



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

**POINT LOMA  
WASTEWATER TREATMENT PLANT**

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

## **MARCH 2022**

Environmental Monitoring and Technical Services  
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April 30, 2022

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 March 2022 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 Public Utilities Director

PV/rk

cc: U.S. Environmental Protection Agency, Region 9



## INTRODUCTION

Monthly reports of water quality and ocean conditions for the San Diego coastal region surrounding the Point Loma Ocean Outfall are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2017-0007, NPDES Permit No. CA0107409 for the Point Loma Wastewater Treatment Plant (PLWTP), Point Loma Ocean Outfall (PLOO). This report includes receiving waters monitoring data collected from all shore, kelp and offshore stations specified in the above order. Data for influent and effluent monitoring activities for the PLWTP are presented in separate reports.

## MATERIALS AND METHODS

### ***Shore Stations***

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

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

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

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

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

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

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

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

### ***Offshore Stations***

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

Seawater samples for bacteriological analyses at the offshore stations are collected using a CTD-integrated rosette sampler with Niskin bottles. Profiles of the various physical/chemical parameters (listed above) are taken using a Sea-Bird CTD. Additionally, data for depths closest to those at which bacteriological samples were collected are extracted from the CTD profiles and presented with the bacteriological data.

### ***Bacteriological Reporting and Quality Assurance***

Estimated values for bacteriological analyses are denoted by greater than (>), less than (<), or estimated (e) qualifiers and result from plates with colony counts above or below the permissible counting limits established in Bordner et al. (1978)<sup>1</sup>. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

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

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

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

### **Single Sample Maximums:**

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

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

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987<sup>2</sup>) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2022 Quality Assurance Report, which will be completed in March 2023.

## SUMMARY OF RESULTS

As of October 2020, new 2019 Ocean Plan Water Quality Objectives are included for a six-week rolling geometric mean of *Enterococcus* density, which shall not exceed 30 cfu/100 ml, and a Statistical Threshold Value (STV) for *Enterococcus*, which shall not exceed 110 cfu/100 ml for more than 10% of samples per month (see Appendix B).

### ***Shore Stations***

- The eight shore stations (D4, D5, D7, D8-B, D9, D10, D11, D12) were sampled on March 2, 9, 16, 23, and 28.
- During March, one of the eight shore stations was out of compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
  - o The Single Sample Maximum standard for *Enterococcus* was exceeded at station D8-B.
- Nothing of sewage origin was observed at PLOO shore stations in March.
- 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 March 1, 8, 16, 22, and 30.

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

- During March, each of the kelp stations was in compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards.
- Water column temperatures ranged from 11.44 to 15.86°C. The difference between surface and bottom waters ranged from 0.18 to 4.37°C.
- Chlorophyll *a* concentrations ranged from 0.75 to 9.84 µg/L.
- Nothing of sewage origin was observed at PLOO kelp stations in March.

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

- Quarterly water quality sampling was not conducted during March at the offshore stations. The next quarterly sampling is scheduled for May 2022.



## TABLES AND FIGURES





**Figure 1.1** Station Map



# Shore Stations



**Table 2.1**

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 geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (\*). Values >1,000 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Mar 2022	6	13	8	35	15	58	133	8
02 Mar 2022	7	9	6	41	14	46	113	6
03 Mar 2022	7	9	6	41	14	46	113	6
04 Mar 2022	10	13	8	30	9	56	110	8
05 Mar 2022	10	13	8	30	9	56	110	8
06 Mar 2022	10	13	8	30	9	56	110	8
07 Mar 2022	10	13	8	30	9	56	110	8
08 Mar 2022	10	13	8	30	9	56	110	8
09 Mar 2022	9	11	6	20	7	29	49	6
10 Mar 2022	9	11	6	20	7	29	49	6
11 Mar 2022	13	16	8	30	7	24	47	8
12 Mar 2022	13	16	8	30	7	24	47	8
13 Mar 2022	13	16	8	30	7	24	47	8
14 Mar 2022	13	16	8	30	7	24	47	8
15 Mar 2022	13	16	8	30	7	24	47	8
16 Mar 2022	14	26	11	50	13	32	45	9
17 Mar 2022	14	26	11	50	13	32	45	9
18 Mar 2022	13	24	8	48	12	29	56	8
19 Mar 2022	13	24	8	48	12	29	56	8
20 Mar 2022	13	24	8	48	12	29	56	8
21 Mar 2022	13	24	8	48	12	29	56	8
22 Mar 2022	13	24	8	48	12	29	56	8
23 Mar 2022	10	14	6	25	9	24	38	6
24 Mar 2022	10	14	6	25	9	24	38	6
25 Mar 2022	10	8	4	22	11	14	14	4
26 Mar 2022	10	8	4	22	11	14	14	4
27 Mar 2022	10	8	4	22	11	14	14	4
28 Mar 2022	7	9	4	22	8	15	15	5
29 Mar 2022	7	9	4	22	8	15	15	5
30 Mar 2022	7	9	4	22	8	15	15	5
31 Mar 2022	7	9	4	22	8	15	15	5

\* Geometric mean calculated using n<5

ns = not sampled

**Table 2.2**

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the PLOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (\*). Values >200 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Mar 2022	3	3	2	6	4	15	20	2
02 Mar 2022	2	3	2	8	4	14	14	2
03 Mar 2022	2	3	2	8	4	14	14	2
04 Mar 2022	3	2	2	6	4	15	10	2
05 Mar 2022	3	2	2	6	4	15	10	2
06 Mar 2022	3	2	2	6	4	15	10	2
07 Mar 2022	3	2	2	6	4	15	10	2
08 Mar 2022	3	2	2	6	4	15	10	2
09 Mar 2022	2	3	2	5	4	10	7	2
10 Mar 2022	2	3	2	5	4	10	7	2
11 Mar 2022	3	3	2	6	4	8	5	2
12 Mar 2022	3	3	2	6	4	8	5	2
13 Mar 2022	3	3	2	6	4	8	5	2
14 Mar 2022	3	3	2	6	4	8	5	2
15 Mar 2022	3	3	2	6	4	8	5	2
16 Mar 2022	2	4	2	14	6	10	7	3
17 Mar 2022	2	4	2	14	6	10	7	3
18 Mar 2022	3	5	2	12	4	11	9	2
19 Mar 2022	3	5	2	12	4	11	9	2
20 Mar 2022	3	5	2	12	4	11	9	2
21 Mar 2022	3	5	2	12	4	11	9	2
22 Mar 2022	3	5	2	12	4	11	9	2
23 Mar 2022	2	4	2	9	3	8	7	2
24 Mar 2022	2	4	2	9	3	8	7	2
25 Mar 2022	2	4	2	12	3	5	4	2
26 Mar 2022	2	4	2	12	3	5	4	2
27 Mar 2022	2	4	2	12	3	5	4	2
28 Mar 2022	2	5	2	14	3	6	4	2
29 Mar 2022	2	5	2	14	3	6	4	2
30 Mar 2022	2	5	2	14	3	6	4	2
31 Mar 2022	2	5	2	14	3	6	4	2

\* Geometric mean calculated using n<5

ns = not sampled

**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 30 days unless otherwise noted (\*). Values >35 CFU/100 mL exceed the standard.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Mar 2022	2	2	3	9	4	26	30	3
02 Mar 2022	2	2	3	11	3	26	21	3
03 Mar 2022	2	2	3	11	3	26	21	3
04 Mar 2022	2	2	3	9	3	29	17	3
05 Mar 2022	2	2	3	9	3	29	17	3
06 Mar 2022	2	2	3	9	3	29	17	3
07 Mar 2022	2	2	3	9	3	29	17	3
08 Mar 2022	2	2	3	9	3	29	17	3
09 Mar 2022	2	2	3	7	3	17	12	3
10 Mar 2022	2	2	3	7	3	17	12	3
11 Mar 2022	2	2	3	9	3	19	11	3
12 Mar 2022	2	2	3	9	3	19	11	3
13 Mar 2022	2	2	3	9	3	19	11	3
14 Mar 2022	2	2	3	9	3	19	11	3
15 Mar 2022	2	2	3	9	3	19	11	3
16 Mar 2022	2	3	5	18	4	24	13	3
17 Mar 2022	2	3	5	19	4	24	13	3
18 Mar 2022	2	3	6	15	4	23	13	2
19 Mar 2022	2	3	6	15	4	23	13	2
20 Mar 2022	2	3	6	15	4	23	13	2
21 Mar 2022	2	3	6	15	4	23	13	2
22 Mar 2022	2	3	6	15	4	23	13	2
23 Mar 2022	2	2	5	11	3	14	10	2
24 Mar 2022	2	2	5	11	3	14	10	2
25 Mar 2022	2	3	4	15	4	9	6	2
26 Mar 2022	2	3	4	15	4	9	6	2
27 Mar 2022	2	3	4	15	4	9	5	2
28 Mar 2022	2	2	4	11	3	9	7	2
29 Mar 2022	2	2	4	11	3	9	7	2
30 Mar 2022	2	2	4	11	3	9	7	2
31 Mar 2022	2	2	4	11	3	9	7	2

\* Geometric mean calculated using n<5

ns = not sampled

**Table 2.4**

Summary of compliance at the PLOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
09 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
16 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
23 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
28 Mar 2022	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 at the PLOO shore stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
09 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
16 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
23 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
28 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.6**

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

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
09 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
16 Mar 2022	IC	IC	IC	E	IC	IC	IC	IC
17 Mar 2022	ns	ns	ns	IC	ns	ns	ns	ns
23 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
28 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 2.7**

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

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
02 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
09 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
16 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
23 Mar 2022	IC	IC	IC	IC	IC	IC	IC	IC
28 Mar 2022	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 total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Enter) are reported as CFU/100 mL. The fecal:total coliform ratio (F:T) is unitless. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Enter	F:T
D4	02 Mar 2022	734	<20	<2	4e	0.10
D4	09 Mar 2022	818	6e	<2	<2	0.33
D4	16 Mar 2022	826	<20	<2	<2	0.10
D4	23 Mar 2022	813	4e	2e	<2	0.50
D4	28 Mar 2022	1017	<2	<2	<2	1.00
D5	02 Mar 2022	751	<2	<2	<2	1.00
D5	09 Mar 2022	800	4e	4e	<2	1.00
D5	16 Mar 2022	838	<200	22e	6e	0.11
D5	23 Mar 2022	828	2e	<2	<2	1.00
D5	28 Mar 2022	1041	20e	8e	<2	0.40
D7	02 Mar 2022	820	2e	<2	2e	1.00
D7	09 Mar 2022	855	2e	<2	<2	1.00
D7	16 Mar 2022	906	40e	2e	34e	0.05
D7	23 Mar 2022	857	<2	<2	<2	1.00
D7	28 Mar 2022	943	2e	<2	<2	1.00
D8-B	02 Mar 2022	844	80e	<20	28e	0.25
D8-B	09 Mar 2022	916	4e	<2	<2	0.50
D8-B	16 Mar 2022	924	400e	300e	220e	0.75
D8-B	17 Mar 2022	1156	ns	ns	28e	ns
D8-B	23 Mar 2022	918	2e	2e	<2	1.00
D8-B	28 Mar 2022	929	20e	22e	<2	1.10
D9	02 Mar 2022	856	8e	<2	2e	0.25
D9	09 Mar 2022	928	<2	<2	<2	1.00
D9	16 Mar 2022	938	<200	16e	20e	0.08
D9	23 Mar 2022	934	4e	2e	<2	0.50
D9	28 Mar 2022	918	<2	<2	<2	1.00
D10	02 Mar 2022	907	18e	10e	26e	0.56
D10	09 Mar 2022	1010	<2	<2	<2	1.00
D10	16 Mar 2022	953	100e	18e	56	0.18
D10	23 Mar 2022	950	10e	<2	<2	0.20
D10	28 Mar 2022	853	22e	16e	8e	0.73
D11	02 Mar 2022	929	60e	4e	4e	0.07
D11	09 Mar 2022	1025	2e	<2	2e	1.00
D11	16 Mar 2022	1009	40e	18e	34e	0.45
D11	23 Mar 2022	1028	8e	<2	<2	0.25
D11	28 Mar 2022	841	<20	2e	32e	0.10
D12	02 Mar 2022	1002	<2	<2	<2	1.00
D12	09 Mar 2022	1109	<2	<2	<2	1.00
D12	16 Mar 2022	1044	<20	4e	2e	0.20
D12	23 Mar 2022	1058	<2	<2	<2	1.00
D12	28 Mar 2022	817	<20	2e	4e	0.10

ns = not sampled

ND = no data

**Comments**

Station	Date	Depth	Parameter	Comments
D8-B	17 Mar 2022			Resample

**Table 2.9**

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

Station	Date	Parameter	Value
D4	02 Mar 2022	Arrive Time	734
D4	02 Mar 2022	Weather	Sunny
D4	02 Mar 2022	Wind Speed (kts)	1.9
D4	02 Mar 2022	Wind Dir	SW
D4	02 Mar 2022	Animal Life	
D4	02 Mar 2022	Floatables	Foam
D4	02 Mar 2022	Water Color	Green
D4	02 Mar 2022	Current Direction	S
D4	02 Mar 2022	Water Temp (C)	14.2
D4	02 Mar 2022	Wave Height Low (ft)	3
D4	02 Mar 2022	High Tide (ft)	6.08
D4	02 Mar 2022	High Tide Time	829
D4	02 Mar 2022	Low Tide (ft)	0.74
D4	02 Mar 2022	Low Tide Time	229
D4	02 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-6; Trash-1; Kelp; Algae
D4	09 Mar 2022	Arrive Time	818
D4	09 Mar 2022	Weather	Sunny
D4	09 Mar 2022	Wind Speed (kts)	7.21
D4	09 Mar 2022	Wind Dir	E
D4	09 Mar 2022	Animal Life	
D4	09 Mar 2022	Floatables	None
D4	09 Mar 2022	Water Color	Blue
D4	09 Mar 2022	Current Direction	N
D4	09 Mar 2022	Water Temp (C)	15.4
D4	09 Mar 2022	Wave Height Low (ft)	1
D4	09 Mar 2022	High Tide (ft)	4.17
D4	09 Mar 2022	High Tide Time	39
D4	09 Mar 2022	Low Tide (ft)	1.1
D4	09 Mar 2022	Low Tide Time	858
D4	09 Mar 2022	Comments	Algae; Seagrass; Kelp
D4	16 Mar 2022	Arrive Time	826
D4	16 Mar 2022	Weather	Cloudy
D4	16 Mar 2022	Wind Speed (kts)	2.9
D4	16 Mar 2022	Wind Dir	SW
D4	16 Mar 2022	Animal Life	
D4	16 Mar 2022	Floatables	Foam
D4	16 Mar 2022	Water Color	Green
D4	16 Mar 2022	Current Direction	N
D4	16 Mar 2022	Water Temp (C)	16.4
D4	16 Mar 2022	Wave Height Low (ft)	4
D4	16 Mar 2022	High Tide (ft)	5.45
D4	16 Mar 2022	High Tide Time	836
D4	16 Mar 2022	Low Tide (ft)	1.13
D4	16 Mar 2022	Low Tide Time	241
D4	16 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-1; Boater/Kayaker-3; Trash-1; Kelp; Algae
D4	23 Mar 2022	Arrive Time	813
D4	23 Mar 2022	Weather	Sunny
D4	23 Mar 2022	Wind Speed (kts)	1.7
D4	23 Mar 2022	Wind Dir	E
D4	23 Mar 2022	Animal Life	Bird-7; Dolphin-3
D4	23 Mar 2022	Floatables	None
D4	23 Mar 2022	Water Color	Blue

Station	Date	Parameter	Value
D4	23 Mar 2022	Current Direction	N
D4	23 Mar 2022	Water Temp (C)	15.2
D4	23 Mar 2022	Wave Height Low (ft)	2
D4	23 Mar 2022	High Tide (ft)	5.12
D4	23 Mar 2022	High Tide Time	33
D4	23 Mar 2022	Low Tide (ft)	0.19
D4	23 Mar 2022	Low Tide Time	813
D4	23 Mar 2022	Comments	Water clear; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-5
D4	28 Mar 2022	Arrive Time	1017
D4	28 Mar 2022	Weather	Sunny
D4	28 Mar 2022	Wind Speed (kts)	16.8
D4	28 Mar 2022	Wind Dir	S
D4	28 Mar 2022	Animal Life	
D4	28 Mar 2022	Floatables	None
D4	28 Mar 2022	Water Color	Green
D4	28 Mar 2022	Current Direction	N
D4	28 Mar 2022	Water Temp (C)	17.5
D4	28 Mar 2022	Wave Height Low (ft)	1
D4	28 Mar 2022	High Tide (ft)	5.3
D4	28 Mar 2022	High Tide Time	704
D4	28 Mar 2022	Low Tide (ft)	1.72
D4	28 Mar 2022	Low Tide Time	114
D4	28 Mar 2022	Comments	Seagrass; Algae
D5	02 Mar 2022	Arrive Time	751
D5	02 Mar 2022	Weather	Sunny
D5	02 Mar 2022	Wind Speed (kts)	0
D5	02 Mar 2022	Wind Dir	
D5	02 Mar 2022	Animal Life	
D5	02 Mar 2022	Floatables	Foam
D5	02 Mar 2022	Water Color	Green
D5	02 Mar 2022	Current Direction	S
D5	02 Mar 2022	Water Temp (C)	15.3
D5	02 Mar 2022	Wave Height Low (ft)	4
D5	02 Mar 2022	High Tide (ft)	6.08
D5	02 Mar 2022	High Tide Time	829
D5	02 Mar 2022	Low Tide (ft)	0.74
D5	02 Mar 2022	Low Tide Time	229
D5	02 Mar 2022	Comments	Kelp; Algae
D5	09 Mar 2022	Arrive Time	800
D5	09 Mar 2022	Weather	Sunny
D5	09 Mar 2022	Wind Speed (kts)	0.7
D5	09 Mar 2022	Wind Dir	S
D5	09 Mar 2022	Animal Life	Bird-15; Seagull-2
D5	09 Mar 2022	Floatables	None
D5	09 Mar 2022	Water Color	Blue
D5	09 Mar 2022	Current Direction	N
D5	09 Mar 2022	Water Temp (C)	14.2
D5	09 Mar 2022	Wave Height Low (ft)	0
D5	09 Mar 2022	High Tide (ft)	4.17
D5	09 Mar 2022	High Tide Time	39
D5	09 Mar 2022	Low Tide (ft)	1.1
D5	09 Mar 2022	Low Tide Time	858
D5	09 Mar 2022	Comments	Algae; Seagrass; Kelp
D5	16 Mar 2022	Arrive Time	838
D5	16 Mar 2022	Weather	Cloudy
D5	16 Mar 2022	Wind Speed (kts)	1.5

Station	Date	Parameter	Value
D5	16 Mar 2022	Wind Dir	SW
D5	16 Mar 2022	Animal Life	Seagull-1
D5	16 Mar 2022	Floatables	Foam; Film
D5	16 Mar 2022	Water Color	Brown
D5	16 Mar 2022	Current Direction	N
D5	16 Mar 2022	Water Temp (C)	17.2
D5	16 Mar 2022	Wave Height Low (ft)	3
D5	16 Mar 2022	High Tide (ft)	5.45
D5	16 Mar 2022	High Tide Time	836
D5	16 Mar 2022	Low Tide (ft)	1.13
D5	16 Mar 2022	Low Tide Time	241
D5	16 Mar 2022	Comments	Kelp; Algae; Seagrass
D5	23 Mar 2022	Arrive Time	828
D5	23 Mar 2022	Weather	Sunny
D5	23 Mar 2022	Wind Speed (kts)	1.31
D5	23 Mar 2022	Wind Dir	NW
D5	23 Mar 2022	Animal Life	Bird-7
D5	23 Mar 2022	Floatables	None
D5	23 Mar 2022	Water Color	Green
D5	23 Mar 2022	Current Direction	N
D5	23 Mar 2022	Water Temp (C)	15.5
D5	23 Mar 2022	Wave Height Low (ft)	1
D5	23 Mar 2022	High Tide (ft)	5.12
D5	23 Mar 2022	High Tide Time	33
D5	23 Mar 2022	Low Tide (ft)	0.19
D5	23 Mar 2022	Low Tide Time	813
D5	23 Mar 2022	Comments	Seagrass; Algae; Kelp
D5	28 Mar 2022	Arrive Time	1041
D5	28 Mar 2022	Weather	Sunny
D5	28 Mar 2022	Wind Speed (kts)	8.4
D5	28 Mar 2022	Wind Dir	S
D5	28 Mar 2022	Animal Life	Bird-7; Pelican-5; Seagull-1
D5	28 Mar 2022	Floatables	None
D5	28 Mar 2022	Water Color	Green
D5	28 Mar 2022	Current Direction	N
D5	28 Mar 2022	Water Temp (C)	17.4
D5	28 Mar 2022	Wave Height Low (ft)	3
D5	28 Mar 2022	High Tide (ft)	5.3
D5	28 Mar 2022	High Tide Time	704
D5	28 Mar 2022	Low Tide (ft)	1.72
D5	28 Mar 2022	Low Tide Time	114
D5	28 Mar 2022	Comments	Algae; Kelp
D7	02 Mar 2022	Arrive Time	820
D7	02 Mar 2022	Weather	Sunny
D7	02 Mar 2022	Wind Speed (kts)	1.8
D7	02 Mar 2022	Wind Dir	W
D7	02 Mar 2022	Animal Life	Bird-1; Seagull-2
D7	02 Mar 2022	Floatables	Foam
D7	02 Mar 2022	Water Color	Green
D7	02 Mar 2022	Current Direction	N
D7	02 Mar 2022	Water Temp (C)	15.5
D7	02 Mar 2022	Wave Height Low (ft)	5
D7	02 Mar 2022	High Tide (ft)	6.08
D7	02 Mar 2022	High Tide Time	829
D7	02 Mar 2022	Low Tide (ft)	0.74
D7	02 Mar 2022	Low Tide Time	229
D7	02 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-7; Trash-1; Kelp; Algae; Person/Walker/Jogger-1

Station	Date	Parameter	Value
D7	09 Mar 2022	Arrive Time	855
D7	09 Mar 2022	Weather	Sunny
D7	09 Mar 2022	Wind Speed (kts)	1.3
D7	09 Mar 2022	Wind Dir	SW
D7	09 Mar 2022	Animal Life	Seagull-12
D7	09 Mar 2022	Floatables	None
D7	09 Mar 2022	Water Color	Blue
D7	09 Mar 2022	Current Direction	N
D7	09 Mar 2022	Water Temp (C)	16
D7	09 Mar 2022	Wave Height Low (ft)	1
D7	09 Mar 2022	High Tide (ft)	4.17
D7	09 Mar 2022	High Tide Time	39
D7	09 Mar 2022	Low Tide (ft)	1.1
D7	09 Mar 2022	Low Tide Time	858
D7	09 Mar 2022	Comments	Water clear; Trash-1; Algae; Kelp; Person/Walker/Jogger-1
D7	16 Mar 2022	Arrive Time	906
D7	16 Mar 2022	Weather	Cloudy
D7	16 Mar 2022	Wind Speed (kts)	1.8
D7	16 Mar 2022	Wind Dir	SW
D7	16 Mar 2022	Animal Life	Foam; Film
D7	16 Mar 2022	Floatables	Green
D7	16 Mar 2022	Water Color	
D7	16 Mar 2022	Current Direction	N
D7	16 Mar 2022	Water Temp (C)	17
D7	16 Mar 2022	Wave Height Low (ft)	4
D7	16 Mar 2022	High Tide (ft)	5.45
D7	16 Mar 2022	High Tide Time	836
D7	16 Mar 2022	Low Tide (ft)	1.13
D7	16 Mar 2022	Low Tide Time	241
D7	16 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-7; Trash-1; Algae; Kelp; Person/Walker/Jogger-4
D7	23 Mar 2022	Arrive Time	857
D7	23 Mar 2022	Weather	Sunny
D7	23 Mar 2022	Wind Speed (kts)	0
D7	23 Mar 2022	Wind Dir	
D7	23 Mar 2022	Animal Life	
D7	23 Mar 2022	Floatables	None
D7	23 Mar 2022	Water Color	Green
D7	23 Mar 2022	Current Direction	S
D7	23 Mar 2022	Water Temp (C)	15.9
D7	23 Mar 2022	Wave Height Low (ft)	1
D7	23 Mar 2022	High Tide (ft)	5.12
D7	23 Mar 2022	High Tide Time	33
D7	23 Mar 2022	Low Tide (ft)	0.19
D7	23 Mar 2022	Low Tide Time	813
D7	23 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-14; Trash-1; Algae; Seagrass; Kelp
D7	28 Mar 2022	Arrive Time	943
D7	28 Mar 2022	Weather	Cloudy
D7	28 Mar 2022	Wind Speed (kts)	10.5
D7	28 Mar 2022	Wind Dir	SE
D7	28 Mar 2022	Animal Life	
D7	28 Mar 2022	Floatables	Foam
D7	28 Mar 2022	Water Color	Green
D7	28 Mar 2022	Current Direction	N
D7	28 Mar 2022	Water Temp (C)	17.9
D7	28 Mar 2022	Wave Height Low (ft)	2

Station	Date	Parameter	Value
D7	28 Mar 2022	High Tide (ft)	5.3
D7	28 Mar 2022	High Tide Time	704
D7	28 Mar 2022	Low Tide (ft)	1.72
D7	28 Mar 2022	Low Tide Time	114
D7	28 Mar 2022	Comments	Algae; Kelp
D8-B	02 Mar 2022	Arrive Time	844
D8-B	02 Mar 2022	Weather	Sunny
D8-B	02 Mar 2022	Wind Speed (kts)	2.2
D8-B	02 Mar 2022	Wind Dir	NE
D8-B	02 Mar 2022	Animal Life	
D8-B	02 Mar 2022	Floatables	Foam
D8-B	02 Mar 2022	Water Color	Green
D8-B	02 Mar 2022	Current Direction	N
D8-B	02 Mar 2022	Water Temp (C)	16.3
D8-B	02 Mar 2022	Wave Height Low (ft)	4
D8-B	02 Mar 2022	High Tide (ft)	6.08
D8-B	02 Mar 2022	High Tide Time	829
D8-B	02 Mar 2022	Low Tide (ft)	0.74
D8-B	02 Mar 2022	Low Tide Time	229
D8-B	02 Mar 2022	Comments	Water turbid; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-1
D8-B	09 Mar 2022	Arrive Time	916
D8-B	09 Mar 2022	Weather	Sunny
D8-B	09 Mar 2022	Wind Speed (kts)	3.7
D8-B	09 Mar 2022	Wind Dir	SW
D8-B	09 Mar 2022	Animal Life	
D8-B	09 Mar 2022	Floatables	Foam
D8-B	09 Mar 2022	Water Color	Green
D8-B	09 Mar 2022	Current Direction	N
D8-B	09 Mar 2022	Water Temp (C)	16.2
D8-B	09 Mar 2022	Wave Height Low (ft)	1
D8-B	09 Mar 2022	High Tide (ft)	4.17
D8-B	09 Mar 2022	High Tide Time	39
D8-B	09 Mar 2022	Low Tide (ft)	1.1
D8-B	09 Mar 2022	Low Tide Time	858
D8-B	09 Mar 2022	Comments	Algae; Seagrass; Kelp
D8-B	16 Mar 2022	Arrive Time	924
D8-B	16 Mar 2022	Weather	Cloudy
D8-B	16 Mar 2022	Wind Speed (kts)	4.8
D8-B	16 Mar 2022	Wind Dir	W
D8-B	16 Mar 2022	Animal Life	
D8-B	16 Mar 2022	Floatables	Foam; Film
D8-B	16 Mar 2022	Water Color	Green
D8-B	16 Mar 2022	Current Direction	N
D8-B	16 Mar 2022	Water Temp (C)	17.3
D8-B	16 Mar 2022	Wave Height Low (ft)	4
D8-B	16 Mar 2022	High Tide (ft)	5.45
D8-B	16 Mar 2022	High Tide Time	836
D8-B	16 Mar 2022	Low Tide (ft)	1.13
D8-B	16 Mar 2022	Low Tide Time	241
D8-B	16 Mar 2022	Comments	Water turbid; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-2
D8-B	17 Mar 2022	Arrive Time	1156
D8-B	17 Mar 2022	Weather	Sunny
D8-B	17 Mar 2022	Wind Speed (kts)	5.8
D8-B	17 Mar 2022	Wind Dir	S
D8-B	17 Mar 2022	Animal Life	Seagull-3

Station	Date	Parameter	Value
D8-B	17 Mar 2022	Floatables	Foam; Film
D8-B	17 Mar 2022	Water Color	Brown
D8-B	17 Mar 2022	Current Direction	S
D8-B	17 Mar 2022	Water Temp (C)	17.7
D8-B	17 Mar 2022	Wave Height Low (ft)	3
D8-B	17 Mar 2022	High Tide (ft)	5.47
D8-B	17 Mar 2022	High Tide Time	911
D8-B	17 Mar 2022	Low Tide (ft)	0.73
D8-B	17 Mar 2022	Low Tide Time	315
D8-B	17 Mar 2022	Comments	Resample; Water turbid; Trash-1; Algae; Seagrass; Kelp; Person/Walker/Jogger-1
D8-B	23 Mar 2022	Arrive Time	918
D8-B	23 Mar 2022	Weather	Sunny
D8-B	23 Mar 2022	Wind Speed (kts)	1
D8-B	23 Mar 2022	Wind Dir	SW
D8-B	23 Mar 2022	Animal Life	
D8-B	23 Mar 2022	Floatables	Foam
D8-B	23 Mar 2022	Water Color	Green
D8-B	23 Mar 2022	Current Direction	S
D8-B	23 Mar 2022	Water Temp (C)	16.9
D8-B	23 Mar 2022	Wave Height Low (ft)	2
D8-B	23 Mar 2022	High Tide (ft)	5.12
D8-B	23 Mar 2022	High Tide Time	33
D8-B	23 Mar 2022	Low Tide (ft)	0.19
D8-B	23 Mar 2022	Low Tide Time	813
D8-B	23 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-5; Trash-1; Algae; Seagrass; Kelp; Person/Walker/Jogger-2
D8-B	28 Mar 2022	Arrive Time	929
D8-B	28 Mar 2022	Weather	Overcast
D8-B	28 Mar 2022	Wind Speed (kts)	1.9
D8-B	28 Mar 2022	Wind Dir	NE
D8-B	28 Mar 2022	Animal Life	
D8-B	28 Mar 2022	Floatables	None
D8-B	28 Mar 2022	Water Color	Green
D8-B	28 Mar 2022	Current Direction	N
D8-B	28 Mar 2022	Water Temp (C)	17.2
D8-B	28 Mar 2022	Wave Height Low (ft)	3
D8-B	28 Mar 2022	High Tide (ft)	5.3
D8-B	28 Mar 2022	High Tide Time	704
D8-B	28 Mar 2022	Low Tide (ft)	1.72
D8-B	28 Mar 2022	Low Tide Time	114
D8-B	28 Mar 2022	Comments	Kelp; Algae
D9	02 Mar 2022	Arrive Time	856
D9	02 Mar 2022	Weather	Sunny
D9	02 Mar 2022	Wind Speed (kts)	1.5
D9	02 Mar 2022	Wind Dir	NW
D9	02 Mar 2022	Animal Life	
D9	02 Mar 2022	Floatables	Foam
D9	02 Mar 2022	Water Color	Green
D9	02 Mar 2022	Current Direction	N
D9	02 Mar 2022	Water Temp (C)	16.2
D9	02 Mar 2022	Wave Height Low (ft)	4
D9	02 Mar 2022	High Tide (ft)	6.08
D9	02 Mar 2022	High Tide Time	829
D9	02 Mar 2022	Low Tide (ft)	0.74
D9	02 Mar 2022	Low Tide Time	229
D9	02 Mar 2022	Comments	Water turbid; Trash-1; Algae; Person/Walker/Jogger-3

Station	Date	Parameter	Value
D9	09 Mar 2022	Arrive Time	928
D9	09 Mar 2022	Weather	Sunny
D9	09 Mar 2022	Wind Speed (kts)	1.2
D9	09 Mar 2022	Wind Dir	SW
D9	09 Mar 2022	Animal Life	
D9	09 Mar 2022	Floatables	None
D9	09 Mar 2022	Water Color	Green
D9	09 Mar 2022	Current Direction	N
D9	09 Mar 2022	Water Temp (C)	17
D9	09 Mar 2022	Wave Height Low (ft)	1
D9	09 Mar 2022	High Tide (ft)	4.17
D9	09 Mar 2022	High Tide Time	39
D9	09 Mar 2022	Low Tide (ft)	1.1
D9	09 Mar 2022	Low Tide Time	858
D9	09 Mar 2022	Comments	Algae; Seagrass; Kelp
D9	16 Mar 2022	Arrive Time	938
D9	16 Mar 2022	Weather	Cloudy
D9	16 Mar 2022	Wind Speed (kts)	4.9
D9	16 Mar 2022	Wind Dir	SW
D9	16 Mar 2022	Animal Life	
D9	16 Mar 2022	Floatables	Foam; Film
D9	16 Mar 2022	Water Color	Green
D9	16 Mar 2022	Current Direction	N
D9	16 Mar 2022	Water Temp (C)	17.5
D9	16 Mar 2022	Wave Height Low (ft)	5
D9	16 Mar 2022	High Tide (ft)	5.45
D9	16 Mar 2022	High Tide Time	836
D9	16 Mar 2022	Low Tide (ft)	1.13
D9	16 Mar 2022	Low Tide Time	241
D9	16 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-1; Trash-2; Algae; Person/Walker/Jogger-1
D9	23 Mar 2022	Arrive Time	934
D9	23 Mar 2022	Weather	Sunny
D9	23 Mar 2022	Wind Speed (kts)	0
D9	23 Mar 2022	Wind Dir	
D9	23 Mar 2022	Animal Life	Dog-1
D9	23 Mar 2022	Floatables	Foam
D9	23 Mar 2022	Water Color	Green
D9	23 Mar 2022	Current Direction	S
D9	23 Mar 2022	Water Temp (C)	16.7
D9	23 Mar 2022	Wave Height Low (ft)	2
D9	23 Mar 2022	High Tide (ft)	5.12
D9	23 Mar 2022	High Tide Time	33
D9	23 Mar 2022	Low Tide (ft)	0.19
D9	23 Mar 2022	Low Tide Time	813
D9	23 Mar 2022	Comments	Water turbid; Trash-1; Algae; Seagrass; Kelp; Person/Walker/Jogger-6
D9	28 Mar 2022	Arrive Time	918
D9	28 Mar 2022	Weather	Overcast
D9	28 Mar 2022	Wind Speed (kts)	3.9
D9	28 Mar 2022	Wind Dir	S
D9	28 Mar 2022	Animal Life	Seagull-2
D9	28 Mar 2022	Floatables	None
D9	28 Mar 2022	Water Color	Green
D9	28 Mar 2022	Current Direction	N
D9	28 Mar 2022	Water Temp (C)	17.3
D9	28 Mar 2022	Wave Height Low (ft)	2
D9	28 Mar 2022	High Tide (ft)	5.3

Station	Date	Parameter	Value
D9	28 Mar 2022	High Tide Time	704
D9	28 Mar 2022	Low Tide (ft)	1.72
D9	28 Mar 2022	Low Tide Time	114
D9	28 Mar 2022	Comments	Algae
D10	02 Mar 2022	Arrive Time	907
D10	02 Mar 2022	Weather	Sunny
D10	02 Mar 2022	Wind Speed (kts)	3.7
D10	02 Mar 2022	Wind Dir	E
D10	02 Mar 2022	Animal Life	Seagull-8
D10	02 Mar 2022	Floatables	Foam
D10	02 Mar 2022	Water Color	Green
D10	02 Mar 2022	Current Direction	N
D10	02 Mar 2022	Water Temp (C)	17
D10	02 Mar 2022	Wave Height Low (ft)	3
D10	02 Mar 2022	High Tide (ft)	6.08
D10	02 Mar 2022	High Tide Time	829
D10	02 Mar 2022	Low Tide (ft)	0.74
D10	02 Mar 2022	Low Tide Time	229
D10	02 Mar 2022	Comments	Water clear; Boogie boarder/Swimmer-2; Surfer/Paddle boarder-9; Trash-1; Kelp; Seagrass; Debris; Person/Walker/Jogger-11
D10	09 Mar 2022	Arrive Time	1010
D10	09 Mar 2022	Weather	Sunny
D10	09 Mar 2022	Wind Speed (kts)	6.3
D10	09 Mar 2022	Wind Dir	S
D10	09 Mar 2022	Animal Life	Seagull-3
D10	09 Mar 2022	Floatables	None
D10	09 Mar 2022	Water Color	Green
D10	09 Mar 2022	Current Direction	N
D10	09 Mar 2022	Water Temp (C)	17.7
D10	09 Mar 2022	Wave Height Low (ft)	1
D10	09 Mar 2022	High Tide (ft)	4.17
D10	09 Mar 2022	High Tide Time	39
D10	09 Mar 2022	Low Tide (ft)	1.1
D10	09 Mar 2022	Low Tide Time	858
D10	09 Mar 2022	Comments	Water clear; Boogie boarder/Swimmer-5; Surfer/Paddle boarder-8; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-13
D10	16 Mar 2022	Arrive Time	953
D10	16 Mar 2022	Weather	Cloudy
D10	16 Mar 2022	Wind Speed (kts)	4.9
D10	16 Mar 2022	Wind Dir	W
D10	16 Mar 2022	Animal Life	Seagull-4
D10	16 Mar 2022	Floatables	Foam; Film
D10	16 Mar 2022	Water Color	Green
D10	16 Mar 2022	Current Direction	N
D10	16 Mar 2022	Water Temp (C)	17.9
D10	16 Mar 2022	Wave Height Low (ft)	5
D10	16 Mar 2022	High Tide (ft)	5.45
D10	16 Mar 2022	High Tide Time	836
D10	16 Mar 2022	Low Tide (ft)	1.13
D10	16 Mar 2022	Low Tide Time	241
D10	16 Mar 2022	Comments	Water turbid; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-7
D10	23 Mar 2022	Arrive Time	950
D10	23 Mar 2022	Weather	Sunny
D10	23 Mar 2022	Wind Speed (kts)	1.2

Station	Date	Parameter	Value
D10	23 Mar 2022	Wind Dir	W
D10	23 Mar 2022	Animal Life	Bird-3; Seagull-1
D10	23 Mar 2022	Floatables	Foam
D10	23 Mar 2022	Water Color	Green
D10	23 Mar 2022	Current Direction	S
D10	23 Mar 2022	Water Temp (C)	17
D10	23 Mar 2022	Wave Height Low (ft)	3
D10	23 Mar 2022	High Tide (ft)	5.12
D10	23 Mar 2022	High Tide Time	33
D10	23 Mar 2022	Low Tide (ft)	0.19
D10	23 Mar 2022	Low Tide Time	813
D10	23 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-16; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-23
D10	28 Mar 2022	Arrive Time	853
D10	28 Mar 2022	Weather	Cloudy
D10	28 Mar 2022	Wind Speed (kts)	10.5
D10	28 Mar 2022	Wind Dir	SE
D10	28 Mar 2022	Animal Life	Seagull-1
D10	28 Mar 2022	Floatables	None
D10	28 Mar 2022	Water Color	Green
D10	28 Mar 2022	Current Direction	N
D10	28 Mar 2022	Water Temp (C)	17.3
D10	28 Mar 2022	Wave Height Low (ft)	3
D10	28 Mar 2022	High Tide (ft)	5.3
D10	28 Mar 2022	High Tide Time	704
D10	28 Mar 2022	Low Tide (ft)	1.72
D10	28 Mar 2022	Low Tide Time	114
D10	28 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-8; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-9
D11	02 Mar 2022	Arrive Time	929
D11	02 Mar 2022	Weather	Sunny
D11	02 Mar 2022	Wind Speed (kts)	1.6
D11	02 Mar 2022	Wind Dir	NW
D11	02 Mar 2022	Animal Life	Dog-2
D11	02 Mar 2022	Floatables	Foam
D11	02 Mar 2022	Water Color	Green
D11	02 Mar 2022	Current Direction	S
D11	02 Mar 2022	Water Temp (C)	17.4
D11	02 Mar 2022	Wave Height Low (ft)	4
D11	02 Mar 2022	High Tide (ft)	6.08
D11	02 Mar 2022	High Tide Time	829
D11	02 Mar 2022	Low Tide (ft)	0.74
D11	02 Mar 2022	Low Tide Time	229
D11	02 Mar 2022	Comments	Water turbid; Boogie boarder/Swimmer-1; Surfer/Paddle boarder-11; Trash-1; Kelp; Seagrass; Debris; Person/Walker/Jogger-14
D11	09 Mar 2022	Arrive Time	1025
D11	09 Mar 2022	Weather	Sunny
D11	09 Mar 2022	Wind Speed (kts)	9.2
D11	09 Mar 2022	Wind Dir	S
D11	09 Mar 2022	Animal Life	Dog-3; Pelican-1
D11	09 Mar 2022	Floatables	None
D11	09 Mar 2022	Water Color	Green
D11	09 Mar 2022	Current Direction	N
D11	09 Mar 2022	Water Temp (C)	17.6
D11	09 Mar 2022	Wave Height Low (ft)	1
D11	09 Mar 2022	High Tide (ft)	4.17
D11	09 Mar 2022	High Tide Time	39

Station	Date	Parameter	Value
D11	09 Mar 2022	Low Tide (ft)	1.1
D11	09 Mar 2022	Low Tide Time	858
D11	09 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-4; Trash-1; Algae; Seagrass; Kelp; Person/Walker/Jogger-2
D11	16 Mar 2022	Arrive Time	1009
D11	16 Mar 2022	Weather	Cloudy
D11	16 Mar 2022	Wind Speed (kts)	5
D11	16 Mar 2022	Wind Dir	W
D11	16 Mar 2022	Animal Life	Bird-1; Dog-1
D11	16 Mar 2022	Floatables	Foam; Film
D11	16 Mar 2022	Water Color	Green
D11	16 Mar 2022	Current Direction	N
D11	16 Mar 2022	Water Temp (C)	18
D11	16 Mar 2022	Wave Height Low (ft)	4
D11	16 Mar 2022	High Tide (ft)	5.45
D11	16 Mar 2022	High Tide Time	836
D11	16 Mar 2022	Low Tide (ft)	1.13
D11	16 Mar 2022	Low Tide Time	241
D11	16 Mar 2022	Comments	Water turbid; Surfer/Paddle boarder-3; Trash-1; Kelp; Seagrass; Algae; Debris; Person/Walker/Jogger-16
D11	23 Mar 2022	Arrive Time	1028
D11	23 Mar 2022	Weather	Sunny
D11	23 Mar 2022	Wind Speed (kts)	0.6
D11	23 Mar 2022	Wind Dir	W
D11	23 Mar 2022	Animal Life	Dog-3
D11	23 Mar 2022	Floatables	Foam; Film
D11	23 Mar 2022	Water Color	Green
D11	23 Mar 2022	Current Direction	S
D11	23 Mar 2022	Water Temp (C)	17.7
D11	23 Mar 2022	Wave Height Low (ft)	3
D11	23 Mar 2022	High Tide (ft)	5.12
D11	23 Mar 2022	High Tide Time	33
D11	23 Mar 2022	Low Tide (ft)	0.19
D11	23 Mar 2022	Low Tide Time	813
D11	23 Mar 2022	Comments	Water turbid; Boogie boarder/Swimmer-4; Surfer/Paddle boarder-11; Trash-1; Seagrass; Kelp; Algae; Person/Walker/Jogger-9
D11	28 Mar 2022	Arrive Time	841
D11	28 Mar 2022	Weather	Cloudy
D11	28 Mar 2022	Wind Speed (kts)	11.5
D11	28 Mar 2022	Wind Dir	SE
D11	28 Mar 2022	Animal Life	Bird-40; Dog-2; Seagull-15
D11	28 Mar 2022	Floatables	Foam
D11	28 Mar 2022	Water Color	Green
D11	28 Mar 2022	Current Direction	N
D11	28 Mar 2022	Water Temp (C)	17.1
D11	28 Mar 2022	Wave Height Low (ft)	4
D11	28 Mar 2022	High Tide (ft)	5.3
D11	28 Mar 2022	High Tide Time	704
D11	28 Mar 2022	Low Tide (ft)	1.72
D11	28 Mar 2022	Low Tide Time	114
D11	28 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-2; Trash-2; Kelp; Seagrass; Algae; Person/Walker/Jogger-2
D12	02 Mar 2022	Arrive Time	1002
D12	02 Mar 2022	Weather	Sunny
D12	02 Mar 2022	Wind Speed (kts)	4.2
D12	02 Mar 2022	Wind Dir	SW

Station	Date	Parameter	Value
D12	02 Mar 2022	Animal Life	Seagull-2
D12	02 Mar 2022	Floatables	Foam
D12	02 Mar 2022	Water Color	Green
D12	02 Mar 2022	Current Direction	S
D12	02 Mar 2022	Water Temp (C)	17.9
D12	02 Mar 2022	Wave Height Low (ft)	4
D12	02 Mar 2022	High Tide (ft)	6.08
D12	02 Mar 2022	High Tide Time	829
D12	02 Mar 2022	Low Tide (ft)	0.74
D12	02 Mar 2022	Low Tide Time	229
D12	02 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-3; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-17
D12	09 Mar 2022	Arrive Time	1109
D12	09 Mar 2022	Weather	Sunny
D12	09 Mar 2022	Wind Speed (kts)	6.4
D12	09 Mar 2022	Wind Dir	SW
D12	09 Mar 2022	Animal Life	
D12	09 Mar 2022	Floatables	None
D12	09 Mar 2022	Water Color	Green
D12	09 Mar 2022	Current Direction	N
D12	09 Mar 2022	Water Temp (C)	18.1
D12	09 Mar 2022	Wave Height Low (ft)	1
D12	09 Mar 2022	High Tide (ft)	4.17
D12	09 Mar 2022	High Tide Time	39
D12	09 Mar 2022	Low Tide (ft)	1.1
D12	09 Mar 2022	Low Tide Time	858
D12	09 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-1; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-26
D12	16 Mar 2022	Arrive Time	1044
D12	16 Mar 2022	Weather	Cloudy
D12	16 Mar 2022	Wind Speed (kts)	3.9
D12	16 Mar 2022	Wind Dir	W
D12	16 Mar 2022	Animal Life	
D12	16 Mar 2022	Floatables	Foam; Film
D12	16 Mar 2022	Water Color	Green
D12	16 Mar 2022	Current Direction	N
D12	16 Mar 2022	Water Temp (C)	18.8
D12	16 Mar 2022	Wave Height Low (ft)	4
D12	16 Mar 2022	High Tide (ft)	5.45
D12	16 Mar 2022	High Tide Time	836
D12	16 Mar 2022	Low Tide (ft)	1.13
D12	16 Mar 2022	Low Tide Time	241
D12	16 Mar 2022	Comments	Water turbid; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-38
D12	23 Mar 2022	Arrive Time	1058
D12	23 Mar 2022	Weather	Sunny
D12	23 Mar 2022	Wind Speed (kts)	1.32
D12	23 Mar 2022	Wind Dir	W
D12	23 Mar 2022	Animal Life	
D12	23 Mar 2022	Floatables	None
D12	23 Mar 2022	Water Color	Green
D12	23 Mar 2022	Current Direction	S
D12	23 Mar 2022	Water Temp (C)	21.5
D12	23 Mar 2022	Wave Height Low (ft)	2
D12	23 Mar 2022	High Tide (ft)	5.12
D12	23 Mar 2022	High Tide Time	33
D12	23 Mar 2022	Low Tide (ft)	0.19
D12	23 Mar 2022	Low Tide Time	813

<b>Station</b>	<b>Date</b>	<b>Parameter</b>	<b>Value</b>
D12	23 Mar 2022	Comments	Water clear; Boogie boarder/Swimmer-3; Trash-1; Kelp; Sea-grass; Person/Walker/Jogger-45
D12	28 Mar 2022	Arrive Time	817
D12	28 Mar 2022	Weather	Cloudy
D12	28 Mar 2022	Wind Speed (kts)	12.6
D12	28 Mar 2022	Wind Dir	SE
D12	28 Mar 2022	Animal Life	Seagull-1
D12	28 Mar 2022	Floatables	Foam
D12	28 Mar 2022	Water Color	Green
D12	28 Mar 2022	Current Direction	N
D12	28 Mar 2022	Water Temp (C)	19.7
D12	28 Mar 2022	Wave Height Low (ft)	3
D12	28 Mar 2022	High Tide (ft)	5.3
D12	28 Mar 2022	High Tide Time	704
D12	28 Mar 2022	Low Tide (ft)	1.72
D12	28 Mar 2022	Low Tide Time	114
D12	28 Mar 2022	Comments	Water clear; Surfer/Paddle boarder-5; Trash-2; Kelp; Sea-grass; Debris; Person/Walker/Jogger-7



# Kelp Stations



**Table 3.1**

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 geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (\*). Values >1,000 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Mar 2022	8	7	5	3	3	3	5	3
02 Mar 2022	10	7	5	3	3	3	5	3
03 Mar 2022	10	7	5	3	3	3	5	3
04 Mar 2022	10	7	5	3	3	3	5	3
05 Mar 2022	10	7	5	3	3	3	5	3
06 Mar 2022	10	7	5	3	3	3	5	3
07 Mar 2022	10	7	5	3	3	3	5	3
08 Mar 2022	15	8	8	4	3	3	5	4
09 Mar 2022	17	12	10	3	4	3	6	5
10 Mar 2022	17	12	10	3	4	3	6	5
11 Mar 2022	17	12	10	3	4	3	6	5
12 Mar 2022	17	12	10	3	4	3	6	5
13 Mar 2022	17	12	10	3	4	3	6	5
14 Mar 2022	17	12	10	3	4	3	6	5
15 Mar 2022	17	12	10	3	4	3	6	5
16 Mar 2022	17	11	10	4	3	3	6	5
17 Mar 2022	17	11	10	4	3	3	6	5
18 Mar 2022	17	11	10	4	3	3	6	5
19 Mar 2022	29	11	14	5	4	3	5	6
20 Mar 2022	29	11	14	5	4	3	5	6
21 Mar 2022	29	11	14	5	4	3	5	6
22 Mar 2022	18	10	10	4	4	3	5	5
23 Mar 2022	18	10	10	4	4	3	5	5
24 Mar 2022	18	10	10	4	4	3	5	5
25 Mar 2022	18	10	10	4	4	3	5	5
26 Mar 2022	18	10	10	4	4	3	5	5
27 Mar 2022	18	16	13	5	4	3	5	5
28 Mar 2022	18	16	13	5	4	3	5	5
29 Mar 2022	18	16	13	5	4	3	5	5
30 Mar 2022	13	12	10	6	4	3	4	8
31 Mar 2022	11	9	7	7	3	2	3	9

\* Geometric mean calculated using n<5

**Table 3.2**

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 Mar 2022	3	3	2	2	2	2	2	2
02 Mar 2022	3	3	2	2	2	2	2	2
03 Mar 2022	3	3	2	2	2	2	2	2
04 Mar 2022	3	3	2	2	2	2	2	2
05 Mar 2022	3	3	2	2	2	2	2	2
06 Mar 2022	3	3	2	2	2	2	2	2
07 Mar 2022	3	3	2	2	2	2	2	2
08 Mar 2022	3	3	3	2	2	2	2	2
09 Mar 2022	3	3	3	2	2	2	2	2
10 Mar 2022	3	3	3	2	2	2	2	2
11 Mar 2022	3	3	3	2	2	2	2	2
12 Mar 2022	3	3	3	2	2	2	2	2
13 Mar 2022	3	3	3	2	2	2	2	2
14 Mar 2022	3	3	3	2	2	2	2	2
15 Mar 2022	3	3	3	2	2	2	2	2
16 Mar 2022	3	3	3	2	2	2	2	2
17 Mar 2022	3	3	3	2	2	2	2	2
18 Mar 2022	3	3	3	2	2	2	2	2
19 Mar 2022	3	3	3	2	2	2	2	2
20 Mar 2022	3	3	3	2	2	2	2	2
21 Mar 2022	3	3	3	2	2	2	2	2
22 Mar 2022	3	3	3	2	2	2	2	2
23 Mar 2022	3	3	3	2	2	2	2	2
24 Mar 2022	3	3	3	2	2	2	2	2
25 Mar 2022	3	3	3	2	2	2	2	2
26 Mar 2022	3	3	3	2	2	2	2	2
27 Mar 2022	3	3	3	2	2	2	2	2
28 Mar 2022	3	3	3	2	2	2	2	2
29 Mar 2022	3	3	3	2	2	2	2	2
30 Mar 2022	3	3	3	2	2	2	2	2
31 Mar 2022	3	2	3	2	2	2	2	3

\* Geometric mean calculated using n<5

**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 30 days unless otherwise noted (\*). Values >35 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Mar 2022	2	2	2	2	2	2	2	2
02 Mar 2022	2	2	2	2	2	2	2	2
03 Mar 2022	2	2	2	2	2	2	2	2
04 Mar 2022	2	2	2	2	2	2	2	2
05 Mar 2022	2	2	2	2	2	2	2	2
06 Mar 2022	2	2	2	2	2	2	2	2
07 Mar 2022	2	2	2	2	2	2	2	2
08 Mar 2022	2	2	2	2	2	2	2	2
09 Mar 2022	2	2	2	2	2	2	2	2
10 Mar 2022	2	2	2	2	2	2	2	2
11 Mar 2022	2	2	2	2	2	2	2	2
12 Mar 2022	2	2	2	2	2	2	2	2
13 Mar 2022	2	2	2	2	2	2	2	2
14 Mar 2022	2	2	2	2	2	2	2	2
15 Mar 2022	2	2	2	2	2	2	2	2
16 Mar 2022	2	2	2	2	2	2	2	2
17 Mar 2022	2	2	2	2	2	2	2	2
18 Mar 2022	2	2	2	2	2	2	2	2
19 Mar 2022	2	2	2	2	2	2	2	2
20 Mar 2022	2	2	2	2	2	2	2	2
21 Mar 2022	2	2	2	2	2	2	2	2
22 Mar 2022	2	2	2	2	2	2	2	2
23 Mar 2022	2	2	2	2	2	2	2	2
24 Mar 2022	2	2	2	2	2	2	2	2
25 Mar 2022	2	2	2	2	2	2	2	2
26 Mar 2022	2	2	2	2	2	2	2	2
27 Mar 2022	2	2	2	2	2	2	2	2
28 Mar 2022	2	2	2	2	2	2	2	2
29 Mar 2022	2	2	2	2	2	2	2	2
30 Mar 2022	2	2	2	2	2	2	2	2
31 Mar 2022	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 total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Mar 2022	IC							
08 Mar 2022	IC							
16 Mar 2022	IC							
22 Mar 2022	IC							
30 Mar 2022	IC							

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.5**

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
01 Mar 2022	IC							
08 Mar 2022	IC							
16 Mar 2022	IC							
22 Mar 2022	IC							
30 Mar 2022	IC							

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.6**

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
01 Mar 2022	IC							
08 Mar 2022	IC							
16 Mar 2022	IC							
22 Mar 2022	IC							
30 Mar 2022	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
01 Mar 2022	IC							
08 Mar 2022	IC							
16 Mar 2022	IC							
22 Mar 2022	IC							
30 Mar 2022	IC							

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

**Table 3.8**

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

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH
A1	01 Mar 2022	756	1	<2	<2	<2	1.00	14.0	70.52	8.2	33.51	8.1
A1	01 Mar 2022	756	12	4e	4e	<2	1.00	13.5	78.19	7.0	33.53	8.0
A1	01 Mar 2022	756	18	80e	8e	2e	0.10	11.9	79.66	4.6	33.60	7.8
A1	08 Mar 2022	750	1	2e	<2	<2	1.00	14.5	77.84	8.0	33.48	8.1
A1	08 Mar 2022	750	12	180e	6e	<2	0.03	13.1	82.72	6.2	33.48	8.0
A1	08 Mar 2022	750	18	70	8e	2e	0.11	12.4	83.33	5.7	33.49	7.9
A1	16 Mar 2022	807	1	<2	<2	<2	1.00	15.8	69.54	9.0	33.49	8.0
A1	16 Mar 2022	807	12	8e	<2	<2	0.25	13.7	77.33	6.3	33.52	7.8
A1	16 Mar 2022	807	18	42	2e	2e	0.05	11.7	80.52	4.8	33.58	7.6
A1	22 Mar 2022	805	1	<2	<2	<2	1.00	13.7	75.07	7.3	33.53	7.9
A1	22 Mar 2022	805	12	4e	<2	<2	0.50	11.5	80.80	4.6	33.63	7.7
A1	22 Mar 2022	805	18	2e	<2	<2	1.00	11.4	81.48	4.5	33.64	7.6
A1	30 Mar 2022	746	1	<2	<2	<2	1.00	15.7	79.36	8.2	33.46	8.1
A1	30 Mar 2022	746	12	2e	<2	<2	1.00	14.4	75.30	7.3	33.53	8.0
A1	30 Mar 2022	746	18	6e	2e	<2	0.33	13.6	76.67	6.7	33.53	7.9
A6	01 Mar 2022	816	1	<2	<2	<2	1.00	14.4	73.04	8.5	33.51	8.1
A6	01 Mar 2022	816	12	10e	4e	<2	0.40	13.5	77.62	6.3	33.54	8.0
A6	01 Mar 2022	816	18	92	14e	<2	0.15	11.7	78.17	4.2	33.62	7.8
A6	08 Mar 2022	824	1	<2	2e	<2	1.00	14.7	76.36	8.3	33.48	8.1
A6	08 Mar 2022	824	12	20e	2e	<2	0.10	12.9	82.00	6.1	33.49	8.0
A6	08 Mar 2022	824	18	40e	<2	2e	0.05	12.4	82.21	5.6	33.51	7.9
A6	16 Mar 2022	842	1	<2	<2	<2	1.00	15.8	75.36	9.1	33.48	8.0
A6	16 Mar 2022	842	12	4e	<2	<2	0.50	13.8	77.19	6.5	33.53	7.8
A6	16 Mar 2022	842	18	20e	10e	2e	0.50	11.9	75.86	4.8	33.62	7.6
A6	22 Mar 2022	838	1	<2	<2	<2	1.00	14.2	74.49	7.5	33.54	8.0
A6	22 Mar 2022	838	12	6e	<2	2e	0.33	12.0	79.76	5.2	33.61	7.8
A6	22 Mar 2022	838	18	20e	2e	2e	0.10	12.2	79.99	5.3	33.60	7.8
A6	30 Mar 2022	816	1	<2	<2	<2	1.00	15.7	74.18	8.3	33.41	8.1
A6	30 Mar 2022	816	12	10e	<2	<2	0.20	14.7	77.69	7.5	33.51	8.0
A6	30 Mar 2022	816	18	2e	2e	<2	1.00	13.8	77.38	6.6	33.51	7.9
A7	01 Mar 2022	802	1	<2	<2	<2	1.00	14.4	75.62	8.1	33.50	8.1
A7	01 Mar 2022	802	12	60e	6e	2e	0.10	12.8	79.54	5.6	33.55	7.9
A7	01 Mar 2022	802	18	44	<2	2e	0.05	12.6	79.79	5.4	33.57	7.9
A7	08 Mar 2022	808	1	4e	<2	<2	0.50	14.6	75.35	8.0	33.47	8.1
A7	08 Mar 2022	808	12	26e	4e	<2	0.15	13.6	81.20	6.7	33.48	8.0
A7	08 Mar 2022	808	18	110	26e	6e	0.24	12.5	82.13	5.8	33.50	7.9
A7	16 Mar 2022	827	1	<2	<2	<2	1.00	15.7	79.44	8.7	33.51	8.0
A7	16 Mar 2022	827	12	<2	<2	2e	1.00	14.4	77.84	7.4	33.52	7.9
A7	16 Mar 2022	827	18	18e	2e	<2	0.11	12.9	77.87	5.5	33.57	7.8

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH
A7	22 Mar 2022	822	1	<2	<2	<2	1.00	14.1	76.57	7.8	33.52	8.0
A7	22 Mar 2022	822	12	<2	<2	2e	1.00	11.9	79.52	5.1	33.59	7.7
A7	22 Mar 2022	822	18	4e	<2	2e	0.50	11.7	80.03	4.7	33.62	7.7
A7	30 Mar 2022	758	1	<2	<2	<2	1.00	15.7	78.60	8.3	33.48	8.1
A7	30 Mar 2022	758	12	<2	<2	<2	1.00	14.6	75.92	7.6	33.52	8.0
A7	30 Mar 2022	758	18	6e	<2	2e	0.33	13.7	75.98	6.4	33.52	7.9
C4	01 Mar 2022	926	1	<2	<2	<2	1.00	14.1	75.04	7.8	33.51	8.1
C4	01 Mar 2022	926	3	2e	<2	<2	1.00	14.0	74.95	7.7	33.51	8.1
C4	01 Mar 2022	926	9	<2	<2	<2	1.00	13.8	75.79	7.3	33.51	8.1
C4	08 Mar 2022	956	1	<2	<2	<2	1.00	14.8	75.11	7.7	33.47	8.1
C4	08 Mar 2022	956	3	<20	<2	<2	0.10	14.6	74.67	7.9	33.47	8.1
C4	08 Mar 2022	956	9	22e	<2	<2	0.09	14.0	78.03	7.1	33.49	8.1
C4	16 Mar 2022	947	1	4e	<2	<2	0.50	15.6	53.54	7.6	33.52	7.9
C4	16 Mar 2022	947	3	<20	<2	<2	0.10	15.3	53.25	7.9	33.53	7.9
C4	16 Mar 2022	947	9	<2	2e	2e	1.00	13.4	78.44	5.8	33.56	7.8
C4	22 Mar 2022	952	1	2e	<2	<2	1.00	14.2	69.83	7.2	33.58	7.9
C4	22 Mar 2022	952	3	4e	<2	<2	0.50	13.9	69.46	6.9	33.59	7.9
C4	22 Mar 2022	952	9	2e	<2	<2	1.00	12.2	75.86	4.5	33.61	7.7
C4	30 Mar 2022	929	1	<2	<2	<2	1.00	15.7	60.56	7.9	33.47	8.0
C4	30 Mar 2022	929	3	<20	<2	<2	0.10	15.6	62.28	8.0	33.48	8.0
C4	30 Mar 2022	929	9	<2	2e	<2	1.00	15.3	72.20	7.2	33.49	8.0
C5	01 Mar 2022	912	1	4e	<2	<2	0.50	14.7	59.71	7.4	33.50	8.1
C5	01 Mar 2022	912	3	20e	<2	<2	0.10	14.6	55.76	7.3	33.50	8.1
C5	01 Mar 2022	912	9	<20	2e	<2	0.10	14.3	61.28	7.0	33.50	8.0
C5	08 Mar 2022	942	1	<2	<2	<2	1.00	14.8	74.64	7.9	33.44	8.1
C5	08 Mar 2022	942	3	<2	<2	<2	1.00	14.6	74.38	7.9	33.45	8.1
C5	08 Mar 2022	942	9	4e	<2	<2	0.50	13.7	79.40	6.8	33.49	8.1
C5	16 Mar 2022	937	1	4e	<2	<2	0.50	15.6	65.66	9.0	33.50	8.0
C5	16 Mar 2022	937	3	2e	<2	<2	1.00	15.5	72.04	9.1	33.50	8.0
C5	16 Mar 2022	937	9	<2	<2	<2	1.00	14.2	73.46	6.2	33.52	7.9
C5	22 Mar 2022	942	1	<2	<2	<2	1.00	14.4	72.75	7.6	33.56	7.9
C5	22 Mar 2022	942	3	4e	<2	<2	0.50	14.1	73.17	7.8	33.53	8.0
C5	22 Mar 2022	942	9	4e	<2	<2	0.50	12.2	69.06	4.6	33.63	7.8
C5	30 Mar 2022	914	1	<2	<2	<2	1.00	15.7	74.42	7.9	33.47	8.1
C5	30 Mar 2022	914	3	<2	<2	<2	1.00	15.7	74.39	7.9	33.47	8.1
C5	30 Mar 2022	914	9	2e	<2	<2	1.00	15.6	67.84	7.6	33.48	8.0
C6	01 Mar 2022	901	1	4e	<2	<2	0.50	14.4	67.50	7.3	33.50	8.0
C6	01 Mar 2022	901	3	6e	<2	<2	0.33	14.3	67.09	7.5	33.51	8.0
C6	01 Mar 2022	901	9	10e	<2	<2	0.20	14.1	64.58	6.5	33.51	8.0
C6	08 Mar 2022	926	1	2e	<2	<2	1.00	14.9	74.53	8.2	33.45	8.1
C6	08 Mar 2022	926	3	<2	<2	<2	1.00	14.8	72.90	8.1	33.45	8.1
C6	08 Mar 2022	926	9	<2	<2	<2	1.00	13.9	78.88	6.6	33.50	8.1
C6	16 Mar 2022	927	1	<2	<2	<2	1.00	15.6	73.81	9.1	33.51	8.0
C6	16 Mar 2022	927	3	2e	<2	<2	1.00	15.6	74.55	8.8	33.51	8.0
C6	16 Mar 2022	927	9	<2	<2	<2	1.00	13.8	68.86	5.5	33.52	7.7

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH
C6	22 Mar 2022	929	1	2e	<2	<2	1.00	14.3	75.42	7.6	33.55	8.0
C6	22 Mar 2022	929	3	<2	<2	<2	1.00	14.1	75.24	7.0	33.57	7.9
C6	22 Mar 2022	929	9	<2	<2	<2	1.00	11.6	76.90	4.4	33.65	7.7
C6	30 Mar 2022	904	1	<2	<2	<2	1.00	15.6	73.57	7.8	33.45	8.0
C6	30 Mar 2022	904	3	2e	<2	<2	1.00	15.6	73.76	7.8	33.48	8.0
C6	30 Mar 2022	904	9	<2	<2	<2	1.00	15.5	74.41	7.7	33.48	8.0
C7	01 Mar 2022	831	1	<2	<2	<2	1.00	14.4	76.11	8.5	33.49	8.1
C7	01 Mar 2022	831	12	2e	<2	<2	1.00	13.2	78.06	6.1	33.53	8.0
C7	01 Mar 2022	831	18	24e	<2	2e	0.08	11.9	78.52	4.7	33.60	7.8
C7	08 Mar 2022	844	1	<2	<2	<2	1.00	14.8	70.97	8.3	33.43	8.1
C7	08 Mar 2022	844	12	6e	2e	2e	0.33	13.5	81.11	6.2	33.51	8.0
C7	08 Mar 2022	844	18	6e	<2	<2	0.33	13.1	82.08	5.9	33.50	8.0
C7	16 Mar 2022	852	1	<2	<2	2e	1.00	15.8	74.80	9.2	33.49	8.0
C7	16 Mar 2022	852	12	<2	<2	<2	1.00	14.3	77.99	7.3	33.52	7.9
C7	16 Mar 2022	852	18	6e	<2	<2	0.33	12.5	75.26	4.9	33.55	7.6
C7	22 Mar 2022	851	1	2e	<2	<2	1.00	14.5	70.48	7.9	33.53	8.0
C7	22 Mar 2022	851	12	<2	<2	<2	1.00	12.1	78.41	5.2	33.62	7.8
C7	22 Mar 2022	851	18	6e	2e	<2	0.33	11.7	80.19	4.7	33.65	7.7
C7	30 Mar 2022	837	1	2e	2e	<2	1.00	15.8	70.44	7.9	33.38	8.1
C7	30 Mar 2022	837	12	<2	<2	<2	1.00	15.4	74.61	8.0	33.47	8.1
C7	30 Mar 2022	837	18	4e	<2	<2	0.50	14.6	74.88	6.6	33.47	7.9
C8	01 Mar 2022	841	1	<2	<2	<2	1.00	14.6	79.36	8.5	33.50	8.1
C8	01 Mar 2022	841	12	2e	<2	<2	1.00	13.2	79.30	6.0	33.52	8.0
C8	01 Mar 2022	841	18	8e	<2	<2	0.25	12.1	78.22	4.8	33.58	7.8
C8	08 Mar 2022	904	1	<2	<2	<2	1.00	14.7	72.48	8.1	33.44	8.1
C8	08 Mar 2022	904	12	<2	<2	<2	1.00	14.0	79.97	7.3	33.48	8.1
C8	08 Mar 2022	904	18	<20	<2	<2	0.10	13.3	80.40	6.3	33.50	8.0
C8	16 Mar 2022	905	1	<2	<2	<2	1.00	15.8	71.58	9.3	33.49	8.0
C8	16 Mar 2022	905	12	<2	<2	<2	1.00	14.0	78.11	6.5	33.51	7.8
C8	16 Mar 2022	905	18	8e	4e	2e	0.50	12.4	72.79	4.7	33.55	7.6
C8	22 Mar 2022	908	1	4e	<2	4e	0.50	14.0	70.44	7.2	33.54	7.9
C8	22 Mar 2022	908	12	2e	<2	<2	1.00	12.4	78.12	5.2	33.60	7.8
C8	22 Mar 2022	908	18	8e	2e	<2	0.25	11.5	77.30	4.2	33.67	7.7
C8	30 Mar 2022	843	1	120	8e	<2	0.07	15.7	66.34	8.1	33.31	8.1
C8	30 Mar 2022	843	12	<2	<2	<2	1.00	14.9	72.04	7.7	33.48	8.1
C8	30 Mar 2022	843	18	2e	<2	<2	1.00	13.1	74.07	6.2	33.52	7.9

ns = not sampled

ND = no data

**Table 3.9**

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

Station	Date	Parameter	Value
A1	01 Mar 2022	Depth (m)	21
A1	01 Mar 2022	Arrive Time	756
A1	01 Mar 2022	Depart Time	756
A1	01 Mar 2022	Air Temp (C)	16.2
A1	01 Mar 2022	Weather	Clear
A1	01 Mar 2022	Visibility (mi)	10
A1	01 Mar 2022	Wind Speed (kts)	13.9
A1	01 Mar 2022	Wind Dir	N
A1	01 Mar 2022	Water Color	Green
A1	01 Mar 2022	Wave Ht Low (ft)	4.6
A1	01 Mar 2022	Wave Period (sec)	10.1
A1	01 Mar 2022	Sea State	Calm
A1	01 Mar 2022	High Tide (ft)	6.18
A1	01 Mar 2022	High Tide Time	1548
A1	01 Mar 2022	Low Tide (ft)	-1.43
A1	01 Mar 2022	Low Tide Time	2242
A1	01 Mar 2022	Comments	Cast done on station (Navops late)
A1	08 Mar 2022	Depth (m)	18
A1	08 Mar 2022	Arrive Time	750
A1	08 Mar 2022	Depart Time	757
A1	08 Mar 2022	Air Temp (C)	11.9
A1	08 Mar 2022	Weather	Clear
A1	08 Mar 2022	Visibility (mi)	12
A1	08 Mar 2022	Wind Speed (kts)	7.1
A1	08 Mar 2022	Wind Dir	E
A1	08 Mar 2022	Water Color	Green
A1	08 Mar 2022	Wave Ht Low (ft)	3
A1	08 Mar 2022	Wave Period (sec)	13
A1	08 Mar 2022	Sea State	Light Chop
A1	08 Mar 2022	High Tide (ft)	4.4
A1	08 Mar 2022	High Tide Time	806
A1	08 Mar 2022	Low Tide (ft)	1.03
A1	08 Mar 2022	Low Tide Time	1518
A1	08 Mar 2022	Comments	none
A1	16 Mar 2022	Depth (m)	17
A1	16 Mar 2022	Arrive Time	807
A1	16 Mar 2022	Depart Time	818
A1	16 Mar 2022	Air Temp (C)	15
A1	16 Mar 2022	Weather	Overcast
A1	16 Mar 2022	Visibility (mi)	7
A1	16 Mar 2022	Wind Speed (kts)	3.6
A1	16 Mar 2022	Wind Dir	S
A1	16 Mar 2022	Water Color	Blueish-Green
A1	16 Mar 2022	Wave Ht Low (ft)	6.9
A1	16 Mar 2022	Wave Period (sec)	17
A1	16 Mar 2022	Sea State	Confused Swell
A1	16 Mar 2022	High Tide (ft)	5.38
A1	16 Mar 2022	High Tide Time	1536
A1	16 Mar 2022	Low Tide (ft)	-0.65
A1	16 Mar 2022	Low Tide Time	2224
A1	16 Mar 2022	Comments	none
A1	22 Mar 2022	Depth (m)	18
A1	22 Mar 2022	Arrive Time	805

Station	Date	Parameter	Value
A1	22 Mar 2022	Depart Time	813
A1	22 Mar 2022	Air Temp (C)	14.4
A1	22 Mar 2022	Weather	Clear
A1	22 Mar 2022	Visibility (mi)	10
A1	22 Mar 2022	Wind Speed (kts)	3.5
A1	22 Mar 2022	Wind Dir	E
A1	22 Mar 2022	Water Color	Green
A1	22 Mar 2022	Wave Ht Low (ft)	5.6
A1	22 Mar 2022	Wave Period (sec)	13
A1	22 Mar 2022	Sea State	Regular Swell
A1	22 Mar 2022	High Tide (ft)	5.19
A1	22 Mar 2022	High Tide Time	706
A1	22 Mar 2022	Low Tide (ft)	0.05
A1	22 Mar 2022	Low Tide Time	1354
A1	22 Mar 2022	Comments	Kelp
A1	30 Mar 2022	Depth (m)	20
A1	30 Mar 2022	Arrive Time	740
A1	30 Mar 2022	Depart Time	746
A1	30 Mar 2022	Air Temp (C)	14.4
A1	30 Mar 2022	Weather	Partly Cloudy
A1	30 Mar 2022	Visibility (mi)	8
A1	30 Mar 2022	Wind Speed (kts)	3.3
A1	30 Mar 2022	Wind Dir	NE
A1	30 Mar 2022	Water Color	Green
A1	30 Mar 2022	Wave Ht Low (ft)	7
A1	30 Mar 2022	Wave Period (sec)	8
A1	30 Mar 2022	Sea State	Light Chop
A1	30 Mar 2022	High Tide (ft)	5.35
A1	30 Mar 2022	High Tide Time	1542
A1	30 Mar 2022	Low Tide (ft)	-0.7
A1	30 Mar 2022	Low Tide Time	2206
A1	30 Mar 2022	Comments	Kelp; Kelp debris
A6	01 Mar 2022	Depth (m)	21
A6	01 Mar 2022	Arrive Time	816
A6	01 Mar 2022	Depart Time	819
A6	01 Mar 2022	Air Temp (C)	17.2
A6	01 Mar 2022	Weather	Clear
A6	01 Mar 2022	Visibility (mi)	10
A6	01 Mar 2022	Wind Speed (kts)	4.2
A6	01 Mar 2022	Wind Dir	NE
A6	01 Mar 2022	Water Color	Green
A6	01 Mar 2022	Wave Ht Low (ft)	4.6
A6	01 Mar 2022	Wave Period (sec)	10.1
A6	01 Mar 2022	Sea State	Calm
A6	01 Mar 2022	High Tide (ft)	6.18
A6	01 Mar 2022	High Tide Time	1548
A6	01 Mar 2022	Low Tide (ft)	-1.43
A6	01 Mar 2022	Low Tide Time	2242
A6	01 Mar 2022	Comments	Lobster Floats; Kelp
A6	08 Mar 2022	Depth (m)	18
A6	08 Mar 2022	Arrive Time	824
A6	08 Mar 2022	Depart Time	831
A6	08 Mar 2022	Air Temp (C)	13.4
A6	08 Mar 2022	Weather	Clear
A6	08 Mar 2022	Visibility (mi)	12
A6	08 Mar 2022	Wind Speed (kts)	0
A6	08 Mar 2022	Wind Dir	S
A6	08 Mar 2022	Water Color	Green

Station	Date	Parameter	Value
A6	08 Mar 2022	Wave Ht Low (ft)	3
A6	08 Mar 2022	Wave Period (sec)	13
A6	08 Mar 2022	Sea State	Light Chop
A6	08 Mar 2022	High Tide (ft)	4.4
A6	08 Mar 2022	High Tide Time	806
A6	08 Mar 2022	Low Tide (ft)	1.03
A6	08 Mar 2022	Low Tide Time	1518
A6	08 Mar 2022	Comments	none
A6	16 Mar 2022	Depth (m)	17
A6	16 Mar 2022	Arrive Time	842
A6	16 Mar 2022	Depart Time	842
A6	16 Mar 2022	Air Temp (C)	14.9
A6	16 Mar 2022	Weather	Overcast
A6	16 Mar 2022	Visibility (mi)	7
A6	16 Mar 2022	Wind Speed (kts)	4.1
A6	16 Mar 2022	Wind Dir	SW
A6	16 Mar 2022	Water Color	Greenish-Blue
A6	16 Mar 2022	Wave Ht Low (ft)	6.9
A6	16 Mar 2022	Wave Period (sec)	17
A6	16 Mar 2022	Sea State	Confused Swell
A6	16 Mar 2022	High Tide (ft)	5.38
A6	16 Mar 2022	High Tide Time	1536
A6	16 Mar 2022	Low Tide (ft)	-0.65
A6	16 Mar 2022	Low Tide Time	2224
A6	16 Mar 2022	Comments	none
A6	22 Mar 2022	Depth (m)	17
A6	22 Mar 2022	Arrive Time	838
A6	22 Mar 2022	Depart Time	840
A6	22 Mar 2022	Air Temp (C)	15.7
A6	22 Mar 2022	Weather	Clear
A6	22 Mar 2022	Visibility (mi)	10
A6	22 Mar 2022	Wind Speed (kts)	1.3
A6	22 Mar 2022	Wind Dir	NE
A6	22 Mar 2022	Water Color	Green
A6	22 Mar 2022	Wave Ht Low (ft)	5.6
A6	22 Mar 2022	Wave Period (sec)	13
A6	22 Mar 2022	Sea State	Regular Swell
A6	22 Mar 2022	High Tide (ft)	5.19
A6	22 Mar 2022	High Tide Time	706
A6	22 Mar 2022	Low Tide (ft)	0.05
A6	22 Mar 2022	Low Tide Time	1354
A6	22 Mar 2022	Comments	none
A6	30 Mar 2022	Depth (m)	19
A6	30 Mar 2022	Arrive Time	807
A6	30 Mar 2022	Depart Time	816
A6	30 Mar 2022	Air Temp (C)	14.7
A6	30 Mar 2022	Weather	Partly Cloudy
A6	30 Mar 2022	Visibility (mi)	8
A6	30 Mar 2022	Wind Speed (kts)	2.4
A6	30 Mar 2022	Wind Dir	NE
A6	30 Mar 2022	Water Color	Green
A6	30 Mar 2022	Wave Ht Low (ft)	7
A6	30 Mar 2022	Wave Period (sec)	8
A6	30 Mar 2022	Sea State	Light Chop
A6	30 Mar 2022	High Tide (ft)	5.35
A6	30 Mar 2022	High Tide Time	1542
A6	30 Mar 2022	Low Tide (ft)	-0.7
A6	30 Mar 2022	Low Tide Time	2206

Station	Date	Parameter	Value
A6	30 Mar 2022	Comments	Kelp
A7	01 Mar 2022	Depth (m)	16
A7	01 Mar 2022	Arrive Time	802
A7	01 Mar 2022	Depart Time	809
A7	01 Mar 2022	Air Temp (C)	16
A7	01 Mar 2022	Weather	Clear
A7	01 Mar 2022	Visibility (mi)	10
A7	01 Mar 2022	Wind Speed (kts)	4.9
A7	01 Mar 2022	Wind Dir	N
A7	01 Mar 2022	Water Color	Green
A7	01 Mar 2022	Wave Ht Low (ft)	4.6
A7	01 Mar 2022	Wave Period (sec)	10.1
A7	01 Mar 2022	Sea State	Calm
A7	01 Mar 2022	High Tide (ft)	6.18
A7	01 Mar 2022	High Tide Time	1548
A7	01 Mar 2022	Low Tide (ft)	-1.43
A7	01 Mar 2022	Low Tide Time	2242
A7	01 Mar 2022	Comments	Lobster Floats; Kelp
A7	08 Mar 2022	Depth (m)	18
A7	08 Mar 2022	Arrive Time	808
A7	08 Mar 2022	Depart Time	814
A7	08 Mar 2022	Air Temp (C)	13.2
A7	08 Mar 2022	Weather	Clear
A7	08 Mar 2022	Visibility (mi)	12
A7	08 Mar 2022	Wind Speed (kts)	4.6
A7	08 Mar 2022	Wind Dir	S
A7	08 Mar 2022	Water Color	Green
A7	08 Mar 2022	Wave Ht Low (ft)	3
A7	08 Mar 2022	Wave Period (sec)	13
A7	08 Mar 2022	Sea State	Light Chop
A7	08 Mar 2022	High Tide (ft)	4.4
A7	08 Mar 2022	High Tide Time	806
A7	08 Mar 2022	Low Tide (ft)	1.03
A7	08 Mar 2022	Low Tide Time	1518
A7	08 Mar 2022	Comments	none
A7	16 Mar 2022	Depth (m)	20
A7	16 Mar 2022	Arrive Time	827
A7	16 Mar 2022	Depart Time	830
A7	16 Mar 2022	Air Temp (C)	15
A7	16 Mar 2022	Weather	Overcast
A7	16 Mar 2022	Visibility (mi)	7
A7	16 Mar 2022	Wind Speed (kts)	3.7
A7	16 Mar 2022	Wind Dir	S
A7	16 Mar 2022	Water Color	Greenish-Blue
A7	16 Mar 2022	Wave Ht Low (ft)	6.9
A7	16 Mar 2022	Wave Period (sec)	17
A7	16 Mar 2022	Sea State	Confused Swell
A7	16 Mar 2022	High Tide (ft)	5.38
A7	16 Mar 2022	High Tide Time	1536
A7	16 Mar 2022	Low Tide (ft)	-0.65
A7	16 Mar 2022	Low Tide Time	2224
A7	16 Mar 2022	Comments	none
A7	22 Mar 2022	Depth (m)	17
A7	22 Mar 2022	Arrive Time	822
A7	22 Mar 2022	Depart Time	825
A7	22 Mar 2022	Air Temp (C)	14.8
A7	22 Mar 2022	Weather	Clear

Station	Date	Parameter	Value
A7	22 Mar 2022	Visibility (mi)	10
A7	22 Mar 2022	Wind Speed (kts)	6.1
A7	22 Mar 2022	Wind Dir	SE
A7	22 Mar 2022	Water Color	Green
A7	22 Mar 2022	Wave Ht Low (ft)	5.6
A7	22 Mar 2022	Wave Period (sec)	13
A7	22 Mar 2022	Sea State	Regular Swell
A7	22 Mar 2022	High Tide (ft)	5.19
A7	22 Mar 2022	High Tide Time	706
A7	22 Mar 2022	Low Tide (ft)	0.05
A7	22 Mar 2022	Low Tide Time	1354
A7	22 Mar 2022	Comments	Tide too low for 18m (17m depth); Multiple attempts made
A7	30 Mar 2022	Depth (m)	21
A7	30 Mar 2022	Arrive Time	753
A7	30 Mar 2022	Depart Time	758
A7	30 Mar 2022	Air Temp (C)	14.4
A7	30 Mar 2022	Weather	Partly Cloudy
A7	30 Mar 2022	Visibility (mi)	8
A7	30 Mar 2022	Wind Speed (kts)	4.5
A7	30 Mar 2022	Wind Dir	NE
A7	30 Mar 2022	Water Color	Green
A7	30 Mar 2022	Wave Ht Low (ft)	7
A7	30 Mar 2022	Wave Period (sec)	8
A7	30 Mar 2022	Sea State	Light Chop
A7	30 Mar 2022	High Tide (ft)	5.35
A7	30 Mar 2022	High Tide Time	1542
A7	30 Mar 2022	Low Tide (ft)	-0.7
A7	30 Mar 2022	Low Tide Time	2206
A7	30 Mar 2022	Comments	Kelp
C4	01 Mar 2022	Depth (m)	10
C4	01 Mar 2022	Arrive Time	926
C4	01 Mar 2022	Depart Time	926
C4	01 Mar 2022	Air Temp (C)	14.9
C4	01 Mar 2022	Weather	Clear
C4	01 Mar 2022	Visibility (mi)	10
C4	01 Mar 2022	Wind Speed (kts)	4.8
C4	01 Mar 2022	Wind Dir	S
C4	01 Mar 2022	Water Color	Green
C4	01 Mar 2022	Wave Ht Low (ft)	4.6
C4	01 Mar 2022	Wave Period (sec)	10.1
C4	01 Mar 2022	Sea State	Calm
C4	01 Mar 2022	High Tide (ft)	6.18
C4	01 Mar 2022	High Tide Time	1548
C4	01 Mar 2022	Low Tide (ft)	-1.43
C4	01 Mar 2022	Low Tide Time	2242
C4	01 Mar 2022	Comments	Kelp; Lobster Floats
C4	08 Mar 2022	Depth (m)	10
C4	08 Mar 2022	Arrive Time	956
C4	08 Mar 2022	Depart Time	1001
C4	08 Mar 2022	Air Temp (C)	13.7
C4	08 Mar 2022	Weather	Clear
C4	08 Mar 2022	Visibility (mi)	12
C4	08 Mar 2022	Wind Speed (kts)	0.9
C4	08 Mar 2022	Wind Dir	S
C4	08 Mar 2022	Water Color	Greenish-Brown
C4	08 Mar 2022	Wave Ht Low (ft)	3
C4	08 Mar 2022	Wave Period (sec)	13
C4	08 Mar 2022	Sea State	Light Chop

Station	Date	Parameter	Value
C4	08 Mar 2022	High Tide (ft)	4.4
C4	08 Mar 2022	High Tide Time	806
C4	08 Mar 2022	Low Tide (ft)	1.03
C4	08 Mar 2022	Low Tide Time	1518
C4	08 Mar 2022	Comments	none
C4	16 Mar 2022	Depth (m)	12
C4	16 Mar 2022	Arrive Time	947
C4	16 Mar 2022	Depart Time	950
C4	16 Mar 2022	Air Temp (C)	15.1
C4	16 Mar 2022	Weather	Overcast
C4	16 Mar 2022	Visibility (mi)	7
C4	16 Mar 2022	Wind Speed (kts)	4.6
C4	16 Mar 2022	Wind Dir	W
C4	16 Mar 2022	Water Color	Green
C4	16 Mar 2022	Wave Ht Low (ft)	6.9
C4	16 Mar 2022	Wave Period (sec)	17
C4	16 Mar 2022	Sea State	Confused Swell
C4	16 Mar 2022	High Tide (ft)	5.38
C4	16 Mar 2022	High Tide Time	1536
C4	16 Mar 2022	Low Tide (ft)	-0.65
C4	16 Mar 2022	Low Tide Time	2224
C4	16 Mar 2022	Comments	none
C4	22 Mar 2022	Depth (m)	11
C4	22 Mar 2022	Arrive Time	952
C4	22 Mar 2022	Depart Time	955
C4	22 Mar 2022	Air Temp (C)	15.7
C4	22 Mar 2022	Weather	Clear
C4	22 Mar 2022	Visibility (mi)	10
C4	22 Mar 2022	Wind Speed (kts)	0.4
C4	22 Mar 2022	Wind Dir	N
C4	22 Mar 2022	Water Color	Green
C4	22 Mar 2022	Wave Ht Low (ft)	5.6
C4	22 Mar 2022	Wave Period (sec)	13
C4	22 Mar 2022	Sea State	Regular Swell
C4	22 Mar 2022	High Tide (ft)	5.19
C4	22 Mar 2022	High Tide Time	706
C4	22 Mar 2022	Low Tide (ft)	0.05
C4	22 Mar 2022	Low Tide Time	1354
C4	22 Mar 2022	Comments	Kelp; Kelp Debris
C4	30 Mar 2022	Depth (m)	12
C4	30 Mar 2022	Arrive Time	920
C4	30 Mar 2022	Depart Time	929
C4	30 Mar 2022	Air Temp (C)	14.7
C4	30 Mar 2022	Weather	Partly Cloudy
C4	30 Mar 2022	Visibility (mi)	8
C4	30 Mar 2022	Wind Speed (kts)	9.5
C4	30 Mar 2022	Wind Dir	W
C4	30 Mar 2022	Water Color	Green
C4	30 Mar 2022	Wave Ht Low (ft)	7
C4	30 Mar 2022	Wave Period (sec)	8
C4	30 Mar 2022	Sea State	Light Chop
C4	30 Mar 2022	High Tide (ft)	5.35
C4	30 Mar 2022	High Tide Time	1542
C4	30 Mar 2022	Low Tide (ft)	-0.7
C4	30 Mar 2022	Low Tide Time	2206
C4	30 Mar 2022	Comments	none
C5	01 Mar 2022	Depth (m)	12

Station	Date	Parameter	Value
C5	01 Mar 2022	Arrive Time	912
C5	01 Mar 2022	Depart Time	915
C5	01 Mar 2022	Air Temp (C)	16.9
C5	01 Mar 2022	Weather	Clear
C5	01 Mar 2022	Visibility (mi)	10
C5	01 Mar 2022	Wind Speed (kts)	2.6
C5	01 Mar 2022	Wind Dir	S
C5	01 Mar 2022	Water Color	Green
C5	01 Mar 2022	Wave Ht Low (ft)	4.6
C5	01 Mar 2022	Wave Period (sec)	10.1
C5	01 Mar 2022	Sea State	Calm
C5	01 Mar 2022	High Tide (ft)	6.18
C5	01 Mar 2022	High Tide Time	1548
C5	01 Mar 2022	Low Tide (ft)	-1.43
C5	01 Mar 2022	Low Tide Time	2242
C5	01 Mar 2022	Comments	Lobster Floats
C5	08 Mar 2022	Depth (m)	9
C5	08 Mar 2022	Arrive Time	942
C5	08 Mar 2022	Depart Time	949
C5	08 Mar 2022	Air Temp (C)	13.5
C5	08 Mar 2022	Weather	Clear
C5	08 Mar 2022	Visibility (mi)	12
C5	08 Mar 2022	Wind Speed (kts)	7.7
C5	08 Mar 2022	Wind Dir	S
C5	08 Mar 2022	Water Color	Greenish-Brown
C5	08 Mar 2022	Wave Ht Low (ft)	3
C5	08 Mar 2022	Wave Period (sec)	13
C5	08 Mar 2022	Sea State	Light Chop
C5	08 Mar 2022	High Tide (ft)	4.4
C5	08 Mar 2022	High Tide Time	806
C5	08 Mar 2022	Low Tide (ft)	1.03
C5	08 Mar 2022	Low Tide Time	1518
C5	08 Mar 2022	Comments	none
C5	16 Mar 2022	Depth (m)	1
C5	16 Mar 2022	Arrive Time	937
C5	16 Mar 2022	Depart Time	940
C5	16 Mar 2022	Air Temp (C)	15
C5	16 Mar 2022	Weather	Overcast
C5	16 Mar 2022	Visibility (mi)	7
C5	16 Mar 2022	Wind Speed (kts)	5.3
C5	16 Mar 2022	Wind Dir	W
C5	16 Mar 2022	Water Color	Green
C5	16 Mar 2022	Wave Ht Low (ft)	6.9
C5	16 Mar 2022	Wave Period (sec)	17
C5	16 Mar 2022	Sea State	Confused Swell
C5	16 Mar 2022	High Tide (ft)	5.38
C5	16 Mar 2022	High Tide Time	1536
C5	16 Mar 2022	Low Tide (ft)	-0.65
C5	16 Mar 2022	Low Tide Time	2224
C5	16 Mar 2022	Comments	none
C5	22 Mar 2022	Depth (m)	9
C5	22 Mar 2022	Arrive Time	942
C5	22 Mar 2022	Depart Time	944
C5	22 Mar 2022	Air Temp (C)	16.1
C5	22 Mar 2022	Weather	Clear
C5	22 Mar 2022	Visibility (mi)	10
C5	22 Mar 2022	Wind Speed (kts)	1.2
C5	22 Mar 2022	Wind Dir	W

Station	Date	Parameter	Value
C5	22 Mar 2022	Water Color	Green
C5	22 Mar 2022	Wave Ht Low (ft)	5.6
C5	22 Mar 2022	Wave Period (sec)	13
C5	22 Mar 2022	Sea State	Regular Swell
C5	22 Mar 2022	High Tide (ft)	5.19
C5	22 Mar 2022	High Tide Time	706
C5	22 Mar 2022	Low Tide (ft)	0.05
C5	22 Mar 2022	Low Tide Time	1354
C5	22 Mar 2022	Comments	none
C5	30 Mar 2022	Depth (m)	12
C5	30 Mar 2022	Arrive Time	911
C5	30 Mar 2022	Depart Time	914
C5	30 Mar 2022	Air Temp (C)	14.7
C5	30 Mar 2022	Weather	Partly Cloudy
C5	30 Mar 2022	Visibility (mi)	8
C5	30 Mar 2022	Wind Speed (kts)	1.8
C5	30 Mar 2022	Wind Dir	W
C5	30 Mar 2022	Water Color	Green
C5	30 Mar 2022	Wave Ht Low (ft)	7
C5	30 Mar 2022	Wave Period (sec)	8
C5	30 Mar 2022	Sea State	Light Chop
C5	30 Mar 2022	High Tide (ft)	5.35
C5	30 Mar 2022	High Tide Time	1542
C5	30 Mar 2022	Low Tide (ft)	-0.7
C5	30 Mar 2022	Low Tide Time	2206
C5	30 Mar 2022	Comments	Kelp; Kelp debris
C6	01 Mar 2022	Depth (m)	10
C6	01 Mar 2022	Arrive Time	901
C6	01 Mar 2022	Depart Time	904
C6	01 Mar 2022	Air Temp (C)	15.8
C6	01 Mar 2022	Weather	Clear
C6	01 Mar 2022	Visibility (mi)	10
C6	01 Mar 2022	Wind Speed (kts)	4.9
C6	01 Mar 2022	Wind Dir	NW
C6	01 Mar 2022	Water Color	Green
C6	01 Mar 2022	Wave Ht Low (ft)	4.6
C6	01 Mar 2022	Wave Period (sec)	10.1
C6	01 Mar 2022	Sea State	Calm
C6	01 Mar 2022	High Tide (ft)	6.18
C6	01 Mar 2022	High Tide Time	1548
C6	01 Mar 2022	Low Tide (ft)	-1.43
C6	01 Mar 2022	Low Tide Time	2242
C6	01 Mar 2022	Comments	none
C6	08 Mar 2022	Depth (m)	9
C6	08 Mar 2022	Arrive Time	926
C6	08 Mar 2022	Depart Time	933
C6	08 Mar 2022	Air Temp (C)	13.6
C6	08 Mar 2022	Weather	Clear
C6	08 Mar 2022	Visibility (mi)	12
C6	08 Mar 2022	Wind Speed (kts)	1.9
C6	08 Mar 2022	Wind Dir	W
C6	08 Mar 2022	Water Color	Greenish-Brown
C6	08 Mar 2022	Wave Ht Low (ft)	3
C6	08 Mar 2022	Wave Period (sec)	13
C6	08 Mar 2022	Sea State	Light Chop
C6	08 Mar 2022	High Tide (ft)	4.4
C6	08 Mar 2022	High Tide Time	806
C6	08 Mar 2022	Low Tide (ft)	1.03

Station	Date	Parameter	Value
C6	08 Mar 2022	Low Tide Time	1518
C6	08 Mar 2022	Comments	none
C6	16 Mar 2022	Depth (m)	
C6	16 Mar 2022	Arrive Time	927
C6	16 Mar 2022	Depart Time	930
C6	16 Mar 2022	Air Temp (C)	15.1
C6	16 Mar 2022	Weather	Overcast
C6	16 Mar 2022	Visibility (mi)	7
C6	16 Mar 2022	Wind Speed (kts)	3.8
C6	16 Mar 2022	Wind Dir	SW
C6	16 Mar 2022	Water Color	Green
C6	16 Mar 2022	Wave Ht Low (ft)	6.9
C6	16 Mar 2022	Wave Period (sec)	17
C6	16 Mar 2022	Sea State	Confused Swell
C6	16 Mar 2022	High Tide (ft)	5.38
C6	16 Mar 2022	High Tide Time	1536
C6	16 Mar 2022	Low Tide (ft)	-0.65
C6	16 Mar 2022	Low Tide Time	2224
C6	16 Mar 2022	Comments	none
C6	22 Mar 2022	Depth (m)	9
C6	22 Mar 2022	Arrive Time	929
C6	22 Mar 2022	Depart Time	932
C6	22 Mar 2022	Air Temp (C)	16.8
C6	22 Mar 2022	Weather	Clear
C6	22 Mar 2022	Visibility (mi)	10
C6	22 Mar 2022	Wind Speed (kts)	2.5
C6	22 Mar 2022	Wind Dir	NW
C6	22 Mar 2022	Water Color	Green
C6	22 Mar 2022	Wave Ht Low (ft)	5.6
C6	22 Mar 2022	Wave Period (sec)	13
C6	22 Mar 2022	Sea State	Regular Swell
C6	22 Mar 2022	High Tide (ft)	5.19
C6	22 Mar 2022	High Tide Time	706
C6	22 Mar 2022	Low Tide (ft)	0.05
C6	22 Mar 2022	Low Tide Time	1354
C6	22 Mar 2022	Comments	none
C6	30 Mar 2022	Depth (m)	11
C6	30 Mar 2022	Arrive Time	900
C6	30 Mar 2022	Depart Time	904
C6	30 Mar 2022	Air Temp (C)	14.6
C6	30 Mar 2022	Weather	Partly Cloudy
C6	30 Mar 2022	Visibility (mi)	8
C6	30 Mar 2022	Wind Speed (kts)	3.7
C6	30 Mar 2022	Wind Dir	N
C6	30 Mar 2022	Water Color	Green
C6	30 Mar 2022	Wave Ht Low (ft)	7
C6	30 Mar 2022	Wave Period (sec)	8
C6	30 Mar 2022	Sea State	Light Chop
C6	30 Mar 2022	High Tide (ft)	5.35
C6	30 Mar 2022	High Tide Time	1542
C6	30 Mar 2022	Low Tide (ft)	-0.7
C6	30 Mar 2022	Low Tide Time	2206
C6	30 Mar 2022	Comments	none
C7	01 Mar 2022	Depth (m)	
C7	01 Mar 2022	Arrive Time	831
C7	01 Mar 2022	Depart Time	835
C7	01 Mar 2022	Air Temp (C)	16.3

Station	Date	Parameter	Value
C7	01 Mar 2022	Weather	Clear
C7	01 Mar 2022	Visibility (mi)	10
C7	01 Mar 2022	Wind Speed (kts)	3.2
C7	01 Mar 2022	Wind Dir	N
C7	01 Mar 2022	Water Color	Green
C7	01 Mar 2022	Wave Ht Low (ft)	4.6
C7	01 Mar 2022	Wave Period (sec)	10.1
C7	01 Mar 2022	Sea State	Calm
C7	01 Mar 2022	High Tide (ft)	6.18
C7	01 Mar 2022	High Tide Time	1548
C7	01 Mar 2022	Low Tide (ft)	-1.43
C7	01 Mar 2022	Low Tide Time	2242
C7	01 Mar 2022	Comments	none
C7	08 Mar 2022	Depth (m)	18
C7	08 Mar 2022	Arrive Time	844
C7	08 Mar 2022	Depart Time	851
C7	08 Mar 2022	Air Temp (C)	13.7
C7	08 Mar 2022	Weather	Clear
C7	08 Mar 2022	Visibility (mi)	12
C7	08 Mar 2022	Wind Speed (kts)	0.9
C7	08 Mar 2022	Wind Dir	W
C7	08 Mar 2022	Water Color	Greenish-Brown
C7	08 Mar 2022	Wave Ht Low (ft)	3
C7	08 Mar 2022	Wave Period (sec)	13
C7	08 Mar 2022	Sea State	Light Chop
C7	08 Mar 2022	High Tide (ft)	4.4
C7	08 Mar 2022	High Tide Time	806
C7	08 Mar 2022	Low Tide (ft)	1.03
C7	08 Mar 2022	Low Tide Time	1518
C7	08 Mar 2022	Comments	none
C7	16 Mar 2022	Depth (m)	19
C7	16 Mar 2022	Arrive Time	852
C7	16 Mar 2022	Depart Time	904
C7	16 Mar 2022	Air Temp (C)	14.9
C7	16 Mar 2022	Weather	Overcast
C7	16 Mar 2022	Visibility (mi)	7
C7	16 Mar 2022	Wind Speed (kts)	6.8
C7	16 Mar 2022	Wind Dir	SW
C7	16 Mar 2022	Water Color	Green
C7	16 Mar 2022	Wave Ht Low (ft)	6.9
C7	16 Mar 2022	Wave Period (sec)	17
C7	16 Mar 2022	Sea State	Confused Swell
C7	16 Mar 2022	High Tide (ft)	5.38
C7	16 Mar 2022	High Tide Time	1536
C7	16 Mar 2022	Low Tide (ft)	-0.65
C7	16 Mar 2022	Low Tide Time	2224
C7	16 Mar 2022	Comments	none
C7	22 Mar 2022	Depth (m)	18
C7	22 Mar 2022	Arrive Time	851
C7	22 Mar 2022	Depart Time	900
C7	22 Mar 2022	Air Temp (C)	15.2
C7	22 Mar 2022	Weather	Clear
C7	22 Mar 2022	Visibility (mi)	10
C7	22 Mar 2022	Wind Speed (kts)	4.5
C7	22 Mar 2022	Wind Dir	SW
C7	22 Mar 2022	Water Color	Brownish-Green
C7	22 Mar 2022	Wave Ht Low (ft)	5.6
C7	22 Mar 2022	Wave Period (sec)	13

Station	Date	Parameter	Value
C7	22 Mar 2022	Sea State	Regular Swell
C7	22 Mar 2022	High Tide (ft)	5.19
C7	22 Mar 2022	High Tide Time	706
C7	22 Mar 2022	Low Tide (ft)	0.05
C7	22 Mar 2022	Low Tide Time	1354
C7	22 Mar 2022	Comments	Multiple casts to achieve depth; Kelp
C7	30 Mar 2022	Depth (m)	19
C7	30 Mar 2022	Arrive Time	827
C7	30 Mar 2022	Depart Time	831
C7	30 Mar 2022	Air Temp (C)	14.5
C7	30 Mar 2022	Weather	Partly Cloudy
C7	30 Mar 2022	Visibility (mi)	8
C7	30 Mar 2022	Wind Speed (kts)	4.1
C7	30 Mar 2022	Wind Dir	NE
C7	30 Mar 2022	Water Color	Green
C7	30 Mar 2022	Wave Ht Low (ft)	7
C7	30 Mar 2022	Wave Period (sec)	8
C7	30 Mar 2022	Sea State	Light Chop
C7	30 Mar 2022	High Tide (ft)	5.35
C7	30 Mar 2022	High Tide Time	1542
C7	30 Mar 2022	Low Tide (ft)	-0.7
C7	30 Mar 2022	Low Tide Time	2206
C7	30 Mar 2022	Comments	Kelp; Kelp debris; Seagrass
C8	01 Mar 2022	Depth (m)	20
C8	01 Mar 2022	Arrive Time	841
C8	01 Mar 2022	Depart Time	845
C8	01 Mar 2022	Air Temp (C)	15.6
C8	01 Mar 2022	Weather	Clear
C8	01 Mar 2022	Visibility (mi)	10
C8	01 Mar 2022	Wind Speed (kts)	8
C8	01 Mar 2022	Wind Dir	NW
C8	01 Mar 2022	Water Color	Green
C8	01 Mar 2022	Wave Ht Low (ft)	4.6
C8	01 Mar 2022	Wave Period (sec)	10.1
C8	01 Mar 2022	Sea State	Calm
C8	01 Mar 2022	High Tide (ft)	6.18
C8	01 Mar 2022	High Tide Time	1548
C8	01 Mar 2022	Low Tide (ft)	-1.43
C8	01 Mar 2022	Low Tide Time	2242
C8	01 Mar 2022	Comments	none
C8	08 Mar 2022	Depth (m)	18
C8	08 Mar 2022	Arrive Time	904
C8	08 Mar 2022	Depart Time	907
C8	08 Mar 2022	Air Temp (C)	13.9
C8	08 Mar 2022	Weather	Clear
C8	08 Mar 2022	Visibility (mi)	12
C8	08 Mar 2022	Wind Speed (kts)	1.8
C8	08 Mar 2022	Wind Dir	N
C8	08 Mar 2022	Water Color	Greenish-Brown
C8	08 Mar 2022	Wave Ht Low (ft)	3
C8	08 Mar 2022	Wave Period (sec)	13
C8	08 Mar 2022	Sea State	Light Chop
C8	08 Mar 2022	High Tide (ft)	4.4
C8	08 Mar 2022	High Tide Time	806
C8	08 Mar 2022	Low Tide (ft)	1.03
C8	08 Mar 2022	Low Tide Time	1518
C8	08 Mar 2022	Comments	none

Station	Date	Parameter	Value
C8	16 Mar 2022	Depth (m)	20
C8	16 Mar 2022	Arrive Time	905
C8	16 Mar 2022	Depart Time	907
C8	16 Mar 2022	Air Temp (C)	14.9
C8	16 Mar 2022	Weather	Overcast
C8	16 Mar 2022	Visibility (mi)	7
C8	16 Mar 2022	Wind Speed (kts)	5.5
C8	16 Mar 2022	Wind Dir	SW
C8	16 Mar 2022	Water Color	Green
C8	16 Mar 2022	Wave Ht Low (ft)	6.9
C8	16 Mar 2022	Wave Period (sec)	17
C8	16 Mar 2022	Sea State	Confused Swell
C8	16 Mar 2022	High Tide (ft)	5.38
C8	16 Mar 2022	High Tide Time	1536
C8	16 Mar 2022	Low Tide (ft)	-0.65
C8	16 Mar 2022	Low Tide Time	2224
C8	16 Mar 2022	Comments	none
C8	22 Mar 2022	Depth (m)	19
C8	22 Mar 2022	Arrive Time	908
C8	22 Mar 2022	Depart Time	911
C8	22 Mar 2022	Air Temp (C)	15.2
C8	22 Mar 2022	Weather	Clear
C8	22 Mar 2022	Visibility (mi)	10
C8	22 Mar 2022	Wind Speed (kts)	2.2
C8	22 Mar 2022	Wind Dir	SW
C8	22 Mar 2022	Water Color	Green
C8	22 Mar 2022	Wave Ht Low (ft)	5.6
C8	22 Mar 2022	Wave Period (sec)	13
C8	22 Mar 2022	Sea State	Regular Swell
C8	22 Mar 2022	High Tide (ft)	5.19
C8	22 Mar 2022	High Tide Time	706
C8	22 Mar 2022	Low Tide (ft)	0.05
C8	22 Mar 2022	Low Tide Time	1354
C8	22 Mar 2022	Comments	none
C8	30 Mar 2022	Depth (m)	20
C8	30 Mar 2022	Arrive Time	840
C8	30 Mar 2022	Depart Time	843
C8	30 Mar 2022	Air Temp (C)	14.5
C8	30 Mar 2022	Weather	Partly Cloudy
C8	30 Mar 2022	Visibility (mi)	8
C8	30 Mar 2022	Wind Speed (kts)	3.1
C8	30 Mar 2022	Wind Dir	N
C8	30 Mar 2022	Water Color	Green
C8	30 Mar 2022	Wave Ht Low (ft)	7
C8	30 Mar 2022	Wave Period (sec)	8
C8	30 Mar 2022	Sea State	Light Chop
C8	30 Mar 2022	High Tide (ft)	5.35
C8	30 Mar 2022	High Tide Time	1542
C8	30 Mar 2022	Low Tide (ft)	-0.7
C8	30 Mar 2022	Low Tide Time	2206
C8	30 Mar 2022	Comments	Kelp debris; Seagrass

**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 ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
A1	01 Mar 2022	1	14.02	70.52	8.2	33.51	8.1	25.0	2.90
A1	01 Mar 2022	2	14.01	74.15	8.1	33.51	8.1	25.0	3.20
A1	01 Mar 2022	3	14.00	74.40	8.1	33.51	8.1	25.0	3.45
A1	01 Mar 2022	4	13.99	75.73	8.0	33.51	8.0	25.0	3.92
A1	01 Mar 2022	5	13.99	75.55	8.0	33.51	8.0	25.0	4.04
A1	01 Mar 2022	6	14.00	75.77	8.0	33.51	8.0	25.0	4.29
A1	01 Mar 2022	7	13.98	75.83	8.0	33.51	8.0	25.0	4.33
A1	01 Mar 2022	8	13.97	76.00	8.0	33.51	8.0	25.0	4.42
A1	01 Mar 2022	9	13.91	76.08	7.7	33.51	8.0	25.1	4.22
A1	01 Mar 2022	10	13.73	76.40	7.4	33.52	8.0	25.1	3.49
A1	01 Mar 2022	11	13.68	77.22	7.2	33.52	8.0	25.1	2.98
A1	01 Mar 2022	12	13.51	78.19	7.0	33.53	8.0	25.2	2.43
A1	01 Mar 2022	13	13.50	78.45	6.6	33.52	8.0	25.1	2.23
A1	01 Mar 2022	14	12.84	79.27	5.6	33.57	7.9	25.3	1.58
A1	01 Mar 2022	15	12.34	79.43	4.9	33.59	7.8	25.4	1.18
A1	01 Mar 2022	16	12.07	79.42	4.6	33.60	7.8	25.5	0.98
A1	01 Mar 2022	17	11.99	79.44	4.7	33.60	7.8	25.5	0.86
A1	01 Mar 2022	18	11.91	79.66	4.6	33.60	7.8	25.5	0.81
A1	01 Mar 2022	19	11.89	79.98	4.6	33.60	7.8	25.5	0.82
A1	08 Mar 2022	1	14.46	77.84	8.0	33.48	8.1	24.9	1.88
A1	08 Mar 2022	2	14.46	77.81	8.0	33.48	8.1	24.9	2.00
A1	08 Mar 2022	3	14.44	77.07	7.8	33.48	8.1	24.9	2.12
A1	08 Mar 2022	4	14.32	78.13	7.6	33.48	8.1	24.9	2.41
A1	08 Mar 2022	5	14.19	79.14	7.4	33.48	8.1	25.0	2.39
A1	08 Mar 2022	6	13.99	80.38	7.3	33.48	8.1	25.0	2.32
A1	08 Mar 2022	7	13.91	81.35	7.1	33.47	8.1	25.0	2.34
A1	08 Mar 2022	8	13.74	81.54	7.0	33.48	8.0	25.1	2.08
A1	08 Mar 2022	9	13.73	82.05	6.9	33.47	8.0	25.1	1.95
A1	08 Mar 2022	10	13.51	82.33	6.7	33.48	8.0	25.1	1.82
A1	08 Mar 2022	11	13.34	82.60	6.5	33.48	8.0	25.1	1.75
A1	08 Mar 2022	12	13.13	82.72	6.2	33.48	8.0	25.2	1.65
A1	08 Mar 2022	13	12.75	82.80	6.0	33.50	8.0	25.3	1.44
A1	08 Mar 2022	14	12.74	82.97	6.0	33.49	7.9	25.3	1.33
A1	08 Mar 2022	15	12.52	83.11	5.8	33.50	7.9	25.3	1.26
A1	08 Mar 2022	16	12.44	83.19	5.8	33.49	7.9	25.3	1.28
A1	08 Mar 2022	17	12.41	83.19	5.8	33.49	7.9	25.3	1.17
A1	08 Mar 2022	18	12.41	83.33	5.7	33.49	7.9	25.3	1.23
A1	08 Mar 2022	19	12.41	82.83	5.7	33.49	7.9	25.3	1.20
A1	16 Mar 2022	1	15.82	69.54	9.0	33.49	8.0	24.6	2.71
A1	16 Mar 2022	2	15.82	66.04	9.0	33.49	8.0	24.6	2.93
A1	16 Mar 2022	3	15.65	75.20	8.9	33.51	8.0	24.7	3.40
A1	16 Mar 2022	4	15.45	75.70	8.8	33.50	8.0	24.7	3.37
A1	16 Mar 2022	5	15.21	76.61	8.6	33.51	8.0	24.8	3.37
A1	16 Mar 2022	6	15.07	77.71	8.2	33.51	8.0	24.8	3.48
A1	16 Mar 2022	7	14.65	77.71	7.8	33.52	7.9	24.9	3.54
A1	16 Mar 2022	8	14.46	78.06	7.5	33.51	7.9	24.9	3.53
A1	16 Mar 2022	9	14.28	77.95	7.2	33.51	7.9	25.0	3.78
A1	16 Mar 2022	10	14.07	77.31	7.1	33.52	7.9	25.0	4.18
A1	16 Mar 2022	11	13.95	77.20	6.9	33.52	7.8	25.1	4.42
A1	16 Mar 2022	12	13.74	77.33	6.3	33.52	7.8	25.1	4.37
A1	16 Mar 2022	13	12.86	78.67	5.4	33.54	7.8	25.3	3.24
A1	16 Mar 2022	14	12.10	80.67	4.8	33.55	7.7	25.4	2.12
A1	16 Mar 2022	15	11.69	80.68	4.6	33.58	7.6	25.5	1.47

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
A1	16 Mar 2022	16	11.65	80.35	4.6	33.58	7.6	25.6	1.24
A1	16 Mar 2022	17	11.68	80.54	4.7	33.58	7.6	25.5	1.06
A1	16 Mar 2022	18	11.70	80.52	4.8	33.58	7.6	25.5	1.00
A1	16 Mar 2022	19	11.72	80.40	4.8	33.58	7.6	25.5	0.96
A1	22 Mar 2022	1	13.70	75.07	7.3	33.53	7.9	25.1	3.26
A1	22 Mar 2022	2	13.67	74.88	7.0	33.53	7.9	25.1	3.69
A1	22 Mar 2022	3	13.16	73.86	6.5	33.54	7.9	25.2	4.35
A1	22 Mar 2022	4	12.63	74.35	6.0	33.55	7.8	25.3	4.23
A1	22 Mar 2022	5	12.31	75.85	5.6	33.56	7.8	25.4	4.18
A1	22 Mar 2022	6	12.02	77.51	5.3	33.56	7.8	25.5	3.83
A1	22 Mar 2022	7	11.90	78.58	5.1	33.58	7.7	25.5	3.10
A1	22 Mar 2022	8	11.79	79.33	4.9	33.59	7.7	25.5	2.49
A1	22 Mar 2022	9	11.57	79.89	4.7	33.62	7.7	25.6	2.44
A1	22 Mar 2022	10	11.53	80.38	4.7	33.62	7.7	25.6	2.08
A1	22 Mar 2022	11	11.50	80.83	4.6	33.62	7.7	25.6	1.89
A1	22 Mar 2022	12	11.48	80.80	4.6	33.63	7.7	25.6	1.74
A1	22 Mar 2022	13	11.47	80.89	4.6	33.63	7.7	25.6	1.80
A1	22 Mar 2022	14	11.46	81.35	4.5	33.64	7.7	25.6	2.00
A1	22 Mar 2022	15	11.44	81.66	4.5	33.64	7.6	25.6	1.71
A1	22 Mar 2022	16	11.44	81.61	4.5	33.64	7.6	25.6	1.58
A1	22 Mar 2022	17	11.45	81.58	4.5	33.64	7.6	25.6	1.55
A1	22 Mar 2022	18	11.45	81.48	4.5	33.64	7.6	25.6	1.49
A1	30 Mar 2022	1	15.70	79.36	8.2	33.46	8.1	24.6	1.68
A1	30 Mar 2022	2	15.69	78.67	8.2	33.48	8.1	24.6	2.09
A1	30 Mar 2022	3	15.66	78.42	8.2	33.48	8.1	24.7	2.59
A1	30 Mar 2022	4	15.43	76.63	8.3	33.49	8.1	24.7	3.34
A1	30 Mar 2022	5	15.49	77.22	8.3	33.48	8.1	24.7	3.59
A1	30 Mar 2022	6	15.25	76.73	8.1	33.49	8.0	24.8	3.68
A1	30 Mar 2022	7	15.15	77.25	8.0	33.48	8.0	24.8	3.98
A1	30 Mar 2022	8	15.12	76.09	8.0	33.49	8.0	24.8	4.62
A1	30 Mar 2022	9	15.01	75.82	7.9	33.50	8.0	24.8	5.07
A1	30 Mar 2022	10	14.96	75.44	7.7	33.50	8.0	24.8	5.21
A1	30 Mar 2022	11	14.67	74.97	7.3	33.51	8.0	24.9	4.69
A1	30 Mar 2022	12	14.37	75.30	7.3	33.53	8.0	25.0	4.10
A1	30 Mar 2022	13	14.49	75.88	7.2	33.52	8.0	24.9	4.05
A1	30 Mar 2022	14	13.84	77.12	6.8	33.53	7.9	25.1	3.13
A1	30 Mar 2022	15	13.75	77.43	6.8	33.53	7.9	25.1	3.09
A1	30 Mar 2022	16	13.65	76.98	6.8	33.52	7.9	25.1	4.17
A1	30 Mar 2022	17	13.56	77.23	6.8	33.53	7.9	25.1	4.22
A1	30 Mar 2022	18	13.64	76.67	6.7	33.53	7.9	25.1	3.55
A1	30 Mar 2022	19	13.17	76.43	6.2	33.54	7.9	25.2	3.77
A6	01 Mar 2022	1	14.36	73.04	8.5	33.51	8.1	25.0	3.60
A6	01 Mar 2022	2	14.35	73.07	8.4	33.51	8.1	25.0	4.12
A6	01 Mar 2022	3	14.32	72.96	8.3	33.51	8.1	25.0	5.71
A6	01 Mar 2022	4	14.33	72.32	8.3	33.51	8.1	25.0	6.36
A6	01 Mar 2022	5	14.33	72.67	8.2	33.51	8.1	25.0	5.87
A6	01 Mar 2022	6	14.21	72.99	7.8	33.51	8.1	25.0	4.07
A6	01 Mar 2022	7	14.12	75.52	7.4	33.51	8.1	25.0	2.53
A6	01 Mar 2022	8	14.01	77.23	7.2	33.52	8.1	25.0	1.86
A6	01 Mar 2022	9	13.90	77.48	7.0	33.52	8.0	25.1	1.57
A6	01 Mar 2022	10	13.73	77.55	6.8	33.53	8.0	25.1	1.33
A6	01 Mar 2022	11	13.56	77.52	6.5	33.54	8.0	25.1	1.29
A6	01 Mar 2022	12	13.46	77.62	6.3	33.54	8.0	25.2	1.19
A6	01 Mar 2022	13	13.12	77.56	5.8	33.55	8.0	25.2	1.14
A6	01 Mar 2022	14	12.46	78.01	5.3	33.59	7.9	25.4	1.12
A6	01 Mar 2022	15	12.51	78.84	5.1	33.57	7.9	25.4	1.08
A6	01 Mar 2022	16	12.14	78.79	4.8	33.60	7.8	25.5	0.98
A6	01 Mar 2022	17	11.85	78.38	4.4	33.62	7.8	25.5	0.92

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
A6	01 Mar 2022	18	11.66	78.17	4.2	33.62	7.8	25.6	0.83
A6	01 Mar 2022	19	11.60	77.28	4.2	33.63	7.8	25.6	0.78
A6	01 Mar 2022	20	11.65	76.68	4.3	33.63	7.8	25.6	0.75
A6	08 Mar 2022	1	14.67	76.36	8.3	33.48	8.1	24.9	1.75
A6	08 Mar 2022	2	14.58	75.88	8.1	33.48	8.1	24.9	2.11
A6	08 Mar 2022	3	14.35	75.32	7.7	33.49	8.1	24.9	2.50
A6	08 Mar 2022	4	14.06	76.61	7.2	33.48	8.1	25.0	2.34
A6	08 Mar 2022	5	13.81	79.07	7.0	33.48	8.1	25.1	2.08
A6	08 Mar 2022	6	13.67	80.38	6.8	33.48	8.0	25.1	1.97
A6	08 Mar 2022	7	13.56	81.10	6.6	33.48	8.0	25.1	1.89
A6	08 Mar 2022	8	13.40	81.30	6.4	33.48	8.0	25.1	1.80
A6	08 Mar 2022	9	13.26	81.28	6.2	33.49	8.0	25.2	1.51
A6	08 Mar 2022	10	13.08	81.67	6.1	33.49	8.0	25.2	1.36
A6	08 Mar 2022	11	12.98	81.95	6.1	33.49	8.0	25.2	1.29
A6	08 Mar 2022	12	12.95	82.00	6.1	33.49	8.0	25.2	1.25
A6	08 Mar 2022	13	12.95	81.95	6.1	33.49	7.9	25.2	1.20
A6	08 Mar 2022	14	12.92	82.02	6.1	33.49	7.9	25.2	1.21
A6	08 Mar 2022	15	12.90	82.14	6.0	33.49	7.9	25.2	1.25
A6	08 Mar 2022	16	12.84	82.03	5.9	33.49	7.9	25.3	1.27
A6	08 Mar 2022	17	12.73	82.17	5.8	33.50	7.9	25.3	1.17
A6	08 Mar 2022	18	12.44	82.21	5.6	33.51	7.9	25.3	1.20
A6	08 Mar 2022	19	12.33	82.38	5.5	33.51	7.9	25.4	1.22
A6	16 Mar 2022	1	15.82	75.36	9.1	33.48	8.0	24.6	1.89
A6	16 Mar 2022	2	15.80	76.21	9.0	33.43	8.0	24.6	2.43
A6	16 Mar 2022	3	15.72	75.61	8.9	33.49	8.0	24.7	3.89
A6	16 Mar 2022	4	15.54	74.45	8.7	33.50	8.0	24.7	5.39
A6	16 Mar 2022	5	15.35	73.51	8.4	33.50	8.0	24.7	6.09
A6	16 Mar 2022	6	15.01	72.93	8.1	33.52	8.0	24.8	6.23
A6	16 Mar 2022	7	14.73	74.38	7.8	33.52	7.9	24.9	6.06
A6	16 Mar 2022	8	14.58	75.03	7.5	33.51	7.9	24.9	5.69
A6	16 Mar 2022	9	14.31	75.81	7.1	33.52	7.9	25.0	4.51
A6	16 Mar 2022	10	14.22	76.57	6.9	33.51	7.8	25.0	4.10
A6	16 Mar 2022	11	14.01	76.64	6.7	33.52	7.8	25.0	3.83
A6	16 Mar 2022	12	13.77	77.19	6.5	33.53	7.8	25.1	3.47
A6	16 Mar 2022	13	13.61	77.39	6.2	33.53	7.8	25.1	3.02
A6	16 Mar 2022	14	13.16	77.74	5.8	33.58	7.7	25.3	2.74
A6	16 Mar 2022	15	12.92	77.39	5.5	33.56	7.7	25.3	2.18
A6	16 Mar 2022	16	12.68	77.30	5.3	33.57	7.7	25.3	1.88
A6	16 Mar 2022	17	12.39	77.27	5.1	33.57	7.6	25.4	1.55
A6	16 Mar 2022	18	11.92	75.86	4.8	33.62	7.6	25.5	1.34
A6	16 Mar 2022	19	11.56	73.76	4.6	33.62	7.6	25.6	1.19
A6	16 Mar 2022	20	11.45	72.62	4.6	33.61	7.6	25.6	1.03
A6	22 Mar 2022	1	14.21	74.49	7.5	33.54	8.0	25.0	1.81
A6	22 Mar 2022	2	13.39	74.83	6.5	33.58	7.9	25.2	1.79
A6	22 Mar 2022	3	12.52	76.32	5.6	33.58	7.8	25.4	1.64
A6	22 Mar 2022	4	12.21	78.15	5.3	33.58	7.8	25.4	1.78
A6	22 Mar 2022	5	12.17	78.86	5.3	33.58	7.8	25.5	1.99
A6	22 Mar 2022	6	12.17	79.05	5.4	33.58	7.8	25.5	2.19
A6	22 Mar 2022	7	12.17	79.24	5.4	33.59	7.8	25.5	1.81
A6	22 Mar 2022	8	12.17	79.60	5.4	33.59	7.8	25.5	2.05
A6	22 Mar 2022	9	12.16	79.63	5.4	33.59	7.8	25.5	1.85
A6	22 Mar 2022	10	12.16	79.64	5.3	33.59	7.8	25.5	1.74
A6	22 Mar 2022	11	12.11	79.72	5.3	33.60	7.8	25.5	1.56
A6	22 Mar 2022	12	12.03	79.76	5.2	33.61	7.8	25.5	1.43
A6	22 Mar 2022	13	12.06	79.74	5.2	33.60	7.7	25.5	1.40
A6	22 Mar 2022	14	12.04	79.68	5.2	33.60	7.7	25.5	1.37
A6	22 Mar 2022	15	12.05	79.89	5.3	33.61	7.7	25.5	1.42
A6	22 Mar 2022	16	12.12	79.81	5.3	33.60	7.8	25.5	1.47

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
A6	22 Mar 2022	17	12.19	79.86	5.4	33.60	7.8	25.5	1.50
A6	22 Mar 2022	18	12.20	79.99	5.3	33.60	7.8	25.5	1.57
A6	30 Mar 2022	1	15.72	74.18	8.3	33.41	8.1	24.6	2.44
A6	30 Mar 2022	2	15.68	74.72	8.3	33.43	8.1	24.6	2.76
A6	30 Mar 2022	3	15.68	74.80	8.3	33.43	8.1	24.6	2.80
A6	30 Mar 2022	4	15.59	75.13	8.2	33.47	8.1	24.7	3.07
A6	30 Mar 2022	5	15.47	76.72	8.2	33.48	8.1	24.7	3.21
A6	30 Mar 2022	6	15.49	77.11	8.2	33.47	8.1	24.7	3.38
A6	30 Mar 2022	7	15.37	77.03	8.0	33.48	8.1	24.7	3.44
A6	30 Mar 2022	8	15.25	76.95	8.0	33.49	8.1	24.8	3.54
A6	30 Mar 2022	9	15.25	76.97	8.0	33.49	8.1	24.8	3.52
A6	30 Mar 2022	10	15.25	76.72	7.9	33.49	8.1	24.8	3.49
A6	30 Mar 2022	11	15.03	77.00	7.6	33.49	8.0	24.8	3.24
A6	30 Mar 2022	12	14.73	77.69	7.5	33.51	8.0	24.9	2.85
A6	30 Mar 2022	13	14.61	78.20	7.3	33.51	8.0	24.9	2.60
A6	30 Mar 2022	14	14.36	78.16	7.1	33.51	8.0	25.0	2.37
A6	30 Mar 2022	15	14.26	78.29	7.1	33.51	8.0	25.0	2.53
A6	30 Mar 2022	16	14.07	78.15	6.8	33.52	8.0	25.0	2.37
A6	30 Mar 2022	17	13.84	77.53	6.6	33.52	7.9	25.1	2.25
A6	30 Mar 2022	18	13.83	77.38	6.6	33.51	7.9	25.1	2.12
A6	30 Mar 2022	19	13.81	76.69	6.5	33.52	7.9	25.1	1.86
A6	30 Mar 2022	20	13.77	76.46	6.5	33.52	7.9	25.1	1.82
A6	30 Mar 2022	21	13.78	76.31	6.6	33.52	7.9	25.1	1.79
A7	01 Mar 2022	1	14.36	75.62	8.1	33.50	8.1	25.0	2.39
A7	01 Mar 2022	2	14.36	75.60	8.1	33.50	8.1	25.0	2.62
A7	01 Mar 2022	3	14.36	75.42	8.1	33.50	8.1	25.0	2.99
A7	01 Mar 2022	4	14.34	75.35	8.1	33.51	8.1	25.0	3.71
A7	01 Mar 2022	5	14.31	75.20	8.0	33.51	8.1	25.0	4.55
A7	01 Mar 2022	6	14.26	74.59	7.8	33.51	8.1	25.0	4.72
A7	01 Mar 2022	7	14.13	74.78	7.7	33.51	8.1	25.0	4.07
A7	01 Mar 2022	8	14.08	75.76	7.4	33.51	8.1	25.0	3.47
A7	01 Mar 2022	9	13.72	76.97	6.8	33.53	8.0	25.1	2.70
A7	01 Mar 2022	10	13.26	78.44	6.1	33.55	8.0	25.2	1.75
A7	01 Mar 2022	11	12.94	79.13	5.7	33.55	7.9	25.3	1.45
A7	01 Mar 2022	12	12.78	79.54	5.6	33.55	7.9	25.3	1.36
A7	01 Mar 2022	13	12.73	79.85	5.6	33.55	7.9	25.3	1.28
A7	01 Mar 2022	14	12.67	79.96	5.5	33.55	7.9	25.3	1.19
A7	01 Mar 2022	15	12.65	79.86	5.5	33.56	7.9	25.3	1.20
A7	01 Mar 2022	16	12.63	79.86	5.5	33.56	7.9	25.4	1.05
A7	01 Mar 2022	17	12.60	79.75	5.5	33.56	7.9	25.4	1.03
A7	01 Mar 2022	18	12.57	79.79	5.4	33.57	7.9	25.4	1.00
A7	01 Mar 2022	19	12.47	79.73	5.3	33.57	7.9	25.4	1.01
A7	01 Mar 2022	20	12.32	79.58	5.0	33.58	7.8	25.4	0.99
A7	01 Mar 2022	21	12.06	79.67	4.7	33.60	7.8	25.5	0.91
A7	08 Mar 2022	1	14.57	75.35	8.0	33.47	8.1	24.9	2.09
A7	08 Mar 2022	2	14.57	73.63	7.9	33.47	8.1	24.9	2.08
A7	08 Mar 2022	3	14.48	75.10	7.8	33.48	8.1	24.9	2.34
A7	08 Mar 2022	4	14.24	75.98	7.6	33.49	8.1	25.0	2.51
A7	08 Mar 2022	5	14.20	77.91	7.5	33.48	8.1	25.0	2.70
A7	08 Mar 2022	6	14.14	78.62	7.4	33.48	8.1	25.0	2.95
A7	08 Mar 2022	7	14.02	79.21	7.4	33.48	8.1	25.0	2.70
A7	08 Mar 2022	8	13.98	79.75	7.2	33.48	8.1	25.0	2.56
A7	08 Mar 2022	9	13.74	80.82	6.9	33.48	8.0	25.1	2.30
A7	08 Mar 2022	10	13.66	80.99	6.8	33.48	8.0	25.1	2.06
A7	08 Mar 2022	11	13.65	81.16	6.8	33.48	8.0	25.1	1.90
A7	08 Mar 2022	12	13.62	81.20	6.7	33.48	8.0	25.1	1.87
A7	08 Mar 2022	13	13.34	81.34	6.3	33.49	8.0	25.2	1.65
A7	08 Mar 2022	14	12.96	81.91	6.0	33.49	8.0	25.2	1.42

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	08 Mar 2022	15	12.74	82.03	5.9	33.50	7.9	25.3	1.39
A7	08 Mar 2022	16	12.55	82.12	5.8	33.50	7.9	25.3	1.38
A7	08 Mar 2022	17	12.52	82.03	5.8	33.50	7.9	25.3	1.41
A7	08 Mar 2022	18	12.52	82.13	5.8	33.50	7.9	25.3	1.36
A7	08 Mar 2022	19	12.50	82.12	5.7	33.50	7.9	25.3	1.19
A7	16 Mar 2022	1	15.66	79.44	8.7	33.51	8.0	24.7	1.49
A7	16 Mar 2022	2	15.67	79.41	8.7	33.51	8.0	24.7	1.58
A7	16 Mar 2022	3	15.58	79.42	8.5	33.51	8.0	24.7	2.00
A7	16 Mar 2022	4	15.34	78.78	8.4	33.52	8.0	24.8	2.89
A7	16 Mar 2022	5	15.21	78.04	8.3	33.51	8.0	24.8	3.70
A7	16 Mar 2022	6	15.07	77.38	8.2	33.51	8.0	24.8	3.99
A7	16 Mar 2022	7	14.97	77.24	8.2	33.51	7.9	24.8	4.28
A7	16 Mar 2022	8	15.02	77.12	8.1	33.51	7.9	24.8	4.22
A7	16 Mar 2022	9	14.79	77.12	7.9	33.51	7.9	24.9	4.25
A7	16 Mar 2022	10	14.66	77.12	7.8	33.51	7.9	24.9	4.12
A7	16 Mar 2022	11	14.56	77.38	7.6	33.51	7.9	24.9	4.05
A7	16 Mar 2022	12	14.37	77.84	7.4	33.52	7.9	25.0	3.68
A7	16 Mar 2022	13	14.18	78.68	7.1	33.52	7.9	25.0	3.39
A7	16 Mar 2022	14	14.12	78.87	6.8	33.51	7.8	25.0	2.88
A7	16 Mar 2022	15	13.82	78.95	6.5	33.52	7.8	25.1	2.60
A7	16 Mar 2022	16	13.46	79.33	6.2	33.54	7.8	25.2	2.13
A7	16 Mar 2022	17	13.53	79.36	6.3	33.52	7.8	25.1	2.11
A7	16 Mar 2022	18	12.90	77.87	5.5	33.57	7.8	25.3	1.92
A7	16 Mar 2022	19	11.86	75.76	4.9	33.59	7.6	25.5	1.42
A7	22 Mar 2022	1	14.09	76.57	7.8	33.52	8.0	25.0	2.14
A7	22 Mar 2022	2	14.08	76.53	7.7	33.52	8.0	25.0	2.24
A7	22 Mar 2022	3	13.67	76.65	7.0	33.52	8.0	25.1	2.92
A7	22 Mar 2022	4	12.71	75.94	6.3	33.55	7.9	25.3	3.75
A7	22 Mar 2022	5	12.65	76.28	6.2	33.53	7.8	25.3	4.38
A7	22 Mar 2022	6	12.66	76.37	6.2	33.53	7.8	25.3	4.30
A7	22 Mar 2022	7	12.67	76.45	6.1	33.55	7.8	25.3	3.72
A7	22 Mar 2022	8	12.54	77.14	5.8	33.57	7.8	25.4	2.86
A7	22 Mar 2022	9	12.45	78.50	5.7	33.57	7.8	25.4	2.39
A7	22 Mar 2022	10	12.31	78.22	5.6	33.57	7.8	25.4	2.51
A7	22 Mar 2022	11	12.05	78.65	5.3	33.59	7.8	25.5	2.49
A7	22 Mar 2022	12	11.91	79.52	5.1	33.59	7.7	25.5	2.13
A7	22 Mar 2022	13	11.84	79.94	5.0	33.60	7.7	25.5	1.86
A7	22 Mar 2022	14	11.77	80.37	4.8	33.61	7.7	25.6	1.92
A7	22 Mar 2022	15	11.77	80.32	4.8	33.61	7.7	25.6	2.03
A7	22 Mar 2022	16	11.74	80.19	4.8	33.62	7.7	25.6	1.67
A7	22 Mar 2022	17	11.73	80.03	4.7	33.62	7.7	25.6	1.46
A7	30 Mar 2022	1	15.74	78.60	8.3	33.48	8.1	24.6	1.51
A7	30 Mar 2022	2	15.74	78.75	8.3	33.48	8.1	24.6	1.54
A7	30 Mar 2022	3	15.73	79.28	8.3	33.48	8.1	24.6	1.71
A7	30 Mar 2022	4	15.68	79.08	8.1	33.47	8.1	24.6	2.09
A7	30 Mar 2022	5	15.14	77.56	8.0	33.51	8.1	24.8	3.37
A7	30 Mar 2022	6	15.26	77.94	7.9	33.49	8.1	24.8	4.12
A7	30 Mar 2022	7	15.01	76.10	7.8	33.50	8.0	24.8	4.53
A7	30 Mar 2022	8	14.98	76.26	7.8	33.50	8.0	24.8	4.24
A7	30 Mar 2022	9	14.88	75.56	7.8	33.52	8.0	24.9	4.65
A7	30 Mar 2022	10	14.73	75.49	7.7	33.52	8.0	24.9	5.17
A7	30 Mar 2022	11	14.71	75.53	7.6	33.52	8.0	24.9	4.87
A7	30 Mar 2022	12	14.64	75.92	7.6	33.52	8.0	24.9	4.67
A7	30 Mar 2022	13	14.61	76.20	7.4	33.52	8.0	24.9	4.24
A7	30 Mar 2022	14	14.42	76.88	7.1	33.52	8.0	25.0	3.29
A7	30 Mar 2022	15	14.18	76.59	6.9	33.53	8.0	25.0	2.49
A7	30 Mar 2022	16	13.98	75.82	6.7	33.52	8.0	25.0	2.21
A7	30 Mar 2022	17	13.78	76.10	6.6	33.53	7.9	25.1	2.14

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	30 Mar 2022	18	13.73	75.98	6.4	33.52	7.9	25.1	2.05
A7	30 Mar 2022	19	13.34	75.16	6.2	33.54	7.9	25.2	2.21
A7	30 Mar 2022	20	13.31	74.60	6.1	33.53	7.9	25.2	1.86
C4	01 Mar 2022	1	14.07	75.04	7.8	33.51	8.1	25.0	1.43
C4	01 Mar 2022	2	14.06	75.20	7.8	33.51	8.1	25.0	1.48
C4	01 Mar 2022	3	13.99	74.95	7.7	33.51	8.1	25.0	1.81
C4	01 Mar 2022	4	13.98	74.93	7.6	33.51	8.1	25.0	2.15
C4	01 Mar 2022	5	13.97	74.73	7.6	33.51	8.1	25.0	2.59
C4	01 Mar 2022	6	13.93	74.81	7.6	33.51	8.1	25.1	2.86
C4	01 Mar 2022	7	13.89	75.09	7.5	33.51	8.1	25.1	2.92
C4	01 Mar 2022	8	13.88	75.43	7.5	33.51	8.1	25.1	3.07
C4	01 Mar 2022	9	13.82	75.79	7.3	33.51	8.1	25.1	2.72
C4	01 Mar 2022	10	13.69	76.07	6.8	33.52	8.0	25.1	2.11
C4	01 Mar 2022	11	13.62	75.60	6.5	33.52	8.0	25.1	1.64
C4	01 Mar 2022	12	13.60	73.07	6.4	33.52	8.0	25.1	1.45
C4	08 Mar 2022	1	14.78	75.11	7.7	33.47	8.1	24.8	0.90
C4	08 Mar 2022	2	14.64	75.06	7.7	33.46	8.1	24.9	1.04
C4	08 Mar 2022	3	14.56	74.67	7.9	33.47	8.1	24.9	1.33
C4	08 Mar 2022	4	14.52	74.16	8.0	33.47	8.1	24.9	1.79
C4	08 Mar 2022	5	14.47	74.62	8.1	33.48	8.1	24.9	2.26
C4	08 Mar 2022	6	14.44	75.33	8.0	33.48	8.1	24.9	2.65
C4	08 Mar 2022	7	14.39	75.95	7.9	33.49	8.1	24.9	2.83
C4	08 Mar 2022	8	14.32	76.63	7.6	33.49	8.1	25.0	2.74
C4	08 Mar 2022	9	13.97	78.03	7.1	33.49	8.1	25.0	2.28
C4	08 Mar 2022	10	13.71	79.55	6.8	33.48	8.1	25.1	1.37
C4	16 Mar 2022	1	15.59	53.54	7.6	33.52	7.9	24.7	3.94
C4	16 Mar 2022	2	15.62	53.21	7.6	33.52	7.9	24.7	3.86
C4	16 Mar 2022	3	15.31	53.25	7.9	33.53	7.9	24.8	5.20
C4	16 Mar 2022	4	15.12	59.74	8.3	33.52	8.0	24.8	8.34
C4	16 Mar 2022	5	15.10	64.18	8.2	33.51	8.0	24.8	9.84
C4	16 Mar 2022	6	14.74	70.21	7.6	33.53	7.9	24.9	8.96
C4	16 Mar 2022	7	14.38	77.75	7.1	33.53	7.8	25.0	7.29
C4	16 Mar 2022	8	14.00	79.78	6.5	33.54	7.8	25.1	5.40
C4	16 Mar 2022	9	13.38	78.44	5.8	33.56	7.8	25.2	3.26
C4	16 Mar 2022	10	13.04	75.41	5.2	33.54	7.8	25.3	1.97
C4	16 Mar 2022	11	12.83	71.35	4.9	33.54	7.7	25.3	1.26
C4	16 Mar 2022	12	12.76	69.71	4.9	33.54	7.7	25.3	1.01
C4	22 Mar 2022	1	14.21	69.83	7.2	33.58	7.9	25.0	0.78
C4	22 Mar 2022	2	14.12	65.89	7.1	33.58	7.9	25.1	0.84
C4	22 Mar 2022	3	13.87	69.46	6.9	33.59	7.9	25.1	0.96
C4	22 Mar 2022	4	13.54	65.53	6.6	33.59	7.8	25.2	1.19
C4	22 Mar 2022	5	13.35	66.83	6.5	33.58	7.8	25.2	1.57
C4	22 Mar 2022	6	13.06	69.77	6.1	33.58	7.8	25.3	1.71
C4	22 Mar 2022	7	12.71	73.87	5.3	33.60	7.8	25.4	1.49
C4	22 Mar 2022	8	12.44	76.28	4.6	33.61	7.8	25.4	1.04
C4	22 Mar 2022	9	12.24	75.86	4.5	33.61	7.7	25.5	0.83
C4	22 Mar 2022	10	12.23	73.73	4.6	33.61	7.7	25.5	0.80
C4	30 Mar 2022	1	15.66	60.56	7.9	33.47	8.0	24.6	2.92
C4	30 Mar 2022	2	15.65	60.76	7.9	33.47	8.0	24.7	3.09
C4	30 Mar 2022	3	15.61	62.28	8.0	33.48	8.0	24.7	3.38
C4	30 Mar 2022	4	15.58	66.67	8.0	33.48	8.1	24.7	3.25
C4	30 Mar 2022	5	15.57	70.48	8.1	33.48	8.1	24.7	3.19
C4	30 Mar 2022	6	15.56	69.03	8.1	33.48	8.1	24.7	3.14
C4	30 Mar 2022	7	15.51	71.57	8.1	33.48	8.1	24.7	2.87
C4	30 Mar 2022	8	15.50	71.07	7.7	33.48	8.1	24.7	2.61
C4	30 Mar 2022	9	15.31	72.20	7.2	33.49	8.0	24.7	1.82

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C4	30 Mar 2022	10	15.35	69.70	7.3	33.49	8.0	24.7	1.56
C4	30 Mar 2022	11	15.26	67.45	7.0	33.49	8.0	24.8	1.31
C4	30 Mar 2022	12	15.26	63.98	6.9	33.49	8.0	24.8	1.15
C5	01 Mar 2022	1	14.67	59.71	7.4	33.50	8.1	24.9	0.82
C5	01 Mar 2022	2	14.60	56.75	7.3	33.50	8.1	24.9	0.94
C5	01 Mar 2022	3	14.58	55.76	7.3	33.50	8.1	24.9	1.07
C5	01 Mar 2022	4	14.54	54.19	7.3	33.50	8.1	24.9	1.17
C5	01 Mar 2022	5	14.45	54.15	7.2	33.50	8.1	24.9	1.21
C5	01 Mar 2022	6	14.41	55.20	7.2	33.50	8.0	24.9	1.19
C5	01 Mar 2022	7	14.34	58.26	7.1	33.50	8.0	25.0	1.15
C5	01 Mar 2022	8	14.30	60.36	7.1	33.50	8.0	25.0	1.16
C5	01 Mar 2022	9	14.28	61.28	7.0	33.50	8.0	25.0	1.08
C5	01 Mar 2022	10	14.08	61.22	6.6	33.50	8.0	25.0	1.03
C5	01 Mar 2022	11	13.82	52.44	6.2	33.51	8.0	25.1	1.07
C5	08 Mar 2022	1	14.81	74.64	7.9	33.44	8.1	24.8	0.81
C5	08 Mar 2022	2	14.72	74.71	7.8	33.45	8.1	24.8	0.93
C5	08 Mar 2022	3	14.65	74.38	7.9	33.45	8.1	24.9	1.22
C5	08 Mar 2022	4	14.60	73.71	7.9	33.45	8.1	24.9	1.99
C5	08 Mar 2022	5	14.42	72.60	7.8	33.47	8.1	24.9	2.83
C5	08 Mar 2022	6	14.22	74.16	7.6	33.49	8.1	25.0	2.57
C5	08 Mar 2022	7	14.16	76.36	7.4	33.48	8.1	25.0	2.11
C5	08 Mar 2022	8	13.95	78.38	7.1	33.49	8.1	25.0	1.82
C5	08 Mar 2022	9	13.68	79.40	6.8	33.49	8.1	25.1	1.61
C5	08 Mar 2022	10	13.46	80.37	6.6	33.49	8.0	25.1	1.16
C5	16 Mar 2022	1	15.59	65.66	9.0	33.50	8.0	24.7	3.02
C5	16 Mar 2022	2	15.54	66.03	9.1	33.50	8.0	24.7	3.43
C5	16 Mar 2022	3	15.51	72.04	9.1	33.50	8.0	24.7	4.03
C5	16 Mar 2022	4	15.41	74.62	8.9	33.51	8.0	24.7	6.22
C5	16 Mar 2022	5	15.28	73.61	8.4	33.51	8.0	24.8	8.76
C5	16 Mar 2022	6	14.92	72.19	7.8	33.52	8.0	24.8	7.41
C5	16 Mar 2022	7	14.70	73.99	7.5	33.52	7.9	24.9	5.44
C5	16 Mar 2022	8	14.67	74.10	7.2	33.51	7.9	24.9	4.49
C5	16 Mar 2022	9	14.22	73.46	6.2	33.52	7.9	25.0	3.23
C5	16 Mar 2022	10	13.72	65.78	5.4	33.53	7.8	25.1	2.09
C5	16 Mar 2022	11	13.65	62.97	5.2	33.52	7.7	25.1	1.49
C5	22 Mar 2022	1	14.39	72.75	7.6	33.56	7.9	25.0	1.00
C5	22 Mar 2022	2	14.22	72.57	7.7	33.55	8.0	25.0	1.36
C5	22 Mar 2022	3	14.08	73.17	7.8	33.53	8.0	25.0	2.09
C5	22 Mar 2022	4	13.94	73.59	7.2	33.55	8.0	25.1	2.41
C5	22 Mar 2022	5	13.51	74.27	6.5	33.57	7.9	25.2	2.20
C5	22 Mar 2022	6	13.31	74.44	5.8	33.59	7.9	25.2	1.63
C5	22 Mar 2022	7	12.63	73.99	5.2	33.62	7.8	25.4	1.35
C5	22 Mar 2022	8	12.72	72.42	5.1	33.59	7.8	25.4	1.16
C5	22 Mar 2022	9	12.16	69.06	4.6	33.63	7.8	25.5	1.27
C5	22 Mar 2022	10	11.84	61.27	4.4	33.63	7.7	25.6	1.31
C5	22 Mar 2022	11	12.22	51.44	4.9	33.62	7.7	25.5	1.31
C5	30 Mar 2022	1	15.71	74.42	7.9	33.47	8.1	24.6	1.61
C5	30 Mar 2022	2	15.70	72.34	7.9	33.47	8.1	24.6	1.65
C5	30 Mar 2022	3	15.70	74.39	7.9	33.47	8.1	24.6	1.85
C5	30 Mar 2022	4	15.69	74.55	7.9	33.47	8.1	24.6	2.04
C5	30 Mar 2022	5	15.68	74.43	7.9	33.47	8.1	24.6	2.16
C5	30 Mar 2022	6	15.67	73.60	7.8	33.47	8.1	24.6	2.15
C5	30 Mar 2022	7	15.66	71.38	7.6	33.48	8.0	24.7	1.85
C5	30 Mar 2022	8	15.65	68.85	7.6	33.48	8.0	24.7	1.62
C5	30 Mar 2022	9	15.61	67.84	7.6	33.48	8.0	24.7	1.40
C5	30 Mar 2022	10	15.59	69.58	7.4	33.48	8.0	24.7	1.25

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
C5	30 Mar 2022	11	15.30	63.18	6.9	33.49	8.0	24.7	1.25
C6	01 Mar 2022	1	14.40	67.50	7.3	33.50	8.0	24.9	0.90
C6	01 Mar 2022	2	14.38	67.02	7.4	33.50	8.0	25.0	1.00
C6	01 Mar 2022	3	14.32	67.09	7.5	33.51	8.0	25.0	1.26
C6	01 Mar 2022	4	14.30	67.94	7.5	33.50	8.0	25.0	1.62
C6	01 Mar 2022	5	14.30	69.37	7.4	33.50	8.0	25.0	1.72
C6	01 Mar 2022	6	14.28	69.82	7.3	33.50	8.0	25.0	1.56
C6	01 Mar 2022	7	14.26	69.39	7.2	33.50	8.0	25.0	1.38
C6	01 Mar 2022	8	14.20	67.48	6.9	33.51	8.0	25.0	1.30
C6	01 Mar 2022	9	14.05	64.58	6.5	33.51	8.0	25.0	1.16
C6	01 Mar 2022	10	13.81	58.02	6.1	33.52	8.0	25.1	1.14
C6	08 Mar 2022	1	14.88	74.53	8.2	33.45	8.1	24.8	1.43
C6	08 Mar 2022	2	14.85	74.10	8.2	33.45	8.1	24.8	1.71
C6	08 Mar 2022	3	14.80	72.90	8.1	33.45	8.1	24.8	2.56
C6	08 Mar 2022	4	14.76	71.00	8.0	33.46	8.1	24.8	3.63
C6	08 Mar 2022	5	14.66	70.16	7.9	33.47	8.1	24.9	3.81
C6	08 Mar 2022	6	14.48	72.29	7.7	33.48	8.1	24.9	3.31
C6	08 Mar 2022	7	14.37	74.99	7.4	33.48	8.1	24.9	2.63
C6	08 Mar 2022	8	14.24	77.64	7.1	33.49	8.1	25.0	2.08
C6	08 Mar 2022	9	13.86	78.88	6.6	33.50	8.1	25.1	1.81
C6	08 Mar 2022	10	13.59	79.66	6.2	33.50	8.0	25.1	1.21
C6	16 Mar 2022	1	15.63	73.81	9.1	33.51	8.0	24.7	2.74
C6	16 Mar 2022	2	15.61	74.39	9.1	33.51	8.0	24.7	3.15
C6	16 Mar 2022	3	15.61	74.55	8.8	33.51	8.0	24.7	4.83
C6	16 Mar 2022	4	15.31	66.49	8.0	33.52	8.0	24.8	9.25
C6	16 Mar 2022	5	15.05	64.47	7.3	33.52	8.0	24.8	8.37
C6	16 Mar 2022	6	14.82	67.56	6.8	33.52	7.9	24.9	5.59
C6	16 Mar 2022	7	14.55	70.16	6.3	33.52	7.9	24.9	3.67
C6	16 Mar 2022	8	14.06	68.68	5.7	33.53	7.8	25.0	2.33
C6	16 Mar 2022	9	13.80	68.86	5.5	33.52	7.7	25.1	1.68
C6	16 Mar 2022	10	14.19	68.06	6.2	33.52	7.8	25.0	2.09
C6	22 Mar 2022	1	14.33	75.42	7.6	33.55	8.0	25.0	1.39
C6	22 Mar 2022	2	14.25	75.28	7.4	33.55	8.0	25.0	1.42
C6	22 Mar 2022	3	14.05	75.24	7.0	33.57	7.9	25.1	1.40
C6	22 Mar 2022	4	13.83	75.26	6.6	33.58	7.9	25.1	1.36
C6	22 Mar 2022	5	13.39	76.45	6.3	33.59	7.9	25.2	1.31
C6	22 Mar 2022	6	13.10	77.75	5.8	33.59	7.8	25.3	1.24
C6	22 Mar 2022	7	12.55	78.07	5.1	33.61	7.8	25.4	1.06
C6	22 Mar 2022	8	11.75	78.01	4.5	33.65	7.7	25.6	0.90
C6	22 Mar 2022	9	11.55	76.90	4.4	33.65	7.7	25.6	0.86
C6	30 Mar 2022	1	15.59	73.57	7.8	33.45	8.0	24.6	2.07
C6	30 Mar 2022	2	15.59	73.58	7.8	33.48	8.0	24.7	2.03
C6	30 Mar 2022	3	15.59	73.76	7.8	33.48	8.0	24.7	2.01
C6	30 Mar 2022	4	15.59	73.61	7.8	33.48	8.0	24.7	2.04
C6	30 Mar 2022	5	15.58	73.64	7.8	33.48	8.0	24.7	2.10
C6	30 Mar 2022	6	15.58	73.29	7.8	33.48	8.0	24.7	2.15
C6	30 Mar 2022	7	15.57	73.30	7.8	33.48	8.0	24.7	1.99
C6	30 Mar 2022	8	15.43	73.67	7.7	33.49	8.0	24.7	1.51
C6	30 Mar 2022	9	15.49	74.41	7.7	33.48	8.0	24.7	1.44
C6	30 Mar 2022	10	15.41	73.89	7.7	33.49	8.0	24.7	1.22
C6	30 Mar 2022	11	15.41	73.45	7.7	33.49	8.0	24.7	1.07
C7	01 Mar 2022	1	14.40	76.11	8.5	33.49	8.1	24.9	1.83
C7	01 Mar 2022	2	14.40	76.50	8.5	33.49	8.1	24.9	1.92
C7	01 Mar 2022	3	14.39	76.28	8.5	33.49	8.1	24.9	2.10
C7	01 Mar 2022	4	14.38	76.29	8.5	33.49	8.1	24.9	2.38

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens ( $\sigma\text{-t}$ )	Chlor ( $\mu\text{g/L}$ )
C7	01 Mar 2022	5	14.37	76.05	8.4	33.49	8.1	24.9	2.97
C7	01 Mar 2022	6	14.34	75.90	8.4	33.49	8.1	25.0	3.48
C7	01 Mar 2022	7	14.31	75.76	8.3	33.49	8.1	25.0	3.92
C7	01 Mar 2022	8	14.27	75.69	8.1	33.49	8.1	25.0	4.03
C7	01 Mar 2022	9	14.04	75.85	7.4	33.51	8.1	25.0	3.56
C7	01 Mar 2022	10	13.49	77.14	6.5	33.53	8.0	25.2	2.62
C7	01 Mar 2022	11	13.29	77.62	6.2	33.53	8.0	25.2	2.02
C7	01 Mar 2022	12	13.22	78.06	6.1	33.53	8.0	25.2	1.74
C7	01 Mar 2022	13	13.00	78.41	5.6	33.53	8.0	25.3	1.47
C7	01 Mar 2022	14	12.30	78.60	5.0	33.59	7.9	25.4	1.31
C7	01 Mar 2022	15	12.06	79.03	4.6	33.59	7.8	25.5	1.16
C7	01 Mar 2022	16	12.03	78.61	4.6	33.59	7.8	25.5	1.08
C7	01 Mar 2022	17	12.01	78.39	4.7	33.59	7.8	25.5	1.04
C7	01 Mar 2022	18	11.95	78.52	4.7	33.60	7.8	25.5	0.99
C7	01 Mar 2022	19	11.95	78.18	4.7	33.60	7.8	25.5	0.96
C7	08 Mar 2022	1	14.77	70.97	8.3	33.43	8.1	24.8	1.95
C7	08 Mar 2022	2	14.76	70.38	8.3	33.43	8.1	24.8	2.74
C7	08 Mar 2022	3	14.68	67.60	8.0	33.44	8.1	24.8	5.43
C7	08 Mar 2022	4	14.49	68.42	7.6	33.47	8.1	24.9	5.41
C7	08 Mar 2022	5	14.38	74.76	7.5	33.48	8.1	24.9	4.25
C7	08 Mar 2022	6	14.39	76.99	7.6	33.47	8.1	24.9	3.62
C7	08 Mar 2022	7	14.27	77.92	7.4	33.48	8.1	25.0	3.32
C7	08 Mar 2022	8	14.18	78.66	7.2	33.48	8.1	25.0	2.64
C7	08 Mar 2022	9	14.02	79.41	7.2	33.49	8.1	25.0	2.37
C7	08 Mar 2022	10	14.07	80.19	7.0	33.48	8.1	25.0	2.01
C7	08 Mar 2022	11	13.73	80.94	6.6	33.50	8.0	25.1	1.61
C7	08 Mar 2022	12	13.46	81.11	6.2	33.51	8.0	25.1	1.33
C7	08 Mar 2022	13	13.27	81.38	6.0	33.50	8.0	25.2	1.07
C7	08 Mar 2022	14	13.15	82.01	6.0	33.50	8.0	25.2	0.93
C7	08 Mar 2022	15	13.19	82.15	6.0	33.49	8.0	25.2	0.89
C7	08 Mar 2022	16	13.15	81.98	6.0	33.50	8.0	25.2	0.88
C7	08 Mar 2022	17	13.13	82.08	5.9	33.50	8.0	25.2	0.83
C7	16 Mar 2022	1	15.85	74.80	9.2	33.49	8.0	24.6	3.12
C7	16 Mar 2022	2	15.86	73.74	9.2	33.49	8.0	24.6	3.11
C7	16 Mar 2022	3	15.86	74.43	9.2	33.49	8.0	24.6	3.53
C7	16 Mar 2022	4	15.71	73.62	9.3	33.50	8.0	24.7	5.35
C7	16 Mar 2022	5	15.50	72.64	9.2	33.51	8.0	24.7	6.02
C7	16 Mar 2022	6	15.20	74.24	8.6	33.52	8.0	24.8	5.25
C7	16 Mar 2022	7	14.84	76.10	8.0	33.52	8.0	24.9	5.04
C7	16 Mar 2022	8	14.71	76.92	7.8	33.52	7.9	24.9	4.56
C7	16 Mar 2022	9	14.51	77.31	7.6	33.52	7.9	24.9	4.46
C7	16 Mar 2022	10	14.40	77.54	7.6	33.52	7.9	25.0	4.22
C7	16 Mar 2022	11	14.38	77.73	7.5	33.52	7.9	25.0	3.94
C7	16 Mar 2022	12	14.26	77.99	7.3	33.52	7.9	25.0	3.98
C7	16 Mar 2022	13	14.13	78.24	6.8	33.51	7.9	25.0	3.73
C7	16 Mar 2022	14	13.76	78.59	6.2	33.52	7.8	25.1	3.38
C7	16 Mar 2022	15	13.14	78.77	5.4	33.54	7.8	25.2	2.28
C7	16 Mar 2022	16	12.67	77.76	4.9	33.55	7.7	25.3	1.60
C7	16 Mar 2022	17	12.59	76.03	4.8	33.54	7.6	25.3	1.26
C7	16 Mar 2022	18	12.48	75.26	4.9	33.55	7.6	25.4	1.13
C7	16 Mar 2022	19	12.47	74.34	4.9	33.55	7.6	25.4	1.08
C7	22 Mar 2022	1	14.50	70.48	7.9	33.53	8.0	24.9	3.12
C7	22 Mar 2022	2	14.48	70.02	7.9	33.54	8.0	25.0	3.94
C7	22 Mar 2022	3	14.43	70.38	7.5	33.54	8.0	25.0	4.48
C7	22 Mar 2022	4	14.06	70.66	7.0	33.57	7.9	25.1	3.74
C7	22 Mar 2022	5	13.58	72.20	6.5	33.59	7.9	25.2	2.73
C7	22 Mar 2022	6	13.22	74.91	6.3	33.59	7.8	25.3	2.14
C7	22 Mar 2022	7	13.09	75.98	6.1	33.59	7.8	25.3	1.97

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C7	22 Mar 2022	8	12.85	76.38	5.9	33.59	7.8	25.3	1.80
C7	22 Mar 2022	9	12.61	76.91	5.7	33.60	7.8	25.4	1.94
C7	22 Mar 2022	10	12.50	77.29	5.5	33.59	7.8	25.4	1.93
C7	22 Mar 2022	11	12.39	77.74	5.4	33.59	7.8	25.4	1.89
C7	22 Mar 2022	12	12.11	78.41	5.2	33.62	7.8	25.5	1.89
C7	22 Mar 2022	13	12.19	79.10	5.2	33.61	7.8	25.5	1.89
C7	22 Mar 2022	14	11.95	79.38	5.0	33.64	7.7	25.5	1.64
C7	22 Mar 2022	15	11.80	79.83	4.8	33.64	7.7	25.6	1.44
C7	22 Mar 2022	16	11.73	80.25	4.7	33.64	7.7	25.6	1.40
C7	22 Mar 2022	17	11.70	80.19	4.7	33.65	7.7	25.6	1.26
C7	30 Mar 2022	1	15.78	70.44	7.9	33.38	8.1	24.6	1.53
C7	30 Mar 2022	2	15.77	69.71	7.9	33.38	8.1	24.6	1.51
C7	30 Mar 2022	3	15.77	68.93	7.8	33.38	8.1	24.6	1.56
C7	30 Mar 2022	4	15.76	66.68	7.7	33.39	8.1	24.6	1.79
C7	30 Mar 2022	5	15.76	69.70	7.6	33.40	8.1	24.6	1.92
C7	30 Mar 2022	6	15.76	70.36	7.7	33.42	8.1	24.6	1.87
C7	30 Mar 2022	7	15.72	70.33	7.7	33.44	8.1	24.6	1.82
C7	30 Mar 2022	8	15.71	70.74	7.7	33.45	8.1	24.6	1.77
C7	30 Mar 2022	9	15.68	70.86	7.8	33.45	8.1	24.6	1.84
C7	30 Mar 2022	10	15.64	71.89	7.9	33.45	8.1	24.6	1.87
C7	30 Mar 2022	11	15.55	73.49	7.9	33.46	8.1	24.7	1.87
C7	30 Mar 2022	12	15.42	74.61	8.0	33.47	8.1	24.7	1.94
C7	30 Mar 2022	13	15.30	76.36	8.0	33.47	8.1	24.7	1.89
C7	30 Mar 2022	14	15.24	76.70	7.7	33.47	8.1	24.7	1.87
C7	30 Mar 2022	15	14.91	75.36	6.9	33.49	8.0	24.8	1.59
C7	30 Mar 2022	16	14.60	74.59	6.6	33.50	8.0	24.9	1.24
C7	30 Mar 2022	17	13.99	74.77	6.7	33.51	8.0	25.0	1.28
C7	30 Mar 2022	18	14.57	74.88	6.6	33.47	7.9	24.9	1.34
C7	30 Mar 2022	19	13.07	73.18	6.1	33.57	7.9	25.3	1.48
C8	01 Mar 2022	1	14.59	79.36	8.5	33.50	8.1	24.9	1.14
C8	01 Mar 2022	2	14.57	79.36	8.5	33.50	8.1	24.9	1.20
C8	01 Mar 2022	3	14.54	79.14	8.4	33.50	8.1	24.9	1.43
C8	01 Mar 2022	4	14.41	78.90	8.3	33.50	8.1	24.9	1.88
C8	01 Mar 2022	5	14.35	77.81	8.2	33.50	8.1	25.0	2.27
C8	01 Mar 2022	6	14.31	77.55	8.1	33.50	8.1	25.0	2.51
C8	01 Mar 2022	7	14.22	77.60	7.8	33.50	8.1	25.0	2.49
C8	01 Mar 2022	8	14.01	77.51	7.3	33.50	8.1	25.0	2.57
C8	01 Mar 2022	9	13.61	78.08	6.8	33.52	8.0	25.1	2.43
C8	01 Mar 2022	10	13.49	78.35	6.5	33.51	8.0	25.1	2.13
C8	01 Mar 2022	11	13.36	78.99	6.3	33.51	8.0	25.2	1.88
C8	01 Mar 2022	12	13.18	79.30	6.0	33.52	8.0	25.2	1.67
C8	01 Mar 2022	13	12.93	79.33	5.7	33.53	7.9	25.3	1.49
C8	01 Mar 2022	14	12.67	79.06	5.3	33.55	7.9	25.3	1.28
C8	01 Mar 2022	15	12.34	78.69	5.0	33.57	7.9	25.4	1.16
C8	01 Mar 2022	16	12.23	78.40	4.8	33.58	7.8	25.4	1.05
C8	01 Mar 2022	17	12.16	78.32	4.8	33.58	7.8	25.5	1.05
C8	01 Mar 2022	18	12.11	78.22	4.8	33.58	7.8	25.5	1.02
C8	01 Mar 2022	19	12.09	78.08	4.8	33.59	7.8	25.5	1.01
C8	01 Mar 2022	20	12.11	77.76	4.8	33.58	7.8	25.5	1.01
C8	08 Mar 2022	1	14.72	72.48	8.1	33.44	8.1	24.8	2.08
C8	08 Mar 2022	2	14.74	72.04	8.1	33.44	8.1	24.8	1.95
C8	08 Mar 2022	3	14.65	72.38	8.2	33.45	8.1	24.8	4.21
C8	08 Mar 2022	4	14.57	69.23	8.2	33.45	8.1	24.9	8.70
C8	08 Mar 2022	5	14.47	67.07	7.9	33.46	8.1	24.9	8.54
C8	08 Mar 2022	6	14.35	70.68	7.6	33.47	8.1	24.9	6.32
C8	08 Mar 2022	7	14.25	74.74	7.5	33.48	8.1	25.0	4.56
C8	08 Mar 2022	8	14.22	77.10	7.5	33.48	8.1	25.0	3.70
C8	08 Mar 2022	9	14.21	78.28	7.6	33.48	8.1	25.0	3.20

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
C8	08 Mar 2022	10	14.20	78.91	7.5	33.48	8.1	25.0	2.84
C8	08 Mar 2022	11	14.06	79.67	7.4	33.48	8.1	25.0	2.45
C8	08 Mar 2022	12	13.96	79.97	7.3	33.48	8.1	25.0	2.35
C8	08 Mar 2022	13	13.93	80.28	7.1	33.48	8.1	25.0	2.25
C8	08 Mar 2022	14	13.73	80.67	6.9	33.49	8.1	25.1	2.21
C8	08 Mar 2022	15	13.60	80.95	6.6	33.49	8.0	25.1	2.08
C8	08 Mar 2022	16	13.54	80.77	6.5	33.49	8.0	25.1	2.15
C8	08 Mar 2022	17	13.40	80.53	6.3	33.50	8.0	25.2	1.87
C8	08 Mar 2022	18	13.31	80.40	6.3	33.50	8.0	25.2	1.71
C8	08 Mar 2022	19	13.29	80.99	6.2	33.50	8.0	25.2	1.64
C8	16 Mar 2022	1	15.76	71.58	9.3	33.49	8.0	24.6	4.35
C8	16 Mar 2022	2	15.75	71.44	9.3	33.49	8.0	24.6	5.96
C8	16 Mar 2022	3	15.60	69.48	9.0	33.50	8.0	24.7	6.95
C8	16 Mar 2022	4	15.05	70.83	8.4	33.52	8.0	24.8	6.25
C8	16 Mar 2022	5	14.84	74.63	8.0	33.51	8.0	24.9	5.86
C8	16 Mar 2022	6	14.74	75.97	7.7	33.51	7.9	24.9	5.19
C8	16 Mar 2022	7	14.53	77.11	7.4	33.51	7.9	24.9	4.73
C8	16 Mar 2022	8	14.28	77.63	7.0	33.51	7.9	25.0	4.51
C8	16 Mar 2022	9	14.08	77.80	6.7	33.51	7.8	25.0	4.63
C8	16 Mar 2022	10	14.00	77.74	6.6	33.51	7.8	25.0	4.38
C8	16 Mar 2022	11	13.96	78.15	6.6	33.51	7.8	25.0	4.08
C8	16 Mar 2022	12	13.97	78.11	6.5	33.51	7.8	25.0	3.82
C8	16 Mar 2022	13	13.74	78.47	6.1	33.51	7.8	25.1	3.41
C8	16 Mar 2022	14	13.53	79.23	5.6	33.52	7.8	25.1	3.13
C8	16 Mar 2022	15	13.01	79.66	5.1	33.54	7.7	25.3	2.46
C8	16 Mar 2022	16	12.44	78.98	4.7	33.55	7.6	25.4	1.81
C8	16 Mar 2022	17	12.32	74.29	4.6	33.55	7.6	25.4	1.45
C8	16 Mar 2022	18	12.38	72.79	4.7	33.55	7.6	25.4	1.28
C8	16 Mar 2022	19	12.38	71.01	4.8	33.55	7.6	25.4	1.27
C8	16 Mar 2022	20	12.19	54.15	4.8	33.56	7.6	25.4	1.42
C8	22 Mar 2022	1	14.04	70.44	7.2	33.54	7.9	25.0	1.59
C8	22 Mar 2022	2	13.94	70.62	7.1	33.55	7.9	25.1	2.01
C8	22 Mar 2022	3	13.50	71.98	6.7	33.56	7.9	25.2	2.79
C8	22 Mar 2022	4	13.10	74.04	6.2	33.57	7.9	25.3	2.75
C8	22 Mar 2022	5	12.95	75.69	6.0	33.57	7.8	25.3	2.84
C8	22 Mar 2022	6	12.86	76.64	5.9	33.57	7.8	25.3	3.01
C8	22 Mar 2022	7	12.75	76.62	5.8	33.59	7.8	25.3	2.76
C8	22 Mar 2022	8	12.65	76.64	5.6	33.59	7.8	25.4	2.36
C8	22 Mar 2022	9	12.59	77.05	5.5	33.60	7.8	25.4	2.01
C8	22 Mar 2022	10	12.53	77.88	5.5	33.60	7.8	25.4	1.71
C8	22 Mar 2022	11	12.47	78.29	5.4	33.61	7.8	25.4	1.69
C8	22 Mar 2022	12	12.40	78.12	5.2	33.60	7.8	25.4	1.59
C8	22 Mar 2022	13	12.15	78.98	5.0	33.63	7.7	25.5	1.45
C8	22 Mar 2022	14	12.13	78.62	4.8	33.62	7.7	25.5	1.35
C8	22 Mar 2022	15	11.82	78.59	4.6	33.66	7.7	25.6	1.34
C8	22 Mar 2022	16	11.69	79.00	4.4	33.66	7.7	25.6	1.26
C8	22 Mar 2022	17	11.61	78.81	4.3	33.66	7.7	25.6	1.09
C8	22 Mar 2022	18	11.48	77.30	4.2	33.67	7.7	25.7	1.08
C8	22 Mar 2022	19	11.48	76.03	4.2	33.67	7.7	25.7	1.05
C8	30 Mar 2022	1	15.71	66.34	8.1	33.31	8.1	24.5	1.92
C8	30 Mar 2022	2	15.70	67.79	8.1	33.34	8.1	24.5	2.56
C8	30 Mar 2022	3	15.70	68.42	8.1	33.35	8.1	24.5	2.92
C8	30 Mar 2022	4	15.61	69.42	8.2	33.42	8.1	24.6	3.10
C8	30 Mar 2022	5	15.56	72.71	8.3	33.45	8.1	24.6	3.00
C8	30 Mar 2022	6	15.49	74.09	8.3	33.45	8.1	24.7	3.12
C8	30 Mar 2022	7	15.40	74.75	8.3	33.47	8.1	24.7	3.10
C8	30 Mar 2022	8	15.40	74.41	8.2	33.47	8.1	24.7	3.19
C8	30 Mar 2022	9	15.28	73.58	8.2	33.48	8.1	24.7	3.15

<b>Station</b>	<b>Date</b>	<b>Depth (m)</b>	<b>Temp (°C)</b>	<b>XMS (%)</b>	<b>DO (mg/L)</b>	<b>Sal (ppt)</b>	<b>pH</b>	<b>Dens (<math>\sigma-t</math>)</b>	<b>Chlor (<math>\mu\text{g/L}</math>)</b>
C8	30 Mar 2022	10	15.22	73.41	8.1	33.48	8.1	24.8	3.34
C8	30 Mar 2022	11	15.09	73.22	7.9	33.48	8.1	24.8	3.77
C8	30 Mar 2022	12	14.95	72.04	7.7	33.48	8.1	24.8	4.23
C8	30 Mar 2022	13	14.68	71.50	7.3	33.49	8.0	24.9	4.06
C8	30 Mar 2022	14	14.14	72.32	7.0	33.51	8.0	25.0	3.34
C8	30 Mar 2022	15	13.66	75.73	7.0	33.52	8.0	25.1	2.97
C8	30 Mar 2022	16	14.15	76.49	6.9	33.49	7.9	25.0	3.35
C8	30 Mar 2022	17	13.16	75.23	6.4	33.54	7.9	25.2	2.95
C8	30 Mar 2022	18	13.12	74.07	6.2	33.52	7.9	25.2	2.64
C8	30 Mar 2022	19	13.08	73.72	6.2	33.53	7.9	25.2	2.70
C8	30 Mar 2022	20	13.06	73.41	6.2	33.53	7.9	25.2	2.76

NA = not available

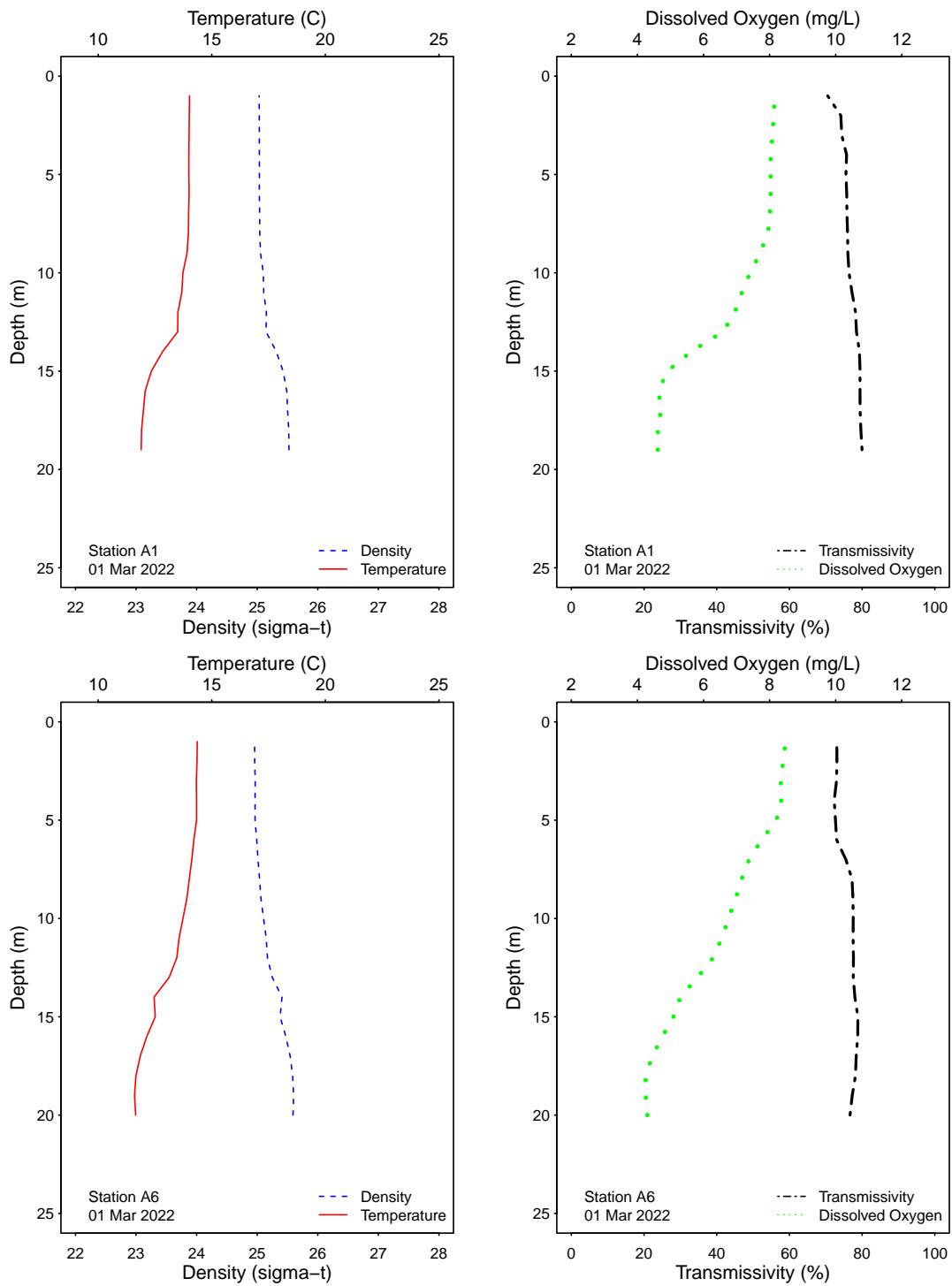


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

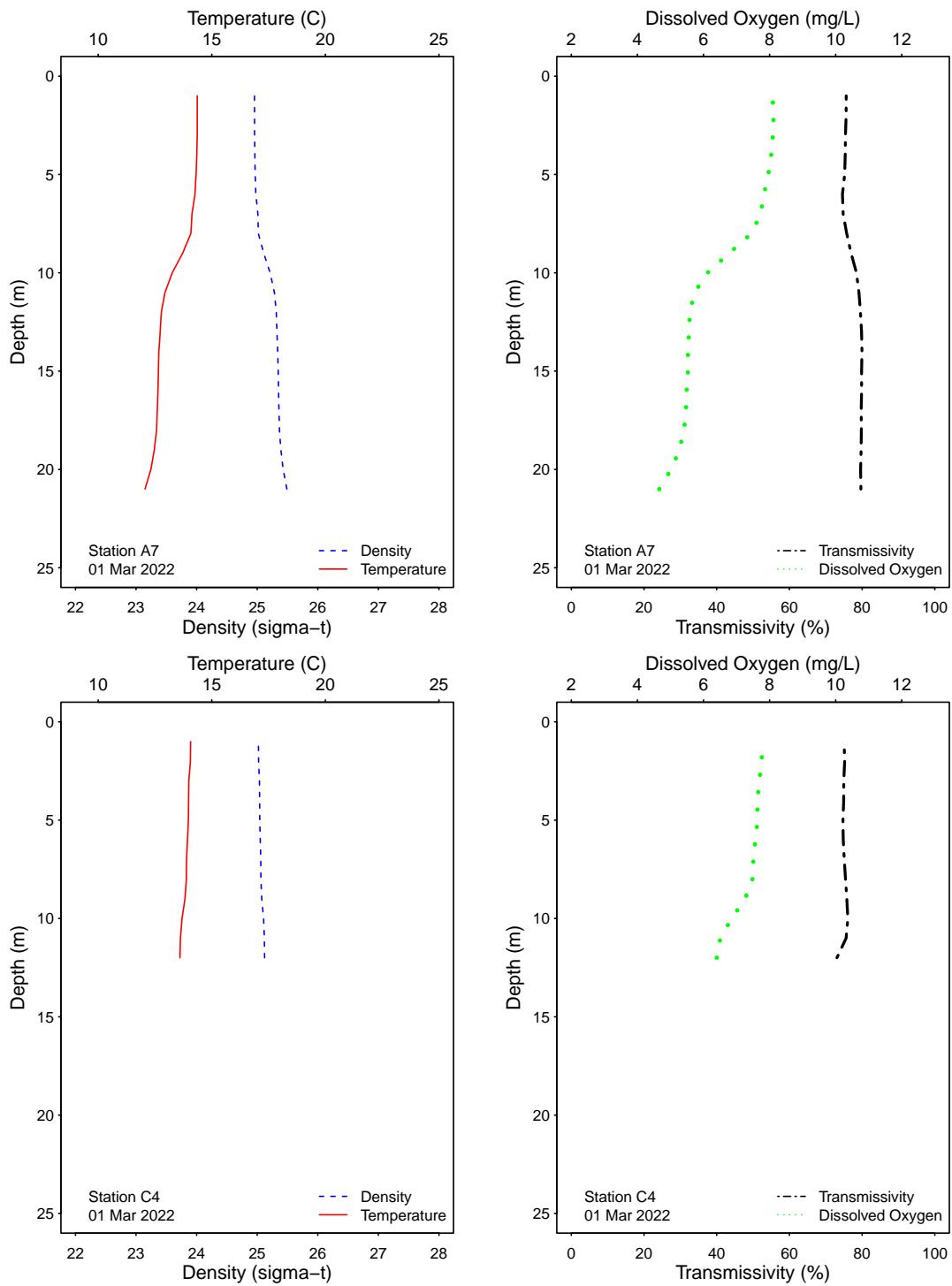


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

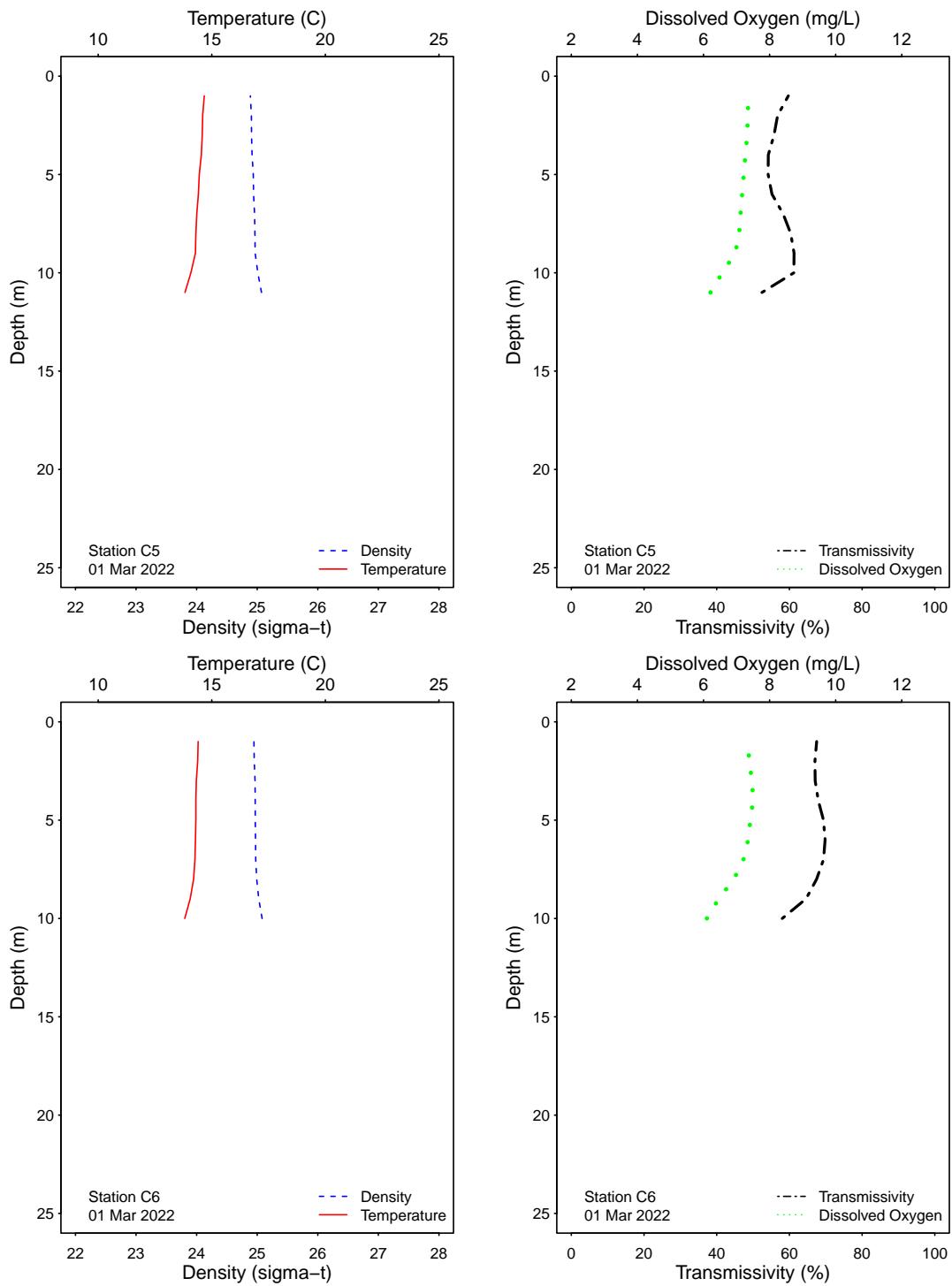


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

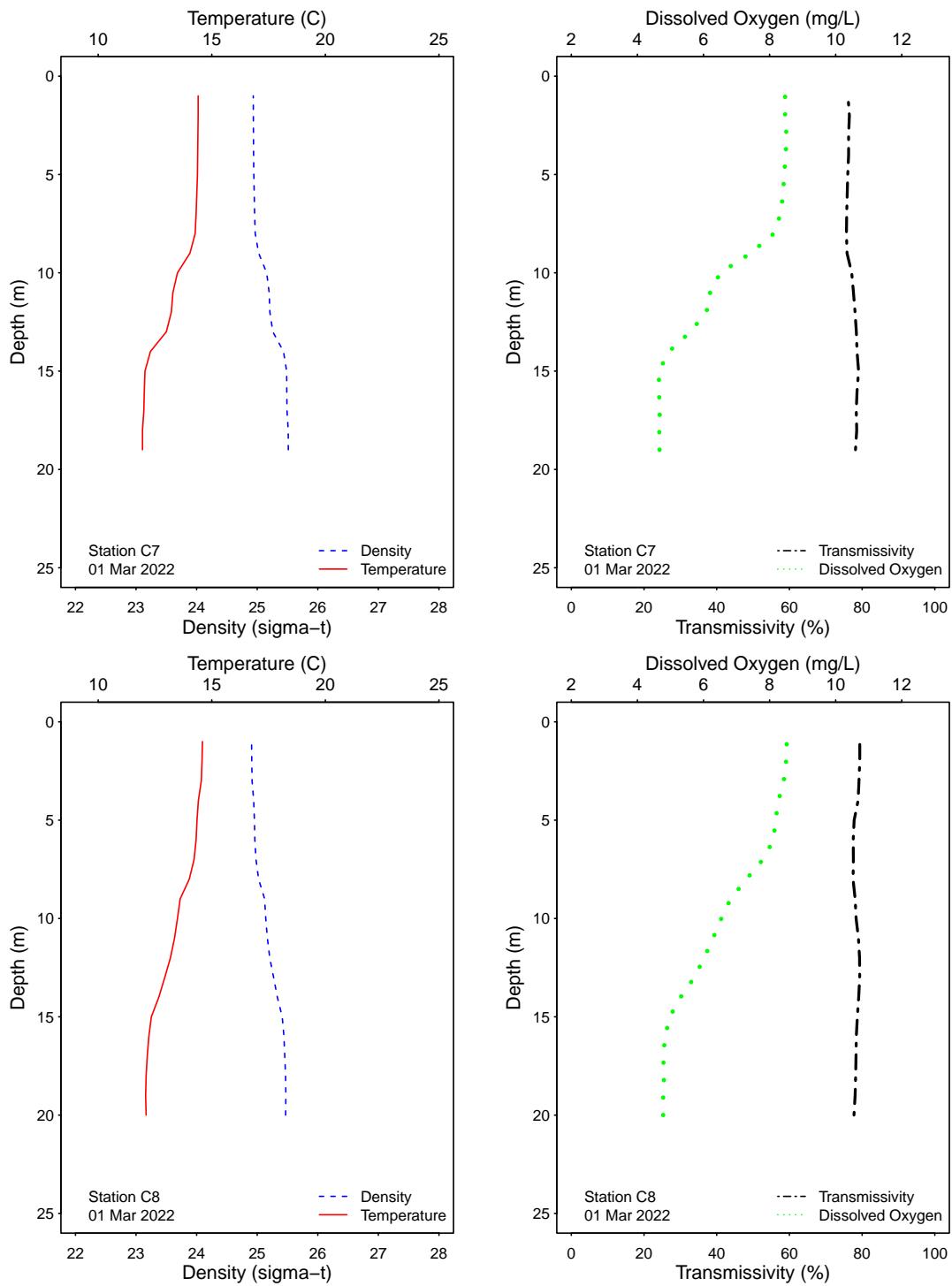


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

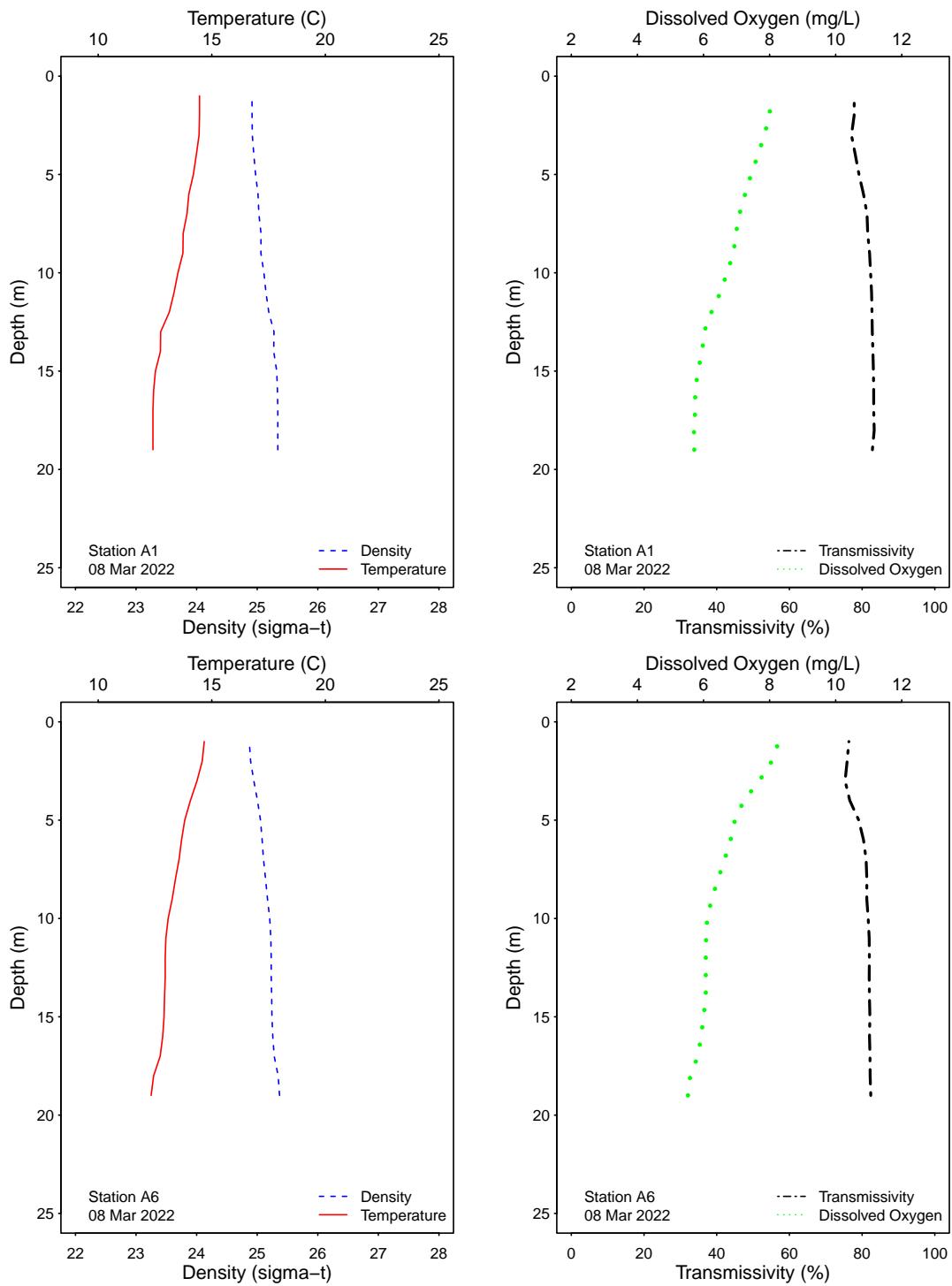


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

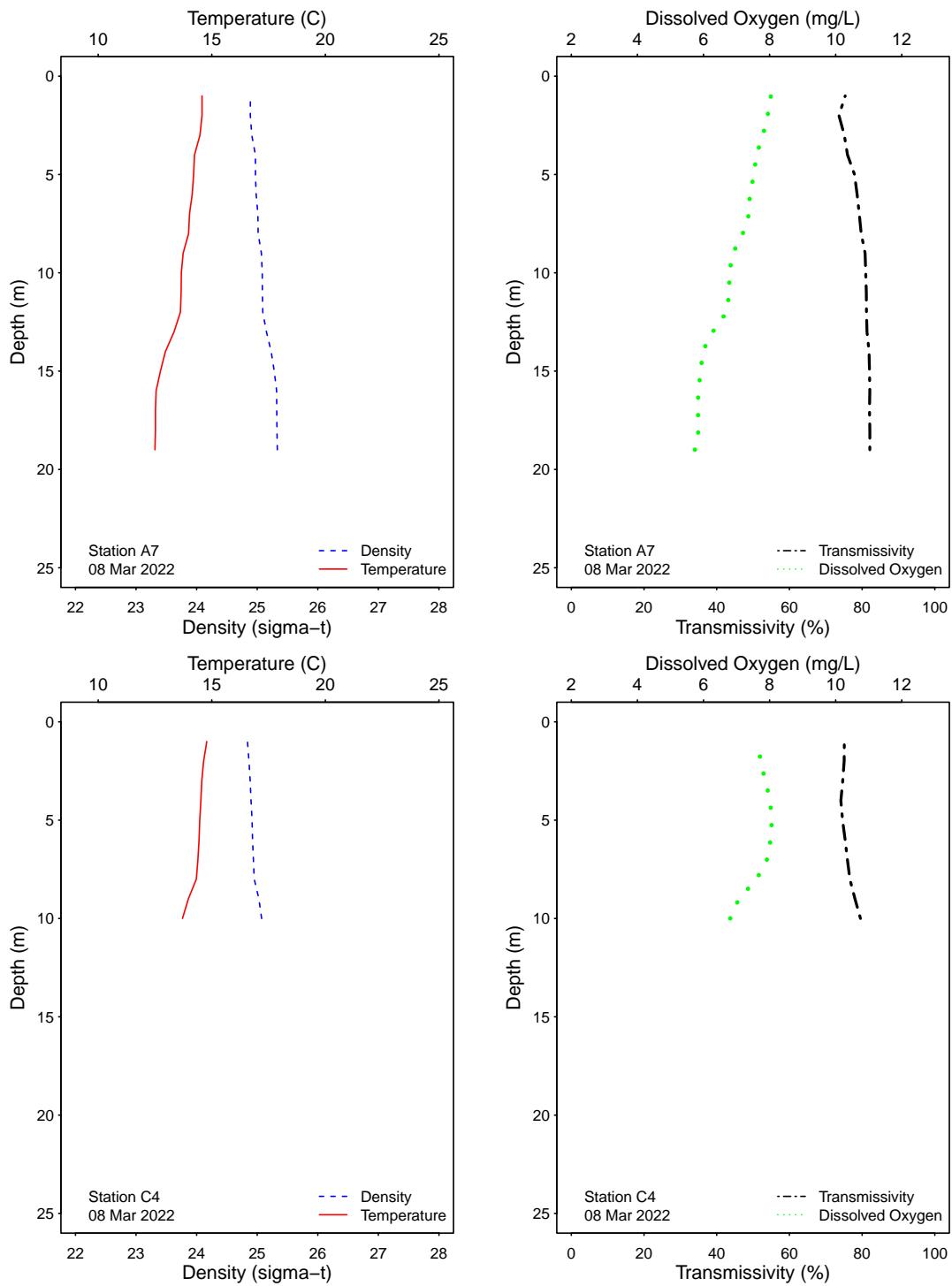


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

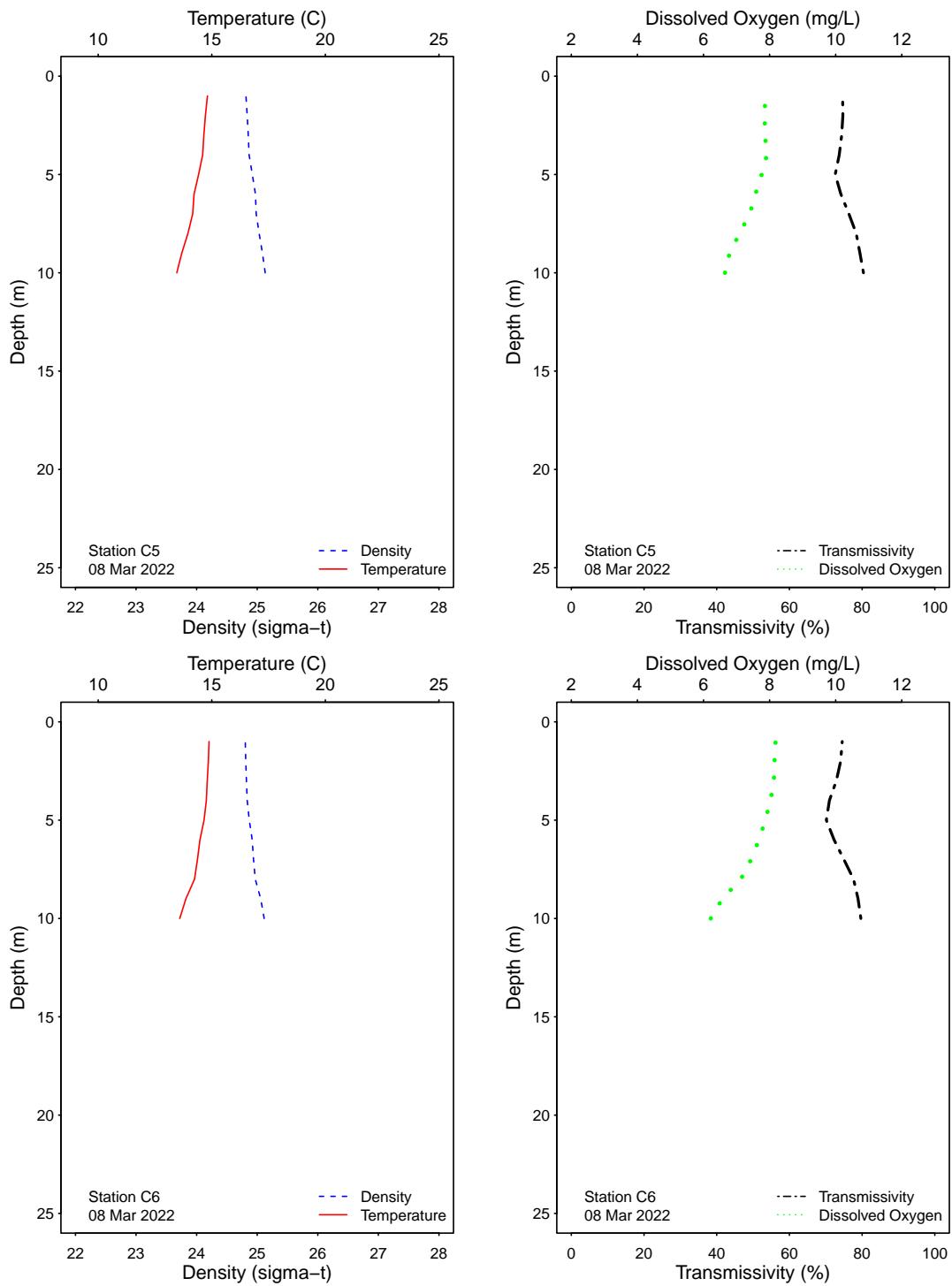


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

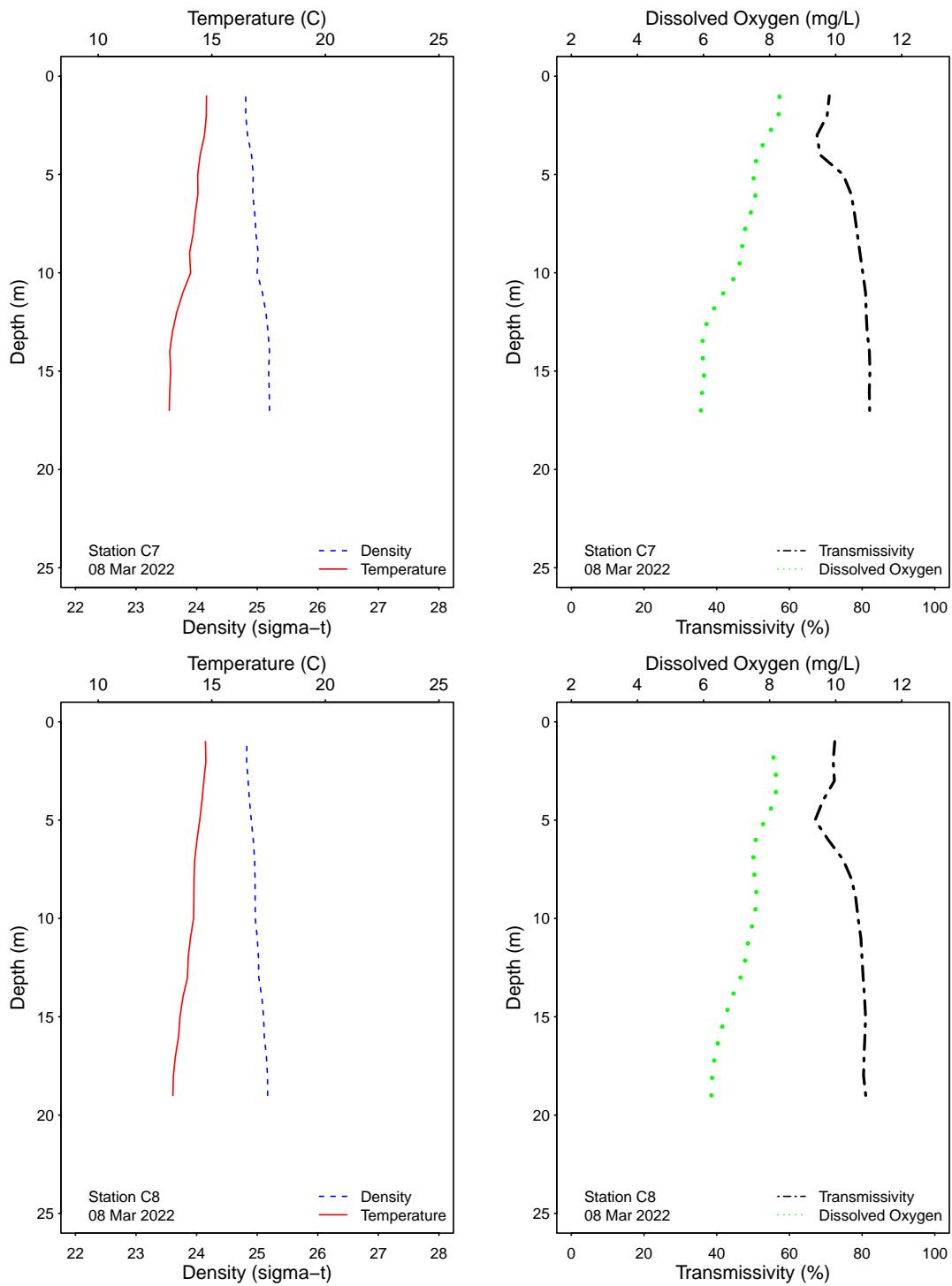


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

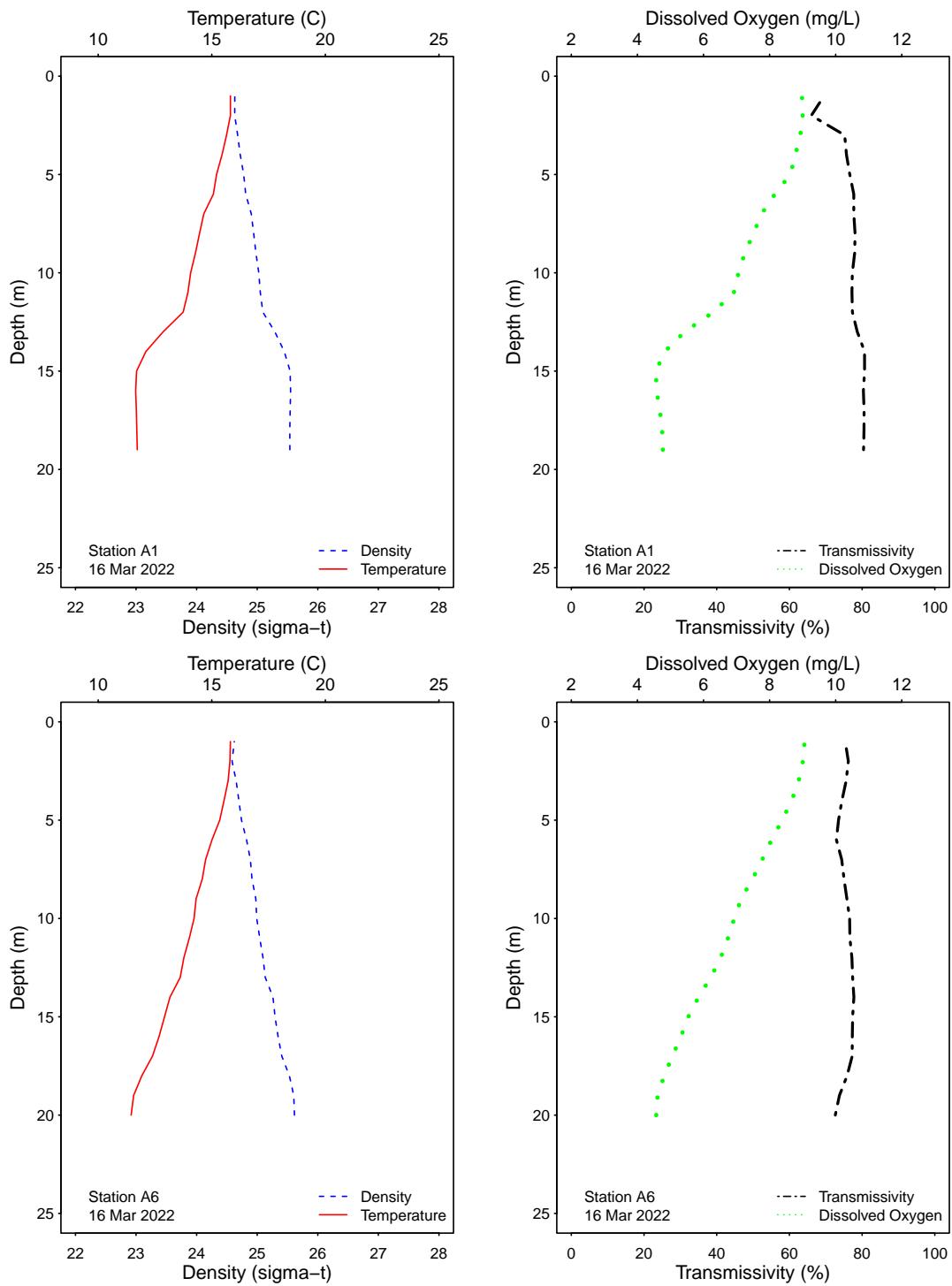


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

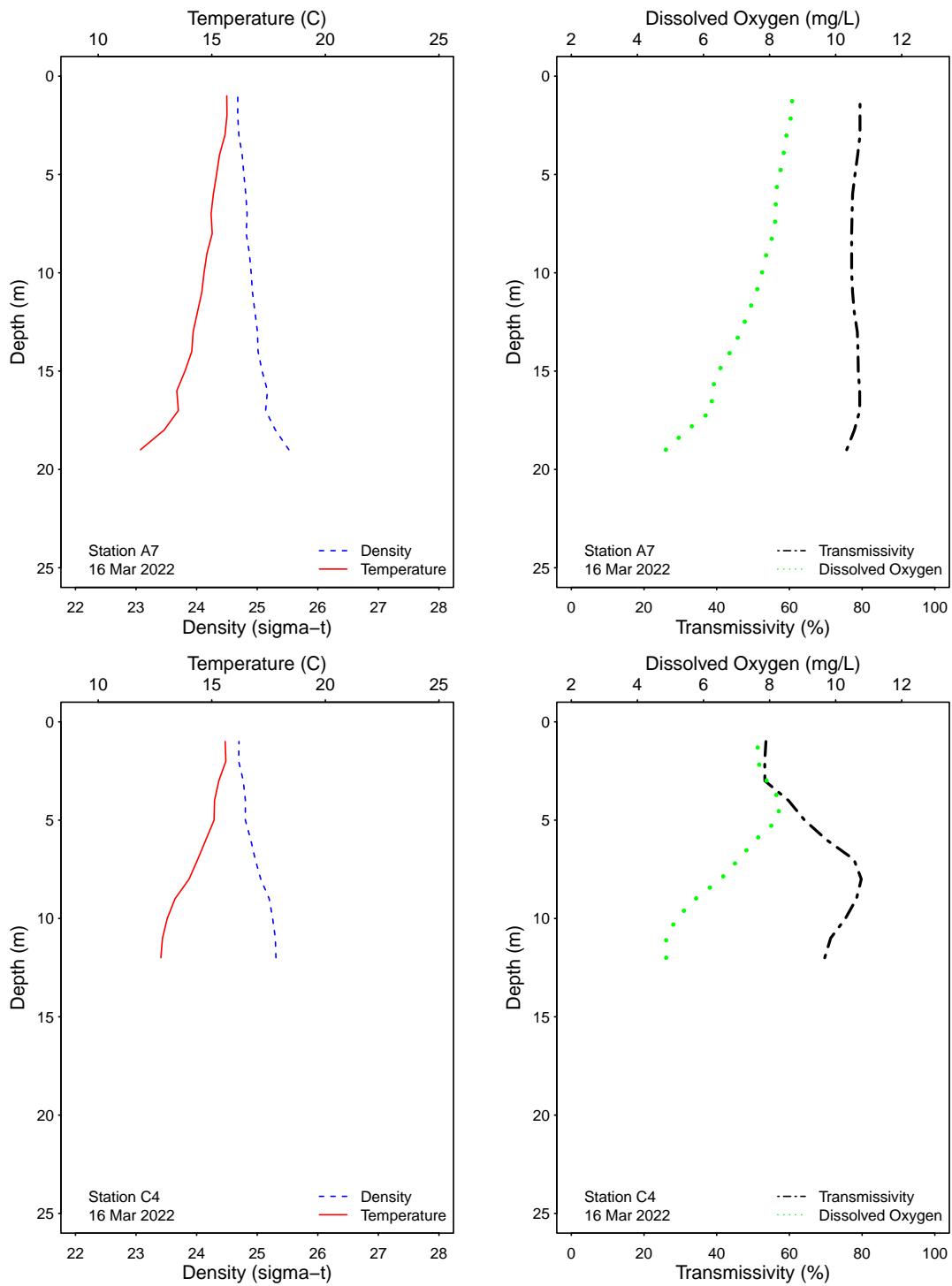


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

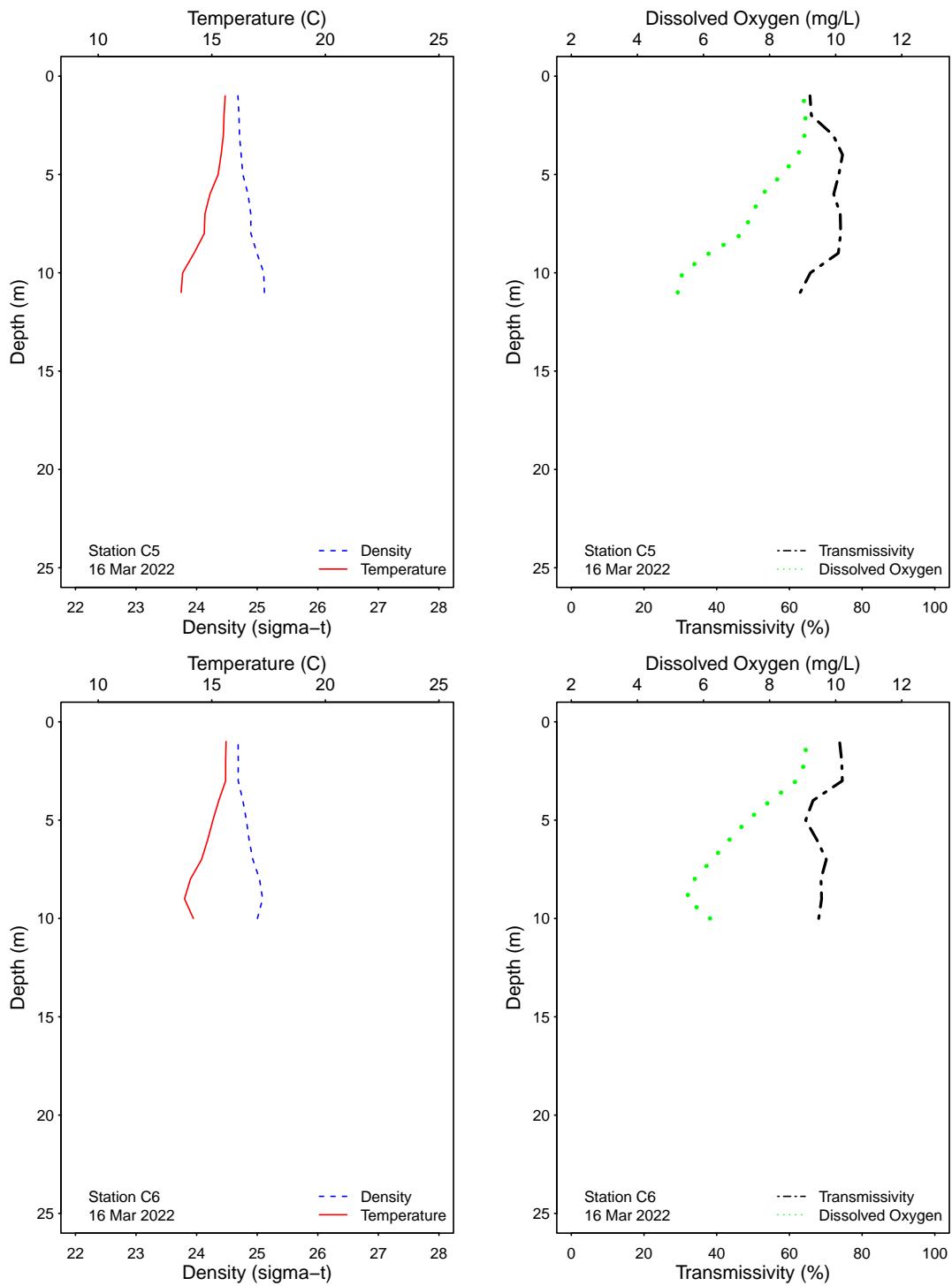


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

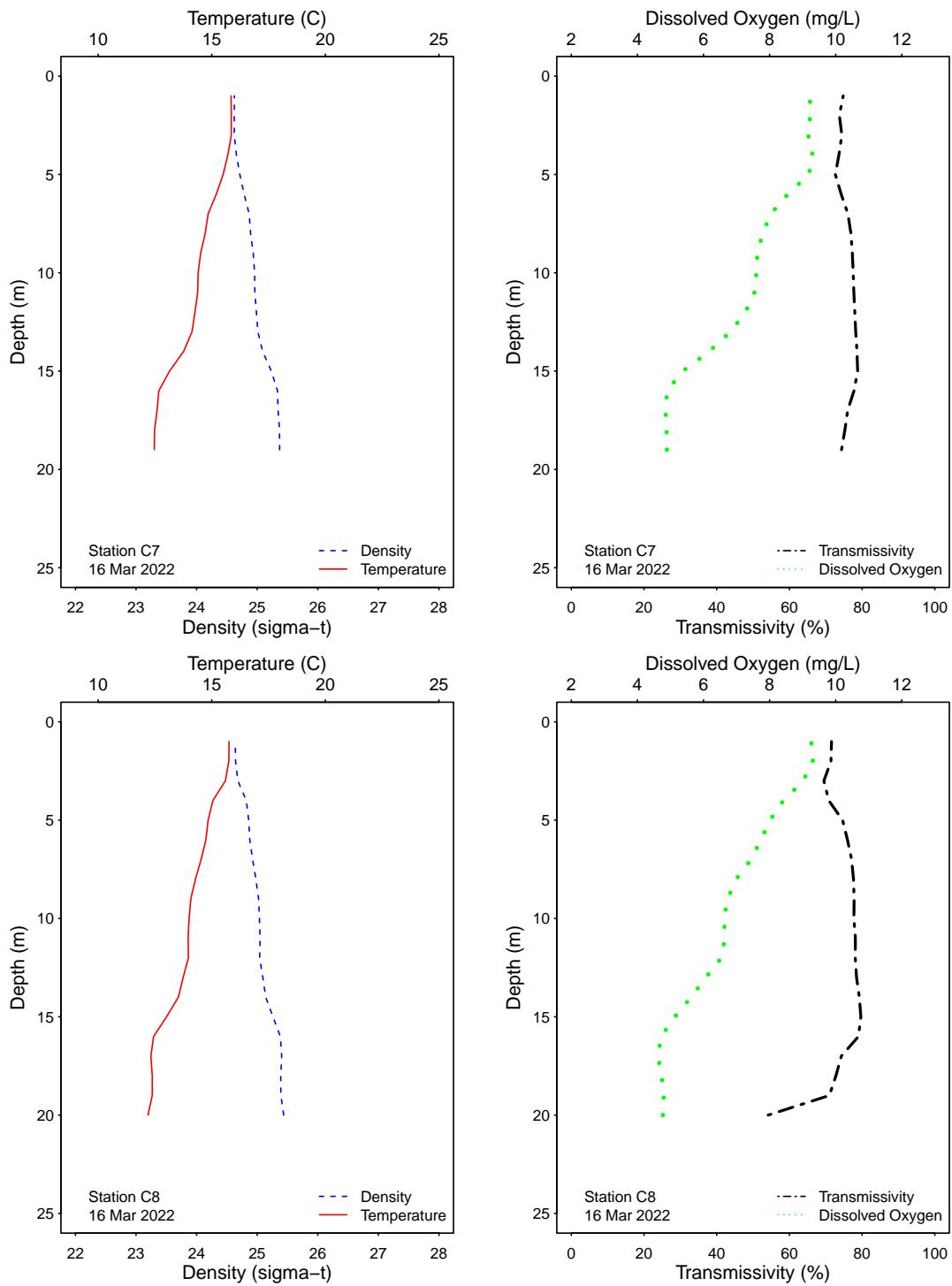


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

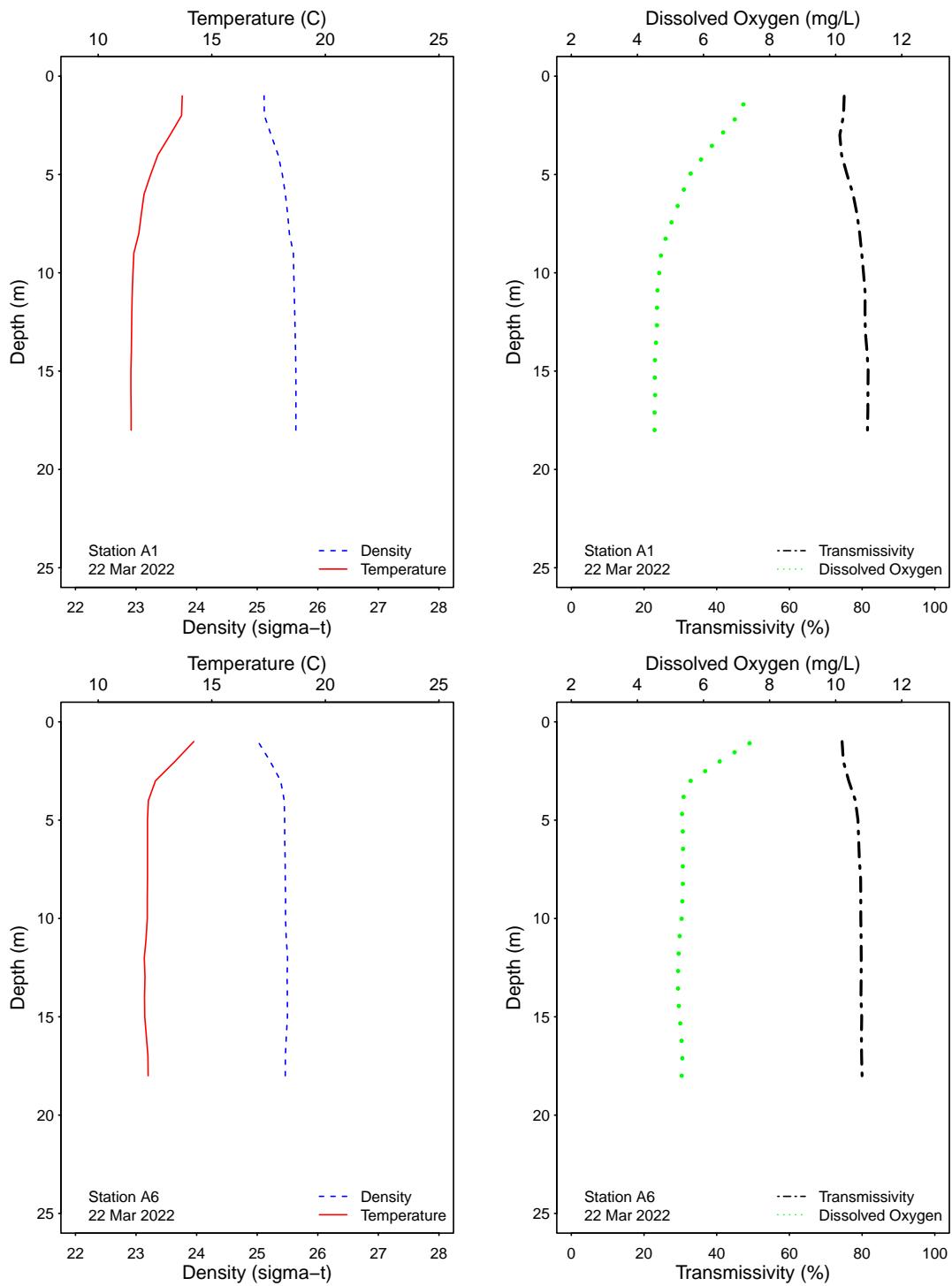


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

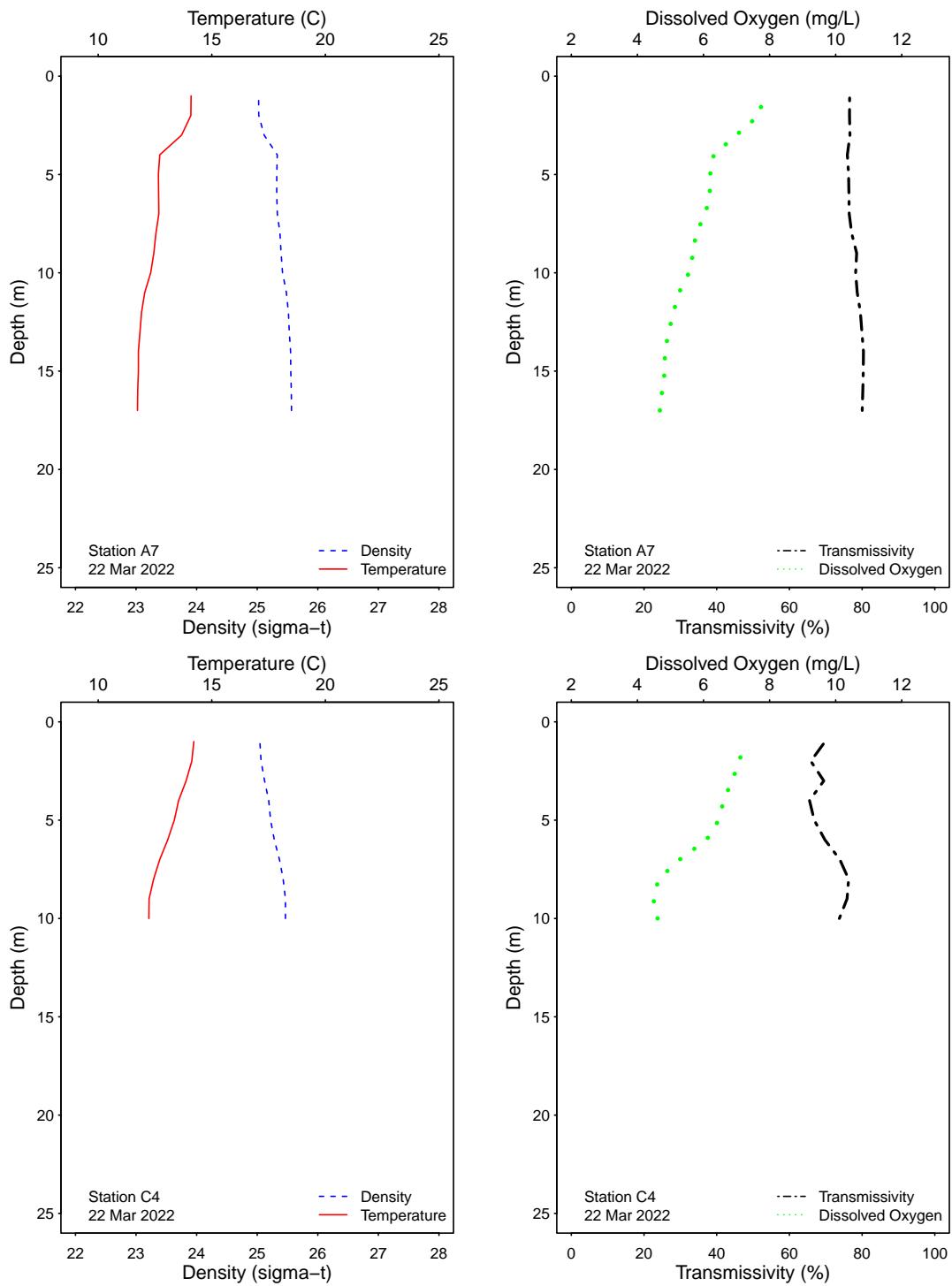


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

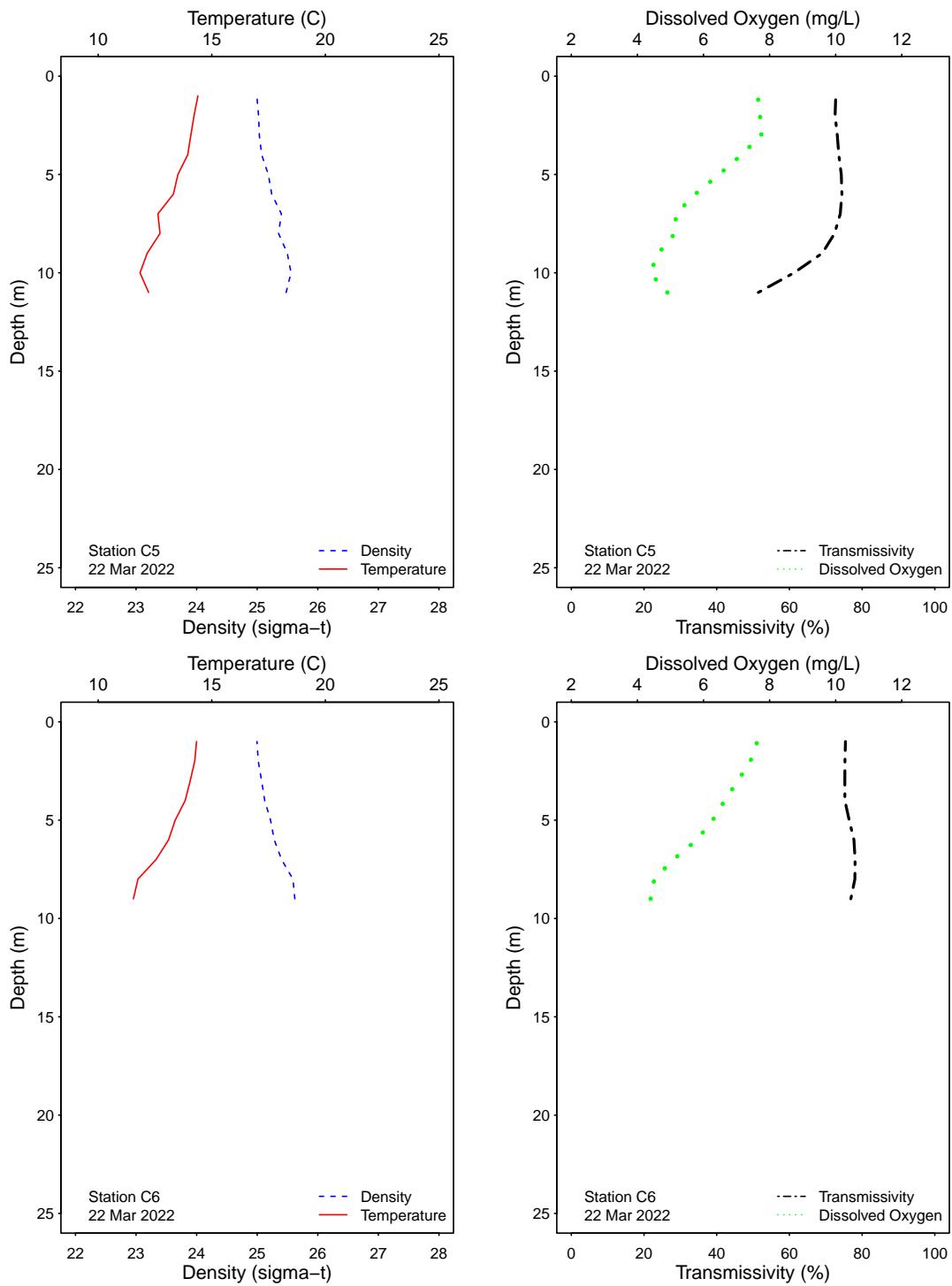


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

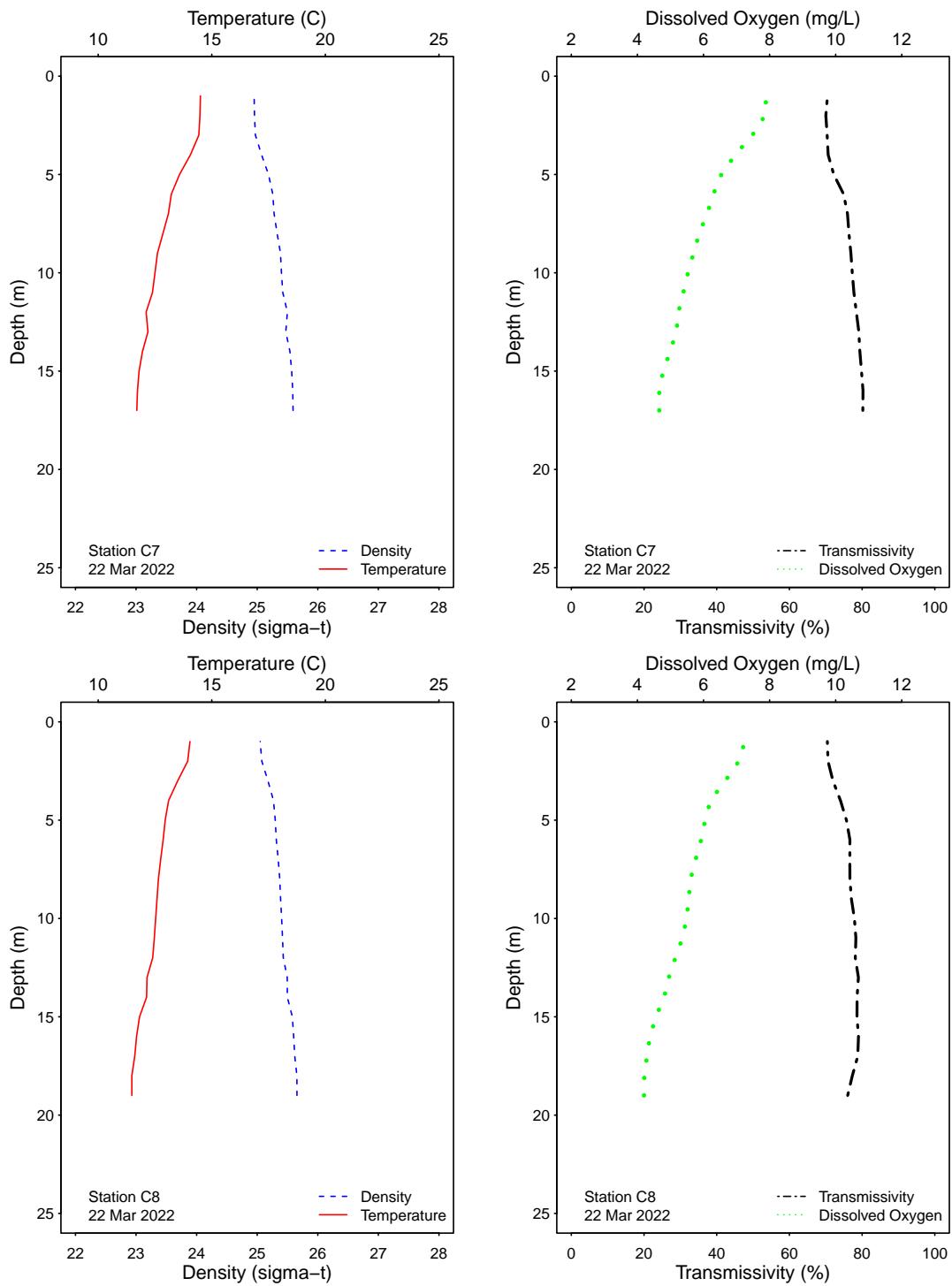


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

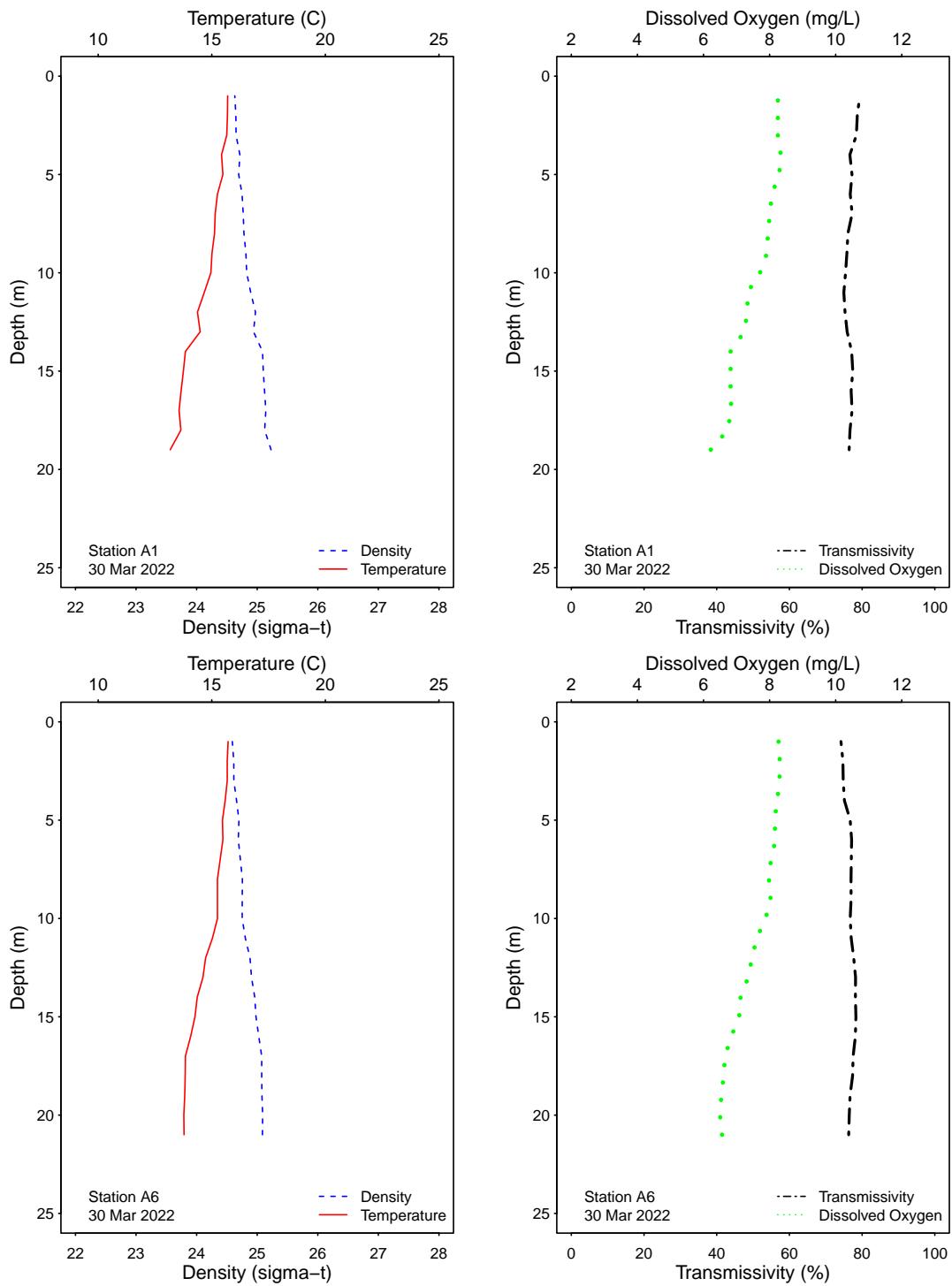


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

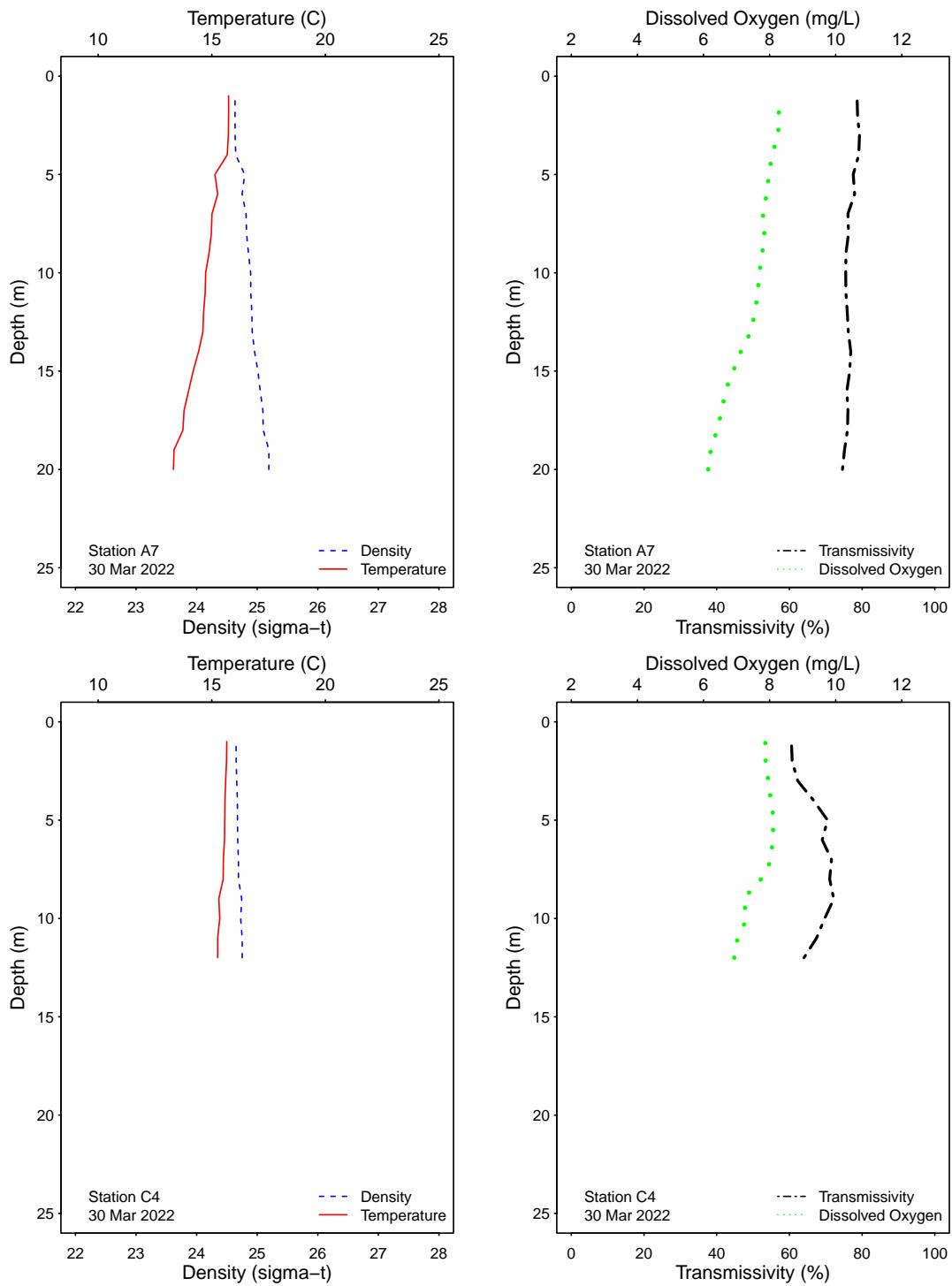


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

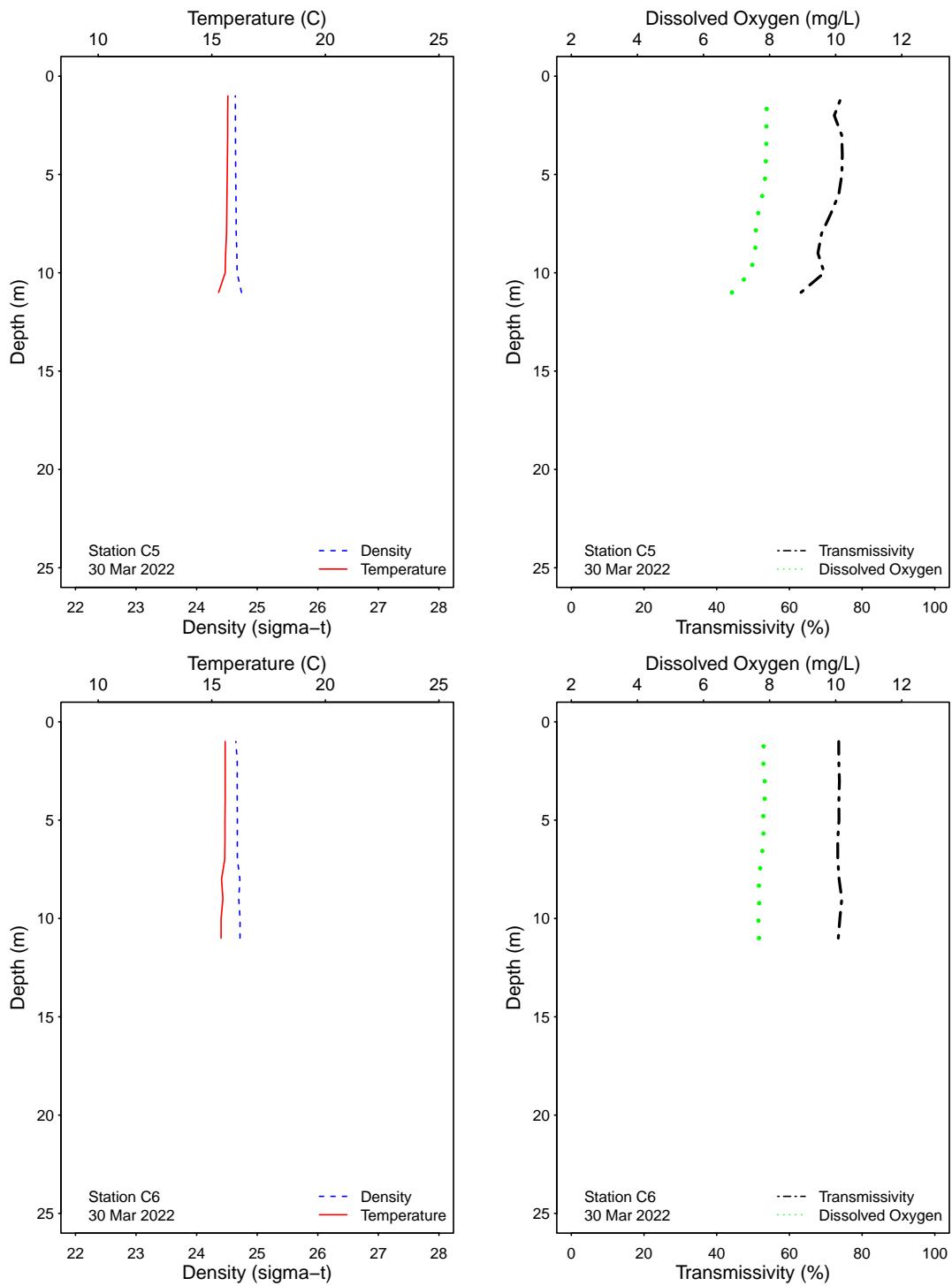


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

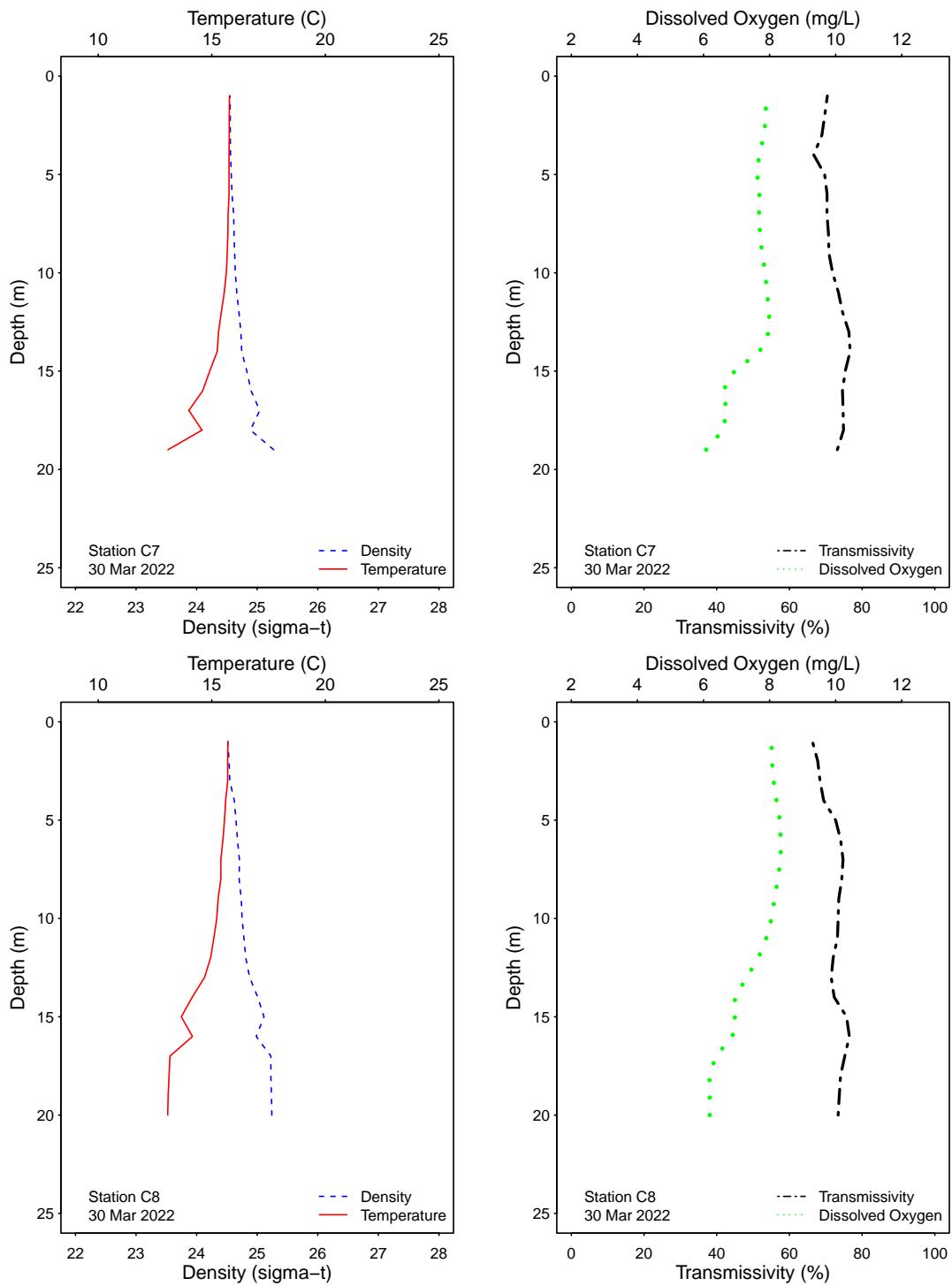


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

## 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.

<b>Station</b>	<b>Date</b>	<b>Depth</b>	<b>Analyst</b>	<b>Procedure</b>	<b>Total</b>	<b>Fecal</b>	<b>Entero</b>
A7	01 Mar 2022	18	CRE	LAB DUPLICATE	40e	4e	<2
A7	08 Mar 2022	18	CRE	LAB DUPLICATE	140e	14e	2e
A7	16 Mar 2022	18	KA	LAB DUPLICATE	4e	<2	<2
A7	22 Mar 2022	18	JF	LAB DUPLICATE	<2	<2	<2
A7	30 Mar 2022	18	JF	LAB DUPLICATE	ns	<2	<2
A7	30 Mar 2022	18	KA	LAB DUPLICATE	6e	ns	ns
C7	01 Mar 2022	18	CRE	LAB DUPLICATE	<20	2e	<2
C7	08 Mar 2022	18	CRE	LAB DUPLICATE	2e	<2	<2
C7	16 Mar 2022	18	KA	LAB DUPLICATE	2e	<2	<2
C7	22 Mar 2022	18	JF	LAB DUPLICATE	4e	<2	<2
C7	30 Mar 2022	18	JF	LAB DUPLICATE	2e	<2	<2
C8	01 Mar 2022	12	CRE	LAB DUPLICATE	<2	<2	<2
C8	08 Mar 2022	12	CRE	LAB DUPLICATE	<2	<2	<2
C8	16 Mar 2022	12	KA	LAB DUPLICATE	<2	<2	<2
C8	22 Mar 2022	12	JF	LAB DUPLICATE	<2	<2	<2
C8	30 Mar 2022	12	JF	LAB DUPLICATE	<2	<2	<2
D12	02 Mar 2022		JF	FIELD DUPLICATE	<2	<2	<2
D12	02 Mar 2022		JF	LAB DUPLICATE	<2	<2	8e
D12	09 Mar 2022		CRE	FIELD DUPLICATE	<2	<2	<2
D12	09 Mar 2022		CRE	LAB DUPLICATE	<2	<2	<2
D12	16 Mar 2022		KA	LAB DUPLICATE	<2	2e	4e
D12	23 Mar 2022		JF	FIELD DUPLICATE	2e	<2	<2
D12	23 Mar 2022		JF	LAB DUPLICATE	<2	<2	<2
D12	28 Mar 2022		BS	FIELD DUPLICATE	40e	8e	8e
D12	28 Mar 2022		BS	LAB DUPLICATE	12e	6e	2e

ns = not sampled

ND = no data



## **APPENDIX B**

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



# Shore Stations



**Table B.1**

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

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Mar 2022	2	2	3	6	3	21	21	3
02 Mar 2022	2	2	3	10	3	22	19	3
03 Mar 2022	2	2	3	10	3	22	19	3
04 Mar 2022	2	2	3	10	3	22	19	3
05 Mar 2022	2	2	3	10	3	22	19	3
06 Mar 2022	2	2	3	10	3	22	19	3
07 Mar 2022	2	2	3	10	3	22	19	3
08 Mar 2022	2	2	3	10	3	22	19	3
09 Mar 2022	2	2	3	8	3	17	15	3
10 Mar 2022	2	2	3	8	3	17	15	3
11 Mar 2022	2	2	3	8	3	17	15	3
12 Mar 2022	2	2	3	8	3	17	15	3
13 Mar 2022	2	2	3	8	3	17	15	3
14 Mar 2022	2	2	3	8	3	17	15	3
15 Mar 2022	2	2	3	8	3	17	15	3
16 Mar 2022	2	3	4	12	4	21	14	3
17 Mar 2022	2	3	4	14	4	21	14	3
18 Mar 2022	2	3	4	14	4	21	14	3
19 Mar 2022	2	3	4	14	4	21	14	3
20 Mar 2022	2	3	4	14	4	21	14	3
21 Mar 2022	2	3	4	14	4	21	14	3
22 Mar 2022	2	3	4	14	4	21	14	3
23 Mar 2022	2	3	4	14	4	16	10	3
24 Mar 2022	2	3	4	14	4	16	10	3
25 Mar 2022	2	3	4	14	4	16	10	3
26 Mar 2022	2	3	4	14	4	16	10	3
27 Mar 2022	2	3	4	14	4	16	10	3
28 Mar 2022	2	3	4	11	3	14	11	3
29 Mar 2022	2	3	4	11	3	14	11	3
30 Mar 2022	2	2	4	8	3	13	11	2
31 Mar 2022	2	2	4	8	3	13	11	2

\* Geometric mean calculated using n<5

ns = not sampled

**Table B.2**

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

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

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

# Kelp Stations



**Table B.3**

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 Mar 2022	2	2	2	2	2	2	2	2
02 Mar 2022	2	2	2	2	2	2	2	2
03 Mar 2022	2	2	2	2	2	2	2	2
04 Mar 2022	2	2	2	2	2	2	2	2
05 Mar 2022	2	2	2	2	2	2	2	2
06 Mar 2022	2	2	2	2	2	2	2	2
07 Mar 2022	2	2	2	2	2	2	2	2
08 Mar 2022	2	2	2	2	2	2	2	2
09 Mar 2022	2	2	2	2	2	2	2	2
10 Mar 2022	2	2	2	2	2	2	2	2
11 Mar 2022	2	2	2	2	2	2	2	2
12 Mar 2022	2	2	2	2	2	2	2	2
13 Mar 2022	2	2	2	2	2	2	2	2
14 Mar 2022	2	2	2	2	2	2	2	2
15 Mar 2022	2	2	2	2	2	2	2	2
16 Mar 2022	2	2	2	2	2	2	2	2
17 Mar 2022	2	2	2	2	2	2	2	2
18 Mar 2022	2	2	2	2	2	2	2	2
19 Mar 2022	2	2	2	2	2	2	2	2
20 Mar 2022	2	2	2	2	2	2	2	2
21 Mar 2022	2	2	2	2	2	2	2	2
22 Mar 2022	2	2	2	2	2	2	2	2
23 Mar 2022	2	2	2	2	2	2	2	2
24 Mar 2022	2	2	2	2	2	2	2	2
25 Mar 2022	2	2	2	2	2	2	2	2
26 Mar 2022	2	2	2	2	2	2	2	2
27 Mar 2022	2	2	2	2	2	2	2	2
28 Mar 2022	2	2	2	2	2	2	2	2
29 Mar 2022	2	2	2	2	2	2	2	2
30 Mar 2022	2	2	2	2	2	2	2	2
31 Mar 2022	2	2	2	2	2	2	2	2

\* Geometric mean calculated using n<5

**Table B.4**

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
March	IC							

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data