



POINT LOMA OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

POINT LOMA WASTEWATER TREATMENT PLANT

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

APRIL 2025

Environmental Monitoring and Technical Services
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Public Utilities Department
Environmental Monitoring & Technical Services Division

May 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 April 2025 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:

- Over the past several years, due to increasing instability in some cliffside areas of Point Loma, City staff have periodically been unable to safely access and sample some stations. As a result, after consultation with and approval by the Regional Board, the sampling location has varied between D8, D8-A and D8-B. Access to site D8 was recently restored and sampling at D8 resumed in March 2025.

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 ≥ 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)¹. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

Results of the bacteriological analysis of seawater samples collected from each of the shore, kelp bed, and offshore stations located within State waters are assessed relative to the geometric mean and single sample maximum water-contact standards specified in the California Ocean Plan. The seven standards are defined as follows:

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

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

¹ Bordner, R., J. Winter, and P. Scarpino (eds.). (1978). Microbiological Methods for Monitoring the Environment: Water and Wastes, EPA Research and Development, EPA-600/8-78-017. 337 p.

Single Sample Maximums:

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

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, 1987²) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2025 Quality Assurance Report, which will be completed in March 2026.

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, D9, D10, D11, D12) were sampled on April 2, 9, 16, 23, and 30.
- During the April 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 (SSM) standard for *Enterococcus* was exceeded at station D11.
- A sewage-like odor was observed at station D8 on one or more days in April.
- 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 April 4, 8, 15, 22, and 29.

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

- During the April 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 10.31 to 16.30°C. The difference between surface and bottom waters ranged from 1.19 to 4.75°C.
- Chlorophyll *a* concentrations ranged from 0.16 to 23.35 µg/L.
 - o Chlorophyll *a* data are not available for all depths at station A1 on April 15th and C5 on April 4th due to sensor failure.
- Nothing of sewage origin was observed at PLOO kelp stations in April.

Offshore Stations

- Quarterly water quality sampling was not conducted during April at the offshore stations. The next quarterly sampling is scheduled for May 2025.



TABLES AND FIGURES

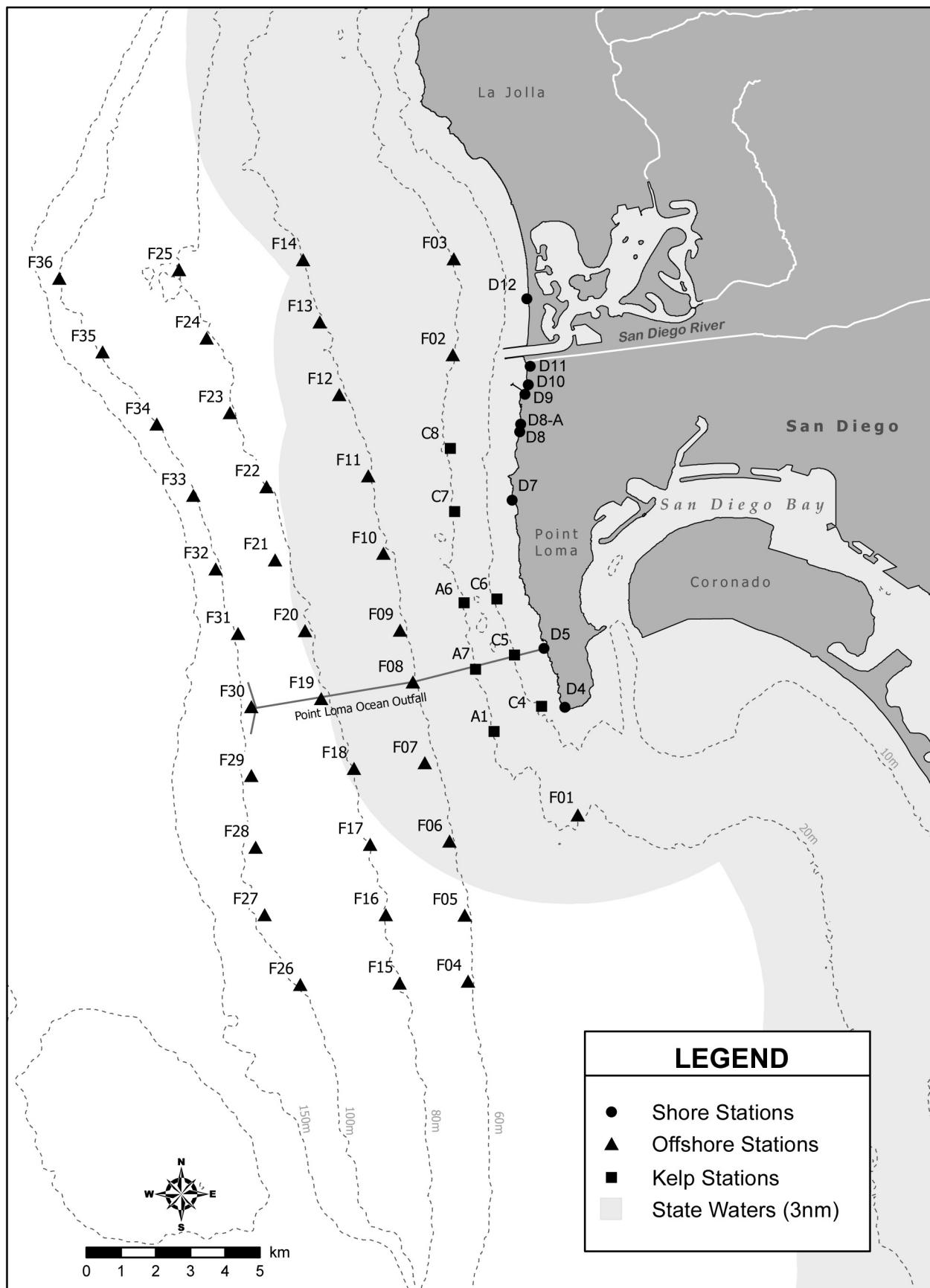


Figure 1.1 Station Map

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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	D9	D10	D11	D12
01 Apr 2025	*3	*6	*3	*6	*5	*7	*13	*7
02 Apr 2025	4	5	3	5	5	6	16	8
03 Apr 2025	4	5	3	5	5	6	16	8
04 Apr 2025	*5	*6	*3	*6	*7	*7	*16	*9
05 Apr 2025	*5	*6	*3	*6	*7	*7	*16	*9
06 Apr 2025	*5	*6	*3	*6	*7	*7	*16	*9
07 Apr 2025	*5	*6	*3	*6	*7	*7	*16	*9
08 Apr 2025	*5	*6	*3	*6	*7	*7	*16	*9
09 Apr 2025	4	5	3	5	5	6	11	8
10 Apr 2025	4	5	3	5	5	6	11	8
11 Apr 2025	*5	*3	*3	*3	*3	*3	*8	*8
12 Apr 2025	*5	*3	*3	*3	*3	*3	*8	*8
13 Apr 2025	*5	*3	*3	*3	*3	*3	*8	*8
14 Apr 2025	*5	*3	*3	*3	*3	*3	*8	*8
15 Apr 2025	*5	*3	*3	*3	*3	*3	*8	*8
16 Apr 2025	4	3	3	3	3	3	7	6
17 Apr 2025	4	3	3	3	3	3	7	6
18 Apr 2025	*5	*3	*3	*3	*3	*2	*5	*5
19 Apr 2025	*5	*3	*3	*3	*3	*2	*5	*5
20 Apr 2025	*5	*3	*3	*3	*3	*2	*5	*5
21 Apr 2025	*5	*3	*3	*3	*3	*2	*5	*5
22 Apr 2025	*5	*3	*3	*3	*3	*2	*5	*5
23 Apr 2025	4	3	3	3	3	2	6	4
24 Apr 2025	4	3	3	3	3	2	6	4
25 Apr 2025	*3	*2	*2	*2	*3	*2	*8	*4
26 Apr 2025	*3	*2	*2	*2	*3	*2	*8	*4
27 Apr 2025	*3	*2	*2	*2	*3	*2	*8	*4
28 Apr 2025	*3	*2	*2	*2	*3	*2	*8	*4
29 Apr 2025	*3	*2	*2	*2	*3	*2	*8	*4
30 Apr 2025	3	2	2	2	2	2	17	3

* 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	D9	D10	D11	D12
02 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
23 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table 2.3

Summary of compliance with the Ocean Plan's 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	D9	D10	D11	D12
01 Apr 2025	*2	*2	*5	*9	*5	*12	*13	*6
02 Apr 2025	2	2	4	9	5	12	19	5
03 Apr 2025	2	2	4	9	5	12	19	5
04 Apr 2025	*2	*2	*4	*14	*7	*18	*22	*6
05 Apr 2025	*2	*2	*4	*14	*7	*18	*22	*6
06 Apr 2025	*2	*2	*4	*14	*7	*18	*22	*6
07 Apr 2025	*2	*2	*4	*14	*7	*18	*22	*6
08 Apr 2025	*2	*2	*4	*14	*7	*18	*22	*6
09 Apr 2025	2	2	4	15	5	12	16	5
10 Apr 2025	2	2	4	15	5	12	16	5
11 Apr 2025	*2	*2	*3	*10	*3	*7	*13	*3
12 Apr 2025	*2	*2	*3	*10	*3	*7	*13	*3
13 Apr 2025	*2	*2	*3	*10	*3	*7	*13	*3
14 Apr 2025	*2	*2	*3	*10	*3	*7	*13	*3
15 Apr 2025	*2	*2	*3	*10	*3	*7	*13	*3
16 Apr 2025	2	2	3	8	3	5	9	3
17 Apr 2025	2	2	3	8	3	5	9	3
18 Apr 2025	*2	*2	*2	*10	*3	*6	*10	*3
19 Apr 2025	*2	*2	*2	*10	*3	*6	*10	*3
20 Apr 2025	*2	*2	*2	*10	*3	*6	*10	*3
21 Apr 2025	*2	*2	*2	*10	*3	*6	*10	*3
22 Apr 2025	*2	*2	*2	*10	*3	*6	*10	*3
23 Apr 2025	2	2	2	11	3	5	10	3
24 Apr 2025	2	2	2	11	3	5	10	3
25 Apr 2025	*2	*2	*2	*8	*3	*3	*9	*2
26 Apr 2025	*2	*2	*2	*8	*3	*3	*9	*2
27 Apr 2025	*2	*2	*2	*8	*3	*3	*9	*2
28 Apr 2025	*2	*2	*2	*8	*3	*3	*9	*2
29 Apr 2025	*2	*2	*2	*8	*3	*3	*9	*2
30 Apr 2025	2	2	2	10	4	4	26	2

* 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	D9	D10	D11	D12
02 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
23 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Apr 2025	IC	IC	IC	IC	IC	IC	E	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	D9	D10	D11	D12
01 Apr 2025	*8	*9	*8	*40	*29	*42	*170	*26
02 Apr 2025	9	11	10	35	31	58	175	31
03 Apr 2025	9	11	10	35	31	58	175	31
04 Apr 2025	*13	*16	*11	*40	*52	*75	*106	*47
05 Apr 2025	*13	*16	*11	*40	*52	*75	*106	*47
06 Apr 2025	*13	*16	*11	*40	*52	*75	*106	*47
07 Apr 2025	*13	*16	*11	*40	*52	*75	*106	*47
08 Apr 2025	*13	*16	*11	*40	*52	*75	*106	*47
09 Apr 2025	9	17	8	55	68	91	76	49
10 Apr 2025	9	17	8	55	68	91	76	49
11 Apr 2025	*11	*16	*6	*36	*50	*75	*63	*62
12 Apr 2025	*11	*16	*6	*36	*50	*75	*63	*62
13 Apr 2025	*11	*16	*6	*36	*50	*75	*63	*62
14 Apr 2025	*11	*16	*6	*36	*50	*75	*63	*62
15 Apr 2025	*11	*16	*6	*36	*50	*75	*63	*62
16 Apr 2025	8	17	5	32	42	58	50	49
17 Apr 2025	8	17	5	32	42	58	50	49
18 Apr 2025	*6	*28	*6	*36	*50	*75	*36	*35
19 Apr 2025	*6	*28	*6	*36	*50	*75	*36	*35
20 Apr 2025	*6	*28	*6	*36	*50	*75	*36	*35
21 Apr 2025	*6	*28	*6	*36	*50	*75	*36	*35
22 Apr 2025	*6	*28	*6	*36	*50	*75	*36	*35
23 Apr 2025	5	26	8	50	26	42	32	20
24 Apr 2025	5	26	8	50	26	42	32	20
25 Apr 2025	*4	*20	*6	*63	*24	*42	*36	*19
26 Apr 2025	*4	*20	*6	*63	*24	*42	*36	*19
27 Apr 2025	*4	*20	*6	*63	*24	*42	*36	*19
28 Apr 2025	*4	*20	*6	*63	*24	*42	*36	*19
29 Apr 2025	*4	*20	*6	*63	*24	*42	*36	*19
30 Apr 2025	5	32	8	80	23	36	66	12

* 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	D9	D10	D11	D12
02 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
23 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Apr 2025	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	D9	D10	D11	D12
02 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
23 Apr 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Apr 2025	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.

Station	Date	Time	Total	Fecal	Enter
D10	02 Apr 2025	837	200e	<2	12e
D10	09 Apr 2025	925	<200	2e	2e
D10	16 Apr 2025	921	20e	<2	2e
D10	23 Apr 2025	837	4e	<2	2e
D10	30 Apr 2025	914	<20	2e	10e
D11	02 Apr 2025	826	200e	40	72
D11	09 Apr 2025	913	<20	<2	4e
D11	16 Apr 2025	859	<20	4e	2e
D11	23 Apr 2025	827	20e	10e	12e
D11	30 Apr 2025	903	800e	400	1600e
D12	02 Apr 2025	806	60e	10e	<2
D12	09 Apr 2025	853	60e	4e	<2
D12	16 Apr 2025	837	<20	<2	<2
D12	23 Apr 2025	805	2e	<2	<2
D12	30 Apr 2025	842	<2	<2	<2
D4	02 Apr 2025	946	<20	14e	<2
D4	09 Apr 2025	1044	<2	<2	<2
D4	16 Apr 2025	1118	<2	<2	<2
D4	23 Apr 2025	944	<2	<2	<2
D4	30 Apr 2025	1046	<20	2e	<2
D5	02 Apr 2025	935	<20	2e	<2
D5	09 Apr 2025	1054	<20	<2	2e
D5	16 Apr 2025	1102	<20	<2	<2
D5	23 Apr 2025	933	<20	<2	<2
D5	30 Apr 2025	1034	<200	<2	2e
D7	02 Apr 2025	910	<20	<2	2e
D7	09 Apr 2025	959	2e	<2	<2
D7	16 Apr 2025	1031	<2	<2	<2
D7	23 Apr 2025	906	<20	<2	2e
D7	30 Apr 2025	1004	<20	<2	<2
D8	02 Apr 2025	859	20e	2e	10e
D8	09 Apr 2025	944	<200	<2	<20
D8	16 Apr 2025	1004	<20	<2	<2
D8	23 Apr 2025	855	<200	4e	12e
D8	30 Apr 2025	950	<200	<2	18e
D9	02 Apr 2025	847	40e	6e	6e
D9	09 Apr 2025	934	<200	<2	<2
D9	16 Apr 2025	947	<20	<2	<2
D9	23 Apr 2025	846	<2	<2	<2
D9	30 Apr 2025	937	<20	2e	<20

ns = not sampled

ND = no data

Table 2.9

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

Station	Date	Parameter	Value
D4	02 Apr 2025	Arrive Time	946
	02 Apr 2025	Wind Speed (kts)	6.1
	02 Apr 2025	Wind Dir	NW
	02 Apr 2025	Animal Life	
	02 Apr 2025	Floatables	Dead animals; Foam
	02 Apr 2025	Current Direction	E
	02 Apr 2025	Water Temp (C)	13.3
	02 Apr 2025	High Tide Time	
	02 Apr 2025	Low Tide Time	
	02 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae;Debris
D4	09 Apr 2025	Arrive Time	1054
	09 Apr 2025	Wind Speed (kts)	3.4
	09 Apr 2025	Wind Dir	NW
	09 Apr 2025	Animal Life	
	09 Apr 2025	Floatables	
	09 Apr 2025	Current Direction	S
	09 Apr 2025	Water Temp (C)	13.6
	09 Apr 2025	High Tide Time	
	09 Apr 2025	Low Tide Time	
	09 Apr 2025	Comments	Water clear; Trash-3; Kelp;Seagrass;Algae
D4	16 Apr 2025	Arrive Time	1118
	16 Apr 2025	Wind Speed (kts)	2.9
	16 Apr 2025	Wind Dir	SW
	16 Apr 2025	Animal Life	
	16 Apr 2025	Floatables	Dead animals; None
	16 Apr 2025	Current Direction	S
	16 Apr 2025	Water Temp (C)	15.1
	16 Apr 2025	High Tide Time	
	16 Apr 2025	Low Tide Time	
	16 Apr 2025	Comments	Water clear; Trash-3; Algae;Kelp;Seagrass;Debris
D4	23 Apr 2025	Arrive Time	944
	23 Apr 2025	Wind Speed (kts)	0.7
	23 Apr 2025	Wind Dir	W
	23 Apr 2025	Animal Life	Bird-5;
	23 Apr 2025	Floatables	Dead animals
	23 Apr 2025	Current Direction	S
	23 Apr 2025	Water Temp (C)	15.8
	23 Apr 2025	High Tide Time	
	23 Apr 2025	Low Tide Time	
	23 Apr 2025	Comments	Water clear; Trash-3; Algae;Kelp;Seagrass
D4	30 Apr 2025	Arrive Time	1046
	30 Apr 2025	Wind Speed (kts)	3.6
	30 Apr 2025	Wind Dir	W
	30 Apr 2025	Animal Life	
	30 Apr 2025	Floatables	Dead animals
	30 Apr 2025	Current Direction	S
	30 Apr 2025	Water Temp (C)	17.4
	30 Apr 2025	High Tide Time	
	30 Apr 2025	Low Tide Time	
	30 Apr 2025	Comments	Water clear; Trash-4; Kelp;Seagrass;Algae;Debris
D5	02 Apr 2025	Arrive Time	934

Station	Date	Parameter	Value
D5	02 Apr 2025	Wind Speed (kts)	10.4
D5	02 Apr 2025	Wind Dir	W
D5	02 Apr 2025	Animal Life	
D5	02 Apr 2025	Floatables	
D5	02 Apr 2025	Current Direction	E
D5	02 Apr 2025	Water Temp (C)	12.6
D5	02 Apr 2025	High Tide Time	
D5	02 Apr 2025	Low Tide Time	
D5	02 Apr 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D5	09 Apr 2025	Arrive Time	1044
D5	09 Apr 2025	Wind Speed (kts)	3.6
D5	09 Apr 2025	Wind Dir	W
D5	09 Apr 2025	Animal Life	
D5	09 Apr 2025	Floatables	
D5	09 Apr 2025	Current Direction	S
D5	09 Apr 2025	Water Temp (C)	14.4
D5	09 Apr 2025	High Tide Time	
D5	09 Apr 2025	Low Tide Time	
D5	09 Apr 2025	Comments	Water clear; Trash-3; Kelp;Seagrass;Algae
D5	16 Apr 2025	Arrive Time	1102
D5	16 Apr 2025	Wind Speed (kts)	1.5
D5	16 Apr 2025	Wind Dir	NW
D5	16 Apr 2025	Animal Life	
D5	16 Apr 2025	Floatables	
D5	16 Apr 2025	Current Direction	S
D5	16 Apr 2025	Water Temp (C)	17.2
D5	16 Apr 2025	High Tide Time	
D5	16 Apr 2025	Low Tide Time	
D5	16 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae
D5	23 Apr 2025	Arrive Time	933
D5	23 Apr 2025	Wind Speed (kts)	2.2
D5	23 Apr 2025	Wind Dir	W
D5	23 Apr 2025	Animal Life	Bird-2; Seagull-2;
D5	23 Apr 2025	Floatables	
D5	23 Apr 2025	Current Direction	S
D5	23 Apr 2025	Water Temp (C)	16.4
D5	23 Apr 2025	High Tide Time	
D5	23 Apr 2025	Low Tide Time	
D5	23 Apr 2025	Comments	Water clear; Trash-1; Algae; Person/Walker/Jogger-3
D5	30 Apr 2025	Arrive Time	1034
D5	30 Apr 2025	Wind Speed (kts)	3.3
D5	30 Apr 2025	Wind Dir	W
D5	30 Apr 2025	Animal Life	
D5	30 Apr 2025	Floatables	
D5	30 Apr 2025	Current Direction	S
D5	30 Apr 2025	Water Temp (C)	16.7
D5	30 Apr 2025	High Tide Time	
D5	30 Apr 2025	Low Tide Time	
D5	30 Apr 2025	Comments	Water clear; Trash-2; Seagrass;Algae
D7	02 Apr 2025	Arrive Time	910
D7	02 Apr 2025	Wind Speed (kts)	4.5
D7	02 Apr 2025	Wind Dir	SW
D7	02 Apr 2025	Animal Life	
D7	02 Apr 2025	Floatables	Dead animals; Foam
D7	02 Apr 2025	Current Direction	E
D7	02 Apr 2025	Water Temp (C)	12.2

Station	Date	Parameter	Value
D7	02 Apr 2025	High Tide Time	
D7	02 Apr 2025	Low Tide Time	
D7	02 Apr 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D7	09 Apr 2025	Arrive Time	959
D7	09 Apr 2025	Wind Speed (kts)	1.5
D7	09 Apr 2025	Wind Dir	NW
D7	09 Apr 2025	Animal Life	
D7	09 Apr 2025	Floatables	
D7	09 Apr 2025	Current Direction	S
D7	09 Apr 2025	Water Temp (C)	14.7
D7	09 Apr 2025	High Tide Time	
D7	09 Apr 2025	Low Tide Time	
D7	09 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-1; Trash-1; Kelp;Seagrass;Algae
D7	16 Apr 2025	Arrive Time	1031
D7	16 Apr 2025	Wind Speed (kts)	0
D7	16 Apr 2025	Wind Dir	SW
D7	16 Apr 2025	Animal Life	
D7	16 Apr 2025	Floatables	
D7	16 Apr 2025	Current Direction	S
D7	16 Apr 2025	Water Temp (C)	13.9
D7	16 Apr 2025	High Tide Time	
D7	16 Apr 2025	Low Tide Time	
D7	16 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-4; Trash-1; Kelp;Seagrass;Algae;Debris
D7	23 Apr 2025	Arrive Time	906
D7	23 Apr 2025	Wind Speed (kts)	2.2
D7	23 Apr 2025	Wind Dir	NW
D7	23 Apr 2025	Animal Life	
D7	23 Apr 2025	Floatables	
D7	23 Apr 2025	Current Direction	S
D7	23 Apr 2025	Water Temp (C)	15.4
D7	23 Apr 2025	High Tide Time	
D7	23 Apr 2025	Low Tide Time	
D7	23 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-2; Trash-1; Algae;Seagrass
D7	30 Apr 2025	Arrive Time	1004
D7	30 Apr 2025	Wind Speed (kts)	0
D7	30 Apr 2025	Wind Dir	XX
D7	30 Apr 2025	Animal Life	
D7	30 Apr 2025	Floatables	
D7	30 Apr 2025	Current Direction	S
D7	30 Apr 2025	Water Temp (C)	15
D7	30 Apr 2025	High Tide Time	
D7	30 Apr 2025	Low Tide Time	
D7	30 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-14; Trash-1; Kelp;Seagrass;Algae
D8	02 Apr 2025	Arrive Time	859
D8	02 Apr 2025	Wind Speed (kts)	0.9
D8	02 Apr 2025	Wind Dir	SW
D8	02 Apr 2025	Animal Life	
D8	02 Apr 2025	Floatables	Foam; Dead animals
D8	02 Apr 2025	Current Direction	E
D8	02 Apr 2025	Water Temp (C)	12.9
D8	02 Apr 2025	High Tide Time	
D8	02 Apr 2025	Low Tide Time	

Station	Date	Parameter	Value
D8	02 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae;Debris; Person/Walker/Jogger-2
D8	09 Apr 2025	Arrive Time	944
D8	09 Apr 2025	Wind Speed (kts)	2.8
D8	09 Apr 2025	Wind Dir	W
D8	09 Apr 2025	Animal Life	
D8	09 Apr 2025	Floatables	
D8	09 Apr 2025	Current Direction	S
D8	09 Apr 2025	Water Temp (C)	13.9
D8	09 Apr 2025	High Tide Time	
D8	09 Apr 2025	Low Tide Time	
D8	09 Apr 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae
D8	16 Apr 2025	Arrive Time	1004
D8	16 Apr 2025	Wind Speed (kts)	0
D8	16 Apr 2025	Wind Dir	SW
D8	16 Apr 2025	Animal Life	Dog-1;
D8	16 Apr 2025	Floatables	
D8	16 Apr 2025	Current Direction	S
D8	16 Apr 2025	Water Temp (C)	14.6
D8	16 Apr 2025	High Tide Time	
D8	16 Apr 2025	Low Tide Time	
D8	16 Apr 2025	Comments	Water clear; Trash-4; Kelp;Seagrass;Algae;Debris; Person/Walker/Jogger-1
D8	23 Apr 2025	Arrive Time	855
D8	23 Apr 2025	Wind Speed (kts)	1.4
D8	23 Apr 2025	Wind Dir	W
D8	23 Apr 2025	Animal Life	
D8	23 Apr 2025	Floatables	
D8	23 Apr 2025	Current Direction	S
D8	23 Apr 2025	Water Temp (C)	15.3
D8	23 Apr 2025	High Tide Time	
D8	23 Apr 2025	Low Tide Time	
D8	23 Apr 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae; Sewage-like odor
D8	30 Apr 2025	Arrive Time	950
D8	30 Apr 2025	Wind Speed (kts)	1.1
D8	30 Apr 2025	Wind Dir	SW
D8	30 Apr 2025	Animal Life	
D8	30 Apr 2025	Floatables	
D8	30 Apr 2025	Current Direction	S
D8	30 Apr 2025	Water Temp (C)	15.6
D8	30 Apr 2025	High Tide Time	
D8	30 Apr 2025	Low Tide Time	
D8	30 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae; Sewage-like odor
D9	02 Apr 2025	Arrive Time	847
D9	02 Apr 2025	Wind Speed (kts)	2.9
D9	02 Apr 2025	Wind Dir	SW
D9	02 Apr 2025	Animal Life	
D9	02 Apr 2025	Floatables	Foam
D9	02 Apr 2025	Current Direction	E
D9	02 Apr 2025	Water Temp (C)	13
D9	02 Apr 2025	High Tide Time	
D9	02 Apr 2025	Low Tide Time	
D9	02 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae;Debris
D9	09 Apr 2025	Arrive Time	934
D9	09 Apr 2025	Wind Speed (kts)	1.7

Station	Date	Parameter	Value
D9	09 Apr 2025	Wind Dir	W
D9	09 Apr 2025	Animal Life	
D9	09 Apr 2025	Floatables	
D9	09 Apr 2025	Current Direction	S
D9	09 Apr 2025	Water Temp (C)	13.4
D9	09 Apr 2025	High Tide Time	
D9	09 Apr 2025	Low Tide Time	
D9	09 Apr 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae
D9	16 Apr 2025	Arrive Time	947
D9	16 Apr 2025	Wind Speed (kts)	6.6
D9	16 Apr 2025	Wind Dir	SE
D9	16 Apr 2025	Animal Life	
D9	16 Apr 2025	Floatables	
D9	16 Apr 2025	Current Direction	S
D9	16 Apr 2025	Water Temp (C)	4.4
D9	16 Apr 2025	High Tide Time	
D9	16 Apr 2025	Low Tide Time	
D9	16 Apr 2025	Comments	Water clear; Trash-2; Seagrass;Algae;Debris
D9	23 Apr 2025	Arrive Time	846
D9	23 Apr 2025	Wind Speed (kts)	2.4
D9	23 Apr 2025	Wind Dir	W
D9	23 Apr 2025	Animal Life	
D9	23 Apr 2025	Floatables	
D9	23 Apr 2025	Current Direction	S
D9	23 Apr 2025	Water Temp (C)	15
D9	23 Apr 2025	High Tide Time	
D9	23 Apr 2025	Low Tide Time	
D9	23 Apr 2025	Comments	Water clear; Trash-1; Algae
D9	30 Apr 2025	Arrive Time	937
D9	30 Apr 2025	Wind Speed (kts)	1.7
D9	30 Apr 2025	Wind Dir	SW
D9	30 Apr 2025	Animal Life	
D9	30 Apr 2025	Floatables	
D9	30 Apr 2025	Current Direction	S
D9	30 Apr 2025	Water Temp (C)	16.1
D9	30 Apr 2025	High Tide Time	
D9	30 Apr 2025	Low Tide Time	
D9	30 Apr 2025	Comments	Water clear; Trash-2; Seagrass;Debris;Algae;Kelp
D10	02 Apr 2025	Arrive Time	837
D10	02 Apr 2025	Wind Speed (kts)	13.6
D10	02 Apr 2025	Wind Dir	W
D10	02 Apr 2025	Animal Life	Dog-1;
D10	02 Apr 2025	Floatables	Dead animals; Foam
D10	02 Apr 2025	Current Direction	E
D10	02 Apr 2025	Water Temp (C)	11.5
D10	02 Apr 2025	High Tide Time	
D10	02 Apr 2025	Low Tide Time	
D10	02 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae;Debris; Person/Walker/Jogger-1
D10	09 Apr 2025	Arrive Time	925
D10	09 Apr 2025	Wind Speed (kts)	3.8
D10	09 Apr 2025	Wind Dir	W
D10	09 Apr 2025	Animal Life	
D10	09 Apr 2025	Floatables	
D10	09 Apr 2025	Current Direction	S
D10	09 Apr 2025	Water Temp (C)	12.9

Station	Date	Parameter	Value
D10	09 Apr 2025	High Tide Time	
D10	09 Apr 2025	Low Tide Time	
D10	09 Apr 2025	Comments	Water clear; Boogie boarder/Swimmer-1; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-3
D10	16 Apr 2025	Arrive Time	921
D10	16 Apr 2025	Wind Speed (kts)	3.3
D10	16 Apr 2025	Wind Dir	SW
D10	16 Apr 2025	Animal Life	
D10	16 Apr 2025	Floatables	
D10	16 Apr 2025	Current Direction	S
D10	16 Apr 2025	Water Temp (C)	14.6
D10	16 Apr 2025	High Tide Time	
D10	16 Apr 2025	Low Tide Time	
D10	16 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-14; Trash-3; Kelp;Seagrass;Debris; Person/Walker/Jogger-12
D10	23 Apr 2025	Arrive Time	837
D10	23 Apr 2025	Wind Speed (kts)	1.9
D10	23 Apr 2025	Wind Dir	NW
D10	23 Apr 2025	Animal Life	
D10	23 Apr 2025	Floatables	
D10	23 Apr 2025	Current Direction	S
D10	23 Apr 2025	Water Temp (C)	15.3
D10	23 Apr 2025	High Tide Time	
D10	23 Apr 2025	Low Tide Time	
D10	23 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-7; Trash-2; Kelp
D10	30 Apr 2025	Arrive Time	914
D10	30 Apr 2025	Wind Speed (kts)	1.9
D10	30 Apr 2025	Wind Dir	SW
D10	30 Apr 2025	Animal Life	
D10	30 Apr 2025	Floatables	
D10	30 Apr 2025	Current Direction	S
D10	30 Apr 2025	Water Temp (C)	15.4
D10	30 Apr 2025	High Tide Time	
D10	30 Apr 2025	Low Tide Time	
D10	30 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-16; Trash-2; Seagrass;Debris;Kelp; Person//Walker/Jogger-5
D11	02 Apr 2025	Arrive Time	826
D11	02 Apr 2025	Wind Speed (kts)	5.9
D11	02 Apr 2025	Wind Dir	W
D11	02 Apr 2025	Animal Life	
D11	02 Apr 2025	Floatables	Dead animals; Foam
D11	02 Apr 2025	Current Direction	E
D11	02 Apr 2025	Water Temp (C)	13.9
D11	02 Apr 2025	High Tide Time	
D11	02 Apr 2025	Low Tide Time	
D11	02 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris;Algae
D11	09 Apr 2025	Arrive Time	913
D11	09 Apr 2025	Wind Speed (kts)	1.5
D11	09 Apr 2025	Wind Dir	W
D11	09 Apr 2025	Animal Life	
D11	09 Apr 2025	Floatables	Foam
D11	09 Apr 2025	Current Direction	S
D11	09 Apr 2025	Water Temp (C)	12.6
D11	09 Apr 2025	High Tide Time	
D11	09 Apr 2025	Low Tide Time	

Station	Date	Parameter	Value
D11	09 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-0; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-6
D11	16 Apr 2025	Arrive Time	859
D11	16 Apr 2025	Wind Speed (kts)	1.5
D11	16 Apr 2025	Wind Dir	SW
D11	16 Apr 2025	Animal Life	
D11	16 Apr 2025	Floatables	
D11	16 Apr 2025	Current Direction	S
D11	16 Apr 2025	Water Temp (C)	14.2
D11	16 Apr 2025	High Tide Time	
D11	16 Apr 2025	Low Tide Time	
D11	16 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-4; Trash-2; Kelp;Seagrass;Debris;Algae
D11	23 Apr 2025	Arrive Time	827
D11	23 Apr 2025	Wind Speed (kts)	3.6
D11	23 Apr 2025	Wind Dir	NW
D11	23 Apr 2025	Animal Life	Dog-1;
D11	23 Apr 2025	Floatables	
D11	23 Apr 2025	Current Direction	S
D11	23 Apr 2025	Water Temp (C)	15
D11	23 Apr 2025	High Tide Time	
D11	23 Apr 2025	Low Tide Time	
D11	23 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-15; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-2
D11	30 Apr 2025	Arrive Time	903
D11	30 Apr 2025	Wind Speed (kts)	1.3
D11	30 Apr 2025	Wind Dir	SW
D11	30 Apr 2025	Animal Life	
D11	30 Apr 2025	Floatables	
D11	30 Apr 2025	Current Direction	S
D11	30 Apr 2025	Water Temp (C)	15.9
D11	30 Apr 2025	High Tide Time	
D11	30 Apr 2025	Low Tide Time	
D11	30 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-1; Trash-2; Algae;Kelp;Debris
D12	02 Apr 2025	Arrive Time	806
D12	02 Apr 2025	Wind Speed (kts)	9.7
D12	02 Apr 2025	Wind Dir	W
D12	02 Apr 2025	Animal Life	
D12	02 Apr 2025	Floatables	Foam; Dead animals
D12	02 Apr 2025	Current Direction	E
D12	02 Apr 2025	Water Temp (C)	14.1
D12	02 Apr 2025	High Tide Time	
D12	02 Apr 2025	Low Tide Time	
D12	02 Apr 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Debris; Person/Walker/Jogger-2
D12	09 Apr 2025	Arrive Time	853
D12	09 Apr 2025	Wind Speed (kts)	3.8
D12	09 Apr 2025	Wind Dir	W
D12	09 Apr 2025	Animal Life	
D12	09 Apr 2025	Floatables	
D12	09 Apr 2025	Current Direction	S
D12	09 Apr 2025	Water Temp (C)	12.8
D12	09 Apr 2025	High Tide Time	
D12	09 Apr 2025	Low Tide Time	

Station	Date	Parameter	Value
D12	09 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-1; Trash-1; Kelp;Sea-grass; Person/Walker/Jogger-3
D12	16 Apr 2025	Arrive Time	837
D12	16 Apr 2025	Wind Speed (kts)	2.5
D12	16 Apr 2025	Wind Dir	NE
D12	16 Apr 2025	Animal Life	
D12	16 Apr 2025	Floatables	
D12	16 Apr 2025	Current Direction	S
D12	16 Apr 2025	Water Temp (C)	14
D12	16 Apr 2025	High Tide Time	
D12	16 Apr 2025	Low Tide Time	
D12	16 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-2; Trash-2; Kelp;Sea-grass;Debris; Person/Walker/Jogger-10
D12	23 Apr 2025	Arrive Time	805
D12	23 Apr 2025	Wind Speed (kts)	3.6
D12	23 Apr 2025	Wind Dir	W
D12	23 Apr 2025	Animal Life	Seagull-1;
D12	23 Apr 2025	Floatables	
D12	23 Apr 2025	Current Direction	S
D12	23 Apr 2025	Water Temp (C)	15.5
D12	23 Apr 2025	High Tide Time	
D12	23 Apr 2025	Low Tide Time	
D12	23 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-4; Trash-3; Kelp;Sea-grass; Person/Walker/Jogger-1
D12	30 Apr 2025	Arrive Time	842
D12	30 Apr 2025	Wind Speed (kts)	1.9
D12	30 Apr 2025	Wind Dir	S
D12	30 Apr 2025	Animal Life	
D12	30 Apr 2025	Floatables	
D12	30 Apr 2025	Current Direction	S
D12	30 Apr 2025	Water Temp (C)	16.8
D12	30 Apr 2025	High Tide Time	
D12	30 Apr 2025	Low Tide Time	
D12	30 Apr 2025	Comments	Water clear; Surfer/Paddle boarder-3; Trash-2; Sea-grass;Kelp;Debris; Person/Walker/Jogger-4

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

* 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
04 Apr 2025	IC							
08 Apr 2025	IC							
15 Apr 2025	IC							
22 Apr 2025	IC							
29 Apr 2025	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 Apr 2025	*3	*3	*3	*2	*2	*2	*2	*2
02 Apr 2025	*3	*3	*3	*2	*2	*2	*2	*2
03 Apr 2025	*3	*3	*3	*2	*2	*2	*2	*2
04 Apr 2025	*2	*2	*3	*2	*2	*2	*2	*2
05 Apr 2025	*2	*2	*3	*2	*2	*2	*2	*2
06 Apr 2025	*2	*2	*3	*2	*2	*2	*2	*2
07 Apr 2025	*2	*2	*3	*2	*2	*2	*2	*2
08 Apr 2025	2	2	3	2	2	2	2	2
09 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
10 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
11 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
12 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
13 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
14 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
15 Apr 2025	2	2	2	2	2	2	2	2
16 Apr 2025	2	2	2	2	2	2	2	2
17 Apr 2025	2	2	2	2	2	2	2	2
18 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
19 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
20 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
21 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
22 Apr 2025	2	2	2	2	2	2	2	2
23 Apr 2025	2	2	2	2	2	2	2	2
24 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
25 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
26 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
27 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
28 Apr 2025	*2	*2	*2	*2	*2	*2	*2	*2
29 Apr 2025	2	2	2	2	2	2	2	2
30 Apr 2025	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
04 Apr 2025	IC							
08 Apr 2025	IC							
15 Apr 2025	IC							
22 Apr 2025	IC							
29 Apr 2025	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 Apr 2025	*35	*25	*21	*3	*2	*2	*6	*8
02 Apr 2025	*35	*25	*21	*3	*2	*2	*6	*8
03 Apr 2025	*35	*25	*21	*3	*2	*2	*6	*8
04 Apr 2025	*33	*15	*18	*3	*2	*2	*4	*6
05 Apr 2025	*33	*15	*18	*3	*2	*2	*4	*6
06 Apr 2025	*33	*15	*18	*3	*2	*2	*4	*6
07 Apr 2025	*33	*15	*18	*3	*2	*2	*4	*6
08 Apr 2025	19	11	12	3	2	2	4	6
09 Apr 2025	*13	*10	*8	*3	*2	*2	*4	*6
10 Apr 2025	*13	*10	*8	*3	*2	*2	*4	*6
11 Apr 2025	*13	*10	*8	*3	*2	*2	*4	*6
12 Apr 2025	*13	*10	*8	*3	*2	*2	*4	*6
13 Apr 2025	*13	*10	*8	*3	*2	*2	*4	*6
14 Apr 2025	*13	*10	*8	*3	*2	*2	*4	*6
15 Apr 2025	9	8	6	3	2	2	4	5
16 Apr 2025	9	8	6	3	2	2	4	5
17 Apr 2025	9	8	6	3	2	2	4	5
18 Apr 2025	*5	*6	*5	*3	*2	*2	*3	*4
19 Apr 2025	*5	*6	*5	*3	*2	*2	*3	*4
20 Apr 2025	*5	*6	*5	*3	*2	*2	*3	*4
21 Apr 2025	*5	*6	*5	*3	*2	*2	*3	*4
22 Apr 2025	5	5	4	3	2	2	3	3
23 Apr 2025	5	5	4	3	2	2	3	3
24 Apr 2025	*6	*4	*4	*2	*2	*2	*3	*3
25 Apr 2025	*6	*4	*4	*2	*2	*2	*3	*3
26 Apr 2025	*6	*4	*4	*2	*2	*2	*3	*3
27 Apr 2025	*6	*4	*4	*2	*2	*2	*3	*3
28 Apr 2025	*6	*4	*4	*2	*2	*2	*3	*3
29 Apr 2025	12	5	5	2	2	2	3	3
30 Apr 2025	12	5	5	2	2	2	3	3

- 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 10^4 CFU/100 mL.

Date	A1	A6	A7	C4	C5	C6	C7	C8
04 Apr 2025	IC							
08 Apr 2025	IC							
15 Apr 2025	IC							
22 Apr 2025	IC							
29 Apr 2025	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
04 Apr 2025	IC							
08 Apr 2025	IC							
15 Apr 2025	IC							
22 Apr 2025	IC							
29 Apr 2025	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	04 Apr 2025	816	1	52	4e	<2
A1	04 Apr 2025	816	12	26e	4e	<2
A1	04 Apr 2025	816	18	76	10e	2e
A1	08 Apr 2025	841	1	<2	<2	<2
A1	08 Apr 2025	841	12	<2	<2	<2
A1	08 Apr 2025	841	18	<2	<2	<2
A1	15 Apr 2025	747	1	<2	<2	<2
A1	15 Apr 2025	747	12	<2	<2	<2
A1	15 Apr 2025	747	18	<2	<2	<2
A1	22 Apr 2025	750	1	4e	<2	2e
A1	22 Apr 2025	750	12	2e	<2	<2
A1	22 Apr 2025	750	18	12e	<2	<2
A1	29 Apr 2025	750	1	100	16e	2e
A1	29 Apr 2025	750	12	110	14e	<2
A1	29 Apr 2025	750	18	460	50	4e
A6	04 Apr 2025	846	1	<2	<2	<2
A6	04 Apr 2025	846	12	6e	<2	<2
A6	04 Apr 2025	846	18	38e	<2	<2
A6	08 Apr 2025	908	1	<2	<2	<2
A6	08 Apr 2025	908	12	2e	<2	<2
A6	08 Apr 2025	908	18	6e	<2	<2
A6	15 Apr 2025	816	1	2e	2e	2e
A6	15 Apr 2025	816	12	<2	<2	<2
A6	15 Apr 2025	816	18	4e	2e	<2
A6	22 Apr 2025	821	1	<2	<2	<2
A6	22 Apr 2025	821	12	<2	<2	<2
A6	22 Apr 2025	821	18	4e	<2	<2
A6	29 Apr 2025	820	1	8e	<2	4e
A6	29 Apr 2025	820	12	<2	2e	2e
A6	29 Apr 2025	820	18	18e	<2	<2
A7	04 Apr 2025	835	1	<2	<2	<2
A7	04 Apr 2025	835	12	48	14e	2e
A7	04 Apr 2025	835	18	10e	<2	<2
A7	08 Apr 2025	857	1	2e	<2	<2
A7	08 Apr 2025	857	12	<2	<2	<2
A7	08 Apr 2025	857	18	<2	<2	<2
A7	15 Apr 2025	802	1	<2	<2	<2
A7	15 Apr 2025	802	12	<2	<2	<2
A7	15 Apr 2025	802	18	2e	<2	<2

Station	Date	Time	Depth	Total	Fecal	Enteric
A7	22 Apr 2025	805	1	<2	<2	<2
A7	22 Apr 2025	805	12	<2	<2	<2
A7	22 Apr 2025	805	18	6e	<2	<2
A7	29 Apr 2025	808	1	<2	<2	2e
A7	29 Apr 2025	808	12	18e	2e	<2
A7	29 Apr 2025	808	18	10e	2e	<2
C4	04 Apr 2025	953	1	<2	2e	<2
C4	04 Apr 2025	953	3	2e	2e	<2
C4	04 Apr 2025	953	9	2e	2e	<2
C4	08 Apr 2025	1031	1	<2	<2	<2
C4	08 Apr 2025	1031	3	<2	<2	<2
C4	08 Apr 2025	1031	9	2e	<2	<2
C4	15 Apr 2025	924	1	<2	<2	<2
C4	15 Apr 2025	924	3	<2	<2	<2
C4	15 Apr 2025	924	9	<2	<2	<2
C4	22 Apr 2025	932	1	<2	<2	<2
C4	22 Apr 2025	932	3	<2	<2	<2
C4	22 Apr 2025	932	9	4e	<2	<2
C4	29 Apr 2025	923	1	2e	2e	<2
C4	29 Apr 2025	923	3	2e	<2	<2
C4	29 Apr 2025	923	9	4e	<2	<2
C5	04 Apr 2025	942	1	<2	<2	<2
C5	04 Apr 2025	942	3	<2	<2	<2
C5	04 Apr 2025	942	9	<2	<2	<2
C5	08 Apr 2025	1020	1	<2	<2	<2
C5	08 Apr 2025	1020	3	<2	<2	<2
C5	08 Apr 2025	1020	9	2e	<2	<2
C5	15 Apr 2025	913	1	<2	<2	<2
C5	15 Apr 2025	913	3	<2	<2	<2
C5	15 Apr 2025	913	9	2e	<2	<2
C5	22 Apr 2025	920	1	<2	<2	<2
C5	22 Apr 2025	920	3	<2	<2	<2
C5	22 Apr 2025	920	9	<2	<2	<2
C5	29 Apr 2025	914	1	<2	<2	<2
C5	29 Apr 2025	914	3	<2	<2	<2
C5	29 Apr 2025	914	9	<2	<2	<2
C6	04 Apr 2025	932	1	2e	<2	<2
C6	04 Apr 2025	932	3	<2	<2	<2
C6	04 Apr 2025	932	9	<2	<2	<2
C6	08 Apr 2025	1003	1	<2	<2	<2
C6	08 Apr 2025	1003	3	<2	<2	<2
C6	08 Apr 2025	1003	9	<2	<2	<2
C6	15 Apr 2025	903	1	<2	<2	<2
C6	15 Apr 2025	903	3	<2	<2	<2
C6	15 Apr 2025	903	9	<2	<2	<2

Station	Date	Time	Depth	Total	Fecal	Enteric
C6	22 Apr 2025	911	1	<2	<2	<2
C6	22 Apr 2025	911	3	<2	<2	<2
C6	22 Apr 2025	911	9	<2	<2	<2
C6	29 Apr 2025	904	1	<2	<2	<2
C6	29 Apr 2025	904	3	4e	<2	<2
C6	29 Apr 2025	904	9	4e	<2	<2
C7	04 Apr 2025	900	1	<2	<2	<2
C7	04 Apr 2025	900	12	<2	2e	<2
C7	04 Apr 2025	900	18	4e	2e	<2
C7	08 Apr 2025	930	1	2e	<2	<2
C7	08 Apr 2025	930	12	<2	<2	<2
C7	08 Apr 2025	930	18	8e	<2	<2
C7	15 Apr 2025	838	1	<2	2e	<2
C7	15 Apr 2025	838	12	<2	<2	<2
C7	15 Apr 2025	838	18	4e	<2	<2
C7	22 Apr 2025	837	1	<2	<2	<2
C7	22 Apr 2025	837	12	2e	<2	<2
C7	22 Apr 2025	837	18	2e	<2	<2
C7	29 Apr 2025	834	1	2e	<2	<2
C7	29 Apr 2025	834	12	2e	<2	<2
C7	29 Apr 2025	834	18	<2	<2	<2
C8	04 Apr 2025	911	1	<2	<2	<2
C8	04 Apr 2025	911	12	2e	<2	<2
C8	04 Apr 2025	911	18	10e	<2	<2
C8	08 Apr 2025	941	1	<2	<2	<2
C8	08 Apr 2025	941	12	6e	<2	<2
C8	08 Apr 2025	941	18	8e	<2	2e
C8	15 Apr 2025	842	1	<2	<2	<2
C8	15 Apr 2025	842	12	<2	<2	<2
C8	15 Apr 2025	842	18	<2	<2	<2
C8	22 Apr 2025	855	1	<2	<2	<2
C8	22 Apr 2025	855	12	<2	<2	<2
C8	22 Apr 2025	855	18	<2	<2	<2
C8	29 Apr 2025	845	1	4e	<2	<2
C8	29 Apr 2025	845	12	<2	2e	2e
C8	29 Apr 2025	845	18	<2	<2	<2

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	04 Apr 2025	Arrive Time	816
A1	04 Apr 2025	Depart Time	827
A1	04 Apr 2025	Air Temp (C)	13.4
A1	04 Apr 2025	Visibility (mi)	10
A1	04 Apr 2025	Wind Speed (kts)	4.4
A1	04 Apr 2025	Wind Dir	E
A1	04 Apr 2025	Sea State	Regular Swell
A1	04 Apr 2025	High Tide Time	148
A1	04 Apr 2025	Low Tide Time	1012
A1	04 Apr 2025	Comments	Kelp
A1	08 Apr 2025	Arrive Time	841
A1	08 Apr 2025	Depart Time	845
A1	08 Apr 2025	Air Temp (C)	12.2
A1	08 Apr 2025	Visibility (mi)	0
A1	08 Apr 2025	Wind Speed (kts)	3.1
A1	08 Apr 2025	Wind Dir	NW
A1	08 Apr 2025	Sea State	Light Chop
A1	08 Apr 2025	High Tide Time	712
A1	08 Apr 2025	Low Tide Time	1354
A1	08 Apr 2025	Comments	
A1	15 Apr 2025	Arrive Time	747
A1	15 Apr 2025	Depart Time	755
A1	15 Apr 2025	Air Temp (C)	14.4
A1	15 Apr 2025	Visibility (mi)	9
A1	15 Apr 2025	Wind Speed (kts)	2.3
A1	15 Apr 2025	Wind Dir	SW
A1	15 Apr 2025	Sea State	Calm
A1	15 Apr 2025	High Tide Time	2236
A1	15 Apr 2025	Low Tide Time	518
A1	15 Apr 2025	Comments	Kelp. Needed second cast to get 18m sample after Niskin failed on first cast
A1	22 Apr 2025	Arrive Time	750
A1	22 Apr 2025	Depart Time	753
A1	22 Apr 2025	Air Temp (C)	14.1
A1	22 Apr 2025	Visibility (mi)	9
A1	22 Apr 2025	Wind Speed (kts)	6.6
A1	22 Apr 2025	Wind Dir	NW
A1	22 Apr 2025	Sea State	Calm
A1	22 Apr 2025	High Tide Time	500
A1	22 Apr 2025	Low Tide Time	1212
A1	22 Apr 2025	Comments	
A1	29 Apr 2025	Arrive Time	750
A1	29 Apr 2025	Depart Time	759
A1	29 Apr 2025	Air Temp (C)	14.7
A1	29 Apr 2025	Visibility (mi)	11
A1	29 Apr 2025	Wind Speed (kts)	0
A1	29 Apr 2025	Wind Dir	NE
A1	29 Apr 2025	Sea State	Regular Swell
A1	29 Apr 2025	High Tide Time	2242
A1	29 Apr 2025	Low Tide Time	512
A1	29 Apr 2025	Comments	

Station	Date	Parameter	Value
C4	04 Apr 2025	Arrive Time	953
C4	04 Apr 2025	Depart Time	957
C4	04 Apr 2025	Air Temp (C)	15.6
C4	04 Apr 2025	Visibility (mi)	10
C4	04 Apr 2025	Wind Speed (kts)	0
C4	04 Apr 2025	Wind Dir	SW
C4	04 Apr 2025	Sea State	Regular Swell
C4	04 Apr 2025	High Tide Time	148
C4	04 Apr 2025	Low Tide Time	1012
C4	04 Apr 2025	Comments	
C4	08 Apr 2025	Arrive Time	1031
C4	08 Apr 2025	Depart Time	1033
C4	08 Apr 2025	Air Temp (C)	14.9
C4	08 Apr 2025	Visibility (mi)	2
C4	08 Apr 2025	Wind Speed (kts)	5
C4	08 Apr 2025	Wind Dir	N
C4	08 Apr 2025	Sea State	Light Chop
C4	08 Apr 2025	High Tide Time	712
C4	08 Apr 2025	Low Tide Time	1354
C4	08 Apr 2025	Comments	
C4	15 Apr 2025	Arrive Time	924
C4	15 Apr 2025	Depart Time	930
C4	15 Apr 2025	Air Temp (C)	14.5
C4	15 Apr 2025	Visibility (mi)	9
C4	15 Apr 2025	Wind Speed (kts)	12.1
C4	15 Apr 2025	Wind Dir	SW
C4	15 Apr 2025	Sea State	Calm
C4	15 Apr 2025	High Tide Time	2236
C4	15 Apr 2025	Low Tide Time	518
C4	15 Apr 2025	Comments	
C4	22 Apr 2025	Arrive Time	932
C4	22 Apr 2025	Depart Time	936
C4	22 Apr 2025	Air Temp (C)	15.2
C4	22 Apr 2025	Visibility (mi)	9
C4	22 Apr 2025	Wind Speed (kts)	6.7
C4	22 Apr 2025	Wind Dir	W
C4	22 Apr 2025	Sea State	Calm
C4	22 Apr 2025	High Tide Time	500
C4	22 Apr 2025	Low Tide Time	1212
C4	22 Apr 2025	Comments	
C4	29 Apr 2025	Arrive Time	923
C4	29 Apr 2025	Depart Time	928
C4	29 Apr 2025	Air Temp (C)	16.3
C4	29 Apr 2025	Visibility (mi)	11
C4	29 Apr 2025	Wind Speed (kts)	6.6
C4	29 Apr 2025	Wind Dir	S
C4	29 Apr 2025	Sea State	Regular Swell
C4	29 Apr 2025	High Tide Time	2242
C4	29 Apr 2025	Low Tide Time	512
C4	29 Apr 2025	Comments	
A7	04 Apr 2025	Arrive Time	835
A7	04 Apr 2025	Depart Time	839
A7	04 Apr 2025	Air Temp (C)	12.5
A7	04 Apr 2025	Visibility (mi)	10
A7	04 Apr 2025	Wind Speed (kts)	2.6
A7	04 Apr 2025	Wind Dir	SE

Station	Date	Parameter	Value
A7	04 Apr 2025	Sea State	Regular Swell
A7	04 Apr 2025	High Tide Time	148
A7	04 Apr 2025	Low Tide Time	1012
A7	04 Apr 2025	Comments	Kelp
A7	08 Apr 2025	Arrive Time	857
A7	08 Apr 2025	Depart Time	900
A7	08 Apr 2025	Air Temp (C)	12.4
A7	08 Apr 2025	Visibility (mi)	0
A7	08 Apr 2025	Wind Speed (kts)	0
A7	08 Apr 2025	Wind Dir	N
A7	08 Apr 2025	Sea State	Light Chop
A7	08 Apr 2025	High Tide Time	712
A7	08 Apr 2025	Low Tide Time	1354
A7	08 Apr 2025	Comments	
A7	15 Apr 2025	Arrive Time	802
A7	15 Apr 2025	Depart Time	808
A7	15 Apr 2025	Air Temp (C)	14.4
A7	15 Apr 2025	Visibility (mi)	9
A7	15 Apr 2025	Wind Speed (kts)	5.9
A7	15 Apr 2025	Wind Dir	W
A7	15 Apr 2025	Sea State	Calm
A7	15 Apr 2025	High Tide Time	2236
A7	15 Apr 2025	Low Tide Time	518
A7	15 Apr 2025	Comments	
A7	22 Apr 2025	Arrive Time	805
A7	22 Apr 2025	Depart Time	814
A7	22 Apr 2025	Air Temp (C)	14.1
A7	22 Apr 2025	Visibility (mi)	9
A7	22 Apr 2025	Wind Speed (kts)	1
A7	22 Apr 2025	Wind Dir	N
A7	22 Apr 2025	Sea State	Calm
A7	22 Apr 2025	High Tide Time	500
A7	22 Apr 2025	Low Tide Time	1212
A7	22 Apr 2025	Comments	CTD wire pinched
A7	29 Apr 2025	Arrive Time	808
A7	29 Apr 2025	Depart Time	812
A7	29 Apr 2025	Air Temp (C)	14.7
A7	29 Apr 2025	Visibility (mi)	11
A7	29 Apr 2025	Wind Speed (kts)	0
A7	29 Apr 2025	Wind Dir	NW
A7	29 Apr 2025	Sea State	Regular Swell
A7	29 Apr 2025	High Tide Time	2242
A7	29 Apr 2025	Low Tide Time	512
A7	29 Apr 2025	Comments	
C5	04 Apr 2025	Arrive Time	942
C5	04 Apr 2025	Depart Time	946
C5	04 Apr 2025	Air Temp (C)	13.5
C5	04 Apr 2025	Visibility (mi)	10
C5	04 Apr 2025	Wind Speed (kts)	0
C5	04 Apr 2025	Wind Dir	S
C5	04 Apr 2025	Sea State	Regular Swell
C5	04 Apr 2025	High Tide Time	148
C5	04 Apr 2025	Low Tide Time	1012
C5	04 Apr 2025	Comments	
C5	08 Apr 2025	Arrive Time	1020

Station	Date	Parameter	Value
C5	08 Apr 2025	Depart Time	1022
C5	08 Apr 2025	Air Temp (C)	15
C5	08 Apr 2025	Visibility (mi)	2
C5	08 Apr 2025	Wind Speed (kts)	0
C5	08 Apr 2025	Wind Dir	N
C5	08 Apr 2025	Sea State	Light Chop
C5	08 Apr 2025	High Tide Time	712
C5	08 Apr 2025	Low Tide Time	1354
C5	08 Apr 2025	Comments	
C5	15 Apr 2025	Arrive Time	913
C5	15 Apr 2025	Depart Time	917
C5	15 Apr 2025	Air Temp (C)	14.5
C5	15 Apr 2025	Visibility (mi)	9
C5	15 Apr 2025	Wind Speed (kts)	5.1
C5	15 Apr 2025	Wind Dir	SW
C5	15 Apr 2025	Sea State	Calm
C5	15 Apr 2025	High Tide Time	2236
C5	15 Apr 2025	Low Tide Time	518
C5	15 Apr 2025	Comments	
C5	22 Apr 2025	Arrive Time	920
C5	22 Apr 2025	Depart Time	925
C5	22 Apr 2025	Air Temp (C)	14.6
C5	22 Apr 2025	Visibility (mi)	9
C5	22 Apr 2025	Wind Speed (kts)	4.4
C5	22 Apr 2025	Wind Dir	S
C5	22 Apr 2025	Sea State	Calm
C5	22 Apr 2025	High Tide Time	500
C5	22 Apr 2025	Low Tide Time	1212
C5	22 Apr 2025	Comments	
C5	29 Apr 2025	Arrive Time	914
C5	29 Apr 2025	Depart Time	917
C5	29 Apr 2025	Air Temp (C)	16.4
C5	29 Apr 2025	Visibility (mi)	11
C5	29 Apr 2025	Wind Speed (kts)	2.5
C5	29 Apr 2025	Wind Dir	SW
C5	29 Apr 2025	Sea State	Regular Swell
C5	29 Apr 2025	High Tide Time	2242
C5	29 Apr 2025	Low Tide Time	512
C5	29 Apr 2025	Comments	
A6	04 Apr 2025	Arrive Time	846
A6	04 Apr 2025	Depart Time	851
A6	04 Apr 2025	Air Temp (C)	13.3
A6	04 Apr 2025	Visibility (mi)	10
A6	04 Apr 2025	Wind Speed (kts)	0
A6	04 Apr 2025	Wind Dir	S
A6	04 Apr 2025	Sea State	Regular Swell
A6	04 Apr 2025	High Tide Time	148
A6	04 Apr 2025	Low Tide Time	1012
A6	04 Apr 2025	Comments	Kelp Debris
A6	08 Apr 2025	Arrive Time	908
A6	08 Apr 2025	Depart Time	913
A6	08 Apr 2025	Air Temp (C)	12.5
A6	08 Apr 2025	Visibility (mi)	0
A6	08 Apr 2025	Wind Speed (kts)	0
A6	08 Apr 2025	Wind Dir	N
A6	08 Apr 2025	Sea State	Light Chop

Station	Date	Parameter	Value
A6	08 Apr 2025	High Tide Time	712
A6	08 Apr 2025	Low Tide Time	1354
A6	08 Apr 2025	Comments	
A6	15 Apr 2025	Arrive Time	816
A6	15 Apr 2025	Depart Time	821
A6	15 Apr 2025	Air Temp (C)	14.5
A6	15 Apr 2025	Visibility (mi)	9
A6	15 Apr 2025	Wind Speed (kts)	5.5
A6	15 Apr 2025	Wind Dir	SW
A6	15 Apr 2025	Sea State	Calm
A6	15 Apr 2025	High Tide Time	2236
A6	15 Apr 2025	Low Tide Time	518
A6	15 Apr 2025	Comments	
A6	22 Apr 2025	Arrive Time	821
A6	22 Apr 2025	Depart Time	827
A6	22 Apr 2025	Air Temp (C)	14
A6	22 Apr 2025	Visibility (mi)	9
A6	22 Apr 2025	Wind Speed (kts)	17.2
A6	22 Apr 2025	Wind Dir	NW
A6	22 Apr 2025	Sea State	Calm
A6	22 Apr 2025	High Tide Time	500
A6	22 Apr 2025	Low Tide Time	1212
A6	22 Apr 2025	Comments	
A6	29 Apr 2025	Arrive Time	820
A6	29 Apr 2025	Depart Time	824
A6	29 Apr 2025	Air Temp (C)	14.9
A6	29 Apr 2025	Visibility (mi)	11
A6	29 Apr 2025	Wind Speed (kts)	8
A6	29 Apr 2025	Wind Dir	NW
A6	29 Apr 2025	Sea State	Regular Swell
A6	29 Apr 2025	High Tide Time	2242
A6	29 Apr 2025	Low Tide Time	512
A6	29 Apr 2025	Comments	
C6	04 Apr 2025	Arrive Time	932
C6	04 Apr 2025	Depart Time	936
C6	04 Apr 2025	Air Temp (C)	14.4
C6	04 Apr 2025	Visibility (mi)	10
C6	04 Apr 2025	Wind Speed (kts)	0
C6	04 Apr 2025	Wind Dir	NE
C6	04 Apr 2025	Sea State	Regular Swell
C6	04 Apr 2025	High Tide Time	148
C6	04 Apr 2025	Low Tide Time	1012
C6	04 Apr 2025	Comments	
C6	08 Apr 2025	Arrive Time	1003
C6	08 Apr 2025	Depart Time	1015
C6	08 Apr 2025	Air Temp (C)	13.3
C6	08 Apr 2025	Visibility (mi)	2
C6	08 Apr 2025	Wind Speed (kts)	3.3
C6	08 Apr 2025	Wind Dir	N
C6	08 Apr 2025	Sea State	Light Chop
C6	08 Apr 2025	High Tide Time	712
C6	08 Apr 2025	Low Tide Time	1354
C6	08 Apr 2025	Comments	
C6	15 Apr 2025	Arrive Time	903
C6	15 Apr 2025	Depart Time	907

Station	Date	Parameter	Value
C6	15 Apr 2025	Air Temp (C)	14.6
C6	15 Apr 2025	Visibility (mi)	9
C6	15 Apr 2025	Wind Speed (kts)	7.8
C6	15 Apr 2025	Wind Dir	W
C6	15 Apr 2025	Sea State	Calm
C6	15 Apr 2025	High Tide Time	2236
C6	15 Apr 2025	Low Tide Time	518
C6	15 Apr 2025	Comments	
C6	22 Apr 2025	Arrive Time	911
C6	22 Apr 2025	Depart Time	913
C6	22 Apr 2025	Air Temp (C)	14.7
C6	22 Apr 2025	Visibility (mi)	9
C6	22 Apr 2025	Wind Speed (kts)	0
C6	22 Apr 2025	Wind Dir	NW
C6	22 Apr 2025	Sea State	Calm
C6	22 Apr 2025	High Tide Time	500
C6	22 Apr 2025	Low Tide Time	1212
C6	22 Apr 2025	Comments	
C6	29 Apr 2025	Arrive Time	904
C6	29 Apr 2025	Depart Time	908
C6	29 Apr 2025	Air Temp (C)	17.7
C6	29 Apr 2025	Visibility (mi)	11
C6	29 Apr 2025	Wind Speed (kts)	0
C6	29 Apr 2025	Wind Dir	W
C6	29 Apr 2025	Sea State	Regular Swell
C6	29 Apr 2025	High Tide Time	2242
C6	29 Apr 2025	Low Tide Time	512
C6	29 Apr 2025	Comments	
C7	04 Apr 2025	Arrive Time	900
C7	04 Apr 2025	Depart Time	904
C7	04 Apr 2025	Air Temp (C)	14.9
C7	04 Apr 2025	Visibility (mi)	10
C7	04 Apr 2025	Wind Speed (kts)	2.1
C7	04 Apr 2025	Wind Dir	SW
C7	04 Apr 2025	Sea State	Regular Swell
C7	04 Apr 2025	High Tide Time	148
C7	04 Apr 2025	Low Tide Time	1012
C7	04 Apr 2025	Comments	
C7	08 Apr 2025	Arrive Time	930
C7	08 Apr 2025	Depart Time	932
C7	08 Apr 2025	Air Temp (C)	12.8
C7	08 Apr 2025	Visibility (mi)	0
C7	08 Apr 2025	Wind Speed (kts)	0
C7	08 Apr 2025	Wind Dir	NW
C7	08 Apr 2025	Sea State	Light Chop
C7	08 Apr 2025	High Tide Time	712
C7	08 Apr 2025	Low Tide Time	1354
C7	08 Apr 2025	Comments	
C7	15 Apr 2025	Arrive Time	838
C7	15 Apr 2025	Depart Time	838
C7	15 Apr 2025	Air Temp (C)	14.6
C7	15 Apr 2025	Visibility (mi)	9
C7	15 Apr 2025	Wind Speed (kts)	8.8
C7	15 Apr 2025	Wind Dir	NW
C7	15 Apr 2025	Sea State	Calm
C7	15 Apr 2025	High Tide Time	2236

Station	Date	Parameter	Value
C7	15 Apr 2025	Low Tide Time	518
C7	15 Apr 2025	Comments	Collected on station
C7	22 Apr 2025	Arrive Time	837
C7	22 Apr 2025	Depart Time	842
C7	22 Apr 2025	Air Temp (C)	14.1
C7	22 Apr 2025	Visibility (mi)	9
C7	22 Apr 2025	Wind Speed (kts)	14.3
C7	22 Apr 2025	Wind Dir	NW
C7	22 Apr 2025	Sea State	Calm
C7	22 Apr 2025	High Tide Time	500
C7	22 Apr 2025	Low Tide Time	1212
C7	22 Apr 2025	Comments	
C7	29 Apr 2025	Arrive Time	834
C7	29 Apr 2025	Depart Time	838
C7	29 Apr 2025	Air Temp (C)	15.1
C7	29 Apr 2025	Visibility (mi)	11
C7	29 Apr 2025	Wind Speed (kts)	5.5
C7	29 Apr 2025	Wind Dir	NW
C7	29 Apr 2025	Sea State	Regular Swell
C7	29 Apr 2025	High Tide Time	2242
C7	29 Apr 2025	Low Tide Time	512
C7	29 Apr 2025	Comments	
C8	04 Apr 2025	Arrive Time	911
C8	04 Apr 2025	Depart Time	915
C8	04 Apr 2025	Air Temp (C)	13.7
C8	04 Apr 2025	Visibility (mi)	10
C8	04 Apr 2025	Wind Speed (kts)	3.6
C8	04 Apr 2025	Wind Dir	SW
C8	04 Apr 2025	Sea State	Regular Swell
C8	04 Apr 2025	High Tide Time	148
C8	04 Apr 2025	Low Tide Time	1012
C8	04 Apr 2025	Comments	Seagrass
C8	08 Apr 2025	Arrive Time	941
C8	08 Apr 2025	Depart Time	944
C8	08 Apr 2025	Air Temp (C)	12.9
C8	08 Apr 2025	Visibility (mi)	0
C8	08 Apr 2025	Wind Speed (kts)	0
C8	08 Apr 2025	Wind Dir	W
C8	08 Apr 2025	Sea State	Light Chop
C8	08 Apr 2025	High Tide Time	712
C8	08 Apr 2025	Low Tide Time	1354
C8	08 Apr 2025	Comments	
C8	15 Apr 2025	Arrive Time	842
C8	15 Apr 2025	Depart Time	846
C8	15 Apr 2025	Air Temp (C)	14.5
C8	15 Apr 2025	Visibility (mi)	9
C8	15 Apr 2025	Wind Speed (kts)	8.5
C8	15 Apr 2025	Wind Dir	W
C8	15 Apr 2025	Sea State	Calm
C8	15 Apr 2025	High Tide Time	2236
C8	15 Apr 2025	Low Tide Time	518
C8	15 Apr 2025	Comments	
C8	22 Apr 2025	Arrive Time	855
C8	22 Apr 2025	Depart Time	856
C8	22 Apr 2025	Air Temp (C)	15.1

Station	Date	Parameter	Value
C8	22 Apr 2025	Visibility (mi)	9
C8	22 Apr 2025	Wind Speed (kts)	3.5
C8	22 Apr 2025	Wind Dir	SW
C8	22 Apr 2025	Sea State	Calm
C8	22 Apr 2025	High Tide Time	500
C8	22 Apr 2025	Low Tide Time	1212
C8	22 Apr 2025	Comments	
C8	29 Apr 2025	Arrive Time	845
C8	29 Apr 2025	Depart Time	850
C8	29 Apr 2025	Air Temp (C)	15.1
C8	29 Apr 2025	Visibility (mi)	11
C8	29 Apr 2025	Wind Speed (kts)	6.1
C8	29 Apr 2025	Wind Dir	NW
C8	29 Apr 2025	Sea State	Regular Swell
C8	29 Apr 2025	High Tide Time	2242
C8	29 Apr 2025	Low Tide Time	512
C8	29 Apr 2025	Comments	

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	04 Apr 2025	1	12.24	87.61	5.9	33.83	7.8	25.6	1.32
A1	04 Apr 2025	2	12.26	87.53	6.2	33.85	7.9	25.6	1.19
A1	04 Apr 2025	3	12.08	87.27	6.1	33.89	7.9	25.7	1.11
A1	04 Apr 2025	4	11.93	86.87	5.8	33.91	7.8	25.8	1.40
A1	04 Apr 2025	5	11.91	86.27	5.6	33.91	7.8	25.8	1.94
A1	04 Apr 2025	6	11.83	85.57	5.5	33.92	7.8	25.8	2.52
A1	04 Apr 2025	7	11.78	85.22	5.3	33.92	7.8	25.8	3.10
A1	04 Apr 2025	8	11.56	85.03	5.0	33.95	7.8	25.9	4.67
A1	04 Apr 2025	9	11.41	85.77	4.6	33.96	7.8	25.9	5.63
A1	04 Apr 2025	10	11.28	86.84	4.2	33.98	7.7	25.9	5.89
A1	04 Apr 2025	11	11.17	89.37	3.9	33.99	7.7	26.0	5.60
A1	04 Apr 2025	12	10.93	91.31	3.6	34.03	7.7	26.0	0.80
A1	04 Apr 2025	13	10.62	91.81	3.0	34.06	7.7	26.1	0.35
A1	04 Apr 2025	14	10.62	93.46	2.8	34.06	7.6	26.1	0.40
A1	04 Apr 2025	15	10.49	93.91	2.6	34.08	7.6	26.1	0.32
A1	04 Apr 2025	16	10.52	93.86	2.5	34.07	7.6	26.1	0.38
A1	04 Apr 2025	17	10.48	93.47	2.4	34.08	7.6	26.1	0.35
A1	04 Apr 2025	18	10.50	91.35	2.4	34.08	7.6	26.1	0.27
A1	04 Apr 2025	19	10.49	93.44	2.3	34.08	7.6	26.1	0.45
A1	08 Apr 2025	1	12.51	82.72	6.1	33.89	7.9	25.6	5.61
A1	08 Apr 2025	2	12.45	80.12	6.3	33.93	7.9	25.7	5.97
A1	08 Apr 2025	3	12.34	80.22	6.4	33.95	7.9	25.7	6.92
A1	08 Apr 2025	4	12.31	80.37	6.3	33.94	7.9	25.7	6.96
A1	08 Apr 2025	5	12.26	80.94	6.2	33.93	7.9	25.7	6.69
A1	08 Apr 2025	6	12.07	81.14	6.1	34.02	7.9	25.8	6.10
A1	08 Apr 2025	7	11.70	81.56	6.0	34.07	7.8	25.9	6.56
A1	08 Apr 2025	8	11.45	83.42	5.6	34.05	7.8	26.0	6.47
A1	08 Apr 2025	9	11.28	85.24	5.3	34.12	7.8	26.0	5.72
A1	08 Apr 2025	10	11.14	86.70	5.1	34.15	7.7	26.1	4.70
A1	08 Apr 2025	11	11.05	88.91	4.8	34.14	7.7	26.1	3.17
A1	08 Apr 2025	12	11.04	90.38	4.6	34.25	7.7	26.2	2.70
A1	08 Apr 2025	13	11.02	96.26	4.3	34.09	7.7	26.1	2.73
A1	08 Apr 2025	14	11.01	90.75	3.9	34.05	7.7	26.0	2.82
A1	08 Apr 2025	15	11.01	91.00	3.6	34.03	7.7	26.0	2.65
A1	08 Apr 2025	16	11.00	90.92	3.5	34.02	7.7	26.0	2.57
A1	08 Apr 2025	17	11.00	90.94	3.4	34.01	7.7	26.0	2.64
A1	08 Apr 2025	18	10.99	90.96	3.4	34.00	7.7	26.0	2.59
A1	08 Apr 2025	19	10.98	94.75	3.2	33.99	7.7	26.0	2.56
A1	08 Apr 2025	20	10.99	91.27	3.2	33.99	7.7	26.0	2.48
A1	15 Apr 2025	1	14.87	87.97	11.1	33.82	8.3	25.1	2.92
A1	15 Apr 2025	2	14.70	87.66	11.2	33.83	8.3	25.1	3.16
A1	15 Apr 2025	3	14.04	86.95	11.4	33.85	8.3	25.3	5.18
A1	15 Apr 2025	4	13.55	83.72	10.7	33.85	8.3	25.4	6.53
A1	15 Apr 2025	5	12.04	80.42	8.0	33.90	8.1	25.7	10.29
A1	15 Apr 2025	6	11.81	78.64	6.5	33.88	7.9	25.8	11.92
A1	15 Apr 2025	7	11.66	76.91	6.0	33.88	7.9	25.8	NA
A1	15 Apr 2025	8	11.62	76.60	5.8	33.88	7.9	25.8	NA
A1	15 Apr 2025	9	11.61	75.56	5.7	33.88	7.8	25.8	NA
A1	15 Apr 2025	10	11.59	75.08	5.7	33.88	7.8	25.8	NA
A1	15 Apr 2025	11	11.58	74.55	5.7	33.88	7.8	25.8	NA
A1	15 Apr 2025	12	11.57	74.95	5.6	33.88	7.8	25.8	NA
A1	15 Apr 2025	13	11.47	74.24	5.4	33.88	7.8	25.8	NA
A1	15 Apr 2025	14	11.40	72.67	5.0	33.89	7.8	25.8	NA
A1	15 Apr 2025	15	11.32	71.85	4.6	33.91	7.8	25.9	NA
A1	15 Apr 2025	16	11.24	69.99	4.0	33.92	7.8	25.9	NA
A1	15 Apr 2025	17	11.15	70.19	3.5	33.94	7.7	25.9	NA
A1	15 Apr 2025	18	11.12	69.48	3.1	33.94	7.7	25.9	NA
A1	22 Apr 2025	1	15.35	88.72	10.1	33.59	8.2	24.8	2.30
A1	22 Apr 2025	2	15.34	88.68	10.1	33.59	8.2	24.8	2.24
A1	22 Apr 2025	3	15.33	88.43	10.0	33.59	8.2	24.8	2.42
A1	22 Apr 2025	4	15.00	87.80	9.9	33.56	8.2	24.9	2.98
A1	22 Apr 2025	5	14.87	86.49	9.7	33.56	8.1	24.9	4.47
A1	22 Apr 2025	6	14.45	84.88	9.3	33.56	8.1	25.0	5.47
A1	22 Apr 2025	7	14.16	82.85	8.9	33.56	8.1	25.0	8.01
A1	22 Apr 2025	8	13.78	83.93	8.3	33.56	8.0	25.1	7.32

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A1	22 Apr 2025	9	12.86	87.41	7.6	33.60	8.0	25.3	5.17
A1	22 Apr 2025	10	12.52	91.63	7.1	33.61	7.9	25.4	2.92
A1	22 Apr 2025	11	12.60	92.67	7.0	33.60	7.9	25.4	2.76
A1	22 Apr 2025	12	12.45	92.93	6.9	33.61	7.9	25.4	2.86
A1	22 Apr 2025	13	12.38	93.28	6.7	33.62	7.9	25.4	2.22
A1	22 Apr 2025	14	12.19	94.23	6.5	33.63	7.9	25.5	2.17
A1	22 Apr 2025	15	11.98	94.73	6.2	33.66	7.8	25.6	1.61
A1	22 Apr 2025	16	11.93	94.83	6.0	33.66	7.8	25.6	1.49
A1	22 Apr 2025	17	11.82	94.89	5.7	33.67	7.8	25.6	1.39
A1	22 Apr 2025	18	11.48	94.00	5.2	33.72	7.8	25.7	1.00
A1	29 Apr 2025	1	15.69	95.84	8.5	33.48	8.1	24.6	0.41
A1	29 Apr 2025	2	15.67	95.65	8.4	33.48	8.1	24.7	0.42
A1	29 Apr 2025	3	15.51	95.78	8.4	33.48	8.1	24.7	0.47
A1	29 Apr 2025	4	15.40	95.97	8.3	33.47	8.1	24.7	0.48
A1	29 Apr 2025	5	15.11	96.24	8.0	33.46	8.1	24.8	0.53
A1	29 Apr 2025	6	13.85	96.27	7.6	33.46	8.1	25.0	0.55
A1	29 Apr 2025	7	12.79	96.41	7.0	33.45	8.0	25.2	0.60
A1	29 Apr 2025	8	11.73	96.49	6.4	33.48	7.9	25.5	0.64
A1	29 Apr 2025	9	11.36	96.70	5.8	33.54	7.8	25.6	0.68
A1	29 Apr 2025	10	11.27	96.51	5.5	33.56	7.8	25.6	0.64
A1	29 Apr 2025	11	11.26	95.65	5.3	33.55	7.8	25.6	0.65
A1	29 Apr 2025	12	11.23	95.89	5.3	33.56	7.8	25.6	0.69
A1	29 Apr 2025	13	11.23	95.98	5.2	33.56	7.8	25.6	0.65
A1	29 Apr 2025	14	11.20	95.81	5.2	33.58	7.8	25.6	0.72
A1	29 Apr 2025	15	11.15	95.80	5.0	33.60	7.8	25.7	0.74
A1	29 Apr 2025	16	11.14	95.70	5.2	33.60	7.8	25.7	0.73
A1	29 Apr 2025	17	11.16	95.60	5.1	33.60	7.8	25.7	0.70
A1	29 Apr 2025	18	11.01	95.52	4.6	33.65	7.8	25.7	0.70
A1	29 Apr 2025	19	10.94	94.62	4.4	33.68	7.7	25.8	0.68
C4	04 Apr 2025	1	12.37	77.45	3.7	33.77	7.9	25.6	1.48
C4	04 Apr 2025	2	12.48	77.09	5.1	33.79	7.9	25.6	1.58
C4	04 Apr 2025	3	12.19	77.75	5.8	33.94	7.9	25.7	1.54
C4	04 Apr 2025	4	11.94	79.07	5.9	34.06	7.8	25.9	1.27
C4	04 Apr 2025	5	11.70	79.19	5.8	34.15	7.8	26.0	0.99
C4	04 Apr 2025	6	11.41	81.51	5.7	34.17	7.8	26.1	1.21
C4	04 Apr 2025	7	11.28	85.56	5.2	34.08	7.8	26.0	1.15
C4	04 Apr 2025	8	11.20	88.43	4.6	34.04	7.7	26.0	0.86
C4	04 Apr 2025	9	11.09	90.75	4.0	34.05	7.7	26.0	0.53
C4	04 Apr 2025	10	10.98	91.95	3.6	34.05	7.7	26.0	0.31
C4	04 Apr 2025	11	10.98	90.58	3.3	34.03	7.7	26.0	0.52
C4	08 Apr 2025	1	13.23	78.79	8.5	33.89	8.1	25.5	2.88
C4	08 Apr 2025	2	13.00	78.71	8.3	33.91	8.1	25.5	3.42
C4	08 Apr 2025	3	12.50	77.70	7.7	33.92	8.0	25.7	4.92
C4	08 Apr 2025	4	12.45	78.06	7.2	33.90	8.0	25.6	6.00
C4	08 Apr 2025	5	12.39	78.97	7.0	33.90	8.0	25.7	6.74
C4	08 Apr 2025	6	12.31	79.06	6.7	33.91	7.9	25.7	6.44
C4	08 Apr 2025	7	12.22	80.26	6.4	33.91	7.9	25.7	6.46
C4	08 Apr 2025	8	11.93	81.24	5.9	33.93	7.9	25.8	5.96
C4	08 Apr 2025	9	11.75	83.44	5.3	33.94	7.8	25.8	5.07
C4	08 Apr 2025	10	11.39	84.34	4.6	33.96	7.8	25.9	3.96
C4	08 Apr 2025	11	11.28	84.89	3.9	33.96	7.7	25.9	1.97
C4	08 Apr 2025	12	11.33	84.35	3.8	33.95	7.7	25.9	2.83
C4	15 Apr 2025	1	14.82	84.92	10.8	33.86	8.3	25.1	3.37
C4	15 Apr 2025	2	14.83	84.77	10.8	33.86	8.3	25.1	3.49
C4	15 Apr 2025	3	14.68	84.32	10.7	33.85	8.3	25.2	3.96
C4	15 Apr 2025	4	13.69	82.03	10.4	33.87	8.2	25.4	6.92
C4	15 Apr 2025	5	13.22	80.53	8.6	33.89	8.1	25.5	5.31
C4	15 Apr 2025	6	12.67	88.09	6.6	33.90	8.0	25.6	2.68
C4	15 Apr 2025	7	12.42	91.82	5.9	33.90	7.9	25.7	1.47
C4	15 Apr 2025	8	12.28	92.88	5.6	33.90	7.9	25.7	1.15
C4	15 Apr 2025	9	12.25	92.49	5.4	33.90	7.9	25.7	1.15
C4	15 Apr 2025	10	12.25	92.73	5.3	33.90	7.9	25.7	1.13
C4	15 Apr 2025	11	12.31	91.90	5.3	33.90	7.9	25.7	1.40
C4	15 Apr 2025	12	12.42	91.70	5.6	33.90	7.9	25.7	1.58
C4	22 Apr 2025	1	15.41	86.56	9.5	33.69	8.2	24.9	1.71
C4	22 Apr 2025	2	15.38	86.46	9.5	33.68	8.2	24.9	1.79
C4	22 Apr 2025	3	15.36	86.13	9.5	33.68	8.2	24.9	2.31
C4	22 Apr 2025	4	15.32	86.12	9.4	33.68	8.2	24.9	2.68
C4	22 Apr 2025	5	15.25	86.35	9.2	33.68	8.2	24.9	3.01

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C4	22 Apr 2025	6	14.96	87.05	8.4	33.65	8.2	24.9	2.96
C4	22 Apr 2025	7	12.91	89.33	6.9	33.70	8.0	25.4	2.10
C4	22 Apr 2025	8	11.69	93.56	5.4	33.78	7.8	25.7	0.51
C4	22 Apr 2025	9	11.47	94.11	4.7	33.77	7.8	25.7	0.45
C4	22 Apr 2025	10	11.40	92.46	4.3	33.77	7.7	25.7	0.39
C4	22 Apr 2025	11	11.45	91.34	4.3	33.76	7.7	25.7	0.36
C4	29 Apr 2025	1	15.85	85.71	8.0	33.48	8.1	24.6	0.34
C4	29 Apr 2025	2	15.62	85.76	8.1	33.47	8.1	24.7	0.31
C4	29 Apr 2025	3	15.43	86.53	8.1	33.47	8.1	24.7	0.33
C4	29 Apr 2025	4	15.31	89.30	8.2	33.47	8.1	24.7	0.37
C4	29 Apr 2025	5	15.24	91.58	8.2	33.47	8.1	24.7	0.44
C4	29 Apr 2025	6	15.10	92.39	7.9	33.47	8.1	24.8	0.49
C4	29 Apr 2025	7	14.70	92.30	7.2	33.48	8.1	24.9	0.48
C4	29 Apr 2025	8	13.14	91.65	6.3	33.58	8.0	25.3	0.38
C4	29 Apr 2025	9	12.47	91.02	5.5	33.64	7.9	25.4	0.30
C4	29 Apr 2025	10	12.42	89.16	5.3	33.63	7.8	25.4	0.30
C4	29 Apr 2025	11	12.39	87.86	5.1	33.63	7.8	25.4	0.33
C4	29 Apr 2025	12	12.59	88.21	5.2	33.62	7.8	25.4	0.39
A7	04 Apr 2025	1	12.61	87.55	6.9	33.80	7.9	25.5	1.21
A7	04 Apr 2025	2	12.58	87.53	6.8	33.81	7.9	25.6	1.27
A7	04 Apr 2025	3	12.35	87.14	6.5	33.85	7.9	25.6	1.30
A7	04 Apr 2025	4	12.21	86.56	6.1	33.85	7.9	25.7	1.67
A7	04 Apr 2025	5	12.04	86.46	5.7	33.86	7.9	25.7	1.82
A7	04 Apr 2025	6	11.92	87.57	5.4	33.88	7.8	25.7	1.83
A7	04 Apr 2025	7	11.72	88.31	5.1	33.91	7.8	25.8	2.02
A7	04 Apr 2025	8	11.46	87.94	4.7	33.92	7.8	25.9	2.26
A7	04 Apr 2025	9	11.28	88.22	4.2	33.95	7.8	25.9	1.88
A7	04 Apr 2025	10	11.25	90.11	4.1	33.96	7.8	25.9	1.60
A7	04 Apr 2025	11	11.23	90.14	4.0	33.96	7.7	25.9	1.26
A7	04 Apr 2025	12	11.13	89.71	3.8	33.96	7.7	25.9	1.06
A7	04 Apr 2025	13	10.78	91.19	3.3	34.01	7.7	26.0	0.78
A7	04 Apr 2025	14	10.57	92.69	2.8	34.05	7.7	26.1	0.28
A7	04 Apr 2025	15	10.53	94.13	2.5	34.05	7.6	26.1	0.22
A7	04 Apr 2025	16	10.42	94.71	2.3	34.07	7.6	26.2	0.19
A7	04 Apr 2025	17	10.35	95.30	2.2	34.10	7.6	26.2	0.20
A7	04 Apr 2025	18	10.34	94.98	2.1	34.11	7.6	26.2	0.20
A7	04 Apr 2025	19	10.35	94.38	2.0	34.11	7.6	26.2	0.21
A7	08 Apr 2025	1	13.00	75.50	8.9	33.88	8.1	25.5	8.73
A7	08 Apr 2025	2	12.94	74.61	8.8	33.89	8.1	25.5	10.08
A7	08 Apr 2025	3	12.88	73.73	8.7	33.88	8.1	25.6	12.77
A7	08 Apr 2025	4	12.87	72.52	8.6	33.88	8.1	25.6	13.24
A7	08 Apr 2025	5	12.81	70.42	8.3	33.88	8.0	25.6	13.86
A7	08 Apr 2025	6	12.72	70.66	7.8	33.88	8.0	25.6	12.91
A7	08 Apr 2025	7	12.33	71.57	7.4	33.90	8.0	25.7	11.27
A7	08 Apr 2025	8	12.14	74.13	6.9	33.90	7.9	25.7	10.82
A7	08 Apr 2025	9	11.78	75.89	6.4	33.92	7.9	25.8	12.37
A7	08 Apr 2025	10	11.53	77.32	5.8	33.93	7.9	25.8	13.78
A7	08 Apr 2025	11	11.42	79.33	5.3	33.93	7.8	25.9	9.83
A7	08 Apr 2025	12	11.26	83.39	4.8	33.95	7.8	25.9	7.68
A7	08 Apr 2025	13	11.12	85.36	4.4	33.95	7.8	25.9	5.59
A7	08 Apr 2025	14	11.08	88.03	4.2	33.95	7.7	25.9	4.84
A7	08 Apr 2025	15	11.07	89.69	4.0	33.95	7.7	25.9	4.02
A7	08 Apr 2025	16	11.06	90.05	3.9	33.95	7.7	25.9	3.75
A7	08 Apr 2025	17	11.06	90.24	4.0	33.95	7.7	25.9	3.58
A7	08 Apr 2025	18	11.04	89.92	3.7	33.95	7.7	26.0	3.81
A7	08 Apr 2025	19	11.03	89.68	3.7	33.95	7.7	26.0	3.33
A7	15 Apr 2025	1	14.83	84.51	11.4	33.81	8.3	25.1	6.17
A7	15 Apr 2025	2	14.83	84.11	11.3	33.81	8.3	25.1	5.97
A7	15 Apr 2025	3	14.79	84.21	10.7	33.81	8.3	25.1	6.39
A7	15 Apr 2025	4	13.72	82.49	9.5	33.87	8.2	25.4	7.33
A7	15 Apr 2025	5	12.58	82.78	7.7	33.91	8.1	25.6	5.23
A7	15 Apr 2025	6	11.90	83.26	6.5	33.86	8.0	25.7	7.46
A7	15 Apr 2025	7	11.54	82.29	6.0	33.84	7.9	25.8	9.97
A7	15 Apr 2025	8	11.53	81.00	5.8	33.83	7.9	25.8	10.56
A7	15 Apr 2025	9	11.51	80.77	5.7	33.82	7.8	25.8	10.71
A7	15 Apr 2025	10	11.42	81.28	5.6	33.81	7.8	25.8	9.28
A7	15 Apr 2025	11	11.37	82.09	5.5	33.80	7.8	25.8	8.49
A7	15 Apr 2025	12	11.33	83.67	5.3	33.80	7.8	25.8	8.30
A7	15 Apr 2025	13	11.25	84.47	5.1	33.81	7.8	25.8	7.21
A7	15 Apr 2025	14	11.23	84.98	5.0	33.81	7.8	25.8	7.02

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A7	15 Apr 2025	15	11.22	85.29	4.8	33.82	7.8	25.8	7.89
A7	15 Apr 2025	16	11.13	84.93	4.5	33.84	7.8	25.8	7.28
A7	15 Apr 2025	17	11.08	85.00	4.0	33.87	7.7	25.9	7.10
A7	15 Apr 2025	18	11.10	84.09	3.6	33.89	7.7	25.9	7.83
A7	15 Apr 2025	19	11.11	81.80	3.5	33.89	7.7	25.9	8.15
A7	22 Apr 2025	1	15.33	87.15	10.1	33.60	8.2	24.8	2.17
A7	22 Apr 2025	2	15.33	88.54	10.1	33.60	8.2	24.8	2.20
A7	22 Apr 2025	3	15.32	88.43	10.1	33.60	8.2	24.8	2.41
A7	22 Apr 2025	4	15.19	88.15	10.0	33.59	8.2	24.8	2.80
A7	22 Apr 2025	5	14.87	87.59	9.7	33.58	8.2	24.9	3.56
A7	22 Apr 2025	6	14.40	85.56	9.4	33.58	8.1	25.0	5.84
A7	22 Apr 2025	7	14.18	82.39	9.2	33.57	8.1	25.0	8.98
A7	22 Apr 2025	8	13.92	80.47	8.9	33.57	8.1	25.1	10.29
A7	22 Apr 2025	9	13.72	80.03	8.6	33.57	8.1	25.1	10.11
A7	22 Apr 2025	10	13.66	81.40	8.4	33.57	8.0	25.2	8.89
A7	22 Apr 2025	11	13.44	83.22	8.2	33.58	8.0	25.2	8.23
A7	22 Apr 2025	12	13.22	84.54	8.0	33.60	8.0	25.3	6.55
A7	22 Apr 2025	13	13.28	86.71	7.8	33.59	8.0	25.2	5.65
A7	22 Apr 2025	14	12.81	87.76	7.4	33.62	8.0	25.4	5.04
A7	22 Apr 2025	15	12.45	89.31	6.8	33.65	7.9	25.5	2.96
A7	22 Apr 2025	16	12.20	91.66	6.3	33.67	7.9	25.5	2.11
A7	22 Apr 2025	17	11.70	93.75	5.1	33.72	7.8	25.7	1.30
A7	22 Apr 2025	18	11.81	91.53	5.2	33.71	7.8	25.6	1.52
A7	29 Apr 2025	1	15.59	94.90	8.4	33.48	8.1	24.7	0.60
A7	29 Apr 2025	2	15.58	94.91	8.4	33.48	8.1	24.7	0.65
A7	29 Apr 2025	3	15.51	93.88	8.4	33.48	8.1	24.7	0.65
A7	29 Apr 2025	4	15.48	94.39	8.4	33.48	8.1	24.7	0.66
A7	29 Apr 2025	5	15.44	95.46	8.4	33.48	8.1	24.7	0.69
A7	29 Apr 2025	6	15.39	95.85	8.3	33.48	8.1	24.7	0.64
A7	29 Apr 2025	7	15.22	96.03	8.2	33.48	8.1	24.7	0.62
A7	29 Apr 2025	8	14.64	96.12	7.8	33.46	8.1	24.9	0.61
A7	29 Apr 2025	9	13.38	96.40	7.4	33.48	8.0	25.1	0.62
A7	29 Apr 2025	10	12.55	96.48	6.8	33.49	8.0	25.3	0.66
A7	29 Apr 2025	11	12.06	96.56	6.5	33.49	7.9	25.4	0.69
A7	29 Apr 2025	12	11.91	96.46	6.2	33.49	7.9	25.4	0.69
A7	29 Apr 2025	13	11.79	95.36	6.1	33.51	7.9	25.5	0.69
A7	29 Apr 2025	14	11.75	95.82	6.0	33.51	7.9	25.5	0.72
A7	29 Apr 2025	15	11.68	96.37	5.9	33.51	7.9	25.5	0.71
A7	29 Apr 2025	16	11.62	96.43	5.8	33.53	7.8	25.5	0.72
A7	29 Apr 2025	17	11.60	96.46	5.7	33.53	7.8	25.5	0.73
A7	29 Apr 2025	18	11.59	96.38	5.7	33.54	7.8	25.5	0.81
A7	29 Apr 2025	19	11.61	96.29	5.7	33.54	7.8	25.5	0.70
A7	29 Apr 2025	20	11.62	96.07	5.7	33.54	7.8	25.5	0.66
C5	04 Apr 2025	1	12.84	88.65	6.0	33.74	8.0	25.4	0.71
C5	04 Apr 2025	2	12.66	88.87	6.6	33.85	7.9	25.6	0.77
C5	04 Apr 2025	3	12.40	88.52	6.5	34.00	7.9	25.7	0.79
C5	04 Apr 2025	4	12.01	88.40	6.4	34.14	7.9	25.9	0.92
C5	04 Apr 2025	5	11.82	89.31	6.2	34.07	7.8	25.9	0.93
C5	04 Apr 2025	6	11.75	90.44	6.0	34.03	7.8	25.9	0.93
C5	04 Apr 2025	7	11.65	91.12	5.6	34.06	7.8	25.9	0.89
C5	04 Apr 2025	8	11.46	91.82	5.4	34.16	7.8	26.0	0.70
C5	04 Apr 2025	9	11.28	92.59	5.2	34.22	7.7	26.1	0.51
C5	04 Apr 2025	10	11.00	91.32	4.9	34.23	7.7	26.2	NA
C5	04 Apr 2025	11	11.16	89.73	4.5	34.05	7.7	26.0	NA
C5	08 Apr 2025	1	13.76	76.97	7.3	33.93	8.0	25.4	0.68
C5	08 Apr 2025	2	13.78	74.89	7.2	33.93	8.0	25.4	0.70
C5	08 Apr 2025	3	13.02	76.05	7.0	34.00	8.0	25.6	1.16
C5	08 Apr 2025	4	12.61	75.72	6.5	33.99	8.0	25.7	1.81
C5	08 Apr 2025	5	12.29	78.68	5.9	33.99	7.9	25.8	1.51
C5	08 Apr 2025	6	12.16	83.14	5.4	33.98	7.9	25.8	1.28
C5	08 Apr 2025	7	11.96	84.76	5.0	33.99	7.8	25.8	1.10
C5	08 Apr 2025	8	11.53	84.46	4.4	34.02	7.8	25.9	0.75
C5	08 Apr 2025	9	11.31	81.88	4.1	34.01	7.8	26.0	0.77
C5	08 Apr 2025	10	11.27	79.20	3.8	34.01	7.7	26.0	0.93
C5	08 Apr 2025	11	11.29	77.24	3.7	34.00	7.7	25.9	0.99
C5	15 Apr 2025	1	14.90	86.94	10.8	33.84	8.3	25.1	2.86
C5	15 Apr 2025	2	14.90	86.91	10.9	33.84	8.3	25.1	3.00
C5	15 Apr 2025	3	14.89	87.12	10.8	33.84	8.3	25.1	3.96
C5	15 Apr 2025	4	14.46	86.91	9.6	33.85	8.2	25.2	4.77

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C5	15 Apr 2025	5	12.91	84.50	7.7	33.92	8.1	25.6	4.67
C5	15 Apr 2025	6	12.70	85.84	6.7	33.90	8.0	25.6	4.30
C5	15 Apr 2025	7	12.43	85.52	5.9	33.91	7.9	25.7	4.09
C5	15 Apr 2025	8	12.47	86.37	5.5	33.91	7.9	25.6	3.31
C5	15 Apr 2025	9	12.27	85.86	4.8	33.92	7.8	25.7	2.43
C5	15 Apr 2025	10	12.32	85.33	4.7	33.92	7.8	25.7	2.23
C5	22 Apr 2025	1	15.30	88.04	9.5	33.67	8.2	24.9	2.97
C5	22 Apr 2025	2	15.39	88.20	9.4	33.67	8.2	24.9	2.45
C5	22 Apr 2025	3	14.78	87.80	9.2	33.65	8.2	25.0	4.29
C5	22 Apr 2025	4	13.98	84.70	8.8	33.64	8.1	25.1	8.28
C5	22 Apr 2025	5	13.84	82.47	8.4	33.64	8.1	25.2	4.85
C5	22 Apr 2025	6	13.82	87.84	8.2	33.65	8.0	25.2	2.13
C5	22 Apr 2025	7	13.80	91.21	8.2	33.65	8.0	25.2	1.74
C5	22 Apr 2025	8	13.75	92.43	8.2	33.65	8.0	25.2	1.38
C5	22 Apr 2025	9	13.58	92.88	7.8	33.66	8.0	25.2	0.84
C5	22 Apr 2025	10	13.52	93.11	7.6	33.67	8.0	25.3	0.57
C5	22 Apr 2025	11	13.66	91.75	7.7	33.66	8.0	25.2	0.94
C5	29 Apr 2025	1	15.55	91.40	8.3	33.47	8.1	24.7	0.49
C5	29 Apr 2025	2	15.54	91.50	8.3	33.47	8.1	24.7	0.48
C5	29 Apr 2025	3	15.28	91.60	8.3	33.46	8.1	24.7	0.55
C5	29 Apr 2025	4	15.07	91.65	8.2	33.46	8.1	24.8	0.63
C5	29 Apr 2025	5	14.91	92.19	8.1	33.45	8.1	24.8	0.62
C5	29 Apr 2025	6	14.71	92.38	8.1	33.45	8.1	24.8	0.58
C5	29 Apr 2025	7	14.65	92.79	8.0	33.46	8.1	24.9	0.58
C5	29 Apr 2025	8	14.64	92.76	8.0	33.46	8.1	24.9	0.58
C5	29 Apr 2025	9	14.63	92.89	7.9	33.45	8.1	24.9	0.58
C5	29 Apr 2025	10	14.56	92.75	7.9	33.45	8.1	24.9	0.59
C5	29 Apr 2025	11	14.36	91.48	7.9	33.46	8.1	24.9	0.52
A6	04 Apr 2025	1	12.53	87.12	6.4	33.82	7.9	25.6	1.38
A6	04 Apr 2025	2	12.48	86.95	6.3	33.82	7.9	25.6	1.54
A6	04 Apr 2025	3	11.91	86.87	5.6	33.89	7.9	25.7	1.78
A6	04 Apr 2025	4	11.49	87.68	4.8	33.91	7.8	25.8	1.13
A6	04 Apr 2025	5	11.25	91.46	4.2	33.92	7.8	25.9	0.90
A6	04 Apr 2025	6	11.22	93.05	3.9	33.92	7.7	25.9	1.22
A6	04 Apr 2025	7	11.12	93.61	3.8	33.93	7.7	25.9	0.93
A6	04 Apr 2025	8	10.97	93.96	3.5	33.93	7.7	25.9	0.92
A6	04 Apr 2025	9	10.91	94.67	3.3	33.94	7.7	26.0	0.61
A6	04 Apr 2025	10	10.83	95.54	3.2	33.98	7.7	26.0	0.58
A6	04 Apr 2025	11	10.70	95.34	3.0	34.01	7.7	26.1	0.60
A6	04 Apr 2025	12	10.55	95.38	2.7	34.04	7.7	26.1	0.32
A6	04 Apr 2025	13	10.53	95.70	2.5	34.04	7.7	26.1	0.29
A6	04 Apr 2025	14	10.45	95.58	2.4	34.06	7.6	26.1	0.28
A6	04 Apr 2025	15	10.35	95.98	2.3	34.09	7.6	26.2	0.23
A6	04 Apr 2025	16	10.35	95.96	2.1	34.09	7.6	26.2	5.69
A6	04 Apr 2025	17	10.40	96.01	2.2	34.08	7.6	26.2	1.34
A6	04 Apr 2025	18	10.31	95.87	2.0	34.11	7.6	26.2	0.19
A6	04 Apr 2025	19	10.32	95.38	1.9	34.11	7.6	26.2	1.69
A6	08 Apr 2025	1	13.13	80.22	8.2	33.91	8.0	25.5	4.86
A6	08 Apr 2025	2	12.84	79.56	8.0	33.92	8.0	25.6	5.57
A6	08 Apr 2025	3	12.35	76.34	7.6	33.94	8.0	25.7	6.96
A6	08 Apr 2025	4	12.26	78.59	7.2	33.93	8.0	25.7	9.05
A6	08 Apr 2025	5	12.15	78.36	6.9	33.93	7.9	25.7	10.42
A6	08 Apr 2025	6	11.90	79.33	6.5	33.94	7.9	25.8	8.94
A6	08 Apr 2025	7	11.79	80.96	6.0	33.94	7.9	25.8	7.37
A6	08 Apr 2025	8	11.75	80.56	5.8	33.94	7.9	25.8	7.12
A6	08 Apr 2025	9	11.71	82.93	5.6	33.94	7.8	25.8	6.72
A6	08 Apr 2025	10	11.67	85.22	5.5	33.95	7.8	25.8	6.27
A6	08 Apr 2025	11	11.64	85.89	5.3	33.95	7.8	25.8	6.02
A6	08 Apr 2025	12	11.56	86.19	5.2	33.96	7.8	25.9	5.58
A6	08 Apr 2025	13	11.47	86.65	4.9	33.96	7.8	25.9	5.11
A6	08 Apr 2025	14	11.34	87.90	4.6	33.98	7.8	25.9	4.65
A6	08 Apr 2025	15	11.23	88.79	4.4	33.98	7.8	25.9	4.40
A6	08 Apr 2025	16	11.20	89.44	4.3	33.98	7.8	25.9	3.45
A6	08 Apr 2025	17	11.20	89.87	4.1	33.98	7.8	25.9	3.34
A6	08 Apr 2025	18	11.20	89.72	4.0	33.98	7.7	25.9	3.78
A6	15 Apr 2025	1	14.66	75.18	11.3	33.82	8.3	25.1	12.02
A6	15 Apr 2025	2	14.45	74.81	10.7	33.83	8.3	25.2	12.25
A6	15 Apr 2025	3	13.31	75.43	9.5	33.84	8.2	25.4	10.52
A6	15 Apr 2025	4	12.94	77.98	8.5	33.85	8.1	25.5	9.88

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A6	15 Apr 2025	5	12.57	79.90	7.9	33.85	8.0	25.6	8.65
A6	15 Apr 2025	6	12.33	83.65	7.5	33.86	8.0	25.6	6.85
A6	15 Apr 2025	7	12.27	84.14	7.3	33.86	8.0	25.7	6.54
A6	15 Apr 2025	8	12.21	84.86	7.1	33.87	8.0	25.7	6.92
A6	15 Apr 2025	9	12.15	85.08	6.9	33.87	8.0	25.7	6.68
A6	15 Apr 2025	10	11.99	84.99	6.4	33.88	7.9	25.7	6.23
A6	15 Apr 2025	11	11.89	84.88	5.9	33.89	7.9	25.7	6.35
A6	15 Apr 2025	12	11.84	85.15	5.6	33.89	7.9	25.8	6.21
A6	15 Apr 2025	13	11.80	85.44	5.5	33.89	7.9	25.8	6.18
A6	15 Apr 2025	14	11.73	85.27	5.3	33.90	7.8	25.8	6.54
A6	15 Apr 2025	15	11.67	84.86	4.9	33.91	7.8	25.8	6.67
A6	15 Apr 2025	16	11.54	83.67	4.5	33.92	7.8	25.8	6.83
A6	15 Apr 2025	17	11.25	83.57	3.6	33.93	7.7	25.9	6.32
A6	15 Apr 2025	18	11.13	83.77	3.0	33.93	7.6	25.9	6.09
A6	22 Apr 2025	1	15.40	88.18	10.0	33.61	8.2	24.8	2.18
A6	22 Apr 2025	2	15.32	88.04	10.0	33.61	8.2	24.8	2.43
A6	22 Apr 2025	3	15.21	87.83	10.0	33.60	8.2	24.8	2.78
A6	22 Apr 2025	4	15.15	87.40	9.9	33.60	8.2	24.9	3.50
A6	22 Apr 2025	5	14.50	87.15	9.6	33.58	8.2	25.0	4.72
A6	22 Apr 2025	6	13.88	83.51	9.0	33.58	8.1	25.1	11.24
A6	22 Apr 2025	7	13.34	80.20	8.4	33.59	8.0	25.2	9.81
A6	22 Apr 2025	8	13.25	83.40	8.1	33.58	8.0	25.2	6.94
A6	22 Apr 2025	9	13.23	85.49	8.0	33.58	8.0	25.2	6.73
A6	22 Apr 2025	10	13.14	86.94	7.9	33.59	8.0	25.3	6.08
A6	22 Apr 2025	11	13.08	88.04	7.8	33.59	8.0	25.3	5.34
A6	22 Apr 2025	12	13.03	88.29	7.6	33.60	8.0	25.3	4.63
A6	22 Apr 2025	13	12.93	88.84	7.4	33.62	8.0	25.3	4.11
A6	22 Apr 2025	14	12.63	89.98	7.0	33.65	7.9	25.4	3.06
A6	22 Apr 2025	15	12.48	92.37	6.6	33.66	7.9	25.5	1.97
A6	22 Apr 2025	16	12.28	93.39	6.2	33.68	7.9	25.5	1.64
A6	22 Apr 2025	17	12.30	94.02	6.0	33.68	7.8	25.5	1.17
A6	22 Apr 2025	18	11.96	94.65	5.6	33.71	7.8	25.6	0.96
A6	29 Apr 2025	1	15.68	92.34	8.3	33.48	8.1	24.7	0.67
A6	29 Apr 2025	2	15.66	92.36	8.3	33.48	8.1	24.7	0.74
A6	29 Apr 2025	3	15.59	92.29	8.3	33.48	8.1	24.7	0.76
A6	29 Apr 2025	4	15.50	92.26	8.3	33.48	8.1	24.7	0.84
A6	29 Apr 2025	5	15.46	92.22	8.2	33.48	8.1	24.7	0.91
A6	29 Apr 2025	6	15.34	92.47	8.2	33.48	8.1	24.7	1.00
A6	29 Apr 2025	7	15.27	92.85	8.2	33.48	8.1	24.7	1.02
A6	29 Apr 2025	8	15.24	93.30	8.1	33.48	8.1	24.7	1.04
A6	29 Apr 2025	9	15.11	93.31	8.1	33.48	8.1	24.8	1.10
A6	29 Apr 2025	10	15.07	93.68	8.0	33.48	8.1	24.8	0.99
A6	29 Apr 2025	11	14.71	94.04	7.8	33.48	8.1	24.9	1.00
A6	29 Apr 2025	12	13.79	91.34	7.4	33.52	8.0	25.1	0.79
A6	29 Apr 2025	13	13.24	94.34	6.9	33.49	8.0	25.2	0.84
A6	29 Apr 2025	14	12.27	94.30	6.4	33.55	7.9	25.4	1.29
A6	29 Apr 2025	15	12.30	94.77	6.1	33.52	7.9	25.4	0.56
A6	29 Apr 2025	16	12.09	95.49	6.0	33.52	7.9	25.4	0.60
A6	29 Apr 2025	17	11.71	93.66	5.8	33.56	7.9	25.5	0.58
A6	29 Apr 2025	18	11.66	92.43	5.6	33.56	7.8	25.5	0.59
A6	29 Apr 2025	19	11.70	93.80	5.6	33.56	7.8	25.5	0.58
C6	04 Apr 2025	1	12.77	81.37	6.9	33.81	8.0	25.5	0.43
C6	04 Apr 2025	2	12.65	67.29	7.3	33.87	8.0	25.6	0.45
C6	04 Apr 2025	3	12.29	83.12	7.2	33.98	7.9	25.7	0.54
C6	04 Apr 2025	4	11.79	86.52	6.9	34.06	7.8	25.9	0.74
C6	04 Apr 2025	5	11.67	90.04	6.5	34.11	7.8	26.0	0.77
C6	04 Apr 2025	6	11.43	91.10	5.9	34.11	7.8	26.0	0.89
C6	04 Apr 2025	7	11.20	92.31	5.1	34.06	7.8	26.0	0.77
C6	04 Apr 2025	8	11.11	93.13	4.3	34.02	7.7	26.0	0.43
C6	04 Apr 2025	9	10.92	92.95	3.9	34.03	7.7	26.0	0.43
C6	08 Apr 2025	1	13.27	78.80	6.6	33.96	8.0	25.5	1.07
C6	08 Apr 2025	2	13.13	79.31	6.9	34.01	8.0	25.6	1.27
C6	08 Apr 2025	3	12.67	80.83	6.9	34.08	8.0	25.7	1.77
C6	08 Apr 2025	4	12.47	81.70	6.8	34.03	8.0	25.7	2.71
C6	08 Apr 2025	5	12.38	82.76	6.6	33.98	8.0	25.7	3.72
C6	08 Apr 2025	6	12.35	83.31	6.4	34.00	7.9	25.7	3.37
C6	08 Apr 2025	7	12.15	83.67	6.3	34.16	7.9	25.9	2.41
C6	08 Apr 2025	8	11.65	85.44	6.2	34.32	7.8	26.1	1.44
C6	08 Apr 2025	9	11.56	86.12	4.7	34.34	7.8	26.2	1.51

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C6	15 Apr 2025	1	15.04	76.19	11.6	33.86	8.3	25.1	10.60
C6	15 Apr 2025	2	15.04	75.87	11.5	33.86	8.3	25.1	9.76
C6	15 Apr 2025	3	14.92	75.49	11.1	33.86	8.3	25.1	10.28
C6	15 Apr 2025	4	14.62	74.06	10.2	33.87	8.2	25.2	11.03
C6	15 Apr 2025	5	13.71	84.82	9.2	33.88	8.2	25.4	5.80
C6	15 Apr 2025	6	13.33	86.33	8.2	33.88	8.1	25.5	5.17
C6	15 Apr 2025	7	12.80	84.27	7.3	33.89	8.0	25.6	5.22
C6	15 Apr 2025	8	12.63	87.97	6.5	33.90	8.0	25.6	3.67
C6	15 Apr 2025	9	12.41	90.55	5.1	33.92	7.8	25.7	1.93
C6	15 Apr 2025	10	12.49	90.47	5.1	33.91	7.8	25.7	1.87
C6	22 Apr 2025	1	15.85	79.51	9.6	33.71	8.2	24.8	0.94
C6	22 Apr 2025	2	15.84	77.28	9.6	33.69	8.2	24.8	1.02
C6	22 Apr 2025	3	15.64	90.65	9.3	33.70	8.2	24.8	1.33
C6	22 Apr 2025	4	14.70	90.79	8.7	33.68	8.1	25.0	1.34
C6	22 Apr 2025	5	14.35	91.14	8.3	33.66	8.1	25.1	2.10
C6	22 Apr 2025	6	13.59	90.72	7.9	33.66	8.0	25.2	2.13
C6	22 Apr 2025	7	13.54	92.64	7.8	33.65	8.0	25.2	1.46
C6	22 Apr 2025	8	13.52	93.35	7.8	33.64	8.0	25.2	1.51
C6	22 Apr 2025	9	13.56	93.40	7.7	33.64	8.0	25.2	1.35
C6	29 Apr 2025	1	15.82	87.24	8.2	33.48	8.1	24.6	0.44
C6	29 Apr 2025	2	15.73	87.59	8.3	33.48	8.1	24.6	0.47
C6	29 Apr 2025	3	15.58	89.37	8.3	33.47	8.1	24.7	0.63
C6	29 Apr 2025	4	15.46	90.43	8.3	33.47	8.1	24.7	0.73
C6	29 Apr 2025	5	15.46	90.96	8.3	33.46	8.1	24.7	0.81
C6	29 Apr 2025	6	15.36	91.30	8.2	33.46	8.1	24.7	0.76
C6	29 Apr 2025	7	14.97	91.30	8.0	33.46	8.1	24.8	0.66
C6	29 Apr 2025	8	14.60	91.12	7.8	33.45	8.1	24.9	0.57
C6	29 Apr 2025	9	14.09	89.63	7.8	33.44	8.0	25.0	0.52
C6	29 Apr 2025	10	14.87	88.43	7.9	33.45	8.0	24.8	0.79
C7	04 Apr 2025	1	12.75	88.41	7.0	33.78	7.9	25.5	0.90
C7	04 Apr 2025	2	12.73	84.15	7.0	33.79	7.9	25.5	0.99
C7	04 Apr 2025	3	12.14	87.52	6.6	33.91	7.9	25.7	0.89
C7	04 Apr 2025	4	11.76	87.98	5.7	33.91	7.8	25.8	0.73
C7	04 Apr 2025	5	11.44	89.87	4.8	33.92	7.8	25.9	0.80
C7	04 Apr 2025	6	11.36	92.28	4.3	33.91	7.8	25.9	1.07
C7	04 Apr 2025	7	11.23	93.33	4.0	33.92	7.8	25.9	0.87
C7	04 Apr 2025	8	11.08	94.12	3.8	33.94	7.7	25.9	0.96
C7	04 Apr 2025	9	11.10	94.55	3.6	33.92	7.7	25.9	0.97
C7	04 Apr 2025	10	10.90	95.25	3.4	33.96	7.7	26.0	0.59
C7	04 Apr 2025	11	10.84	95.42	3.2	33.96	7.7	26.0	0.50
C7	04 Apr 2025	12	10.80	95.58	3.1	33.97	7.7	26.0	0.48
C7	04 Apr 2025	13	10.75	95.76	3.0	33.99	7.7	26.0	0.45
C7	04 Apr 2025	14	10.62	95.59	2.7	34.02	7.7	26.1	0.28
C7	04 Apr 2025	15	10.61	95.75	2.6	34.01	7.7	26.1	0.28
C7	04 Apr 2025	16	10.50	95.51	2.5	34.04	7.6	26.1	0.24
C7	04 Apr 2025	17	10.50	95.14	2.4	34.04	7.6	26.1	0.17
C7	04 Apr 2025	18	10.49	94.81	2.4	34.05	7.6	26.1	0.22
C7	08 Apr 2025	1	13.57	75.06	9.8	33.90	8.2	25.4	6.56
C7	08 Apr 2025	2	13.51	75.29	9.7	33.90	8.1	25.4	7.99
C7	08 Apr 2025	3	13.12	73.98	9.3	33.94	8.1	25.5	8.96
C7	08 Apr 2025	4	12.74	71.95	8.8	33.94	8.1	25.6	11.76
C7	08 Apr 2025	5	12.71	73.34	8.4	33.92	8.0	25.6	11.82
C7	08 Apr 2025	6	12.69	75.19	8.2	33.92	8.0	25.6	10.55
C7	08 Apr 2025	7	12.42	76.05	7.8	33.94	8.0	25.7	10.11
C7	08 Apr 2025	8	12.01	76.97	7.1	33.95	8.0	25.8	9.73
C7	08 Apr 2025	9	11.66	79.09	6.4	33.98	7.9	25.9	9.03
C7	08 Apr 2025	10	11.49	81.33	5.7	33.99	7.8	25.9	7.08
C7	08 Apr 2025	11	11.37	84.93	5.1	33.99	7.8	25.9	6.70
C7	08 Apr 2025	12	11.14	86.07	4.6	34.01	7.8	26.0	5.64
C7	08 Apr 2025	13	10.94	87.87	4.0	34.03	7.7	26.0	3.76
C7	08 Apr 2025	14	10.76	90.01	3.4	34.04	7.7	26.1	2.27
C7	08 Apr 2025	15	10.68	91.99	3.1	34.03	7.7	26.1	1.59
C7	08 Apr 2025	16	10.61	93.21	3.0	34.03	7.7	26.1	1.02
C7	08 Apr 2025	17	10.56	93.51	2.8	34.03	7.7	26.1	0.66
C7	08 Apr 2025	18	10.54	93.08	2.6	34.04	7.6	26.1	0.47
C7	08 Apr 2025	19	10.56	92.62	2.6	34.04	7.6	26.1	0.53
C7	15 Apr 2025	1	14.91	63.41	11.9	33.83	8.3	25.1	23.35
C7	15 Apr 2025	2	14.87	63.28	11.9	33.83	8.3	25.1	23.26
C7	15 Apr 2025	3	14.66	65.51	11.8	33.84	8.3	25.1	17.29

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C7	15 Apr 2025	4	14.35	72.31	11.2	33.85	8.3	25.2	17.33
C7	15 Apr 2025	5	13.82	71.75	10.4	33.87	8.2	25.4	17.10
C7	15 Apr 2025	6	13.70	73.98	9.8	33.86	8.2	25.4	15.04
C7	15 Apr 2025	7	13.36	79.58	9.3	33.86	8.1	25.4	8.15
C7	15 Apr 2025	8	13.09	83.34	8.7	33.85	8.1	25.5	6.77
C7	15 Apr 2025	9	12.35	84.66	7.3	33.88	8.0	25.7	5.83
C7	15 Apr 2025	10	12.19	86.21	6.3	33.89	7.9	25.7	4.94
C7	15 Apr 2025	11	12.00	87.25	5.6	33.90	7.9	25.7	4.45
C7	15 Apr 2025	12	11.60	88.37	4.8	33.91	7.8	25.8	3.86
C7	15 Apr 2025	13	11.24	87.67	4.4	33.89	7.8	25.9	5.96
C7	15 Apr 2025	14	11.18	86.26	4.0	33.89	7.7	25.9	6.42
C7	15 Apr 2025	15	11.06	85.39	3.6	33.91	7.7	25.9	6.26
C7	15 Apr 2025	16	11.06	83.85	3.4	33.91	7.7	25.9	6.92
C7	15 Apr 2025	17	11.01	83.40	3.1	33.92	7.7	25.9	6.44
C7	15 Apr 2025	18	11.01	83.81	3.0	33.93	7.7	25.9	6.45
C7	22 Apr 2025	1	15.60	86.47	9.8	33.63	8.2	24.8	2.57
C7	22 Apr 2025	2	15.60	86.51	9.8	33.63	8.2	24.8	2.51
C7	22 Apr 2025	3	15.29	86.23	9.9	33.63	8.2	24.9	3.46
C7	22 Apr 2025	4	14.82	83.73	10.1	33.64	8.2	25.0	5.82
C7	22 Apr 2025	5	14.37	82.41	9.9	33.63	8.2	25.0	6.63
C7	22 Apr 2025	6	14.08	80.91	9.6	33.61	8.1	25.1	8.29
C7	22 Apr 2025	7	14.00	79.69	9.4	33.60	8.1	25.1	9.67
C7	22 Apr 2025	8	13.93	79.40	9.2	33.60	8.1	25.1	9.75
C7	22 Apr 2025	9	13.84	79.06	9.0	33.59	8.1	25.1	10.03
C7	22 Apr 2025	10	13.56	79.18	8.7	33.60	8.1	25.2	9.36
C7	22 Apr 2025	11	13.22	81.99	8.2	33.63	8.0	25.3	6.21
C7	22 Apr 2025	12	13.02	86.31	7.8	33.62	8.0	25.3	4.15
C7	22 Apr 2025	13	12.80	88.63	7.4	33.63	8.0	25.4	3.66
C7	22 Apr 2025	14	12.39	89.79	6.9	33.65	7.9	25.5	2.60
C7	22 Apr 2025	15	12.13	92.88	6.4	33.66	7.9	25.5	1.94
C7	22 Apr 2025	16	12.05	93.84	6.2	33.66	7.9	25.5	1.43
C7	22 Apr 2025	17	12.03	94.21	6.0	33.66	7.8	25.5	1.30
C7	22 Apr 2025	18	12.03	94.09	6.0	33.66	7.8	25.5	1.22
C7	29 Apr 2025	1	16.29	82.73	8.6	33.51	8.1	24.5	0.56
C7	29 Apr 2025	2	16.26	85.73	8.6	33.51	8.1	24.5	0.55
C7	29 Apr 2025	3	16.18	89.30	8.6	33.51	8.1	24.6	0.56
C7	29 Apr 2025	4	15.84	92.76	8.7	33.51	8.1	24.6	0.60
C7	29 Apr 2025	5	15.71	94.28	8.7	33.50	8.1	24.7	0.65
C7	29 Apr 2025	6	15.64	94.51	8.6	33.50	8.1	24.7	0.67
C7	29 Apr 2025	7	15.53	94.94	8.6	33.49	8.1	24.7	0.69
C7	29 Apr 2025	8	15.35	95.11	8.4	33.48	8.1	24.7	0.74
C7	29 Apr 2025	9	15.15	95.06	8.3	33.48	8.1	24.8	0.84
C7	29 Apr 2025	10	14.98	94.69	8.2	33.47	8.1	24.8	0.90
C7	29 Apr 2025	11	14.87	94.59	8.0	33.46	8.1	24.8	0.99
C7	29 Apr 2025	12	14.50	94.27	7.8	33.43	8.1	24.9	1.07
C7	29 Apr 2025	13	13.92	93.96	7.6	33.42	8.0	25.0	1.13
C7	29 Apr 2025	14	13.12	94.43	7.4	33.45	8.0	25.2	1.02
C7	29 Apr 2025	15	12.97	95.15	7.2	33.45	8.0	25.2	0.86
C7	29 Apr 2025	16	12.94	95.51	7.1	33.45	8.0	25.2	0.81
C7	29 Apr 2025	17	12.93	95.41	7.0	33.45	8.0	25.2	0.71
C7	29 Apr 2025	18	12.95	95.08	7.0	33.45	8.0	25.2	0.73
C8	04 Apr 2025	1	12.89	82.57	5.1	33.66	7.9	25.4	1.18
C8	04 Apr 2025	2	12.88	82.32	6.0	33.73	8.0	25.4	1.24
C8	04 Apr 2025	3	12.84	82.01	6.2	33.76	7.9	25.5	1.60
C8	04 Apr 2025	4	12.74	79.92	6.3	33.82	7.9	25.5	2.56
C8	04 Apr 2025	5	12.29	82.88	6.4	34.08	7.9	25.8	2.23
C8	04 Apr 2025	6	11.96	88.54	6.3	34.19	7.8	26.0	1.78
C8	04 Apr 2025	7	11.49	90.89	6.2	34.10	7.8	26.0	1.52
C8	04 Apr 2025	8	11.24	92.30	5.3	34.07	7.8	26.0	1.17
C8	04 Apr 2025	9	11.07	94.02	4.5	34.05	7.7	26.0	0.82
C8	04 Apr 2025	10	10.98	94.54	4.0	34.01	7.7	26.0	0.68
C8	04 Apr 2025	11	10.84	94.71	3.6	34.02	7.7	26.0	0.64
C8	04 Apr 2025	12	10.62	95.09	3.2	34.05	7.7	26.1	0.41
C8	04 Apr 2025	13	10.47	95.26	2.8	34.07	7.7	26.1	0.29
C8	04 Apr 2025	14	10.38	95.78	2.5	34.09	7.6	26.2	0.23
C8	04 Apr 2025	15	10.33	96.07	2.4	34.10	7.6	26.2	0.16
C8	04 Apr 2025	16	10.32	96.26	2.3	34.10	7.6	26.2	0.16
C8	04 Apr 2025	17	10.32	96.19	2.3	34.10	7.6	26.2	0.18
C8	04 Apr 2025	18	10.32	96.01	2.2	34.10	7.6	26.2	0.18
C8	04 Apr 2025	19	10.33	95.75	2.2	34.10	7.6	26.2	0.20

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C8	08 Apr 2025	1	13.29	67.91	9.5	33.87	8.1	25.5	9.74
C8	08 Apr 2025	2	13.26	67.93	9.6	33.88	8.1	25.5	10.42
C8	08 Apr 2025	3	13.22	67.66	9.5	33.90	8.1	25.5	12.19
C8	08 Apr 2025	4	12.83	67.33	9.2	33.95	8.1	25.6	14.72
C8	08 Apr 2025	5	12.39	66.16	8.4	33.98	8.0	25.7	15.34
C8	08 Apr 2025	6	12.07	70.33	7.3	33.98	8.0	25.8	10.22
C8	08 Apr 2025	7	11.64	76.53	6.3	34.01	7.9	25.9	8.34
C8	08 Apr 2025	8	11.27	81.03	5.3	34.02	7.8	26.0	7.58
C8	08 Apr 2025	9	11.00	84.82	4.6	34.02	7.8	26.0	6.15
C8	08 Apr 2025	10	10.90	87.12	4.0	34.02	7.7	26.0	3.98
C8	08 Apr 2025	11	10.74	89.52	3.7	34.02	7.7	26.1	2.79
C8	08 Apr 2025	12	10.67	90.88	3.3	34.03	7.7	26.1	2.03
C8	08 Apr 2025	13	10.64	91.67	3.1	34.03	7.7	26.1	1.56
C8	08 Apr 2025	14	10.63	92.02	3.0	34.02	7.7	26.1	1.43
C8	08 Apr 2025	15	10.64	93.09	2.9	34.03	7.7	26.1	1.35
C8	08 Apr 2025	16	10.63	93.11	2.9	34.04	7.7	26.1	1.71
C8	08 Apr 2025	17	10.61	92.42	2.8	34.04	7.7	26.1	1.59
C8	08 Apr 2025	18	10.59	90.60	2.8	34.05	7.7	26.1	1.54
C8	08 Apr 2025	19	10.58	90.55	2.6	34.05	7.7	26.1	1.31
C8	08 Apr 2025	20	10.58	87.05	2.6	34.05	7.6	26.1	1.34
C8	15 Apr 2025	1	14.64	81.91	11.1	33.83	8.3	25.1	8.40
C8	15 Apr 2025	2	14.66	81.84	11.8	33.83	8.3	25.1	8.23
C8	15 Apr 2025	3	14.58	81.11	11.7	33.83	8.3	25.2	10.85
C8	15 Apr 2025	4	14.07	76.54	11.3	33.85	8.3	25.3	16.12
C8	15 Apr 2025	5	13.81	72.27	10.3	33.85	8.2	25.3	15.08
C8	15 Apr 2025	6	13.16	77.53	9.4	33.85	8.2	25.5	10.48
C8	15 Apr 2025	7	12.89	80.62	8.9	33.85	8.1	25.5	9.20
C8	15 Apr 2025	8	12.70	81.59	8.5	33.85	8.1	25.6	8.30
C8	15 Apr 2025	9	12.62	82.89	8.2	33.85	8.1	25.6	8.28
C8	15 Apr 2025	10	12.51	83.12	8.0	33.85	8.0	25.6	7.38
C8	15 Apr 2025	11	12.50	83.93	7.8	33.87	8.0	25.6	7.25
C8	15 Apr 2025	12	12.43	83.60	7.4	33.88	8.0	25.6	7.50
C8	15 Apr 2025	13	12.28	82.78	6.8	33.90	8.0	25.7	7.20
C8	15 Apr 2025	14	12.09	82.71	6.0	33.91	7.9	25.7	7.57
C8	15 Apr 2025	15	11.69	80.92	5.0	33.92	7.8	25.8	7.24
C8	15 Apr 2025	16	11.55	82.66	4.4	33.92	7.8	25.8	6.17
C8	15 Apr 2025	17	11.33	84.12	3.9	33.92	7.7	25.9	5.62
C8	15 Apr 2025	18	11.19	83.64	3.4	33.93	7.7	25.9	6.08
C8	15 Apr 2025	19	11.19	81.94	3.3	33.93	7.7	25.9	6.29
C8	22 Apr 2025	1	15.29	87.35	9.9	33.56	8.2	24.8	2.71
C8	22 Apr 2025	2	15.29	86.73	9.9	33.56	8.2	24.8	2.82
C8	22 Apr 2025	3	15.28	87.06	9.9	33.56	8.2	24.8	3.24
C8	22 Apr 2025	4	15.28	87.06	9.9	33.56	8.2	24.8	3.81
C8	22 Apr 2025	5	15.24	86.89	9.9	33.56	8.2	24.8	4.38
C8	22 Apr 2025	6	14.89	86.32	9.8	33.56	8.2	24.9	5.04
C8	22 Apr 2025	7	14.45	84.81	9.3	33.55	8.1	25.0	6.81
C8	22 Apr 2025	8	13.63	83.96	8.4	33.52	8.1	25.1	6.81
C8	22 Apr 2025	9	13.37	85.33	7.9	33.52	8.0	25.2	5.24
C8	22 Apr 2025	10	13.25	88.54	7.7	33.59	8.0	25.2	6.07
C8	22 Apr 2025	11	13.06	88.25	7.5	33.61	8.0	25.3	6.18
C8	22 Apr 2025	12	12.96	87.05	7.4	33.63	8.0	25.3	6.13
C8	22 Apr 2025	13	12.92	86.79	7.3	33.63	8.0	25.3	6.29
C8	22 Apr 2025	14	12.88	86.65	7.3	33.63	8.0	25.4	5.77
C8	22 Apr 2025	15	12.83	86.60	7.2	33.64	8.0	25.4	5.50
C8	22 Apr 2025	16	12.71	87.19	7.1	33.64	7.9	25.4	4.33
C8	22 Apr 2025	17	12.48	88.41	6.8	33.65	7.9	25.4	3.02
C8	22 Apr 2025	18	12.32	90.44	6.6	33.66	7.9	25.5	2.33
C8	22 Apr 2025	19	12.26	92.07	6.4	33.66	7.9	25.5	1.79
C8	29 Apr 2025	1	16.30	91.95	8.7	33.52	8.1	24.5	0.64
C8	29 Apr 2025	2	16.18	92.46	8.7	33.51	8.1	24.6	0.60
C8	29 Apr 2025	3	15.77	92.45	8.8	33.51	8.2	24.7	0.60
C8	29 Apr 2025	4	15.65	94.71	8.8	33.49	8.1	24.7	0.63
C8	29 Apr 2025	5	15.44	95.33	8.7	33.48	8.1	24.7	0.67
C8	29 Apr 2025	6	15.22	95.68	8.6	33.47	8.1	24.7	0.76
C8	29 Apr 2025	7	14.97	95.58	8.5	33.47	8.1	24.8	0.84
C8	29 Apr 2025	8	14.87	95.14	8.4	33.46	8.1	24.8	0.90
C8	29 Apr 2025	9	14.84	94.90	8.4	33.46	8.1	24.8	0.97
C8	29 Apr 2025	10	14.81	94.85	8.3	33.46	8.1	24.8	0.97
C8	29 Apr 2025	11	14.76	94.78	8.2	33.46	8.1	24.8	1.00
C8	29 Apr 2025	12	14.54	94.62	8.1	33.45	8.1	24.9	1.10
C8	29 Apr 2025	13	14.23	94.35	8.0	33.45	8.1	24.9	1.07

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C8	29 Apr 2025	14	14.06	93.77	7.8	33.45	8.0	25.0	1.13
C8	29 Apr 2025	15	13.96	93.78	7.7	33.44	8.0	25.0	1.21
C8	29 Apr 2025	16	13.77	93.68	7.6	33.44	8.0	25.0	1.19
C8	29 Apr 2025	17	13.67	93.51	7.6	33.44	8.0	25.1	1.07
C8	29 Apr 2025	18	13.66	93.33	7.5	33.44	8.0	25.1	0.92
C8	29 Apr 2025	19	13.64	93.34	7.4	33.44	8.0	25.1	0.88

NA = not available

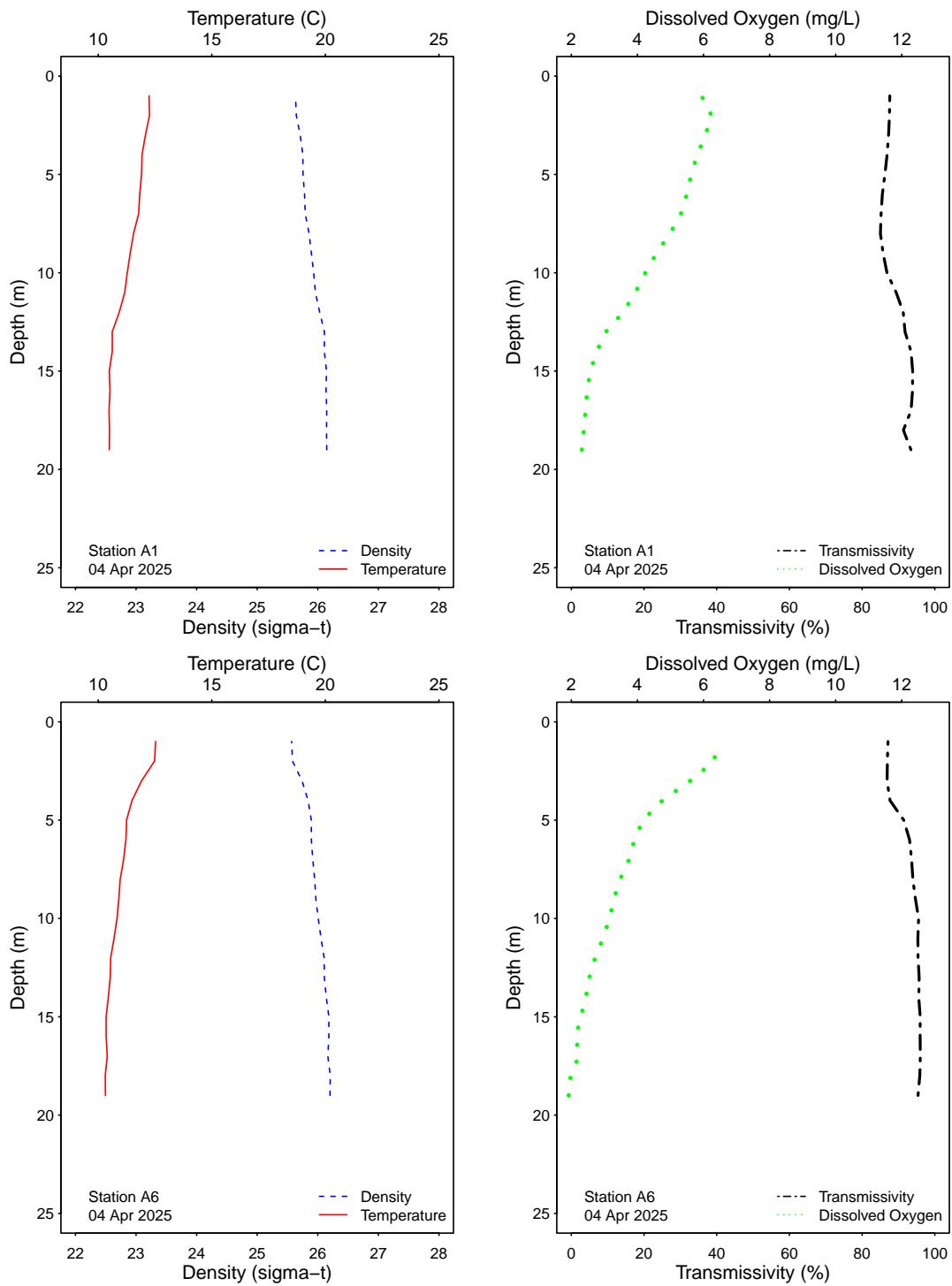


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

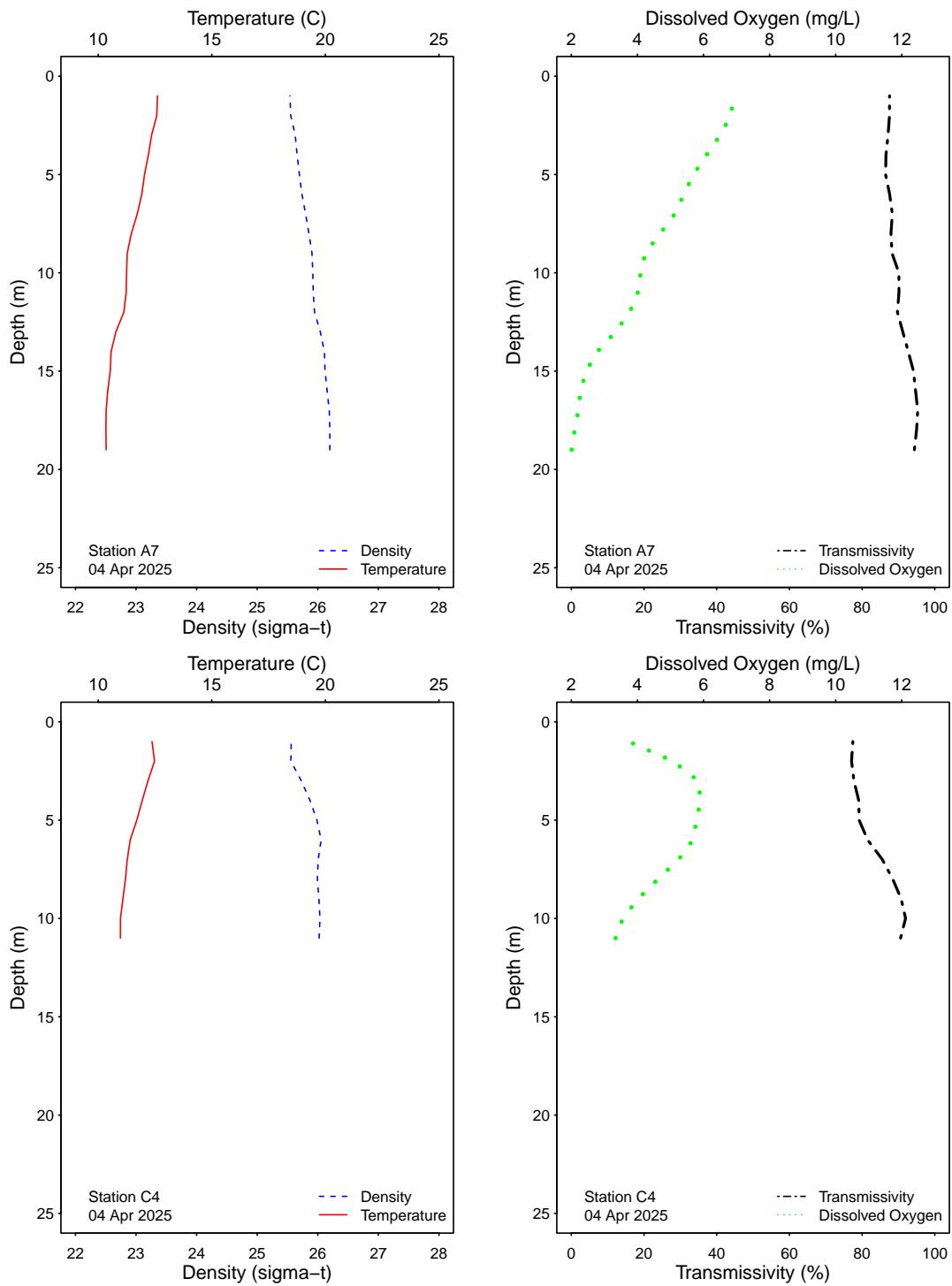


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

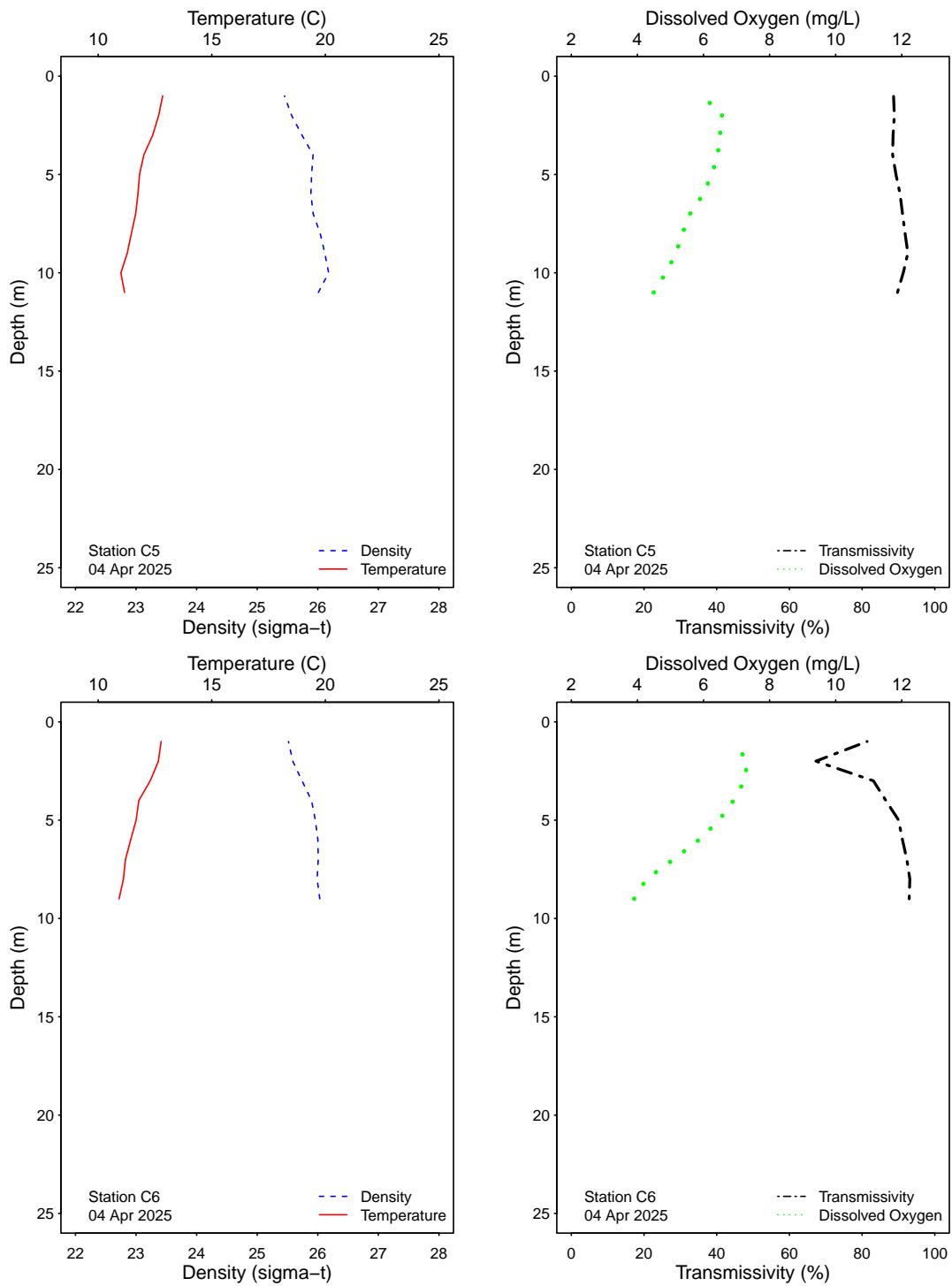


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

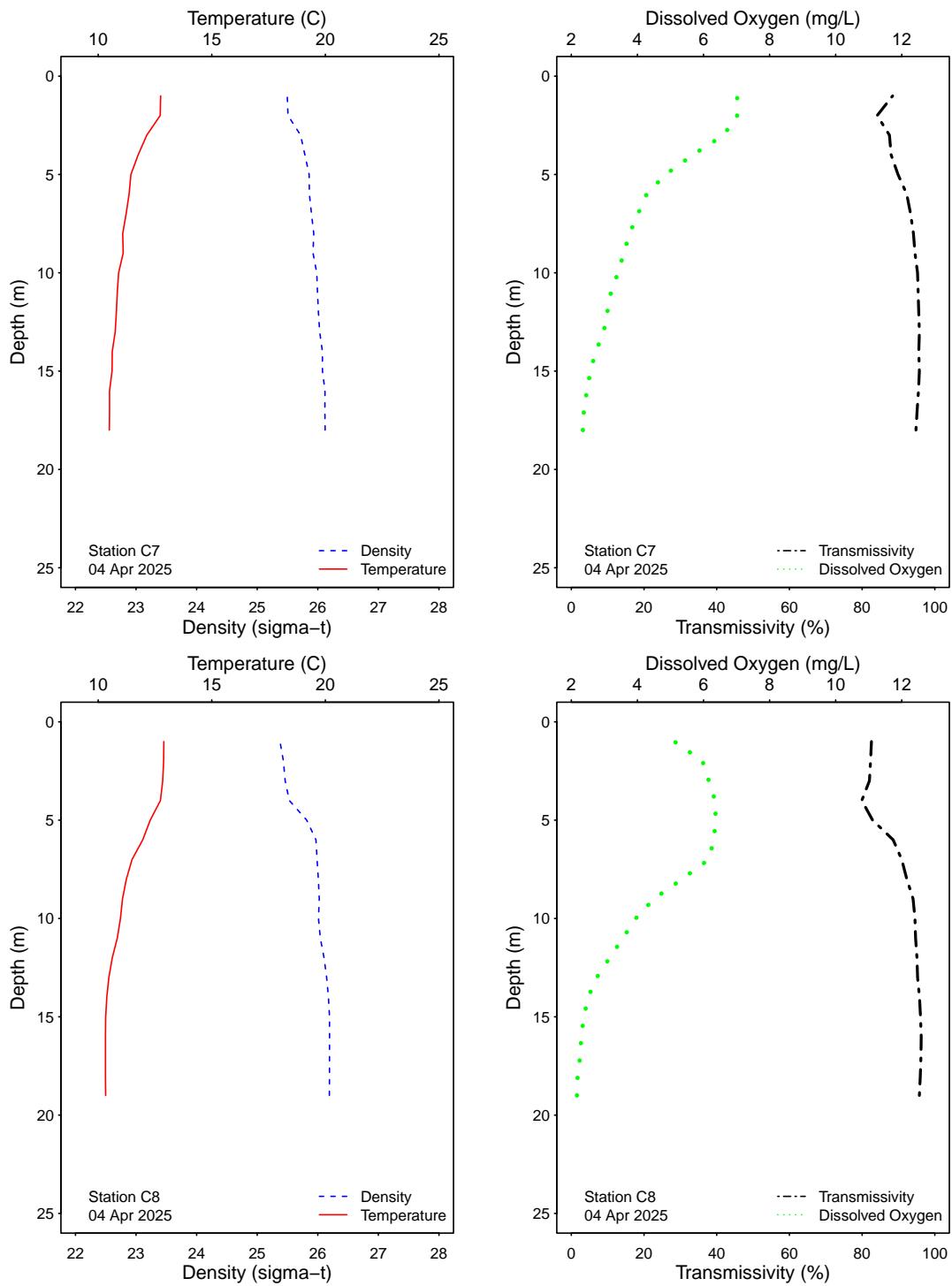


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

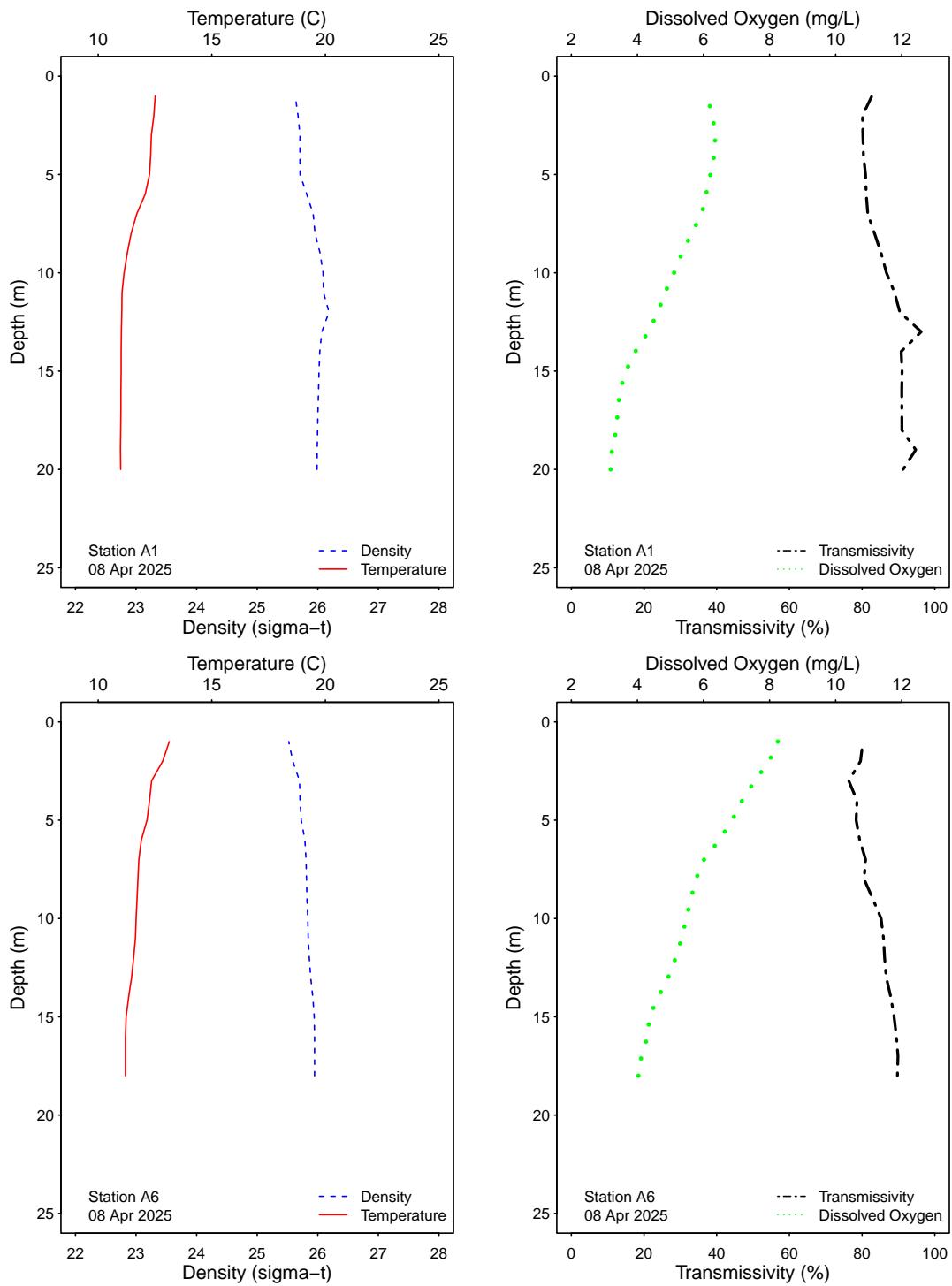


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

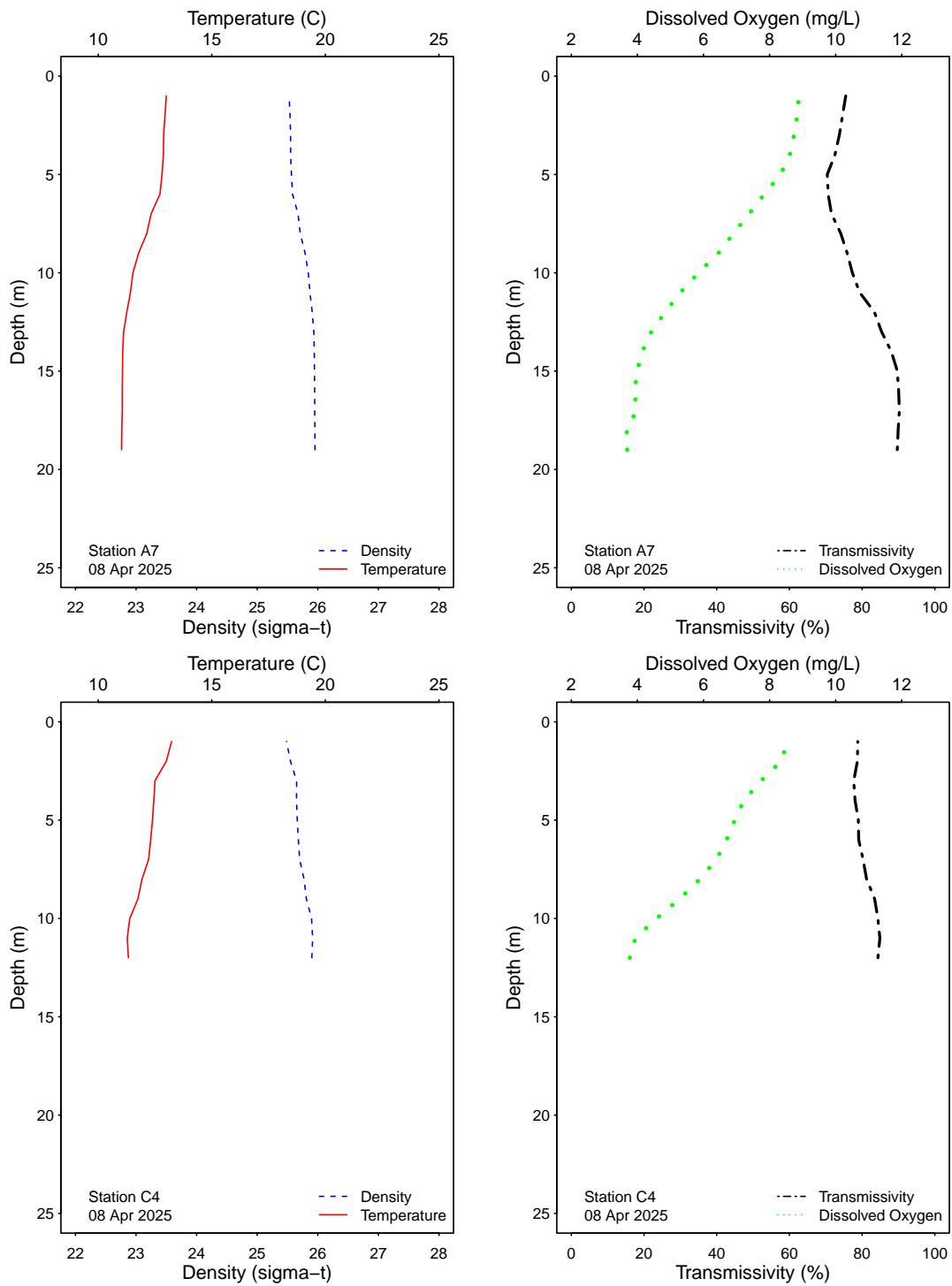


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

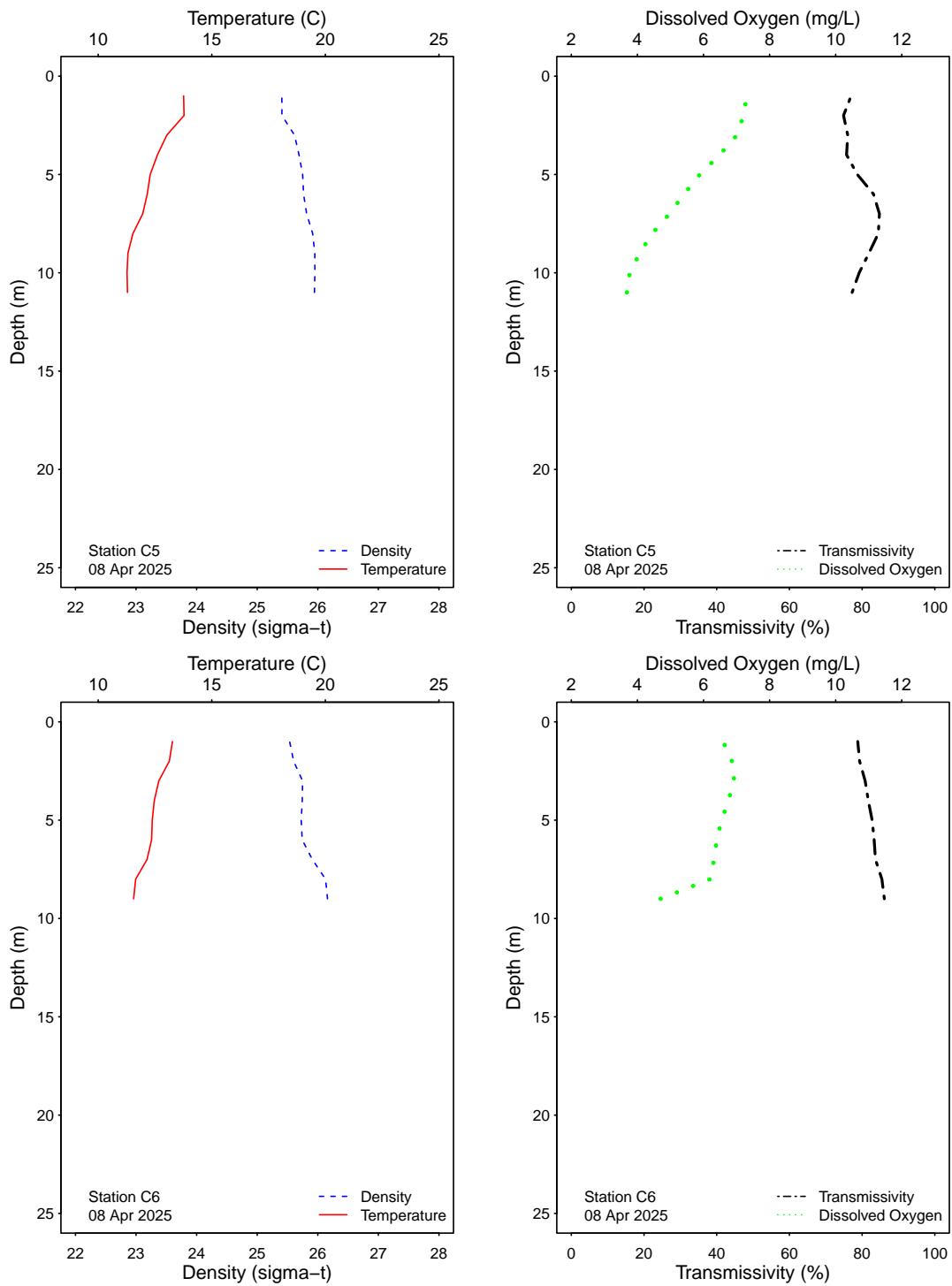


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

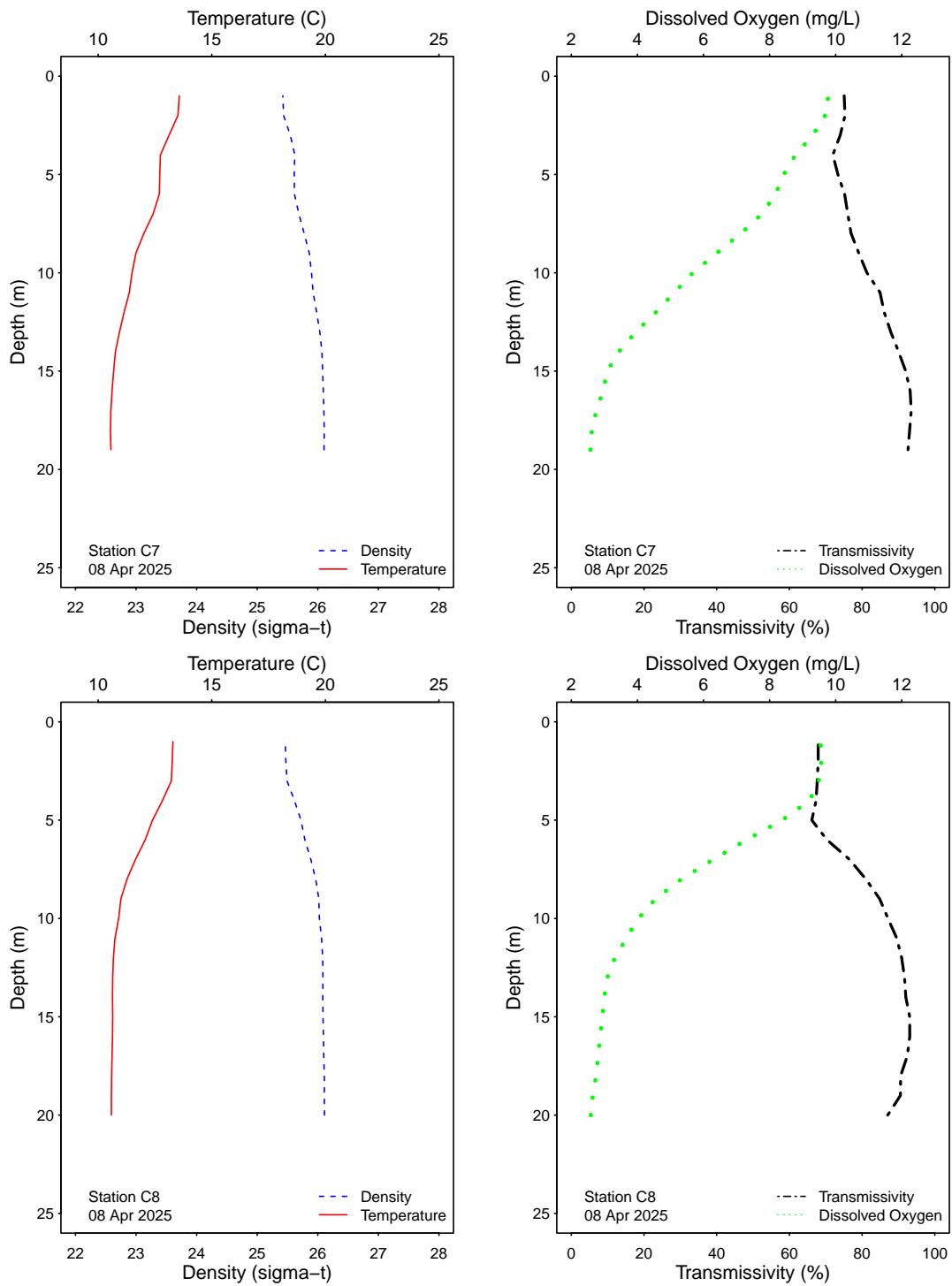


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

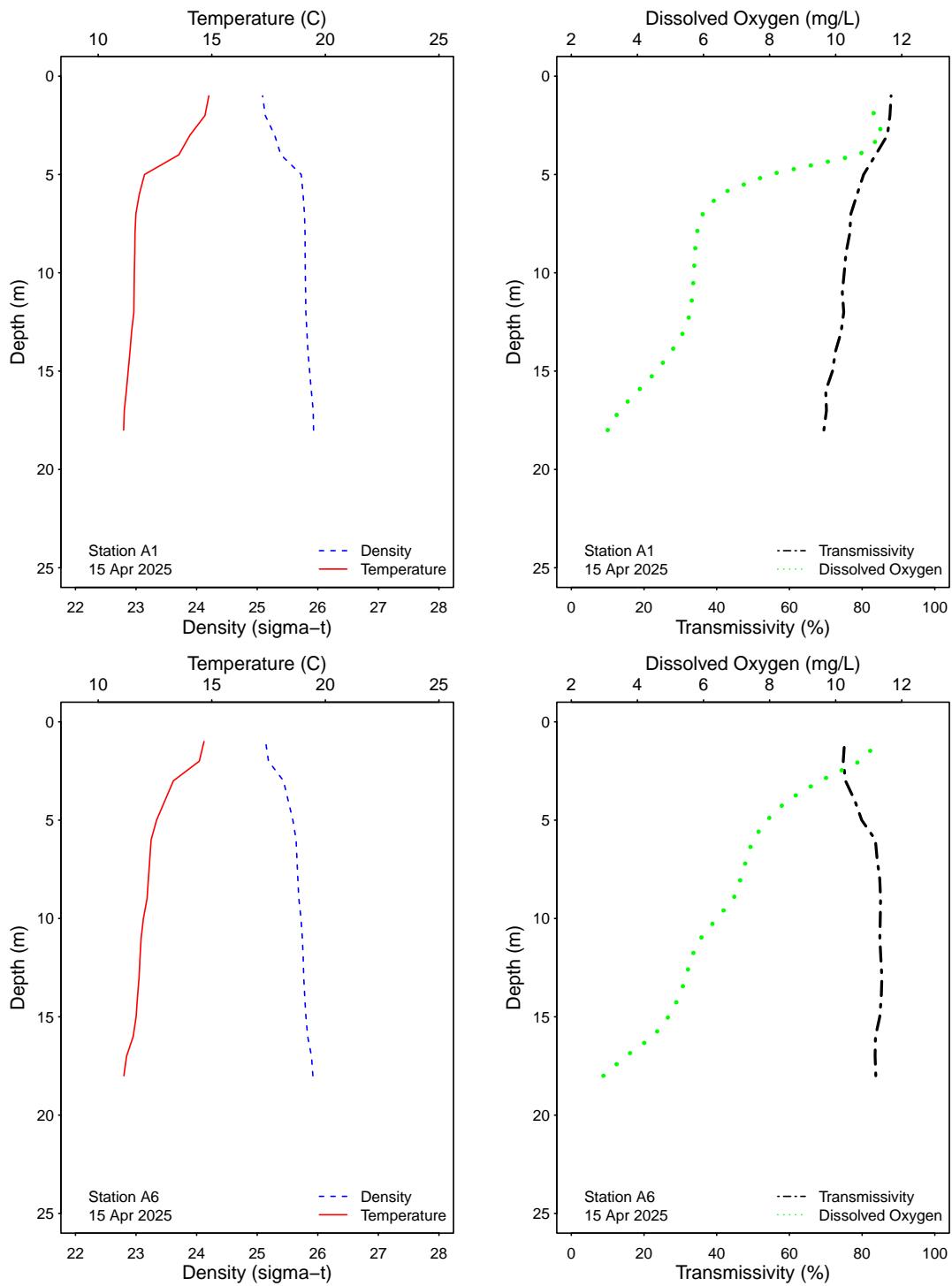


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

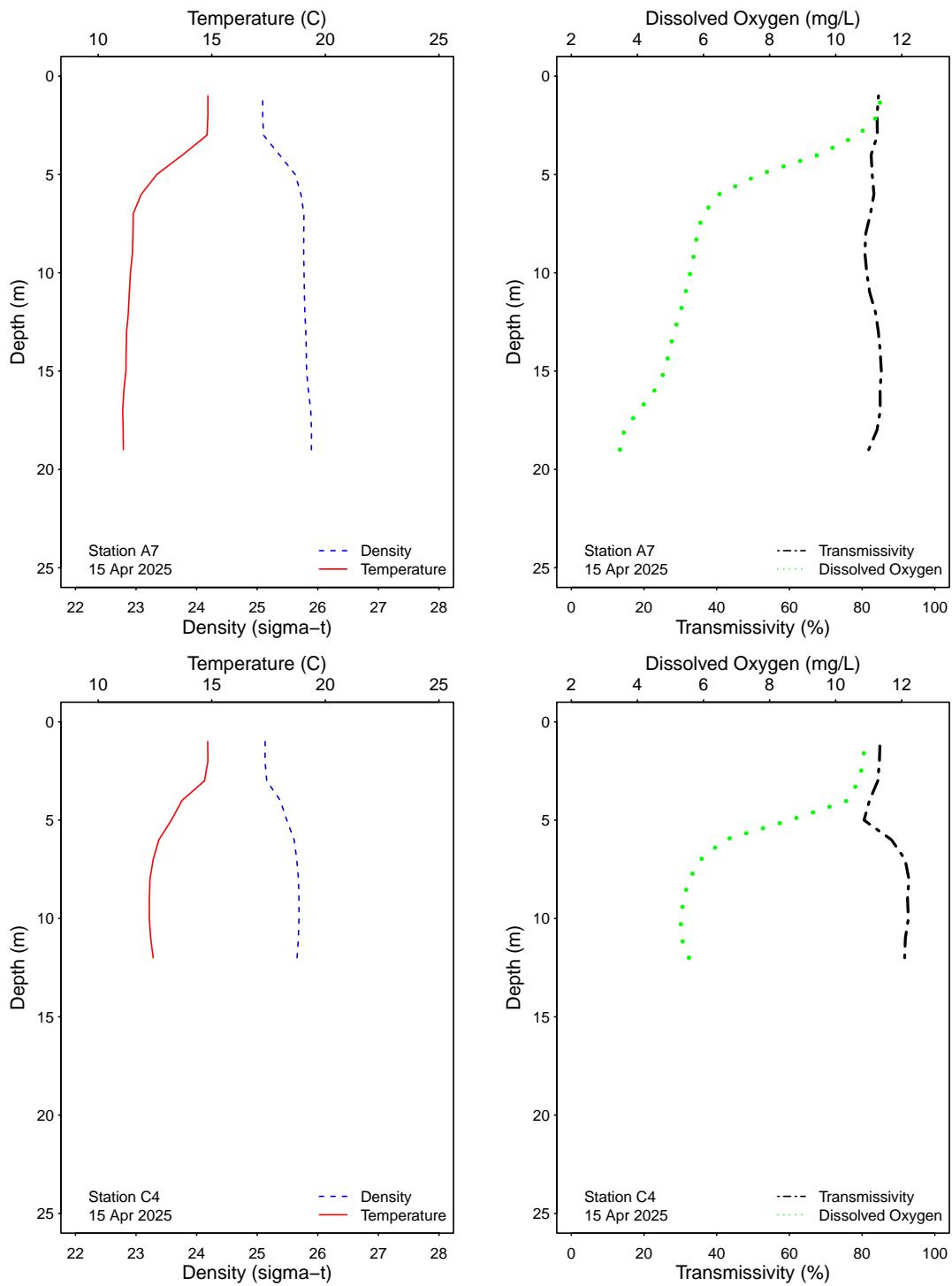


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

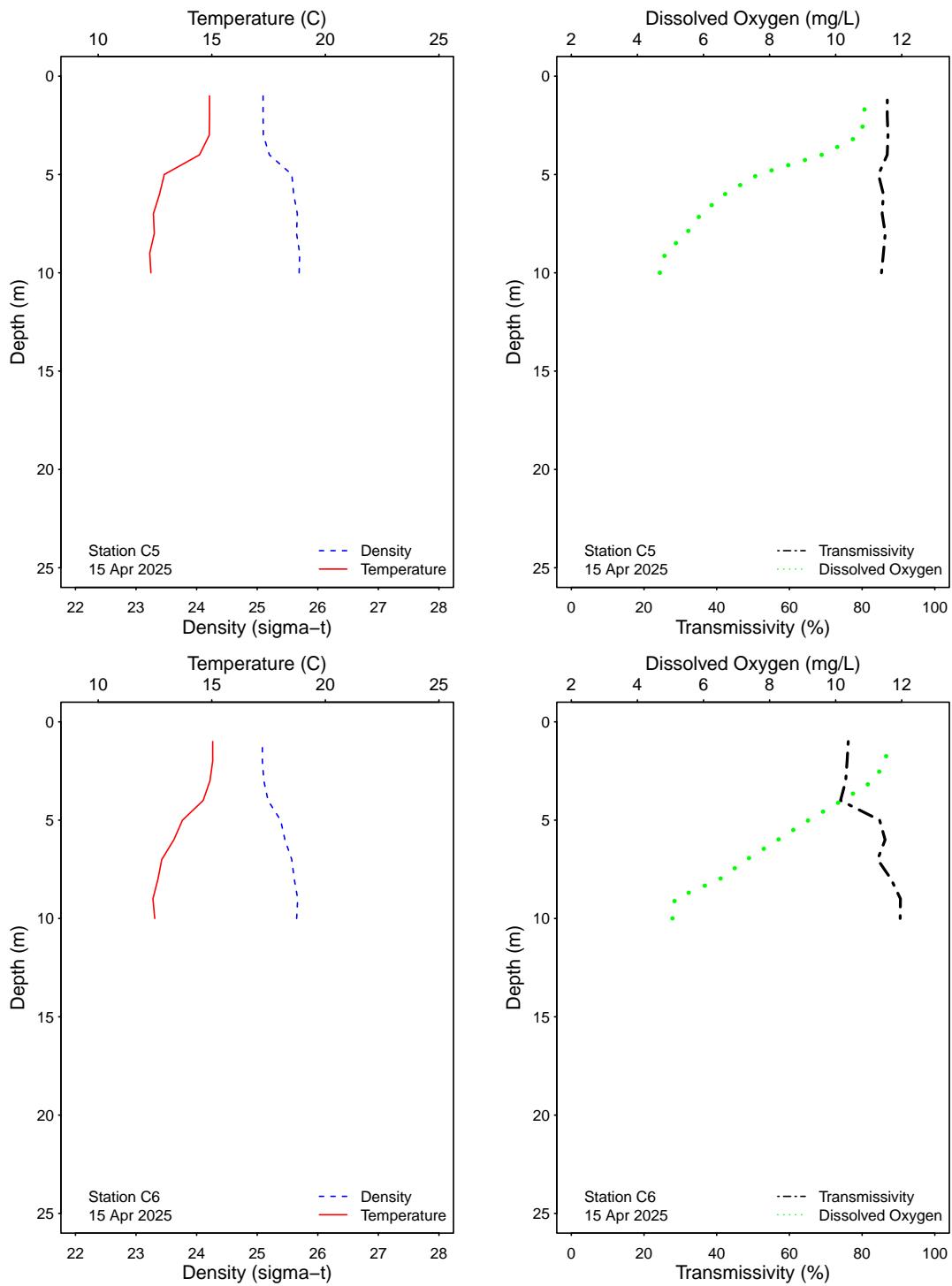


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

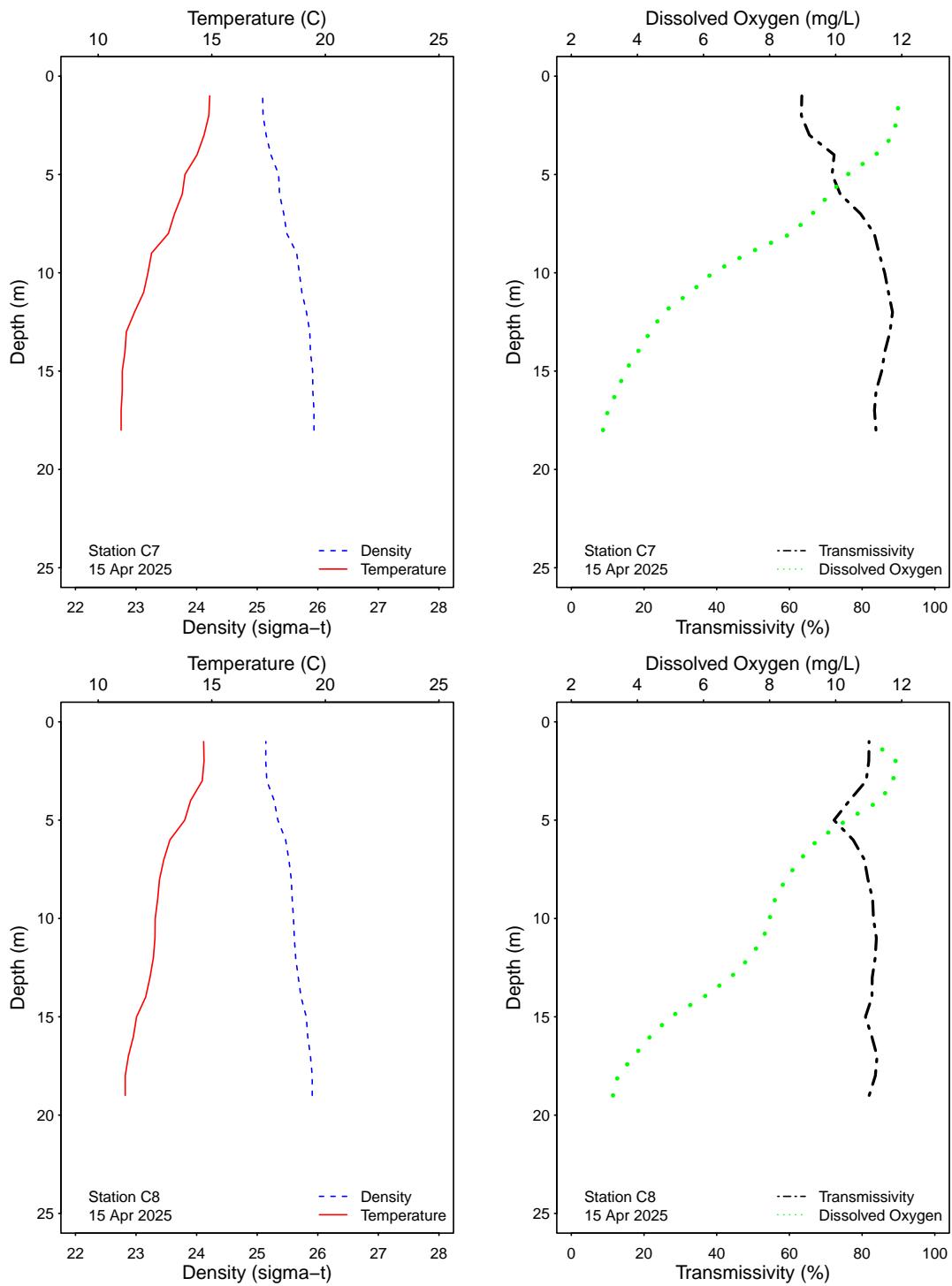


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

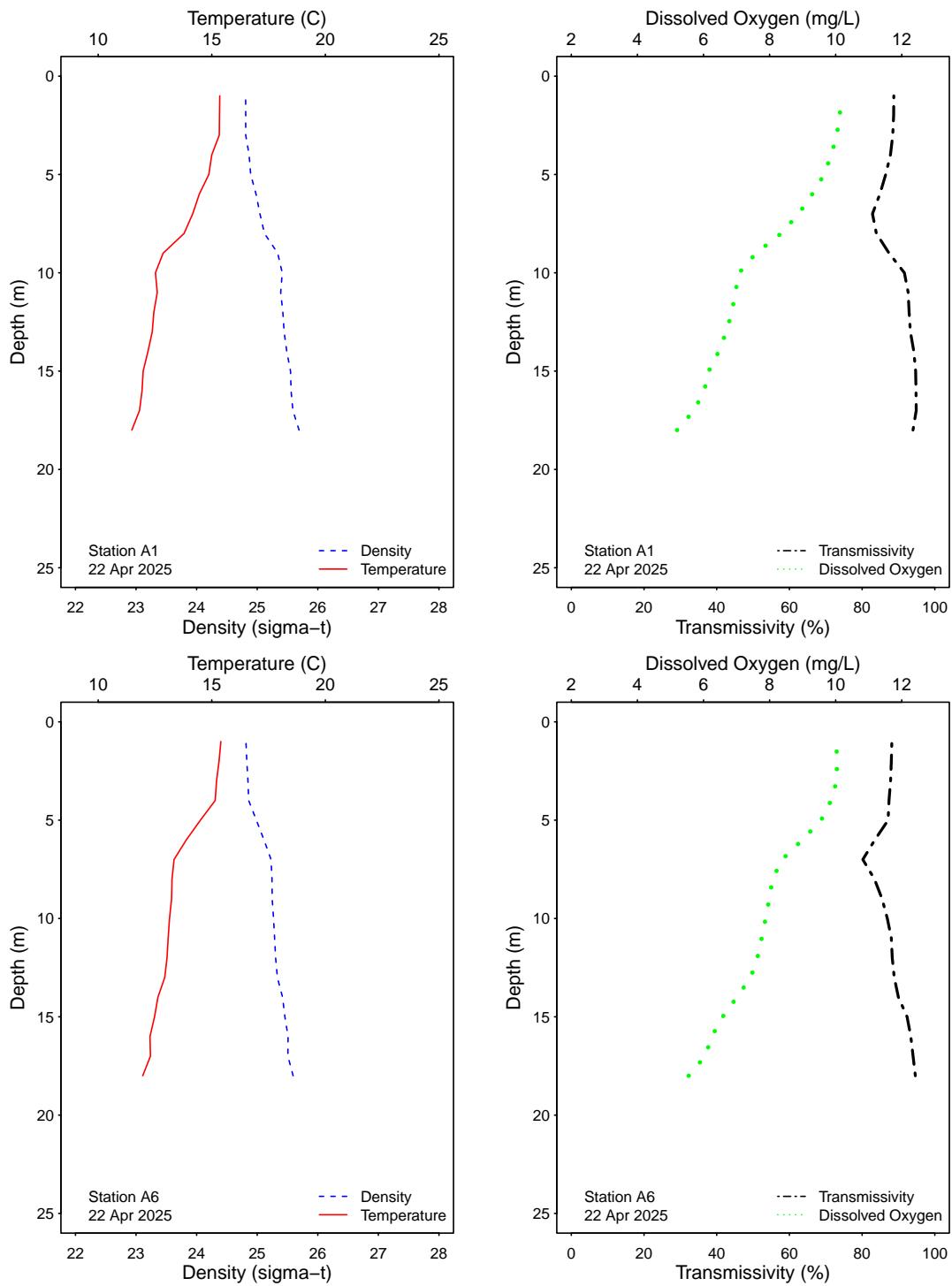


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

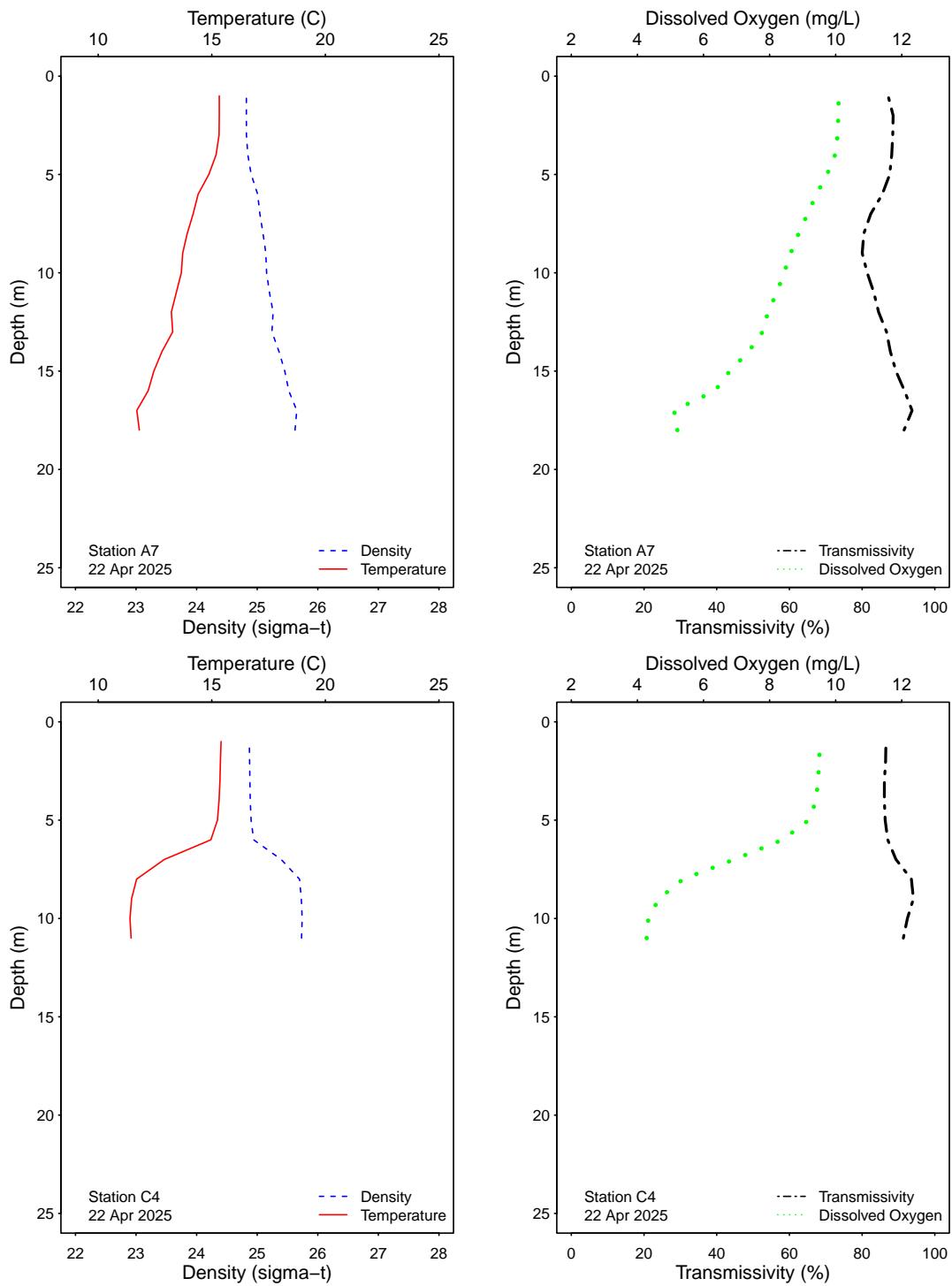


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

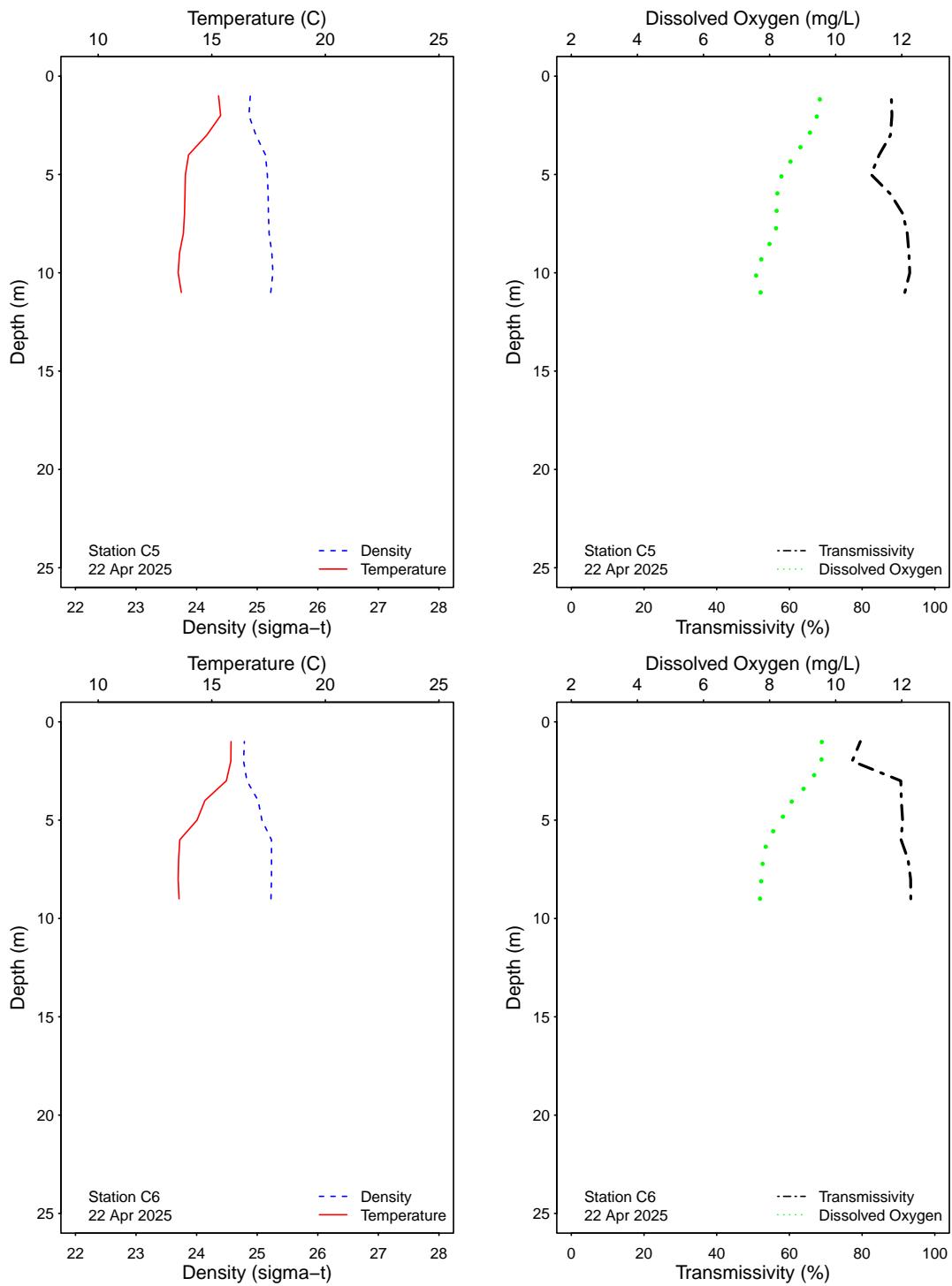


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

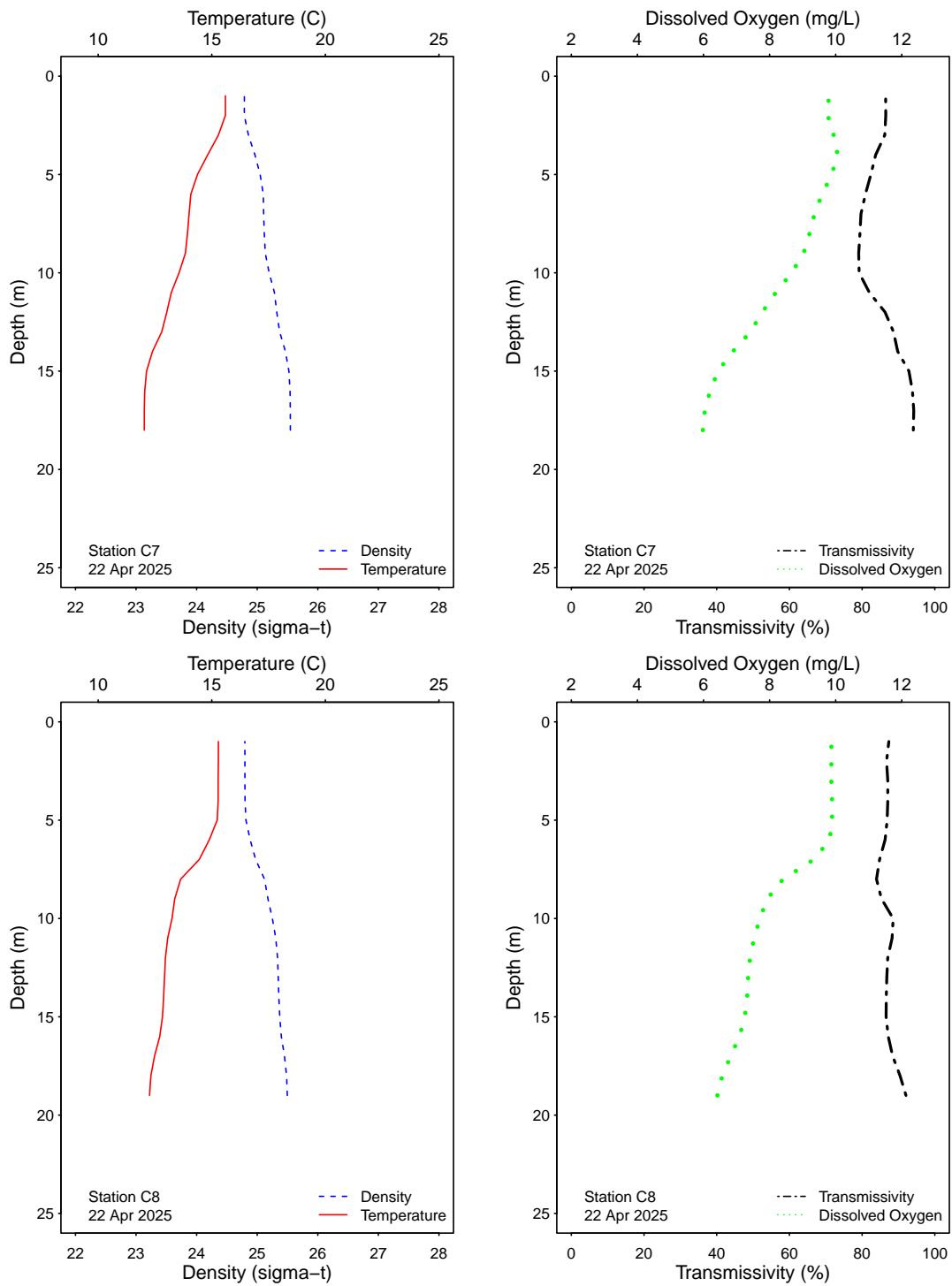


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

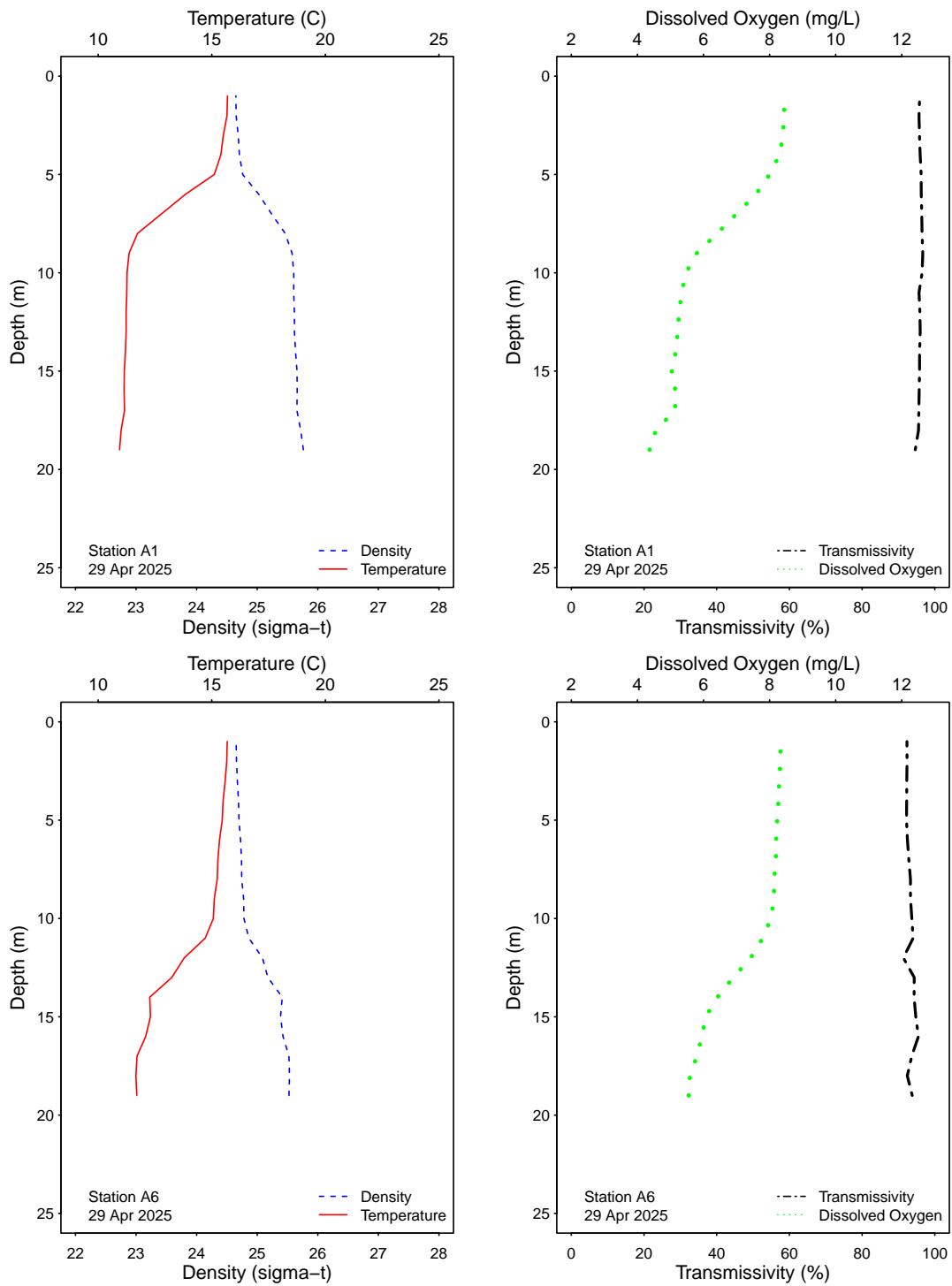


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

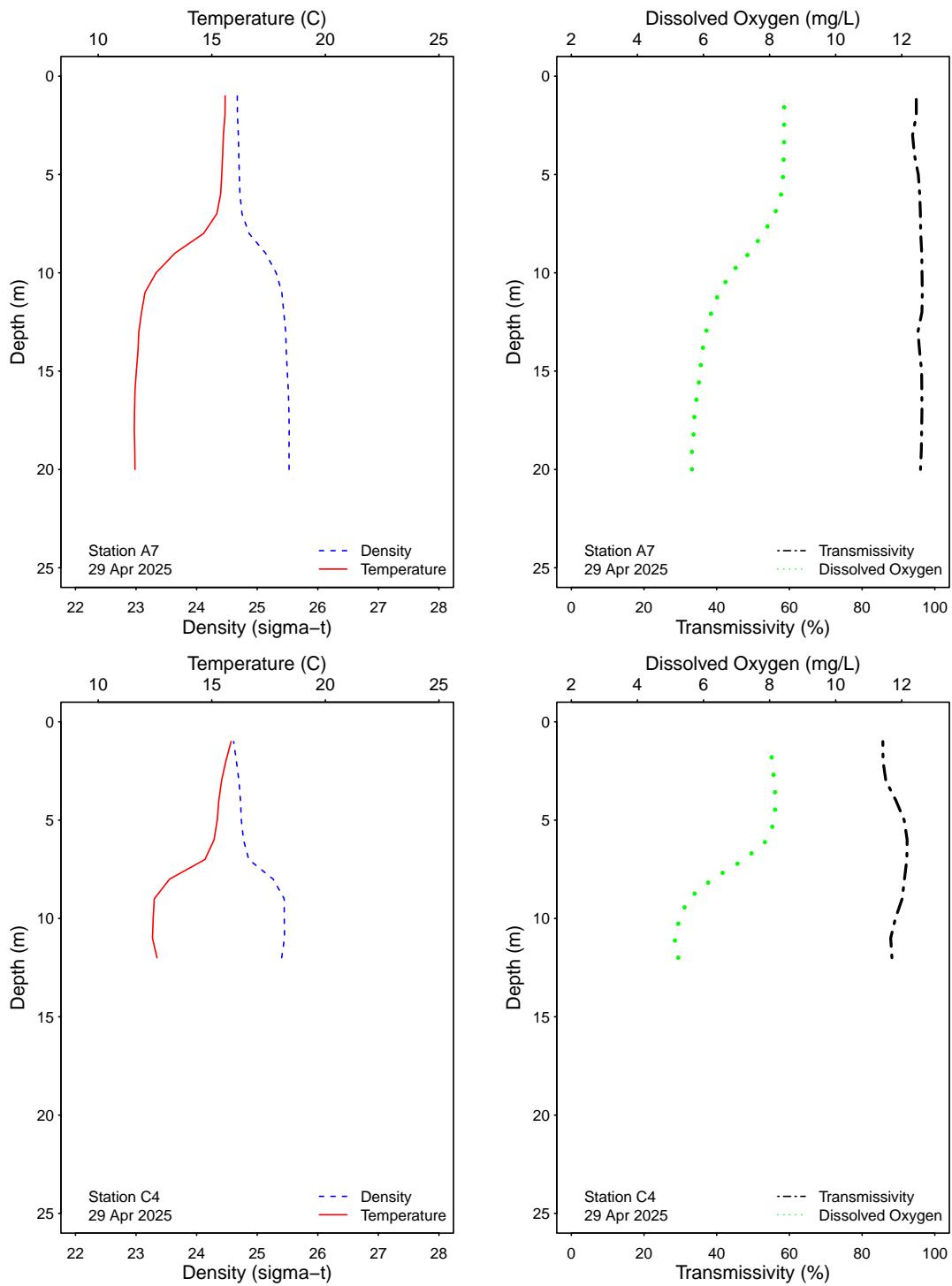


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

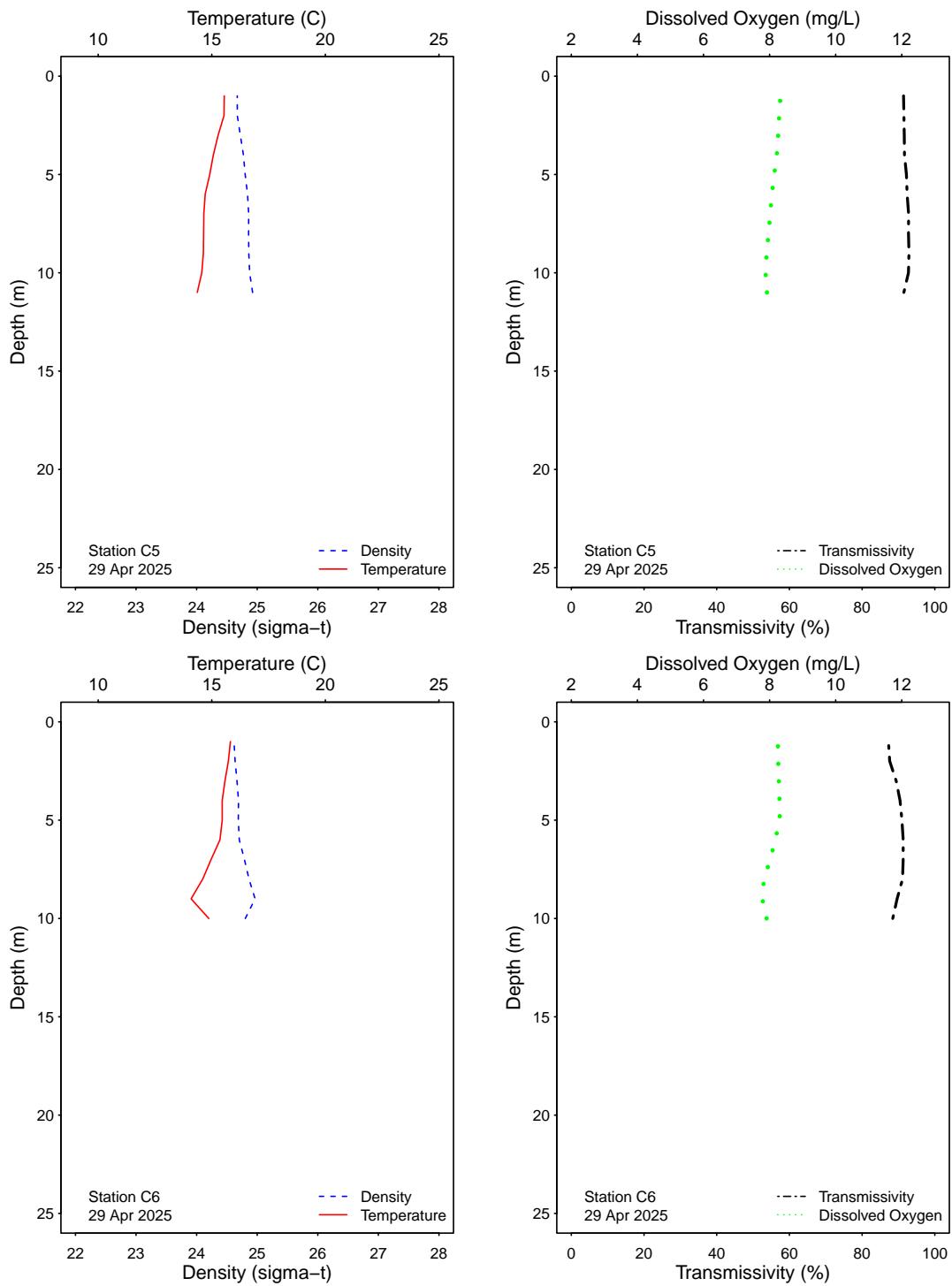


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

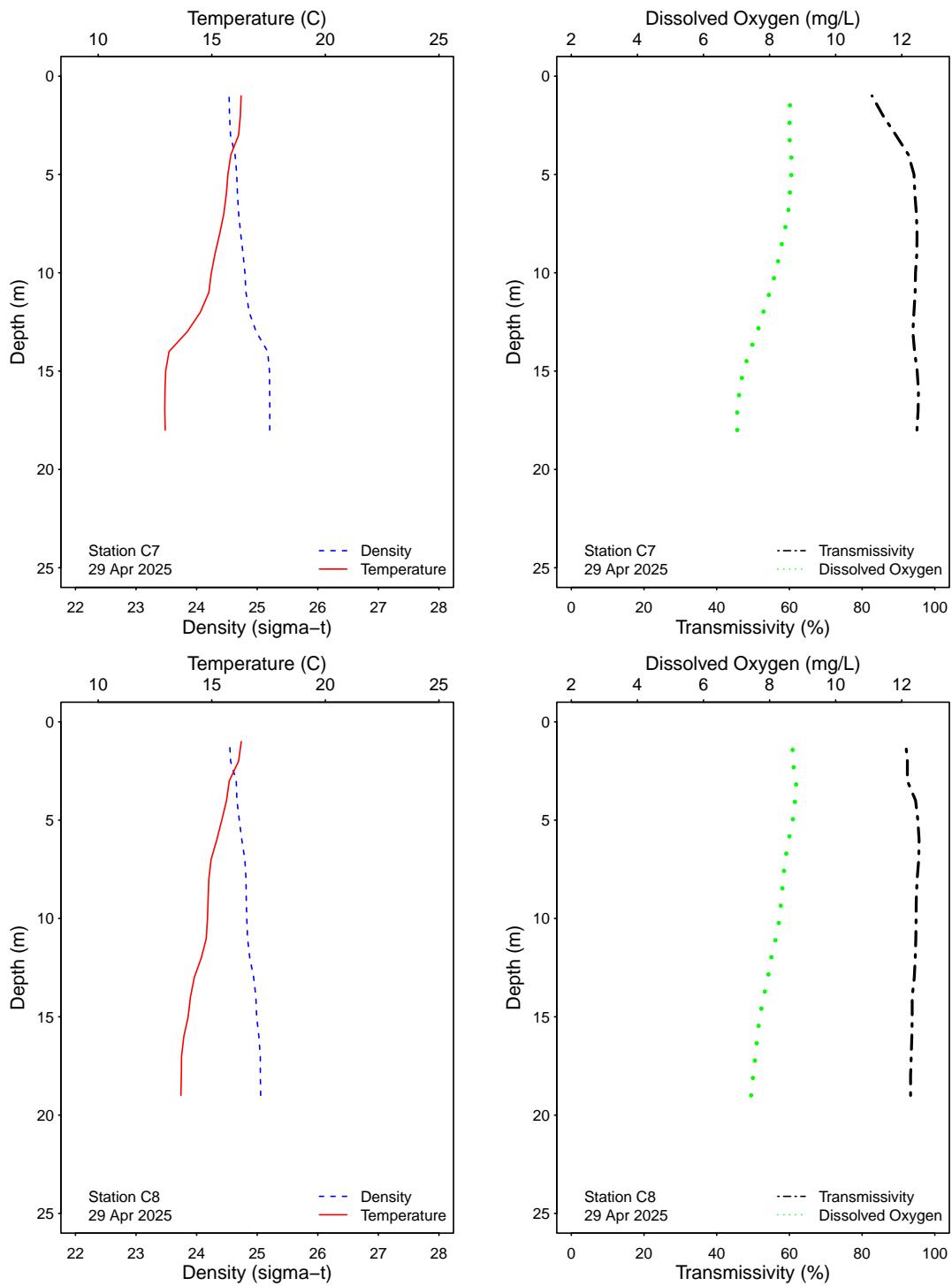


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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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.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Enter
A7	04 Apr 2025	18	NCD	LAB DUPLICATE	6	2	2
A7	08 Apr 2025	18	NCD	LAB DUPLICATE	2	2	2
A7	15 Apr 2025	18	ADG	LAB DUPLICATE	2	2	2
A7	22 Apr 2025	18	NCD	LAB DUPLICATE	6	2	2
A7	29 Apr 2025	18	KT	LAB DUPLICATE	22	2	2
C7	04 Apr 2025	18	NCD	LAB DUPLICATE	2	2	2
C7	08 Apr 2025	18	NCD	LAB DUPLICATE	8	2	2
C7	15 Apr 2025	18	ADG	LAB DUPLICATE	6	2	2
C7	22 Apr 2025	18	NCD	LAB DUPLICATE	2	2	2
C7	29 Apr 2025	18	KT	LAB DUPLICATE	2	2	2
C8	04 Apr 2025	12	NCD	LAB DUPLICATE	2	2	2
C8	08 Apr 2025	12	NCD	LAB DUPLICATE	4	2	2
C8	15 Apr 2025	12	ADG	LAB DUPLICATE	2	2	2
C8	22 Apr 2025	12	NCD	LAB DUPLICATE	2	2	2
C8	29 Apr 2025	12	KT	LAB DUPLICATE	2	2	2
D12	02 Apr 2025		WT	LAB DUPLICATE	20	2	2
D12	02 Apr 2025		WT	FIELD DUPLICATE	20	6	2
D12	09 Apr 2025		WT	FIELD DUPLICATE	20	4	2
D12	09 Apr 2025		WT	LAB DUPLICATE	20	2	4
D12	16 Apr 2025		NCD	FIELD DUPLICATE	20	2	2
D12	16 Apr 2025		NCD	LAB DUPLICATE	2	2	2
D12	23 Apr 2025		ADG	FIELD DUPLICATE	2	2	2
D12	23 Apr 2025		ADG	LAB DUPLICATE	2	2	2
D12	30 Apr 2025		JF	FIELD DUPLICATE	2	2	2
D12	30 Apr 2025		JF	LAB DUPLICATE	2	2	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	D8-B	D9	D10	D11	D12
01 Apr 2025	2	2	6	*9	*2	5	12	15	9
02 Apr 2025	2	2	6	9		6	17	19	7
03 Apr 2025	2	2	6	9		6	17	19	7
04 Apr 2025	2	2	6	9		6	17	19	7
05 Apr 2025	2	2	6	9		6	17	19	7
06 Apr 2025	2	2	6	9		6	17	19	7
07 Apr 2025	2	2	6	9		6	17	19	7
08 Apr 2025	2	2	6	9		6	17	19	7
09 Apr 2025	2	2	4	11		4	9	15	4
10 Apr 2025	2	2	4	11		4	9	15	4
11 Apr 2025	2	2	4	11		4	9	15	4
12 Apr 2025	2	2	4	11		4	9	15	4
13 Apr 2025	2	2	4	11		4	9	15	4
14 Apr 2025	2	2	4	11		4	9	15	4
15 Apr 2025	2	2	4	11		4	9	15	4
16 Apr 2025	2	2	3	11		4	9	11	4
17 Apr 2025	2	2	3	11		4	9	11	4
18 Apr 2025	2	2	3	11		4	9	11	4
19 Apr 2025	2	2	3	11		4	9	11	4
20 Apr 2025	2	2	3	11		4	9	11	4
21 Apr 2025	2	2	3	11		4	9	11	4
22 Apr 2025	2	2	3	11		4	9	11	4
23 Apr 2025	2	2	3	8		3	5	9	3
24 Apr 2025	2	2	3	8		3	5	9	3
25 Apr 2025	2	2	3	8		3	5	9	3
26 Apr 2025	2	2	3	8		3	5	9	3
27 Apr 2025	2	2	3	8		3	5	9	3
28 Apr 2025	2	2	3	8		3	5	9	3
29 Apr 2025	2	2	3	8		3	5	9	3
30 Apr 2025	2	2	2	12		4	5	24	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	D9	D10	D11	D12
April	IC	IC	IC	IC	IC	IC	E	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	D9	D10	D11	D12
01 Apr 2025	*12	*11	*13	*20	*30	*30	*180	*20
02 Apr 2025	20	20	20	20	40	40	200	20
03 Apr 2025	20	20	20	20	40	40	200	20
04 Apr 2025	*20	*20	*20	*20	*40	*120	*180	*40
05 Apr 2025	*20	*20	*20	*20	*40	*120	*180	*40
06 Apr 2025	*20	*20	*20	*20	*40	*120	*180	*40
07 Apr 2025	*20	*20	*20	*20	*40	*120	*180	*40
08 Apr 2025	*20	*20	*20	*20	*40	*120	*180	*40
09 Apr 2025	20	20	20	20	40	200	160	60
10 Apr 2025	20	20	20	20	40	200	160	60
11 Apr 2025	*20	*20	*11	*20	*40	*120	*110	*60
12 Apr 2025	*20	*20	*11	*20	*40	*120	*110	*60
13 Apr 2025	*20	*20	*11	*20	*40	*120	*110	*60
14 Apr 2025	*20	*20	*11	*20	*40	*120	*110	*60
15 Apr 2025	*20	*20	*11	*20	*40	*120	*110	*60
16 Apr 2025	20	20	2	20	40	40	20	60
17 Apr 2025	20	20	2	20	40	40	20	60
18 Apr 2025	*11	*20	*11	*20	*40	*120	*20	*40
19 Apr 2025	*11	*20	*11	*20	*40	*120	*20	*40
20 Apr 2025	*11	*20	*11	*20	*40	*120	*20	*40
21 Apr 2025	*11	*20	*11	*20	*40	*120	*20	*40
22 Apr 2025	*11	*20	*11	*20	*40	*120	*20	*40
23 Apr 2025	2	20	20	20	40	40	20	20
24 Apr 2025	2	20	20	20	40	40	20	20
25 Apr 2025	*2	*20	*11	*110	*30	*110	*20	*40
26 Apr 2025	*2	*20	*11	*110	*30	*110	*20	*40
27 Apr 2025	*2	*20	*11	*110	*30	*110	*20	*40
28 Apr 2025	*2	*20	*11	*110	*30	*110	*20	*40
29 Apr 2025	*2	*20	*11	*110	*30	*110	*20	*40
30 Apr 2025	2	20	20	200	20	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	D9	D10	D11	D12
April	IC	IC	IC	IC	IC	IC	E	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 kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (*). Values >30 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Apr 2025	2	3	3	2	2	2	2	2
02 Apr 2025	3	3	3	2	2	2	2	2
03 Apr 2025	3	3	3	2	2	2	2	2
04 Apr 2025	2	3	3	2	2	2	2	2
05 Apr 2025	2	3	3	2	2	2	2	2
06 Apr 2025	2	3	3	2	2	2	2	2
07 Apr 2025	3	3	3	2	2	2	2	2
08 Apr 2025	2	3	3	2	2	2	2	2
09 Apr 2025	2	3	3	2	2	2	2	2
10 Apr 2025	2	3	3	2	2	2	2	2
11 Apr 2025	2	3	3	2	2	2	2	2
12 Apr 2025	2	3	3	2	2	2	2	2
13 Apr 2025	2	3	3	2	2	2	2	2
14 Apr 2025	2	3	3	2	2	2	2	2
15 Apr 2025	2	2	2	2	2	2	2	2
16 Apr 2025	2	2	2	2	2	2	2	2
17 Apr 2025	2	2	2	2	2	2	2	2
18 Apr 2025	2	2	2	2	2	2	2	2
19 Apr 2025	2	2	2	2	2	2	2	2
20 Apr 2025	2	2	2	2	2	2	2	2
21 Apr 2025	2	2	2	2	2	2	2	2
22 Apr 2025	2	2	2	2	2	2	2	2
23 Apr 2025	2	2	2	2	2	2	2	2
24 Apr 2025	2	2	2	2	2	2	2	2
25 Apr 2025	2	2	2	2	2	2	2	2
26 Apr 2025	2	2	2	2	2	2	2	2
27 Apr 2025	2	2	2	2	2	2	2	2
28 Apr 2025	2	2	2	2	2	2	2	2
29 Apr 2025	2	2	2	2	2	2	2	2
30 Apr 2025	2	2	2	2	2	2	2	2

* Geometric mean calculated using n<5

Table B.6

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
April	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	A6	A7	C4	C5	C6	C7	C8
01 Apr 2025	*2	*17	*160	*2	*4	*49	*2	*9	*70	*3	*2	*2	*2	*4
02 Apr 2025	*2	*17	*160	*2	*4	*49	*2	*9	*70	*3	*2	*2	*3	*10
03 Apr 2025	*2	*17	*160	*2	*4	*49	*2	*9	*70	*3	*2	*2	*3	*4
04 Apr 2025	*2	*16	*138	*2	*4	*41	*2	*9	*27	*3	*2	*2	*2	*10
05 Apr 2025	*2	*16	*138	*2	*4	*41	*2	*9	*27	*3	*2	*2	*2	*10
06 Apr 2025	*2	*16	*138	*2	*4	*41	*2	*9	*27	*3	*2	*2	*2	*10
07 Apr 2025	*2	*16	*138	*2	*4	*41	*2	*9	*27	*3	*2	*2	*2	*10
08 Apr 2025	2	6	76	2	38	2	6	14	2	2	2	2	2	2
09 Apr 2025	*2	*14	*41	*2	*4	*32	*2	*7	*12	*3	*2	*2	*2	*4
10 Apr 2025	*2	*14	*41	*2	*4	*32	*2	*7	*12	*3	*2	*2	*2	*4
11 Apr 2025	*2	*14	*41	*2	*4	*32	*2	*7	*12	*3	*2	*2	*2	*4
12 Apr 2025	*2	*14	*41	*2	*4	*32	*2	*7	*12	*3	*2	*2	*2	*4
13 Apr 2025	*2	*14	*41	*2	*4	*32	*2	*7	*12	*3	*2	*2	*2	*4
14 Apr 2025	*2	*14	*41	*2	*4	*32	*2	*7	*12	*3	*2	*2	*2	*4
15 Apr 2025	2	6	26	2	26	2	10	2	2	2	2	2	2	8
16 Apr 2025	2	6	2	2	26	2	10	2	2	2	2	2	2	8
17 Apr 2025	2	2	6	2	2	26	2	10	2	2	2	2	2	8
18 Apr 2025	*2	*4	*2	*4	*16	*2	*6	*2	*6	*2	*2	*2	*2	*7
19 Apr 2025	*2	*4	*2	*4	*16	*2	*6	*2	*6	*2	*2	*2	*2	*7
20 Apr 2025	*2	*2	*4	*2	*4	*16	*2	*6	*2	*6	*2	*2	*2	*7
21 Apr 2025	*2	*2	*4	*2	*4	*16	*2	*6	*2	*6	*2	*2	*2	*7
22 Apr 2025	2	2	6	2	2	6	2	6	2	2	2	2	2	6
23 Apr 2025	2	2	6	2	2	6	2	6	2	2	2	2	2	6
24 Apr 2025	*3	*2	*7	*2	*5	*2	*4	*2	*4	*2	*2	*2	*2	*5
25 Apr 2025	*3	*2	*7	*2	*5	*2	*4	*2	*4	*2	*2	*2	*2	*5
26 Apr 2025	*3	*2	*7	*2	*5	*2	*4	*2	*4	*2	*2	*2	*2	*5
27 Apr 2025	*3	*2	*7	*2	*5	*2	*4	*2	*4	*2	*2	*2	*2	*5
28 Apr 2025	*3	*2	*7	*2	*5	*2	*4	*2	*4	*2	*2	*2	*2	*5
29 Apr 2025	4	2	12	2	6	2	6	2	6	2	2	2	2	2
30 Apr 2025	4	2	12	2	6	2	6	2	6	2	2	2	2	2

* 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

Date	A1		A6		A7		C4		C5		C6		C7		C8					
	1m	12m	18m	1m	12m	18m	1m	12m	1m	3m	9m	1m	3m	9m	1m	12m	18m	1m	12m	18m
April	IC	IC	E	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data