | 26 Dec 2024 | Floatables        | None   |
| D11     | 26 Dec 2024 | Current Direction | S  |
| D11     | 26 Dec 2024 | Water Temp (C)    | 12.2   |
| D11     | 26 Dec 2024 | High Tide Time    | 534  |
| D11     | 26 Dec 2024 | Low Tide Time     | 1304   |
| D11     | 26 Dec 2024 | Comments          | Water clear; Boogie boarder/Swimmer-5; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-10 |
| D12     | 04 Dec 2024 | Arrive Time       | 1026   |
| D12     | 04 Dec 2024 | Wind Speed (kts)  | 2  |
| D12     | 04 Dec 2024 | Wind Dir          | W  |
| D12     | 04 Dec 2024 | Animal Life       |  |
| D12     | 04 Dec 2024 | Floatables        | Foam   |
| D12     | 04 Dec 2024 | Current Direction | E  |
| D12     | 04 Dec 2024 | Water Temp (C)    | 15.5   |
| D12     | 04 Dec 2024 | High Tide Time    | 943  |
| D12     | 04 Dec 2024 | Low Tide Time     | 321  |
| D12     | 04 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Debris   |
| D12     | 11 Dec 2024 | Arrive Time       | 820  |
| D12     | 11 Dec 2024 | Wind Speed (kts)  | 1.1  |
| D12     | 11 Dec 2024 | Wind Dir          | N  |
| D12     | 11 Dec 2024 | Animal Life       |  |
| D12     | 11 Dec 2024 | Floatables        | None   |
| D12     | 11 Dec 2024 | Current Direction | S  |
| D12     | 11 Dec 2024 | Water Temp (C)    | 10.8   |
| D12     | 11 Dec 2024 | High Tide Time    | 520  |
| D12     | 11 Dec 2024 | Low Tide Time     | 1226   |
| D12     | 11 Dec 2024 | Comments          | Water clear; Fisherman-1; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-4                     |
| D12     | 18 Dec 2024 | Arrive Time       | 819  |
| D12     | 18 Dec 2024 | Wind Speed (kts)  | 1.2  |
| D12     | 18 Dec 2024 | Wind Dir          | W  |
| D12     | 18 Dec 2024 | Animal Life       |  |
| D12     | 18 Dec 2024 | Floatables        | None   |

| Station | Date        | Parameter         | Value  |
|---------|-------------|-------------------|--|
| D12     | 18 Dec 2024 | Current Direction | E  |
| D12     | 18 Dec 2024 | Water Temp (C)    | 11   |
| D12     | 18 Dec 2024 | High Tide Time    | 1012   |
| D12     | 18 Dec 2024 | Low Tide Time     | 407  |
| D12     | 18 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass;Debris                   |
| D12     | 26 Dec 2024 | Arrive Time       | 848  |
| D12     | 26 Dec 2024 | Wind Speed (kts)  | 0.1  |
| D12     | 26 Dec 2024 | Wind Dir          | N  |
| D12     | 26 Dec 2024 | Animal Life       | Bird-20;   |
| D12     | 26 Dec 2024 | Floatables        | None   |
| D12     | 26 Dec 2024 | Current Direction | S  |
| D12     | 26 Dec 2024 | Water Temp (C)    | 12.1   |
| D12     | 26 Dec 2024 | High Tide Time    | 534  |
| D12     | 26 Dec 2024 | Low Tide Time     | 1304   |
| D12     | 26 Dec 2024 | Comments          | Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-10 |

# Kelp Stations



**Table 3.1**

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the PLOO 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        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 01 Dec 2024 | *3 | *3 | *5 | *2 | *2 | *2 | *2 | *2 |
| 02 Dec 2024 | 2  | 3  | 4  | 2  | 2  | 2  | 2  | 2  |
| 03 Dec 2024 | 2  | 3  | 4  | 2  | 2  | 2  | 2  | 2  |
| 04 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 05 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 06 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 07 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 08 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 09 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 10 Dec 2024 | *3 | *3 | *4 | *2 | *2 | *2 | *2 | *2 |
| 11 Dec 2024 | 2  | 3  | 4  | 2  | 2  | 2  | 2  | 2  |
| 12 Dec 2024 | *3 | *2 | *3 | *2 | *2 | *2 | *2 | *2 |
| 13 Dec 2024 | *3 | *2 | *3 | *2 | *2 | *2 | *2 | *2 |
| 14 Dec 2024 | *3 | *2 | *3 | *2 | *2 | *2 | *2 | *2 |
| 15 Dec 2024 | *3 | *2 | *3 | *2 | *2 | *2 | *2 | *2 |
| 16 Dec 2024 | *3 | *2 | *3 | *2 | *2 | *2 | *2 | *2 |
| 17 Dec 2024 | 3  | 2  | 3  | 2  | 2  | 2  | 2  | 3  |
| 18 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 19 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 20 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 21 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 22 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 23 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 24 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 25 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 26 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 27 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 28 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 29 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *3 |
| 30 Dec 2024 | 2  | 3  | 3  | 2  | 2  | 2  | 2  | 3  |
| 31 Dec 2024 | 2  | 3  | 3  | 2  | 2  | 2  | 2  | 3  |

\* Geometric mean calculated using n<5

**Table 3.2**

Summary of compliance at the PLOO 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        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 02 Dec 2024 | IC |
| 11 Dec 2024 | IC |
| 17 Dec 2024 | IC |
| 26 Dec 2024 | IC |
| 30 Dec 2024 | IC |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.3**

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the PLOO 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 >35 CFU/100 mL exceed the standard.

| Date        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 01 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 02 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 03 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 04 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 05 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 06 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 07 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 08 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 09 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 10 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 11 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 12 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 13 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 14 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 15 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 16 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 17 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 18 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 19 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 20 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 21 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 22 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 23 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 24 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 25 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 26 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 27 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 28 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 29 Dec 2024 | *2 | *2 | *2 | *2 | *2 | *2 | *2 | *2 |
| 30 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 31 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |

\* Geometric mean calculated using n<5

**Table 3.4**

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

| Date        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 02 Dec 2024 | IC |
| 11 Dec 2024 | IC |
| 17 Dec 2024 | IC |
| 26 Dec 2024 | IC |
| 30 Dec 2024 | 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 Geometric Mean standard for total coliform bacteria at the PLOO 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 >1000 CFU/100 mL exceed the standard.

| Date        | A1 | A6 | A7  | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|-----|----|----|----|----|----|
| 01 Dec 2024 | *7 | *6 | *18 | *2 | *2 | *2 | *3 | *3 |
| 02 Dec 2024 | 5  | 5  | 11  | 2  | 2  | 2  | 3  | 3  |
| 03 Dec 2024 | 5  | 5  | 11  | 2  | 2  | 2  | 3  | 3  |
| 04 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 05 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 06 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 07 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 08 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 09 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 10 Dec 2024 | *5 | *5 | *12 | *2 | *2 | *2 | *2 | *2 |
| 11 Dec 2024 | 4  | 4  | 8   | 2  | 2  | 2  | 2  | 3  |
| 12 Dec 2024 | *5 | *3 | *6  | *2 | *2 | *2 | *2 | *4 |
| 13 Dec 2024 | *5 | *3 | *6  | *2 | *2 | *2 | *2 | *4 |
| 14 Dec 2024 | *5 | *3 | *6  | *2 | *2 | *2 | *2 | *4 |
| 15 Dec 2024 | *5 | *3 | *6  | *2 | *2 | *2 | *2 | *4 |
| 16 Dec 2024 | *5 | *3 | *6  | *2 | *2 | *2 | *2 | *4 |
| 17 Dec 2024 | 7  | 4  | 8   | 2  | 2  | 2  | 2  | 6  |
| 18 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 19 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 20 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 21 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 22 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 23 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 24 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 25 Dec 2024 | *4 | *3 | *5  | *2 | *2 | *2 | *2 | *7 |
| 26 Dec 2024 | *4 | *4 | *6  | *3 | *2 | *2 | *3 | *9 |
| 27 Dec 2024 | *4 | *4 | *6  | *3 | *2 | *2 | *3 | *9 |
| 28 Dec 2024 | *4 | *4 | *6  | *3 | *2 | *2 | *3 | *9 |
| 29 Dec 2024 | *4 | *4 | *6  | *3 | *2 | *2 | *3 | *9 |
| 30 Dec 2024 | 6  | 7  | 9   | 3  | 2  | 2  | 3  | 7  |
| 31 Dec 2024 | 6  | 7  | 9   | 3  | 2  | 2  | 3  | 7  |

- Median calculated using n<5

**Table 3.6**

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

| Date        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 02 Dec 2024 | IC |
| 11 Dec 2024 | IC |
| 17 Dec 2024 | IC |
| 26 Dec 2024 | IC |
| 30 Dec 2024 | IC |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.7**

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

| Date        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 02 Dec 2024 | IC |
| 11 Dec 2024 | IC |
| 17 Dec 2024 | IC |
| 26 Dec 2024 | IC |
| 30 Dec 2024 | IC |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.8**

Summary of water quality parameters at the PLOO 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 |
|---------|-------------|------|-------|-------|-------|-------|
| A1      | 02 Dec 2024 | 737  | 1     | <2    | <2    | <2    |
| A1      | 02 Dec 2024 | 737  | 12    | <2    | <2    | <2    |
| A1      | 02 Dec 2024 | 737  | 18    | <2    | <2    | <2    |
| A1      | 11 Dec 2024 | 758  | 1     | <2    | <2    | <2    |
| A1      | 11 Dec 2024 | 758  | 12    | <2    | <2    | <2    |
| A1      | 11 Dec 2024 | 758  | 18    | <2    | <2    | <2    |
| A1      | 17 Dec 2024 | 746  | 1     | 2e    | <2    | <2    |
| A1      | 17 Dec 2024 | 746  | 12    | 10e   | 4e    | <2    |
| A1      | 17 Dec 2024 | 746  | 18    | 50    | 2e    | <2    |
| A1      | 26 Dec 2024 | 719  | 1     | 2e    | <2    | <2    |
| A1      | 26 Dec 2024 | 719  | 12    | 2e    | <2    | <2    |
| A1      | 26 Dec 2024 | 719  | 18    | 6e    | <2    | <2    |
| A1      | 30 Dec 2024 | 742  | 1     | <2    | 2e    | <2    |
| A1      | 30 Dec 2024 | 742  | 12    | 12e   | <2    | <2    |
| A1      | 30 Dec 2024 | 742  | 18    | 66    | 8e    | 4e    |
| A6      | 02 Dec 2024 | 813  | 1     | <2    | <2    | <2    |
| A6      | 02 Dec 2024 | 813  | 12    | <2    | <2    | <2    |
| A6      | 02 Dec 2024 | 813  | 18    | 2e    | <2    | <2    |
| A6      | 11 Dec 2024 | 822  | 1     | <2    | <2    | <2    |
| A6      | 11 Dec 2024 | 822  | 12    | <2    | <2    | <2    |
| A6      | 11 Dec 2024 | 822  | 18    | <2    | <2    | <2    |
| A6      | 17 Dec 2024 | 810  | 1     | <2    | <2    | <2    |
| A6      | 17 Dec 2024 | 810  | 12    | 2e    | 2e    | <2    |
| A6      | 17 Dec 2024 | 810  | 18    | 48    | 2e    | 2e    |
| A6      | 26 Dec 2024 | 740  | 1     | <2    | <2    | <2    |
| A6      | 26 Dec 2024 | 740  | 12    | 2e    | 2e    | <2    |
| A6      | 26 Dec 2024 | 740  | 18    | 8e    | 2e    | <2    |
| A6      | 30 Dec 2024 | 807  | 1     | 8e    | <2    | <2    |
| A6      | 30 Dec 2024 | 807  | 12    | 32e   | 4e    | 2e    |
| A6      | 30 Dec 2024 | 807  | 18    | 180e  | 34e   | 2e    |
| A7      | 02 Dec 2024 | 756  | 1     | <2    | <2    | <2    |
| A7      | 02 Dec 2024 | 756  | 12    | <2    | <2    | <2    |
| A7      | 02 Dec 2024 | 756  | 18    | <2    | <2    | <2    |
| A7      | 11 Dec 2024 | 808  | 1     | <2    | <2    | <2    |
| A7      | 11 Dec 2024 | 808  | 12    | <2    | <2    | <2    |
| A7      | 11 Dec 2024 | 808  | 18    | <2    | 2e    | <2    |
| A7      | 17 Dec 2024 | 757  | 1     | <2    | <2    | <2    |
| A7      | 17 Dec 2024 | 757  | 12    | 60    | 4e    | 4e    |
| A7      | 17 Dec 2024 | 757  | 18    | 8e    | 2e    | 2e    |

| Station | Date        | Time | Depth | Total | Fecal | Enteric |
|---------|-------------|------|-------|-------|-------|---------|
| A7      | 26 Dec 2024 | 729  | 1     | <2    | <2    | <2      |
| A7      | 26 Dec 2024 | 729  | 12    | 6e    | <2    | 2e      |
| A7      | 26 Dec 2024 | 729  | 18    | 22e   | 2e    | <2      |
| A7      | 30 Dec 2024 | 756  | 1     | 4e    | <2    | <2      |
| A7      | 30 Dec 2024 | 756  | 12    | 12e   | 6e    | <2      |
| A7      | 30 Dec 2024 | 756  | 18    | 180e  | 40    | 6e      |
| C4      | 02 Dec 2024 | 913  | 1     | <2    | <2    | <2      |
| C4      | 02 Dec 2024 | 913  | 3     | <2    | <2    | <2      |
| C4      | 02 Dec 2024 | 913  | 9     | <2    | <2    | <2      |
| C4      | 11 Dec 2024 | 940  | 1     | <2    | 2e    | <2      |
| C4      | 11 Dec 2024 | 940  | 3     | <2    | <2    | <2      |
| C4      | 11 Dec 2024 | 940  | 9     | 2e    | <2    | <2      |
| C4      | 17 Dec 2024 | 916  | 1     | 2e    | <2    | <2      |
| C4      | 17 Dec 2024 | 916  | 3     | 6e    | <2    | <2      |
| C4      | 17 Dec 2024 | 916  | 9     | 4e    | <2    | <2      |
| C4      | 26 Dec 2024 | 843  | 1     | 12e   | <2    | <2      |
| C4      | 26 Dec 2024 | 843  | 3     | 4e    | 2e    | <2      |
| C4      | 26 Dec 2024 | 843  | 9     | 4e    | 2e    | <2      |
| C4      | 30 Dec 2024 | 917  | 1     | <2    | <2    | <2      |
| C4      | 30 Dec 2024 | 917  | 3     | <2    | <2    | <2      |
| C4      | 30 Dec 2024 | 917  | 9     | 2e    | 2e    | <2      |
| C5      | 02 Dec 2024 | 904  | 1     | 2e    | 2e    | <2      |
| C5      | 02 Dec 2024 | 904  | 3     | <2    | <2    | <2      |
| C5      | 02 Dec 2024 | 904  | 9     | <2    | <2    | <2      |
| C5      | 11 Dec 2024 | 930  | 1     | <2    | <2    | <2      |
| C5      | 11 Dec 2024 | 930  | 3     | <2    | <2    | <2      |
| C5      | 11 Dec 2024 | 930  | 9     | 2e    | <2    | <2      |
| C5      | 17 Dec 2024 | 905  | 1     | <2    | <2    | <2      |
| C5      | 17 Dec 2024 | 905  | 3     | <2    | <2    | <2      |
| C5      | 17 Dec 2024 | 905  | 9     | 2e    | <2    | <2      |
| C5      | 26 Dec 2024 | 831  | 1     | 2e    | <2    | <2      |
| C5      | 26 Dec 2024 | 831  | 3     | 4e    | <2    | <2      |
| C5      | 26 Dec 2024 | 831  | 9     | <2    | <2    | <2      |
| C5      | 30 Dec 2024 | 906  | 1     | <2    | <2    | <2      |
| C5      | 30 Dec 2024 | 906  | 3     | <2    | <2    | <2      |
| C5      | 30 Dec 2024 | 906  | 9     | 4e    | 2e    | <2      |
| C6      | 02 Dec 2024 | 854  | 1     | 2e    | <2    | <2      |
| C6      | 02 Dec 2024 | 854  | 3     | <2    | <2    | <2      |
| C6      | 02 Dec 2024 | 854  | 9     | <2    | 2e    | <2      |
| C6      | 11 Dec 2024 | 919  | 1     | 2e    | <2    | <2      |
| C6      | 11 Dec 2024 | 919  | 3     | <2    | <2    | <2      |
| C6      | 11 Dec 2024 | 919  | 9     | <2    | <2    | <2      |
| C6      | 17 Dec 2024 | 855  | 1     | <2    | <2    | <2      |
| C6      | 17 Dec 2024 | 855  | 3     | 4e    | <2    | <2      |
| C6      | 17 Dec 2024 | 855  | 9     | 2e    | 4e    | <2      |

| Station | Date        | Time | Depth | Total | Fecal | Enterο |
|---------|-------------|------|-------|-------|-------|--------|
| C6      | 26 Dec 2024 | 820  | 1     | <2    | <2    | <2     |
| C6      | 26 Dec 2024 | 820  | 3     | 2e    | <2    | 4e     |
| C6      | 26 Dec 2024 | 820  | 9     | 2e    | <2    | 2e     |
| C6      | 30 Dec 2024 | 856  | 1     | 2e    | <2    | <2     |
| C6      | 30 Dec 2024 | 856  | 3     | 2e    | 4e    | <2     |
| C6      | 30 Dec 2024 | 856  | 9     | 2e    | <2    | <2     |
| C7      | 02 Dec 2024 | 826  | 1     | <2    | <2    | <2     |
| C7      | 02 Dec 2024 | 826  | 12    | <2    | <2    | <2     |
| C7      | 02 Dec 2024 | 826  | 18    | 6e    | 2e    | <2     |
| C7      | 11 Dec 2024 | 844  | 1     | 2e    | <2    | <2     |
| C7      | 11 Dec 2024 | 844  | 12    | <2    | 2e    | <2     |
| C7      | 11 Dec 2024 | 844  | 18    | 2e    | <2    | <2     |
| C7      | 17 Dec 2024 | 823  | 1     | <2    | <2    | <2     |
| C7      | 17 Dec 2024 | 823  | 12    | <2    | <2    | <2     |
| C7      | 17 Dec 2024 | 823  | 18    | <2    | <2    | <2     |
| C7      | 26 Dec 2024 | 752  | 1     | 2e    | <2    | <2     |
| C7      | 26 Dec 2024 | 752  | 12    | 6e    | <2    | <2     |
| C7      | 26 Dec 2024 | 752  | 18    | <20   | <2    | 2e     |
| C7      | 30 Dec 2024 | 825  | 1     | 4e    | <2    | 2e     |
| C7      | 30 Dec 2024 | 825  | 12    | <2    | <2    | <2     |
| C7      | 30 Dec 2024 | 825  | 18    | 4e    | <2    | <2     |
| C8      | 02 Dec 2024 | 838  | 1     | <2    | <2    | <2     |
| C8      | 02 Dec 2024 | 838  | 12    | 2e    | <2    | <2     |
| C8      | 02 Dec 2024 | 838  | 18    | <2    | <2    | <2     |
| C8      | 11 Dec 2024 | 856  | 1     | <2    | <2    | <2     |
| C8      | 11 Dec 2024 | 856  | 12    | 2e    | 2e    | <2     |
| C8      | 11 Dec 2024 | 856  | 18    | 26e   | 4e    | <2     |
| C8      | 17 Dec 2024 | 835  | 1     | 4e    | <2    | <2     |
| C8      | 17 Dec 2024 | 835  | 12    | 130   | 18e   | 2e     |
| C8      | 17 Dec 2024 | 835  | 18    | 4e    | <2    | <2     |
| C8      | 26 Dec 2024 | 801  | 1     | 4e    | <2    | <2     |
| C8      | 26 Dec 2024 | 801  | 12    | 2e    | 2e    | <2     |
| C8      | 26 Dec 2024 | 801  | 18    | <20   | <2    | <2     |
| C8      | 30 Dec 2024 | 840  | 1     | <2    | <2    | 2e     |
| C8      | 30 Dec 2024 | 840  | 12    | 2e    | 2e    | <2     |
| C8      | 30 Dec 2024 | 840  | 18    | 2e    | 2e    | 2e     |

ns = not sampled

ND = no data

**Table 3.9**

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

| Station | Date        | Parameter        | Value   |
|---------|-------------|------------------|---|
| A1      | 02 Dec 2024 | Arrive Time      | 737   |
| A1      | 02 Dec 2024 | Depart Time      | 746   |
| A1      | 02 Dec 2024 | Air Temp (C)     | 13.9  |
| A1      | 02 Dec 2024 | Visibility (mi)  | 10  |
| A1      | 02 Dec 2024 | Wind Speed (kts) | 4.7   |
| A1      | 02 Dec 2024 | Wind Dir         | N   |
| A1      | 02 Dec 2024 | Sea State        | Wind Ripples  |
| A1      | 02 Dec 2024 | High Tide Time   | 830   |
| A1      | 02 Dec 2024 | Low Tide Time    | 1606  |
| A1      | 02 Dec 2024 | Comments         | Did 2nd cast to confirm DO sensor was consistent; Kelp; Kelp Debris; Lobster Floats |
| A1      | 11 Dec 2024 | Arrive Time      | 752   |
| A1      | 11 Dec 2024 | Depart Time      | 758   |
| A1      | 11 Dec 2024 | Air Temp (C)     | 14  |
| A1      | 11 Dec 2024 | Visibility (mi)  | 10  |
| A1      | 11 Dec 2024 | Wind Speed (kts) | 6.2   |
| A1      | 11 Dec 2024 | Wind Dir         | N   |
| A1      | 11 Dec 2024 | Sea State        | Calm  |
| A1      | 11 Dec 2024 | High Tide Time   | 518   |
| A1      | 11 Dec 2024 | Low Tide Time    | 1224  |
| A1      | 11 Dec 2024 | Comments         |   |
| A1      | 17 Dec 2024 | Arrive Time      | 746   |
| A1      | 17 Dec 2024 | Depart Time      | 751   |
| A1      | 17 Dec 2024 | Air Temp (C)     | 12.9  |
| A1      | 17 Dec 2024 | Visibility (mi)  | 10  |
| A1      | 17 Dec 2024 | Wind Speed (kts) | 6.4   |
| A1      | 17 Dec 2024 | Wind Dir         | NE  |
| A1      | 17 Dec 2024 | Sea State        | Light Chop  |
| A1      | 17 Dec 2024 | High Tide Time   | 924   |
| A1      | 17 Dec 2024 | Low Tide Time    | 1700  |
| A1      | 17 Dec 2024 | Comments         | Kelp; Lobster Floats  |
| A1      | 26 Dec 2024 | Arrive Time      | 719   |
| A1      | 26 Dec 2024 | Depart Time      | 724   |
| A1      | 26 Dec 2024 | Air Temp (C)     | 11.5  |
| A1      | 26 Dec 2024 | Visibility (mi)  | 8   |
| A1      | 26 Dec 2024 | Wind Speed (kts) | 15.4  |
| A1      | 26 Dec 2024 | Wind Dir         | E   |
| A1      | 26 Dec 2024 | Sea State        | Regular Swell   |
| A1      | 26 Dec 2024 | High Tide Time   | 536   |
| A1      | 26 Dec 2024 | Low Tide Time    | 1300  |
| A1      | 26 Dec 2024 | Comments         | Kelp; Lobster Floats  |
| A1      | 30 Dec 2024 | Arrive Time      | 742   |
| A1      | 30 Dec 2024 | Depart Time      | 748   |
| A1      | 30 Dec 2024 | Air Temp (C)     | 12.5  |
| A1      | 30 Dec 2024 | Visibility (mi)  | 5   |
| A1      | 30 Dec 2024 | Wind Speed (kts) | 6.1   |
| A1      | 30 Dec 2024 | Wind Dir         | E   |
| A1      | 30 Dec 2024 | Sea State        | Confused Swell  |
| A1      | 30 Dec 2024 | High Tide Time   | 748   |
| A1      | 30 Dec 2024 | Low Tide Time    | 1518  |
| A1      | 30 Dec 2024 | Comments         | Kelp; Kelp Debris   |

| Station | Date        | Parameter        | Value                             |
|---------|-------------|------------------|-----------------------------------|
| C4      | 02 Dec 2024 | Arrive Time      | 913                               |
| C4      | 02 Dec 2024 | Depart Time      | 915                               |
| C4      | 02 Dec 2024 | Air Temp (C)     | 13.7                              |
| C4      | 02 Dec 2024 | Visibility (mi)  | 10                                |
| C4      | 02 Dec 2024 | Wind Speed (kts) | 0                                 |
| C4      | 02 Dec 2024 | Wind Dir         | E                                 |
| C4      | 02 Dec 2024 | Sea State        | Wind Ripples                      |
| C4      | 02 Dec 2024 | High Tide Time   | 830                               |
| C4      | 02 Dec 2024 | Low Tide Time    | 1606                              |
| C4      | 02 Dec 2024 | Comments         | Kelp; Kelp Debris; Lobster Floats |
| C4      | 11 Dec 2024 | Arrive Time      | 937                               |
| C4      | 11 Dec 2024 | Depart Time      | 940                               |
| C4      | 11 Dec 2024 | Air Temp (C)     | 14.2                              |
| C4      | 11 Dec 2024 | Visibility (mi)  | 9                                 |
| C4      | 11 Dec 2024 | Wind Speed (kts) | 3.6                               |
| C4      | 11 Dec 2024 | Wind Dir         | NE                                |
| C4      | 11 Dec 2024 | Sea State        | Light Chop                        |
| C4      | 11 Dec 2024 | High Tide Time   | 518                               |
| C4      | 11 Dec 2024 | Low Tide Time    | 1224                              |
| C4      | 11 Dec 2024 | Comments         |                                   |
| C4      | 17 Dec 2024 | Arrive Time      | 916                               |
| C4      | 17 Dec 2024 | Depart Time      | 935                               |
| C4      | 17 Dec 2024 | Air Temp (C)     | 13.6                              |
| C4      | 17 Dec 2024 | Visibility (mi)  | 10                                |
| C4      | 17 Dec 2024 | Wind Speed (kts) | 2.1                               |
| C4      | 17 Dec 2024 | Wind Dir         | E                                 |
| C4      | 17 Dec 2024 | Sea State        | Light Chop                        |
| C4      | 17 Dec 2024 | High Tide Time   | 924                               |
| C4      | 17 Dec 2024 | Low Tide Time    | 1700                              |
| C4      | 17 Dec 2024 | Comments         | Lobster Floats                    |
| C4      | 26 Dec 2024 | Arrive Time      | 843                               |
| C4      | 26 Dec 2024 | Depart Time      | 845                               |
| C4      | 26 Dec 2024 | Air Temp (C)     | 12.4                              |
| C4      | 26 Dec 2024 | Visibility (mi)  | 8                                 |
| C4      | 26 Dec 2024 | Wind Speed (kts) | 4.6                               |
| C4      | 26 Dec 2024 | Wind Dir         | E                                 |
| C4      | 26 Dec 2024 | Sea State        | Regular Swell                     |
| C4      | 26 Dec 2024 | High Tide Time   | 536                               |
| C4      | 26 Dec 2024 | Low Tide Time    | 1300                              |
| C4      | 26 Dec 2024 | Comments         | Kelp; Kelp Debris; Lobster Floats |
| C4      | 30 Dec 2024 | Arrive Time      | 917                               |
| C4      | 30 Dec 2024 | Depart Time      | 919                               |
| C4      | 30 Dec 2024 | Air Temp (C)     | 12.8                              |
| C4      | 30 Dec 2024 | Visibility (mi)  | 5                                 |
| C4      | 30 Dec 2024 | Wind Speed (kts) | 4.1                               |
| C4      | 30 Dec 2024 | Wind Dir         | E                                 |
| C4      | 30 Dec 2024 | Sea State        | Confused Swell                    |
| C4      | 30 Dec 2024 | High Tide Time   | 748                               |
| C4      | 30 Dec 2024 | Low Tide Time    | 1518                              |
| C4      | 30 Dec 2024 | Comments         | Kelp; Kelp Debris; Lobster Floats |
| A7      | 02 Dec 2024 | Arrive Time      | 756                               |
| A7      | 02 Dec 2024 | Depart Time      | 759                               |
| A7      | 02 Dec 2024 | Air Temp (C)     | 14.3                              |
| A7      | 02 Dec 2024 | Visibility (mi)  | 10                                |
| A7      | 02 Dec 2024 | Wind Speed (kts) | 4.9                               |
| A7      | 02 Dec 2024 | Wind Dir         | N                                 |

| Station | Date        | Parameter        | Value                             |
|---------|-------------|------------------|-----------------------------------|
| A7      | 02 Dec 2024 | Sea State        | Wind Ripples                      |
| A7      | 02 Dec 2024 | High Tide Time   | 830                               |
| A7      | 02 Dec 2024 | Low Tide Time    | 1606                              |
| A7      | 02 Dec 2024 | Comments         | Lobster Floats                    |
| A7      | 11 Dec 2024 | Arrive Time      | 805                               |
| A7      | 11 Dec 2024 | Depart Time      | 808                               |
| A7      | 11 Dec 2024 | Air Temp (C)     | 13.9                              |
| A7      | 11 Dec 2024 | Visibility (mi)  | 10                                |
| A7      | 11 Dec 2024 | Wind Speed (kts) | 1.3                               |
| A7      | 11 Dec 2024 | Wind Dir         | NW                                |
| A7      | 11 Dec 2024 | Sea State        | Calm                              |
| A7      | 11 Dec 2024 | High Tide Time   | 518                               |
| A7      | 11 Dec 2024 | Low Tide Time    | 1224                              |
| A7      | 11 Dec 2024 | Comments         |                                   |
| A7      | 17 Dec 2024 | Arrive Time      | 757                               |
| A7      | 17 Dec 2024 | Depart Time      | 802                               |
| A7      | 17 Dec 2024 | Air Temp (C)     | 13.1                              |
| A7      | 17 Dec 2024 | Visibility (mi)  | 10                                |
| A7      | 17 Dec 2024 | Wind Speed (kts) | 5.5                               |
| A7      | 17 Dec 2024 | Wind Dir         | N                                 |
| A7      | 17 Dec 2024 | Sea State        | Light Chop                        |
| A7      | 17 Dec 2024 | High Tide Time   | 924                               |
| A7      | 17 Dec 2024 | Low Tide Time    | 1700                              |
| A7      | 17 Dec 2024 | Comments         | Kelp Debris; Lobster Floats       |
| A7      | 26 Dec 2024 | Arrive Time      | 729                               |
| A7      | 26 Dec 2024 | Depart Time      | 733                               |
| A7      | 26 Dec 2024 | Air Temp (C)     | 11.6                              |
| A7      | 26 Dec 2024 | Visibility (mi)  | 8                                 |
| A7      | 26 Dec 2024 | Wind Speed (kts) | 7.1                               |
| A7      | 26 Dec 2024 | Wind Dir         | E                                 |
| A7      | 26 Dec 2024 | Sea State        | Regular Swell                     |
| A7      | 26 Dec 2024 | High Tide Time   | 536                               |
| A7      | 26 Dec 2024 | Low Tide Time    | 1300                              |
| A7      | 26 Dec 2024 | Comments         | Kelp; Kelp Debris; Lobster Floats |
| A7      | 30 Dec 2024 | Arrive Time      | 756                               |
| A7      | 30 Dec 2024 | Depart Time      | 800                               |
| A7      | 30 Dec 2024 | Air Temp (C)     | 12.6                              |
| A7      | 30 Dec 2024 | Visibility (mi)  | 5                                 |
| A7      | 30 Dec 2024 | Wind Speed (kts) | 3.4                               |
| A7      | 30 Dec 2024 | Wind Dir         | E                                 |
| A7      | 30 Dec 2024 | Sea State        | Confused Swell                    |
| A7      | 30 Dec 2024 | High Tide Time   | 748                               |
| A7      | 30 Dec 2024 | Low Tide Time    | 1518                              |
| A7      | 30 Dec 2024 | Comments         | Kelp                              |
| C5      | 02 Dec 2024 | Arrive Time      | 904                               |
| C5      | 02 Dec 2024 | Depart Time      | 906                               |
| C5      | 02 Dec 2024 | Air Temp (C)     | 14.2                              |
| C5      | 02 Dec 2024 | Visibility (mi)  | 10                                |
| C5      | 02 Dec 2024 | Wind Speed (kts) | 0                                 |
| C5      | 02 Dec 2024 | Wind Dir         | NW                                |
| C5      | 02 Dec 2024 | Sea State        | Wind Ripples                      |
| C5      | 02 Dec 2024 | High Tide Time   | 830                               |
| C5      | 02 Dec 2024 | Low Tide Time    | 1606                              |
| C5      | 02 Dec 2024 | Comments         | Kelp; Kelp Debris; Lobster Floats |
| C5      | 11 Dec 2024 | Arrive Time      | 926                               |

| Station | Date        | Parameter        | Value  |
|---------|-------------|------------------|--|
| C5      | 11 Dec 2024 | Depart Time      | 930  |
| C5      | 11 Dec 2024 | Air Temp (C)     | 13.9   |
| C5      | 11 Dec 2024 | Visibility (mi)  | 9  |
| C5      | 11 Dec 2024 | Wind Speed (kts) | 3.2  |
| C5      | 11 Dec 2024 | Wind Dir         | E  |
| C5      | 11 Dec 2024 | Sea State        | Light Chop   |
| C5      | 11 Dec 2024 | High Tide Time   | 518  |
| C5      | 11 Dec 2024 | Low Tide Time    | 1224   |
| C5      | 11 Dec 2024 | Comments         |  |
| C5      | 17 Dec 2024 | Arrive Time      | 905  |
| C5      | 17 Dec 2024 | Depart Time      | 909  |
| C5      | 17 Dec 2024 | Air Temp (C)     | 13.8   |
| C5      | 17 Dec 2024 | Visibility (mi)  | 10   |
| C5      | 17 Dec 2024 | Wind Speed (kts) | 0  |
| C5      | 17 Dec 2024 | Wind Dir         | N  |
| C5      | 17 Dec 2024 | Sea State        | Light Chop   |
| C5      | 17 Dec 2024 | High Tide Time   | 924  |
| C5      | 17 Dec 2024 | Low Tide Time    | 1700   |
| C5      | 17 Dec 2024 | Comments         | Lobster Floats   |
| C5      | 26 Dec 2024 | Arrive Time      | 831  |
| C5      | 26 Dec 2024 | Depart Time      | 833  |
| C5      | 26 Dec 2024 | Air Temp (C)     | 12.9   |
| C5      | 26 Dec 2024 | Visibility (mi)  | 8  |
| C5      | 26 Dec 2024 | Wind Speed (kts) | 2.7  |
| C5      | 26 Dec 2024 | Wind Dir         | E  |
| C5      | 26 Dec 2024 | Sea State        | Regular Swell  |
| C5      | 26 Dec 2024 | High Tide Time   | 536  |
| C5      | 26 Dec 2024 | Low Tide Time    | 1300   |
| C5      | 26 Dec 2024 | Comments         | Could not come within 0.05nm of station due to the size of the swell. (0.07nm from station); Kelp; Kelp Debris |
| C5      | 30 Dec 2024 | Arrive Time      | 906  |
| C5      | 30 Dec 2024 | Depart Time      | 911  |
| C5      | 30 Dec 2024 | Air Temp (C)     | 13   |
| C5      | 30 Dec 2024 | Visibility (mi)  | 5  |
| C5      | 30 Dec 2024 | Wind Speed (kts) | 4.7  |
| C5      | 30 Dec 2024 | Wind Dir         | E  |
| C5      | 30 Dec 2024 | Sea State        | Confused Swell   |
| C5      | 30 Dec 2024 | High Tide Time   | 748  |
| C5      | 30 Dec 2024 | Low Tide Time    | 1518   |
| C5      | 30 Dec 2024 | Comments         | Kelp; Kelp Debris  |
| A6      | 02 Dec 2024 | Arrive Time      | 813  |
| A6      | 02 Dec 2024 | Depart Time      | 816  |
| A6      | 02 Dec 2024 | Air Temp (C)     | 14   |
| A6      | 02 Dec 2024 | Visibility (mi)  | 10   |
| A6      | 02 Dec 2024 | Wind Speed (kts) | 1.8  |
| A6      | 02 Dec 2024 | Wind Dir         | NW   |
| A6      | 02 Dec 2024 | Sea State        | Wind Ripples   |
| A6      | 02 Dec 2024 | High Tide Time   | 830  |
| A6      | 02 Dec 2024 | Low Tide Time    | 1606   |
| A6      | 02 Dec 2024 | Comments         | Kelp Debris; Lobster Floats  |
| A6      | 11 Dec 2024 | Arrive Time      | 816  |
| A6      | 11 Dec 2024 | Depart Time      | 822  |
| A6      | 11 Dec 2024 | Air Temp (C)     | 13.8   |
| A6      | 11 Dec 2024 | Visibility (mi)  | 10   |
| A6      | 11 Dec 2024 | Wind Speed (kts) | 18   |
| A6      | 11 Dec 2024 | Wind Dir         | NW   |

| Station | Date        | Parameter        | Value                             |
|---------|-------------|------------------|-----------------------------------|
| A6      | 11 Dec 2024 | Sea State        | Calm                              |
| A6      | 11 Dec 2024 | High Tide Time   | 518                               |
| A6      | 11 Dec 2024 | Low Tide Time    | 1224                              |
| A6      | 11 Dec 2024 | Comments         |                                   |
| A6      | 17 Dec 2024 | Arrive Time      | 810                               |
| A6      | 17 Dec 2024 | Depart Time      | 814                               |
| A6      | 17 Dec 2024 | Air Temp (C)     | 13.2                              |
| A6      | 17 Dec 2024 | Visibility (mi)  | 10                                |
| A6      | 17 Dec 2024 | Wind Speed (kts) | 1.6                               |
| A6      | 17 Dec 2024 | Wind Dir         | N                                 |
| A6      | 17 Dec 2024 | Sea State        | Light Chop                        |
| A6      | 17 Dec 2024 | High Tide Time   | 924                               |
| A6      | 17 Dec 2024 | Low Tide Time    | 1700                              |
| A6      | 17 Dec 2024 | Comments         | Seagrass; Lobster Floats          |
| A6      | 26 Dec 2024 | Arrive Time      | 740                               |
| A6      | 26 Dec 2024 | Depart Time      | 745                               |
| A6      | 26 Dec 2024 | Air Temp (C)     | 11.8                              |
| A6      | 26 Dec 2024 | Visibility (mi)  | 8                                 |
| A6      | 26 Dec 2024 | Wind Speed (kts) | 6.6                               |
| A6      | 26 Dec 2024 | Wind Dir         | E                                 |
| A6      | 26 Dec 2024 | Sea State        | Regular Swell                     |
| A6      | 26 Dec 2024 | High Tide Time   | 536                               |
| A6      | 26 Dec 2024 | Low Tide Time    | 1300                              |
| A6      | 26 Dec 2024 | Comments         |                                   |
| A6      | 30 Dec 2024 | Arrive Time      | 807                               |
| A6      | 30 Dec 2024 | Depart Time      | 815                               |
| A6      | 30 Dec 2024 | Air Temp (C)     | 13                                |
| A6      | 30 Dec 2024 | Visibility (mi)  | 5                                 |
| A6      | 30 Dec 2024 | Wind Speed (kts) | 4.5                               |
| A6      | 30 Dec 2024 | Wind Dir         | E                                 |
| A6      | 30 Dec 2024 | Sea State        | Confused Swell                    |
| A6      | 30 Dec 2024 | High Tide Time   | 748                               |
| A6      | 30 Dec 2024 | Low Tide Time    | 1518                              |
| A6      | 30 Dec 2024 | Comments         | Kelp                              |
| C6      | 02 Dec 2024 | Arrive Time      | 854                               |
| C6      | 02 Dec 2024 | Depart Time      | 858                               |
| C6      | 02 Dec 2024 | Air Temp (C)     | 14                                |
| C6      | 02 Dec 2024 | Visibility (mi)  | 10                                |
| C6      | 02 Dec 2024 | Wind Speed (kts) | 1.3                               |
| C6      | 02 Dec 2024 | Wind Dir         | NW                                |
| C6      | 02 Dec 2024 | Sea State        | Wind Ripples                      |
| C6      | 02 Dec 2024 | High Tide Time   | 830                               |
| C6      | 02 Dec 2024 | Low Tide Time    | 1606                              |
| C6      | 02 Dec 2024 | Comments         | Kelp; Kelp Debris; Lobster Floats |
| C6      | 11 Dec 2024 | Arrive Time      | 909                               |
| C6      | 11 Dec 2024 | Depart Time      | 919                               |
| C6      | 11 Dec 2024 | Air Temp (C)     | 13.9                              |
| C6      | 11 Dec 2024 | Visibility (mi)  | 9                                 |
| C6      | 11 Dec 2024 | Wind Speed (kts) | 8.3                               |
| C6      | 11 Dec 2024 | Wind Dir         | SE                                |
| C6      | 11 Dec 2024 | Sea State        | Light Chop                        |
| C6      | 11 Dec 2024 | High Tide Time   | 518                               |
| C6      | 11 Dec 2024 | Low Tide Time    | 1224                              |
| C6      | 11 Dec 2024 | Comments         |                                   |
| C6      | 17 Dec 2024 | Arrive Time      | 855                               |

| Station | Date        | Parameter        | Value  |
|---------|-------------|------------------|--|
| C6      | 17 Dec 2024 | Depart Time      | 858  |
| C6      | 17 Dec 2024 | Air Temp (C)     | 13.6   |
| C6      | 17 Dec 2024 | Visibility (mi)  | 10   |
| C6      | 17 Dec 2024 | Wind Speed (kts) | 1.3  |
| C6      | 17 Dec 2024 | Wind Dir         | NW   |
| C6      | 17 Dec 2024 | Sea State        | Light Chop   |
| C6      | 17 Dec 2024 | High Tide Time   | 924  |
| C6      | 17 Dec 2024 | Low Tide Time    | 1700   |
| C6      | 17 Dec 2024 | Comments         | Kelp Debris; Seagrass; Lobster Floats  |
| C6      | 26 Dec 2024 | Arrive Time      | 820  |
| C6      | 26 Dec 2024 | Depart Time      | 822  |
| C6      | 26 Dec 2024 | Air Temp (C)     | 12.3   |
| C6      | 26 Dec 2024 | Visibility (mi)  | 8  |
| C6      | 26 Dec 2024 | Wind Speed (kts) | 2  |
| C6      | 26 Dec 2024 | Wind Dir         | E  |
| C6      | 26 Dec 2024 | Sea State        | Regular Swell  |
| C6      | 26 Dec 2024 | High Tide Time   | 536  |
| C6      | 26 Dec 2024 | Low Tide Time    | 1300   |
| C6      | 26 Dec 2024 | Comments         | Could not come within 0.05nm of station due to the size of the swell (0.06 nm from station); Kelp; Kelp Debris |
| C6      | 30 Dec 2024 | Arrive Time      | 856  |
| C6      | 30 Dec 2024 | Depart Time      | 859  |
| C6      | 30 Dec 2024 | Air Temp (C)     | 13.1   |
| C6      | 30 Dec 2024 | Visibility (mi)  | 5  |
| C6      | 30 Dec 2024 | Wind Speed (kts) | 3.7  |
| C6      | 30 Dec 2024 | Wind Dir         | NE   |
| C6      | 30 Dec 2024 | Sea State        | Confused Swell   |
| C6      | 30 Dec 2024 | High Tide Time   | 748  |
| C6      | 30 Dec 2024 | Low Tide Time    | 1518   |
| C6      | 30 Dec 2024 | Comments         |  |
| C7      | 02 Dec 2024 | Arrive Time      | 826  |
| C7      | 02 Dec 2024 | Depart Time      | 831  |
| C7      | 02 Dec 2024 | Air Temp (C)     | 13.9   |
| C7      | 02 Dec 2024 | Visibility (mi)  | 10   |
| C7      | 02 Dec 2024 | Wind Speed (kts) | 0.1  |
| C7      | 02 Dec 2024 | Wind Dir         | NW   |
| C7      | 02 Dec 2024 | Sea State        | Wind Ripples   |
| C7      | 02 Dec 2024 | High Tide Time   | 830  |
| C7      | 02 Dec 2024 | Low Tide Time    | 1606   |
| C7      | 02 Dec 2024 | Comments         | Lobster Floats   |
| C7      | 11 Dec 2024 | Arrive Time      | 840  |
| C7      | 11 Dec 2024 | Depart Time      | 844  |
| C7      | 11 Dec 2024 | Air Temp (C)     | 13.6   |
| C7      | 11 Dec 2024 | Visibility (mi)  | 9  |
| C7      | 11 Dec 2024 | Wind Speed (kts) | 11.1   |
| C7      | 11 Dec 2024 | Wind Dir         | N  |
| C7      | 11 Dec 2024 | Sea State        | Light Chop   |
| C7      | 11 Dec 2024 | High Tide Time   | 518  |
| C7      | 11 Dec 2024 | Low Tide Time    | 1224   |
| C7      | 11 Dec 2024 | Comments         |  |
| C7      | 17 Dec 2024 | Arrive Time      | 823  |
| C7      | 17 Dec 2024 | Depart Time      | 832  |
| C7      | 17 Dec 2024 | Air Temp (C)     | 13   |
| C7      | 17 Dec 2024 | Visibility (mi)  | 10   |
| C7      | 17 Dec 2024 | Wind Speed (kts) | 0  |
| C7      | 17 Dec 2024 | Wind Dir         | NW   |

| Station | Date        | Parameter        | Value                       |
|---------|-------------|------------------|-----------------------------|
| C7      | 17 Dec 2024 | Sea State        | Light Chop                  |
| C7      | 17 Dec 2024 | High Tide Time   | 924                         |
| C7      | 17 Dec 2024 | Low Tide Time    | 1700                        |
| C7      | 17 Dec 2024 | Comments         | Kelp Debris; Lobster Floats |
| C7      | 26 Dec 2024 | Arrive Time      | 752                         |
| C7      | 26 Dec 2024 | Depart Time      | 755                         |
| C7      | 26 Dec 2024 | Air Temp (C)     | 11.9                        |
| C7      | 26 Dec 2024 | Visibility (mi)  | 8                           |
| C7      | 26 Dec 2024 | Wind Speed (kts) | 8.6                         |
| C7      | 26 Dec 2024 | Wind Dir         | E                           |
| C7      | 26 Dec 2024 | Sea State        | Regular Swell               |
| C7      | 26 Dec 2024 | High Tide Time   | 536                         |
| C7      | 26 Dec 2024 | Low Tide Time    | 1300                        |
| C7      | 26 Dec 2024 | Comments         | Kelp; Kelp Debris           |
| C7      | 30 Dec 2024 | Arrive Time      | 825                         |
| C7      | 30 Dec 2024 | Depart Time      | 830                         |
| C7      | 30 Dec 2024 | Air Temp (C)     | 13.5                        |
| C7      | 30 Dec 2024 | Visibility (mi)  | 5                           |
| C7      | 30 Dec 2024 | Wind Speed (kts) | 2                           |
| C7      | 30 Dec 2024 | Wind Dir         | NE                          |
| C7      | 30 Dec 2024 | Sea State        | Confused Swell              |
| C7      | 30 Dec 2024 | High Tide Time   | 748                         |
| C7      | 30 Dec 2024 | Low Tide Time    | 1518                        |
| C7      | 30 Dec 2024 | Comments         |                             |
| C8      | 02 Dec 2024 | Arrive Time      | 838                         |
| C8      | 02 Dec 2024 | Depart Time      | 841                         |
| C8      | 02 Dec 2024 | Air Temp (C)     | 13.5                        |
| C8      | 02 Dec 2024 | Visibility (mi)  | 10                          |
| C8      | 02 Dec 2024 | Wind Speed (kts) | 2.2                         |
| C8      | 02 Dec 2024 | Wind Dir         | N                           |
| C8      | 02 Dec 2024 | Sea State        | Wind Ripples                |
| C8      | 02 Dec 2024 | High Tide Time   | 830                         |
| C8      | 02 Dec 2024 | Low Tide Time    | 1606                        |
| C8      | 02 Dec 2024 | Comments         | Lobster Floats              |
| C8      | 11 Dec 2024 | Arrive Time      | 852                         |
| C8      | 11 Dec 2024 | Depart Time      | 856                         |
| C8      | 11 Dec 2024 | Air Temp (C)     | 12.9                        |
| C8      | 11 Dec 2024 | Visibility (mi)  | 9                           |
| C8      | 11 Dec 2024 | Wind Speed (kts) | 16.8                        |
| C8      | 11 Dec 2024 | Wind Dir         | NW                          |
| C8      | 11 Dec 2024 | Sea State        | Light Chop                  |
| C8      | 11 Dec 2024 | High Tide Time   | 518                         |
| C8      | 11 Dec 2024 | Low Tide Time    | 1224                        |
| C8      | 11 Dec 2024 | Comments         |                             |
| C8      | 17 Dec 2024 | Arrive Time      | 835                         |
| C8      | 17 Dec 2024 | Depart Time      | 842                         |
| C8      | 17 Dec 2024 | Air Temp (C)     | 12.3                        |
| C8      | 17 Dec 2024 | Visibility (mi)  | 10                          |
| C8      | 17 Dec 2024 | Wind Speed (kts) | 3.8                         |
| C8      | 17 Dec 2024 | Wind Dir         | N                           |
| C8      | 17 Dec 2024 | Sea State        | Light Chop                  |
| C8      | 17 Dec 2024 | High Tide Time   | 924                         |
| C8      | 17 Dec 2024 | Low Tide Time    | 1700                        |
| C8      | 17 Dec 2024 | Comments         | Lobster Floats              |
| C8      | 26 Dec 2024 | Arrive Time      | 801                         |

| Station | Date        | Parameter        | Value          |
|---------|-------------|------------------|----------------|
| C8      | 26 Dec 2024 | Depart Time      | 806            |
|         | 26 Dec 2024 | Air Temp (C)     | 12.2           |
|         | 26 Dec 2024 | Visibility (mi)  | 8              |
|         | 26 Dec 2024 | Wind Speed (kts) | 4.6            |
|         | 26 Dec 2024 | Wind Dir         | SE             |
|         | 26 Dec 2024 | Sea State        | Regular Swell  |
|         | 26 Dec 2024 | High Tide Time   | 536            |
|         | 26 Dec 2024 | Low Tide Time    | 1300           |
|         | 26 Dec 2024 | Comments         |                |
| C8      | 30 Dec 2024 | Arrive Time      | 840            |
|         | 30 Dec 2024 | Depart Time      | 843            |
|         | 30 Dec 2024 | Air Temp (C)     | 13.4           |
|         | 30 Dec 2024 | Visibility (mi)  | 5              |
|         | 30 Dec 2024 | Wind Speed (kts) | 3.2            |
|         | 30 Dec 2024 | Wind Dir         | N              |
|         | 30 Dec 2024 | Sea State        | Confused Swell |
|         | 30 Dec 2024 | High Tide Time   | 748            |
|         | 30 Dec 2024 | Low Tide Time    | 1518           |
|         | 30 Dec 2024 | Comments         |                |

**Comments**

| <b>date</b> | <b>station</b> | <b>depth</b> | <b>parmcode</b> | <b>comments</b>  |
|-------------|----------------|--------------|-----------------|--|
| 17-Dec-2024 | C6             |              |                 | One colony found on TSA plate, none on selective mEI plate. Results not likely affected. |
| 17-Dec-2024 | C5             |              |                 | One colony found on TSA plate, none on selective mEI plate. Results not likely affected. |

**Table 3.10**

Summary of CTD profile data from the PLOO 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) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| A1      | 02 Dec 2024 | 1         | 13.48     | 95.63   | 7.0       | 33.33     | 8.1 | 25.0       | 1.08         |
| A1      | 02 Dec 2024 | 2         | 13.48     | 95.39   | 7.0       | 33.33     | 8.1 | 25.0       | 1.22         |
| A1      | 02 Dec 2024 | 3         | 13.47     | 95.64   | 7.0       | 33.33     | 8.1 | 25.0       | 1.28         |
| A1      | 02 Dec 2024 | 4         | 13.41     | 95.89   | 6.9       | 33.34     | 8.1 | 25.0       | 1.22         |
| A1      | 02 Dec 2024 | 5         | 13.26     | 96.20   | 6.8       | 33.34     | 8.0 | 25.1       | 1.02         |
| A1      | 02 Dec 2024 | 6         | 13.10     | 96.50   | 6.5       | 33.34     | 8.0 | 25.1       | 0.90         |
| A1      | 02 Dec 2024 | 7         | 12.92     | 96.29   | 6.2       | 33.36     | 8.0 | 25.1       | 0.81         |
| A1      | 02 Dec 2024 | 8         | 12.72     | 95.49   | 5.8       | 33.36     | 8.0 | 25.2       | 0.76         |
| A1      | 02 Dec 2024 | 9         | 12.59     | 94.97   | 5.6       | 33.37     | 7.9 | 25.2       | 0.64         |
| A1      | 02 Dec 2024 | 10        | 12.54     | 94.63   | 5.5       | 33.36     | 7.9 | 25.2       | 0.58         |
| A1      | 02 Dec 2024 | 11        | 12.50     | 94.19   | 5.4       | 33.37     | 7.9 | 25.2       | 0.55         |
| A1      | 02 Dec 2024 | 12        | 12.39     | 94.21   | 5.3       | 33.38     | 7.9 | 25.3       | 0.50         |
| A1      | 02 Dec 2024 | 13        | 12.30     | 94.13   | 5.2       | 33.38     | 7.9 | 25.3       | 0.46         |
| A1      | 02 Dec 2024 | 14        | 12.15     | 93.81   | 5.2       | 33.39     | 7.9 | 25.3       | 0.41         |
| A1      | 02 Dec 2024 | 15        | 11.96     | 93.65   | 5.1       | 33.41     | 7.9 | 25.4       | 0.42         |
| A1      | 02 Dec 2024 | 16        | 11.78     | 92.55   | 5.1       | 33.41     | 7.9 | 25.4       | 0.44         |
| A1      | 02 Dec 2024 | 17        | 11.66     | 89.71   | 5.1       | 33.42     | 7.9 | 25.4       | 0.56         |
| A1      | 02 Dec 2024 | 18        | 11.60     | 90.54   | 5.1       | 33.42     | 7.9 | 25.4       | 0.53         |
| A1      | 02 Dec 2024 | 19        | 11.58     | 91.66   | 5.1       | 33.43     | 7.9 | 25.4       | 0.54         |
| A1      | 11 Dec 2024 | 1         | 13.07     | 91.38   | 7.5       | 33.32     | 8.1 | 25.1       | 3.07         |
| A1      | 11 Dec 2024 | 2         | 13.07     | 91.41   | 7.5       | 33.33     | 8.1 | 25.1       | 3.16         |
| A1      | 11 Dec 2024 | 3         | 13.06     | 91.16   | 7.5       | 33.33     | 8.1 | 25.1       | 3.34         |
| A1      | 11 Dec 2024 | 4         | 13.06     | 91.50   | 7.5       | 33.33     | 8.1 | 25.1       | 3.08         |
| A1      | 11 Dec 2024 | 5         | 13.05     | 91.80   | 7.4       | 33.33     | 8.1 | 25.1       | 3.80         |
| A1      | 11 Dec 2024 | 6         | 13.03     | 91.41   | 7.4       | 33.33     | 8.1 | 25.1       | 3.42         |
| A1      | 11 Dec 2024 | 7         | 13.02     | 91.21   | 7.4       | 33.33     | 8.1 | 25.1       | 3.42         |
| A1      | 11 Dec 2024 | 8         | 13.02     | 90.60   | 7.4       | 33.33     | 8.1 | 25.1       | 4.07         |
| A1      | 11 Dec 2024 | 9         | 13.02     | 90.98   | 7.4       | 33.33     | 8.1 | 25.1       | 3.45         |
| A1      | 11 Dec 2024 | 10        | 13.01     | 91.52   | 7.4       | 33.33     | 8.1 | 25.1       | 3.21         |
| A1      | 11 Dec 2024 | 11        | 13.01     | 91.50   | 7.4       | 33.33     | 8.1 | 25.1       | 3.35         |
| A1      | 11 Dec 2024 | 12        | 13.01     | 91.19   | 7.4       | 33.33     | 8.1 | 25.1       | 3.25         |
| A1      | 11 Dec 2024 | 13        | 13.00     | 91.21   | 7.4       | 33.33     | 8.1 | 25.1       | 3.78         |
| A1      | 11 Dec 2024 | 14        | 12.99     | 89.55   | 7.3       | 33.34     | 8.1 | 25.1       | 3.49         |
| A1      | 11 Dec 2024 | 15        | 12.87     | 89.99   | 7.0       | 33.35     | 8.0 | 25.1       | 3.44         |
| A1      | 11 Dec 2024 | 16        | 12.31     | 90.94   | 6.4       | 33.40     | 8.0 | 25.3       | 2.34         |
| A1      | 11 Dec 2024 | 17        | 12.40     | 93.23   | 6.0       | 33.36     | 7.9 | 25.2       | 1.81         |
| A1      | 11 Dec 2024 | 18        | 12.11     | 93.52   | 5.6       | 33.39     | 7.9 | 25.3       | 1.18         |
| A1      | 11 Dec 2024 | 19        | 12.08     | 94.21   | 5.4       | 33.39     | 7.9 | 25.3       | 0.79         |
| A1      | 17 Dec 2024 | 1         | 13.33     | 85.21   | 8.0       | 33.33     | 8.1 | 25.0       | 4.02         |
| A1      | 17 Dec 2024 | 2         | 13.33     | 85.37   | 8.0       | 33.33     | 8.1 | 25.0       | 4.03         |
| A1      | 17 Dec 2024 | 3         | 13.34     | 85.10   | 8.0       | 33.33     | 8.1 | 25.0       | 4.55         |
| A1      | 17 Dec 2024 | 4         | 13.33     | 85.05   | 8.0       | 33.33     | 8.1 | 25.0       | 4.67         |
| A1      | 17 Dec 2024 | 5         | 13.32     | 85.09   | 7.9       | 33.33     | 8.1 | 25.0       | 4.85         |
| A1      | 17 Dec 2024 | 6         | 13.29     | 85.34   | 7.7       | 33.34     | 8.1 | 25.0       | 3.95         |
| A1      | 17 Dec 2024 | 7         | 13.20     | 86.49   | 7.6       | 33.34     | 8.1 | 25.1       | 3.62         |
| A1      | 17 Dec 2024 | 8         | 13.16     | 87.55   | 7.4       | 33.34     | 8.0 | 25.1       | 3.20         |
| A1      | 17 Dec 2024 | 9         | 13.13     | 87.84   | 7.3       | 33.34     | 8.0 | 25.1       | 2.75         |
| A1      | 17 Dec 2024 | 10        | 13.12     | 87.92   | 7.3       | 33.34     | 8.0 | 25.1       | 3.34         |
| A1      | 17 Dec 2024 | 11        | 13.09     | 88.29   | 7.3       | 33.34     | 8.0 | 25.1       | 2.82         |
| A1      | 17 Dec 2024 | 12        | 13.05     | 87.65   | 7.2       | 33.34     | 8.0 | 25.1       | 2.68         |
| A1      | 17 Dec 2024 | 13        | 13.02     | 88.53   | 7.1       | 33.34     | 8.0 | 25.1       | 3.08         |
| A1      | 17 Dec 2024 | 14        | 12.98     | 88.72   | 7.0       | 33.35     | 8.0 | 25.1       | 2.84         |
| A1      | 17 Dec 2024 | 15        | 12.89     | 89.40   | 6.9       | 33.35     | 8.0 | 25.1       | 2.49         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| A1      | 17 Dec 2024 | 16        | 12.71     | 89.88   | 6.6       | 33.36     | 8.0 | 25.2       | 2.51         |
| A1      | 17 Dec 2024 | 17        | 12.49     | 90.10   | 6.2       | 33.38     | 8.0 | 25.2       | 2.22         |
| A1      | 17 Dec 2024 | 18        | 12.18     | 91.72   | 5.8       | 33.40     | 7.9 | 25.3       | 1.69         |
| A1      | 17 Dec 2024 | 19        | 12.27     | 92.31   | 5.7       | 33.40     | 7.9 | 25.3       | 1.73         |
| A1      | 26 Dec 2024 | 1         | 13.17     | 87.65   | 7.6       | 33.34     | 8.0 | 25.1       | 2.70         |
| A1      | 26 Dec 2024 | 2         | 13.17     | 88.03   | 7.6       | 33.34     | 8.0 | 25.1       | 2.87         |
| A1      | 26 Dec 2024 | 3         | 13.16     | 88.41   | 7.6       | 33.34     | 8.0 | 25.1       | 2.99         |
| A1      | 26 Dec 2024 | 4         | 13.15     | 88.48   | 7.5       | 33.34     | 8.0 | 25.1       | 3.00         |
| A1      | 26 Dec 2024 | 5         | 13.14     | 88.95   | 7.4       | 33.33     | 8.0 | 25.1       | 2.94         |
| A1      | 26 Dec 2024 | 6         | 13.07     | 89.24   | 7.3       | 33.34     | 8.0 | 25.1       | 2.60         |
| A1      | 26 Dec 2024 | 7         | 12.81     | 90.11   | 7.0       | 33.34     | 8.0 | 25.1       | 2.53         |
| A1      | 26 Dec 2024 | 8         | 12.68     | 93.04   | 6.8       | 33.34     | 8.0 | 25.2       | 2.49         |
| A1      | 26 Dec 2024 | 9         | 12.72     | 94.47   | 6.6       | 33.34     | 8.0 | 25.2       | 2.26         |
| A1      | 26 Dec 2024 | 10        | 12.54     | 93.80   | 6.4       | 33.35     | 8.0 | 25.2       | 2.07         |
| A1      | 26 Dec 2024 | 11        | 12.48     | 93.72   | 6.3       | 33.35     | 7.9 | 25.2       | 1.50         |
| A1      | 26 Dec 2024 | 12        | 12.44     | 93.23   | 6.2       | 33.36     | 7.9 | 25.2       | 1.37         |
| A1      | 26 Dec 2024 | 13        | 12.46     | 93.21   | 6.2       | 33.35     | 7.9 | 25.2       | 1.35         |
| A1      | 26 Dec 2024 | 14        | 12.38     | 92.98   | 6.1       | 33.37     | 7.9 | 25.2       | 1.26         |
| A1      | 26 Dec 2024 | 15        | 12.36     | 92.55   | 6.0       | 33.37     | 7.9 | 25.3       | 1.22         |
| A1      | 26 Dec 2024 | 16        | 12.20     | 92.23   | 5.8       | 33.40     | 7.9 | 25.3       | 1.21         |
| A1      | 26 Dec 2024 | 17        | 11.98     | 90.50   | 5.5       | 33.43     | 7.9 | 25.4       | 0.92         |
| A1      | 26 Dec 2024 | 18        | 11.85     | 86.77   | 5.2       | 33.45     | 7.8 | 25.4       | 0.69         |
| A1      | 26 Dec 2024 | 19        | 11.82     | 82.72   | 5.1       | 33.46     | 7.8 | 25.4       | 0.56         |
| A1      | 30 Dec 2024 | 1         | 13.11     | 78.18   | 7.9       | 33.37     | 8.0 | 25.1       | 2.79         |
| A1      | 30 Dec 2024 | 2         | 13.12     | 78.17   | 7.9       | 33.37     | 8.0 | 25.1       | 3.04         |
| A1      | 30 Dec 2024 | 3         | 13.07     | 78.37   | 7.8       | 33.38     | 8.0 | 25.1       | 3.13         |
| A1      | 30 Dec 2024 | 4         | 13.03     | 79.31   | 7.7       | 33.38     | 8.0 | 25.1       | 2.84         |
| A1      | 30 Dec 2024 | 5         | 12.97     | 80.13   | 7.5       | 33.39     | 8.0 | 25.2       | 2.69         |
| A1      | 30 Dec 2024 | 6         | 12.86     | 81.14   | 7.3       | 33.40     | 7.9 | 25.2       | 2.31         |
| A1      | 30 Dec 2024 | 7         | 12.79     | 82.22   | 7.0       | 33.39     | 7.9 | 25.2       | 2.00         |
| A1      | 30 Dec 2024 | 8         | 12.38     | 84.40   | 6.5       | 33.41     | 7.9 | 25.3       | 1.46         |
| A1      | 30 Dec 2024 | 9         | 12.21     | 86.06   | 6.0       | 33.40     | 7.9 | 25.3       | 0.96         |
| A1      | 30 Dec 2024 | 10        | 11.97     | 86.90   | 5.7       | 33.41     | 7.8 | 25.4       | 0.81         |
| A1      | 30 Dec 2024 | 11        | 11.72     | 92.02   | 5.4       | 33.43     | 7.8 | 25.4       | 0.68         |
| A1      | 30 Dec 2024 | 12        | 11.61     | 92.40   | 5.2       | 33.44     | 7.8 | 25.4       | 0.56         |
| A1      | 30 Dec 2024 | 13        | 11.53     | 93.48   | 5.0       | 33.45     | 7.8 | 25.5       | 0.48         |
| A1      | 30 Dec 2024 | 14        | 11.50     | 93.04   | 4.9       | 33.47     | 7.8 | 25.5       | 0.44         |
| A1      | 30 Dec 2024 | 15        | 11.51     | 92.41   | 4.8       | 33.48     | 7.8 | 25.5       | 0.40         |
| A1      | 30 Dec 2024 | 16        | 11.44     | 89.24   | 4.6       | 33.52     | 7.8 | 25.5       | 0.38         |
| A1      | 30 Dec 2024 | 17        | 11.45     | 87.31   | 4.5       | 33.52     | 7.8 | 25.5       | 0.34         |
| A1      | 30 Dec 2024 | 18        | 11.46     | 87.47   | 4.4       | 33.52     | 7.8 | 25.5       | 0.35         |
| A1      | 30 Dec 2024 | 19        | 11.43     | 85.84   | 4.3       | 33.54     | 7.8 | 25.6       | 0.32         |
| A1      | 30 Dec 2024 | 20        | 11.42     | 84.83   | 4.2       | 33.55     | 7.8 | 25.6       | 0.32         |
| C4      | 02 Dec 2024 | 1         | 13.53     | 93.44   | 6.8       | 33.34     | 8.0 | 25.0       | 0.89         |
| C4      | 02 Dec 2024 | 2         | 13.51     | 93.68   | 6.8       | 33.34     | 8.0 | 25.0       | 0.86         |
| C4      | 02 Dec 2024 | 3         | 13.48     | 93.43   | 6.8       | 33.34     | 8.0 | 25.0       | 0.85         |
| C4      | 02 Dec 2024 | 4         | 13.44     | 93.60   | 6.8       | 33.34     | 8.0 | 25.0       | 0.89         |
| C4      | 02 Dec 2024 | 5         | 13.40     | 93.59   | 6.8       | 33.34     | 8.0 | 25.0       | 1.04         |
| C4      | 02 Dec 2024 | 6         | 13.37     | 93.42   | 6.7       | 33.34     | 8.0 | 25.0       | 1.10         |
| C4      | 02 Dec 2024 | 7         | 13.36     | 93.33   | 6.6       | 33.34     | 8.0 | 25.0       | 1.15         |
| C4      | 02 Dec 2024 | 8         | 13.31     | 93.98   | 6.4       | 33.35     | 8.0 | 25.1       | 1.20         |
| C4      | 02 Dec 2024 | 9         | 13.02     | 93.89   | 5.9       | 33.37     | 8.0 | 25.1       | 1.09         |
| C4      | 02 Dec 2024 | 10        | 12.96     | 90.81   | 5.6       | 33.36     | 7.9 | 25.1       | 0.84         |
| C4      | 02 Dec 2024 | 11        | 12.93     | 87.35   | 5.4       | 33.35     | 7.9 | 25.1       | 0.62         |
| C4      | 11 Dec 2024 | 1         | 13.12     | 89.39   | 7.6       | 33.35     | 8.1 | 25.1       | 2.95         |
| C4      | 11 Dec 2024 | 2         | 13.13     | 89.22   | 7.6       | 33.35     | 8.1 | 25.1       | 2.51         |
| C4      | 11 Dec 2024 | 3         | 13.00     | 89.67   | 7.4       | 33.36     | 8.1 | 25.1       | 2.62         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| C4      | 11 Dec 2024 | 4         | 12.96     | 90.01   | 7.2       | 33.35     | 8.0 | 25.1       | 2.61         |
| C4      | 11 Dec 2024 | 5         | 12.93     | 90.49   | 7.1       | 33.36     | 8.0 | 25.1       | 2.63         |
| C4      | 11 Dec 2024 | 6         | 12.91     | 91.20   | 7.0       | 33.36     | 8.0 | 25.1       | 2.53         |
| C4      | 11 Dec 2024 | 7         | 12.74     | 91.23   | 6.5       | 33.38     | 8.0 | 25.2       | 2.75         |
| C4      | 11 Dec 2024 | 8         | 12.41     | 88.70   | 5.9       | 33.40     | 7.9 | 25.3       | 1.86         |
| C4      | 11 Dec 2024 | 9         | 12.39     | 84.31   | 5.5       | 33.39     | 7.9 | 25.3       | 1.11         |
| C4      | 17 Dec 2024 | 1         | 13.26     | 83.42   | 7.5       | 33.34     | 8.1 | 25.1       | 1.83         |
| C4      | 17 Dec 2024 | 2         | 13.25     | 84.05   | 7.5       | 33.34     | 8.1 | 25.1       | 2.10         |
| C4      | 17 Dec 2024 | 3         | 13.24     | 85.13   | 7.5       | 33.34     | 8.1 | 25.1       | 2.23         |
| C4      | 17 Dec 2024 | 4         | 13.24     | 85.11   | 7.5       | 33.34     | 8.1 | 25.1       | 2.52         |
| C4      | 17 Dec 2024 | 5         | 13.22     | 85.24   | 7.5       | 33.34     | 8.1 | 25.1       | 2.80         |
| C4      | 17 Dec 2024 | 6         | 13.21     | 85.42   | 7.5       | 33.34     | 8.1 | 25.1       | 3.17         |
| C4      | 17 Dec 2024 | 7         | 13.07     | 85.24   | 7.3       | 33.35     | 8.1 | 25.1       | 3.27         |
| C4      | 17 Dec 2024 | 8         | 13.03     | 85.34   | 7.0       | 33.35     | 8.0 | 25.1       | 2.71         |
| C4      | 17 Dec 2024 | 9         | 12.86     | 87.37   | 6.7       | 33.36     | 8.0 | 25.2       | 2.52         |
| C4      | 17 Dec 2024 | 10        | 12.68     | 89.30   | 6.2       | 33.37     | 8.0 | 25.2       | 1.66         |
| C4      | 17 Dec 2024 | 11        | 12.49     | 88.25   | 5.6       | 33.38     | 7.9 | 25.2       | 1.30         |
| C4      | 17 Dec 2024 | 12        | 12.49     | 86.34   | 5.4       | 33.37     | 7.9 | 25.2       | 1.24         |
| C4      | 26 Dec 2024 | 1         | 13.18     | 40.95   | 8.4       | 33.37     | 8.0 | 25.1       | 1.16         |
| C4      | 26 Dec 2024 | 2         | 13.18     | 40.82   | 8.4       | 33.37     | 8.0 | 25.1       | 1.24         |
| C4      | 26 Dec 2024 | 3         | 13.17     | 40.84   | 8.3       | 33.37     | 8.0 | 25.1       | 1.19         |
| C4      | 26 Dec 2024 | 4         | 13.15     | 41.02   | 8.2       | 33.37     | 8.0 | 25.1       | 1.19         |
| C4      | 26 Dec 2024 | 5         | 13.09     | 42.55   | 7.9       | 33.38     | 8.0 | 25.1       | 1.10         |
| C4      | 26 Dec 2024 | 6         | 13.08     | 48.33   | 7.7       | 33.38     | 8.0 | 25.1       | 1.10         |
| C4      | 26 Dec 2024 | 7         | 13.06     | 52.07   | 7.6       | 33.38     | 8.0 | 25.1       | 1.10         |
| C4      | 26 Dec 2024 | 8         | 13.06     | 50.88   | 7.6       | 33.38     | 8.0 | 25.1       | 1.07         |
| C4      | 26 Dec 2024 | 9         | 12.92     | 52.73   | 7.2       | 33.40     | 8.0 | 25.2       | 1.04         |
| C4      | 26 Dec 2024 | 10        | 12.81     | 51.36   | 6.7       | 33.40     | 8.0 | 25.2       | 0.92         |
| C4      | 26 Dec 2024 | 11        | 12.80     | 49.06   | 6.5       | 33.40     | 8.0 | 25.2       | 0.87         |
| C4      | 30 Dec 2024 | 1         | 12.90     | 80.97   | 7.3       | 33.40     | 8.0 | 25.2       | 1.65         |
| C4      | 30 Dec 2024 | 2         | 12.90     | 80.75   | 7.3       | 33.40     | 8.0 | 25.2       | 1.70         |
| C4      | 30 Dec 2024 | 3         | 12.91     | 80.25   | 7.3       | 33.40     | 8.0 | 25.2       | 1.75         |
| C4      | 30 Dec 2024 | 4         | 12.91     | 80.07   | 7.3       | 33.40     | 8.0 | 25.2       | 1.87         |
| C4      | 30 Dec 2024 | 5         | 12.91     | 79.90   | 7.3       | 33.41     | 8.0 | 25.2       | 1.78         |
| C4      | 30 Dec 2024 | 6         | 12.91     | 79.91   | 7.2       | 33.41     | 7.9 | 25.2       | 1.76         |
| C4      | 30 Dec 2024 | 7         | 12.88     | 80.18   | 7.1       | 33.41     | 7.9 | 25.2       | 1.64         |
| C4      | 30 Dec 2024 | 8         | 12.74     | 80.47   | 6.8       | 33.43     | 7.9 | 25.2       | 1.33         |
| C4      | 30 Dec 2024 | 9         | 12.48     | 80.55   | 6.3       | 33.46     | 7.9 | 25.3       | 1.01         |
| C4      | 30 Dec 2024 | 10        | 12.10     | 81.73   | 5.6       | 33.48     | 7.8 | 25.4       | 0.74         |
| C4      | 30 Dec 2024 | 11        | 12.06     | 77.02   | 5.2       | 33.47     | 7.8 | 25.4       | 0.54         |
| C4      | 30 Dec 2024 | 12        | 12.06     | 70.05   | 5.0       | 33.47     | 7.8 | 25.4       | 0.53         |
| A7      | 02 Dec 2024 | 1         | 13.57     | 94.08   | 7.0       | 33.34     | 8.1 | 25.0       | 1.31         |
| A7      | 02 Dec 2024 | 2         | 13.57     | 94.25   | 7.1       | 33.34     | 8.1 | 25.0       | 1.32         |
| A7      | 02 Dec 2024 | 3         | 13.57     | 94.44   | 7.1       | 33.34     | 8.1 | 25.0       | 1.26         |
| A7      | 02 Dec 2024 | 4         | 13.54     | 94.82   | 7.0       | 33.34     | 8.1 | 25.0       | 1.37         |
| A7      | 02 Dec 2024 | 5         | 13.52     | 95.00   | 7.1       | 33.34     | 8.1 | 25.0       | 1.39         |
| A7      | 02 Dec 2024 | 6         | 13.52     | 95.09   | 7.0       | 33.34     | 8.1 | 25.0       | 1.27         |
| A7      | 02 Dec 2024 | 7         | 13.52     | 95.26   | 7.1       | 33.34     | 8.1 | 25.0       | 1.37         |
| A7      | 02 Dec 2024 | 8         | 13.50     | 94.85   | 7.0       | 33.34     | 8.1 | 25.0       | 1.38         |
| A7      | 02 Dec 2024 | 9         | 13.45     | 95.41   | 6.9       | 33.34     | 8.1 | 25.0       | 1.21         |
| A7      | 02 Dec 2024 | 10        | 13.20     | 95.59   | 6.6       | 33.37     | 8.0 | 25.1       | 0.97         |
| A7      | 02 Dec 2024 | 11        | 12.74     | 95.76   | 6.1       | 33.38     | 8.0 | 25.2       | 0.77         |
| A7      | 02 Dec 2024 | 12        | 12.31     | 95.81   | 5.7       | 33.41     | 8.0 | 25.3       | 0.61         |
| A7      | 02 Dec 2024 | 13        | 12.13     | 95.86   | 5.6       | 33.39     | 7.9 | 25.3       | 0.47         |
| A7      | 02 Dec 2024 | 14        | 12.13     | 95.93   | 5.5       | 33.38     | 7.9 | 25.3       | 0.44         |
| A7      | 02 Dec 2024 | 15        | 12.09     | 96.01   | 5.4       | 33.39     | 7.9 | 25.3       | 0.48         |
| A7      | 02 Dec 2024 | 16        | 12.06     | 95.94   | 5.4       | 33.39     | 7.9 | 25.3       | 0.49         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| A7      | 02 Dec 2024 | 17        | 12.04     | 95.88   | 5.4       | 33.39     | 7.9 | 25.3       | 0.48         |
| A7      | 02 Dec 2024 | 18        | 12.02     | 95.82   | 5.4       | 33.39     | 7.9 | 25.3       | 0.49         |
| A7      | 11 Dec 2024 | 1         | 13.47     | 90.33   | 8.0       | 33.32     | 8.1 | 25.0       | 3.13         |
| A7      | 11 Dec 2024 | 2         | 13.47     | 89.74   | 8.0       | 33.32     | 8.1 | 25.0       | 2.86         |
| A7      | 11 Dec 2024 | 3         | 13.47     | 89.84   | 8.0       | 33.33     | 8.1 | 25.0       | 3.23         |
| A7      | 11 Dec 2024 | 4         | 13.47     | 90.05   | 8.0       | 33.33     | 8.1 | 25.0       | 3.36         |
| A7      | 11 Dec 2024 | 5         | 13.47     | 90.30   | 8.0       | 33.33     | 8.1 | 25.0       | 3.14         |
| A7      | 11 Dec 2024 | 6         | 13.46     | 88.53   | 8.0       | 33.33     | 8.1 | 25.0       | 3.33         |
| A7      | 11 Dec 2024 | 7         | 13.46     | 90.07   | 8.0       | 33.33     | 8.1 | 25.0       | 3.39         |
| A7      | 11 Dec 2024 | 8         | 13.43     | 90.38   | 7.8       | 33.34     | 8.1 | 25.0       | 3.33         |
| A7      | 11 Dec 2024 | 9         | 13.20     | 90.35   | 7.5       | 33.37     | 8.1 | 25.1       | 2.90         |
| A7      | 11 Dec 2024 | 10        | 12.82     | 90.62   | 7.0       | 33.38     | 8.0 | 25.2       | 2.97         |
| A7      | 11 Dec 2024 | 11        | 12.59     | 91.99   | 6.7       | 33.37     | 8.0 | 25.2       | 2.65         |
| A7      | 11 Dec 2024 | 12        | 12.55     | 93.26   | 6.5       | 33.36     | 8.0 | 25.2       | 2.38         |
| A7      | 11 Dec 2024 | 13        | 12.44     | 94.00   | 6.3       | 33.38     | 8.0 | 25.2       | 2.06         |
| A7      | 11 Dec 2024 | 14        | 12.25     | 94.10   | 6.0       | 33.38     | 7.9 | 25.3       | 1.82         |
| A7      | 11 Dec 2024 | 15        | 12.20     | 94.45   | 5.9       | 33.38     | 7.9 | 25.3       | 1.43         |
| A7      | 11 Dec 2024 | 16        | 12.11     | 95.14   | 5.8       | 33.38     | 7.9 | 25.3       | 1.21         |
| A7      | 11 Dec 2024 | 17        | 12.06     | 95.22   | 5.7       | 33.38     | 7.9 | 25.3       | 1.35         |
| A7      | 11 Dec 2024 | 18        | 12.01     | 95.65   | 5.7       | 33.38     | 7.9 | 25.3       | 0.99         |
| A7      | 11 Dec 2024 | 19        | 12.00     | 95.57   | 5.6       | 33.38     | 7.9 | 25.3       | 0.91         |
| A7      | 11 Dec 2024 | 20        | 11.99     | 95.63   | 5.6       | 33.38     | 7.9 | 25.3       | 0.87         |
| A7      | 17 Dec 2024 | 1         | 13.46     | 84.51   | 8.0       | 33.33     | 8.1 | 25.0       | 3.94         |
| A7      | 17 Dec 2024 | 2         | 13.48     | 84.29   | 8.0       | 33.33     | 8.1 | 25.0       | 3.94         |
| A7      | 17 Dec 2024 | 3         | 13.48     | 84.46   | 8.0       | 33.33     | 8.1 | 25.0       | 4.03         |
| A7      | 17 Dec 2024 | 4         | 13.47     | 84.66   | 7.9       | 33.33     | 8.1 | 25.0       | 4.41         |
| A7      | 17 Dec 2024 | 5         | 13.43     | 84.96   | 7.8       | 33.33     | 8.1 | 25.0       | 3.79         |
| A7      | 17 Dec 2024 | 6         | 13.31     | 85.15   | 7.7       | 33.34     | 8.1 | 25.0       | 3.32         |
| A7      | 17 Dec 2024 | 7         | 13.26     | 86.97   | 7.5       | 33.34     | 8.1 | 25.1       | 3.00         |
| A7      | 17 Dec 2024 | 8         | 13.19     | 88.42   | 7.3       | 33.35     | 8.1 | 25.1       | 2.61         |
| A7      | 17 Dec 2024 | 9         | 13.07     | 88.76   | 7.0       | 33.35     | 8.0 | 25.1       | 2.23         |
| A7      | 17 Dec 2024 | 10        | 12.85     | 89.18   | 6.7       | 33.37     | 8.0 | 25.2       | 1.73         |
| A7      | 17 Dec 2024 | 11        | 12.68     | 90.24   | 6.4       | 33.38     | 8.0 | 25.2       | 1.74         |
| A7      | 17 Dec 2024 | 12        | 12.62     | 90.52   | 6.3       | 33.38     | 8.0 | 25.2       | 1.62         |
| A7      | 17 Dec 2024 | 13        | 12.55     | 90.73   | 6.2       | 33.38     | 8.0 | 25.2       | 1.53         |
| A7      | 17 Dec 2024 | 14        | 12.52     | 90.83   | 6.2       | 33.38     | 8.0 | 25.2       | 1.49         |
| A7      | 17 Dec 2024 | 15        | 12.50     | 90.97   | 6.1       | 33.38     | 8.0 | 25.2       | 1.36         |
| A7      | 17 Dec 2024 | 16        | 12.40     | 91.04   | 6.0       | 33.39     | 8.0 | 25.3       | 1.37         |
| A7      | 17 Dec 2024 | 17        | 12.29     | 91.36   | 5.8       | 33.40     | 7.9 | 25.3       | 1.31         |
| A7      | 17 Dec 2024 | 18        | 12.05     | 92.10   | 5.5       | 33.42     | 7.9 | 25.4       | 1.05         |
| A7      | 17 Dec 2024 | 19        | 12.03     | 92.47   | 5.4       | 33.42     | 7.9 | 25.4       | 0.85         |
| A7      | 17 Dec 2024 | 20        | 11.91     | 92.86   | 5.2       | 33.44     | 7.9 | 25.4       | 0.74         |
| A7      | 17 Dec 2024 | 21        | 11.81     | 93.04   | 5.2       | 33.45     | 7.9 | 25.4       | 0.67         |
| A7      | 26 Dec 2024 | 1         | 13.34     | 84.62   | 7.9       | 33.35     | 8.1 | 25.0       | 3.17         |
| A7      | 26 Dec 2024 | 2         | 13.33     | 84.46   | 7.9       | 33.35     | 8.1 | 25.0       | 3.31         |
| A7      | 26 Dec 2024 | 3         | 13.30     | 84.61   | 7.9       | 33.35     | 8.1 | 25.1       | 3.34         |
| A7      | 26 Dec 2024 | 4         | 13.18     | 84.90   | 7.6       | 33.36     | 8.1 | 25.1       | 3.13         |
| A7      | 26 Dec 2024 | 5         | 13.12     | 85.59   | 7.4       | 33.35     | 8.0 | 25.1       | 2.84         |
| A7      | 26 Dec 2024 | 6         | 12.96     | 86.12   | 7.2       | 33.37     | 8.0 | 25.1       | 2.78         |
| A7      | 26 Dec 2024 | 7         | 12.68     | 88.96   | 6.8       | 33.35     | 8.0 | 25.2       | 2.19         |
| A7      | 26 Dec 2024 | 8         | 12.67     | 91.23   | 6.6       | 33.35     | 8.0 | 25.2       | 1.84         |
| A7      | 26 Dec 2024 | 9         | 12.65     | 91.89   | 6.6       | 33.35     | 8.0 | 25.2       | 1.79         |
| A7      | 26 Dec 2024 | 10        | 12.58     | 92.18   | 6.4       | 33.36     | 8.0 | 25.2       | 1.60         |
| A7      | 26 Dec 2024 | 11        | 12.40     | 91.98   | 6.2       | 33.38     | 7.9 | 25.3       | 1.36         |
| A7      | 26 Dec 2024 | 12        | 12.21     | 91.64   | 5.9       | 33.39     | 7.9 | 25.3       | 1.20         |
| A7      | 26 Dec 2024 | 13        | 12.11     | 89.30   | 5.6       | 33.42     | 7.9 | 25.3       | 1.01         |
| A7      | 26 Dec 2024 | 14        | 12.08     | 82.71   | 5.4       | 33.42     | 7.9 | 25.3       | 0.83         |
| A7      | 26 Dec 2024 | 15        | 12.08     | 79.59   | 5.3       | 33.42     | 7.9 | 25.4       | 0.69         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| A7      | 26 Dec 2024 | 16        | 11.94     | 79.08   | 5.2       | 33.45     | 7.9 | 25.4       | 0.63         |
| A7      | 26 Dec 2024 | 17        | 11.86     | 73.69   | 5.0       | 33.46     | 7.8 | 25.4       | 0.64         |
| A7      | 26 Dec 2024 | 18        | 11.82     | 74.14   | 4.9       | 33.47     | 7.8 | 25.4       | 0.62         |
| A7      | 26 Dec 2024 | 19        | 11.72     | 67.40   | 4.7       | 33.49     | 7.8 | 25.5       | 0.52         |
| A7      | 26 Dec 2024 | 20        | 11.74     | 62.31   | 4.7       | 33.48     | 7.8 | 25.5       | 0.46         |
| A7      | 30 Dec 2024 | 1         | 13.15     | 77.85   | 7.9       | 33.37     | 8.0 | 25.1       | 2.71         |
| A7      | 30 Dec 2024 | 2         | 13.16     | 78.32   | 7.9       | 33.37     | 8.0 | 25.1       | 2.85         |
| A7      | 30 Dec 2024 | 3         | 13.15     | 78.25   | 7.9       | 33.37     | 8.0 | 25.1       | 2.95         |
| A7      | 30 Dec 2024 | 4         | 13.12     | 77.92   | 7.8       | 33.37     | 8.0 | 25.1       | 3.32         |
| A7      | 30 Dec 2024 | 5         | 13.10     | 77.84   | 7.7       | 33.37     | 8.0 | 25.1       | 3.33         |
| A7      | 30 Dec 2024 | 6         | 13.04     | 78.55   | 7.6       | 33.38     | 8.0 | 25.1       | 2.91         |
| A7      | 30 Dec 2024 | 7         | 12.90     | 80.24   | 7.4       | 33.40     | 8.0 | 25.2       | 2.73         |
| A7      | 30 Dec 2024 | 8         | 12.90     | 81.32   | 7.3       | 33.39     | 8.0 | 25.2       | 2.73         |
| A7      | 30 Dec 2024 | 9         | 12.77     | 82.34   | 7.0       | 33.41     | 7.9 | 25.2       | 2.33         |
| A7      | 30 Dec 2024 | 10        | 12.43     | 83.46   | 6.4       | 33.43     | 7.9 | 25.3       | 1.66         |
| A7      | 30 Dec 2024 | 11        | 11.99     | 86.91   | 5.8       | 33.42     | 7.9 | 25.4       | 1.12         |
| A7      | 30 Dec 2024 | 12        | 11.69     | 91.21   | 5.4       | 33.46     | 7.8 | 25.5       | 0.71         |
| A7      | 30 Dec 2024 | 13        | 11.60     | 92.34   | 5.1       | 33.45     | 7.8 | 25.5       | 0.49         |
| A7      | 30 Dec 2024 | 14        | 11.54     | 92.19   | 4.9       | 33.51     | 7.8 | 25.5       | 0.45         |
| A7      | 30 Dec 2024 | 15        | 11.42     | 90.90   | 4.6       | 33.53     | 7.8 | 25.6       | 0.39         |
| A7      | 30 Dec 2024 | 16        | 11.42     | 88.18   | 4.3       | 33.55     | 7.8 | 25.6       | 0.32         |
| A7      | 30 Dec 2024 | 17        | 11.42     | 83.42   | 4.2       | 33.56     | 7.8 | 25.6       | 0.34         |
| A7      | 30 Dec 2024 | 18        | 11.42     | 85.77   | 4.1       | 33.56     | 7.8 | 25.6       | 0.31         |
| A7      | 30 Dec 2024 | 19        | 11.42     | 82.01   | 4.1       | 33.57     | 7.8 | 25.6       | 0.30         |
| C5      | 02 Dec 2024 | 1         | 13.80     | 77.52   | 6.7       | 33.36     | 8.0 | 25.0       | 0.38         |
| C5      | 02 Dec 2024 | 2         | 13.81     | 77.58   | 6.7       | 33.36     | 8.0 | 25.0       | 0.37         |
| C5      | 02 Dec 2024 | 3         | 13.78     | 77.21   | 6.7       | 33.37     | 8.0 | 25.0       | 0.40         |
| C5      | 02 Dec 2024 | 4         | 13.68     | 76.86   | 6.6       | 33.37     | 8.0 | 25.0       | 0.48         |
| C5      | 02 Dec 2024 | 5         | 13.63     | 77.78   | 6.5       | 33.36     | 8.0 | 25.0       | 0.65         |
| C5      | 02 Dec 2024 | 6         | 13.57     | 78.71   | 6.5       | 33.36     | 8.0 | 25.0       | 0.72         |
| C5      | 02 Dec 2024 | 7         | 13.50     | 79.62   | 6.4       | 33.37     | 8.0 | 25.0       | 0.63         |
| C5      | 02 Dec 2024 | 8         | 13.40     | 82.93   | 6.2       | 33.37     | 8.0 | 25.0       | 0.50         |
| C5      | 02 Dec 2024 | 9         | 13.25     | 84.99   | 5.9       | 33.37     | 8.0 | 25.1       | 0.47         |
| C5      | 02 Dec 2024 | 10        | 12.89     | 85.00   | 5.6       | 33.38     | 7.9 | 25.2       | 0.39         |
| C5      | 02 Dec 2024 | 11        | 12.85     | 76.43   | 5.4       | 33.37     | 7.9 | 25.2       | 0.38         |
| C5      | 11 Dec 2024 | 1         | 13.46     | 67.02   | 7.4       | 33.36     | 8.0 | 25.0       | 1.31         |
| C5      | 11 Dec 2024 | 2         | 13.37     | 65.33   | 7.2       | 33.37     | 8.0 | 25.1       | 1.50         |
| C5      | 11 Dec 2024 | 3         | 13.29     | 63.32   | 6.8       | 33.37     | 8.0 | 25.1       | 1.65         |
| C5      | 11 Dec 2024 | 4         | 12.88     | 52.34   | 6.3       | 33.40     | 8.0 | 25.2       | 1.60         |
| C5      | 11 Dec 2024 | 5         | 12.55     | 38.50   | 6.0       | 33.39     | 7.9 | 25.2       | 1.42         |
| C5      | 11 Dec 2024 | 6         | 12.42     | 67.98   | 5.8       | 33.38     | 7.9 | 25.3       | 1.11         |
| C5      | 11 Dec 2024 | 7         | 12.39     | 83.01   | 5.7       | 33.38     | 7.9 | 25.3       | 1.02         |
| C5      | 11 Dec 2024 | 8         | 12.34     | 85.82   | 5.6       | 33.38     | 7.9 | 25.3       | 1.06         |
| C5      | 11 Dec 2024 | 9         | 12.30     | 83.65   | 5.5       | 33.38     | 7.9 | 25.3       | 0.97         |
| C5      | 11 Dec 2024 | 10        | 12.30     | 79.49   | 5.5       | 33.38     | 7.9 | 25.3       | 0.86         |
| C5      | 17 Dec 2024 | 1         | 13.47     | 84.12   | 7.3       | 33.34     | 8.0 | 25.0       | 1.13         |
| C5      | 17 Dec 2024 | 2         | 13.47     | 84.03   | 7.3       | 33.34     | 8.0 | 25.0       | 1.15         |
| C5      | 17 Dec 2024 | 3         | 13.42     | 84.01   | 7.2       | 33.35     | 8.0 | 25.0       | 1.18         |
| C5      | 17 Dec 2024 | 4         | 13.38     | 83.87   | 7.1       | 33.35     | 8.0 | 25.0       | 1.37         |
| C5      | 17 Dec 2024 | 5         | 13.34     | 84.09   | 7.0       | 33.35     | 8.0 | 25.0       | 1.37         |
| C5      | 17 Dec 2024 | 6         | 13.30     | 85.07   | 6.8       | 33.35     | 8.0 | 25.1       | 1.18         |
| C5      | 17 Dec 2024 | 7         | 13.28     | 85.44   | 6.7       | 33.35     | 8.0 | 25.1       | 1.03         |
| C5      | 17 Dec 2024 | 8         | 13.19     | 85.76   | 6.6       | 33.36     | 8.0 | 25.1       | 0.97         |
| C5      | 17 Dec 2024 | 9         | 13.06     | 86.18   | 6.3       | 33.36     | 8.0 | 25.1       | 0.92         |
| C5      | 17 Dec 2024 | 10        | 12.78     | 86.47   | 5.8       | 33.38     | 7.9 | 25.2       | 0.75         |
| C5      | 17 Dec 2024 | 11        | 12.68     | 87.51   | 5.5       | 33.37     | 7.9 | 25.2       | 0.64         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| C5      | 26 Dec 2024 | 1         | 13.02     | 71.78   | 7.4       | 33.37     | 8.0 | 25.1       | 1.29         |
|         | 26 Dec 2024 | 2         | 13.02     | 71.03   | 7.4       | 33.37     | 8.0 | 25.1       | 1.39         |
|         | 26 Dec 2024 | 3         | 13.01     | 71.23   | 7.3       | 33.37     | 8.0 | 25.1       | 1.42         |
|         | 26 Dec 2024 | 4         | 13.00     | 72.15   | 7.3       | 33.37     | 8.0 | 25.1       | 1.48         |
|         | 26 Dec 2024 | 5         | 12.95     | 73.17   | 7.1       | 33.37     | 8.0 | 25.1       | 1.56         |
|         | 26 Dec 2024 | 6         | 12.78     | 75.01   | 6.8       | 33.38     | 8.0 | 25.2       | 1.42         |
|         | 26 Dec 2024 | 7         | 12.73     | 80.10   | 6.7       | 33.37     | 8.0 | 25.2       | 1.49         |
|         | 26 Dec 2024 | 8         | 12.71     | 81.49   | 6.6       | 33.37     | 8.0 | 25.2       | 1.43         |
|         | 26 Dec 2024 | 9         | 12.70     | 81.21   | 6.5       | 33.37     | 8.0 | 25.2       | 1.35         |
|         | 26 Dec 2024 | 10        | 12.64     | 80.85   | 6.4       | 33.38     | 8.0 | 25.2       | 1.24         |
|         | 26 Dec 2024 | 11        | 12.51     | 78.42   | 6.2       | 33.39     | 7.9 | 25.2       | 1.35         |
| C5      | 30 Dec 2024 | 1         | 12.85     | 72.80   | 7.2       | 33.40     | 7.9 | 25.2       | 1.15         |
|         | 30 Dec 2024 | 2         | 12.84     | 77.80   | 7.2       | 33.41     | 7.9 | 25.2       | 1.28         |
|         | 30 Dec 2024 | 3         | 12.74     | 78.36   | 7.0       | 33.42     | 7.9 | 25.2       | 1.25         |
|         | 30 Dec 2024 | 4         | 12.72     | 77.33   | 6.9       | 33.41     | 7.9 | 25.2       | 1.14         |
|         | 30 Dec 2024 | 5         | 12.71     | 77.58   | 6.8       | 33.41     | 7.9 | 25.2       | 0.99         |
|         | 30 Dec 2024 | 6         | 12.63     | 78.56   | 6.6       | 33.41     | 7.9 | 25.2       | 0.90         |
|         | 30 Dec 2024 | 7         | 12.61     | 80.44   | 6.4       | 33.41     | 7.9 | 25.2       | 0.94         |
|         | 30 Dec 2024 | 8         | 12.58     | 82.41   | 6.3       | 33.41     | 7.9 | 25.2       | 0.79         |
|         | 30 Dec 2024 | 9         | 12.50     | 82.41   | 6.1       | 33.43     | 7.9 | 25.3       | 0.72         |
|         | 30 Dec 2024 | 10        | 12.10     | 78.94   | 5.7       | 33.47     | 7.8 | 25.4       | 0.75         |
|         | 30 Dec 2024 | 11        | 12.04     | 72.00   | 5.4       | 33.46     | 7.8 | 25.4       | 0.65         |
| A6      | 02 Dec 2024 | 1         | 13.46     | 94.14   | 6.6       | 33.36     | 8.0 | 25.0       | 0.91         |
|         | 02 Dec 2024 | 2         | 13.49     | 94.07   | 6.7       | 33.35     | 8.0 | 25.0       | 0.97         |
|         | 02 Dec 2024 | 3         | 13.39     | 93.94   | 6.4       | 33.37     | 8.0 | 25.0       | 0.93         |
|         | 02 Dec 2024 | 4         | 13.20     | 94.42   | 6.1       | 33.37     | 8.0 | 25.1       | 0.85         |
|         | 02 Dec 2024 | 5         | 13.08     | 94.56   | 6.0       | 33.37     | 8.0 | 25.1       | 0.82         |
|         | 02 Dec 2024 | 6         | 13.00     | 94.82   | 5.9       | 33.37     | 8.0 | 25.1       | 0.77         |
|         | 02 Dec 2024 | 7         | 12.93     | 95.03   | 5.8       | 33.37     | 8.0 | 25.1       | 0.71         |
|         | 02 Dec 2024 | 8         | 12.86     | 95.07   | 5.8       | 33.37     | 7.9 | 25.2       | 0.68         |
|         | 02 Dec 2024 | 9         | 12.73     | 95.23   | 5.7       | 33.38     | 7.9 | 25.2       | 0.62         |
|         | 02 Dec 2024 | 10        | 12.64     | 95.22   | 5.7       | 33.37     | 7.9 | 25.2       | 0.60         |
|         | 02 Dec 2024 | 11        | 12.56     | 95.41   | 5.6       | 33.38     | 7.9 | 25.2       | 0.54         |
|         | 02 Dec 2024 | 12        | 12.39     | 95.37   | 5.6       | 33.38     | 7.9 | 25.3       | 0.52         |
|         | 02 Dec 2024 | 13        | 12.30     | 95.40   | 5.5       | 33.38     | 7.9 | 25.3       | 0.52         |
|         | 02 Dec 2024 | 14        | 12.23     | 95.68   | 5.5       | 33.38     | 7.9 | 25.3       | 0.54         |
|         | 02 Dec 2024 | 15        | 12.20     | 95.73   | 5.4       | 33.38     | 7.9 | 25.3       | 0.53         |
|         | 02 Dec 2024 | 16        | 11.81     | 95.62   | 5.4       | 33.42     | 7.9 | 25.4       | 0.55         |
|         | 02 Dec 2024 | 17        | 11.62     | 95.31   | 5.3       | 33.42     | 7.9 | 25.4       | 0.60         |
|         | 02 Dec 2024 | 18        | 11.46     | 94.77   | 5.2       | 33.44     | 7.9 | 25.5       | 0.68         |
|         | 02 Dec 2024 | 19        | 11.41     | 93.98   | 5.1       | 33.44     | 7.9 | 25.5       | 0.66         |
| A6      | 11 Dec 2024 | 1         | 13.47     | 89.76   | 7.8       | 33.32     | 8.1 | 25.0       | 2.49         |
|         | 11 Dec 2024 | 2         | 13.46     | 90.03   | 7.8       | 33.32     | 8.1 | 25.0       | 2.72         |
|         | 11 Dec 2024 | 3         | 13.45     | 90.00   | 7.8       | 33.33     | 8.1 | 25.0       | 2.99         |
|         | 11 Dec 2024 | 4         | 13.45     | 89.80   | 7.8       | 33.33     | 8.1 | 25.0       | 3.46         |
|         | 11 Dec 2024 | 5         | 13.44     | 89.51   | 7.8       | 33.33     | 8.1 | 25.0       | 4.03         |
|         | 11 Dec 2024 | 6         | 13.44     | 89.86   | 7.8       | 33.33     | 8.1 | 25.0       | 4.07         |
|         | 11 Dec 2024 | 7         | 13.42     | 89.44   | 7.8       | 33.34     | 8.1 | 25.0       | 4.18         |
|         | 11 Dec 2024 | 8         | 13.41     | 88.90   | 7.8       | 33.34     | 8.1 | 25.0       | 3.69         |
|         | 11 Dec 2024 | 9         | 13.40     | 88.81   | 7.8       | 33.34     | 8.1 | 25.0       | 3.96         |
|         | 11 Dec 2024 | 10        | 13.40     | 89.39   | 7.8       | 33.34     | 8.1 | 25.0       | 3.83         |
|         | 11 Dec 2024 | 11        | 13.30     | 90.07   | 7.7       | 33.35     | 8.1 | 25.1       | 3.54         |
|         | 11 Dec 2024 | 12        | 13.16     | 90.36   | 7.5       | 33.35     | 8.1 | 25.1       | 3.87         |
|         | 11 Dec 2024 | 13        | 12.98     | 90.97   | 7.2       | 33.37     | 8.0 | 25.1       | 3.97         |
|         | 11 Dec 2024 | 14        | 12.96     | 91.11   | 7.0       | 33.36     | 8.0 | 25.1       | 3.20         |
|         | 11 Dec 2024 | 15        | 12.86     | 92.08   | 6.9       | 33.36     | 8.0 | 25.2       | 2.94         |
|         | 11 Dec 2024 | 16        | 12.78     | 92.81   | 6.7       | 33.36     | 8.0 | 25.2       | 2.33         |
|         | 11 Dec 2024 | 17        | 12.66     | 93.28   | 6.6       | 33.38     | 8.0 | 25.2       | 2.01         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| A6      | 11 Dec 2024 | 18        | 12.45     | 94.00   | 6.3       | 33.38     | 8.0 | 25.2       | 1.59         |
| A6      | 11 Dec 2024 | 19        | 12.36     | 94.48   | 6.1       | 33.38     | 8.0 | 25.3       | 1.55         |
| A6      | 11 Dec 2024 | 20        | 12.14     | 94.45   | 5.8       | 33.40     | 7.9 | 25.3       | 1.62         |
| A6      | 11 Dec 2024 | 21        | 11.95     | 94.68   | 5.6       | 33.41     | 7.9 | 25.4       | 1.24         |
| A6      | 17 Dec 2024 | 1         | 13.57     | 83.38   | 8.1       | 33.33     | 8.1 | 25.0       | 2.20         |
| A6      | 17 Dec 2024 | 2         | 13.57     | 84.39   | 8.1       | 33.33     | 8.1 | 25.0       | 2.38         |
| A6      | 17 Dec 2024 | 3         | 13.57     | 84.69   | 8.1       | 33.33     | 8.1 | 25.0       | 2.73         |
| A6      | 17 Dec 2024 | 4         | 13.48     | 84.68   | 7.9       | 33.34     | 8.1 | 25.0       | 2.72         |
| A6      | 17 Dec 2024 | 5         | 13.44     | 85.45   | 7.8       | 33.34     | 8.1 | 25.0       | 2.66         |
| A6      | 17 Dec 2024 | 6         | 13.45     | 85.60   | 7.7       | 33.34     | 8.1 | 25.0       | 2.83         |
| A6      | 17 Dec 2024 | 7         | 13.40     | 85.67   | 7.7       | 33.34     | 8.1 | 25.0       | 2.62         |
| A6      | 17 Dec 2024 | 8         | 13.34     | 86.06   | 7.5       | 33.34     | 8.1 | 25.0       | 2.81         |
| A6      | 17 Dec 2024 | 9         | 13.10     | 86.41   | 7.2       | 33.35     | 8.0 | 25.1       | 2.11         |
| A6      | 17 Dec 2024 | 10        | 13.05     | 87.54   | 7.1       | 33.35     | 8.0 | 25.1       | 2.20         |
| A6      | 17 Dec 2024 | 11        | 13.05     | 87.80   | 7.0       | 33.35     | 8.0 | 25.1       | 1.90         |
| A6      | 17 Dec 2024 | 12        | 13.05     | 87.94   | 7.0       | 33.35     | 8.0 | 25.1       | 1.87         |
| A6      | 17 Dec 2024 | 13        | 13.03     | 87.97   | 7.0       | 33.35     | 8.0 | 25.1       | 1.75         |
| A6      | 17 Dec 2024 | 14        | 12.90     | 88.10   | 6.8       | 33.36     | 8.0 | 25.1       | 1.61         |
| A6      | 17 Dec 2024 | 15        | 12.84     | 88.32   | 6.5       | 33.36     | 8.0 | 25.2       | 1.52         |
| A6      | 17 Dec 2024 | 16        | 12.51     | 88.69   | 6.1       | 33.39     | 8.0 | 25.2       | 1.20         |
| A6      | 17 Dec 2024 | 17        | 12.31     | 89.60   | 5.8       | 33.40     | 7.9 | 25.3       | 1.19         |
| A6      | 17 Dec 2024 | 18        | 12.18     | 91.56   | 5.5       | 33.41     | 7.9 | 25.3       | 0.85         |
| A6      | 17 Dec 2024 | 19        | 12.12     | 91.78   | 5.4       | 33.41     | 7.9 | 25.3       | 0.89         |
| A6      | 17 Dec 2024 | 20        | 12.11     | 91.71   | 5.3       | 33.41     | 7.9 | 25.3       | 0.89         |
| A6      | 26 Dec 2024 | 1         | 13.50     | 83.59   | 8.2       | 33.34     | 8.1 | 25.0       | 3.32         |
| A6      | 26 Dec 2024 | 2         | 13.50     | 83.93   | 8.2       | 33.34     | 8.1 | 25.0       | 3.32         |
| A6      | 26 Dec 2024 | 3         | 13.49     | 82.71   | 8.2       | 33.34     | 8.1 | 25.0       | 3.36         |
| A6      | 26 Dec 2024 | 4         | 13.41     | 78.49   | 8.1       | 33.36     | 8.1 | 25.0       | 3.35         |
| A6      | 26 Dec 2024 | 5         | 13.05     | 74.88   | 7.8       | 33.38     | 8.0 | 25.1       | 2.25         |
| A6      | 26 Dec 2024 | 6         | 12.93     | 77.64   | 7.3       | 33.38     | 8.0 | 25.1       | 1.72         |
| A6      | 26 Dec 2024 | 7         | 12.54     | 81.83   | 6.7       | 33.38     | 8.0 | 25.2       | 1.27         |
| A6      | 26 Dec 2024 | 8         | 12.31     | 83.70   | 6.2       | 33.40     | 7.9 | 25.3       | 1.12         |
| A6      | 26 Dec 2024 | 9         | 12.29     | 83.86   | 6.0       | 33.39     | 7.9 | 25.3       | 0.95         |
| A6      | 26 Dec 2024 | 10        | 12.18     | 83.79   | 5.9       | 33.40     | 7.9 | 25.3       | 0.93         |
| A6      | 26 Dec 2024 | 11        | 12.20     | 83.69   | 5.8       | 33.40     | 7.9 | 25.3       | 0.79         |
| A6      | 26 Dec 2024 | 12        | 12.09     | 83.73   | 5.6       | 33.41     | 7.9 | 25.3       | 0.76         |
| A6      | 26 Dec 2024 | 13        | 12.02     | 84.05   | 5.5       | 33.42     | 7.9 | 25.4       | 0.71         |
| A6      | 26 Dec 2024 | 14        | 12.02     | 84.61   | 5.4       | 33.42     | 7.9 | 25.4       | 0.71         |
| A6      | 26 Dec 2024 | 15        | 12.00     | 84.28   | 5.4       | 33.42     | 7.9 | 25.4       | 0.66         |
| A6      | 26 Dec 2024 | 16        | 11.97     | 83.67   | 5.3       | 33.43     | 7.9 | 25.4       | 0.59         |
| A6      | 26 Dec 2024 | 17        | 11.82     | 81.75   | 5.2       | 33.45     | 7.9 | 25.4       | 0.57         |
| A6      | 26 Dec 2024 | 18        | 11.78     | 81.50   | 5.0       | 33.45     | 7.8 | 25.4       | 0.55         |
| A6      | 26 Dec 2024 | 19        | 11.79     | 75.96   | 4.9       | 33.46     | 7.8 | 25.4       | 0.56         |
| A6      | 26 Dec 2024 | 20        | 11.83     | 61.08   | 4.9       | 33.47     | 7.8 | 25.4       | 0.61         |
| A6      | 30 Dec 2024 | 1         | 13.17     | 80.06   | 7.6       | 33.36     | 8.0 | 25.1       | 2.47         |
| A6      | 30 Dec 2024 | 2         | 13.17     | 79.87   | 7.7       | 33.37     | 8.0 | 25.1       | 2.42         |
| A6      | 30 Dec 2024 | 3         | 13.12     | 78.91   | 7.6       | 33.38     | 8.0 | 25.1       | 2.61         |
| A6      | 30 Dec 2024 | 4         | 13.01     | 78.75   | 7.5       | 33.39     | 8.0 | 25.1       | 2.73         |
| A6      | 30 Dec 2024 | 5         | 12.79     | 79.96   | 7.2       | 33.41     | 8.0 | 25.2       | 2.78         |
| A6      | 30 Dec 2024 | 6         | 12.56     | 82.52   | 6.7       | 33.43     | 7.9 | 25.3       | 2.34         |
| A6      | 30 Dec 2024 | 7         | 12.02     | 86.64   | 6.1       | 33.47     | 7.9 | 25.4       | 1.87         |
| A6      | 30 Dec 2024 | 8         | 11.75     | 90.81   | 5.6       | 33.45     | 7.8 | 25.4       | 1.19         |
| A6      | 30 Dec 2024 | 9         | 11.71     | 93.54   | 5.3       | 33.44     | 7.8 | 25.4       | 0.87         |
| A6      | 30 Dec 2024 | 10        | 11.65     | 94.09   | 5.2       | 33.45     | 7.8 | 25.5       | 0.64         |
| A6      | 30 Dec 2024 | 11        | 11.55     | 93.45   | 5.0       | 33.48     | 7.8 | 25.5       | 0.58         |
| A6      | 30 Dec 2024 | 12        | 11.48     | 91.38   | 4.8       | 33.51     | 7.8 | 25.5       | 0.46         |
| A6      | 30 Dec 2024 | 13        | 11.45     | 88.60   | 4.6       | 33.53     | 7.8 | 25.5       | 0.39         |
| A6      | 30 Dec 2024 | 14        | 11.44     | 87.79   | 4.5       | 33.53     | 7.8 | 25.6       | 0.40         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| A6      | 30 Dec 2024 | 15        | 11.42     | 87.22   | 4.4       | 33.55     | 7.8 | 25.6       | 0.37         |
| A6      | 30 Dec 2024 | 16        | 11.41     | 87.07   | 4.3       | 33.56     | 7.8 | 25.6       | 0.35         |
| A6      | 30 Dec 2024 | 17        | 11.43     | 87.41   | 4.3       | 33.56     | 7.8 | 25.6       | 0.39         |
| A6      | 30 Dec 2024 | 18        | 11.41     | 86.04   | 4.2       | 33.58     | 7.8 | 25.6       | 0.38         |
| A6      | 30 Dec 2024 | 19        | 11.42     | 82.30   | 4.0       | 33.59     | 7.8 | 25.6       | 0.35         |
| A6      | 30 Dec 2024 | 20        | 11.42     | 78.16   | 4.0       | 33.59     | 7.7 | 25.6       | 0.33         |
| C6      | 02 Dec 2024 | 1         | 13.55     | 92.93   | 7.0       | 33.36     | 8.1 | 25.0       | 0.76         |
| C6      | 02 Dec 2024 | 2         | 13.55     | 93.04   | 7.0       | 33.36     | 8.1 | 25.0       | 0.82         |
| C6      | 02 Dec 2024 | 3         | 13.54     | 92.83   | 7.0       | 33.36     | 8.1 | 25.0       | 0.88         |
| C6      | 02 Dec 2024 | 4         | 13.52     | 92.75   | 7.0       | 33.36     | 8.1 | 25.0       | 0.91         |
| C6      | 02 Dec 2024 | 5         | 13.49     | 92.60   | 7.0       | 33.36     | 8.1 | 25.0       | 0.79         |
| C6      | 02 Dec 2024 | 6         | 13.42     | 91.22   | 6.7       | 33.37     | 8.0 | 25.0       | 0.60         |
| C6      | 02 Dec 2024 | 7         | 13.13     | 88.98   | 6.3       | 33.38     | 8.0 | 25.1       | 0.43         |
| C6      | 02 Dec 2024 | 8         | 12.71     | 85.89   | 6.0       | 33.39     | 8.0 | 25.2       | 0.37         |
| C6      | 02 Dec 2024 | 9         | 12.65     | 84.21   | 5.7       | 33.38     | 8.0 | 25.2       | 0.29         |
| C6      | 02 Dec 2024 | 10        | 12.64     | 84.24   | 5.7       | 33.38     | 7.9 | 25.2       | 0.26         |
| C6      | 11 Dec 2024 | 1         | 13.16     | 79.96   | 5.6       | 33.16     | 8.0 | 24.9       | 0.93         |
| C6      | 11 Dec 2024 | 2         | 13.14     | 80.17   | 6.8       | 33.29     | 8.0 | 25.0       | 1.08         |
| C6      | 11 Dec 2024 | 3         | 13.13     | 80.62   | 7.2       | 33.37     | 8.0 | 25.1       | 1.31         |
| C6      | 11 Dec 2024 | 4         | 13.13     | 81.38   | 7.2       | 33.37     | 8.0 | 25.1       | 1.31         |
| C6      | 11 Dec 2024 | 5         | 13.12     | 81.57   | 7.1       | 33.37     | 8.0 | 25.1       | 1.39         |
| C6      | 11 Dec 2024 | 6         | 13.07     | 82.50   | 7.0       | 33.38     | 8.0 | 25.1       | 1.36         |
| C6      | 11 Dec 2024 | 7         | 13.00     | 83.55   | 6.9       | 33.38     | 8.0 | 25.1       | 1.20         |
| C6      | 11 Dec 2024 | 8         | 12.98     | 84.04   | 6.7       | 33.38     | 8.0 | 25.1       | 1.20         |
| C6      | 11 Dec 2024 | 9         | 12.60     | 82.67   | 6.2       | 33.41     | 8.0 | 25.2       | 0.99         |
| C6      | 11 Dec 2024 | 10        | 12.51     | 81.92   | 5.8       | 33.38     | 7.9 | 25.2       | 0.72         |
| C6      | 11 Dec 2024 | 11        | 12.44     | 81.29   | 5.7       | 33.39     | 7.9 | 25.3       | 0.74         |
| C6      | 17 Dec 2024 | 1         | 13.37     | 81.27   | 7.6       | 33.34     | 8.0 | 25.0       | 0.86         |
| C6      | 17 Dec 2024 | 2         | 13.37     | 81.17   | 7.6       | 33.34     | 8.0 | 25.0       | 0.90         |
| C6      | 17 Dec 2024 | 3         | 13.35     | 81.06   | 7.6       | 33.34     | 8.0 | 25.0       | 1.17         |
| C6      | 17 Dec 2024 | 4         | 13.32     | 80.65   | 7.5       | 33.34     | 8.0 | 25.0       | 1.36         |
| C6      | 17 Dec 2024 | 5         | 13.30     | 79.88   | 7.3       | 33.34     | 8.0 | 25.0       | 1.11         |
| C6      | 17 Dec 2024 | 6         | 13.19     | 75.14   | 7.0       | 33.36     | 8.0 | 25.1       | 1.13         |
| C6      | 17 Dec 2024 | 7         | 12.90     | 80.54   | 6.3       | 33.37     | 8.0 | 25.2       | 0.71         |
| C6      | 17 Dec 2024 | 8         | 12.69     | 82.22   | 5.7       | 33.38     | 7.9 | 25.2       | 0.54         |
| C6      | 17 Dec 2024 | 9         | 12.44     | 80.78   | 5.3       | 33.38     | 7.9 | 25.3       | 0.70         |
| C6      | 17 Dec 2024 | 10        | 12.39     | 78.56   | 5.1       | 33.38     | 7.9 | 25.3       | 0.86         |
| C6      | 26 Dec 2024 | 1         | 13.19     | 77.35   | 7.8       | 33.37     | 8.0 | 25.1       | 1.97         |
| C6      | 26 Dec 2024 | 2         | 13.18     | 77.40   | 7.8       | 33.37     | 8.0 | 25.1       | 2.10         |
| C6      | 26 Dec 2024 | 3         | 13.17     | 77.66   | 7.7       | 33.37     | 8.0 | 25.1       | 2.07         |
| C6      | 26 Dec 2024 | 4         | 13.14     | 76.99   | 7.5       | 33.37     | 8.0 | 25.1       | 1.95         |
| C6      | 26 Dec 2024 | 5         | 12.95     | 78.68   | 7.1       | 33.39     | 8.0 | 25.2       | 1.57         |
| C6      | 26 Dec 2024 | 6         | 12.72     | 81.21   | 6.7       | 33.40     | 8.0 | 25.2       | 1.21         |
| C6      | 26 Dec 2024 | 7         | 12.56     | 79.62   | 6.4       | 33.40     | 8.0 | 25.2       | 0.97         |
| C6      | 26 Dec 2024 | 8         | 12.55     | 75.95   | 6.2       | 33.39     | 7.9 | 25.2       | 0.89         |
| C6      | 26 Dec 2024 | 9         | 12.56     | 73.73   | 6.2       | 33.39     | 7.9 | 25.2       | 0.92         |
| C6      | 26 Dec 2024 | 10        | 12.55     | 72.72   | 6.2       | 33.39     | 7.9 | 25.2       | 0.91         |
| C6      | 26 Dec 2024 | 11        | 12.55     | 72.31   | 6.2       | 33.39     | 7.9 | 25.2       | 0.82         |
| C6      | 30 Dec 2024 | 1         | 12.95     | 78.36   | 7.7       | 33.40     | 8.0 | 25.2       | 1.54         |
| C6      | 30 Dec 2024 | 2         | 12.87     | 77.34   | 7.7       | 33.41     | 8.0 | 25.2       | 1.59         |
| C6      | 30 Dec 2024 | 3         | 12.85     | 76.37   | 7.6       | 33.41     | 7.9 | 25.2       | 1.52         |
| C6      | 30 Dec 2024 | 4         | 12.86     | 75.81   | 7.6       | 33.40     | 7.9 | 25.2       | 1.58         |
| C6      | 30 Dec 2024 | 5         | 12.85     | 76.16   | 7.6       | 33.41     | 7.9 | 25.2       | 1.52         |
| C6      | 30 Dec 2024 | 6         | 12.84     | 76.37   | 7.5       | 33.41     | 7.9 | 25.2       | 1.53         |
| C6      | 30 Dec 2024 | 7         | 12.75     | 76.28   | 7.2       | 33.42     | 7.9 | 25.2       | 1.33         |
| C6      | 30 Dec 2024 | 8         | 12.54     | 76.69   | 6.8       | 33.45     | 7.9 | 25.3       | 1.07         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| C6      | 30 Dec 2024 | 9         | 12.33     | 77.07   | 6.2       | 33.44     | 7.9 | 25.3       | 0.80         |
|         | 30 Dec 2024 | 10        | 12.41     | 79.27   | 6.0       | 33.43     | 7.9 | 25.3       | 0.69         |
|         | 30 Dec 2024 | 11        | 12.30     | 79.92   | 5.9       | 33.44     | 7.8 | 25.3       | 0.64         |
| C7      | 02 Dec 2024 | 1         | 13.67     | 94.12   | 7.1       | 33.35     | 8.1 | 25.0       | 0.78         |
| C7      | 02 Dec 2024 | 2         | 13.67     | 94.13   | 7.1       | 33.35     | 8.1 | 25.0       | 0.83         |
| C7      | 02 Dec 2024 | 3         | 13.66     | 94.24   | 7.1       | 33.35     | 8.1 | 25.0       | 0.99         |
| C7      | 02 Dec 2024 | 4         | 13.57     | 93.84   | 6.9       | 33.35     | 8.0 | 25.0       | 1.47         |
| C7      | 02 Dec 2024 | 5         | 13.45     | 93.35   | 6.6       | 33.36     | 8.0 | 25.0       | 1.19         |
| C7      | 02 Dec 2024 | 6         | 13.25     | 93.97   | 6.3       | 33.36     | 8.0 | 25.1       | 0.86         |
| C7      | 02 Dec 2024 | 7         | 13.07     | 95.42   | 6.0       | 33.36     | 8.0 | 25.1       | 0.74         |
| C7      | 02 Dec 2024 | 8         | 12.97     | 95.49   | 5.9       | 33.36     | 8.0 | 25.1       | 0.76         |
| C7      | 02 Dec 2024 | 9         | 12.90     | 95.33   | 5.9       | 33.35     | 8.0 | 25.1       | 0.73         |
| C7      | 02 Dec 2024 | 10        | 12.82     | 95.40   | 5.8       | 33.35     | 8.0 | 25.2       | 0.74         |
| C7      | 02 Dec 2024 | 11        | 12.72     | 95.50   | 5.8       | 33.36     | 7.9 | 25.2       | 0.80         |
| C7      | 02 Dec 2024 | 12        | 12.58     | 95.45   | 5.7       | 33.37     | 7.9 | 25.2       | 0.60         |
| C7      | 02 Dec 2024 | 13        | 12.22     | 95.73   | 5.7       | 33.39     | 7.9 | 25.3       | 0.52         |
| C7      | 02 Dec 2024 | 14        | 12.07     | 96.08   | 5.6       | 33.37     | 7.9 | 25.3       | 0.54         |
| C7      | 02 Dec 2024 | 15        | 11.99     | 96.62   | 5.6       | 33.37     | 7.9 | 25.3       | 0.58         |
| C7      | 02 Dec 2024 | 16        | 11.89     | 96.64   | 5.6       | 33.37     | 7.9 | 25.3       | 0.60         |
| C7      | 02 Dec 2024 | 17        | 11.85     | 97.05   | 5.5       | 33.38     | 7.9 | 25.4       | 0.55         |
| C7      | 02 Dec 2024 | 18        | 11.82     | 96.44   | 5.4       | 33.39     | 7.9 | 25.4       | 0.52         |
| C7      | 02 Dec 2024 | 19        | 11.73     | 95.48   | 5.4       | 33.40     | 7.9 | 25.4       | 0.43         |
| C7      | 11 Dec 2024 | 1         | 13.25     | 86.92   | 7.1       | 33.35     | 8.1 | 25.1       | 3.10         |
| C7      | 11 Dec 2024 | 2         | 13.26     | 87.03   | 7.4       | 33.35     | 8.1 | 25.1       | 3.54         |
| C7      | 11 Dec 2024 | 3         | 13.26     | 86.84   | 7.6       | 33.35     | 8.1 | 25.1       | 2.80         |
| C7      | 11 Dec 2024 | 4         | 13.25     | 87.05   | 7.7       | 33.36     | 8.1 | 25.1       | 3.07         |
| C7      | 11 Dec 2024 | 5         | 13.25     | 87.15   | 7.7       | 33.36     | 8.1 | 25.1       | 2.67         |
| C7      | 11 Dec 2024 | 6         | 13.18     | 86.85   | 7.6       | 33.40     | 8.1 | 25.1       | 3.24         |
| C7      | 11 Dec 2024 | 7         | 12.91     | 87.86   | 7.4       | 33.43     | 8.0 | 25.2       | 3.08         |
| C7      | 11 Dec 2024 | 8         | 12.83     | 90.49   | 7.0       | 33.39     | 8.0 | 25.2       | 3.24         |
| C7      | 11 Dec 2024 | 9         | 12.80     | 91.67   | 6.8       | 33.38     | 8.0 | 25.2       | 3.14         |
| C7      | 11 Dec 2024 | 10        | 12.79     | 91.87   | 6.6       | 33.37     | 8.0 | 25.2       | 3.01         |
| C7      | 11 Dec 2024 | 11        | 12.77     | 91.99   | 6.5       | 33.37     | 8.0 | 25.2       | 2.61         |
| C7      | 11 Dec 2024 | 12        | 12.63     | 91.89   | 6.4       | 33.39     | 8.0 | 25.2       | 2.26         |
| C7      | 11 Dec 2024 | 13        | 12.47     | 92.37   | 6.2       | 33.39     | 8.0 | 25.3       | 2.19         |
| C7      | 11 Dec 2024 | 14        | 12.34     | 93.36   | 6.0       | 33.39     | 7.9 | 25.3       | 1.84         |
| C7      | 11 Dec 2024 | 15        | 12.24     | 94.20   | 5.8       | 33.39     | 7.9 | 25.3       | 1.46         |
| C7      | 11 Dec 2024 | 16        | 12.15     | 94.68   | 5.7       | 33.40     | 7.9 | 25.3       | 1.45         |
| C7      | 11 Dec 2024 | 17        | 11.97     | 95.01   | 5.5       | 33.42     | 7.9 | 25.4       | 1.07         |
| C7      | 11 Dec 2024 | 18        | 11.89     | 94.34   | 5.3       | 33.41     | 7.9 | 25.4       | 0.77         |
| C7      | 11 Dec 2024 | 19        | 11.86     | 94.06   | 5.3       | 33.41     | 7.9 | 25.4       | 0.72         |
| C7      | 17 Dec 2024 | 1         | 13.75     | 91.90   | 7.6       | 33.27     | 8.1 | 24.9       | 2.39         |
| C7      | 17 Dec 2024 | 2         | 13.75     | 91.80   | 8.1       | 33.30     | 8.1 | 24.9       | 2.49         |
| C7      | 17 Dec 2024 | 3         | 13.69     | 91.91   | 8.3       | 33.32     | 8.1 | 25.0       | 2.42         |
| C7      | 17 Dec 2024 | 4         | 13.67     | 91.95   | 8.3       | 33.32     | 8.1 | 25.0       | 2.43         |
| C7      | 17 Dec 2024 | 5         | 13.65     | 92.21   | 8.3       | 33.31     | 8.1 | 25.0       | 2.83         |
| C7      | 17 Dec 2024 | 6         | 13.65     | 92.39   | 8.3       | 33.32     | 8.1 | 25.0       | 3.05         |
| C7      | 17 Dec 2024 | 7         | 13.65     | 92.29   | 8.3       | 33.32     | 8.1 | 25.0       | 3.64         |
| C7      | 17 Dec 2024 | 8         | 13.62     | 92.26   | 8.3       | 33.32     | 8.1 | 25.0       | 3.18         |
| C7      | 17 Dec 2024 | 9         | 13.59     | 92.07   | 8.2       | 33.32     | 8.1 | 25.0       | 3.17         |
| C7      | 17 Dec 2024 | 10        | 13.54     | 92.70   | 8.1       | 33.32     | 8.1 | 25.0       | 2.89         |
| C7      | 17 Dec 2024 | 11        | 13.41     | 93.09   | 8.0       | 33.32     | 8.1 | 25.0       | 2.52         |
| C7      | 17 Dec 2024 | 12        | 13.32     | 93.55   | 7.7       | 33.33     | 8.1 | 25.0       | 2.43         |
| C7      | 17 Dec 2024 | 13        | 13.10     | 93.37   | 7.4       | 33.35     | 8.1 | 25.1       | 2.24         |
| C7      | 17 Dec 2024 | 14        | 12.91     | 91.66   | 7.0       | 33.35     | 8.0 | 25.1       | 2.30         |
| C7      | 17 Dec 2024 | 15        | 12.69     | 90.27   | 6.5       | 33.39     | 8.0 | 25.2       | 2.13         |
| C7      | 17 Dec 2024 | 16        | 12.13     | 88.44   | 5.9       | 33.42     | 7.9 | 25.3       | 1.29         |
| C7      | 17 Dec 2024 | 17        | 12.16     | 89.33   | 5.5       | 33.39     | 7.9 | 25.3       | 1.00         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| C7      | 17 Dec 2024 | 18        | 12.16     | 89.73   | 5.5       | 33.40     | 7.9 | 25.3       | 0.98         |
| C7      | 17 Dec 2024 | 19        | 12.08     | 90.40   | 5.4       | 33.40     | 7.9 | 25.3       | 0.82         |
| C7      | 26 Dec 2024 | 2         | 13.25     | 63.14   | 8.1       | 33.36     | 8.0 | 25.1       | 2.85         |
| C7      | 26 Dec 2024 | 3         | 13.24     | 62.69   | 8.1       | 33.36     | 8.0 | 25.1       | 2.87         |
| C7      | 26 Dec 2024 | 4         | 13.23     | 63.34   | 8.0       | 33.36     | 8.0 | 25.1       | 2.72         |
| C7      | 26 Dec 2024 | 5         | 13.16     | 66.25   | 7.8       | 33.37     | 8.0 | 25.1       | 2.28         |
| C7      | 26 Dec 2024 | 6         | 13.07     | 69.45   | 7.7       | 33.37     | 8.0 | 25.1       | 1.86         |
| C7      | 26 Dec 2024 | 7         | 13.01     | 71.28   | 7.6       | 33.37     | 8.0 | 25.1       | 1.64         |
| C7      | 26 Dec 2024 | 8         | 13.03     | 73.85   | 7.5       | 33.37     | 8.0 | 25.1       | 1.58         |
| C7      | 26 Dec 2024 | 9         | 12.95     | 73.68   | 7.3       | 33.38     | 8.0 | 25.1       | 1.42         |
| C7      | 26 Dec 2024 | 10        | 12.86     | 73.50   | 7.2       | 33.39     | 8.0 | 25.2       | 1.28         |
| C7      | 26 Dec 2024 | 11        | 12.81     | 73.41   | 7.0       | 33.39     | 8.0 | 25.2       | 1.27         |
| C7      | 26 Dec 2024 | 12        | 12.63     | 73.50   | 6.7       | 33.40     | 8.0 | 25.2       | 1.15         |
| C7      | 26 Dec 2024 | 13        | 12.48     | 74.08   | 6.4       | 33.40     | 7.9 | 25.3       | 1.08         |
| C7      | 26 Dec 2024 | 14        | 12.30     | 75.65   | 6.1       | 33.41     | 7.9 | 25.3       | 0.86         |
| C7      | 26 Dec 2024 | 15        | 12.31     | 75.56   | 5.9       | 33.40     | 7.9 | 25.3       | 0.83         |
| C7      | 26 Dec 2024 | 16        | 12.01     | 75.12   | 5.6       | 33.44     | 7.9 | 25.4       | 0.79         |
| C7      | 26 Dec 2024 | 17        | 11.91     | 69.80   | 5.3       | 33.44     | 7.9 | 25.4       | 0.78         |
| C7      | 26 Dec 2024 | 18        | 11.96     | 46.44   | 5.2       | 33.43     | 7.8 | 25.4       | 0.78         |
| C7      | 26 Dec 2024 | 19        | 11.88     | 29.67   | 5.1       | 33.45     | 7.8 | 25.4       | 0.75         |
| C7      | 30 Dec 2024 | 1         | 13.13     | 73.22   | 7.8       | 33.37     | 8.0 | 25.1       | 3.26         |
| C7      | 30 Dec 2024 | 2         | 13.13     | 73.57   | 7.8       | 33.37     | 8.0 | 25.1       | 3.56         |
| C7      | 30 Dec 2024 | 3         | 13.10     | 73.85   | 7.8       | 33.37     | 8.0 | 25.1       | 3.35         |
| C7      | 30 Dec 2024 | 4         | 13.05     | 74.41   | 7.7       | 33.38     | 8.0 | 25.1       | 2.65         |
| C7      | 30 Dec 2024 | 5         | 12.94     | 75.89   | 7.5       | 33.38     | 8.0 | 25.2       | 1.87         |
| C7      | 30 Dec 2024 | 6         | 12.88     | 77.59   | 7.2       | 33.38     | 8.0 | 25.2       | 1.48         |
| C7      | 30 Dec 2024 | 7         | 12.73     | 80.32   | 6.9       | 33.38     | 7.9 | 25.2       | 1.22         |
| C7      | 30 Dec 2024 | 8         | 12.54     | 84.57   | 6.6       | 33.39     | 7.9 | 25.2       | 0.94         |
| C7      | 30 Dec 2024 | 9         | 12.39     | 87.79   | 6.2       | 33.39     | 7.9 | 25.3       | 0.84         |
| C7      | 30 Dec 2024 | 10        | 12.05     | 90.04   | 5.8       | 33.42     | 7.9 | 25.4       | 0.65         |
| C7      | 30 Dec 2024 | 11        | 11.98     | 91.40   | 5.6       | 33.42     | 7.8 | 25.4       | 0.59         |
| C7      | 30 Dec 2024 | 12        | 11.97     | 91.60   | 5.5       | 33.42     | 7.8 | 25.4       | 0.62         |
| C7      | 30 Dec 2024 | 13        | 11.96     | 91.00   | 5.4       | 33.43     | 7.8 | 25.4       | 0.52         |
| C7      | 30 Dec 2024 | 14        | 11.79     | 89.13   | 5.1       | 33.46     | 7.8 | 25.4       | 0.46         |
| C7      | 30 Dec 2024 | 15        | 11.65     | 86.27   | 4.9       | 33.48     | 7.8 | 25.5       | 0.48         |
| C7      | 30 Dec 2024 | 16        | 11.64     | 78.81   | 4.7       | 33.48     | 7.8 | 25.5       | 0.60         |
| C7      | 30 Dec 2024 | 17        | 11.64     | 77.36   | 4.6       | 33.48     | 7.8 | 25.5       | 0.59         |
| C7      | 30 Dec 2024 | 18        | 11.64     | 75.47   | 4.6       | 33.48     | 7.8 | 25.5       | 0.59         |
| C7      | 30 Dec 2024 | 19        | 11.64     | 74.14   | 4.6       | 33.48     | 7.8 | 25.5       | 0.57         |
| C8      | 02 Dec 2024 | 1         | 13.64     | 95.45   | 6.8       | 33.34     | 8.0 | 25.0       | 0.64         |
| C8      | 02 Dec 2024 | 2         | 13.64     | 95.21   | 6.8       | 33.34     | 8.0 | 25.0       | 0.70         |
| C8      | 02 Dec 2024 | 3         | 13.63     | 95.15   | 6.8       | 33.34     | 8.0 | 25.0       | 0.69         |
| C8      | 02 Dec 2024 | 4         | 13.64     | 95.23   | 6.8       | 33.34     | 8.0 | 25.0       | 0.68         |
| C8      | 02 Dec 2024 | 5         | 13.42     | 95.39   | 6.6       | 33.36     | 8.0 | 25.0       | 0.71         |
| C8      | 02 Dec 2024 | 6         | 13.14     | 95.54   | 6.3       | 33.36     | 8.0 | 25.1       | 0.62         |
| C8      | 02 Dec 2024 | 7         | 12.87     | 96.06   | 6.1       | 33.37     | 8.0 | 25.2       | 0.53         |
| C8      | 02 Dec 2024 | 8         | 12.65     | 96.82   | 6.0       | 33.36     | 8.0 | 25.2       | 0.54         |
| C8      | 02 Dec 2024 | 9         | 12.58     | 96.84   | 5.9       | 33.36     | 8.0 | 25.2       | 0.55         |
| C8      | 02 Dec 2024 | 10        | 12.47     | 96.74   | 5.8       | 33.37     | 8.0 | 25.2       | 0.55         |
| C8      | 02 Dec 2024 | 11        | 12.27     | 96.77   | 5.7       | 33.37     | 8.0 | 25.3       | 0.51         |
| C8      | 02 Dec 2024 | 12        | 12.15     | 96.86   | 5.7       | 33.37     | 7.9 | 25.3       | 0.51         |
| C8      | 02 Dec 2024 | 13        | 12.03     | 96.79   | 5.6       | 33.38     | 7.9 | 25.3       | 0.48         |
| C8      | 02 Dec 2024 | 14        | 11.99     | 96.63   | 5.6       | 33.37     | 7.9 | 25.3       | 0.46         |
| C8      | 02 Dec 2024 | 15        | 11.94     | 96.33   | 5.5       | 33.38     | 7.9 | 25.3       | 0.42         |
| C8      | 02 Dec 2024 | 16        | 11.90     | 95.50   | 5.4       | 33.39     | 7.9 | 25.4       | 0.39         |
| C8      | 02 Dec 2024 | 17        | 11.86     | 94.59   | 5.4       | 33.39     | 7.9 | 25.4       | 0.38         |
| C8      | 02 Dec 2024 | 18        | 11.81     | 93.86   | 5.3       | 33.39     | 7.9 | 25.4       | 0.39         |
| C8      | 02 Dec 2024 | 19        | 11.80     | 92.13   | 5.3       | 33.39     | 7.9 | 25.4       | 0.39         |

| Station | Date        | Depth (m) | Temp (°C) | XMS (%) | DO (mg/l) | Sal (ppt) | pH  | Dens (s-t) | Chlor (µg/L) |
|---------|-------------|-----------|-----------|---------|-----------|-----------|-----|------------|--------------|
| C8      | 02 Dec 2024 | 20        | 11.80     | 91.00   | 5.3       | 33.39     | 7.9 | 25.4       | 0.41         |
| C8      | 11 Dec 2024 | 1         | 12.98     | 87.10   | 5.8       | 33.33     | 8.0 | 25.1       | 2.49         |
| C8      | 11 Dec 2024 | 2         | 12.98     | 87.41   | 6.0       | 33.35     | 8.0 | 25.1       | 2.29         |
| C8      | 11 Dec 2024 | 3         | 12.98     | 87.48   | 6.4       | 33.36     | 8.0 | 25.1       | 2.35         |
| C8      | 11 Dec 2024 | 4         | 12.94     | 87.55   | 6.8       | 33.39     | 8.0 | 25.2       | 2.45         |
| C8      | 11 Dec 2024 | 5         | 12.88     | 87.74   | 6.9       | 33.40     | 8.0 | 25.2       | 2.75         |
| C8      | 11 Dec 2024 | 6         | 12.85     | 88.01   | 6.8       | 33.41     | 8.0 | 25.2       | 2.30         |
| C8      | 11 Dec 2024 | 7         | 12.78     | 88.54   | 6.7       | 33.42     | 8.0 | 25.2       | 2.20         |
| C8      | 11 Dec 2024 | 8         | 12.70     | 89.02   | 6.6       | 33.40     | 8.0 | 25.2       | 2.49         |
| C8      | 11 Dec 2024 | 9         | 12.60     | 90.96   | 6.5       | 33.37     | 8.0 | 25.2       | 2.39         |
| C8      | 11 Dec 2024 | 10        | 12.61     | 92.09   | 6.4       | 33.37     | 8.0 | 25.2       | 2.62         |
| C8      | 11 Dec 2024 | 11        | 12.56     | 92.51   | 6.3       | 33.37     | 8.0 | 25.2       | 2.47         |
| C8      | 11 Dec 2024 | 12        | 12.42     | 92.52   | 6.1       | 33.38     | 8.0 | 25.2       | 2.05         |
| C8      | 11 Dec 2024 | 13        | 12.20     | 93.46   | 5.8       | 33.40     | 7.9 | 25.3       | 1.49         |
| C8      | 11 Dec 2024 | 14        | 12.02     | 94.09   | 5.6       | 33.41     | 7.9 | 25.3       | 0.94         |
| C8      | 11 Dec 2024 | 15        | 11.95     | 93.48   | 5.4       | 33.41     | 7.9 | 25.4       | 0.88         |
| C8      | 11 Dec 2024 | 16        | 11.82     | 92.85   | 5.3       | 33.41     | 7.9 | 25.4       | 0.64         |
| C8      | 11 Dec 2024 | 17        | 11.66     | 93.12   | 5.3       | 33.42     | 7.9 | 25.4       | 0.56         |
| C8      | 11 Dec 2024 | 18        | 11.57     | 93.77   | 5.2       | 33.42     | 7.9 | 25.4       | 0.61         |
| C8      | 11 Dec 2024 | 19        | 11.56     | 93.57   | 5.2       | 33.42     | 7.9 | 25.4       | 0.62         |
| C8      | 17 Dec 2024 | 1         | 13.65     | 91.12   | 8.4       | 33.32     | 8.1 | 25.0       | 2.43         |
| C8      | 17 Dec 2024 | 2         | 13.65     | 91.45   | 8.3       | 33.32     | 8.1 | 25.0       | 2.39         |
| C8      | 17 Dec 2024 | 3         | 13.60     | 91.38   | 8.3       | 33.33     | 8.1 | 25.0       | 2.43         |
| C8      | 17 Dec 2024 | 4         | 13.57     | 91.30   | 8.2       | 33.32     | 8.1 | 25.0       | 2.65         |
| C8      | 17 Dec 2024 | 5         | 13.45     | 91.76   | 8.1       | 33.32     | 8.1 | 25.0       | 2.49         |
| C8      | 17 Dec 2024 | 6         | 13.35     | 93.10   | 7.9       | 33.32     | 8.1 | 25.0       | 2.18         |
| C8      | 17 Dec 2024 | 7         | 13.24     | 93.43   | 7.8       | 33.31     | 8.1 | 25.0       | 2.34         |
| C8      | 17 Dec 2024 | 8         | 13.09     | 93.89   | 7.6       | 33.30     | 8.1 | 25.1       | 2.11         |
| C8      | 17 Dec 2024 | 9         | 12.98     | 94.19   | 7.5       | 33.30     | 8.1 | 25.1       | 2.09         |
| C8      | 17 Dec 2024 | 10        | 13.03     | 94.10   | 7.5       | 33.29     | 8.1 | 25.1       | 2.64         |
| C8      | 17 Dec 2024 | 11        | 13.02     | 94.55   | 7.4       | 33.30     | 8.1 | 25.1       | 2.27         |
| C8      | 17 Dec 2024 | 12        | 12.82     | 94.78   | 7.3       | 33.31     | 8.1 | 25.1       | 2.59         |
| C8      | 17 Dec 2024 | 13        | 12.68     | 95.10   | 7.0       | 33.31     | 8.0 | 25.1       | 2.98         |
| C8      | 17 Dec 2024 | 14        | 12.45     | 95.15   | 6.7       | 33.31     | 8.0 | 25.2       | 2.06         |
| C8      | 17 Dec 2024 | 15        | 12.41     | 95.50   | 6.6       | 33.32     | 8.0 | 25.2       | 2.27         |
| C8      | 17 Dec 2024 | 16        | 12.45     | 95.44   | 6.5       | 33.31     | 8.0 | 25.2       | 1.85         |
| C8      | 17 Dec 2024 | 17        | 12.25     | 95.36   | 6.3       | 33.35     | 8.0 | 25.3       | 1.50         |
| C8      | 17 Dec 2024 | 18        | 12.23     | 94.71   | 6.1       | 33.36     | 8.0 | 25.3       | 1.58         |
| C8      | 17 Dec 2024 | 19        | 12.14     | 93.83   | 5.9       | 33.38     | 7.9 | 25.3       | 1.37         |
| C8      | 17 Dec 2024 | 20        | 12.02     | 92.99   | 5.8       | 33.40     | 7.9 | 25.3       | 1.19         |
| C8      | 26 Dec 2024 | 1         | 13.24     | 75.62   | 8.2       | 33.35     | 8.1 | 25.1       | 2.94         |
| C8      | 26 Dec 2024 | 2         | 13.24     | 75.52   | 8.2       | 33.35     | 8.1 | 25.1       | 3.14         |
| C8      | 26 Dec 2024 | 3         | 13.24     | 75.68   | 8.2       | 33.35     | 8.1 | 25.1       | 3.21         |
| C8      | 26 Dec 2024 | 4         | 13.24     | 75.29   | 8.2       | 33.35     | 8.1 | 25.1       | 3.36         |
| C8      | 26 Dec 2024 | 5         | 13.24     | 75.54   | 8.1       | 33.35     | 8.1 | 25.1       | 3.36         |
| C8      | 26 Dec 2024 | 6         | 13.23     | 75.18   | 8.1       | 33.35     | 8.1 | 25.1       | 3.24         |
| C8      | 26 Dec 2024 | 7         | 13.14     | 74.95   | 7.8       | 33.36     | 8.1 | 25.1       | 2.63         |
| C8      | 26 Dec 2024 | 8         | 13.14     | 74.43   | 7.6       | 33.36     | 8.0 | 25.1       | 2.15         |
| C8      | 26 Dec 2024 | 9         | 13.02     | 73.44   | 7.4       | 33.37     | 8.0 | 25.1       | 1.91         |
| C8      | 26 Dec 2024 | 10        | 12.96     | 72.92   | 7.2       | 33.37     | 8.0 | 25.1       | 1.56         |
| C8      | 26 Dec 2024 | 11        | 12.88     | 72.37   | 7.1       | 33.38     | 8.0 | 25.2       | 1.47         |
| C8      | 26 Dec 2024 | 12        | 12.82     | 68.14   | 6.9       | 33.38     | 8.0 | 25.2       | 1.30         |
| C8      | 26 Dec 2024 | 13        | 12.57     | 64.36   | 6.5       | 33.40     | 8.0 | 25.2       | 1.14         |
| C8      | 26 Dec 2024 | 14        | 12.47     | 64.44   | 6.0       | 33.40     | 7.9 | 25.3       | 0.98         |
| C8      | 26 Dec 2024 | 15        | 12.15     | 60.09   | 5.7       | 33.42     | 7.9 | 25.3       | 0.91         |
| C8      | 26 Dec 2024 | 16        | 11.93     | 38.46   | 5.2       | 33.44     | 7.9 | 25.4       | 0.87         |
| C8      | 26 Dec 2024 | 17        | 11.85     | 34.87   | 4.9       | 33.45     | 7.8 | 25.4       | 1.04         |
| C8      | 26 Dec 2024 | 18        | 11.78     | 20.39   | 4.8       | 33.45     | 7.8 | 25.4       | 1.07         |

| <b>Station</b> | <b>Date</b> | <b>Depth (m)</b> | <b>Temp (°C)</b> | <b>XMS (%)</b> | <b>DO (mg/l)</b> | <b>Sal (ppt)</b> | <b>pH</b> | <b>Dens (s-t)</b> | <b>Chlor (µg/L)</b> |
|----------------|-------------|------------------|------------------|----------------|------------------|------------------|-----------|-------------------|---------------------|
| C8             | 26 Dec 2024 | 19               | 11.77            | 7.46           | 4.7              | 33.45            | 7.8       | 25.4              | 1.18                |
| C8             | 30 Dec 2024 | 1                | 13.06            | 68.27          | 7.5              | 33.37            | 8.0       | 25.1              | 4.40                |
| C8             | 30 Dec 2024 | 2                | 12.99            | 69.17          | 7.5              | 33.38            | 8.0       | 25.1              | 4.32                |
| C8             | 30 Dec 2024 | 3                | 12.83            | 71.52          | 7.5              | 33.39            | 7.9       | 25.2              | 3.08                |
| C8             | 30 Dec 2024 | 4                | 12.65            | 70.44          | 7.3              | 33.40            | 7.9       | 25.2              | 2.03                |
| C8             | 30 Dec 2024 | 5                | 12.62            | 65.54          | 7.1              | 33.40            | 7.9       | 25.2              | 1.33                |
| C8             | 30 Dec 2024 | 6                | 12.52            | 66.95          | 6.9              | 33.41            | 7.9       | 25.3              | 1.04                |
| C8             | 30 Dec 2024 | 7                | 12.46            | 67.26          | 6.5              | 33.41            | 7.9       | 25.3              | 0.91                |
| C8             | 30 Dec 2024 | 8                | 12.00            | 62.52          | 6.0              | 33.48            | 7.9       | 25.4              | 0.81                |
| C8             | 30 Dec 2024 | 9                | 11.76            | 62.21          | 5.4              | 33.46            | 7.8       | 25.4              | 0.70                |
| C8             | 30 Dec 2024 | 10               | 11.71            | 74.49          | 5.0              | 33.46            | 7.8       | 25.4              | 0.62                |
| C8             | 30 Dec 2024 | 11               | 11.83            | 72.85          | 5.0              | 33.46            | 7.8       | 25.4              | 0.55                |
| C8             | 30 Dec 2024 | 12               | 11.59            | 76.89          | 4.8              | 33.49            | 7.8       | 25.5              | 0.55                |
| C8             | 30 Dec 2024 | 13               | 11.58            | 79.53          | 4.7              | 33.49            | 7.8       | 25.5              | 0.48                |
| C8             | 30 Dec 2024 | 14               | 11.57            | 78.35          | 4.6              | 33.49            | 7.8       | 25.5              | 0.42                |
| C8             | 30 Dec 2024 | 15               | 11.57            | 76.63          | 4.5              | 33.50            | 7.8       | 25.5              | 0.45                |
| C8             | 30 Dec 2024 | 16               | 11.57            | 74.77          | 4.5              | 33.50            | 7.8       | 25.5              | 0.47                |
| C8             | 30 Dec 2024 | 17               | 11.55            | 72.08          | 4.4              | 33.51            | 7.8       | 25.5              | 0.48                |
| C8             | 30 Dec 2024 | 18               | 11.55            | 66.24          | 4.4              | 33.51            | 7.8       | 25.5              | 0.51                |
| C8             | 30 Dec 2024 | 19               | 11.55            | 59.31          | 4.4              | 33.51            | 7.8       | 25.5              | 0.59                |
| C8             | 30 Dec 2024 | 20               | 11.55            | 60.18          | 4.4              | 33.51            | 7.8       | 25.5              | 0.61                |

NA = not available

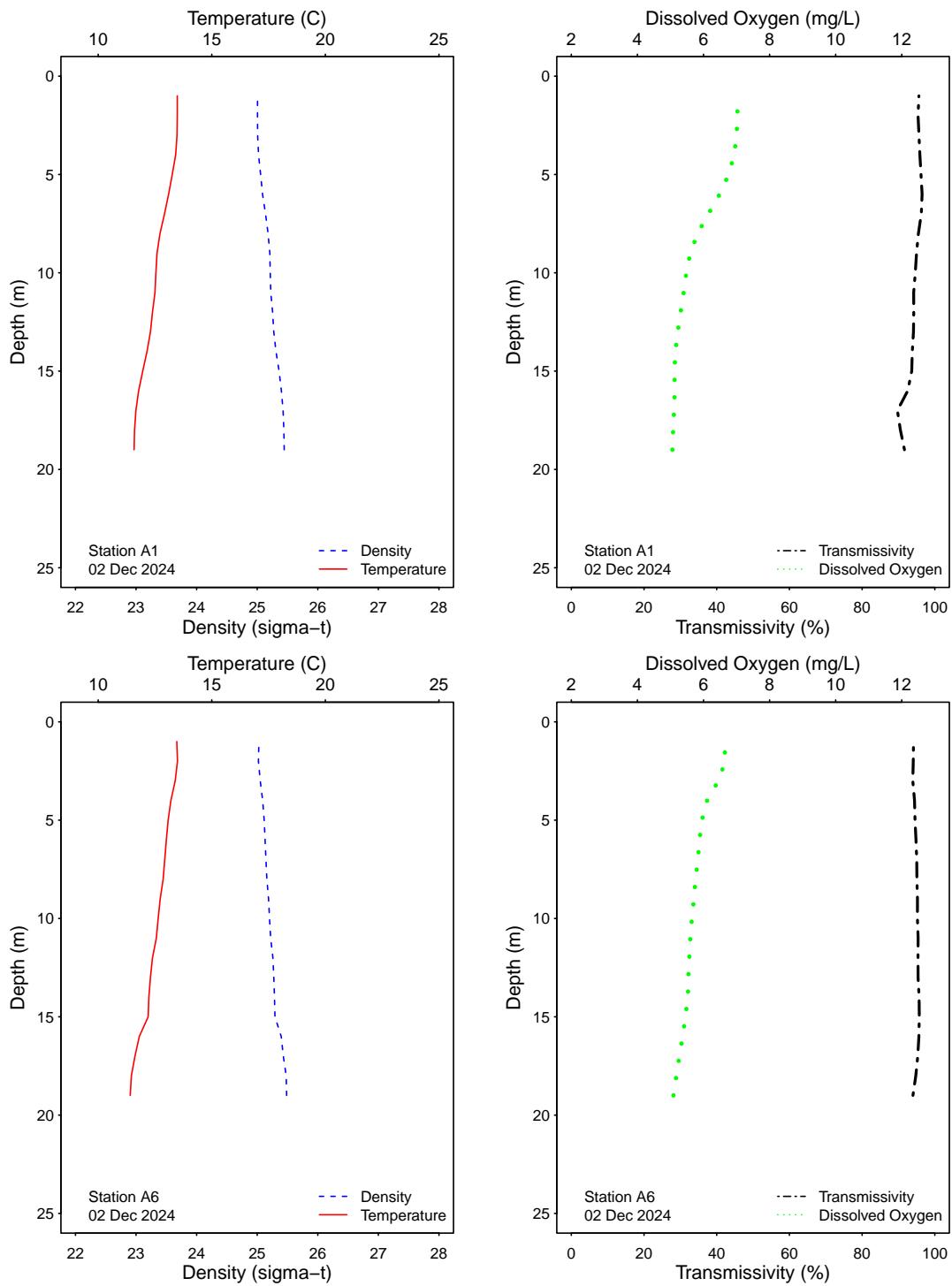


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

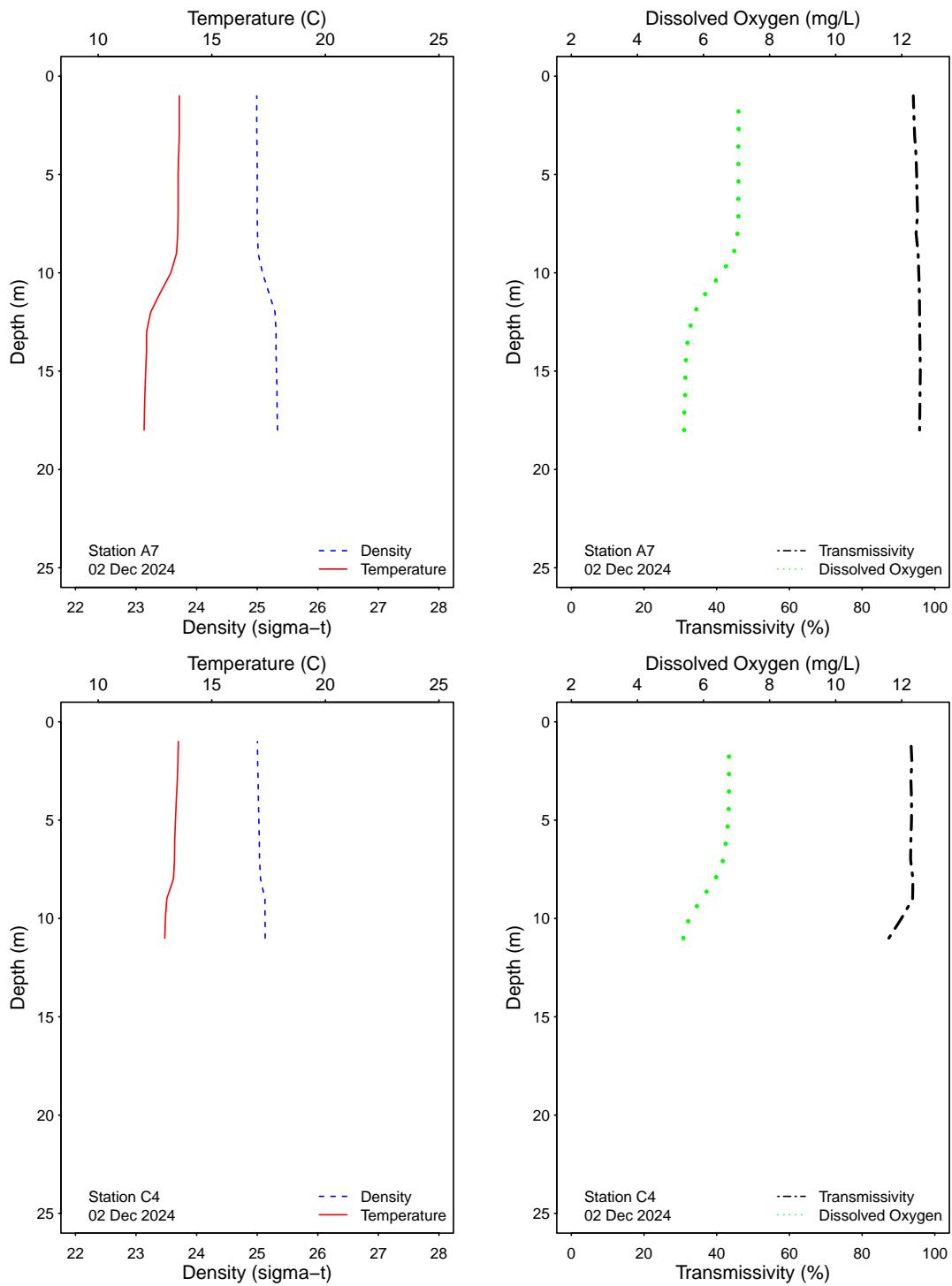


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

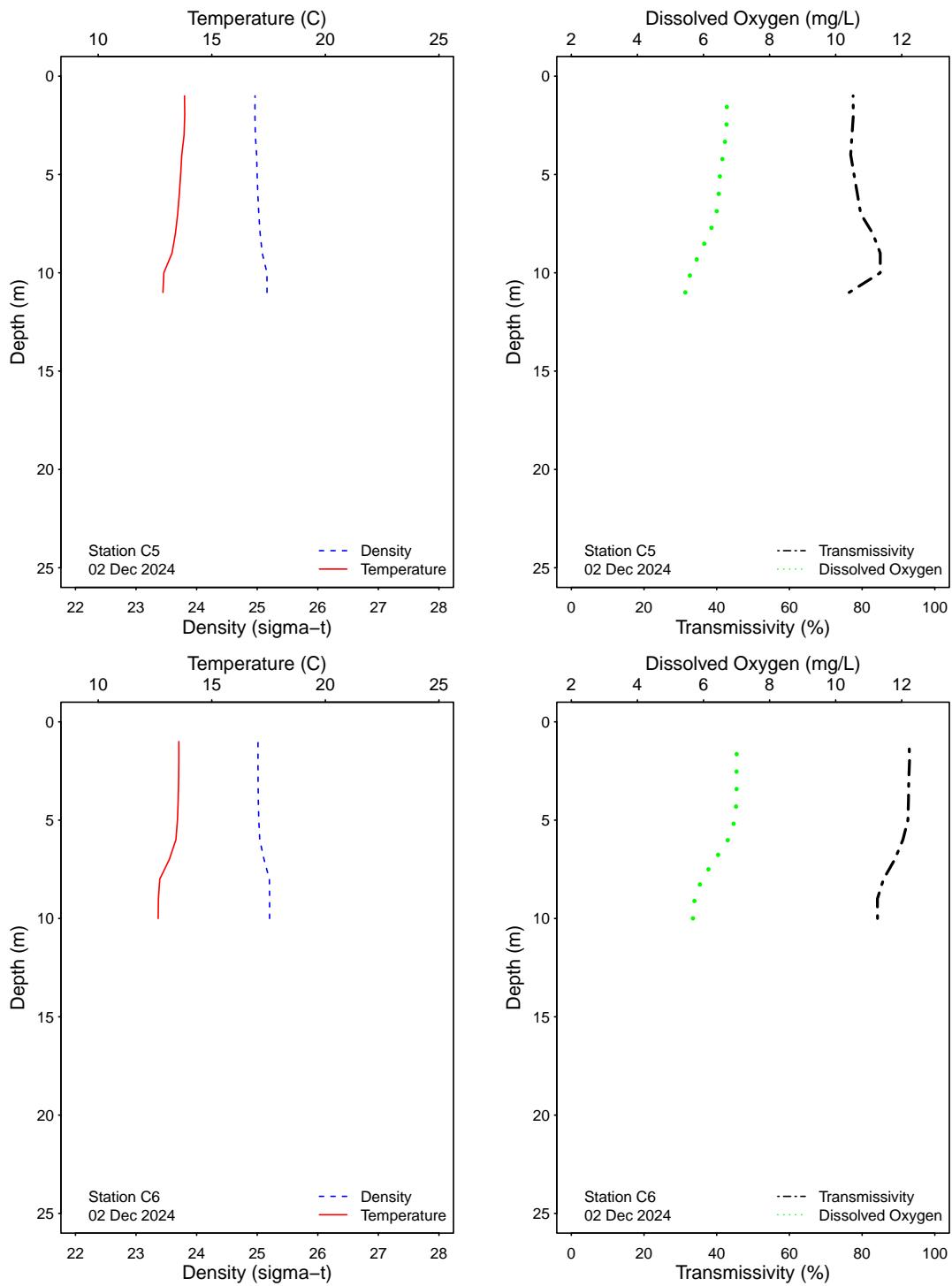


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

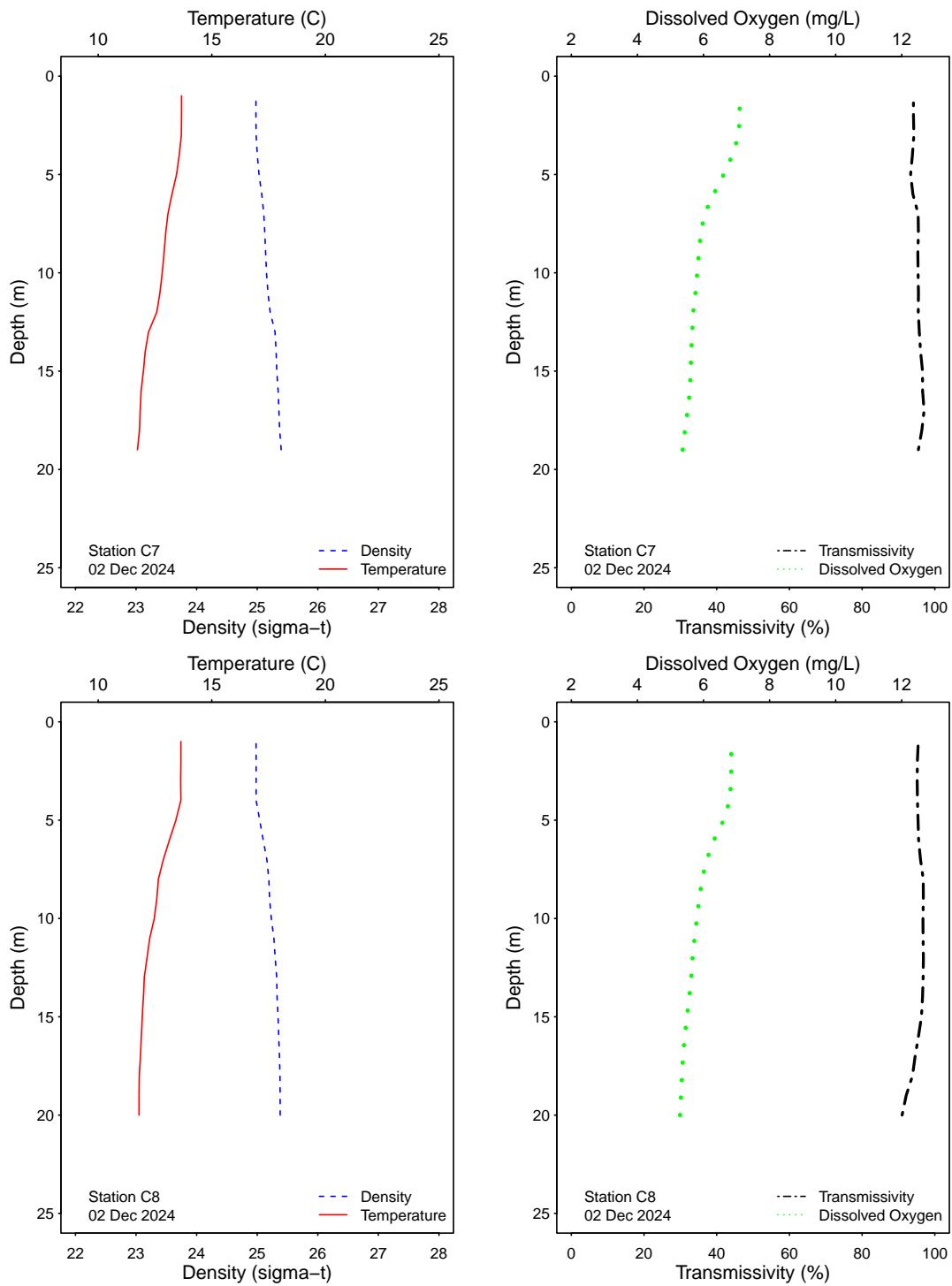


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

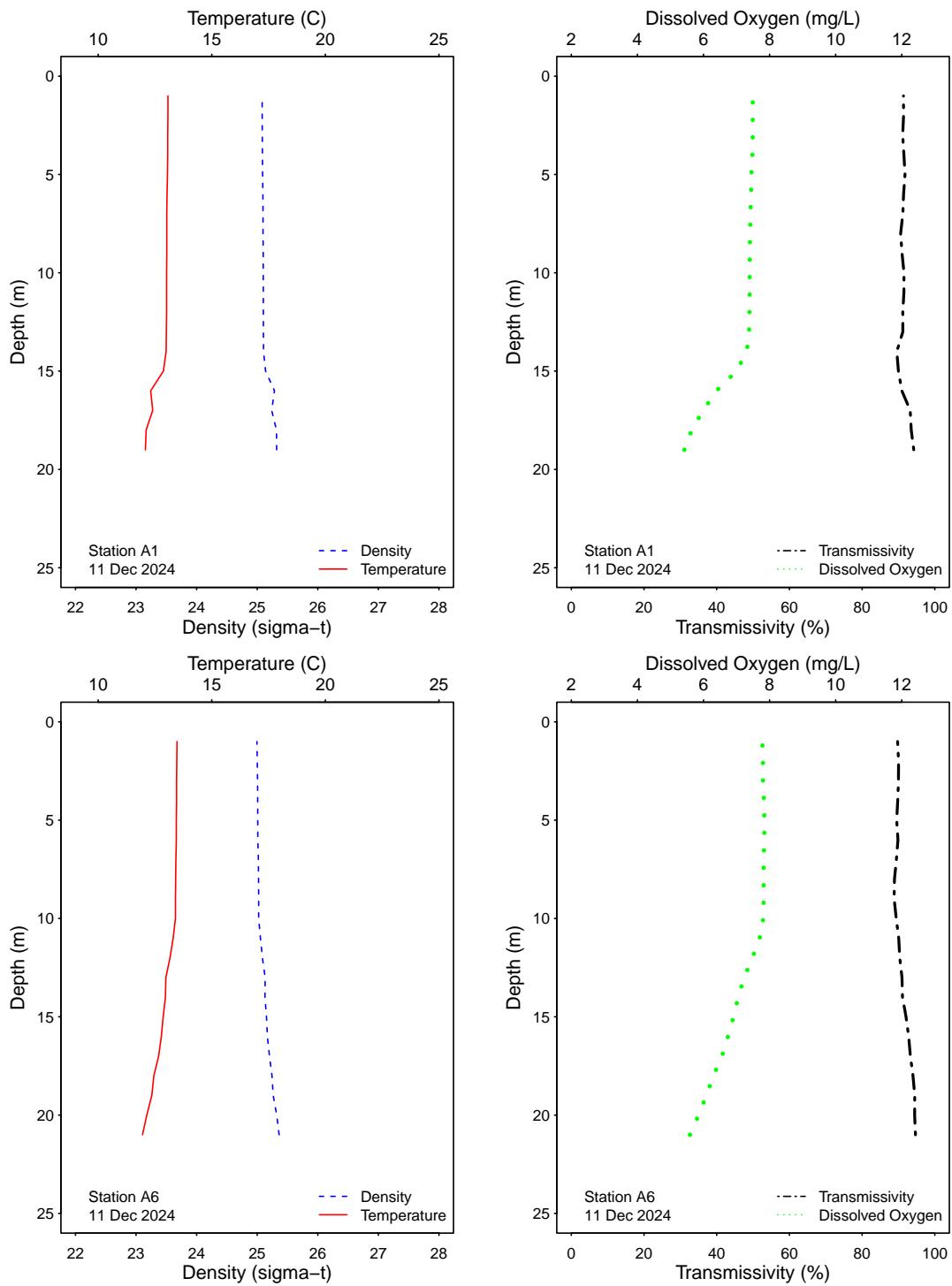


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

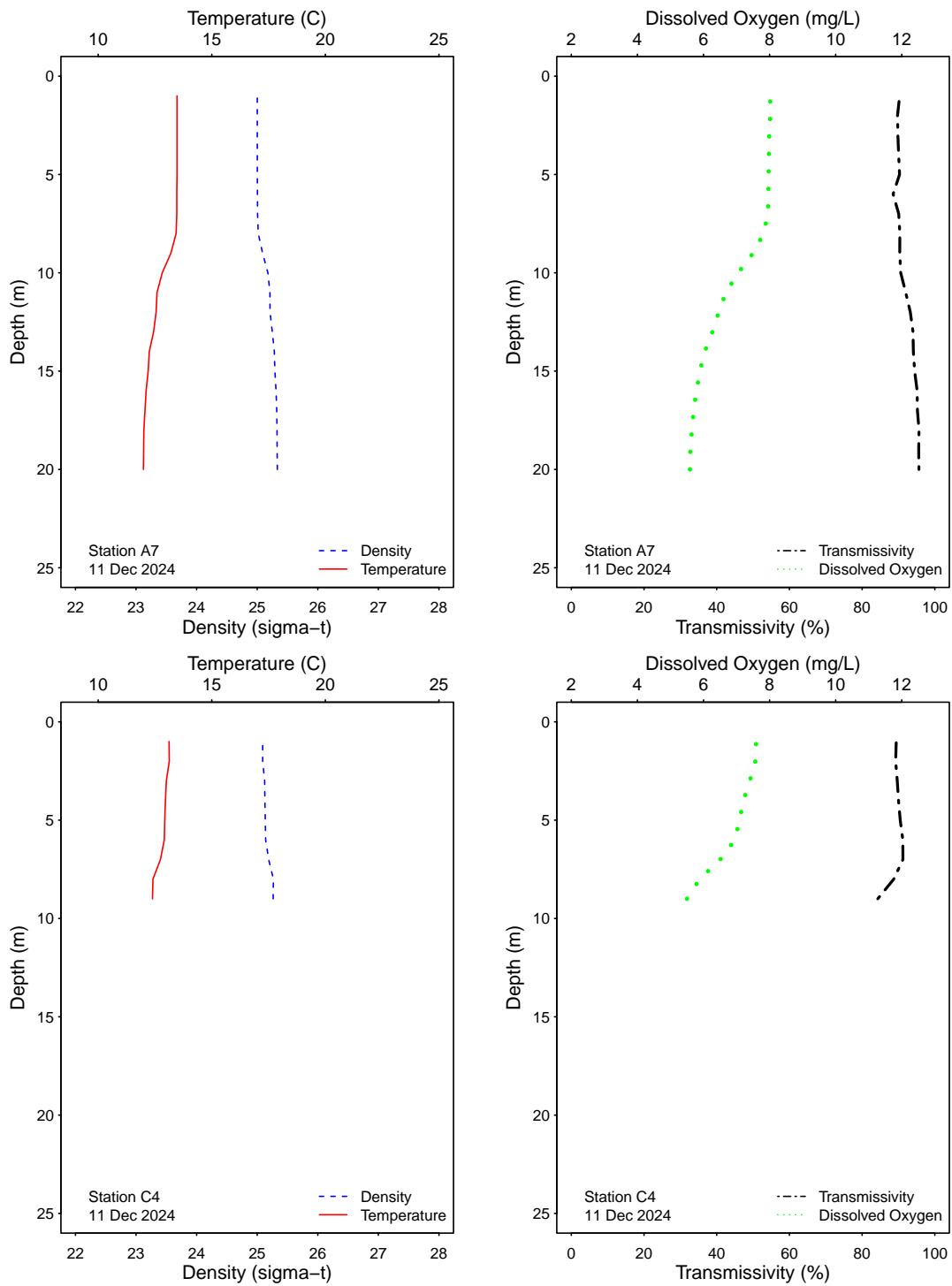


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

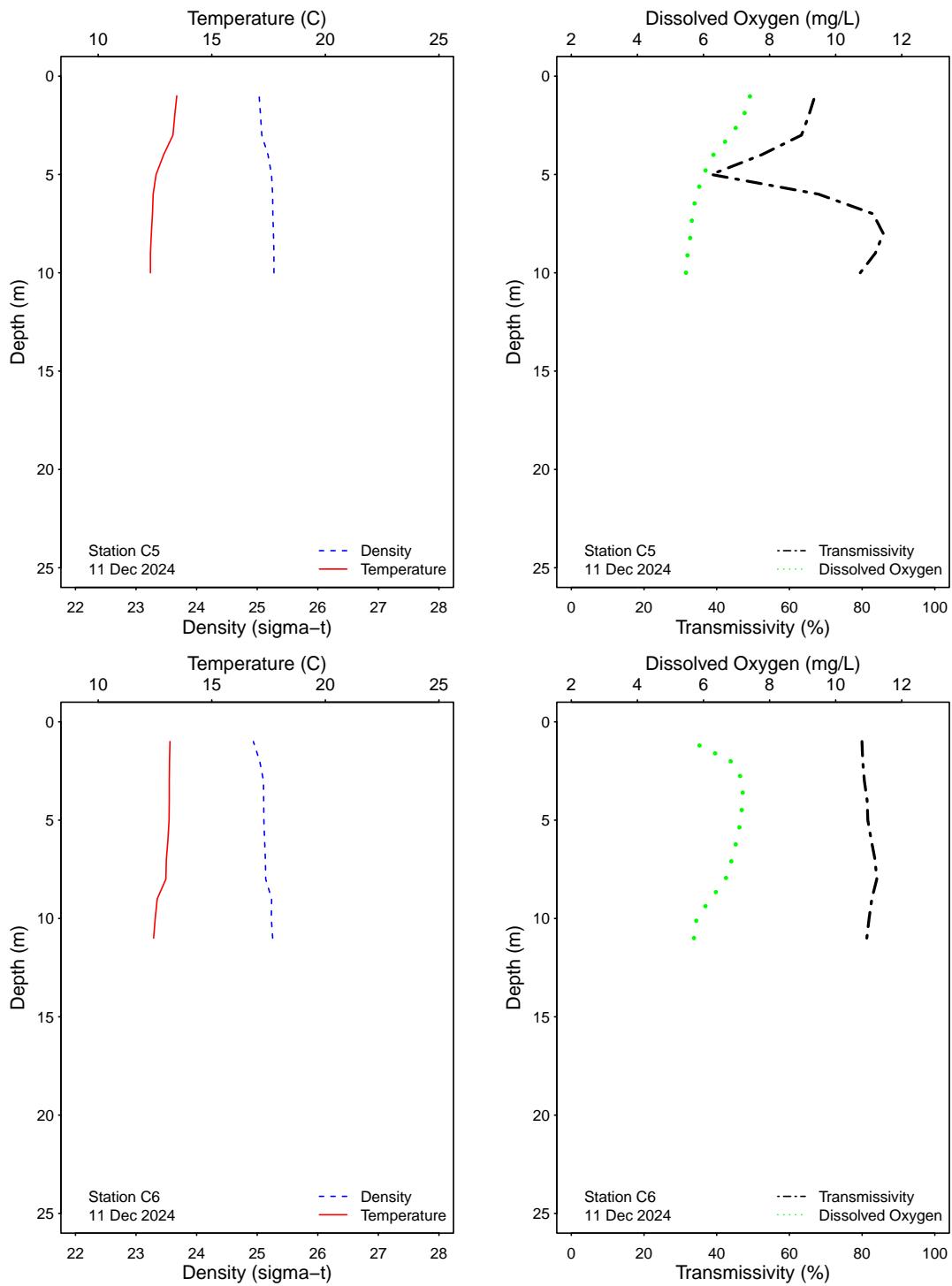


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

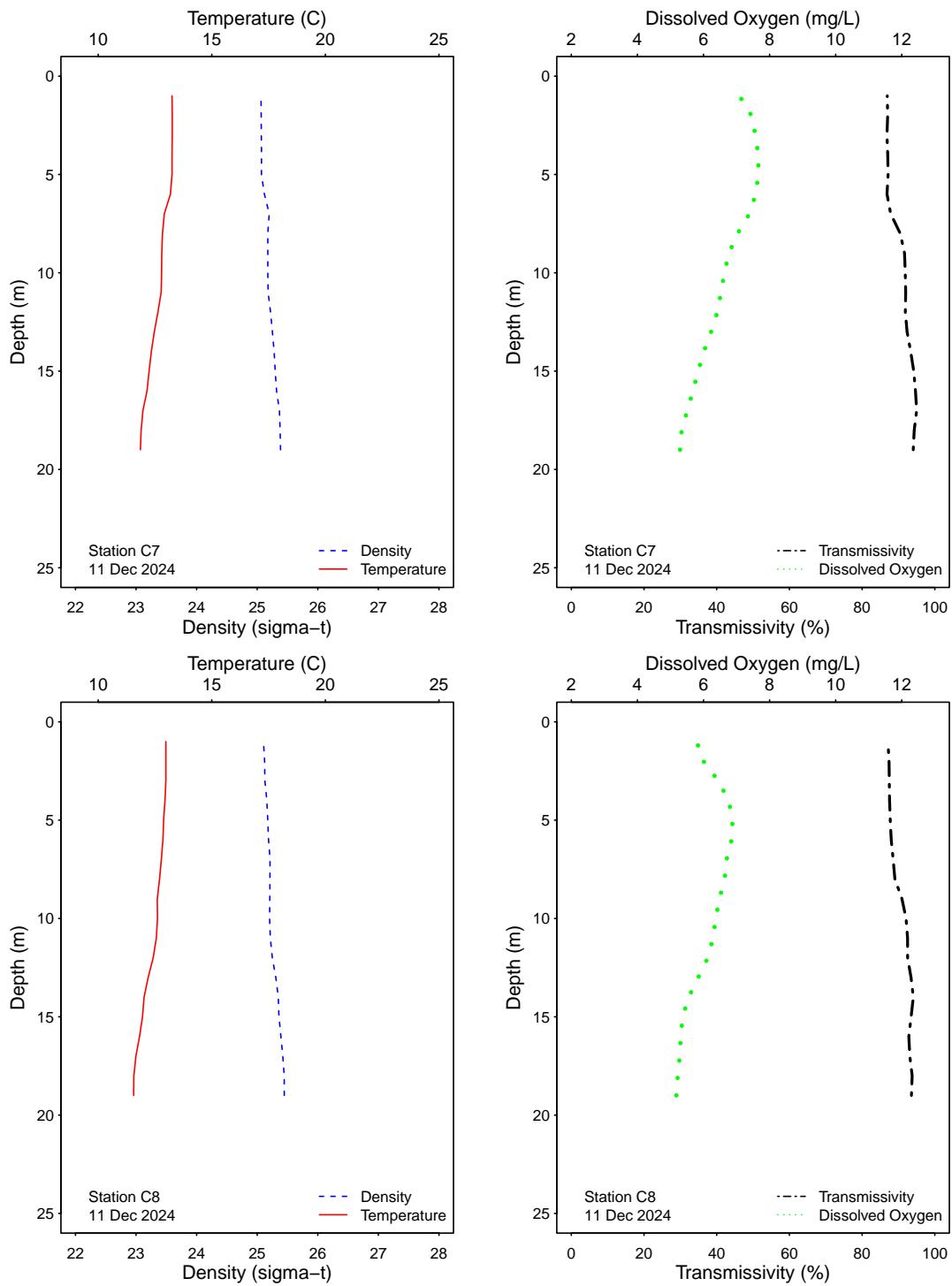


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

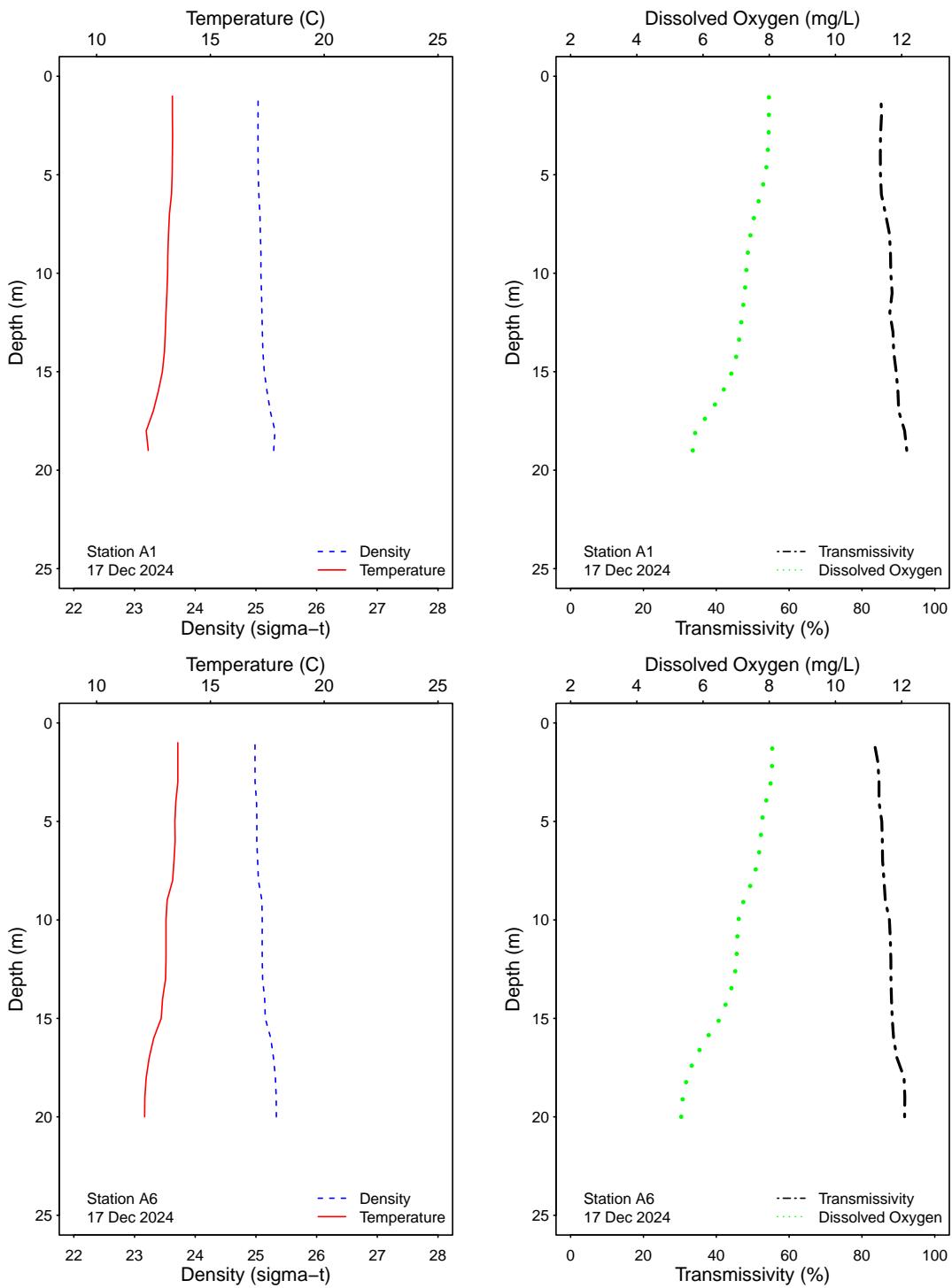


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

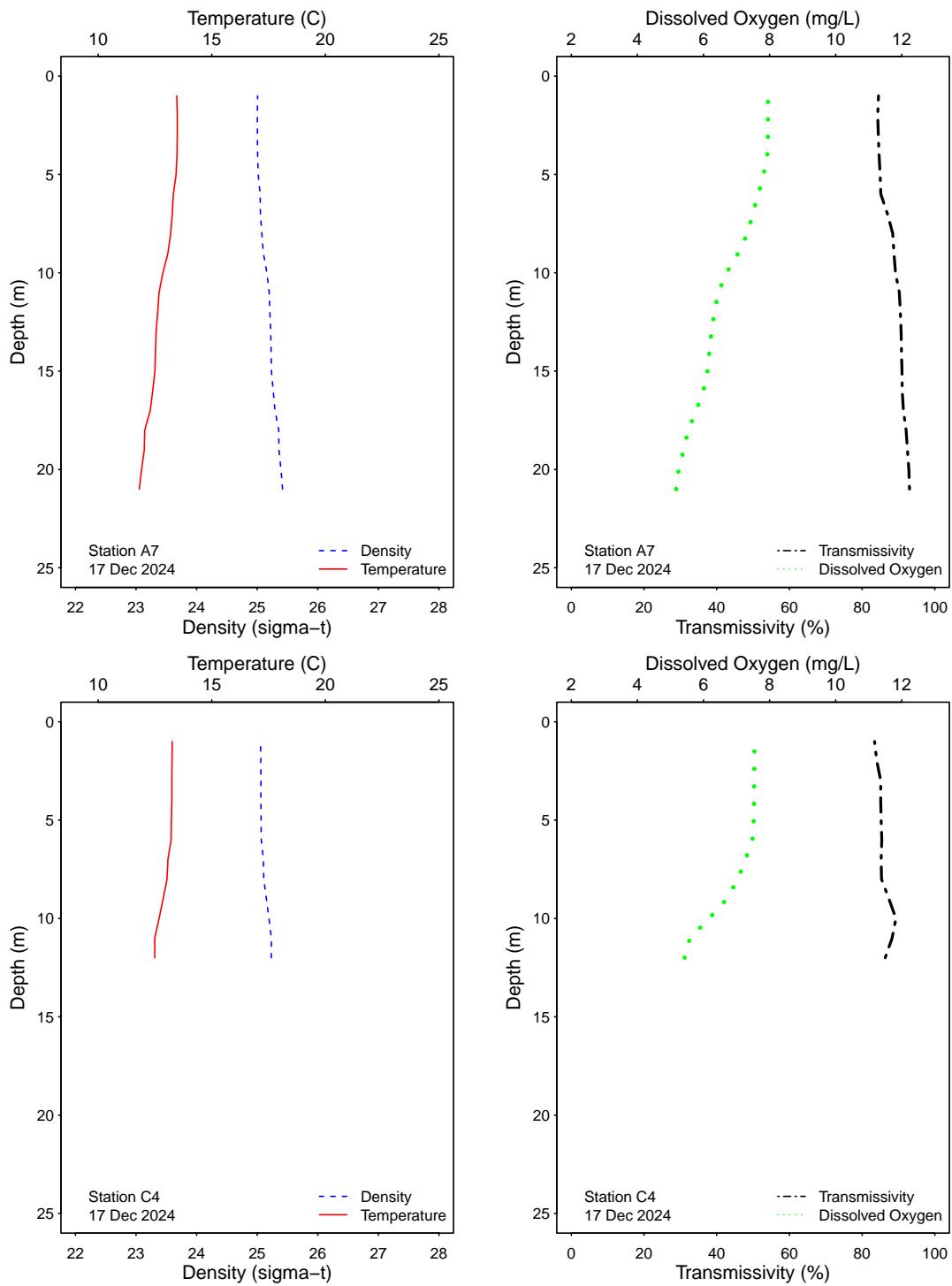


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

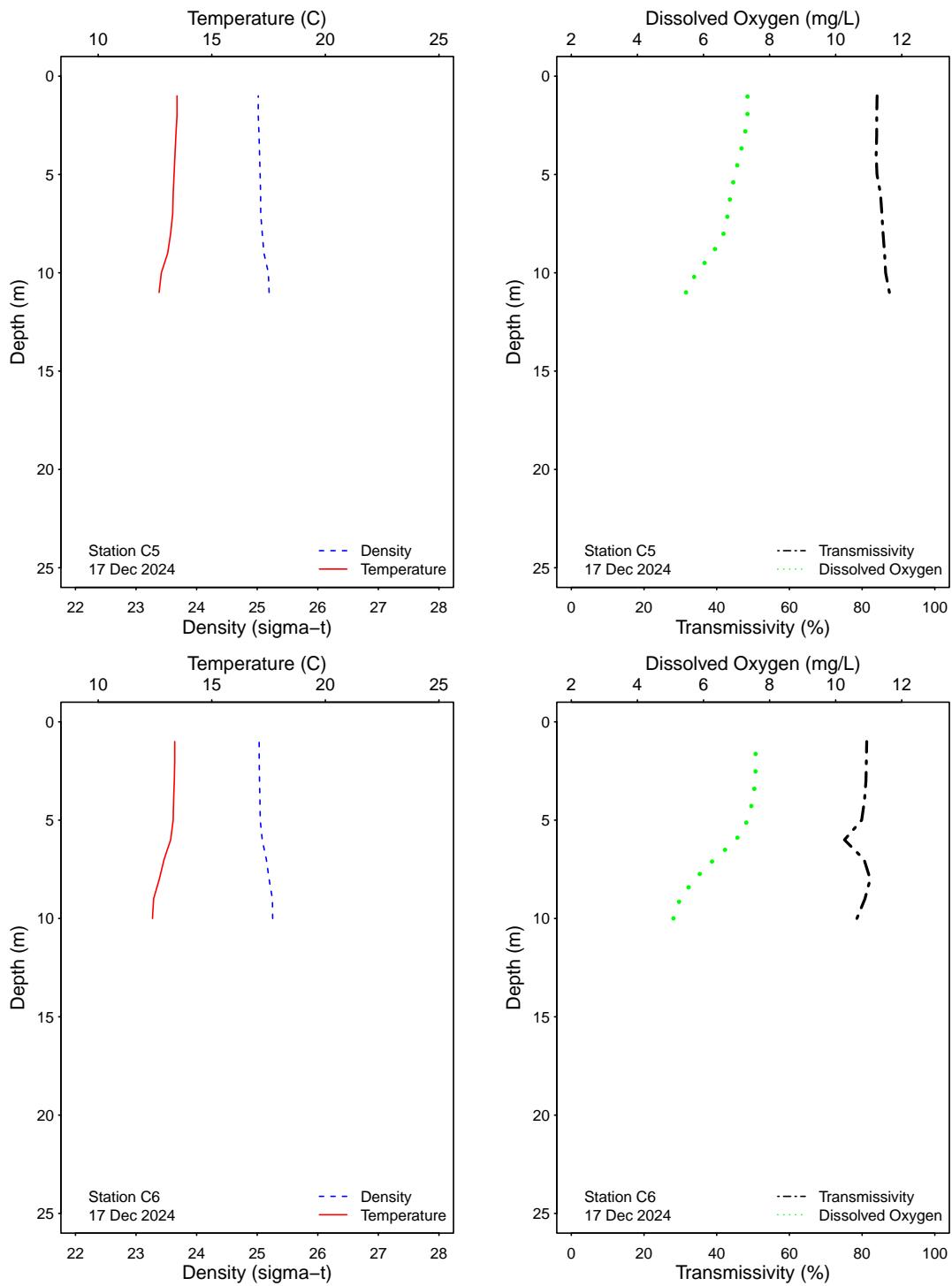


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

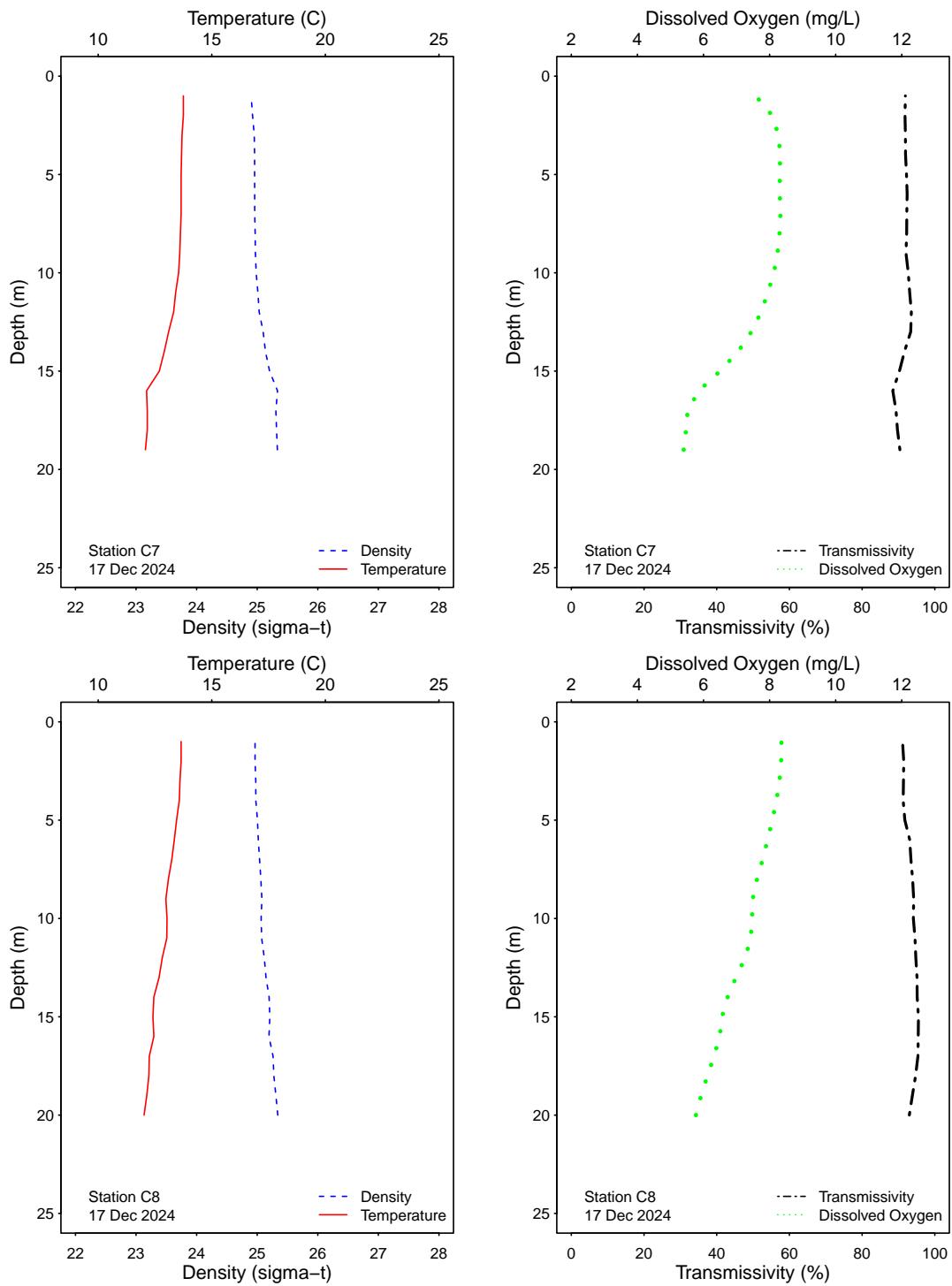


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

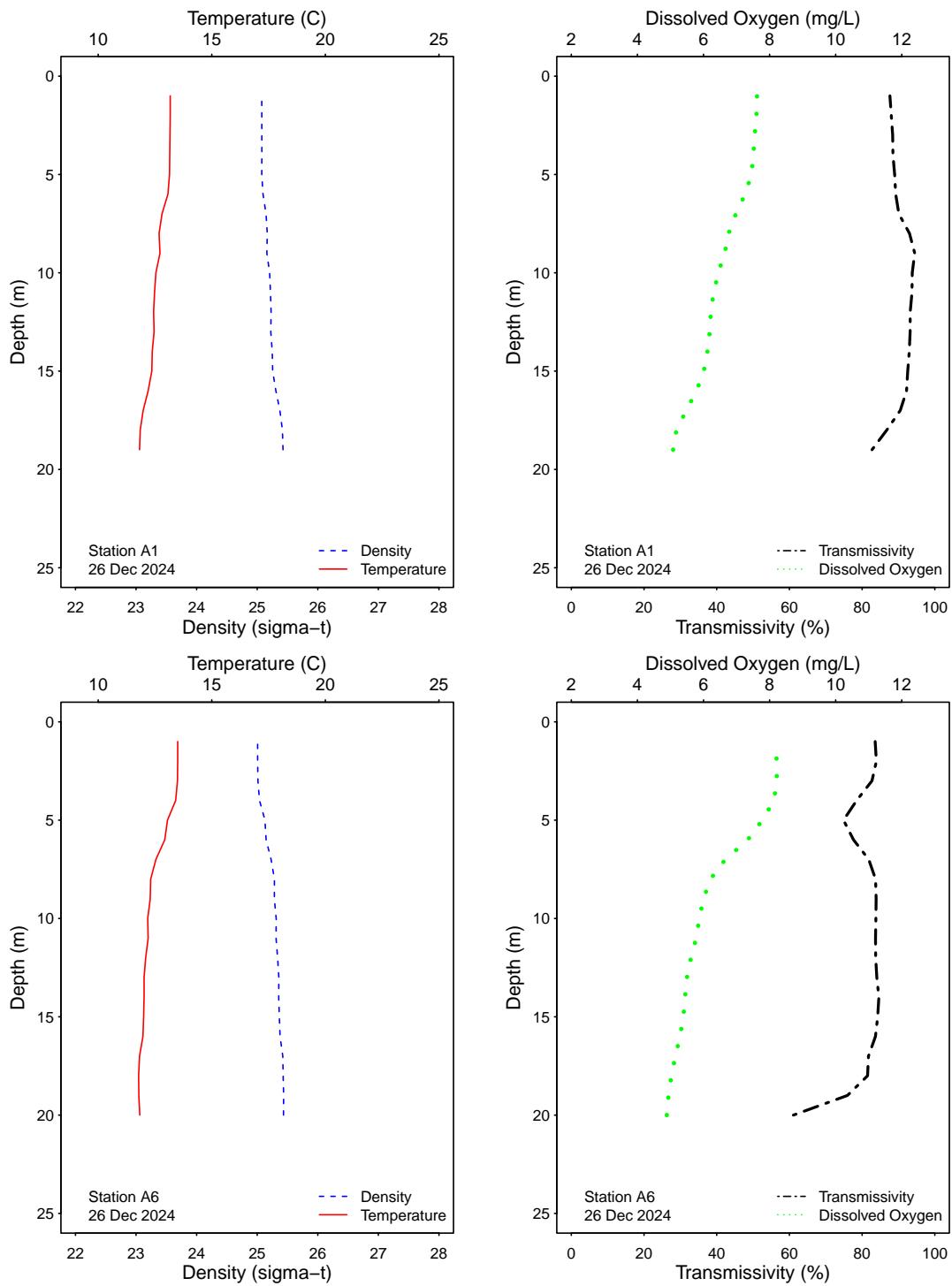


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

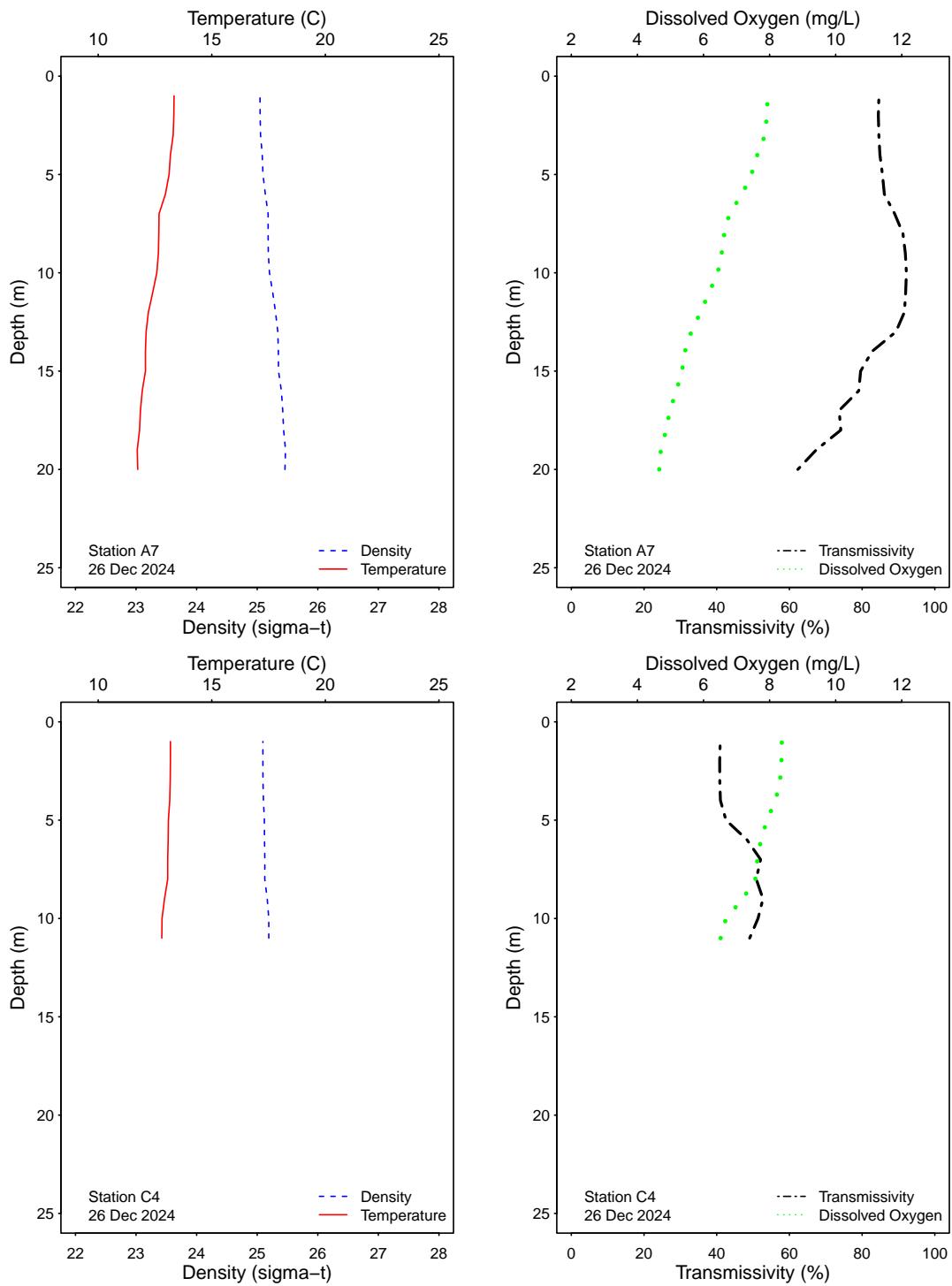


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

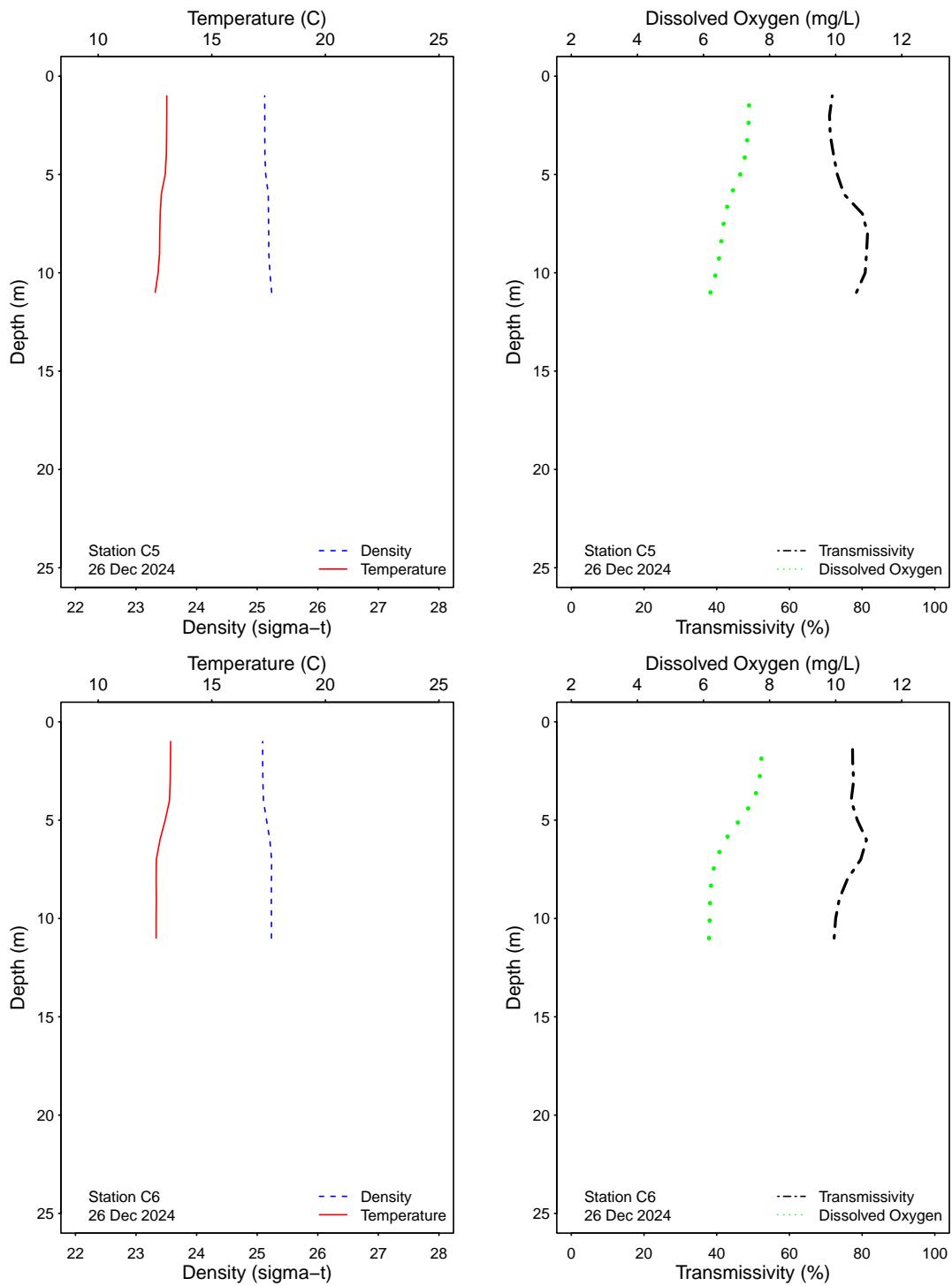


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

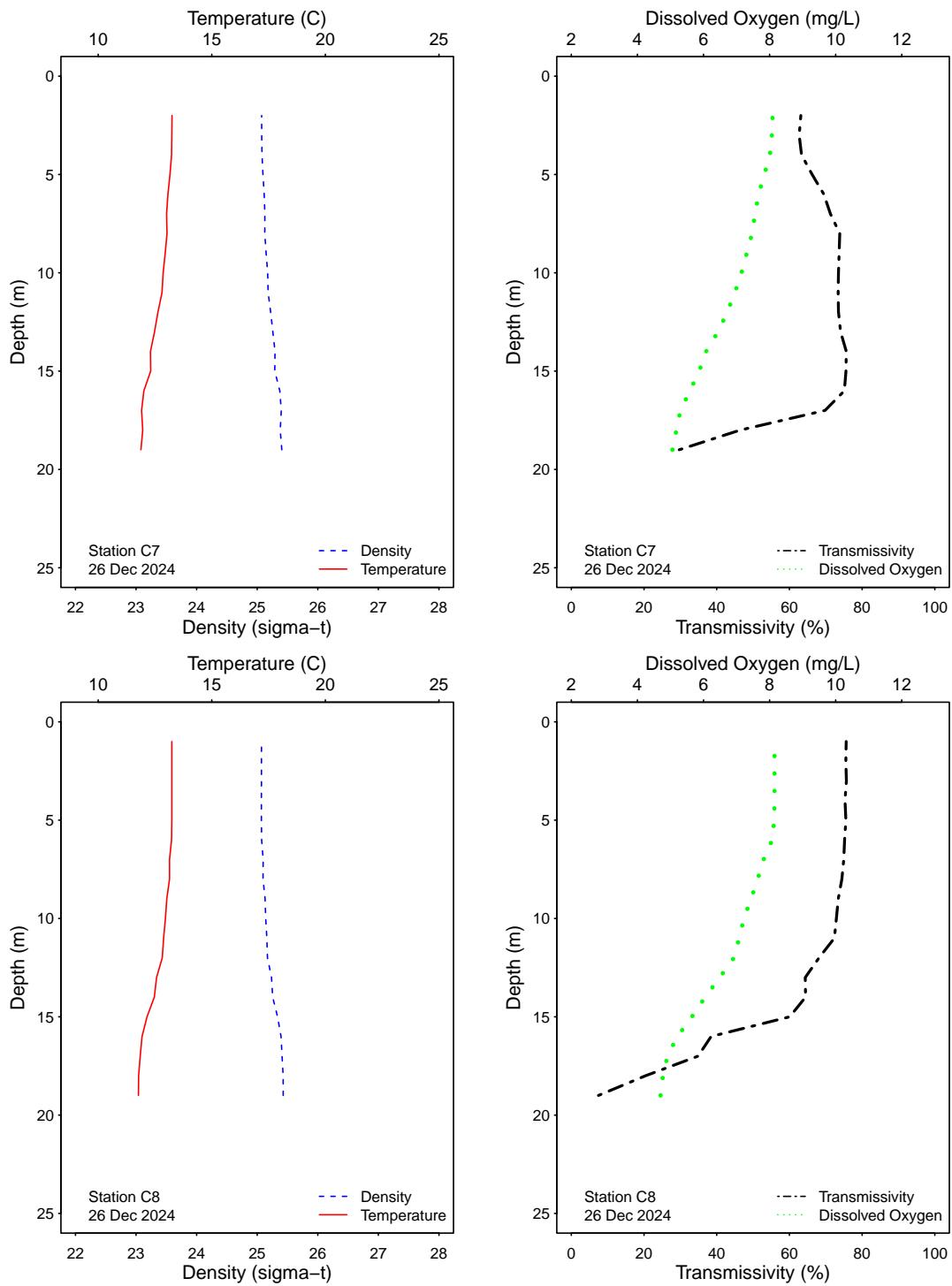


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

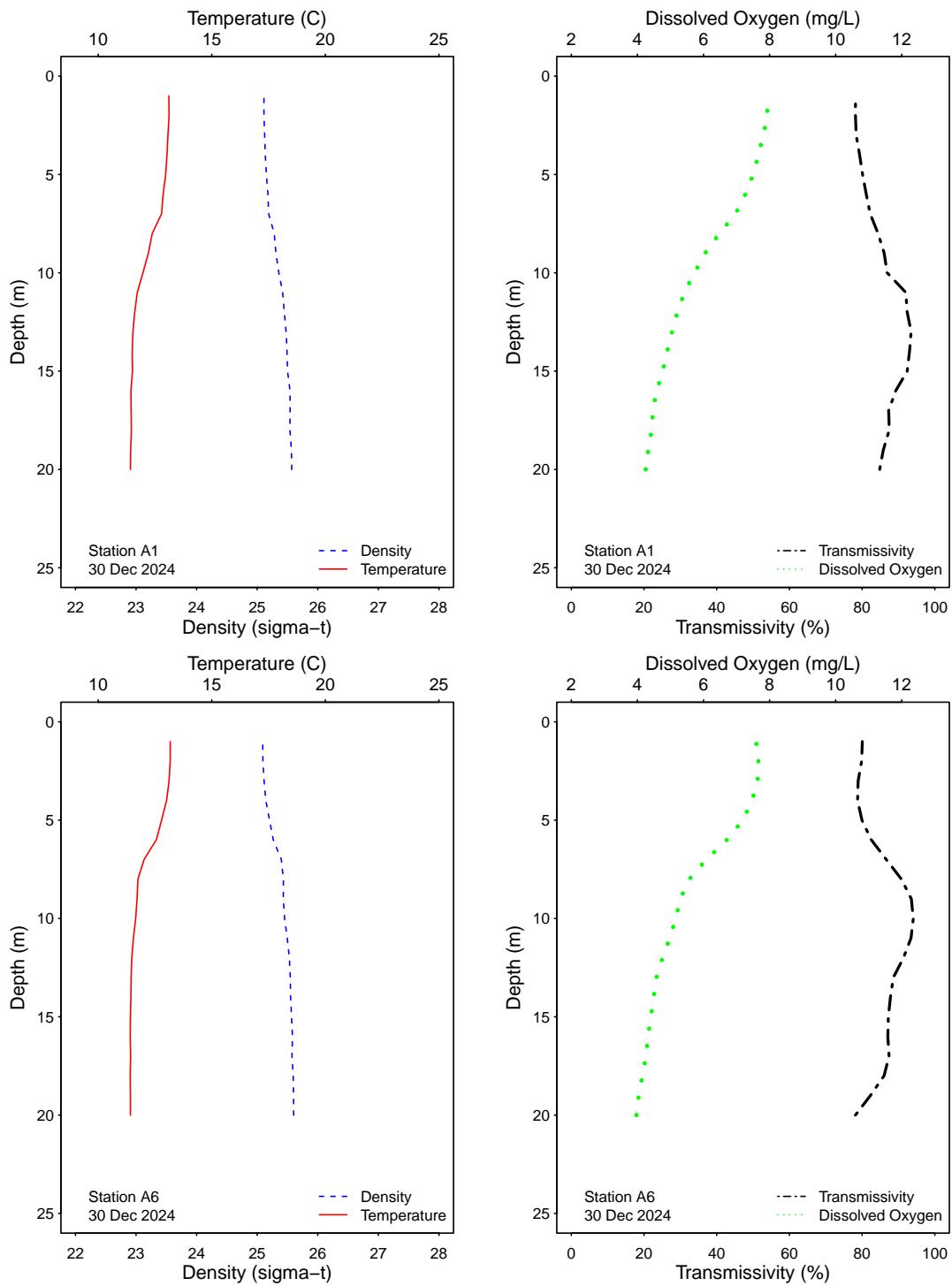


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

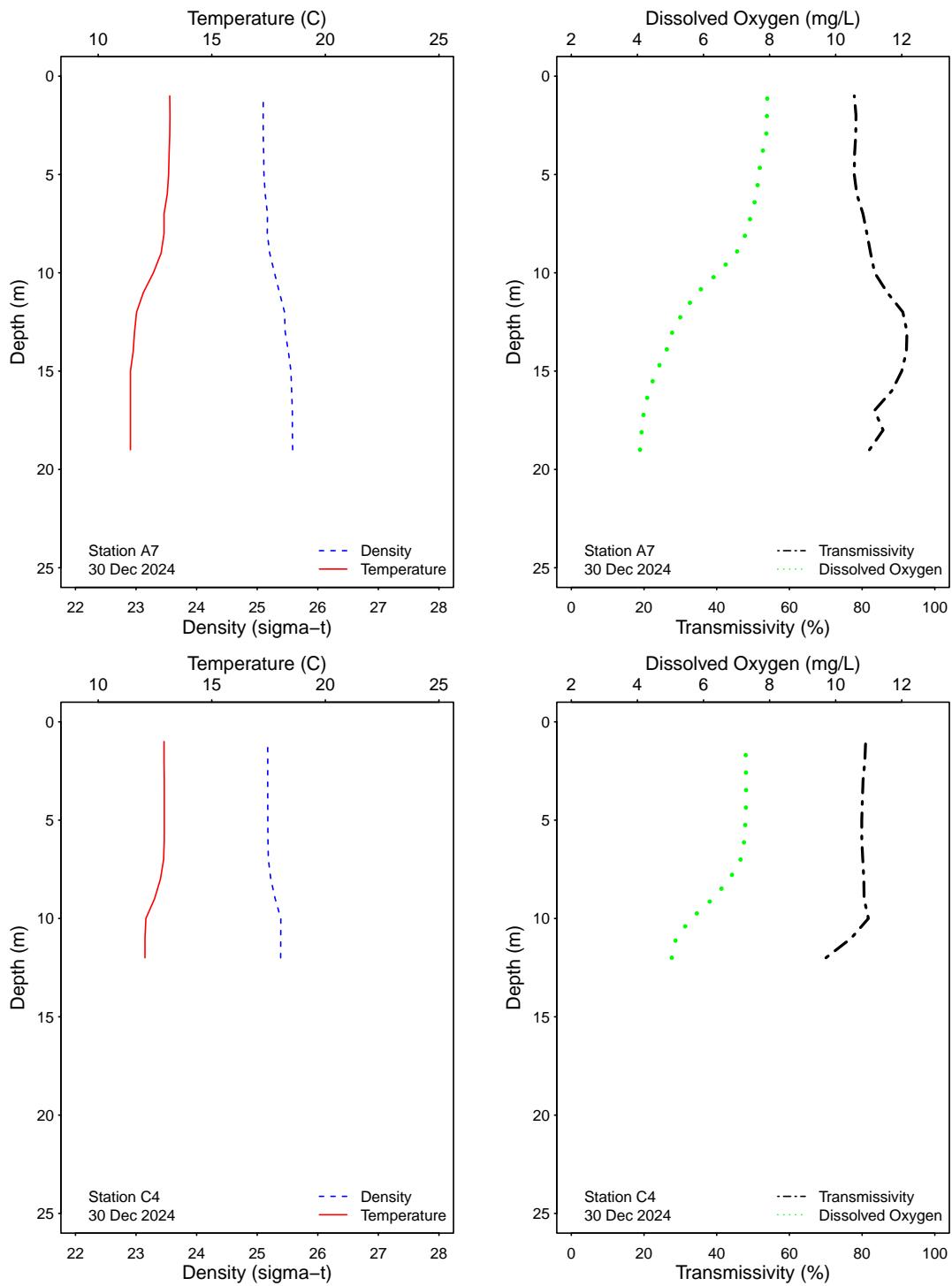


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

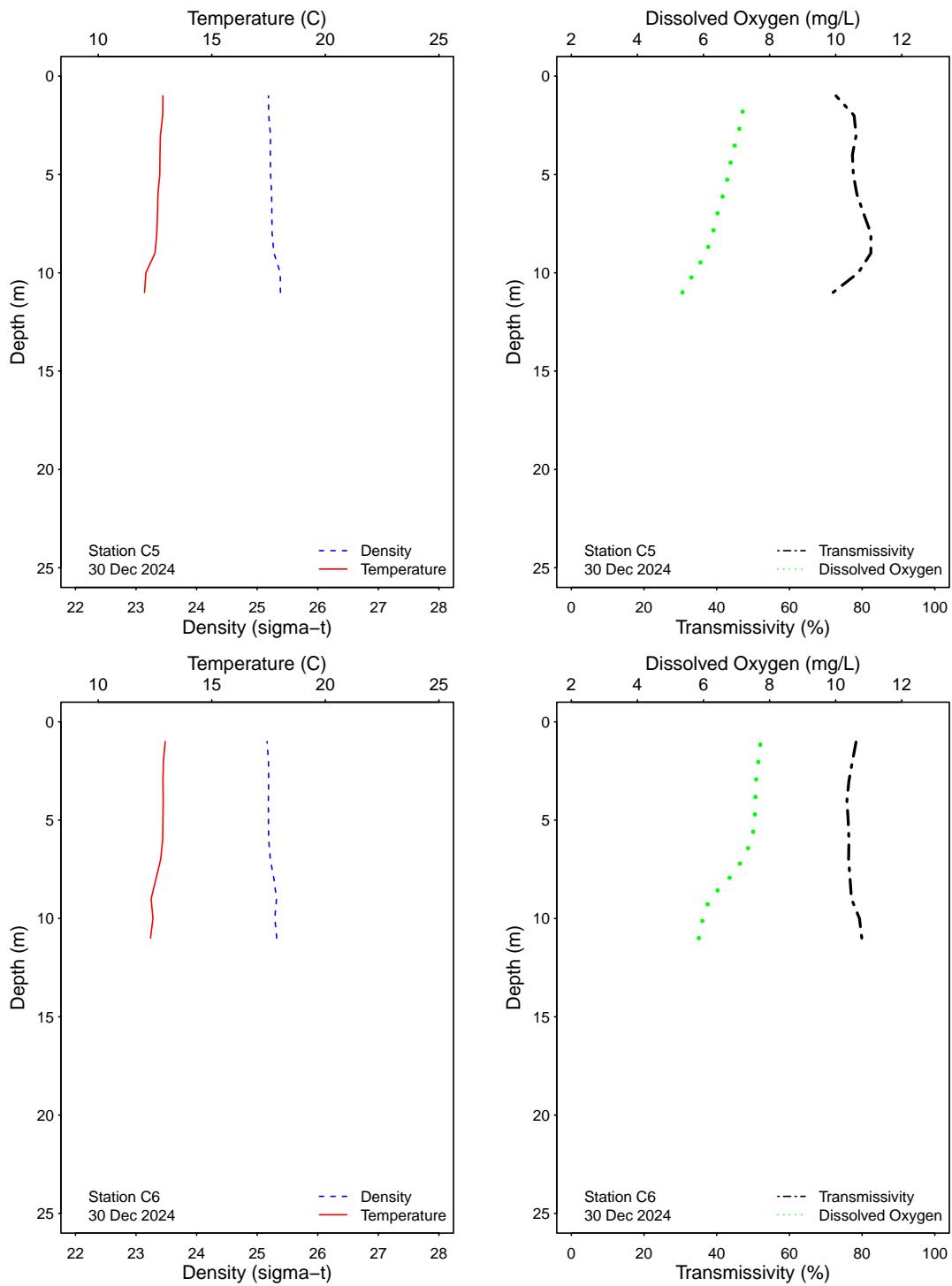


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

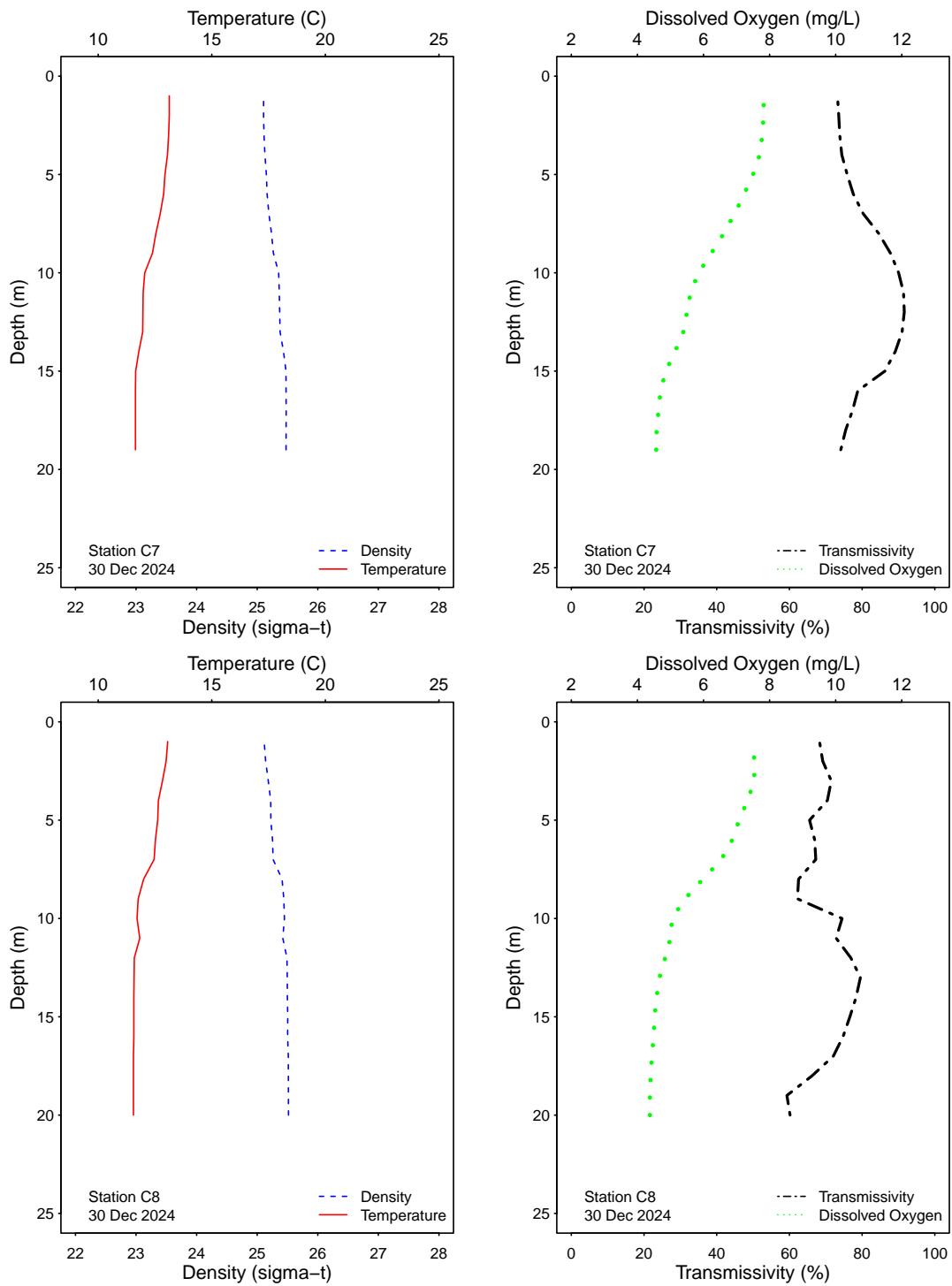


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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# **APPENDIX A**

## Quality Assurance



**Table A.1**

Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected PLOO 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> |
|----------------|-------------|--------------|----------------|------------------|--------------|--------------|--------------|
| A7             | 02 Dec 2024 | 18           | ADG            | LAB DUPLICATE    | 2            | 2            | 2            |
| A7             | 11 Dec 2024 | 18           | ADG            | LAB DUPLICATE    | 2            | 2            | 2            |
| A7             | 17 Dec 2024 | 18           | ADG            | LAB DUPLICATE    | 2            | 2            | 2            |
| A7             | 26 Dec 2024 | 18           | JF             | LAB DUPLICATE    | 40           | 2            | 2            |
| A7             | 30 Dec 2024 | 18           | JF             | LAB DUPLICATE    | 800          | 30           | 2            |
| C7             | 02 Dec 2024 | 18           | ADG            | LAB DUPLICATE    | 4            | 2            | 2            |
| C7             | 11 Dec 2024 | 18           | ADG            | LAB DUPLICATE    | 6            | 2            | 2            |
| C7             | 17 Dec 2024 | 18           | ADG            | LAB DUPLICATE    | 2            | 2            | 2            |
| C7             | 26 Dec 2024 | 18           | JF             | LAB DUPLICATE    | 2            | 2            | 2            |
| C7             | 30 Dec 2024 | 18           | JF             | LAB DUPLICATE    | 4            | 2            | 2            |
| C8             | 02 Dec 2024 | 12           | ADG            | LAB DUPLICATE    | 2            | 2            | 2            |
| C8             | 11 Dec 2024 | 12           | ADG            | LAB DUPLICATE    | 4            | 2            | 2            |
| C8             | 17 Dec 2024 | 12           | ADG            | LAB DUPLICATE    | 140          | 26           | 2            |
| C8             | 26 Dec 2024 | 12           | JF             | LAB DUPLICATE    | 2            | 2            | 2            |
| C8             | 30 Dec 2024 | 12           | JF             | LAB DUPLICATE    | 6            | 2            | 2            |
| D12            | 04 Dec 2024 |              | ADG            | LAB DUPLICATE    | 20           | 2            | 2            |
| D12            | 04 Dec 2024 |              | ADG            | FIELD DUPLICATE  | 20           | 2            | 2            |
| D12            | 11 Dec 2024 |              | ND             | LAB DUPLICATE    | 2            | 2            | 6            |
| D12            | 11 Dec 2024 |              | ND             | FIELD DUPLICATE  | 20           | 20           | 2            |
| D12            | 18 Dec 2024 |              | ND             | LAB DUPLICATE    | 20           | 14           | 6            |
| D12            | 18 Dec 2024 |              | ND             | FIELD DUPLICATE  | 20           | 8            | 6            |
| D12            | 26 Dec 2024 |              | WT             | FIELD DUPLICATE  | 20           | 2            | 2            |
| D12            | 26 Dec 2024 |              | WT             | LAB DUPLICATE    | 20           | 4            | 2            |

ns = not sampled

ND = no data

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## **APPENDIX B**

### **New 2019 Ocean Plan Water Quality Objectives**



# Shore Stations



**Table B.1**

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the PLOO 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        | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|-------------|----|----|----|------|----|-----|-----|-----|
| 01 Dec 2024 | 2  | 4  | 2  | 4    | 4  | 7   | 4   | 3   |
| 02 Dec 2024 | 2  | 4  | 2  | 4    | 4  | 7   | 4   | 3   |
| 03 Dec 2024 | 2  | 4  | 2  | 4    | 4  | 7   | 4   | 3   |
| 04 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 05 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 06 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 07 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 08 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 09 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 10 Dec 2024 | 2  | 4  | 2  | 6    | 5  | 7   | 5   | 3   |
| 11 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 12 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 13 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 14 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 15 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 16 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 17 Dec 2024 | 2  | 3  | 2  | 9    | 5  | 6   | 5   | 4   |
| 18 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 19 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 20 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 21 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 22 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 23 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 24 Dec 2024 | 2  | 3  | 2  | 6    | 11 | 8   | 5   | 4   |
| 25 Dec 2024 | 2  | 2  | 2  | 6    | 9  | 5   | 3   | 2   |
| 26 Dec 2024 | 2  | 2  | 2  | 5    | 8  | 5   | 5   | 3   |
| 27 Dec 2024 | 2  | 2  | 2  | 5    | 8  | 5   | 5   | 3   |
| 28 Dec 2024 | 2  | 2  | 2  | 5    | 8  | 5   | 5   | 3   |
| 29 Dec 2024 | 2  | 2  | 2  | 5    | 8  | 5   | 5   | 3   |
| 30 Dec 2024 | 2  | 2  | 2  | 5    | 8  | 5   | 5   | 3   |
| 31 Dec 2024 | 2  | 2  | 2  | 5    | 8  | 5   | 5   | 3   |

\* Geometric mean calculated using n<5

**Table B.2**

Summary of compliance at the PLOO 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     | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|----------|----|----|----|------|----|-----|-----|-----|
| December | IC | IC | IC | IC   | E  | IC  | IC  | IC  |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table B.3**

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the PLOO 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        | D4  | D5  | D7 | D8-B        | D9  | D10 | D11 | D12 |
|-------------|-----|-----|----|-------------|-----|-----|-----|-----|
| 01 Dec 2024 | *20 | *30 | *5 | <b>*200</b> | *20 | *20 | *30 | *20 |
| 02 Dec 2024 | *20 | *30 | *5 | <b>*200</b> | *20 | *20 | *30 | *20 |
| 03 Dec 2024 | *20 | *30 | *5 | <b>*200</b> | *20 | *20 | *30 | *20 |
| 04 Dec 2024 | 20  | 40  | 2  | <b>200</b>  | 20  | 20  | 20  | 20  |
| 05 Dec 2024 | 20  | 40  | 2  | <b>200</b>  | 20  | 20  | 20  | 20  |
| 06 Dec 2024 | *20 | *60 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 07 Dec 2024 | *20 | *60 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 08 Dec 2024 | *20 | *60 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 09 Dec 2024 | *20 | *60 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 10 Dec 2024 | *20 | *60 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 11 Dec 2024 | 20  | 40  | 2  | <b>200</b>  | 20  | 20  | 40  | 20  |
| 12 Dec 2024 | 20  | 40  | 2  | <b>200</b>  | 20  | 20  | 40  | 20  |
| 13 Dec 2024 | *20 | *40 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 14 Dec 2024 | *20 | *40 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 15 Dec 2024 | *20 | *40 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 16 Dec 2024 | *20 | *40 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 17 Dec 2024 | *20 | *40 | *2 | <b>*300</b> | *20 | *20 | *30 | *20 |
| 18 Dec 2024 | 20  | 40  | 2  | <b>200</b>  | 20  | 20  | 20  | 20  |
| 19 Dec 2024 | 20  | 40  | 2  | <b>200</b>  | 20  | 20  | 20  | 20  |
| 20 Dec 2024 | *16 | *40 | *2 | <b>*150</b> | *20 | *20 | *20 | *20 |
| 21 Dec 2024 | *16 | *40 | *2 | <b>*150</b> | *20 | *20 | *20 | *20 |
| 22 Dec 2024 | *16 | *40 | *2 | <b>*150</b> | *20 | *20 | *20 | *20 |
| 23 Dec 2024 | *16 | *40 | *2 | <b>*150</b> | *20 | *20 | *20 | *20 |
| 24 Dec 2024 | *16 | *40 | *2 | <b>*150</b> | *20 | *20 | *20 | *20 |
| 25 Dec 2024 | *12 | *40 | *2 | <b>*100</b> | *20 | *20 | *20 | *20 |
| 26 Dec 2024 | *7  | *30 | *2 | *60         | *30 | *20 | *20 | *20 |
| 27 Dec 2024 | *7  | *30 | *2 | *60         | *30 | *20 | *20 | *20 |
| 28 Dec 2024 | *7  | *30 | *2 | *60         | *30 | *20 | *20 | *20 |
| 29 Dec 2024 | *7  | *30 | *2 | *60         | *30 | *20 | *20 | *20 |
| 30 Dec 2024 | *7  | *30 | *2 | *60         | *30 | *20 | *20 | *20 |
| 31 Dec 2024 | *7  | *30 | *2 | *60         | *30 | *20 | *20 | *20 |

\* Median calculated using n<5

**Table B.4**

Summary of compliance at the PLOO 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 station, per month.

| Date     | D4 | D5 | D7 | D8-B | D9 | D10 | D11 | D12 |
|----------|----|----|----|------|----|-----|-----|-----|
| December | IC | IC | IC | E    | E  | IC  | IC  | IC  |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

# Kelp Stations



**Table B.5**

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the PLOO 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        | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|-------------|----|----|----|----|----|----|----|----|
| 01 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 02 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 03 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 04 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 05 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 06 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 07 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 08 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 09 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 10 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 11 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 12 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 13 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 14 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 15 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 16 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 17 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 18 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 19 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 20 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 21 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 22 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 23 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 24 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 25 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 26 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 27 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 28 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 29 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 30 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |
| 31 Dec 2024 | 2  | 2  | 2  | 2  | 2  | 2  | 2  | 2  |

\* Geometric mean calculated using n<5

**Table B.6**

Summary of compliance at the PLOO 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     | A1 | A6 | A7 | C4 | C5 | C6 | C7 | C8 |
|----------|----|----|----|----|----|----|----|----|
| December | IC |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table B.7**

Summary of compliance with the Ocean Plan's 30-day Median" standard for total coliform bacteria at the PLOO 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        | A1 | 1m | 12m | 18m | 1m  | 12m | 18m | 1m  | 12m | 18m | C4 | C5 | C6 | C7 | C8  |
|-------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|
|             | *2 | *2 | *8  | *2  | *20 | *2  | *15 | *23 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 01 Dec 2024 | *2 | 2  | 2   | 2   | 10  | 2   | 8   | 20  | 2   | 2   | 2  | 2  | 2  | 2  | *3  |
| 02 Dec 2024 | 2  | 2  | 2   | 2   | 10  | 2   | 8   | 20  | 2   | 2   | 2  | 2  | 2  | 2  | 2   |
| 03 Dec 2024 | 2  | 2  | 2   | 2   | 10  | 2   | 8   | 20  | 2   | 2   | 2  | 2  | 2  | 2  | 2   |
| 04 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 05 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 06 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 07 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 08 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 09 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 10 Dec 2024 | *2 | *2 | *2  | *2  | *16 | *2  | *15 | *18 | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 11 Dec 2024 | 2  | 2  | 2   | 2   | 2   | 2   | 8   | 16  | 2   | 2   | 2  | 2  | 2  | 2  | 2   |
| 12 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *9  | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 13 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *9  | *2  | *2  | *2 | *2 | *2 | *2 | *5  |
| 14 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *9  | *2  | *2  | *2 | *2 | *2 | *2 | *5  |
| 15 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *9  | *2  | *2  | *2 | *2 | *2 | *2 | *5  |
| 16 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *9  | *2  | *2  | *2 | *2 | *2 | *2 | *5  |
| 17 Dec 2024 | 2  | 2  | 2   | 2   | 2   | 2   | 8   | 8   | 2   | 2   | 2  | 2  | 2  | 2  | 4   |
| 18 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 19 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *3  |
| 20 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *3  |
| 21 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *3  |
| 22 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *3  |
| 23 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 24 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 25 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *5  | *2  | *2  | *2 | *2 | *2 | *2 | *2  |
| 26 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *4  | *5  | *2  | *3 | *2 | *2 | *4 | *3  |
| 27 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *4  | *5  | *2  | *3 | *2 | *2 | *2 | *12 |
| 28 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *4  | *5  | *2  | *3 | *2 | *2 | *4 | *3  |
| 29 Dec 2024 | *2 | *2 | *2  | *2  | *2  | *2  | *5  | *4  | *5  | *2  | *3 | *2 | *2 | *4 | *3  |
| 30 Dec 2024 | 2  | 2  | 2   | 2   | 2   | 2   | 8   | 2   | 2   | 2   | 2  | 2  | 2  | 2  | 4   |
| 31 Dec 2024 | 2  | 2  | 2   | 2   | 2   | 2   | 8   | 2   | 2   | 2   | 2  | 2  | 2  | 2  | 4   |

\* Median calculated using n<5

**Table B.8**

Summary of compliance at the PLOO 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

|          | A1 | A6  | A7  | C4 | C5  | C6  | C7 | C8  |     |
|----------|----|-----|-----|----|-----|-----|----|-----|-----|
| Date     | 1m | 12m | 18m | 1m | 12m | 18m | 1m | 12m | 18m |
| December | IC | IC  | IC  | IC | IC  | IC  | IC | IC  | IC  |

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data