MONTHLY RECEIVING WATERS MONITORING REPORT FOR THE POINT LOMA OCEAN OUTFALL

POINT LOMA METROPOLITAN WASTEWATER TREATMENT PLANT

NPDES PERMIT NO. CA 0107409
SDRWQCB Order No. R9-2009-0001

SEPTEMBER 2016

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

THE CITY OF SAN DIEGO

October 31, 2016

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 September 2016 Monthly Receiving Waters Monitoring Report for the Point Loma Ocean Outfall, Point Loma Wastewater Treatment Plant as required per Order No. R9-2009-0001, NPDES Permit No. CA0107409.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the Point Loma outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

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

TDS/asb

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

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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. R9-2009-0001, 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 monitored at eight shore stations (D4, D5, D7–D12). These stations range from the tip of the Point Loma Peninsula to west of Mission Bay (see station locations map). Due to site inaccessibility, station D8 has been temporarily abandoned and replaced with station D8-A. This new location will be sampled until access is restored at the original location. Seawater samples are collected from the surf zone at each station five times during the month. These samples are subsequently transported to the City's Marine Microbiology Laboratory and analyzed for the presence of several types of fecal indicator bacteria (FIBs), 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 five times during the month according to permit specifications in order 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 indicator bacteria (i.e., total coliforms, fecal coliforms, and *Enterococcus*). Additional samples for ammonium analysis are collected at these same sites and depths on a quarterly basis in order to correspond to sampling at the offshore stations located within State waters that is typically scheduled during the months of February, May, August and November. 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 primarily collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for ammonium and bacteriological analyses are then drawn from these bottles into sterile sample bottles for processing at the City's Toxicology Laboratory (ammonium) and Marine Microbiology Laboratory (bacteria), respectively. 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 eight scans per second. These scans are then internally averaged to create water column profiles with data readings at a rate of one per meter. The CTD data are presented in both graphical and tabular form. Additionally, data for depths closest to those where bacteriological samples are collected are extracted from the CTD profiles and 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); 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 *Entercocccus* bacteria, water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, chromomorphic dissolved organic matter (CDOM), and visual observations of weather and water conditions. Monitoring at sites within State waters also include the collection of discrete grab samples for ammonium analysis (see Table 4.2).

Seawater samples for ammonium and bacteriological analyses at the offshore stations are primarily 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. The CTD profile data are then presented in both graphical and tabular form. Additionally, data for depths closest to those at which bacteriological samples are 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;

[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.

(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) 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 exactly the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987) 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 2016 Quality Assurance Report, which will be completed in March 2017.

SUMMARY OF RESULTS

Shore Stations

- During September 2016, each of the eight shore stations was in compliance with various water-contact standards specified in the Ocean Plan.
- 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 surfgrass. See the City of San Diego's most recent *Point Loma Ocean Outfall Annual Receiving Waters Monitoring and Assessment Report* for details (http://www.sandiego.gov/mwwd/environment/oceanmonitor/reports/index.shtml).
- Nothing of sewage origin was observed at any of the shore stations.

Kelp Bed Stations

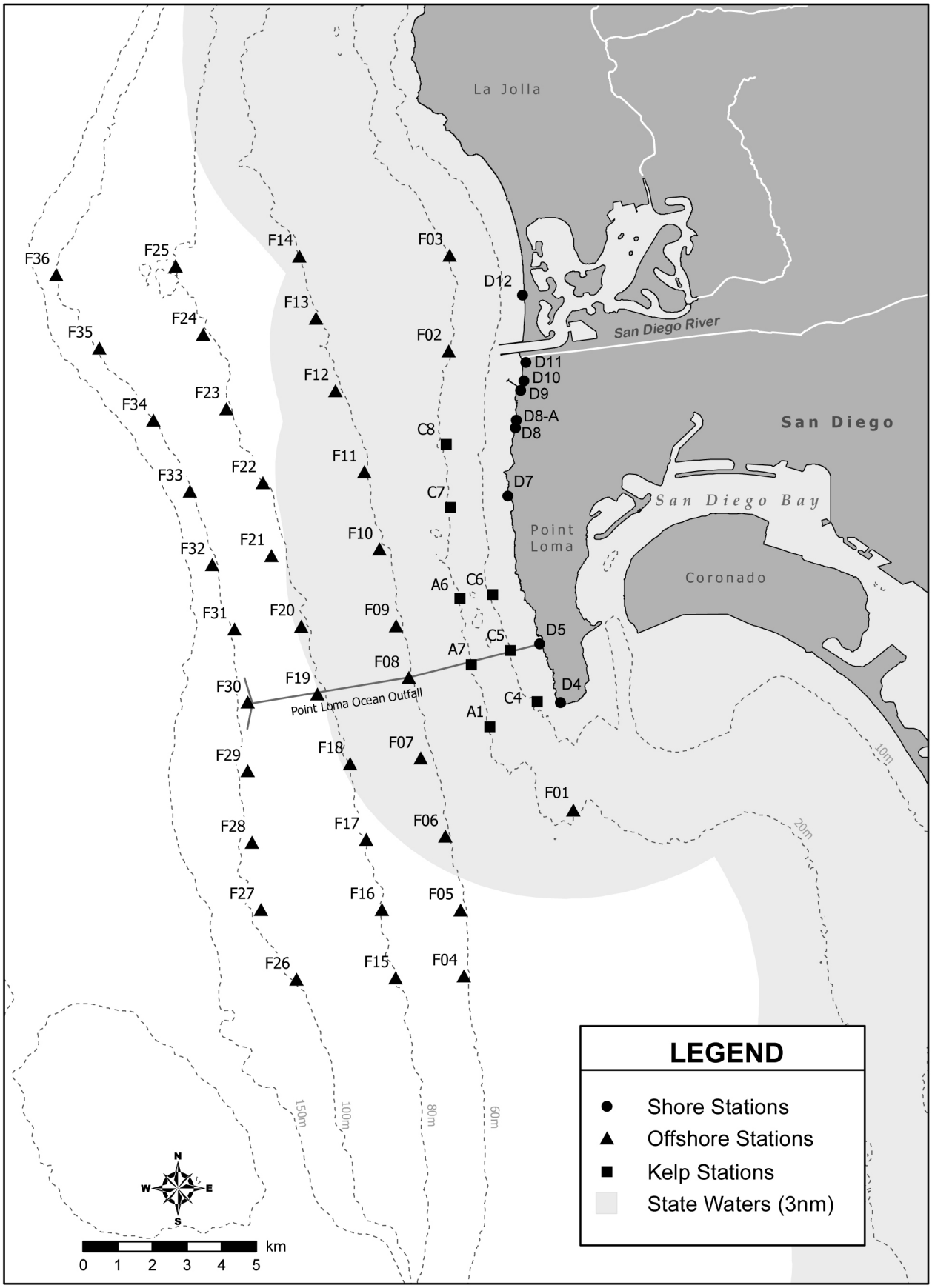
- The eight kelp bed water quality stations (A1, A6, A7, C4, C5, C6, C7, C8) were sampled five times during September (i.e. September 1, 6, 14, 19, 25).
- During September, each of the kelp bed stations was in compliance with various water-contact standards specified in the Ocean Plan.
- Water column temperatures ranged from 12.56 to 21.00°C during the month. The difference between surface and bottom waters ranged from 1.63 to 7.50°C, indicating that the water column was stratified at the kelp bed stations during the month.
- Chlorophyll *a* concentrations ranged from 0 to 6.87 µg/L during September, suggesting the presence of phytoplankton blooms during the month.

- There were no notable visual observations for September.

Offshore Stations

- Quarterly sampling was not conducted during September at the offshore stations. The next quarterly sampling is scheduled for November 2016.

TABLES AND FIGURES


La Jolla
San Diego River
San Diego
San Diego Bay
Point Loma
Coronado
Point Loma Ocean Outfall
F36
F25
F14
F03
D12
F13
F24
F35
F02
D11
D10
D9
F12
F23
F34
D8-A
D8
C8
F11
F22
F33
C7
D7
F10
F21
F32
A6
C6
F31
F20
F09
C5
D5
A7
F08
F30
F19
C4
D4
A1
F18
F07
F29
F01
F28
F17
F06
F27
F16
F05
F26
F15
F04
10m
20m
150m
100m
80m
60m
N
W
E
S
km
0 1 2 3 4 5
LEGEND
Shore Stations
Offshore Stations
Kelp Stations
State Waters (3nm)

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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-A	D9	D10	D11	D12
01 Sep 2016	8	36	45	32	20	32	36	20
02 Sep 2016	8	36	45	32	20	32	36	20
03 Sep 2016	8	36	45	32	20	32	36	20
04 Sep 2016	8	36	45	32	20	32	36	20
05 Sep 2016	8	36	45	32	20	32	36	20
06 Sep 2016	8	36	45	32	20	32	36	20
07 Sep 2016	8	23	29	20	14	20	22	13
08 Sep 2016	8	23	29	20	14	20	22	13
09 Sep 2016	8	23	29	20	14	20	22	13
10 Sep 2016	8	23	29	20	14	20	22	13
11 Sep 2016	8	23	29	20	14	20	22	13
12 Sep 2016	8	23	29	20	14	20	22	13
13 Sep 2016	8	14	33	20	12	13	22	8
14 Sep 2016	8	14	33	20	12	13	22	8
15 Sep 2016	8	14	33	20	12	13	22	8
16 Sep 2016	8	14	33	20	12	13	22	8
17 Sep 2016	8	14	33	20	12	13	22	8
18 Sep 2016	8	14	33	20	12	13	22	8
19 Sep 2016	8	13	33	32	12	19	26	8
20 Sep 2016	8	13	33	32	12	19	26	8
21 Sep 2016	8	13	33	32	12	19	26	8
22 Sep 2016	8	13	33	32	12	19	26	8
23 Sep 2016	8	13	33	32	12	19	26	8
24 Sep 2016	8	13	33	32	12	19	26	8
25 Sep 2016	13	13	38	40	12	19	21	8
26 Sep 2016	13	13	38	40	12	19	21	8
27 Sep 2016	13	13	38	40	12	19	21	8
28 Sep 2016	13	13	38	40	12	19	21	8
29 Sep 2016	13	13	38	40	12	19	21	8
30 Sep 2016	13	13	38	40	12	19	21	8

* 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-A	D9	D10	D11	D12
01 Sep 2016	2	2	10	2	2	3	5	2
02 Sep 2016	2	2	10	2	2	3	5	2
03 Sep 2016	2	2	10	2	2	3	5	2
04 Sep 2016	2	2	10	2	2	3	5	2
05 Sep 2016	2	2	10	2	2	3	5	2
06 Sep 2016	2	2	10	2	2	3	5	2
07 Sep 2016	2	2	6	2	2	3	5	2
08 Sep 2016	2	2	6	2	2	3	5	2
09 Sep 2016	2	2	6	2	2	3	5	2
10 Sep 2016	2	2	6	2	2	3	5	2
11 Sep 2016	2	2	6	2	2	3	5	2
12 Sep 2016	2	2	6	2	2	3	5	2
13 Sep 2016	2	2	8	2	2	3	5	2
14 Sep 2016	2	2	8	2	2	3	5	2
15 Sep 2016	2	2	8	2	2	3	5	2
16 Sep 2016	2	2	8	2	2	3	5	2
17 Sep 2016	2	2	8	2	2	3	5	2
18 Sep 2016	2	2	8	2	2	3	5	2
19 Sep 2016	2	2	10	4	2	4	4	3
20 Sep 2016	2	2	10	4	2	4	4	3
21 Sep 2016	2	2	10	4	2	4	4	3
22 Sep 2016	2	2	10	4	2	4	4	3
23 Sep 2016	2	2	10	4	2	4	4	3
24 Sep 2016	2	2	10	4	2	4	4	3
25 Sep 2016	2	2	12	4	2	4	2	3
26 Sep 2016	2	2	12	4	2	4	2	3
27 Sep 2016	2	2	12	4	2	4	2	3
28 Sep 2016	2	2	12	4	2	4	2	3
29 Sep 2016	2	2	12	4	2	4	2	3
30 Sep 2016	2	2	12	4	2	4	2	3

* 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-A	D9	D10	D11	D12
01 Sep 2016	2	2	2	2	3	3	3	3
02 Sep 2016	2	2	2	2	3	3	3	3
03 Sep 2016	2	2	2	2	3	3	3	3
04 Sep 2016	2	2	2	2	3	3	3	3
05 Sep 2016	2	2	2	2	3	3	3	3
06 Sep 2016	2	2	2	2	3	3	3	3
07 Sep 2016	2	2	2	2	2	3	3	3
08 Sep 2016	2	2	2	2	2	3	3	3
09 Sep 2016	2	2	2	2	2	3	3	3
10 Sep 2016	2	2	2	2	2	3	3	3
11 Sep 2016	2	2	2	2	2	3	3	3
12 Sep 2016	2	2	2	2	2	3	3	3
13 Sep 2016	2	2	3	2	2	3	3	2
14 Sep 2016	2	2	3	2	2	3	3	2
15 Sep 2016	2	2	3	2	2	3	3	2
16 Sep 2016	2	2	3	2	2	3	3	2
17 Sep 2016	2	2	3	2	2	3	3	2
18 Sep 2016	2	2	3	2	2	3	3	2
19 Sep 2016	2	2	3	4	3	6	2	2
20 Sep 2016	2	2	3	4	3	6	2	2
21 Sep 2016	2	2	3	4	3	6	2	2
22 Sep 2016	2	2	3	4	3	6	2	2
23 Sep 2016	2	2	3	4	3	6	2	2
24 Sep 2016	2	2	3	4	3	6	2	2
25 Sep 2016	2	2	3	4	3	6	2	2
26 Sep 2016	2	2	3	4	3	6	2	2
27 Sep 2016	2	2	3	4	3	6	2	2
28 Sep 2016	2	2	3	4	3	6	2	2
29 Sep 2016	2	2	3	4	3	6	2	2
30 Sep 2016	2	2	3	4	3	6	2	2

* Geometric mean calculated using n<5
ns = not sampled

Table 2.4

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

Date	D4	D5	D7	D8-A	D9	D10	D11	D12
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
07 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
13 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

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-A	D9	D10	D11	D12
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
07 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
13 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

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-A	D9	D10	D11	D12
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
07 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
13 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

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-A	D9	D10	D11	D12
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
07 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
13 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

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* (Entero) 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	Entero	F:T
D4	01 Sep 2016	916	<20	<2	<2	0.10
D4	07 Sep 2016	944	20e	<2	<2	0.10
D4	13 Sep 2016	1117	2e	<2	<2	1.00
D4	19 Sep 2016	1003	<20	<2	2e	0.10
D4	25 Sep 2016	905	20e	2e	<2	0.10
D5	01 Sep 2016	900	<20	<2	<2	0.10
D5	07 Sep 2016	928	20e	<2	<2	0.10
D5	13 Sep 2016	1138	<2	<2	<2	1.00
D5	19 Sep 2016	942	<20	<2	<2	0.10
D5	25 Sep 2016	842	<20	<2	2e	0.10
D7	01 Sep 2016	938	120e	100e	<2	0.83
D7	07 Sep 2016	1007	20e	2e	2e	0.10
D7	13 Sep 2016	1044	40e	8e	8e	0.20
D7	19 Sep 2016	1025	20e	28e	<2	1.40
D7	25 Sep 2016	935	40e	6e	<2	0.15
D8-A	01 Sep 2016	957	<20	<2	<2	0.10
D8-A	07 Sep 2016	1022	<20	<2	<2	0.10
D8-A	13 Sep 2016	1027	20e	<2	<2	0.10
D8-A	19 Sep 2016	1040	220e	88	62	0.40
D8-A	25 Sep 2016	953	60e	2e	<2	0.03
D9	01 Sep 2016	1013	2e	<2	2e	1.00
D9	07 Sep 2016	1040	40e	2e	<2	0.05
D9	13 Sep 2016	1003	8e	<2	<2	0.25
D9	19 Sep 2016	1053	<20	2e	8e	0.10
D9	25 Sep 2016	1006	<20	<2	<2	0.10
D10	01 Sep 2016	1022	20e	4e	8e	0.20
D10	07 Sep 2016	1056	<20	2e	<2	0.10
D10	13 Sep 2016	947	2e	2e	2e	1.00
D10	19 Sep 2016	1108	140e	48	80	0.34
D10	25 Sep 2016	1019	<20	<2	<2	0.10
D11	01 Sep 2016	1033	40e	<2	2e	0.05
D11	07 Sep 2016	1112	6e	<2	<2	0.33
D11	13 Sep 2016	935	<20	2e	<2	0.10
D11	19 Sep 2016	1124	40e	2e	6e	0.05
D11	25 Sep 2016	1035	<20	2e	<2	0.10

Station	Date	Time	Total	Fecal	Entero	F:T
D12	01 Sep 2016	1052	<20	<2	<2	0.10
D12	07 Sep 2016	1136	2e	<2	4e	1.00
D12	13 Sep 2016	905	2e	<2	<2	1.00
D12	19 Sep 2016	1146	20e	18e	<2	0.90
D12	25 Sep 2016	1104	<20	<2	<2	0.10

ns = not sampled
ND = no data

Table 2.9

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

Station	Date	Parameter	Value
D4	01 Sep 2016	Arrive Time	916
D4	01 Sep 2016	Weather	Overcast
D4	01 Sep 2016	Wind Speed (kts)	0.7
D4	01 Sep 2016	Wind Dir	W
D4	01 Sep 2016	Animal Life	None
D4	01 Sep 2016	Floatables	None
D4	01 Sep 2016	Water Color	Green
D4	01 Sep 2016	Current Direction	N
D4	01 Sep 2016	Wave Height Low (ft)	2
D4	01 Sep 2016	High Tide (ft)	4.9
D4	01 Sep 2016	High Tide Time	1002
D4	01 Sep 2016	Low Tide (ft)	-0.2
D4	01 Sep 2016	Low Tide Time	355
D4	01 Sep 2016	Comments	Water clear
D4	07 Sep 2016	Arrive Time	944
D4	07 Sep 2016	Weather	Overcast
D4	07 Sep 2016	Wind Speed (kts)	0.5
D4	07 Sep 2016	Wind Dir	W
D4	07 Sep 2016	Animal Life	None
D4	07 Sep 2016	Floatables	None
D4	07 Sep 2016	Water Color	Green
D4	07 Sep 2016	Current Direction	N
D4	07 Sep 2016	Wave Height Low (ft)	3
D4	07 Sep 2016	High Tide (ft)	4.4
D4	07 Sep 2016	High Tide Time	1312
D4	07 Sep 2016	Low Tide (ft)	2.1
D4	07 Sep 2016	Low Tide Time	639
D4	07 Sep 2016	Comments	Water clear
D4	13 Sep 2016	Arrive Time	1117
D4	13 Sep 2016	Weather	Cloudy
D4	13 Sep 2016	Wind Speed (kts)	3
D4	13 Sep 2016	Wind Dir	SW
D4	13 Sep 2016	Animal Life	None
D4	13 Sep 2016	Floatables	None
D4	13 Sep 2016	Water Color	Green
D4	13 Sep 2016	Current Direction	SW
D4	13 Sep 2016	Wave Height Low (ft)	2
D4	13 Sep 2016	High Tide (ft)	4.4
D4	13 Sep 2016	High Tide Time	757
D4	13 Sep 2016	Low Tide (ft)	1.7
D4	13 Sep 2016	Low Tide Time	1329
D4	13 Sep 2016	Comments	Kelp; Seagrass; Algae; Water clear
D4	19 Sep 2016	Arrive Time	1003
D4	19 Sep 2016	Weather	Partly Cloudy
D4	19 Sep 2016	Wind Speed (kts)	5
D4	19 Sep 2016	Wind Dir	W
D4	19 Sep 2016	Animal Life	None
D4	19 Sep 2016	Floatables	None

Station	Date	Parameter	Value
D4	19 Sep 2016	Water Color	Green
D4	19 Sep 2016	Current Direction	N
D4	19 Sep 2016	Wave Height Low (ft)	4
D4	19 Sep 2016	High Tide (ft)	5.9
D4	19 Sep 2016	High Tide Time	1119
D4	19 Sep 2016	Low Tide (ft)	0.6
D4	19 Sep 2016	Low Tide Time	511
D4	19 Sep 2016	Comments	Water clear
D4	25 Sep 2016	Arrive Time	905
D4	25 Sep 2016	Weather	Sunny
D4	25 Sep 2016	Wind Speed (kts)	0.3
D4	25 Sep 2016	Wind Dir	W
D4	25 Sep 2016	Animal Life	None
D4	25 Sep 2016	Floatables	None
D4	25 Sep 2016	Water Color	Green
D4	25 Sep 2016	Current Direction	W
D4	25 Sep 2016	Wave Height Low (ft)	1
D4	25 Sep 2016	High Tide (ft)	4.3
D4	25 Sep 2016	High Tide Time	653
D4	25 Sep 2016	Low Tide (ft)	2.2
D4	25 Sep 2016	Low Tide Time	1215
D4	25 Sep 2016	Comments	Seagrass; Water clear
D5	01 Sep 2016	Arrive Time	900
D5	01 Sep 2016	Weather	Overcast
D5	01 Sep 2016	Wind Speed (kts)	1.5
D5	01 Sep 2016	Wind Dir	W
D5	01 Sep 2016	Animal Life	None
D5	01 Sep 2016	Floatables	None
D5	01 Sep 2016	Water Color	Green
D5	01 Sep 2016	Current Direction	N
D5	01 Sep 2016	Wave Height Low (ft)	2
D5	01 Sep 2016	High Tide (ft)	4.9
D5	01 Sep 2016	High Tide Time	1002
D5	01 Sep 2016	Low Tide (ft)	-0.2
D5	01 Sep 2016	Low Tide Time	355
D5	01 Sep 2016	Comments	Water clear
D5	07 Sep 2016	Arrive Time	928
D5	07 Sep 2016	Weather	Overcast
D5	07 Sep 2016	Wind Speed (kts)	0.3
D5	07 Sep 2016	Wind Dir	W
D5	07 Sep 2016	Animal Life	None
D5	07 Sep 2016	Floatables	None
D5	07 Sep 2016	Water Color	Green
D5	07 Sep 2016	Current Direction	N
D5	07 Sep 2016	Wave Height Low (ft)	4
D5	07 Sep 2016	High Tide (ft)	4.4
D5	07 Sep 2016	High Tide Time	1312
D5	07 Sep 2016	Low Tide (ft)	2.1
D5	07 Sep 2016	Low Tide Time	639
D5	07 Sep 2016	Comments	Water clear
D5	13 Sep 2016	Arrive Time	1138

Station	Date	Parameter	Value
D5	13 Sep 2016	Weather	Cloudy
D5	13 Sep 2016	Wind Speed (kts)	4
D5	13 Sep 2016	Wind Dir	SW
D5	13 Sep 2016	Animal Life	None
D5	13 Sep 2016	Floatables	None
D5	13 Sep 2016	Water Color	Green
D5	13 Sep 2016	Current Direction	SW
D5	13 Sep 2016	Wave Height Low (ft)	2
D5	13 Sep 2016	High Tide (ft)	4.4
D5	13 Sep 2016	High Tide Time	757
D5	13 Sep 2016	Low Tide (ft)	1.7
D5	13 Sep 2016	Low Tide Time	1329
D5	13 Sep 2016	Comments	Kelp; Algae; Water turbid
D5	19 Sep 2016	Arrive Time	942
D5	19 Sep 2016	Weather	Partly Cloudy
D5	19 Sep 2016	Wind Speed (kts)	2.5
D5	19 Sep 2016	Wind Dir	W
D5	19 Sep 2016	Animal Life	None
D5	19 Sep 2016	Floatables	None
D5	19 Sep 2016	Water Color	Green
D5	19 Sep 2016	Current Direction	N
D5	19 Sep 2016	Wave Height Low (ft)	3
D5	19 Sep 2016	High Tide (ft)	5.9
D5	19 Sep 2016	High Tide Time	1119
D5	19 Sep 2016	Low Tide (ft)	0.6
D5	19 Sep 2016	Low Tide Time	511
D5	19 Sep 2016	Comments	Water clear
D5	25 Sep 2016	Arrive Time	842
D5	25 Sep 2016	Weather	Sunny
D5	25 Sep 2016	Wind Speed (kts)	0.1
D5	25 Sep 2016	Wind Dir	NW
D5	25 Sep 2016	Animal Life	None
D5	25 Sep 2016	Floatables	None
D5	25 Sep 2016	Water Color	Green
D5	25 Sep 2016	Current Direction	NW
D5	25 Sep 2016	Wave Height Low (ft)	2
D5	25 Sep 2016	High Tide (ft)	4.3
D5	25 Sep 2016	High Tide Time	653
D5	25 Sep 2016	Low Tide (ft)	2.2
D5	25 Sep 2016	Low Tide Time	1215
D5	25 Sep 2016	Comments	Kelp; Seagrass; Algae; Water clear
D7	01 Sep 2016	Arrive Time	938
D7	01 Sep 2016	Weather	Overcast
D7	01 Sep 2016	Wind Speed (kts)	0.3
D7	01 Sep 2016	Wind Dir	W
D7	01 Sep 2016	Animal Life	None
D7	01 Sep 2016	Floatables	None
D7	01 Sep 2016	Water Color	Green
D7	01 Sep 2016	Current Direction	N
D7	01 Sep 2016	Wave Height Low (ft)	4
D7	01 Sep 2016	High Tide (ft)	4.9
D7	01 Sep 2016	High Tide Time	1002

Station	Date	Parameter	Value
D7	01 Sep 2016	Low Tide (ft)	-0.2
D7	01 Sep 2016	Low Tide Time	355
D7	01 Sep 2016	Comments	Water clear
D7	07 Sep 2016	Arrive Time	1007
D7	07 Sep 2016	Weather	Overcast
D7	07 Sep 2016	Wind Speed (kts)	0.5
D7	07 Sep 2016	Wind Dir	W
D7	07 Sep 2016	Animal Life	None
D7	07 Sep 2016	Floatables	None
D7	07 Sep 2016	Water Color	Green
D7	07 Sep 2016	Current Direction	N
D7	07 Sep 2016	Wave Height Low (ft)	5
D7	07 Sep 2016	High Tide (ft)	4.4
D7	07 Sep 2016	High Tide Time	1312
D7	07 Sep 2016	Low Tide (ft)	2.1
D7	07 Sep 2016	Low Tide Time	639
D7	07 Sep 2016	Comments	2 Surfers; Water clear
D7	13 Sep 2016	Arrive Time	1044
D7	13 Sep 2016	Weather	Cloudy
D7	13 Sep 2016	Wind Speed (kts)	4
D7	13 Sep 2016	Wind Dir	SW
D7	13 Sep 2016	Animal Life	None
D7	13 Sep 2016	Floatables	None
D7	13 Sep 2016	Water Color	Green
D7	13 Sep 2016	Current Direction	SW
D7	13 Sep 2016	Wave Height Low (ft)	3
D7	13 Sep 2016	High Tide (ft)	4.4
D7	13 Sep 2016	High Tide Time	757
D7	13 Sep 2016	Low Tide (ft)	1.7
D7	13 Sep 2016	Low Tide Time	1329
D7	13 Sep 2016	Comments	Kelp; Seagrass; Algae; 3 Surfers; Water clear
D7	19 Sep 2016	Arrive Time	1025
D7	19 Sep 2016	Weather	Partly Cloudy
D7	19 Sep 2016	Wind Speed (kts)	4.2
D7	19 Sep 2016	Wind Dir	W
D7	19 Sep 2016	Animal Life	None
D7	19 Sep 2016	Floatables	None
D7	19 Sep 2016	Water Color	Green
D7	19 Sep 2016	Current Direction	N
D7	19 Sep 2016	Wave Height Low (ft)	3
D7	19 Sep 2016	High Tide (ft)	5.9
D7	19 Sep 2016	High Tide Time	1119
D7	19 Sep 2016	Low Tide (ft)	0.6
D7	19 Sep 2016	Low Tide Time	511
D7	19 Sep 2016	Comments	2 Surfers; Water clear
D7	25 Sep 2016	Arrive Time	935
D7	25 Sep 2016	Weather	Sunny
D7	25 Sep 2016	Wind Speed (kts)	0.1
D7	25 Sep 2016	Wind Dir	W
D7	25 Sep 2016	Animal Life	None
D7	25 Sep 2016	Floatables	None

Station	Date	Parameter	Value
D7	25 Sep 2016	Water Color	Green
D7	25 Sep 2016	Current Direction	W
D7	25 Sep 2016	Wave Height Low (ft)	3
D7	25 Sep 2016	High Tide (ft)	4.3
D7	25 Sep 2016	High Tide Time	653
D7	25 Sep 2016	Low Tide (ft)	2.2
D7	25 Sep 2016	Low Tide Time	1215
D7	25 Sep 2016	Comments	Seagrass; 7 Persons; 6 Surfers; Water clear
D8-A	01 Sep 2016	Arrive Time	957
D8-A	01 Sep 2016	Weather	Overcast
D8-A	01 Sep 2016	Wind Speed (kts)	1.2
D8-A	01 Sep 2016	Wind Dir	W
D8-A	01 Sep 2016	Animal Life	None
D8-A	01 Sep 2016	Floatables	None
D8-A	01 Sep 2016	Water Color	Green
D8-A	01 Sep 2016	Current Direction	N
D8-A	01 Sep 2016	Wave Height Low (ft)	4
D8-A	01 Sep 2016	High Tide (ft)	4.9
D8-A	01 Sep 2016	High Tide Time	1002
D8-A	01 Sep 2016	Low Tide (ft)	1
D8-A	01 Sep 2016	Low Tide Time	1553
D8-A	01 Sep 2016	Comments	Kelp; Water clear
D8-A	07 Sep 2016	Arrive Time	1022
D8-A	07 Sep 2016	Weather	Overcast
D8-A	07 Sep 2016	Wind Speed (kts)	0.9
D8-A	07 Sep 2016	Wind Dir	W
D8-A	07 Sep 2016	Animal Life	None
D8-A	07 Sep 2016	Floatables	None
D8-A	07 Sep 2016	Water Color	Green
D8-A	07 Sep 2016	Current Direction	N
D8-A	07 Sep 2016	Wave Height Low (ft)	4
D8-A	07 Sep 2016	High Tide (ft)	4.4
D8-A	07 Sep 2016	High Tide Time	1312
D8-A	07 Sep 2016	Low Tide (ft)	2.1
D8-A	07 Sep 2016	Low Tide Time	639
D8-A	07 Sep 2016	Comments	Water clear
D8-A	13 Sep 2016	Arrive Time	1027
D8-A	13 Sep 2016	Weather	Cloudy
D8-A	13 Sep 2016	Wind Speed (kts)	3
D8-A	13 Sep 2016	Wind Dir	SW
D8-A	13 Sep 2016	Animal Life	None
D8-A	13 Sep 2016	Floatables	None
D8-A	13 Sep 2016	Water Color	Green
D8-A	13 Sep 2016	Current Direction	SW
D8-A	13 Sep 2016	Wave Height Low (ft)	3
D8-A	13 Sep 2016	High Tide (ft)	4.4
D8-A	13 Sep 2016	High Tide Time	757
D8-A	13 Sep 2016	Low Tide (ft)	1.7
D8-A	13 Sep 2016	Low Tide Time	1329
D8-A	13 Sep 2016	Comments	Kelp; Seagrass; Algae; Water clear
D8-A	19 Sep 2016	Arrive Time	1040

Station	Date	Parameter	Value
D8-A	19 Sep 2016	Weather	Partly Cloudy
D8-A	19 Sep 2016	Wind Speed (kts)	5.1
D8-A	19 Sep 2016	Wind Dir	W
D8-A	19 Sep 2016	Animal Life	None
D8-A	19 Sep 2016	Floatables	None
D8-A	19 Sep 2016	Water Color	Green
D8-A	19 Sep 2016	Current Direction	N
D8-A	19 Sep 2016	Wave Height Low (ft)	5
D8-A	19 Sep 2016	High Tide (ft)	5.9
D8-A	19 Sep 2016	High Tide Time	1119
D8-A	19 Sep 2016	Low Tide (ft)	0.6
D8-A	19 Sep 2016	Low Tide Time	511
D8-A	19 Sep 2016	Comments	Water clear
D8-A	25 Sep 2016	Arrive Time	953
D8-A	25 Sep 2016	Weather	Sunny
D8-A	25 Sep 2016	Wind Speed (kts)	0.5
D8-A	25 Sep 2016	Wind Dir	NW
D8-A	25 Sep 2016	Animal Life	None
D8-A	25 Sep 2016	Floatables	None
D8-A	25 Sep 2016	Water Color	Green
D8-A	25 Sep 2016	Current Direction	NW
D8-A	25 Sep 2016	Wave Height Low (ft)	3
D8-A	25 Sep 2016	High Tide (ft)	4.3
D8-A	25 Sep 2016	High Tide Time	653
D8-A	25 Sep 2016	Low Tide (ft)	2.2
D8-A	25 Sep 2016	Low Tide Time	1215
D8-A	25 Sep 2016	Comments	Kelp; Seagrass; Water clear
D9	01 Sep 2016	Arrive Time	1013
D9	01 Sep 2016	Weather	Overcast
D9	01 Sep 2016	Wind Speed (kts)	2
D9	01 Sep 2016	Wind Dir	W
D9	01 Sep 2016	Animal Life	None
D9	01 Sep 2016	Floatables	None
D9	01 Sep 2016	Water Color	Green
D9	01 Sep 2016	Current Direction	N
D9	01 Sep 2016	Wave Height Low (ft)	3
D9	01 Sep 2016	High Tide (ft)	4.9
D9	01 Sep 2016	High Tide Time	1002
D9	01 Sep 2016	Low Tide (ft)	1
D9	01 Sep 2016	Low Tide Time	1553
D9	01 Sep 2016	Comments	Water clear
D9	07 Sep 2016	Arrive Time	1040
D9	07 Sep 2016	Weather	Overcast
D9	07 Sep 2016	Wind Speed (kts)	0.9
D9	07 Sep 2016	Wind Dir	W
D9	07 Sep 2016	Animal Life	None
D9	07 Sep 2016	Floatables	None
D9	07 Sep 2016	Water Color	Green
D9	07 Sep 2016	Current Direction	N
D9	07 Sep 2016	Wave Height Low (ft)	3
D9	07 Sep 2016	High Tide (ft)	4.4
D9	07 Sep 2016	High Tide Time	1312

Station	Date	Parameter	Value
D9	07 Sep 2016	Low Tide (ft)	2.1
D9	07 Sep 2016	Low Tide Time	639
D9	07 Sep 2016	Comments	Water clear
D9	13 Sep 2016	Arrive Time	1003
D9	13 Sep 2016	Weather	Cloudy
D9	13 Sep 2016	Wind Speed (kts)	3
D9	13 Sep 2016	Wind Dir	SW
D9	13 Sep 2016	Animal Life	None
D9	13 Sep 2016	Floatables	None
D9	13 Sep 2016	Water Color	Green
D9	13 Sep 2016	Current Direction	SW
D9	13 Sep 2016	Wave Height Low (ft)	3
D9	13 Sep 2016	High Tide (ft)	4.4
D9	13 Sep 2016	High Tide Time	757
D9	13 Sep 2016	Low Tide (ft)	1.7
D9	13 Sep 2016	Low Tide Time	1329
D9	13 Sep 2016	Comments	Kelp; Seagrass; Water clear
D9	19 Sep 2016	Arrive Time	1053
D9	19 Sep 2016	Weather	Partly Cloudy
D9	19 Sep 2016	Wind Speed (kts)	6.3
D9	19 Sep 2016	Wind Dir	W
D9	19 Sep 2016	Animal Life	None
D9	19 Sep 2016	Floatables	None
D9	19 Sep 2016	Water Color	Green
D9	19 Sep 2016	Current Direction	N
D9	19 Sep 2016	Wave Height Low (ft)	4
D9	19 Sep 2016	High Tide (ft)	5.9
D9	19 Sep 2016	High Tide Time	1119
D9	19 Sep 2016	Low Tide (ft)	0.6
D9	19 Sep 2016	Low Tide Time	511
D9	19 Sep 2016	Comments	Water clear
D9	25 Sep 2016	Arrive Time	1006
D9	25 Sep 2016	Weather	Sunny
D9	25 Sep 2016	Wind Speed (kts)	1.7
D9	25 Sep 2016	Wind Dir	NW
D9	25 Sep 2016	Animal Life	None
D9	25 Sep 2016	Floatables	None
D9	25 Sep 2016	Water Color	Green
D9	25 Sep 2016	Current Direction	NW
D9	25 Sep 2016	Wave Height Low (ft)	3
D9	25 Sep 2016	High Tide (ft)	4.3
D9	25 Sep 2016	High Tide Time	653
D9	25 Sep 2016	Low Tide (ft)	2.2
D9	25 Sep 2016	Low Tide Time	1215
D9	25 Sep 2016	Comments	Seagrass; 6 Persons; 11 Surfers; Water clear
D10	01 Sep 2016	Arrive Time	1022
D10	01 Sep 2016	Weather	Overcast
D10	01 Sep 2016	Wind Speed (kts)	2
D10	01 Sep 2016	Wind Dir	W
D10	01 Sep 2016	Animal Life	None
D10	01 Sep 2016	Floatables	None

Station	Date	Parameter	Value
D10	01 Sep 2016	Water Color	Green
D10	01 Sep 2016	Current Direction	N
D10	01 Sep 2016	Wave Height Low (ft)	3
D10	01 Sep 2016	High Tide (ft)	4.9
D10	01 Sep 2016	High Tide Time	1002
D10	01 Sep 2016	Low Tide (ft)	1
D10	01 Sep 2016	Low Tide Time	1553
D10	01 Sep 2016	Comments	Water clear
D10	07 Sep 2016	Arrive Time	1056
D10	07 Sep 2016	Weather	Overcast
D10	07 Sep 2016	Wind Speed (kts)	1.1
D10	07 Sep 2016	Wind Dir	W
D10	07 Sep 2016	Animal Life	None
D10	07 Sep 2016	Floatables	None
D10	07 Sep 2016	Water Color	Green
D10	07 Sep 2016	Current Direction	N
D10	07 Sep 2016	Wave Height Low (ft)	3
D10	07 Sep 2016	High Tide (ft)	4.4
D10	07 Sep 2016	High Tide Time	1312
D10	07 Sep 2016	Low Tide (ft)	2.1
D10	07 Sep 2016	Low Tide Time	639
D10	07 Sep 2016	Comments	1 Surfer; Water clear
D10	13 Sep 2016	Arrive Time	947
D10	13 Sep 2016	Weather	Cloudy
D10	13 Sep 2016	Wind Speed (kts)	3
D10	13 Sep 2016	Wind Dir	SW
D10	13 Sep 2016	Animal Life	None
D10	13 Sep 2016	Floatables	None
D10	13 Sep 2016	Water Color	Green
D10	13 Sep 2016	Current Direction	SW
D10	13 Sep 2016	Wave Height Low (ft)	2
D10	13 Sep 2016	High Tide (ft)	4.4
D10	13 Sep 2016	High Tide Time	757
D10	13 Sep 2016	Low Tide (ft)	1.7
D10	13 Sep 2016	Low Tide Time	1329
D10	13 Sep 2016	Comments	Kelp; Seagrass; 3 Surfers; 1 Swimmer; Water clear
D10	19 Sep 2016	Arrive Time	1108
D10	19 Sep 2016	Weather	Overcast
D10	19 Sep 2016	Wind Speed (kts)	5.3
D10	19 Sep 2016	Wind Dir	W
D10	19 Sep 2016	Animal Life	None
D10	19 Sep 2016	Floatables	None
D10	19 Sep 2016	Water Color	Green
D10	19 Sep 2016	Current Direction	N
D10	19 Sep 2016	Wave Height Low (ft)	5
D10	19 Sep 2016	High Tide (ft)	5.9
D10	19 Sep 2016	High Tide Time	1119
D10	19 Sep 2016	Low Tide (ft)	0.6
D10	19 Sep 2016	Low Tide Time	511
D10	19 Sep 2016	Comments	Water clear
D10	25 Sep 2016	Arrive Time	1019

Station	Date	Parameter	Value
D10	25 Sep 2016	Weather	Sunny
D10	25 Sep 2016	Wind Speed (kts)	1.3
D10	25 Sep 2016	Wind Dir	NW
D10	25 Sep 2016	Animal Life	None
D10	25 Sep 2016	Floatables	None
D10	25 Sep 2016	Water Color	Green
D10	25 Sep 2016	Current Direction	NW
D10	25 Sep 2016	Wave Height Low (ft)	3
D10	25 Sep 2016	High Tide (ft)	4.3
D10	25 Sep 2016	High Tide Time	653
D10	25 Sep 2016	Low Tide (ft)	2.2
D10	25 Sep 2016	Low Tide Time	1215
D10	25 Sep 2016	Comments	35 Persons; 25 Surfers; Water clear
D11	01 Sep 2016	Arrive Time	1033
D11	01 Sep 2016	Weather	Overcast
D11	01 Sep 2016	Wind Speed (kts)	1.7
D11	01 Sep 2016	Wind Dir	W
D11	01 Sep 2016	Animal Life	None
D11	01 Sep 2016	Floatables	None
D11	01 Sep 2016	Water Color	Green
D11	01 Sep 2016	Current Direction	N
D11	01 Sep 2016	Wave Height Low (ft)	4
D11	01 Sep 2016	High Tide (ft)	4.9
D11	01 Sep 2016	High Tide Time	1002
D11	01 Sep 2016	Low Tide (ft)	1
D11	01 Sep 2016	Low Tide Time	1553
D11	01 Sep 2016	Comments	6 Surfers; Water clear
D11	07 Sep 2016	Arrive Time	1112
D11	07 Sep 2016	Weather	Overcast
D11	07 Sep 2016	Wind Speed (kts)	1.3
D11	07 Sep 2016	Wind Dir	W
D11	07 Sep 2016	Animal Life	None
D11	07 Sep 2016	Floatables	None
D11	07 Sep 2016	Water Color	Green
D11	07 Sep 2016	Current Direction	N
D11	07 Sep 2016	Wave Height Low (ft)	3
D11	07 Sep 2016	High Tide (ft)	4.4
D11	07 Sep 2016	High Tide Time	1312
D11	07 Sep 2016	Low Tide (ft)	2.1
D11	07 Sep 2016	Low Tide Time	639
D11	07 Sep 2016	Comments	4 Surfers; Water clear
D11	13 Sep 2016	Arrive Time	935
D11	13 Sep 2016	Weather	Cloudy
D11	13 Sep 2016	Wind Speed (kts)	2
D11	13 Sep 2016	Wind Dir	SW
D11	13 Sep 2016	Animal Life	None
D11	13 Sep 2016	Floatables	None
D11	13 Sep 2016	Water Color	Green
D11	13 Sep 2016	Current Direction	SW
D11	13 Sep 2016	Wave Height Low (ft)	2
D11	13 Sep 2016	High Tide (ft)	4.4
D11	13 Sep 2016	High Tide Time	757

Station	Date	Parameter	Value
D11	13 Sep 2016	Low Tide (ft)	1.7
D11	13 Sep 2016	Low Tide Time	1329
D11	13 Sep 2016	Comments	Kelp; Seagrass; 1 Person; 2 Surfers; Water clear
D11	19 Sep 2016	Arrive Time	1124
D11	19 Sep 2016	Weather	Overcast
D11	19 Sep 2016	Wind Speed (kts)	2.2
D11	19 Sep 2016	Wind Dir	W
D11	19 Sep 2016	Animal Life	None
D11	19 Sep 2016	Floatables	None
D11	19 Sep 2016	Water Color	Green
D11	19 Sep 2016	Current Direction	N
D11	19 Sep 2016	Wave Height Low (ft)	4
D11	19 Sep 2016	High Tide (ft)	5.9
D11	19 Sep 2016	High Tide Time	1119
D11	19 Sep 2016	Low Tide (ft)	0.6
D11	19 Sep 2016	Low Tide Time	511
D11	19 Sep 2016	Comments	5 Surfers; Water clear
D11	25 Sep 2016	Arrive Time	1035
D11	25 Sep 2016	Weather	Sunny
D11	25 Sep 2016	Wind Speed (kts)	6.4
D11	25 Sep 2016	Wind Dir	NW
D11	25 Sep 2016	Animal Life	None
D11	25 Sep 2016	Floatables	None
D11	25 Sep 2016	Water Color	Green
D11	25 Sep 2016	Current Direction	NW
D11	25 Sep 2016	Wave Height Low (ft)	3
D11	25 Sep 2016	High Tide (ft)	4.3
D11	25 Sep 2016	High Tide Time	653
D11	25 Sep 2016	Low Tide (ft)	2.2
D11	25 Sep 2016	Low Tide Time	1215
D11	25 Sep 2016	Comments	30 Persons; 7 Surfers; Water clear
D12	01 Sep 2016	Arrive Time	1052
D12	01 Sep 2016	Weather	Overcast
D12	01 Sep 2016	Wind Speed (kts)	3.3
D12	01 Sep 2016	Wind Dir	W
D12	01 Sep 2016	Animal Life	None
D12	01 Sep 2016	Floatables	None
D12	01 Sep 2016	Water Color	Green
D12	01 Sep 2016	Current Direction	N
D12	01 Sep 2016	Wave Height Low (ft)	2
D12	01 Sep 2016	High Tide (ft)	4.9
D12	01 Sep 2016	High Tide Time	1002
D12	01 Sep 2016	Low Tide (ft)	1
D12	01 Sep 2016	Low Tide Time	1553
D12	01 Sep 2016	Comments	1 Surfer; Water clear
D12	07 Sep 2016	Arrive Time	1136
D12	07 Sep 2016	Weather	Overcast
D12	07 Sep 2016	Wind Speed (kts)	1.5
D12	07 Sep 2016	Wind Dir	W
D12	07 Sep 2016	Animal Life	None
D12	07 Sep 2016	Floatables	None

Station	Date	Parameter	Value
D12	07 Sep 2016	Water Color	Green
D12	07 Sep 2016	Current Direction	N
D12	07 Sep 2016	Wave Height Low (ft)	3
D12	07 Sep 2016	High Tide (ft)	4.4
D12	07 Sep 2016	High Tide Time	1312
D12	07 Sep 2016	Low Tide (ft)	2.1
D12	07 Sep 2016	Low Tide Time	639
D12	07 Sep 2016	Comments	3 Swimmers; Water clear
D12	13 Sep 2016	Arrive Time	905
D12	13 Sep 2016	Weather	Cloudy
D12	13 Sep 2016	Wind Speed (kts)	2
D12	13 Sep 2016	Wind Dir	SW
D12	13 Sep 2016	Animal Life	None
D12	13 Sep 2016	Floatables	None
D12	13 Sep 2016	Water Color	Green
D12	13 Sep 2016	Current Direction	SW
D12	13 Sep 2016	Wave Height Low (ft)	2
D12	13 Sep 2016	High Tide (ft)	4.4
D12	13 Sep 2016	High Tide Time	757
D12	13 Sep 2016	Low Tide (ft)	1.7
D12	13 Sep 2016	Low Tide Time	1329
D12	13 Sep 2016	Comments	Kelp; Seagrass; 2 Persons; Water clear
D12	19 Sep 2016	Arrive Time	1146
D12	19 Sep 2016	Weather	Overcast
D12	19 Sep 2016	Wind Speed (kts)	2.1
D12	19 Sep 2016	Wind Dir	W
D12	19 Sep 2016	Animal Life	None
D12	19 Sep 2016	Floatables	None
D12	19 Sep 2016	Water Color	Green
D12	19 Sep 2016	Current Direction	N
D12	19 Sep 2016	Wave Height Low (ft)	3
D12	19 Sep 2016	High Tide (ft)	5.9
D12	19 Sep 2016	High Tide Time	1119
D12	19 Sep 2016	Low Tide (ft)	0.2
D12	19 Sep 2016	Low Tide Time	1757
D12	19 Sep 2016	Comments	Water clear
D12	25 Sep 2016	Arrive Time	1104
D12	25 Sep 2016	Weather	Sunny
D12	25 Sep 2016	Wind Speed (kts)	10.4
D12	25 Sep 2016	Wind Dir	NW
D12	25 Sep 2016	Animal Life	None
D12	25 Sep 2016	Floatables	None
D12	25 Sep 2016	Water Color	Green
D12	25 Sep 2016	Current Direction	NW
D12	25 Sep 2016	Wave Height Low (ft)	2
D12	25 Sep 2016	High Tide (ft)	4.3
D12	25 Sep 2016	High Tide Time	653
D12	25 Sep 2016	Low Tide (ft)	2.2
D12	25 Sep 2016	Low Tide Time	1215
D12	25 Sep 2016	Comments	35 Persons; Water clear

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 Sep 2016	3	4	4	3	3	4	2	2
02 Sep 2016	3	4	4	3	3	4	2	2
03 Sep 2016	3	4	4	3	3	4	2	2
04 Sep 2016	3	4	4	3	3	4	2	2
05 Sep 2016	3	4	4	3	3	4	2	2
06 Sep 2016	3	5	5	3	3	4	2	2
07 Sep 2016	3	5	5	3	3	4	2	2
08 Sep 2016	3	5	5	3	3	4	2	2
09 Sep 2016	3	5	5	3	3	4	2	2
10 Sep 2016	4	5	6	3	3	4	2	2
11 Sep 2016	4	5	6	3	3	4	2	2
12 Sep 2016	4	5	6	3	3	4	2	2
13 Sep 2016	4	5	6	3	3	4	2	2
14 Sep 2016	3	6	5	3	3	4	3	2
15 Sep 2016	3	6	5	3	3	4	3	2
16 Sep 2016	3	6	5	3	3	4	3	2
17 Sep 2016	3	6	5	3	3	4	3	2
18 Sep 2016	3	6	5	3	3	4	3	2
19 Sep 2016	6	6	6	3	3	3	3	2
20 Sep 2016	6	6	6	3	3	3	3	2
21 Sep 2016	6	6	6	3	3	3	3	2
22 Sep 2016	6	6	6	3	3	3	3	2
23 Sep 2016	7	7	7	3	3	4	3	2
24 Sep 2016	7	7	7	3	3	4	3	2
25 Sep 2016	7	6	7	3	3	3	3	2
26 Sep 2016	9	6	8	3	3	4	3	2
27 Sep 2016	9	6	8	3	3	4	3	2
28 Sep 2016	9	6	8	3	3	4	3	2
29 Sep 2016	12	7	7	4	3	3	3	2
30 Sep 2016	12	7	7	4	3	3	3	2

* Geometric mean calculated using n<5

Table 3.2

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Sep 2016	2	2	2	2	2	2	2	2
02 Sep 2016	2	2	2	2	2	2	2	2
03 Sep 2016	2	2	2	2	2	2	2	2
04 Sep 2016	2	2	2	2	2	2	2	2
05 Sep 2016	2	2	2	2	2	2	2	2
06 Sep 2016	2	2	2	2	2	2	2	2
07 Sep 2016	2	2	2	2	2	2	2	2
08 Sep 2016	2	2	2	2	2	2	2	2
09 Sep 2016	2	2	2	2	2	2	2	2
10 Sep 2016	2	2	2	2	2	2	2	2
11 Sep 2016	2	2	2	2	2	2	2	2
12 Sep 2016	2	2	2	2	2	2	2	2
13 Sep 2016	2	2	2	2	2	2	2	2
14 Sep 2016	2	2	2	2	2	2	2	2
15 Sep 2016	2	2	2	2	2	2	2	2
16 Sep 2016	2	2	2	2	2	2	2	2
17 Sep 2016	2	2	2	2	2	2	2	2
18 Sep 2016	2	2	2	2	2	2	2	2
19 Sep 2016	3	2	2	2	2	2	2	2
20 Sep 2016	3	2	2	2	2	2	2	2
21 Sep 2016	3	2	2	2	2	2	2	2
22 Sep 2016	3	2	2	2	2	2	2	2
23 Sep 2016	3	2	2	2	2	2	2	2
24 Sep 2016	3	2	2	2	2	2	2	2
25 Sep 2016	3	2	2	2	2	2	2	2
26 Sep 2016	3	2	2	2	2	2	2	2
27 Sep 2016	3	2	2	2	2	2	2	2
28 Sep 2016	3	2	2	2	2	2	2	2
29 Sep 2016	4	2	2	2	2	2	2	2
30 Sep 2016	4	2	2	2	2	2	2	2

* Geometric mean calculated using n<5

Table 3.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the PLOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Sep 2016	2	2	2	2	2	2	2	2
02 Sep 2016	2	2	2	2	2	2	2	2
03 Sep 2016	2	2	2	2	2	2	2	2
04 Sep 2016	2	2	2	2	2	2	2	2
05 Sep 2016	2	2	2	2	2	2	2	2
06 Sep 2016	2	2	2	2	2	2	2	2
07 Sep 2016	2	2	2	2	2	2	2	2
08 Sep 2016	2	2	2	2	2	2	2	2
09 Sep 2016	2	2	2	2	2	2	2	2
10 Sep 2016	2	2	2	2	2	2	2	2
11 Sep 2016	2	2	2	2	2	2	2	2
12 Sep 2016	2	2	2	2	2	2	2	2
13 Sep 2016	2	2	2	2	2	2	2	2
14 Sep 2016	2	2	2	2	2	2	2	2
15 Sep 2016	2	2	2	2	2	2	2	2
16 Sep 2016	2	2	2	2	2	2	2	2
17 Sep 2016	2	2	2	2	2	2	2	2
18 Sep 2016	2	2	2	2	2	2	2	2
19 Sep 2016	2	2	2	2	2	2	2	2
20 Sep 2016	2	2	2	2	2	2	2	2
21 Sep 2016	2	2	2	2	2	2	2	2
22 Sep 2016	2	2	2	2	2	2	2	2
23 Sep 2016	3	2	2	2	2	2	2	2
24 Sep 2016	3	2	2	2	2	2	2	2
25 Sep 2016	2	2	2	2	2	2	2	2
26 Sep 2016	3	2	2	2	2	2	2	2
27 Sep 2016	3	2	2	2	2	2	2	2
28 Sep 2016	3	2	2	2	2	2	2	2
29 Sep 2016	3	2	2	2	2	2	2	2
30 Sep 2016	3	2	2	2	2	2	2	2

* Geometric mean calculated using n<5

Table 3.4

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
06 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
14 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

Table 3.5

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
06 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
14 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

Table 3.6

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
06 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
14 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

Table 3.7

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

Date	A1	A6	A7	C4	C5	C6	C7	C8
01 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
06 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
14 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
19 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC
25 Sep 2016	IC	IC	IC	IC	IC	IC	IC	IC

IC = In Compliance
E = Exceedance
ns = not sampled

Table 3.8

Summary of water quality parameters at the PLOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal) and *Enterococcus* (Entero) bacteria are reported as CFU/100 mL; the fecal:total coliform ratio (F:T) is unitless; ammonium (N-NH3) values are reported as mg/L; values for temperature (Temp,°C), transmissivity (XMS, %), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	N-NH3	Temp	XMS	DO	Sal	pH
A1	01 Sep 2016	750	1	<2	<2	<2	1.00	ns	19.1	81.07	8.2	33.35	8.2
A1	01 Sep 2016	750	12	<2	<2	<2	1.00	ns	14.8	81.28	6.6	33.24	8.1
A1	01 Sep 2016	750	18	<20	<2	<2	0.10	ns	13.6	87.14	6.4	33.26	8.0
A1	06 Sep 2016	857	1	2e	<2	<2	1.00	ns	19.4	78.59	7.9	33.45	8.1
A1	06 Sep 2016	857	12	12e	<2	<2	0.17	ns	14.0	84.76	6.2	33.25	8.0
A1	06 Sep 2016	857	18	14e	<2	<2	0.14	ns	13.5	84.94	6.2	33.27	7.9
A1	14 Sep 2016	758	1	<2	<2	<2	1.00	ns	16.3	75.54	8.0	33.37	8.1
A1	14 Sep 2016	758	12	<2	<2	<2	1.00	ns	14.5	77.62	6.0	33.31	8.1
A1	14 Sep 2016	758	18	<2	<2	<2	1.00	ns	13.3	84.63	6.0	33.30	8.0
A1	19 Sep 2016	817	1	<2	<2	<2	1.00	ns	19.0	85.48	8.0	33.41	8.1
A1	19 Sep 2016	817	12	4e	<2	2e	0.50	ns	13.3	87.35	6.8	33.25	8.0
A1	19 Sep 2016	817	18	860	110	20e	0.13	ns	12.6	86.84	6.4	33.30	7.9
A1	25 Sep 2016	812	1	8e	<2	<2	0.25	ns	17.3	71.81	8.4	33.28	8.1
A1	25 Sep 2016	812	12	4e	<2	<2	0.50	ns	15.3	78.92	7.9	33.26	8.1
A1	25 Sep 2016	812	18	<2	<2	<2	1.00	ns	14.9	79.11	7.5	33.27	8.1
C4	01 Sep 2016	1016	1	<2	<2	<2	1.00	ns	19.3	79.44	7.8	33.42	8.2
C4	01 Sep 2016	1016	3	<20	<2	<2	0.10	ns	18.1	79.04	7.6	33.27	8.2
C4	01 Sep 2016	1016	9	<2	<2	<2	1.00	ns	15.3	65.69	7.5	33.27	8.1
C4	06 Sep 2016	1137	1	<2	<2	<2	1.00	ns	19.8	76.21	7.6	33.41	8.2
C4	06 Sep 2016	1137	3	<2	<2	<2	1.00	ns	19.5	75.16	6.9	33.38	8.2
C4	06 Sep 2016	1137	9	<20	<2	<2	0.10	ns	16.4	64.19	6.2	33.31	8.0
C4	14 Sep 2016	942	1	<2	<2	<2	1.00	ns	17.0	74.94	7.1	33.45	8.1
C4	14 Sep 2016	942	3	<2	<2	<2	1.00	ns	16.6	74.73	6.9	33.41	8.1
C4	14 Sep 2016	942	9	<2	<2	<2	1.00	ns	14.9	77.91	5.7	33.32	8.1
C4	19 Sep 2016	1043	1	<2	<2	<2	1.00	ns	19.1	83.65	7.9	33.42	8.1
C4	19 Sep 2016	1043	3	<2	<2	<2	1.00	ns	19.0	83.71	7.8	33.41	8.1
C4	19 Sep 2016	1043	9	<2	<2	<2	1.00	ns	14.8	63.83	7.2	33.27	8.1
C4	25 Sep 2016	1011	1	2e	<2	<2	1.00	ns	18.5	55.84	6.7	33.34	8.0
C4	25 Sep 2016	1011	3	4e	2e	<2	0.50	ns	17.9	53.94	7.0	33.32	8.0
C4	25 Sep 2016	1011	9	2e	<2	<2	1.00	ns	16.1	61.71	5.2	33.25	8.0
C5	01 Sep 2016	1003	1	<20	<2	<2	0.10	ns	20.2	79.52	7.2	33.44	8.2
C5	01 Sep 2016	1003	3	<20	<2	<2	0.10	ns	19.4	75.28	6.8	33.34	8.2
C5	01 Sep 2016	1003	9	<2	<2	<2	1.00	ns	15.6	62.67	7.1	33.29	8.1
C5	06 Sep 2016	1122	1	<2	<2	<2	1.00	ns	19.9	77.92	7.4	33.46	8.1
C5	06 Sep 2016	1122	3	<2	<2	<2	1.00	ns	19.1	78.12	6.2	33.38	8.1

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	N-NH3	Temp	XMS	DO	Sal	pH
C5	06 Sep 2016	1122	9	<2	<2	<2	1.00	ns	15.6	80.49	7.2	33.28	8.1
C5	14 Sep 2016	931	1	2e	<2	<2	1.00	ns	17.7	65.60	7.4	33.40	8.2
C5	14 Sep 2016	931	3	<2	<2	<2	1.00	ns	17.1	76.38	6.3	33.36	8.1
C5	14 Sep 2016	931	9	<2	<2	<2	1.00	ns	14.2	83.15	6.7	33.30	8.1
C5	19 Sep 2016	1032	1	<2	<2	<2	1.00	ns	19.0	84.46	8.0	33.42	8.1
C5	19 Sep 2016	1032	3	<2	<2	<2	1.00	ns	18.9	84.64	8.0	33.42	8.1
C5	19 Sep 2016	1032	9	<2	<2	<2	1.00	ns	15.3	81.21	8.0	33.29	8.1
C5	25 Sep 2016	957	1	<2	<2	<2	1.00	ns	18.1	75.64	7.5	33.32	8.1
C5	25 Sep 2016	957	3	<2	<2	<2	1.00	ns	17.8	68.12	7.1	33.33	8.1
C5	25 Sep 2016	957	9	4e	<2	<2	0.50	ns	15.5	76.11	6.4	33.28	8.0
A6	01 Sep 2016	829	1	<20	<2	<2	0.10	ns	20.2	80.98	7.9	33.45	8.2
A6	01 Sep 2016	829	12	<2	<2	<2	1.00	ns	14.0	86.16	6.3	33.25	8.1
A6	01 Sep 2016	829	18	<2	<2	<2	1.00	ns	13.6	85.37	6.5	33.25	8.0
A6	06 Sep 2016	937	1	<2	<2	<2	1.00	ns	19.9	82.29	7.4	33.45	8.2
A6	06 Sep 2016	937	12	6e	<2	<2	0.33	ns	14.5	83.33	5.8	33.23	8.0
A6	06 Sep 2016	937	18	40	2e	<2	0.05	ns	13.8	85.05	6.1	33.27	8.0
A6	14 Sep 2016	831	1	<2	<2	<2	1.00	ns	17.1	81.10	7.4	33.40	8.2
A6	14 Sep 2016	831	12	2e	<2	<2	1.00	ns	13.9	80.26	6.7	33.29	8.1
A6	14 Sep 2016	831	18	18e	6e	<2	0.33	ns	13.4	83.17	6.1	33.31	8.0
A6	19 Sep 2016	932	1	<2	<2	<2	1.00	ns	18.8	83.71	8.1	33.41	8.1
A6	19 Sep 2016	932	12	2e	<2	<2	1.00	ns	14.7	86.21	6.9	33.26	8.1
A6	19 Sep 2016	932	18	20e	4e	<2	0.20	ns	12.9	86.59	6.4	33.28	8.0
A6	25 Sep 2016	850	1	2e	<2	<2	1.00	ns	17.3	80.50	8.7	33.27	8.2
A6	25 Sep 2016	850	12	<2	<2	<2	1.00	ns	17.0	81.60	8.7	33.25	8.2
A6	25 Sep 2016	850	18	<2	<2	<2	1.00	ns	16.0	80.96	8.2	33.26	8.2
C6	01 Sep 2016	946	1	<20	<2	<2	0.10	ns	19.8	61.86	7.2	33.43	8.2
C6	01 Sep 2016	946	3	<20	<2	<2	0.10	ns	19.0	78.55	6.2	33.57	8.2
C6	01 Sep 2016	946	9	<20	<2	<2	0.10	ns	15.8	51.82	6.8	33.33	8.1
C6	06 Sep 2016	1107	1	<2	<2	<2	1.00	ns	19.7	79.52	7.6	33.46	8.1
C6	06 Sep 2016	1107	3	<2	<2	<2	1.00	ns	18.7	78.32	7.1	33.30	8.1
C6	06 Sep 2016	1107	9	<2	<2	<2	1.00	ns	16.2	77.65	7.3	33.35	8.1
C6	14 Sep 2016	919	1	<2	<2	<2	1.00	ns	18.1	81.09	7.4	33.41	8.2
C6	14 Sep 2016	919	3	<2	<2	<2	1.00	ns	16.7	79.84	6.4	33.29	8.2
C6	14 Sep 2016	919	9	<2	<2	<2	1.00	ns	14.6	79.26	6.8	33.30	8.1
C6	19 Sep 2016	1021	1	<2	<2	<2	1.00	ns	19.1	81.49	7.9	33.41	8.1
C6	19 Sep 2016	1021	3	2e	<2	<2	1.00	ns	18.9	83.25	7.9	33.41	8.1
C6	19 Sep 2016	1021	9	<2	<2	<2	1.00	ns	16.9	81.72	8.3	33.33	8.1
C6	25 Sep 2016	944	1	<2	<2	<2	1.00	ns	17.9	77.67	8.2	33.30	8.2
C6	25 Sep 2016	944	3	<2	<2	<2	1.00	ns	17.8	77.69	7.8	33.28	8.2
C6	25 Sep 2016	944	9	<2	<2	<2	1.00	ns	15.7	75.81	7.1	33.29	8.1
A7	01 Sep 2016	813	1	<2	<2	<2	1.00	ns	20.1	80.73	7.8	33.45	8.2

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	N-NH3	Temp	XMS	DO	Sal	pH
A7	01 Sep 2016	813	12	<20	<2	<2	0.10	ns	14.3	80.91	6.3	33.23	8.1
A7	01 Sep 2016	813	18	<2	<2	<2	1.00	ns	13.6	86.14	6.5	33.26	8.0
A7	06 Sep 2016	923	1	<2	<2	<2	1.00	ns	19.1	79.73	7.0	33.42	8.1
A7	06 Sep 2016	923	12	12e	<2	2e	0.17	ns	14.1	84.75	5.9	33.25	8.0
A7	06 Sep 2016	923	18	42	<2	2e	0.05	ns	13.7	84.78	6.1	33.27	7.9
A7	14 Sep 2016	815	1	<2	<2	<2	1.00	ns	16.8	80.51	7.8	33.39	8.2
A7	14 Sep 2016	815	12	<2	<2	<2	1.00	ns	15.1	76.25	7.6	33.31	8.1
A7	14 Sep 2016	815	18	<2	<2	<2	1.00	ns	13.6	81.34	5.9	33.30	8.0
A7	19 Sep 2016	840	1	<2	<2	<2	1.00	ns	19.1	84.68	8.0	33.42	8.1
A7	19 Sep 2016	840	12	2e	<2	<2	1.00	ns	13.9	86.51	6.8	33.25	8.0
A7	19 Sep 2016	840	18	44	6e	<2	0.14	ns	12.7	86.13	6.3	33.29	8.0
A7	25 Sep 2016	832	1	<2	<2	<2	1.00	ns	17.5	75.78	8.2	33.30	8.1
A7	25 Sep 2016	832	12	<2	<2	<2	1.00	ns	16.2	79.02	7.3	33.26	8.1
A7	25 Sep 2016	832	18	6e	<2	<2	0.33	ns	14.8	79.34	7.6	33.27	8.1
C7	01 Sep 2016	912	1	<2	<2	<2	1.00	ns	20.9	80.95	8.3	33.47	8.2
C7	01 Sep 2016	912	12	<2	<2	<2	1.00	ns	17.1	80.15	5.1	33.10	8.2
C7	01 Sep 2016	912	18	2e	<2	<2	1.00	ns	13.4	85.90	7.2	33.25	8.0
C7	06 Sep 2016	954	1	<2	<2	<2	1.00	ns	19.7	78.37	8.0	33.47	8.1
C7	06 Sep 2016	954	12	2e	<2	<2	1.00	ns	15.1	80.05	6.4	33.25	8.1
C7	06 Sep 2016	954	18	<2	<2	<2	1.00	ns	14.6	84.08	6.5	33.27	8.0
C7	14 Sep 2016	847	1	<2	<2	<2	1.00	ns	16.6	79.21	7.5	33.38	8.2
C7	14 Sep 2016	847	12	<2	<2	<2	1.00	ns	13.9	80.56	6.6	33.30	8.1
C7	14 Sep 2016	847	18	28e	<2	<2	0.07	ns	13.1	86.73	6.2	33.32	8.0
C7	19 Sep 2016	948	1	2e	<2	<2	1.00	ns	18.8	81.09	8.0	33.41	8.1
C7	19 Sep 2016	948	12	<2	<2	<2	1.00	ns	16.2	84.60	6.9	33.27	8.1
C7	19 Sep 2016	948	18	4e	<2	<2	0.50	ns	13.9	84.59	7.2	33.26	8.0
C7	25 Sep 2016	908	1	<2	<2	<2	1.00	ns	18.0	76.51	8.3	33.30	8.2
C7	25 Sep 2016	908	12	<2	<2	<2	1.00	ns	17.2	77.92	8.2	33.28	8.2
C7	25 Sep 2016	908	18	<2	<2	<2	1.00	ns	14.9	80.87	7.1	33.28	8.1
C8	01 Sep 2016	924	1	<2	<2	<2	1.00	ns	21.0	82.76	7.9	33.48	8.2
C8	01 Sep 2016	924	12	<2	<2	<2	1.00	ns	15.1	78.49	5.4	33.22	8.2
C8	01 Sep 2016	924	18	4e	<2	<2	0.50	ns	13.5	85.24	6.5	33.24	8.0
C8	06 Sep 2016	1005	1	<2	<2	<2	1.00	ns	19.2	80.08	8.2	33.43	8.2
C8	06 Sep 2016	1005	12	<2	<2	<2	1.00	ns	16.1	77.97	6.5	33.29	8.1
C8	06 Sep 2016	1005	18	<2	<2	<2	1.00	ns	14.6	83.49	6.2	33.27	8.0
C8	14 Sep 2016	859	1	<2	<2	<2	1.00	ns	17.2	80.79	7.9	33.40	8.2
C8	14 Sep 2016	859	12	<2	<2	<2	1.00	ns	14.1	77.12	6.4	33.29	8.1
C8	14 Sep 2016	859	18	6e	<2	<2	0.33	ns	13.6	85.90	5.8	33.30	8.0
C8	19 Sep 2016	1002	1	<2	<2	<2	1.00	ns	19.4	86.00	8.1	33.43	8.2
C8	19 Sep 2016	1002	12	<2	<2	<2	1.00	ns	16.4	84.34	7.5	33.26	8.1
C8	19 Sep 2016	1002	18	2e	<2	<2	1.00	ns	14.1	85.72	7.4	33.25	8.1

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	N-NH3	Temp	XMS	DO	Sal	pH
C8	25 Sep 2016	927	1	<2	<2	<2	1.00	ns	17.8	83.52	8.5	33.30	8.2
C8	25 Sep 2016	927	12	<2	<2	<2	1.00	ns	16.9	81.63	7.8	33.27	8.2
C8	25 Sep 2016	927	18	2e	<2	<2	1.00	ns	14.5	81.58	6.9	33.27	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	01 Sep 2016	Depth (m)	20
A1	01 Sep 2016	Arrive Time	750
A1	01 Sep 2016	Depart Time	805
A1	01 Sep 2016	Air Temp (C)	19
A1	01 Sep 2016	Weather	Fog
A1	01 Sep 2016	Visibility (mi)	4
A1	01 Sep 2016	Wind Speed (kts)	3
A1	01 Sep 2016	Wind Dir	W
A1	01 Sep 2016	Water Color	Green
A1	01 Sep 2016	Wave Ht Low (ft)	4
A1	01 Sep 2016	Wave Period (sec)	13
A1	01 Sep 2016	Sea State	Light chop
A1	01 Sep 2016	High Tide (ft)	4.94
A1	01 Sep 2016	High Tide Time	1002
A1	01 Sep 2016	Low Tide (ft)	1
A1	01 Sep 2016	Low Tide Time	1553
A1	01 Sep 2016	Comments	
A1	06 Sep 2016	Depth (m)	18
A1	06 Sep 2016	Arrive Time	857
A1	06 Sep 2016	Depart Time	920
A1	06 Sep 2016	Air Temp (C)	18
A1	06 Sep 2016	Weather	Partly Cloudy
A1	06 Sep 2016	Visibility (mi)	7
A1	06 Sep 2016	Wind Speed (kts)	6
A1	06 Sep 2016	Wind Dir	NE
A1	06 Sep 2016	Water Color	Bluish-Green
A1	06 Sep 2016	Wave Ht Low (ft)	4
A1	06 Sep 2016	Wave Period (sec)	13
A1	06 Sep 2016	Sea State	Wind ripples
A1	06 Sep 2016	High Tide (ft)	4.58
A1	06 Sep 2016	High Tide Time	1230
A1	06 Sep 2016	Low Tide (ft)	1.71
A1	06 Sep 2016	Low Tide Time	611
A1	06 Sep 2016	Comments	
A1	14 Sep 2016	Depth (m)	19
A1	14 Sep 2016	Arrive Time	758
A1	14 Sep 2016	Depart Time	805
A1	14 Sep 2016	Air Temp (C)	17
A1	14 Sep 2016	Weather	Partly Cloudy
A1	14 Sep 2016	Visibility (mi)	4
A1	14 Sep 2016	Wind Speed (kts)	5
A1	14 Sep 2016	Wind Dir	NE
A1	14 Sep 2016	Water Color	Green
A1	14 Sep 2016	Wave Ht Low (ft)	3
A1	14 Sep 2016	Wave Period (sec)	9
A1	14 Sep 2016	Sea State	Calm
A1	14 Sep 2016	High Tide (ft)	4.75
A1	14 Sep 2016	High Tide Time	825
A1	14 Sep 2016	Low Tide (ft)	1.25

Station	Date	Parameter	Value
A1	14 Sep 2016	Low Tide Time	1409
A1	14 Sep 2016	Comments	Kelp; Boats
A1	19 Sep 2016	Depth (m)	17
A1	19 Sep 2016	Arrive Time	817
A1	19 Sep 2016	Depart Time	828
A1	19 Sep 2016	Air Temp (C)	19
A1	19 Sep 2016	Weather	Partly Cloudy
A1	19 Sep 2016	Visibility (mi)	5
A1	19 Sep 2016	Wind Speed (kts)	9
A1	19 Sep 2016	Wind Dir	N
A1	19 Sep 2016	Water Color	Greenish-Blue
A1	19 Sep 2016	Wave Ht Low (ft)	3
A1	19 Sep 2016	Wave Period (sec)	13
A1	19 Sep 2016	Sea State	Light chop
A1	19 Sep 2016	High Tide (ft)	5.86
A1	19 Sep 2016	High Tide Time	1119
A1	19 Sep 2016	Low Tide (ft)	0.62
A1	19 Sep 2016	Low Tide Time	511
A1	19 Sep 2016	Comments	
A1	25 Sep 2016	Depth (m)	19
A1	25 Sep 2016	Arrive Time	812
A1	25 Sep 2016	Depart Time	820
A1	25 Sep 2016	Air Temp (C)	19
A1	25 Sep 2016	Weather	Clear
A1	25 Sep 2016	Visibility (mi)	7
A1	25 Sep 2016	Wind Speed (kts)	3
A1	25 Sep 2016	Wind Dir	E
A1	25 Sep 2016	Water Color	Green
A1	25 Sep 2016	Wave Ht Low (ft)	3
A1	25 Sep 2016	Wave Period (sec)	9
A1	25 Sep 2016	Sea State	Calm
A1	25 Sep 2016	High Tide (ft)	4.26
A1	25 Sep 2016	High Tide Time	653
A1	25 Sep 2016	Low Tide (ft)	2.16
A1	25 Sep 2016	Low Tide Time	1215
A1	25 Sep 2016	Comments	Kelp; Boats
C4	01 Sep 2016	Depth (m)	10
C4	01 Sep 2016	Arrive Time	1016
C4	01 Sep 2016	Depart Time	1036
C4	01 Sep 2016	Air Temp (C)	20
C4	01 Sep 2016	Weather	Cloudy
C4	01 Sep 2016	Visibility (mi)	4
C4	01 Sep 2016	Wind Speed (kts)	2
C4	01 Sep 2016	Wind Dir	S
C4	01 Sep 2016	Water Color	Green
C4	01 Sep 2016	Wave Ht Low (ft)	4
C4	01 Sep 2016	Wave Period (sec)	13
C4	01 Sep 2016	Sea State	Light chop
C4	01 Sep 2016	High Tide (ft)	4.94
C4	01 Sep 2016	High Tide Time	1002
C4	01 Sep 2016	Low Tide (ft)	1
C4	01 Sep 2016	Low Tide Time	1553

Station	Date	Parameter	Value
C4	01 Sep 2016	Comments	
C4	06 Sep 2016	Depth (m)	9
C4	06 Sep 2016	Arrive Time	1137
C4	06 Sep 2016	Depart Time	1140
C4	06 Sep 2016	Air Temp (C)	20
C4	06 Sep 2016	Weather	Clear
C4	06 Sep 2016	Visibility (mi)	7
C4	06 Sep 2016	Wind Speed (kts)	5
C4	06 Sep 2016	Wind Dir	S
C4	06 Sep 2016	Water Color	Bluish-Green
C4	06 Sep 2016	Wave Ht Low (ft)	4
C4	06 Sep 2016	Wave Period (sec)	13
C4	06 Sep 2016	Sea State	Wind ripples
C4	06 Sep 2016	High Tide (ft)	4.58
C4	06 Sep 2016	High Tide Time	1230
C4	06 Sep 2016	Low Tide (ft)	1.71
C4	06 Sep 2016	Low Tide Time	611
C4	06 Sep 2016	Comments	
C4	14 Sep 2016	Depth (m)	10
C4	14 Sep 2016	Arrive Time	942
C4	14 Sep 2016	Depart Time	953
C4	14 Sep 2016	Air Temp (C)	18
C4	14 Sep 2016	Weather	Partly Cloudy
C4	14 Sep 2016	Visibility (mi)	6
C4	14 Sep 2016	Wind Speed (kts)	7
C4	14 Sep 2016	Wind Dir	S
C4	14 Sep 2016	Water Color	Green
C4	14 Sep 2016	Wave Ht Low (ft)	3
C4	14 Sep 2016	Wave Period (sec)	9
C4	14 Sep 2016	Sea State	Calm
C4	14 Sep 2016	High Tide (ft)	4.75
C4	14 Sep 2016	High Tide Time	825
C4	14 Sep 2016	Low Tide (ft)	1.25
C4	14 Sep 2016	Low Tide Time	1409
C4	14 Sep 2016	Comments	Kelp
C4	19 Sep 2016	Depth (m)	10
C4	19 Sep 2016	Arrive Time	1043
C4	19 Sep 2016	Depart Time	1046
C4	19 Sep 2016	Air Temp (C)	19
C4	19 Sep 2016	Weather	Partly Cloudy
C4	19 Sep 2016	Visibility (mi)	5
C4	19 Sep 2016	Wind Speed (kts)	12
C4	19 Sep 2016	Wind Dir	SE
C4	19 Sep 2016	Water Color	Green
C4	19 Sep 2016	Wave Ht Low (ft)	3
C4	19 Sep 2016	Wave Period (sec)	13
C4	19 Sep 2016	Sea State	Light chop
C4	19 Sep 2016	High Tide (ft)	5.86
C4	19 Sep 2016	High Tide Time	1119
C4	19 Sep 2016	Low Tide (ft)	0.62
C4	19 Sep 2016	Low Tide Time	511
C4	19 Sep 2016	Comments	

Station	Date	Parameter	Value
C4	25 Sep 2016	Depth (m)	10
C4	25 Sep 2016	Arrive Time	1011
C4	25 Sep 2016	Depart Time	1014
C4	25 Sep 2016	Air Temp (C)	19
C4	25 Sep 2016	Weather	Clear
C4	25 Sep 2016	Visibility (mi)	12
C4	25 Sep 2016	Wind Speed (kts)	6
C4	25 Sep 2016	Wind Dir	E
C4	25 Sep 2016	Water Color	Brownish-Green
C4	25 Sep 2016	Wave Ht Low (ft)	3
C4	25 Sep 2016	Wave Period (sec)	9
C4	25 Sep 2016	Sea State	Calm
C4	25 Sep 2016	High Tide (ft)	4.26
C4	25 Sep 2016	High Tide Time	653
C4	25 Sep 2016	Low Tide (ft)	2.16
C4	25 Sep 2016	Low Tide Time	1215
C4	25 Sep 2016	Comments	Kelp; boats nearby; Seagrass
C5	01 Sep 2016	Depth (m)	12
C5	01 Sep 2016	Arrive Time	1003
C5	01 Sep 2016	Depart Time	1008
C5	01 Sep 2016	Air Temp (C)	20
C5	01 Sep 2016	Weather	Cloudy
C5	01 Sep 2016	Visibility (mi)	4
C5	01 Sep 2016	Wind Speed (kts)	0
C5	01 Sep 2016	Wind Dir	
C5	01 Sep 2016	Water Color	Green
C5	01 Sep 2016	Wave Ht Low (ft)	4
C5	01 Sep 2016	Wave Period (sec)	13
C5	01 Sep 2016	Sea State	Light chop
C5	01 Sep 2016	High Tide (ft)	4.94
C5	01 Sep 2016	High Tide Time	1002
C5	01 Sep 2016	Low Tide (ft)	1
C5	01 Sep 2016	Low Tide Time	1553
C5	01 Sep 2016	Comments	
C5	06 Sep 2016	Depth (m)	9
C5	06 Sep 2016	Arrive Time	1122
C5	06 Sep 2016	Depart Time	1126
C5	06 Sep 2016	Air Temp (C)	19
C5	06 Sep 2016	Weather	Clear
C5	06 Sep 2016	Visibility (mi)	7
C5	06 Sep 2016	Wind Speed (kts)	5
C5	06 Sep 2016	Wind Dir	N
C5	06 Sep 2016	Water Color	Bluish-Green
C5	06 Sep 2016	Wave Ht Low (ft)	4
C5	06 Sep 2016	Wave Period (sec)	13
C5	06 Sep 2016	Sea State	Wind ripples
C5	06 Sep 2016	High Tide (ft)	4.58
C5	06 Sep 2016	High Tide Time	1230
C5	06 Sep 2016	Low Tide (ft)	1.71
C5	06 Sep 2016	Low Tide Time	611
C5	06 Sep 2016	Comments	

Station	Date	Parameter	Value
C5	14 Sep 2016	Depth (m)	9
C5	14 Sep 2016	Arrive Time	931
C5	14 Sep 2016	Depart Time	934
C5	14 Sep 2016	Air Temp (C)	18
C5	14 Sep 2016	Weather	Partly Cloudy
C5	14 Sep 2016	Visibility (mi)	6
C5	14 Sep 2016	Wind Speed (kts)	6
C5	14 Sep 2016	Wind Dir	E
C5	14 Sep 2016	Water Color	Green
C5	14 Sep 2016	Wave Ht Low (ft)	3
C5	14 Sep 2016	Wave Period (sec)	9
C5	14 Sep 2016	Sea State	Calm
C5	14 Sep 2016	High Tide (ft)	4.75
C5	14 Sep 2016	High Tide Time	825
C5	14 Sep 2016	Low Tide (ft)	1.25
C5	14 Sep 2016	Low Tide Time	1409
C5	14 Sep 2016	Comments	2 sea lions; Kelp debris
C5	19 Sep 2016	Depth (m)	10
C5	19 Sep 2016	Arrive Time	1032
C5	19 Sep 2016	Depart Time	1036
C5	19 Sep 2016	Air Temp (C)	19
C5	19 Sep 2016	Weather	Partly Cloudy
C5	19 Sep 2016	Visibility (mi)	5
C5	19 Sep 2016	Wind Speed (kts)	12
C5	19 Sep 2016	Wind Dir	N
C5	19 Sep 2016	Water Color	Green
C5	19 Sep 2016	Wave Ht Low (ft)	3
C5	19 Sep 2016	Wave Period (sec)	13
C5	19 Sep 2016	Sea State	Light chop
C5	19 Sep 2016	High Tide (ft)	5.86
C5	19 Sep 2016	High Tide Time	1119
C5	19 Sep 2016	Low Tide (ft)	0.62
C5	19 Sep 2016	Low Tide Time	511
C5	19 Sep 2016	Comments	
C5	25 Sep 2016	Depth (m)	10
C5	25 Sep 2016	Arrive Time	957
C5	25 Sep 2016	Depart Time	1002
C5	25 Sep 2016	Air Temp (C)	19
C5	25 Sep 2016	Weather	Clear
C5	25 Sep 2016	Visibility (mi)	12
C5	25 Sep 2016	Wind Speed (kts)	4
C5	25 Sep 2016	Wind Dir	W
C5	25 Sep 2016	Water Color	Green
C5	25 Sep 2016	Wave Ht Low (ft)	3
C5	25 Sep 2016	Wave Period (sec)	9
C5	25 Sep 2016	Sea State	Calm
C5	25 Sep 2016	High Tide (ft)	4.26
C5	25 Sep 2016	High Tide Time	653
C5	25 Sep 2016	Low Tide (ft)	2.16
C5	25 Sep 2016	Low Tide Time	1215
C5	25 Sep 2016	Comments	Kelp; Boats
A6	01 Sep 2016	Depth (m)	18

Station	Date	Parameter	Value
A6	01 Sep 2016	Arrive Time	829
A6	01 Sep 2016	Depart Time	833
A6	01 Sep 2016	Air Temp (C)	19
A6	01 Sep 2016	Weather	Fog
A6	01 Sep 2016	Visibility (mi)	4
A6	01 Sep 2016	Wind Speed (kts)	1
A6	01 Sep 2016	Wind Dir	SW
A6	01 Sep 2016	Water Color	Green
A6	01 Sep 2016	Wave Ht Low (ft)	4
A6	01 Sep 2016	Wave Period (sec)	13
A6	01 Sep 2016	Sea State	Light chop
A6	01 Sep 2016	High Tide (ft)	4.94
A6	01 Sep 2016	High Tide Time	1002
A6	01 Sep 2016	Low Tide (ft)	1
A6	01 Sep 2016	Low Tide Time	1553
A6	01 Sep 2016	Comments	
A6	06 Sep 2016	Depth (m)	18
A6	06 Sep 2016	Arrive Time	937
A6	06 Sep 2016	Depart Time	944
A6	06 Sep 2016	Air Temp (C)	19
A6	06 Sep 2016	Weather	Clear
A6	06 Sep 2016	Visibility (mi)	7
A6	06 Sep 2016	Wind Speed (kts)	2
A6	06 Sep 2016	Wind Dir	NE
A6	06 Sep 2016	Water Color	Bluish-Green
A6	06 Sep 2016	Wave Ht Low (ft)	4
A6	06 Sep 2016	Wave Period (sec)	13
A6	06 Sep 2016	Sea State	Wind ripples
A6	06 Sep 2016	High Tide (ft)	4.58
A6	06 Sep 2016	High Tide Time	1230
A6	06 Sep 2016	Low Tide (ft)	1.71
A6	06 Sep 2016	Low Tide Time	611
A6	06 Sep 2016	Comments	
A6	14 Sep 2016	Depth (m)	19
A6	14 Sep 2016	Arrive Time	831
A6	14 Sep 2016	Depart Time	836
A6	14 Sep 2016	Air Temp (C)	17
A6	14 Sep 2016	Weather	Partly Cloudy
A6	14 Sep 2016	Visibility (mi)	6
A6	14 Sep 2016	Wind Speed (kts)	3
A6	14 Sep 2016	Wind Dir	S
A6	14 Sep 2016	Water Color	Green
A6	14 Sep 2016	Wave Ht Low (ft)	3
A6	14 Sep 2016	Wave Period (sec)	9
A6	14 Sep 2016	Sea State	Calm
A6	14 Sep 2016	High Tide (ft)	4.75
A6	14 Sep 2016	High Tide Time	825
A6	14 Sep 2016	Low Tide (ft)	1.25
A6	14 Sep 2016	Low Tide Time	1409
A6	14 Sep 2016	Comments	Kelp
A6	19 Sep 2016	Depth (m)	18
A6	19 Sep 2016	Arrive Time	932

Station	Date	Parameter	Value
A6	19 Sep 2016	Depart Time	935
A6	19 Sep 2016	Air Temp (C)	19
A6	19 Sep 2016	Weather	Partly Cloudy
A6	19 Sep 2016	Visibility (mi)	5
A6	19 Sep 2016	Wind Speed (kts)	9
A6	19 Sep 2016	Wind Dir	S
A6	19 Sep 2016	Water Color	Greenish-Blue
A6	19 Sep 2016	Wave Ht Low (ft)	3
A6	19 Sep 2016	Wave Period (sec)	13
A6	19 Sep 2016	Sea State	Light chop
A6	19 Sep 2016	High Tide (ft)	5.86
A6	19 Sep 2016	High Tide Time	1119
A6	19 Sep 2016	Low Tide (ft)	0.62
A6	19 Sep 2016	Low Tide Time	511
A6	19 Sep 2016	Comments	
A6	25 Sep 2016	Depth (m)	19
A6	25 Sep 2016	Arrive Time	850
A6	25 Sep 2016	Depart Time	900
A6	25 Sep 2016	Air Temp (C)	19
A6	25 Sep 2016	Weather	Clear
A6	25 Sep 2016	Visibility (mi)	10
A6	25 Sep 2016	Wind Speed (kts)	3
A6	25 Sep 2016	Wind Dir	N
A6	25 Sep 2016	Water Color	Green
A6	25 Sep 2016	Wave Ht Low (ft)	3
A6	25 Sep 2016	Wave Period (sec)	9
A6	25 Sep 2016	Sea State	Calm
A6	25 Sep 2016	High Tide (ft)	4.26
A6	25 Sep 2016	High Tide Time	653
A6	25 Sep 2016	Low Tide (ft)	2.16
A6	25 Sep 2016	Low Tide Time	1215
A6	25 Sep 2016	Comments	Kelp
C6	01 Sep 2016	Depth (m)	9
C6	01 Sep 2016	Arrive Time	946
C6	01 Sep 2016	Depart Time	955
C6	01 Sep 2016	Air Temp (C)	20
C6	01 Sep 2016	Weather	Cloudy
C6	01 Sep 2016	Visibility (mi)	4
C6	01 Sep 2016	Wind Speed (kts)	4
C6	01 Sep 2016	Wind Dir	S
C6	01 Sep 2016	Water Color	Green
C6	01 Sep 2016	Wave Ht Low (ft)	4
C6	01 Sep 2016	Wave Period (sec)	13
C6	01 Sep 2016	Sea State	Light chop
C6	01 Sep 2016	High Tide (ft)	4.94
C6	01 Sep 2016	High Tide Time	1002
C6	01 Sep 2016	Low Tide (ft)	1
C6	01 Sep 2016	Low Tide Time	1553
C6	01 Sep 2016	Comments	
C6	06 Sep 2016	Depth (m)	9
C6	06 Sep 2016	Arrive Time	1107
C6	06 Sep 2016	Depart Time	1112

Station	Date	Parameter	Value
C6	06 Sep 2016	Air Temp (C)	19
C6	06 Sep 2016	Weather	Clear
C6	06 Sep 2016	Visibility (mi)	7
C6	06 Sep 2016	Wind Speed (kts)	5
C6	06 Sep 2016	Wind Dir	NW
C6	06 Sep 2016	Water Color	Bluish-Green
C6	06 Sep 2016	Wave Ht Low (ft)	4
C6	06 Sep 2016	Wave Period (sec)	13
C6	06 Sep 2016	Sea State	Wind ripples
C6	06 Sep 2016	High Tide (ft)	4.58
C6	06 Sep 2016	High Tide Time	1230
C6	06 Sep 2016	Low Tide (ft)	1.71
C6	06 Sep 2016	Low Tide Time	611
C6	06 Sep 2016	Comments	
C6	14 Sep 2016	Depth (m)	9
C6	14 Sep 2016	Arrive Time	919
C6	14 Sep 2016	Depart Time	923
C6	14 Sep 2016	Air Temp (C)	18
C6	14 Sep 2016	Weather	Partly Cloudy
C6	14 Sep 2016	Visibility (mi)	6
C6	14 Sep 2016	Wind Speed (kts)	6
C6	14 Sep 2016	Wind Dir	SE
C6	14 Sep 2016	Water Color	Green
C6	14 Sep 2016	Wave Ht Low (ft)	3
C6	14 Sep 2016	Wave Period (sec)	9
C6	14 Sep 2016	Sea State	Calm
C6	14 Sep 2016	High Tide (ft)	4.75
C6	14 Sep 2016	High Tide Time	825
C6	14 Sep 2016	Low Tide (ft)	1.25
C6	14 Sep 2016	Low Tide Time	1409
C6	14 Sep 2016	Comments	Kelp; Seagrass
C6	19 Sep 2016	Depth (m)	9
C6	19 Sep 2016	Arrive Time	1021
C6	19 Sep 2016	Depart Time	1025
C6	19 Sep 2016	Air Temp (C)	19
C6	19 Sep 2016	Weather	Partly Cloudy
C6	19 Sep 2016	Visibility (mi)	5
C6	19 Sep 2016	Wind Speed (kts)	10
C6	19 Sep 2016	Wind Dir	N
C6	19 Sep 2016	Water Color	Green
C6	19 Sep 2016	Wave Ht Low (ft)	3
C6	19 Sep 2016	Wave Period (sec)	13
C6	19 Sep 2016	Sea State	Light chop
C6	19 Sep 2016	High Tide (ft)	5.86
C6	19 Sep 2016	High Tide Time	1119
C6	19 Sep 2016	Low Tide (ft)	0.62
C6	19 Sep 2016	Low Tide Time	511
C6	19 Sep 2016	Comments	
C6	25 Sep 2016	Depth (m)	8
C6	25 Sep 2016	Arrive Time	944
C6	25 Sep 2016	Depart Time	948
C6	25 Sep 2016	Air Temp (C)	19

Station	Date	Parameter	Value
C6	25 Sep 2016	Weather	Clear
C6	25 Sep 2016	Visibility (mi)	12
C6	25 Sep 2016	Wind Speed (kts)	5
C6	25 Sep 2016	Wind Dir	NW
C6	25 Sep 2016	Water Color	Green
C6	25 Sep 2016	Wave Ht Low (ft)	3
C6	25 Sep 2016	Wave Period (sec)	9
C6	25 Sep 2016	Sea State	Calm
C6	25 Sep 2016	High Tide (ft)	4.26
C6	25 Sep 2016	High Tide Time	653
C6	25 Sep 2016	Low Tide (ft)	2.16
C6	25 Sep 2016	Low Tide Time	1215
C6	25 Sep 2016	Comments	Kelp
A7	01 Sep 2016	Depth (m)	18
A7	01 Sep 2016	Arrive Time	813
A7	01 Sep 2016	Depart Time	820
A7	01 Sep 2016	Air Temp (C)	19
A7	01 Sep 2016	Weather	Fog
A7	01 Sep 2016	Visibility (mi)	4
A7	01 Sep 2016	Wind Speed (kts)	0
A7	01 Sep 2016	Wind Dir	
A7	01 Sep 2016	Water Color	Green
A7	01 Sep 2016	Wave Ht Low (ft)	4
A7	01 Sep 2016	Wave Period (sec)	13
A7	01 Sep 2016	Sea State	Light chop
A7	01 Sep 2016	High Tide (ft)	4.94
A7	01 Sep 2016	High Tide Time	1002
A7	01 Sep 2016	Low Tide (ft)	1
A7	01 Sep 2016	Low Tide Time	1553
A7	01 Sep 2016	Comments	
A7	06 Sep 2016	Depth (m)	18
A7	06 Sep 2016	Arrive Time	923
A7	06 Sep 2016	Depart Time	929
A7	06 Sep 2016	Air Temp (C)	19
A7	06 Sep 2016	Weather	Clear
A7	06 Sep 2016	Visibility (mi)	7
A7	06 Sep 2016	Wind Speed (kts)	3
A7	06 Sep 2016	Wind Dir	SW
A7	06 Sep 2016	Water Color	Bluish-Green
A7	06 Sep 2016	Wave Ht Low (ft)	4
A7	06 Sep 2016	Wave Period (sec)	13
A7	06 Sep 2016	Sea State	Wind ripples
A7	06 Sep 2016	High Tide (ft)	4.58
A7	06 Sep 2016	High Tide Time	1230
A7	06 Sep 2016	Low Tide (ft)	1.71
A7	06 Sep 2016	Low Tide Time	611
A7	06 Sep 2016	Comments	
A7	14 Sep 2016	Depth (m)	19
A7	14 Sep 2016	Arrive Time	815
A7	14 Sep 2016	Depart Time	822
A7	14 Sep 2016	Air Temp (C)	17
A7	14 Sep 2016	Weather	Partly Cloudy

Station	Date	Parameter	Value
A7	14 Sep 2016	Visibility (mi)	6
A7	14 Sep 2016	Wind Speed (kts)	6
A7	14 Sep 2016	Wind Dir	SE
A7	14 Sep 2016	Water Color	Green
A7	14 Sep 2016	Wave Ht Low (ft)	3
A7	14 Sep 2016	Wave Period (sec)	9
A7	14 Sep 2016	Sea State	Calm
A7	14 Sep 2016	High Tide (ft)	4.75
A7	14 Sep 2016	High Tide Time	825
A7	14 Sep 2016	Low Tide (ft)	1.25
A7	14 Sep 2016	Low Tide Time	1409
A7	14 Sep 2016	Comments	Kelp; Kelp debris
A7	19 Sep 2016	Depth (m)	18
A7	19 Sep 2016	Arrive Time	840
A7	19 Sep 2016	Depart Time	843
A7	19 Sep 2016	Air Temp (C)	19
A7	19 Sep 2016	Weather	Partly Cloudy
A7	19 Sep 2016	Visibility (mi)	5
A7	19 Sep 2016	Wind Speed (kts)	9
A7	19 Sep 2016	Wind Dir	SW
A7	19 Sep 2016	Water Color	Greenish-Blue
A7	19 Sep 2016	Wave Ht Low (ft)	3
A7	19 Sep 2016	Wave Period (sec)	13
A7	19 Sep 2016	Sea State	Light chop
A7	19 Sep 2016	High Tide (ft)	5.86
A7	19 Sep 2016	High Tide Time	1119
A7	19 Sep 2016	Low Tide (ft)	0.62
A7	19 Sep 2016	Low Tide Time	511
A7	19 Sep 2016	Comments	Boats
A7	25 Sep 2016	Depth (m)	18
A7	25 Sep 2016	Arrive Time	832
A7	25 Sep 2016	Depart Time	837
A7	25 Sep 2016	Air Temp (C)	20
A7	25 Sep 2016	Weather	Clear
A7	25 Sep 2016	Visibility (mi)	7
A7	25 Sep 2016	Wind Speed (kts)	0
A7	25 Sep 2016	Wind Dir	
A7	25 Sep 2016	Water Color	Green
A7	25 Sep 2016	Wave Ht Low (ft)	3
A7	25 Sep 2016	Wave Period (sec)	9
A7	25 Sep 2016	Sea State	Calm
A7	25 Sep 2016	High Tide (ft)	4.26
A7	25 Sep 2016	High Tide Time	653
A7	25 Sep 2016	Low Tide (ft)	2.16
A7	25 Sep 2016	Low Tide Time	1215
A7	25 Sep 2016	Comments	Kelp; Kelp debris
C7	01 Sep 2016	Depth (m)	18
C7	01 Sep 2016	Arrive Time	912
C7	01 Sep 2016	Depart Time	921
C7	01 Sep 2016	Air Temp (C)	20
C7	01 Sep 2016	Weather	Fog
C7	01 Sep 2016	Visibility (mi)	4

Station	Date	Parameter	Value
C7	01 Sep 2016	Wind Speed (kts)	0
C7	01 Sep 2016	Wind Dir	
C7	01 Sep 2016	Water Color	Green
C7	01 Sep 2016	Wave Ht Low (ft)	4
C7	01 Sep 2016	Wave Period (sec)	13
C7	01 Sep 2016	Sea State	Light chop
C7	01 Sep 2016	High Tide (ft)	4.94
C7	01 Sep 2016	High Tide Time	1002
C7	01 Sep 2016	Low Tide (ft)	1
C7	01 Sep 2016	Low Tide Time	1553
C7	01 Sep 2016	Comments	
C7	06 Sep 2016	Depth (m)	18
C7	06 Sep 2016	Arrive Time	954
C7	06 Sep 2016	Depart Time	957
C7	06 Sep 2016	Air Temp (C)	19
C7	06 Sep 2016	Weather	Clear
C7	06 Sep 2016	Visibility (mi)	7
C7	06 Sep 2016	Wind Speed (kts)	2
C7	06 Sep 2016	Wind Dir	W
C7	06 Sep 2016	Water Color	Bluish-Green
C7	06 Sep 2016	Wave Ht Low (ft)	4
C7	06 Sep 2016	Wave Period (sec)	13
C7	06 Sep 2016	Sea State	Wind ripples
C7	06 Sep 2016	High Tide (ft)	4.58
C7	06 Sep 2016	High Tide Time	1230
C7	06 Sep 2016	Low Tide (ft)	1.71
C7	06 Sep 2016	Low Tide Time	611
C7	06 Sep 2016	Comments	
C7	14 Sep 2016	Depth (m)	18
C7	14 Sep 2016	Arrive Time	847
C7	14 Sep 2016	Depart Time	850
C7	14 Sep 2016	Air Temp (C)	17
C7	14 Sep 2016	Weather	Partly Cloudy
C7	14 Sep 2016	Visibility (mi)	6
C7	14 Sep 2016	Wind Speed (kts)	3
C7	14 Sep 2016	Wind Dir	W
C7	14 Sep 2016	Water Color	Green
C7	14 Sep 2016	Wave Ht Low (ft)	3
C7	14 Sep 2016	Wave Period (sec)	9
C7	14 Sep 2016	Sea State	Calm
C7	14 Sep 2016	High Tide (ft)	4.75
C7	14 Sep 2016	High Tide Time	825
C7	14 Sep 2016	Low Tide (ft)	1.25
C7	14 Sep 2016	Low Tide Time	1409
C7	14 Sep 2016	Comments	Kelp
C7	19 Sep 2016	Depth (m)	18
C7	19 Sep 2016	Arrive Time	948
C7	19 Sep 2016	Depart Time	1001
C7	19 Sep 2016	Air Temp (C)	19
C7	19 Sep 2016	Weather	Partly Cloudy
C7	19 Sep 2016	Visibility (mi)	5
C7	19 Sep 2016	Wind Speed (kts)	7

Station	Date	Parameter	Value
C7	19 Sep 2016	Wind Dir	N
C7	19 Sep 2016	Water Color	Green
C7	19 Sep 2016	Wave Ht Low (ft)	3
C7	19 Sep 2016	Wave Period (sec)	13
C7	19 Sep 2016	Sea State	Light chop
C7	19 Sep 2016	High Tide (ft)	5.86
C7	19 Sep 2016	High Tide Time	1119
C7	19 Sep 2016	Low Tide (ft)	0.62
C7	19 Sep 2016	Low Tide Time	511
C7	19 Sep 2016	Comments	
C7	25 Sep 2016	Depth (m)	20
C7	25 Sep 2016	Arrive Time	908
C7	25 Sep 2016	Depart Time	913
C7	25 Sep 2016	Air Temp (C)	19
C7	25 Sep 2016	Weather	Clear
C7	25 Sep 2016	Visibility (mi)	10
C7	25 Sep 2016	Wind Speed (kts)	3
C7	25 Sep 2016	Wind Dir	SE
C7	25 Sep 2016	Water Color	Green
C7	25 Sep 2016	Wave Ht Low (ft)	3
C7	25 Sep 2016	Wave Period (sec)	9
C7	25 Sep 2016	Sea State	Calm
C7	25 Sep 2016	High Tide (ft)	4.26
C7	25 Sep 2016	High Tide Time	653
C7	25 Sep 2016	Low Tide (ft)	2.16
C7	25 Sep 2016	Low Tide Time	1215
C7	25 Sep 2016	Comments	Kelp
C8	01 Sep 2016	Depth (m)	18
C8	01 Sep 2016	Arrive Time	924
C8	01 Sep 2016	Depart Time	934
C8	01 Sep 2016	Air Temp (C)	20
C8	01 Sep 2016	Weather	Fog
C8	01 Sep 2016	Visibility (mi)	4
C8	01 Sep 2016	Wind Speed (kts)	0
C8	01 Sep 2016	Wind Dir	
C8	01 Sep 2016	Water Color	Green
C8	01 Sep 2016	Wave Ht Low (ft)	4
C8	01 Sep 2016	Wave Period (sec)	13
C8	01 Sep 2016	Sea State	Light chop
C8	01 Sep 2016	High Tide (ft)	4.94
C8	01 Sep 2016	High Tide Time	1002
C8	01 Sep 2016	Low Tide (ft)	1
C8	01 Sep 2016	Low Tide Time	1553
C8	01 Sep 2016	Comments	
C8	06 Sep 2016	Depth (m)	20
C8	06 Sep 2016	Arrive Time	1005
C8	06 Sep 2016	Depart Time	1008
C8	06 Sep 2016	Air Temp (C)	20
C8	06 Sep 2016	Weather	Clear
C8	06 Sep 2016	Visibility (mi)	7
C8	06 Sep 2016	Wind Speed (kts)	0
C8	06 Sep 2016	Wind Dir	

Station	Date	Parameter	Value
C8	06 Sep 2016	Water Color	Bluish-Green
C8	06 Sep 2016	Wave Ht Low (ft)	4
C8	06 Sep 2016	Wave Period (sec)	13
C8	06 Sep 2016	Sea State	Wind ripples
C8	06 Sep 2016	High Tide (ft)	4.58
C8	06 Sep 2016	High Tide Time	1230
C8	06 Sep 2016	Low Tide (ft)	1.71
C8	06 Sep 2016	Low Tide Time	611
C8	06 Sep 2016	Comments	
C8	14 Sep 2016	Depth (m)	19
C8	14 Sep 2016	Arrive Time	859
C8	14 Sep 2016	Depart Time	902
C8	14 Sep 2016	Air Temp (C)	18
C8	14 Sep 2016	Weather	Partly Cloudy
C8	14 Sep 2016	Visibility (mi)	6
C8	14 Sep 2016	Wind Speed (kts)	7
C8	14 Sep 2016	Wind Dir	W
C8	14 Sep 2016	Water Color	Green
C8	14 Sep 2016	Wave Ht Low (ft)	3
C8	14 Sep 2016	Wave Period (sec)	9
C8	14 Sep 2016	Sea State	Calm
C8	14 Sep 2016	High Tide (ft)	4.75
C8	14 Sep 2016	High Tide Time	825
C8	14 Sep 2016	Low Tide (ft)	1.25
C8	14 Sep 2016	Low Tide Time	1409
C8	14 Sep 2016	Comments	Kelp debris
C8	19 Sep 2016	Depth (m)	20
C8	19 Sep 2016	Arrive Time	1002
C8	19 Sep 2016	Depart Time	1007
C8	19 Sep 2016	Air Temp (C)	19
C8	19 Sep 2016	Weather	Partly Cloudy
C8	19 Sep 2016	Visibility (mi)	5
C8	19 Sep 2016	Wind Speed (kts)	10
C8	19 Sep 2016	Wind Dir	N
C8	19 Sep 2016	Water Color	Green
C8	19 Sep 2016	Wave Ht Low (ft)	3
C8	19 Sep 2016	Wave Period (sec)	13
C8	19 Sep 2016	Sea State	Light chop
C8	19 Sep 2016	High Tide (ft)	5.86
C8	19 Sep 2016	High Tide Time	1119
C8	19 Sep 2016	Low Tide (ft)	0.62
C8	19 Sep 2016	Low Tide Time	511
C8	19 Sep 2016	Comments	Boats
C8	25 Sep 2016	Depth (m)	18
C8	25 Sep 2016	Arrive Time	927
C8	25 Sep 2016	Depart Time	928
C8	25 Sep 2016	Air Temp (C)	20
C8	25 Sep 2016	Weather	Clear
C8	25 Sep 2016	Visibility (mi)	12
C8	25 Sep 2016	Wind Speed (kts)	4
C8	25 Sep 2016	Wind Dir	SE
C8	25 Sep 2016	Water Color	Green

Station	Date	Parameter	Value
C8	25 Sep 2016	Wave Ht Low (ft)	3
C8	25 Sep 2016	Wave Period (sec)	9
C8	25 Sep 2016	Sea State	Calm
C8	25 Sep 2016	High Tide (ft)	4.26
C8	25 Sep 2016	High Tide Time	653
C8	25 Sep 2016	Low Tide (ft)	2.16
C8	25 Sep 2016	Low Tide Time	1215
C8	25 Sep 2016	Comments	Kelp

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 (σ-t)	Chlor (μg/L)
A1	01 Sep 2016	1	19.09	81.07	8.2	33.35	8.2	23.7	3.43
A1	01 Sep 2016	2	19.11	81.19	7.9	33.42	8.2	23.8	4.62
A1	01 Sep 2016	3	18.28	80.57	7.8	33.55	8.2	24.1	5.70
A1	01 Sep 2016	4	17.55	79.63	7.7	33.46	8.2	24.2	6.24
A1	01 Sep 2016	5	16.78	78.91	7.4	33.37	8.2	24.3	6.00
A1	01 Sep 2016	6	16.43	77.91	7.0	33.37	8.2	24.4	4.56
A1	01 Sep 2016	7	16.33	77.55	6.7	33.33	8.2	24.4	3.37
A1	01 Sep 2016	8	16.21	77.36	6.6	33.32	8.1	24.4	3.13
A1	01 Sep 2016	9	15.82	76.36	6.6	33.25	8.1	24.4	2.80
A1	01 Sep 2016	10	15.11	76.08	6.5	33.26	8.1	24.6	2.55
A1	01 Sep 2016	11	15.01	79.47	6.6	33.31	8.1	24.7	1.94
A1	01 Sep 2016	12	14.75	81.28	6.6	33.24	8.1	24.7	1.31
A1	01 Sep 2016	13	14.37	83.22	6.6	33.27	8.1	24.8	0.98
A1	01 Sep 2016	14	14.29	84.01	6.3	33.28	8.1	24.8	1.10
A1	01 Sep 2016	15	14.27	84.33	6.1	33.28	8.1	24.8	1.17
A1	01 Sep 2016	16	14.23	84.47	6.2	33.27	8.1	24.8	0.95
A1	01 Sep 2016	17	14.02	86.01	6.4	33.25	8.1	24.8	0.90
A1	01 Sep 2016	18	13.60	87.14	6.4	33.26	8.0	24.9	0.97
A1	01 Sep 2016	19	13.61	86.79	6.3	33.29	8.0	24.9	1.22
A1	06 Sep 2016	1	19.36	78.59	7.9	33.45	8.1	23.7	3.49
A1	06 Sep 2016	2	19.34	78.58	7.5	33.44	8.1	23.7	3.56
A1	06 Sep 2016	3	19.17	79.22	6.7	33.41	8.1	23.8	2.96
A1	06 Sep 2016	4	18.27	79.72	6.2	33.24	8.1	23.9	1.85
A1	06 Sep 2016	5	17.33	79.20	6.1	33.23	8.1	24.1	1.33
A1	06 Sep 2016	6	16.10	78.42	6.0	33.25	8.1	24.4	1.26
A1	06 Sep 2016	7	15.50	78.98	5.8	33.24	8.1	24.5	1.23
A1	06 Sep 2016	8	15.22	79.89	5.8	33.25	8.0	24.6	1.22
A1	06 Sep 2016	9	14.87	80.88	6.0	33.21	8.0	24.6	1.34
A1	06 Sep 2016	10	14.56	82.27	6.1	33.24	8.0	24.7	1.26
A1	06 Sep 2016	11	14.24	83.81	6.2	33.22	8.0	24.8	1.09
A1	06 Sep 2016	12	13.98	84.76	6.2	33.25	8.0	24.8	0.84
A1	06 Sep 2016	13	13.95	85.51	6.2	33.24	8.0	24.8	0.72
A1	06 Sep 2016	14	13.91	86.00	6.0	33.25	8.0	24.9	0.78
A1	06 Sep 2016	15	13.88	86.01	5.8	33.25	8.0	24.9	0.89
A1	06 Sep 2016	16	13.82	86.03	5.9	33.24	8.0	24.9	0.87
A1	06 Sep 2016	17	13.62	86.02	6.2	33.25	8.0	24.9	0.91
A1	06 Sep 2016	18	13.53	84.94	6.2	33.27	7.9	24.9	1.01
A1	14 Sep 2016	1	16.30	75.54	8.0	33.37	8.1	24.4	2.93
A1	14 Sep 2016	2	16.17	75.95	7.9	33.36	8.1	24.4	3.37
A1	14 Sep 2016	3	15.88	76.38	7.9	33.34	8.1	24.5	4.20
A1	14 Sep 2016	4	15.69	76.33	7.8	33.35	8.1	24.5	5.07
A1	14 Sep 2016	5	15.59	76.36	7.7	33.33	8.1	24.6	5.64
A1	14 Sep 2016	6	15.23	76.51	7.6	33.32	8.1	24.6	5.93
A1	14 Sep 2016	7	14.95	76.33	7.6	33.32	8.1	24.7	5.96
A1	14 Sep 2016	8	14.84	76.31	7.4	33.32	8.1	24.7	5.75
A1	14 Sep 2016	9	14.78	76.43	7.2	33.31	8.1	24.7	5.08
A1	14 Sep 2016	10	14.70	76.63	6.8	33.31	8.1	24.7	3.85
A1	14 Sep 2016	11	14.61	76.90	6.3	33.32	8.1	24.8	2.52

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A1	14 Sep 2016	12	14.48	77.62	6.0	33.31	8.1	24.8	1.76
A1	14 Sep 2016	13	14.22	79.25	5.9	33.31	8.0	24.8	1.53
A1	14 Sep 2016	14	13.94	81.44	6.0	33.31	8.0	24.9	1.46
A1	14 Sep 2016	15	13.74	83.78	6.1	33.31	8.0	24.9	1.28
A1	14 Sep 2016	16	13.61	84.32	6.0	33.31	8.0	25.0	0.91
A1	14 Sep 2016	17	13.55	84.41	6.0	33.31	8.0	25.0	0.69
A1	14 Sep 2016	18	13.34	84.63	6.0	33.30	8.0	25.0	0.65
A1	14 Sep 2016	19	13.10	85.66	5.8	33.32	8.0	25.1	0.67
A1	14 Sep 2016	20	13.07	86.08	6.1	33.32	8.0	25.1	0.88
A1	19 Sep 2016	1	18.99	85.48	8.0	33.41	8.1	23.8	1.04
A1	19 Sep 2016	2	18.99	85.39	7.9	33.41	8.1	23.8	1.21
A1	19 Sep 2016	3	18.89	85.38	7.6	33.40	8.1	23.8	1.32
A1	19 Sep 2016	4	17.99	84.94	7.7	33.31	8.1	24.0	1.30
A1	19 Sep 2016	5	15.98	85.44	7.9	33.26	8.1	24.4	1.27
A1	19 Sep 2016	6	15.57	85.84	7.7	33.24	8.1	24.5	1.22
A1	19 Sep 2016	7	15.14	86.04	7.5	33.24	8.1	24.6	1.21
A1	19 Sep 2016	8	14.77	86.18	7.3	33.24	8.1	24.7	1.20
A1	19 Sep 2016	9	14.47	86.40	6.9	33.24	8.1	24.7	1.25
A1	19 Sep 2016	10	13.96	86.65	6.8	33.23	8.0	24.8	1.28
A1	19 Sep 2016	11	13.28	87.00	7.0	33.24	8.0	25.0	1.29
A1	19 Sep 2016	12	13.34	87.35	6.8	33.25	8.0	25.0	1.18
A1	19 Sep 2016	13	13.14	87.40	6.6	33.25	8.0	25.0	1.10
A1	19 Sep 2016	14	12.97	87.44	6.5	33.26	8.0	25.1	1.01
A1	19 Sep 2016	15	12.88	87.05	6.4	33.27	8.0	25.1	0.89
A1	19 Sep 2016	16	12.76	87.02	6.3	33.28	8.0	25.1	0.80
A1	19 Sep 2016	17	12.62	87.07	6.3	33.29	7.9	25.1	0.81
A1	19 Sep 2016	18	12.56	86.84	6.4	33.30	7.9	25.2	0.82
A1	25 Sep 2016	1	17.32	71.81	8.4	33.28	8.1	24.1	2.48
A1	25 Sep 2016	2	17.32	63.64	8.5	33.27	8.1	24.1	2.89
A1	25 Sep 2016	3	17.22	74.89	8.5	33.27	8.1	24.1	3.16
A1	25 Sep 2016	4	17.14	76.13	8.5	33.26	8.1	24.1	3.12
A1	25 Sep 2016	5	16.91	76.42	8.4	33.26	8.1	24.2	3.13
A1	25 Sep 2016	6	16.80	77.27	8.3	33.26	8.1	24.2	3.21
A1	25 Sep 2016	7	16.50	77.88	8.3	33.25	8.1	24.3	3.17
A1	25 Sep 2016	8	16.24	78.13	8.1	33.26	8.1	24.4	3.12
A1	25 Sep 2016	9	16.01	77.97	8.1	33.25	8.1	24.4	3.11
A1	25 Sep 2016	10	15.75	78.26	8.1	33.26	8.1	24.5	3.00
A1	25 Sep 2016	11	15.49	78.64	8.0	33.25	8.1	24.5	2.86
A1	25 Sep 2016	12	15.35	78.92	7.9	33.26	8.1	24.6	2.69
A1	25 Sep 2016	13	15.25	78.85	7.7	33.26	8.1	24.6	2.52
A1	25 Sep 2016	14	15.17	78.94	7.8	33.26	8.1	24.6	2.53
A1	25 Sep 2016	15	15.14	79.18	7.8	33.27	8.1	24.6	2.39
A1	25 Sep 2016	16	15.12	79.33	7.6	33.27	8.1	24.6	2.01
A1	25 Sep 2016	17	15.08	79.35	7.3	33.26	8.1	24.6	2.00
A1	25 Sep 2016	18	14.87	79.11	7.5	33.27	8.1	24.7	2.16
C4	01 Sep 2016	1	19.33	79.44	7.8	33.42	8.2	23.7	5.39
C4	01 Sep 2016	2	19.16	79.32	7.8	33.37	8.2	23.7	6.87
C4	01 Sep 2016	3	18.15	79.04	7.6	33.27	8.2	23.9	5.74
C4	01 Sep 2016	4	17.32	77.38	7.2	33.31	8.2	24.1	2.83
C4	01 Sep 2016	5	16.57	75.96	6.6	33.27	8.2	24.3	2.77
C4	01 Sep 2016	6	16.18	74.57	6.1	33.31	8.2	24.4	3.29
C4	01 Sep 2016	7	15.99	73.03	6.0	33.28	8.2	24.4	5.33

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C4	01 Sep 2016	8	15.63	71.50	6.6	33.28	8.1	24.5	5.62
C4	01 Sep 2016	9	15.31	65.69	7.5	33.27	8.1	24.6	5.88
C4	01 Sep 2016	10	15.21	57.09	8.1	33.31	8.1	24.6	5.03
C4	06 Sep 2016	1	19.78	76.21	7.6	33.41	8.2	23.6	2.48
C4	06 Sep 2016	2	19.66	75.77	7.1	33.38	8.2	23.6	1.59
C4	06 Sep 2016	3	19.48	75.16	6.9	33.38	8.2	23.7	1.44
C4	06 Sep 2016	4	18.74	76.11	6.6	33.40	8.1	23.9	0.90
C4	06 Sep 2016	5	18.62	78.87	6.2	33.29	8.1	23.8	0.88
C4	06 Sep 2016	6	17.80	78.27	5.8	33.34	8.1	24.1	0.89
C4	06 Sep 2016	7	17.25	78.02	5.4	33.33	8.1	24.2	0.88
C4	06 Sep 2016	8	17.29	77.78	5.8	33.30	8.1	24.1	0.89
C4	06 Sep 2016	9	16.42	64.19	6.2	33.31	8.0	24.4	0.91
C4	06 Sep 2016	10	16.23	49.56	6.3	33.32	8.0	24.4	1.92
C4	14 Sep 2016	1	17.01	74.94	7.1	33.45	8.1	24.3	1.99
C4	14 Sep 2016	2	16.90	74.90	7.0	33.43	8.1	24.3	2.80
C4	14 Sep 2016	3	16.59	74.73	6.9	33.41	8.1	24.4	4.02
C4	14 Sep 2016	4	16.29	75.52	6.9	33.37	8.1	24.4	4.58
C4	14 Sep 2016	5	15.86	76.45	6.8	33.34	8.1	24.5	4.38
C4	14 Sep 2016	6	15.48	76.90	6.7	33.34	8.1	24.6	3.29
C4	14 Sep 2016	7	15.33	76.83	6.2	33.34	8.1	24.6	2.54
C4	14 Sep 2016	8	15.17	76.93	5.9	33.33	8.1	24.6	1.90
C4	14 Sep 2016	9	14.86	77.91	5.7	33.32	8.1	24.7	1.32
C4	14 Sep 2016	10	14.72	78.84	5.7	33.33	8.0	24.7	1.62
C4	14 Sep 2016	11	14.55	77.10	6.2	33.33	8.0	24.8	2.38
C4	19 Sep 2016	1	19.12	83.65	7.9	33.42	8.1	23.8	0.68
C4	19 Sep 2016	2	19.12	83.57	7.9	33.42	8.1	23.8	0.71
C4	19 Sep 2016	3	19.04	83.71	7.8	33.41	8.1	23.8	0.93
C4	19 Sep 2016	4	18.96	83.77	7.4	33.40	8.1	23.8	1.81
C4	19 Sep 2016	5	18.34	83.12	7.3	33.35	8.1	23.9	1.22
C4	19 Sep 2016	6	16.16	68.28	7.5	33.31	8.1	24.4	0.88
C4	19 Sep 2016	7	15.83	62.86	7.2	33.32	8.1	24.5	0.80
C4	19 Sep 2016	8	15.23	69.16	7.2	33.26	8.1	24.6	0.68
C4	19 Sep 2016	9	14.83	63.83	7.2	33.27	8.1	24.7	0.65
C4	19 Sep 2016	10	14.73	67.96	7.3	33.26	8.0	24.7	0.62
C4	19 Sep 2016	11	14.72	72.55	7.4	33.27	8.0	24.7	0.66
C4	25 Sep 2016	1	18.51	55.84	6.7	33.34	8.0	23.9	1.81
C4	25 Sep 2016	2	18.22	54.34	6.9	33.32	8.0	23.9	2.07
C4	25 Sep 2016	3	17.92	53.94	7.0	33.32	8.0	24.0	2.09
C4	25 Sep 2016	4	17.60	57.79	6.8	33.30	8.1	24.1	1.80
C4	25 Sep 2016	5	17.18	62.50	6.4	33.28	8.1	24.2	1.31
C4	25 Sep 2016	6	16.91	67.14	5.8	33.28	8.1	24.2	1.12
C4	25 Sep 2016	7	16.50	68.56	5.6	33.25	8.0	24.3	1.03
C4	25 Sep 2016	8	16.07	67.72	5.5	33.28	8.0	24.4	0.97
C4	25 Sep 2016	9	16.08	61.71	5.2	33.25	8.0	24.4	1.30
C4	25 Sep 2016	10	15.51	40.39	5.4	33.27	8.0	24.5	1.16
C5	01 Sep 2016	1	20.18	79.52	7.2	33.44	8.2	23.5	1.91
C5	01 Sep 2016	2	20.09	78.66	6.7	33.39	8.2	23.5	1.88
C5	01 Sep 2016	3	19.38	75.28	6.8	33.34	8.2	23.7	1.36
C5	01 Sep 2016	4	18.39	65.48	6.9	33.34	8.2	23.9	1.35
C5	01 Sep 2016	5	17.90	64.65	6.8	33.19	8.1	23.9	1.44

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C5	01 Sep 2016	6	16.77	71.71	6.8	33.32	8.1	24.3	1.37
C5	01 Sep 2016	7	16.56	76.33	7.0	33.23	8.1	24.3	1.30
C5	01 Sep 2016	8	15.88	75.24	7.2	33.24	8.1	24.4	1.27
C5	01 Sep 2016	9	15.61	62.67	7.1	33.29	8.1	24.5	1.71
C5	01 Sep 2016	10	15.59	57.45	7.2	33.31	8.1	24.5	2.11
C5	06 Sep 2016	1	19.89	77.92	7.4	33.46	8.1	23.6	1.47
C5	06 Sep 2016	2	19.72	77.66	6.6	33.40	8.1	23.6	1.78
C5	06 Sep 2016	3	19.11	78.12	6.2	33.38	8.1	23.8	1.48
C5	06 Sep 2016	4	18.52	78.30	6.6	33.32	8.1	23.9	1.29
C5	06 Sep 2016	5	17.41	80.35	7.0	33.24	8.1	24.1	1.08
C5	06 Sep 2016	6	16.58	82.77	7.1	33.30	8.1	24.3	1.05
C5	06 Sep 2016	7	16.28	82.64	7.2	33.27	8.1	24.4	1.17
C5	06 Sep 2016	8	15.81	82.15	7.2	33.26	8.1	24.5	1.41
C5	06 Sep 2016	9	15.65	80.49	7.2	33.28	8.1	24.5	1.62
C5	06 Sep 2016	10	15.60	78.00	7.2	33.29	8.1	24.5	0.00
C5	14 Sep 2016	1	17.69	65.60	7.4	33.40	8.2	24.1	1.34
C5	14 Sep 2016	2	17.65	75.10	6.8	33.38	8.2	24.1	2.18
C5	14 Sep 2016	3	17.05	76.38	6.3	33.36	8.1	24.2	1.92
C5	14 Sep 2016	4	16.33	76.81	6.1	33.32	8.1	24.4	1.43
C5	14 Sep 2016	5	15.27	78.32	6.2	33.34	8.1	24.6	1.26
C5	14 Sep 2016	6	15.06	83.17	6.3	33.29	8.1	24.6	1.26
C5	14 Sep 2016	7	14.36	84.28	6.6	33.30	8.1	24.8	1.30
C5	14 Sep 2016	8	14.30	83.65	6.6	33.30	8.1	24.8	1.31
C5	14 Sep 2016	9	14.22	83.15	6.7	33.30	8.1	24.8	1.27
C5	14 Sep 2016	10	14.22	82.94	6.6	33.30	8.1	24.8	1.26
C5	19 Sep 2016	1	18.96	84.46	8.0	33.42	8.1	23.8	0.67
C5	19 Sep 2016	2	18.95	84.71	8.0	33.42	8.1	23.8	0.70
C5	19 Sep 2016	3	18.88	84.64	8.0	33.42	8.1	23.8	0.78
C5	19 Sep 2016	4	18.84	84.65	7.8	33.41	8.1	23.8	0.87
C5	19 Sep 2016	5	18.61	84.97	7.7	33.38	8.1	23.9	0.84
C5	19 Sep 2016	6	17.25	85.37	7.8	33.31	8.1	24.2	0.67
C5	19 Sep 2016	7	16.53	85.19	7.7	33.31	8.1	24.3	0.60
C5	19 Sep 2016	8	15.71	84.33	7.9	33.29	8.1	24.5	0.57
C5	19 Sep 2016	9	15.33	81.21	8.0	33.29	8.1	24.6	0.57
C5	19 Sep 2016	10	15.19	79.72	7.9	33.29	8.1	24.6	0.56
C5	19 Sep 2016	11	15.18	79.41	8.0	33.29	8.1	24.6	0.56
C5	25 Sep 2016	1	18.08	75.64	7.5	33.32	8.1	24.0	1.54
C5	25 Sep 2016	2	17.94	72.11	7.4	33.33	8.1	24.0	1.56
C5	25 Sep 2016	3	17.79	68.12	7.1	33.33	8.1	24.0	1.40
C5	25 Sep 2016	4	17.62	66.28	6.8	33.33	8.1	24.1	1.29
C5	25 Sep 2016	5	17.24	68.32	6.7	33.30	8.1	24.1	1.08
C5	25 Sep 2016	6	16.38	71.10	6.5	33.30	8.1	24.4	0.93
C5	25 Sep 2016	7	16.11	75.76	6.1	33.30	8.1	24.4	0.88
C5	25 Sep 2016	8	15.83	77.34	6.2	33.29	8.1	24.5	0.87
C5	25 Sep 2016	9	15.46	76.11	6.4	33.28	8.0	24.5	0.86
C5	25 Sep 2016	10	15.35	72.65	6.5	33.29	8.0	24.6	0.91
A6	01 Sep 2016	1	20.20	80.98	7.9	33.45	8.2	23.5	5.77
A6	01 Sep 2016	2	20.19	81.22	7.2	33.45	8.2	23.5	5.79
A6	01 Sep 2016	3	19.96	81.04	6.9	33.36	8.2	23.5	3.31
A6	01 Sep 2016	4	19.00	80.88	6.7	33.30	8.2	23.7	2.34

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A6	01 Sep 2016	5	18.11	80.00	6.4	33.24	8.2	23.9	1.90
A6	01 Sep 2016	6	16.62	78.09	6.2	33.20	8.2	24.2	1.50
A6	01 Sep 2016	7	15.90	75.68	6.1	33.28	8.2	24.4	1.34
A6	01 Sep 2016	8	15.49	74.37	6.1	33.24	8.2	24.5	1.26
A6	01 Sep 2016	9	15.07	75.92	6.2	33.22	8.1	24.6	1.09
A6	01 Sep 2016	10	14.54	78.18	6.3	33.19	8.1	24.7	1.04
A6	01 Sep 2016	11	14.09	82.45	6.3	33.24	8.1	24.8	1.00
A6	01 Sep 2016	12	14.03	86.16	6.3	33.25	8.1	24.8	0.93
A6	01 Sep 2016	13	13.90	86.67	6.3	33.23	8.1	24.8	0.88
A6	01 Sep 2016	14	13.79	86.71	6.3	33.24	8.1	24.9	0.83
A6	01 Sep 2016	15	13.77	86.86	6.3	33.24	8.1	24.9	0.84
A6	01 Sep 2016	16	13.68	86.74	6.3	33.24	8.0	24.9	0.90
A6	01 Sep 2016	17	13.65	86.61	6.4	33.25	8.0	24.9	0.95
A6	01 Sep 2016	18	13.58	85.37	6.5	33.25	8.0	24.9	1.00
A6	06 Sep 2016	1	19.89	82.29	7.4	33.45	8.2	23.6	2.88
A6	06 Sep 2016	2	19.68	82.02	6.4	33.40	8.2	23.6	3.07
A6	06 Sep 2016	3	18.51	80.46	6.1	33.25	8.2	23.8	2.99
A6	06 Sep 2016	4	17.41	77.68	6.3	33.30	8.1	24.1	2.70
A6	06 Sep 2016	5	16.67	78.04	6.5	33.13	8.1	24.2	2.31
A6	06 Sep 2016	6	15.32	80.52	6.6	33.26	8.1	24.6	1.91
A6	06 Sep 2016	7	15.13	81.16	6.5	33.20	8.1	24.6	1.44
A6	06 Sep 2016	8	14.80	81.55	6.3	33.23	8.0	24.7	1.19
A6	06 Sep 2016	9	14.66	81.45	6.1	33.22	8.0	24.7	1.05
A6	06 Sep 2016	10	14.61	82.37	5.9	33.24	8.0	24.7	0.98
A6	06 Sep 2016	11	14.57	82.81	5.8	33.23	8.0	24.7	0.90
A6	06 Sep 2016	12	14.51	83.33	5.8	33.23	8.0	24.7	0.93
A6	06 Sep 2016	13	14.26	83.81	5.9	33.20	8.0	24.7	1.01
A6	06 Sep 2016	14	14.06	84.78	6.0	33.24	8.0	24.8	0.94
A6	06 Sep 2016	15	13.90	85.45	6.1	33.23	8.0	24.8	0.88
A6	06 Sep 2016	16	13.79	85.36	6.1	33.25	8.0	24.9	0.94
A6	06 Sep 2016	17	13.75	85.30	6.1	33.26	8.0	24.9	0.92
A6	06 Sep 2016	18	13.81	85.05	6.1	33.27	8.0	24.9	0.93
A6	14 Sep 2016	1	17.12	81.10	7.4	33.40	8.2	24.3	3.77
A6	14 Sep 2016	2	16.80	79.96	7.1	33.35	8.2	24.3	4.46
A6	14 Sep 2016	3	15.73	77.76	7.1	33.33	8.1	24.5	5.09
A6	14 Sep 2016	4	15.29	77.53	7.0	33.33	8.1	24.6	5.08
A6	14 Sep 2016	5	14.76	77.59	7.0	33.29	8.1	24.7	4.85
A6	14 Sep 2016	6	14.46	77.34	6.8	33.30	8.1	24.8	5.09
A6	14 Sep 2016	7	14.18	78.13	6.9	33.29	8.1	24.8	5.04
A6	14 Sep 2016	8	14.01	79.17	7.0	33.29	8.1	24.9	4.66
A6	14 Sep 2016	9	13.97	79.35	6.9	33.29	8.1	24.9	4.68
A6	14 Sep 2016	10	13.96	79.19	6.8	33.29	8.1	24.9	4.64
A6	14 Sep 2016	11	13.95	79.39	6.7	33.29	8.1	24.9	4.54
A6	14 Sep 2016	12	13.88	80.26	6.7	33.29	8.1	24.9	4.41
A6	14 Sep 2016	13	13.85	80.50	6.7	33.30	8.1	24.9	3.79
A6	14 Sep 2016	14	13.84	80.56	6.6	33.30	8.1	24.9	2.87
A6	14 Sep 2016	15	13.83	80.65	6.3	33.30	8.1	24.9	2.03
A6	14 Sep 2016	16	13.79	80.79	6.0	33.30	8.0	24.9	1.76
A6	14 Sep 2016	17	13.67	81.33	5.9	33.30	8.0	24.9	1.85
A6	14 Sep 2016	18	13.36	83.17	6.1	33.31	8.0	25.0	1.30
A6	14 Sep 2016	19	13.37	79.98	6.3	33.32	8.0	25.0	0.00
A6	19 Sep 2016	1	18.82	83.71	8.1	33.41	8.1	23.9	0.83

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A6	19 Sep 2016	2	18.80	83.53	8.1	33.41	8.1	23.9	1.01
A6	19 Sep 2016	3	18.77	83.60	8.0	33.41	8.1	23.9	1.24
A6	19 Sep 2016	4	18.61	83.68	8.1	33.40	8.1	23.9	1.32
A6	19 Sep 2016	5	18.28	83.68	8.2	33.38	8.1	24.0	1.38
A6	19 Sep 2016	6	17.91	83.98	8.3	33.35	8.1	24.0	1.44
A6	19 Sep 2016	7	17.66	84.26	8.2	33.35	8.1	24.1	1.30
A6	19 Sep 2016	8	17.36	84.20	8.0	33.32	8.1	24.1	0.99
A6	19 Sep 2016	9	16.97	85.18	7.7	33.31	8.1	24.2	0.80
A6	19 Sep 2016	10	16.34	86.04	7.4	33.28	8.1	24.3	0.81
A6	19 Sep 2016	11	15.67	86.09	7.0	33.27	8.1	24.5	0.86
A6	19 Sep 2016	12	14.67	86.21	6.9	33.26	8.1	24.7	0.89
A6	19 Sep 2016	13	13.96	86.35	6.8	33.25	8.0	24.8	0.92
A6	19 Sep 2016	14	13.63	86.48	6.8	33.25	8.0	24.9	0.96
A6	19 Sep 2016	15	13.44	86.59	6.8	33.26	8.0	25.0	0.89
A6	19 Sep 2016	16	13.37	86.60	6.5	33.26	8.0	25.0	0.84
A6	19 Sep 2016	17	13.07	86.66	6.4	33.27	8.0	25.0	0.81
A6	19 Sep 2016	18	12.86	86.59	6.4	33.28	8.0	25.1	0.79
A6	19 Sep 2016	19	12.80	86.37	6.3	33.29	8.0	25.1	0.77
A6	19 Sep 2016	20	12.77	86.23	6.3	33.30	8.0	25.1	0.76
A6	19 Sep 2016	21	12.64	85.72	6.3	33.31	8.0	25.2	0.74
A6	25 Sep 2016	1	17.26	80.50	8.7	33.27	8.2	24.1	1.59
A6	25 Sep 2016	2	17.25	80.30	8.7	33.27	8.2	24.1	1.84
A6	25 Sep 2016	3	17.22	80.21	8.8	33.27	8.2	24.1	1.91
A6	25 Sep 2016	4	17.16	79.48	8.8	33.26	8.2	24.1	1.96
A6	25 Sep 2016	5	17.08	79.38	8.8	33.26	8.2	24.2	1.95
A6	25 Sep 2016	6	17.05	79.91	8.8	33.25	8.2	24.2	1.99
A6	25 Sep 2016	7	17.05	80.76	8.8	33.25	8.2	24.2	1.98
A6	25 Sep 2016	8	17.04	81.02	8.8	33.25	8.2	24.2	1.97
A6	25 Sep 2016	9	17.02	81.21	8.8	33.25	8.2	24.2	1.94
A6	25 Sep 2016	10	17.01	81.25	8.8	33.25	8.2	24.2	1.98
A6	25 Sep 2016	11	17.00	81.56	8.8	33.25	8.2	24.2	2.08
A6	25 Sep 2016	12	16.98	81.60	8.7	33.25	8.2	24.2	2.23
A6	25 Sep 2016	13	16.97	81.59	8.7	33.25	8.2	24.2	2.46
A6	25 Sep 2016	14	16.78	81.69	8.6	33.24	8.2	24.2	2.58
A6	25 Sep 2016	15	16.51	81.95	8.5	33.26	8.2	24.3	2.76
A6	25 Sep 2016	16	16.42	81.75	8.4	33.25	8.2	24.3	2.78
A6	25 Sep 2016	17	16.22	81.51	8.5	33.25	8.2	24.4	2.71
A6	25 Sep 2016	18	16.02	80.96	8.2	33.26	8.2	24.4	2.43
A6	25 Sep 2016	19	15.97	80.89	7.9	33.25	8.2	24.4	2.37
A6	25 Sep 2016	20	15.63	80.90	8.1	33.27	8.1	24.5	2.35
C6	01 Sep 2016	1	19.76	61.86	7.2	33.43	8.2	23.6	1.89
C6	01 Sep 2016	2	19.68	79.16	6.6	33.43	8.2	23.6	1.73
C6	01 Sep 2016	3	18.98	78.55	6.2	33.57	8.2	23.9	1.07
C6	01 Sep 2016	4	18.21	71.55	6.3	33.58	8.2	24.1	1.01
C6	01 Sep 2016	5	17.34	67.51	6.5	33.46	8.1	24.3	0.98
C6	01 Sep 2016	6	16.58	61.82	6.5	33.38	8.1	24.4	0.96
C6	01 Sep 2016	7	16.10	51.27	6.5	33.38	8.1	24.5	2.11
C6	01 Sep 2016	8	16.02	51.17	6.7	33.31	8.1	24.4	1.03
C6	01 Sep 2016	9	15.80	51.82	6.8	33.33	8.1	24.5	0.96
C6	06 Sep 2016	1	19.74	79.52	7.6	33.46	8.1	23.7	2.47
C6	06 Sep 2016	2	19.68	79.23	7.3	33.42	8.1	23.6	1.77
C6	06 Sep 2016	3	18.67	78.32	7.1	33.30	8.1	23.8	1.02

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C6	06 Sep 2016	4	17.78	79.51	7.0	33.30	8.1	24.0	0.85
C6	06 Sep 2016	5	17.02	80.22	6.9	33.30	8.1	24.2	1.32
C6	06 Sep 2016	6	16.72	79.94	7.0	33.31	8.1	24.3	1.48
C6	06 Sep 2016	7	16.28	80.24	7.4	33.29	8.1	24.4	1.35
C6	06 Sep 2016	8	16.00	78.36	7.5	33.31	8.1	24.4	1.09
C6	06 Sep 2016	9	16.16	77.65	7.3	33.35	8.1	24.4	0.83
C6	14 Sep 2016	1	18.05	81.09	7.4	33.41	8.2	24.0	1.80
C6	14 Sep 2016	2	17.96	81.01	6.7	33.39	8.2	24.0	1.83
C6	14 Sep 2016	3	16.74	79.84	6.4	33.29	8.2	24.3	2.44
C6	14 Sep 2016	4	15.40	79.66	6.6	33.31	8.2	24.6	2.53
C6	14 Sep 2016	5	14.98	80.13	6.8	33.33	8.1	24.7	1.74
C6	14 Sep 2016	6	14.90	75.99	6.7	33.32	8.1	24.7	1.46
C6	14 Sep 2016	7	14.88	77.22	6.6	33.31	8.1	24.7	1.53
C6	14 Sep 2016	8	14.77	76.85	6.6	33.30	8.1	24.7	1.34
C6	14 Sep 2016	9	14.63	79.26	6.8	33.30	8.1	24.7	1.35
C6	14 Sep 2016	10	14.60	80.27	6.8	33.31	8.1	24.8	1.26
C6	19 Sep 2016	1	19.08	81.49	7.9	33.41	8.1	23.8	0.57
C6	19 Sep 2016	2	19.02	83.38	7.9	33.41	8.1	23.8	0.63
C6	19 Sep 2016	3	18.88	83.25	7.9	33.41	8.1	23.8	0.69
C6	19 Sep 2016	4	18.73	83.37	8.0	33.41	8.1	23.9	0.89
C6	19 Sep 2016	5	18.61	83.43	8.2	33.38	8.1	23.9	0.98
C6	19 Sep 2016	6	18.04	83.90	8.1	33.36	8.1	24.0	0.86
C6	19 Sep 2016	7	17.48	83.91	8.2	33.31	8.1	24.1	0.68
C6	19 Sep 2016	8	16.95	82.67	8.2	33.33	8.1	24.2	0.72
C6	19 Sep 2016	9	16.90	81.72	8.3	33.33	8.1	24.3	0.74
C6	25 Sep 2016	1	17.89	77.67	8.2	33.30	8.2	24.0	2.36
C6	25 Sep 2016	2	17.86	77.75	8.0	33.30	8.2	24.0	3.08
C6	25 Sep 2016	3	17.79	77.69	7.8	33.28	8.2	24.0	3.82
C6	25 Sep 2016	4	17.34	77.15	7.7	33.28	8.2	24.1	3.02
C6	25 Sep 2016	5	17.03	76.98	7.4	33.30	8.2	24.2	1.73
C6	25 Sep 2016	6	16.78	76.55	6.9	33.28	8.1	24.2	1.03
C6	25 Sep 2016	7	16.37	76.53	6.6	33.28	8.1	24.3	0.85
C6	25 Sep 2016	8	15.95	77.79	6.7	33.28	8.1	24.4	0.96
C6	25 Sep 2016	9	15.69	75.81	7.1	33.29	8.1	24.5	1.24
A7	01 Sep 2016	1	20.12	80.73	7.8	33.45	8.2	23.5	3.86
A7	01 Sep 2016	2	20.10	81.45	7.5	33.43	8.2	23.5	5.12
A7	01 Sep 2016	3	19.59	81.39	7.4	33.39	8.2	23.6	6.51
A7	01 Sep 2016	4	18.96	80.90	7.3	33.36	8.2	23.8	5.53
A7	01 Sep 2016	5	17.42	80.29	7.0	33.22	8.2	24.0	4.05
A7	01 Sep 2016	6	16.34	78.15	6.7	33.34	8.2	24.4	2.56
A7	01 Sep 2016	7	16.22	77.72	6.5	33.29	8.2	24.4	1.94
A7	01 Sep 2016	8	15.80	77.11	6.4	33.25	8.2	24.4	1.75
A7	01 Sep 2016	9	15.22	76.04	6.4	33.23	8.1	24.6	1.34
A7	01 Sep 2016	10	14.65	76.26	6.3	33.25	8.1	24.7	1.09
A7	01 Sep 2016	11	14.47	78.65	6.3	33.25	8.1	24.7	0.95
A7	01 Sep 2016	12	14.26	80.91	6.3	33.23	8.1	24.8	0.82
A7	01 Sep 2016	13	14.04	84.23	6.2	33.24	8.1	24.8	0.82
A7	01 Sep 2016	14	13.97	85.48	6.1	33.25	8.1	24.8	0.84
A7	01 Sep 2016	15	13.93	85.72	6.2	33.24	8.1	24.8	0.83
A7	01 Sep 2016	16	13.80	85.88	6.3	33.25	8.1	24.9	0.84
A7	01 Sep 2016	17	13.72	85.97	6.4	33.24	8.0	24.9	0.90

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	01 Sep 2016	18	13.55	86.14	6.5	33.26	8.0	24.9	0.91
A7	01 Sep 2016	19	13.59	85.76	6.5	33.26	8.0	24.9	0.91
A7	06 Sep 2016	1	19.13	79.73	7.0	33.42	8.1	23.8	3.00
A7	06 Sep 2016	2	18.62	75.58	6.8	33.27	8.1	23.8	3.21
A7	06 Sep 2016	3	17.44	79.30	6.7	33.32	8.1	24.1	3.24
A7	06 Sep 2016	4	16.94	78.93	6.7	33.24	8.1	24.2	3.07
A7	06 Sep 2016	5	15.88	78.79	6.8	33.23	8.1	24.4	1.99
A7	06 Sep 2016	6	15.55	80.17	6.5	33.25	8.1	24.5	1.29
A7	06 Sep 2016	7	15.14	80.71	6.2	33.24	8.1	24.6	1.05
A7	06 Sep 2016	8	14.94	80.79	5.9	33.23	8.1	24.6	0.96
A7	06 Sep 2016	9	14.72	80.58	5.7	33.24	8.0	24.7	0.83
A7	06 Sep 2016	10	14.66	81.52	5.7	33.24	8.0	24.7	0.71
A7	06 Sep 2016	11	14.35	82.48	5.8	33.21	8.0	24.7	0.73
A7	06 Sep 2016	12	14.12	84.75	5.9	33.25	8.0	24.8	0.75
A7	06 Sep 2016	13	14.00	85.51	6.0	33.23	8.0	24.8	0.72
A7	06 Sep 2016	14	13.85	86.08	6.0	33.25	8.0	24.9	0.69
A7	06 Sep 2016	15	13.80	86.30	6.1	33.25	8.0	24.9	0.69
A7	06 Sep 2016	16	13.72	85.94	6.0	33.26	8.0	24.9	0.67
A7	06 Sep 2016	17	13.74	85.70	6.0	33.27	8.0	24.9	0.69
A7	06 Sep 2016	18	13.74	84.78	6.1	33.27	7.9	24.9	0.69
A7	06 Sep 2016	19	13.74	85.44	6.1	33.28	7.9	24.9	0.64
A7	14 Sep 2016	1	16.82	80.51	7.8	33.39	8.2	24.3	2.39
A7	14 Sep 2016	2	16.76	79.82	7.8	33.38	8.2	24.3	2.80
A7	14 Sep 2016	3	16.59	79.59	7.9	33.37	8.1	24.4	3.18
A7	14 Sep 2016	4	16.11	78.25	8.0	33.35	8.1	24.5	3.71
A7	14 Sep 2016	5	15.92	77.08	8.0	33.36	8.1	24.5	4.39
A7	14 Sep 2016	6	15.83	76.91	8.0	33.35	8.1	24.5	4.55
A7	14 Sep 2016	7	15.65	76.74	8.0	33.33	8.1	24.5	4.66
A7	14 Sep 2016	8	15.36	76.27	8.1	33.34	8.1	24.6	4.65
A7	14 Sep 2016	9	15.32	75.96	8.0	33.33	8.1	24.6	5.00
A7	14 Sep 2016	10	15.26	76.47	7.9	33.33	8.1	24.6	5.37
A7	14 Sep 2016	11	15.26	76.51	7.6	33.33	8.1	24.6	5.55
A7	14 Sep 2016	12	15.11	76.25	7.6	33.31	8.1	24.6	5.46
A7	14 Sep 2016	13	14.81	76.37	7.4	33.31	8.1	24.7	4.97
A7	14 Sep 2016	14	14.65	76.63	7.0	33.30	8.1	24.7	3.57
A7	14 Sep 2016	15	14.57	76.92	6.2	33.30	8.1	24.8	2.21
A7	14 Sep 2016	16	14.29	77.26	5.8	33.28	8.1	24.8	1.44
A7	14 Sep 2016	17	13.83	79.28	5.8	33.30	8.1	24.9	1.10
A7	14 Sep 2016	18	13.57	81.34	5.9	33.30	8.0	25.0	1.01
A7	14 Sep 2016	19	13.40	84.86	6.1	33.31	8.0	25.0	1.43
A7	14 Sep 2016	20	13.39	85.44	6.3	33.31	8.0	25.0	1.91
A7	19 Sep 2016	1	19.05	84.68	8.0	33.42	8.1	23.8	0.91
A7	19 Sep 2016	2	19.07	84.65	8.0	33.42	8.1	23.8	1.10
A7	19 Sep 2016	3	18.99	84.57	8.0	33.41	8.1	23.8	1.27
A7	19 Sep 2016	4	18.60	84.22	8.0	33.38	8.1	23.9	1.30
A7	19 Sep 2016	5	18.08	84.13	7.8	33.36	8.1	24.0	1.21
A7	19 Sep 2016	6	17.53	84.44	7.9	33.28	8.1	24.1	1.17
A7	19 Sep 2016	7	16.01	84.77	8.0	33.27	8.1	24.4	1.10
A7	19 Sep 2016	8	15.72	85.58	7.7	33.25	8.1	24.5	1.02
A7	19 Sep 2016	9	15.38	85.94	7.3	33.24	8.1	24.5	1.02
A7	19 Sep 2016	10	14.78	86.19	7.1	33.25	8.1	24.7	1.05
A7	19 Sep 2016	11	14.38	86.30	6.9	33.24	8.1	24.7	1.03

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
A7	19 Sep 2016	12	13.86	86.51	6.8	33.25	8.0	24.9	1.10
A7	19 Sep 2016	13	13.44	86.78	6.8	33.25	8.0	24.9	1.08
A7	19 Sep 2016	14	13.30	86.97	6.6	33.25	8.0	25.0	1.01
A7	19 Sep 2016	15	13.02	86.95	6.5	33.26	8.0	25.0	0.97
A7	19 Sep 2016	16	12.87	86.66	6.4	33.27	8.0	25.1	0.84
A7	19 Sep 2016	17	12.79	86.50	6.3	33.28	8.0	25.1	0.78
A7	19 Sep 2016	18	12.66	86.13	6.3	33.29	8.0	25.1	0.76
A7	19 Sep 2016	19	12.62	86.04	6.2	33.30	8.0	25.1	0.76
A7	19 Sep 2016	20	12.59	85.97	6.3	33.30	7.9	25.2	0.79
A7	25 Sep 2016	1	17.46	75.78	8.2	33.30	8.1	24.1	2.38
A7	25 Sep 2016	2	17.43	75.51	8.5	33.30	8.1	24.1	2.53
A7	25 Sep 2016	3	17.23	76.50	8.6	33.27	8.1	24.1	2.74
A7	25 Sep 2016	4	17.05	77.88	8.6	33.26	8.2	24.2	2.76
A7	25 Sep 2016	5	16.84	78.53	8.6	33.25	8.2	24.2	2.78
A7	25 Sep 2016	6	16.70	79.01	8.6	33.25	8.2	24.2	2.91
A7	25 Sep 2016	7	16.62	79.02	8.5	33.25	8.2	24.3	2.94
A7	25 Sep 2016	8	16.52	79.44	8.4	33.25	8.2	24.3	2.92
A7	25 Sep 2016	9	16.47	79.58	8.2	33.25	8.2	24.3	2.98
A7	25 Sep 2016	10	16.41	79.75	8.0	33.26	8.2	24.3	2.76
A7	25 Sep 2016	11	16.34	79.57	7.6	33.26	8.2	24.3	2.69
A7	25 Sep 2016	12	16.23	79.02	7.3	33.26	8.1	24.4	2.69
A7	25 Sep 2016	13	16.13	78.71	7.4	33.27	8.1	24.4	2.64
A7	25 Sep 2016	14	15.98	78.83	7.6	33.27	8.1	24.4	2.46
A7	25 Sep 2016	15	15.66	78.69	7.6	33.27	8.1	24.5	2.28
A7	25 Sep 2016	16	15.45	78.71	7.4	33.26	8.1	24.5	2.14
A7	25 Sep 2016	17	15.14	79.48	7.3	33.25	8.1	24.6	2.15
A7	25 Sep 2016	18	14.78	79.34	7.6	33.27	8.1	24.7	2.25
C7	01 Sep 2016	1	20.86	80.95	8.3	33.47	8.2	23.4	2.41
C7	01 Sep 2016	2	20.81	80.67	8.3	33.42	8.2	23.3	2.99
C7	01 Sep 2016	3	20.28	81.03	8.3	33.39	8.2	23.5	3.84
C7	01 Sep 2016	4	19.98	80.89	8.2	33.41	8.2	23.6	5.22
C7	01 Sep 2016	5	19.76	81.11	8.0	33.37	8.2	23.6	4.60
C7	01 Sep 2016	6	19.42	81.06	7.8	33.37	8.2	23.7	2.84
C7	01 Sep 2016	7	19.19	81.20	7.4	33.37	8.2	23.7	1.75
C7	01 Sep 2016	8	19.00	81.31	6.8	33.34	8.2	23.8	1.29
C7	01 Sep 2016	9	18.64	81.42	6.3	33.23	8.2	23.8	1.04
C7	01 Sep 2016	10	17.80	81.11	5.8	33.26	8.2	24.0	1.02
C7	01 Sep 2016	11	17.46	80.83	5.4	33.32	8.2	24.1	1.04
C7	01 Sep 2016	12	17.06	80.15	5.1	33.10	8.2	24.0	1.06
C7	01 Sep 2016	13	15.69	79.13	5.2	33.13	8.2	24.4	1.33
C7	01 Sep 2016	14	15.46	78.48	5.6	33.27	8.2	24.5	1.35
C7	01 Sep 2016	15	14.81	80.71	6.1	33.08	8.1	24.5	1.59
C7	01 Sep 2016	16	14.02	83.98	6.5	33.18	8.1	24.8	2.80
C7	01 Sep 2016	17	13.56	85.43	6.8	33.19	8.1	24.9	4.27
C7	01 Sep 2016	18	13.44	85.90	7.2	33.25	8.0	24.9	4.20
C7	06 Sep 2016	1	19.66	78.37	8.0	33.47	8.1	23.7	5.83
C7	06 Sep 2016	2	19.60	79.56	7.4	33.44	8.1	23.7	5.68
C7	06 Sep 2016	3	18.95	77.38	7.0	33.36	8.2	23.8	5.38
C7	06 Sep 2016	4	18.31	77.00	7.0	33.33	8.2	23.9	4.84
C7	06 Sep 2016	5	17.40	77.33	7.0	33.26	8.1	24.1	4.95
C7	06 Sep 2016	6	16.84	76.90	7.1	33.34	8.1	24.3	4.58
C7	06 Sep 2016	7	16.44	77.06	7.0	33.23	8.1	24.3	3.79

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C7	06 Sep 2016	8	16.10	77.95	7.0	33.35	8.1	24.5	3.47
C7	06 Sep 2016	9	16.08	78.92	6.8	33.19	8.1	24.3	2.52
C7	06 Sep 2016	10	15.55	79.59	6.7	33.31	8.1	24.6	1.85
C7	06 Sep 2016	11	15.61	79.90	6.5	33.20	8.1	24.5	1.98
C7	06 Sep 2016	12	15.07	80.05	6.4	33.25	8.1	24.6	1.48
C7	06 Sep 2016	13	14.94	81.39	6.3	33.26	8.0	24.6	1.13
C7	06 Sep 2016	14	14.88	81.84	6.3	33.23	8.0	24.6	1.35
C7	06 Sep 2016	15	14.67	82.76	6.3	33.25	8.0	24.7	1.27
C7	06 Sep 2016	16	14.64	83.65	6.2	33.27	8.0	24.7	1.27
C7	06 Sep 2016	17	14.68	84.56	6.5	33.26	8.0	24.7	1.44
C7	06 Sep 2016	18	14.60	84.08	6.5	33.27	8.0	24.7	1.40
C7	14 Sep 2016	1	16.58	79.21	7.5	33.38	8.2	24.4	3.39
C7	14 Sep 2016	2	16.03	79.10	7.5	33.33	8.2	24.5	4.10
C7	14 Sep 2016	3	15.17	77.33	7.5	33.33	8.1	24.6	5.15
C7	14 Sep 2016	4	15.03	76.45	7.3	33.32	8.1	24.7	5.74
C7	14 Sep 2016	5	14.91	76.43	7.1	33.31	8.1	24.7	5.95
C7	14 Sep 2016	6	14.65	76.44	7.1	33.32	8.1	24.8	5.93
C7	14 Sep 2016	7	14.54	77.14	7.1	33.31	8.1	24.8	5.48
C7	14 Sep 2016	8	14.32	77.61	7.0	33.30	8.1	24.8	4.96
C7	14 Sep 2016	9	14.22	77.73	6.8	33.30	8.1	24.8	4.30
C7	14 Sep 2016	10	14.07	78.65	6.7	33.30	8.1	24.9	3.67
C7	14 Sep 2016	11	13.96	79.38	6.6	33.30	8.1	24.9	3.26
C7	14 Sep 2016	12	13.90	80.56	6.6	33.30	8.1	24.9	2.85
C7	14 Sep 2016	13	13.87	82.01	6.4	33.31	8.1	24.9	2.29
C7	14 Sep 2016	14	13.85	82.75	6.2	33.31	8.0	24.9	1.37
C7	14 Sep 2016	15	13.78	83.27	5.8	33.30	8.0	24.9	0.87
C7	14 Sep 2016	16	13.53	83.75	5.7	33.30	8.0	25.0	0.70
C7	14 Sep 2016	17	13.18	85.53	5.8	33.32	8.0	25.1	0.93
C7	14 Sep 2016	18	13.11	86.73	6.2	33.32	8.0	25.1	1.67
C7	19 Sep 2016	1	18.81	81.09	8.0	33.41	8.1	23.9	0.80
C7	19 Sep 2016	2	18.80	83.32	8.0	33.41	8.1	23.9	0.92
C7	19 Sep 2016	3	18.73	83.46	8.0	33.40	8.1	23.9	1.01
C7	19 Sep 2016	4	18.64	83.63	8.0	33.40	8.1	23.9	1.13
C7	19 Sep 2016	5	18.54	83.81	8.1	33.39	8.1	23.9	1.22
C7	19 Sep 2016	6	18.33	84.17	8.2	33.38	8.1	24.0	1.26
C7	19 Sep 2016	7	18.14	84.53	8.3	33.37	8.1	24.0	1.32
C7	19 Sep 2016	8	17.96	84.78	8.3	33.35	8.1	24.0	1.41
C7	19 Sep 2016	9	17.60	84.79	8.2	33.32	8.1	24.1	1.45
C7	19 Sep 2016	10	17.36	84.62	7.8	33.31	8.1	24.1	1.17
C7	19 Sep 2016	11	16.80	84.47	7.3	33.31	8.1	24.3	0.92
C7	19 Sep 2016	12	16.24	84.60	6.9	33.27	8.1	24.4	1.05
C7	19 Sep 2016	13	15.03	84.62	7.1	33.26	8.1	24.6	1.11
C7	19 Sep 2016	14	14.30	85.31	7.2	33.24	8.1	24.8	1.07
C7	19 Sep 2016	15	13.99	85.82	7.2	33.25	8.0	24.8	0.98
C7	19 Sep 2016	16	13.94	85.71	7.2	33.25	8.0	24.8	0.95
C7	19 Sep 2016	17	13.91	85.50	7.2	33.26	8.0	24.9	0.94
C7	19 Sep 2016	18	13.91	84.59	7.2	33.26	8.0	24.9	0.95
C7	25 Sep 2016	1	17.98	76.51	8.3	33.30	8.2	24.0	3.10
C7	25 Sep 2016	2	17.90	76.43	8.3	33.29	8.2	24.0	3.84
C7	25 Sep 2016	3	17.59	76.80	8.3	33.27	8.2	24.0	4.18
C7	25 Sep 2016	4	17.42	76.70	8.3	33.27	8.2	24.1	4.43
C7	25 Sep 2016	5	17.30	76.34	8.3	33.27	8.2	24.1	4.32

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C7	25 Sep 2016	6	17.19	76.54	8.3	33.27	8.2	24.1	4.33
C7	25 Sep 2016	7	17.16	77.08	8.3	33.28	8.2	24.2	4.33
C7	25 Sep 2016	8	17.16	77.29	8.3	33.27	8.2	24.2	4.32
C7	25 Sep 2016	9	17.16	77.73	8.3	33.27	8.2	24.2	4.27
C7	25 Sep 2016	10	17.17	77.75	8.3	33.28	8.2	24.2	4.09
C7	25 Sep 2016	11	17.17	77.91	8.3	33.28	8.2	24.2	3.95
C7	25 Sep 2016	12	17.16	77.92	8.2	33.28	8.2	24.2	3.99
C7	25 Sep 2016	13	17.07	78.19	7.8	33.27	8.2	24.2	3.64
C7	25 Sep 2016	14	16.92	79.21	7.4	33.28	8.2	24.2	3.01
C7	25 Sep 2016	15	16.40	79.30	7.2	33.24	8.2	24.3	1.93
C7	25 Sep 2016	16	15.77	79.49	6.8	33.27	8.1	24.5	1.49
C7	25 Sep 2016	17	15.43	80.50	6.7	33.26	8.1	24.5	1.50
C7	25 Sep 2016	18	14.86	80.87	7.1	33.28	8.1	24.7	2.06
C8	01 Sep 2016	1	20.98	82.76	7.9	33.48	8.2	23.3	2.65
C8	01 Sep 2016	2	21.00	81.96	7.9	33.48	8.2	23.3	3.03
C8	01 Sep 2016	3	20.94	82.47	7.6	33.47	8.2	23.3	3.32
C8	01 Sep 2016	4	20.47	83.15	7.7	33.36	8.2	23.4	4.12
C8	01 Sep 2016	5	19.48	82.07	7.9	33.37	8.2	23.7	4.63
C8	01 Sep 2016	6	18.33	81.57	8.0	33.23	8.2	23.8	6.26
C8	01 Sep 2016	7	17.10	80.39	7.8	33.30	8.2	24.2	6.63
C8	01 Sep 2016	8	16.72	79.74	7.5	33.28	8.2	24.3	5.09
C8	01 Sep 2016	9	16.10	79.54	7.2	33.17	8.2	24.3	2.22
C8	01 Sep 2016	10	15.57	79.74	6.8	33.28	8.2	24.5	1.23
C8	01 Sep 2016	11	15.67	79.95	6.2	33.20	8.2	24.4	1.00
C8	01 Sep 2016	12	15.06	78.49	5.4	33.22	8.2	24.6	0.90
C8	01 Sep 2016	13	15.00	77.09	5.2	33.27	8.1	24.6	1.09
C8	01 Sep 2016	14	14.88	76.77	5.7	33.17	8.1	24.6	1.17
C8	01 Sep 2016	15	14.20	78.60	6.1	33.16	8.1	24.7	1.27
C8	01 Sep 2016	16	13.69	82.27	6.4	33.23	8.1	24.9	1.19
C8	01 Sep 2016	17	13.56	84.51	6.5	33.23	8.0	24.9	1.08
C8	01 Sep 2016	18	13.50	85.24	6.5	33.24	8.0	24.9	0.96
C8	01 Sep 2016	19	13.61	85.37	6.4	33.26	8.0	24.9	0.98
C8	06 Sep 2016	1	19.19	80.08	8.2	33.43	8.2	23.8	3.70
C8	06 Sep 2016	2	18.87	80.09	8.2	33.36	8.2	23.8	4.12
C8	06 Sep 2016	3	18.30	79.28	8.2	33.30	8.2	23.9	4.48
C8	06 Sep 2016	4	17.53	78.22	8.2	33.36	8.1	24.1	4.72
C8	06 Sep 2016	5	17.32	78.05	8.0	33.30	8.1	24.1	5.47
C8	06 Sep 2016	6	17.07	78.05	7.8	33.34	8.1	24.2	5.79
C8	06 Sep 2016	7	17.01	77.97	7.6	33.33	8.1	24.2	5.80
C8	06 Sep 2016	8	16.76	77.58	7.3	33.30	8.1	24.3	5.41
C8	06 Sep 2016	9	16.64	78.02	7.0	33.32	8.1	24.3	5.02
C8	06 Sep 2016	10	16.43	78.01	6.6	33.30	8.1	24.3	4.80
C8	06 Sep 2016	11	16.22	77.65	6.3	33.31	8.1	24.4	4.00
C8	06 Sep 2016	12	16.07	77.97	6.5	33.29	8.1	24.4	2.02
C8	06 Sep 2016	13	15.53	78.45	6.4	33.24	8.1	24.5	2.07
C8	06 Sep 2016	14	15.24	79.46	6.2	33.32	8.0	24.6	1.10
C8	06 Sep 2016	15	15.22	79.77	6.0	33.23	8.0	24.6	0.78
C8	06 Sep 2016	16	14.88	80.78	6.0	33.27	8.0	24.7	0.84
C8	06 Sep 2016	17	14.63	82.95	5.9	33.28	8.0	24.7	0.98
C8	06 Sep 2016	18	14.65	83.49	6.2	33.27	8.0	24.7	1.79
C8	06 Sep 2016	19	14.43	82.40	6.4	33.28	8.0	24.8	3.85
C8	14 Sep 2016	1	17.18	80.79	7.9	33.40	8.2	24.2	2.56

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C8	14 Sep 2016	2	16.83	80.24	8.0	33.36	8.2	24.3	2.69
C8	14 Sep 2016	3	16.00	76.94	8.2	33.30	8.2	24.4	2.93
C8	14 Sep 2016	4	15.60	77.27	8.2	33.33	8.2	24.5	3.52
C8	14 Sep 2016	5	15.27	78.52	8.1	33.28	8.2	24.6	4.26
C8	14 Sep 2016	6	15.13	78.74	8.1	33.30	8.2	24.6	4.88
C8	14 Sep 2016	7	15.11	78.27	7.9	33.30	8.2	24.6	5.60
C8	14 Sep 2016	8	15.09	77.81	7.6	33.30	8.2	24.6	6.21
C8	14 Sep 2016	9	15.06	76.99	7.3	33.30	8.2	24.7	6.47
C8	14 Sep 2016	10	14.80	76.56	6.9	33.29	8.1	24.7	6.52
C8	14 Sep 2016	11	14.41	76.65	6.6	33.29	8.1	24.8	6.20
C8	14 Sep 2016	12	14.11	77.12	6.4	33.29	8.1	24.8	5.61
C8	14 Sep 2016	13	14.02	77.86	6.4	33.30	8.1	24.9	4.61
C8	14 Sep 2016	14	13.91	78.46	6.4	33.30	8.1	24.9	3.74
C8	14 Sep 2016	15	13.86	79.37	6.5	33.30	8.1	24.9	4.06
C8	14 Sep 2016	16	13.80	80.78	6.5	33.30	8.0	24.9	3.38
C8	14 Sep 2016	17	13.80	82.80	6.1	33.31	8.0	24.9	1.44
C8	14 Sep 2016	18	13.56	85.90	5.8	33.30	8.0	25.0	1.03
C8	14 Sep 2016	19	13.29	86.16	5.9	33.32	8.0	25.0	1.03
C8	19 Sep 2016	1	19.44	86.00	8.1	33.43	8.2	23.7	0.47
C8	19 Sep 2016	2	19.44	85.97	8.1	33.43	8.2	23.7	0.50
C8	19 Sep 2016	3	19.39	85.95	8.1	33.43	8.2	23.7	0.66
C8	19 Sep 2016	4	19.31	85.77	8.1	33.41	8.2	23.7	0.90
C8	19 Sep 2016	5	18.85	84.88	8.1	33.39	8.2	23.8	1.23
C8	19 Sep 2016	6	18.13	84.04	8.1	33.35	8.2	24.0	1.35
C8	19 Sep 2016	7	17.71	83.16	8.2	33.35	8.1	24.1	1.53
C8	19 Sep 2016	8	17.28	83.14	8.3	33.31	8.1	24.1	1.54
C8	19 Sep 2016	9	17.11	83.46	8.4	33.30	8.1	24.2	1.55
C8	19 Sep 2016	10	16.76	83.94	8.3	33.29	8.1	24.3	1.54
C8	19 Sep 2016	11	16.52	84.17	8.0	33.28	8.1	24.3	1.45
C8	19 Sep 2016	12	16.36	84.34	7.5	33.26	8.1	24.3	1.53
C8	19 Sep 2016	13	15.05	85.07	7.5	33.22	8.1	24.6	1.55
C8	19 Sep 2016	14	14.60	85.38	7.6	33.24	8.1	24.7	1.56
C8	19 Sep 2016	15	14.26	85.58	7.6	33.24	8.1	24.8	1.54
C8	19 Sep 2016	16	14.22	85.56	7.6	33.24	8.1	24.8	1.52
C8	19 Sep 2016	17	14.15	85.63	7.5	33.24	8.1	24.8	1.42
C8	19 Sep 2016	18	14.10	85.72	7.4	33.25	8.1	24.8	1.36
C8	19 Sep 2016	19	13.98	85.81	7.3	33.26	8.0	24.8	1.36
C8	19 Sep 2016	20	13.96	85.65	7.4	33.26	8.0	24.9	1.38
C8	25 Sep 2016	1	17.80	83.52	8.5	33.30	8.2	24.0	1.39
C8	25 Sep 2016	2	17.69	83.65	8.6	33.29	8.2	24.0	1.77
C8	25 Sep 2016	3	17.24	82.99	8.7	33.28	8.2	24.1	2.01
C8	25 Sep 2016	4	17.07	82.24	8.7	33.28	8.2	24.2	2.17
C8	25 Sep 2016	5	17.05	81.59	8.7	33.28	8.2	24.2	2.34
C8	25 Sep 2016	6	17.05	81.51	8.7	33.28	8.2	24.2	2.39
C8	25 Sep 2016	7	17.05	81.32	8.7	33.28	8.2	24.2	2.38
C8	25 Sep 2016	8	17.04	81.11	8.7	33.28	8.2	24.2	2.58
C8	25 Sep 2016	9	17.01	81.41	8.7	33.28	8.2	24.2	3.12
C8	25 Sep 2016	10	16.99	81.59	8.5	33.28	8.2	24.2	4.21
C8	25 Sep 2016	11	16.98	81.50	8.2	33.28	8.2	24.2	5.00
C8	25 Sep 2016	12	16.90	81.63	7.8	33.27	8.2	24.2	4.30
C8	25 Sep 2016	13	16.60	81.09	7.2	33.26	8.2	24.3	3.04
C8	25 Sep 2016	14	16.27	79.92	6.8	33.27	8.2	24.4	2.03
C8	25 Sep 2016	15	15.87	77.77	6.6	33.24	8.2	24.4	1.39

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pH	Dens (σ-t)	Chlor (μg/L)
C8	25 Sep 2016	16	15.19	79.33	6.5	33.27	8.1	24.6	1.16
C8	25 Sep 2016	17	14.91	80.85	6.5	33.27	8.1	24.7	1.21
C8	25 Sep 2016	18	14.54	81.58	6.9	33.27	8.1	24.7	1.30
C8	25 Sep 2016	19	14.49	77.61	7.1	33.28	8.1	24.8	1.66

NA = not available

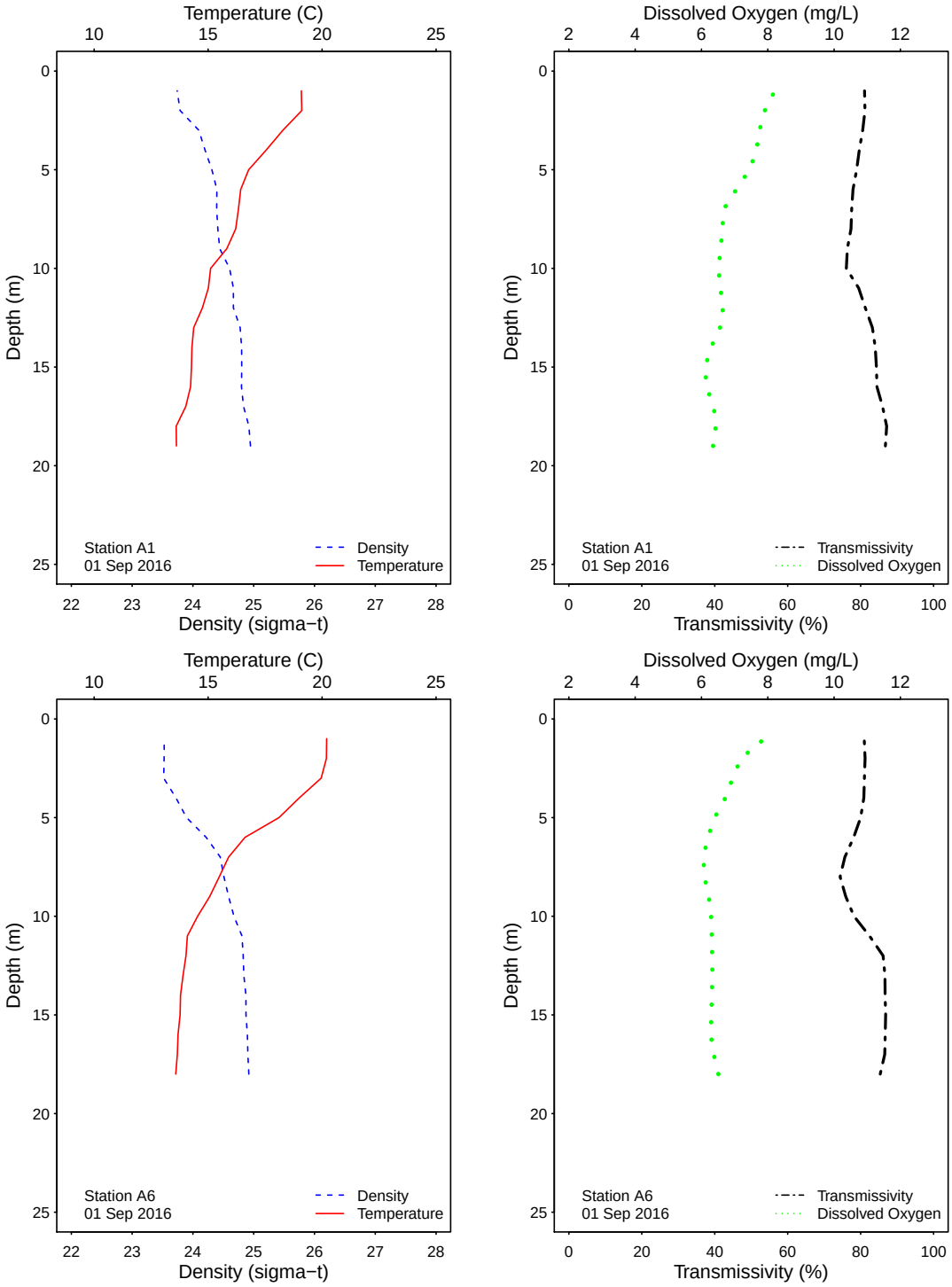

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

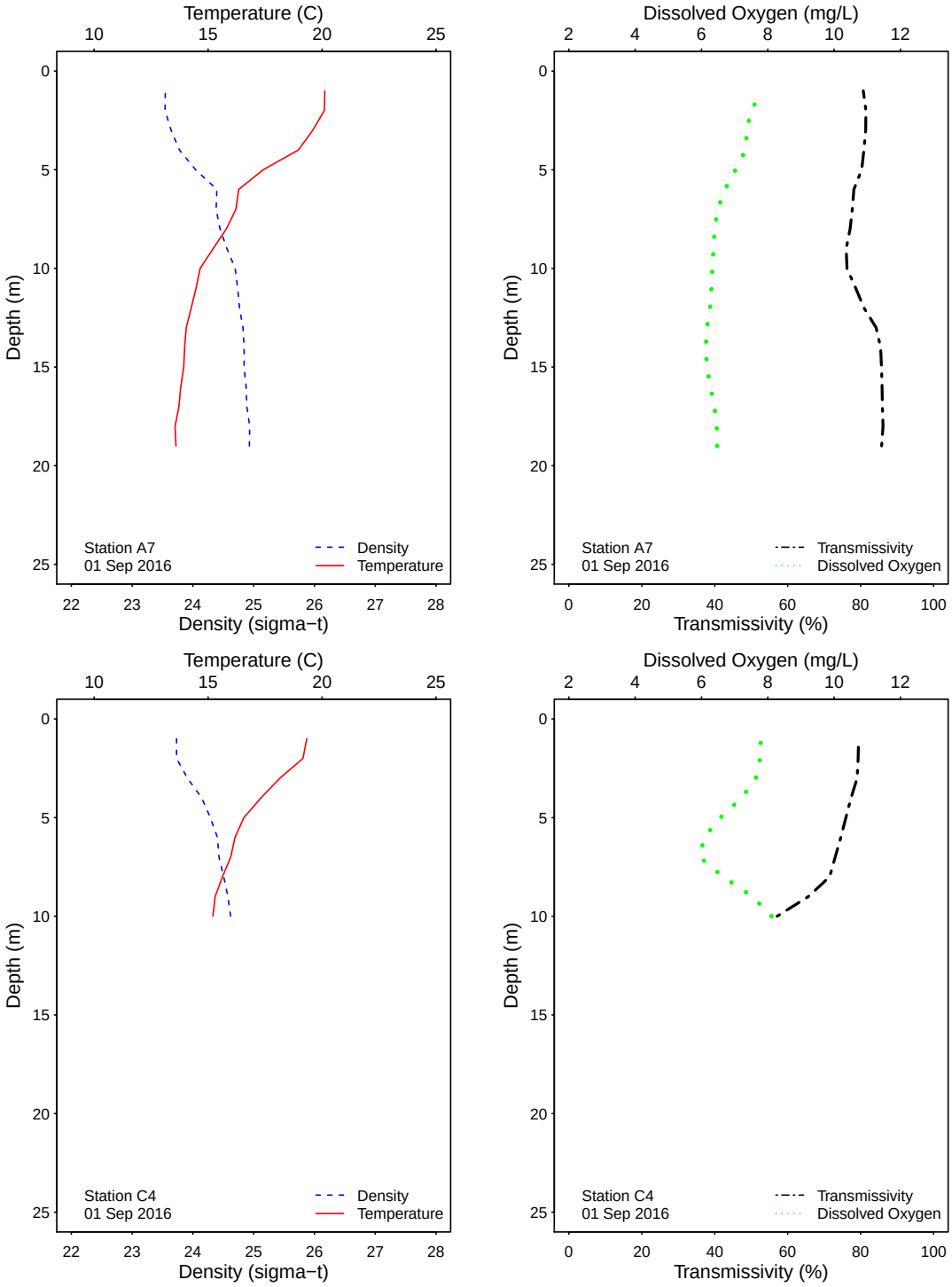

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

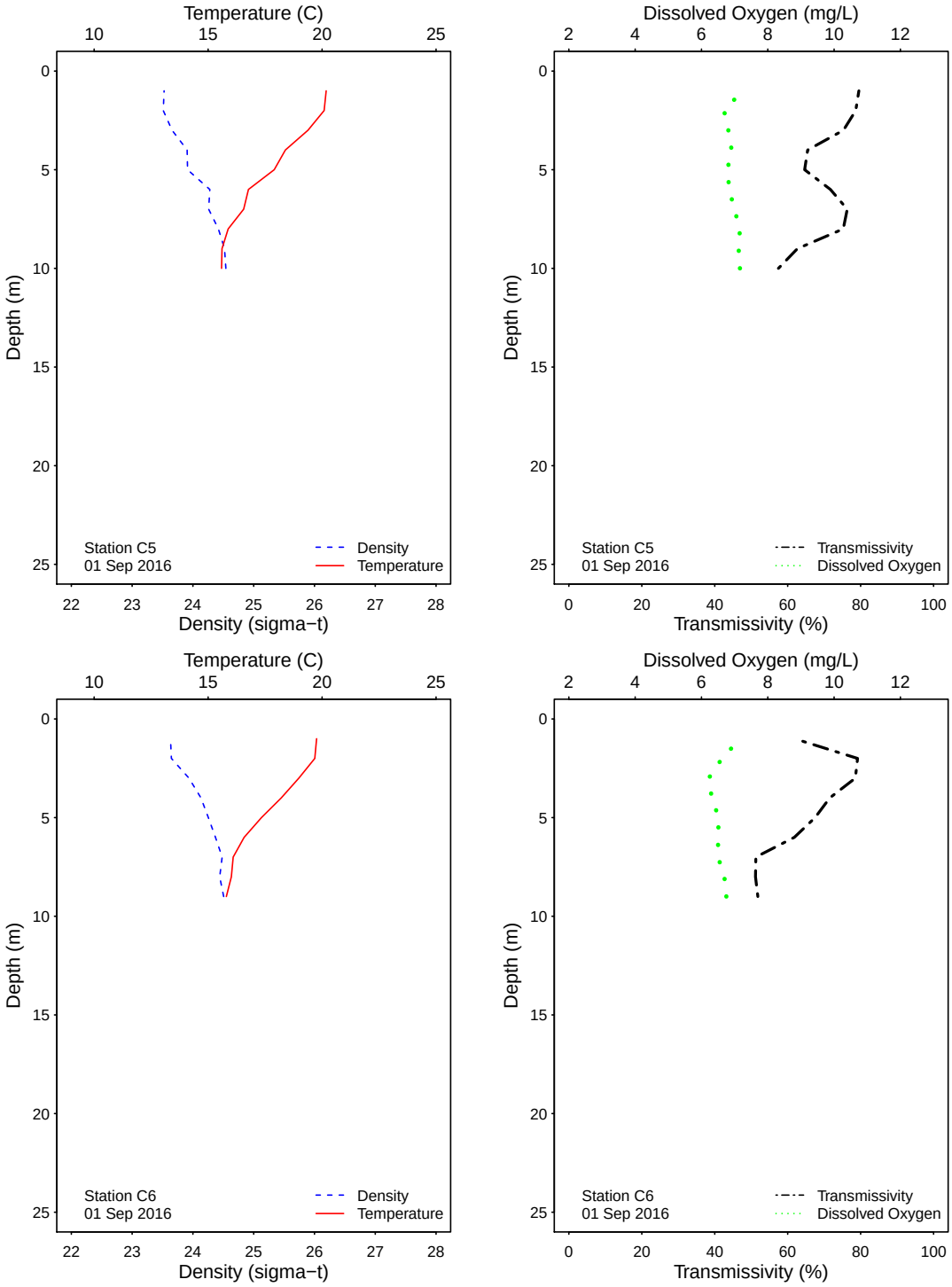

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

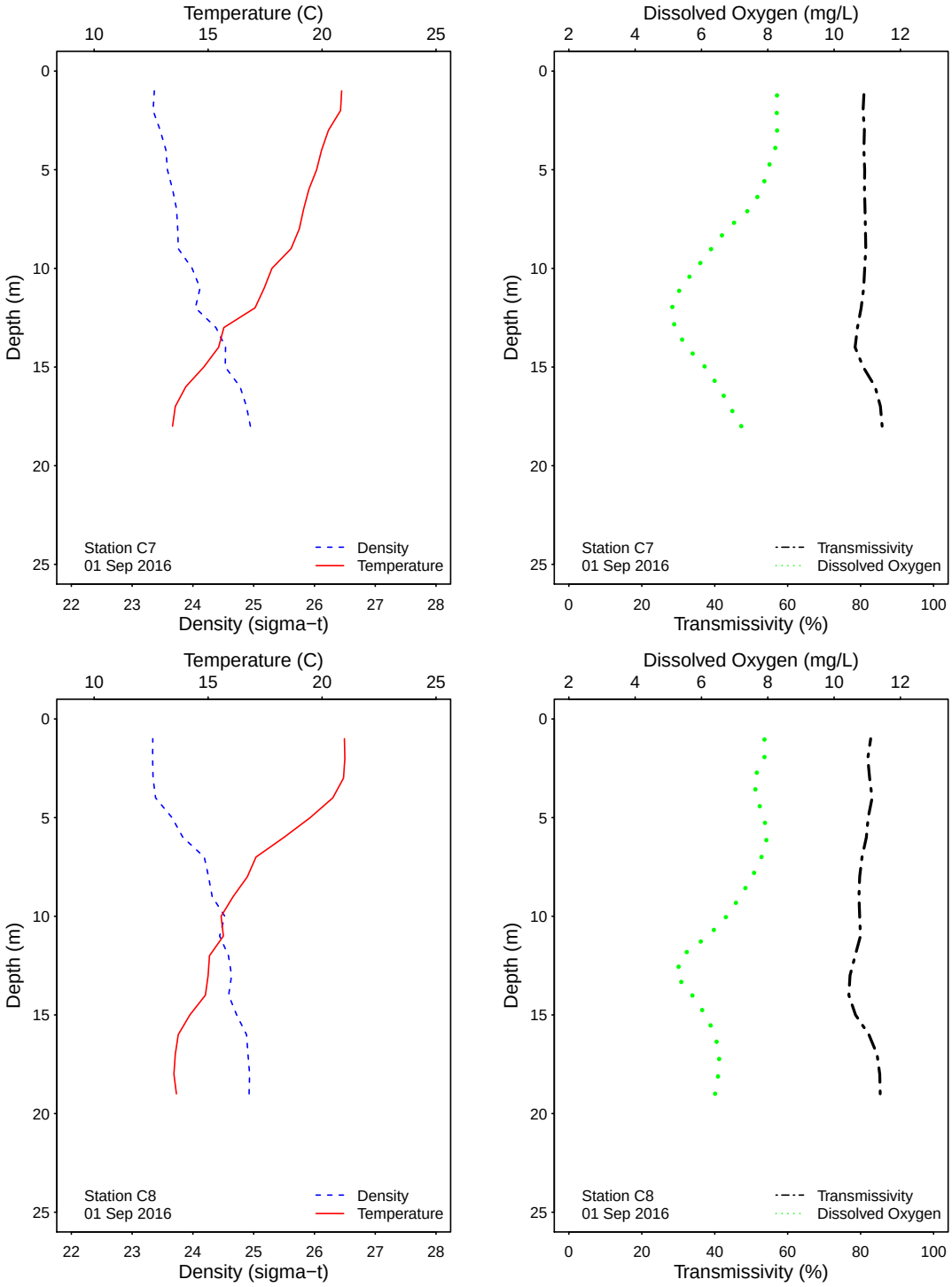

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

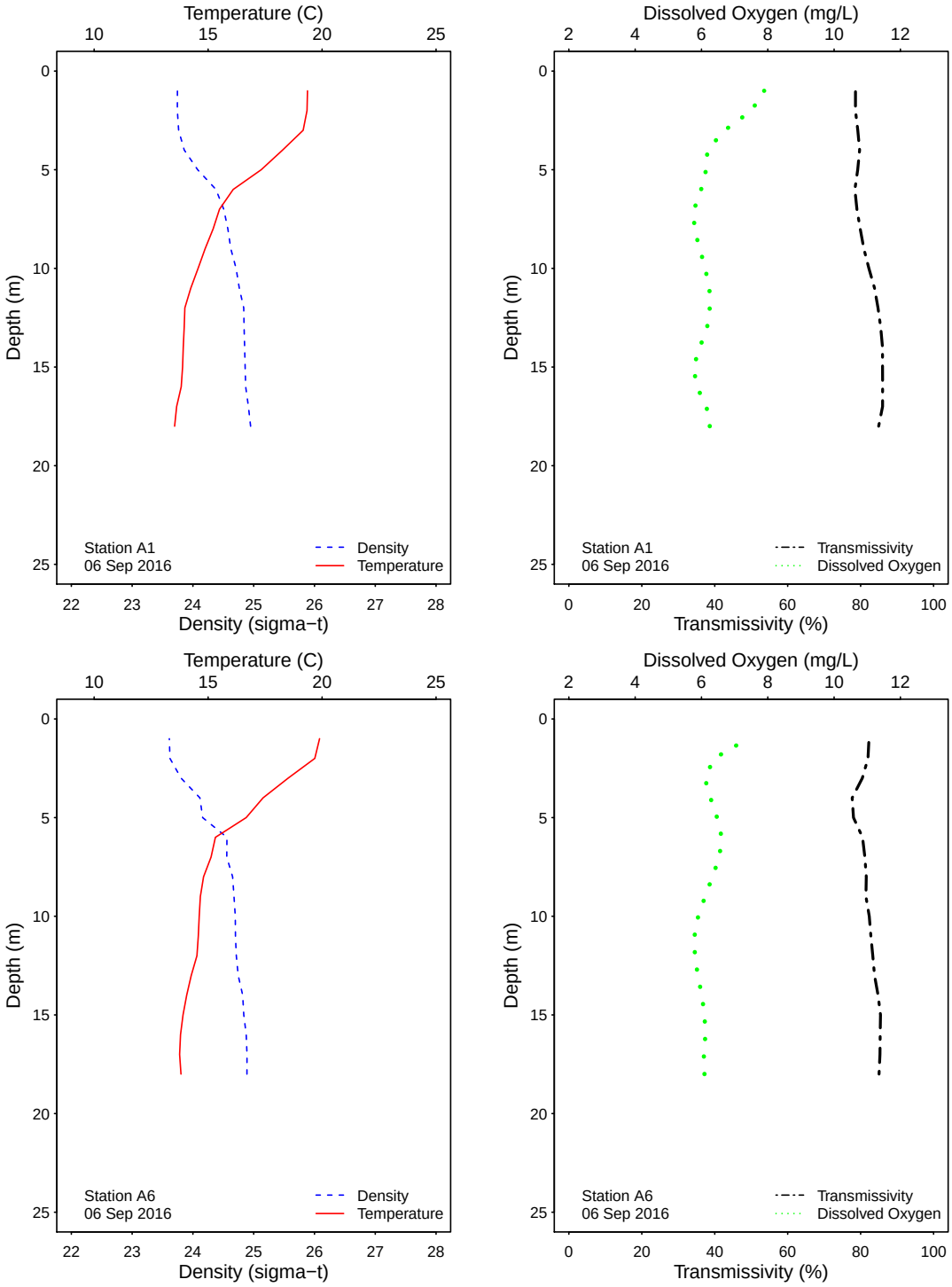

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

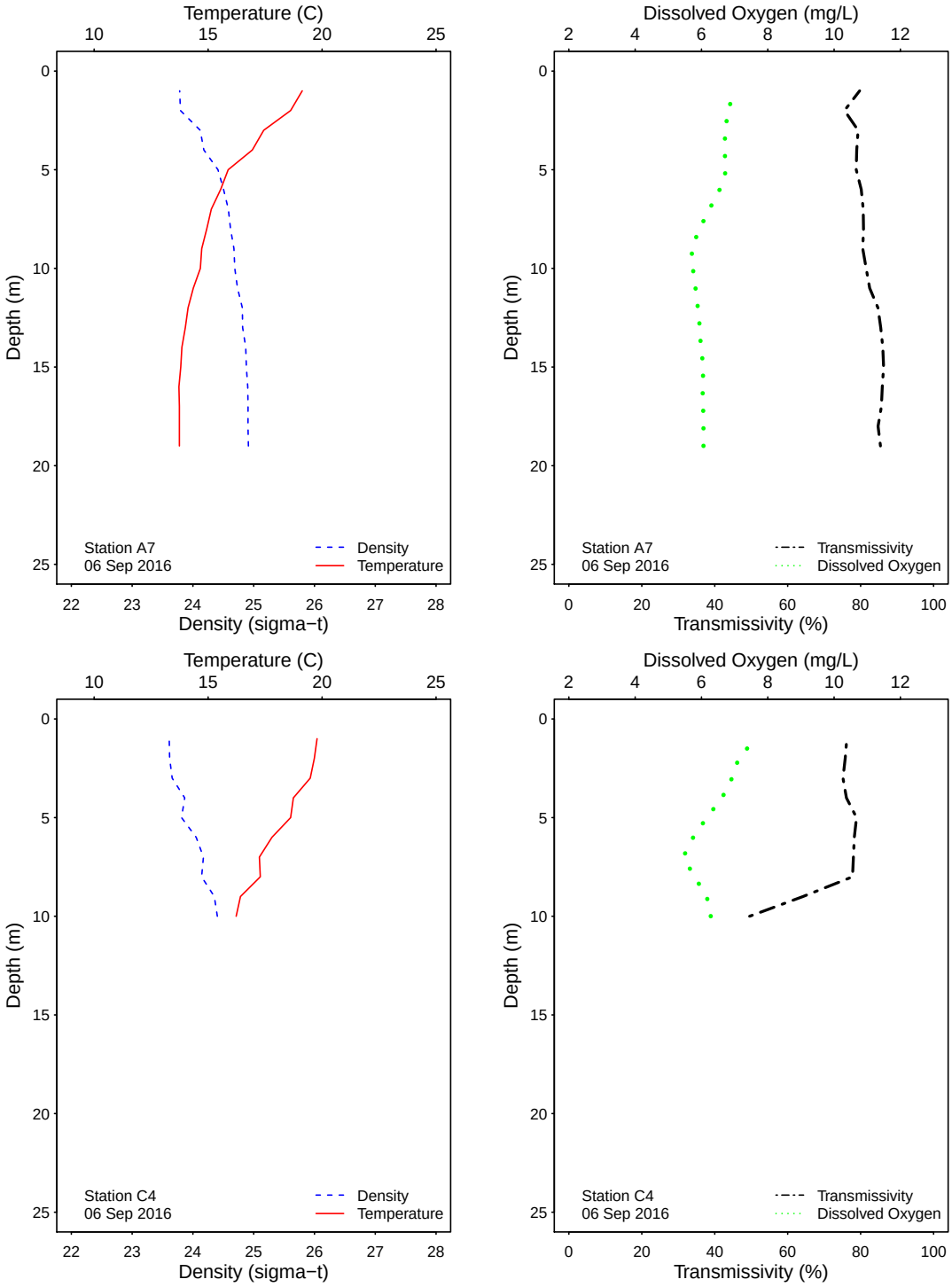

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

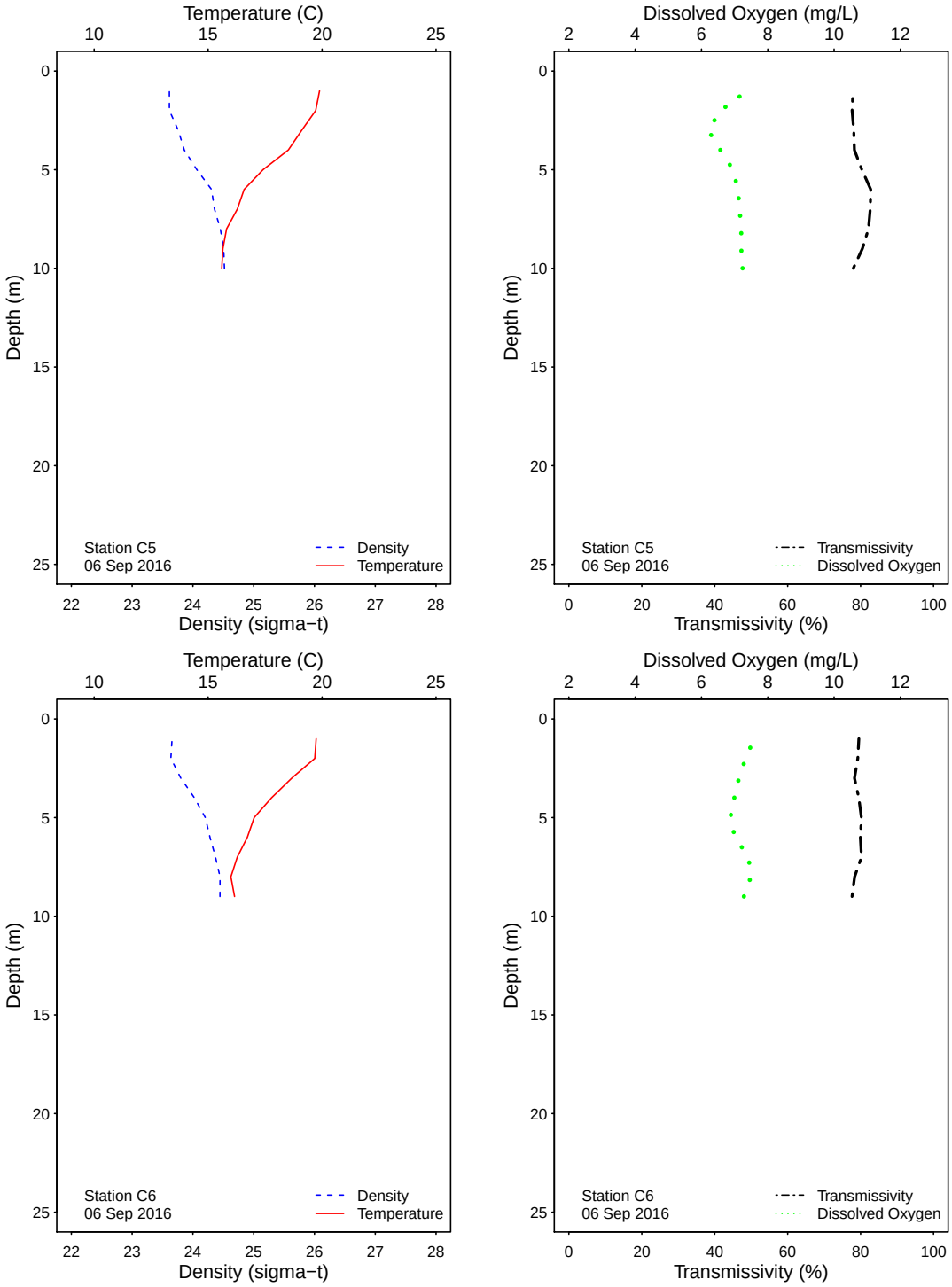

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

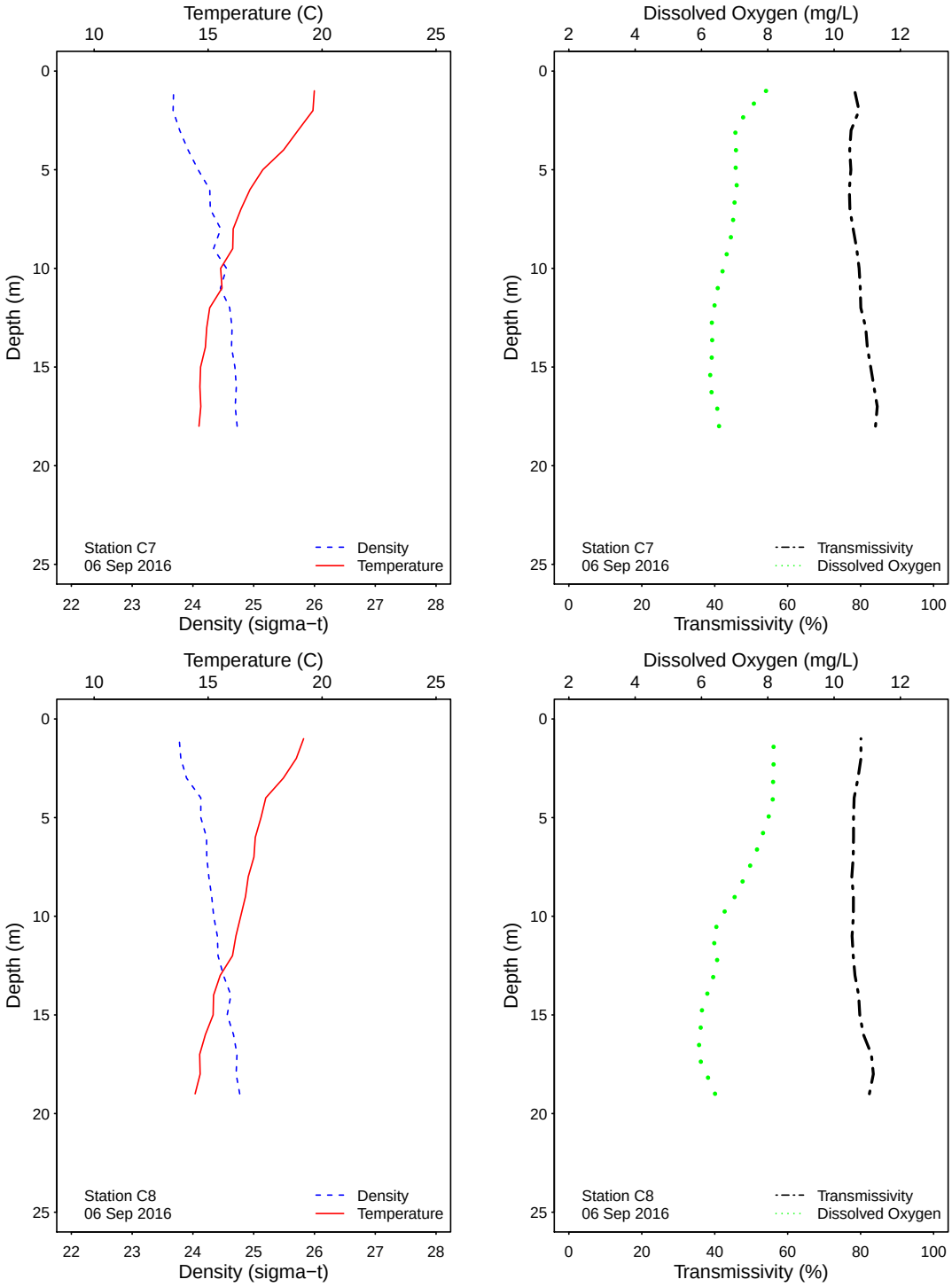

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

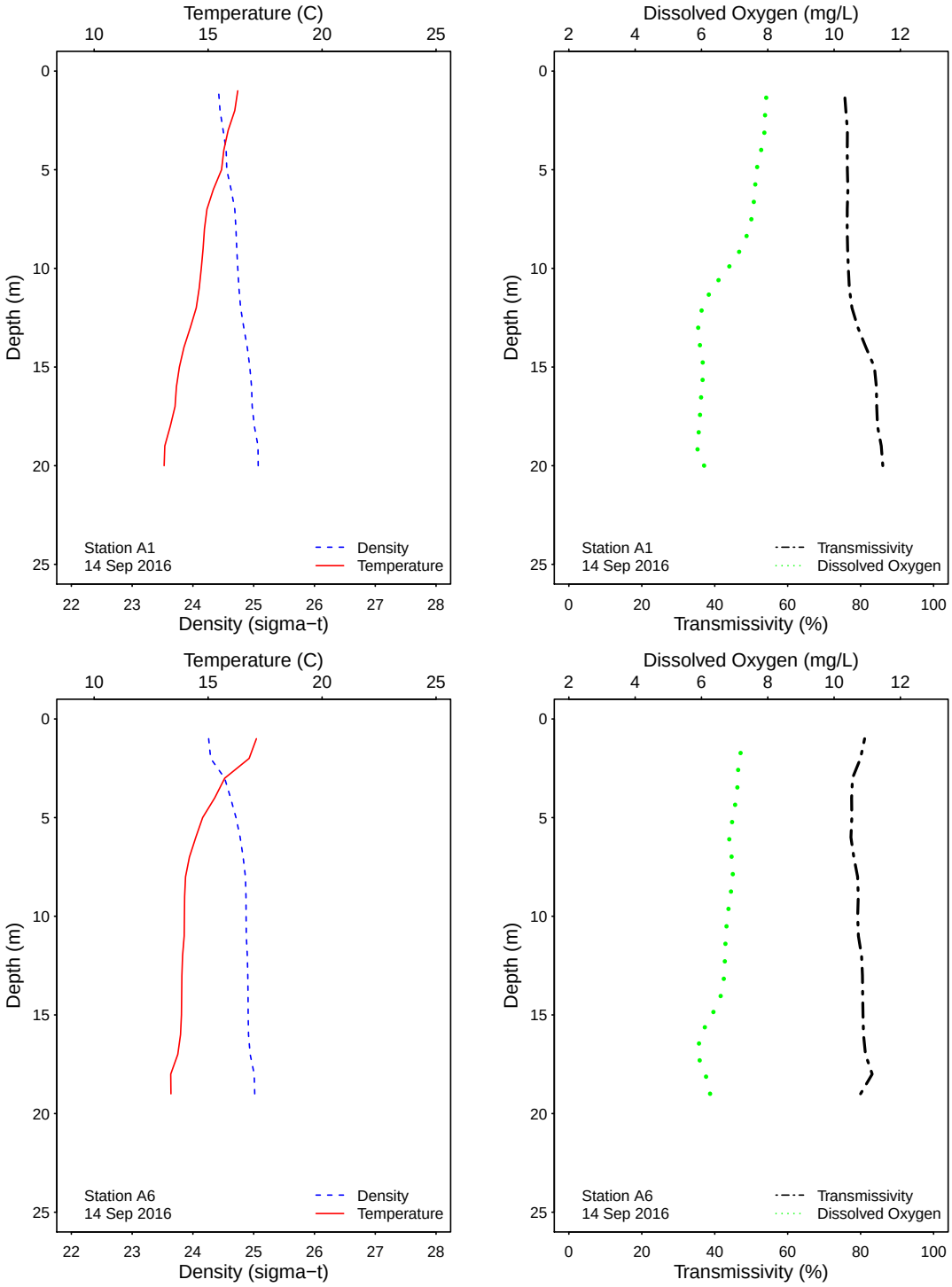

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

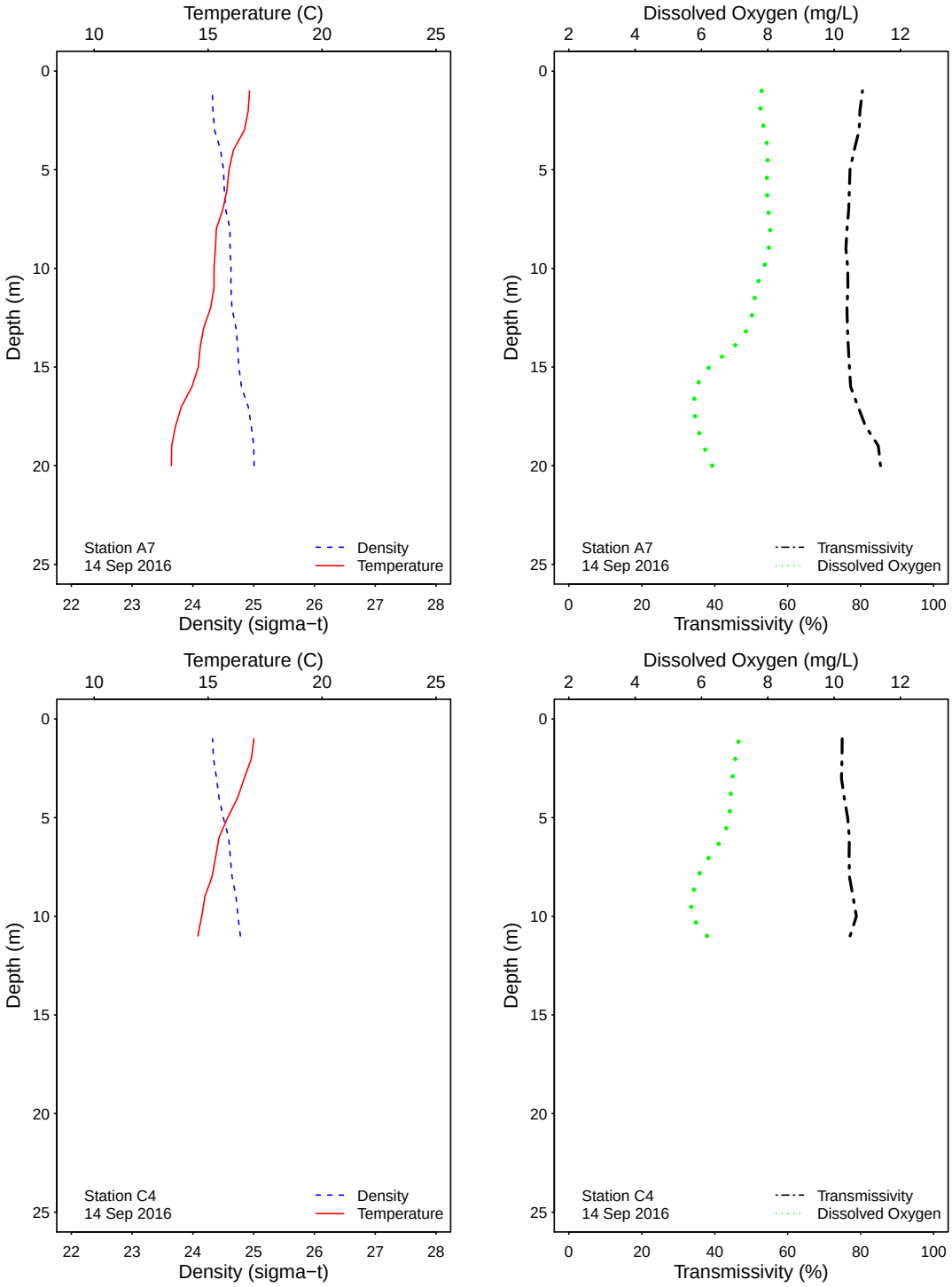

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

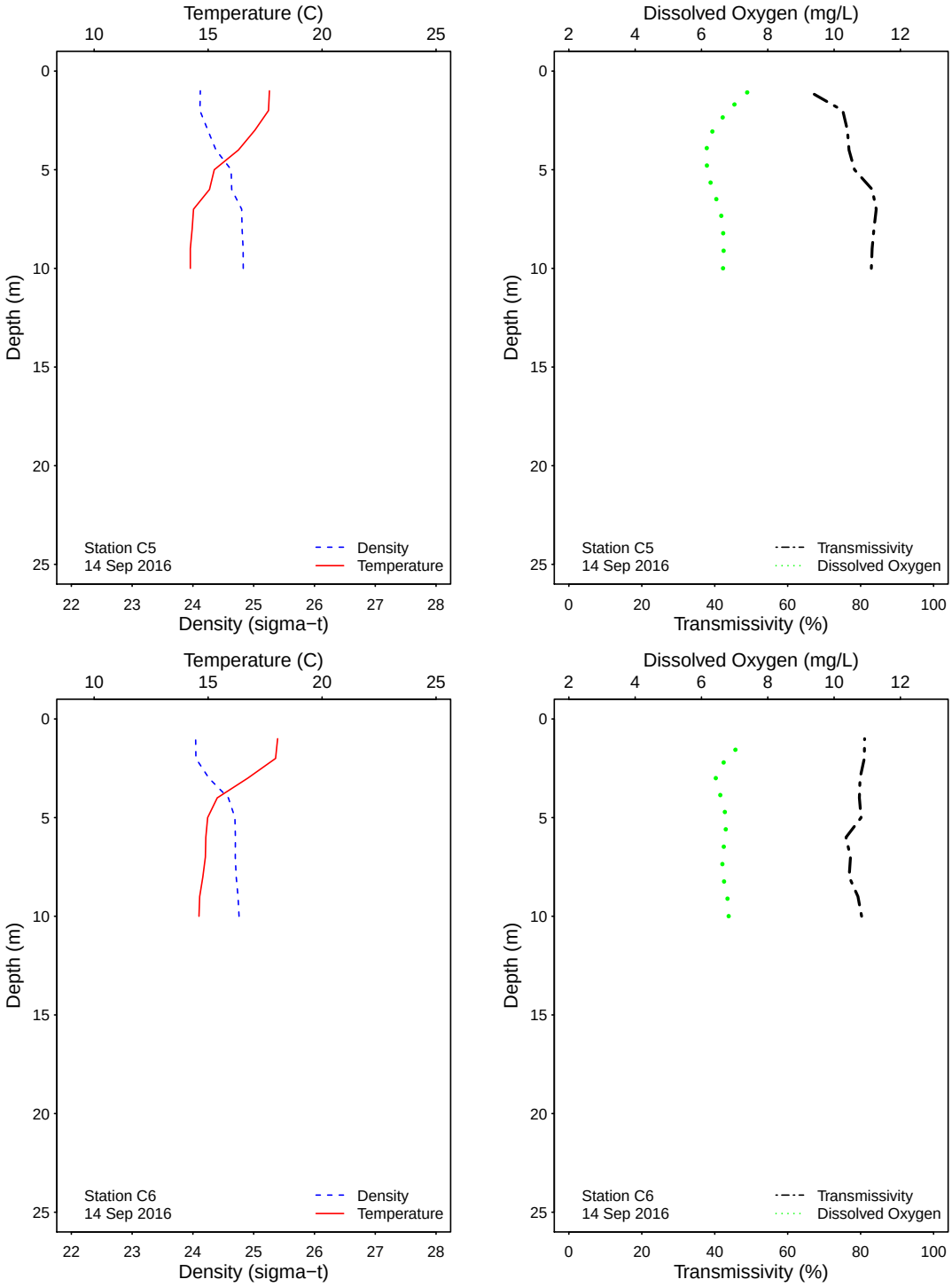

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

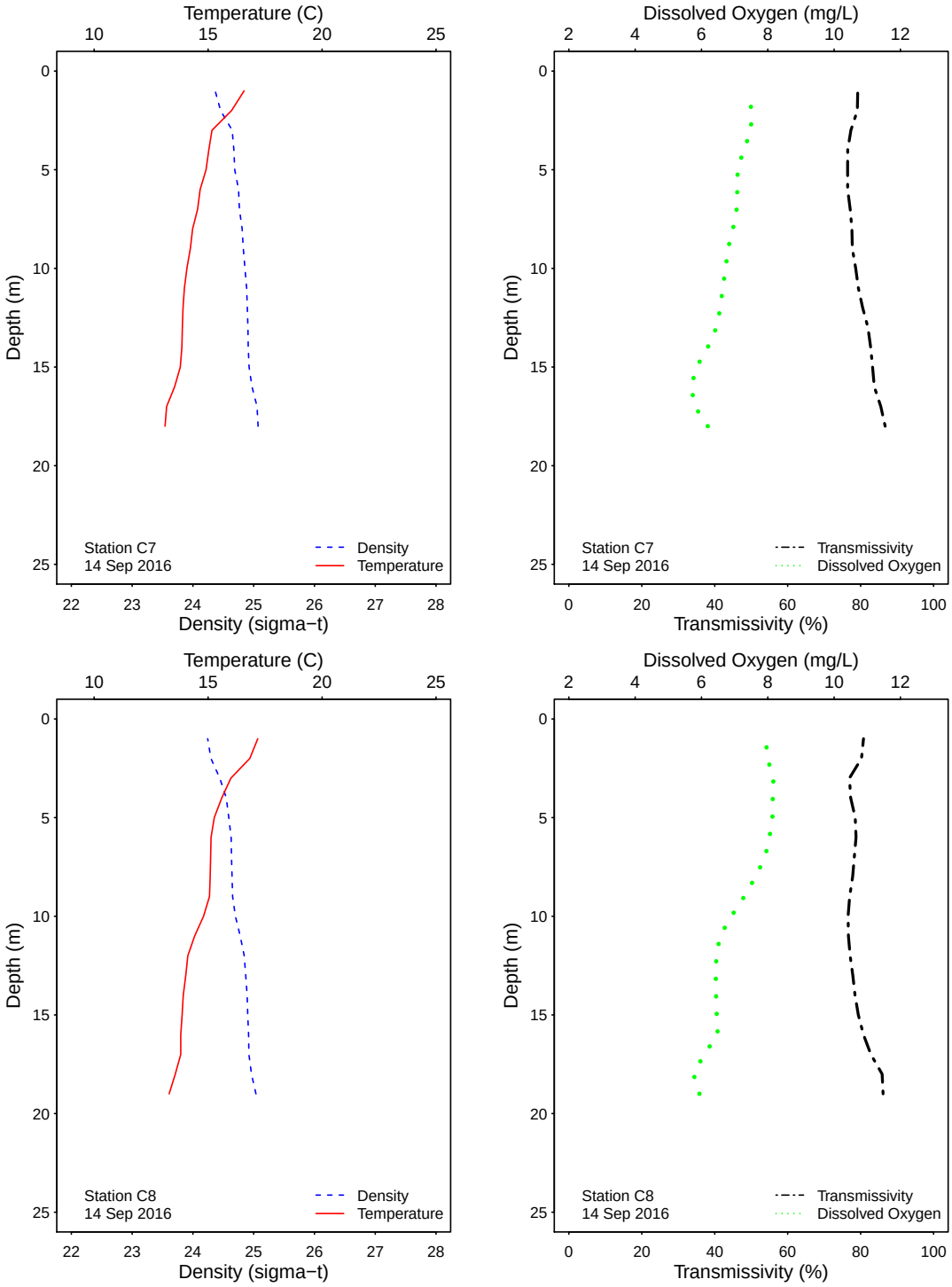

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

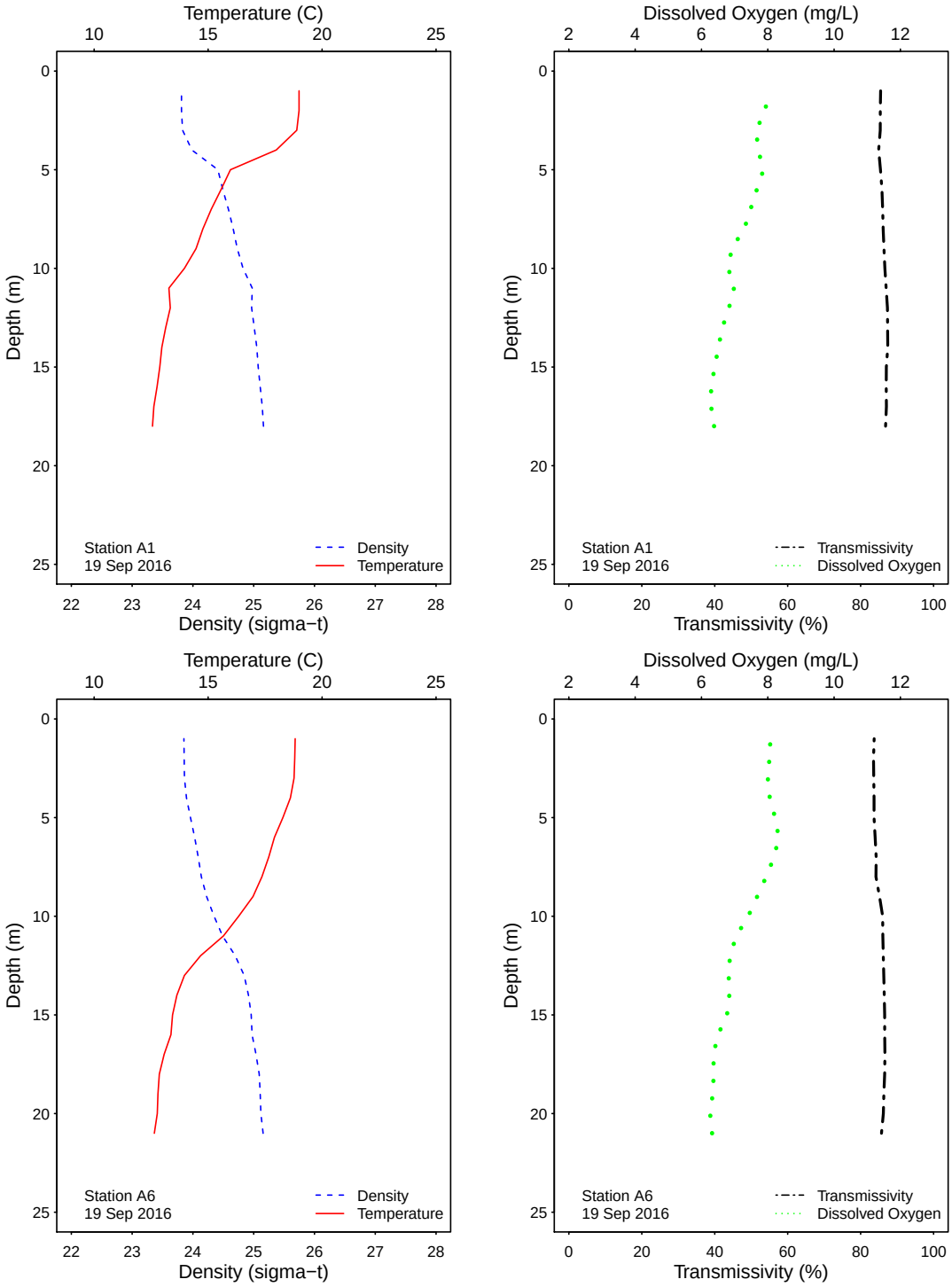

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

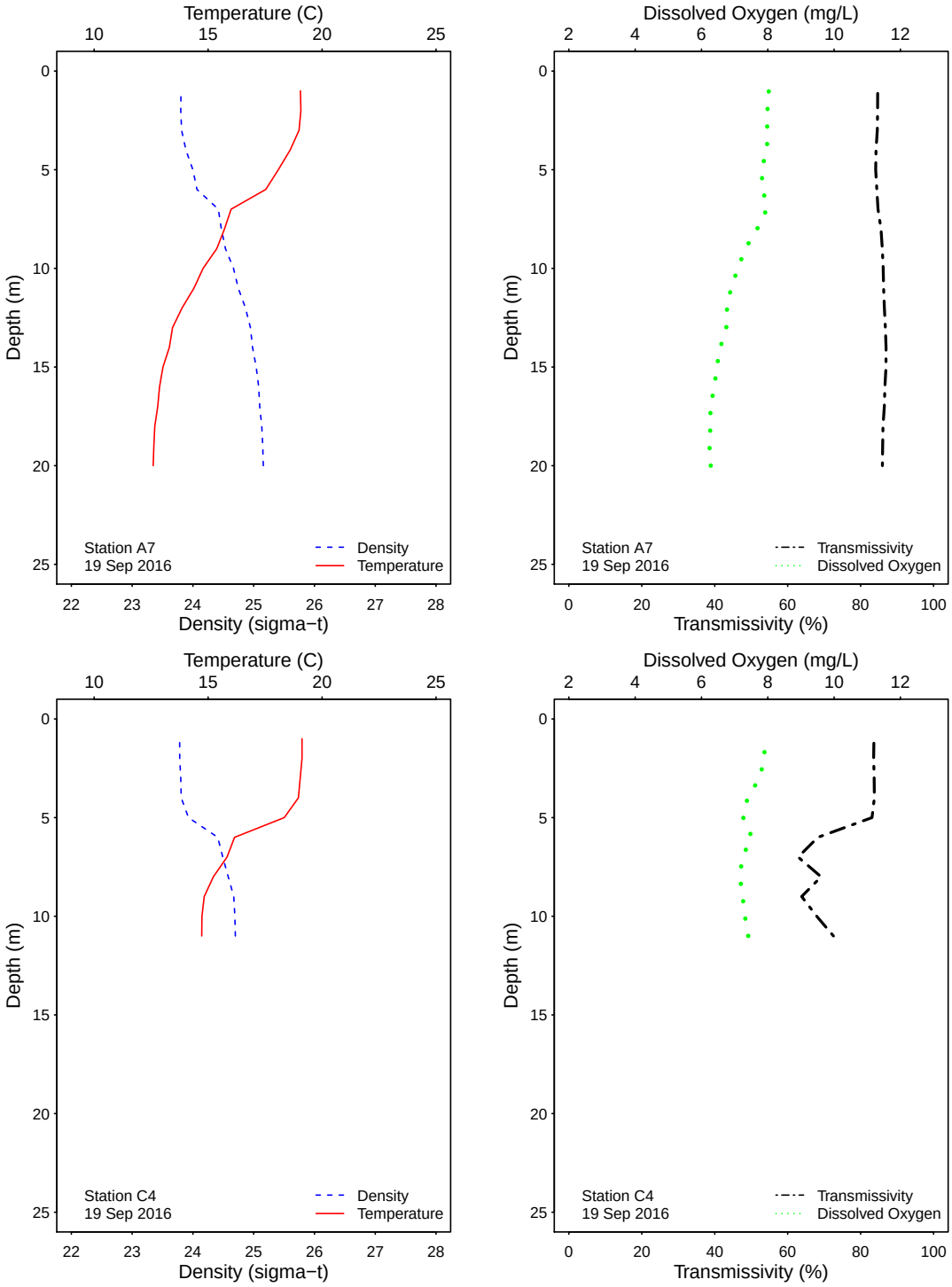

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

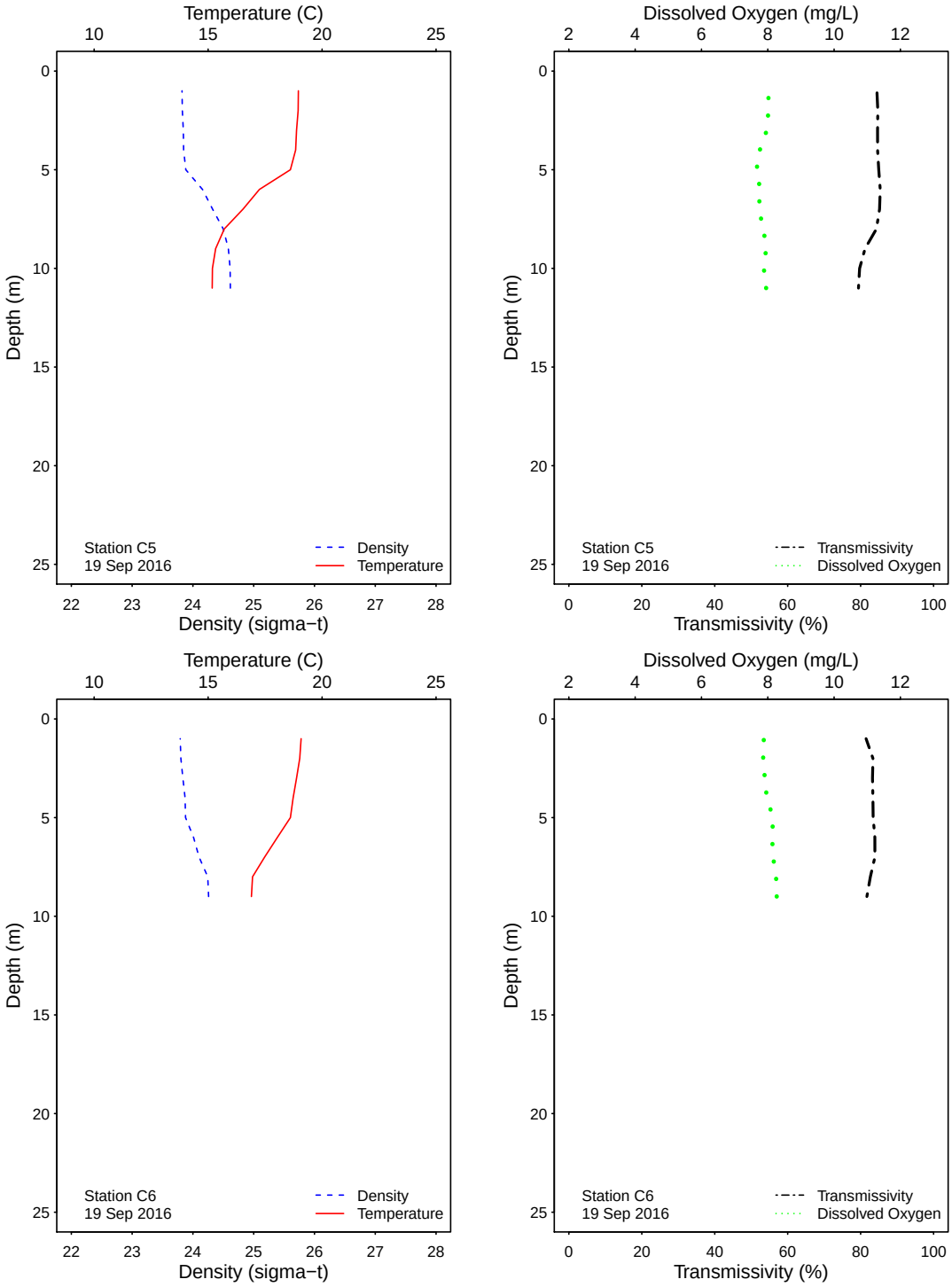

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

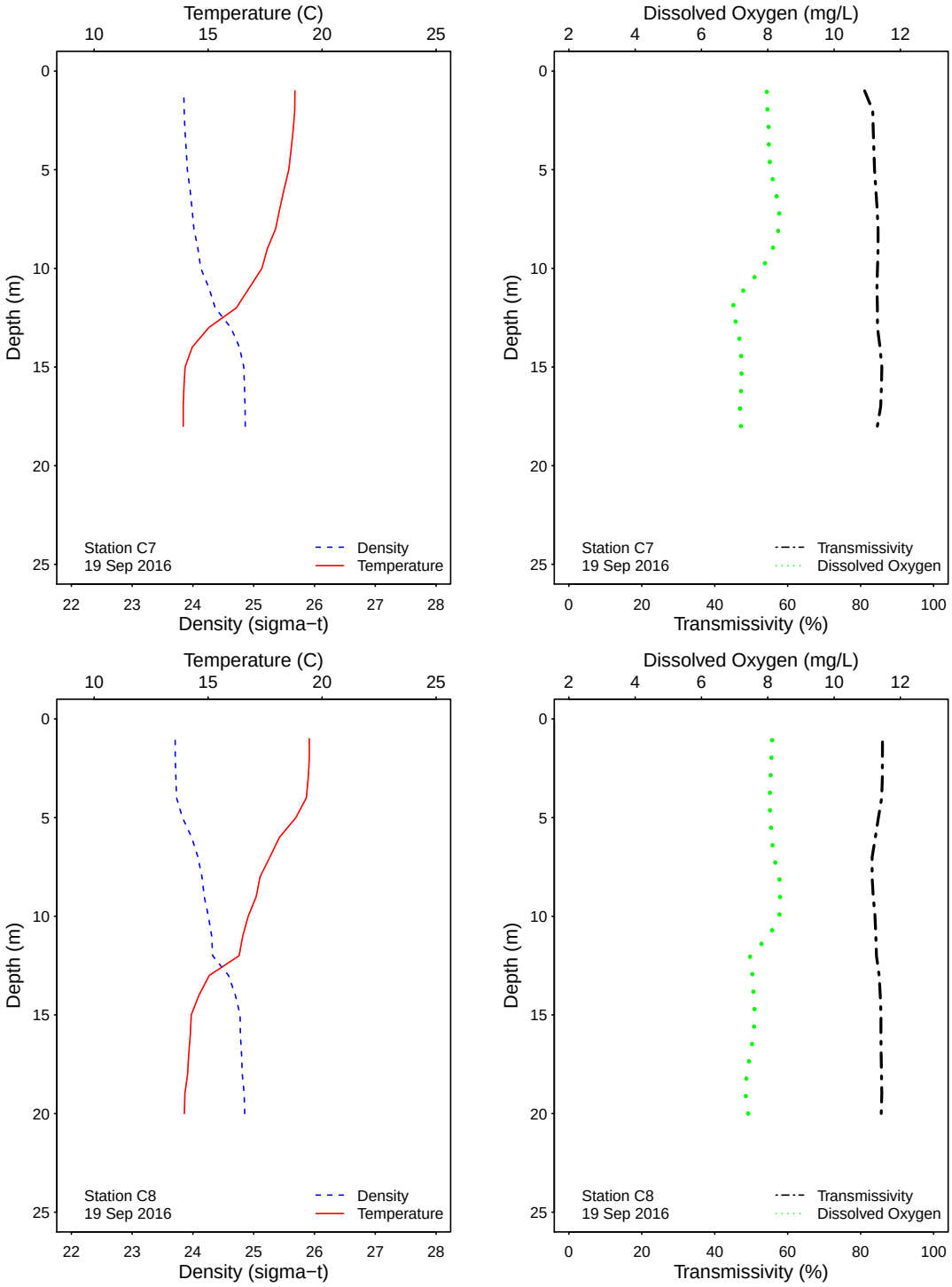

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

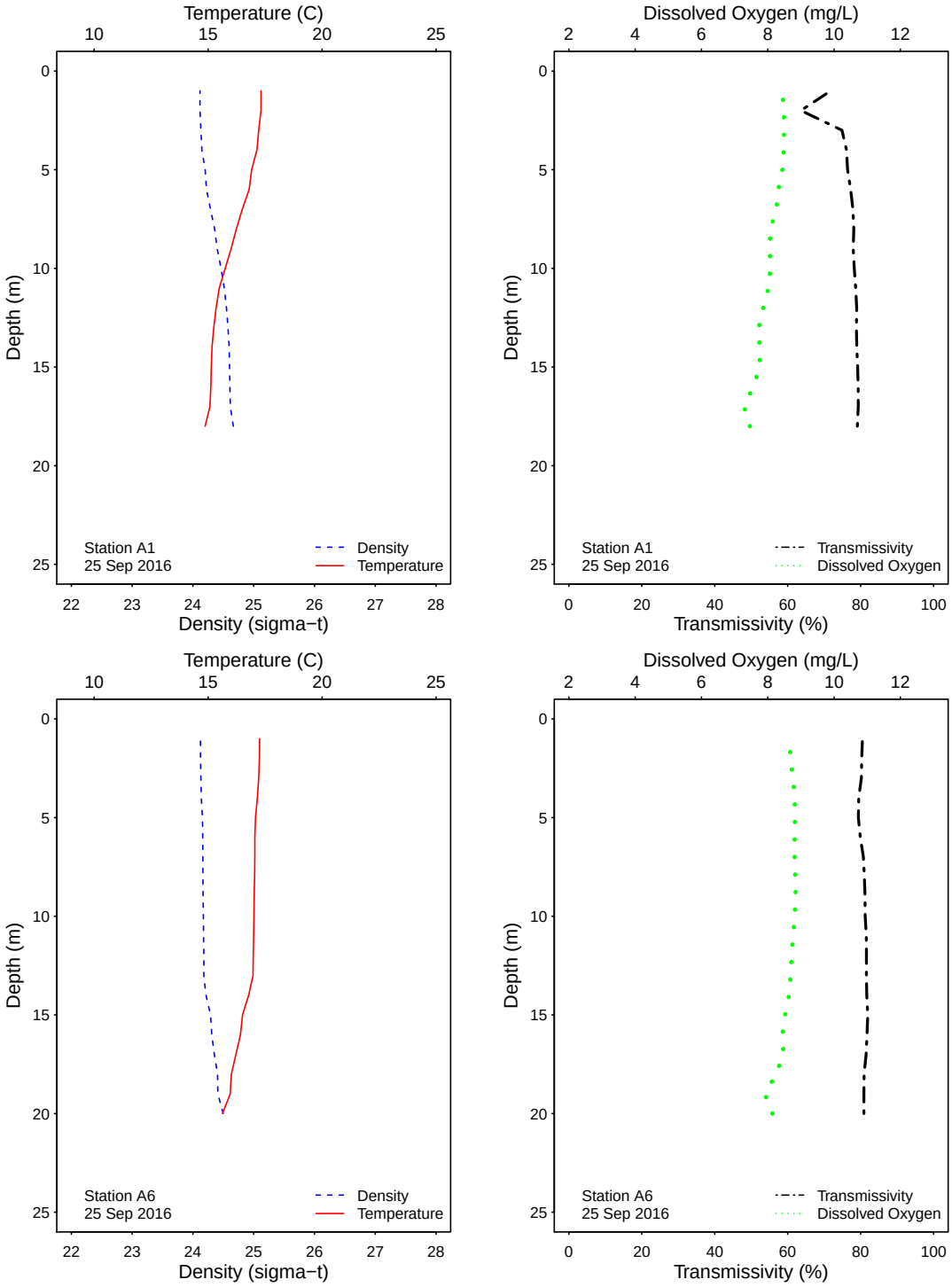

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

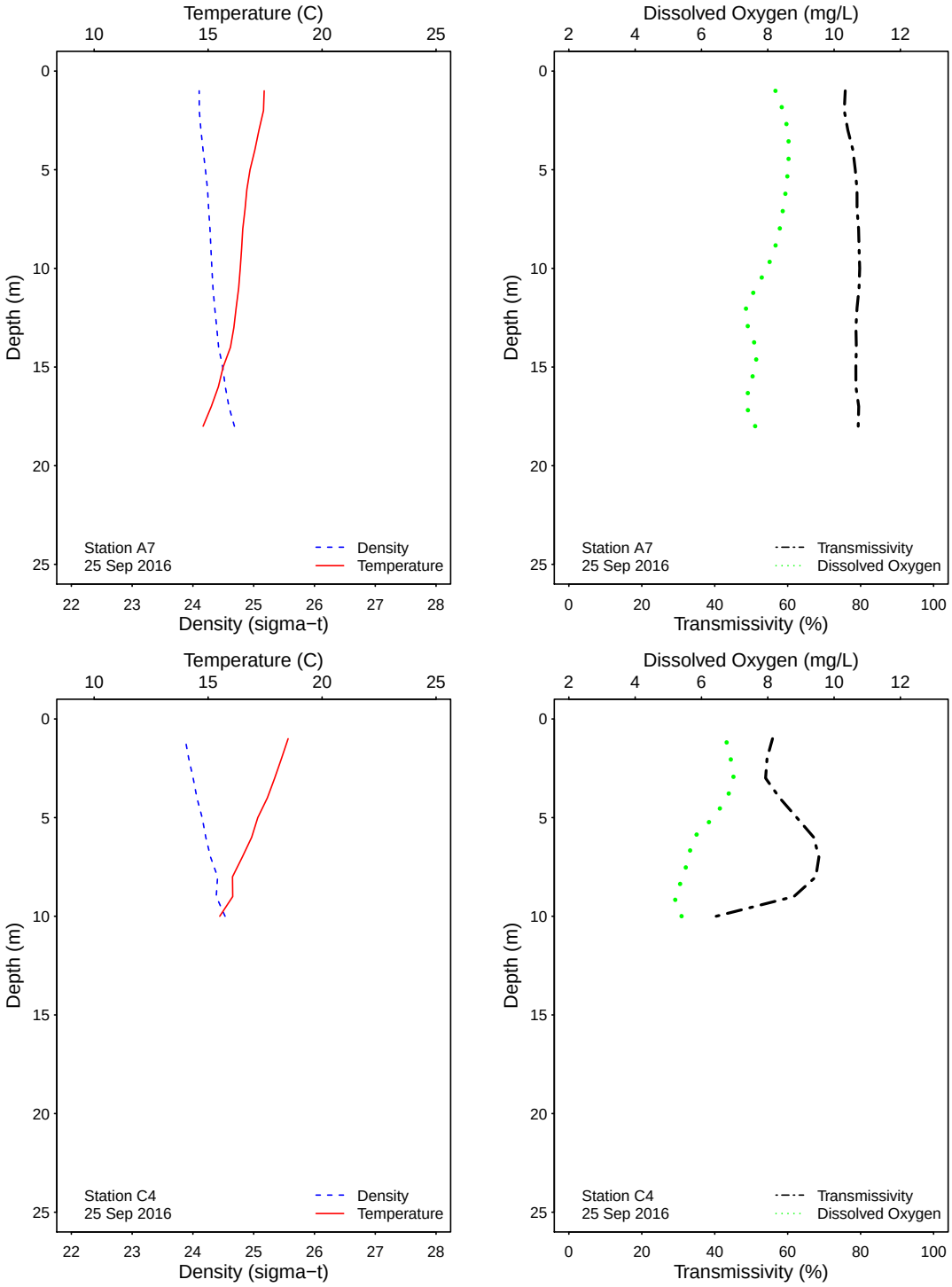

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

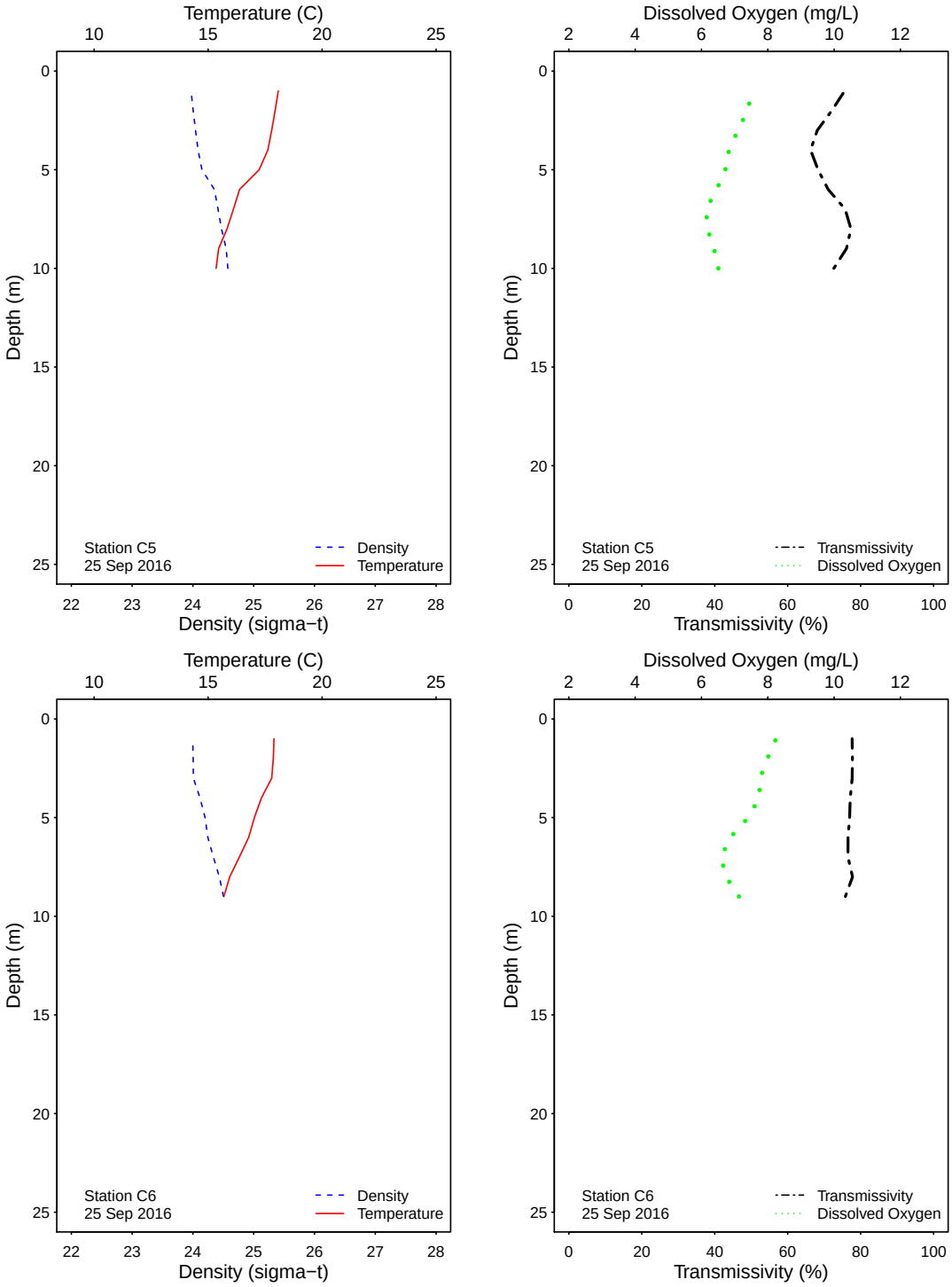

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

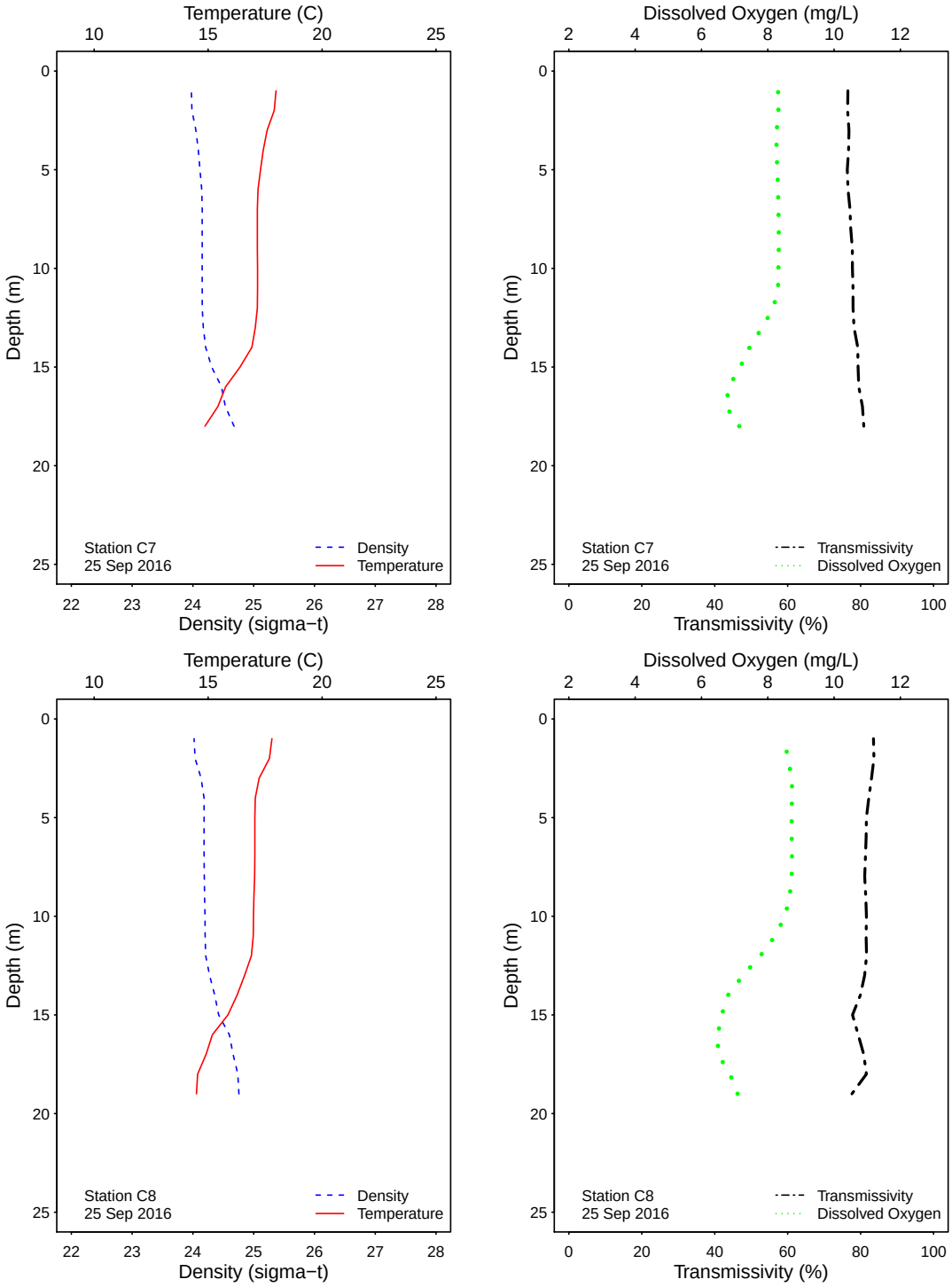

Figure 3.1: Graphics of CTD profile data from the PLOO kelp stations for each sample date.

APPENDIX A

Quality Assurance

Table A.1

Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected PLOO stations. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
A7	01 Sep 2016	18	AR	LAB DUPLICATE	<2	<2	<2
A7	06 Sep 2016	18	SR	LAB DUPLICATE	ns	ns	2e
A7	06 Sep 2016	18	ZV	LAB DUPLICATE	52	<2	ns
A7	14 Sep 2016	18	JT	LAB DUPLICATE	<2	<2	<2
A7	19 Sep 2016	18	JT	LAB DUPLICATE	64	2e	2e
A7	25 Sep 2016	18	ZV	LAB DUPLICATE	<2	4e	<2
C7	01 Sep 2016	18	AR	LAB DUPLICATE	<2	<2	<2
C7	06 Sep 2016	18	SR	LAB DUPLICATE	ns	ns	<2
C7	06 Sep 2016	18	ZV	LAB DUPLICATE	<2	<2	ns
C7	14 Sep 2016	18	JT	LAB DUPLICATE	20e	2e	<2
C7	19 Sep 2016	18	JT	LAB DUPLICATE	<2	<2	<2
C7	25 Sep 2016	18	ZV	LAB DUPLICATE	2e	<2	<2
C8	01 Sep 2016	12	AR	LAB DUPLICATE	2e	<2	<2
C8	06 Sep 2016	12	ZV	LAB DUPLICATE	<2	<2	<2
C8	14 Sep 2016	12	AR	LAB DUPLICATE	<2	<2	<2
C8	19 Sep 2016	12	JT	LAB DUPLICATE	<2	<2	<2
C8	25 Sep 2016	12	ZV	LAB DUPLICATE	<2	<2	<2
D12	01 Sep 2016		JT	FIELD DUPLICATE	<20	<2	<2
D12	01 Sep 2016		JT	LAB DUPLICATE	<20	<2	<2
D12	07 Sep 2016		LMA	FIELD DUPLICATE	<2	4e	4e
D12	07 Sep 2016		LMA	LAB DUPLICATE	<2	<2	<2
D12	13 Sep 2016		JT	FIELD DUPLICATE	<2	<2	<2
D12	13 Sep 2016		JT	LAB DUPLICATE	2e	<2	<2
D12	19 Sep 2016		JT	FIELD DUPLICATE	24e	<2	<2
D12	19 Sep 2016		JT	LAB DUPLICATE	20e	14e	<2
D12	25 Sep 2016		JT	FIELD DUPLICATE	2e	2e	<2
D12	25 Sep 2016		JT	LAB DUPLICATE	<2	<2	<2

ns = not sampled
ND = no data

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