



POINT LOMA OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

**POINT LOMA
WASTEWATER TREATMENT PLANT**

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

OCTOBER 2022

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





Public Utilities Department
Environmental Monitoring & Technical Services Division

November 30, 2022

Mr. David W. Gibson, Executive Officer
California Regional Water Quality Control Board
San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Attention: POTW Compliance Unit

Dear Mr. Gibson:

Enclosed is the October 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,

A handwritten signature in blue ink that reads "Peter S. Vroom". The signature is fluid and cursive, with "Peter S." on top and "Vroom" on the bottom.

Peter S. Vroom, Ph. D.
Deputy Director, Public Utilities Department

PV/rk

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

INTRODUCTION

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

MATERIALS AND METHODS

Shore Stations

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

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

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

Kelp Bed Stations

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

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

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

profiles of temperature, transmissivity, dissolved oxygen, pH, salinity, density, chlorophyll *a* are generated using a Sea-Bird conductivity, temperature and depth instrument (CTD), which collects these data at a rate of ≥ 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 October 5, 12, 19, and 26.
- During October, two of the eight shore stations were out of compliance with the various 2015 California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
 - o The single sample maximum (SSM) for *Enterococcus* was exceeded at stations D8-B and D10.
- A sewage-like odor was observed at station D5 on one or more days in October.
- 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 October 3, 11, 18, and 25.
- During October, 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 13.27 to 19.67°C. The difference between surface and bottom waters ranged from 1.48 to 5.88°C.
- Chlorophyll *a* concentrations ranged from 0.40 to 25.65 µg/L.
- Nothing of sewage origin was observed at PLOO kelp stations in October.

Offshore Stations

- Quarterly water quality sampling was not conducted during October at the offshore stations. The next quarterly sampling is scheduled for November 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 Oct 2022	112	200	200	200	134	112	63	34
02 Oct 2022	112	200	200	200	134	112	63	34
03 Oct 2022	112	200	200	200	134	112	63	34
04 Oct 2022	112	200	200	200	134	112	63	34
05 Oct 2022	126	200	200	126	91	126	50	48
06 Oct 2022	126	200	200	126	91	126	50	48
07 Oct 2022	112	200	200	112	75	112	63	60
08 Oct 2022	112	200	200	112	75	112	63	60
09 Oct 2022	112	200	200	112	75	112	63	60
10 Oct 2022	112	200	200	112	75	112	63	60
11 Oct 2022	112	200	200	112	75	112	63	60
12 Oct 2022	80	126	126	157	83	114	99	48
13 Oct 2022	80	126	126	157	83	114	99	48
14 Oct 2022	63	112	112	148	66	99	148	42
15 Oct 2022	63	112	112	148	66	99	148	42
16 Oct 2022	63	112	112	148	66	99	148	42
17 Oct 2022	63	112	112	148	66	99	148	42
18 Oct 2022	63	112	112	148	66	99	148	42
19 Oct 2022	80	80	126	157	52	114	99	36
20 Oct 2022	80	80	126	157	52	114	99	36
21 Oct 2022	63	63	112	148	31	99	83	42
22 Oct 2022	63	63	112	148	31	99	83	42
23 Oct 2022	63	63	112	148	31	99	83	42
24 Oct 2022	63	63	112	148	31	99	83	42
25 Oct 2022	63	63	112	148	31	99	83	42
26 Oct 2022	80	50	126	157	29	114	99	36
27 Oct 2022	80	50	126	157	29	114	99	36
28 Oct 2022	112	36	112	148	31	176	83	36
29 Oct 2022	112	36	112	148	31	176	83	36
30 Oct 2022	112	36	112	148	31	176	83	36
31 Oct 2022	112	36	112	148	31	176	83	36

* 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 Oct 2022	5	4	5	5	3	4	10	8
02 Oct 2022	5	4	5	5	3	4	10	8
03 Oct 2022	5	4	5	5	3	4	10	8
04 Oct 2022	5	4	5	5	3	4	10	8
05 Oct 2022	4	4	4	4	3	5	8	8
06 Oct 2022	4	4	4	4	3	5	8	8
07 Oct 2022	5	5	5	4	3	6	6	12
08 Oct 2022	5	5	5	4	3	6	6	12
09 Oct 2022	5	5	5	4	3	6	6	12
10 Oct 2022	5	5	5	4	3	6	6	12
11 Oct 2022	5	5	5	4	3	6	6	12
12 Oct 2022	5	4	7	10	3	8	10	8
13 Oct 2022	5	4	7	10	3	8	10	8
14 Oct 2022	7	5	8	8	2	7	13	5
15 Oct 2022	7	5	8	8	2	7	13	5
16 Oct 2022	7	5	8	8	2	7	13	5
17 Oct 2022	7	5	8	8	2	7	13	5
18 Oct 2022	7	5	8	8	2	7	13	5
19 Oct 2022	5	9	6	6	3	5	9	4
20 Oct 2022	5	9	6	6	3	5	9	4
21 Oct 2022	4	7	8	7	4	7	13	5
22 Oct 2022	4	7	8	7	4	7	13	5
23 Oct 2022	4	7	8	7	4	7	13	5
24 Oct 2022	4	7	8	7	4	7	13	5
25 Oct 2022	4	7	8	7	4	7	13	5
26 Oct 2022	3	6	9	13	3	9	14	5
27 Oct 2022	3	6	9	13	3	9	14	5
28 Oct 2022	3	7	6	22	4	14	10	4
29 Oct 2022	3	7	6	22	4	14	10	4
30 Oct 2022	3	7	6	22	4	14	10	4
31 Oct 2022	3	7	6	22	4	14	10	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 Oct 2022	4	3	5	2	2	5	4	11
02 Oct 2022	4	3	5	2	2	5	4	11
03 Oct 2022	4	3	5	2	2	5	4	11
04 Oct 2022	4	3	5	2	2	5	4	11
05 Oct 2022	3	4	4	2	2	4	3	8
06 Oct 2022	3	4	4	2	2	4	3	8
07 Oct 2022	4	4	2	2	2	5	4	11
08 Oct 2022	4	4	2	2	2	5	4	11
09 Oct 2022	4	4	2	2	2	5	4	11
10 Oct 2022	4	4	2	2	2	5	4	11
11 Oct 2022	4	4	2	2	2	5	4	11
12 Oct 2022	3	3	3	6	2	7	7	9
13 Oct 2022	3	3	3	7	2	7	7	9
14 Oct 2022	4	4	3	9	2	5	10	5
15 Oct 2022	4	4	3	9	2	5	10	5
16 Oct 2022	4	4	3	9	2	5	10	5
17 Oct 2022	4	4	3	9	2	5	10	5
18 Oct 2022	4	4	3	9	2	5	10	5
19 Oct 2022	4	3	3	7	2	5	7	4
20 Oct 2022	4	3	3	7	2	5	7	4
21 Oct 2022	5	4	3	9	3	7	8	5
22 Oct 2022	5	4	3	9	3	7	8	5
23 Oct 2022	5	4	3	9	3	7	8	5
24 Oct 2022	5	4	3	9	3	7	8	5
25 Oct 2022	5	4	3	9	3	7	8	5
26 Oct 2022	4	3	3	10	2	13	10	6
27 Oct 2022	4	3	3	10	2	14	10	6
28 Oct 2022	2	4	3	14	3	18	9	3
29 Oct 2022	2	4	3	14	3	18	9	3
30 Oct 2022	2	4	3	14	3	18	9	3
31 Oct 2022	2	4	3	14	3	18	9	3

* 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
05 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
12 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
19 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
26 Oct 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
05 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
12 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
19 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
26 Oct 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
05 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
12 Oct 2022	IC	IC	IC	E	IC	IC	IC	IC
13 Oct 2022	ns	ns	ns	IC	ns	ns	ns	ns
19 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
26 Oct 2022	IC	IC	IC	IC	IC	E	IC	IC
27 Oct 2022	ns	ns	ns	ns	ns	IC	ns	ns

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
05 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
12 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
19 Oct 2022	IC	IC	IC	IC	IC	IC	IC	IC
26 Oct 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	05 Oct 2022	1030	200e	2e	2e	0.01
D4	12 Oct 2022	742	20e	10e	<2	0.50
D4	19 Oct 2022	835	<200	2e	4e	0.01
D4	26 Oct 2022	917	<200	<2	<2	0.01
D5	05 Oct 2022	1011	200e	8e	22e	0.04
D5	12 Oct 2022	755	20e	<2	2e	0.10
D5	19 Oct 2022	856	<20	80e	<2	4.00
D5	26 Oct 2022	934	<20	2e	<2	0.10
D7	05 Oct 2022	942	<200	2e	<2	0.01
D7	12 Oct 2022	819	20e	<20	6e	1.00
D7	19 Oct 2022	918	<200	<2	<2	0.01
D7	26 Oct 2022	1004	<200	<20	2e	0.10
D8-B	05 Oct 2022	925	<20	<2	<2	0.10
D8-B	12 Oct 2022	832	600	280e	500	0.47
D8-B	13 Oct 2022	1236	ns	ns	16e	ns
D8-B	19 Oct 2022	932	<200	<2	<2	0.01
D8-B	26 Oct 2022	1018	200e	200e	20e	1.00
D9	05 Oct 2022	908	20e	<2	<2	0.10
D9	12 Oct 2022	843	120e	2e	2e	0.02
D9	19 Oct 2022	948	20e	<20	6e	1.00
D9	26 Oct 2022	1033	<20	<2	<2	0.10
D10	05 Oct 2022	843	<200	12e	<2	0.06
D10	12 Oct 2022	854	120e	40e	38e	0.33
D10	19 Oct 2022	1007	<200	<2	6e	0.01
D10	26 Oct 2022	1045	200e	40e	180e	0.20
D10	27 Oct 2022	1352	ns	ns	22e	ns
D11	05 Oct 2022	825	<20	4e	<2	0.20
D11	12 Oct 2022	907	600e	74	76	0.12
D11	19 Oct 2022	1021	20e	2e	<2	0.10
D11	26 Oct 2022	1100	<200	20e	24e	0.10
D12	05 Oct 2022	805	<200	8e	2e	0.04
D12	12 Oct 2022	956	<20	2e	4e	0.10
D12	19 Oct 2022	1049	<20	<2	2e	0.10
D12	26 Oct 2022	1138	<20	8e	8e	0.40

ns = not sampled

ND = no data

Comments

Station	Date	Depth	Parameter	Comments
D8-B	13 Oct 2022			Resample
D10	27 Oct 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	05 Oct 2022	Arrive Time	1030
D4	05 Oct 2022	Weather	Cloudy
D4	05 Oct 2022	Wind Speed (kts)	0.7
D4	05 Oct 2022	Wind Dir	W
D4	05 Oct 2022	Animal Life	
D4	05 Oct 2022	Floatables	Foam
D4	05 Oct 2022	Water Color	Blue
D4	05 Oct 2022	Current Direction	
D4	05 Oct 2022	Water Temp (C)	18
D4	05 Oct 2022	Wave Height Low (ft)	1
D4	05 Oct 2022	High Tide (ft)	4.41
D4	05 Oct 2022	High Tide Time	727
D4	05 Oct 2022	Low Tide (ft)	-0.29
D4	05 Oct 2022	Low Tide Time	49
D4	05 Oct 2022	Comments	Kelp; Seagrass; Algae
D4	12 Oct 2022	Arrive Time	742
D4	12 Oct 2022	Weather	Overcast
D4	12 Oct 2022	Wind Speed (kts)	0
D4	12 Oct 2022	Wind Dir	
D4	12 Oct 2022	Animal Life	Seagull-2
D4	12 Oct 2022	Floatables	None
D4	12 Oct 2022	Water Color	Green
D4	12 Oct 2022	Current Direction	S
D4	12 Oct 2022	Water Temp (C)	18
D4	12 Oct 2022	Wave Height Low (ft)	1
D4	12 Oct 2022	High Tide (ft)	5.76
D4	12 Oct 2022	High Tide Time	1041
D4	12 Oct 2022	Low Tide (ft)	1.56
D4	12 Oct 2022	Low Tide Time	435
D4	12 Oct 2022	Comments	Water turbid; Boater/Kayaker-2; Trash-1; Algae; Seagrass
D4	19 Oct 2022	Arrive Time	835
D4	19 Oct 2022	Weather	Sunny
D4	19 Oct 2022	Wind Speed (kts)	1.1
D4	19 Oct 2022	Wind Dir	NE
D4	19 Oct 2022	Animal Life	Bird-2; Pelican-3; Seagull-3
D4	19 Oct 2022	Floatables	None
D4	19 Oct 2022	Water Color	Green
D4	19 Oct 2022	Current Direction	S
D4	19 Oct 2022	Water Temp (C)	18
D4	19 Oct 2022	Wave Height Low (ft)	2
D4	19 Oct 2022	High Tide (ft)	4.12
D4	19 Oct 2022	High Tide Time	717
D4	19 Oct 2022	Low Tide (ft)	0.65
D4	19 Oct 2022	Low Tide Time	18
D4	19 Oct 2022	Comments	Water clear; Boater/Kayaker-4; Trash-1; Kelp; Seagrass; Algae
D4	26 Oct 2022	Arrive Time	917
D4	26 Oct 2022	Weather	Cloudy
D4	26 Oct 2022	Wind Speed (kts)	2.9
D4	26 Oct 2022	Wind Dir	SW
D4	26 Oct 2022	Animal Life	Bird-1; Seagull-1; Seal/Sea Lion-1
D4	26 Oct 2022	Floatables	None
D4	26 Oct 2022	Water Color	Green

Station	Date	Parameter	Value
D4	26 Oct 2022	Current Direction	N
D4	26 Oct 2022	Water Temp (C)	20
D4	26 Oct 2022	Wave Height Low (ft)	2
D4	26 Oct 2022	High Tide (ft)	6.27
D4	26 Oct 2022	High Tide Time	941
D4	26 Oct 2022	Low Tide (ft)	1.21
D4	26 Oct 2022	Low Tide Time	332
D4	26 Oct 2022	Comments	Water turbid; Boater/Kayaker-4; Trash-1; Kelp; Seagrass
D5	05 Oct 2022	Arrive Time	1011
D5	05 Oct 2022	Weather	Cloudy
D5	05 Oct 2022	Wind Speed (kts)	0.4
D5	05 Oct 2022	Wind Dir	W
D5	05 Oct 2022	Animal Life	
D5	05 Oct 2022	Floatables	Foam
D5	05 Oct 2022	Water Color	Green
D5	05 Oct 2022	Current Direction	
D5	05 Oct 2022	Water Temp (C)	19
D5	05 Oct 2022	Wave Height Low (ft)	1
D5	05 Oct 2022	High Tide (ft)	4.41
D5	05 Oct 2022	High Tide Time	727
D5	05 Oct 2022	Low Tide (ft)	-0.29
D5	05 Oct 2022	Low Tide Time	49
D5	05 Oct 2022	Comments	Seagrass; Algae; Kelp
D5	12 Oct 2022	Arrive Time	755
D5	12 Oct 2022	Weather	Overcast
D5	12 Oct 2022	Wind Speed (kts)	0
D5	12 Oct 2022	Wind Dir	
D5	12 Oct 2022	Animal Life	Seagull-2
D5	12 Oct 2022	Floatables	Foam
D5	12 Oct 2022	Water Color	Green
D5	12 Oct 2022	Current Direction	N
D5	12 Oct 2022	Water Temp (C)	19
D5	12 Oct 2022	Wave Height Low (ft)	1
D5	12 Oct 2022	High Tide (ft)	5.76
D5	12 Oct 2022	High Tide Time	1041
D5	12 Oct 2022	Low Tide (ft)	1.56
D5	12 Oct 2022	Low Tide Time	435
D5	12 Oct 2022	Comments	Kelp; Algae; Seagrass
D5	19 Oct 2022	Arrive Time	856
D5	19 Oct 2022	Weather	Sunny
D5	19 Oct 2022	Wind Speed (kts)	0.3
D5	19 Oct 2022	Wind Dir	NE
D5	19 Oct 2022	Animal Life	Seagull-2
D5	19 Oct 2022	Floatables	None
D5	19 Oct 2022	Water Color	Green
D5	19 Oct 2022	Current Direction	S
D5	19 Oct 2022	Water Temp (C)	18
D5	19 Oct 2022	Wave Height Low (ft)	2
D5	19 Oct 2022	High Tide (ft)	4.12
D5	19 Oct 2022	High Tide Time	717
D5	19 Oct 2022	Low Tide (ft)	0.65
D5	19 Oct 2022	Low Tide Time	18
D5	19 Oct 2022	Comments	Kelp
D5	26 Oct 2022	Arrive Time	934
D5	26 Oct 2022	Weather	Cloudy
D5	26 Oct 2022	Wind Speed (kts)	0.1
D5	26 Oct 2022	Wind Dir	NW

Station	Date	Parameter	Value
D5	26 Oct 2022	Animal Life	Seagull-12
D5	26 Oct 2022	Floatables	Foam; Film
D5	26 Oct 2022	Water Color	Green
D5	26 Oct 2022	Current Direction	N
D5	26 Oct 2022	Water Temp (C)	20
D5	26 Oct 2022	Wave Height Low (ft)	3
D5	26 Oct 2022	High Tide (ft)	6.27
D5	26 Oct 2022	High Tide Time	941
D5	26 Oct 2022	Low Tide (ft)	1.21
D5	26 Oct 2022	Low Tide Time	332
D5	26 Oct 2022	Comments	Water turbid; Boater/Kayaker-1; Trash-1; Kelp; Seagrass; Sewage-like odor
D7	05 Oct 2022	Arrive Time	942
D7	05 Oct 2022	Weather	Cloudy
D7	05 Oct 2022	Wind Speed (kts)	2.3
D7	05 Oct 2022	Wind Dir	W
D7	05 Oct 2022	Animal Life	
D7	05 Oct 2022	Floatables	Foam
D7	05 Oct 2022	Water Color	Green
D7	05 Oct 2022	Current Direction	
D7	05 Oct 2022	Water Temp (C)	18
D7	05 Oct 2022	Wave Height Low (ft)	3
D7	05 Oct 2022	High Tide (ft)	4.41
D7	05 Oct 2022	High Tide Time	727
D7	05 Oct 2022	Low Tide (ft)	-0.29
D7	05 Oct 2022	Low Tide Time	49
D7	05 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-5; Trash-1; Seagrass; Algae; Kelp
D7	12 Oct 2022	Arrive Time	819
D7	12 Oct 2022	Weather	Overcast
D7	12 Oct 2022	Wind Speed (kts)	0
D7	12 Oct 2022	Wind Dir	
D7	12 Oct 2022	Animal Life	Dog-2
D7	12 Oct 2022	Floatables	Foam
D7	12 Oct 2022	Water Color	Green
D7	12 Oct 2022	Current Direction	N
D7	12 Oct 2022	Water Temp (C)	19
D7	12 Oct 2022	Wave Height Low (ft)	3
D7	12 Oct 2022	High Tide (ft)	5.76
D7	12 Oct 2022	High Tide Time	1041
D7	12 Oct 2022	Low Tide (ft)	1.56
D7	12 Oct 2022	Low Tide Time	435
D7	12 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-8; Trash-1; Kelp; Algae; Seagrass; Person/Walker/Jogger-2
D7	19 Oct 2022	Arrive Time	918
D7	19 Oct 2022	Weather	Sunny
D7	19 Oct 2022	Wind Speed (kts)	0
D7	19 Oct 2022	Wind Dir	
D7	19 Oct 2022	Animal Life	
D7	19 Oct 2022	Floatables	None
D7	19 Oct 2022	Water Color	Green
D7	19 Oct 2022	Current Direction	S
D7	19 Oct 2022	Water Temp (C)	19
D7	19 Oct 2022	Wave Height Low (ft)	4
D7	19 Oct 2022	High Tide (ft)	4.12
D7	19 Oct 2022	High Tide Time	717
D7	19 Oct 2022	Low Tide (ft)	0.65
D7	19 Oct 2022	Low Tide Time	18

Station	Date	Parameter	Value
D7	19 Oct 2022	Comments	Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp
D7	26 Oct 2022	Arrive Time	1004
D7	26 Oct 2022	Weather	Sunny
D7	26 Oct 2022	Wind Speed (kts)	2.9
D7	26 Oct 2022	Wind Dir	S
D7	26 Oct 2022	Animal Life	
D7	26 Oct 2022	Floatables	Foam; Film
D7	26 Oct 2022	Water Color	Green
D7	26 Oct 2022	Current Direction	N
D7	26 Oct 2022	Water Temp (C)	22
D7	26 Oct 2022	Wave Height Low (ft)	4
D7	26 Oct 2022	High Tide (ft)	6.27
D7	26 Oct 2022	High Tide Time	941
D7	26 Oct 2022	Low Tide (ft)	1.21
D7	26 Oct 2022	Low Tide Time	332
D7	26 Oct 2022	Comments	Water turbid; Boater/Kayaker-2; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-5
D8-B	05 Oct 2022	Arrive Time	925
D8-B	05 Oct 2022	Weather	Cloudy
D8-B	05 Oct 2022	Wind Speed (kts)	3.4
D8-B	05 Oct 2022	Wind Dir	SW
D8-B	05 Oct 2022	Animal Life	
D8-B	05 Oct 2022	Floatables	Foam
D8-B	05 Oct 2022	Water Color	Green
D8-B	05 Oct 2022	Current Direction	N
D8-B	05 Oct 2022	Water Temp (C)	18
D8-B	05 Oct 2022	Wave Height Low (ft)	2
D8-B	05 Oct 2022	High Tide (ft)	4.41
D8-B	05 Oct 2022	High Tide Time	727
D8-B	05 Oct 2022	Low Tide (ft)	-0.29
D8-B	05 Oct 2022	Low Tide Time	49
D8-B	05 Oct 2022	Comments	Seagrass; Kelp; Algae
D8-B	12 Oct 2022	Arrive Time	832
D8-B	12 Oct 2022	Weather	Overcast
D8-B	12 Oct 2022	Wind Speed (kts)	2.5
D8-B	12 Oct 2022	Wind Dir	W
D8-B	12 Oct 2022	Animal Life	
D8-B	12 Oct 2022	Floatables	Foam
D8-B	12 Oct 2022	Water Color	Green
D8-B	12 Oct 2022	Current Direction	N
D8-B	12 Oct 2022	Water Temp (C)	20
D8-B	12 Oct 2022	Wave Height Low (ft)	3
D8-B	12 Oct 2022	High Tide (ft)	5.76
D8-B	12 Oct 2022	High Tide Time	1041
D8-B	12 Oct 2022	Low Tide (ft)	1.56
D8-B	12 Oct 2022	Low Tide Time	435
D8-B	12 Oct 2022	Comments	Water turbid; Boater/Kayaker-1; Trash-1; Kelp; Seagrass; Algae
D8-B	13 Oct 2022	Arrive Time	1236
D8-B	13 Oct 2022	Weather	Drizzle
D8-B	13 Oct 2022	Wind Speed (kts)	5.2
D8-B	13 Oct 2022	Wind Dir	W
D8-B	13 Oct 2022	Animal Life	
D8-B	13 Oct 2022	Floatables	Foam
D8-B	13 Oct 2022	Water Color	Green
D8-B	13 Oct 2022	Current Direction	S
D8-B	13 Oct 2022	Water Temp (C)	20

Station	Date	Parameter	Value
D8-B	13 Oct 2022	Wave Height Low (ft)	3
D8-B	13 Oct 2022	High Tide (ft)	5.48
D8-B	13 Oct 2022	High Tide Time	1108
D8-B	13 Oct 2022	Low Tide (ft)	2.09
D8-B	13 Oct 2022	Low Tide Time	457
D8-B	13 Oct 2022	Comments	Resample; Kelp; Seagrass; Algae
D8-B	19 Oct 2022	Arrive Time	932
D8-B	19 Oct 2022	Weather	Sunny
D8-B	19 Oct 2022	Wind Speed (kts)	0
D8-B	19 Oct 2022	Wind Dir	
D8-B	19 Oct 2022	Animal Life	Seagull-2
D8-B	19 Oct 2022	Floatables	None
D8-B	19 Oct 2022	Water Color	Green
D8-B	19 Oct 2022	Current Direction	S
D8-B	19 Oct 2022	Water Temp (C)	18
D8-B	19 Oct 2022	Wave Height Low (ft)	2
D8-B	19 Oct 2022	High Tide (ft)	4.12
D8-B	19 Oct 2022	High Tide Time	717
D8-B	19 Oct 2022	Low Tide (ft)	0.65
D8-B	19 Oct 2022	Low Tide Time	18
D8-B	19 Oct 2022	Comments	Water clear; Boater/Kayaker-1; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-4
D8-B	26 Oct 2022	Arrive Time	1018
D8-B	26 Oct 2022	Weather	Sunny
D8-B	26 Oct 2022	Wind Speed (kts)	2.1
D8-B	26 Oct 2022	Wind Dir	NW
D8-B	26 Oct 2022	Animal Life	
D8-B	26 Oct 2022	Floatables	Foam; Film
D8-B	26 Oct 2022	Water Color	Brown
D8-B	26 Oct 2022	Current Direction	N
D8-B	26 Oct 2022	Water Temp (C)	19
D8-B	26 Oct 2022	Wave Height Low (ft)	4
D8-B	26 Oct 2022	High Tide (ft)	6.27
D8-B	26 Oct 2022	High Tide Time	941
D8-B	26 Oct 2022	Low Tide (ft)	1.21
D8-B	26 Oct 2022	Low Tide Time	332
D8-B	26 Oct 2022	Comments	Kelp; Seagrass; Algae; Debris
D9	05 Oct 2022	Arrive Time	908
D9	05 Oct 2022	Weather	Cloudy
D9	05 Oct 2022	Wind Speed (kts)	3.3
D9	05 Oct 2022	Wind Dir	SW
D9	05 Oct 2022	Animal Life	
D9	05 Oct 2022	Floatables	Foam
D9	05 Oct 2022	Water Color	Green
D9	05 Oct 2022	Current Direction	N
D9	05 Oct 2022	Water Temp (C)	18
D9	05 Oct 2022	Wave Height Low (ft)	3
D9	05 Oct 2022	High Tide (ft)	4.41
D9	05 Oct 2022	High Tide Time	727
D9	05 Oct 2022	Low Tide (ft)	-0.29
D9	05 Oct 2022	Low Tide Time	49
D9	05 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-7; Trash-1; Seagrass; Kelp; Algae
D9	12 Oct 2022	Arrive Time	843
D9	12 Oct 2022	Weather	Overcast
D9	12 Oct 2022	Wind Speed (kts)	1.8
D9	12 Oct 2022	Wind Dir	SW

Station	Date	Parameter	Value
D9	12 Oct 2022	Animal Life	Dog-1
D9	12 Oct 2022	Floatables	Foam
D9	12 Oct 2022	Water Color	Green
D9	12 Oct 2022	Current Direction	N
D9	12 Oct 2022	Water Temp (C)	19
D9	12 Oct 2022	Wave Height Low (ft)	3
D9	12 Oct 2022	High Tide (ft)	5.76
D9	12 Oct 2022	High Tide Time	1041
D9	12 Oct 2022	Low Tide (ft)	1.56
D9	12 Oct 2022	Low Tide Time	435
D9	12 Oct 2022	Comments	Water clear; Surfer/Paddle boarder-1; Boater/Kayaker-5; Trash-1; Seagrass; Algae; Person/Walker/Jogger-1
D9	19 Oct 2022	Arrive Time	948
D9	19 Oct 2022	Weather	Sunny
D9	19 Oct 2022	Wind Speed (kts)	0
D9	19 Oct 2022	Wind Dir	
D9	19 Oct 2022	Animal Life	Dog-1; Seagull-2
D9	19 Oct 2022	Floatables	Foam
D9	19 Oct 2022	Water Color	Green
D9	19 Oct 2022	Current Direction	S
D9	19 Oct 2022	Water Temp (C)	18
D9	19 Oct 2022	Wave Height Low (ft)	3
D9	19 Oct 2022	High Tide (ft)	4.12
D9	19 Oct 2022	High Tide Time	717
D9	19 Oct 2022	Low Tide (ft)	0.65
D9	19 Oct 2022	Low Tide Time	18
D9	19 Oct 2022	Comments	Water clear; Surfer/Paddle boarder-6; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-5
D9	26 Oct 2022	Arrive Time	1033
D9	26 Oct 2022	Weather	Sunny
D9	26 Oct 2022	Wind Speed (kts)	4
D9	26 Oct 2022	Wind Dir	SW
D9	26 Oct 2022	Animal Life	
D9	26 Oct 2022	Floatables	Foam; Film
D9	26 Oct 2022	Water Color	Green
D9	26 Oct 2022	Current Direction	N
D9	26 Oct 2022	Water Temp (C)	20
D9	26 Oct 2022	Wave Height Low (ft)	4
D9	26 Oct 2022	High Tide (ft)	6.27
D9	26 Oct 2022	High Tide Time	941
D9	26 Oct 2022	Low Tide (ft)	1.21
D9	26 Oct 2022	Low Tide Time	332
D9	26 Oct 2022	Comments	Kelp; Seagrass; Algae
D10	05 Oct 2022	Arrive Time	843
D10	05 Oct 2022	Weather	Cloudy
D10	05 Oct 2022	Wind Speed (kts)	1.9
D10	05 Oct 2022	Wind Dir	W
D10	05 Oct 2022	Animal Life	Bird-1
D10	05 Oct 2022	Floatables	Foam
D10	05 Oct 2022	Water Color	Green
D10	05 Oct 2022	Current Direction	N
D10	05 Oct 2022	Water Temp (C)	18
D10	05 Oct 2022	Wave Height Low (ft)	4
D10	05 Oct 2022	High Tide (ft)	4.41
D10	05 Oct 2022	High Tide Time	727
D10	05 Oct 2022	Low Tide (ft)	-0.29
D10	05 Oct 2022	Low Tide Time	49

Station	Date	Parameter	Value
D10	05 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-41; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-6
D10	12 Oct 2022	Arrive Time	854
D10	12 Oct 2022	Weather	Overcast
D10	12 Oct 2022	Wind Speed (kts)	1.3
D10	12 Oct 2022	Wind Dir	W
D10	12 Oct 2022	Animal Life	Bird-2; Dog-1
D10	12 Oct 2022	Floatables	Foam
D10	12 Oct 2022	Water Color	Green
D10	12 Oct 2022	Current Direction	N
D10	12 Oct 2022	Water Temp (C)	20
D10	12 Oct 2022	Wave Height Low (ft)	2
D10	12 Oct 2022	High Tide (ft)	5.76
D10	12 Oct 2022	High Tide Time	1041
D10	12 Oct 2022	Low Tide (ft)	1.56
D10	12 Oct 2022	Low Tide Time	435
D10	12 Oct 2022	Comments	Water turbid; Boogie boarder/Swimmer-5; Surfer/Paddle boarder-6; Trash-2; Kelp; Seagrass; Algae; Person/Walker/Jogger-10
D10	19 Oct 2022	Arrive Time	1007
D10	19 Oct 2022	Weather	Sunny
D10	19 Oct 2022	Wind Speed (kts)	3.6
D10	19 Oct 2022	Wind Dir	NW
D10	19 Oct 2022	Animal Life	Bird-20; Seagull-3
D10	19 Oct 2022	Floatables	None
D10	19 Oct 2022	Water Color	Green
D10	19 Oct 2022	Current Direction	S
D10	19 Oct 2022	Water Temp (C)	18
D10	19 Oct 2022	Wave Height Low (ft)	4
D10	19 Oct 2022	High Tide (ft)	4.12
D10	19 Oct 2022	High Tide Time	717
D10	19 Oct 2022	Low Tide (ft)	0.65
D10	19 Oct 2022	Low Tide Time	18
D10	19 Oct 2022	Comments	Water clear; Boogie boarder/Swimmer-4; Surfer/Paddle boarder-21; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-30
D10	26 Oct 2022	Arrive Time	1045
D10	26 Oct 2022	Weather	Sunny
D10	26 Oct 2022	Wind Speed (kts)	5
D10	26 Oct 2022	Wind Dir	SW
D10	26 Oct 2022	Animal Life	Pelican-1
D10	26 Oct 2022	Floatables	Foam
D10	26 Oct 2022	Water Color	Green
D10	26 Oct 2022	Current Direction	N
D10	26 Oct 2022	Water Temp (C)	21
D10	26 Oct 2022	Wave Height Low (ft)	4
D10	26 Oct 2022	High Tide (ft)	6.27
D10	26 Oct 2022	High Tide Time	941
D10	26 Oct 2022	Low Tide (ft)	1.21
D10	26 Oct 2022	Low Tide Time	332
D10	26 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-25; Trash-2; Kelp; Seagrass; Person/Walker/Jogger-12
D10	27 Oct 2022	Arrive Time	1352
D10	27 Oct 2022	Weather	Sunny
D10	27 Oct 2022	Wind Speed (kts)	2.9
D10	27 Oct 2022	Wind Dir	W
D10	27 Oct 2022	Animal Life	

Station	Date	Parameter	Value
D10	27 Oct 2022	Floatables	Foam
D10	27 Oct 2022	Water Color	Brown
D10	27 Oct 2022	Current Direction	N
D10	27 Oct 2022	Water Temp (C)	20.2
D10	27 Oct 2022	Wave Height Low (ft)	3
D10	27 Oct 2022	High Tide (ft)	6.31
D10	27 Oct 2022	High Tide Time	1013
D10	27 Oct 2022	Low Tide (ft)	1.61
D10	27 Oct 2022	Low Tide Time	400
D10	27 Oct 2022	Comments	Resample; Water turbid; Boogie boarder/Swimmer-2; Surfer/Paddle boarder-19; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-33
D11	05 Oct 2022	Arrive Time	825
D11	05 Oct 2022	Weather	Cloudy
D11	05 Oct 2022	Wind Speed (kts)	2.8
D11	05 Oct 2022	Wind Dir	W
D11	05 Oct 2022	Animal Life	
D11	05 Oct 2022	Floatables	Foam
D11	05 Oct 2022	Water Color	Green
D11	05 Oct 2022	Current Direction	S
D11	05 Oct 2022	Water Temp (C)	18
D11	05 Oct 2022	Wave Height Low (ft)	4
D11	05 Oct 2022	High Tide (ft)	4.41
D11	05 Oct 2022	High Tide Time	727
D11	05 Oct 2022	Low Tide (ft)	-0.29
D11	05 Oct 2022	Low Tide Time	49
D11	05 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-30; Trash-1; Seagrass; Kelp; Algae; Person/Walker/Jogger-6
D11	12 Oct 2022	Arrive Time	907
D11	12 Oct 2022	Weather	Overcast
D11	12 Oct 2022	Wind Speed (kts)	3.3
D11	12 Oct 2022	Wind Dir	W
D11	12 Oct 2022	Animal Life	Dog-2
D11	12 Oct 2022	Floatables	None
D11	12 Oct 2022	Water Color	Green
D11	12 Oct 2022	Current Direction	N
D11	12 Oct 2022	Water Temp (C)	19
D11	12 Oct 2022	Wave Height Low (ft)	3
D11	12 Oct 2022	High Tide (ft)	5.76
D11	12 Oct 2022	High Tide Time	1041
D11	12 Oct 2022	Low Tide (ft)	1.56
D11	12 Oct 2022	Low Tide Time	435
D11	12 Oct 2022	Comments	Water clear; Surfer/Paddle boarder-13; Trash-2; Kelp; Seagrass; Algae; Debris; Person/Walker/Jogger-7
D11	19 Oct 2022	Arrive Time	1021
D11	19 Oct 2022	Weather	Sunny
D11	19 Oct 2022	Wind Speed (kts)	2.5
D11	19 Oct 2022	Wind Dir	NE
D11	19 Oct 2022	Animal Life	Bird-2; Seagull-2
D11	19 Oct 2022	Floatables	None
D11	19 Oct 2022	Water Color	Green
D11	19 Oct 2022	Current Direction	S
D11	19 Oct 2022	Water Temp (C)	19
D11	19 Oct 2022	Wave Height Low (ft)	3
D11	19 Oct 2022	High Tide (ft)	4.12
D11	19 Oct 2022	High Tide Time	717
D11	19 Oct 2022	Low Tide (ft)	0.65
D11	19 Oct 2022	Low Tide Time	18

Station	Date	Parameter	Value
D11	19 Oct 2022	Comments	Water clear; Surfer/Paddle boarder-26; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-22
D11	26 Oct 2022	Arrive Time	1104
D11	26 Oct 2022	Weather	Sunny
D11	26 Oct 2022	Wind Speed (kts)	4
D11	26 Oct 2022	Wind Dir	SW
D11	26 Oct 2022	Animal Life	Bird-3
D11	26 Oct 2022	Floatables	Foam; Film
D11	26 Oct 2022	Water Color	Green
D11	26 Oct 2022	Current Direction	N
D11	26 Oct 2022	Water Temp (C)	21
D11	26 Oct 2022	Wave Height Low (ft)	4
D11	26 Oct 2022	High Tide (ft)	6.27
D11	26 Oct 2022	High Tide Time	941
D11	26 Oct 2022	Low Tide (ft)	1.21
D11	26 Oct 2022	Low Tide Time	332
D11	26 Oct 2022	Comments	Water turbid; Boogie boarder/Swimmer-1; Surfer/Paddle boarder-17; Trash-2; Kelp; Seagrass; Algae; Person/Walker/Jogger-6
D12	05 Oct 2022	Arrive Time	805
D12	05 Oct 2022	Weather	Cloudy
D12	05 Oct 2022	Wind Speed (kts)	1.8
D12	05 Oct 2022	Wind Dir	W
D12	05 Oct 2022	Animal Life	Bird-2
D12	05 Oct 2022	Floatables	Foam
D12	05 Oct 2022	Water Color	Green
D12	05 Oct 2022	Current Direction	N
D12	05 Oct 2022	Water Temp (C)	17
D12	05 Oct 2022	Wave Height Low (ft)	4
D12	05 Oct 2022	High Tide (ft)	4.41
D12	05 Oct 2022	High Tide Time	727
D12	05 Oct 2022	Low Tide (ft)	-0.29
D12	05 Oct 2022	Low Tide Time	49
D12	05 Oct 2022	Comments	Water turbid; Surfer/Paddle boarder-9; Trash-1; Seagrass; Kelp; Person/Walker/Jogger-6
D12	12 Oct 2022	Arrive Time	956
D12	12 Oct 2022	Weather	Overcast
D12	12 Oct 2022	Wind Speed (kts)	1.8
D12	12 Oct 2022	Wind Dir	W
D12	12 Oct 2022	Animal Life	None
D12	12 Oct 2022	Floatables	None
D12	12 Oct 2022	Water Color	Green
D12	12 Oct 2022	Current Direction	N
D12	12 Oct 2022	Water Temp (C)	19
D12	12 Oct 2022	Wave Height Low (ft)	2
D12	12 Oct 2022	High Tide (ft)	5.76
D12	12 Oct 2022	High Tide Time	1041
D12	12 Oct 2022	Low Tide (ft)	1.56
D12	12 Oct 2022	Low Tide Time	435
D12	12 Oct 2022	Comments	Water clear; Surfer/Paddle boarder-2; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-8
D12	19 Oct 2022	Arrive Time	1049
D12	19 Oct 2022	Weather	Sunny
D12	19 Oct 2022	Wind Speed (kts)	3.1
D12	19 Oct 2022	Wind Dir	NW
D12	19 Oct 2022	Animal Life	None
D12	19 Oct 2022	Floatables	None

Station	Date	Parameter	Value
D12	19 Oct 2022	Water Color	Green
D12	19 Oct 2022	Current Direction	S
D12	19 Oct 2022	Water Temp (C)	18
D12	19 Oct 2022	Wave Height Low (ft)	2
D12	19 Oct 2022	High Tide (ft)	4.12
D12	19 Oct 2022	High Tide Time	717
D12	19 Oct 2022	Low Tide (ft)	0.65
D12	19 Oct 2022	Low Tide Time	18
D12	19 Oct 2022	Comments	Water clear; Boogie boarder/Swimmer-15; Trash-1; Kelp; Seagrass; Algae; Person/Walker/Jogger-30
D12	26 Oct 2022	Arrive Time	1138
D12	26 Oct 2022	Weather	Sunny
D12	26 Oct 2022	Wind Speed (kts)	4
D12	26 Oct 2022	Wind Dir	SW
D12	26 Oct 2022	Animal Life	Bird-2; Dolphin-3; Seagull-1
D12	26 Oct 2022	Floatables	None
D12	26 Oct 2022	Water Color	Green
D12	26 Oct 2022	Current Direction	N
D12	26 Oct 2022	Water Temp (C)	22
D12	26 Oct 2022	Wave Height Low (ft)	3
D12	26 Oct 2022	High Tide (ft)	6.27
D12	26 Oct 2022	High Tide Time	941
D12	26 Oct 2022	Low Tide (ft)	1.21
D12	26 Oct 2022	Low Tide Time	332
D12	26 Oct 2022	Comments	Water clear; Boogie boarder/Swimmer-2; Surfer/Paddle boarder-2; Trash-1; Kelp; Seagrass; Person/Walker/Jogger-14

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 Oct 2022	6	7	4	28	7	11	6	6
02 Oct 2022	6	7	4	28	7	11	6	6
03 Oct 2022	5	5	3	17	7	8	5	5
04 Oct 2022	5	5	3	17	7	8	5	5
05 Oct 2022	5	5	3	17	7	8	5	5
06 Oct 2022	5	5	3	17	7	8	5	5
07 Oct 2022	6	5	4	11	9	6	6	4
08 Oct 2022	6	5	4	11	9	6	6	4
09 Oct 2022	6	5	4	11	9	6	6	4
10 Oct 2022	6	5	4	11	9	6	6	4
11 Oct 2022	5	5	3	8	7	7	6	5
12 Oct 2022	5	5	3	8	7	7	6	5
13 Oct 2022	4	4	2	4	5	5	4	4
14 Oct 2022	4	4	2	4	5	5	4	4
15 Oct 2022	4	4	2	4	5	5	4	4
16 Oct 2022	4	4	2	4	5	5	4	4
17 Oct 2022	4	4	2	4	5	5	4	4
18 Oct 2022	3	3	2	3	5	6	4	4
19 Oct 2022	3	3	2	3	5	6	4	4
20 Oct 2022	4	4	2	2	4	4	3	4
21 Oct 2022	4	4	2	2	4	4	3	4
22 Oct 2022	4	4	2	2	4	4	3	4
23 Oct 2022	4	4	2	2	4	4	3	4
24 Oct 2022	4	4	2	2	4	4	3	4
25 Oct 2022	5	4	3	2	4	5	3	4
26 Oct 2022	5	4	3	2	4	5	3	4
27 Oct 2022	5	4	3	2	4	5	3	4
28 Oct 2022	5	4	3	2	4	5	3	4
29 Oct 2022	4	4	3	2	4	6	3	3
30 Oct 2022	4	4	3	2	4	6	3	3
31 Oct 2022	4	4	3	2	4	6	3	3

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

* 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
03 Oct 2022	IC							
11 Oct 2022	IC							
18 Oct 2022	IC							
25 Oct 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
03 Oct 2022	IC							
11 Oct 2022	IC							
18 Oct 2022	IC							
25 Oct 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
03 Oct 2022	IC							
11 Oct 2022	IC							
18 Oct 2022	IC							
25 Oct 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
03 Oct 2022	IC							
11 Oct 2022	IC							
18 Oct 2022	IC							
25 Oct 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	03 Oct 2022	804	1	<2	<2	<2	1.0	18.5	78.15	8.3	33.46	8.1
A1	03 Oct 2022	804	12	4e	<2	<2	0.5	15.3	85.04	7.3	33.36	8.0
A1	03 Oct 2022	804	18	<2	2e	<2	1.0	14.2	86.85	6.4	33.39	7.9
A1	11 Oct 2022	805	1	<2	<2	<2	1.0	18.8	84.87	8.2	33.45	8.1
A1	11 Oct 2022	805	12	<2	<2	<2	1.0	13.8	90.84	6.9	33.37	7.9
A1	11 Oct 2022	805	18	<2	<2	<2	1.0	13.6	91.29	6.8	33.38	7.9
A1	18 Oct 2022	816	1	<2	2e	<2	1.0	18.6	86.41	8.0	33.49	8.1
A1	18 Oct 2022	816	12	<2	2e	<2	1.0	16.1	86.56	7.2	33.42	8.1
A1	18 Oct 2022	816	18	<2	<2	<2	1.0	14.1	89.18	6.7	33.36	8.0
A1	25 Oct 2022	816	1	<2	<2	<2	1.0	18.2	83.15	7.7	33.49	8.1
A1	25 Oct 2022	816	12	26e	8e	<2	0.3	14.7	87.22	7.0	33.34	8.1
A1	25 Oct 2022	816	18	18e	4e	<2	0.2	14.0	88.85	6.8	33.34	8.1
A6	03 Oct 2022	837	1	<2	<2	<2	1.0	18.3	84.25	9.2	33.41	8.2
A6	03 Oct 2022	837	12	<2	<2	<2	1.0	16.1	83.94	7.9	33.39	8.1
A6	03 Oct 2022	837	18	2e	<2	<2	1.0	14.8	88.69	7.0	33.38	8.0
A6	11 Oct 2022	824	1	<2	<2	<2	1.0	19.2	75.29	9.9	33.44	8.3
A6	11 Oct 2022	824	12	4e	<2	<2	0.5	14.7	90.80	7.0	33.36	8.0
A6	11 Oct 2022	824	18	20e	4e	<2	0.2	13.9	90.41	6.5	33.38	8.0
A6	18 Oct 2022	841	1	2e	<2	<2	1.0	18.4	84.46	7.8	33.49	8.1
A6	18 Oct 2022	841	12	2e	2e	<2	1.0	14.3	90.19	6.6	33.38	8.0
A6	18 Oct 2022	841	18	<2	<2	<2	1.0	14.1	90.54	6.6	33.38	8.0
A6	25 Oct 2022	847	1	<2	<2	<2	1.0	18.8	84.89	7.7	33.54	8.2
A6	25 Oct 2022	847	12	6e	12e	<2	2.0	15.2	89.32	7.2	33.34	8.1
A6	25 Oct 2022	847	18	14e	14e	<2	1.0	14.4	89.55	7.0	33.34	8.1
A7	03 Oct 2022	818	1	<2	<2	<2	1.0	18.4	80.60	8.7	33.44	8.2
A7	03 Oct 2022	818	12	<2	2e	<2	1.0	15.1	85.18	7.7	33.38	8.0
A7	03 Oct 2022	818	18	<2	<2	<2	1.0	15.0	86.83	7.2	33.39	8.0
A7	11 Oct 2022	816	1	<2	<2	<2	1.0	19.2	84.88	8.7	33.47	8.2
A7	11 Oct 2022	816	12	<2	<2	<2	1.0	14.4	91.51	7.4	33.35	8.0
A7	11 Oct 2022	816	18	2e	<2	<2	1.0	13.7	90.55	6.5	33.38	7.9
A7	18 Oct 2022	829	1	<2	<2	<2	1.0	18.2	84.70	7.9	33.47	8.1
A7	18 Oct 2022	829	12	<2	<2	<2	1.0	15.7	88.67	6.7	33.42	8.1
A7	18 Oct 2022	829	18	2e	<2	<2	1.0	14.3	89.05	5.7	33.40	8.0
A7	25 Oct 2022	833	1	<2	<2	<2	1.0	18.3	79.84	7.5	33.50	8.1
A7	25 Oct 2022	833	12	6e	<2	<2	0.3	14.9	89.36	7.3	33.34	8.1
A7	25 Oct 2022	833	18	18e	4e	<2	0.2	14.2	89.30	7.0	33.34	8.1
C4	03 Oct 2022	948	1	<2	<2	<2	1.0	18.4	79.45	8.7	33.41	8.2
C4	03 Oct 2022	948	3	2e	<2	<2	1.0	18.1	79.12	8.3	33.41	8.2
C4	03 Oct 2022	948	9	<2	<2	<2	1.0	16.5	84.44	6.6	33.40	8.0

Station	Date	Time	Depth	Total	Fecal	Enteric	F:T	Temp	XMS	DO	Sal	pH
C4	11 Oct 2022	930	1	<2	<2	<2	1.0	19.3	86.02	8.6	33.48	8.2
C4	11 Oct 2022	930	3	<2	<2	<2	1.0	19.0	85.76	7.9	33.46	8.2
C4	11 Oct 2022	930	9	<2	<2	<2	1.0	15.2	87.22	7.0	33.36	8.0
C4	18 Oct 2022	948	1	<2	<2	<2	1.0	19.0	75.59	9.5	33.48	8.2
C4	18 Oct 2022	948	3	<2	2e	<2	1.0	18.2	61.73	8.6	33.47	8.3
C4	18 Oct 2022	948	9	<2	<2	<2	1.0	15.9	85.38	5.6	33.40	8.1
C4	25 Oct 2022	1003	1	<2	<2	<2	1.0	18.6	80.96	7.7	33.50	8.2
C4	25 Oct 2022	1003	3	2e	<2	<2	1.0	18.5	81.23	7.6	33.50	8.2
C4	25 Oct 2022	1003	9	<2	<2	<2	1.0	16.9	82.95	6.5	33.41	8.2
C5	03 Oct 2022	935	1	<20	<2	<2	0.1	18.8	77.87	8.0	33.44	8.1
C5	03 Oct 2022	935	3	<2	<2	<2	1.0	18.7	72.34	8.1	33.44	8.1
C5	03 Oct 2022	935	9	4e	<2	<2	0.5	15.9	86.56	6.1	33.38	8.0
C5	11 Oct 2022	921	1	<2	<2	<2	1.0	19.5	84.95	8.9	33.48	8.2
C5	11 Oct 2022	921	3	<2	<2	<2	1.0	19.1	81.45	8.6	33.45	8.2
C5	11 Oct 2022	921	9	2e	<2	<2	1.0	15.9	87.11	6.4	33.38	8.0
C5	18 Oct 2022	941	1	<2	<2	<2	1.0	19.1	60.77	8.5	33.48	8.2
C5	18 Oct 2022	941	3	4e	<2	<2	0.5	18.0	49.17	7.8	33.47	8.2
C5	18 Oct 2022	941	9	2e	<2	<2	1.0	15.8	85.08	4.1	33.41	8.1
C5	25 Oct 2022	953	1	2e	<2	<2	1.0	18.7	65.17	6.4	33.53	8.1
C5	25 Oct 2022	953	3	4e	<2	<2	0.5	18.6	61.41	6.4	33.53	8.1
C5	25 Oct 2022	953	9	<20	2e	<2	0.1	15.9	46.79	6.4	33.38	8.1
C6	03 Oct 2022	924	1	2e	<2	<2	1.0	18.3	74.65	8.9	33.43	8.2
C6	03 Oct 2022	924	3	2e	<2	<2	1.0	17.9	76.13	8.9	33.41	8.2
C6	03 Oct 2022	924	9	<2	<2	<2	1.0	16.9	84.95	8.0	33.41	8.1
C6	11 Oct 2022	910	1	<20	<2	<2	0.1	19.5	75.06	10.3	33.44	8.3
C6	11 Oct 2022	910	3	<2	<2	<2	1.0	19.3	76.95	8.8	33.43	8.2
C6	11 Oct 2022	910	9	<2	<2	4e	1.0	16.6	87.96	6.7	33.38	8.0
C6	18 Oct 2022	927	1	<20	<2	<2	0.1	19.1	77.93	6.8	33.44	8.1
C6	18 Oct 2022	927	3	<2	2e	<2	1.0	18.2	73.03	7.4	33.47	8.1
C6	18 Oct 2022	927	9	<2	<2	<2	1.0	15.7	84.94	5.5	33.41	8.1
C6	25 Oct 2022	942	1	<2	<2	<2	1.0	18.9	75.55	6.9	33.54	8.1
C6	25 Oct 2022	942	3	<20	4e	<2	0.2	18.8	73.34	6.8	33.54	8.1
C6	25 Oct 2022	942	9	2e	<2	<2	1.0	15.8	77.60	6.7	33.37	8.1
C7	03 Oct 2022	852	1	<2	<2	4e	1.0	18.5	81.74	8.8	33.45	8.2
C7	03 Oct 2022	852	12	<2	2e	<2	1.0	16.8	84.38	7.9	33.37	8.1
C7	03 Oct 2022	852	18	4e	<2	<2	0.5	14.1	89.42	6.1	33.42	7.9
C7	11 Oct 2022	840	1	<2	<2	<2	1.0	19.5	82.44	9.7	33.46	8.3
C7	11 Oct 2022	840	12	<2	<2	<2	1.0	16.4	87.51	7.2	33.38	8.0
C7	11 Oct 2022	840	18	6e	4e	<2	0.7	14.4	89.72	6.6	33.35	8.0
C7	18 Oct 2022	856	1	<2	6e	<2	3.0	18.1	79.85	7.7	33.47	8.1
C7	18 Oct 2022	856	12	<2	<2	<2	1.0	14.2	90.23	6.1	33.38	8.0
C7	18 Oct 2022	856	18	4e	<2	<2	0.5	13.3	90.46	6.0	33.38	8.0
C7	25 Oct 2022	903	1	<2	<2	8e	1.0	18.8	65.62	7.2	33.53	8.1
C7	25 Oct 2022	903	12	4e	<2	<2	0.5	16.0	88.49	7.1	33.39	8.1
C7	25 Oct 2022	903	18	2e	<2	<2	1.0	14.8	89.32	7.1	33.36	8.1

Station	Date	Time	Depth	Total	Fecal	Enter	F:T	Temp	XMS	DO	Sal	pH
C8	03 Oct 2022	904	1	<2	<2	20e	1.0	18.6	53.76	9.4	33.44	8.2
C8	03 Oct 2022	904	12	<2	<2	<2	1.0	16.3	85.09	7.2	33.40	8.1
C8	03 Oct 2022	904	18	2e	<2	<2	1.0	14.3	89.61	6.6	33.39	8.0
C8	11 Oct 2022	851	1	<2	<2	<2	1.0	19.7	86.59	9.5	33.48	8.3
C8	11 Oct 2022	851	12	<20	<2	<2	0.1	17.1	87.35	7.5	33.39	8.1
C8	11 Oct 2022	851	18	<20	<2	<2	0.1	15.4	90.02	6.7	33.36	8.0
C8	18 Oct 2022	907	1	<2	<2	<2	1.0	18.5	78.61	7.6	33.48	8.1
C8	18 Oct 2022	907	12	<2	<2	<2	1.0	13.7	90.82	6.3	33.37	8.0
C8	18 Oct 2022	907	18	4e	2e	<2	0.5	13.4	90.42	6.2	33.38	8.0
C8	25 Oct 2022	915	1	<2	<2	<2	1.0	18.8	75.56	7.4	33.53	8.2
C8	25 Oct 2022	915	12	<2	<2	<2	1.0	16.6	86.76	7.2	33.40	8.1
C8	25 Oct 2022	915	18	<2	<2	<2	1.0	15.3	88.99	7.1	33.37	8.1

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	03 Oct 2022	Depth (m)	19
A1	03 Oct 2022	Arrive Time	804
A1	03 Oct 2022	Depart Time	809
A1	03 Oct 2022	Air Temp (C)	19.3
A1	03 Oct 2022	Weather	Overcast
A1	03 Oct 2022	Visibility (mi)	9
A1	03 Oct 2022	Wind Speed (kts)	3.4
A1	03 Oct 2022	Wind Dir	NW
A1	03 Oct 2022	Water Color	Brownish-Green
A1	03 Oct 2022	Wave Ht Low (ft)	3
A1	03 Oct 2022	Wave Period (sec)	13
A1	03 Oct 2022	Sea State	Regular Swell
A1	03 Oct 2022	High Tide (ft)	5.12
A1	03 Oct 2022	High Tide Time	2300
A1	03 Oct 2022	Low Tide (ft)	-0.04
A1	03 Oct 2022	Low Tide Time	654
A1	03 Oct 2022	Comments	Kelp Debris
A1	11 Oct 2022	Depth (m)	18
A1	11 Oct 2022	Arrive Time	805
A1	11 Oct 2022	Depart Time	813
A1	11 Oct 2022	Air Temp (C)	19.3
A1	11 Oct 2022	Weather	Overcast
A1	11 Oct 2022	Visibility (mi)	10
A1	11 Oct 2022	Wind Speed (kts)	0.1
A1	11 Oct 2022	Wind Dir	N
A1	11 Oct 2022	Water Color	Blueish-Green
A1	11 Oct 2022	Wave Ht Low (ft)	3.3
A1	11 Oct 2022	Wave Period (sec)	17
A1	11 Oct 2022	Sea State	Calm
A1	11 Oct 2022	High Tide (ft)	5.91
A1	11 Oct 2022	High Tide Time	1718
A1	11 Oct 2022	Low Tide (ft)	0.04
A1	11 Oct 2022	Low Tide Time	0
A1	11 Oct 2022	Comments	Kelp Debris; Lobster Floats
A1	18 Oct 2022	Depth (m)	19
A1	18 Oct 2022	Arrive Time	816
A1	18 Oct 2022	Depart Time	821
A1	18 Oct 2022	Air Temp (C)	18.6
A1	18 Oct 2022	Weather	Clear
A1	18 Oct 2022	Visibility (mi)	12
A1	18 Oct 2022	Wind Speed (kts)	3.3
A1	18 Oct 2022	Wind Dir	NE
A1	18 Oct 2022	Water Color	Blue
A1	18 Oct 2022	Wave Ht Low (ft)	3
A1	18 Oct 2022	Wave Period (sec)	14
A1	18 Oct 2022	Sea State	Light Chop
A1	18 Oct 2022	High Tide (ft)	4.2
A1	18 Oct 2022	High Tide Time	2348
A1	18 Oct 2022	Low Tide (ft)	0.68
A1	18 Oct 2022	Low Tide Time	654
A1	18 Oct 2022	Comments	none
A1	25 Oct 2022	Depth (m)	18
A1	25 Oct 2022	Arrive Time	816

Station	Date	Parameter	Value
A1	25 Oct 2022	Depart Time	825
A1	25 Oct 2022	Air Temp (C)	16.5
A1	25 Oct 2022	Weather	Clear
A1	25 Oct 2022	Visibility (mi)	10
A1	25 Oct 2022	Wind Speed (kts)	6
A1	25 Oct 2022	Wind Dir	E
A1	25 Oct 2022	Water Color	Greenish-Blue
A1	25 Oct 2022	Wave Ht Low (ft)	3.3
A1	25 Oct 2022	Wave Period (sec)	15
A1	25 Oct 2022	Sea State	Confused Swell
A1	25 Oct 2022	High Tide (ft)	6.01
A1	25 Oct 2022	High Tide Time	1618
A1	25 Oct 2022	Low Tide (ft)	-0.23
A1	25 Oct 2022	Low Tide Time	2254
A1	25 Oct 2022	Comments	Recast due to bubbles; Used 2nd cast; Kelp Debris; Lobster Traps
A6	03 Oct 2022	Depth (m)	19
A6	03 Oct 2022	Arrive Time	837
A6	03 Oct 2022	Depart Time	842
A6	03 Oct 2022	Air Temp (C)	19.3
A6	03 Oct 2022	Weather	Overcast
A6	03 Oct 2022	Visibility (mi)	9
A6	03 Oct 2022	Wind Speed (kts)	3.1
A6	03 Oct 2022	Wind Dir	NW
A6	03 Oct 2022	Water Color	Blueish-Green
A6	03 Oct 2022	Wave Ht Low (ft)	3
A6	03 Oct 2022	Wave Period (sec)	13
A6	03 Oct 2022	Sea State	Regular Swell
A6	03 Oct 2022	High Tide (ft)	5.12
A6	03 Oct 2022	High Tide Time	2300
A6	03 Oct 2022	Low Tide (ft)	-0.04
A6	03 Oct 2022	Low Tide Time	654
A6	03 Oct 2022	Comments	none
A6	11 Oct 2022	Depth (m)	16
A6	11 Oct 2022	Arrive Time	824
A6	11 Oct 2022	Depart Time	833
A6	11 Oct 2022	Air Temp (C)	19.3
A6	11 Oct 2022	Weather	Overcast
A6	11 Oct 2022	Visibility (mi)	10
A6	11 Oct 2022	Wind Speed (kts)	0
A6	11 Oct 2022	Wind Dir	N
A6	11 Oct 2022	Water Color	Blueish-Green
A6	11 Oct 2022	Wave Ht Low (ft)	3.3
A6	11 Oct 2022	Wave Period (sec)	17
A6	11 Oct 2022	Sea State	Calm
A6	11 Oct 2022	High Tide (ft)	5.91
A6	11 Oct 2022	High Tide Time	1718
A6	11 Oct 2022	Low Tide (ft)	0.04
A6	11 Oct 2022	Low Tide Time	0
A6	11 Oct 2022	Comments	Kelp; Kelp Debris; Lobster Floats
A6	18 Oct 2022	Depth (m)	19
A6	18 Oct 2022	Arrive Time	841
A6	18 Oct 2022	Depart Time	845
A6	18 Oct 2022	Air Temp (C)	19.1
A6	18 Oct 2022	Weather	Clear
A6	18 Oct 2022	Visibility (mi)	12
A6	18 Oct 2022	Wind Speed (kts)	3
A6	18 Oct 2022	Wind Dir	N

Station	Date	Parameter	Value
A6	18 Oct 2022	Water Color	Blue
A6	18 Oct 2022	Wave Ht Low (ft)	3
A6	18 Oct 2022	Wave Period (sec)	14
A6	18 Oct 2022	Sea State	Light Chop
A6	18 Oct 2022	High Tide (ft)	4.2
A6	18 Oct 2022	High Tide Time	2348
A6	18 Oct 2022	Low Tide (ft)	0.68
A6	18 Oct 2022	Low Tide Time	654
A6	18 Oct 2022	Comments	none
A6	25 Oct 2022	Depth (m)	20
A6	25 Oct 2022	Arrive Time	847
A6	25 Oct 2022	Depart Time	854
A6	25 Oct 2022	Air Temp (C)	18.1
A6	25 Oct 2022	Weather	Clear
A6	25 Oct 2022	Visibility (mi)	10
A6	25 Oct 2022	Wind Speed (kts)	2.2
A6	25 Oct 2022	Wind Dir	E
A6	25 Oct 2022	Water Color	Greenish-Blue
A6	25 Oct 2022	Wave Ht Low (ft)	3.3
A6	25 Oct 2022	Wave Period (sec)	15
A6	25 Oct 2022	Sea State	Confused Swell
A6	25 Oct 2022	High Tide (ft)	6.01
A6	25 Oct 2022	High Tide Time	1618
A6	25 Oct 2022	Low Tide (ft)	-0.23
A6	25 Oct 2022	Low Tide Time	2254
A6	25 Oct 2022	Comments	Kelp; Kelp Debris; Lobster Floats
A7	03 Oct 2022	Depth (m)	18
A7	03 Oct 2022	Arrive Time	818
A7	03 Oct 2022	Depart Time	827
A7	03 Oct 2022	Air Temp (C)	19.3
A7	03 Oct 2022	Weather	Overcast
A7	03 Oct 2022	Visibility (mi)	9
A7	03 Oct 2022	Wind Speed (kts)	4
A7	03 Oct 2022	Wind Dir	NW
A7	03 Oct 2022	Water Color	Brownish-Green
A7	03 Oct 2022	Wave Ht Low (ft)	3
A7	03 Oct 2022	Wave Period (sec)	13
A7	03 Oct 2022	Sea State	Regular Swell
A7	03 Oct 2022	High Tide (ft)	5.12
A7	03 Oct 2022	High Tide Time	2300
A7	03 Oct 2022	Low Tide (ft)	-0.04
A7	03 Oct 2022	Low Tide Time	654
A7	03 Oct 2022	Comments	Bubble on 1st cast, did not get depth on 2nd cast, used 3rd cast
A7	11 Oct 2022	Depth (m)	20
A7	11 Oct 2022	Arrive Time	816
A7	11 Oct 2022	Depart Time	821
A7	11 Oct 2022	Air Temp (C)	19.3
A7	11 Oct 2022	Weather	Overcast
A7	11 Oct 2022	Visibility (mi)	10
A7	11 Oct 2022	Wind Speed (kts)	0
A7	11 Oct 2022	Wind Dir	N
A7	11 Oct 2022	Water Color	Blueish-Green
A7	11 Oct 2022	Wave Ht Low (ft)	3.3
A7	11 Oct 2022	Wave Period (sec)	17
A7	11 Oct 2022	Sea State	Calm
A7	11 Oct 2022	High Tide (ft)	5.91
A7	11 Oct 2022	High Tide Time	1718

Station	Date	Parameter	Value
A7	11 Oct 2022	Low Tide (ft)	0.04
A7	11 Oct 2022	Low Tide Time	0
A7	11 Oct 2022	Comments	Kelp; Kelp Debris; Lobster Floats
A7	18 Oct 2022	Depth (m)	19
A7	18 Oct 2022	Arrive Time	829
A7	18 Oct 2022	Depart Time	834
A7	18 Oct 2022	Air Temp (C)	18.9
A7	18 Oct 2022	Weather	Clear
A7	18 Oct 2022	Visibility (mi)	12
A7	18 Oct 2022	Wind Speed (kts)	3.4
A7	18 Oct 2022	Wind Dir	NE
A7	18 Oct 2022	Water Color	Blue
A7	18 Oct 2022	Wave Ht Low (ft)	3
A7	18 Oct 2022	Wave Period (sec)	14
A7	18 Oct 2022	Sea State	Light Chop
A7	18 Oct 2022	High Tide (ft)	4.2
A7	18 Oct 2022	High Tide Time	2348
A7	18 Oct 2022	Low Tide (ft)	0.68
A7	18 Oct 2022	Low Tide Time	654
A7	18 Oct 2022	Comments	none
A7	25 Oct 2022	Depth (m)	19
A7	25 Oct 2022	Arrive Time	833
A7	25 Oct 2022	Depart Time	842
A7	25 Oct 2022	Air Temp (C)	17.5
A7	25 Oct 2022	Weather	Clear
A7	25 Oct 2022	Visibility (mi)	10
A7	25 Oct 2022	Wind Speed (kts)	5
A7	25 Oct 2022	Wind Dir	E
A7	25 Oct 2022	Water Color	Greenish-Blue
A7	25 Oct 2022	Wave Ht Low (ft)	3.3
A7	25 Oct 2022	Wave Period (sec)	15
A7	25 Oct 2022	Sea State	Confused Swell
A7	25 Oct 2022	High Tide (ft)	6.01
A7	25 Oct 2022	High Tide Time	1618
A7	25 Oct 2022	Low Tide (ft)	-0.23
A7	25 Oct 2022	Low Tide Time	2254
A7	25 Oct 2022	Comments	Fishing vessel on station; Kelp Debris; Lobster Traps
C4	03 Oct 2022	Depth (m)	10
C4	03 Oct 2022	Arrive Time	948
C4	03 Oct 2022	Depart Time	953
C4	03 Oct 2022	Air Temp (C)	19.6
C4	03 Oct 2022	Weather	Overcast
C4	03 Oct 2022	Visibility (mi)	9
C4	03 Oct 2022	Wind Speed (kts)	2.3
C4	03 Oct 2022	Wind Dir	NW
C4	03 Oct 2022	Water Color	Greenish-Brown
C4	03 Oct 2022	Wave Ht Low (ft)	3
C4	03 Oct 2022	Wave Period (sec)	13
C4	03 Oct 2022	Sea State	Regular Swell
C4	03 Oct 2022	High Tide (ft)	5.12
C4	03 Oct 2022	High Tide Time	2300
C4	03 Oct 2022	Low Tide (ft)	-0.04
C4	03 Oct 2022	Low Tide Time	654
C4	03 Oct 2022	Comments	Kelp Debris; Lobster Floats
C4	11 Oct 2022	Depth (m)	13
C4	11 Oct 2022	Arrive Time	930
C4	11 Oct 2022	Depart Time	934

Station	Date	Parameter	Value
C4	11 Oct 2022	Air Temp (C)	19.5
C4	11 Oct 2022	Weather	Overcast
C4	11 Oct 2022	Visibility (mi)	10
C4	11 Oct 2022	Wind Speed (kts)	0.8
C4	11 Oct 2022	Wind Dir	NE
C4	11 Oct 2022	Water Color	Blueish-Green
C4	11 Oct 2022	Wave Ht Low (ft)	3.3
C4	11 Oct 2022	Wave Period (sec)	17
C4	11 Oct 2022	Sea State	Regular Swell
C4	11 Oct 2022	High Tide (ft)	5.91
C4	11 Oct 2022	High Tide Time	1718
C4	11 Oct 2022	Low Tide (ft)	0.04
C4	11 Oct 2022	Low Tide Time	0
C4	11 Oct 2022	Comments	Kelp Debris; Lobster Floats
C4	18 Oct 2022	Depth (m)	10
C4	18 Oct 2022	Arrive Time	948
C4	18 Oct 2022	Depart Time	953
C4	18 Oct 2022	Air Temp (C)	19.6
C4	18 Oct 2022	Weather	Clear
C4	18 Oct 2022	Visibility (mi)	12
C4	18 Oct 2022	Wind Speed (kts)	5.7
C4	18 Oct 2022	Wind Dir	SW
C4	18 Oct 2022	Water Color	Reddish-Brown
C4	18 Oct 2022	Wave Ht Low (ft)	3
C4	18 Oct 2022	Wave Period (sec)	14
C4	18 Oct 2022	Sea State	Light Chop
C4	18 Oct 2022	High Tide (ft)	4.2
C4	18 Oct 2022	High Tide Time	2348
C4	18 Oct 2022	Low Tide (ft)	0.68
C4	18 Oct 2022	Low Tide Time	654
C4	18 Oct 2022	Comments	Bloom visible
C4	25 Oct 2022	Depth (m)	11
C4	25 Oct 2022	Arrive Time	1003
C4	25 Oct 2022	Depart Time	1006
C4	25 Oct 2022	Air Temp (C)	17.9
C4	25 Oct 2022	Weather	Clear
C4	25 Oct 2022	Visibility (mi)	10
C4	25 Oct 2022	Wind Speed (kts)	2.5
C4	25 Oct 2022	Wind Dir	E
C4	25 Oct 2022	Water Color	Green
C4	25 Oct 2022	Wave Ht Low (ft)	3.3
C4	25 Oct 2022	Wave Period (sec)	15
C4	25 Oct 2022	Sea State	Regular Swell
C4	25 Oct 2022	High Tide (ft)	6.01
C4	25 Oct 2022	High Tide Time	1618
C4	25 Oct 2022	Low Tide (ft)	-0.23
C4	25 Oct 2022	Low Tide Time	2254
C4	25 Oct 2022	Comments	Kelp; Kelp Debris; Lobster Floats
C5	03 Oct 2022	Depth (m)	10
C5	03 Oct 2022	Arrive Time	935
C5	03 Oct 2022	Depart Time	940
C5	03 Oct 2022	Air Temp (C)	19.5
C5	03 Oct 2022	Weather	Overcast
C5	03 Oct 2022	Visibility (mi)	9
C5	03 Oct 2022	Wind Speed (kts)	1.9
C5	03 Oct 2022	Wind Dir	NW
C5	03 Oct 2022	Water Color	Greenish-Brown
C5	03 Oct 2022	Wave Ht Low (ft)	3

Station	Date	Parameter	Value
C5	03 Oct 2022	Wave Period (sec)	13
C5	03 Oct 2022	Sea State	Regular Swell
C5	03 Oct 2022	High Tide (ft)	5.12
C5	03 Oct 2022	High Tide Time	2300
C5	03 Oct 2022	Low Tide (ft)	-0.04
C5	03 Oct 2022	Low Tide Time	654
C5	03 Oct 2022	Comments	Kelp Debris; Lobster Floats
C5	11 Oct 2022	Depth (m)	12
C5	11 Oct 2022	Arrive Time	921
C5	11 Oct 2022	Depart Time	925
C5	11 Oct 2022	Air Temp (C)	19.6
C5	11 Oct 2022	Weather	Overcast
C5	11 Oct 2022	Visibility (mi)	10
C5	11 Oct 2022	Wind Speed (kts)	0
C5	11 Oct 2022	Wind Dir	E
C5	11 Oct 2022	Water Color	Blueish-Green
C5	11 Oct 2022	Wave Ht Low (ft)	3.3
C5	11 Oct 2022	Wave Period (sec)	17
C5	11 Oct 2022	Sea State	Regular Swell
C5	11 Oct 2022	High Tide (ft)	5.91
C5	11 Oct 2022	High Tide Time	1718
C5	11 Oct 2022	Low Tide (ft)	0.04
C5	11 Oct 2022	Low Tide Time	0
C5	11 Oct 2022	Comments	Kelp Debris; Lobster Floats
C5	18 Oct 2022	Depth (m)	10
C5	18 Oct 2022	Arrive Time	941
C5	18 Oct 2022	Depart Time	942
C5	18 Oct 2022	Air Temp (C)	19.5
C5	18 Oct 2022	Weather	Clear
C5	18 Oct 2022	Visibility (mi)	12
C5	18 Oct 2022	Wind Speed (kts)	5.8
C5	18 Oct 2022	Wind Dir	NW
C5	18 Oct 2022	Water Color	Reddish-Brown
C5	18 Oct 2022	Wave Ht Low (ft)	3
C5	18 Oct 2022	Wave Period (sec)	14
C5	18 Oct 2022	Sea State	Light Chop
C5	18 Oct 2022	High Tide (ft)	4.2
C5	18 Oct 2022	High Tide Time	2348
C5	18 Oct 2022	Low Tide (ft)	0.68
C5	18 Oct 2022	Low Tide Time	654
C5	18 Oct 2022	Comments	Bloom visible
C5	25 Oct 2022	Depth (m)	10
C5	25 Oct 2022	Arrive Time	953
C5	25 Oct 2022	Depart Time	957
C5	25 Oct 2022	Air Temp (C)	18.8
C5	25 Oct 2022	Weather	Clear
C5	25 Oct 2022	Visibility (mi)	10
C5	25 Oct 2022	Wind Speed (kts)	0
C5	25 Oct 2022	Wind Dir	SW
C5	25 Oct 2022	Water Color	Green
C5	25 Oct 2022	Wave Ht Low (ft)	3.3
C5	25 Oct 2022	Wave Period (sec)	15
C5	25 Oct 2022	Sea State	Regular Swell
C5	25 Oct 2022	High Tide (ft)	6.01
C5	25 Oct 2022	High Tide Time	1618
C5	25 Oct 2022	Low Tide (ft)	-0.23
C5	25 Oct 2022	Low Tide Time	2254
C5	25 Oct 2022	Comments	Kelp; Kelp Debris; Lobster Floats

Station	Date	Parameter	Value
C6	03 Oct 2022	Depth (m)	9
C6	03 Oct 2022	Arrive Time	924
C6	03 Oct 2022	Depart Time	929
C6	03 Oct 2022	Air Temp (C)	19.5
C6	03 Oct 2022	Weather	Overcast
C6	03 Oct 2022	Visibility (mi)	9
C6	03 Oct 2022	Wind Speed (kts)	1.6
C6	03 Oct 2022	Wind Dir	NW
C6	03 Oct 2022	Water Color	Greenish-Brown
C6	03 Oct 2022	Wave Ht Low (ft)	3
C6	03 Oct 2022	Wave Period (sec)	13
C6	03 Oct 2022	Sea State	Regular Swell
C6	03 Oct 2022	High Tide (ft)	5.12
C6	03 Oct 2022	High Tide Time	2300
C6	03 Oct 2022	Low Tide (ft)	-0.04
C6	03 Oct 2022	Low Tide Time	654
C6	03 Oct 2022	Comments	Kelp Debris; Lobster Floats
C6	11 Oct 2022	Depth (m)	10
C6	11 Oct 2022	Arrive Time	910
C6	11 Oct 2022	Depart Time	916
C6	11 Oct 2022	Air Temp (C)	19.6
C6	11 Oct 2022	Weather	Overcast
C6	11 Oct 2022	Visibility (mi)	10
C6	11 Oct 2022	Wind Speed (kts)	0.7
C6	11 Oct 2022	Wind Dir	E
C6	11 Oct 2022	Water Color	Blueish-Green
C6	11 Oct 2022	Wave Ht Low (ft)	3.3
C6	11 Oct 2022	Wave Period (sec)	17
C6	11 Oct 2022	Sea State	Regular Swell
C6	11 Oct 2022	High Tide (ft)	5.91
C6	11 Oct 2022	High Tide Time	1718
C6	11 Oct 2022	Low Tide (ft)	0.04
C6	11 Oct 2022	Low Tide Time	0
C6	11 Oct 2022	Comments	Kelp Debris; Lobster Floats
C6	18 Oct 2022	Depth (m)	9
C6	18 Oct 2022	Arrive Time	927
C6	18 Oct 2022	Depart Time	932
C6	18 Oct 2022	Air Temp (C)	19.7
C6	18 Oct 2022	Weather	Clear
C6	18 Oct 2022	Visibility (mi)	12
C6	18 Oct 2022	Wind Speed (kts)	1.8
C6	18 Oct 2022	Wind Dir	N
C6	18 Oct 2022	Water Color	Greenish-Blue
C6	18 Oct 2022	Wave Ht Low (ft)	3
C6	18 Oct 2022	Wave Period (sec)	14
C6	18 Oct 2022	Sea State	Light Chop
C6	18 Oct 2022	High Tide (ft)	4.2
C6	18 Oct 2022	High Tide Time	2348
C6	18 Oct 2022	Low Tide (ft)	0.68
C6	18 Oct 2022	Low Tide Time	654
C6	18 Oct 2022	Comments	none
C6	25 Oct 2022	Depth (m)	10
C6	25 Oct 2022	Arrive Time	942
C6	25 Oct 2022	Depart Time	946
C6	25 Oct 2022	Air Temp (C)	18.5
C6	25 Oct 2022	Weather	Clear
C6	25 Oct 2022	Visibility (mi)	10

Station	Date	Parameter	Value
C6	25 Oct 2022	Wind Speed (kts)	2.8
C6	25 Oct 2022	Wind Dir	NW
C6	25 Oct 2022	Water Color	Green
C6	25 Oct 2022	Wave Ht Low (ft)	3.3
C6	25 Oct 2022	Wave Period (sec)	15
C6	25 Oct 2022	Sea State	Regular Swell
C6	25 Oct 2022	High Tide (ft)	6.01
C6	25 Oct 2022	High Tide Time	1618
C6	25 Oct 2022	Low Tide (ft)	-0.23
C6	25 Oct 2022	Low Tide Time	2254
C6	25 Oct 2022	Comments	Kelp; Kelp Debris; Lobster Floats
C7	03 Oct 2022	Depth (m)	18
C7	03 Oct 2022	Arrive Time	852
C7	03 Oct 2022	Depart Time	857
C7	03 Oct 2022	Air Temp (C)	19.6
C7	03 Oct 2022	Weather	Overcast
C7	03 Oct 2022	Visibility (mi)	9
C7	03 Oct 2022	Wind Speed (kts)	3.7
C7	03 Oct 2022	Wind Dir	NW
C7	03 Oct 2022	Water Color	Greenish-Brown
C7	03 Oct 2022	Wave Ht Low (ft)	3
C7	03 Oct 2022	Wave Period (sec)	13
C7	03 Oct 2022	Sea State	Regular Swell
C7	03 Oct 2022	High Tide (ft)	5.12
C7	03 Oct 2022	High Tide Time	2300
C7	03 Oct 2022	Low Tide (ft)	-0.04
C7	03 Oct 2022	Low Tide Time	654
C7	03 Oct 2022	Comments	Kelp Debris
C7	11 Oct 2022	Depth (m)	18
C7	11 Oct 2022	Arrive Time	840
C7	11 Oct 2022	Depart Time	845
C7	11 Oct 2022	Air Temp (C)	
C7	11 Oct 2022	Weather	Overcast
C7	11 Oct 2022	Visibility (mi)	10
C7	11 Oct 2022	Wind Speed (kts)	
C7	11 Oct 2022	Wind Dir	
C7	11 Oct 2022	Water Color	Blueish-Green
C7	11 Oct 2022	Wave Ht Low (ft)	3.3
C7	11 Oct 2022	Wave Period (sec)	17
C7	11 Oct 2022	Sea State	Regular Swell
C7	11 Oct 2022	High Tide (ft)	5.91
C7	11 Oct 2022	High Tide Time	1718
C7	11 Oct 2022	Low Tide (ft)	0.04
C7	11 Oct 2022	Low Tide Time	0
C7	11 Oct 2022	Comments	Kelp Debris; Lobster Floats
C7	18 Oct 2022	Depth (m)	18
C7	18 Oct 2022	Arrive Time	856
C7	18 Oct 2022	Depart Time	859
C7	18 Oct 2022	Air Temp (C)	19.4
C7	18 Oct 2022	Weather	Clear
C7	18 Oct 2022	Visibility (mi)	12
C7	18 Oct 2022	Wind Speed (kts)	5.1
C7	18 Oct 2022	Wind Dir	NE
C7	18 Oct 2022	Water Color	Brownish-Green
C7	18 Oct 2022	Wave Ht Low (ft)	3
C7	18 Oct 2022	Wave Period (sec)	14
C7	18 Oct 2022	Sea State	Light Chop
C7	18 Oct 2022	High Tide (ft)	4.2

Station	Date	Parameter	Value
C7	18 Oct 2022	High Tide Time	2348
C7	18 Oct 2022	Low Tide (ft)	0.68
C7	18 Oct 2022	Low Tide Time	654
C7	18 Oct 2022	Comments	Bringing back sample for Wendy to look at for zooplankton
C7	25 Oct 2022	Depth (m)	18
C7	25 Oct 2022	Arrive Time	903
C7	25 Oct 2022	Depart Time	908
C7	25 Oct 2022	Air Temp (C)	18.1
C7	25 Oct 2022	Weather	Clear
C7	25 Oct 2022	Visibility (mi)	10
C7	25 Oct 2022	Wind Speed (kts)	0
C7	25 Oct 2022	Wind Dir	NE
C7	25 Oct 2022	Water Color	Greenish-Blue
C7	25 Oct 2022	Wave Ht Low (ft)	3.3
C7	25 Oct 2022	Wave Period (sec)	15
C7	25 Oct 2022	Sea State	Regular Swell
C7	25 Oct 2022	High Tide (ft)	6.01
C7	25 Oct 2022	High Tide Time	1618
C7	25 Oct 2022	Low Tide (ft)	-0.23
C7	25 Oct 2022	Low Tide Time	2254
C7	25 Oct 2022	Comments	Kelp Debris; Lobster Floats
C8	03 Oct 2022	Depth (m)	19
C8	03 Oct 2022	Arrive Time	904
C8	03 Oct 2022	Depart Time	910
C8	03 Oct 2022	Air Temp (C)	19.5
C8	03 Oct 2022	Weather	Overcast
C8	03 Oct 2022	Visibility (mi)	9
C8	03 Oct 2022	Wind Speed (kts)	2.3
C8	03 Oct 2022	Wind Dir	NW
C8	03 Oct 2022	Water Color	Brown
C8	03 Oct 2022	Wave Ht Low (ft)	3
C8	03 Oct 2022	Wave Period (sec)	13
C8	03 Oct 2022	Sea State	Regular Swell
C8	03 Oct 2022	High Tide (ft)	5.12
C8	03 Oct 2022	High Tide Time	2300
C8	03 Oct 2022	Low Tide (ft)	-0.04
C8	03 Oct 2022	Low Tide Time	654
C8	03 Oct 2022	Comments	Brown algal bloom
C8	11 Oct 2022	Depth (m)	20
C8	11 Oct 2022	Arrive Time	851
C8	11 Oct 2022	Depart Time	858
C8	11 Oct 2022	Air Temp (C)	19.5
C8	11 Oct 2022	Weather	Overcast
C8	11 Oct 2022	Visibility (mi)	10
C8	11 Oct 2022	Wind Speed (kts)	0.9
C8	11 Oct 2022	Wind Dir	SE
C8	11 Oct 2022	Water Color	Blueish-Green
C8	11 Oct 2022	Wave Ht Low (ft)	3.3
C8	11 Oct 2022	Wave Period (sec)	17
C8	11 Oct 2022	Sea State	Regular Swell
C8	11 Oct 2022	High Tide (ft)	5.91
C8	11 Oct 2022	High Tide Time	1718
C8	11 Oct 2022	Low Tide (ft)	0.04
C8	11 Oct 2022	Low Tide Time	0
C8	11 Oct 2022	Comments	Kelp Debris; Lobster Floats
C8	18 Oct 2022	Depth (m)	20
C8	18 Oct 2022	Arrive Time	907

Station	Date	Parameter	Value
C8	18 Oct 2022	Depart Time	911
C8	18 Oct 2022	Air Temp (C)	19.3
C8	18 Oct 2022	Weather	Clear
C8	18 Oct 2022	Visibility (mi)	12
C8	18 Oct 2022	Wind Speed (kts)	3.1
C8	18 Oct 2022	Wind Dir	NW
C8	18 Oct 2022	Water Color	Greenish-Blue
C8	18 Oct 2022	Wave Ht Low (ft)	3
C8	18 Oct 2022	Wave Period (sec)	14
C8	18 Oct 2022	Sea State	Light Chop
C8	18 Oct 2022	High Tide (ft)	4.2
C8	18 Oct 2022	High Tide Time	2348
C8	18 Oct 2022	Low Tide (ft)	0.68
C8	18 Oct 2022	Low Tide Time	654
C8	18 Oct 2022	Comments	none
C8	25 Oct 2022	Depth (m)	20
C8	25 Oct 2022	Arrive Time	915
C8	25 Oct 2022	Depart Time	927
C8	25 Oct 2022	Air Temp (C)	17.8
C8	25 Oct 2022	Weather	Clear
C8	25 Oct 2022	Visibility (mi)	10
C8	25 Oct 2022	Wind Speed (kts)	1
C8	25 Oct 2022	Wind Dir	E
C8	25 Oct 2022	Water Color	Greenish-Blue
C8	25 Oct 2022	Wave Ht Low (ft)	3.3
C8	25 Oct 2022	Wave Period (sec)	15
C8	25 Oct 2022	Sea State	Regular Swell
C8	25 Oct 2022	High Tide (ft)	6.01
C8	25 Oct 2022	High Tide Time	1618
C8	25 Oct 2022	Low Tide (ft)	-0.23
C8	25 Oct 2022	Low Tide Time	2254
C8	25 Oct 2022	Comments	Kelp Debris; Lobster Floats

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	03 Oct 2022	1	18.51	78.15	8.3	33.46	8.1	24.0	5.04
A1	03 Oct 2022	2	18.39	78.12	8.4	33.44	8.1	24.0	5.11
A1	03 Oct 2022	3	18.05	78.32	8.6	33.42	8.1	24.0	4.62
A1	03 Oct 2022	4	17.93	80.20	8.6	33.41	8.1	24.1	4.23
A1	03 Oct 2022	5	17.76	81.05	8.5	33.41	8.1	24.1	3.96
A1	03 Oct 2022	6	17.36	81.60	8.3	33.39	8.1	24.2	3.59
A1	03 Oct 2022	7	16.74	82.04	8.2	33.39	8.1	24.3	3.60
A1	03 Oct 2022	8	16.36	82.56	7.9	33.39	8.1	24.4	3.54
A1	03 Oct 2022	9	15.87	82.86	7.7	33.38	8.1	24.5	3.37
A1	03 Oct 2022	10	15.65	83.60	7.6	33.37	8.0	24.6	3.09
A1	03 Oct 2022	11	15.46	84.25	7.6	33.38	8.0	24.6	2.69
A1	03 Oct 2022	12	15.30	85.04	7.3	33.36	8.0	24.6	2.24
A1	03 Oct 2022	13	14.84	86.04	7.1	33.38	8.0	24.8	1.65
A1	03 Oct 2022	14	14.73	86.68	6.9	33.38	8.0	24.8	1.18
A1	03 Oct 2022	15	14.56	87.00	6.7	33.38	8.0	24.8	0.96
A1	03 Oct 2022	16	14.42	87.04	6.6	33.38	8.0	24.8	0.87
A1	03 Oct 2022	17	14.30	87.02	6.5	33.38	7.9	24.9	0.76
A1	03 Oct 2022	18	14.21	86.85	6.4	33.39	7.9	24.9	0.68
A1	11 Oct 2022	1	18.75	84.87	8.2	33.45	8.1	23.9	2.85
A1	11 Oct 2022	2	17.74	84.89	7.7	33.44	8.1	24.1	2.98
A1	11 Oct 2022	3	17.05	85.96	7.3	33.40	8.0	24.3	2.52
A1	11 Oct 2022	4	15.97	87.79	7.0	33.37	8.0	24.5	1.67
A1	11 Oct 2022	5	15.01	89.18	7.0	33.38	8.0	24.7	1.05
A1	11 Oct 2022	6	14.92	89.93	7.0	33.35	8.0	24.7	0.76
A1	11 Oct 2022	7	14.11	90.94	7.1	33.36	8.0	24.9	0.89
A1	11 Oct 2022	8	14.03	91.62	7.1	33.35	8.0	24.9	0.92
A1	11 Oct 2022	9	13.95	91.49	6.9	33.36	7.9	24.9	0.77
A1	11 Oct 2022	10	13.94	91.30	6.8	33.36	7.9	24.9	0.63
A1	11 Oct 2022	11	13.85	91.12	6.8	33.36	7.9	24.9	0.59
A1	11 Oct 2022	12	13.80	90.84	6.9	33.37	7.9	25.0	0.58
A1	11 Oct 2022	13	13.82	91.27	6.8	33.37	7.9	25.0	0.58
A1	11 Oct 2022	14	13.75	91.34	6.8	33.37	7.9	25.0	0.58
A1	11 Oct 2022	15	13.74	91.24	6.8	33.37	7.9	25.0	0.55
A1	11 Oct 2022	16	13.73	91.16	6.8	33.37	7.9	25.0	0.57
A1	11 Oct 2022	17	13.71	91.30	6.8	33.38	7.9	25.0	0.55
A1	11 Oct 2022	18	13.63	91.29	6.8	33.38	7.9	25.0	0.56
A1	11 Oct 2022	19	13.49	91.29	6.6	33.38	7.9	25.0	0.55
A1	18 Oct 2022	1	18.60	86.41	8.0	33.49	8.1	24.0	1.50
A1	18 Oct 2022	2	18.57	86.62	7.9	33.49	8.1	24.0	1.56
A1	18 Oct 2022	3	18.34	86.44	8.0	33.48	8.1	24.0	1.60
A1	18 Oct 2022	4	18.19	86.47	8.0	33.48	8.1	24.1	1.81
A1	18 Oct 2022	5	17.99	86.32	7.9	33.47	8.1	24.1	1.68
A1	18 Oct 2022	6	17.83	85.31	7.8	33.47	8.1	24.1	1.82
A1	18 Oct 2022	7	17.69	84.92	7.7	33.46	8.1	24.2	1.87
A1	18 Oct 2022	8	17.53	84.92	7.6	33.45	8.1	24.2	1.88
A1	18 Oct 2022	9	17.29	85.27	7.5	33.45	8.1	24.3	1.89
A1	18 Oct 2022	10	17.08	85.41	7.4	33.44	8.1	24.3	1.92
A1	18 Oct 2022	11	16.57	85.67	7.3	33.43	8.1	24.4	1.81
A1	18 Oct 2022	12	16.14	86.56	7.2	33.42	8.1	24.5	1.66
A1	18 Oct 2022	13	15.84	87.16	7.1	33.40	8.1	24.6	1.59
A1	18 Oct 2022	14	15.51	87.72	7.0	33.40	8.1	24.6	1.43
A1	18 Oct 2022	15	15.12	88.26	6.8	33.39	8.1	24.7	1.31
A1	18 Oct 2022	16	14.97	88.93	6.8	33.38	8.1	24.7	1.24

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A1	18 Oct 2022	17	14.78	89.04	6.7	33.37	8.0	24.8	1.21
A1	18 Oct 2022	18	14.14	89.18	6.7	33.36	8.0	24.9	1.10
A1	18 Oct 2022	19	13.91	89.46	6.6	33.36	8.0	24.9	0.96
A1	18 Oct 2022	20	13.77	89.75	6.5	33.36	8.0	25.0	0.87
A1	25 Oct 2022	1	18.19	83.15	7.7	33.49	8.1	24.1	1.81
A1	25 Oct 2022	2	18.16	83.13	7.6	33.49	8.1	24.1	1.95
A1	25 Oct 2022	3	18.09	83.02	7.6	33.48	8.1	24.1	2.19
A1	25 Oct 2022	4	18.03	83.01	7.5	33.48	8.1	24.1	2.36
A1	25 Oct 2022	5	17.87	82.92	7.3	33.46	8.1	24.1	2.62
A1	25 Oct 2022	6	17.38	82.98	7.1	33.44	8.1	24.2	2.30
A1	25 Oct 2022	7	16.69	83.58	6.8	33.41	8.1	24.4	1.57
A1	25 Oct 2022	8	16.24	83.34	6.8	33.39	8.1	24.5	1.00
A1	25 Oct 2022	9	15.93	82.77	6.7	33.37	8.1	24.5	0.80
A1	25 Oct 2022	10	15.42	82.71	6.9	33.36	8.1	24.6	0.70
A1	25 Oct 2022	11	14.89	84.26	7.1	33.35	8.1	24.7	0.70
A1	25 Oct 2022	12	14.67	87.22	7.0	33.34	8.1	24.8	0.70
A1	25 Oct 2022	13	14.57	88.98	7.0	33.34	8.1	24.8	0.75
A1	25 Oct 2022	14	14.54	89.44	7.1	33.34	8.1	24.8	0.76
A1	25 Oct 2022	15	14.50	89.64	7.0	33.34	8.1	24.8	0.79
A1	25 Oct 2022	16	14.26	89.56	6.9	33.34	8.1	24.9	0.78
A1	25 Oct 2022	17	14.12	89.35	6.9	33.34	8.1	24.9	0.76
A1	25 Oct 2022	18	14.00	88.85	6.8	33.34	8.1	24.9	0.70
A1	25 Oct 2022	19	13.92	88.35	6.7	33.34	8.0	24.9	0.66
A1	25 Oct 2022	20	13.88	87.81	6.7	33.35	8.0	24.9	0.64
A6	03 Oct 2022	1	18.26	84.25	9.2	33.41	8.2	24.0	2.69
A6	03 Oct 2022	2	18.11	84.23	9.2	33.41	8.2	24.0	2.74
A6	03 Oct 2022	3	17.93	84.10	8.8	33.41	8.2	24.1	2.98
A6	03 Oct 2022	4	17.58	83.45	8.5	33.42	8.2	24.2	3.24
A6	03 Oct 2022	5	17.34	82.38	8.3	33.41	8.1	24.2	3.61
A6	03 Oct 2022	6	16.94	82.67	8.2	33.41	8.1	24.3	3.47
A6	03 Oct 2022	7	16.63	83.09	8.1	33.40	8.1	24.4	3.48
A6	03 Oct 2022	8	16.48	83.19	8.0	33.40	8.1	24.4	3.41
A6	03 Oct 2022	9	16.42	83.52	8.0	33.40	8.1	24.4	3.23
A6	03 Oct 2022	10	16.34	83.92	8.0	33.40	8.1	24.4	3.21
A6	03 Oct 2022	11	16.23	83.80	8.0	33.39	8.1	24.5	3.25
A6	03 Oct 2022	12	16.14	83.94	7.9	33.39	8.1	24.5	3.13
A6	03 Oct 2022	13	16.02	84.19	7.6	33.38	8.1	24.5	2.89
A6	03 Oct 2022	14	15.53	85.54	7.3	33.40	8.0	24.6	2.23
A6	03 Oct 2022	15	15.56	87.24	7.0	33.37	8.0	24.6	1.68
A6	03 Oct 2022	16	14.79	88.30	6.8	33.39	8.0	24.8	1.58
A6	03 Oct 2022	17	14.52	88.76	6.9	33.39	8.0	24.8	1.36
A6	03 Oct 2022	18	14.82	88.69	7.0	33.38	8.0	24.8	1.32
A6	03 Oct 2022	19	14.47	88.75	7.0	33.39	8.0	24.8	1.30
A6	03 Oct 2022	20	14.45	88.69	7.0	33.39	8.0	24.9	1.22
A6	11 Oct 2022	1	19.25	75.29	9.9	33.44	8.3	23.8	5.86
A6	11 Oct 2022	2	19.16	76.47	9.8	33.44	8.2	23.8	5.90
A6	11 Oct 2022	3	19.06	76.60	9.4	33.44	8.2	23.8	5.76
A6	11 Oct 2022	4	18.58	78.40	9.0	33.43	8.2	23.9	5.46
A6	11 Oct 2022	5	18.06	83.50	8.5	33.42	8.2	24.0	4.32
A6	11 Oct 2022	6	17.31	85.62	8.0	33.41	8.1	24.2	3.21
A6	11 Oct 2022	7	16.93	87.72	7.7	33.40	8.1	24.3	2.13
A6	11 Oct 2022	8	16.42	88.69	7.3	33.39	8.1	24.4	1.42
A6	11 Oct 2022	9	15.57	89.69	7.1	33.38	8.0	24.6	0.99
A6	11 Oct 2022	10	15.32	90.13	7.1	33.37	8.0	24.6	0.80
A6	11 Oct 2022	11	14.81	90.52	7.0	33.36	8.0	24.8	0.72
A6	11 Oct 2022	12	14.71	90.80	7.0	33.36	8.0	24.8	0.66
A6	11 Oct 2022	13	14.66	90.64	6.9	33.37	8.0	24.8	0.62
A6	11 Oct 2022	14	14.53	90.66	6.8	33.37	8.0	24.8	0.54

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A6	11 Oct 2022	15	14.44	90.59	6.8	33.37	8.0	24.8	0.49
A6	11 Oct 2022	16	14.24	90.70	6.7	33.37	8.0	24.9	0.50
A6	11 Oct 2022	17	14.01	90.54	6.6	33.38	8.0	24.9	0.43
A6	11 Oct 2022	18	13.89	90.41	6.5	33.38	8.0	25.0	0.44
A6	11 Oct 2022	19	13.66	90.35	6.4	33.38	7.9	25.0	0.42
A6	11 Oct 2022	20	13.48	90.39	6.4	33.38	7.9	25.0	0.47
A6	11 Oct 2022	21	13.37	90.11	6.4	33.39	7.9	25.1	0.40
A6	18 Oct 2022	1	18.39	84.46	7.8	33.49	8.1	24.0	2.25
A6	18 Oct 2022	2	17.37	84.55	7.5	33.48	8.1	24.3	2.35
A6	18 Oct 2022	3	16.49	86.39	7.1	33.44	8.1	24.4	2.23
A6	18 Oct 2022	4	16.20	87.46	6.8	33.42	8.1	24.5	1.98
A6	18 Oct 2022	5	15.82	87.91	6.6	33.41	8.1	24.6	1.73
A6	18 Oct 2022	6	15.53	88.66	6.5	33.41	8.1	24.6	1.47
A6	18 Oct 2022	7	15.24	89.21	6.4	33.40	8.1	24.7	1.28
A6	18 Oct 2022	8	15.07	89.71	6.4	33.39	8.1	24.7	1.15
A6	18 Oct 2022	9	14.77	89.79	6.6	33.39	8.0	24.8	1.18
A6	18 Oct 2022	10	14.61	90.10	6.7	33.38	8.0	24.8	1.21
A6	18 Oct 2022	11	14.53	90.13	6.6	33.38	8.0	24.8	1.24
A6	18 Oct 2022	12	14.34	90.19	6.6	33.38	8.0	24.9	1.25
A6	18 Oct 2022	13	14.32	90.48	6.6	33.38	8.0	24.9	1.25
A6	18 Oct 2022	14	14.29	90.45	6.7	33.37	8.0	24.9	1.28
A6	18 Oct 2022	15	14.24	90.55	6.7	33.37	8.0	24.9	1.28
A6	18 Oct 2022	16	14.22	90.59	6.7	33.37	8.0	24.9	1.27
A6	18 Oct 2022	17	14.19	90.69	6.6	33.37	8.0	24.9	1.24
A6	18 Oct 2022	18	14.11	90.54	6.6	33.38	8.0	24.9	1.25
A6	18 Oct 2022	19	13.77	90.82	6.5	33.38	8.0	25.0	1.26
A6	25 Oct 2022	1	18.76	84.89	7.7	33.54	8.2	24.0	1.65
A6	25 Oct 2022	2	18.76	84.90	7.7	33.54	8.2	24.0	1.69
A6	25 Oct 2022	3	18.75	84.99	7.7	33.54	8.2	24.0	1.83
A6	25 Oct 2022	4	18.73	85.16	7.5	33.54	8.2	24.0	1.90
A6	25 Oct 2022	5	18.47	85.26	7.3	33.51	8.2	24.0	1.92
A6	25 Oct 2022	6	17.98	85.62	7.0	33.47	8.2	24.1	1.66
A6	25 Oct 2022	7	17.14	86.30	7.0	33.44	8.2	24.3	1.23
A6	25 Oct 2022	8	16.71	87.58	7.0	33.41	8.2	24.4	0.97
A6	25 Oct 2022	9	16.35	88.39	7.0	33.38	8.1	24.4	0.86
A6	25 Oct 2022	10	15.73	88.92	7.2	33.37	8.1	24.6	0.83
A6	25 Oct 2022	11	15.41	89.10	7.2	33.35	8.1	24.6	0.82
A6	25 Oct 2022	12	15.18	89.32	7.2	33.34	8.1	24.7	0.80
A6	25 Oct 2022	13	15.13	89.58	7.3	33.35	8.1	24.7	0.79
A6	25 Oct 2022	14	15.06	89.63	7.2	33.34	8.1	24.7	0.78
A6	25 Oct 2022	15	14.92	89.80	7.2	33.35	8.1	24.7	0.76
A6	25 Oct 2022	16	14.88	89.84	7.2	33.35	8.1	24.7	0.79
A6	25 Oct 2022	17	14.60	89.83	7.1	33.34	8.1	24.8	0.75
A6	25 Oct 2022	18	14.41	89.55	7.0	33.34	8.1	24.8	0.71
A6	25 Oct 2022	19	14.19	89.30	6.9	33.34	8.1	24.9	0.73
A6	25 Oct 2022	20	13.54	89.10	7.0	33.38	8.1	25.0	0.76
A7	03 Oct 2022	1	18.37	80.60	8.7	33.44	8.2	24.0	5.00
A7	03 Oct 2022	2	18.09	81.09	8.7	33.43	8.2	24.0	4.92
A7	03 Oct 2022	3	17.55	82.16	8.5	33.41	8.2	24.2	4.35
A7	03 Oct 2022	4	16.80	82.19	8.3	33.41	8.1	24.3	4.16
A7	03 Oct 2022	5	16.54	82.38	8.1	33.39	8.1	24.4	3.98
A7	03 Oct 2022	6	16.00	82.76	7.8	33.41	8.1	24.5	3.85
A7	03 Oct 2022	7	15.56	83.56	7.7	33.40	8.1	24.6	3.61
A7	03 Oct 2022	8	15.35	84.16	7.7	33.38	8.1	24.6	3.30
A7	03 Oct 2022	9	15.37	84.67	7.8	33.38	8.1	24.6	3.36
A7	03 Oct 2022	10	15.25	85.02	7.7	33.38	8.1	24.7	3.27
A7	03 Oct 2022	11	15.21	85.09	7.7	33.38	8.1	24.7	3.18
A7	03 Oct 2022	12	15.13	85.18	7.7	33.38	8.0	24.7	2.90

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	03 Oct 2022	13	15.08	85.33	7.6	33.38	8.0	24.7	2.84
A7	03 Oct 2022	14	15.07	85.60	7.5	33.39	8.0	24.7	2.68
A7	03 Oct 2022	15	15.08	85.73	7.5	33.39	8.0	24.7	2.61
A7	03 Oct 2022	16	15.08	86.30	7.4	33.39	8.0	24.7	2.51
A7	03 Oct 2022	17	15.04	86.50	7.3	33.39	8.0	24.7	2.22
A7	03 Oct 2022	18	15.04	86.83	7.2	33.39	8.0	24.7	1.89
A7	03 Oct 2022	19	14.94	87.34	7.1	33.39	8.0	24.7	1.82
A7	03 Oct 2022	20	14.71	87.50	6.9	33.40	8.0	24.8	1.68
A7	11 Oct 2022	1	19.19	84.88	8.7	33.47	8.2	23.8	3.06
A7	11 Oct 2022	2	19.19	85.06	8.7	33.47	8.2	23.8	3.39
A7	11 Oct 2022	3	18.87	83.36	8.4	33.45	8.2	23.9	4.72
A7	11 Oct 2022	4	18.14	82.62	7.9	33.44	8.1	24.0	3.82
A7	11 Oct 2022	5	17.75	85.27	7.4	33.38	8.1	24.1	2.46
A7	11 Oct 2022	6	16.23	87.51	7.4	33.37	8.1	24.4	1.61
A7	11 Oct 2022	7	16.46	88.28	7.3	33.36	8.0	24.4	1.17
A7	11 Oct 2022	8	15.18	87.83	7.3	33.35	8.0	24.7	1.25
A7	11 Oct 2022	9	14.62	89.62	7.4	33.36	8.0	24.8	1.02
A7	11 Oct 2022	10	14.53	91.11	7.4	33.35	8.0	24.8	1.01
A7	11 Oct 2022	11	14.46	91.34	7.5	33.35	8.0	24.8	1.02
A7	11 Oct 2022	12	14.41	91.51	7.4	33.35	8.0	24.8	1.01
A7	11 Oct 2022	13	14.27	91.50	7.2	33.35	8.0	24.9	0.96
A7	11 Oct 2022	14	14.11	91.34	7.0	33.36	8.0	24.9	0.79
A7	11 Oct 2022	15	14.08	90.81	6.8	33.36	8.0	24.9	0.63
A7	11 Oct 2022	16	14.07	90.66	6.8	33.37	8.0	24.9	0.59
A7	11 Oct 2022	17	14.05	90.65	6.7	33.37	8.0	24.9	0.61
A7	11 Oct 2022	18	13.71	90.55	6.5	33.38	7.9	25.0	0.48
A7	11 Oct 2022	19	13.49	90.35	6.4	33.38	7.9	25.0	0.43
A7	11 Oct 2022	20	13.40	90.09	6.3	33.38	7.9	25.1	0.40
A7	18 Oct 2022	1	18.18	84.70	7.9	33.47	8.1	24.1	2.33
A7	18 Oct 2022	2	18.13	84.62	7.9	33.48	8.1	24.1	2.35
A7	18 Oct 2022	3	17.69	84.08	7.8	33.47	8.1	24.2	2.52
A7	18 Oct 2022	4	17.62	84.62	7.8	33.46	8.1	24.2	2.74
A7	18 Oct 2022	5	17.60	85.25	7.8	33.46	8.1	24.2	2.71
A7	18 Oct 2022	6	17.57	86.02	7.8	33.45	8.1	24.2	2.55
A7	18 Oct 2022	7	17.50	86.52	7.8	33.45	8.1	24.2	2.47
A7	18 Oct 2022	8	17.46	86.85	7.8	33.45	8.1	24.2	2.35
A7	18 Oct 2022	9	17.35	86.64	7.6	33.45	8.1	24.2	2.25
A7	18 Oct 2022	10	16.52	87.22	7.2	33.46	8.1	24.4	2.18
A7	18 Oct 2022	11	15.84	88.08	6.9	33.41	8.1	24.6	1.83
A7	18 Oct 2022	12	15.71	88.67	6.7	33.42	8.1	24.6	1.56
A7	18 Oct 2022	13	15.62	88.62	6.6	33.41	8.1	24.6	1.53
A7	18 Oct 2022	14	15.58	88.63	6.5	33.41	8.1	24.6	1.42
A7	18 Oct 2022	15	15.48	88.86	6.4	33.40	8.1	24.6	1.34
A7	18 Oct 2022	16	15.30	88.85	6.2	33.40	8.0	24.7	1.31
A7	18 Oct 2022	17	15.00	88.96	5.7	33.40	8.0	24.7	1.18
A7	18 Oct 2022	18	14.29	89.05	5.7	33.40	8.0	24.9	0.92
A7	18 Oct 2022	19	14.11	89.37	5.9	33.38	8.0	24.9	0.76
A7	25 Oct 2022	1	18.34	79.84	7.5	33.50	8.1	24.0	1.83
A7	25 Oct 2022	2	18.34	80.35	7.5	33.50	8.1	24.0	1.91
A7	25 Oct 2022	3	18.34	81.33	7.4	33.50	8.1	24.0	2.13
A7	25 Oct 2022	4	18.32	81.63	7.3	33.50	8.1	24.0	2.45
A7	25 Oct 2022	5	17.89	81.68	7.2	33.47	8.1	24.1	2.41
A7	25 Oct 2022	6	17.50	83.13	7.2	33.45	8.1	24.2	1.94
A7	25 Oct 2022	7	16.93	85.15	7.1	33.42	8.1	24.3	1.37
A7	25 Oct 2022	8	16.14	86.61	7.2	33.39	8.1	24.5	1.06
A7	25 Oct 2022	9	15.65	88.16	7.3	33.36	8.1	24.6	0.91
A7	25 Oct 2022	10	15.38	88.81	7.4	33.35	8.1	24.6	0.93
A7	25 Oct 2022	11	15.24	89.03	7.4	33.34	8.1	24.6	0.89

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	25 Oct 2022	12	14.90	89.36	7.3	33.34	8.1	24.7	0.84
A7	25 Oct 2022	13	14.75	89.31	7.3	33.34	8.1	24.7	0.81
A7	25 Oct 2022	14	14.65	89.57	7.3	33.33	8.1	24.8	0.80
A7	25 Oct 2022	15	14.62	89.80	7.3	33.33	8.1	24.8	0.80
A7	25 Oct 2022	16	14.56	89.89	7.2	33.33	8.1	24.8	0.81
A7	25 Oct 2022	17	14.21	89.82	7.0	33.34	8.1	24.9	0.78
A7	25 Oct 2022	18	14.15	89.30	7.0	33.34	8.1	24.9	0.73
C4	03 Oct 2022	1	18.36	79.45	8.7	33.41	8.2	24.0	4.76
C4	03 Oct 2022	2	18.37	79.42	8.6	33.41	8.2	24.0	4.91
C4	03 Oct 2022	3	18.15	79.12	8.3	33.41	8.2	24.0	5.10
C4	03 Oct 2022	4	17.99	77.37	8.0	33.43	8.1	24.1	4.66
C4	03 Oct 2022	5	17.95	79.83	7.7	33.43	8.1	24.1	4.31
C4	03 Oct 2022	6	17.82	80.36	7.4	33.43	8.1	24.1	3.35
C4	03 Oct 2022	7	17.67	81.75	7.2	33.43	8.1	24.1	2.29
C4	03 Oct 2022	8	17.30	83.29	6.9	33.41	8.1	24.2	1.72
C4	03 Oct 2022	9	16.46	84.44	6.6	33.40	8.0	24.4	1.15
C4	03 Oct 2022	10	16.23	81.38	6.5	33.38	8.0	24.5	0.92
C4	11 Oct 2022	1	19.33	86.02	8.6	33.48	8.2	23.8	1.57
C4	11 Oct 2022	2	19.31	86.17	8.5	33.47	8.2	23.8	1.64
C4	11 Oct 2022	3	19.04	85.76	7.9	33.46	8.2	23.8	2.15
C4	11 Oct 2022	4	17.35	85.95	7.1	33.43	8.1	24.2	2.43
C4	11 Oct 2022	5	15.92	85.86	7.0	33.40	8.1	24.5	1.70
C4	11 Oct 2022	6	15.64	87.08	7.0	33.37	8.0	24.6	1.07
C4	11 Oct 2022	7	15.43	87.43	7.0	33.36	8.0	24.6	0.85
C4	11 Oct 2022	8	15.30	87.41	7.0	33.36	8.0	24.6	0.75
C4	11 Oct 2022	9	15.16	87.22	7.0	33.36	8.0	24.7	0.70
C4	11 Oct 2022	10	15.09	86.74	6.9	33.36	8.0	24.7	0.61
C4	11 Oct 2022	11	15.10	85.21	6.9	33.36	8.0	24.7	0.58
C4	11 Oct 2022	12	15.11	84.77	7.0	33.36	8.0	24.7	0.60
C4	18 Oct 2022	1	19.00	75.59	9.5	33.48	8.2	23.9	9.18
C4	18 Oct 2022	2	18.72	74.52	9.4	33.48	8.3	23.9	16.44
C4	18 Oct 2022	3	18.18	61.73	8.6	33.47	8.3	24.1	19.59
C4	18 Oct 2022	4	17.78	65.72	8.0	33.45	8.2	24.1	13.92
C4	18 Oct 2022	5	17.40	74.59	7.7	33.45	8.2	24.2	8.75
C4	18 Oct 2022	6	17.16	79.74	7.3	33.43	8.2	24.3	5.66
C4	18 Oct 2022	7	16.89	82.58	6.8	33.42	8.2	24.3	3.86
C4	18 Oct 2022	8	16.43	84.48	6.1	33.41	8.2	24.4	2.72
C4	18 Oct 2022	9	15.91	85.38	5.6	33.40	8.1	24.5	1.83
C4	18 Oct 2022	10	14.97	85.41	5.4	33.37	8.1	24.7	1.17
C4	18 Oct 2022	11	14.50	83.45	5.6	33.37	8.1	24.8	0.86
C4	25 Oct 2022	1	18.60	80.96	7.7	33.50	8.2	24.0	1.91
C4	25 Oct 2022	2	18.58	81.09	7.7	33.50	8.2	24.0	1.94
C4	25 Oct 2022	3	18.53	81.23	7.6	33.50	8.2	24.0	2.16
C4	25 Oct 2022	4	18.50	81.27	7.6	33.50	8.2	24.0	2.28
C4	25 Oct 2022	5	18.43	81.25	7.5	33.49	8.2	24.0	2.40
C4	25 Oct 2022	6	18.16	81.58	7.4	33.47	8.2	24.1	2.18
C4	25 Oct 2022	7	17.64	82.10	7.3	33.44	8.2	24.2	1.78
C4	25 Oct 2022	8	16.97	83.11	7.0	33.41	8.2	24.3	1.36
C4	25 Oct 2022	9	16.90	82.95	6.5	33.41	8.2	24.3	1.06
C4	25 Oct 2022	10	16.69	78.95	6.8	33.39	8.1	24.4	0.83
C4	25 Oct 2022	11	16.54	78.32	7.0	33.38	8.1	24.4	0.73
C5	03 Oct 2022	1	18.80	77.87	8.0	33.44	8.1	23.9	3.71
C5	03 Oct 2022	2	18.86	72.74	8.0	33.44	8.1	23.9	3.91
C5	03 Oct 2022	3	18.73	72.34	8.1	33.44	8.1	23.9	4.24
C5	03 Oct 2022	4	18.30	80.34	7.8	33.42	8.2	24.0	3.56
C5	03 Oct 2022	5	17.82	84.12	7.5	33.43	8.1	24.1	2.10

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C5	03 Oct 2022	6	17.97	86.73	7.2	33.40	8.1	24.1	1.46
C5	03 Oct 2022	7	16.78	86.67	6.7	33.40	8.1	24.3	1.28
C5	03 Oct 2022	8	16.16	86.65	6.4	33.42	8.0	24.5	0.80
C5	03 Oct 2022	9	15.88	86.56	6.1	33.38	8.0	24.5	0.73
C5	03 Oct 2022	10	15.23	86.06	6.0	33.41	7.9	24.7	0.65
C5	11 Oct 2022	1	19.46	84.95	8.9	33.48	8.2	23.7	2.00
C5	11 Oct 2022	2	19.26	84.44	8.8	33.47	8.2	23.8	3.25
C5	11 Oct 2022	3	19.14	81.45	8.6	33.45	8.2	23.8	4.63
C5	11 Oct 2022	4	18.84	83.79	8.1	33.44	8.2	23.9	3.01
C5	11 Oct 2022	5	17.77	86.48	6.9	33.40	8.1	24.1	1.89
C5	11 Oct 2022	6	16.80	86.26	6.4	33.39	8.0	24.3	1.26
C5	11 Oct 2022	7	16.43	85.91	6.5	33.38	8.0	24.4	0.97
C5	11 Oct 2022	8	16.22	86.60	6.4	33.37	8.0	24.4	0.72
C5	11 Oct 2022	9	15.92	87.11	6.4	33.38	8.0	24.5	0.59
C5	11 Oct 2022	10	15.84	85.61	6.3	33.37	8.0	24.5	0.50
C5	11 Oct 2022	11	15.85	84.60	6.3	33.37	8.0	24.5	0.47
C5	18 Oct 2022	1	19.09	60.77	8.5	33.48	8.2	23.8	6.33
C5	18 Oct 2022	2	18.64	57.99	8.3	33.47	8.2	23.9	22.13
C5	18 Oct 2022	3	17.97	49.17	7.8	33.47	8.2	24.1	18.82
C5	18 Oct 2022	4	17.54	69.21	7.4	33.45	8.2	24.2	9.61
C5	18 Oct 2022	5	17.30	80.62	7.0	33.44	8.2	24.2	6.50
C5	18 Oct 2022	6	17.23	82.43	6.6	33.44	8.2	24.3	5.34
C5	18 Oct 2022	7	17.05	82.22	5.8	33.43	8.1	24.3	5.84
C5	18 Oct 2022	8	16.60	82.00	4.8	33.41	8.1	24.4	4.45
C5	18 Oct 2022	9	15.77	85.08	4.1	33.41	8.1	24.6	2.29
C5	18 Oct 2022	10	15.38	86.64	4.0	33.40	8.0	24.7	1.28
C5	18 Oct 2022	11	15.32	86.81	4.0	33.40	8.0	24.7	0.89
C5	25 Oct 2022	1	18.67	65.17	6.4	33.53	8.1	24.0	0.95
C5	25 Oct 2022	2	18.65	64.27	6.4	33.53	8.1	24.0	0.99
C5	25 Oct 2022	3	18.62	61.41	6.4	33.53	8.1	24.0	1.27
C5	25 Oct 2022	4	18.59	59.41	6.3	33.53	8.1	24.0	1.43
C5	25 Oct 2022	5	18.56	55.23	6.2	33.52	8.1	24.0	1.42
C5	25 Oct 2022	6	18.35	53.32	6.0	33.50	8.1	24.0	1.34
C5	25 Oct 2022	7	17.05	52.26	6.0	33.45	8.1	24.3	1.08
C5	25 Oct 2022	8	16.22	52.75	6.1	33.41	8.1	24.5	0.98
C5	25 Oct 2022	9	15.88	46.79	6.4	33.38	8.1	24.5	0.93
C5	25 Oct 2022	10	15.64	45.25	6.7	33.36	8.1	24.6	1.00
C6	03 Oct 2022	1	18.29	74.65	8.9	33.43	8.2	24.0	5.75
C6	03 Oct 2022	2	18.33	74.15	8.8	33.43	8.2	24.0	6.07
C6	03 Oct 2022	3	17.85	76.13	8.9	33.41	8.2	24.1	6.65
C6	03 Oct 2022	4	17.66	80.11	8.8	33.40	8.2	24.1	4.90
C6	03 Oct 2022	5	17.51	83.92	8.8	33.40	8.2	24.2	3.83
C6	03 Oct 2022	6	17.25	83.64	8.6	33.40	8.2	24.2	3.57
C6	03 Oct 2022	7	16.98	83.52	8.3	33.41	8.1	24.3	3.41
C6	03 Oct 2022	8	16.85	84.95	8.0	33.41	8.1	24.3	2.91
C6	11 Oct 2022	1	19.53	75.06	10.3	33.44	8.3	23.7	5.12
C6	11 Oct 2022	2	19.42	75.01	9.5	33.44	8.2	23.7	4.88
C6	11 Oct 2022	3	19.27	76.95	8.8	33.43	8.2	23.8	4.30
C6	11 Oct 2022	4	19.01	75.37	8.7	33.43	8.2	23.8	4.58
C6	11 Oct 2022	5	18.45	79.06	8.6	33.42	8.2	24.0	3.72
C6	11 Oct 2022	6	17.93	84.14	8.1	33.41	8.2	24.1	2.49
C6	11 Oct 2022	7	17.34	86.79	7.6	33.40	8.1	24.2	1.47
C6	11 Oct 2022	8	16.95	88.28	7.2	33.39	8.1	24.3	1.04
C6	11 Oct 2022	9	16.62	87.96	6.7	33.38	8.0	24.4	0.78
C6	11 Oct 2022	10	16.48	85.30	6.4	33.38	8.0	24.4	0.55

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C6	18 Oct 2022	1	19.06	77.93	6.8	33.44	8.1	23.8	1.28
C6	18 Oct 2022	2	18.96	77.80	7.0	33.49	8.1	23.9	2.70
C6	18 Oct 2022	3	18.24	73.03	7.4	33.47	8.1	24.0	9.82
C6	18 Oct 2022	4	17.58	66.94	7.4	33.45	8.1	24.2	8.85
C6	18 Oct 2022	5	17.25	76.51	7.2	33.44	8.1	24.3	5.64
C6	18 Oct 2022	6	17.10	82.38	7.1	33.44	8.1	24.3	4.21
C6	18 Oct 2022	7	17.10	83.45	6.8	33.43	8.1	24.3	4.02
C6	18 Oct 2022	8	16.72	83.03	6.0	33.42	8.1	24.4	3.55
C6	18 Oct 2022	9	15.74	84.94	5.5	33.41	8.1	24.6	1.82
C6	25 Oct 2022	1	18.88	75.55	6.9	33.54	8.1	23.9	1.07
C6	25 Oct 2022	2	18.85	74.61	6.8	33.54	8.1	23.9	1.15
C6	25 Oct 2022	3	18.82	73.34	6.8	33.54	8.1	24.0	1.40
C6	25 Oct 2022	4	18.79	72.28	6.7	33.54	8.1	24.0	1.41
C6	25 Oct 2022	5	18.76	71.91	6.5	33.53	8.1	24.0	1.38
C6	25 Oct 2022	6	17.95	71.93	6.3	33.49	8.1	24.1	1.10
C6	25 Oct 2022	7	16.78	74.68	6.2	33.43	8.1	24.4	0.82
C6	25 Oct 2022	8	15.87	77.73	6.5	33.39	8.1	24.5	0.69
C6	25 Oct 2022	9	15.82	77.60	6.7	33.37	8.1	24.5	0.66
C6	25 Oct 2022	10	15.79	76.89	6.7	33.37	8.1	24.5	0.66
C6	25 Oct 2022	11	15.79	75.85	6.7	33.37	8.1	24.5	0.66
C7	03 Oct 2022	1	18.50	81.74	8.8	33.45	8.2	24.0	5.26
C7	03 Oct 2022	2	18.52	80.94	8.8	33.44	8.2	24.0	5.62
C7	03 Oct 2022	3	18.40	80.29	8.7	33.43	8.2	24.0	5.71
C7	03 Oct 2022	4	18.13	78.25	8.5	33.44	8.2	24.0	6.40
C7	03 Oct 2022	5	18.01	76.75	8.5	33.44	8.2	24.1	7.30
C7	03 Oct 2022	6	17.86	77.36	8.4	33.42	8.2	24.1	7.29
C7	03 Oct 2022	7	17.48	79.78	8.4	33.40	8.2	24.2	6.41
C7	03 Oct 2022	8	17.23	81.20	8.3	33.40	8.1	24.2	5.70
C7	03 Oct 2022	9	17.11	81.95	8.2	33.40	8.1	24.3	4.96
C7	03 Oct 2022	10	17.02	82.37	8.2	33.39	8.1	24.3	4.51
C7	03 Oct 2022	11	16.72	83.31	8.1	33.40	8.1	24.4	4.12
C7	03 Oct 2022	12	16.76	84.38	7.9	33.37	8.1	24.3	3.64
C7	03 Oct 2022	13	16.25	85.03	7.6	33.40	8.1	24.5	3.33
C7	03 Oct 2022	14	16.19	86.01	7.3	33.41	8.0	24.5	2.73
C7	03 Oct 2022	15	16.11	85.97	6.8	33.40	8.0	24.5	2.27
C7	03 Oct 2022	16	15.52	86.69	6.2	33.38	8.0	24.6	2.09
C7	03 Oct 2022	17	14.68	88.47	5.9	33.40	7.9	24.8	1.27
C7	03 Oct 2022	18	14.13	89.42	6.1	33.42	7.9	24.9	0.96
C7	11 Oct 2022	1	19.50	82.44	9.7	33.46	8.3	23.7	2.90
C7	11 Oct 2022	2	19.51	83.21	9.7	33.46	8.3	23.7	2.92
C7	11 Oct 2022	3	19.45	83.43	9.7	33.46	8.3	23.7	3.11
C7	11 Oct 2022	4	19.31	82.61	9.7	33.45	8.3	23.8	3.78
C7	11 Oct 2022	5	19.14	81.94	9.3	33.44	8.2	23.8	3.62
C7	11 Oct 2022	6	18.79	83.91	8.9	33.44	8.2	23.9	2.95
C7	11 Oct 2022	7	18.30	85.96	8.6	33.43	8.2	24.0	2.41
C7	11 Oct 2022	8	18.04	87.06	8.3	33.41	8.2	24.0	2.22
C7	11 Oct 2022	9	17.57	87.12	8.1	33.40	8.1	24.2	2.14
C7	11 Oct 2022	10	17.27	87.44	7.8	33.39	8.1	24.2	2.09
C7	11 Oct 2022	11	16.70	87.48	7.3	33.38	8.1	24.3	1.82
C7	11 Oct 2022	12	16.35	87.51	7.2	33.38	8.0	24.4	1.34
C7	11 Oct 2022	13	15.96	88.40	7.2	33.36	8.1	24.5	1.18
C7	11 Oct 2022	14	15.50	89.67	6.9	33.37	8.0	24.6	0.90
C7	11 Oct 2022	15	15.36	89.82	6.7	33.36	8.0	24.6	0.60
C7	11 Oct 2022	16	15.07	89.57	6.6	33.36	8.0	24.7	0.50
C7	11 Oct 2022	17	14.93	89.48	6.6	33.36	8.0	24.7	0.49
C7	11 Oct 2022	18	14.39	89.72	6.6	33.35	8.0	24.8	0.47
C7	11 Oct 2022	19	14.07	89.73	6.6	33.37	8.0	24.9	0.51

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C7	18 Oct 2022	1	18.08	79.85	7.7	33.47	8.1	24.1	4.32
C7	18 Oct 2022	2	17.77	79.76	7.7	33.47	8.1	24.2	4.99
C7	18 Oct 2022	3	17.47	79.32	7.6	33.46	8.1	24.2	5.85
C7	18 Oct 2022	4	17.19	80.18	7.2	33.45	8.1	24.3	5.39
C7	18 Oct 2022	5	16.65	82.19	6.9	33.43	8.1	24.4	4.66
C7	18 Oct 2022	6	16.16	85.57	6.6	33.43	8.1	24.5	3.00
C7	18 Oct 2022	7	16.13	87.11	6.3	33.41	8.1	24.5	2.26
C7	18 Oct 2022	8	15.45	87.99	6.2	33.41	8.1	24.6	1.93
C7	18 Oct 2022	9	14.95	88.75	6.1	33.40	8.1	24.8	1.45
C7	18 Oct 2022	10	14.70	89.52	6.0	33.39	8.1	24.8	1.24
C7	18 Oct 2022	11	14.35	89.88	6.1	33.39	8.0	24.9	1.09
C7	18 Oct 2022	12	14.24	90.23	6.1	33.38	8.0	24.9	1.05
C7	18 Oct 2022	13	14.10	90.44	6.1	33.38	8.0	24.9	1.02
C7	18 Oct 2022	14	13.93	90.54	6.2	33.38	8.0	24.9	0.99
C7	18 Oct 2022	15	13.79	90.44	6.1	33.38	8.0	25.0	0.95
C7	18 Oct 2022	16	13.55	90.47	6.1	33.38	8.0	25.0	0.87
C7	18 Oct 2022	17	13.32	90.45	6.0	33.38	8.0	25.1	0.76
C7	18 Oct 2022	18	13.27	90.46	6.0	33.38	8.0	25.1	0.71
C7	25 Oct 2022	1	18.75	65.62	7.2	33.53	8.1	24.0	1.50
C7	25 Oct 2022	2	18.71	80.93	7.2	33.52	8.1	24.0	1.53
C7	25 Oct 2022	3	18.31	85.56	7.2	33.48	8.1	24.0	1.44
C7	25 Oct 2022	4	18.01	86.55	7.1	33.48	8.1	24.1	1.37
C7	25 Oct 2022	5	17.82	86.36	6.8	33.46	8.1	24.1	1.24
C7	25 Oct 2022	6	17.06	85.60	6.7	33.44	8.1	24.3	1.08
C7	25 Oct 2022	7	16.64	87.00	6.9	33.41	8.1	24.4	0.97
C7	25 Oct 2022	8	16.48	87.86	7.0	33.41	8.1	24.4	0.91
C7	25 Oct 2022	9	16.31	88.26	7.0	33.40	8.1	24.4	0.87
C7	25 Oct 2022	10	16.24	88.44	7.1	33.40	8.1	24.5	0.86
C7	25 Oct 2022	11	16.05	88.13	7.1	33.39	8.1	24.5	0.85
C7	25 Oct 2022	12	16.02	88.49	7.1	33.39	8.1	24.5	0.84
C7	25 Oct 2022	13	16.02	88.61	7.1	33.39	8.1	24.5	0.83
C7	25 Oct 2022	14	15.83	89.00	7.1	33.39	8.1	24.5	0.79
C7	25 Oct 2022	15	15.76	89.17	7.0	33.38	8.1	24.6	0.75
C7	25 Oct 2022	16	15.22	89.27	7.0	33.37	8.1	24.7	0.78
C7	25 Oct 2022	17	14.88	89.25	7.1	33.36	8.1	24.7	0.75
C7	25 Oct 2022	18	14.84	89.32	7.1	33.36	8.1	24.7	0.72
C7	25 Oct 2022	19	14.82	89.10	7.1	33.36	8.1	24.7	0.67
C8	03 Oct 2022	1	18.63	53.76	9.4	33.44	8.2	23.9	25.65
C8	03 Oct 2022	2	18.59	46.77	9.3	33.44	8.2	23.9	24.37
C8	03 Oct 2022	3	18.19	58.88	9.0	33.42	8.2	24.0	16.92
C8	03 Oct 2022	4	18.06	68.73	8.9	33.42	8.2	24.0	11.00
C8	03 Oct 2022	5	17.92	74.59	8.6	33.41	8.2	24.1	7.86
C8	03 Oct 2022	6	17.66	80.64	8.5	33.42	8.2	24.1	5.15
C8	03 Oct 2022	7	17.65	82.52	8.1	33.39	8.1	24.1	4.36
C8	03 Oct 2022	8	16.66	83.14	7.7	33.41	8.1	24.4	4.25
C8	03 Oct 2022	9	16.57	83.47	7.5	33.41	8.1	24.4	3.95
C8	03 Oct 2022	10	16.47	84.07	7.4	33.41	8.1	24.4	3.60
C8	03 Oct 2022	11	16.45	84.76	7.3	33.41	8.1	24.4	3.36
C8	03 Oct 2022	12	16.28	85.09	7.2	33.40	8.1	24.5	3.13
C8	03 Oct 2022	13	16.04	85.24	7.2	33.41	8.0	24.5	3.10
C8	03 Oct 2022	14	16.05	85.70	7.0	33.40	8.0	24.5	2.81
C8	03 Oct 2022	15	15.55	85.98	6.9	33.38	8.0	24.6	2.56
C8	03 Oct 2022	16	15.31	87.40	6.8	33.39	8.0	24.7	1.99
C8	03 Oct 2022	17	14.62	89.07	6.6	33.38	8.0	24.8	1.69
C8	03 Oct 2022	18	14.29	89.61	6.6	33.39	8.0	24.9	1.28
C8	03 Oct 2022	19	14.26	89.70	6.7	33.39	8.0	24.9	1.07
C8	11 Oct 2022	1	19.67	86.59	9.5	33.48	8.3	23.7	1.68
C8	11 Oct 2022	2	19.65	86.63	9.5	33.48	8.3	23.7	1.64

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C8	11 Oct 2022	3	19.61	87.41	9.2	33.48	8.2	23.7	1.60
C8	11 Oct 2022	4	19.58	87.73	9.1	33.48	8.2	23.7	1.88
C8	11 Oct 2022	5	19.50	87.07	9.0	33.47	8.2	23.7	2.30
C8	11 Oct 2022	6	19.27	86.45	9.0	33.46	8.2	23.8	2.47
C8	11 Oct 2022	7	18.98	85.99	8.9	33.45	8.2	23.8	2.45
C8	11 Oct 2022	8	18.75	86.29	8.7	33.44	8.2	23.9	2.32
C8	11 Oct 2022	9	18.42	86.63	8.4	33.42	8.2	24.0	2.23
C8	11 Oct 2022	10	17.78	86.66	8.1	33.41	8.2	24.1	2.18
C8	11 Oct 2022	11	17.33	86.75	7.8	33.40	8.1	24.2	2.02
C8	11 Oct 2022	12	17.10	87.35	7.5	33.39	8.1	24.3	1.82
C8	11 Oct 2022	13	17.04	87.61	7.3	33.39	8.1	24.3	1.61
C8	11 Oct 2022	14	16.93	87.80	7.1	33.38	8.1	24.3	1.37
C8	11 Oct 2022	15	16.63	88.24	6.9	33.38	8.0	24.4	1.27
C8	11 Oct 2022	16	16.09	88.60	6.9	33.37	8.0	24.5	1.07
C8	11 Oct 2022	17	15.56	89.21	7.0	33.37	8.0	24.6	0.92
C8	11 Oct 2022	18	15.36	90.02	6.7	33.36	8.0	24.6	0.66
C8	11 Oct 2022	19	15.03	89.65	6.4	33.36	8.0	24.7	0.53
C8	11 Oct 2022	20	14.89	88.33	6.4	33.36	8.0	24.7	0.43
C8	18 Oct 2022	1	18.46	78.61	7.6	33.48	8.1	24.0	3.60
C8	18 Oct 2022	2	17.81	78.21	7.2	33.49	8.1	24.2	3.74
C8	18 Oct 2022	3	16.10	78.63	7.0	33.48	8.1	24.6	3.95
C8	18 Oct 2022	4	15.35	82.80	6.8	33.42	8.1	24.7	3.67
C8	18 Oct 2022	5	14.98	87.74	6.8	33.40	8.1	24.7	2.52
C8	18 Oct 2022	6	14.79	89.32	6.6	33.39	8.1	24.8	2.03
C8	18 Oct 2022	7	14.59	89.75	6.5	33.38	8.1	24.8	1.57
C8	18 Oct 2022	8	14.26	90.00	6.4	33.38	8.1	24.9	1.36
C8	18 Oct 2022	9	14.05	90.25	6.5	33.37	8.1	24.9	1.21
C8	18 Oct 2022	10	13.92	90.62	6.5	33.37	8.1	24.9	1.18
C8	18 Oct 2022	11	13.83	90.77	6.4	33.37	8.0	25.0	1.16
C8	18 Oct 2022	12	13.72	90.82	6.3	33.37	8.0	25.0	1.11
C8	18 Oct 2022	13	13.60	90.86	6.3	33.37	8.0	25.0	1.12
C8	18 Oct 2022	14	13.56	90.83	6.3	33.38	8.0	25.0	1.12
C8	18 Oct 2022	15	13.53	90.87	6.2	33.38	8.0	25.0	1.04
C8	18 Oct 2022	16	13.46	90.67	6.2	33.38	8.0	25.0	1.00
C8	18 Oct 2022	17	13.38	90.42	6.2	33.38	8.0	25.1	0.94
C8	18 Oct 2022	18	13.37	90.42	6.2	33.38	8.0	25.1	0.89
C8	18 Oct 2022	19	13.37	90.21	6.2	33.38	8.0	25.1	0.85
C8	18 Oct 2022	20	13.38	90.17	6.1	33.38	8.0	25.1	0.85
C8	25 Oct 2022	1	18.84	75.56	7.4	33.53	8.2	23.9	2.08
C8	25 Oct 2022	2	18.85	80.51	7.4	33.53	8.2	23.9	2.17
C8	25 Oct 2022	3	18.78	80.75	7.4	33.52	8.2	23.9	2.28
C8	25 Oct 2022	4	18.73	80.87	7.4	33.52	8.2	24.0	2.47
C8	25 Oct 2022	5	18.69	81.65	7.3	33.52	8.2	24.0	2.56
C8	25 Oct 2022	6	18.66	82.46	7.3	33.51	8.2	24.0	2.24
C8	25 Oct 2022	7	18.23	82.96	7.2	33.48	8.2	24.1	1.97
C8	25 Oct 2022	8	17.67	85.41	7.1	33.45	8.2	24.2	1.75
C8	25 Oct 2022	9	17.46	86.09	7.0	33.44	8.1	24.2	1.42
C8	25 Oct 2022	10	17.09	86.18	7.0	33.43	8.1	24.3	1.26
C8	25 Oct 2022	11	16.88	86.25	7.0	33.42	8.1	24.3	1.11
C8	25 Oct 2022	12	16.56	86.76	7.2	33.40	8.1	24.4	1.00
C8	25 Oct 2022	13	16.28	87.45	7.1	33.38	8.1	24.4	0.96
C8	25 Oct 2022	14	15.93	88.06	7.2	33.38	8.1	24.5	0.91
C8	25 Oct 2022	15	15.95	87.91	7.2	33.38	8.1	24.5	0.82
C8	25 Oct 2022	16	15.52	88.37	7.2	33.37	8.1	24.6	0.79
C8	25 Oct 2022	17	15.41	88.98	7.1	33.37	8.1	24.6	0.72
C8	25 Oct 2022	18	15.35	88.99	7.1	33.37	8.1	24.6	0.69
C8	25 Oct 2022	19	15.20	88.58	7.1	33.36	8.1	24.7	0.66
C8	25 Oct 2022	20	15.08	88.25	7.1	33.36	8.1	24.7	0.67

NA = not available

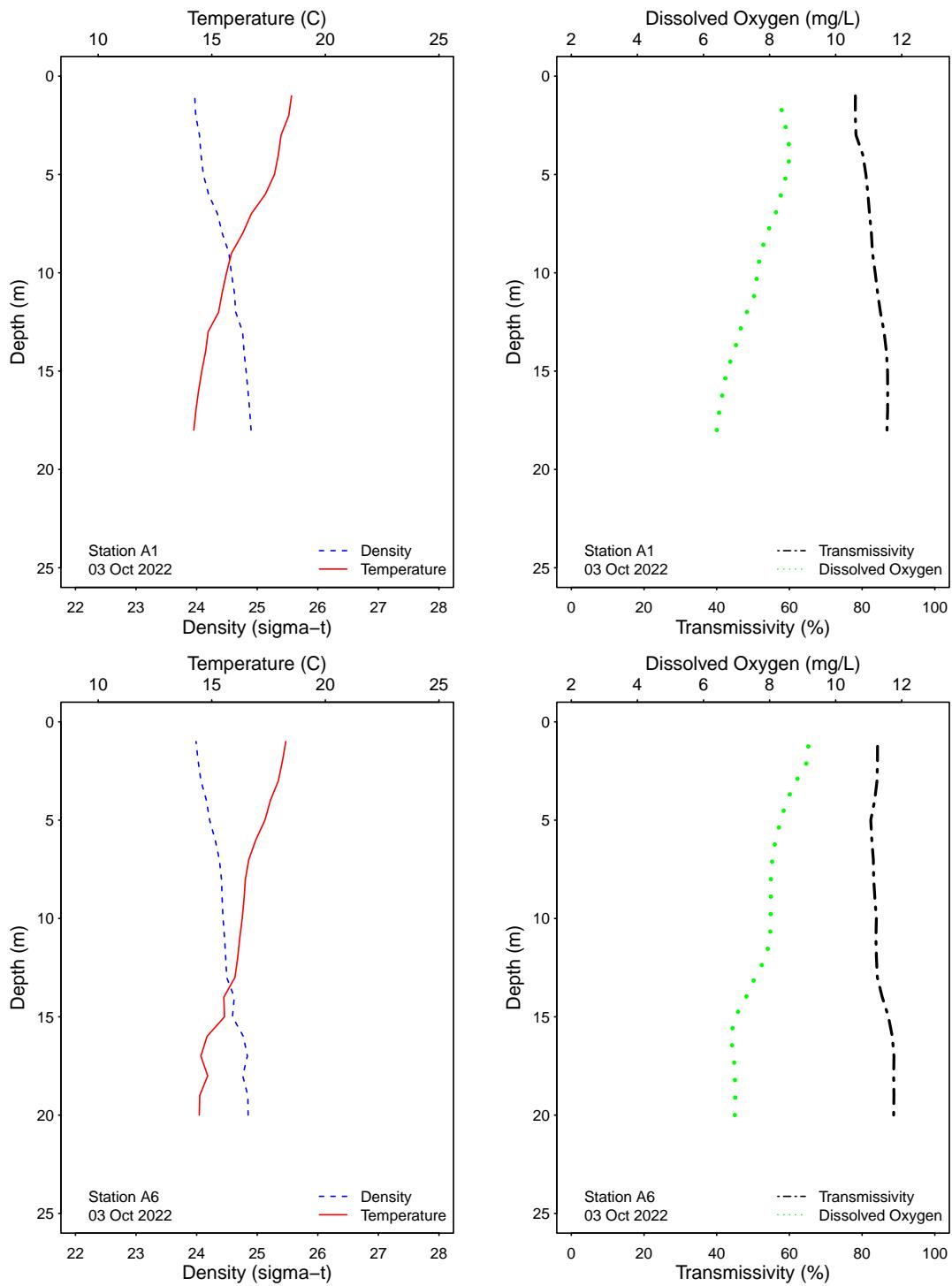


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

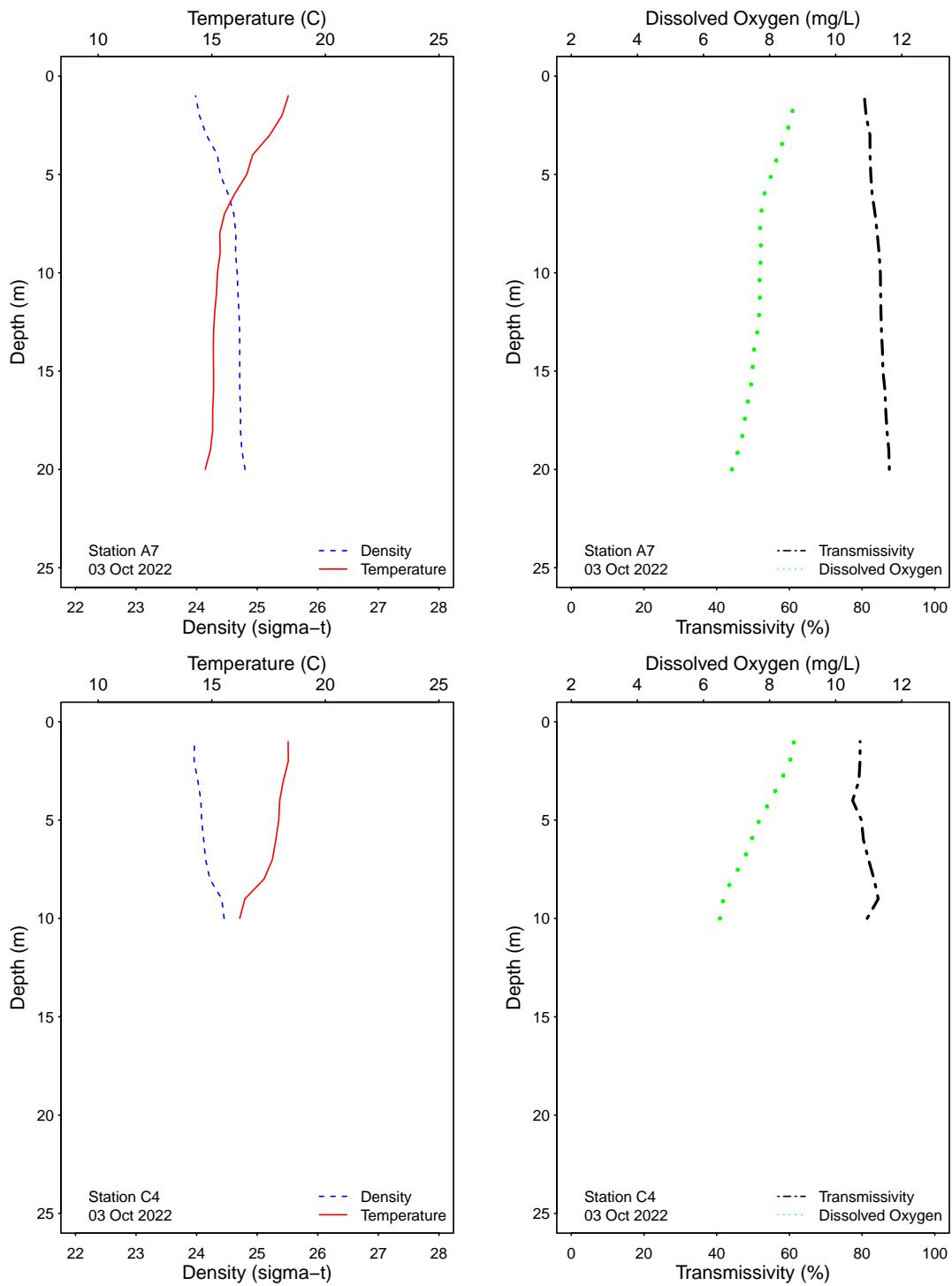


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

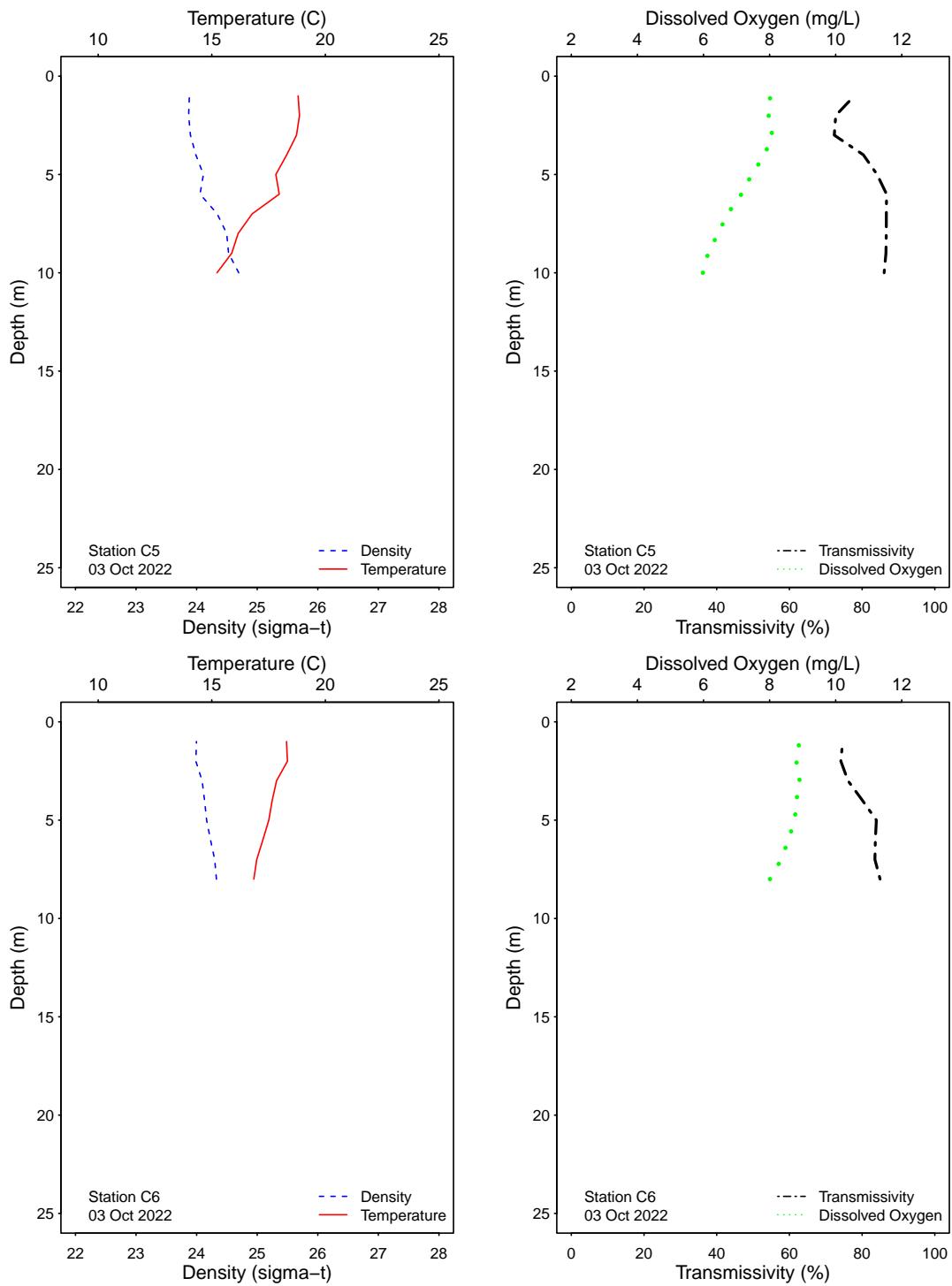


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

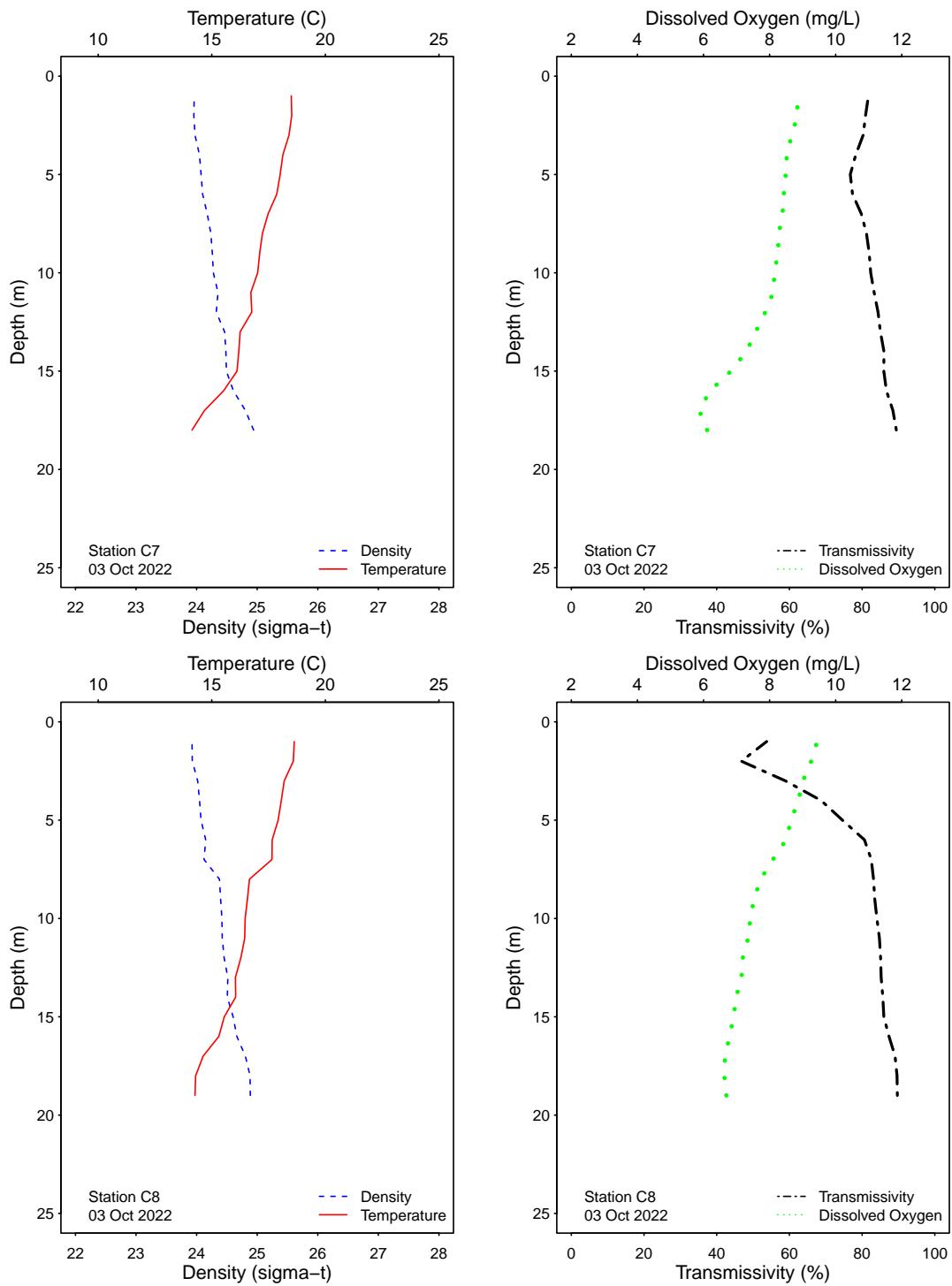


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

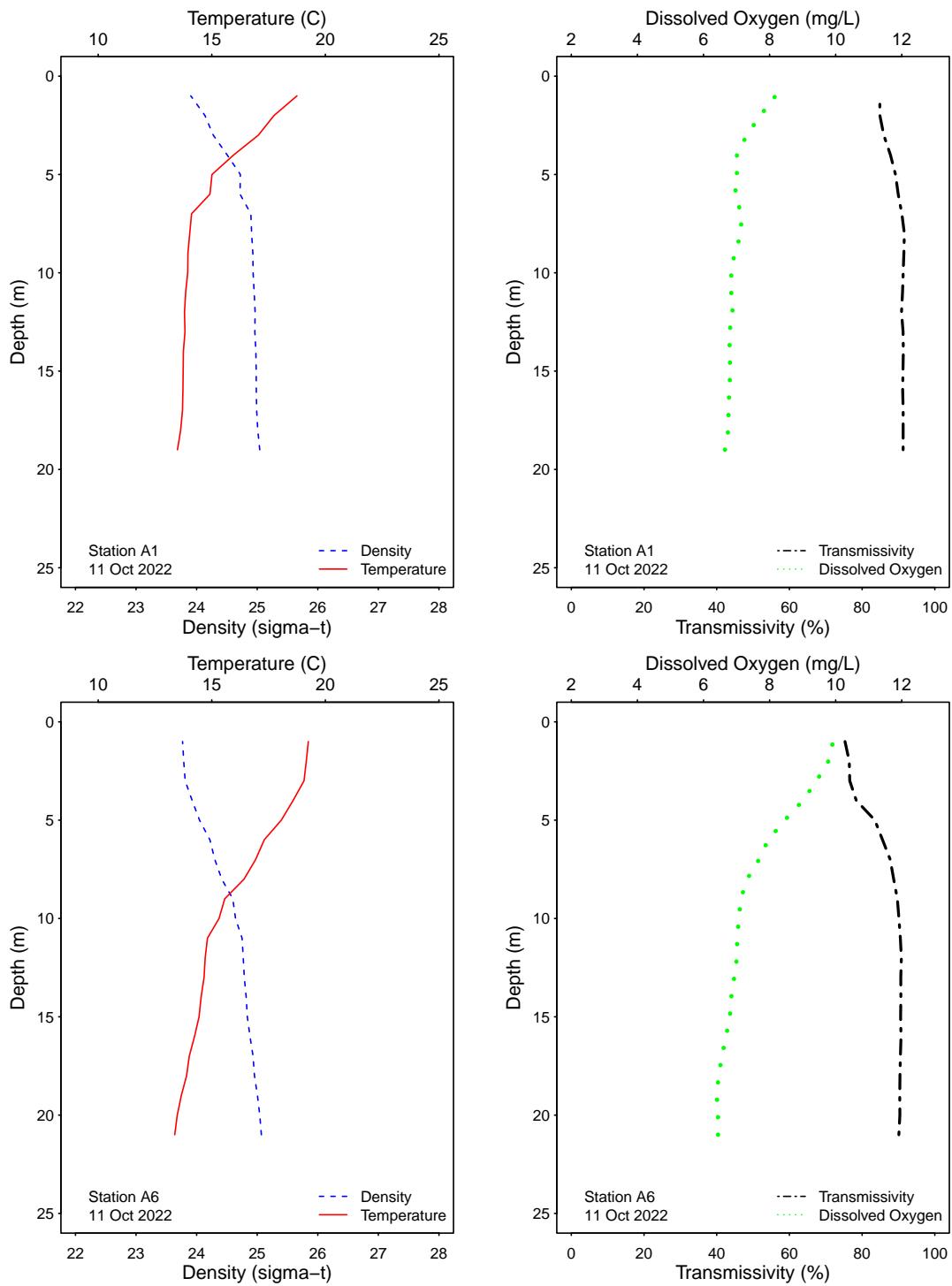


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

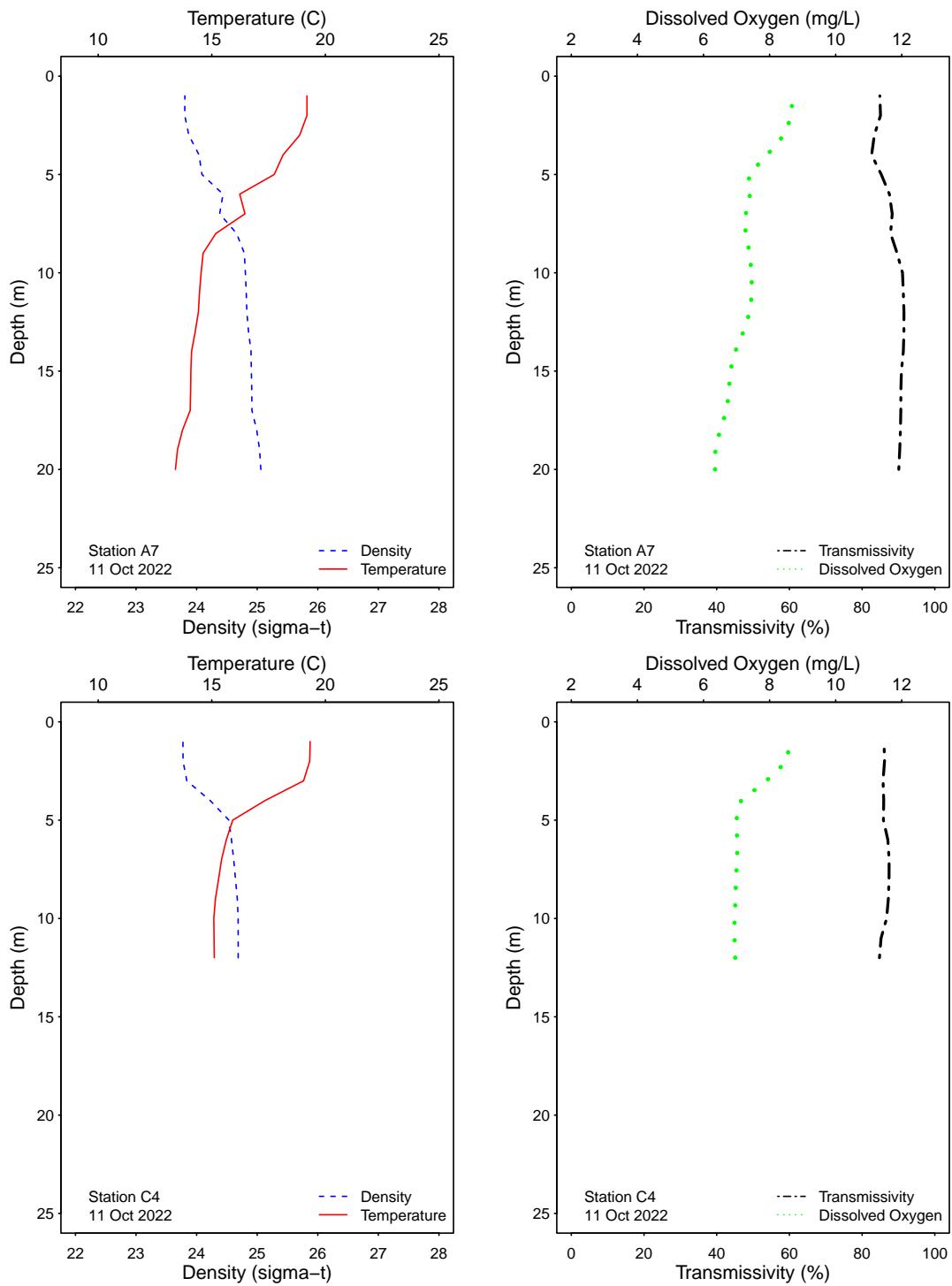


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

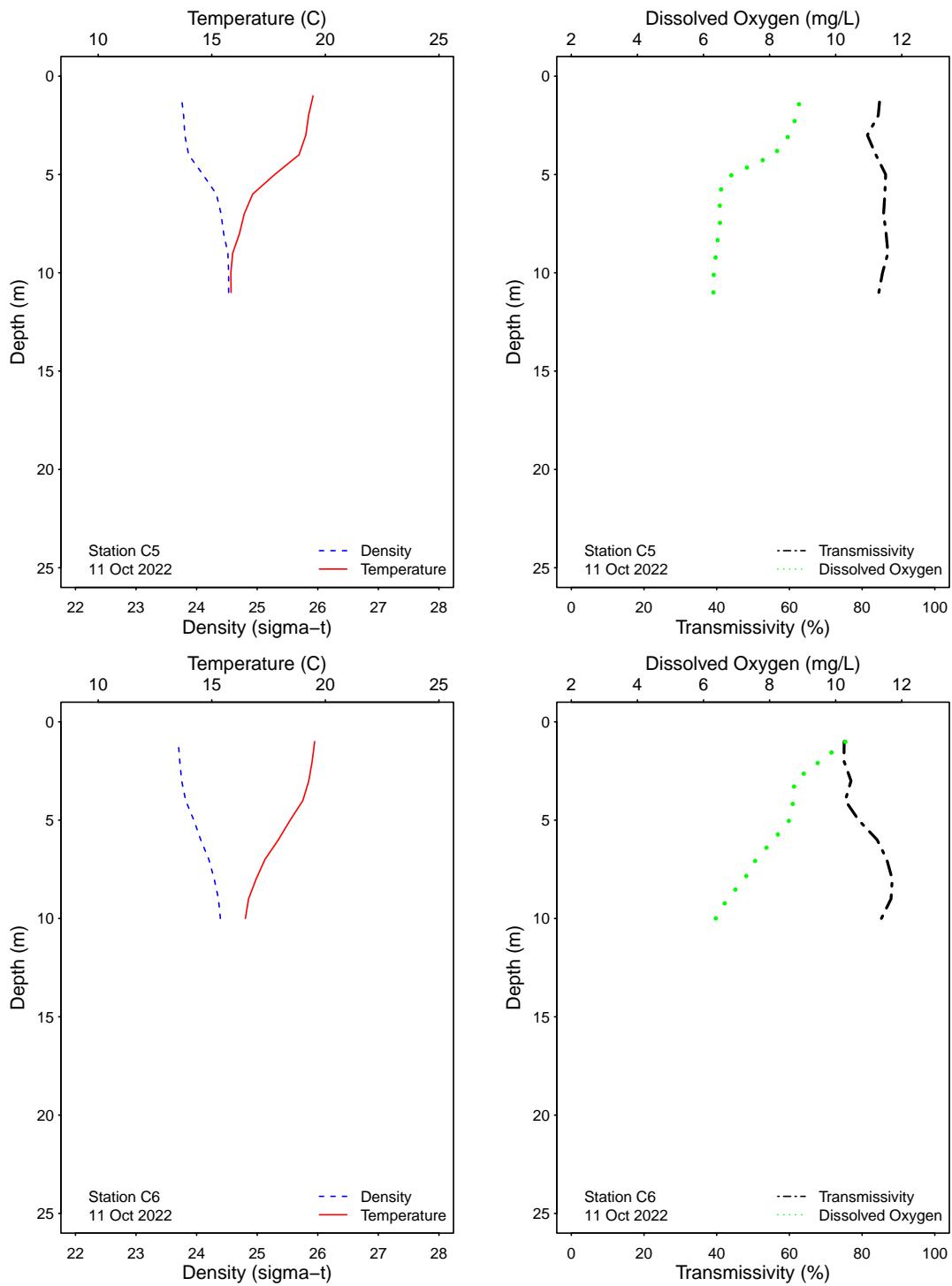


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

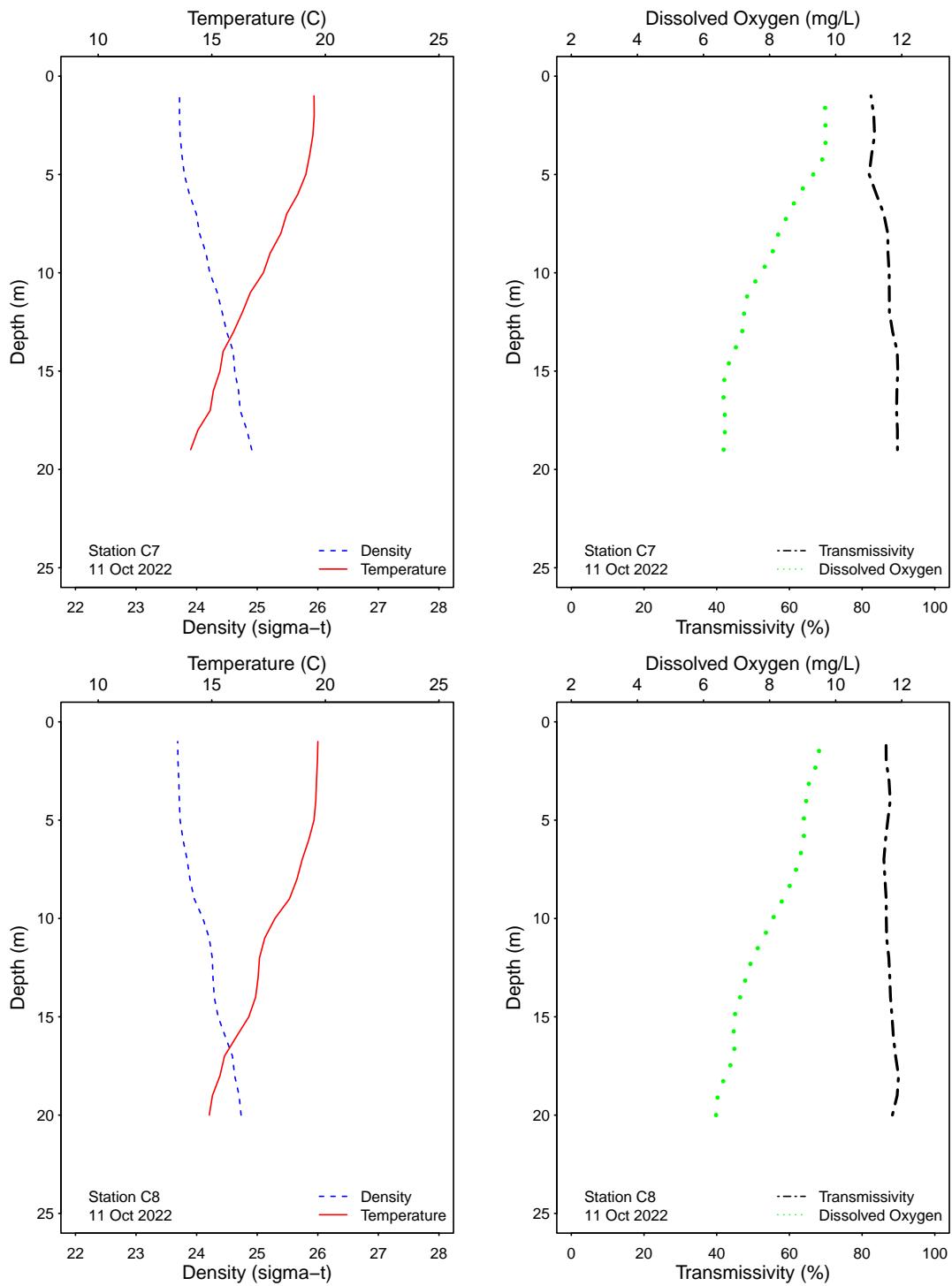


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

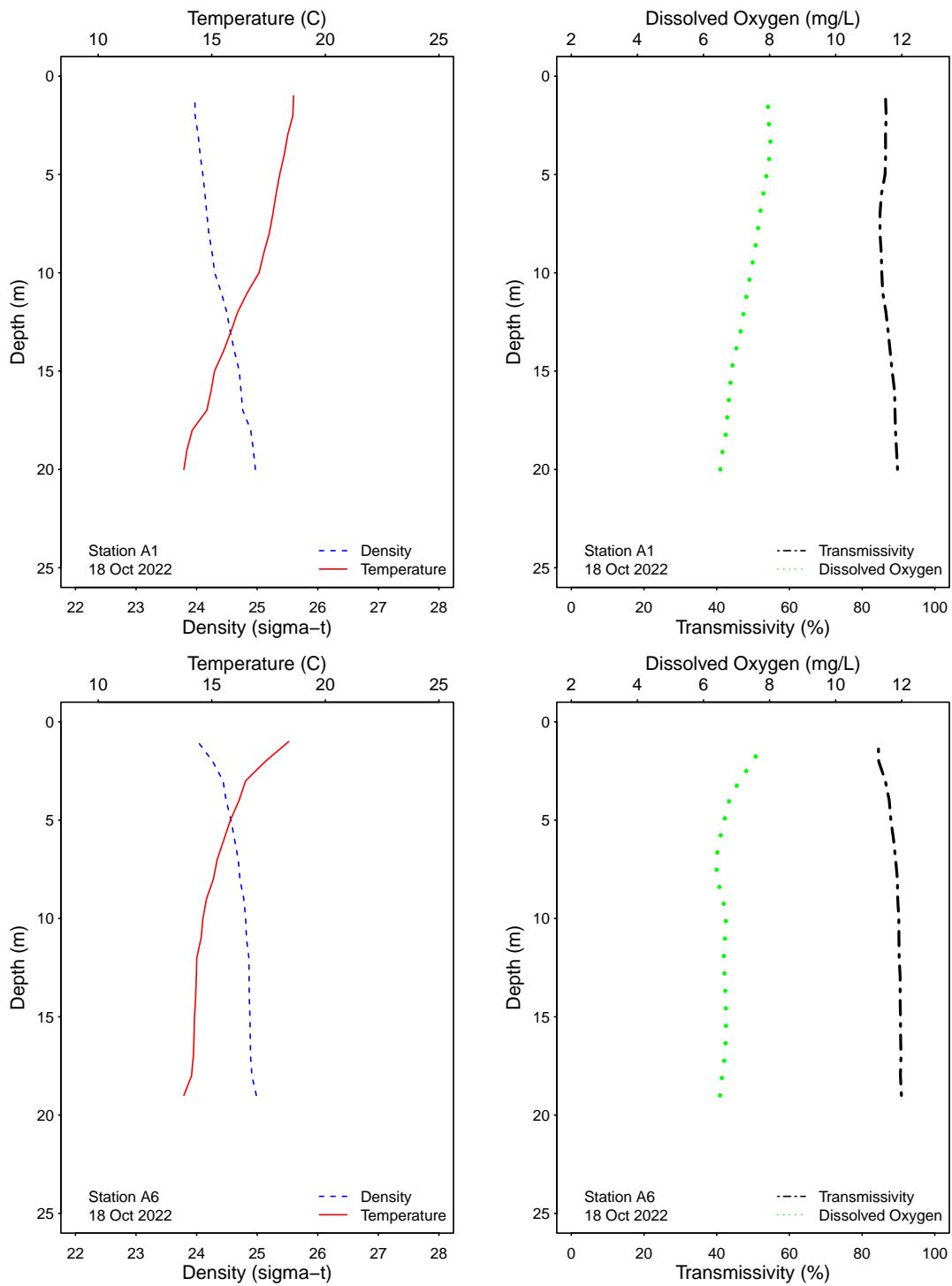


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

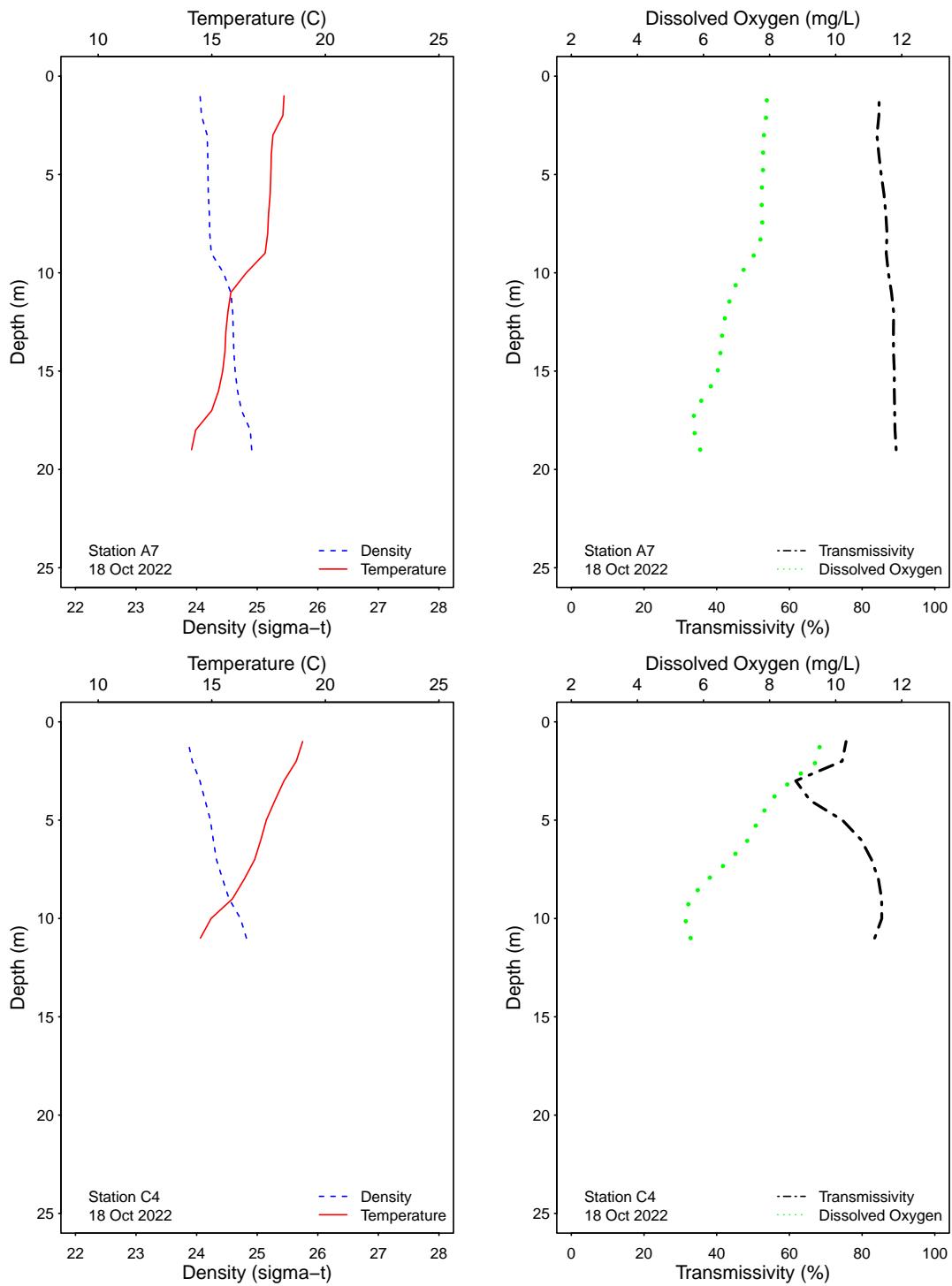


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

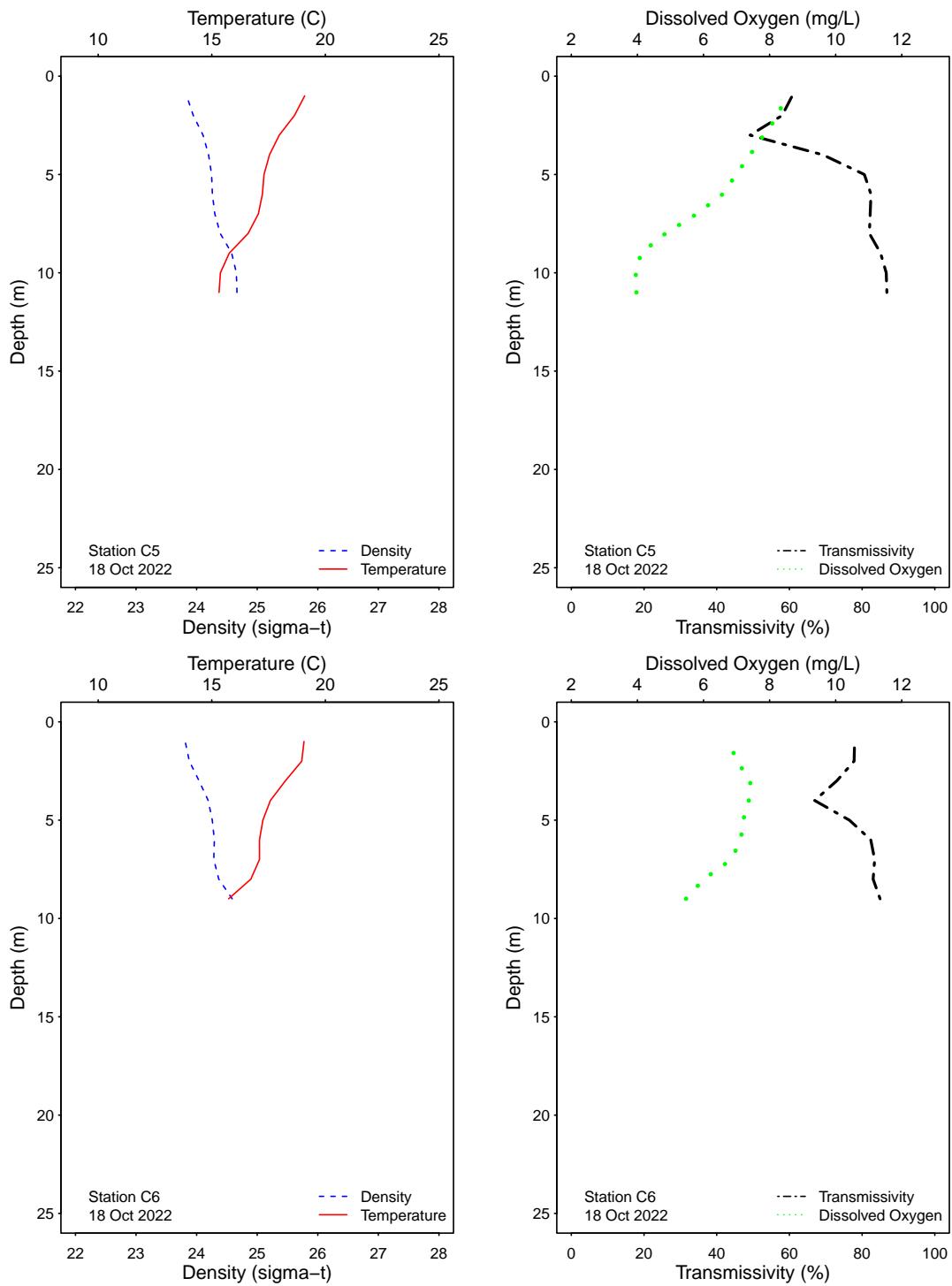


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

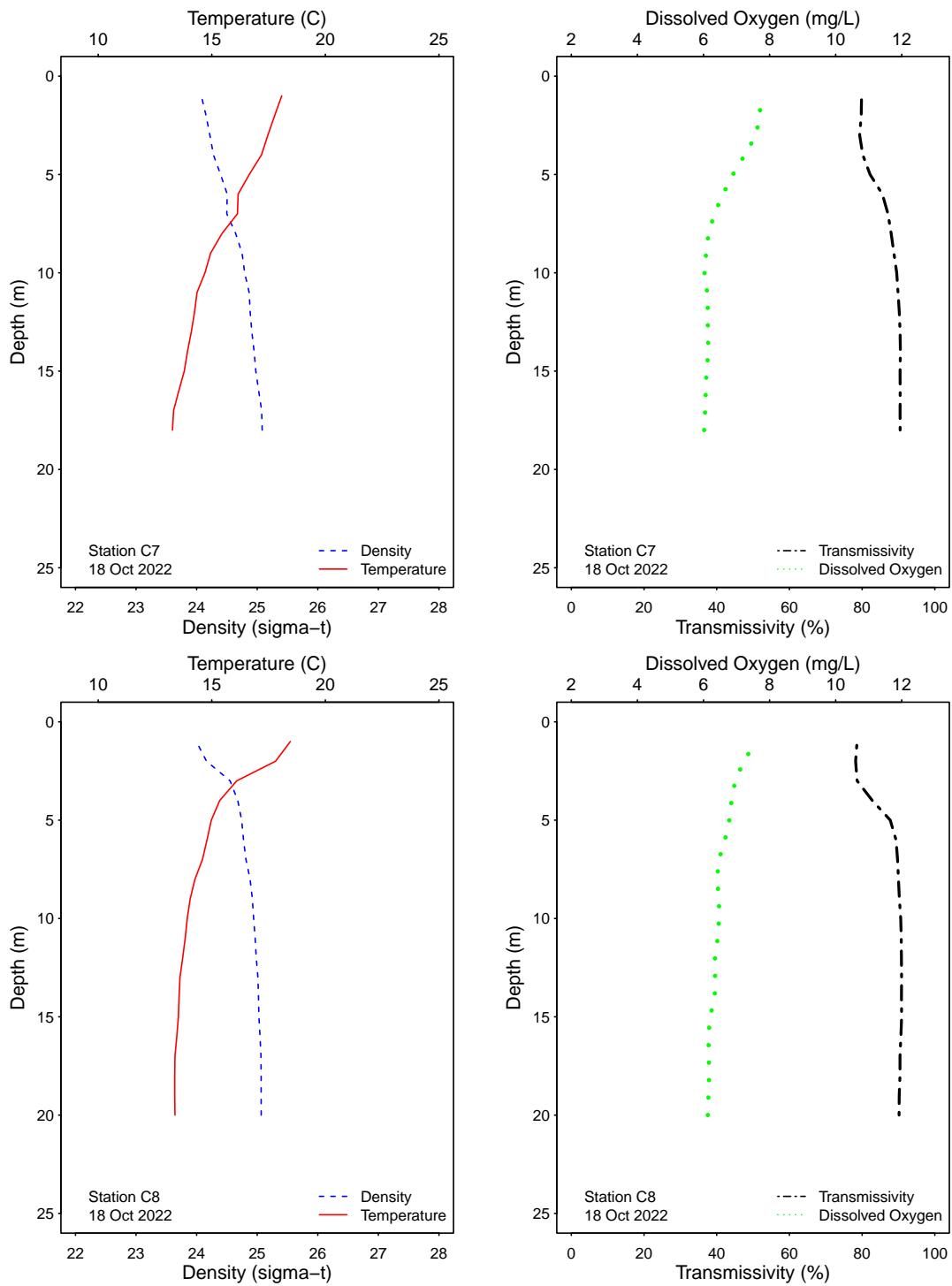


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

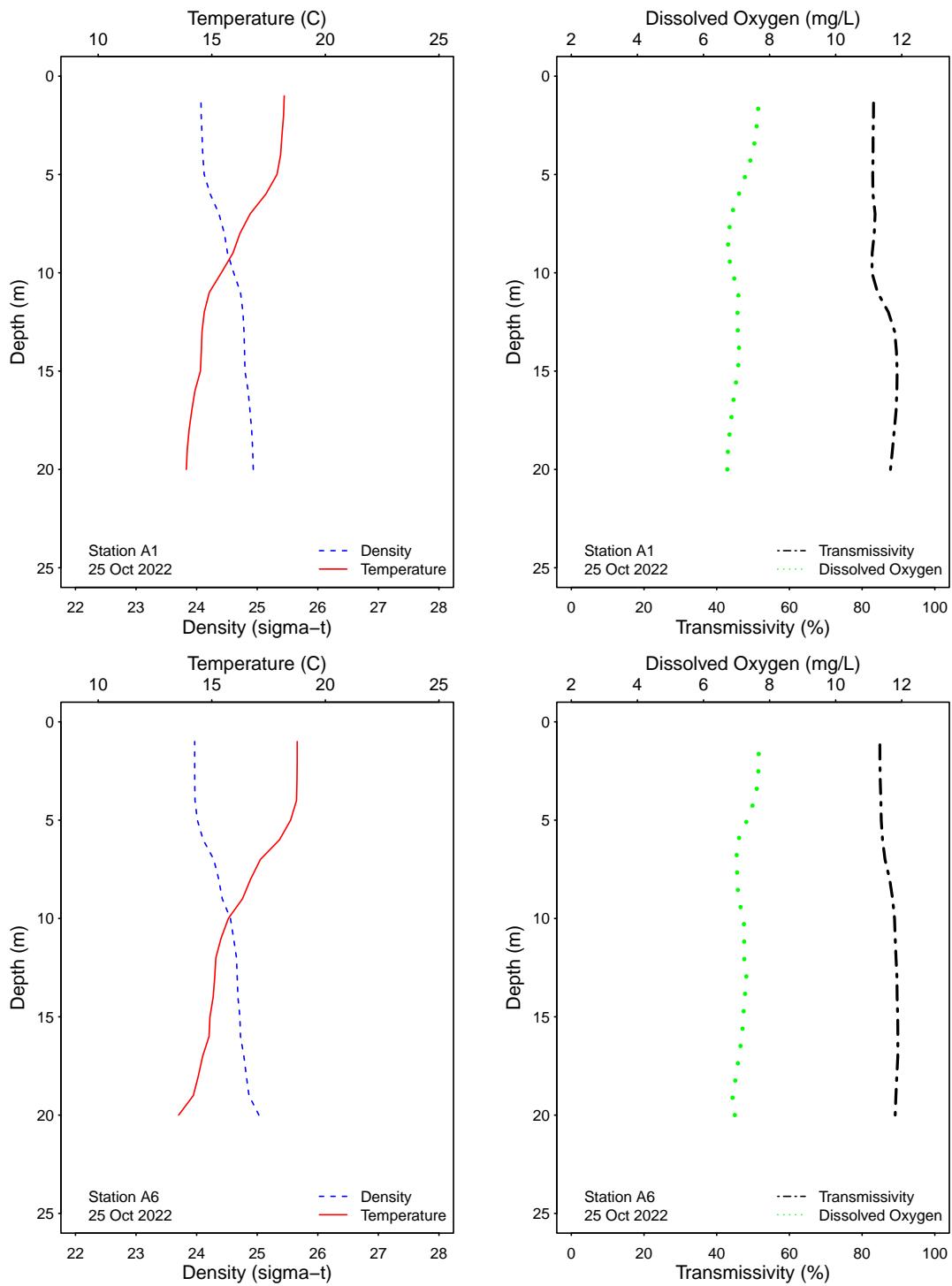


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

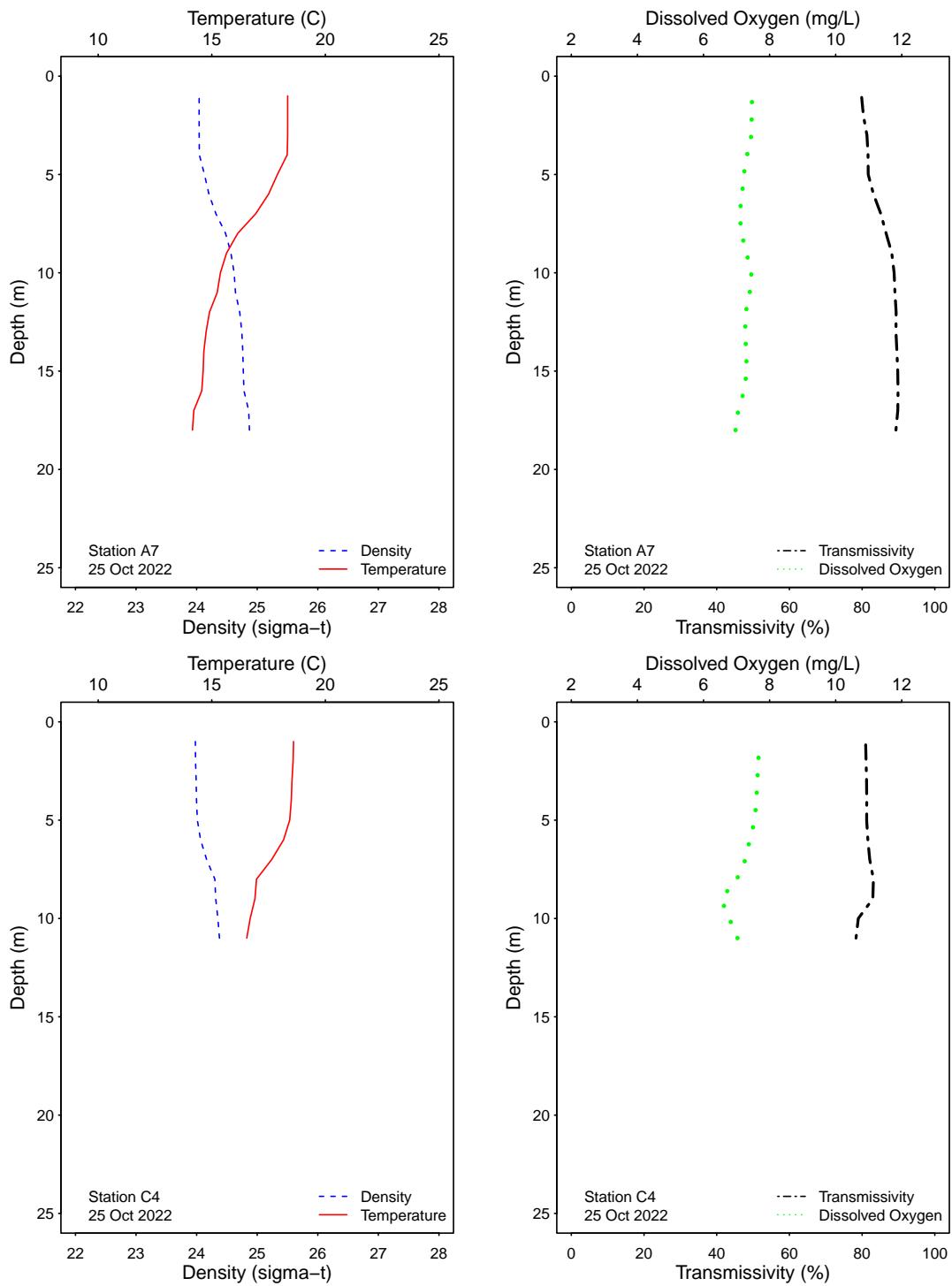


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

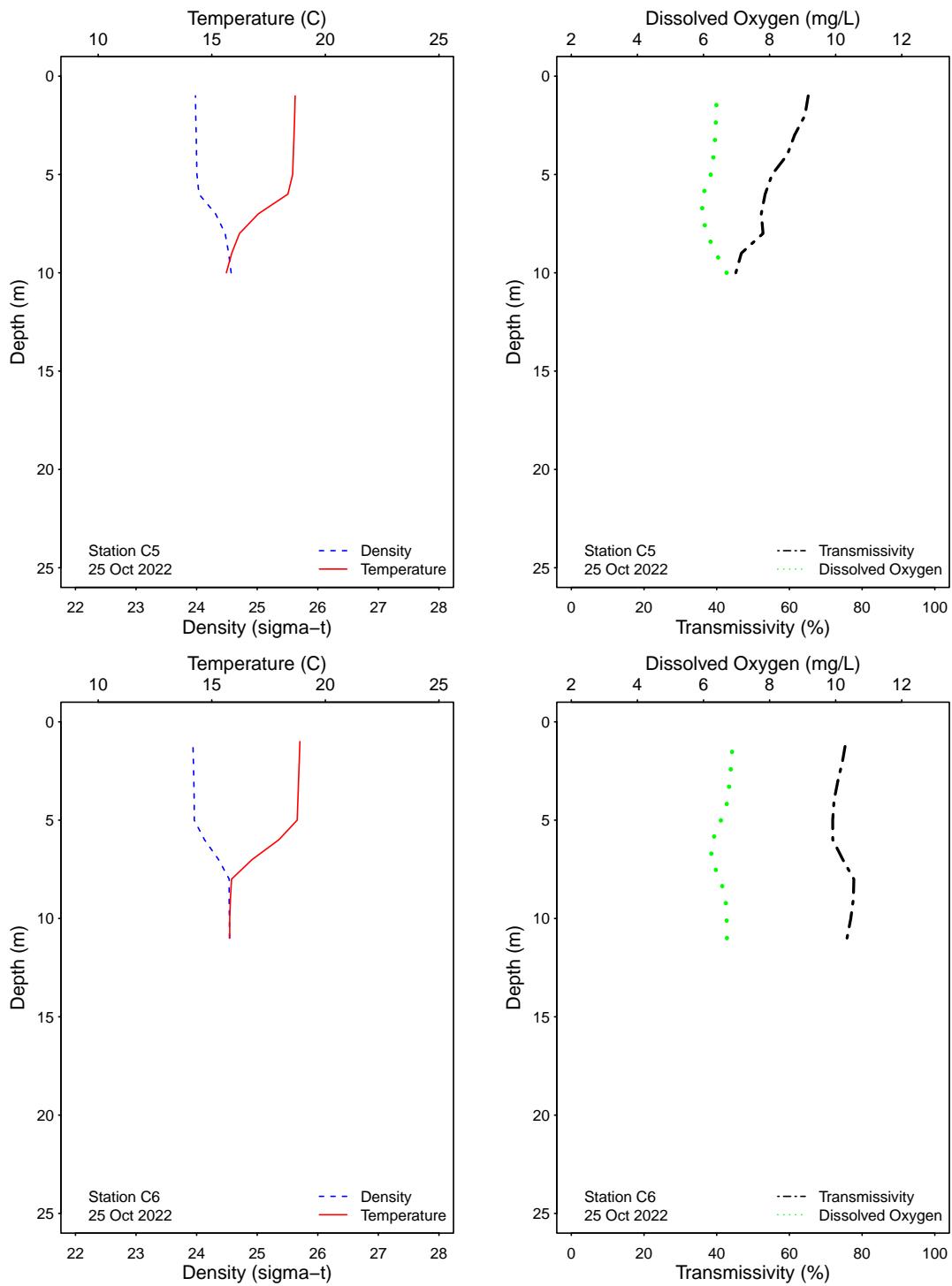


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

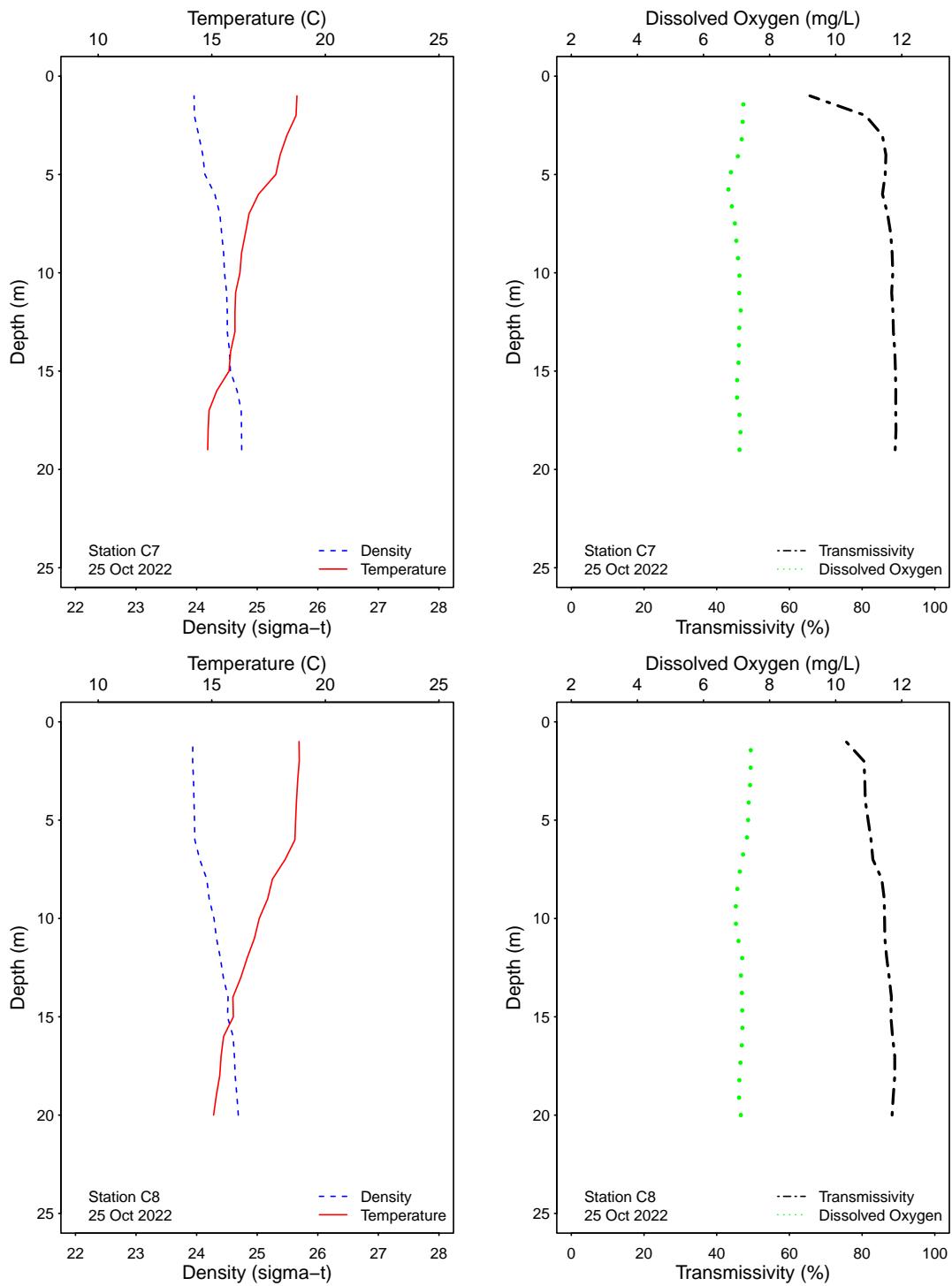


Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

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	03 Oct 2022	18	LMA	LAB DUPLICATE	2e	<2	<2
A7	11 Oct 2022	18	KT	LAB DUPLICATE	<2	<2	<2
A7	18 Oct 2022	18	CRE	LAB DUPLICATE	4e	<2	<2
A7	25 Oct 2022	18	CRE	LAB DUPLICATE	24e	6e	<2
C7	03 Oct 2022	18	LMA	LAB DUPLICATE	<2	4e	<2
C7	11 Oct 2022	18	KT	LAB DUPLICATE	8e	2e	<2
C7	18 Oct 2022	18	CRE	LAB DUPLICATE	6e	2e	<2
C7	25 Oct 2022	18	CRE	LAB DUPLICATE	<2	<2	2e
C8	03 Oct 2022	12	LMA	LAB DUPLICATE	<2	2e	<2
C8	11 Oct 2022	12	KT	LAB DUPLICATE	2e	<2	<2
C8	18 Oct 2022	12	CRE	LAB DUPLICATE	4e	<2	<2
C8	25 Oct 2022	12	CRE	LAB DUPLICATE	<2	<2	<2
D12	05 Oct 2022		CRE	FIELD DUPLICATE	<20	2e	4e
D12	05 Oct 2022		CRE	LAB DUPLICATE	20e	<2	4e
D12	12 Oct 2022		KT	FIELD DUPLICATE	<20	12e	6e
D12	12 Oct 2022		KT	LAB DUPLICATE	<20	2e	8e
D12	19 Oct 2022		KA	FIELD DUPLICATE	<2	<2	<2
D12	19 Oct 2022		KA	LAB DUPLICATE	<20	<2	<2
D12	26 Oct 2022		JF	FIELD DUPLICATE	<20	10e	8e
D12	26 Oct 2022		JF	LAB DUPLICATE	<20	10e	18e

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 Oct 2022	3	3	4	3	3	4	5	6
02 Oct 2022	3	3	4	3	3	4	5	6
03 Oct 2022	3	3	4	3	3	4	5	6
04 Oct 2022	3	3	4	3	3	4	5	6
05 Oct 2022	3	4	4	3	2	4	3	6
06 Oct 2022	3	4	4	3	2	4	3	6
07 Oct 2022	3	4	4	3	2	4	3	6
08 Oct 2022	3	4	4	3	2	4	3	6
09 Oct 2022	3	4	4	3	2	4	3	6
10 Oct 2022	3	4	4	3	2	4	3	6
11 Oct 2022	3	4	4	3	2	4	3	6
12 Oct 2022	3	4	4	6	2	6	6	7
13 Oct 2022	3	4	4	7	2	6	6	7
14 Oct 2022	3	4	4	7	2	6	6	7
15 Oct 2022	3	4	4	7	2	6	6	7
16 Oct 2022	3	4	4	7	2	6	6	7
17 Oct 2022	3	4	4	7	2	6	6	7
18 Oct 2022	3	4	4	7	2	6	6	7
19 Oct 2022	4	3	3	6	2	7	6	7
20 Oct 2022	4	3	3	6	2	7	6	7
21 Oct 2022	4	3	3	6	2	7	6	7
22 Oct 2022	4	3	3	6	2	7	6	7
23 Oct 2022	4	3	3	6	2	7	6	7
24 Oct 2022	4	3	3	6	2	7	6	7
25 Oct 2022	4	3	3	6	2	7	6	7
26 Oct 2022	4	3	3	8	2	9	9	5
27 Oct 2022	4	3	3	8	2	11	9	5
28 Oct 2022	4	3	3	8	2	11	9	5
29 Oct 2022	4	3	3	8	2	11	9	5
30 Oct 2022	4	3	3	8	2	11	9	5
31 Oct 2022	4	3	3	8	2	11	9	5

* 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
October	IC	IC	IC	E	IC	E	IC	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Table B.3

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

Date	D4	D5	D7	D8-B	D9	D10	D11	D12
01 Oct 2022	200	200	200	200	200	200	110	30
02 Oct 2022	200	200	200	200	200	200	110	30
03 Oct 2022	200	200	200	200	200	200	110	30
04 Oct 2022	200	200	200	200	200	200	110	30
05 Oct 2022	200	200	200	200	200	200	20	40
06 Oct 2022	200	200	200	200	200	200	20	40
07 Oct 2022	200	200	200	200	110	200	110	60
08 Oct 2022	200	200	200	200	110	200	110	60
09 Oct 2022	200	200	200	200	110	200	110	60
10 Oct 2022	200	200	200	200	110	200	110	60
11 Oct 2022	200	200	200	200	110	200	110	60
12 Oct 2022	200	200	200	200	120	200	200	40
13 Oct 2022	200	200	200	200	120	200	200	40
14 Oct 2022	110	200	200	200	70	160	200	30
15 Oct 2022	110	200	200	200	70	160	200	30
16 Oct 2022	110	200	200	200	70	160	200	30
17 Oct 2022	110	200	200	200	70	160	200	30
18 Oct 2022	110	200	200	200	70	160	200	30
19 Oct 2022	200	200	200	200	20	200	200	20
20 Oct 2022	200	200	200	200	20	200	200	20
21 Oct 2022	110	110	200	200	20	160	110	30
22 Oct 2022	110	110	200	200	20	160	110	30
23 Oct 2022	110	110	200	200	20	160	110	30
24 Oct 2022	110	110	200	200	20	160	110	30
25 Oct 2022	110	110	200	200	20	160	110	30
26 Oct 2022	200	20	200	200	20	200	200	20
27 Oct 2022	200	20	200	200	20	200	200	20
28 Oct 2022	200	20	200	200	20	200	110	20
29 Oct 2022	200	20	200	200	20	200	110	20
30 Oct 2022	200	20	200	200	20	200	110	20
31 Oct 2022	200	20	200	200	20	200	110	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
October	IC	IC	IC	E	IC	IC	E	IC

IC = In Compliance

E = Exceedance

ns = not sampled

ND = no data

Kelp Stations

Table B.5

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

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

* 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
October	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 PL00 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<5

Date	A1			A6			A7			C4			C5			C6			C7			C8			
	1m	12m	18m	1m	12m	18m	1m	12m	18m	3m	9m	1m	3m	9m	1m	3m	9m	1m	12m	18m	1m	12m	18m		
01 Oct 2022	2	2	11	11	2	8	2	3	3	20	110	20	2	11	13	20	20	20	11	20	20	2	5	3	2
02 Oct 2022	2	2	11	11	2	2	2	2	2	20	20	2	2	2	6	20	20	20	2	2	2	4	2	2	5
03 Oct 2022	2	2	2	2	2	2	2	2	2	20	20	2	2	2	6	20	20	20	2	2	2	4	2	2	2
04 Oct 2022	2	2	2	2	2	2	2	2	2	20	20	2	2	2	6	20	20	20	2	2	2	4	2	2	2
05 Oct 2022	2	2	2	2	2	2	2	2	2	20	20	2	2	2	6	20	20	20	2	2	2	4	2	2	2
06 Oct 2022	2	2	2	2	2	2	2	2	2	20	20	2	2	2	6	20	20	20	2	2	2	4	2	2	2
07 Oct 2022	2	3	11	2	2	8	2	2	3	11	11	11	11	11	13	11	11	11	11	11	11	6	2	2	5
08 Oct 2022	2	3	11	2	2	8	2	2	3	11	11	11	11	11	13	11	11	11	11	11	11	6	2	2	5
09 Oct 2022	2	3	11	2	2	8	2	2	3	11	11	11	11	11	13	11	11	11	11	11	11	6	2	2	5
10 Oct 2022	2	3	11	2	2	8	2	2	3	11	11	11	11	11	13	11	11	11	11	11	11	6	2	2	5
11 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	6	20	2	2	2	2	6	2	2	8
12 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	6	20	2	2	2	2	6	2	2	8
13 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	5	11	2	2	2	2	5	2	2	5
14 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	5	11	2	2	2	2	5	2	2	5
15 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	5	11	2	2	2	2	5	2	2	5
16 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	5	11	2	2	2	2	5	2	2	5
17 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	5	11	2	2	2	2	5	2	2	5
18 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	4	20	2	2	2	2	4	2	2	4
19 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	4	20	2	2	2	2	4	2	2	4
20 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	5	2	2	6
21 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	5	2	2	6
22 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	5	2	2	6
23 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	5	2	2	6
24 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	5	2	2	6
25 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	4	2	2	2	2	4	2	2	4	
26 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	4	2	2	2	2	4	2	2	4	
27 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	4	2	2	2	2	4	2	2	4	
28 Oct 2022	2	2	2	2	2	14	2	2	2	2	2	2	2	2	2	4	2	2	2	2	4	2	2	4	
29 Oct 2022	2	3	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	4	2	2	3
30 Oct 2022	2	3	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	4	2	2	3
31 Oct 2022	2	3	2	2	2	14	2	2	2	2	2	2	2	2	2	3	11	2	2	2	2	4	2	2	3

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