



POINT LOMA OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

**POINT LOMA
WASTEWATER TREATMENT PLANT**

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

JUNE 2022

Environmental Monitoring and Technical Services
2392 Kincaid Road • Mail Station 45A • San Diego, CA 92101
Tel (619) 758-2300 Fax (619) 758-2309



July 31, 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 June 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 ≥ 4 scans per second. These scans are then internally averaged to create water column profiles with data readings at a rate of one per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

Offshore Stations

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

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

Bacteriological Reporting and Quality Assurance

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

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

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

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

Single Sample Maximums:

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

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

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987²) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 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 *Enterococcus* and total coliforms, see Appendix B.

Shore Stations

- The eight shore stations (D4, D5, D7, D8-B, D9, D10, D11, D12) were sampled on June 1, 8, 15, 22, and 29.
- During June, 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 D11.
- Nothing of sewage origin was observed at PLOO shore stations in June.
- Over the years, elevated bacteria levels at shore and kelp bed stations have tended to be associated with rainfall events, heavy recreational use, or the presence of seabirds or decaying kelp and surf grass. See the City of San Diego's most recent *Biennial Receiving Waters Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls* for details (<https://www.sandiego.gov/public-utilities/sustainability/ocean-monitoring/reports>).

Kelp Bed Stations

- The eight kelp bed water quality stations (A1, A6, A7, C4, C5, C6, C7, C8) were sampled on June 1, 7, 14, 21, and 28.
- During June, each of the kelp stations was in compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards.

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

- Water column temperatures ranged from 11.79 to 20.91°C. The difference between surface and bottom waters ranged from 2.83 to 8.91°C.
- Chlorophyll *a* concentrations ranged from 1.12 to 13.20 µg/L.
- Nothing of sewage origin was observed at PLOO kelp stations in June.

Offshore Stations

- Quarterly water quality sampling was not conducted during June at the offshore stations. The next quarterly sampling is scheduled for August 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 Jun 2022	9	13	9	23	39	25	27	8
02 Jun 2022	9	13	9	23	39	25	27	8
03 Jun 2022	14	11	11	24	56	30	35	11
04 Jun 2022	14	11	11	24	56	30	35	11
05 Jun 2022	14	11	11	24	56	30	35	11
06 Jun 2022	14	11	11	24	56	30	35	11
07 Jun 2022	14	11	11	24	56	30	35	11
08 Jun 2022	9	20	13	23	45	36	39	9
09 Jun 2022	9	20	13	23	45	36	39	9
10 Jun 2022	8	20	20	24	56	42	46	8
11 Jun 2022	8	20	20	24	56	42	46	8
12 Jun 2022	8	20	20	24	56	42	46	8
13 Jun 2022	8	20	20	24	56	42	46	8
14 Jun 2022	8	20	20	24	56	42	46	8
15 Jun 2022	9	20	20	23	45	45	39	9
16 Jun 2022	9	20	20	23	45	45	39	9
17 Jun 2022	8	20	20	20	31	55	26	8
18 Jun 2022	8	20	20	20	31	55	26	8
19 Jun 2022	8	20	20	20	31	55	26	8
20 Jun 2022	8	20	20	20	31	55	26	8
21 Jun 2022	8	20	20	20	31	55	26	8
22 Jun 2022	6	20	20	20	29	45	28	14
23 Jun 2022	6	20	20	20	29	45	28	14
24 Jun 2022	6	36	20	20	36	53	31	24
25 Jun 2022	6	36	20	20	36	53	31	24
26 Jun 2022	6	36	20	20	36	53	31	24
27 Jun 2022	6	36	20	20	36	53	31	24
28 Jun 2022	6	36	20	20	36	53	31	24
29 Jun 2022	7	20	25	20	42	62	29	14
30 Jun 2022	7	20	25	20	42	62	29	14

* 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 Jun 2022	2	2	2	3	3	4	5	2
02 Jun 2022	2	2	2	3	3	4	5	2
03 Jun 2022	2	2	2	4	3	4	7	2
04 Jun 2022	2	2	2	4	3	4	7	2
05 Jun 2022	2	2	2	4	3	4	7	2
06 Jun 2022	2	2	2	4	3	4	7	2
07 Jun 2022	2	2	2	4	3	4	7	2
08 Jun 2022	2	2	2	3	3	3	9	2
09 Jun 2022	2	2	2	3	3	3	9	2
10 Jun 2022	2	2	2	4	3	4	14	2
11 Jun 2022	2	2	2	4	3	4	14	2
12 Jun 2022	2	2	2	4	3	4	14	2
13 Jun 2022	2	2	2	4	3	4	14	2
14 Jun 2022	2	2	2	4	3	4	14	2
15 Jun 2022	2	3	3	5	4	4	12	2
16 Jun 2022	2	3	3	5	4	4	12	2
17 Jun 2022	2	4	4	4	4	2	10	2
18 Jun 2022	2	4	4	4	4	2	10	2
19 Jun 2022	2	4	4	4	4	2	10	2
20 Jun 2022	2	4	4	4	4	2	10	2
21 Jun 2022	2	4	4	4	4	2	10	2
22 Jun 2022	2	5	3	4	3	2	7	4
23 Jun 2022	2	5	3	4	3	2	7	4
24 Jun 2022	2	6	4	4	4	2	7	4
25 Jun 2022	2	6	4	4	4	2	7	4
26 Jun 2022	2	6	4	4	4	2	7	4
27 Jun 2022	2	6	4	4	4	2	7	4
28 Jun 2022	2	6	4	4	4	2	7	4
29 Jun 2022	2	5	3	4	3	3	6	4
30 Jun 2022	2	5	3	4	3	3	6	4

* 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 Jun 2022	2	2	2	6	3	2	3	2
02 Jun 2022	2	2	2	6	3	2	3	2
03 Jun 2022	2	2	2	8	4	2	4	2
04 Jun 2022	2	2	2	8	4	2	4	2
05 Jun 2022	2	2	2	8	4	2	4	2
06 Jun 2022	2	2	2	8	4	2	4	2
07 Jun 2022	2	2	2	8	4	2	4	2
08 Jun 2022	2	2	2	6	3	2	8	2
09 Jun 2022	2	2	2	6	3	2	8	2
10 Jun 2022	2	2	2	8	4	2	12	2
11 Jun 2022	2	2	2	8	4	2	12	2
12 Jun 2022	2	2	2	8	4	2	12	2
13 Jun 2022	2	2	2	8	4	2	12	2
14 Jun 2022	2	2	2	8	4	2	12	2
15 Jun 2022	2	2	2	7	3	2	9	2
16 Jun 2022	2	2	2	7	3	2	9	2
17 Jun 2022	2	2	2	6	2	2	7	2
18 Jun 2022	2	2	2	6	2	2	7	2
19 Jun 2022	2	2	2	6	2	2	7	2
20 Jun 2022	2	2	2	6	2	2	7	2
21 Jun 2022	2	2	2	6	2	2	7	2
22 Jun 2022	2	2	2	5	2	2	8	2
23 Jun 2022	2	2	2	5	2	2	8	2
24 Jun 2022	2	2	2	6	2	2	10	2
25 Jun 2022	2	2	2	6	2	2	10	2
26 Jun 2022	2	2	2	6	2	2	10	2
27 Jun 2022	2	2	2	6	2	2	10	2
28 Jun 2022	2	2	2	6	2	2	10	2
29 Jun 2022	2	2	2	5	2	2	8	2
30 Jun 2022	2	2	2	5	2	2	8	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
01 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
08 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
15 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
22 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
29 Jun 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
01 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
08 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
15 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
22 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
29 Jun 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
01 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
08 Jun 2022	IC	IC	IC	IC	IC	IC	E	IC
10 Jun 2022	ns	ns	ns	ns	ns	ns	IC	ns
15 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
22 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
29 Jun 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
01 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
08 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
15 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
22 Jun 2022	IC	IC	IC	IC	IC	IC	IC	IC
29 Jun 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	01 Jun 2022	925	<20	<2	<2	0.10
D4	08 Jun 2022	830	<2	<2	<2	1.00
D4	15 Jun 2022	807	14e	4e	2e	0.29
D4	22 Jun 2022	844	2e	<2	<2	1.00
D4	29 Jun 2022	800	<20	<2	<2	0.10
D5	01 Jun 2022	936	<20	<2	<2	0.10
D5	08 Jun 2022	817	<200	2e	<2	0.01
D5	15 Jun 2022	828	20e	<20	2e	1.00
D5	22 Jun 2022	824	<20	<20	<2	1.00
D5	29 Jun 2022	816	2e	<2	<2	1.00
D7	01 Jun 2022	1001	<20	<2	2e	0.10
D7	08 Jun 2022	920	<20	<2	2e	0.10
D7	15 Jun 2022	859	20e	<20	2e	1.00
D7	22 Jun 2022	912	<20	<2	<2	0.10
D7	29 Jun 2022	842	60e	<2	6e	0.03
D8-B	01 Jun 2022	1022	<20	4e	60	0.20
D8-B	08 Jun 2022	939	<20	<2	<2	0.10
D8-B	15 Jun 2022	921	20e	<20	4e	1.00
D8-B	22 Jun 2022	928	20e	<2	<2	0.10
D8-B	29 Jun 2022	859	<20	2e	<2	0.10
D9	01 Jun 2022	1037	<200	<2	<2	0.01
D9	08 Jun 2022	954	<20	<2	<2	0.10
D9	15 Jun 2022	931	20e	<20	2e	1.00
D9	22 Jun 2022	944	20e	<2	<2	0.10
D9	29 Jun 2022	917	80e	<2	<2	0.02
D10	01 Jun 2022	1050	80e	<2	<2	0.02
D10	08 Jun 2022	1010	80e	<2	<2	0.02
D10	15 Jun 2022	946	60e	4e	<2	0.07
D10	22 Jun 2022	958	20e	<2	<2	0.10
D10	29 Jun 2022	958	120e	4e	2e	0.03
D11	01 Jun 2022	1101	<20	6e	<2	0.30
D11	08 Jun 2022	1024	60e	36e	160e	0.60
D11	10 Jun 2022	932	ns	ns	16e	ns
D11	15 Jun 2022	1037	20e	6e	2e	0.30
D11	22 Jun 2022	1011	40e	2e	10e	0.05
D11	29 Jun 2022	1017	<20	<2	2e	0.10
D12	01 Jun 2022	1157	<20	<2	2e	0.10
D12	08 Jun 2022	1054	4e	<2	<2	0.50
D12	15 Jun 2022	1111	<20	<2	<2	0.10
D12	22 Jun 2022	1038	200e	50	4e	0.25
D12	29 Jun 2022	1056	2e	<2	<2	1.00

ns = not sampled

ND = no data

Comments

Station	Date	Depth	Parameter	Comments
D11	10 Jun 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	01 Jun 2022	Arrive Time	925
D4	01 Jun 2022	Weather	Cloudy
D4	01 Jun 2022	Wind Speed (kts)	2.7
D4	01 Jun 2022	Wind Dir	W
D4	01 Jun 2022	Animal Life	Pelican-3
D4	01 Jun 2022	Floatables	None
D4	01 Jun 2022	Water Color	Green
D4	01 Jun 2022	Current Direction	S
D4	01 Jun 2022	Water Temp (C)	20.5
D4	01 Jun 2022	Wave Height Low (ft)	1
D4	01 Jun 2022	High Tide (ft)	3.24
D4	01 Jun 2022	High Tide Time	1157
D4	01 Jun 2022	Low Tide (ft)	-0.48
D4	01 Jun 2022	Low Tide Time	524
D4	01 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-3; Trash-1; Kelp; Algae; Person/Walker/Jogger-1
D4	08 Jun 2022	Arrive Time	830
D4	08 Jun 2022	Weather	Overcast
D4	08 Jun 2022	Wind Speed (kts)	2.8
D4	08 Jun 2022	Wind Dir	S
D4	08 Jun 2022	Animal Life	Pelican-1
D4	08 Jun 2022	Floatables	None
D4	08 Jun 2022	Water Color	Green
D4	08 Jun 2022	Current Direction	S
D4	08 Jun 2022	Water Temp (C)	21.1
D4	08 Jun 2022	Wave Height Low (ft)	1
D4	08 Jun 2022	High Tide (ft)	3.6
D4	08 Jun 2022	High Tide Time	411
D4	08 Jun 2022	Low Tide (ft)	0.77
D4	08 Jun 2022	Low Tide Time	1053
D4	08 Jun 2022	Comments	Kelp; Seagrass
D4	15 Jun 2022	Arrive Time	807
D4	15 Jun 2022	Weather	Cloudy
D4	15 Jun 2022	Wind Speed (kts)	0.6
D4	15 Jun 2022	Wind Dir	S
D4	15 Jun 2022	Animal Life	Bird-4; Pelican-7; Seagull-1
D4	15 Jun 2022	Floatables	Foam
D4	15 Jun 2022	Water Color	Colorless
D4	15 Jun 2022	Current Direction	N
D4	15 Jun 2022	Water Temp (C)	20.1
D4	15 Jun 2022	Wave Height Low (ft)	2
D4	15 Jun 2022	High Tide (ft)	3.76
D4	15 Jun 2022	High Tide Time	1121
D4	15 Jun 2022	Low Tide (ft)	-1.73
D4	15 Jun 2022	Low Tide Time	455
D4	15 Jun 2022	Comments	Algae; Seagrass; Kelp
D4	22 Jun 2022	Arrive Time	844
D4	22 Jun 2022	Weather	Partly cloudy
D4	22 Jun 2022	Wind Speed (kts)	3.4
D4	22 Jun 2022	Wind Dir	NW
D4	22 Jun 2022	Animal Life	Bird-5
D4	22 Jun 2022	Floatables	None
D4	22 Jun 2022	Water Color	Green

Station	Date	Parameter	Value
D4	22 Jun 2022	Current Direction	S
D4	22 Jun 2022	Water Temp (C)	23.1
D4	22 Jun 2022	Wave Height Low (ft)	2
D4	22 Jun 2022	High Tide (ft)	3.5
D4	22 Jun 2022	High Tide Time	503
D4	22 Jun 2022	Low Tide (ft)	1.02
D4	22 Jun 2022	Low Tide Time	1106
D4	22 Jun 2022	Comments	Kelp; Seagrass; Algae
D4	29 Jun 2022	Arrive Time	800
D4	29 Jun 2022	Weather	Cloudy
D4	29 Jun 2022	Wind Speed (kts)	2.3
D4	29 Jun 2022	Wind Dir	SW
D4	29 Jun 2022	Animal Life	Bird-1
D4	29 Jun 2022	Floatables	None
D4	29 Jun 2022	Water Color	Colorless
D4	29 Jun 2022	Current Direction	N
D4	29 Jun 2022	Water Temp (C)	20.5
D4	29 Jun 2022	Wave Height Low (ft)	1
D4	29 Jun 2022	High Tide (ft)	3.49
D4	29 Jun 2022	High Tide Time	1106
D4	29 Jun 2022	Low Tide (ft)	-0.57
D4	29 Jun 2022	Low Tide Time	436
D4	29 Jun 2022	Comments	Seagrass; Kelp; Algae
D5	01 Jun 2022	Arrive Time	936
D5	01 Jun 2022	Weather	Cloudy
D5	01 Jun 2022	Wind Speed (kts)	2
D5	01 Jun 2022	Wind Dir	W
D5	01 Jun 2022	Animal Life	
D5	01 Jun 2022	Floatables	Foam
D5	01 Jun 2022	Water Color	Green
D5	01 Jun 2022	Current Direction	S
D5	01 Jun 2022	Water Temp (C)	21.5
D5	01 Jun 2022	Wave Height Low (ft)	2
D5	01 Jun 2022	High Tide (ft)	3.24
D5	01 Jun 2022	High Tide Time	1157
D5	01 Jun 2022	Low Tide (ft)	-0.48
D5	01 Jun 2022	Low Tide Time	524
D5	01 Jun 2022	Comments	Kelp; Seagrass; Algae
D5	08 Jun 2022	Arrive Time	817
D5	08 Jun 2022	Weather	Overcast
D5	08 Jun 2022	Wind Speed (kts)	1.7
D5	08 Jun 2022	Wind Dir	SW
D5	08 Jun 2022	Animal Life	
D5	08 Jun 2022	Floatables	None
D5	08 Jun 2022	Water Color	Green
D5	08 Jun 2022	Current Direction	N
D5	08 Jun 2022	Water Temp (C)	21.6
D5	08 Jun 2022	Wave Height Low (ft)	2
D5	08 Jun 2022	High Tide (ft)	3.6
D5	08 Jun 2022	High Tide Time	411
D5	08 Jun 2022	Low Tide (ft)	0.77
D5	08 Jun 2022	Low Tide Time	1053
D5	08 Jun 2022	Comments	Kelp; Seagrass; Algae
D5	15 Jun 2022	Arrive Time	828
D5	15 Jun 2022	Weather	Cloudy
D5	15 Jun 2022	Wind Speed (kts)	0
D5	15 Jun 2022	Wind Dir	

Station	Date	Parameter	Value
D5	15 Jun 2022	Animal Life	Pelican-1; Seagull-1
D5	15 Jun 2022	Floatables	Foam
D5	15 Jun 2022	Water Color	Brown
D5	15 Jun 2022	Current Direction	N
D5	15 Jun 2022	Water Temp (C)	21.7
D5	15 Jun 2022	Wave Height Low (ft)	1
D5	15 Jun 2022	High Tide (ft)	3.76
D5	15 Jun 2022	High Tide Time	1121
D5	15 Jun 2022	Low Tide (ft)	-1.73
D5	15 Jun 2022	Low Tide Time	455
D5	15 Jun 2022	Comments	Kelp; Seagrass; Algae
D5	22 Jun 2022	Arrive Time	824
D5	22 Jun 2022	Weather	Partly cloudy
D5	22 Jun 2022	Wind Speed (kts)	3.3
D5	22 Jun 2022	Wind Dir	NW
D5	22 Jun 2022	Animal Life	Seagull-2
D5	22 Jun 2022	Floatables	Foam
D5	22 Jun 2022	Water Color	Green
D5	22 Jun 2022	Current Direction	S
D5	22 Jun 2022	Water Temp (C)	23.1
D5	22 Jun 2022	Wave Height Low (ft)	2
D5	22 Jun 2022	High Tide (ft)	3.5
D5	22 Jun 2022	High Tide Time	503
D5	22 Jun 2022	Low Tide (ft)	1.02
D5	22 Jun 2022	Low Tide Time	1106
D5	22 Jun 2022	Comments	none
D5	29 Jun 2022	Arrive Time	816
D5	29 Jun 2022	Weather	Cloudy
D5	29 Jun 2022	Wind Speed (kts)	3.1
D5	29 Jun 2022	Wind Dir	SW
D5	29 Jun 2022	Animal Life	
D5	29 Jun 2022	Floatables	None
D5	29 Jun 2022	Water Color	Green
D5	29 Jun 2022	Current Direction	N
D5	29 Jun 2022	Water Temp (C)	20.8
D5	29 Jun 2022	Wave Height Low (ft)	2
D5	29 Jun 2022	High Tide (ft)	3.49
D5	29 Jun 2022	High Tide Time	1106
D5	29 Jun 2022	Low Tide (ft)	-0.57
D5	29 Jun 2022	Low Tide Time	436
D5	29 Jun 2022	Comments	Seagrass; Algae; Kelp
D7	01 Jun 2022	Arrive Time	1001
D7	01 Jun 2022	Weather	Partly cloudy
D7	01 Jun 2022	Wind Speed (kts)	3
D7	01 Jun 2022	Wind Dir	W
D7	01 Jun 2022	Animal Life	
D7	01 Jun 2022	Floatables	None
D7	01 Jun 2022	Water Color	Green
D7	01 Jun 2022	Current Direction	S
D7	01 Jun 2022	Water Temp (C)	21.5
D7	01 Jun 2022	Wave Height Low (ft)	2
D7	01 Jun 2022	High Tide (ft)	3.24
D7	01 Jun 2022	High Tide Time	1157
D7	01 Jun 2022	Low Tide (ft)	-0.48
D7	01 Jun 2022	Low Tide Time	524
D7	01 Jun 2022	Comments	Water turbid; Boogie boarder/Swimmer-1; Surfer/Paddle boarder-10; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-4

Station	Date	Parameter	Value
D7	08 Jun 2022	Arrive Time	920
D7	08 Jun 2022	Weather	Overcast
D7	08 Jun 2022	Wind Speed (kts)	0.7
D7	08 Jun 2022	Wind Dir	SW
D7	08 Jun 2022	Animal Life	
D7	08 Jun 2022	Floatables	None
D7	08 Jun 2022	Water Color	Green
D7	08 Jun 2022	Current Direction	N
D7	08 Jun 2022	Water Temp (C)	21.7
D7	08 Jun 2022	Wave Height Low (ft)	3
D7	08 Jun 2022	High Tide (ft)	3.6
D7	08 Jun 2022	High Tide Time	411
D7	08 Jun 2022	Low Tide (ft)	0.77
D7	08 Jun 2022	Low Tide Time	1053
D7	08 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-9; Trash-1; Kelp; Seagrass; Algae
D7	15 Jun 2022	Arrive Time	859
D7	15 Jun 2022	Weather	Cloudy
D7	15 Jun 2022	Wind Speed (kts)	1.8
D7	15 Jun 2022	Wind Dir	W
D7	15 Jun 2022	Animal Life	
D7	15 Jun 2022	Floatables	Foam
D7	15 Jun 2022	Water Color	Green
D7	15 Jun 2022	Current Direction	
D7	15 Jun 2022	Water Temp (C)	21.5
D7	15 Jun 2022	Wave Height Low (ft)	3
D7	15 Jun 2022	High Tide (ft)	3.76
D7	15 Jun 2022	High Tide Time	1121
D7	15 Jun 2022	Low Tide (ft)	-1.73
D7	15 Jun 2022	Low Tide Time	455
D7	15 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-11; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-3
D7	22 Jun 2022	Arrive Time	912
D7	22 Jun 2022	Weather	Partly cloudy
D7	22 Jun 2022	Wind Speed (kts)	4.4
D7	22 Jun 2022	Wind Dir	NW
D7	22 Jun 2022	Animal Life	Seagull-2
D7	22 Jun 2022	Floatables	None
D7	22 Jun 2022	Water Color	Green
D7	22 Jun 2022	Current Direction	S
D7	22 Jun 2022	Water Temp (C)	23.5
D7	22 Jun 2022	Wave Height Low (ft)	2
D7	22 Jun 2022	High Tide (ft)	3.5
D7	22 Jun 2022	High Tide Time	503
D7	22 Jun 2022	Low Tide (ft)	1.02
D7	22 Jun 2022	Low Tide Time	1106
D7	22 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-3; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-2
D7	29 Jun 2022	Arrive Time	842
D7	29 Jun 2022	Weather	Sunny
D7	29 Jun 2022	Wind Speed (kts)	4
D7	29 Jun 2022	Wind Dir	SW
D7	29 Jun 2022	Animal Life	Seagull-1
D7	29 Jun 2022	Floatables	None
D7	29 Jun 2022	Water Color	Colorless
D7	29 Jun 2022	Current Direction	N
D7	29 Jun 2022	Water Temp (C)	21.7

Station	Date	Parameter	Value
D7	29 Jun 2022	Wave Height Low (ft)	1
D7	29 Jun 2022	High Tide (ft)	3.49
D7	29 Jun 2022	High Tide Time	1106
D7	29 Jun 2022	Low Tide (ft)	-0.57
D7	29 Jun 2022	Low Tide Time	436
D7	29 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-8; Trash-1; Seagrass; Algae; Kelp
D8-B	01 Jun 2022	Arrive Time	1022
D8-B	01 Jun 2022	Weather	Sunny
D8-B	01 Jun 2022	Wind Speed (kts)	4.6
D8-B	01 Jun 2022	Wind Dir	W
D8-B	01 Jun 2022	Animal Life	Bird-1
D8-B	01 Jun 2022	Floatables	Foam
D8-B	01 Jun 2022	Water Color	Green
D8-B	01 Jun 2022	Current Direction	S
D8-B	01 Jun 2022	Water Temp (C)	20.9
D8-B	01 Jun 2022	Wave Height Low (ft)	3
D8-B	01 Jun 2022	High Tide (ft)	3.24
D8-B	01 Jun 2022	High Tide Time	1157
D8-B	01 Jun 2022	Low Tide (ft)	-0.48
D8-B	01 Jun 2022	Low Tide Time	524
D8-B	01 Jun 2022	Comments	Water turbid; Surfer/Paddle boarder-4; Trash-1; Kelp; Seagrass; Algae
D8-B	08 Jun 2022	Arrive Time	939
D8-B	08 Jun 2022	Weather	Overcast
D8-B	08 Jun 2022	Wind Speed (kts)	1.2
D8-B	08 Jun 2022	Wind Dir	W
D8-B	08 Jun 2022	Animal Life	
D8-B	08 Jun 2022	Floatables	None
D8-B	08 Jun 2022	Water Color	Green
D8-B	08 Jun 2022	Current Direction	N
D8-B	08 Jun 2022	Water Temp (C)	21.7
D8-B	08 Jun 2022	Wave Height Low (ft)	3
D8-B	08 Jun 2022	High Tide (ft)	3.6
D8-B	08 Jun 2022	High Tide Time	411
D8-B	08 Jun 2022	Low Tide (ft)	0.77
D8-B	08 Jun 2022	Low Tide Time	1053
D8-B	08 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-8; Trash-1; Kelp; Seagrass; Algae
D8-B	15 Jun 2022	Arrive Time	920
D8-B	15 Jun 2022	Weather	Cloudy
D8-B	15 Jun 2022	Wind Speed (kts)	3
D8-B	15 Jun 2022	Wind Dir	W
D8-B	15 Jun 2022	Animal Life	Pelican-3
D8-B	15 Jun 2022	Floatables	Foam
D8-B	15 Jun 2022	Water Color	Green
D8-B	15 Jun 2022	Current Direction	S
D8-B	15 Jun 2022	Water Temp (C)	21.2
D8-B	15 Jun 2022	Wave Height Low (ft)	2
D8-B	15 Jun 2022	High Tide (ft)	3.76
D8-B	15 Jun 2022	High Tide Time	1121
D8-B	15 Jun 2022	Low Tide (ft)	-1.73
D8-B	15 Jun 2022	Low Tide Time	455
D8-B	15 Jun 2022	Comments	Kelp; Seagrass; Algae
D8-B	22 Jun 2022	Arrive Time	928
D8-B	22 Jun 2022	Weather	Partly cloudy
D8-B	22 Jun 2022	Wind Speed (kts)	3.12

Station	Date	Parameter	Value
D8-B	22 Jun 2022	Wind Dir	NW
D8-B	22 Jun 2022	Animal Life	
D8-B	22 Jun 2022	Floatables	None; Tampons
D8-B	22 Jun 2022	Water Color	Green
D8-B	22 Jun 2022	Current Direction	S
D8-B	22 Jun 2022	Water Temp (C)	22.7
D8-B	22 Jun 2022	Wave Height Low (ft)	2
D8-B	22 Jun 2022	High Tide (ft)	3.5
D8-B	22 Jun 2022	High Tide Time	503
D8-B	22 Jun 2022	Low Tide (ft)	1.02
D8-B	22 Jun 2022	Low Tide Time	1106
D8-B	22 Jun 2022	Comments	Water turbid; Surfer/Paddle boarder-2; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-1
D8-B	29 Jun 2022	Arrive Time	859
D8-B	29 Jun 2022	Weather	Sunny
D8-B	29 Jun 2022	Wind Speed (kts)	4.9
D8-B	29 Jun 2022	Wind Dir	SW
D8-B	29 Jun 2022	Animal Life	
D8-B	29 Jun 2022	Floatables	Foam
D8-B	29 Jun 2022	Water Color	Green
D8-B	29 Jun 2022	Current Direction	N
D8-B	29 Jun 2022	Water Temp (C)	22.1
D8-B	29 Jun 2022	Wave Height Low (ft)	2
D8-B	29 Jun 2022	High Tide (ft)	3.49
D8-B	29 Jun 2022	High Tide Time	1106
D8-B	29 Jun 2022	Low Tide (ft)	-0.57
D8-B	29 Jun 2022	Low Tide Time	436
D8-B	29 Jun 2022	Comments	Water turbid; Surfer/Paddle boarder-1; Trash-1; Algae; Seagrass; Kelp
D9	01 Jun 2022	Arrive Time	1037
D9	01 Jun 2022	Weather	Sunny
D9	01 Jun 2022	Wind Speed (kts)	8.1
D9	01 Jun 2022	Wind Dir	SW
D9	01 Jun 2022	Animal Life	
D9	01 Jun 2022	Floatables	None
D9	01 Jun 2022	Water Color	Brown
D9	01 Jun 2022	Current Direction	N
D9	01 Jun 2022	Water Temp (C)	21.4
D9	01 Jun 2022	Wave Height Low (ft)	2
D9	01 Jun 2022	High Tide (ft)	3.24
D9	01 Jun 2022	High Tide Time	1157
D9	01 Jun 2022	Low Tide (ft)	-0.48
D9	01 Jun 2022	Low Tide Time	524
D9	01 Jun 2022	Comments	Water turbid; Surfer/Paddle boarder-7; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-4
D9	08 Jun 2022	Arrive Time	954
D9	08 Jun 2022	Weather	Overcast
D9	08 Jun 2022	Wind Speed (kts)	3.4
D9	08 Jun 2022	Wind Dir	SW
D9	08 Jun 2022	Animal Life	Seagull-4
D9	08 Jun 2022	Floatables	Foam; Film
D9	08 Jun 2022	Water Color	Green
D9	08 Jun 2022	Current Direction	N
D9	08 Jun 2022	Water Temp (C)	21.9
D9	08 Jun 2022	Wave Height Low (ft)	3
D9	08 Jun 2022	High Tide (ft)	3.6
D9	08 Jun 2022	High Tide Time	411
D9	08 Jun 2022	Low Tide (ft)	0.77

Station	Date	Parameter	Value
D9	08 Jun 2022	Low Tide Time	1053
D9	08 Jun 2022	Comments	Water turbid; Trash-1; Algae; Kelp; Person/Walker/Jogger-2
D9	15 Jun 2022	Arrive Time	931
D9	15 Jun 2022	Weather	Cloudy
D9	15 Jun 2022	Wind Speed (kts)	4.1
D9	15 Jun 2022	Wind Dir	SW
D9	15 Jun 2022	Animal Life	Seagull-1
D9	15 Jun 2022	Floatables	Foam
D9	15 Jun 2022	Water Color	Brown
D9	15 Jun 2022	Current Direction	N
D9	15 Jun 2022	Water Temp (C)	21.7
D9	15 Jun 2022	Wave Height Low (ft)	1
D9	15 Jun 2022	High Tide (ft)	3.76
D9	15 Jun 2022	High Tide Time	1121
D9	15 Jun 2022	Low Tide (ft)	-1.73
D9	15 Jun 2022	Low Tide Time	455
D9	15 Jun 2022	Comments	Kelp; Seagrass; Algae
D9	22 Jun 2022	Arrive Time	944
D9	22 Jun 2022	Weather	Partly cloudy
D9	22 Jun 2022	Wind Speed (kts)	1
D9	22 Jun 2022	Wind Dir	NW
D9	22 Jun 2022	Animal Life	
D9	22 Jun 2022	Floatables	None
D9	22 Jun 2022	Water Color	Green
D9	22 Jun 2022	Current Direction	S
D9	22 Jun 2022	Water Temp (C)	23
D9	22 Jun 2022	Wave Height Low (ft)	2
D9	22 Jun 2022	High Tide (ft)	3.5
D9	22 Jun 2022	High Tide Time	503
D9	22 Jun 2022	Low Tide (ft)	1.02
D9	22 Jun 2022	Low Tide Time	1106
D9	22 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-4; Trash-1; Kelp; Person/Walker/Jogger-6
D9	29 Jun 2022	Arrive Time	917
D9	29 Jun 2022	Weather	Sunny
D9	29 Jun 2022	Wind Speed (kts)	1.6
D9	29 Jun 2022	Wind Dir	SW
D9	29 Jun 2022	Animal Life	
D9	29 Jun 2022	Floatables	Foam
D9	29 Jun 2022	Water Color	Green
D9	29 Jun 2022	Current Direction	N
D9	29 Jun 2022	Water Temp (C)	22.2
D9	29 Jun 2022	Wave Height Low (ft)	1
D9	29 Jun 2022	High Tide (ft)	3.49
D9	29 Jun 2022	High Tide Time	1106
D9	29 Jun 2022	Low Tide (ft)	-0.57
D9	29 Jun 2022	Low Tide Time	436
D9	29 Jun 2022	Comments	Water clear; Trash-1; Algae; Seagrass; Kelp; Person/Walker/Jogger-1
D10	01 Jun 2022	Arrive Time	1050
D10	01 Jun 2022	Weather	Sunny
D10	01 Jun 2022	Wind Speed (kts)	6.5
D10	01 Jun 2022	Wind Dir	SW
D10	01 Jun 2022	Animal Life	
D10	01 Jun 2022	Floatables	Foam
D10	01 Jun 2022	Water Color	Green
D10	01 Jun 2022	Current Direction	N

Station	Date	Parameter	Value
D10	01 Jun 2022	Water Temp (C)	21.7
D10	01 Jun 2022	Wave Height Low (ft)	3
D10	01 Jun 2022	High Tide (ft)	3.24
D10	01 Jun 2022	High Tide Time	1157
D10	01 Jun 2022	Low Tide (ft)	-0.48
D10	01 Jun 2022	Low Tide Time	524
D10	01 Jun 2022	Comments	Water turbid; Surfer/Paddle boarder-22; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-35
D10	08 Jun 2022	Arrive Time	1010
D10	08 Jun 2022	Weather	Overcast
D10	08 Jun 2022	Wind Speed (kts)	2.9
D10	08 Jun 2022	Wind Dir	W
D10	08 Jun 2022	Animal Life	Seagull-2
D10	08 Jun 2022	Floatables	None
D10	08 Jun 2022	Water Color	Green
D10	08 Jun 2022	Current Direction	N
D10	08 Jun 2022	Water Temp (C)	21.9
D10	08 Jun 2022	Wave Height Low (ft)	3
D10	08 Jun 2022	High Tide (ft)	3.6
D10	08 Jun 2022	High Tide Time	411
D10	08 Jun 2022	Low Tide (ft)	0.77
D10	08 Jun 2022	Low Tide Time	1053
D10	08 Jun 2022	Comments	Water clear; Boogie boarder/Swimmer-11; Surfer/Paddle boarder-21; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-41
D10	15 Jun 2022	Arrive Time	946
D10	15 Jun 2022	Weather	Cloudy
D10	15 Jun 2022	Wind Speed (kts)	3.6
D10	15 Jun 2022	Wind Dir	SW
D10	15 Jun 2022	Animal Life	Seagull-3
D10	15 Jun 2022	Floatables	Foam
D10	15 Jun 2022	Water Color	Green
D10	15 Jun 2022	Current Direction	N
D10	15 Jun 2022	Water Temp (C)	21.5
D10	15 Jun 2022	Wave Height Low (ft)	1
D10	15 Jun 2022	High Tide (ft)	3.76
D10	15 Jun 2022	High Tide Time	1121
D10	15 Jun 2022	Low Tide (ft)	-1.73
D10	15 Jun 2022	Low Tide Time	455
D10	15 Jun 2022	Comments	Water turbid; Surfer/Paddle boarder-24; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-10
D10	22 Jun 2022	Arrive Time	958
D10	22 Jun 2022	Weather	Partly cloudy
D10	22 Jun 2022	Wind Speed (kts)	8.5
D10	22 Jun 2022	Wind Dir	W
D10	22 Jun 2022	Animal Life	
D10	22 Jun 2022	Floatables	None
D10	22 Jun 2022	Water Color	Green
D10	22 Jun 2022	Current Direction	S
D10	22 Jun 2022	Water Temp (C)	23.3
D10	22 Jun 2022	Wave Height Low (ft)	2
D10	22 Jun 2022	High Tide (ft)	3.5
D10	22 Jun 2022	High Tide Time	503
D10	22 Jun 2022	Low Tide (ft)	1.02
D10	22 Jun 2022	Low Tide Time	1106
D10	22 Jun 2022	Comments	Water turbid; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-20

Station	Date	Parameter	Value
D10	29 Jun 2022	Arrive Time	958
D10	29 Jun 2022	Weather	Sunny
D10	29 Jun 2022	Wind Speed (kts)	6.9
D10	29 Jun 2022	Wind Dir	SW
D10	29 Jun 2022	Animal Life	Bird-1
D10	29 Jun 2022	Floatables	None
D10	29 Jun 2022	Water Color	Green
D10	29 Jun 2022	Current Direction	N
D10	29 Jun 2022	Water Temp (C)	23
D10	29 Jun 2022	Wave Height Low (ft)	1
D10	29 Jun 2022	High Tide (ft)	3.49
D10	29 Jun 2022	High Tide Time	1106
D10	29 Jun 2022	Low Tide (ft)	-0.57
D10	29 Jun 2022	Low Tide Time	436
D10	29 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-35; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-25
D11	01 Jun 2022	Arrive Time	1101
D11	01 Jun 2022	Weather	Sunny
D11	01 Jun 2022	Wind Speed (kts)	6.6
D11	01 Jun 2022	Wind Dir	SW
D11	01 Jun 2022	Animal Life	
D11	01 Jun 2022	Floatables	Foam
D11	01 Jun 2022	Water Color	Green
D11	01 Jun 2022	Current Direction	N
D11	01 Jun 2022	Water Temp (C)	21.6
D11	01 Jun 2022	Wave Height Low (ft)	3
D11	01 Jun 2022	High Tide (ft)	3.24
D11	01 Jun 2022	High Tide Time	1157
D11	01 Jun 2022	Low Tide (ft)	-0.48
D11	01 Jun 2022	Low Tide Time	524
D11	01 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-21; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-23
D11	08 Jun 2022	Arrive Time	1024
D11	08 Jun 2022	Weather	Overcast
D11	08 Jun 2022	Wind Speed (kts)	3.9
D11	08 Jun 2022	Wind Dir	SW
D11	08 Jun 2022	Animal Life	Dog-3
D11	08 Jun 2022	Floatables	Foam
D11	08 Jun 2022	Water Color	Green
D11	08 Jun 2022	Current Direction	S
D11	08 Jun 2022	Water Temp (C)	22.8
D11	08 Jun 2022	Wave Height Low (ft)	3
D11	08 Jun 2022	High Tide (ft)	3.6
D11	08 Jun 2022	High Tide Time	411
D11	08 Jun 2022	Low Tide (ft)	0.77
D11	08 Jun 2022	Low Tide Time	1053
D11	08 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-23; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-23
D11	10 Jun 2022	Arrive Time	932
D11	10 Jun 2022	Weather	Cloudy
D11	10 Jun 2022	Wind Speed (kts)	2.6
D11	10 Jun 2022	Wind Dir	W
D11	10 Jun 2022	Animal Life	
D11	10 Jun 2022	Floatables	None
D11	10 Jun 2022	Water Color	Green
D11	10 Jun 2022	Current Direction	S
D11	10 Jun 2022	Water Temp (C)	22
D11	10 Jun 2022	Wave Height Low (ft)	2

Station	Date	Parameter	Value
D11	10 Jun 2022	High Tide (ft)	3.56
D11	10 Jun 2022	High Tide Time	640
D11	10 Jun 2022	Low Tide (ft)	0.83
D11	10 Jun 2022	Low Tide Time	59
D11	10 Jun 2022	Comments	Resample; Water clear; Surfer/Paddle boarder-21; Trash-1; Seagrass; Kelp; Algae; Person/Walker/Jogger-4
D11	15 Jun 2022	Arrive Time	1037
D11	15 Jun 2022	Weather	Partly cloudy
D11	15 Jun 2022	Wind Speed (kts)	5
D11	15 Jun 2022	Wind Dir	SW
D11	15 Jun 2022	Animal Life	Dog-3
D11	15 Jun 2022	Floatables	Foam
D11	15 Jun 2022	Water Color	Green
D11	15 Jun 2022	Current Direction	N
D11	15 Jun 2022	Water Temp (C)	22.3
D11	15 Jun 2022	Wave Height Low (ft)	1
D11	15 Jun 2022	High Tide (ft)	3.76
D11	15 Jun 2022	High Tide Time	1121
D11	15 Jun 2022	Low Tide (ft)	-1.73
D11	15 Jun 2022	Low Tide Time	455
D11	15 Jun 2022	Comments	Water turbid; Boogie boarder/Swimmer-2; Surfer/Paddle boarder-10; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-6
D11	22 Jun 2022	Arrive Time	1011
D11	22 Jun 2022	Weather	Partly cloudy
D11	22 Jun 2022	Wind Speed (kts)	5
D11	22 Jun 2022	Wind Dir	W
D11	22 Jun 2022	Animal Life	Bird-10
D11	22 Jun 2022	Floatables	None
D11	22 Jun 2022	Water Color	Green
D11	22 Jun 2022	Current Direction	S
D11	22 Jun 2022	Water Temp (C)	24.6
D11	22 Jun 2022	Wave Height Low (ft)	2
D11	22 Jun 2022	High Tide (ft)	3.5
D11	22 Jun 2022	High Tide Time	503
D11	22 Jun 2022	Low Tide (ft)	1.02
D11	22 Jun 2022	Low Tide Time	1106
D11	22 Jun 2022	Comments	Water turbid; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-30
D11	29 Jun 2022	Arrive Time	1017
D11	29 Jun 2022	Weather	Sunny
D11	29 Jun 2022	Wind Speed (kts)	5.6
D11	29 Jun 2022	Wind Dir	SW
D11	29 Jun 2022	Animal Life	Bird-1; Dog-1
D11	29 Jun 2022	Floatables	None
D11	29 Jun 2022	Water Color	Green
D11	29 Jun 2022	Current Direction	N
D11	29 Jun 2022	Water Temp (C)	21.7
D11	29 Jun 2022	Wave Height Low (ft)	1
D11	29 Jun 2022	High Tide (ft)	3.49
D11	29 Jun 2022	High Tide Time	1106
D11	29 Jun 2022	Low Tide (ft)	-0.57
D11	29 Jun 2022	Low Tide Time	436
D11	29 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-17; Trash-1; Seagrass; Algae; Kelp; Person/Walker/Jogger-16
D12	01 Jun 2022	Arrive Time	1157
D12	01 Jun 2022	Weather	Sunny

Station	Date	Parameter	Value
D12	01 Jun 2022	Wind Speed (kts)	8
D12	01 Jun 2022	Wind Dir	SW
D12	01 Jun 2022	Animal Life	
D12	01 Jun 2022	Floatables	None
D12	01 Jun 2022	Water Color	Green
D12	01 Jun 2022	Current Direction	N
D12	01 Jun 2022	Water Temp (C)	22.7
D12	01 Jun 2022	Wave Height Low (ft)	2
D12	01 Jun 2022	High Tide (ft)	3.24
D12	01 Jun 2022	High Tide Time	1157
D12	01 Jun 2022	Low Tide (ft)	-0.48
D12	01 Jun 2022	Low Tide Time	524
D12	01 Jun 2022	Comments	Water clear; Boogie boarder/Swimmer-26; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-31
D12	08 Jun 2022	Arrive Time	1054
D12	08 Jun 2022	Weather	Partly cloudy
D12	08 Jun 2022	Wind Speed (kts)	5.8
D12	08 Jun 2022	Wind Dir	SW
D12	08 Jun 2022	Animal Life	Bird-1; Fish-3
D12	08 Jun 2022	Floatables	None
D12	08 Jun 2022	Water Color	Green
D12	08 Jun 2022	Current Direction	N
D12	08 Jun 2022	Water Temp (C)	22.9
D12	08 Jun 2022	Wave Height Low (ft)	2
D12	08 Jun 2022	High Tide (ft)	3.6
D12	08 Jun 2022	High Tide Time	411
D12	08 Jun 2022	Low Tide (ft)	0.77
D12	08 Jun 2022	Low Tide Time	1053
D12	08 Jun 2022	Comments	Water clear; Boogie boarder/Swimmer-6; Surfer/Paddle boarder-2; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-30
D12	15 Jun 2022	Arrive Time	1111
D12	15 Jun 2022	Weather	Partly cloudy
D12	15 Jun 2022	Wind Speed (kts)	5.3
D12	15 Jun 2022	Wind Dir	W
D12	15 Jun 2022	Animal Life	Dolphin-6; Seagull-1
D12	15 Jun 2022	Floatables	Foam
D12	15 Jun 2022	Water Color	Green
D12	15 Jun 2022	Current Direction	N
D12	15 Jun 2022	Water Temp (C)	24.5
D12	15 Jun 2022	Wave Height Low (ft)	2
D12	15 Jun 2022	High Tide (ft)	3.76
D12	15 Jun 2022	High Tide Time	1121
D12	15 Jun 2022	Low Tide (ft)	-1.73
D12	15 Jun 2022	Low Tide Time	455
D12	15 Jun 2022	Comments	Water clear; Surfer/Paddle boarder-1; Trash-1; Seagrass; Kelp; Algae; Person/Walker/Jogger-30
D12	22 Jun 2022	Arrive Time	1038
D12	22 Jun 2022	Weather	Partly cloudy
D12	22 Jun 2022	Wind Speed (kts)	10.6
D12	22 Jun 2022	Wind Dir	NW
D12	22 Jun 2022	Animal Life	
D12	22 Jun 2022	Floatables	None
D12	22 Jun 2022	Water Color	Green
D12	22 Jun 2022	Current Direction	S
D12	22 Jun 2022	Water Temp (C)	24.1
D12	22 Jun 2022	Wave Height Low (ft)	2
D12	22 Jun 2022	High Tide (ft)	3.5

Station	Date	Parameter	Value
D12	22 Jun 2022	High Tide Time	503
D12	22 Jun 2022	Low Tide (ft)	1.02
D12	22 Jun 2022	Low Tide Time	1106
D12	22 Jun 2022	Comments	Water turbid; Trash-1; Kelp; Algae; Seagrass; Person/Walker/Jogger-38
D12	29 Jun 2022	Arrive Time	1056
D12	29 Jun 2022	Weather	Sunny
D12	29 Jun 2022	Wind Speed (kts)	5.9
D12	29 Jun 2022	Wind Dir	SW
D12	29 Jun 2022	Animal Life	
D12	29 Jun 2022	Floatables	None
D12	29 Jun 2022	Water Color	Green
D12	29 Jun 2022	Current Direction	N
D12	29 Jun 2022	Water Temp (C)	22.8
D12	29 Jun 2022	Wave Height Low (ft)	1
D12	29 Jun 2022	High Tide (ft)	3.49
D12	29 Jun 2022	High Tide Time	1106
D12	29 Jun 2022	Low Tide (ft)	-0.57
D12	29 Jun 2022	Low Tide Time	436
D12	29 Jun 2022	Comments	Water clear; Boogie boarder/Swimmer-10; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-65

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 Jun 2022	7	8	8	3	3	2	5	6
02 Jun 2022	7	8	8	3	3	2	5	6
03 Jun 2022	7	8	8	3	3	2	5	6
04 Jun 2022	7	8	8	3	3	2	5	6
05 Jun 2022	7	8	8	3	3	2	5	6
06 Jun 2022	7	8	8	3	3	2	5	6
07 Jun 2022	5	6	6	3	3	2	6	5
08 Jun 2022	5	6	6	3	3	2	6	5
09 Jun 2022	5	6	6	3	3	2	6	5
10 Jun 2022	5	6	6	3	3	2	6	5
11 Jun 2022	3	7	5	3	3	2	7	6
12 Jun 2022	3	7	5	3	3	2	7	6
13 Jun 2022	3	7	5	3	3	2	7	6
14 Jun 2022	4	7	5	4	4	3	6	5
15 Jun 2022	3	6	4	4	4	3	4	3
16 Jun 2022	3	6	4	4	4	3	4	3
17 Jun 2022	3	6	4	4	4	3	4	3
18 Jun 2022	3	6	4	4	4	3	4	3
19 Jun 2022	3	6	4	4	4	3	4	3
20 Jun 2022	3	6	4	4	4	3	4	3
21 Jun 2022	3	5	4	5	3	3	3	3
22 Jun 2022	3	5	4	5	3	3	3	3
23 Jun 2022	4	6	5	4	4	3	3	2
24 Jun 2022	4	6	5	4	4	3	3	2
25 Jun 2022	4	6	5	4	4	3	3	2
26 Jun 2022	4	6	5	4	4	3	3	2
27 Jun 2022	4	6	5	4	4	3	3	2
28 Jun 2022	3	5	4	4	3	3	3	2
29 Jun 2022	3	5	4	4	3	3	3	2
30 Jun 2022	3	5	4	4	3	3	3	2

* 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 Jun 2022	3	3	4	2	2	2	2	2
02 Jun 2022	3	3	4	2	2	2	2	2
03 Jun 2022	3	3	4	2	2	2	2	2
04 Jun 2022	3	3	4	2	2	2	2	2
05 Jun 2022	3	3	4	2	2	2	2	2
06 Jun 2022	3	3	4	2	2	2	2	2
07 Jun 2022	3	3	4	2	2	2	2	2
08 Jun 2022	3	3	4	2	2	2	2	2
09 Jun 2022	3	3	4	2	2	2	2	2
10 Jun 2022	3	3	4	2	2	2	2	2
11 Jun 2022	2	3	3	2	2	2	2	2
12 Jun 2022	2	3	3	2	2	2	2	2
13 Jun 2022	2	3	3	2	2	2	2	2
14 Jun 2022	2	3	3	2	2	2	2	2
15 Jun 2022	2	3	3	3	2	2	2	2
16 Jun 2022	2	3	3	3	2	2	2	2
17 Jun 2022	2	3	3	3	2	2	2	2
18 Jun 2022	2	3	3	3	2	2	2	2
19 Jun 2022	2	3	3	3	2	2	2	2
20 Jun 2022	2	3	3	3	2	2	2	2
21 Jun 2022	2	2	3	2	2	2	2	2
22 Jun 2022	2	2	3	2	2	2	2	2
23 Jun 2022	2	3	2	2	2	2	2	2
24 Jun 2022	2	3	2	2	2	2	2	2
25 Jun 2022	2	3	2	2	2	2	2	2
26 Jun 2022	2	3	2	2	2	2	2	2
27 Jun 2022	2	3	2	2	2	2	2	2
28 Jun 2022	2	2	2	2	2	2	2	2
29 Jun 2022	2	2	2	2	2	2	2	2
30 Jun 2022	2	2	2	2	2	2	2	2

* 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 Jun 2022	2	2	2	2	2	2	2	2
02 Jun 2022	2	2	2	2	2	2	2	2
03 Jun 2022	2	2	2	2	2	2	2	2
04 Jun 2022	2	2	2	2	2	2	2	2
05 Jun 2022	2	2	2	2	2	2	2	2
06 Jun 2022	2	2	2	2	2	2	2	2
07 Jun 2022	2	2	2	2	2	2	2	2
08 Jun 2022	2	2	2	2	2	2	2	2
09 Jun 2022	2	2	2	2	2	2	2	2
10 Jun 2022	2	2	2	2	2	2	2	2
11 Jun 2022	2	2	2	2	2	2	2	2
12 Jun 2022	2	2	2	2	2	2	2	2
13 Jun 2022	2	2	2	2	2	2	2	2
14 Jun 2022	2	2	2	2	2	2	2	2
15 Jun 2022	2	2	2	2	2	2	2	2
16 Jun 2022	2	2	2	2	2	2	2	2
17 Jun 2022	2	2	2	2	2	2	2	2
18 Jun 2022	2	2	2	2	2	2	2	2
19 Jun 2022	2	2	2	2	2	2	2	2
20 Jun 2022	2	2	2	2	2	2	2	2
21 Jun 2022	2	2	2	2	2	2	2	2
22 Jun 2022	2	2	2	2	2	2	2	2
23 Jun 2022	2	2	2	2	2	2	2	2
24 Jun 2022	2	2	2	2	2	2	2	2
25 Jun 2022	2	2	2	2	2	2	2	2
26 Jun 2022	2	2	2	2	2	2	2	2
27 Jun 2022	2	2	2	2	2	2	2	2
28 Jun 2022	2	2	2	2	2	2	2	2
29 Jun 2022	2	2	2	2	2	2	2	2
30 Jun 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 Jun 2022	IC							
07 Jun 2022	IC							
14 Jun 2022	IC							
21 Jun 2022	IC							
28 Jun 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 Jun 2022	IC							
07 Jun 2022	IC							
14 Jun 2022	IC							
21 Jun 2022	IC							
28 Jun 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 Jun 2022	IC							
07 Jun 2022	IC							
14 Jun 2022	IC							
21 Jun 2022	IC							
28 Jun 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 Jun 2022	IC							
07 Jun 2022	IC							
14 Jun 2022	IC							
21 Jun 2022	IC							
28 Jun 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 Jun 2022	747	1	<2	<2	2e	1.0	17.9	72.85	8.3	33.72	8.2
A1	01 Jun 2022	747	12	<2	<2	<2	1.0	15.4	68.62	6.8	33.71	8.1
A1	01 Jun 2022	747	18	4e	2e	<2	0.5	12.9	76.56	4.9	33.69	7.9
A1	07 Jun 2022	741	1	<2	<2	<2	1.0	19.3	66.89	8.1	33.76	8.2
A1	07 Jun 2022	741	12	<2	<2	<2	1.0	17.4	62.71	7.6	33.73	8.2
A1	07 Jun 2022	741	18	2e	<2	<2	1.0	14.4	75.67	5.8	33.60	7.9
A1	14 Jun 2022	828	1	<2	<2	<2	1.0	19.7	76.02	7.9	33.61	8.2
A1	14 Jun 2022	828	12	4e	<2	<2	0.5	14.1	76.01	7.6	33.51	8.1
A1	14 Jun 2022	828	18	6e	<2	<2	0.3	12.8	71.41	6.8	33.47	8.1
A1	21 Jun 2022	743	1	<2	<2	2e	1.0	20.4	73.40	8.3	33.61	8.2
A1	21 Jun 2022	743	12	<2	<2	<2	1.0	13.7	75.26	6.3	33.54	8.0
A1	21 Jun 2022	743	18	<20	<2	<2	0.1	12.0	77.68	5.5	33.57	7.9
A1	28 Jun 2022	811	1	<2	<2	<2	1.0	17.5	69.69	8.5	33.57	8.2
A1	28 Jun 2022	811	12	4e	<2	<2	0.5	13.0	71.67	7.5	33.52	8.0
A1	28 Jun 2022	811	18	<2	<2	<2	1.0	12.4	76.15	6.0	33.55	7.9
A6	01 Jun 2022	809	1	<2	4e	<2	2.0	19.1	73.24	8.1	33.73	8.3
A6	01 Jun 2022	809	12	4e	<2	<2	0.5	15.0	75.25	6.3	33.70	8.1
A6	01 Jun 2022	809	18	60e	10e	2e	0.2	12.1	79.20	4.8	33.70	7.9
A6	07 Jun 2022	804	1	<2	<2	<2	1.0	19.7	64.46	8.3	33.74	8.3
A6	07 Jun 2022	804	12	<2	<2	<2	1.0	15.4	73.59	6.2	33.68	8.1
A6	07 Jun 2022	804	18	6e	<2	<2	0.3	12.7	78.56	5.3	33.68	7.9
A6	14 Jun 2022	853	1	4e	<2	<2	0.5	20.1	72.64	8.3	33.73	8.3
A6	14 Jun 2022	853	12	2e	<2	<2	1.0	17.5	72.32	7.4	33.67	8.3
A6	14 Jun 2022	853	18	18e	<2	<2	0.1	12.1	75.21	6.2	33.45	8.0
A6	21 Jun 2022	805	1	<2	<2	<2	1.0	20.8	76.22	8.3	33.59	8.2
A6	21 Jun 2022	805	12	<2	<2	<2	1.0	17.1	75.26	8.3	33.55	8.2
A6	21 Jun 2022	805	18	<2	<2	<2	1.0	14.9	76.60	7.4	33.55	8.1
A6	28 Jun 2022	840	1	<2	<2	<2	1.0	18.2	63.33	9.0	33.57	8.2
A6	28 Jun 2022	840	12	<2	<2	<2	1.0	12.3	77.68	6.2	33.53	7.9
A6	28 Jun 2022	840	18	2e	<2	<2	1.0	11.9	79.07	5.5	33.56	7.9
A7	01 Jun 2022	758	1	<2	<2	<2	1.0	18.9	68.80	8.3	33.74	8.3
A7	01 Jun 2022	758	12	<2	<2	<2	1.0	15.0	68.26	7.1	33.70	8.2
A7	01 Jun 2022	758	18	<20	4e	<2	0.2	12.7	79.06	5.3	33.68	8.0
A7	07 Jun 2022	752	1	2e	4e	<2	2.0	19.5	64.06	8.4	33.75	8.3
A7	07 Jun 2022	752	12	<2	2e	<2	1.0	17.5	67.30	7.8	33.73	8.2
A7	07 Jun 2022	752	18	2e	<2	<2	1.0	12.5	78.52	5.0	33.67	7.9
A7	14 Jun 2022	841	1	<2	<2	<2	1.0	19.7	74.75	8.0	33.65	8.2
A7	14 Jun 2022	841	12	2e	<2	<2	1.0	12.9	75.80	7.0	33.47	8.1
A7	14 Jun 2022	841	18	14e	2e	<2	0.1	12.2	75.44	6.3	33.47	8.0

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH
A7	21 Jun 2022	754	1	<2	<2	<2	1.0	20.5	75.10	8.0	33.60	8.2
A7	21 Jun 2022	754	12	<2	<2	<2	1.0	17.1	70.02	8.2	33.60	8.1
A7	21 Jun 2022	754	18	10e	<2	2e	0.2	12.3	79.21	6.1	33.57	7.9
A7	28 Jun 2022	825	1	<2	<2	<2	1.0	18.6	74.67	8.6	33.59	8.2
A7	28 Jun 2022	825	12	<2	<2	<2	1.0	12.6	76.98	6.4	33.53	7.9
A7	28 Jun 2022	825	18	<2	<2	<2	1.0	12.2	78.15	5.9	33.55	7.9
C4	01 Jun 2022	919	1	2e	<2	<2	1.0	18.6	66.35	7.8	33.74	8.2
C4	01 Jun 2022	919	3	<2	<2	<2	1.0	18.5	66.17	7.9	33.74	8.2
C4	01 Jun 2022	919	9	<2	<2	<2	1.0	15.5	71.47	4.9	33.73	8.0
C4	07 Jun 2022	912	1	<2	<2	<2	1.0	19.7	66.22	8.2	33.77	8.3
C4	07 Jun 2022	912	3	<2	<2	<2	1.0	19.6	64.92	8.2	33.77	8.3
C4	07 Jun 2022	912	9	<2	<2	<2	1.0	17.7	61.96	5.7	33.70	8.0
C4	14 Jun 2022	1002	1	4e	4e	2e	1.0	19.8	66.31	7.9	33.74	8.3
C4	14 Jun 2022	1002	3	12e	6e	<2	0.5	19.8	66.52	7.9	33.74	8.3
C4	14 Jun 2022	1002	9	<2	<2	<2	1.0	17.1	70.42	7.0	33.66	8.2
C4	21 Jun 2022	917	1	<2	<2	<2	1.0	20.9	71.85	8.3	33.60	8.2
C4	21 Jun 2022	917	3	<20	<2	<2	0.1	20.5	71.59	8.0	33.60	8.2
C4	21 Jun 2022	917	9	<20	<2	<2	0.1	15.6	70.78	6.6	33.58	8.1
C4	28 Jun 2022	945	1	<2	<2	<2	1.0	18.0	74.96	8.8	33.58	8.2
C4	28 Jun 2022	945	3	<2	<2	<2	1.0	16.3	73.48	8.2	33.58	8.2
C4	28 Jun 2022	945	9	<2	<2	<2	1.0	13.2	72.11	6.0	33.53	8.0
C5	01 Jun 2022	906	1	<20	<2	<2	0.1	19.0	66.21	7.7	33.74	8.2
C5	01 Jun 2022	906	3	<2	<2	<2	1.0	18.8	68.85	7.6	33.73	8.2
C5	01 Jun 2022	906	9	2e	<2	<2	1.0	15.9	71.89	6.9	33.70	8.2
C5	07 Jun 2022	900	1	<2	<2	<2	1.0	19.9	64.60	8.0	33.77	8.3
C5	07 Jun 2022	900	3	2e	<2	<2	1.0	19.5	62.18	8.0	33.77	8.2
C5	07 Jun 2022	900	9	2e	<2	<2	1.0	15.1	64.26	5.3	33.75	8.1
C5	14 Jun 2022	949	1	<2	<2	<2	1.0	19.9	61.36	7.6	33.73	8.3
C5	14 Jun 2022	949	3	<20	<2	<2	0.1	19.9	61.05	7.7	33.73	8.3
C5	14 Jun 2022	949	9	2e	<2	<2	1.0	16.2	44.44	6.3	33.65	8.1
C5	21 Jun 2022	908	1	<2	<2	<2	1.0	20.8	74.61	7.9	33.60	8.2
C5	21 Jun 2022	908	3	<2	<2	<2	1.0	20.1	71.60	8.1	33.60	8.2
C5	21 Jun 2022	908	9	<2	<2	<2	1.0	15.0	73.42	7.4	33.54	8.1
C5	28 Jun 2022	935	1	<2	<2	<2	1.0	18.6	74.17	8.9	33.59	8.2
C5	28 Jun 2022	935	3	<2	<2	<2	1.0	16.5	72.78	8.4	33.58	8.2
C5	28 Jun 2022	935	9	<2	<2	<2	1.0	13.1	77.72	6.9	33.54	8.0
C6	01 Jun 2022	857	1	<2	<2	<2	1.0	18.9	71.42	8.3	33.73	8.3
C6	01 Jun 2022	857	3	<2	<2	<2	1.0	18.6	71.57	8.1	33.73	8.3
C6	01 Jun 2022	857	9	<2	<2	<2	1.0	15.4	68.21	5.8	33.72	8.1
C6	07 Jun 2022	850	1	2e	<2	<2	1.0	19.8	63.54	8.1	33.75	8.3
C6	07 Jun 2022	850	3	<2	<2	<2	1.0	19.8	65.38	8.1	33.75	8.3
C6	07 Jun 2022	850	9	<2	<2	<2	1.0	18.0	64.81	7.2	33.69	8.1
C6	14 Jun 2022	939	1	20e	<2	<2	0.1	20.1	53.22	7.4	33.74	8.2
C6	14 Jun 2022	939	3	<20	<2	<2	0.1	20.1	64.43	7.5	33.74	8.3
C6	14 Jun 2022	939	9	<2	<2	<2	1.0	15.4	68.28	7.1	33.58	8.2

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH
C6	21 Jun 2022	859	1	<2	<2	<2	1.0	20.8	72.95	8.4	33.59	8.2
C6	21 Jun 2022	859	3	<2	<2	<2	1.0	20.8	75.26	8.4	33.59	8.2
C6	21 Jun 2022	859	9	<2	<2	<2	1.0	15.8	75.54	8.1	33.59	8.2
C6	28 Jun 2022	926	1	<2	<2	<2	1.0	18.0	72.07	9.0	33.58	8.2
C6	28 Jun 2022	926	3	2e	<2	<2	1.0	16.6	72.79	8.8	33.59	8.2
C6	28 Jun 2022	926	9	<2	<2	<2	1.0	13.4	77.44	7.0	33.54	8.0
C7	01 Jun 2022	824	1	<2	<2	<2	1.0	19.2	71.21	8.3	33.73	8.3
C7	01 Jun 2022	824	12	<2	<2	<2	1.0	15.1	71.80	6.5	33.70	8.1
C7	01 Jun 2022	824	18	<2	2e	<2	1.0	13.7	77.90	4.9	33.69	7.9
C7	07 Jun 2022	818	1	<20	<2	<2	0.1	19.8	60.17	8.1	33.76	8.3
C7	07 Jun 2022	818	12	<2	<2	<2	1.0	12.4	78.85	5.0	33.65	7.9
C7	07 Jun 2022	818	18	<2	<2	<2	1.0	11.8	78.42	4.9	33.65	7.9
C7	14 Jun 2022	908	1	<2	<2	<2	1.0	19.8	75.90	7.7	33.63	8.2
C7	14 Jun 2022	908	12	<2	<2	<2	1.0	17.9	73.65	8.6	33.65	8.3
C7	14 Jun 2022	908	18	2e	<2	<2	1.0	12.7	73.74	6.6	33.46	8.1
C7	21 Jun 2022	830	1	<2	<2	<2	1.0	20.9	75.06	7.6	33.62	8.2
C7	21 Jun 2022	830	12	<2	<2	<2	1.0	19.1	76.85	8.1	33.57	8.2
C7	21 Jun 2022	830	18	<2	<2	<2	1.0	12.6	76.54	6.8	33.57	8.0
C7	28 Jun 2022	854	1	<2	<2	<2	1.0	18.5	73.65	8.8	33.58	8.2
C7	28 Jun 2022	854	12	2e	<2	<2	1.0	12.3	77.65	6.3	33.52	7.9
C7	28 Jun 2022	854	18	2e	2e	<2	1.0	12.1	78.68	5.8	33.54	7.9
C8	01 Jun 2022	832	1	4e	4e	<2	1.0	18.9	67.87	7.8	33.75	8.2
C8	01 Jun 2022	832	12	<2	<2	<2	1.0	15.8	75.54	7.4	33.68	8.2
C8	01 Jun 2022	832	18	<2	<2	<2	1.0	12.8	77.98	4.8	33.70	7.9
C8	07 Jun 2022	832	1	4e	<2	<2	0.5	20.1	63.27	8.3	33.77	8.3
C8	07 Jun 2022	832	12	<2	<2	<2	1.0	12.7	76.63	5.5	33.65	7.9
C8	07 Jun 2022	832	18	<2	<2	<2	1.0	11.9	78.84	4.9	33.66	7.9
C8	14 Jun 2022	920	1	<2	<2	<2	1.0	19.7	76.77	7.8	33.59	8.2
C8	14 Jun 2022	920	12	2e	<2	<2	1.0	15.6	71.05	8.9	33.64	8.2
C8	14 Jun 2022	920	18	<2	<2	<2	1.0	13.3	74.83	7.3	33.48	8.1
C8	21 Jun 2022	841	1	<2	<2	<2	1.0	20.9	72.30	7.8	33.61	8.2
C8	21 Jun 2022	841	12	<2	<2	<2	1.0	19.6	75.81	8.1	33.58	8.2
C8	21 Jun 2022	841	18	<2	2e	<2	1.0	12.1	78.51	6.1	33.57	8.0
C8	28 Jun 2022	904	1	<2	<2	<2	1.0	18.4	72.23	9.0	33.58	8.2
C8	28 Jun 2022	904	12	<2	<2	<2	1.0	12.3	78.81	6.2	33.53	7.9
C8	28 Jun 2022	904	18	<2	<2	<2	1.0	12.3	78.96	6.2	33.55	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 Jun 2022	Depth (m)	17
A1	01 Jun 2022	Arrive Time	747
A1	01 Jun 2022	Depart Time	751
A1	01 Jun 2022	Air Temp (C)	16.4
A1	01 Jun 2022	Weather	Continuous Layer of Clouds
A1	01 Jun 2022	Visibility (mi)	9
A1	01 Jun 2022	Wind Speed (kts)	1.8
A1	01 Jun 2022	Wind Dir	NE
A1	01 Jun 2022	Water Color	Blueish-Green
A1	01 Jun 2022	Wave Ht Low (ft)	4
A1	01 Jun 2022	Wave Period (sec)	17
A1	01 Jun 2022	Sea State	Regular Swell
A1	01 Jun 2022	High Tide (ft)	5.46
A1	01 Jun 2022	High Tide Time	524
A1	01 Jun 2022	Low Tide (ft)	-0.53
A1	01 Jun 2022	Low Tide Time	1224
A1	01 Jun 2022	Comments	none
A1	07 Jun 2022	Depth (m)	19
A1	07 Jun 2022	Arrive Time	741
A1	07 Jun 2022	Depart Time	747
A1	07 Jun 2022	Air Temp (C)	16.9
A1	07 Jun 2022	Weather	Overcast
A1	07 Jun 2022	Visibility (mi)	4
A1	07 Jun 2022	Wind Speed (kts)	3.8
A1	07 Jun 2022	Wind Dir	SE
A1	07 Jun 2022	Water Color	Brownish-Green
A1	07 Jun 2022	Wave Ht Low (ft)	3
A1	07 Jun 2022	Wave Period (sec)	12
A1	07 Jun 2022	Sea State	Light Chop
A1	07 Jun 2022	High Tide (ft)	4.03
A1	07 Jun 2022	High Tide Time	18
A1	07 Jun 2022	Low Tide (ft)	0.66
A1	07 Jun 2022	Low Tide Time	1700
A1	07 Jun 2022	Comments	none
A1	14 Jun 2022	Depth (m)	17
A1	14 Jun 2022	Arrive Time	828
A1	14 Jun 2022	Depart Time	835
A1	14 Jun 2022	Air Temp (C)	17.4
A1	14 Jun 2022	Weather	Continuous Layer of Clouds
A1	14 Jun 2022	Visibility (mi)	10
A1	14 Jun 2022	Wind Speed (kts)	7
A1	14 Jun 2022	Wind Dir	E
A1	14 Jun 2022	Water Color	Blueish-Green
A1	14 Jun 2022	Wave Ht Low (ft)	7
A1	14 Jun 2022	Wave Period (sec)	10
A1	14 Jun 2022	Sea State	Regular Swell
A1	14 Jun 2022	High Tide (ft)	6.95
A1	14 Jun 2022	High Tide Time	430
A1	14 Jun 2022	Low Tide (ft)	-1.64
A1	14 Jun 2022	Low Tide Time	1106
A1	14 Jun 2022	Comments	CTD 25+ Battery failure; Swapped out battery and all clear.; Kelp Debris
A1	21 Jun 2022	Depth (m)	18

Station	Date	Parameter	Value
A1	21 Jun 2022	Arrive Time	743
A1	21 Jun 2022	Depart Time	748
A1	21 Jun 2022	Air Temp (C)	18.5
A1	21 Jun 2022	Weather	Overcast
A1	21 Jun 2022	Visibility (mi)	8
A1	21 Jun 2022	Wind Speed (kts)	6
A1	21 Jun 2022	Wind Dir	SE
A1	21 Jun 2022	Water Color	Blueish-Green
A1	21 Jun 2022	Wave Ht Low (ft)	3.6
A1	21 Jun 2022	Wave Period (sec)	9
A1	21 Jun 2022	Sea State	Regular Swell
A1	21 Jun 2022	High Tide (ft)	4.83
A1	21 Jun 2022	High Tide Time	6
A1	21 Jun 2022	Low Tide (ft)	0.63
A1	21 Jun 2022	Low Tide Time	1718
A1	21 Jun 2022	Comments	none
A1	28 Jun 2022	Depth (m)	17
A1	28 Jun 2022	Arrive Time	811
A1	28 Jun 2022	Depart Time	816
A1	28 Jun 2022	Air Temp (C)	18.3
A1	28 Jun 2022	Weather	Fog
A1	28 Jun 2022	Visibility (mi)	0
A1	28 Jun 2022	Wind Speed (kts)	3.3
A1	28 Jun 2022	Wind Dir	NE
A1	28 Jun 2022	Water Color	Greenish-Blue
A1	28 Jun 2022	Wave Ht Low (ft)	3
A1	28 Jun 2022	Wave Period (sec)	18
A1	28 Jun 2022	Sea State	Calm
A1	28 Jun 2022	High Tide (ft)	5.92
A1	28 Jun 2022	High Tide Time	406
A1	28 Jun 2022	Low Tide (ft)	-0.55
A1	28 Jun 2022	Low Tide Time	1100
A1	28 Jun 2022	Comments	Kelp; Kelp Debris
A6	01 Jun 2022	Depth (m)	19
A6	01 Jun 2022	Arrive Time	809
A6	01 Jun 2022	Depart Time	813
A6	01 Jun 2022	Air Temp (C)	16.5
A6	01 Jun 2022	Weather	Continuous Layer of Clouds
A6	01 Jun 2022	Visibility (mi)	9
A6	01 Jun 2022	Wind Speed (kts)	2.5
A6	01 Jun 2022	Wind Dir	SW
A6	01 Jun 2022	Water Color	Blueish-Green
A6	01 Jun 2022	Wave Ht Low (ft)	4
A6	01 Jun 2022	Wave Period (sec)	17
A6	01 Jun 2022	Sea State	Regular Swell
A6	01 Jun 2022	High Tide (ft)	5.46
A6	01 Jun 2022	High Tide Time	524
A6	01 Jun 2022	Low Tide (ft)	-0.53
A6	01 Jun 2022	Low Tide Time	1224
A6	01 Jun 2022	Comments	Kelp
A6	07 Jun 2022	Depth (m)	13
A6	07 Jun 2022	Arrive Time	804
A6	07 Jun 2022	Depart Time	810
A6	07 Jun 2022	Air Temp (C)	16.7
A6	07 Jun 2022	Weather	Overcast
A6	07 Jun 2022	Visibility (mi)	4
A6	07 Jun 2022	Wind Speed (kts)	7.2
A6	07 Jun 2022	Wind Dir	SE

Station	Date	Parameter	Value
A6	07 Jun 2022	Water Color	Brownish-Green
A6	07 Jun 2022	Wave Ht Low (ft)	3
A6	07 Jun 2022	Wave Period (sec)	12
A6	07 Jun 2022	Sea State	Light Chop
A6	07 Jun 2022	High Tide (ft)	4.03
A6	07 Jun 2022	High Tide Time	18
A6	07 Jun 2022	Low Tide (ft)	0.66
A6	07 Jun 2022	Low Tide Time	1700
A6	07 Jun 2022	Comments	none
A6	14 Jun 2022	Depth (m)	17
A6	14 Jun 2022	Arrive Time	853
A6	14 Jun 2022	Depart Time	900
A6	14 Jun 2022	Air Temp (C)	17.8
A6	14 Jun 2022	Weather	Continuous Layer of Clouds
A6	14 Jun 2022	Visibility (mi)	10
A6	14 Jun 2022	Wind Speed (kts)	4.9
A6	14 Jun 2022	Wind Dir	E
A6	14 Jun 2022	Water Color	Blueish-Green
A6	14 Jun 2022	Wave Ht Low (ft)	7
A6	14 Jun 2022	Wave Period (sec)	10
A6	14 Jun 2022	Sea State	Regular Swell
A6	14 Jun 2022	High Tide (ft)	6.95
A6	14 Jun 2022	High Tide Time	430
A6	14 Jun 2022	Low Tide (ft)	-1.64
A6	14 Jun 2022	Low Tide Time	1106
A6	14 Jun 2022	Comments	Kelp Debris
A6	21 Jun 2022	Depth (m)	17
A6	21 Jun 2022	Arrive Time	805
A6	21 Jun 2022	Depart Time	816
A6	21 Jun 2022	Air Temp (C)	18.6
A6	21 Jun 2022	Weather	Overcast
A6	21 Jun 2022	Visibility (mi)	8
A6	21 Jun 2022	Wind Speed (kts)	4.6
A6	21 Jun 2022	Wind Dir	SE
A6	21 Jun 2022	Water Color	Blueish-Green
A6	21 Jun 2022	Wave Ht Low (ft)	3.6
A6	21 Jun 2022	Wave Period (sec)	9
A6	21 Jun 2022	Sea State	Regular Swell
A6	21 Jun 2022	High Tide (ft)	4.83
A6	21 Jun 2022	High Tide Time	6
A6	21 Jun 2022	Low Tide (ft)	0.63
A6	21 Jun 2022	Low Tide Time	1718
A6	21 Jun 2022	Comments	Recast for deeper depth
A6	28 Jun 2022	Depth (m)	19
A6	28 Jun 2022	Arrive Time	840
A6	28 Jun 2022	Depart Time	843
A6	28 Jun 2022	Air Temp (C)	18.4
A6	28 Jun 2022	Weather	Fog
A6	28 Jun 2022	Visibility (mi)	0
A6	28 Jun 2022	Wind Speed (kts)	2.2
A6	28 Jun 2022	Wind Dir	NE
A6	28 Jun 2022	Water Color	Greenish-Blue
A6	28 Jun 2022	Wave Ht Low (ft)	3
A6	28 Jun 2022	Wave Period (sec)	18
A6	28 Jun 2022	Sea State	Calm
A6	28 Jun 2022	High Tide (ft)	5.92
A6	28 Jun 2022	High Tide Time	406
A6	28 Jun 2022	Low Tide (ft)	-0.55

Station	Date	Parameter	Value
A6	28 Jun 2022	Low Tide Time	1100
A6	28 Jun 2022	Comments	Kelp
A7	01 Jun 2022	Depth (m)	20
A7	01 Jun 2022	Arrive Time	758
A7	01 Jun 2022	Depart Time	802
A7	01 Jun 2022	Air Temp (C)	16.4
A7	01 Jun 2022	Weather	Continuous Layer of Clouds
A7	01 Jun 2022	Visibility (mi)	9
A7	01 Jun 2022	Wind Speed (kts)	0
A7	01 Jun 2022	Wind Dir	NE
A7	01 Jun 2022	Water Color	Blueish-Green
A7	01 Jun 2022	Wave Ht Low (ft)	4
A7	01 Jun 2022	Wave Period (sec)	17
A7	01 Jun 2022	Sea State	Regular Swell
A7	01 Jun 2022	High Tide (ft)	5.46
A7	01 Jun 2022	High Tide Time	524
A7	01 Jun 2022	Low Tide (ft)	-0.53
A7	01 Jun 2022	Low Tide Time	1224
A7	01 Jun 2022	Comments	Kelp
A7	07 Jun 2022	Depth (m)	15
A7	07 Jun 2022	Arrive Time	752
A7	07 Jun 2022	Depart Time	759
A7	07 Jun 2022	Air Temp (C)	16.8
A7	07 Jun 2022	Weather	Overcast
A7	07 Jun 2022	Visibility (mi)	4
A7	07 Jun 2022	Wind Speed (kts)	6.5
A7	07 Jun 2022	Wind Dir	SW
A7	07 Jun 2022	Water Color	Brownish-Green
A7	07 Jun 2022	Wave Ht Low (ft)	3
A7	07 Jun 2022	Wave Period (sec)	12
A7	07 Jun 2022	Sea State	Light Chop
A7	07 Jun 2022	High Tide (ft)	4.03
A7	07 Jun 2022	High Tide Time	18
A7	07 Jun 2022	Low Tide (ft)	0.66
A7	07 Jun 2022	Low Tide Time	1700
A7	07 Jun 2022	Comments	none
A7	14 Jun 2022	Depth (m)	18
A7	14 Jun 2022	Arrive Time	841
A7	14 Jun 2022	Depart Time	846
A7	14 Jun 2022	Air Temp (C)	17.7
A7	14 Jun 2022	Weather	Continuous Layer of Clouds
A7	14 Jun 2022	Visibility (mi)	10
A7	14 Jun 2022	Wind Speed (kts)	7.2
A7	14 Jun 2022	Wind Dir	E
A7	14 Jun 2022	Water Color	Blueish-Green
A7	14 Jun 2022	Wave Ht Low (ft)	7
A7	14 Jun 2022	Wave Period (sec)	10
A7	14 Jun 2022	Sea State	Regular Swell
A7	14 Jun 2022	High Tide (ft)	6.95
A7	14 Jun 2022	High Tide Time	430
A7	14 Jun 2022	Low Tide (ft)	-1.64
A7	14 Jun 2022	Low Tide Time	1106
A7	14 Jun 2022	Comments	none
A7	21 Jun 2022	Depth (m)	17
A7	21 Jun 2022	Arrive Time	754
A7	21 Jun 2022	Depart Time	803
A7	21 Jun 2022	Air Temp (C)	18.8

Station	Date	Parameter	Value
A7	21 Jun 2022	Weather	Overcast
A7	21 Jun 2022	Visibility (mi)	8
A7	21 Jun 2022	Wind Speed (kts)	9.8
A7	21 Jun 2022	Wind Dir	SE
A7	21 Jun 2022	Water Color	Blueish-Green
A7	21 Jun 2022	Wave Ht Low (ft)	3.6
A7	21 Jun 2022	Wave Period (sec)	9
A7	21 Jun 2022	Sea State	Regular Swell
A7	21 Jun 2022	High Tide (ft)	4.83
A7	21 Jun 2022	High Tide Time	6
A7	21 Jun 2022	Low Tide (ft)	0.63
A7	21 Jun 2022	Low Tide Time	1718
A7	21 Jun 2022	Comments	none
A7	28 Jun 2022	Depth (m)	19
A7	28 Jun 2022	Arrive Time	825
A7	28 Jun 2022	Depart Time	829
A7	28 Jun 2022	Air Temp (C)	18.5
A7	28 Jun 2022	Weather	Fog
A7	28 Jun 2022	Visibility (mi)	0
A7	28 Jun 2022	Wind Speed (kts)	2.9
A7	28 Jun 2022	Wind Dir	N
A7	28 Jun 2022	Water Color	Greenish-Blue
A7	28 Jun 2022	Wave Ht Low (ft)	3
A7	28 Jun 2022	Wave Period (sec)	18
A7	28 Jun 2022	Sea State	Calm
A7	28 Jun 2022	High Tide (ft)	5.92
A7	28 Jun 2022	High Tide Time	406
A7	28 Jun 2022	Low Tide (ft)	-0.55
A7	28 Jun 2022	Low Tide Time	1100
A7	28 Jun 2022	Comments	Used btl 4 for mid depth sample; Kelp; Kelp Debris
C4	01 Jun 2022	Depth (m)	11
C4	01 Jun 2022	Arrive Time	919
C4	01 Jun 2022	Depart Time	922
C4	01 Jun 2022	Air Temp (C)	16.6
C4	01 Jun 2022	Weather	Continuous Layer of Clouds
C4	01 Jun 2022	Visibility (mi)	9
C4	01 Jun 2022	Wind Speed (kts)	3
C4	01 Jun 2022	Wind Dir	S
C4	01 Jun 2022	Water Color	Blueish-Green
C4	01 Jun 2022	Wave Ht Low (ft)	4
C4	01 Jun 2022	Wave Period (sec)	17
C4	01 Jun 2022	Sea State	Regular Swell
C4	01 Jun 2022	High Tide (ft)	5.46
C4	01 Jun 2022	High Tide Time	524
C4	01 Jun 2022	Low Tide (ft)	-0.53
C4	01 Jun 2022	Low Tide Time	1224
C4	01 Jun 2022	Comments	Seagrass
C4	07 Jun 2022	Depth (m)	11
C4	07 Jun 2022	Arrive Time	912
C4	07 Jun 2022	Depart Time	915
C4	07 Jun 2022	Air Temp (C)	17.2
C4	07 Jun 2022	Weather	Overcast
C4	07 Jun 2022	Visibility (mi)	4
C4	07 Jun 2022	Wind Speed (kts)	6.9
C4	07 Jun 2022	Wind Dir	S
C4	07 Jun 2022	Water Color	Brownish-Green
C4	07 Jun 2022	Wave Ht Low (ft)	3
C4	07 Jun 2022	Wave Period (sec)	12

Station	Date	Parameter	Value
C4	07 Jun 2022	Sea State	Light Chop
C4	07 Jun 2022	High Tide (ft)	4.03
C4	07 Jun 2022	High Tide Time	18
C4	07 Jun 2022	Low Tide (ft)	0.66
C4	07 Jun 2022	Low Tide Time	1700
C4	07 Jun 2022	Comments	none
C4	14 Jun 2022	Depth (m)	12
C4	14 Jun 2022	Arrive Time	1002
C4	14 Jun 2022	Depart Time	1008
C4	14 Jun 2022	Air Temp (C)	17.8
C4	14 Jun 2022	Weather	Continuous Layer of Clouds
C4	14 Jun 2022	Visibility (mi)	10
C4	14 Jun 2022	Wind Speed (kts)	4.5
C4	14 Jun 2022	Wind Dir	SE
C4	14 Jun 2022	Water Color	Green
C4	14 Jun 2022	Wave Ht Low (ft)	7
C4	14 Jun 2022	Wave Period (sec)	10
C4	14 Jun 2022	Sea State	Regular Swell
C4	14 Jun 2022	High Tide (ft)	6.95
C4	14 Jun 2022	High Tide Time	430
C4	14 Jun 2022	Low Tide (ft)	-1.64
C4	14 Jun 2022	Low Tide Time	1106
C4	14 Jun 2022	Comments	Kelp Debris
C4	21 Jun 2022	Depth (m)	11
C4	21 Jun 2022	Arrive Time	917
C4	21 Jun 2022	Depart Time	921
C4	21 Jun 2022	Air Temp (C)	18.3
C4	21 Jun 2022	Weather	Overcast
C4	21 Jun 2022	Visibility (mi)	8
C4	21 Jun 2022	Wind Speed (kts)	2.8
C4	21 Jun 2022	Wind Dir	SE
C4	21 Jun 2022	Water Color	Blueish-Green
C4	21 Jun 2022	Wave Ht Low (ft)	3.6
C4	21 Jun 2022	Wave Period (sec)	9
C4	21 Jun 2022	Sea State	Regular Swell
C4	21 Jun 2022	High Tide (ft)	4.83
C4	21 Jun 2022	High Tide Time	6
C4	21 Jun 2022	Low Tide (ft)	0.63
C4	21 Jun 2022	Low Tide Time	1718
C4	21 Jun 2022	Comments	Kelp; Kelp Debris
C4	28 Jun 2022	Depth (m)	11
C4	28 Jun 2022	Arrive Time	945
C4	28 Jun 2022	Depart Time	953
C4	28 Jun 2022	Air Temp (C)	18.4
C4	28 Jun 2022	Weather	Fog
C4	28 Jun 2022	Visibility (mi)	0
C4	28 Jun 2022	Wind Speed (kts)	4.6
C4	28 Jun 2022	Wind Dir	N
C4	28 Jun 2022	Water Color	Blueish-Green
C4	28 Jun 2022	Wave Ht Low (ft)	3
C4	28 Jun 2022	Wave Period (sec)	18
C4	28 Jun 2022	Sea State	Calm
C4	28 Jun 2022	High Tide (ft)	5.92
C4	28 Jun 2022	High Tide Time	406
C4	28 Jun 2022	Low Tide (ft)	-0.55
C4	28 Jun 2022	Low Tide Time	1100
C4	28 Jun 2022	Comments	Kelp; Seagrass

Station	Date	Parameter	Value
C5	01 Jun 2022	Depth (m)	10
C5	01 Jun 2022	Arrive Time	906
C5	01 Jun 2022	Depart Time	915
C5	01 Jun 2022	Air Temp (C)	16.6
C5	01 Jun 2022	Weather	Continuous Layer of Clouds
C5	01 Jun 2022	Visibility (mi)	9
C5	01 Jun 2022	Wind Speed (kts)	8.3
C5	01 Jun 2022	Wind Dir	S
C5	01 Jun 2022	Water Color	Blueish-Green
C5	01 Jun 2022	Wave Ht Low (ft)	4
C5	01 Jun 2022	Wave Period (sec)	17
C5	01 Jun 2022	Sea State	Regular Swell
C5	01 Jun 2022	High Tide (ft)	5.46
C5	01 Jun 2022	High Tide Time	524
C5	01 Jun 2022	Low Tide (ft)	-0.53
C5	01 Jun 2022	Low Tide Time	1224
C5	01 Jun 2022	Comments	Kelp Debris
C5	07 Jun 2022	Depth (m)	11
C5	07 Jun 2022	Arrive Time	900
C5	07 Jun 2022	Depart Time	905
C5	07 Jun 2022	Air Temp (C)	17.1
C5	07 Jun 2022	Weather	Overcast
C5	07 Jun 2022	Visibility (mi)	4
C5	07 Jun 2022	Wind Speed (kts)	5.2
C5	07 Jun 2022	Wind Dir	S
C5	07 Jun 2022	Water Color	Brownish-Green
C5	07 Jun 2022	Wave Ht Low (ft)	3
C5	07 Jun 2022	Wave Period (sec)	12
C5	07 Jun 2022	Sea State	Light Chop
C5	07 Jun 2022	High Tide (ft)	4.03
C5	07 Jun 2022	High Tide Time	18
C5	07 Jun 2022	Low Tide (ft)	0.66
C5	07 Jun 2022	Low Tide Time	1700
C5	07 Jun 2022	Comments	none
C5	14 Jun 2022	Depth (m)	11
C5	14 Jun 2022	Arrive Time	949
C5	14 Jun 2022	Depart Time	955
C5	14 Jun 2022	Air Temp (C)	17.7
C5	14 Jun 2022	Weather	Continuous Layer of Clouds
C5	14 Jun 2022	Visibility (mi)	10
C5	14 Jun 2022	Wind Speed (kts)	4.4
C5	14 Jun 2022	Wind Dir	SE
C5	14 Jun 2022	Water Color	Green
C5	14 Jun 2022	Wave Ht Low (ft)	7
C5	14 Jun 2022	Wave Period (sec)	10
C5	14 Jun 2022	Sea State	Regular Swell
C5	14 Jun 2022	High Tide (ft)	6.95
C5	14 Jun 2022	High Tide Time	430
C5	14 Jun 2022	Low Tide (ft)	-1.64
C5	14 Jun 2022	Low Tide Time	1106
C5	14 Jun 2022	Comments	Kelp
C5	21 Jun 2022	Depth (m)	10
C5	21 Jun 2022	Arrive Time	908
C5	21 Jun 2022	Depart Time	912
C5	21 Jun 2022	Air Temp (C)	18.3
C5	21 Jun 2022	Weather	Overcast
C5	21 Jun 2022	Visibility (mi)	8
C5	21 Jun 2022	Wind Speed (kts)	6.3

Station	Date	Parameter	Value
C5	21 Jun 2022	Wind Dir	S
C5	21 Jun 2022	Water Color	Blueish-Green
C5	21 Jun 2022	Wave Ht Low (ft)	3.6
C5	21 Jun 2022	Wave Period (sec)	9
C5	21 Jun 2022	Sea State	Regular Swell
C5	21 Jun 2022	High Tide (ft)	4.83
C5	21 Jun 2022	High Tide Time	6
C5	21 Jun 2022	Low Tide (ft)	0.63
C5	21 Jun 2022	Low Tide Time	1718
C5	21 Jun 2022	Comments	Kelp Debris
C5	28 Jun 2022	Depth (m)	11
C5	28 Jun 2022	Arrive Time	935
C5	28 Jun 2022	Depart Time	939
C5	28 Jun 2022	Air Temp (C)	18.4
C5	28 Jun 2022	Weather	Fog
C5	28 Jun 2022	Visibility (mi)	0
C5	28 Jun 2022	Wind Speed (kts)	5.2
C5	28 Jun 2022	Wind Dir	N
C5	28 Jun 2022	Water Color	Blueish-Green
C5	28 Jun 2022	Wave Ht Low (ft)	3
C5	28 Jun 2022	Wave Period (sec)	18
C5	28 Jun 2022	Sea State	Calm
C5	28 Jun 2022	High Tide (ft)	5.92
C5	28 Jun 2022	High Tide Time	406
C5	28 Jun 2022	Low Tide (ft)	-0.55
C5	28 Jun 2022	Low Tide Time	1100
C5	28 Jun 2022	Comments	Kelp
C6	01 Jun 2022	Depth (m)	9
C6	01 Jun 2022	Arrive Time	857
C6	01 Jun 2022	Depart Time	904
C6	01 Jun 2022	Air Temp (C)	16.6
C6	01 Jun 2022	Weather	Continuous Layer of Clouds
C6	01 Jun 2022	Visibility (mi)	9
C6	01 Jun 2022	Wind Speed (kts)	4.2
C6	01 Jun 2022	Wind Dir	SW
C6	01 Jun 2022	Water Color	Blueish-Green
C6	01 Jun 2022	Wave Ht Low (ft)	4
C6	01 Jun 2022	Wave Period (sec)	17
C6	01 Jun 2022	Sea State	Regular Swell
C6	01 Jun 2022	High Tide (ft)	5.46
C6	01 Jun 2022	High Tide Time	524
C6	01 Jun 2022	Low Tide (ft)	-0.53
C6	01 Jun 2022	Low Tide Time	1224
C6	01 Jun 2022	Comments	Kelp
C6	07 Jun 2022	Depth (m)	9
C6	07 Jun 2022	Arrive Time	850
C6	07 Jun 2022	Depart Time	855
C6	07 Jun 2022	Air Temp (C)	16.8
C6	07 Jun 2022	Weather	Overcast
C6	07 Jun 2022	Visibility (mi)	4
C6	07 Jun 2022	Wind Speed (kts)	8.2
C6	07 Jun 2022	Wind Dir	SE
C6	07 Jun 2022	Water Color	Brownish-Green
C6	07 Jun 2022	Wave Ht Low (ft)	3
C6	07 Jun 2022	Wave Period (sec)	12
C6	07 Jun 2022	Sea State	Light Chop
C6	07 Jun 2022	High Tide (ft)	4.03
C6	07 Jun 2022	High Tide Time	18

Station	Date	Parameter	Value
C6	07 Jun 2022	Low Tide (ft)	0.66
C6	07 Jun 2022	Low Tide Time	1700
C6	07 Jun 2022	Comments	none
C6	14 Jun 2022	Depth (m)	9
C6	14 Jun 2022	Arrive Time	939
C6	14 Jun 2022	Depart Time	944
C6	14 Jun 2022	Air Temp (C)	17.8
C6	14 Jun 2022	Weather	Continuous Layer of Clouds
C6	14 Jun 2022	Visibility (mi)	10
C6	14 Jun 2022	Wind Speed (kts)	19.7
C6	14 Jun 2022	Wind Dir	SE
C6	14 Jun 2022	Water Color	Green
C6	14 Jun 2022	Wave Ht Low (ft)	7
C6	14 Jun 2022	Wave Period (sec)	10
C6	14 Jun 2022	Sea State	Regular Swell
C6	14 Jun 2022	High Tide (ft)	6.95
C6	14 Jun 2022	High Tide Time	430
C6	14 Jun 2022	Low Tide (ft)	-1.64
C6	14 Jun 2022	Low Tide Time	1106
C6	14 Jun 2022	Comments	Surface water opaque white green; Kelp
C6	21 Jun 2022	Depth (m)	9
C6	21 Jun 2022	Arrive Time	859
C6	21 Jun 2022	Depart Time	904
C6	21 Jun 2022	Air Temp (C)	18.5
C6	21 Jun 2022	Weather	Overcast
C6	21 Jun 2022	Visibility (mi)	8
C6	21 Jun 2022	Wind Speed (kts)	5.3
C6	21 Jun 2022	Wind Dir	S
C6	21 Jun 2022	Water Color	Blueish-Green
C6	21 Jun 2022	Wave Ht Low (ft)	3.6
C6	21 Jun 2022	Wave Period (sec)	9
C6	21 Jun 2022	Sea State	Regular Swell
C6	21 Jun 2022	High Tide (ft)	4.83
C6	21 Jun 2022	High Tide Time	6
C6	21 Jun 2022	Low Tide (ft)	0.63
C6	21 Jun 2022	Low Tide Time	1718
C6	21 Jun 2022	Comments	Kelp; Kelp Debris
C6	28 Jun 2022	Depth (m)	9
C6	28 Jun 2022	Arrive Time	926
C6	28 Jun 2022	Depart Time	929
C6	28 Jun 2022	Air Temp (C)	18.3
C6	28 Jun 2022	Weather	Fog
C6	28 Jun 2022	Visibility (mi)	0
C6	28 Jun 2022	Wind Speed (kts)	4.9
C6	28 Jun 2022	Wind Dir	NE
C6	28 Jun 2022	Water Color	Blueish-Green
C6	28 Jun 2022	Wave Ht Low (ft)	3
C6	28 Jun 2022	Wave Period (sec)	18
C6	28 Jun 2022	Sea State	Calm
C6	28 Jun 2022	High Tide (ft)	5.92
C6	28 Jun 2022	High Tide Time	406
C6	28 Jun 2022	Low Tide (ft)	-0.55
C6	28 Jun 2022	Low Tide Time	1100
C6	28 Jun 2022	Comments	Kelp
C7	01 Jun 2022	Depth (m)	18
C7	01 Jun 2022	Arrive Time	824
C7	01 Jun 2022	Depart Time	828

Station	Date	Parameter	Value
C7	01 Jun 2022	Air Temp (C)	16.7
C7	01 Jun 2022	Weather	Continuous Layer of Clouds
C7	01 Jun 2022	Visibility (mi)	9
C7	01 Jun 2022	Wind Speed (kts)	2.6
C7	01 Jun 2022	Wind Dir	SW
C7	01 Jun 2022	Water Color	Blueish-Green
C7	01 Jun 2022	Wave Ht Low (ft)	4
C7	01 Jun 2022	Wave Period (sec)	17
C7	01 Jun 2022	Sea State	Regular Swell
C7	01 Jun 2022	High Tide (ft)	5.46
C7	01 Jun 2022	High Tide Time	524
C7	01 Jun 2022	Low Tide (ft)	-0.53
C7	01 Jun 2022	Low Tide Time	1224
C7	01 Jun 2022	Comments	Kelp
C7	07 Jun 2022	Depth (m)	17
C7	07 Jun 2022	Arrive Time	818
C7	07 Jun 2022	Depart Time	828
C7	07 Jun 2022	Air Temp (C)	16.8
C7	07 Jun 2022	Weather	Overcast
C7	07 Jun 2022	Visibility (mi)	4
C7	07 Jun 2022	Wind Speed (kts)	0.7
C7	07 Jun 2022	Wind Dir	N
C7	07 Jun 2022	Water Color	Brownish-Green
C7	07 Jun 2022	Wave Ht Low (ft)	3
C7	07 Jun 2022	Wave Period (sec)	12
C7	07 Jun 2022	Sea State	Light Chop
C7	07 Jun 2022	High Tide (ft)	4.03
C7	07 Jun 2022	High Tide Time	18
C7	07 Jun 2022	Low Tide (ft)	0.66
C7	07 Jun 2022	Low Tide Time	1700
C7	07 Jun 2022	Comments	none
C7	14 Jun 2022	Depth (m)	18
C7	14 Jun 2022	Arrive Time	908
C7	14 Jun 2022	Depart Time	914
C7	14 Jun 2022	Air Temp (C)	17.8
C7	14 Jun 2022	Weather	Continuous Layer of Clouds
C7	14 Jun 2022	Visibility (mi)	10
C7	14 Jun 2022	Wind Speed (kts)	3.7
C7	14 Jun 2022	Wind Dir	SE
C7	14 Jun 2022	Water Color	Blue
C7	14 Jun 2022	Wave Ht Low (ft)	7
C7	14 Jun 2022	Wave Period (sec)	10
C7	14 Jun 2022	Sea State	Regular Swell
C7	14 Jun 2022	High Tide (ft)	6.95
C7	14 Jun 2022	High Tide Time	430
C7	14 Jun 2022	Low Tide (ft)	-1.64
C7	14 Jun 2022	Low Tide Time	1106
C7	14 Jun 2022	Comments	Kelp
C7	21 Jun 2022	Depth (m)	18
C7	21 Jun 2022	Arrive Time	830
C7	21 Jun 2022	Depart Time	837
C7	21 Jun 2022	Air Temp (C)	18.9
C7	21 Jun 2022	Weather	Overcast
C7	21 Jun 2022	Visibility (mi)	8
C7	21 Jun 2022	Wind Speed (kts)	8.8
C7	21 Jun 2022	Wind Dir	SE
C7	21 Jun 2022	Water Color	Blueish-Green
C7	21 Jun 2022	Wave Ht Low (ft)	3.6

Station	Date	Parameter	Value
C7	21 Jun 2022	Wave Period (sec)	9
C7	21 Jun 2022	Sea State	Regular Swell
C7	21 Jun 2022	High Tide (ft)	4.83
C7	21 Jun 2022	High Tide Time	6
C7	21 Jun 2022	Low Tide (ft)	0.63
C7	21 Jun 2022	Low Tide Time	1718
C7	21 Jun 2022	Comments	Recast for depth but unable to get bottom depth
C7	28 Jun 2022	Depth (m)	18
C7	28 Jun 2022	Arrive Time	854
C7	28 Jun 2022	Depart Time	858
C7	28 Jun 2022	Air Temp (C)	18.5
C7	28 Jun 2022	Weather	Fog
C7	28 Jun 2022	Visibility (mi)	0
C7	28 Jun 2022	Wind Speed (kts)	1.9
C7	28 Jun 2022	Wind Dir	NW
C7	28 Jun 2022	Water Color	Greenish-Blue
C7	28 Jun 2022	Wave Ht Low (ft)	3
C7	28 Jun 2022	Wave Period (sec)	18
C7	28 Jun 2022	Sea State	Calm
C7	28 Jun 2022	High Tide (ft)	5.92
C7	28 Jun 2022	High Tide Time	406
C7	28 Jun 2022	Low Tide (ft)	-0.55
C7	28 Jun 2022	Low Tide Time	1100
C7	28 Jun 2022	Comments	none
C8	01 Jun 2022	Depth (m)	18
C8	01 Jun 2022	Arrive Time	832
C8	01 Jun 2022	Depart Time	844
C8	01 Jun 2022	Air Temp (C)	16.6
C8	01 Jun 2022	Weather	Continuous Layer of Clouds
C8	01 Jun 2022	Visibility (mi)	9
C8	01 Jun 2022	Wind Speed (kts)	4.7
C8	01 Jun 2022	Wind Dir	W
C8	01 Jun 2022	Water Color	Blueish-Green
C8	01 Jun 2022	Wave Ht Low (ft)	4
C8	01 Jun 2022	Wave Period (sec)	17
C8	01 Jun 2022	Sea State	Regular Swell
C8	01 Jun 2022	High Tide (ft)	5.46
C8	01 Jun 2022	High Tide Time	524
C8	01 Jun 2022	Low Tide (ft)	-0.53
C8	01 Jun 2022	Low Tide Time	1224
C8	01 Jun 2022	Comments	none
C8	07 Jun 2022	Depth (m)	18
C8	07 Jun 2022	Arrive Time	832
C8	07 Jun 2022	Depart Time	838
C8	07 Jun 2022	Air Temp (C)	16.8
C8	07 Jun 2022	Weather	Overcast
C8	07 Jun 2022	Visibility (mi)	4
C8	07 Jun 2022	Wind Speed (kts)	0.7
C8	07 Jun 2022	Wind Dir	NW
C8	07 Jun 2022	Water Color	Brownish-Green
C8	07 Jun 2022	Wave Ht Low (ft)	3
C8	07 Jun 2022	Wave Period (sec)	12
C8	07 Jun 2022	Sea State	Light Chop
C8	07 Jun 2022	High Tide (ft)	4.03
C8	07 Jun 2022	High Tide Time	18
C8	07 Jun 2022	Low Tide (ft)	0.66
C8	07 Jun 2022	Low Tide Time	1700
C8	07 Jun 2022	Comments	none

Station	Date	Parameter	Value
C8	14 Jun 2022	Depth (m)	20
C8	14 Jun 2022	Arrive Time	920
C8	14 Jun 2022	Depart Time	926
C8	14 Jun 2022	Air Temp (C)	18
C8	14 Jun 2022	Weather	Continuous Layer of Clouds
C8	14 Jun 2022	Visibility (mi)	10
C8	14 Jun 2022	Wind Speed (kts)	0.8
C8	14 Jun 2022	Wind Dir	SE
C8	14 Jun 2022	Water Color	Blue
C8	14 Jun 2022	Wave Ht Low (ft)	7
C8	14 Jun 2022	Wave Period (sec)	10
C8	14 Jun 2022	Sea State	Regular Swell
C8	14 Jun 2022	High Tide (ft)	6.95
C8	14 Jun 2022	High Tide Time	430
C8	14 Jun 2022	Low Tide (ft)	-1.64
C8	14 Jun 2022	Low Tide Time	1106
C8	14 Jun 2022	Comments	Kelp; Kelp Debris
C8	21 Jun 2022	Depth (m)	19
C8	21 Jun 2022	Arrive Time	841
C8	21 Jun 2022	Depart Time	845
C8	21 Jun 2022	Air Temp (C)	18.8
C8	21 Jun 2022	Weather	Overcast
C8	21 Jun 2022	Visibility (mi)	8
C8	21 Jun 2022	Wind Speed (kts)	6.3
C8	21 Jun 2022	Wind Dir	S
C8	21 Jun 2022	Water Color	Blueish-Green
C8	21 Jun 2022	Wave Ht Low (ft)	3.6
C8	21 Jun 2022	Wave Period (sec)	9
C8	21 Jun 2022	Sea State	Regular Swell
C8	21 Jun 2022	High Tide (ft)	4.83
C8	21 Jun 2022	High Tide Time	6
C8	21 Jun 2022	Low Tide (ft)	0.63
C8	21 Jun 2022	Low Tide Time	1718
C8	21 Jun 2022	Comments	none
C8	28 Jun 2022	Depth (m)	19
C8	28 Jun 2022	Arrive Time	904
C8	28 Jun 2022	Depart Time	910
C8	28 Jun 2022	Air Temp (C)	18.5
C8	28 Jun 2022	Weather	Fog
C8	28 Jun 2022	Visibility (mi)	0
C8	28 Jun 2022	Wind Speed (kts)	9.1
C8	28 Jun 2022	Wind Dir	NW
C8	28 Jun 2022	Water Color	Blueish-Green
C8	28 Jun 2022	Wave Ht Low (ft)	3
C8	28 Jun 2022	Wave Period (sec)	18
C8	28 Jun 2022	Sea State	Calm
C8	28 Jun 2022	High Tide (ft)	5.92
C8	28 Jun 2022	High Tide Time	406
C8	28 Jun 2022	Low Tide (ft)	-0.55
C8	28 Jun 2022	Low Tide Time	1100
C8	28 Jun 2022	Comments	none

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 Jun 2022	1	17.95	72.85	8.3	33.72	8.2	24.3	3.42
A1	01 Jun 2022	2	17.88	72.81	8.3	33.72	8.2	24.3	3.57
A1	01 Jun 2022	3	17.81	72.57	8.2	33.72	8.2	24.3	3.73
A1	01 Jun 2022	4	17.79	72.47	8.2	33.72	8.2	24.3	3.68
A1	01 Jun 2022	5	17.72	72.51	8.2	33.72	8.2	24.4	3.71
A1	01 Jun 2022	6	17.65	72.52	8.2	33.72	8.2	24.4	3.65
A1	01 Jun 2022	7	17.49	72.20	8.2	33.72	8.2	24.4	3.78
A1	01 Jun 2022	8	17.13	71.28	8.2	33.72	8.2	24.5	4.27
A1	01 Jun 2022	9	17.04	70.66	8.0	33.71	8.2	24.5	4.95
A1	01 Jun 2022	10	16.80	69.52	7.9	33.71	8.2	24.6	6.05
A1	01 Jun 2022	11	16.49	68.64	7.4	33.70	8.2	24.6	6.72
A1	01 Jun 2022	12	15.37	68.62	6.8	33.71	8.1	24.9	5.74
A1	01 Jun 2022	13	14.57	73.30	5.9	33.72	8.1	25.1	4.09
A1	01 Jun 2022	14	13.70	76.47	5.2	33.70	8.0	25.2	2.34
A1	01 Jun 2022	15	13.46	77.06	5.0	33.69	8.0	25.3	1.85
A1	01 Jun 2022	16	13.17	77.34	5.1	33.69	7.9	25.3	1.71
A1	01 Jun 2022	17	13.02	77.64	4.9	33.69	7.9	25.4	1.61
A1	01 Jun 2022	18	12.87	76.56	4.9	33.69	7.9	25.4	1.51
A1	07 Jun 2022	1	19.31	66.89	8.1	33.76	8.2	24.0	4.40
A1	07 Jun 2022	2	19.32	66.94	8.1	33.76	8.2	24.0	4.59
A1	07 Jun 2022	3	19.32	66.71	8.1	33.76	8.2	24.0	4.93
A1	07 Jun 2022	4	19.27	66.17	7.9	33.76	8.2	24.0	5.15
A1	07 Jun 2022	5	18.90	65.54	7.9	33.76	8.2	24.1	5.59
A1	07 Jun 2022	6	18.79	65.17	7.9	33.75	8.2	24.1	5.79
A1	07 Jun 2022	7	18.75	64.53	7.9	33.74	8.2	24.1	6.01
A1	07 Jun 2022	8	18.42	63.52	7.8	33.75	8.2	24.2	6.40
A1	07 Jun 2022	9	18.27	63.88	7.8	33.74	8.2	24.2	6.71
A1	07 Jun 2022	10	17.78	63.51	7.8	33.74	8.2	24.4	7.03
A1	07 Jun 2022	11	17.47	62.96	7.8	33.73	8.2	24.4	7.55
A1	07 Jun 2022	12	17.41	62.71	7.6	33.73	8.2	24.4	7.73
A1	07 Jun 2022	13	16.76	63.80	7.3	33.73	8.2	24.6	7.69
A1	07 Jun 2022	14	16.66	65.04	7.1	33.72	8.1	24.6	7.56
A1	07 Jun 2022	15	16.11	66.21	6.4	33.72	8.1	24.7	6.83
A1	07 Jun 2022	16	14.35	69.65	5.7	33.72	8.0	25.1	4.95
A1	07 Jun 2022	17	13.45	75.25	5.5	33.67	7.9	25.3	3.36
A1	07 Jun 2022	18	14.40	75.67	5.8	33.60	7.9	25.0	3.21
A1	14 Jun 2022	1	19.74	76.02	7.9	33.61	8.2	23.8	1.71
A1	14 Jun 2022	2	19.75	76.23	7.9	33.61	8.2	23.8	1.80
A1	14 Jun 2022	3	19.78	76.18	8.0	33.62	8.2	23.8	2.08
A1	14 Jun 2022	4	19.77	75.43	8.0	33.64	8.2	23.8	2.39
A1	14 Jun 2022	5	19.47	74.31	7.9	33.64	8.2	23.9	2.69
A1	14 Jun 2022	6	18.58	74.05	7.9	33.64	8.2	24.1	3.35
A1	14 Jun 2022	7	17.62	72.55	7.9	33.63	8.2	24.3	4.42
A1	14 Jun 2022	8	16.97	72.63	8.2	33.62	8.2	24.5	5.20
A1	14 Jun 2022	9	16.11	72.54	8.3	33.60	8.2	24.6	5.56
A1	14 Jun 2022	10	15.55	73.72	8.1	33.57	8.2	24.7	5.33
A1	14 Jun 2022	11	14.82	74.46	7.7	33.55	8.2	24.9	4.87
A1	14 Jun 2022	12	14.06	76.01	7.6	33.51	8.1	25.0	4.19
A1	14 Jun 2022	13	13.85	77.03	7.7	33.49	8.1	25.1	3.69
A1	14 Jun 2022	14	13.64	77.20	7.6	33.48	8.1	25.1	3.36
A1	14 Jun 2022	15	13.48	77.36	7.6	33.48	8.1	25.1	3.11
A1	14 Jun 2022	16	13.19	77.17	7.4	33.47	8.1	25.2	2.51
A1	14 Jun 2022	17	12.86	74.25	6.8	33.46	8.1	25.2	2.09

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A1	14 Jun 2022	18	12.78	71.41	6.8	33.47	8.1	25.2	1.91
A1	21 Jun 2022	1	20.36	73.40	8.3	33.61	8.2	23.6	1.84
A1	21 Jun 2022	2	20.34	74.11	8.3	33.61	8.2	23.6	1.90
A1	21 Jun 2022	3	20.20	73.43	8.3	33.62	8.2	23.7	2.15
A1	21 Jun 2022	4	19.45	71.42	8.1	33.64	8.2	23.9	2.76
A1	21 Jun 2022	5	18.70	71.30	8.0	33.61	8.2	24.0	3.36
A1	21 Jun 2022	6	17.55	70.86	7.8	33.60	8.1	24.3	5.07
A1	21 Jun 2022	7	17.15	69.38	7.5	33.59	8.1	24.4	6.32
A1	21 Jun 2022	8	16.73	67.67	7.0	33.59	8.1	24.5	6.58
A1	21 Jun 2022	9	15.27	67.56	6.8	33.59	8.1	24.8	5.15
A1	21 Jun 2022	10	14.59	71.37	6.6	33.56	8.0	25.0	3.28
A1	21 Jun 2022	11	14.09	74.40	6.5	33.56	8.0	25.1	2.34
A1	21 Jun 2022	12	13.67	75.26	6.3	33.54	8.0	25.1	1.97
A1	21 Jun 2022	13	13.33	75.66	6.2	33.53	8.0	25.2	1.72
A1	21 Jun 2022	14	13.28	76.33	6.1	33.53	7.9	25.2	1.61
A1	21 Jun 2022	15	13.00	77.09	5.9	33.55	7.9	25.3	1.48
A1	21 Jun 2022	16	12.38	77.43	5.6	33.54	7.9	25.4	1.26
A1	21 Jun 2022	17	11.99	77.68	5.5	33.57	7.9	25.5	1.12
A1	28 Jun 2022	1	17.53	69.69	8.5	33.57	8.2	24.3	1.96
A1	28 Jun 2022	2	16.18	71.07	8.9	33.56	8.2	24.6	2.78
A1	28 Jun 2022	3	15.36	73.01	9.2	33.54	8.2	24.8	4.16
A1	28 Jun 2022	4	15.28	72.52	9.2	33.53	8.2	24.8	4.87
A1	28 Jun 2022	5	15.19	72.11	8.9	33.53	8.2	24.8	5.03
A1	28 Jun 2022	6	14.86	72.77	8.7	33.53	8.1	24.9	4.85
A1	28 Jun 2022	7	14.53	73.47	8.8	33.52	8.1	24.9	5.09
A1	28 Jun 2022	8	14.18	72.63	8.6	33.52	8.1	25.0	6.91
A1	28 Jun 2022	9	13.94	70.77	8.2	33.52	8.1	25.1	9.23
A1	28 Jun 2022	10	13.71	69.71	8.0	33.51	8.1	25.1	9.79
A1	28 Jun 2022	11	13.19	69.39	7.7	33.52	8.0	25.2	8.64
A1	28 Jun 2022	12	13.04	71.67	7.5	33.52	8.0	25.2	7.43
A1	28 Jun 2022	13	13.04	73.46	7.4	33.51	8.0	25.2	7.05
A1	28 Jun 2022	14	12.85	74.19	7.0	33.53	8.0	25.3	6.41
A1	28 Jun 2022	15	12.86	74.55	6.8	33.52	8.0	25.3	5.70
A1	28 Jun 2022	16	12.62	74.78	6.5	33.55	7.9	25.3	5.03
A1	28 Jun 2022	17	12.61	74.65	6.4	33.54	7.9	25.3	4.21
A1	28 Jun 2022	18	12.45	76.15	6.0	33.55	7.9	25.4	3.52
A6	01 Jun 2022	1	19.06	73.24	8.1	33.73	8.3	24.0	2.97
A6	01 Jun 2022	2	19.06	73.36	8.1	33.73	8.3	24.0	3.26
A6	01 Jun 2022	3	19.05	73.21	8.1	33.73	8.3	24.0	3.57
A6	01 Jun 2022	4	19.04	72.94	8.0	33.73	8.3	24.0	3.70
A6	01 Jun 2022	5	18.83	73.78	7.9	33.72	8.2	24.1	3.55
A6	01 Jun 2022	6	17.59	73.97	7.6	33.74	8.2	24.4	4.14
A6	01 Jun 2022	7	16.97	71.83	7.3	33.70	8.2	24.5	4.83
A6	01 Jun 2022	8	15.83	71.07	7.0	33.70	8.2	24.8	5.59
A6	01 Jun 2022	9	15.38	71.49	6.9	33.70	8.1	24.9	5.58
A6	01 Jun 2022	10	15.17	72.46	6.8	33.69	8.1	24.9	5.00
A6	01 Jun 2022	11	15.02	74.13	6.6	33.70	8.1	25.0	4.16
A6	01 Jun 2022	12	14.96	75.25	6.3	33.70	8.1	25.0	3.56
A6	01 Jun 2022	13	14.00	76.32	5.8	33.71	8.1	25.2	2.76
A6	01 Jun 2022	14	13.34	78.40	5.4	33.69	8.0	25.3	2.11
A6	01 Jun 2022	15	12.53	79.07	5.1	33.70	8.0	25.5	1.77
A6	01 Jun 2022	16	12.36	79.28	5.0	33.70	7.9	25.5	1.59
A6	01 Jun 2022	17	12.21	79.25	4.9	33.70	7.9	25.5	1.60
A6	01 Jun 2022	18	12.12	79.20	4.8	33.70	7.9	25.6	1.45
A6	01 Jun 2022	19	12.18	78.71	4.8	33.70	7.9	25.5	1.44
A6	07 Jun 2022	1	19.71	64.46	8.3	33.74	8.3	23.9	5.38
A6	07 Jun 2022	2	19.70	65.55	8.2	33.74	8.3	23.9	5.72

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
A6	07 Jun 2022	3	19.70	65.72	8.3	33.74	8.3	23.9	6.00
A6	07 Jun 2022	4	19.67	65.62	8.2	33.74	8.3	23.9	6.33
A6	07 Jun 2022	5	19.52	64.88	8.2	33.75	8.3	23.9	6.35
A6	07 Jun 2022	6	19.44	65.40	8.2	33.74	8.2	23.9	6.17
A6	07 Jun 2022	7	19.37	65.73	8.1	33.74	8.2	24.0	6.08
A6	07 Jun 2022	8	18.99	66.41	7.8	33.74	8.2	24.1	5.91
A6	07 Jun 2022	9	18.11	67.61	7.8	33.74	8.2	24.3	5.42
A6	07 Jun 2022	10	17.60	69.70	7.1	33.73	8.2	24.4	5.12
A6	07 Jun 2022	11	15.60	72.13	6.6	33.71	8.1	24.8	3.87
A6	07 Jun 2022	12	15.41	73.59	6.2	33.68	8.1	24.9	3.30
A6	07 Jun 2022	13	14.48	74.91	6.0	33.69	8.0	25.1	2.89
A6	07 Jun 2022	14	14.50	74.91	6.0	33.70	8.0	25.1	2.49
A6	07 Jun 2022	15	13.94	74.82	5.7	33.78	8.0	25.3	2.73
A6	07 Jun 2022	16	13.36	76.12	5.6	33.72	8.0	25.3	2.48
A6	07 Jun 2022	17	13.45	74.67	5.4	33.67	8.0	25.3	1.88
A6	07 Jun 2022	18	12.66	78.56	5.3	33.68	7.9	25.4	1.52
A6	07 Jun 2022	19	12.56	79.45	5.1	33.67	7.9	25.4	1.31
A6	07 Jun 2022	20	12.15	79.60	5.0	33.68	7.9	25.5	1.24
A6	07 Jun 2022	21	12.05	79.87	5.0	33.67	7.9	25.5	1.15
A6	14 Jun 2022	1	20.15	72.64	8.3	33.73	8.3	23.8	2.24
A6	14 Jun 2022	2	20.15	72.65	8.3	33.73	8.3	23.8	2.38
A6	14 Jun 2022	3	20.16	72.29	8.3	33.73	8.3	23.8	2.57
A6	14 Jun 2022	4	20.16	71.82	8.3	33.73	8.3	23.8	2.82
A6	14 Jun 2022	5	20.16	71.09	8.4	33.73	8.3	23.8	3.00
A6	14 Jun 2022	6	20.16	70.70	8.4	33.73	8.3	23.8	3.42
A6	14 Jun 2022	7	20.10	69.44	8.4	33.73	8.3	23.8	3.87
A6	14 Jun 2022	8	20.01	69.32	8.4	33.73	8.3	23.8	4.54
A6	14 Jun 2022	9	19.91	69.34	8.4	33.72	8.3	23.8	4.84
A6	14 Jun 2022	10	19.67	69.51	8.3	33.72	8.3	23.9	5.20
A6	14 Jun 2022	11	19.27	70.56	7.9	33.70	8.3	24.0	5.26
A6	14 Jun 2022	12	17.47	72.32	7.4	33.67	8.3	24.4	5.11
A6	14 Jun 2022	13	15.53	74.61	7.4	33.62	8.2	24.8	4.15
A6	14 Jun 2022	14	14.92	76.77	6.9	33.55	8.1	24.9	3.14
A6	14 Jun 2022	15	12.74	77.52	6.6	33.48	8.1	25.3	2.20
A6	14 Jun 2022	16	12.35	77.13	6.7	33.45	8.0	25.3	1.76
A6	14 Jun 2022	17	12.31	76.32	6.2	33.44	8.0	25.3	1.67
A6	14 Jun 2022	18	12.13	75.21	6.2	33.45	8.0	25.4	1.51
A6	21 Jun 2022	1	20.78	76.22	8.3	33.59	8.2	23.5	1.17
A6	21 Jun 2022	2	20.71	76.41	8.3	33.59	8.2	23.5	1.22
A6	21 Jun 2022	3	20.69	76.45	8.2	33.59	8.2	23.5	1.29
A6	21 Jun 2022	4	20.60	76.21	8.0	33.59	8.2	23.5	1.37
A6	21 Jun 2022	5	20.35	76.70	7.9	33.59	8.2	23.6	1.38
A6	21 Jun 2022	6	20.01	77.05	7.9	33.59	8.2	23.7	1.36
A6	21 Jun 2022	7	19.48	76.81	8.1	33.59	8.2	23.8	1.48
A6	21 Jun 2022	8	19.25	76.76	8.2	33.57	8.2	23.9	1.59
A6	21 Jun 2022	9	18.80	77.05	8.2	33.57	8.2	24.0	1.61
A6	21 Jun 2022	10	17.62	76.28	8.5	33.57	8.2	24.3	1.86
A6	21 Jun 2022	11	17.32	75.77	8.5	33.56	8.2	24.3	2.35
A6	21 Jun 2022	12	17.11	75.26	8.3	33.55	8.2	24.4	2.86
A6	21 Jun 2022	13	16.28	75.33	8.2	33.56	8.2	24.6	3.51
A6	21 Jun 2022	14	15.97	75.54	8.1	33.55	8.1	24.6	3.85
A6	21 Jun 2022	15	15.87	75.66	8.0	33.55	8.1	24.7	4.00
A6	21 Jun 2022	16	15.48	76.11	7.7	33.55	8.1	24.8	3.70
A6	21 Jun 2022	17	15.30	76.77	7.9	33.55	8.1	24.8	3.20
A6	21 Jun 2022	18	14.91	76.60	7.4	33.55	8.1	24.9	3.22
A6	21 Jun 2022	19	14.21	78.41	7.2	33.55	8.0	25.0	2.91
A6	28 Jun 2022	1	18.22	63.33	9.0	33.57	8.2	24.1	1.93
A6	28 Jun 2022	2	17.89	67.23	8.9	33.56	8.2	24.2	2.08

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A6	28 Jun 2022	3	16.57	72.68	9.2	33.57	8.2	24.5	2.41
A6	28 Jun 2022	4	15.85	73.16	9.1	33.53	8.2	24.6	3.11
A6	28 Jun 2022	5	14.36	71.79	8.4	33.55	8.2	25.0	5.35
A6	28 Jun 2022	6	13.50	70.99	7.4	33.53	8.1	25.2	7.03
A6	28 Jun 2022	7	12.96	72.44	7.1	33.51	8.0	25.2	7.36
A6	28 Jun 2022	8	13.10	73.10	7.2	33.49	8.0	25.2	7.58
A6	28 Jun 2022	9	12.72	74.11	7.0	33.52	8.0	25.3	6.55
A6	28 Jun 2022	10	12.55	75.05	6.8	33.51	8.0	25.3	5.29
A6	28 Jun 2022	11	12.44	76.56	6.5	33.52	8.0	25.4	4.13
A6	28 Jun 2022	12	12.26	77.68	6.2	33.53	7.9	25.4	3.06
A6	28 Jun 2022	13	12.16	78.35	6.0	33.54	7.9	25.4	2.44
A6	28 Jun 2022	14	12.10	78.61	5.9	33.54	7.9	25.4	2.20
A6	28 Jun 2022	15	12.07	78.75	5.8	33.55	7.9	25.4	2.10
A6	28 Jun 2022	16	11.98	79.01	5.6	33.56	7.9	25.5	2.02
A6	28 Jun 2022	17	11.97	79.03	5.8	33.56	7.9	25.5	2.06
A6	28 Jun 2022	18	11.94	79.07	5.5	33.56	7.9	25.5	2.01
A7	01 Jun 2022	1	18.95	68.80	8.3	33.74	8.3	24.1	4.65
A7	01 Jun 2022	2	18.94	68.94	8.2	33.74	8.3	24.1	5.41
A7	01 Jun 2022	3	18.79	68.14	8.0	33.74	8.3	24.1	7.25
A7	01 Jun 2022	4	18.34	67.02	7.7	33.73	8.2	24.2	7.21
A7	01 Jun 2022	5	17.00	69.36	8.0	33.73	8.2	24.5	5.52
A7	01 Jun 2022	6	16.86	70.76	8.1	33.70	8.2	24.5	5.22
A7	01 Jun 2022	7	16.72	70.67	8.1	33.69	8.2	24.6	5.73
A7	01 Jun 2022	8	16.29	69.75	8.2	33.70	8.2	24.7	7.02
A7	01 Jun 2022	9	16.06	68.13	8.0	33.70	8.2	24.7	7.66
A7	01 Jun 2022	10	15.53	67.14	7.7	33.70	8.2	24.9	8.30
A7	01 Jun 2022	11	15.65	67.08	7.6	33.68	8.2	24.8	8.44
A7	01 Jun 2022	12	14.97	68.26	7.1	33.70	8.2	25.0	7.80
A7	01 Jun 2022	13	14.57	68.94	6.9	33.70	8.1	25.1	7.52
A7	01 Jun 2022	14	14.32	69.90	6.4	33.70	8.1	25.1	6.10
A7	01 Jun 2022	15	13.62	75.62	5.6	33.70	8.0	25.3	3.46
A7	01 Jun 2022	16	12.95	78.53	5.4	33.69	8.0	25.4	2.20
A7	01 Jun 2022	17	12.90	78.84	5.3	33.68	8.0	25.4	1.80
A7	01 Jun 2022	18	12.68	79.06	5.3	33.68	8.0	25.4	1.61
A7	01 Jun 2022	19	12.74	79.15	5.3	33.68	8.0	25.4	1.58
A7	07 Jun 2022	1	19.46	64.06	8.4	33.75	8.3	23.9	4.97
A7	07 Jun 2022	2	19.47	64.01	8.4	33.75	8.3	23.9	5.25
A7	07 Jun 2022	3	19.46	64.04	8.5	33.75	8.3	23.9	5.52
A7	07 Jun 2022	4	19.42	63.87	8.4	33.75	8.3	24.0	5.69
A7	07 Jun 2022	5	19.38	63.68	8.3	33.75	8.3	24.0	5.89
A7	07 Jun 2022	6	19.31	63.85	8.3	33.75	8.2	24.0	5.95
A7	07 Jun 2022	7	19.22	63.87	8.2	33.75	8.2	24.0	6.07
A7	07 Jun 2022	8	19.04	64.70	8.2	33.75	8.2	24.1	5.79
A7	07 Jun 2022	9	18.95	65.51	8.2	33.75	8.2	24.1	5.85
A7	07 Jun 2022	10	17.93	65.85	8.1	33.74	8.2	24.3	5.56
A7	07 Jun 2022	11	17.59	66.48	7.8	33.73	8.2	24.4	5.50
A7	07 Jun 2022	12	17.46	67.30	7.8	33.73	8.2	24.4	5.36
A7	07 Jun 2022	13	17.35	68.04	7.4	33.73	8.2	24.5	5.23
A7	07 Jun 2022	14	16.26	69.66	6.3	33.71	8.2	24.7	4.21
A7	07 Jun 2022	15	14.15	74.99	5.9	33.71	8.0	25.2	2.87
A7	07 Jun 2022	16	14.86	76.82	5.9	33.67	8.0	25.0	2.64
A7	07 Jun 2022	17	13.17	77.79	5.3	33.69	7.9	25.3	1.92
A7	07 Jun 2022	18	12.52	78.52	5.0	33.67	7.9	25.5	1.49
A7	07 Jun 2022	19	12.31	78.38	5.0	33.64	7.9	25.5	1.38
A7	14 Jun 2022	1	19.72	74.75	8.0	33.65	8.2	23.8	1.87
A7	14 Jun 2022	2	19.72	76.06	8.0	33.65	8.2	23.8	1.97
A7	14 Jun 2022	3	19.70	75.85	7.9	33.65	8.2	23.8	2.21
A7	14 Jun 2022	4	19.47	75.51	7.7	33.63	8.2	23.9	2.59

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	14 Jun 2022	5	18.20	74.00	7.8	33.65	8.2	24.2	3.43
A7	14 Jun 2022	6	18.10	73.48	7.8	33.61	8.2	24.2	4.35
A7	14 Jun 2022	7	16.34	71.97	7.9	33.65	8.2	24.6	4.79
A7	14 Jun 2022	8	15.91	73.39	8.1	33.58	8.2	24.7	5.24
A7	14 Jun 2022	9	15.43	73.86	7.8	33.57	8.2	24.8	4.94
A7	14 Jun 2022	10	14.40	75.10	7.7	33.53	8.2	25.0	4.01
A7	14 Jun 2022	11	14.10	75.62	7.4	33.51	8.1	25.0	3.38
A7	14 Jun 2022	12	12.93	75.80	7.0	33.47	8.1	25.2	2.65
A7	14 Jun 2022	13	12.79	76.01	6.8	33.45	8.1	25.2	2.28
A7	14 Jun 2022	14	12.58	77.45	6.7	33.45	8.0	25.3	2.06
A7	14 Jun 2022	15	12.46	77.90	6.6	33.45	8.0	25.3	1.95
A7	14 Jun 2022	16	12.34	77.48	6.5	33.46	8.0	25.3	1.80
A7	14 Jun 2022	17	12.25	76.51	6.5	33.47	8.0	25.4	1.66
A7	14 Jun 2022	18	12.23	75.44	6.3	33.47	8.0	25.4	1.55
A7	14 Jun 2022	19	12.22	74.19	6.3	33.48	8.0	25.4	1.51
A7	21 Jun 2022	1	20.54	75.10	8.0	33.60	8.2	23.6	1.52
A7	21 Jun 2022	2	20.52	75.18	8.1	33.60	8.2	23.6	1.60
A7	21 Jun 2022	3	20.52	75.16	8.1	33.60	8.2	23.6	1.66
A7	21 Jun 2022	4	20.44	75.21	8.0	33.60	8.2	23.6	1.78
A7	21 Jun 2022	5	20.22	74.61	8.2	33.60	8.2	23.6	2.02
A7	21 Jun 2022	6	19.43	73.79	8.0	33.61	8.2	23.8	2.23
A7	21 Jun 2022	7	18.95	73.26	8.2	33.58	8.2	23.9	2.65
A7	21 Jun 2022	8	17.94	72.55	8.1	33.62	8.2	24.2	3.14
A7	21 Jun 2022	9	17.30	71.35	8.3	33.59	8.2	24.4	3.90
A7	21 Jun 2022	10	17.21	70.89	8.3	33.59	8.2	24.4	4.51
A7	21 Jun 2022	11	17.20	70.32	8.2	33.59	8.1	24.4	4.90
A7	21 Jun 2022	12	17.11	70.02	8.2	33.60	8.1	24.4	5.17
A7	21 Jun 2022	13	16.91	70.18	7.9	33.59	8.1	24.5	5.39
A7	21 Jun 2022	14	16.11	70.90	7.4	33.57	8.1	24.6	4.46
A7	21 Jun 2022	15	15.26	74.30	7.0	33.56	8.1	24.8	2.87
A7	21 Jun 2022	16	13.99	77.73	6.5	33.57	8.0	25.1	2.07
A7	21 Jun 2022	17	12.76	78.34	6.2	33.58	8.0	25.3	1.58
A7	21 Jun 2022	18	12.35	79.21	6.1	33.57	7.9	25.4	1.36
A7	28 Jun 2022	1	18.62	74.67	8.6	33.59	8.2	24.0	1.77
A7	28 Jun 2022	2	17.07	74.62	8.6	33.62	8.2	24.4	2.16
A7	28 Jun 2022	3	15.50	73.85	9.0	33.56	8.2	24.8	2.86
A7	28 Jun 2022	4	14.89	72.89	9.0	33.53	8.2	24.9	3.80
A7	28 Jun 2022	5	14.14	71.60	8.8	33.52	8.2	25.0	5.58
A7	28 Jun 2022	6	14.48	70.58	8.4	33.47	8.1	24.9	6.61
A7	28 Jun 2022	7	13.13	70.35	7.7	33.54	8.1	25.2	7.26
A7	28 Jun 2022	8	12.96	72.17	7.2	33.50	8.0	25.2	7.39
A7	28 Jun 2022	9	12.94	73.75	7.0	33.52	8.0	25.3	7.43
A7	28 Jun 2022	10	12.71	74.09	6.6	33.52	8.0	25.3	6.61
A7	28 Jun 2022	11	12.60	76.39	6.5	33.53	8.0	25.3	4.84
A7	28 Jun 2022	12	12.61	76.98	6.4	33.53	7.9	25.3	4.21
A7	28 Jun 2022	13	12.52	77.03	6.4	33.53	7.9	25.4	3.84
A7	28 Jun 2022	14	12.52	77.15	6.3	33.54	7.9	25.4	3.70
A7	28 Jun 2022	15	12.50	77.43	6.3	33.54	7.9	25.4	3.50
A7	28 Jun 2022	16	12.24	78.00	6.1	33.55	7.9	25.4	2.94
A7	28 Jun 2022	17	12.24	78.15	5.9	33.55	7.9	25.4	2.57
C4	01 Jun 2022	1	18.65	66.35	7.8	33.74	8.2	24.1	4.02
C4	01 Jun 2022	2	18.62	66.26	7.8	33.75	8.2	24.2	4.31
C4	01 Jun 2022	3	18.54	66.17	7.9	33.74	8.2	24.2	4.69
C4	01 Jun 2022	4	18.56	66.23	7.8	33.74	8.2	24.2	4.86
C4	01 Jun 2022	5	17.79	66.47	7.9	33.74	8.3	24.4	6.04
C4	01 Jun 2022	6	17.14	67.41	7.6	33.73	8.2	24.5	6.12
C4	01 Jun 2022	7	16.68	69.58	7.1	33.72	8.2	24.6	4.77
C4	01 Jun 2022	8	16.55	71.81	6.3	33.72	8.1	24.6	3.97

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (µg/L)
C4	01 Jun 2022	9	15.46	71.47	4.9	33.73	8.0	24.9	2.68
C4	01 Jun 2022	10	15.17	68.97	4.5	33.71	8.0	24.9	1.98
C4	01 Jun 2022	11	15.19	65.34	4.6	33.70	8.0	24.9	1.75
C4	07 Jun 2022	1	19.70	66.22	8.2	33.77	8.3	23.9	3.60
C4	07 Jun 2022	2	19.68	66.15	8.2	33.77	8.3	23.9	3.85
C4	07 Jun 2022	3	19.59	64.92	8.2	33.77	8.3	23.9	5.01
C4	07 Jun 2022	4	19.56	63.45	8.1	33.77	8.3	23.9	5.95
C4	07 Jun 2022	5	19.51	62.67	8.2	33.77	8.3	24.0	6.10
C4	07 Jun 2022	6	19.51	63.15	8.0	33.77	8.3	23.9	5.85
C4	07 Jun 2022	7	19.15	64.60	7.0	33.76	8.2	24.0	4.52
C4	07 Jun 2022	8	18.08	61.28	5.9	33.76	8.2	24.3	3.31
C4	07 Jun 2022	9	17.69	61.96	5.7	33.70	8.0	24.4	2.85
C4	07 Jun 2022	10	15.77	59.75	4.0	33.79	8.0	24.9	2.26
C4	07 Jun 2022	11	15.07	56.99	3.3	33.72	7.9	25.0	1.61
C4	14 Jun 2022	1	19.83	66.31	7.9	33.74	8.3	23.8	2.42
C4	14 Jun 2022	2	19.83	66.56	7.9	33.75	8.3	23.9	2.51
C4	14 Jun 2022	3	19.82	66.52	7.9	33.74	8.3	23.9	2.72
C4	14 Jun 2022	4	19.82	66.39	7.9	33.74	8.3	23.9	2.96
C4	14 Jun 2022	5	19.81	66.50	7.9	33.74	8.3	23.9	3.21
C4	14 Jun 2022	6	19.31	66.97	8.1	33.72	8.3	24.0	3.65
C4	14 Jun 2022	7	19.21	69.63	8.0	33.69	8.3	24.0	3.94
C4	14 Jun 2022	8	18.23	70.45	7.8	33.68	8.3	24.2	4.26
C4	14 Jun 2022	9	17.10	70.42	7.0	33.66	8.2	24.5	3.36
C4	14 Jun 2022	10	16.44	61.41	6.2	33.63	8.1	24.6	2.12
C4	14 Jun 2022	11	16.08	45.23	6.0	33.61	8.1	24.7	1.52
C4	14 Jun 2022	12	16.56	44.02	6.2	33.59	8.1	24.5	1.68
C4	21 Jun 2022	1	20.90	71.85	8.3	33.60	8.2	23.5	1.69
C4	21 Jun 2022	2	20.91	71.76	8.2	33.61	8.2	23.5	1.76
C4	21 Jun 2022	3	20.49	71.59	8.0	33.60	8.2	23.6	2.33
C4	21 Jun 2022	4	19.39	69.87	7.8	33.61	8.2	23.9	3.35
C4	21 Jun 2022	5	19.19	61.44	7.7	33.58	8.2	23.9	3.79
C4	21 Jun 2022	6	18.85	66.55	7.5	33.58	8.1	24.0	3.89
C4	21 Jun 2022	7	18.05	69.92	7.2	33.57	8.1	24.2	3.85
C4	21 Jun 2022	8	16.51	71.82	7.0	33.60	8.1	24.6	3.54
C4	21 Jun 2022	9	15.59	70.78	6.6	33.58	8.1	24.7	2.77
C4	21 Jun 2022	10	15.05	67.33	6.3	33.53	8.0	24.8	1.94
C4	28 Jun 2022	1	18.00	74.96	8.8	33.58	8.2	24.2	1.44
C4	28 Jun 2022	2	17.70	74.67	8.5	33.57	8.2	24.2	1.69
C4	28 Jun 2022	3	16.26	73.48	8.2	33.58	8.2	24.6	2.80
C4	28 Jun 2022	4	15.26	71.57	8.2	33.56	8.2	24.8	4.90
C4	28 Jun 2022	5	15.02	68.37	8.2	33.53	8.1	24.8	7.43
C4	28 Jun 2022	6	14.46	65.28	7.8	33.53	8.1	25.0	11.78
C4	28 Jun 2022	7	13.96	63.14	7.4	33.54	8.1	25.1	13.20
C4	28 Jun 2022	8	13.93	67.12	6.9	33.52	8.0	25.1	11.50
C4	28 Jun 2022	9	13.24	72.11	6.0	33.53	8.0	25.2	6.33
C4	28 Jun 2022	10	12.92	76.63	5.7	33.54	7.9	25.3	2.98
C4	28 Jun 2022	11	12.93	76.98	5.8	33.53	7.9	25.3	1.99
C5	01 Jun 2022	1	18.96	66.21	7.7	33.74	8.2	24.1	3.12
C5	01 Jun 2022	2	18.62	68.07	7.5	33.74	8.2	24.2	3.57
C5	01 Jun 2022	3	18.82	68.85	7.6	33.73	8.2	24.1	3.86
C5	01 Jun 2022	4	18.62	69.38	7.3	33.74	8.2	24.2	3.84
C5	01 Jun 2022	5	17.49	72.61	6.5	33.74	8.2	24.4	3.36
C5	01 Jun 2022	6	17.00	72.52	6.3	33.73	8.1	24.5	3.16
C5	01 Jun 2022	7	16.44	71.91	7.0	33.71	8.2	24.7	4.20
C5	01 Jun 2022	8	16.31	71.57	7.2	33.70	8.2	24.7	4.94
C5	01 Jun 2022	9	15.95	71.89	6.9	33.70	8.2	24.8	4.36

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C5	01 Jun 2022	10	15.84	73.52	6.7	33.70	8.1	24.8	3.15
C5	01 Jun 2022	11	15.93	73.72	6.9	33.70	8.1	24.8	3.01
C5	07 Jun 2022	1	19.85	64.60	8.0	33.77	8.3	23.9	4.44
C5	07 Jun 2022	2	19.71	64.25	7.9	33.77	8.2	23.9	5.86
C5	07 Jun 2022	3	19.49	62.18	8.0	33.77	8.2	24.0	7.89
C5	07 Jun 2022	4	19.33	62.19	8.0	33.76	8.2	24.0	7.97
C5	07 Jun 2022	5	19.06	64.93	7.7	33.76	8.2	24.1	5.93
C5	07 Jun 2022	6	18.69	67.48	7.5	33.76	8.2	24.1	4.13
C5	07 Jun 2022	7	18.47	68.73	7.2	33.75	8.2	24.2	3.48
C5	07 Jun 2022	8	17.72	69.85	6.2	33.74	8.2	24.4	2.79
C5	07 Jun 2022	9	15.06	64.26	5.3	33.75	8.1	25.0	1.91
C5	07 Jun 2022	10	14.71	58.96	5.3	33.69	8.0	25.0	1.61
C5	14 Jun 2022	1	19.95	61.36	7.6	33.73	8.3	23.8	2.23
C5	14 Jun 2022	2	19.98	61.12	7.6	33.73	8.3	23.8	2.41
C5	14 Jun 2022	3	19.95	61.05	7.7	33.73	8.3	23.8	2.62
C5	14 Jun 2022	4	19.54	62.76	7.4	33.72	8.3	23.9	2.48
C5	14 Jun 2022	5	19.15	63.17	7.1	33.71	8.2	24.0	2.12
C5	14 Jun 2022	6	18.54	63.30	6.7	33.68	8.2	24.1	1.84
C5	14 Jun 2022	7	17.23	61.71	6.4	33.67	8.2	24.4	1.56
C5	14 Jun 2022	8	17.35	53.23	6.4	33.66	8.1	24.4	1.44
C5	14 Jun 2022	9	16.24	44.44	6.3	33.65	8.1	24.7	1.40
C5	14 Jun 2022	10	15.72	43.41	6.3	33.62	8.1	24.8	1.36
C5	14 Jun 2022	11	15.22	43.62	6.4	33.60	8.1	24.8	1.42
C5	21 Jun 2022	1	20.79	74.61	7.9	33.60	8.2	23.5	1.48
C5	21 Jun 2022	2	20.79	74.65	7.9	33.60	8.2	23.5	1.52
C5	21 Jun 2022	3	20.15	71.60	8.1	33.60	8.2	23.7	1.92
C5	21 Jun 2022	4	19.58	71.05	8.3	33.62	8.2	23.8	2.48
C5	21 Jun 2022	5	19.19	71.58	8.1	33.60	8.2	23.9	2.65
C5	21 Jun 2022	6	18.50	72.69	8.1	33.56	8.2	24.0	2.42
C5	21 Jun 2022	7	17.26	73.07	7.4	33.57	8.1	24.4	2.29
C5	21 Jun 2022	8	16.34	73.70	7.0	33.54	8.1	24.5	1.77
C5	21 Jun 2022	9	15.01	73.42	7.4	33.54	8.1	24.8	1.30
C5	21 Jun 2022	10	15.48	73.01	7.4	33.59	8.1	24.8	1.31
C5	28 Jun 2022	1	18.65	74.17	8.9	33.59	8.2	24.0	1.71
C5	28 Jun 2022	2	17.97	73.33	8.7	33.59	8.2	24.2	1.99
C5	28 Jun 2022	3	16.46	72.78	8.4	33.58	8.2	24.6	2.45
C5	28 Jun 2022	4	15.61	72.20	8.0	33.57	8.2	24.7	2.58
C5	28 Jun 2022	5	14.98	74.33	7.7	33.56	8.1	24.9	2.42
C5	28 Jun 2022	6	14.23	75.30	7.6	33.54	8.1	25.0	2.76
C5	28 Jun 2022	7	14.14	76.00	7.4	33.53	8.1	25.0	2.55
C5	28 Jun 2022	8	13.67	77.14	7.0	33.54	8.1	25.1	2.09
C5	28 Jun 2022	9	13.10	77.72	6.9	33.54	8.0	25.2	1.62
C5	28 Jun 2022	10	12.99	78.02	6.5	33.53	8.0	25.3	1.35
C6	01 Jun 2022	1	18.87	71.42	8.3	33.73	8.3	24.1	2.94
C6	01 Jun 2022	2	18.79	71.34	8.2	33.73	8.3	24.1	3.30
C6	01 Jun 2022	3	18.63	71.57	8.1	33.73	8.3	24.1	3.93
C6	01 Jun 2022	4	18.51	71.66	8.1	33.73	8.3	24.2	4.30
C6	01 Jun 2022	5	18.35	71.11	8.0	33.73	8.3	24.2	4.94
C6	01 Jun 2022	6	18.20	69.91	7.8	33.72	8.2	24.2	5.50
C6	01 Jun 2022	7	17.29	69.98	7.2	33.74	8.2	24.5	4.87
C6	01 Jun 2022	8	16.41	71.35	6.3	33.73	8.2	24.7	3.19
C6	01 Jun 2022	9	15.44	68.21	5.8	33.72	8.1	24.9	1.99
C6	01 Jun 2022	10	15.60	67.32	6.3	33.68	8.0	24.8	1.82
C6	07 Jun 2022	1	19.75	63.54	8.1	33.75	8.3	23.9	5.97
C6	07 Jun 2022	2	19.76	61.40	8.2	33.76	8.3	23.9	6.05

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C6	07 Jun 2022	3	19.75	65.38	8.1	33.75	8.3	23.9	5.97
C6	07 Jun 2022	4	19.63	65.31	8.0	33.76	8.2	23.9	7.50
C6	07 Jun 2022	5	19.53	63.36	7.9	33.75	8.2	23.9	7.93
C6	07 Jun 2022	6	19.02	64.88	7.6	33.76	8.2	24.1	6.97
C6	07 Jun 2022	7	18.19	68.17	7.1	33.75	8.2	24.3	5.03
C6	07 Jun 2022	8	16.93	71.01	6.7	33.76	8.1	24.6	3.16
C6	07 Jun 2022	9	17.98	64.81	7.2	33.69	8.1	24.3	3.40
C6	14 Jun 2022	1	20.09	53.22	7.4	33.74	8.2	23.8	1.48
C6	14 Jun 2022	2	20.09	60.95	7.4	33.74	8.2	23.8	1.56
C6	14 Jun 2022	3	20.09	64.43	7.5	33.74	8.3	23.8	1.77
C6	14 Jun 2022	4	19.70	66.23	7.4	33.73	8.3	23.9	1.82
C6	14 Jun 2022	5	18.43	67.44	7.4	33.70	8.2	24.2	1.68
C6	14 Jun 2022	6	17.37	70.12	7.2	33.67	8.2	24.4	1.48
C6	14 Jun 2022	7	16.61	70.61	7.1	33.63	8.2	24.6	1.34
C6	14 Jun 2022	8	15.99	70.10	7.0	33.60	8.2	24.7	1.32
C6	14 Jun 2022	9	15.37	68.28	7.1	33.58	8.2	24.8	1.27
C6	14 Jun 2022	10	15.17	60.46	7.0	33.57	8.1	24.8	1.22
C6	14 Jun 2022	11	15.16	57.54	7.0	33.57	8.1	24.8	1.20
C6	21 Jun 2022	1	20.82	72.95	8.4	33.59	8.2	23.5	1.37
C6	21 Jun 2022	2	20.81	75.24	8.4	33.59	8.2	23.5	1.41
C6	21 Jun 2022	3	20.78	75.26	8.4	33.59	8.2	23.5	1.45
C6	21 Jun 2022	4	20.64	75.74	8.3	33.59	8.2	23.5	1.52
C6	21 Jun 2022	5	20.36	75.34	8.2	33.58	8.2	23.6	1.63
C6	21 Jun 2022	6	19.72	74.69	8.4	33.58	8.2	23.8	1.77
C6	21 Jun 2022	7	18.68	74.77	8.8	33.58	8.2	24.0	2.13
C6	21 Jun 2022	8	18.45	74.41	8.3	33.55	8.2	24.1	2.12
C6	21 Jun 2022	9	15.85	75.54	8.1	33.59	8.2	24.7	1.43
C6	28 Jun 2022	1	18.00	72.07	9.0	33.58	8.2	24.2	2.05
C6	28 Jun 2022	2	17.72	72.46	8.9	33.58	8.2	24.2	2.17
C6	28 Jun 2022	3	16.64	72.79	8.8	33.59	8.2	24.5	2.31
C6	28 Jun 2022	4	15.85	73.33	8.5	33.57	8.2	24.7	2.85
C6	28 Jun 2022	5	15.18	73.57	8.4	33.55	8.2	24.8	3.90
C6	28 Jun 2022	6	14.52	72.52	8.2	33.54	8.1	25.0	4.62
C6	28 Jun 2022	7	14.14	72.76	7.8	33.53	8.1	25.0	3.53
C6	28 Jun 2022	8	13.66	74.87	7.3	33.53	8.1	25.1	2.34
C6	28 Jun 2022	9	13.43	77.44	7.0	33.54	8.0	25.2	1.61
C7	01 Jun 2022	1	19.21	71.21	8.3	33.73	8.3	24.0	3.66
C7	01 Jun 2022	2	19.22	70.06	8.2	33.73	8.3	24.0	3.73
C7	01 Jun 2022	3	19.20	70.98	8.2	33.73	8.3	24.0	4.53
C7	01 Jun 2022	4	19.17	65.91	8.1	33.73	8.3	24.0	7.48
C7	01 Jun 2022	5	19.04	64.48	7.9	33.73	8.3	24.0	9.10
C7	01 Jun 2022	6	18.97	66.69	7.9	33.73	8.2	24.1	8.57
C7	01 Jun 2022	7	18.79	67.58	7.7	33.73	8.2	24.1	7.64
C7	01 Jun 2022	8	17.86	69.55	7.4	33.73	8.2	24.3	6.08
C7	01 Jun 2022	9	16.39	70.93	7.2	33.73	8.2	24.7	5.65
C7	01 Jun 2022	10	16.27	71.56	7.1	33.69	8.2	24.7	5.77
C7	01 Jun 2022	11	15.63	71.04	6.9	33.70	8.2	24.8	6.38
C7	01 Jun 2022	12	15.13	71.80	6.5	33.70	8.1	24.9	5.60
C7	01 Jun 2022	13	14.82	73.54	6.0	33.70	8.1	25.0	4.71
C7	01 Jun 2022	14	14.37	76.12	5.4	33.70	8.0	25.1	3.16
C7	01 Jun 2022	15	14.28	77.26	5.2	33.70	8.0	25.1	2.51
C7	01 Jun 2022	16	13.62	77.65	4.8	33.70	8.0	25.3	2.00
C7	01 Jun 2022	17	13.51	77.99	4.8	33.70	7.9	25.3	1.70
C7	01 Jun 2022	18	13.69	77.90	4.9	33.69	7.9	25.2	1.70
C7	07 Jun 2022	1	19.75	60.17	8.1	33.76	8.3	23.9	8.75
C7	07 Jun 2022	2	19.74	60.90	8.2	33.76	8.3	23.9	9.29

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C7	07 Jun 2022	3	19.74	60.85	8.0	33.76	8.3	23.9	9.59
C7	07 Jun 2022	4	19.21	61.32	7.7	33.77	8.2	24.0	9.05
C7	07 Jun 2022	5	18.63	64.89	7.1	33.75	8.2	24.2	8.15
C7	07 Jun 2022	6	17.20	67.77	6.4	33.75	8.2	24.5	6.81
C7	07 Jun 2022	7	16.16	69.55	6.0	33.72	8.1	24.7	5.42
C7	07 Jun 2022	8	14.86	72.43	5.6	33.72	8.0	25.0	3.84
C7	07 Jun 2022	9	14.12	75.69	5.3	33.69	8.0	25.1	2.91
C7	07 Jun 2022	10	12.96	77.80	5.2	33.66	7.9	25.4	2.27
C7	07 Jun 2022	11	12.69	78.50	5.1	33.64	7.9	25.4	1.91
C7	07 Jun 2022	12	12.39	78.85	5.0	33.65	7.9	25.5	1.64
C7	07 Jun 2022	13	12.53	78.82	4.9	33.64	7.9	25.4	1.56
C7	07 Jun 2022	14	12.16	78.66	4.9	33.65	7.9	25.5	1.40
C7	07 Jun 2022	15	11.96	78.87	5.0	33.65	7.9	25.5	1.38
C7	07 Jun 2022	16	11.83	79.52	5.0	33.65	7.9	25.6	1.27
C7	07 Jun 2022	17	11.79	79.19	5.0	33.65	7.9	25.6	1.16
C7	07 Jun 2022	18	11.79	78.42	4.9	33.65	7.9	25.6	1.14
C7	14 Jun 2022	1	19.82	75.90	7.7	33.63	8.2	23.8	1.73
C7	14 Jun 2022	2	19.82	75.92	7.7	33.63	8.2	23.8	1.79
C7	14 Jun 2022	3	19.80	75.83	7.7	33.62	8.2	23.8	1.93
C7	14 Jun 2022	4	19.80	75.85	7.6	33.62	8.2	23.8	2.06
C7	14 Jun 2022	5	19.80	75.91	7.6	33.63	8.2	23.8	2.16
C7	14 Jun 2022	6	19.81	75.72	7.6	33.63	8.2	23.8	2.26
C7	14 Jun 2022	7	19.81	75.40	7.5	33.63	8.2	23.8	2.56
C7	14 Jun 2022	8	19.79	74.66	7.6	33.63	8.2	23.8	2.98
C7	14 Jun 2022	9	19.33	71.57	7.8	33.66	8.2	23.9	4.15
C7	14 Jun 2022	10	18.92	70.25	8.1	33.67	8.2	24.0	5.09
C7	14 Jun 2022	11	18.71	71.00	8.3	33.65	8.3	24.1	4.56
C7	14 Jun 2022	12	17.85	73.65	8.6	33.65	8.3	24.3	4.04
C7	14 Jun 2022	13	17.49	71.34	8.0	33.62	8.3	24.3	4.74
C7	14 Jun 2022	14	14.59	71.28	7.8	33.57	8.2	25.0	5.08
C7	14 Jun 2022	15	13.33	74.89	7.7	33.48	8.2	25.1	4.10
C7	14 Jun 2022	16	14.24	75.82	7.8	33.48	8.1	25.0	4.17
C7	14 Jun 2022	17	13.40	77.01	7.2	33.51	8.1	25.2	3.80
C7	14 Jun 2022	18	12.68	73.74	6.6	33.46	8.1	25.3	2.31
C7	21 Jun 2022	1	20.85	75.06	7.6	33.62	8.2	23.5	1.44
C7	21 Jun 2022	2	20.85	75.16	7.6	33.62	8.2	23.5	1.48
C7	21 Jun 2022	3	20.85	75.27	7.6	33.62	8.2	23.5	1.50
C7	21 Jun 2022	4	20.79	75.26	7.6	33.61	8.2	23.5	1.52
C7	21 Jun 2022	5	20.71	76.13	7.5	33.60	8.2	23.5	1.40
C7	21 Jun 2022	6	20.67	77.69	7.5	33.60	8.2	23.5	1.31
C7	21 Jun 2022	7	20.62	78.17	7.5	33.60	8.2	23.5	1.31
C7	21 Jun 2022	8	20.58	78.25	7.4	33.59	8.2	23.5	1.31
C7	21 Jun 2022	9	19.71	78.11	7.8	33.60	8.2	23.8	1.43
C7	21 Jun 2022	10	19.42	77.47	8.0	33.57	8.2	23.8	1.60
C7	21 Jun 2022	11	19.26	77.35	8.0	33.57	8.2	23.9	1.70
C7	21 Jun 2022	12	19.11	76.85	8.1	33.57	8.2	23.9	1.90
C7	21 Jun 2022	13	18.55	76.50	8.2	33.58	8.2	24.0	1.86
C7	21 Jun 2022	14	17.91	77.28	8.4	33.57	8.2	24.2	1.59
C7	21 Jun 2022	15	16.51	76.13	8.5	33.57	8.2	24.5	2.14
C7	21 Jun 2022	16	13.92	70.75	7.9	33.55	8.2	25.1	5.53
C7	21 Jun 2022	17	12.57	76.54	6.8	33.57	8.0	25.4	4.44
C7	28 Jun 2022	1	18.54	73.65	8.8	33.58	8.2	24.1	1.91
C7	28 Jun 2022	2	17.54	71.79	8.8	33.57	8.2	24.3	2.69
C7	28 Jun 2022	3	15.96	70.55	9.0	33.58	8.2	24.7	3.91
C7	28 Jun 2022	4	14.91	69.54	9.0	33.55	8.2	24.9	6.61
C7	28 Jun 2022	5	14.40	68.33	9.0	33.51	8.2	25.0	8.01
C7	28 Jun 2022	6	14.27	69.22	8.8	33.51	8.2	25.0	7.45
C7	28 Jun 2022	7	14.21	72.20	8.2	33.51	8.1	25.0	5.89

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C7	28 Jun 2022	8	13.98	74.40	7.1	33.53	8.1	25.1	4.32
C7	28 Jun 2022	9	13.25	76.35	6.3	33.55	8.0	25.2	2.95
C7	28 Jun 2022	10	12.92	77.58	6.4	33.53	8.0	25.3	2.68
C7	28 Jun 2022	11	12.53	77.44	6.4	33.52	8.0	25.3	2.96
C7	28 Jun 2022	12	12.29	77.65	6.3	33.52	7.9	25.4	2.98
C7	28 Jun 2022	13	12.17	77.74	6.1	33.52	7.9	25.4	2.88
C7	28 Jun 2022	14	12.09	78.14	6.0	33.52	7.9	25.4	2.68
C7	28 Jun 2022	15	12.05	78.39	6.0	33.53	7.9	25.4	2.57
C7	28 Jun 2022	16	12.13	78.34	6.1	33.53	7.9	25.4	2.52
C7	28 Jun 2022	17	12.05	78.68	5.8	33.54	7.9	25.4	2.29
C8	01 Jun 2022	1	18.92	67.87	7.8	33.75	8.2	24.1	3.51
C8	01 Jun 2022	2	18.93	68.20	7.8	33.75	8.2	24.1	3.63
C8	01 Jun 2022	3	18.85	68.08	7.9	33.74	8.2	24.1	4.23
C8	01 Jun 2022	4	18.81	68.06	8.0	33.74	8.3	24.1	4.73
C8	01 Jun 2022	5	18.70	68.88	8.1	33.73	8.3	24.1	4.87
C8	01 Jun 2022	6	18.68	69.72	8.0	33.73	8.3	24.1	4.90
C8	01 Jun 2022	7	18.38	69.99	7.9	33.73	8.2	24.2	4.73
C8	01 Jun 2022	8	18.23	70.40	7.8	33.72	8.2	24.2	4.54
C8	01 Jun 2022	9	17.65	71.95	7.9	33.72	8.2	24.4	4.09
C8	01 Jun 2022	10	17.30	73.59	7.8	33.70	8.2	24.4	3.75
C8	01 Jun 2022	11	16.10	75.19	7.9	33.69	8.2	24.7	3.32
C8	01 Jun 2022	12	15.80	75.54	7.4	33.68	8.2	24.8	3.30
C8	01 Jun 2022	13	15.36	75.06	6.6	33.70	8.1	24.9	2.98
C8	01 Jun 2022	14	15.23	75.31	6.3	33.69	8.1	24.9	2.64
C8	01 Jun 2022	15	14.53	75.75	5.7	33.69	8.1	25.1	2.33
C8	01 Jun 2022	16	13.44	76.73	5.1	33.71	8.0	25.3	1.74
C8	01 Jun 2022	17	13.07	77.60	5.0	33.70	8.0	25.4	1.40
C8	01 Jun 2022	18	12.80	77.98	4.8	33.70	7.9	25.4	1.33
C8	01 Jun 2022	19	12.22	78.02	4.8	33.72	7.9	25.6	1.30
C8	07 Jun 2022	1	20.06	63.27	8.3	33.77	8.3	23.8	6.54
C8	07 Jun 2022	2	20.06	62.80	8.4	33.77	8.3	23.8	7.93
C8	07 Jun 2022	3	20.05	61.95	8.2	33.77	8.3	23.8	9.06
C8	07 Jun 2022	4	19.20	62.14	8.0	33.76	8.3	24.0	10.15
C8	07 Jun 2022	5	18.53	62.96	7.7	33.73	8.2	24.2	11.39
C8	07 Jun 2022	6	16.74	63.43	7.0	33.76	8.2	24.6	11.87
C8	07 Jun 2022	7	15.35	64.09	6.1	33.71	8.1	24.9	11.01
C8	07 Jun 2022	8	13.41	68.03	5.6	33.70	8.0	25.3	9.52
C8	07 Jun 2022	9	13.28	70.43	5.5	33.66	8.0	25.3	8.43
C8	07 Jun 2022	10	13.24	72.22	5.5	33.65	7.9	25.3	6.99
C8	07 Jun 2022	11	12.93	74.82	5.5	33.66	8.0	25.4	5.14
C8	07 Jun 2022	12	12.71	76.63	5.5	33.65	7.9	25.4	3.93
C8	07 Jun 2022	13	12.46	77.95	5.5	33.65	7.9	25.5	3.09
C8	07 Jun 2022	14	12.44	78.47	5.4	33.65	7.9	25.5	2.73
C8	07 Jun 2022	15	12.36	78.80	5.3	33.66	7.9	25.5	2.43
C8	07 Jun 2022	16	12.35	79.25	5.1	33.67	7.9	25.5	2.12
C8	07 Jun 2022	17	11.84	79.08	5.0	33.67	7.9	25.6	1.62
C8	07 Jun 2022	18	11.95	78.84	4.9	33.66	7.9	25.6	1.47
C8	07 Jun 2022	19	11.79	78.05	4.9	33.67	7.9	25.6	1.40
C8	14 Jun 2022	1	19.69	76.77	7.8	33.59	8.2	23.8	1.51
C8	14 Jun 2022	2	19.69	76.99	7.8	33.59	8.2	23.8	1.55
C8	14 Jun 2022	3	19.69	77.02	7.8	33.59	8.2	23.8	1.62
C8	14 Jun 2022	4	19.68	76.96	7.8	33.59	8.2	23.8	1.74
C8	14 Jun 2022	5	19.68	76.79	7.7	33.59	8.2	23.8	1.78
C8	14 Jun 2022	6	19.68	76.83	7.8	33.59	8.2	23.8	1.83
C8	14 Jun 2022	7	19.66	76.80	7.8	33.59	8.2	23.8	1.95
C8	14 Jun 2022	8	19.61	76.49	7.8	33.60	8.2	23.8	2.22
C8	14 Jun 2022	9	19.14	75.42	7.8	33.62	8.2	23.9	2.50
C8	14 Jun 2022	10	17.47	74.59	8.0	33.67	8.2	24.4	3.24

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C8	14 Jun 2022	11	16.14	71.93	8.4	33.65	8.2	24.7	4.58
C8	14 Jun 2022	12	15.65	71.05	8.9	33.64	8.2	24.8	6.37
C8	14 Jun 2022	13	15.19	70.40	8.7	33.62	8.3	24.9	7.18
C8	14 Jun 2022	14	14.15	73.06	8.3	33.53	8.2	25.0	5.63
C8	14 Jun 2022	15	13.61	74.19	7.8	33.50	8.2	25.1	4.05
C8	14 Jun 2022	16	13.44	75.02	7.4	33.48	8.1	25.1	2.99
C8	14 Jun 2022	17	13.38	75.22	7.3	33.48	8.1	25.1	2.55
C8	14 Jun 2022	18	13.31	74.83	7.3	33.48	8.1	25.2	2.27
C8	14 Jun 2022	19	13.32	74.05	7.4	33.48	8.1	25.2	2.08
C8	14 Jun 2022	20	13.44	73.85	7.4	33.50	8.1	25.1	2.17
C8	21 Jun 2022	1	20.90	72.30	7.8	33.61	8.2	23.5	1.43
C8	21 Jun 2022	2	20.90	73.38	7.8	33.61	8.2	23.5	1.49
C8	21 Jun 2022	3	20.88	73.46	7.8	33.61	8.2	23.5	1.67
C8	21 Jun 2022	4	20.84	73.27	7.8	33.61	8.2	23.5	1.79
C8	21 Jun 2022	5	20.64	73.35	7.8	33.61	8.2	23.5	2.06
C8	21 Jun 2022	6	20.55	73.71	7.8	33.60	8.2	23.6	2.15
C8	21 Jun 2022	7	20.21	73.41	7.9	33.60	8.2	23.6	2.07
C8	21 Jun 2022	8	19.95	74.34	8.0	33.59	8.2	23.7	1.89
C8	21 Jun 2022	9	19.92	74.46	8.1	33.59	8.2	23.7	1.81
C8	21 Jun 2022	10	19.88	74.79	8.0	33.58	8.2	23.7	1.87
C8	21 Jun 2022	11	19.74	75.41	8.1	33.58	8.2	23.7	1.92
C8	21 Jun 2022	12	19.55	75.81	8.1	33.58	8.2	23.8	1.88
C8	21 Jun 2022	13	18.51	75.82	8.4	33.59	8.2	24.1	1.95
C8	21 Jun 2022	14	17.57	75.43	8.6	33.57	8.2	24.3	2.09
C8	21 Jun 2022	15	15.90	75.75	8.8	33.58	8.2	24.7	3.27
C8	21 Jun 2022	16	14.17	67.51	8.6	33.56	8.2	25.0	7.92
C8	21 Jun 2022	17	13.67	74.12	8.1	33.51	8.1	25.1	7.08
C8	21 Jun 2022	18	12.13	78.51	6.1	33.57	8.0	25.5	4.59
C8	21 Jun 2022	19	11.99	78.10	5.8	33.53	7.9	25.5	2.70
C8	28 Jun 2022	1	18.35	72.23	9.0	33.58	8.2	24.1	1.87
C8	28 Jun 2022	2	17.96	71.38	9.1	33.58	8.2	24.2	2.44
C8	28 Jun 2022	3	17.07	68.49	8.9	33.60	8.2	24.4	3.57
C8	28 Jun 2022	4	15.98	67.52	9.1	33.57	8.2	24.7	5.49
C8	28 Jun 2022	5	15.24	67.43	9.1	33.53	8.2	24.8	8.65
C8	28 Jun 2022	6	14.30	65.77	8.4	33.53	8.2	25.0	11.02
C8	28 Jun 2022	7	13.17	70.21	7.2	33.54	8.1	25.2	7.47
C8	28 Jun 2022	8	12.84	76.09	6.6	33.52	8.0	25.3	4.10
C8	28 Jun 2022	9	12.66	77.89	6.4	33.53	8.0	25.3	2.65
C8	28 Jun 2022	10	12.46	78.56	6.3	33.53	7.9	25.4	2.11
C8	28 Jun 2022	11	12.36	78.78	6.3	33.53	7.9	25.4	2.05
C8	28 Jun 2022	12	12.32	78.81	6.2	33.53	7.9	25.4	2.05
C8	28 Jun 2022	13	12.30	78.87	6.2	33.53	7.9	25.4	1.98
C8	28 Jun 2022	14	12.30	78.50	6.2	33.54	7.9	25.4	1.94
C8	28 Jun 2022	15	12.29	78.85	6.2	33.54	7.9	25.4	1.94
C8	28 Jun 2022	16	12.29	78.96	6.2	33.54	7.9	25.4	1.95
C8	28 Jun 2022	17	12.29	78.98	6.2	33.55	7.9	25.4	1.93
C8	28 Jun 2022	18	12.29	78.96	6.2	33.55	7.9	25.4	1.91
C8	28 Jun 2022	19	12.29	78.94	6.0	33.55	7.9	25.4	1.87

NA = not available

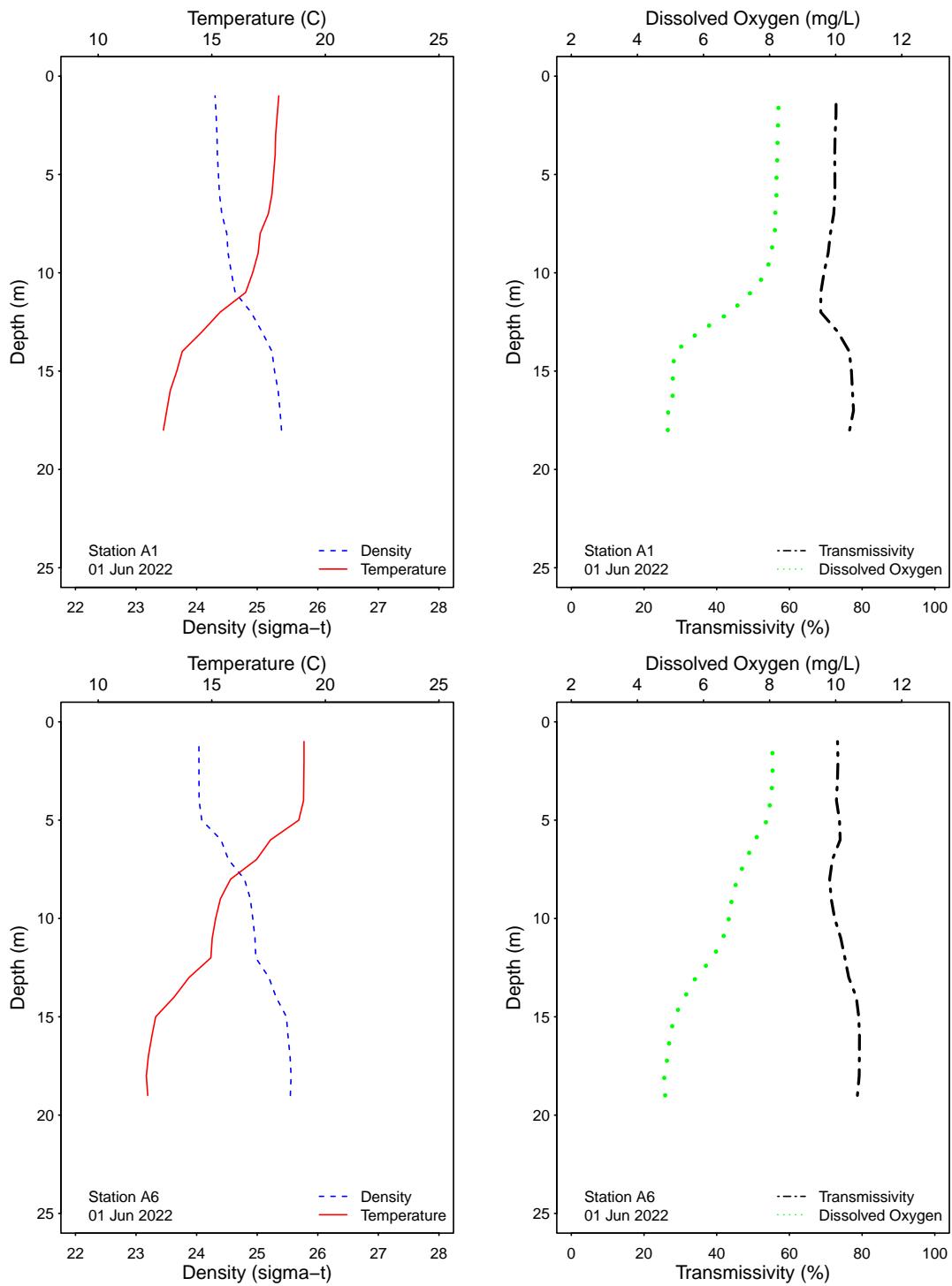


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

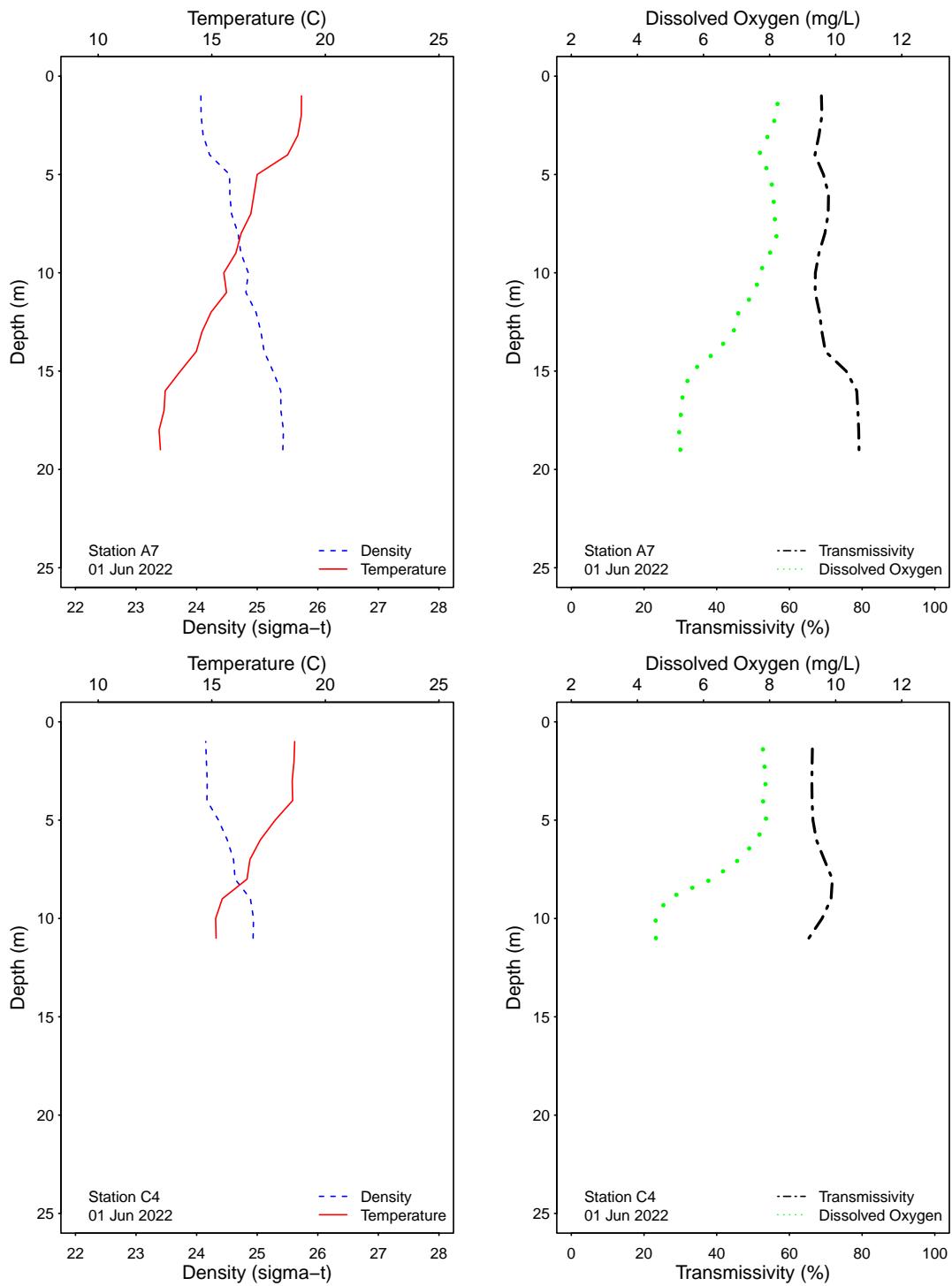


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

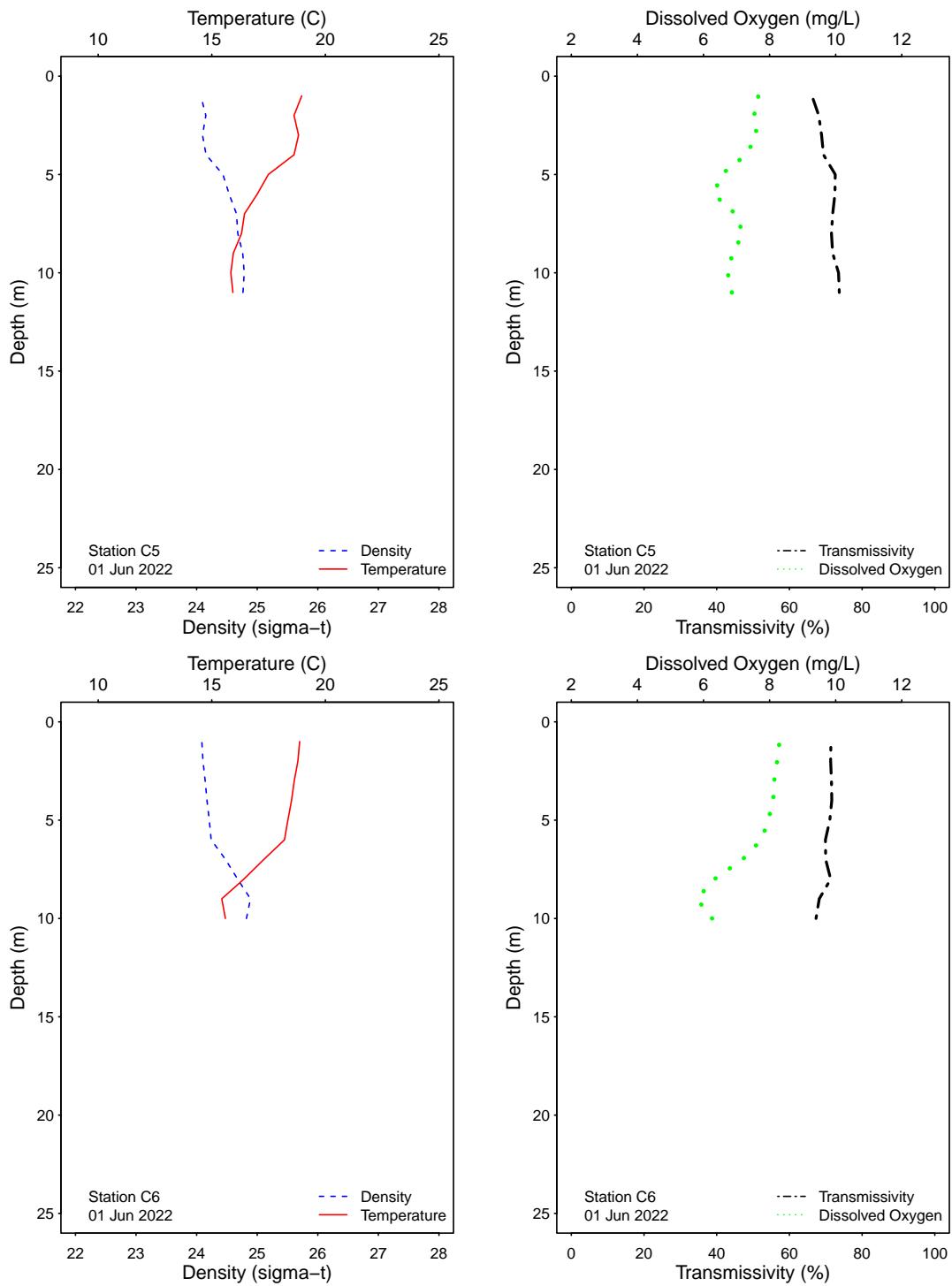


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

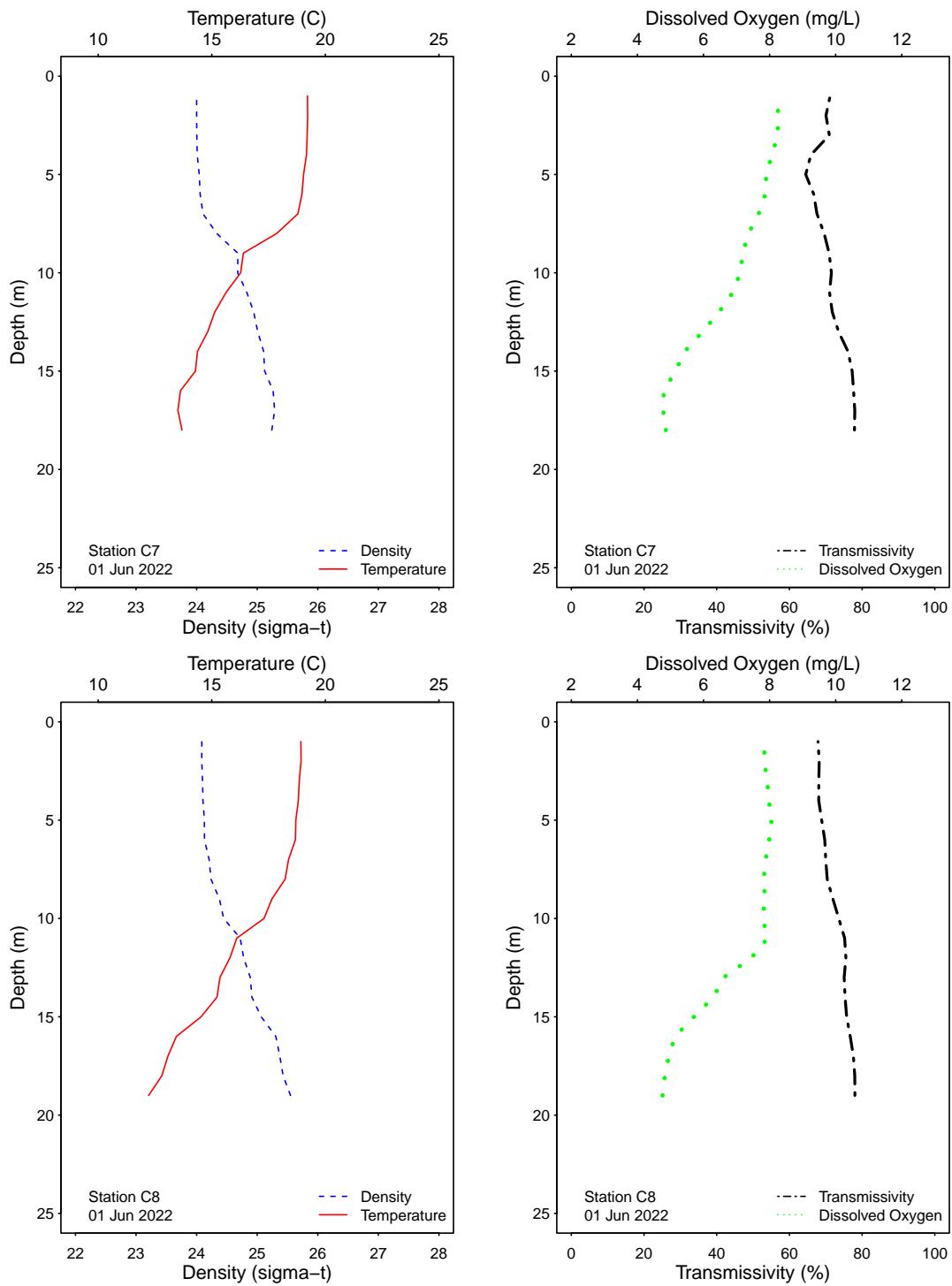


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

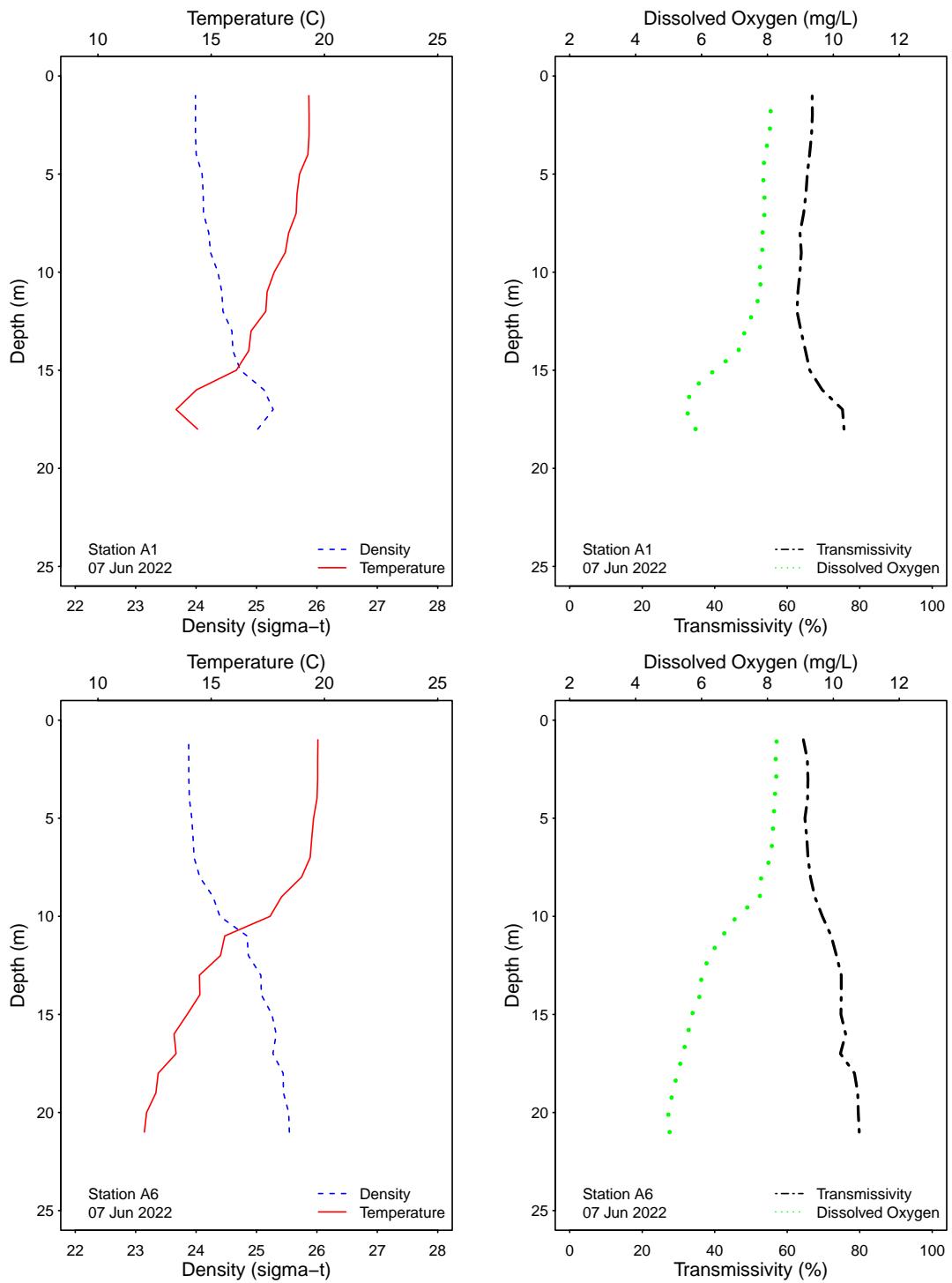


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

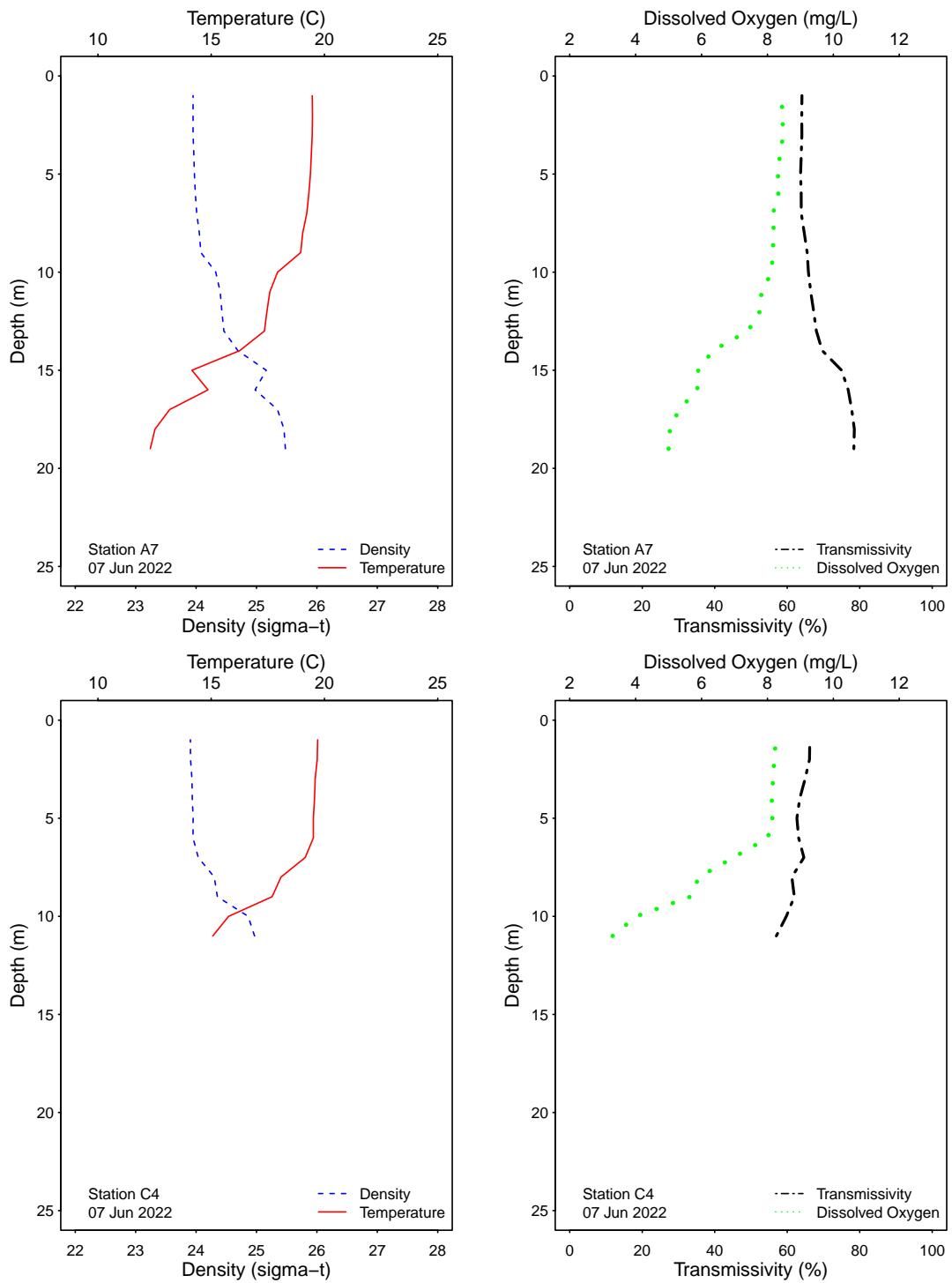


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

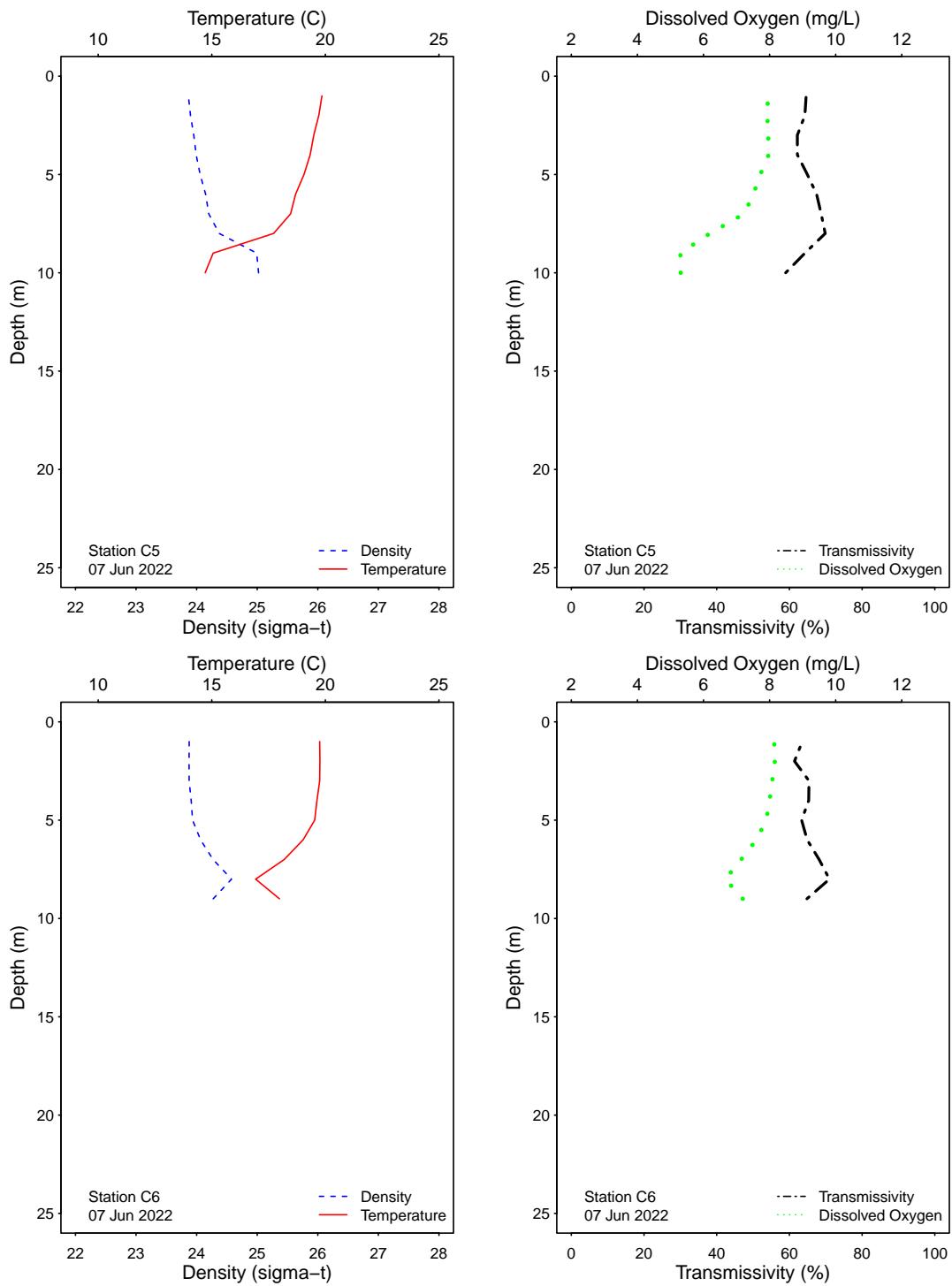


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

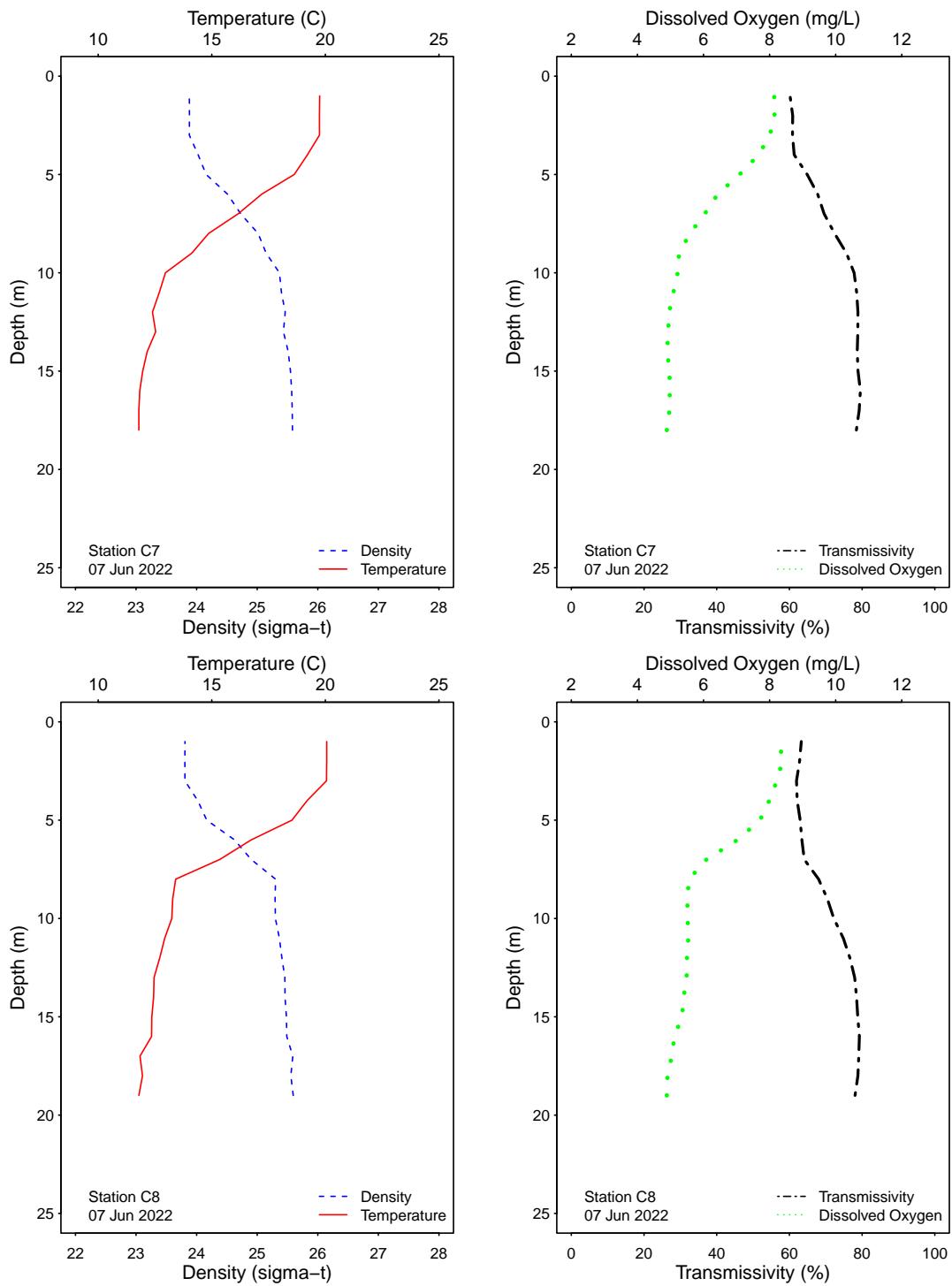


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

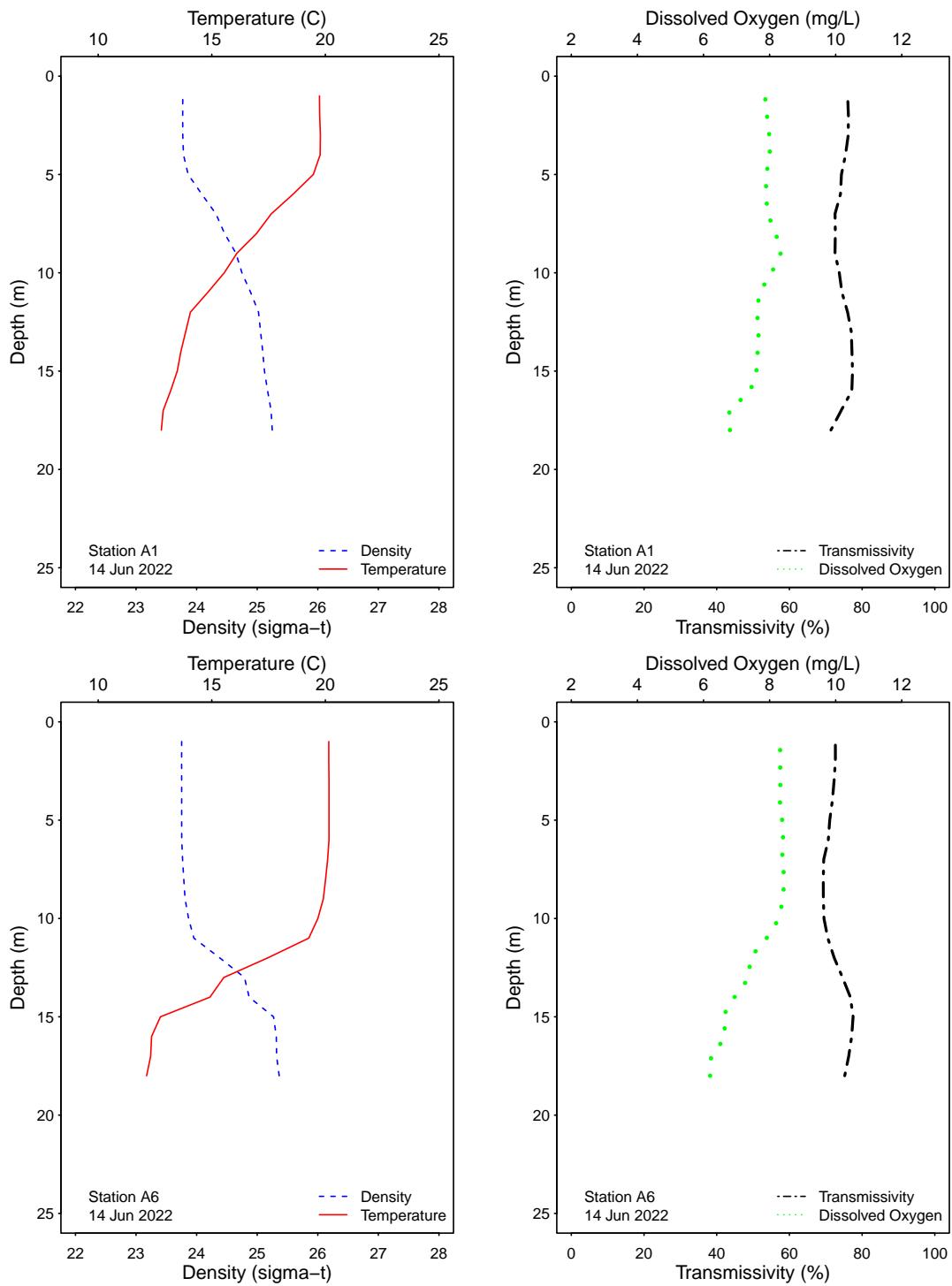


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

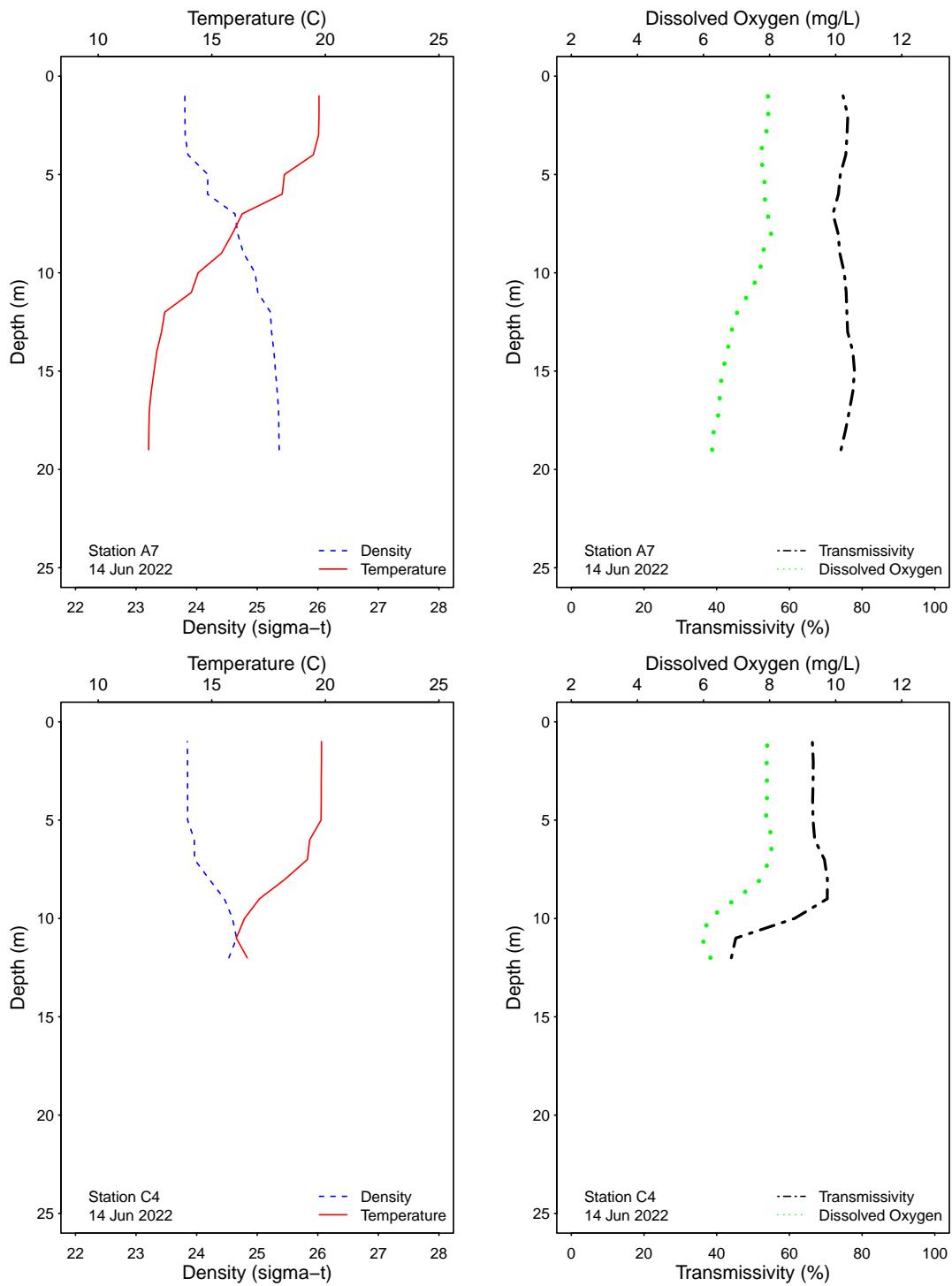


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

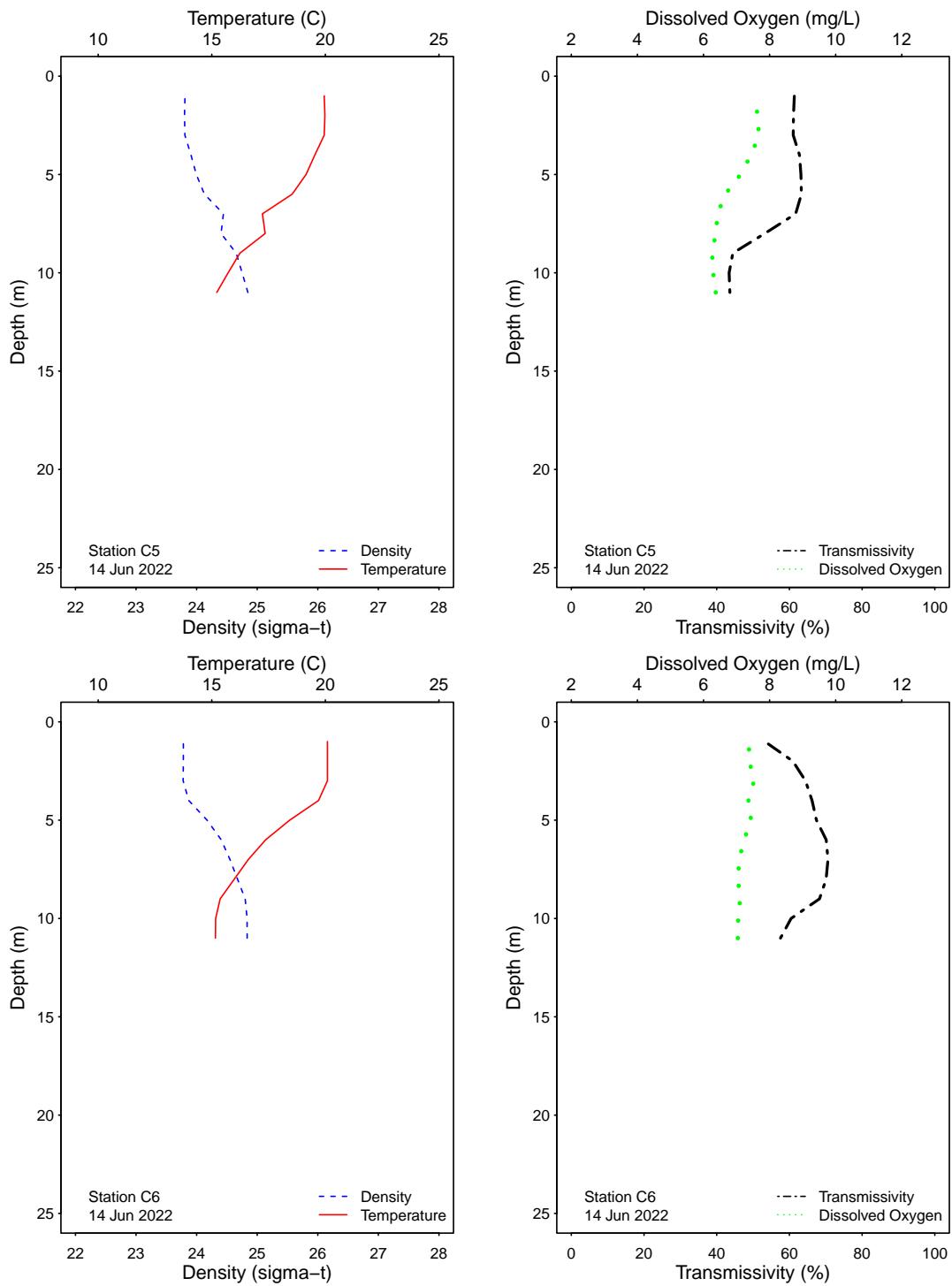


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

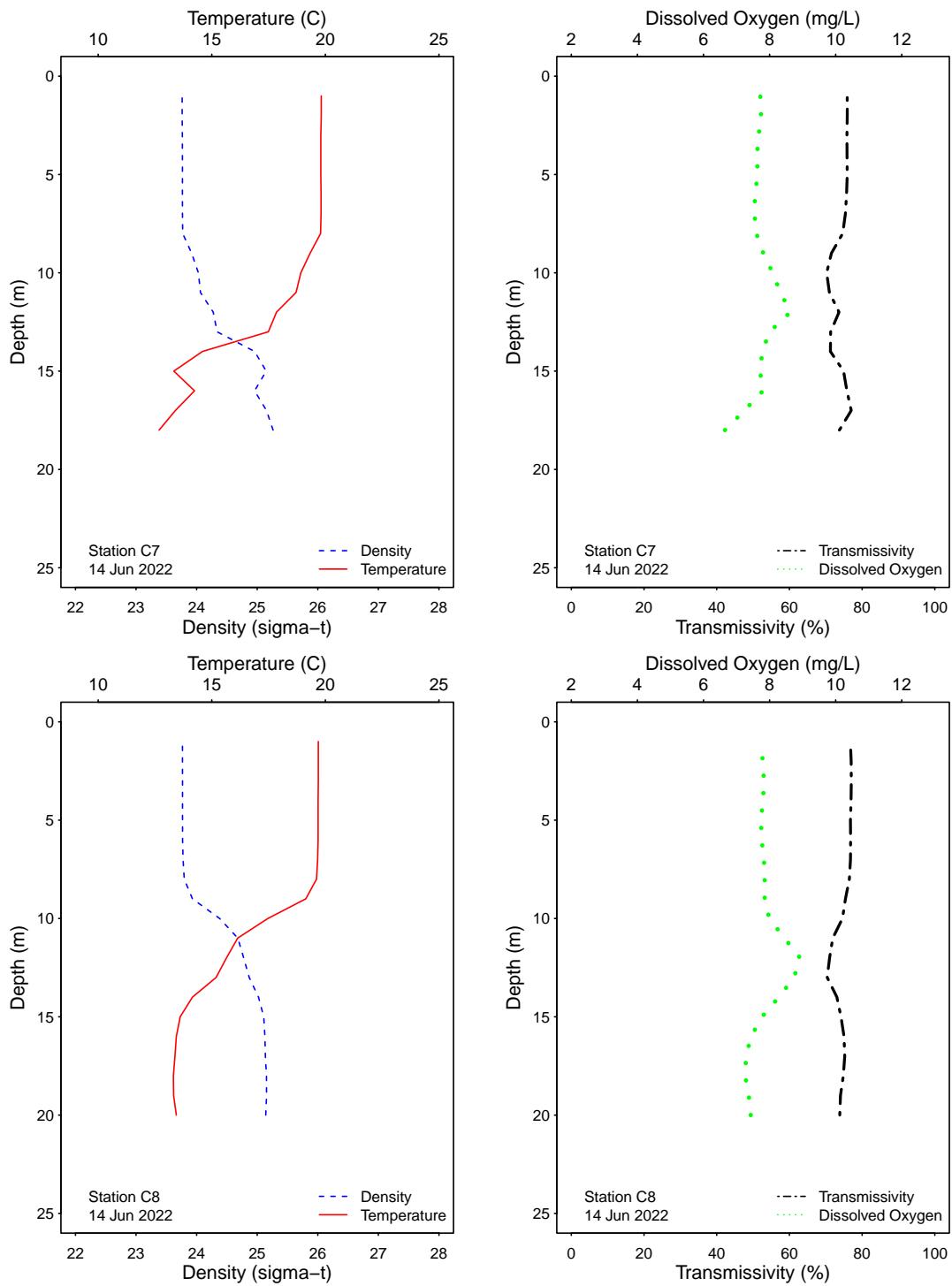


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

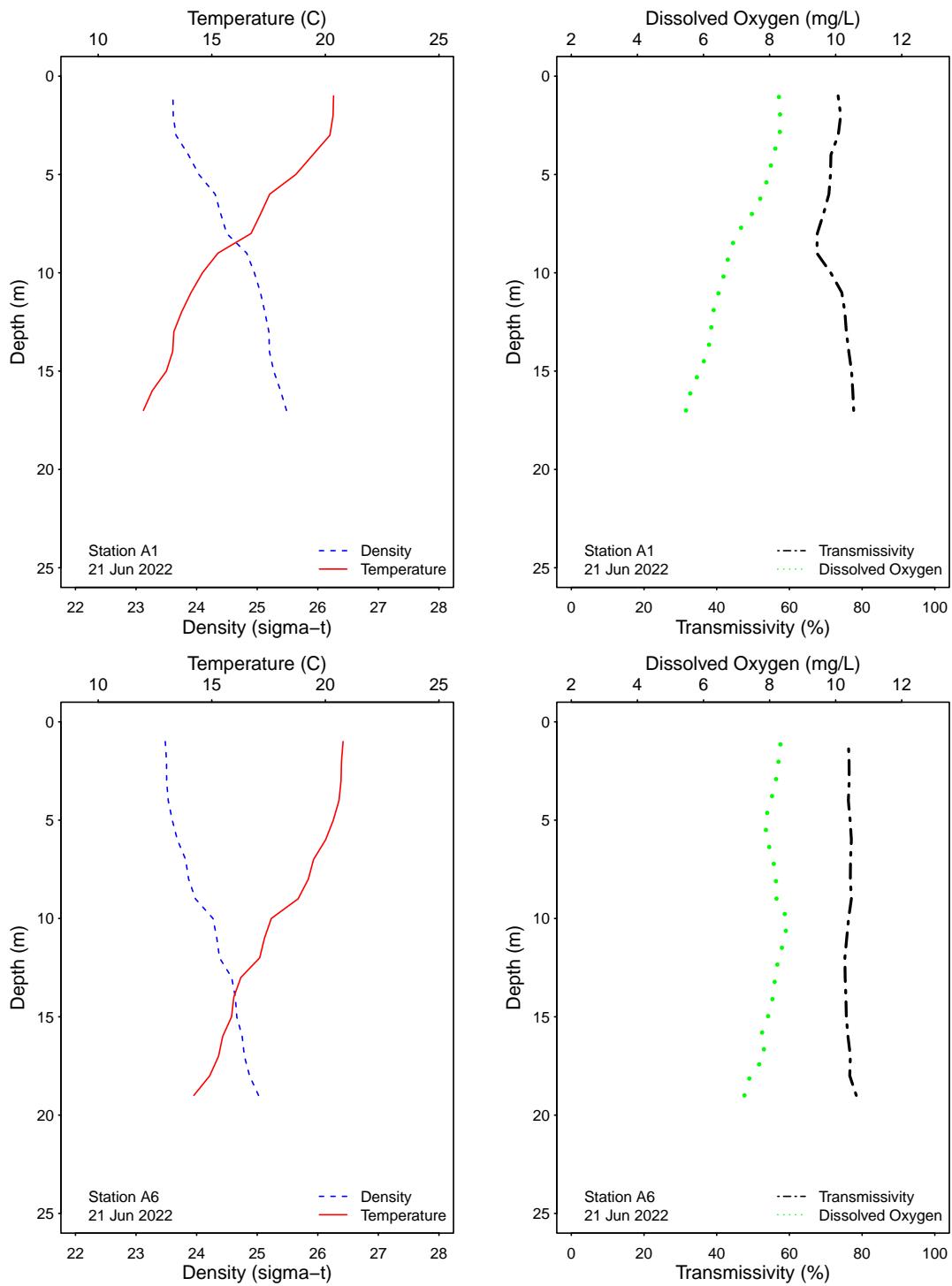


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

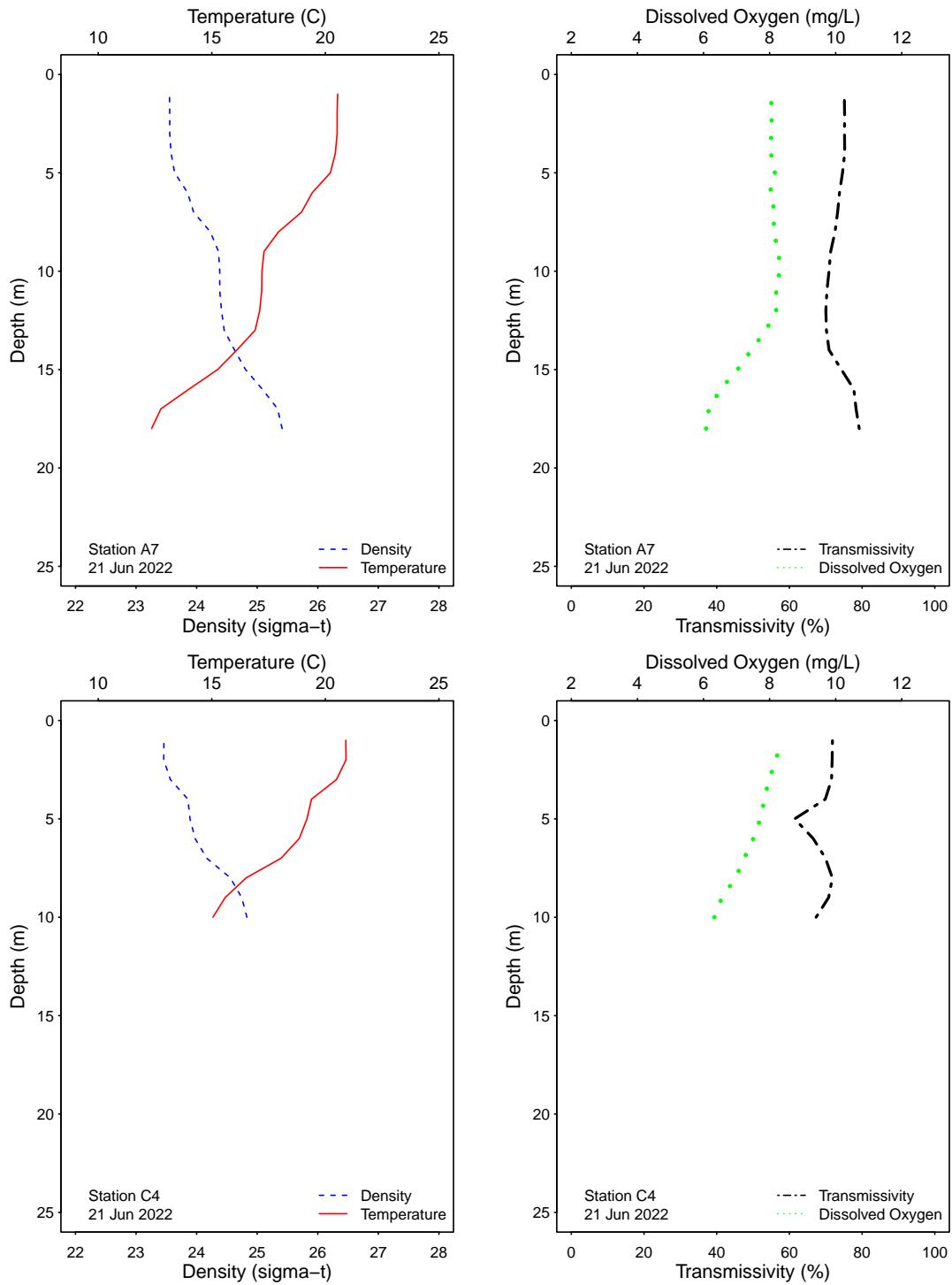


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

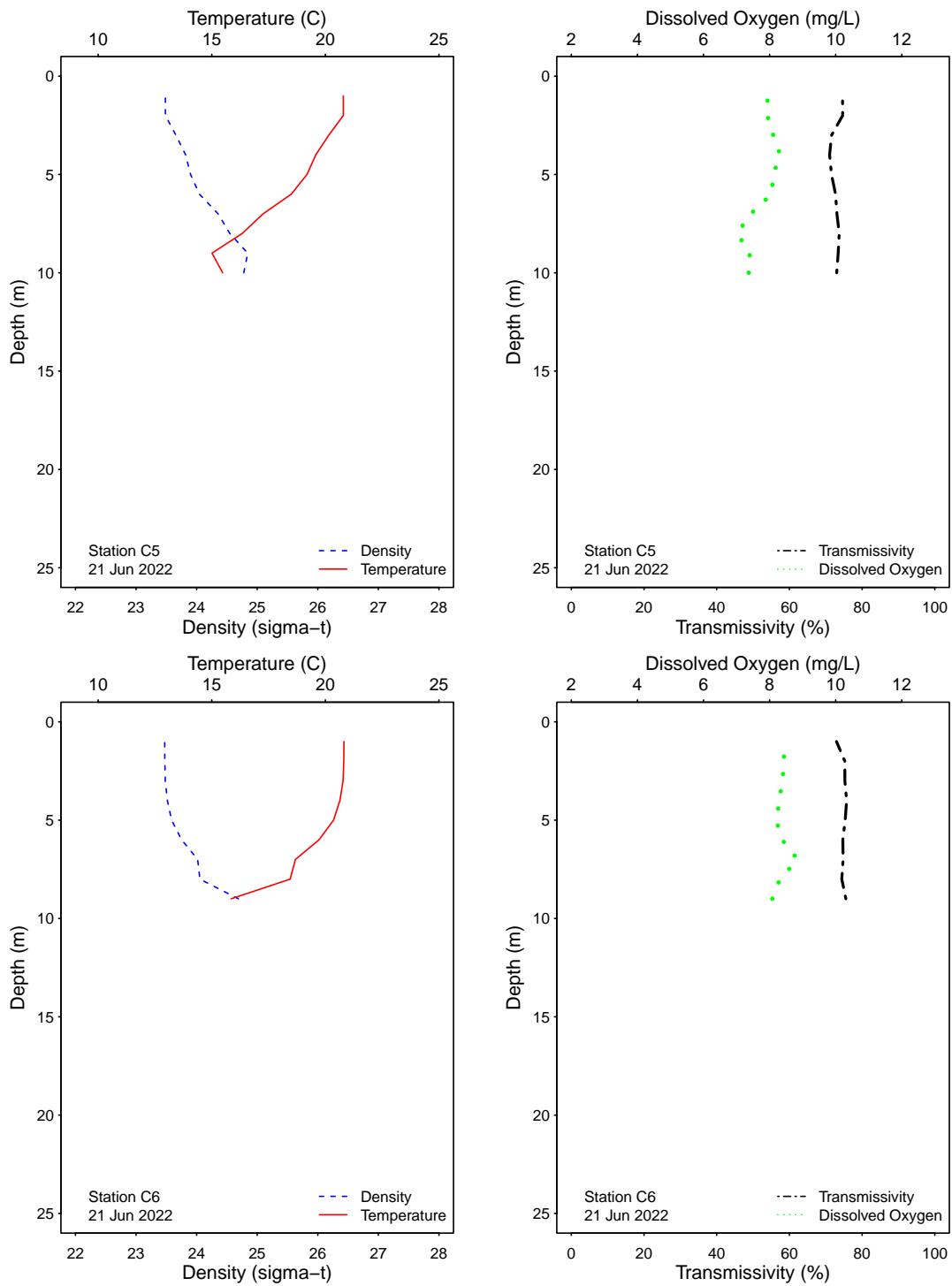


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

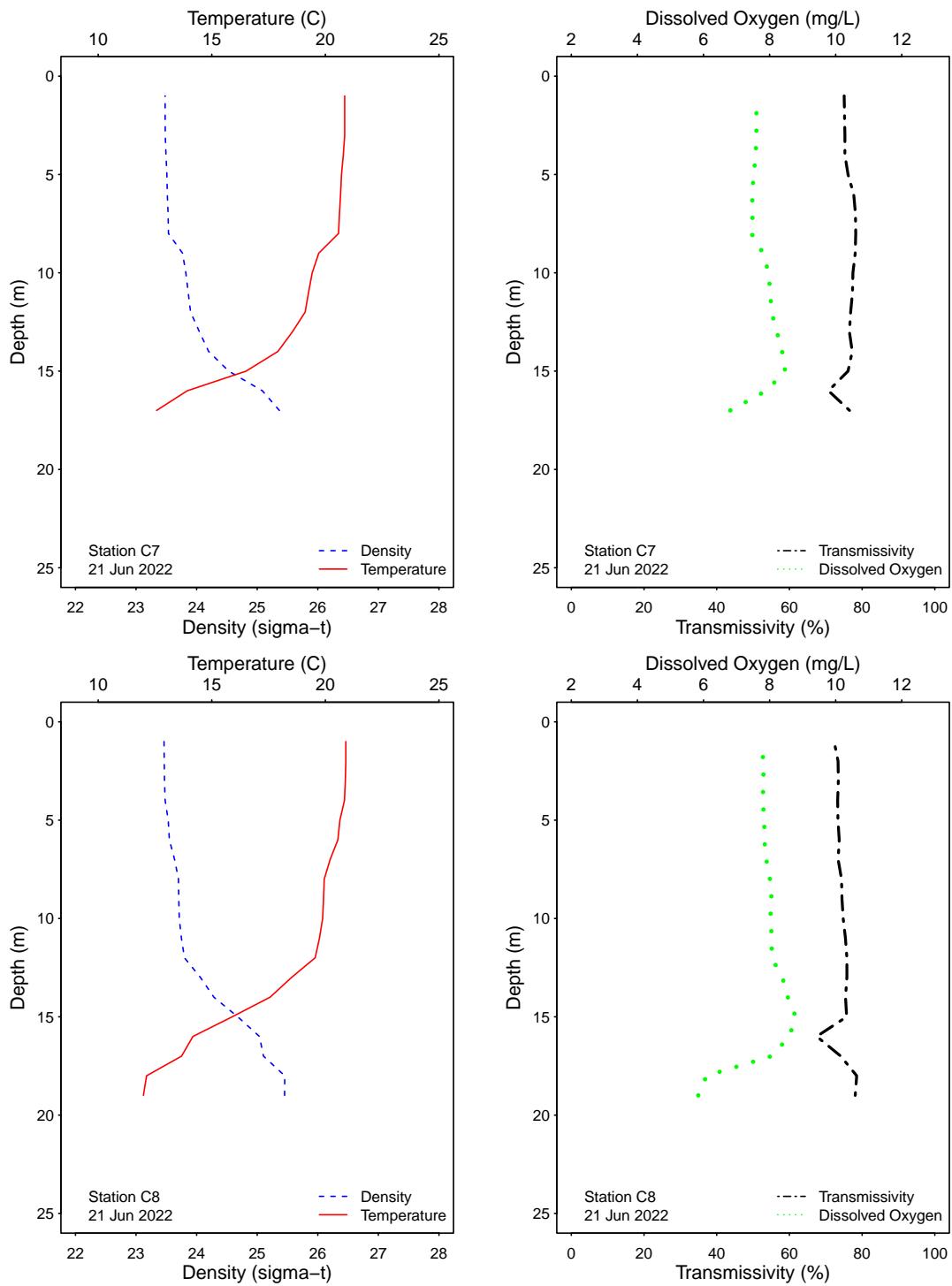


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

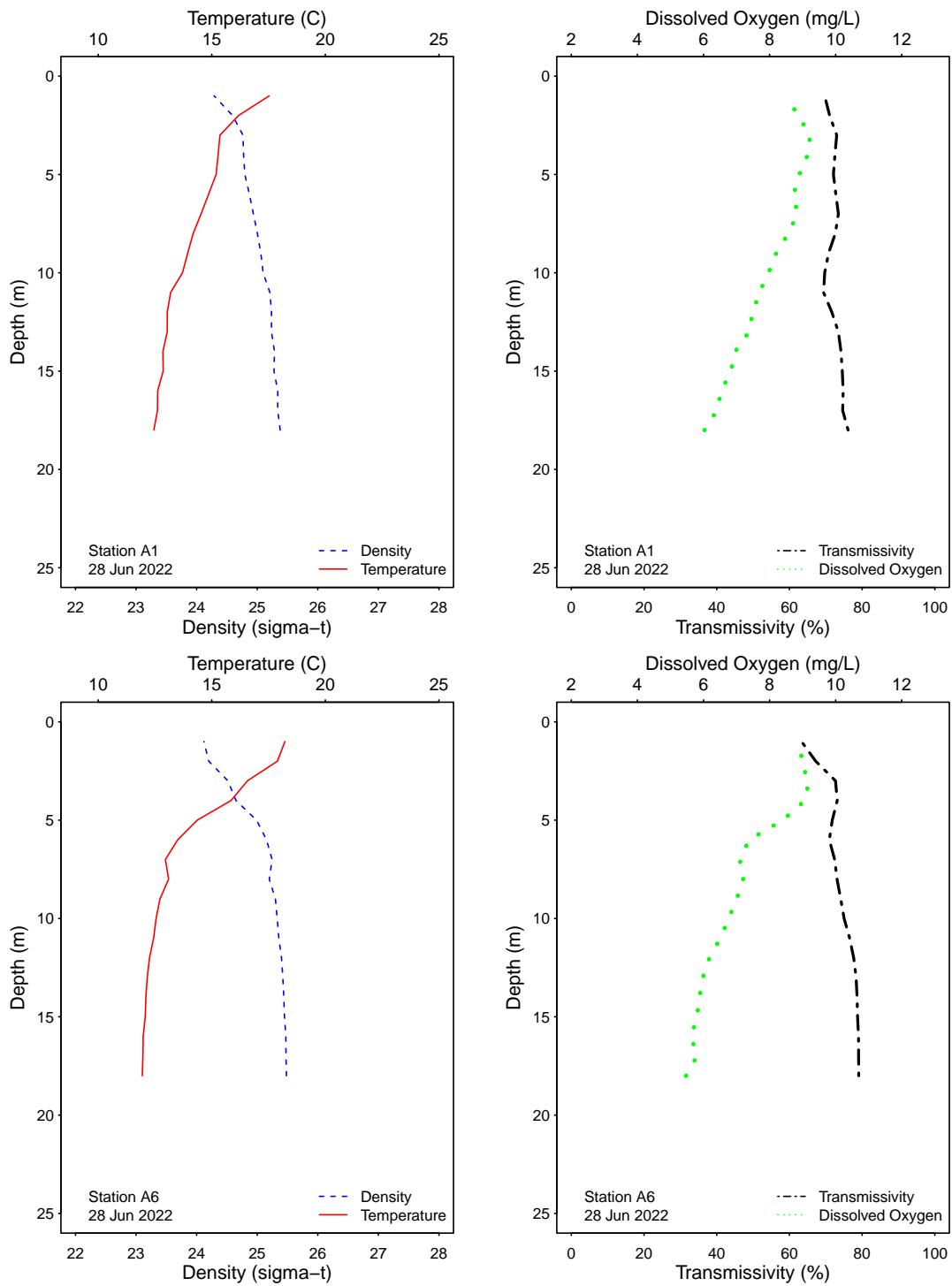


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

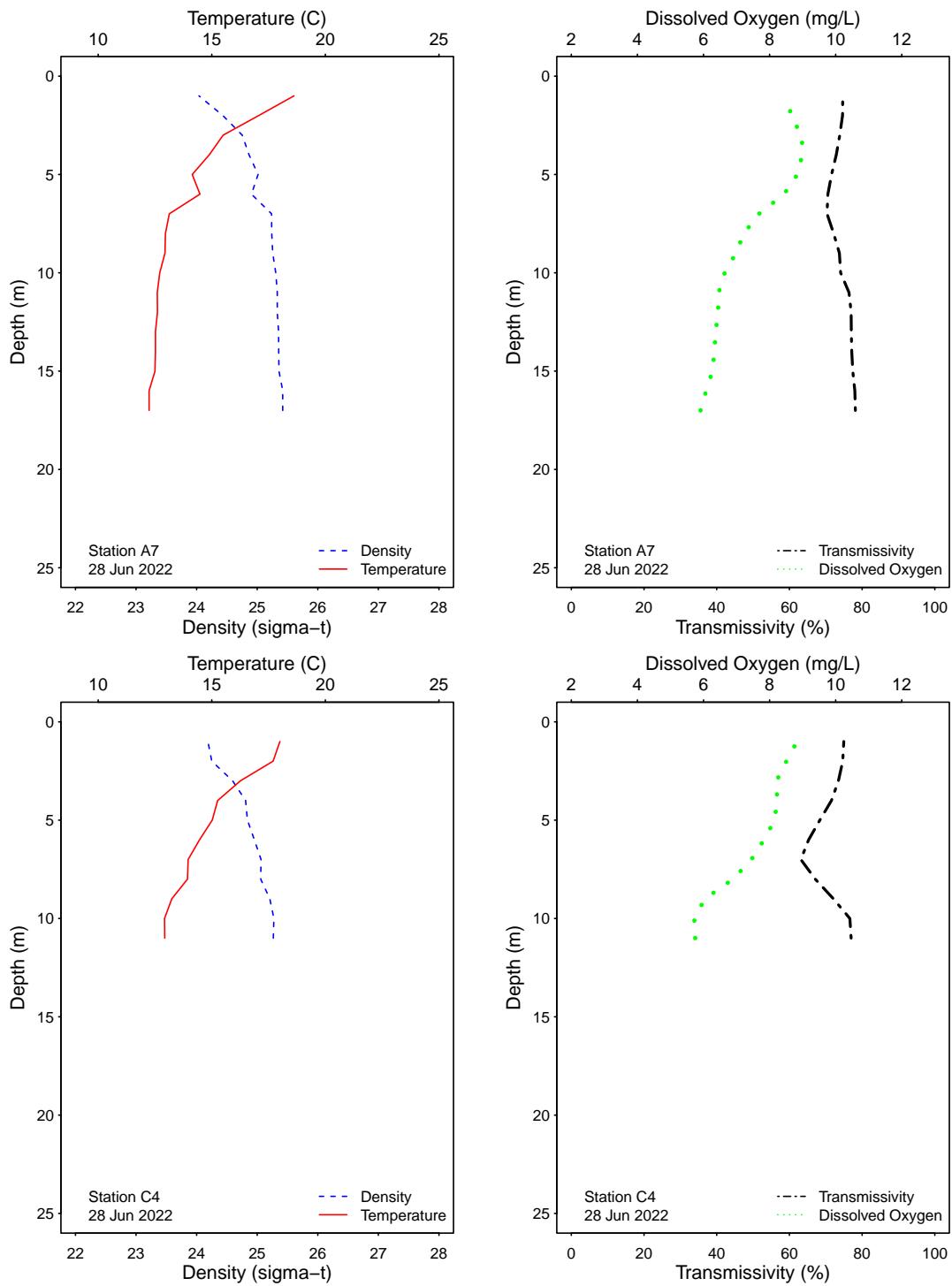


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

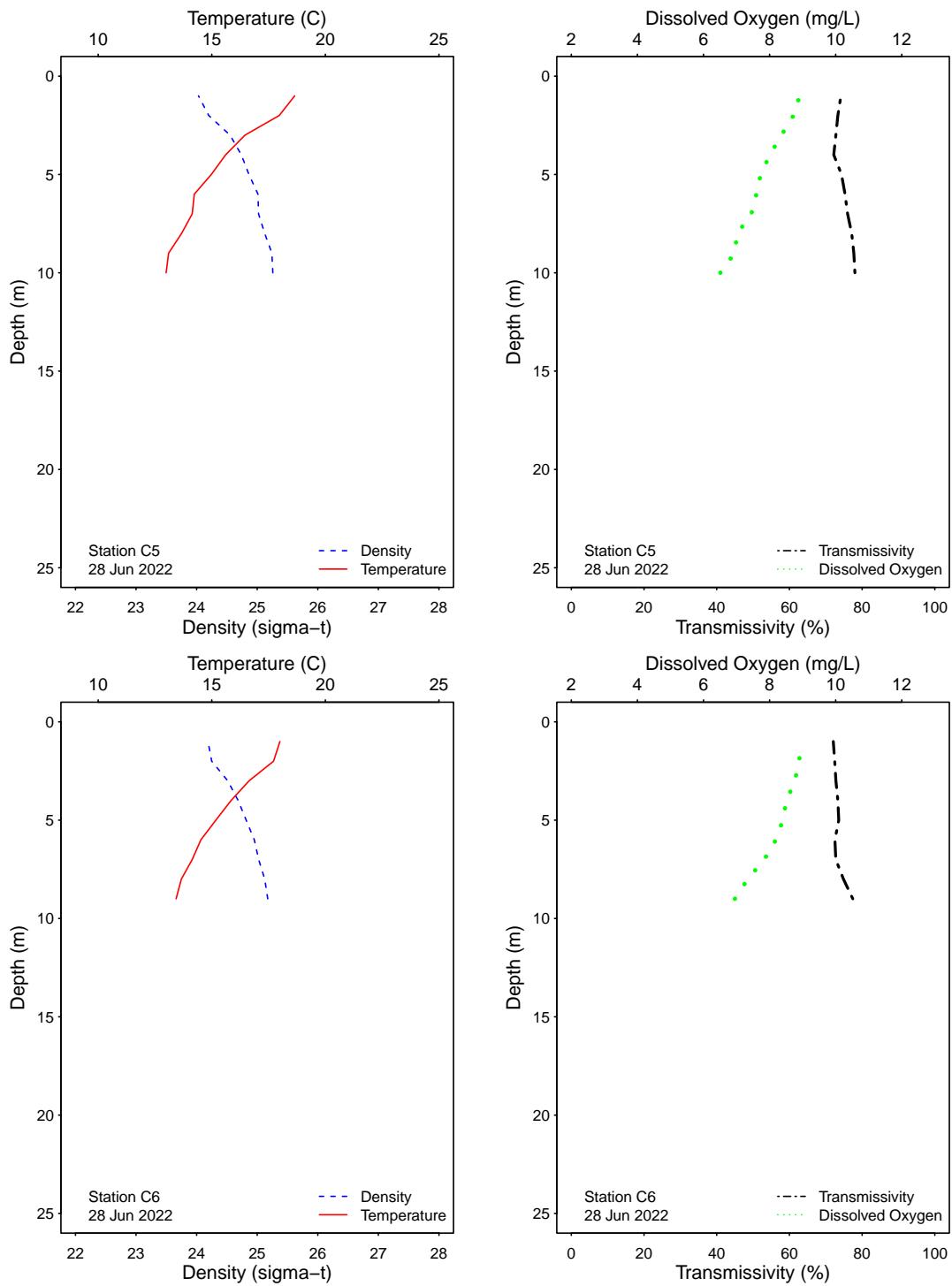


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

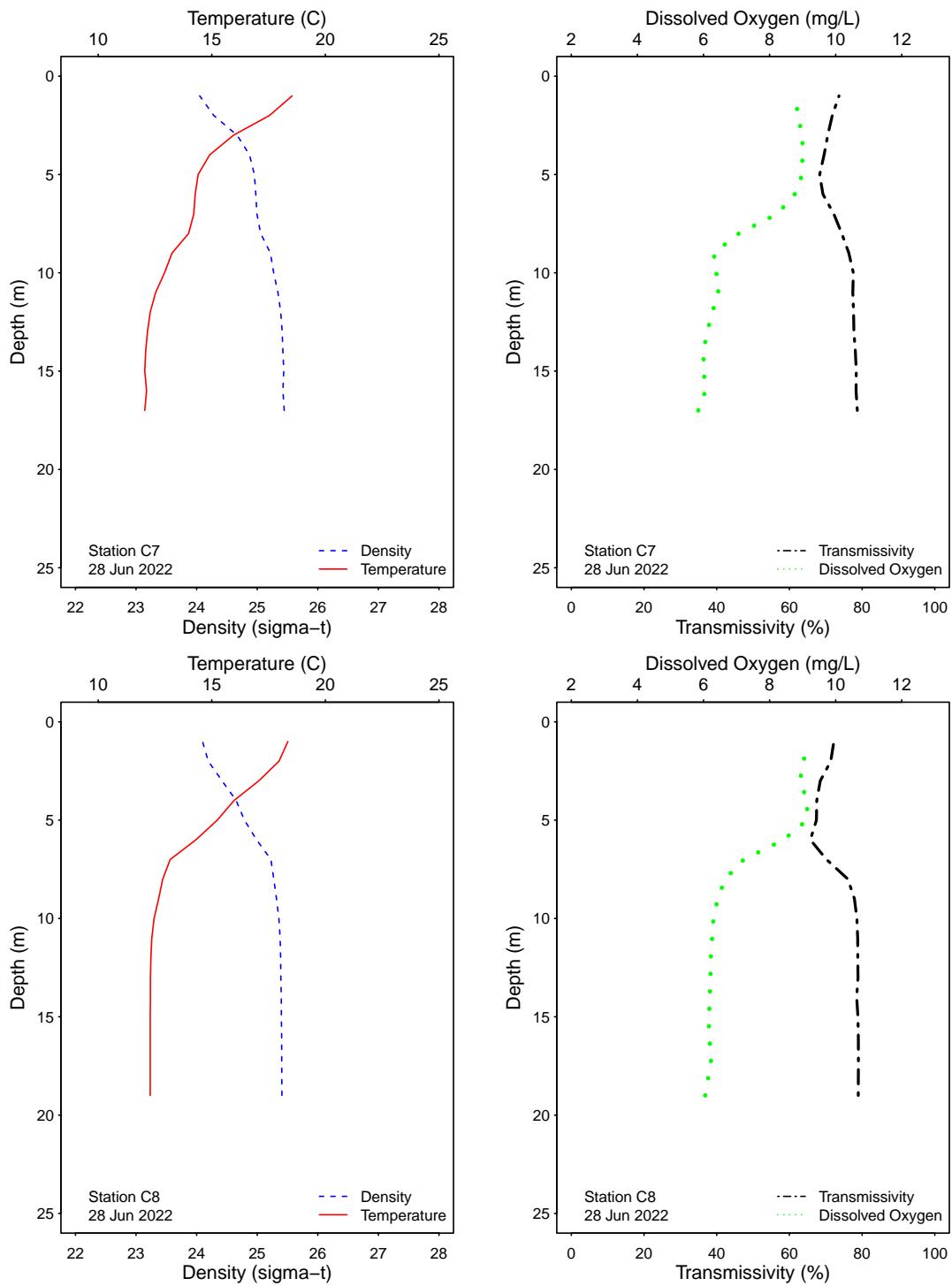


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

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

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Enter
A7	01 Jun 2022	18	CRE	LAB DUPLICATE	16e	6e	<2
A7	07 Jun 2022	18	BS	LAB DUPLICATE	<20	<2	<2
A7	14 Jun 2022	18	BS	LAB DUPLICATE	16e	4e	2e
A7	21 Jun 2022	18	BS	LAB DUPLICATE	<2	<2	<2
A7	28 Jun 2022	18	HF	LAB DUPLICATE	<2	<2	<2
C7	01 Jun 2022	18	CRE	LAB DUPLICATE	<2	<2	<2
C7	07 Jun 2022	18	BS	LAB DUPLICATE	<2	<2	<2
C7	14 Jun 2022	18	BS	LAB DUPLICATE	2e	<2	<2
C7	21 Jun 2022	18	BS	LAB DUPLICATE	<2	<2	<2
C7	28 Jun 2022	18	HF	LAB DUPLICATE	2e	<2	<2
C8	01 Jun 2022	12	CRE	LAB DUPLICATE	<2	<2	<2
C8	07 Jun 2022	12	BS	LAB DUPLICATE	<2	<2	<2
C8	14 Jun 2022	12	BS	LAB DUPLICATE	<2	<2	<2
C8	21 Jun 2022	12	BS	LAB DUPLICATE	<2	<2	<2
C8	28 Jun 2022	12	HF	LAB DUPLICATE	<2	<2	<2
D12	01 Jun 2022		KA	FIELD DUPLICATE	<20	2e	<2
D12	01 Jun 2022		KA	LAB DUPLICATE	<2	<2	<2
D12	08 Jun 2022		KA	FIELD DUPLICATE	<2	2e	<2
D12	08 Jun 2022		KA	LAB DUPLICATE	<20	2e	<2
D12	15 Jun 2022		JF	FIELD DUPLICATE	<20	<2	<2
D12	15 Jun 2022		JF	LAB DUPLICATE	<20	<2	2e
D12	22 Jun 2022		HF	FIELD DUPLICATE	120e	44	8e
D12	22 Jun 2022		HF	LAB DUPLICATE	120e	64	<2
D12	29 Jun 2022		KA	FIELD DUPLICATE	<2	<2	<2
D12	29 Jun 2022		KA	LAB DUPLICATE	<2	<2	<2

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 Jun 2022	2	2	2	6	3	2	4	2
02 Jun 2022	2	2	2	6	3	2	4	2
03 Jun 2022	2	2	2	6	3	2	3	2
04 Jun 2022	2	2	2	6	3	2	3	2
05 Jun 2022	2	2	2	6	3	2	3	2
06 Jun 2022	2	2	2	6	3	2	3	2
07 Jun 2022	2	2	2	6	3	2	3	2
08 Jun 2022	2	2	2	5	3	2	6	2
09 Jun 2022	2	2	2	5	3	2	6	2
10 Jun 2022	2	2	2	5	3	2	7	2
11 Jun 2022	2	2	2	5	3	2	7	2
12 Jun 2022	2	2	2	5	3	2	7	2
13 Jun 2022	2	2	2	5	3	2	7	2
14 Jun 2022	2	2	2	5	3	2	7	2
15 Jun 2022	2	2	2	6	3	2	7	2
16 Jun 2022	2	2	2	6	3	2	7	2
17 Jun 2022	2	2	2	6	3	2	7	2
18 Jun 2022	2	2	2	6	3	2	7	2
19 Jun 2022	2	2	2	6	3	2	7	2
20 Jun 2022	2	2	2	6	3	2	7	2
21 Jun 2022	2	2	2	6	3	2	7	2
22 Jun 2022	2	2	2	6	3	2	9	3
23 Jun 2022	2	2	2	6	3	2	9	3
24 Jun 2022	2	2	2	6	3	2	9	3
25 Jun 2022	2	2	2	6	3	2	9	3
26 Jun 2022	2	2	2	6	3	2	9	3
27 Jun 2022	2	2	2	6	3	2	9	3
28 Jun 2022	2	2	2	6	3	2	9	3
29 Jun 2022	2	2	2	4	2	2	6	2
30 Jun 2022	2	2	2	4	2	2	6	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
June	IC	IC	IC	IC	IC	IC	E	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table B.3

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

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Jun 2022	16	20	20	20	20	20	20	20
02 Jun 2022	16	20	20	20	20	20	20	20
03 Jun 2022	18	20	20	20	110	22	20	20
04 Jun 2022	18	20	20	20	110	22	20	20
05 Jun 2022	18	20	20	20	110	22	20	20
06 Jun 2022	18	20	20	20	110	22	20	20
07 Jun 2022	18	20	20	20	110	22	20	20
08 Jun 2022	16	20	20	20	20	24	20	20
09 Jun 2022	16	20	20	20	20	24	20	20
10 Jun 2022	11	20	20	20	110	52	40	12
11 Jun 2022	11	20	20	20	110	52	40	12
12 Jun 2022	11	20	20	20	110	52	40	12
13 Jun 2022	11	20	20	20	110	52	40	12
14 Jun 2022	11	20	20	20	110	52	40	12
15 Jun 2022	14	20	20	20	20	60	20	20
16 Jun 2022	14	20	20	20	20	60	20	20
17 Jun 2022	10	20	20	20	20	70	20	12
18 Jun 2022	10	20	20	20	20	70	20	12
19 Jun 2022	10	20	20	20	20	70	20	12
20 Jun 2022	10	20	20	20	20	70	20	12
21 Jun 2022	10	20	20	20	20	70	20	12
22 Jun 2022	6	20	20	20	20	60	20	20
23 Jun 2022	6	20	20	20	20	60	20	20
24 Jun 2022	8	20	20	20	20	70	30	20
25 Jun 2022	8	20	20	20	20	70	30	20
26 Jun 2022	8	20	20	20	20	70	30	20
27 Jun 2022	8	20	20	20	20	70	30	20
28 Jun 2022	8	20	20	20	20	70	30	20
29 Jun 2022	14	20	20	20	20	80	20	20
30 Jun 2022	14	20	20	20	20	80	20	20

* Median calculated using n<5

Table B.4

Summary of compliance at the PLOO shore stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10% of samples per station, per month.

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

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Kelp Stations

Table B.5

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

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

* Geometric mean calculated using n<5

Table B.6

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
June	IC							

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table B.7

Summary of compliance with the Ocean Plan's 30-day Median standard for total coliform bacteria at the PLOO kelp stations. Data are based on the median of the five most recent samples from each site and depth over the previous 30 days unless otherwise noted (*). Values >70 CFU/100 mL exceed the standard. Median calculated using $n \geq 5$

Table B.8

Summary of compliance at the PLOO kelp stations with the Ocean Plan's Statistical Threshold Value for total coliform bacteria, which states that total coliform density shall not exceed 230 CFU/100 mL in more than 10 IC = In Compliance E = Exceedance ns = not sampled ND = no data