SD Public Utilities

POINT LOMA OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

POINT LOMA WASTEWATER TREATMENT PLANT

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

JUNE 2025

Environmental Monitoring and Technical Services
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CERTIFIED
Public Utilities Department
Continual Improvement, Prevention of Pollution, Regulatory Compliance
ISO 14001

The City of SAN DIEGO
Public Utilities Department
Environmental Monitoring & Technical Services Division

July 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 June 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,

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, the 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, 1987[2]) 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 June 4, 11, 16, and 25.
- During the June reporting period, each of the eight shore stations was in compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards.
- Nothing of sewage origin was observed at PLOO shore station in June.
- 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 June 2, 9, 17, 24, and 30.
- During the June reporting period, each of the eight kelp stations was in compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards.

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

- Water column temperatures ranged from 10.88 to 20.17°C. The difference between surface and bottom waters ranged from 3.15 to 8.43°C.
- Chlorophyll *a* concentrations ranged from 0.27 to 12.28 µg/L.
- Nothing of sewage origin was observed at PLOO kelp stations in June.

Offshore Stations

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

TABLES AND FIGURES

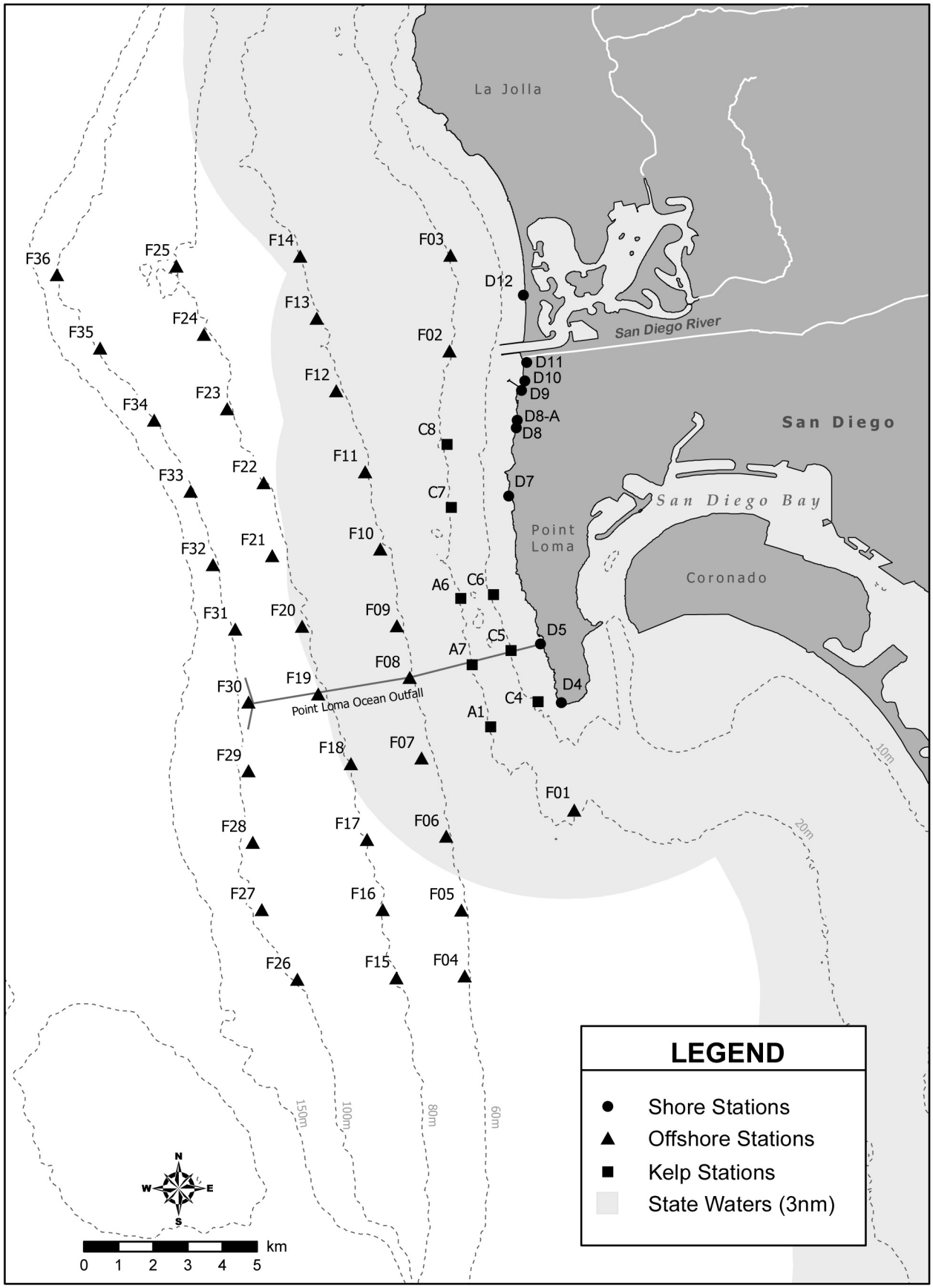

Figure 1.1 Station Map

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Shore Stations

Table 2.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the 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 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*3
02 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*3
03 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*3
04 Jun 2025	2	3	2	4	3	5	5	3
05 Jun 2025	2	3	2	4	3	5	5	3
06 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*4
07 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*4
08 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*4
09 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*4
10 Jun 2025	*2	*4	*2	*4	*3	*6	*6	*4
11 Jun 2025	2	3	2	5	3	8	6	3
12 Jun 2025	2	3	2	5	3	8	6	3
13 Jun 2025	*2	*4	*2	*6	*3	*6	*5	*3
14 Jun 2025	*2	*4	*2	*6	*3	*6	*5	*3
15 Jun 2025	*2	*4	*2	*6	*3	*6	*5	*3
16 Jun 2025	2	3	2	5	3	5	7	3
17 Jun 2025	2	3	2	5	3	5	7	3
18 Jun 2025	2	3	2	5	3	5	7	3
19 Jun 2025	2	3	2	5	3	5	7	3
20 Jun 2025	*2	*4	*2	*6	*4	*6	*8	*2
21 Jun 2025	*2	*4	*2	*6	*4	*6	*8	*2
22 Jun 2025	*2	*4	*2	*6	*4	*6	*8	*2
23 Jun 2025	*2	*4	*2	*6	*4	*6	*8	*2
24 Jun 2025	*2	*4	*2	*6	*4	*6	*8	*2
25 Jun 2025	2	3	2	5	3	8	7	3
26 Jun 2025	2	3	2	5	3	8	7	3
27 Jun 2025	*2	*2	*2	*3	*3	*6	*6	*4
28 Jun 2025	*2	*2	*2	*3	*3	*6	*6	*4
29 Jun 2025	*2	*2	*2	*3	*3	*6	*6	*4
30 Jun 2025	*2	*2	*2	*3	*3	*6	*6	*4

* Geometric mean calculated using n<5

Table 2.2

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

Date	D4	D5	D7	D8	D9	D10	D11	D12
04 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
11 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
25 Jun 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 Jun 2025	*2	*2	*2	*4	*2	*3	*6	*3
02 Jun 2025	*2	*2	*2	*4	*2	*3	*6	*3
03 Jun 2025	*2	*2	*2	*4	*2	*3	*6	*3
04 Jun 2025	2	2	2	4	3	3	5	3
05 Jun 2025	2	2	2	4	3	3	5	3
06 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
07 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
08 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
09 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
10 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
11 Jun 2025	2	2	2	4	3	4	6	3
12 Jun 2025	2	2	2	4	3	4	6	3
13 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
14 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
15 Jun 2025	*2	*2	*2	*5	*3	*3	*6	*3
16 Jun 2025	2	2	3	4	2	3	8	2
17 Jun 2025	2	2	3	4	2	3	8	2
18 Jun 2025	2	2	3	4	2	3	8	2
19 Jun 2025	2	2	3	4	2	3	8	2
20 Jun 2025	*2	*2	*3	*4	*3	*3	*9	*3
21 Jun 2025	*2	*2	*3	*4	*3	*3	*9	*3
22 Jun 2025	*2	*2	*3	*4	*3	*3	*9	*3
23 Jun 2025	*2	*2	*3	*4	*3	*3	*9	*3
24 Jun 2025	*2	*2	*3	*4	*3	*3	*9	*3
25 Jun 2025	2	2	4	4	2	4	13	3
26 Jun 2025	2	2	4	4	2	4	13	3
27 Jun 2025	*2	*2	*5	*3	*3	*5	*11	*3
28 Jun 2025	*2	*2	*5	*3	*3	*5	*11	*3
29 Jun 2025	*2	*2	*5	*3	*3	*5	*11	*3
30 Jun 2025	*2	*2	*5	*3	*3	*5	*11	*3

* Geometric mean calculated using n<5

Table 2.4

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

Date	D4	D5	D7	D8	D9	D10	D11	D12
04 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
11 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
25 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table 2.5

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the PLOO shore stations. Data are based on the median of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1000 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8	D9	D10	D11	D12
01 Jun 2025	*20	*112	*63	*112	*28	*72	*93	*20
02 Jun 2025	*20	*112	*63	*112	*28	*72	*93	*20
03 Jun 2025	*20	*112	*63	*112	*28	*72	*93	*20
04 Jun 2025	13	80	80	80	19	49	78	20
05 Jun 2025	13	80	80	80	19	49	78	20
06 Jun 2025	*11	*112	*112	*112	*19	*61	*110	*20
07 Jun 2025	*11	*112	*112	*112	*19	*61	*110	*20
08 Jun 2025	*11	*112	*112	*112	*19	*61	*110	*20
09 Jun 2025	*11	*112	*112	*112	*19	*61	*110	*20
10 Jun 2025	*11	*112	*112	*112	*19	*61	*110	*20
11 Jun 2025	13	80	80	80	22	77	78	13
12 Jun 2025	13	80	80	80	22	77	78	13
13 Jun 2025	*11	*63	*112	*63	*22	*53	*50	*11
14 Jun 2025	*11	*63	*112	*63	*22	*53	*50	*11
15 Jun 2025	*11	*63	*112	*63	*22	*53	*50	*11
16 Jun 2025	13	80	80	50	14	44	55	8
17 Jun 2025	13	80	80	50	14	44	55	8
18 Jun 2025	13	80	80	50	14	44	55	8
19 Jun 2025	13	80	80	50	14	44	55	8
20 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*6
21 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*6
22 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*6
23 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*6
24 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*6
25 Jun 2025	32	80	80	50	26	69	76	13
26 Jun 2025	32	80	80	50	26	69	76	13
27 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*11
28 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*11
29 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*11
30 Jun 2025	*20	*63	*63	*36	*16	*53	*60	*11

* 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
04 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
11 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
25 Jun 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
04 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
11 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
16 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
25 Jun 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* (Entero) are reported as CFU/100 mL. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero
D10	04 Jun 2025	838	10e	<2	<2
D10	11 Jun 2025	855	<200	18e	10e
D10	16 Jun 2025	857	20e	2e	<2
D10	25 Jun 2025	851	<200	20e	20e
D11	04 Jun 2025	825	40e	2e	2e
D11	11 Jun 2025	845	20e	4e	10e
D11	16 Jun 2025	843	80e	32e	18e
D11	25 Jun 2025	841	<200	4e	48
D12	04 Jun 2025	803	<20	4e	<2
D12	11 Jun 2025	827	<2	<2	<2
D12	16 Jun 2025	815	<2	<2	2e
D12	25 Jun 2025	824	<200	10e	8e
D4	04 Jun 2025	1027	<2	2e	<2
D4	11 Jun 2025	1028	20e	4e	<2
D4	16 Jun 2025	1034	<20	<2	<2
D4	25 Jun 2025	1014	<200	<2	2e
D5	04 Jun 2025	1011	<20	<2	<2
D5	11 Jun 2025	1017	<20	2e	<2
D5	16 Jun 2025	1024	<200	<2	<2
D5	25 Jun 2025	1004	<200	<2	<2
D7	04 Jun 2025	933	<200	<2	<2
D7	11 Jun 2025	936	<20	<2	<2
D7	16 Jun 2025	943	<20	<2	18e
D7	25 Jun 2025	937	<200	<2	8e
D8	04 Jun 2025	916	20e	2e	6e
D8	11 Jun 2025	925	<20	8e	<2
D8	16 Jun 2025	929	<20	<2	2e
D8	25 Jun 2025	923	<200	<2	4e
D9	04 Jun 2025	900	4e	2e	6e
D9	11 Jun 2025	913	40e	4e	2e
D9	16 Jun 2025	915	2e	4e	<2
D9	25 Jun 2025	908	<200	2e	<2

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	04 Jun 2025	Arrive Time	1027
D4	04 Jun 2025	Wind Speed (kts)	3.4
D4	04 Jun 2025	Wind Dir	SW
D4	04 Jun 2025	Animal Life	
D4	04 Jun 2025	Floatables	
D4	04 Jun 2025	Current Direction	S
D4	04 Jun 2025	Water Temp (C)	15.4
D4	04 Jun 2025	High Tide Time	
D4	04 Jun 2025	Low Tide Time	
D4	04 Jun 2025	Comments	Water clear; Trash-1; Seagrass;Algae;Debris
D4	11 Jun 2025	Arrive Time	1028
D4	11 Jun 2025	Wind Speed (kts)	1.1
D4	11 Jun 2025	Wind Dir	W
D4	11 Jun 2025	Animal Life	
D4	11 Jun 2025	Floatables	
D4	11 Jun 2025	Current Direction	S
D4	11 Jun 2025	Water Temp (C)	16.2
D4	11 Jun 2025	High Tide Time	
D4	11 Jun 2025	Low Tide Time	
D4	11 Jun 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae
D4	16 Jun 2025	Arrive Time	1034
D4	16 Jun 2025	Wind Speed (kts)	3
D4	16 Jun 2025	Wind Dir	W
D4	16 Jun 2025	Animal Life	
D4	16 Jun 2025	Floatables	
D4	16 Jun 2025	Current Direction	S
D4	16 Jun 2025	Water Temp (C)	18.3
D4	16 Jun 2025	High Tide Time	
D4	16 Jun 2025	Low Tide Time	
D4	16 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae
D4	25 Jun 2025	Arrive Time	1014
D4	25 Jun 2025	Wind Speed (kts)	2.2
D4	25 Jun 2025	Wind Dir	N
D4	25 Jun 2025	Animal Life	
D4	25 Jun 2025	Floatables	
D4	25 Jun 2025	Current Direction	S
D4	25 Jun 2025	Water Temp (C)	19.4
D4	25 Jun 2025	High Tide Time	
D4	25 Jun 2025	Low Tide Time	
D4	25 Jun 2025	Comments	Water clear; Trash-4; Kelp;Seagrass;Algae;Debris
D5	04 Jun 2025	Arrive Time	1011
D5	04 Jun 2025	Wind Speed (kts)	5.2
D5	04 Jun 2025	Wind Dir	SW
D5	04 Jun 2025	Animal Life	
D5	04 Jun 2025	Floatables	
D5	04 Jun 2025	Current Direction	S
D5	04 Jun 2025	Water Temp (C)	18.3
D5	04 Jun 2025	High Tide Time	
D5	04 Jun 2025	Low Tide Time	
D5	04 Jun 2025	Comments	Water clear; Trash-1; Kelp;Algae
D5	11 Jun 2025	Arrive Time	1017

Station	Date	Parameter	Value
D5	11 Jun 2025	Wind Speed (kts)	0
D5	11 Jun 2025	Wind Dir	XX
D5	11 Jun 2025	Animal Life	
D5	11 Jun 2025	Floatables	
D5	11 Jun 2025	Current Direction	S
D5	11 Jun 2025	Water Temp (C)	18.2
D5	11 Jun 2025	High Tide Time	
D5	11 Jun 2025	Low Tide Time	
D5	11 Jun 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae
D5	16 Jun 2025	Arrive Time	1024
D5	16 Jun 2025	Wind Speed (kts)	1.7
D5	16 Jun 2025	Wind Dir	NW
D5	16 Jun 2025	Animal Life	
D5	16 Jun 2025	Floatables	
D5	16 Jun 2025	Current Direction	S
D5	16 Jun 2025	Water Temp (C)	18.4
D5	16 Jun 2025	High Tide Time	
D5	16 Jun 2025	Low Tide Time	
D5	16 Jun 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae
D5	25 Jun 2025	Arrive Time	1004
D5	25 Jun 2025	Wind Speed (kts)	5.9
D5	25 Jun 2025	Wind Dir	NW
D5	25 Jun 2025	Animal Life	
D5	25 Jun 2025	Floatables	
D5	25 Jun 2025	Current Direction	S
D5	25 Jun 2025	Water Temp (C)	20
D5	25 Jun 2025	High Tide Time	
D5	25 Jun 2025	Low Tide Time	
D5	25 Jun 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae; Person/Walker/Jogger-5
D7	04 Jun 2025	Arrive Time	933
D7	04 Jun 2025	Wind Speed (kts)	4.4
D7	04 Jun 2025	Wind Dir	S
D7	04 Jun 2025	Animal Life	
D7	04 Jun 2025	Floatables	
D7	04 Jun 2025	Current Direction	S
D7	04 Jun 2025	Water Temp (C)	16.1
D7	04 Jun 2025	High Tide Time	
D7	04 Jun 2025	Low Tide Time	
D7	04 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-6; Trash-1; Algae;Seagrass;Kelp; Person/Walker/Jogger-4
D7	11 Jun 2025	Arrive Time	938
D7	11 Jun 2025	Wind Speed (kts)	0
D7	11 Jun 2025	Wind Dir	XX
D7	11 Jun 2025	Animal Life	
D7	11 Jun 2025	Floatables	
D7	11 Jun 2025	Current Direction	S
D7	11 Jun 2025	Water Temp (C)	17.2
D7	11 Jun 2025	High Tide Time	
D7	11 Jun 2025	Low Tide Time	
D7	11 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-12; Trash-1; Kelp;Seagrass;Algae
D7	16 Jun 2025	Arrive Time	943
D7	16 Jun 2025	Wind Speed (kts)	0
D7	16 Jun 2025	Wind Dir	XX
D7	16 Jun 2025	Animal Life	

Station	Date	Parameter	Value
D7	16 Jun 2025	Floatables	
D7	16 Jun 2025	Current Direction	S
D7	16 Jun 2025	Water Temp (C)	18.6
D7	16 Jun 2025	High Tide Time	
D7	16 Jun 2025	Low Tide Time	
D7	16 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp;Seagrass;Algae
D7	25 Jun 2025	Arrive Time	937
D7	25 Jun 2025	Wind Speed (kts)	3.1
D7	25 Jun 2025	Wind Dir	W
D7	25 Jun 2025	Animal Life	
D7	25 Jun 2025	Floatables	
D7	25 Jun 2025	Current Direction	S
D7	25 Jun 2025	Water Temp (C)	19.4
D7	25 Jun 2025	High Tide Time	
D7	25 Jun 2025	Low Tide Time	
D7	25 Jun 2025	Comments	Water clear; Trash-1; Algae;Kelp;Seagrass
D8	04 Jun 2025	Arrive Time	916
D8	04 Jun 2025	Wind Speed (kts)	0
D8	04 Jun 2025	Wind Dir	SW
D8	04 Jun 2025	Animal Life	Dog-2;
D8	04 Jun 2025	Floatables	
D8	04 Jun 2025	Current Direction	S
D8	04 Jun 2025	Water Temp (C)	15.2
D8	04 Jun 2025	High Tide Time	
D8	04 Jun 2025	Low Tide Time	
D8	04 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-2
D8	11 Jun 2025	Arrive Time	925
D8	11 Jun 2025	Wind Speed (kts)	0
D8	11 Jun 2025	Wind Dir	XX
D8	11 Jun 2025	Animal Life	Dog-2;
D8	11 Jun 2025	Floatables	
D8	11 Jun 2025	Current Direction	S
D8	11 Jun 2025	Water Temp (C)	17.5
D8	11 Jun 2025	High Tide Time	
D8	11 Jun 2025	Low Tide Time	
D8	11 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-1
D8	16 Jun 2025	Arrive Time	929
D8	16 Jun 2025	Wind Speed (kts)	1.8
D8	16 Jun 2025	Wind Dir	W
D8	16 Jun 2025	Animal Life	Dog-1;
D8	16 Jun 2025	Floatables	
D8	16 Jun 2025	Current Direction	S
D8	16 Jun 2025	Water Temp (C)	18.9
D8	16 Jun 2025	High Tide Time	
D8	16 Jun 2025	Low Tide Time	
D8	16 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-1
D8	25 Jun 2025	Arrive Time	923
D8	25 Jun 2025	Wind Speed (kts)	2.3
D8	25 Jun 2025	Wind Dir	W
D8	25 Jun 2025	Animal Life	
D8	25 Jun 2025	Floatables	
D8	25 Jun 2025	Current Direction	S

Station	Date	Parameter	Value
D8	25 Jun 2025	Water Temp (C)	19.1
D8	25 Jun 2025	High Tide Time	
D8	25 Jun 2025	Low Tide Time	
D8	25 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae;Debris
D9	04 Jun 2025	Arrive Time	900
D9	04 Jun 2025	Wind Speed (kts)	4.2
D9	04 Jun 2025	Wind Dir	SW
D9	04 Jun 2025	Animal Life	
D9	04 Jun 2025	Floatables	
D9	04 Jun 2025	Current Direction	S
D9	04 Jun 2025	Water Temp (C)	16.6
D9	04 Jun 2025	High Tide Time	
D9	04 Jun 2025	Low Tide Time	
D9	04 Jun 2025	Comments	Water clear; Trash-2; Kelp;Seagrass;Algae; Person/Walker/Jogger-1; Unhoused-1
D9	11 Jun 2025	Arrive Time	913
D9	11 Jun 2025	Wind Speed (kts)	0
D9	11 Jun 2025	Wind Dir	XX
D9	11 Jun 2025	Animal Life	Dog-2;
D9	11 Jun 2025	Floatables	
D9	11 Jun 2025	Current Direction	S
D9	11 Jun 2025	Water Temp (C)	17.7
D9	11 Jun 2025	High Tide Time	
D9	11 Jun 2025	Low Tide Time	
D9	11 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-1
D9	16 Jun 2025	Arrive Time	915
D9	16 Jun 2025	Wind Speed (kts)	1.2
D9	16 Jun 2025	Wind Dir	W
D9	16 Jun 2025	Animal Life	
D9	16 Jun 2025	Floatables	
D9	16 Jun 2025	Current Direction	S
D9	16 Jun 2025	Water Temp (C)	18.8
D9	16 Jun 2025	High Tide Time	
D9	16 Jun 2025	Low Tide Time	
D9	16 Jun 2025	Comments	Water clear; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-2
D9	25 Jun 2025	Arrive Time	908
D9	25 Jun 2025	Wind Speed (kts)	3.2
D9	25 Jun 2025	Wind Dir	SW
D9	25 Jun 2025	Animal Life	
D9	25 Jun 2025	Floatables	
D9	25 Jun 2025	Current Direction	S
D9	25 Jun 2025	Water Temp (C)	19.3
D9	25 Jun 2025	High Tide Time	
D9	25 Jun 2025	Low Tide Time	
D9	25 Jun 2025	Comments	Water clear; Trash-2; Algae; Person/Walker/Jogger-4
D10	04 Jun 2025	Arrive Time	838
D10	04 Jun 2025	Wind Speed (kts)	3.3
D10	04 Jun 2025	Wind Dir	W
D10	04 Jun 2025	Animal Life	
D10	04 Jun 2025	Floatables	
D10	04 Jun 2025	Current Direction	S
D10	04 Jun 2025	Water Temp (C)	17
D10	04 Jun 2025	High Tide Time	
D10	04 Jun 2025	Low Tide Time	

Station	Date	Parameter	Value
D10	04 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-13; Trash-1; Kelp;Seagrass;Debris
D10	11 Jun 2025	Arrive Time	855
D10	11 Jun 2025	Wind Speed (kts)	1.1
D10	11 Jun 2025	Wind Dir	W
D10	11 Jun 2025	Animal Life	
D10	11 Jun 2025	Floatables	
D10	11 Jun 2025	Current Direction	S
D10	11 Jun 2025	Water Temp (C)	17.8
D10	11 Jun 2025	High Tide Time	
D10	11 Jun 2025	Low Tide Time	
D10	11 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-6; Trash-1; Kelp;Seagrass
D10	16 Jun 2025	Arrive Time	857
D10	16 Jun 2025	Wind Speed (kts)	0.9
D10	16 Jun 2025	Wind Dir	W
D10	16 Jun 2025	Animal Life	
D10	16 Jun 2025	Floatables	
D10	16 Jun 2025	Current Direction	S
D10	16 Jun 2025	Water Temp (C)	18.9
D10	16 Jun 2025	High Tide Time	
D10	16 Jun 2025	Low Tide Time	
D10	16 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-13; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-20
D10	25 Jun 2025	Arrive Time	851
D10	25 Jun 2025	Wind Speed (kts)	3.3
D10	25 Jun 2025	Wind Dir	SW
D10	25 Jun 2025	Animal Life	
D10	25 Jun 2025	Floatables	
D10	25 Jun 2025	Current Direction	S
D10	25 Jun 2025	Water Temp (C)	18.7
D10	25 Jun 2025	High Tide Time	
D10	25 Jun 2025	Low Tide Time	
D10	25 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-10; Trash-3; Kelp;Seagrass;Debris; Person/Walker/Jogger-1
D11	04 Jun 2025	Arrive Time	825
D11	04 Jun 2025	Wind Speed (kts)	0
D11	04 Jun 2025	Wind Dir	W
D11	04 Jun 2025	Animal Life	
D11	04 Jun 2025	Floatables	
D11	04 Jun 2025	Current Direction	S
D11	04 Jun 2025	Water Temp (C)	15.8
D11	04 Jun 2025	High Tide Time	
D11	04 Jun 2025	Low Tide Time	
D11	04 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-1; Trash-2; Kelp;Seagrass;Algae;Debris; Person/Walker/Jogger-3
D11	11 Jun 2025	Arrive Time	845
D11	11 Jun 2025	Wind Speed (kts)	1.1
D11	11 Jun 2025	Wind Dir	W
D11	11 Jun 2025	Animal Life	
D11	11 Jun 2025	Floatables	
D11	11 Jun 2025	Current Direction	S
D11	11 Jun 2025	Water Temp (C)	17.8
D11	11 Jun 2025	High Tide Time	
D11	11 Jun 2025	Low Tide Time	

Station	Date	Parameter	Value
D11	11 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-8; Trash-1; Seagrass;Algae;Kelp; Person/Walker/Jogger-4
D11	16 Jun 2025	Arrive Time	843
D11	16 Jun 2025	Wind Speed (kts)	2.9
D11	16 Jun 2025	Wind Dir	W
D11	16 Jun 2025	Animal Life	
D11	16 Jun 2025	Floatables	
D11	16 Jun 2025	Current Direction	S
D11	16 Jun 2025	Water Temp (C)	19.7
D11	16 Jun 2025	High Tide Time	
D11	16 Jun 2025	Low Tide Time	
D11	16 Jun 2025	Comments	Water clear; Boogie boarder/Swimmer-3; Surfer/Paddle boarder-5; Trash-1; Kelp;Seagrass;Algae; Person/Walker/Jogger-3
D11	25 Jun 2025	Arrive Time	841
D11	25 Jun 2025	Wind Speed (kts)	4
D11	25 Jun 2025	Wind Dir	S
D11	25 Jun 2025	Animal Life	
D11	25 Jun 2025	Floatables	
D11	25 Jun 2025	Current Direction	S
D11	25 Jun 2025	Water Temp (C)	19.6
D11	25 Jun 2025	High Tide Time	
D11	25 Jun 2025	Low Tide Time	
D11	25 Jun 2025	Comments	Water clear; Trash-2; Seagrass;Kelp;Debris;Algae; Person/Walker/Jogger-1
D12	04 Jun 2025	Arrive Time	803
D12	04 Jun 2025	Wind Speed (kts)	3.4
D12	04 Jun 2025	Wind Dir	W
D12	04 Jun 2025	Animal Life	
D12	04 Jun 2025	Floatables	
D12	04 Jun 2025	Current Direction	S
D12	04 Jun 2025	Water Temp (C)	15.4
D12	04 Jun 2025	High Tide Time	
D12	04 Jun 2025	Low Tide Time	
D12	04 Jun 2025	Comments	Water clear; Trash-5; Kelp;Seagrass;Debris; Person/Walker/Jogger-1
D12	11 Jun 2025	Arrive Time	827
D12	11 Jun 2025	Wind Speed (kts)	1.3
D12	11 Jun 2025	Wind Dir	W
D12	11 Jun 2025	Animal Life	Dog-2;
D12	11 Jun 2025	Floatables	
D12	11 Jun 2025	Current Direction	S
D12	11 Jun 2025	Water Temp (C)	18
D12	11 Jun 2025	High Tide Time	
D12	11 Jun 2025	Low Tide Time	
D12	11 Jun 2025	Comments	Water clear; Surfer/Paddle boarder-6; Trash-1; Kelp;Seagrass; Person/Walker/Jogger-12
D12	16 Jun 2025	Arrive Time	815
D12	16 Jun 2025	Wind Speed (kts)	0
D12	16 Jun 2025	Wind Dir	XX
D12	16 Jun 2025	Animal Life	Dog-1;
D12	16 Jun 2025	Floatables	
D12	16 Jun 2025	Current Direction	S
D12	16 Jun 2025	Water Temp (C)	17.8
D12	16 Jun 2025	High Tide Time	
D12	16 Jun 2025	Low Tide Time	

Station	Date	Parameter	Value
D12	16 Jun 2025	Comments	Water clear; Trash-1; Kelp; Person/Walker/Jogger-15
D12	25 Jun 2025	Arrive Time	824
D12	25 Jun 2025	Wind Speed (kts)	3.4
D12	25 Jun 2025	Wind Dir	SW
D12	25 Jun 2025	Animal Life	
D12	25 Jun 2025	Floatables	
D12	25 Jun 2025	Current Direction	S
D12	25 Jun 2025	Water Temp (C)	17.9
D12	25 Jun 2025	High Tide Time	
D12	25 Jun 2025	Low Tide Time	
D12	25 Jun 2025	Comments	Water clear; Trash-2; Kelp;Seagrass

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Kelp Stations

Table 3.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the 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 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
02 Jun 2025	2	2	2	2	2	2	2	2
03 Jun 2025	2	2	2	2	2	2	2	2
04 Jun 2025	2	2	2	2	2	2	2	2
05 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
06 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
07 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
08 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
09 Jun 2025	2	2	2	2	2	2	2	2
10 Jun 2025	2	2	2	2	2	2	2	2
11 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
12 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
13 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
14 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
15 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
16 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
17 Jun 2025	2	2	2	2	2	2	2	2
18 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
19 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
20 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
21 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
22 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
23 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
24 Jun 2025	2	2	2	2	2	2	2	2
25 Jun 2025	2	2	2	2	2	2	2	2
26 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
27 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
28 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
29 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
30 Jun 2025	2	2	3	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
02 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
17 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
24 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table 3.3

Summary of compliance with the Ocean Plan's 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 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
02 Jun 2025	2	2	2	2	2	2	2	2
03 Jun 2025	2	2	2	2	2	2	2	2
04 Jun 2025	2	2	2	2	2	2	2	2
05 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
06 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
07 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
08 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
09 Jun 2025	2	2	2	2	2	2	2	2
10 Jun 2025	2	2	2	2	2	2	2	2
11 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
12 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
13 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
14 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
15 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
16 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
17 Jun 2025	2	2	2	2	2	2	2	2
18 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
19 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
20 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
21 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
22 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
23 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
24 Jun 2025	2	2	2	2	2	2	2	2
25 Jun 2025	2	2	2	2	2	2	2	2
26 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
27 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
28 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
29 Jun 2025	*2	*2	*2	*2	*2	*2	*2	*2
30 Jun 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
02 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
17 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
24 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table 3.5

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

- 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
02 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
17 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
24 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table 3.7

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
02 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
09 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
17 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
24 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC
30 Jun 2025	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table 3.8

Summary of water quality parameters at the PLOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; values for temperature (Temp,°C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero
A1	02 Jun 2025	743	1	<2	<2	<2
A1	02 Jun 2025	743	12	<2	<2	<2
A1	02 Jun 2025	743	18	<2	<2	<2
A1	09 Jun 2025	802	1	<20	<2	<2
A1	09 Jun 2025	802	12	4e	<2	<2
A1	09 Jun 2025	802	18	20e	<2	<2
A1	17 Jun 2025	802	1	<2	<2	<2
A1	17 Jun 2025	802	12	<2	<2	<2
A1	17 Jun 2025	802	18	4e	<2	<2
A1	24 Jun 2025	740	1	2e	<2	<2
A1	24 Jun 2025	740	12	<2	<2	<2
A1	24 Jun 2025	740	18	20e	2e	<2
A1	30 Jun 2025	757	1	<2	<2	<2
A1	30 Jun 2025	757	12	<2	<2	<2
A1	30 Jun 2025	757	18	8e	2e	<2
A6	02 Jun 2025	812	1	<2	<2	<2
A6	02 Jun 2025	812	12	<2	<2	<2
A6	02 Jun 2025	812	18	<2	<2	<2
A6	09 Jun 2025	843	1	<2	2e	2e
A6	09 Jun 2025	843	12	2e	<2	<2
A6	09 Jun 2025	843	18	<2	2e	<2
A6	17 Jun 2025	909	1	2e	<2	<2
A6	17 Jun 2025	909	12	<2	<2	<2
A6	17 Jun 2025	909	18	<2	<2	<2
A6	24 Jun 2025	820	1	2e	<2	<2
A6	24 Jun 2025	820	12	4e	<2	2e
A6	24 Jun 2025	820	18	100e	2e	6e
A6	30 Jun 2025	818	1	<2	<2	<2
A6	30 Jun 2025	818	12	2e	<2	<2
A6	30 Jun 2025	818	18	<20	2e	<2
A7	02 Jun 2025	758	1	<2	<2	<2
A7	02 Jun 2025	758	12	<2	<2	<2
A7	02 Jun 2025	758	18	<2	2e	<2
A7	09 Jun 2025	820	1	<20	<2	2e
A7	09 Jun 2025	820	12	2e	2e	<2
A7	09 Jun 2025	820	18	14e	8e	2e
A7	17 Jun 2025	822	1	6e	2e	<2
A7	17 Jun 2025	822	12	<2	<2	<2
A7	17 Jun 2025	822	18	2e	<2	<2

Station	Date	Time	Depth	Total	Fecal	Entero
A7	24 Jun 2025	810	1	<2	<2	<2
A7	24 Jun 2025	810	12	4e	2e	<2
A7	24 Jun 2025	810	18	20e	<2	<2
A7	30 Jun 2025	804	1	<20	<2	<2
A7	30 Jun 2025	804	12	<20	<2	<2
A7	30 Jun 2025	804	18	<20	12e	<2
C4	02 Jun 2025	910	1	<2	<2	<2
C4	02 Jun 2025	910	3	<2	<2	<2
C4	02 Jun 2025	910	9	<2	<2	<2
C4	09 Jun 2025	958	1	<2	<2	<2
C4	09 Jun 2025	958	3	2e	<2	<2
C4	09 Jun 2025	958	9	<2	<2	<2
C4	17 Jun 2025	1032	1	4e	<2	<2
C4	17 Jun 2025	1032	3	<2	<2	<2
C4	17 Jun 2025	1032	9	<2	2e	<2
C4	24 Jun 2025	925	1	<2	<2	<2
C4	24 Jun 2025	925	3	<2	<2	<2
C4	24 Jun 2025	925	9	<2	<2	<2
C4	30 Jun 2025	919	1	2e	<2	<2
C4	30 Jun 2025	919	3	2e	<2	<2
C4	30 Jun 2025	919	9	2e	<2	<2
C5	02 Jun 2025	900	1	<2	<2	<2
C5	02 Jun 2025	900	3	<2	<2	<2
C5	02 Jun 2025	900	9	<2	<2	<2
C5	09 Jun 2025	947	1	<2	<2	4e
C5	09 Jun 2025	947	3	<2	<2	<2
C5	09 Jun 2025	947	9	<2	<2	<2
C5	17 Jun 2025	1020	1	<2	<2	<2
C5	17 Jun 2025	1020	3	<2	2e	<2
C5	17 Jun 2025	1020	9	<2	<2	<2
C5	24 Jun 2025	914	1	<20	<2	<2
C5	24 Jun 2025	914	3	<20	<2	<2
C5	24 Jun 2025	914	9	2e	<2	<2
C5	30 Jun 2025	909	1	<2	<2	<2
C5	30 Jun 2025	909	3	<2	<2	<2
C5	30 Jun 2025	909	9	<2	<2	<2
C6	02 Jun 2025	851	1	<2	<2	<2
C6	02 Jun 2025	851	3	<2	<2	<2
C6	02 Jun 2025	851	9	<20	<2	<2
C6	09 Jun 2025	935	1	<20	<2	<2
C6	09 Jun 2025	935	3	<20	<2	<2
C6	09 Jun 2025	935	9	<2	<2	<2
C6	17 Jun 2025	1009	1	6e	<2	<2
C6	17 Jun 2025	1009	3	<2	<2	<2
C6	17 Jun 2025	1009	9	<2	<2	<2

Station	Date	Time	Depth	Total	Fecal	Entero
C6	24 Jun 2025	905	1	<20	<2	<2
C6	24 Jun 2025	905	3	<20	2e	<2
C6	24 Jun 2025	905	9	<20	<2	<2
C6	30 Jun 2025	859	1	<20	<2	<2
C6	30 Jun 2025	859	3	<20	<2	<2
C6	30 Jun 2025	859	9	<2	<2	<2
C7	02 Jun 2025	823	1	<2	<2	<2
C7	02 Jun 2025	823	12	<2	<2	<2
C7	02 Jun 2025	823	18	<2	<2	<2
C7	09 Jun 2025	902	1	<2	<2	<2
C7	09 Jun 2025	902	12	<2	<2	<2
C7	09 Jun 2025	902	18	<2	<2	<2
C7	17 Jun 2025	925	1	<2	<2	<2
C7	17 Jun 2025	925	12	<2	<2	<2
C7	17 Jun 2025	925	18	<2	<2	<2
C7	24 Jun 2025	833	1	<20	<2	<2
C7	24 Jun 2025	833	12	2e	2e	<2
C7	24 Jun 2025	833	18	10e	2e	<2
C7	30 Jun 2025	836	1	<20	<2	<2
C7	30 Jun 2025	836	12	<2	<2	<2
C7	30 Jun 2025	836	18	10e	6e	<2
C8	02 Jun 2025	836	1	<2	<2	<2
C8	02 Jun 2025	836	12	<2	<2	<2
C8	02 Jun 2025	836	18	<2	<2	<2
C8	09 Jun 2025	917	1	<2	<2	<2
C8	09 Jun 2025	917	12	<2	<2	<2
C8	09 Jun 2025	917	18	<2	<2	10e
C8	17 Jun 2025	946	1	<2	<2	<2
C8	17 Jun 2025	946	12	<2	<2	<2
C8	17 Jun 2025	946	18	<2	<2	<2
C8	24 Jun 2025	843	1	<2	<2	<2
C8	24 Jun 2025	843	12	<2	<2	<2
C8	24 Jun 2025	843	18	<20	<2	<2
C8	30 Jun 2025	843	1	<20	<2	<2
C8	30 Jun 2025	843	12	2e	<2	<2
C8	30 Jun 2025	843	18	80e	2e	<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	02 Jun 2025	Arrive Time	743
A1	02 Jun 2025	Depart Time	753
A1	02 Jun 2025	Air Temp (C)	999
A1	02 Jun 2025	Visibility (mi)	8
A1	02 Jun 2025	Wind Speed (kts)	9999
A1	02 Jun 2025	Wind Dir	
A1	02 Jun 2025	Sea State	Calm
A1	02 Jun 2025	High Tide Time	218
A1	02 Jun 2025	Low Tide Time	936
A1	02 Jun 2025	Comments	
A1	09 Jun 2025	Arrive Time	802
A1	09 Jun 2025	Depart Time	812
A1	09 Jun 2025	Air Temp (C)	16.1
A1	09 Jun 2025	Visibility (mi)	2
A1	09 Jun 2025	Wind Speed (kts)	2.5
A1	09 Jun 2025	Wind Dir	E
A1	09 Jun 2025	Sea State	Light Chop
A1	09 Jun 2025	High Tide Time	2024
A1	09 Jun 2025	Low Tide Time	312
A1	09 Jun 2025	Comments	Kelp
A1	17 Jun 2025	Arrive Time	802
A1	17 Jun 2025	Depart Time	814
A1	17 Jun 2025	Air Temp (C)	17.1
A1	17 Jun 2025	Visibility (mi)	6
A1	17 Jun 2025	Wind Speed (kts)	1.4
A1	17 Jun 2025	Wind Dir	SE
A1	17 Jun 2025	Sea State	Calm
A1	17 Jun 2025	High Tide Time	106
A1	17 Jun 2025	Low Tide Time	830
A1	17 Jun 2025	Comments	Kelp Debris
A1	30 Jun 2025	Arrive Time	746
A1	30 Jun 2025	Depart Time	757
A1	30 Jun 2025	Air Temp (C)	18
A1	30 Jun 2025	Visibility (mi)	9
A1	30 Jun 2025	Wind Speed (kts)	3.3
A1	30 Jun 2025	Wind Dir	W
A1	30 Jun 2025	Sea State	Light Chop
A1	30 Jun 2025	High Tide Time	42
A1	30 Jun 2025	Low Tide Time	742
A1	30 Jun 2025	Comments	Kelp; Unable to Obtain Depth
C4	02 Jun 2025	Arrive Time	910
C4	02 Jun 2025	Depart Time	930
C4	02 Jun 2025	Air Temp (C)	999
C4	02 Jun 2025	Visibility (mi)	8
C4	02 Jun 2025	Wind Speed (kts)	9999
C4	02 Jun 2025	Wind Dir	
C4	02 Jun 2025	Sea State	Calm
C4	02 Jun 2025	High Tide Time	218
C4	02 Jun 2025	Low Tide Time	936
C4	02 Jun 2025	Comments	
C4	09 Jun 2025	Arrive Time	958

Station	Date	Parameter	Value
C4	09 Jun 2025	Depart Time	1021
C4	09 Jun 2025	Air Temp (C)	16.6
C4	09 Jun 2025	Visibility (mi)	2
C4	09 Jun 2025	Wind Speed (kts)	3.9
C4	09 Jun 2025	Wind Dir	W
C4	09 Jun 2025	Sea State	Light Chop
C4	09 Jun 2025	High Tide Time	2024
C4	09 Jun 2025	Low Tide Time	312
C4	09 Jun 2025	Comments	
C4	17 Jun 2025	Arrive Time	1032
C4	17 Jun 2025	Depart Time	1037
C4	17 Jun 2025	Air Temp (C)	18.6
C4	17 Jun 2025	Visibility (mi)	8
C4	17 Jun 2025	Wind Speed (kts)	5.9
C4	17 Jun 2025	Wind Dir	SW
C4	17 Jun 2025	Sea State	Calm
C4	17 Jun 2025	High Tide Time	106
C4	17 Jun 2025	Low Tide Time	830
C4	17 Jun 2025	Comments	btl 3 misfire; manually fired btl 4.
C4	24 Jun 2025	Arrive Time	925
C4	24 Jun 2025	Depart Time	929
C4	24 Jun 2025	Air Temp (C)	18.3
C4	24 Jun 2025	Visibility (mi)	9
C4	24 Jun 2025	Wind Speed (kts)	12.5
C4	24 Jun 2025	Wind Dir	SW
C4	24 Jun 2025	Sea State	Calm
C4	24 Jun 2025	High Tide Time	2048
C4	24 Jun 2025	Low Tide Time	324
C4	24 Jun 2025	Comments	anemometer lubricated
C4	30 Jun 2025	Arrive Time	914
C4	30 Jun 2025	Depart Time	919
C4	30 Jun 2025	Air Temp (C)	18.8
C4	30 Jun 2025	Visibility (mi)	9
C4	30 Jun 2025	Wind Speed (kts)	5.7
C4	30 Jun 2025	Wind Dir	NW
C4	30 Jun 2025	Sea State	Light Chop
C4	30 Jun 2025	High Tide Time	42
C4	30 Jun 2025	Low Tide Time	742
C4	30 Jun 2025	Comments	Kelp
A7	02 Jun 2025	Arrive Time	758
A7	02 Jun 2025	Depart Time	803
A7	02 Jun 2025	Air Temp (C)	999
A7	02 Jun 2025	Visibility (mi)	8
A7	02 Jun 2025	Wind Speed (kts)	9999
A7	02 Jun 2025	Wind Dir	
A7	02 Jun 2025	Sea State	Calm
A7	02 Jun 2025	High Tide Time	218
A7	02 Jun 2025	Low Tide Time	936
A7	02 Jun 2025	Comments	
A7	09 Jun 2025	Arrive Time	820
A7	09 Jun 2025	Depart Time	827
A7	09 Jun 2025	Air Temp (C)	16.5
A7	09 Jun 2025	Visibility (mi)	2
A7	09 Jun 2025	Wind Speed (kts)	1.2
A7	09 Jun 2025	Wind Dir	W
A7	09 Jun 2025	Sea State	Light Chop

Station	Date	Parameter	Value
A7	09 Jun 2025	High Tide Time	2024
A7	09 Jun 2025	Low Tide Time	312
A7	09 Jun 2025	Comments	
A7	17 Jun 2025	Arrive Time	822
A7	17 Jun 2025	Depart Time	826
A7	17 Jun 2025	Air Temp (C)	17.5
A7	17 Jun 2025	Visibility (mi)	6
A7	17 Jun 2025	Wind Speed (kts)	1.4
A7	17 Jun 2025	Wind Dir	SW
A7	17 Jun 2025	Sea State	Calm
A7	17 Jun 2025	High Tide Time	106
A7	17 Jun 2025	Low Tide Time	830
A7	17 Jun 2025	Comments	
A7	24 Jun 2025	Arrive Time	810
A7	24 Jun 2025	Depart Time	814
A7	24 Jun 2025	Air Temp (C)	16.8
A7	24 Jun 2025	Visibility (mi)	9
A7	24 Jun 2025	Wind Speed (kts)	5
A7	24 Jun 2025	Wind Dir	SE
A7	24 Jun 2025	Sea State	Calm
A7	24 Jun 2025	High Tide Time	2048
A7	24 Jun 2025	Low Tide Time	324
A7	24 Jun 2025	Comments	Lost power on boat; restarted NavOps at a7; No wind speed reading, wind entered manually
A7	30 Jun 2025	Arrive Time	800
A7	30 Jun 2025	Depart Time	804
A7	30 Jun 2025	Air Temp (C)	18.2
A7	30 Jun 2025	Visibility (mi)	9
A7	30 Jun 2025	Wind Speed (kts)	2.4
A7	30 Jun 2025	Wind Dir	W
A7	30 Jun 2025	Sea State	Light Chop
A7	30 Jun 2025	High Tide Time	42
A7	30 Jun 2025	Low Tide Time	742
A7	30 Jun 2025	Comments	Kelp Debris
C5	02 Jun 2025	Arrive Time	900
C5	02 Jun 2025	Depart Time	903
C5	02 Jun 2025	Air Temp (C)	999
C5	02 Jun 2025	Visibility (mi)	8
C5	02 Jun 2025	Wind Speed (kts)	9999
C5	02 Jun 2025	Wind Dir	
C5	02 Jun 2025	Sea State	Calm
C5	02 Jun 2025	High Tide Time	218
C5	02 Jun 2025	Low Tide Time	936
C5	02 Jun 2025	Comments	
C5	09 Jun 2025	Arrive Time	947
C5	09 Jun 2025	Depart Time	953
C5	09 Jun 2025	Air Temp (C)	16.5
C5	09 Jun 2025	Visibility (mi)	2
C5	09 Jun 2025	Wind Speed (kts)	3.9
C5	09 Jun 2025	Wind Dir	W
C5	09 Jun 2025	Sea State	Light Chop
C5	09 Jun 2025	High Tide Time	2024
C5	09 Jun 2025	Low Tide Time	312
C5	09 Jun 2025	Comments	
C5	17 Jun 2025	Arrive Time	1020

Station	Date	Parameter	Value
C5	17 Jun 2025	Depart Time	1027
C5	17 Jun 2025	Air Temp (C)	18.4
C5	17 Jun 2025	Visibility (mi)	8
C5	17 Jun 2025	Wind Speed (kts)	0
C5	17 Jun 2025	Wind Dir	SW
C5	17 Jun 2025	Sea State	Calm
C5	17 Jun 2025	High Tide Time	106
C5	17 Jun 2025	Low Tide Time	830
C5	17 Jun 2025	Comments	Kelp
C5	24 Jun 2025	Arrive Time	914
C5	24 Jun 2025	Depart Time	919
C5	24 Jun 2025	Air Temp (C)	17.5
C5	24 Jun 2025	Visibility (mi)	9
C5	24 Jun 2025	Wind Speed (kts)	9.1
C5	24 Jun 2025	Wind Dir	SW
C5	24 Jun 2025	Sea State	Calm
C5	24 Jun 2025	High Tide Time	2048
C5	24 Jun 2025	Low Tide Time	324
C5	24 Jun 2025	Comments	Wind speed entered manually
C5	30 Jun 2025	Arrive Time	904
C5	30 Jun 2025	Depart Time	909
C5	30 Jun 2025	Air Temp (C)	18.3
C5	30 Jun 2025	Visibility (mi)	9
C5	30 Jun 2025	Wind Speed (kts)	3.6
C5	30 Jun 2025	Wind Dir	NW
C5	30 Jun 2025	Sea State	Light Chop
C5	30 Jun 2025	High Tide Time	42
C5	30 Jun 2025	Low Tide Time	742
C5	30 Jun 2025	Comments	Kelp
A6	02 Jun 2025	Arrive Time	812
A6	02 Jun 2025	Depart Time	814
A6	02 Jun 2025	Air Temp (C)	999
A6	02 Jun 2025	Visibility (mi)	8
A6	02 Jun 2025	Wind Speed (kts)	9999
A6	02 Jun 2025	Wind Dir	
A6	02 Jun 2025	Sea State	Calm
A6	02 Jun 2025	High Tide Time	218
A6	02 Jun 2025	Low Tide Time	936
A6	02 Jun 2025	Comments	
A6	09 Jun 2025	Arrive Time	843
A6	09 Jun 2025	Depart Time	849
A6	09 Jun 2025	Air Temp (C)	16.6
A6	09 Jun 2025	Visibility (mi)	2
A6	09 Jun 2025	Wind Speed (kts)	1.9
A6	09 Jun 2025	Wind Dir	NW
A6	09 Jun 2025	Sea State	Light Chop
A6	09 Jun 2025	High Tide Time	2024
A6	09 Jun 2025	Low Tide Time	312
A6	09 Jun 2025	Comments	
A6	17 Jun 2025	Arrive Time	909
A6	17 Jun 2025	Depart Time	916
A6	17 Jun 2025	Air Temp (C)	18.3
A6	17 Jun 2025	Visibility (mi)	6
A6	17 Jun 2025	Wind Speed (kts)	1.7
A6	17 Jun 2025	Wind Dir	NW
A6	17 Jun 2025	Sea State	Calm

Station	Date	Parameter	Value
A6	17 Jun 2025	High Tide Time	106
A6	17 Jun 2025	Low Tide Time	830
A6	17 Jun 2025	Comments	
A6	24 Jun 2025	Arrive Time	820
A6	24 Jun 2025	Depart Time	824
A6	24 Jun 2025	Air Temp (C)	16.9
A6	24 Jun 2025	Visibility (mi)	9
A6	24 Jun 2025	Wind Speed (kts)	5
A6	24 Jun 2025	Wind Dir	NW
A6	24 Jun 2025	Sea State	Calm
A6	24 Jun 2025	High Tide Time	2048
A6	24 Jun 2025	Low Tide Time	324
A6	24 Jun 2025	Comments	Anemometer not spinning, entering wind speed manually
A6	30 Jun 2025	Arrive Time	814
A6	30 Jun 2025	Depart Time	818
A6	30 Jun 2025	Air Temp (C)	18.2
A6	30 Jun 2025	Visibility (mi)	9
A6	30 Jun 2025	Wind Speed (kts)	3.3
A6	30 Jun 2025	Wind Dir	N
A6	30 Jun 2025	Sea State	Light Chop
A6	30 Jun 2025	High Tide Time	42
A6	30 Jun 2025	Low Tide Time	742
A6	30 Jun 2025	Comments	
C6	02 Jun 2025	Arrive Time	851
C6	02 Jun 2025	Depart Time	855
C6	02 Jun 2025	Air Temp (C)	999
C6	02 Jun 2025	Visibility (mi)	8
C6	02 Jun 2025	Wind Speed (kts)	9999
C6	02 Jun 2025	Wind Dir	
C6	02 Jun 2025	Sea State	Calm
C6	02 Jun 2025	High Tide Time	218
C6	02 Jun 2025	Low Tide Time	936
C6	02 Jun 2025	Comments	
C6	09 Jun 2025	Arrive Time	935
C6	09 Jun 2025	Depart Time	940
C6	09 Jun 2025	Air Temp (C)	16.4
C6	09 Jun 2025	Visibility (mi)	2
C6	09 Jun 2025	Wind Speed (kts)	3.7
C6	09 Jun 2025	Wind Dir	W
C6	09 Jun 2025	Sea State	Light Chop
C6	09 Jun 2025	High Tide Time	2024
C6	09 Jun 2025	Low Tide Time	312
C6	09 Jun 2025	Comments	
C6	17 Jun 2025	Arrive Time	1009
C6	17 Jun 2025	Depart Time	1016
C6	17 Jun 2025	Air Temp (C)	18.6
C6	17 Jun 2025	Visibility (mi)	8
C6	17 Jun 2025	Wind Speed (kts)	6
C6	17 Jun 2025	Wind Dir	W
C6	17 Jun 2025	Sea State	Calm
C6	17 Jun 2025	High Tide Time	106
C6	17 Jun 2025	Low Tide Time	830
C6	17 Jun 2025	Comments	
C6	24 Jun 2025	Arrive Time	905
C6	24 Jun 2025	Depart Time	909

Station	Date	Parameter	Value
C6	24 Jun 2025	Air Temp (C)	19
C6	24 Jun 2025	Visibility (mi)	9
C6	24 Jun 2025	Wind Speed (kts)	7
C6	24 Jun 2025	Wind Dir	S
C6	24 Jun 2025	Sea State	Calm
C6	24 Jun 2025	High Tide Time	2048
C6	24 Jun 2025	Low Tide Time	324
C6	24 Jun 2025	Comments	Wind speed entered manually
C6	30 Jun 2025	Arrive Time	855
C6	30 Jun 2025	Depart Time	859
C6	30 Jun 2025	Air Temp (C)	18.4
C6	30 Jun 2025	Visibility (mi)	9
C6	30 Jun 2025	Wind Speed (kts)	4.6
C6	30 Jun 2025	Wind Dir	NW
C6	30 Jun 2025	Sea State	Light Chop
C6	30 Jun 2025	High Tide Time	42
C6	30 Jun 2025	Low Tide Time	742
C6	30 Jun 2025	Comments	
C7	02 Jun 2025	Arrive Time	823
C7	02 Jun 2025	Depart Time	826
C7	02 Jun 2025	Air Temp (C)	999
C7	02 Jun 2025	Visibility (mi)	8
C7	02 Jun 2025	Wind Speed (kts)	9999
C7	02 Jun 2025	Wind Dir	
C7	02 Jun 2025	Sea State	Calm
C7	02 Jun 2025	High Tide Time	218
C7	02 Jun 2025	Low Tide Time	936
C7	02 Jun 2025	Comments	
C7	09 Jun 2025	Arrive Time	902
C7	09 Jun 2025	Depart Time	912
C7	09 Jun 2025	Air Temp (C)	16.4
C7	09 Jun 2025	Visibility (mi)	2
C7	09 Jun 2025	Wind Speed (kts)	4.4
C7	09 Jun 2025	Wind Dir	SW
C7	09 Jun 2025	Sea State	Light Chop
C7	09 Jun 2025	High Tide Time	2024
C7	09 Jun 2025	Low Tide Time	312
C7	09 Jun 2025	Comments	
C7	17 Jun 2025	Arrive Time	925
C7	17 Jun 2025	Depart Time	936
C7	17 Jun 2025	Air Temp (C)	18.3
C7	17 Jun 2025	Visibility (mi)	6
C7	17 Jun 2025	Wind Speed (kts)	3.6
C7	17 Jun 2025	Wind Dir	W
C7	17 Jun 2025	Sea State	Calm
C7	17 Jun 2025	High Tide Time	106
C7	17 Jun 2025	Low Tide Time	830
C7	17 Jun 2025	Comments	1st cast only 17m. Unable to get depth despite multiple attempts due to low tide.
C7	24 Jun 2025	Arrive Time	833
C7	24 Jun 2025	Depart Time	843
C7	24 Jun 2025	Air Temp (C)	17
C7	24 Jun 2025	Visibility (mi)	9
C7	24 Jun 2025	Wind Speed (kts)	6
C7	24 Jun 2025	Wind Dir	N
C7	24 Jun 2025	Sea State	Calm

Station	Date	Parameter	Value
C7	24 Jun 2025	High Tide Time	2048
C7	24 Jun 2025	Low Tide Time	324
C7	24 Jun 2025	Comments	Wind speed entered manually
C7	30 Jun 2025	Arrive Time	826
C7	30 Jun 2025	Depart Time	836
C7	30 Jun 2025	Air Temp (C)	18.5
C7	30 Jun 2025	Visibility (mi)	9
C7	30 Jun 2025	Wind Speed (kts)	2.9
C7	30 Jun 2025	Wind Dir	NW
C7	30 Jun 2025	Sea State	Light Chop
C7	30 Jun 2025	High Tide Time	42
C7	30 Jun 2025	Low Tide Time	742
C7	30 Jun 2025	Comments	Unable to Obtain Depth
C8	02 Jun 2025	Arrive Time	836
C8	02 Jun 2025	Depart Time	838
C8	02 Jun 2025	Air Temp (C)	999
C8	02 Jun 2025	Visibility (mi)	8
C8	02 Jun 2025	Wind Speed (kts)	9999
C8	02 Jun 2025	Wind Dir	
C8	02 Jun 2025	Sea State	Calm
C8	02 Jun 2025	High Tide Time	218
C8	02 Jun 2025	Low Tide Time	936
C8	02 Jun 2025	Comments	
C8	09 Jun 2025	Arrive Time	917
C8	09 Jun 2025	Depart Time	922
C8	09 Jun 2025	Air Temp (C)	16.4
C8	09 Jun 2025	Visibility (mi)	2
C8	09 Jun 2025	Wind Speed (kts)	5.8
C8	09 Jun 2025	Wind Dir	SW
C8	09 Jun 2025	Sea State	Light Chop
C8	09 Jun 2025	High Tide Time	2024
C8	09 Jun 2025	Low Tide Time	312
C8	09 Jun 2025	Comments	
C8	17 Jun 2025	Arrive Time	946
C8	17 Jun 2025	Depart Time	957
C8	17 Jun 2025	Air Temp (C)	18.6
C8	17 Jun 2025	Visibility (mi)	8
C8	17 Jun 2025	Wind Speed (kts)	4.4
C8	17 Jun 2025	Wind Dir	SW
C8	17 Jun 2025	Sea State	Calm
C8	17 Jun 2025	High Tide Time	106
C8	17 Jun 2025	Low Tide Time	830
C8	17 Jun 2025	Comments	
C8	24 Jun 2025	Arrive Time	843
C8	24 Jun 2025	Depart Time	848
C8	24 Jun 2025	Air Temp (C)	17.3
C8	24 Jun 2025	Visibility (mi)	9
C8	24 Jun 2025	Wind Speed (kts)	7
C8	24 Jun 2025	Wind Dir	NW
C8	24 Jun 2025	Sea State	Calm
C8	24 Jun 2025	High Tide Time	2048
C8	24 Jun 2025	Low Tide Time	324
C8	24 Jun 2025	Comments	Wind speed entered manually
C8	30 Jun 2025	Arrive Time	838
C8	30 Jun 2025	Depart Time	843

Station	Date	Parameter	Value
C8	30 Jun 2025	Air Temp (C)	18.2
C8	30 Jun 2025	Visibility (mi)	9
C8	30 Jun 2025	Wind Speed (kts)	2.9
C8	30 Jun 2025	Wind Dir	NW
C8	30 Jun 2025	Sea State	Light Chop
C8	30 Jun 2025	High Tide Time	42
C8	30 Jun 2025	Low Tide Time	742
C8	30 Jun 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	02 Jun 2025	1	16.91	92.00	9.8	33.466	8.3	24.4	1.09
A1	02 Jun 2025	2	16.38	91.99	10.4	33.774	8.3	24.7	1.11
A1	02 Jun 2025	3	15.51	91.61	10.4	33.906	8.2	25.0	1.39
A1	02 Jun 2025	4	15.25	90.33	10.5	33.774	8.2	25.0	1.86
A1	02 Jun 2025	5	15.06	89.61	10.3	33.682	8.2	24.9	3.72
A1	02 Jun 2025	6	14.82	87.17	9.9	33.668	8.2	25.0	7.07
A1	02 Jun 2025	7	14.55	82.74	9.4	33.646	8.1	25.0	10.89
A1	02 Jun 2025	8	14.46	79.14	8.8	33.624	8.1	25.0	11.45
A1	02 Jun 2025	9	14.15	78.80	8.3	33.641	8.1	25.1	10.06
A1	02 Jun 2025	10	13.69	80.61	7.5	33.667	8.0	25.2	6.90
A1	02 Jun 2025	11	13.14	83.16	6.5	33.678	7.9	25.3	4.90
A1	02 Jun 2025	12	12.12	83.18	5.7	33.709	7.8	25.6	2.15
A1	02 Jun 2025	13	11.61	87.78	5.2	33.683	7.8	25.6	1.26
A1	02 Jun 2025	14	11.34	89.29	5.0	33.671	7.8	25.7	0.77
A1	02 Jun 2025	15	11.23	91.56	4.8	33.66	7.8	25.7	0.58
A1	02 Jun 2025	16	11.19	94.09	4.7	33.66	7.7	25.7	0.54
A1	02 Jun 2025	17	11.17	94.42	4.6	33.659	7.7	25.7	0.54
A1	02 Jun 2025	18	11.16	94.42	4.6	33.659	7.7	25.7	0.55
A1	02 Jun 2025	19	11.18	93.71	4.5	33.659	7.7	25.7	0.90
A1	09 Jun 2025	1	15.81	88.70	9.1	33.501	8.2	24.6	1.60
A1	09 Jun 2025	2	15.75	89.01	9.1	33.5	8.2	24.7	1.53
A1	09 Jun 2025	3	15.57	91.12	8.9	33.504	8.2	24.7	1.59
A1	09 Jun 2025	4	14.47	91.38	8.2	33.499	8.1	24.9	2.17
A1	09 Jun 2025	5	13.21	90.32	7.3	33.516	8.0	25.2	3.24
A1	09 Jun 2025	6	12.89	91.04	6.8	33.517	8.0	25.3	2.42
A1	09 Jun 2025	7	12.60	93.21	6.5	33.509	7.9	25.3	1.92
A1	09 Jun 2025	8	12.27	94.35	6.1	33.518	7.9	25.4	1.14
A1	09 Jun 2025	9	12.03	95.00	5.8	33.53	7.9	25.4	0.88
A1	09 Jun 2025	10	11.97	95.59	5.6	33.537	7.9	25.5	0.72
A1	09 Jun 2025	11	11.94	96.28	5.5	33.534	7.8	25.5	0.78
A1	09 Jun 2025	12	11.77	96.39	5.4	33.543	7.8	25.5	0.70
A1	09 Jun 2025	13	11.63	95.66	5.2	33.561	7.8	25.5	0.79
A1	09 Jun 2025	14	11.72	95.03	5.2	33.555	7.8	25.5	0.89
A1	09 Jun 2025	15	11.59	95.49	5.0	33.568	7.8	25.6	1.02
A1	09 Jun 2025	16	11.55	95.06	4.9	33.583	7.8	25.6	0.72
A1	09 Jun 2025	17	11.58	94.64	4.9	33.573	7.8	25.6	0.79
A1	09 Jun 2025	18	11.53	94.26	4.8	33.58	7.8	25.6	0.80
A1	17 Jun 2025	1	19.00	91.93	8.8	33.522	8.2	23.9	0.56
A1	17 Jun 2025	2	18.49	91.99	8.8	33.509	8.2	24.0	0.58
A1	17 Jun 2025	3	17.45	92.00	8.9	33.494	8.2	24.3	0.66
A1	17 Jun 2025	4	16.62	91.96	9.1	33.501	8.2	24.5	0.77
A1	17 Jun 2025	5	16.32	91.66	8.8	33.48	8.2	24.5	0.94
A1	17 Jun 2025	6	15.20	91.27	8.5	33.505	8.1	24.8	0.98
A1	17 Jun 2025	7	14.69	91.27	8.2	33.498	8.1	24.9	1.52
A1	17 Jun 2025	8	14.49	91.22	8.0	33.507	8.1	24.9	5.04
A1	17 Jun 2025	9	14.60	90.45	8.0	33.498	8.1	24.9	1.27
A1	17 Jun 2025	10	14.56	89.64	7.9	33.513	8.1	24.9	1.34
A1	17 Jun 2025	11	14.49	89.12	7.8	33.508	8.1	24.9	1.23
A1	17 Jun 2025	12	14.44	90.02	7.6	33.532	8.1	25.0	1.10
A1	17 Jun 2025	13	13.63	91.08	6.9	33.569	7.9	25.2	0.91
A1	17 Jun 2025	14	13.42	90.96	6.4	33.543	7.9	25.2	1.25
A1	17 Jun 2025	15	12.46	90.37	5.7	33.575	7.9	25.4	0.96
A1	17 Jun 2025	16	11.81	90.96	5.0	33.601	7.8	25.5	0.81
A1	17 Jun 2025	17	11.70	90.77	4.7	33.604	7.8	25.6	0.73
A1	17 Jun 2025	18	11.68	91.45	4.6	33.604	7.8	25.6	0.74
A1	17 Jun 2025	19	11.68	91.36	4.5	33.604	7.8	25.6	0.68
A1	24 Jun 2025	1	18.63	85.01	9.0	33.566	8.2	24.0	2.29
A1	24 Jun 2025	2	18.63	85.15	9.0	33.566	8.2	24.0	2.28
A1	24 Jun 2025	3	18.58	85.25	9.0	33.564	8.2	24.0	2.35
A1	24 Jun 2025	4	18.47	85.14	9.1	33.563	8.2	24.1	2.44
A1	24 Jun 2025	5	18.46	84.50	9.2	33.562	8.2	24.1	2.49
A1	24 Jun 2025	6	18.42	84.23	9.2	33.562	8.2	24.1	2.45
A1	24 Jun 2025	7	18.11	84.21	9.1	33.558	8.2	24.1	2.68
A1	24 Jun 2025	8	17.87	83.74	9.0	33.554	8.2	24.2	3.02
A1	24 Jun 2025	9	17.52	83.21	8.9	33.55	8.2	24.3	3.32

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A1	24 Jun 2025	10	17.39	82.72	8.7	33.549	8.2	24.3	3.66
A1	24 Jun 2025	11	17.20	82.87	8.6	33.542	8.2	24.3	3.83
A1	24 Jun 2025	12	16.82	83.30	8.6	33.542	8.2	24.4	3.81
A1	24 Jun 2025	13	16.53	83.67	8.4	33.533	8.1	24.5	3.82
A1	24 Jun 2025	14	15.43	84.41	8.1	33.529	8.1	24.7	3.57
A1	24 Jun 2025	15	15.00	86.35	7.8	33.542	8.1	24.8	3.09
A1	24 Jun 2025	16	14.17	87.97	7.6	33.512	8.0	25.0	3.16
A1	24 Jun 2025	17	14.08	88.77	7.3	33.527	8.0	25.0	3.17
A1	24 Jun 2025	18	13.49	89.35	6.6	33.507	8.0	25.1	2.98
A1	24 Jun 2025	19	12.84	88.94	5.7	33.554	7.8	25.3	2.32
A1	30 Jun 2025	1	16.94	80.41	8.3	33.594	8.1	24.4	3.51
A1	30 Jun 2025	2	16.96	80.56	8.2	33.593	8.1	24.4	3.61
A1	30 Jun 2025	3	16.38	80.32	8.2	33.555	8.1	24.5	3.61
A1	30 Jun 2025	4	16.06	79.47	8.2	33.584	8.1	24.6	4.25
A1	30 Jun 2025	5	15.56	79.82	7.9	33.561	8.1	24.7	4.33
A1	30 Jun 2025	6	14.74	80.86	7.8	33.571	8.1	24.9	4.32
A1	30 Jun 2025	7	14.26	82.45	7.6	33.567	8.0	25.0	4.07
A1	30 Jun 2025	8	13.96	84.70	7.4	33.561	8.0	25.1	3.85
A1	30 Jun 2025	9	13.59	86.46	7.2	33.561	8.0	25.2	3.68
A1	30 Jun 2025	10	13.27	87.79	7.0	33.565	8.0	25.2	8.14
A1	30 Jun 2025	11	13.20	88.61	6.9	33.565	8.0	25.2	NA
A1	30 Jun 2025	12	13.10	89.46	6.8	33.568	8.0	25.3	NA
A1	30 Jun 2025	13	12.95	90.85	6.6	33.563	7.9	25.3	NA
A1	30 Jun 2025	14	12.71	91.91	6.4	33.575	7.9	25.3	NA
A1	30 Jun 2025	15	12.52	92.13	6.3	33.586	7.9	25.4	NA
A1	30 Jun 2025	16	12.40	91.67	6.0	33.58	7.9	25.4	NA
A1	30 Jun 2025	17	11.98	92.47	5.5	33.609	7.8	25.5	7.35
C4	02 Jun 2025	1	17.01	88.59	10.1	33.62	8.3	24.5	1.14
C4	02 Jun 2025	2	16.94	88.55	10.1	33.613	8.3	24.5	1.15
C4	02 Jun 2025	3	16.61	88.41	10.0	33.616	8.3	24.5	1.11
C4	02 Jun 2025	4	16.51	87.68	9.4	33.615	8.2	24.6	1.37
C4	02 Jun 2025	5	16.26	83.24	8.8	33.616	8.2	24.6	1.50
C4	02 Jun 2025	6	15.92	79.32	8.2	33.612	8.1	24.7	1.96
C4	02 Jun 2025	7	15.52	78.83	7.7	33.61	8.1	24.8	1.83
C4	02 Jun 2025	8	15.09	78.72	7.2	33.605	8.1	24.9	1.27
C4	02 Jun 2025	9	13.92	78.66	6.5	33.604	8.0	25.1	0.90
C4	02 Jun 2025	10	13.71	69.33	6.0	33.603	7.9	25.2	0.83
C4	09 Jun 2025	1	16.27	86.63	8.0	33.554	8.2	24.6	0.89
C4	09 Jun 2025	2	15.39	86.38	7.4	33.497	8.2	24.7	0.83
C4	09 Jun 2025	3	13.26	87.89	6.8	33.536	8.0	25.2	2.98
C4	09 Jun 2025	4	12.74	87.83	6.2	33.513	7.9	25.3	0.83
C4	09 Jun 2025	5	12.46	93.14	5.9	33.516	7.9	25.3	0.79
C4	09 Jun 2025	6	12.43	94.01	5.7	33.511	7.9	25.4	0.81
C4	09 Jun 2025	7	12.35	92.99	5.5	33.508	7.8	25.4	0.86
C4	09 Jun 2025	8	12.28	91.89	5.4	33.512	7.8	25.4	0.77
C4	09 Jun 2025	9	12.24	90.90	5.4	33.513	7.8	25.4	0.70
C4	09 Jun 2025	10	12.15	87.93	5.2	33.516	7.8	25.4	0.60
C4	09 Jun 2025	11	12.14	82.96	5.1	33.52	7.8	25.4	0.48
C4	17 Jun 2025	1	18.92	89.67	7.5	33.403	8.2	23.8	0.44
C4	17 Jun 2025	2	18.86	89.70	8.2	33.463	8.2	23.9	0.43
C4	17 Jun 2025	3	17.89	88.92	8.4	33.717	8.2	24.3	0.47
C4	17 Jun 2025	4	16.64	86.36	8.2	33.984	8.1	24.8	0.46
C4	17 Jun 2025	5	15.86	85.57	8.2	NA	8.1	25.2	0.47
C4	17 Jun 2025	6	14.87	86.05	8.1	NA	8.0	25.3	0.43
C4	17 Jun 2025	7	13.64	87.69	7.9	NA	8.0	25.6	0.40
C4	17 Jun 2025	8	13.19	88.48	7.6	NA	7.8	26.4	0.35
C4	17 Jun 2025	9	13.97	82.88	7.3	NA	7.8	26.1	0.38
C4	17 Jun 2025	10	12.72	66.38	7.6	NA	7.8	26.0	0.47
C4	17 Jun 2025	11	12.73	50.15	5.4	33.878	7.8	25.6	0.54
C4	24 Jun 2025	1	19.30	82.95	8.5	33.546	8.2	23.8	1.03
C4	24 Jun 2025	2	19.26	85.89	8.5	33.521	8.2	23.8	1.10
C4	24 Jun 2025	3	19.11	86.69	8.5	33.579	8.2	23.9	1.26
C4	24 Jun 2025	4	18.39	87.30	8.5	33.559	8.2	24.1	2.19
C4	24 Jun 2025	5	17.95	86.14	8.4	33.554	8.2	24.2	2.87
C4	24 Jun 2025	6	17.79	85.17	8.3	33.549	8.2	24.2	3.06
C4	24 Jun 2025	7	17.69	84.90	8.1	33.548	8.2	24.2	3.00
C4	24 Jun 2025	8	17.50	84.66	7.6	33.546	8.1	24.3	2.61
C4	24 Jun 2025	9	17.21	85.18	6.7	33.549	8.1	24.4	1.69
C4	24 Jun 2025	10	16.51	84.92	5.8	33.548	8.0	24.5	1.34

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C4	24 Jun 2025	11	16.17	85.86	4.8	33.551	7.9	24.6	0.75
C4	24 Jun 2025	12	16.15	81.43	4.4	33.549	7.9	24.6	0.63
C4	30 Jun 2025	1	17.77	82.62	8.6	33.6	8.2	24.3	1.28
C4	30 Jun 2025	2	17.15	82.55	8.3	33.594	8.2	24.4	1.45
C4	30 Jun 2025	3	16.58	82.18	8.0	33.589	8.1	24.5	2.14
C4	30 Jun 2025	4	15.99	81.50	7.6	33.586	8.1	24.7	2.46
C4	30 Jun 2025	5	15.38	81.90	7.4	33.584	8.1	24.8	2.71
C4	30 Jun 2025	6	14.97	82.63	7.0	33.569	8.0	24.9	3.09
C4	30 Jun 2025	7	13.81	84.68	6.2	33.571	8.0	25.1	2.47
C4	30 Jun 2025	8	13.14	88.08	5.5	33.589	7.9	25.3	0.78
C4	30 Jun 2025	9	12.88	88.93	5.1	33.582	7.8	25.3	0.60
C4	30 Jun 2025	10	12.69	88.09	5.0	33.579	7.8	25.4	0.53
C4	30 Jun 2025	11	12.70	83.28	5.0	33.582	7.8	25.4	0.53
C4	30 Jun 2025	12	12.77	83.52	5.0	33.59	7.8	25.3	0.59
A7	02 Jun 2025	1	17.72	92.74	10.2	33.607	8.3	24.3	0.72
A7	02 Jun 2025	2	17.65	93.02	10.2	33.625	8.3	24.3	0.72
A7	02 Jun 2025	3	17.25	93.30	10.5	33.63	8.3	24.4	0.78
A7	02 Jun 2025	4	17.10	92.93	10.6	33.623	8.3	24.4	0.93
A7	02 Jun 2025	5	16.83	92.60	10.3	33.636	8.3	24.5	1.09
A7	02 Jun 2025	6	16.17	91.77	10.2	33.649	8.3	24.7	1.78
A7	02 Jun 2025	7	15.27	90.46	10.3	33.625	8.2	24.9	4.48
A7	02 Jun 2025	8	14.79	88.29	9.6	33.606	8.2	24.9	4.54
A7	02 Jun 2025	9	14.68	86.12	8.4	33.618	8.1	25.0	8.98
A7	02 Jun 2025	10	14.47	82.98	7.5	33.624	8.0	25.0	5.88
A7	02 Jun 2025	11	14.36	84.70	6.8	33.625	8.0	25.0	4.87
A7	02 Jun 2025	12	13.96	85.90	6.2	33.623	8.0	25.1	3.99
A7	02 Jun 2025	13	12.95	87.64	5.9	33.662	7.9	25.4	2.37
A7	02 Jun 2025	14	12.45	90.98	5.5	33.664	7.8	25.5	1.08
A7	02 Jun 2025	15	12.06	92.60	5.2	33.649	7.8	25.5	0.71
A7	02 Jun 2025	16	11.49	94.01	5.1	33.663	7.8	25.6	0.67
A7	02 Jun 2025	17	11.06	94.76	4.8	33.692	7.8	25.7	0.53
A7	02 Jun 2025	18	10.88	95.54	4.2	33.712	7.7	25.8	0.45
A7	02 Jun 2025	19	10.90	94.98	4.0	33.705	7.7	25.8	0.49
A7	09 Jun 2025	1	16.53	91.76	9.8	33.516	8.3	24.5	1.18
A7	09 Jun 2025	2	16.27	90.82	9.7	33.502	8.3	24.5	1.31
A7	09 Jun 2025	3	14.95	90.12	9.2	33.479	8.2	24.8	2.26
A7	09 Jun 2025	4	14.66	88.68	8.9	33.47	8.2	24.9	4.34
A7	09 Jun 2025	5	14.26	87.09	8.6	33.465	8.1	24.9	5.43
A7	09 Jun 2025	6	13.90	87.59	8.2	33.467	8.1	25.0	4.27
A7	09 Jun 2025	7	13.72	90.64	7.8	33.471	8.1	25.1	2.38
A7	09 Jun 2025	8	13.47	92.83	7.6	33.48	8.0	25.1	1.75
A7	09 Jun 2025	9	13.39	93.47	7.2	33.48	8.0	25.1	1.28
A7	09 Jun 2025	10	12.52	94.49	6.5	33.521	8.0	25.3	1.34
A7	09 Jun 2025	11	12.05	95.03	5.8	33.554	7.9	25.5	0.56
A7	09 Jun 2025	12	11.98	95.49	5.5	33.548	7.9	25.5	0.55
A7	09 Jun 2025	13	11.87	95.90	5.3	33.556	7.8	25.5	0.56
A7	09 Jun 2025	14	11.71	95.90	5.1	33.572	7.8	25.5	0.51
A7	09 Jun 2025	15	11.59	95.81	4.9	33.583	7.8	25.6	0.49
A7	09 Jun 2025	16	11.46	95.76	4.8	33.593	7.8	25.6	0.47
A7	09 Jun 2025	17	11.43	95.57	4.6	33.6	7.8	25.6	0.44
A7	09 Jun 2025	18	11.47	95.33	4.6	33.601	7.8	25.6	0.50
A7	17 Jun 2025	1	19.03	90.63	8.9	33.522	8.2	23.9	0.66
A7	17 Jun 2025	2	18.77	90.56	8.9	33.516	8.2	23.9	0.67
A7	17 Jun 2025	3	18.14	90.51	9.2	33.507	8.2	24.1	0.65
A7	17 Jun 2025	4	17.69	91.92	9.2	33.491	8.2	24.2	0.62
A7	17 Jun 2025	5	16.82	92.63	9.2	33.493	8.2	24.4	0.77
A7	17 Jun 2025	6	15.58	92.05	9.0	33.485	8.2	24.7	1.10
A7	17 Jun 2025	7	14.53	90.16	8.5	33.5	8.1	24.9	1.87
A7	17 Jun 2025	8	13.99	89.40	8.1	33.495	8.1	25.0	2.32
A7	17 Jun 2025	9	13.78	88.42	7.7	33.5	8.0	25.1	2.21
A7	17 Jun 2025	10	13.69	89.11	7.6	33.501	8.0	25.1	1.94
A7	17 Jun 2025	11	13.59	89.76	7.3	33.504	8.0	25.1	1.70
A7	17 Jun 2025	12	13.17	90.54	7.0	33.517	8.0	25.2	1.11
A7	17 Jun 2025	13	12.65	91.65	6.4	33.558	7.9	25.3	0.64
A7	17 Jun 2025	14	12.47	92.59	6.0	33.548	7.9	25.4	0.72
A7	17 Jun 2025	15	12.13	92.64	5.7	33.572	7.9	25.5	0.74
A7	17 Jun 2025	16	11.80	92.74	5.3	33.59	7.8	25.5	0.83
A7	17 Jun 2025	17	11.61	93.45	5.0	33.598	7.8	25.6	0.96
A7	17 Jun 2025	18	11.52	94.21	4.8	33.611	7.8	25.6	0.82
A7	17 Jun 2025	19	11.70	94.30	4.8	33.602	7.8	25.6	0.82

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A7	24 Jun 2025	1	19.59	86.33	8.7	33.58	8.2	23.8	1.84
A7	24 Jun 2025	2	19.56	86.59	8.7	33.574	8.2	23.8	1.90
A7	24 Jun 2025	3	18.75	87.33	8.8	33.552	8.2	24.0	2.07
A7	24 Jun 2025	4	18.43	86.87	8.8	33.548	8.2	24.1	2.66
A7	24 Jun 2025	5	17.59	86.01	8.3	33.543	8.2	24.3	2.90
A7	24 Jun 2025	6	16.66	86.54	8.1	33.539	8.1	24.5	3.14
A7	24 Jun 2025	7	16.12	86.47	8.2	33.522	8.1	24.6	3.36
A7	24 Jun 2025	8	15.40	86.79	8.4	33.503	8.1	24.7	3.20
A7	24 Jun 2025	9	14.65	88.37	8.4	33.499	8.1	24.9	2.91
A7	24 Jun 2025	10	14.47	88.94	8.2	33.496	8.1	24.9	2.77
A7	24 Jun 2025	11	14.30	88.84	8.0	33.504	8.1	25.0	2.87
A7	24 Jun 2025	12	14.14	89.06	7.7	33.511	8.0	25.0	2.84
A7	24 Jun 2025	13	14.00	89.46	7.4	33.524	8.0	25.0	2.67
A7	24 Jun 2025	14	13.65	89.60	6.9	33.535	8.0	25.1	2.47
A7	24 Jun 2025	15	13.22	89.99	6.3	33.546	7.9	25.2	2.47
A7	24 Jun 2025	16	12.89	90.34	5.9	33.556	7.9	25.3	2.52
A7	24 Jun 2025	17	12.71	90.40	5.7	33.559	7.9	25.3	2.49
A7	24 Jun 2025	18	12.60	90.64	5.6	33.565	7.9	25.4	2.58
A7	24 Jun 2025	19	12.35	91.20	5.2	33.584	7.8	25.4	2.12
A7	30 Jun 2025	1	16.73	80.58	8.5	33.585	8.1	24.5	3.70
A7	30 Jun 2025	2	16.84	81.19	8.4	33.581	8.1	24.5	3.66
A7	30 Jun 2025	3	15.80	81.47	8.2	33.519	8.1	24.7	3.87
A7	30 Jun 2025	4	14.62	80.28	8.2	33.558	8.1	24.9	4.93
A7	30 Jun 2025	5	14.17	80.42	8.0	33.554	8.0	25.0	5.36
A7	30 Jun 2025	6	13.57	81.71	7.7	33.552	8.0	25.2	4.91
A7	30 Jun 2025	7	13.40	83.01	7.4	33.551	8.0	25.2	4.35
A7	30 Jun 2025	8	13.33	84.72	7.3	33.552	8.0	25.2	3.95
A7	30 Jun 2025	9	13.26	86.26	7.1	33.554	8.0	25.2	3.58
A7	30 Jun 2025	10	13.04	87.05	6.7	33.561	8.0	25.3	3.40
A7	30 Jun 2025	11	12.63	88.37	6.2	33.572	7.9	25.4	2.56
A7	30 Jun 2025	12	12.30	90.45	5.9	33.585	7.9	25.4	2.08
A7	30 Jun 2025	13	12.21	92.15	5.8	33.59	7.9	25.5	2.10
A7	30 Jun 2025	14	11.83	93.05	5.4	33.608	7.8	25.5	1.83
A7	30 Jun 2025	15	11.65	94.17	5.0	33.62	7.8	25.6	1.07
A7	30 Jun 2025	16	11.61	94.83	4.8	33.626	7.8	25.6	1.01
A7	30 Jun 2025	17	11.53	94.91	4.6	33.632	7.8	25.6	0.96
A7	30 Jun 2025	18	11.36	95.02	4.2	33.657	7.7	25.7	0.76
C5	02 Jun 2025	1	17.91	93.19	9.0	33.539	8.3	24.2	0.75
C5	02 Jun 2025	2	17.43	93.34	10.1	33.725	8.3	24.4	0.68
C5	02 Jun 2025	3	17.24	93.28	10.5	33.659	8.3	24.4	0.89
C5	02 Jun 2025	4	17.10	89.55	10.1	33.653	8.2	24.5	1.30
C5	02 Jun 2025	5	17.01	87.82	9.4	33.636	8.2	24.5	3.30
C5	02 Jun 2025	6	16.84	80.34	9.2	33.647	8.2	24.5	9.90
C5	02 Jun 2025	7	16.41	77.47	8.6	33.671	8.2	24.6	6.03
C5	02 Jun 2025	8	15.21	83.50	7.4	33.743	8.1	25.0	2.06
C5	02 Jun 2025	9	12.84	86.90	6.2	33.811	7.9	25.5	0.57
C5	02 Jun 2025	10	12.55	86.01	5.3	33.677	7.8	25.5	3.72
C5	09 Jun 2025	1	16.30	89.49	8.9	33.529	8.2	24.5	2.07
C5	09 Jun 2025	2	16.14	90.37	8.8	33.529	8.2	24.6	1.81
C5	09 Jun 2025	3	15.45	89.33	8.3	33.531	8.2	24.7	3.19
C5	09 Jun 2025	4	14.93	87.70	7.9	33.524	8.1	24.8	2.90
C5	09 Jun 2025	5	14.34	88.38	7.5	33.521	8.1	25.0	1.62
C5	09 Jun 2025	6	13.91	91.20	7.2	33.519	8.0	25.1	0.95
C5	09 Jun 2025	7	13.76	93.21	7.1	33.505	8.0	25.1	0.99
C5	09 Jun 2025	8	13.56	93.66	6.8	33.503	8.0	25.1	0.89
C5	09 Jun 2025	9	13.02	94.19	6.5	33.511	8.0	25.2	0.49
C5	09 Jun 2025	10	12.88	91.86	6.2	33.514	7.9	25.3	0.45
C5	17 Jun 2025	1	19.07	77.21	8.7	33.496	8.2	23.9	0.40
C5	17 Jun 2025	2	18.81	80.76	8.7	33.502	8.2	23.9	0.45
C5	17 Jun 2025	3	17.79	86.21	8.5	33.485	8.2	24.2	0.53
C5	17 Jun 2025	4	16.54	86.02	8.5	33.483	8.2	24.5	0.65
C5	17 Jun 2025	5	15.68	87.54	8.4	33.495	8.1	24.7	0.62
C5	17 Jun 2025	6	15.22	88.78	8.3	33.495	8.1	24.8	0.63
C5	17 Jun 2025	7	14.98	89.38	8.1	33.501	8.1	24.8	0.69
C5	17 Jun 2025	8	14.41	88.63	7.7	33.485	8.1	24.9	0.61
C5	17 Jun 2025	9	14.42	80.29	7.7	33.5	8.1	24.9	0.51
C5	24 Jun 2025	1	19.59	87.33	8.7	33.582	8.2	23.8	1.29
C5	24 Jun 2025	2	19.61	87.35	8.7	33.585	8.2	23.8	1.31

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C5	24 Jun 2025	3	19.46	87.22	8.7	33.58	8.2	23.8	1.58
C5	24 Jun 2025	4	19.02	87.38	8.7	33.568	8.2	23.9	1.98
C5	24 Jun 2025	5	18.46	87.42	8.6	33.56	8.2	24.1	2.36
C5	24 Jun 2025	6	18.22	87.21	8.4	33.554	8.2	24.1	2.43
C5	24 Jun 2025	7	17.54	87.14	8.1	33.551	8.2	24.3	2.62
C5	24 Jun 2025	8	16.52	87.76	7.5	33.539	8.1	24.5	2.38
C5	24 Jun 2025	9	15.74	88.99	7.0	33.545	8.1	24.7	1.41
C5	24 Jun 2025	10	15.69	89.73	6.9	33.542	8.0	24.7	1.05
C5	24 Jun 2025	11	16.32	89.31	7.1	33.541	8.1	24.6	1.59
C5	30 Jun 2025	1	18.02	83.50	9.1	33.604	8.2	24.2	1.65
C5	30 Jun 2025	2	17.88	83.46	8.8	33.6	8.2	24.2	1.82
C5	30 Jun 2025	3	16.73	83.29	8.4	33.578	8.2	24.5	2.49
C5	30 Jun 2025	4	15.49	82.84	8.3	33.586	8.1	24.8	3.90
C5	30 Jun 2025	5	15.18	81.59	8.2	33.572	8.1	24.8	4.63
C5	30 Jun 2025	6	15.06	80.73	7.9	33.568	8.1	24.9	4.73
C5	30 Jun 2025	7	14.44	81.39	7.3	33.553	8.1	25.0	4.64
C5	30 Jun 2025	8	12.88	84.43	6.7	33.554	8.0	25.3	3.07
C5	30 Jun 2025	9	12.39	90.42	6.1	33.584	7.9	25.4	0.90
C5	30 Jun 2025	10	12.92	92.33	6.1	33.553	7.9	25.3	1.66
A6	02 Jun 2025	1	17.70	93.47	10.9	33.62	8.3	24.3	0.70
A6	02 Jun 2025	2	17.65	93.56	10.9	33.62	8.3	24.3	0.68
A6	02 Jun 2025	3	17.15	93.29	11.1	33.633	8.3	24.4	0.76
A6	02 Jun 2025	4	16.74	92.46	11.2	33.624	8.3	24.5	1.04
A6	02 Jun 2025	5	16.49	91.50	10.8	33.625	8.3	24.6	1.36
A6	02 Jun 2025	6	15.12	79.22	10.0	33.637	8.2	24.9	12.28
A6	02 Jun 2025	7	14.87	76.78	9.2	33.604	8.2	24.9	9.96
A6	02 Jun 2025	8	14.27	83.89	8.4	33.628	8.1	25.1	8.50
A6	02 Jun 2025	9	13.88	84.51	7.7	33.632	8.0	25.2	5.71
A6	02 Jun 2025	10	13.84	88.16	7.4	33.63	8.0	25.2	4.33
A6	02 Jun 2025	11	13.65	90.32	7.1	33.63	8.0	25.2	2.48
A6	02 Jun 2025	12	13.44	91.06	6.9	33.633	8.0	25.2	2.17
A6	02 Jun 2025	13	13.35	91.80	6.7	33.632	8.0	25.3	2.12
A6	02 Jun 2025	14	13.30	91.86	6.5	33.626	8.0	25.3	2.03
A6	02 Jun 2025	15	12.75	92.36	6.2	33.631	7.9	25.4	1.68
A6	02 Jun 2025	16	12.45	92.84	5.9	33.642	7.9	25.4	1.46
A6	02 Jun 2025	17	12.43	93.81	5.8	33.63	7.9	25.4	1.15
A6	02 Jun 2025	18	12.06	94.74	5.7	33.639	7.8	25.5	0.87
A6	02 Jun 2025	19	12.02	94.91	5.6	33.638	7.8	25.5	0.92
A6	02 Jun 2025	20	12.11	94.65	5.5	33.637	7.8	25.5	1.00
A6	09 Jun 2025	1	16.40	90.94	9.4	33.515	8.2	24.5	1.25
A6	09 Jun 2025	2	16.19	90.58	9.4	33.506	8.2	24.6	1.50
A6	09 Jun 2025	3	15.48	90.00	9.2	33.477	8.2	24.7	1.79
A6	09 Jun 2025	4	14.63	89.93	8.9	33.447	8.2	24.9	3.27
A6	09 Jun 2025	5	13.90	88.58	8.4	33.427	8.1	25.0	4.02
A6	09 Jun 2025	6	13.21	88.45	7.8	33.446	8.1	25.1	4.47
A6	09 Jun 2025	7	12.78	89.33	7.1	33.476	8.0	25.3	3.50
A6	09 Jun 2025	8	12.63	92.11	6.6	33.48	7.9	25.3	2.79
A6	09 Jun 2025	9	12.36	93.40	6.3	33.501	7.9	25.4	1.70
A6	09 Jun 2025	10	12.14	94.40	5.9	33.528	7.9	25.4	0.90
A6	09 Jun 2025	11	12.06	95.18	5.6	33.536	7.9	25.4	0.60
A6	09 Jun 2025	12	11.94	95.64	5.4	33.543	7.8	25.5	0.56
A6	09 Jun 2025	13	11.88	95.70	5.3	33.548	7.8	25.5	0.49
A6	09 Jun 2025	14	11.77	95.75	5.1	33.56	7.8	25.5	0.47
A6	09 Jun 2025	15	11.62	95.30	5.0	33.58	7.8	25.6	0.44
A6	09 Jun 2025	16	11.57	95.79	4.8	33.575	7.8	25.6	0.45
A6	09 Jun 2025	17	11.33	95.65	4.7	33.609	7.8	25.6	0.43
A6	09 Jun 2025	18	11.36	94.93	4.6	33.611	7.8	25.6	0.57
A6	09 Jun 2025	19	11.35	95.40	4.5	33.614	7.8	25.6	0.49
A6	17 Jun 2025	1	19.18	92.51	8.9	33.529	8.2	23.9	0.44
A6	17 Jun 2025	2	18.70	92.55	9.0	33.515	8.2	24.0	0.44
A6	17 Jun 2025	3	17.57	92.72	9.4	33.511	8.2	24.2	0.44
A6	17 Jun 2025	4	16.72	92.75	9.7	33.495	8.2	24.4	0.52
A6	17 Jun 2025	5	16.05	92.00	9.7	33.499	8.2	24.6	0.70
A6	17 Jun 2025	6	15.72	91.26	9.4	33.49	8.2	24.6	0.92
A6	17 Jun 2025	7	15.49	90.29	9.2	33.485	8.2	24.7	1.05
A6	17 Jun 2025	8	14.91	89.96	8.9	33.485	8.2	24.8	1.28
A6	17 Jun 2025	9	14.49	89.31	8.5	33.492	8.1	24.9	1.72
A6	17 Jun 2025	10	14.18	88.78	8.1	33.489	8.1	25.0	1.92
A6	17 Jun 2025	11	13.70	88.78	7.8	33.479	8.1	25.1	1.99
A6	17 Jun 2025	12	13.08	89.40	7.4	33.503	8.0	25.2	1.97

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
A6	17 Jun 2025	13	12.83	90.05	7.1	33.629	8.0	25.4	1.77
A6	17 Jun 2025	14	12.81	90.74	6.9	33.756	7.9	25.5	1.59
A6	17 Jun 2025	15	12.64	92.63	6.6	33.557	7.9	25.3	1.39
A6	17 Jun 2025	16	12.51	93.26	6.3	33.541	7.9	25.4	1.37
A6	17 Jun 2025	17	12.38	93.47	6.2	33.552	7.9	25.4	1.41
A6	17 Jun 2025	18	12.25	93.37	5.9	33.568	7.9	25.4	1.32
A6	17 Jun 2025	19	12.28	93.30	5.7	33.568	7.9	25.4	0.99
A6	17 Jun 2025	20	12.34	93.51	5.7	33.56	7.9	25.4	0.93
A6	24 Jun 2025	1	20.12	86.39	8.5	33.594	8.2	23.7	1.52
A6	24 Jun 2025	2	20.12	86.41	8.5	33.594	8.2	23.7	1.60
A6	24 Jun 2025	3	20.12	86.52	8.5	33.594	8.2	23.7	1.77
A6	24 Jun 2025	4	20.11	86.52	8.5	33.593	8.2	23.7	1.83
A6	24 Jun 2025	5	19.89	86.23	8.4	33.58	8.2	23.7	2.02
A6	24 Jun 2025	6	19.25	86.40	8.6	33.566	8.2	23.9	2.31
A6	24 Jun 2025	7	18.70	86.75	8.7	33.552	8.2	24.0	2.51
A6	24 Jun 2025	8	17.71	86.72	8.7	33.538	8.2	24.2	2.75
A6	24 Jun 2025	9	16.22	86.68	8.0	33.538	8.1	24.6	3.35
A6	24 Jun 2025	10	14.85	87.04	7.4	33.515	8.1	24.9	3.06
A6	24 Jun 2025	11	13.68	88.12	6.8	33.512	8.0	25.1	3.02
A6	24 Jun 2025	12	13.15	89.06	6.1	33.526	7.9	25.2	3.10
A6	24 Jun 2025	13	12.88	89.63	5.6	33.531	7.9	25.3	2.87
A6	24 Jun 2025	14	12.72	90.39	5.4	33.537	7.8	25.3	2.66
A6	24 Jun 2025	15	12.59	90.91	5.2	33.539	7.8	25.3	2.40
A6	24 Jun 2025	16	12.42	90.98	5.1	33.547	7.8	25.4	2.32
A6	24 Jun 2025	17	12.27	91.53	5.0	33.558	7.8	25.4	2.30
A6	24 Jun 2025	18	11.98	91.64	4.8	33.565	7.8	25.5	1.88
A6	24 Jun 2025	19	11.69	92.77	4.8	33.587	7.8	25.6	1.40
A6	24 Jun 2025	20	12.00	93.18	4.8	33.559	7.8	25.5	1.32
A6	30 Jun 2025	1	17.57	82.39	8.4	33.583	8.2	24.3	2.68
A6	30 Jun 2025	2	16.98	82.16	8.0	33.563	8.2	24.4	2.88
A6	30 Jun 2025	3	14.92	81.47	7.8	33.538	8.1	24.9	3.52
A6	30 Jun 2025	4	13.84	81.04	7.6	33.572	8.0	25.1	3.82
A6	30 Jun 2025	5	13.78	83.26	7.4	33.557	8.0	25.1	3.62
A6	30 Jun 2025	6	13.59	86.27	7.2	33.554	8.0	25.2	3.32
A6	30 Jun 2025	7	13.45	87.32	7.0	33.555	8.0	25.2	4.14
A6	30 Jun 2025	8	13.17	88.35	6.8	33.557	8.0	25.2	NA
A6	30 Jun 2025	9	12.89	89.90	6.6	33.559	8.0	25.3	NA
A6	30 Jun 2025	10	12.65	91.34	6.3	33.571	7.9	25.4	9.91
A6	30 Jun 2025	11	12.54	92.23	6.1	33.573	7.9	25.4	8.40
A6	30 Jun 2025	12	12.46	92.69	6.0	33.574	7.9	25.4	7.37
A6	30 Jun 2025	13	12.27	93.04	5.8	33.583	7.9	25.4	6.24
A6	30 Jun 2025	14	12.08	93.30	5.5	33.589	7.9	25.5	NA
A6	30 Jun 2025	15	11.89	94.12	5.2	33.606	7.8	25.5	NA
A6	30 Jun 2025	16	11.80	94.85	5.0	33.61	7.8	25.5	2.09
A6	30 Jun 2025	17	11.71	95.15	4.8	33.613	7.8	25.6	1.17
A6	30 Jun 2025	18	11.60	95.49	4.7	33.625	7.8	25.6	0.89
A6	30 Jun 2025	19	11.54	95.11	4.6	33.631	7.8	25.6	0.80
A6	30 Jun 2025	20	11.48	95.43	4.5	33.64	7.8	25.6	0.90
A6	30 Jun 2025	21	11.48	95.28	4.4	33.642	7.8	25.6	0.82
C6	02 Jun 2025	1	17.87	92.42	10.9	33.612	8.4	24.2	0.53
C6	02 Jun 2025	2	17.76	92.50	10.9	33.614	8.4	24.3	0.61
C6	02 Jun 2025	3	17.38	92.81	11.0	33.616	8.3	24.4	0.67
C6	02 Jun 2025	4	17.15	92.45	10.7	33.616	8.3	24.4	0.83
C6	02 Jun 2025	5	16.98	91.74	10.3	33.617	8.3	24.5	1.35
C6	02 Jun 2025	6	16.55	90.46	9.7	33.617	8.3	24.6	1.72
C6	02 Jun 2025	7	16.03	87.67	9.1	33.622	8.2	24.7	3.77
C6	02 Jun 2025	8	15.36	85.85	7.9	33.598	8.2	24.8	3.53
C6	02 Jun 2025	9	12.80	85.94	6.4	33.625	8.0	25.4	0.78
C6	02 Jun 2025	10	12.47	82.59	5.5	33.623	7.8	25.4	0.50
C6	09 Jun 2025	1	16.97	90.85	8.9	33.537	8.2	24.4	0.73
C6	09 Jun 2025	2	16.96	90.83	8.9	33.537	8.2	24.4	0.75
C6	09 Jun 2025	3	16.76	90.83	8.6	33.537	8.2	24.4	0.80
C6	09 Jun 2025	4	15.92	90.66	7.9	33.539	8.2	24.6	0.87
C6	09 Jun 2025	5	14.89	90.86	7.8	33.525	8.1	24.9	1.20
C6	09 Jun 2025	6	14.35	91.87	7.7	33.513	8.1	25.0	1.12
C6	09 Jun 2025	7	13.82	93.17	7.3	33.508	8.1	25.1	0.80
C6	09 Jun 2025	8	13.38	93.78	6.7	33.504	8.0	25.2	0.57
C6	09 Jun 2025	9	13.04	91.14	6.1	33.513	7.9	25.2	0.47
C6	17 Jun 2025	1	19.15	80.47	8.9	33.512	8.2	23.8	0.46

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C6	17 Jun 2025	2	18.92	84.45	8.7	33.507	8.2	23.9	0.51
C6	17 Jun 2025	3	18.39	82.62	8.3	33.5	8.2	24.0	0.46
C6	17 Jun 2025	4	17.79	80.52	8.1	33.492	8.2	24.2	0.37
C6	17 Jun 2025	5	16.93	79.24	8.4	33.495	8.2	24.4	0.46
C6	17 Jun 2025	6	15.79	80.91	8.6	33.487	8.2	24.6	0.85
C6	17 Jun 2025	7	14.84	87.30	8.3	33.495	8.1	24.8	0.92
C6	17 Jun 2025	8	14.52	89.67	8.0	33.49	8.1	24.9	0.67
C6	17 Jun 2025	9	13.56	87.56	7.5	33.51	8.0	25.1	0.66
C6	17 Jun 2025	10	14.28	84.07	7.7	33.498	8.0	25.0	0.66
C6	24 Jun 2025	1	20.17	83.58	8.5	33.609	8.2	23.7	1.39
C6	24 Jun 2025	2	20.17	83.22	8.5	33.611	8.2	23.7	1.38
C6	24 Jun 2025	3	20.17	83.62	8.5	33.611	8.2	23.7	1.53
C6	24 Jun 2025	4	20.16	83.65	8.4	33.611	8.2	23.7	1.61
C6	24 Jun 2025	5	19.71	83.69	8.2	33.572	8.2	23.7	1.66
C6	24 Jun 2025	6	18.28	85.51	8.6	33.56	8.2	24.1	2.26
C6	24 Jun 2025	7	18.56	86.20	7.9	33.523	8.2	24.0	2.52
C6	24 Jun 2025	8	16.47	87.90	7.6	33.555	8.1	24.5	1.79
C6	24 Jun 2025	9	16.52	89.86	7.2	33.526	8.1	24.5	1.46
C6	24 Jun 2025	10	15.84	90.09	6.6	33.546	8.0	24.7	1.04
C6	30 Jun 2025	1	17.95	84.36	8.6	33.598	8.2	24.2	1.13
C6	30 Jun 2025	2	17.57	84.30	8.2	33.558	8.2	24.3	1.17
C6	30 Jun 2025	3	15.43	80.72	8.1	33.554	8.1	24.8	2.83
C6	30 Jun 2025	4	14.31	79.40	8.0	33.569	8.1	25.0	4.93
C6	30 Jun 2025	5	14.09	80.14	7.7	33.561	8.0	25.1	4.10
C6	30 Jun 2025	6	13.83	83.80	7.3	33.558	8.0	25.1	3.61
C6	30 Jun 2025	7	13.13	87.67	6.6	33.551	8.0	25.2	1.53
C6	30 Jun 2025	8	12.51	92.19	6.0	33.563	7.9	25.4	0.45
C6	30 Jun 2025	9	12.42	92.49	5.8	33.569	7.9	25.4	0.47
C7	02 Jun 2025	1	17.45	92.90	9.3	33.53	8.3	24.3	0.78
C7	02 Jun 2025	2	17.40	92.93	10.5	33.599	8.3	24.3	0.83
C7	02 Jun 2025	3	17.13	92.68	10.8	33.684	8.3	24.5	0.97
C7	02 Jun 2025	4	16.88	92.32	10.8	33.676	8.3	24.5	1.32
C7	02 Jun 2025	5	16.62	90.83	10.3	33.69	8.3	24.6	1.79
C7	02 Jun 2025	6	15.87	88.32	9.8	33.724	8.2	24.8	10.64
C7	02 Jun 2025	7	15.42	75.91	9.2	33.686	8.2	24.9	8.54
C7	02 Jun 2025	8	14.90	81.69	8.6	33.684	8.1	25.0	4.52
C7	02 Jun 2025	9	13.98	86.76	8.1	33.707	8.1	25.2	2.87
C7	02 Jun 2025	10	13.65	90.01	7.4	33.67	8.0	25.2	1.59
C7	02 Jun 2025	11	12.94	91.40	7.0	33.694	8.0	25.4	1.90
C7	02 Jun 2025	12	12.34	92.17	6.5	33.668	7.9	25.5	1.65
C7	02 Jun 2025	13	12.38	93.15	6.1	33.629	7.9	25.5	1.44
C7	02 Jun 2025	14	12.31	93.41	6.0	33.639	7.9	25.5	1.54
C7	02 Jun 2025	15	12.17	93.57	5.8	33.644	7.9	25.5	1.04
C7	02 Jun 2025	16	12.06	93.40	5.3	33.649	7.8	25.5	0.52
C7	02 Jun 2025	17	11.89	91.25	4.9	33.654	7.8	25.6	0.38
C7	02 Jun 2025	18	11.90	87.66	4.6	33.642	7.8	25.6	0.27
C7	09 Jun 2025	1	17.39	92.45	9.8	33.49	8.3	24.3	0.87
C7	09 Jun 2025	2	17.35	93.04	9.8	33.512	8.3	24.3	0.86
C7	09 Jun 2025	3	17.27	92.93	9.8	33.506	8.3	24.3	0.88
C7	09 Jun 2025	4	16.60	93.04	10.0	33.489	8.3	24.4	0.94
C7	09 Jun 2025	5	16.02	92.15	9.9	33.498	8.3	24.6	2.47
C7	09 Jun 2025	6	15.61	88.48	9.7	33.473	8.2	24.7	5.30
C7	09 Jun 2025	7	15.04	87.15	9.4	33.434	8.2	24.8	4.55
C7	09 Jun 2025	8	14.23	88.00	9.0	33.403	8.2	24.9	3.61
C7	09 Jun 2025	9	13.45	89.42	8.4	33.427	8.1	25.1	3.08
C7	09 Jun 2025	10	13.53	90.19	8.0	33.41	8.0	25.1	3.94
C7	09 Jun 2025	11	13.11	89.52	7.7	33.419	8.0	25.1	5.10
C7	09 Jun 2025	12	12.99	88.27	7.4	33.427	8.0	25.2	7.74
C7	09 Jun 2025	13	12.88	86.23	7.2	33.437	8.0	25.2	8.93
C7	09 Jun 2025	14	12.76	86.43	7.0	33.45	8.0	25.2	7.02
C7	09 Jun 2025	15	12.71	90.09	6.8	33.458	7.9	25.3	2.98
C7	09 Jun 2025	16	12.54	93.21	6.8	33.482	7.9	25.3	1.94
C7	09 Jun 2025	17	12.29	94.76	6.0	33.507	7.9	25.4	1.90
C7	09 Jun 2025	18	12.26	89.03	5.8	33.513	7.9	25.4	0.87
C7	17 Jun 2025	1	19.80	87.81	8.8	33.545	8.3	23.7	0.30
C7	17 Jun 2025	2	19.03	89.87	9.0	33.525	8.3	23.9	0.28
C7	17 Jun 2025	3	18.58	93.16	9.0	33.515	8.2	24.0	0.53
C7	17 Jun 2025	4	18.01	90.16	9.3	33.502	8.2	24.1	0.78
C7	17 Jun 2025	5	17.75	90.03	9.7	33.505	8.2	24.2	0.64

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C7	17 Jun 2025	6	17.65	91.36	9.8	33.501	8.3	24.2	0.60
C7	17 Jun 2025	7	17.33	91.98	9.8	33.494	8.3	24.3	0.61
C7	17 Jun 2025	8	16.28	92.02	9.9	33.507	8.2	24.5	0.74
C7	17 Jun 2025	9	15.96	90.79	9.8	33.493	8.2	24.6	0.99
C7	17 Jun 2025	10	15.77	90.14	9.6	33.489	8.2	24.6	1.15
C7	17 Jun 2025	11	15.44	89.97	9.2	33.46	8.2	24.7	1.28
C7	17 Jun 2025	12	14.58	89.95	8.7	33.465	8.1	24.9	1.43
C7	17 Jun 2025	13	14.04	89.74	8.1	33.485	8.1	25.0	1.99
C7	17 Jun 2025	14	13.59	89.12	7.7	33.488	8.0	25.1	2.57
C7	17 Jun 2025	15	13.36	88.19	7.5	33.492	8.0	25.2	3.27
C7	17 Jun 2025	16	13.20	88.99	7.0	33.483	8.0	25.2	3.10
C7	17 Jun 2025	17	12.55	84.56	6.4	33.521	7.9	25.3	0.74
C7	17 Jun 2025	18	12.58	76.01	6.4	33.523	7.9	25.3	0.74
C7	24 Jun 2025	1	20.11	90.53	8.4	33.568	8.2	23.6	0.97
C7	24 Jun 2025	2	20.12	90.53	8.4	33.569	8.2	23.6	0.92
C7	24 Jun 2025	3	20.09	90.52	8.4	33.563	8.2	23.6	0.98
C7	24 Jun 2025	4	19.99	90.54	8.3	33.558	8.2	23.7	1.10
C7	24 Jun 2025	5	19.66	90.13	8.2	33.565	8.2	23.8	1.67
C7	24 Jun 2025	6	18.48	88.85	8.5	33.525	8.2	24.0	2.05
C7	24 Jun 2025	7	17.04	87.71	8.1	33.546	8.2	24.4	2.51
C7	24 Jun 2025	8	15.96	87.71	7.1	33.541	8.1	24.6	3.15
C7	24 Jun 2025	9	14.68	88.03	6.3	33.534	8.0	24.9	2.74
C7	24 Jun 2025	10	13.81	90.88	5.8	33.534	7.9	25.1	1.49
C7	24 Jun 2025	11	13.41	92.86	5.5	33.537	7.9	25.2	1.42
C7	24 Jun 2025	12	13.36	92.85	5.3	33.532	7.9	25.2	1.79
C7	24 Jun 2025	13	13.34	92.64	5.2	33.528	7.9	25.2	1.69
C7	24 Jun 2025	14	13.32	92.56	5.2	33.534	7.8	25.2	1.61
C7	24 Jun 2025	15	13.29	92.45	5.1	33.537	7.8	25.2	1.73
C7	24 Jun 2025	16	12.87	92.21	4.9	33.543	7.8	25.3	1.70
C7	24 Jun 2025	17	12.34	92.44	4.7	33.555	7.8	25.4	1.27
C7	24 Jun 2025	18	12.21	93.67	4.7	33.565	7.8	25.4	1.16
C7	30 Jun 2025	1	17.95	77.80	8.5	33.577	8.2	24.2	3.18
C7	30 Jun 2025	2	17.90	77.18	8.2	33.562	8.2	24.2	3.20
C7	30 Jun 2025	3	15.99	76.42	8.2	33.583	8.1	24.7	4.62
C7	30 Jun 2025	4	15.55	75.69	8.1	33.558	8.1	24.7	5.43
C7	30 Jun 2025	5	15.19	75.94	8.0	33.556	8.1	24.8	5.61
C7	30 Jun 2025	6	14.94	76.05	7.8	33.548	8.1	24.9	5.80
C7	30 Jun 2025	7	14.47	76.58	7.8	33.534	8.1	25.0	5.89
C7	30 Jun 2025	8	13.84	76.89	7.7	33.546	8.0	25.1	5.77
C7	30 Jun 2025	9	13.40	77.87	7.3	33.548	8.0	25.2	5.20
C7	30 Jun 2025	10	12.90	83.62	6.8	33.55	8.0	25.3	3.12
C7	30 Jun 2025	11	12.54	88.43	6.3	33.546	7.9	25.4	2.91
C7	30 Jun 2025	12	12.24	89.64	6.0	33.564	7.9	25.4	2.69
C7	30 Jun 2025	13	12.16	91.21	5.7	33.568	7.9	25.4	2.19
C7	30 Jun 2025	14	11.70	92.40	5.3	33.602	7.8	25.6	1.91
C7	30 Jun 2025	15	11.57	93.92	4.8	33.616	7.8	25.6	1.08
C7	30 Jun 2025	16	11.38	94.54	4.5	33.638	7.8	25.6	0.81
C7	30 Jun 2025	17	11.34	94.81	4.2	33.649	7.7	25.7	0.64
C7	30 Jun 2025	18	11.44	94.33	4.3	33.646	7.7	25.6	0.75
C8	02 Jun 2025	1	17.24	90.53	10.8	33.61	8.3	24.4	1.01
C8	02 Jun 2025	2	17.15	90.61	10.8	33.609	8.3	24.4	1.04
C8	02 Jun 2025	3	16.94	90.38	10.8	33.613	8.3	24.5	1.08
C8	02 Jun 2025	4	16.87	90.35	10.8	33.612	8.3	24.5	1.26
C8	02 Jun 2025	5	16.80	90.17	10.7	33.611	8.3	24.5	1.41
C8	02 Jun 2025	6	16.70	90.26	10.6	33.612	8.3	24.5	1.44
C8	02 Jun 2025	7	16.62	90.19	10.4	33.611	8.3	24.5	1.52
C8	02 Jun 2025	8	16.46	90.02	10.2	33.612	8.3	24.6	1.65
C8	02 Jun 2025	9	16.33	89.83	10.0	33.611	8.2	24.6	1.77
C8	02 Jun 2025	10	16.13	89.43	9.8	33.607	8.2	24.6	2.27
C8	02 Jun 2025	11	15.74	86.95	9.4	33.603	8.2	24.7	9.16
C8	02 Jun 2025	12	14.67	80.62	8.4	33.604	8.1	25.0	11.60
C8	02 Jun 2025	13	13.26	84.90	7.1	33.622	8.0	25.3	5.93
C8	02 Jun 2025	14	12.45	89.64	6.0	33.61	7.9	25.4	3.68
C8	02 Jun 2025	15	12.15	91.55	5.4	33.618	7.8	25.5	1.99
C8	02 Jun 2025	16	12.29	92.65	5.2	33.601	7.8	25.4	1.53
C8	02 Jun 2025	17	11.85	92.98	5.1	33.617	7.8	25.5	1.22
C8	02 Jun 2025	18	11.66	93.58	5.0	33.625	7.8	25.6	0.58
C8	02 Jun 2025	19	11.61	92.77	4.9	33.626	7.8	25.6	0.48
C8	09 Jun 2025	1	17.66	91.94	9.8	33.532	8.3	24.2	0.90
C8	09 Jun 2025	2	17.63	92.44	9.8	33.529	8.3	24.2	0.90

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C8	09 Jun 2025	3	17.45	92.28	9.9	33.516	8.3	24.3	0.89
C8	09 Jun 2025	4	17.33	92.31	9.9	33.494	8.3	24.3	0.92
C8	09 Jun 2025	5	16.97	92.84	10.0	33.47	8.3	24.3	0.87
C8	09 Jun 2025	6	16.43	93.09	10.2	33.435	8.3	24.4	0.90
C8	09 Jun 2025	7	15.32	93.59	10.6	33.424	8.3	24.7	1.02
C8	09 Jun 2025	8	15.08	92.92	10.3	33.426	8.2	24.7	2.08
C8	09 Jun 2025	9	14.77	91.22	10.1	33.416	8.2	24.8	2.82
C8	09 Jun 2025	10	14.54	89.85	9.8	33.428	8.2	24.9	3.85
C8	09 Jun 2025	11	14.38	88.39	9.3	33.428	8.2	24.9	4.92
C8	09 Jun 2025	12	14.08	87.41	8.7	33.441	8.1	25.0	5.08
C8	09 Jun 2025	13	13.63	87.35	8.1	33.446	8.1	25.1	5.43
C8	09 Jun 2025	14	13.28	88.28	7.6	33.446	8.0	25.1	4.18
C8	09 Jun 2025	15	13.02	90.19	7.4	33.452	8.0	25.2	3.42
C8	09 Jun 2025	16	12.87	91.51	7.1	33.453	8.0	25.2	3.09
C8	09 Jun 2025	17	12.68	93.88	6.8	33.465	7.9	25.3	1.85
C8	09 Jun 2025	18	12.65	94.70	6.6	33.467	7.9	25.3	1.03
C8	09 Jun 2025	19	12.69	94.32	6.5	33.472	7.9	25.3	1.03
C8	17 Jun 2025	1	20.12	22.73	8.3	33.356	8.2	23.5	0.29
C8	17 Jun 2025	2	20.12	53.08	8.6	33.404	8.2	23.5	0.32
C8	17 Jun 2025	3	20.11	88.64	8.2	33.464	8.2	23.6	0.36
C8	17 Jun 2025	4	19.54	92.33	8.1	33.595	8.2	23.8	0.46
C8	17 Jun 2025	5	19.06	90.47	8.3	33.648	8.3	24.0	0.54
C8	17 Jun 2025	6	18.24	92.85	8.6	33.809	8.3	24.3	0.36
C8	17 Jun 2025	7	17.35	93.41	9.1	NA	8.3	24.7	0.40
C8	17 Jun 2025	8	16.60	92.95	9.6	NA	8.3	24.9	0.51
C8	17 Jun 2025	9	16.32	91.57	9.5	33.903	8.2	24.8	0.60
C8	17 Jun 2025	10	16.21	90.22	9.2	NA	8.2	25.1	0.65
C8	17 Jun 2025	11	16.34	90.04	8.8	NA	8.2	25.2	0.84
C8	17 Jun 2025	12	15.87	90.55	9.3	NA	8.2	25.2	1.00
C8	17 Jun 2025	13	15.48	89.85	9.6	33.903	8.2	25.0	1.19
C8	17 Jun 2025	14	15.38	89.31	9.5	33.905	8.2	25.0	1.33
C8	17 Jun 2025	15	15.01	89.33	9.2	NA	8.1	25.4	1.76
C8	17 Jun 2025	16	14.21	88.62	9.0	NA	8.1	26.3	2.43
C8	17 Jun 2025	17	13.58	89.48	9.2	NA	8.0	26.6	1.90
C8	17 Jun 2025	18	12.56	90.29	10.0	NA	7.9	26.1	1.55
C8	17 Jun 2025	19	12.24	90.85	10.0	NA	7.9	26.2	0.79
C8	24 Jun 2025	1	20.01	88.26	8.4	33.554	8.2	23.7	0.79
C8	24 Jun 2025	2	20.02	90.29	8.4	33.561	8.2	23.7	0.88
C8	24 Jun 2025	3	20.00	91.02	8.4	33.559	8.2	23.7	1.00
C8	24 Jun 2025	4	19.99	91.25	8.4	33.558	8.2	23.7	1.01
C8	24 Jun 2025	5	19.93	91.20	8.3	33.555	8.2	23.7	1.06
C8	24 Jun 2025	6	18.97	90.76	8.5	33.535	8.2	23.9	1.32
C8	24 Jun 2025	7	17.12	89.06	8.5	33.538	8.2	24.4	2.03
C8	24 Jun 2025	8	16.38	87.20	8.1	33.528	8.1	24.5	2.94
C8	24 Jun 2025	9	16.08	85.53	7.8	33.522	8.1	24.6	3.58
C8	24 Jun 2025	10	15.87	84.95	7.6	33.52	8.1	24.6	3.75
C8	24 Jun 2025	11	15.31	85.34	7.3	33.516	8.1	24.8	3.53
C8	24 Jun 2025	12	14.59	85.77	6.9	33.521	8.0	24.9	3.67
C8	24 Jun 2025	13	14.03	86.37	6.2	33.528	8.0	25.0	3.14
C8	24 Jun 2025	14	13.35	88.67	5.6	33.543	7.9	25.2	2.49
C8	24 Jun 2025	15	13.22	90.26	5.2	33.539	7.8	25.2	2.07
C8	24 Jun 2025	16	12.78	90.74	5.0	33.545	7.8	25.3	2.03
C8	24 Jun 2025	17	12.63	90.90	4.7	33.546	7.8	25.3	1.59
C8	24 Jun 2025	18	12.54	91.30	4.6	33.552	7.8	25.4	1.27
C8	24 Jun 2025	19	12.50	91.49	4.4	33.555	7.8	25.4	1.19
C8	24 Jun 2025	20	12.59	90.51	4.5	33.556	7.8	25.4	1.26
C8	30 Jun 2025	1	17.02	80.05	8.5	33.566	8.1	24.4	2.51
C8	30 Jun 2025	2	16.78	79.90	8.3	33.564	8.1	24.5	2.66
C8	30 Jun 2025	3	15.54	80.19	8.0	33.572	8.1	24.8	3.39
C8	30 Jun 2025	4	15.43	79.97	7.7	33.551	8.1	24.8	3.90
C8	30 Jun 2025	5	14.91	79.19	7.5	33.54	8.1	24.9	4.06
C8	30 Jun 2025	6	14.02	79.44	7.1	33.55	8.0	25.1	4.24
C8	30 Jun 2025	7	13.35	79.82	6.7	33.558	8.0	25.2	4.14
C8	30 Jun 2025	8	13.08	81.46	6.4	33.549	7.9	25.3	4.00
C8	30 Jun 2025	9	12.72	83.52	6.2	33.535	7.9	25.3	4.10
C8	30 Jun 2025	10	12.37	84.73	6.0	33.547	7.9	25.4	3.83
C8	30 Jun 2025	11	12.20	86.44	5.8	33.544	7.9	25.4	3.23
C8	30 Jun 2025	12	11.96	88.68	5.7	33.539	7.9	25.5	2.93
C8	30 Jun 2025	13	11.73	90.91	5.5	33.559	7.8	25.5	2.41
C8	30 Jun 2025	14	11.60	92.45	5.2	33.585	7.8	25.6	1.96
C8	30 Jun 2025	15	11.55	93.50	5.0	33.593	7.8	25.6	1.61

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/l)	Sal (ppt)	pH	Dens (s-t)	Chlor (µg/L)
C8	30 Jun 2025	16	11.47	94.26	4.8	33.607	7.8	25.6	1.44
C8	30 Jun 2025	17	11.38	94.27	4.7	33.626	7.8	25.6	1.17
C8	30 Jun 2025	18	11.26	94.67	4.4	33.655	7.8	25.7	0.93
C8	30 Jun 2025	19	11.33	94.82	4.4	33.646	7.8	25.7	0.94

NA = not available

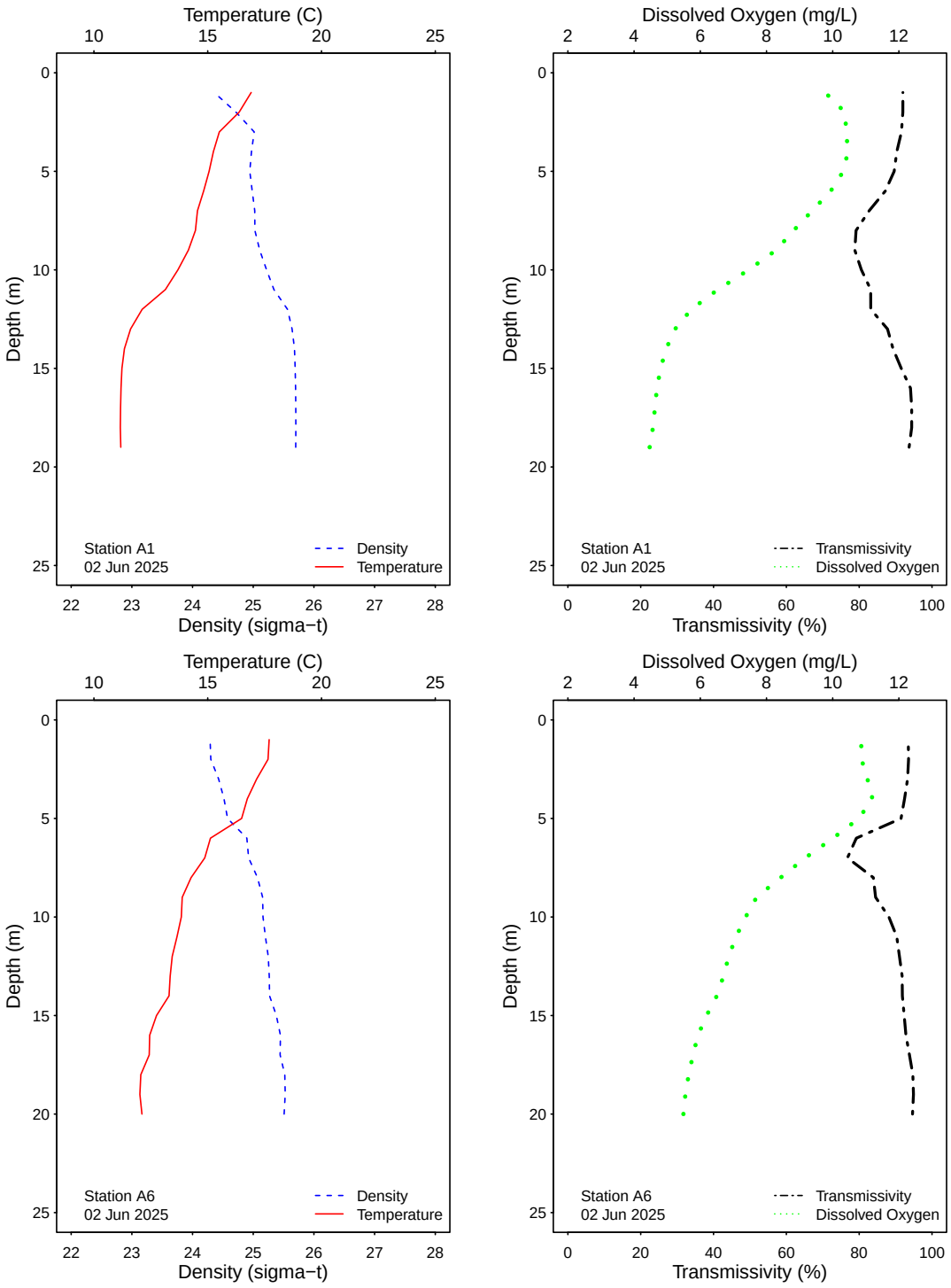

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

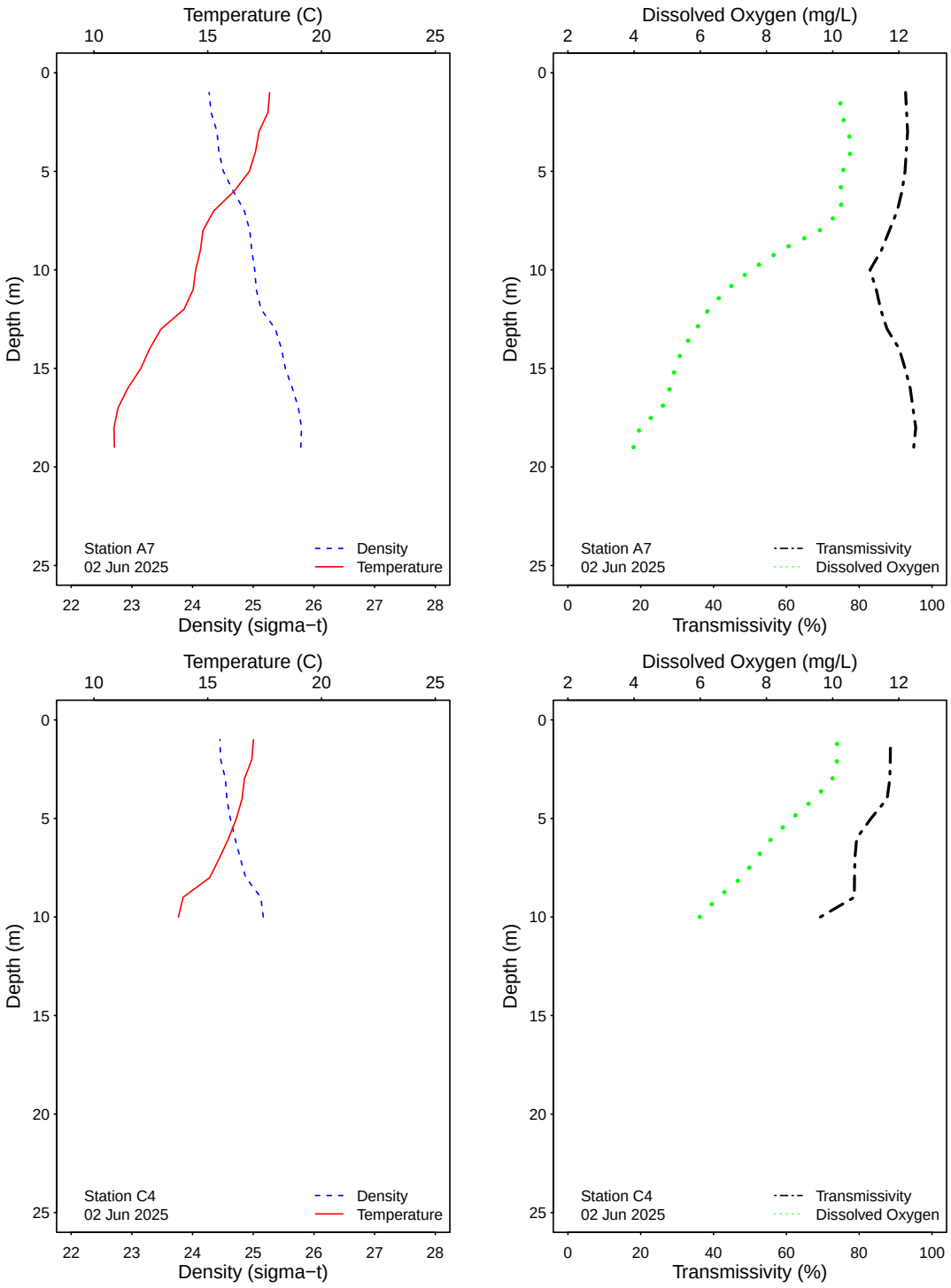

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

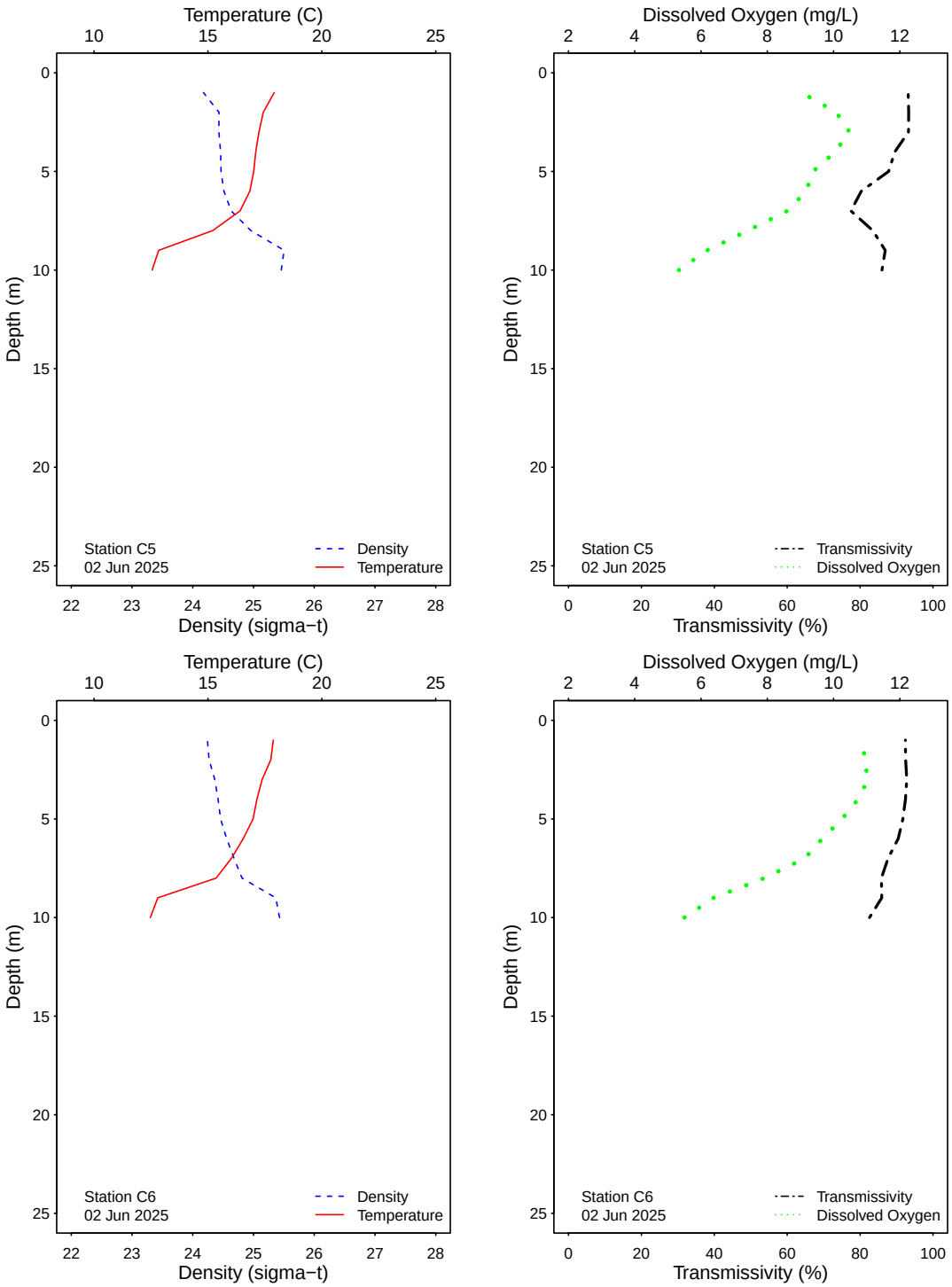

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

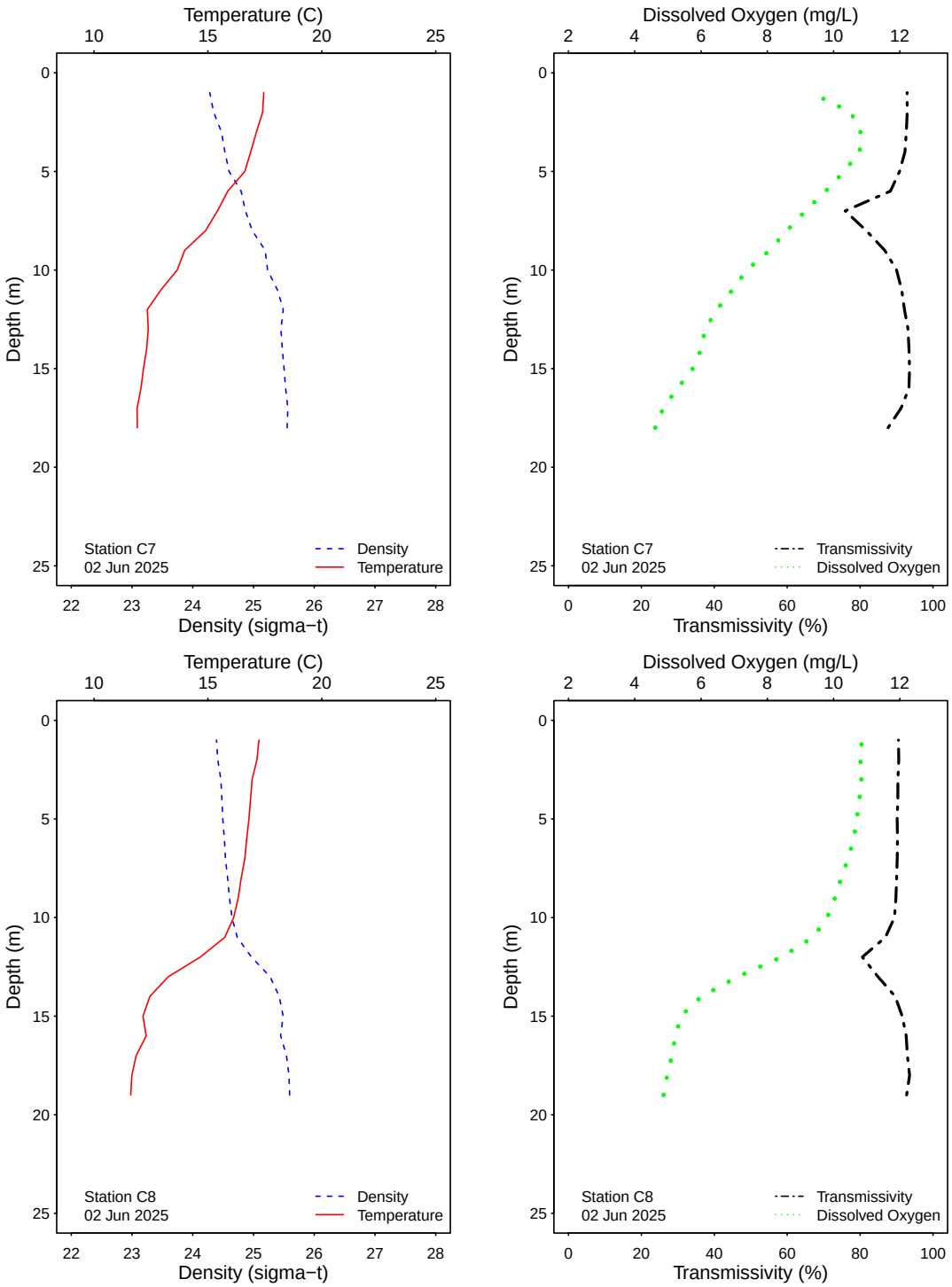

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

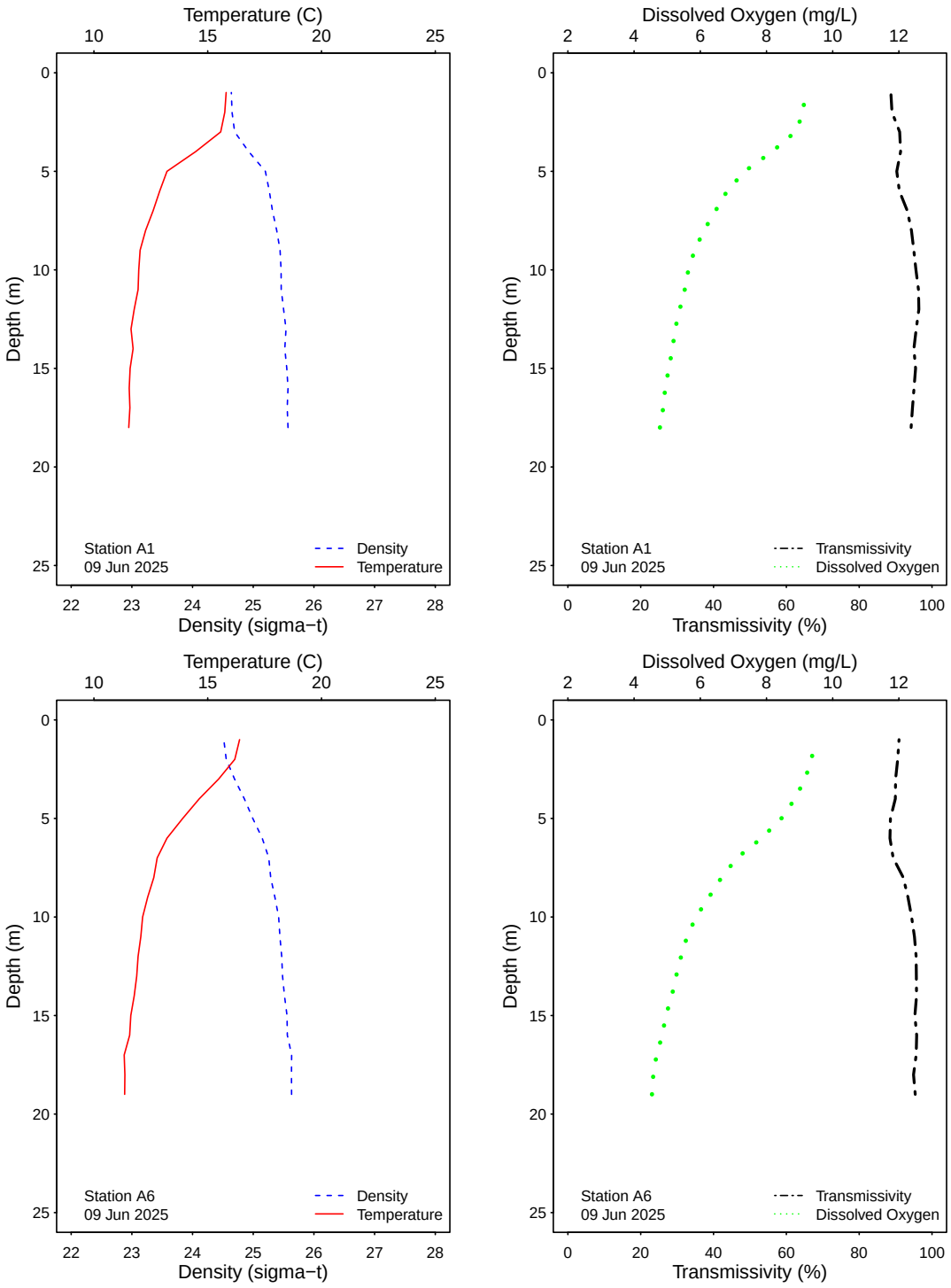

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

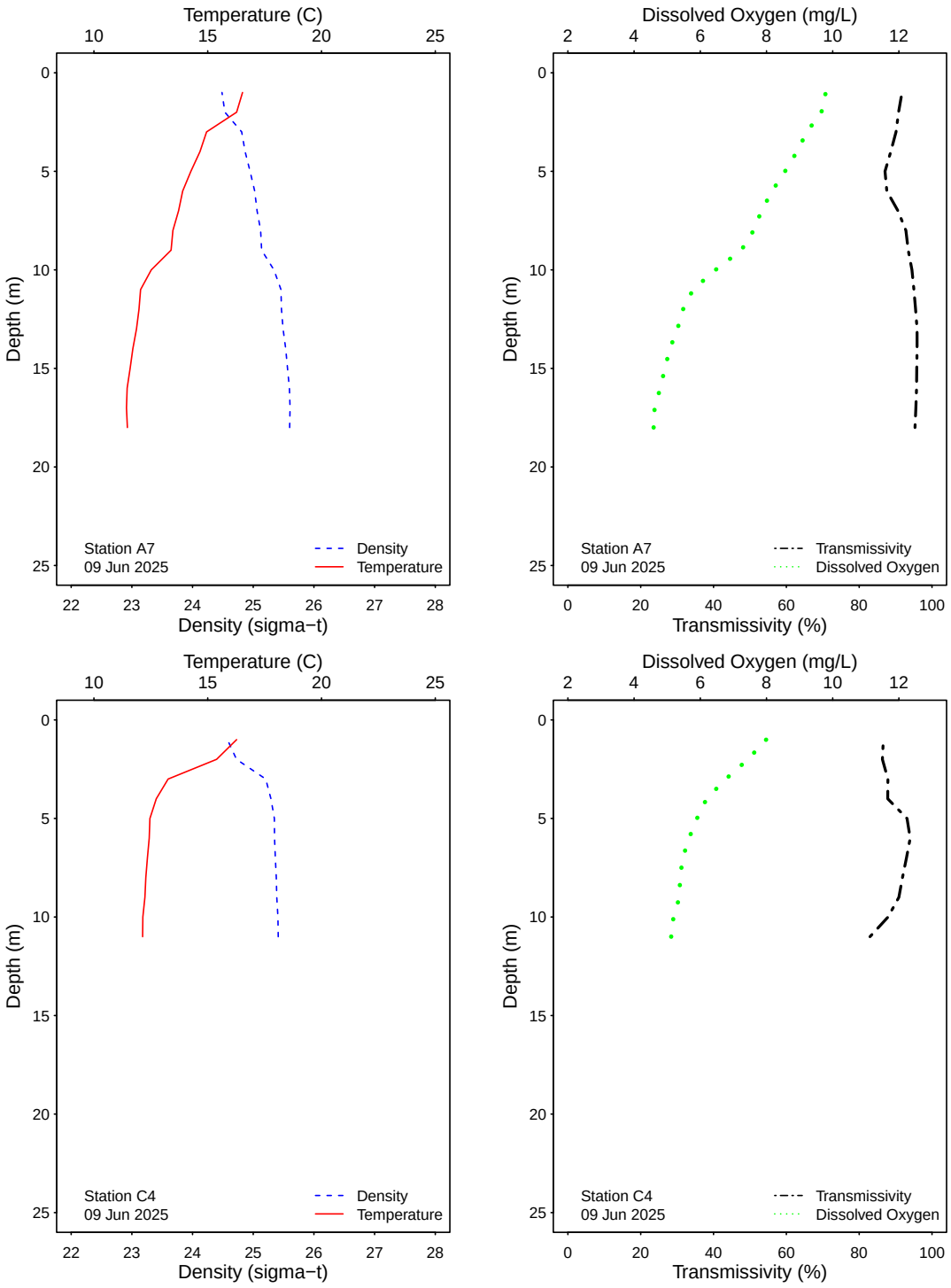

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

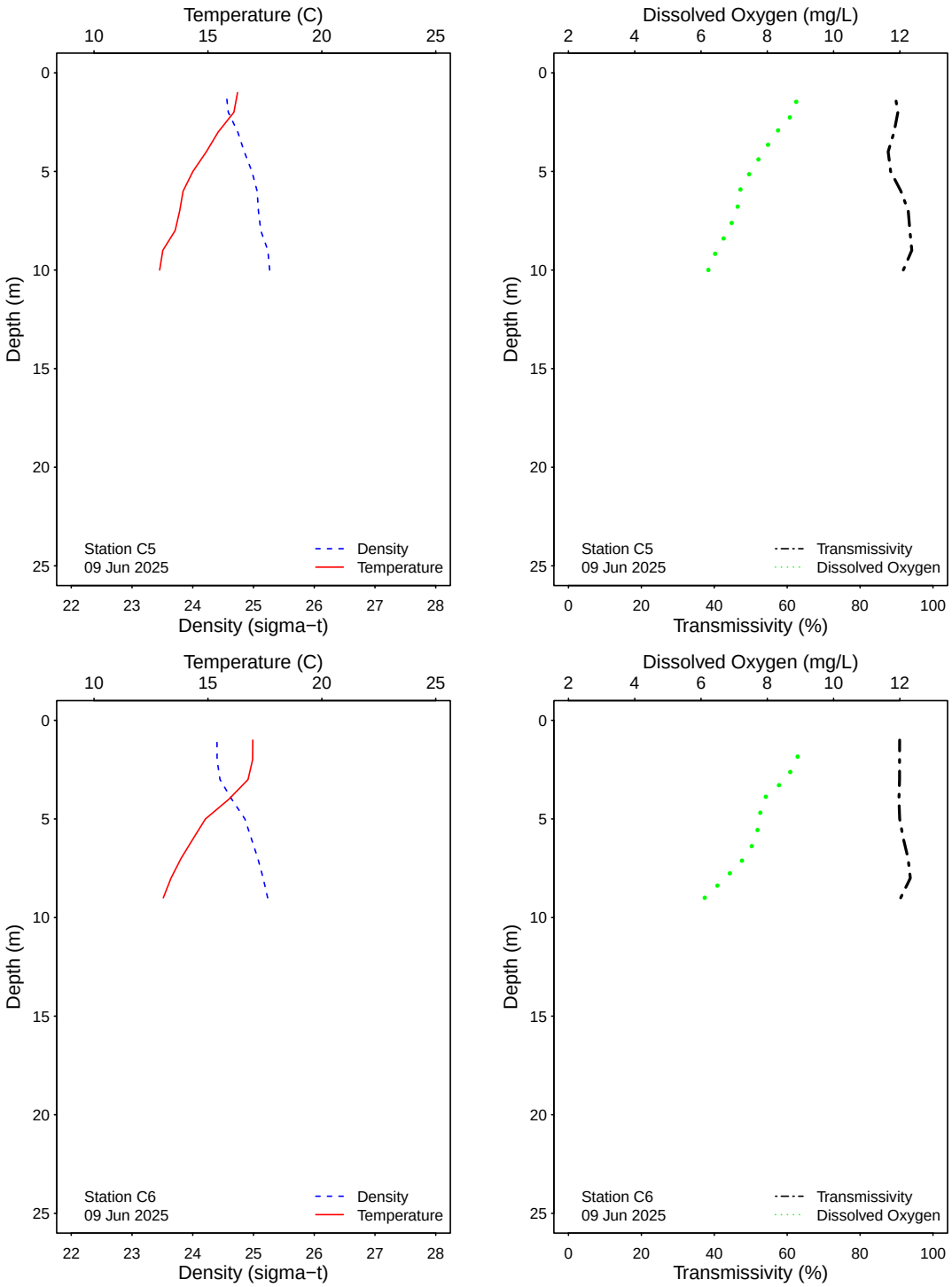

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

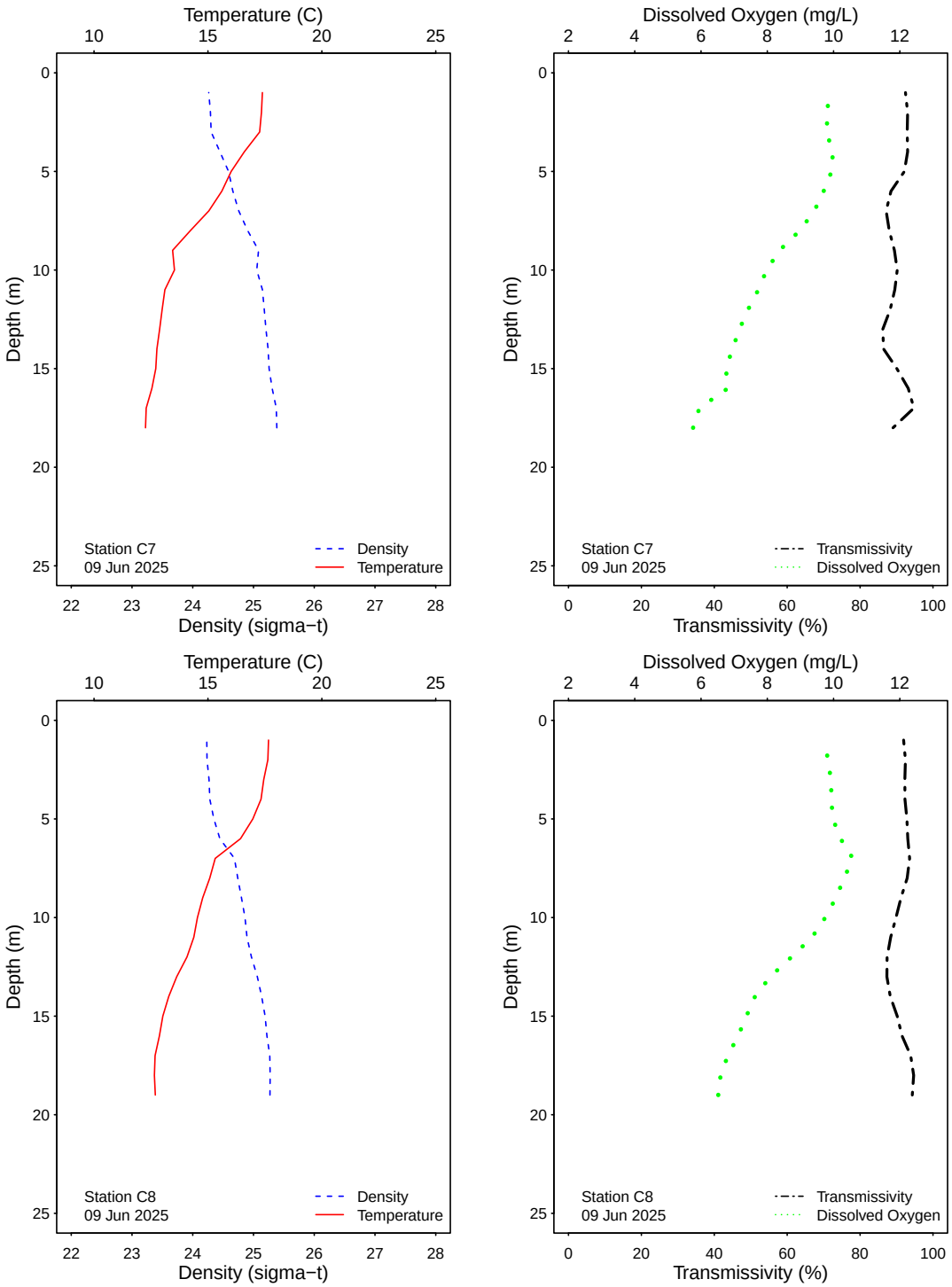

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

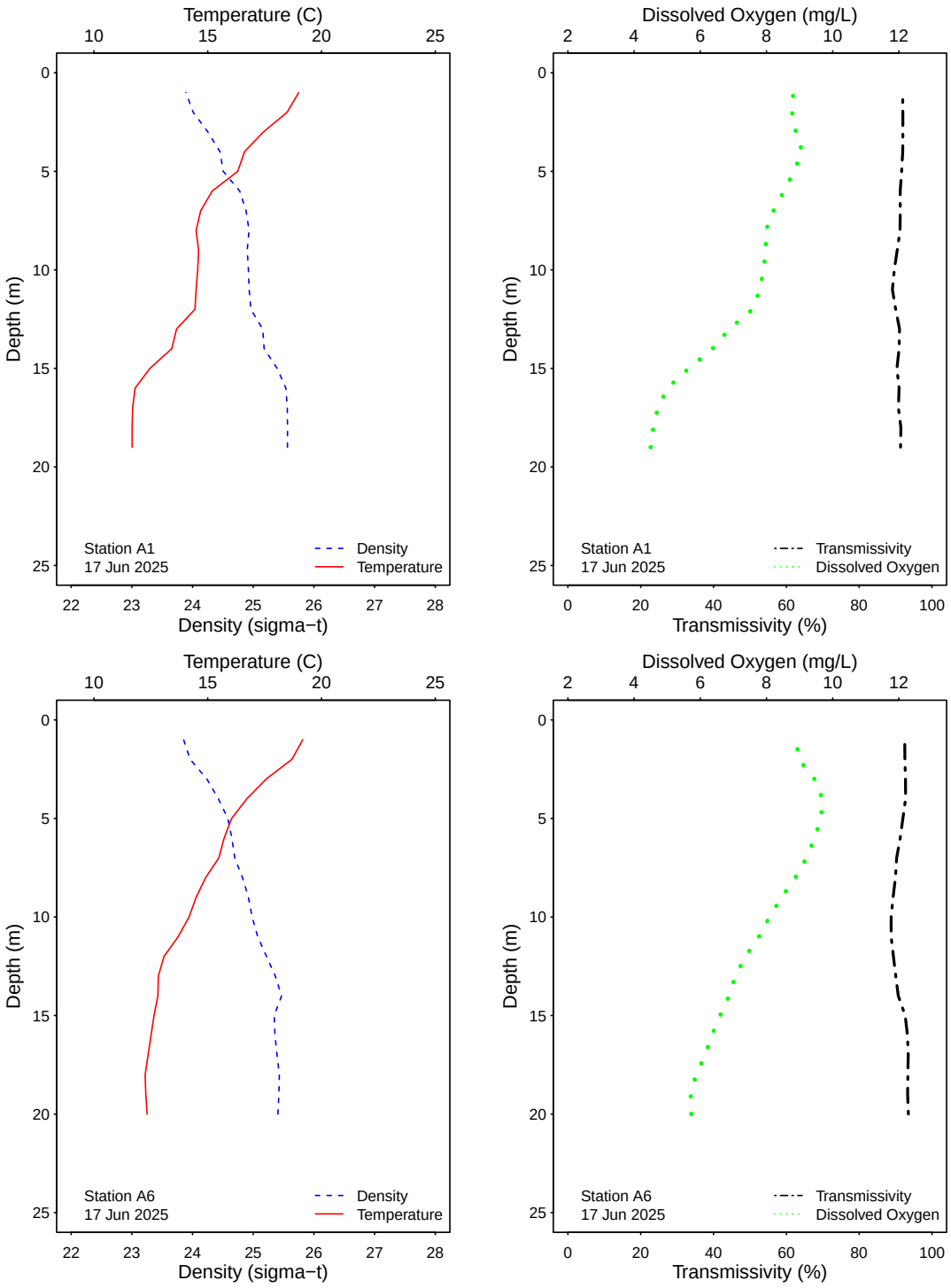

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

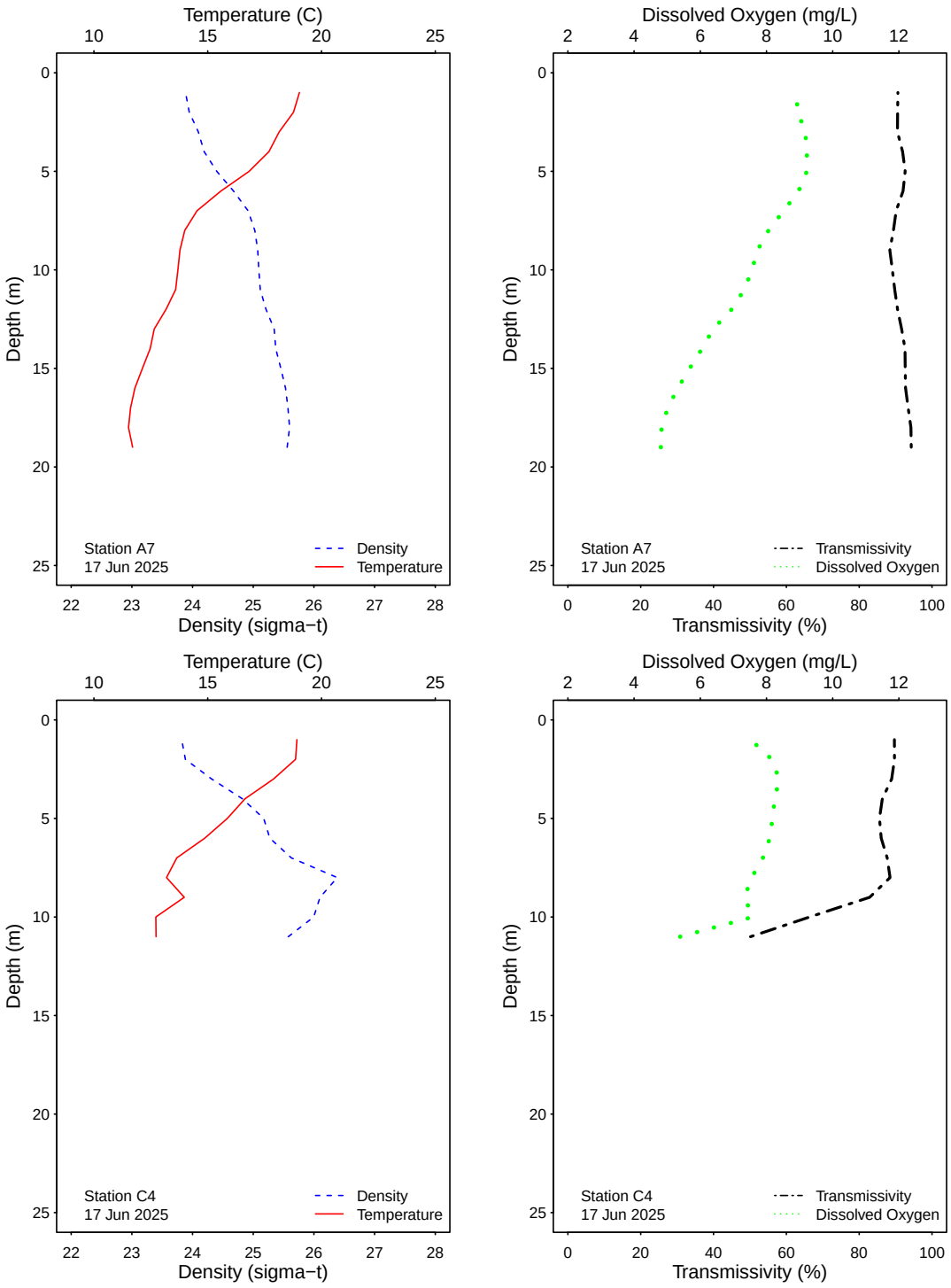

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

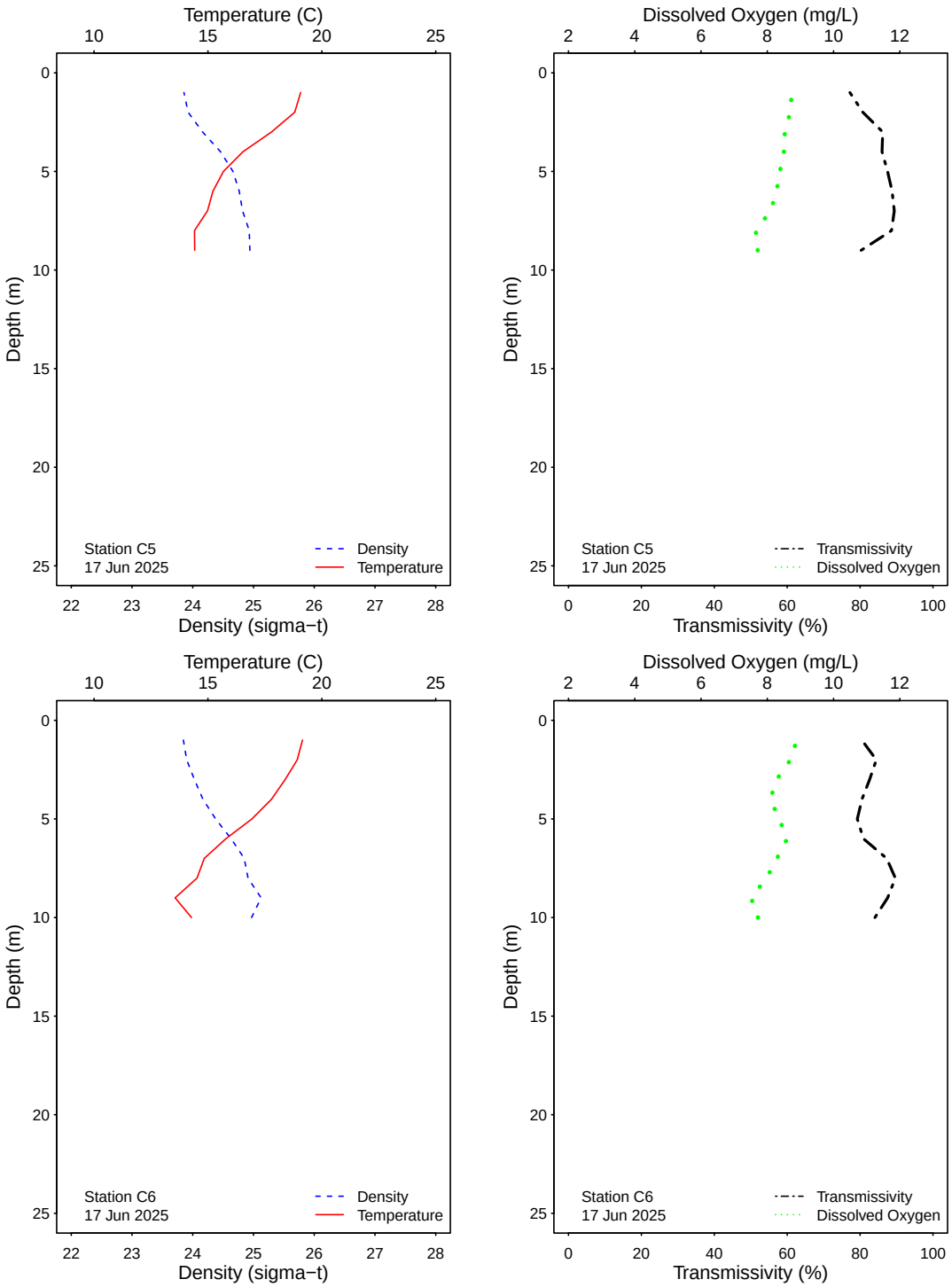

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

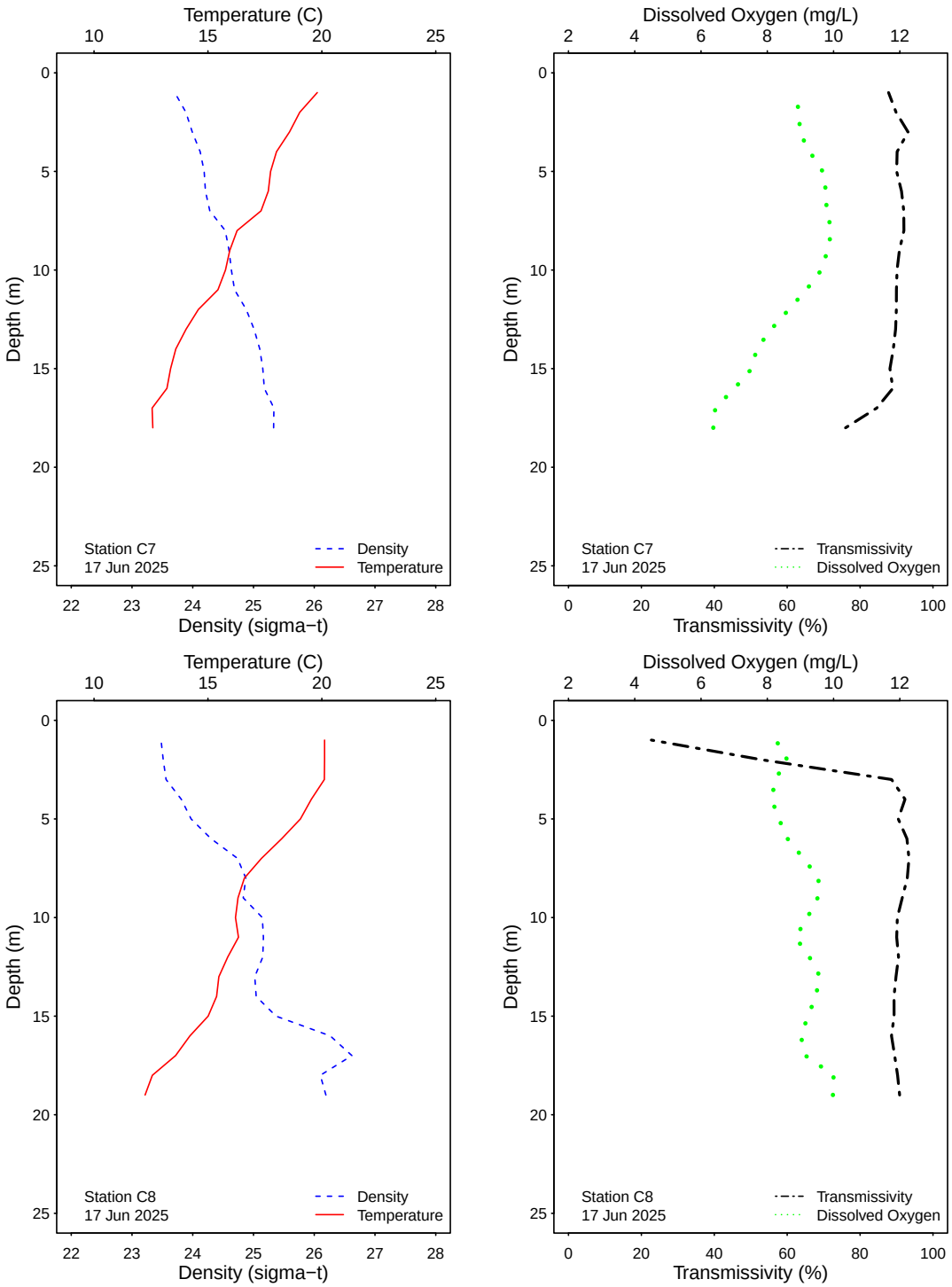

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

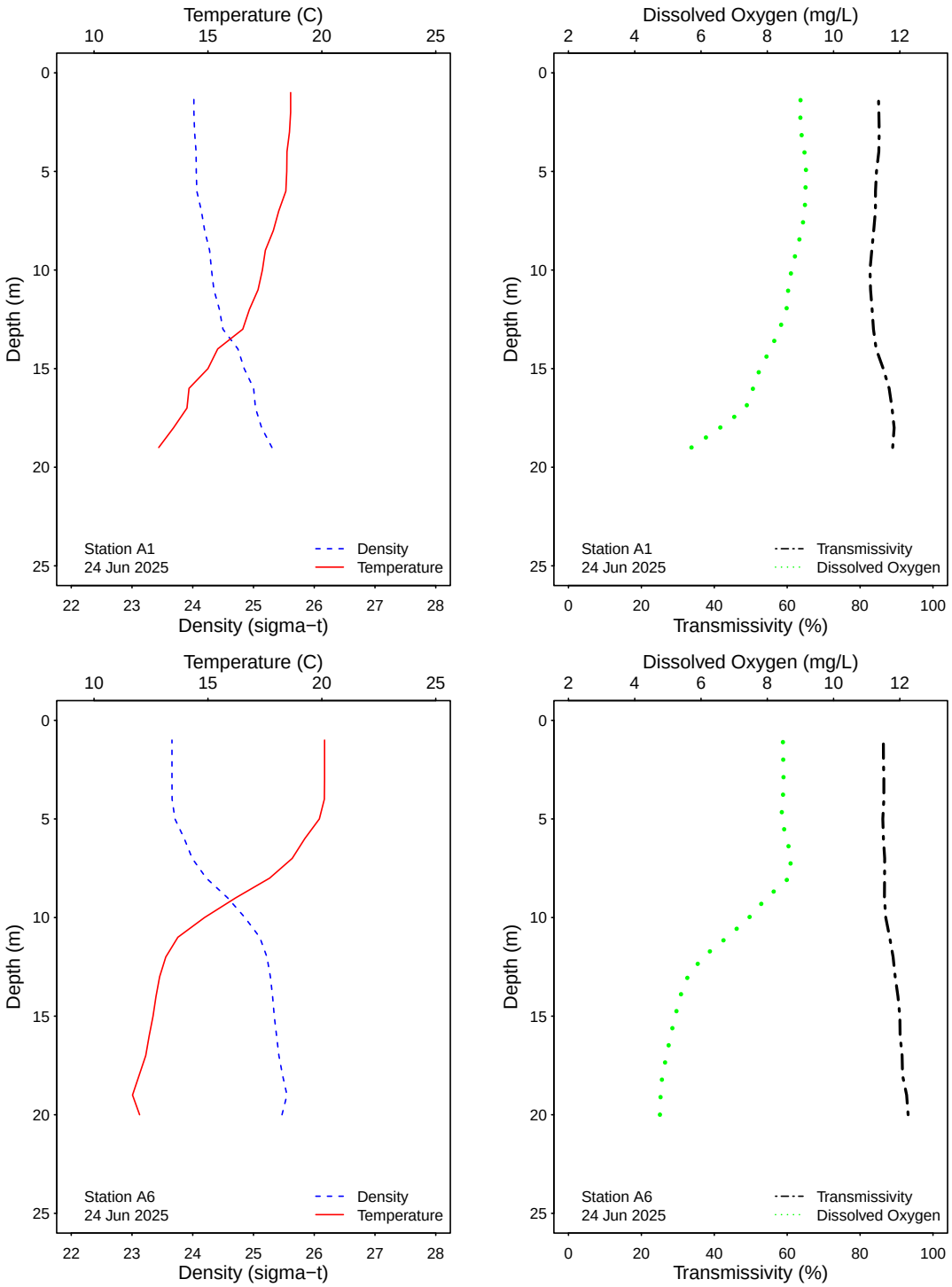

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

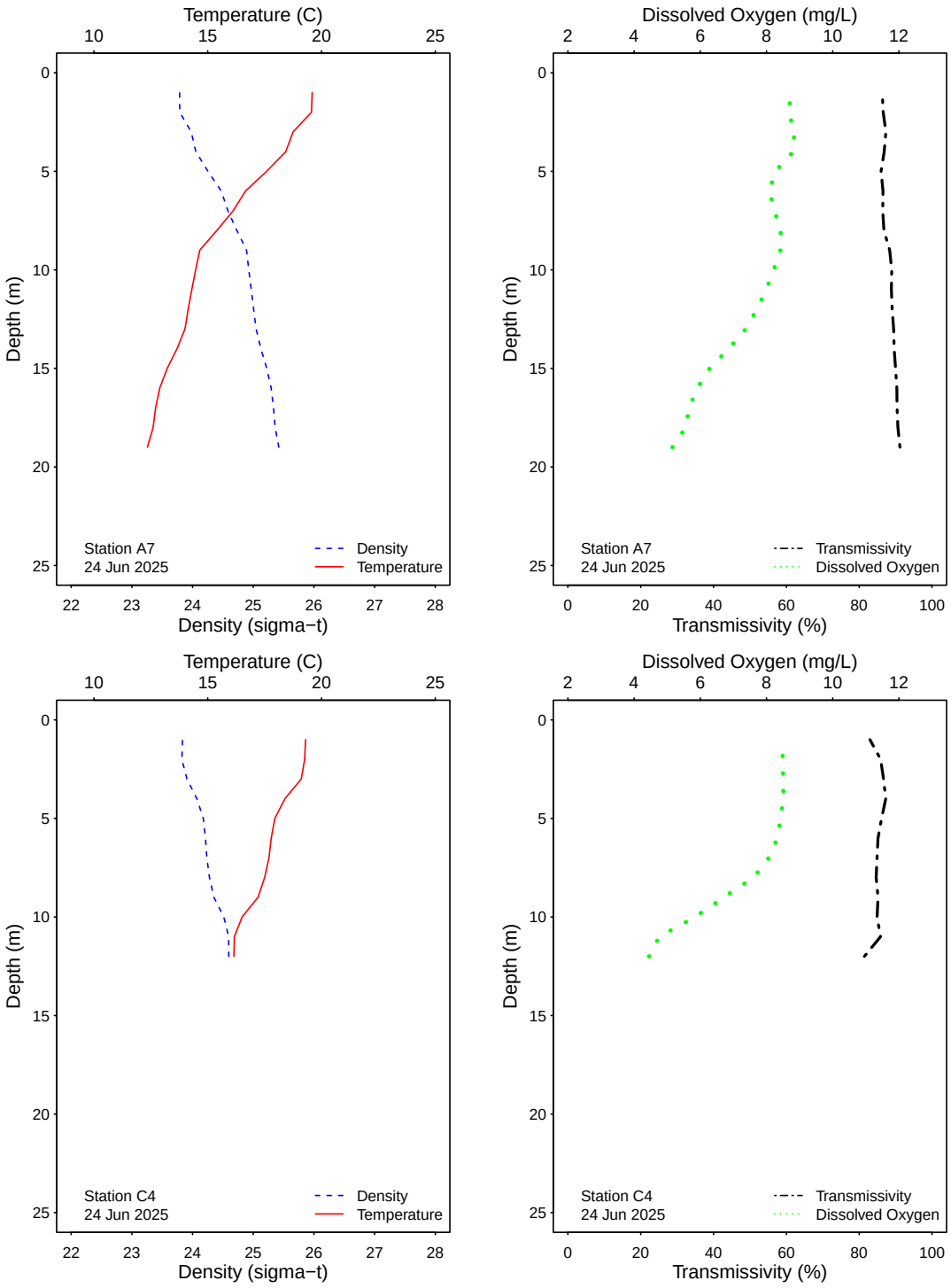

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

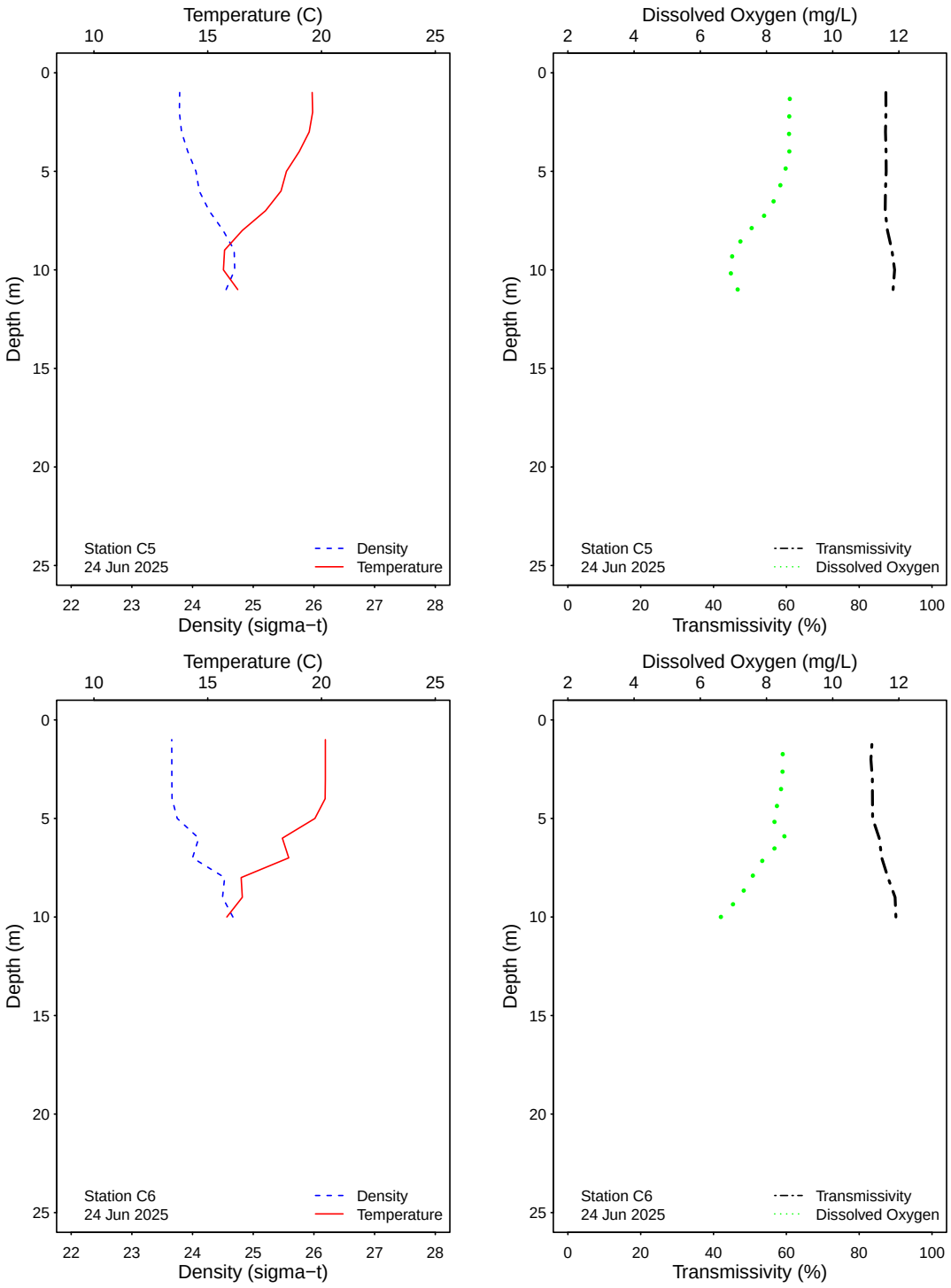

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

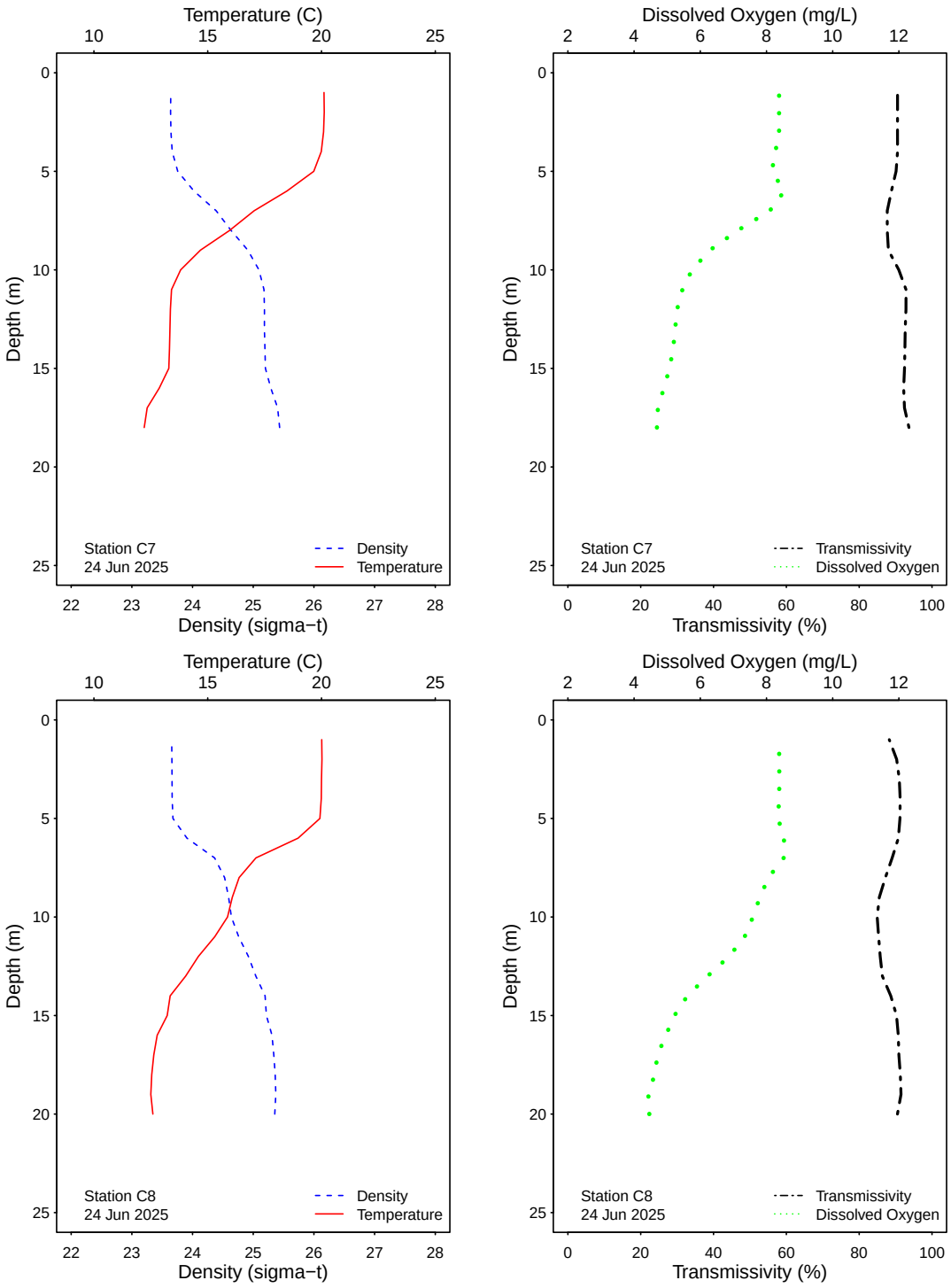

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

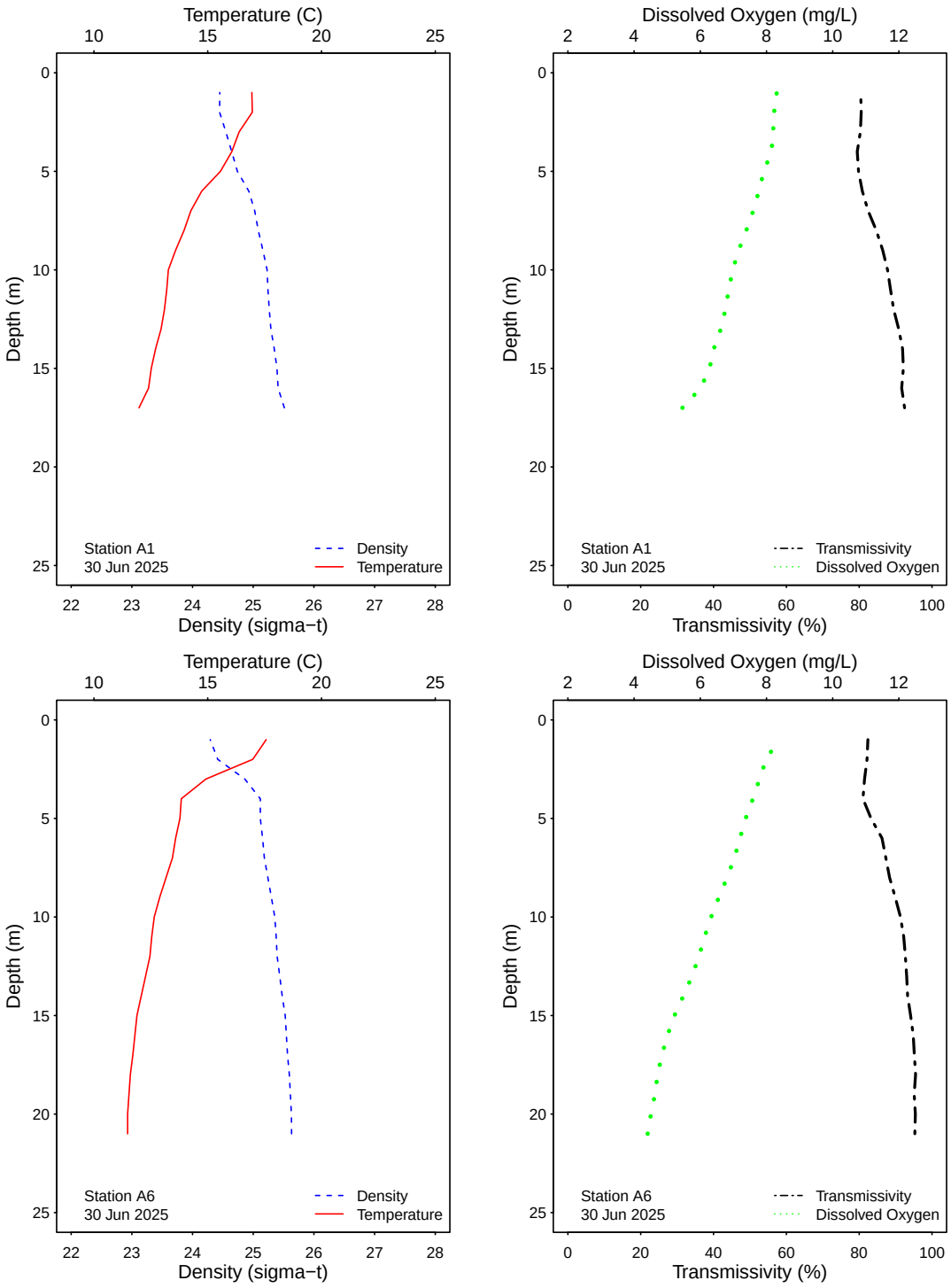

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

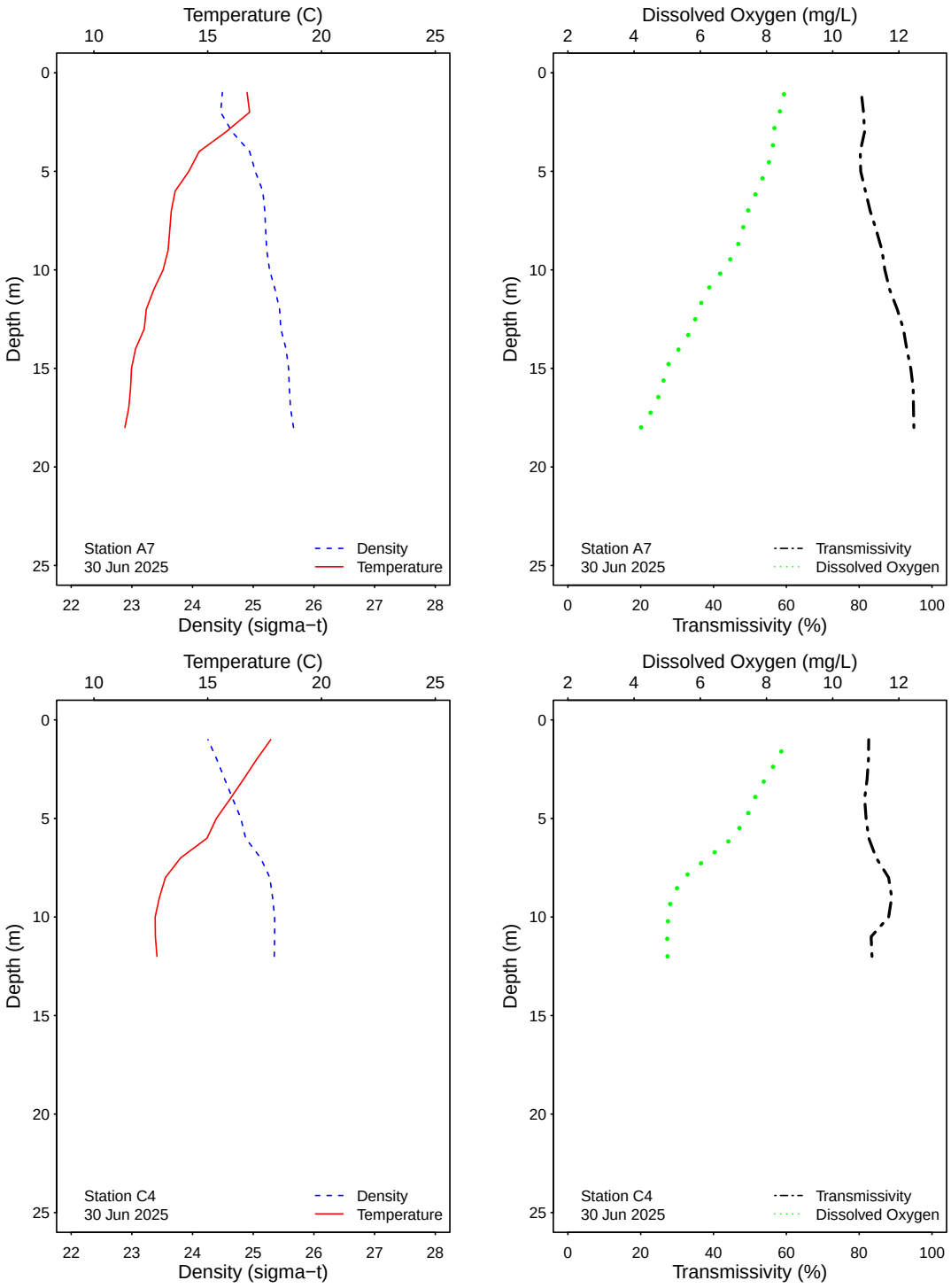

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

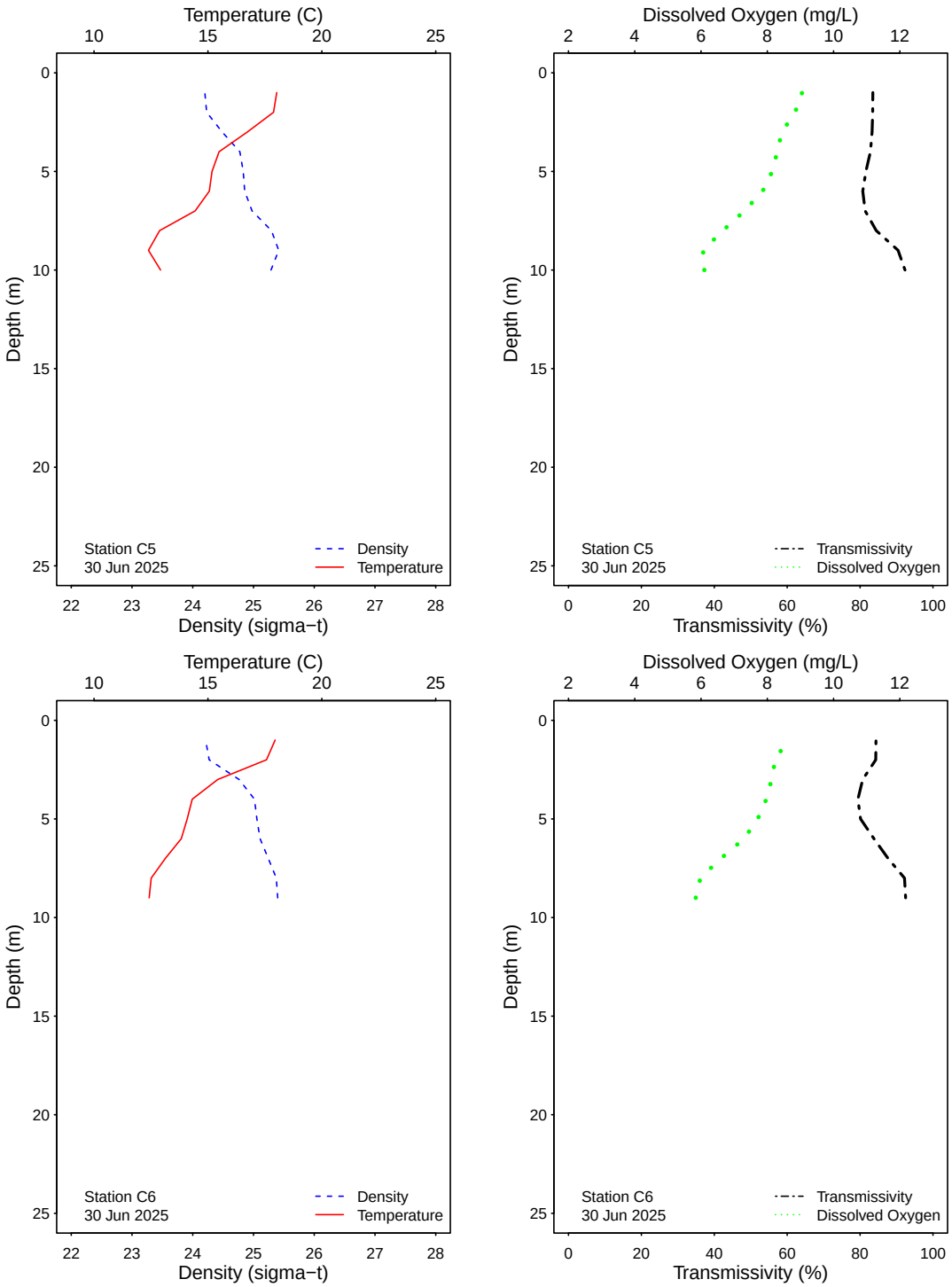

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

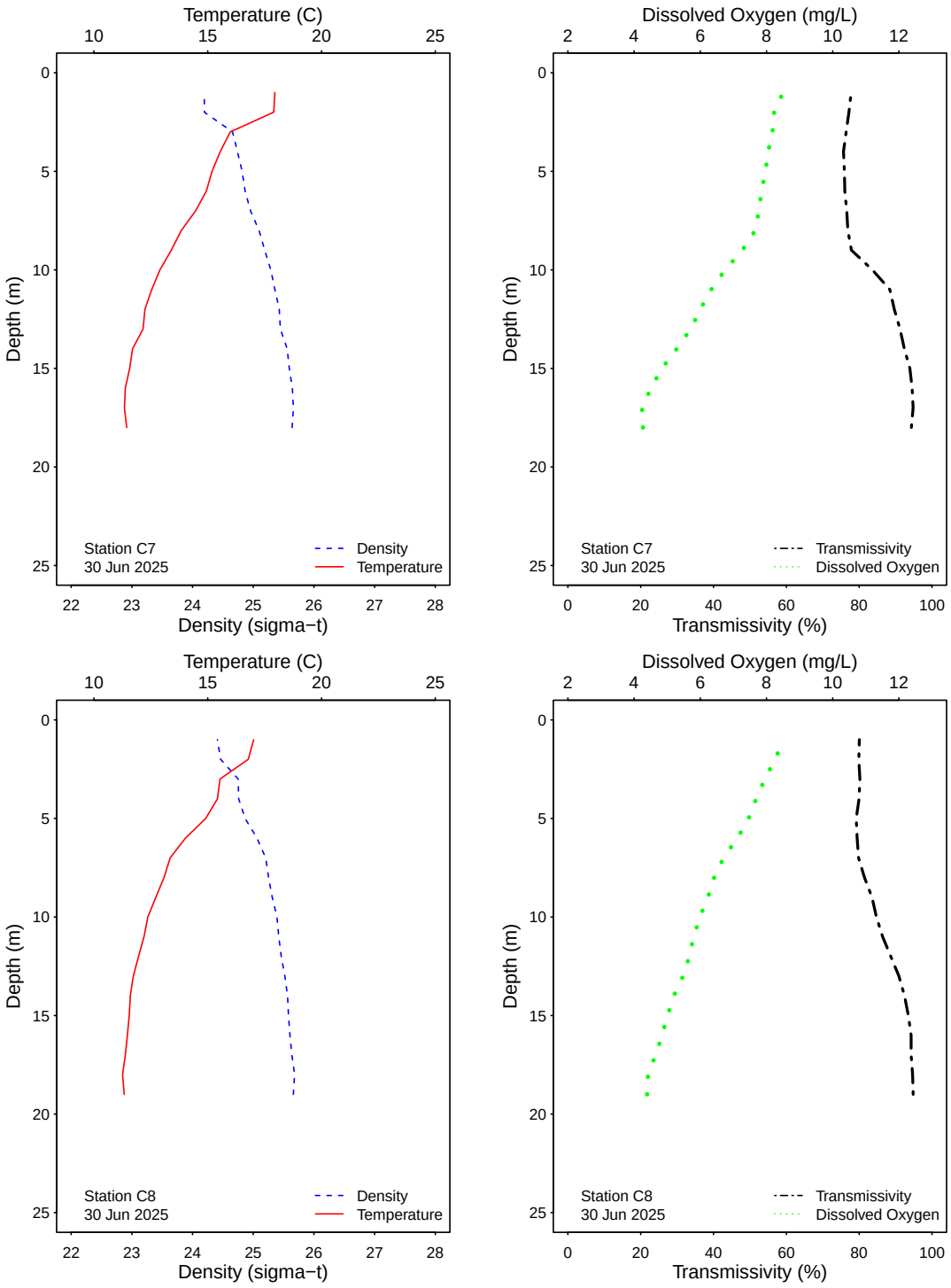

Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

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

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
A7	02 Jun 2025	18	KT	LAB DUPLICATE	2	2	2
A7	09 Jun 2025	18	BS	LAB DUPLICATE	22	4	2
A7	17 Jun 2025	18	KT	LAB DUPLICATE	2	2	2
A7	24 Jun 2025	18	NCD	LAB DUPLICATE	22	4	2
A7	30 Jun 2025	18	JF	LAB DUPLICATE	80	10	2
C7	02 Jun 2025	18	KT	LAB DUPLICATE	2	2	2
C7	09 Jun 2025	18	BS	LAB DUPLICATE	2	2	2
C7	17 Jun 2025	18	KT	LAB DUPLICATE	2	2	2
C7	24 Jun 2025	18	NCD	LAB DUPLICATE	14	2	2
C7	30 Jun 2025	18	JF	LAB DUPLICATE	14	2	2
C8	02 Jun 2025	12	KT	LAB DUPLICATE	2	2	2
C8	09 Jun 2025	12	BS	LAB DUPLICATE	2	2	2
C8	17 Jun 2025	12	KT	LAB DUPLICATE	2	2	2
C8	24 Jun 2025	12	NCD	LAB DUPLICATE	2	2	2
C8	30 Jun 2025	12	JF	LAB DUPLICATE	2	2	2
D12	04 Jun 2025		JF	LAB DUPLICATE	20	4	2
D12	04 Jun 2025		JF	FIELD DUPLICATE	20	2	2
D12	11 Jun 2025		JF	FIELD DUPLICATE	2	2	2
D12	11 Jun 2025		JF	LAB DUPLICATE	4	2	2
D12	16 Jun 2025		KT	LAB DUPLICATE	2	2	2
D12	16 Jun 2025		KT	FIELD DUPLICATE	20	2	2
D12	25 Jun 2025		ADG	FIELD DUPLICATE	200	2	8
D12	25 Jun 2025		ADG	LAB DUPLICATE	200	4	2

ns = not sampled
ND = no data

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APPENDIX B

New 2019 Ocean Plan
Water Quality Objectives

Shore Stations

Table B.1

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the PLOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 6 weeks unless otherwise noted (*). Values >30 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8	D9	D10	D11	D12
01 Jun 2025	2	2	2	6	3	4	16	3
02 Jun 2025	2	2	2	6	3	4	16	3
03 Jun 2025	2	2	2	6	3	4	16	3
04 Jun 2025	2	2	2	5	4	4	12	3
05 Jun 2025	2	2	2	5	4	4	12	3
06 Jun 2025	2	2	2	5	4	4	12	3
07 Jun 2025	2	2	2	5	4	4	12	3
08 Jun 2025	2	2	2	5	4	4	12	3
09 Jun 2025	2	2	2	5	4	4	12	3
10 Jun 2025	2	2	2	5	4	4	12	3
11 Jun 2025	2	2	2	4	3	4	5	3
12 Jun 2025	2	2	2	4	3	4	5	3
13 Jun 2025	2	2	2	4	3	4	5	3
14 Jun 2025	2	2	2	4	3	4	5	3
15 Jun 2025	2	2	2	4	3	4	5	3
16 Jun 2025	2	2	3	3	3	3	6	3
17 Jun 2025	2	2	3	3	3	3	6	3
18 Jun 2025	2	2	3	4	3	4	7	3
19 Jun 2025	2	2	3	4	3	4	7	3
20 Jun 2025	2	2	3	4	3	4	7	3
21 Jun 2025	2	2	3	4	3	4	7	3
22 Jun 2025	2	2	3	4	3	4	7	3
23 Jun 2025	2	2	3	4	3	4	7	3
24 Jun 2025	2	2	3	4	3	4	7	3
25 Jun 2025	2	2	4	4	2	4	11	3
26 Jun 2025	2	2	4	4	2	4	11	3
27 Jun 2025	2	2	4	4	2	4	11	3
28 Jun 2025	2	2	4	4	2	4	11	3
29 Jun 2025	2	2	4	4	2	4	11	3
30 Jun 2025	2	2	4	4	2	4	11	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
June	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Table B.3

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

Date	D4	D5	D7	D8	D9	D10	D11	D12
01 Jun 2025	*20	***200**	***110**	***200**	*20	***110**	***120**	*20
02 Jun 2025	*20	***200**	***110**	***200**	*20	***110**	***120**	*20
03 Jun 2025	*20	***200**	***110**	***200**	*20	***110**	***120**	*20
04 Jun 2025	20	**200**	**200**	**200**	20	20	40	20
05 Jun 2025	20	**200**	**200**	**200**	20	20	40	20
06 Jun 2025	*11	***200**	***200**	***200**	*14	***110**	***120**	*20
07 Jun 2025	*11	***200**	***200**	***200**	*14	***110**	***120**	*20
08 Jun 2025	*11	***200**	***200**	***200**	*14	***110**	***120**	*20
09 Jun 2025	*11	***200**	***200**	***200**	*14	***110**	***120**	*20
10 Jun 2025	*11	***200**	***200**	***200**	*14	***110**	***120**	*20
11 Jun 2025	20	**200**	**200**	**200**	20	**200**	40	20
12 Jun 2025	20	**200**	**200**	**200**	20	**200**	40	20
13 Jun 2025	*11	***110**	***200**	***110**	*24	***110**	*40	*20
14 Jun 2025	*11	***110**	***200**	***110**	*24	***110**	*40	*20
15 Jun 2025	*11	***110**	***200**	***110**	*24	***110**	*40	*20
16 Jun 2025	20	**200**	**200**	20	8	20	40	20
17 Jun 2025	20	**200**	**200**	20	8	20	40	20
18 Jun 2025	20	**200**	**200**	20	8	20	40	20
19 Jun 2025	20	**200**	**200**	20	8	20	40	20
20 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
21 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
22 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
23 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
24 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
25 Jun 2025	20	**200**	**200**	20	40	**200**	**80**	20
26 Jun 2025	20	**200**	**200**	20	40	**200**	**80**	20
27 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
28 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
29 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11
30 Jun 2025	*20	***110**	***110**	*20	*22	***110**	*60	*11

* 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
June	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled
ND = no data

Kelp Stations

Table B.5

Summary of compliance with the Ocean Plan's 6-week Geometric Mean standard for *Enterococcus* at the PLOO 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 Jun 2025	2	2	2	2	2	2	2	2
02 Jun 2025	2	2	2	2	2	2	2	2
03 Jun 2025	2	2	2	2	2	2	2	2
04 Jun 2025	2	2	2	2	2	2	2	2
05 Jun 2025	2	2	2	2	2	2	2	2
06 Jun 2025	2	2	2	2	2	2	2	2
07 Jun 2025	2	2	2	2	2	2	2	2
08 Jun 2025	2	2	2	2	2	2	2	2
09 Jun 2025	2	2	2	2	2	2	2	2
10 Jun 2025	2	2	2	2	2	2	2	2
11 Jun 2025	2	2	2	2	2	2	2	2
12 Jun 2025	2	2	2	2	2	2	2	2
13 Jun 2025	2	2	2	2	2	2	2	2
14 Jun 2025	2	2	2	2	2	2	2	2
15 Jun 2025	2	2	2	2	2	2	2	2
16 Jun 2025	2	2	2	2	2	2	2	2
17 Jun 2025	2	2	2	2	2	2	2	2
18 Jun 2025	2	2	2	2	2	2	2	2
19 Jun 2025	2	2	2	2	2	2	2	2
20 Jun 2025	2	2	2	2	2	2	2	2
21 Jun 2025	2	2	2	2	2	2	2	2
22 Jun 2025	2	2	2	2	2	2	2	2
23 Jun 2025	2	2	2	2	2	2	2	2
24 Jun 2025	2	2	2	2	2	2	2	2
25 Jun 2025	2	2	2	2	2	2	2	2
26 Jun 2025	2	2	2	2	2	2	2	2
27 Jun 2025	2	2	2	2	2	2	2	2
28 Jun 2025	2	2	2	2	2	2	2	2
29 Jun 2025	2	2	2	2	2	2	2	2
30 Jun 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
June	IC	IC	IC	IC	IC	IC	IC	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.

	A1			A6			A7			C4			C5			C6			C7			C8		
Date	1m	12m	18m	1m	12m	18m	1m	12m	18m	1m	3m	9m	1m	3m	9m	1m	3m	9m	1m	12m	18m	1m	12m	18m
01 Jun 2025	*2	*2	*2	*2	*2	*5	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*7	*2	*2	*2	*2	*2
02 Jun 2025	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
03 Jun 2025	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
04 Jun 2025	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
05 Jun 2025	*2	*2	*2	*2	*2	*5	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
06 Jun 2025	*2	*2	*2	*2	*2	*5	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
07 Jun 2025	*2	*2	*2	*2	*2	*5	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
08 Jun 2025	*2	*2	*2	*2	*2	*5	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2	*2
09 Jun 2025	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
10 Jun 2025	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
11 Jun 2025	*2	*2	*2	*2	*2	*2	*11	*2	*4	*2	*2	*2	*2	*2	*2	*11	*2	*2	*2	*2	*2	*2	*2	*2
12 Jun 2025	*2	*2	*2	*2	*2	*2	*11	*2	*4	*2	*2	*2	*2	*2	*2	*11	*2	*2	*2	*2	*2	*2	*2	*2
13 Jun 2025	*2	*2	*2	*2	*2	*2	*11	*2	*4	*2	*2	*2	*2	*2	*2	*11	*2	*2	*2	*2	*2	*2	*2	*2
14 Jun 2025	*2	*2	*2	*2	*2	*2	*11	*2	*4	*2	*2	*2	*2	*2	*2	*11	*2	*2	*2	*2	*2	*2	*2	*2
15 Jun 2025	*2	*2	*2	*2	*2	*2	*11	*2	*4	*2	*2	*2	*2	*2	*2	*11	*2	*2	*2	*2	*2	*2	*2	*2
16 Jun 2025	*2	*2	*2	*2	*2	*2	*11	*2	*4	*2	*2	*2	*2	*2	*2	*11	*2	*2	*2	*2	*2	*2	*2	*2
17 Jun 2025	2	2	2	2	2	2	6	2	2	2	2	2	2	2	2	6	2	2	2	2	2	2	2	2
18 Jun 2025	*2	*2	*3	*2	*2	*2	*13	*2	*4	*3	*2	*2	*2	*2	*2	*13	*2	*2	*2	*2	*2	*2	*2	*2
19 Jun 2025	*2	*2	*3	*2	*2	*2	*13	*2	*4	*3	*2	*2	*2	*2	*2	*13	*2	*2	*2	*2	*2	*2	*2	*2
20 Jun 2025	*2	*2	*3	*2	*2	*2	*13	*2	*4	*3	*2	*2	*2	*2	*2	*13	*2	*2	*2	*2	*2	*2	*2	*2
21 Jun 2025	*2	*2	*3	*2	*2	*2	*13	*2	*4	*3	*2	*2	*2	*2	*2	*13	*2	*2	*2	*2	*2	*2	*2	*2
22 Jun 2025	*2	*2	*3	*2	*2	*2	*13	*2	*4	*3	*2	*2	*2	*2	*2	*13	*2	*2	*2	*2	*2	*2	*2	*2
23 Jun 2025	*2	*2	*3	*2	*2	*2	*13	*2	*4	*3	*2	*2	*2	*2	*2	*13	*2	*2	*2	*2	*2	*2	*2	*2
24 Jun 2025	2	2	4	2	2	2	6	2	6	2	2	2	2	2	2	20	2	2	2	2	2	2	2	2
25 Jun 2025	2	2	4	2	2	2	6	2	6	2	2	2	2	2	2	20	2	2	2	2	2	2	2	2
26 Jun 2025	*2	*2	*12	*2	*2	*2	*4	*2	*8	*2	*2	*2	*2	*2	*2	*13	*11	*11	*2	*2	*2	*2	*2	*2
27 Jun 2025	*2	*2	*12	*2	*2	*2	*4	*2	*8	*2	*2	*2	*2	*2	*2	*13	*11	*11	*2	*2	*2	*2	*2	*2
28 Jun 2025	*2	*2	*12	*2	*2	*2	*4	*2	*8	*2	*2	*2	*2	*2	*2	*13	*11	*11	*2	*2	*2	*2	*2	*2
29 Jun 2025	*2	*2	*12	*2	*2	*2	*4	*2	*8	*2	*2	*2	*2	*2	*2	*13	*11	*11	*2	*2	*2	*2	*2	*2
30 Jun 2025	2	2	8	2	2	2	6	2	14	2	2	2	2	2	2	20	20	2	2	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

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