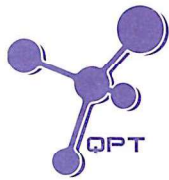


Annex G

Water Quality

Annex G1

Calibration Certificates for Water Quality



專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED

Unit 10, 5/F, Wah Wai Centre, 38-40 Au Pui Wan St., Fotan, Hong Kong
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC060094
Date of Issue : 27 June 2023
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 15M100005
Date of Received : 23 June 2023
Date of Calibration : 23 June 2023
Date of Next Calibration : 22 September 2023
Request No. : D-BC060094

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H ⁺
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130 B
Conductivity	APHA 21e 2510 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.04	0.04	Satisfactory
7.42	7.50	0.08	Satisfactory
10.01	9.98	-0.03	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
10	10.0	0.0	Satisfactory
25	24.9	-0.1	Satisfactory
45	45.1	0.1	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)


(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.18	1.80	Satisfactory
20	20.42	2.10	Satisfactory
30	30.20	0.67	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

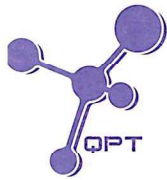
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LEE Chun-ting

Assistant Manager (Chemical Testing)



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC060094
Date of Issue : 27 June 2023
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.29	7.41	0.12	Satisfactory
6.12	6.02	-0.10	Satisfactory
5.48	5.71	0.23	Satisfactory
2.72	2.38	-0.34	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.10	--	Satisfactory
10	9.88	-1.20	Satisfactory
20	20.21	1.10	Satisfactory
100	97.34	-2.70	Satisfactory
800	781.97	-2.30	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(6) Conductivity

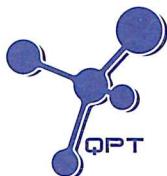
Expected Reading ($\mu\text{S/cm}$ at 25°C)	Display Reading	Tolerance (%)	Result
146.9	151.4	3.06	Satisfactory
1412	1288	-8.78	Satisfactory
12890	12793	-0.75	Satisfactory
58670	59287	1.05	Satisfactory
111900	112186	0.26	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
- The results relate only to the calibrated equipment as received
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--- END OF REPORT ---



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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC060025
Date of Issue : 06 June 2023
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : S/N: 16H104233
Date of Received : 02 June 2023
Date of Calibration : 02 June 2023
Date of Next Calibration : 01 September 2023
Request No. : D-BC060025

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H ⁺
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130 B
Conductivity	APHA 21e 2510 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.07	0.07	Satisfactory
7.42	7.49	0.07	Satisfactory
10.01	10.09	0.08	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
10	10.0	0.0	Satisfactory
25	25.0	0.0	Satisfactory
45	45.0	0.0	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

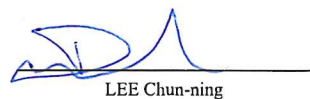
(3) Salinity

Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	10.09	0.90	Satisfactory
20	20.38	1.90	Satisfactory
30	30.33	1.10	Satisfactory

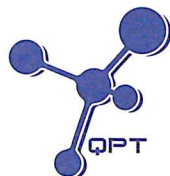
Tolerance of Salinity should be less than ± 10.0 (%)

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BC060025
Date of Issue : 06 June 2023
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
7.12	7.15	0.03	Satisfactory
4.61	4.39	-0.22	Satisfactory
1.57	1.27	-0.30	Satisfactory
0.16	0.56	0.40	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.10	--	Satisfactory
10	9.84	-1.60	Satisfactory
20	20.11	0.50	Satisfactory
100	107.60	7.60	Satisfactory
800	798.22	-0.20	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(6) Conductivity

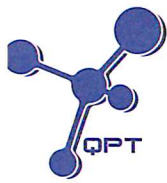
Expected Reading ($\mu\text{S}/\text{cm}$ at 25°C)	Display Reading	Tolerance (%)	Result
146.9	148.7	1.23	Satisfactory
1412	1491	5.59	Satisfactory
12890	12677	-1.65	Satisfactory
58670	59440	1.31	Satisfactory
111900	113112	1.08	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
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--- END OF REPORT ---



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QUALITY PRO TEST-CONSULT LIMITED

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB120080
Date of Issue : 20 December 2022
Page No. : 1 of 2

PART A - CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House Yu Chui Court, Shatin
New Territories (HK) Hong Kong

PART B - SAMPLE INFORMATION

Name of Equipment : YSI ProDSS (Multi-Parameters)
Manufacturer : YSI (a xylem brand)
Serial Number : 17E100747
Date of Received : 20 December 2022
Date of Calibration : 20 December 2022
Date of Next Calibration : 19 March 2023
Request No. : D-BB120080

PART C - REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Test Parameter	Reference Method
pH value	APHA 21e 4500 H ⁺
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure
Salinity	APHA 21e 2520 B
Dissolved oxygen	APHA 21e 4500 O
Turbidity	APHA 21e 2130 B
Conductivity	APHA 21e 2510 B

PART D - CALIBRATION RESULT

(1) pH value

Target (pH unit)	Display Reading (pH unit)	Tolerance	Result
4.00	4.02	0.02	Satisfactory
7.42	7.45	0.03	Satisfactory
10.01	10.06	0.05	Satisfactory

Tolerance of pH value should be less than ± 0.2 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Display Reading (°C)	Tolerance	Result
15	14.9	-0.1	Satisfactory
30	30.0	0.0	Satisfactory
45	49.9	4.9	Satisfactory

Tolerance of Temperature should be less than ± 2.0 (°C)

(3) Salinity

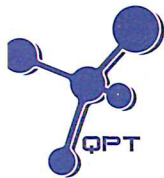
Expected Reading (g/L)	Display Reading (g/L)	Tolerance (%)	Result
10	9.94	-0.60	Satisfactory
20	20.21	1.05	Satisfactory
30	30.20	0.67	Satisfactory

Tolerance of Salinity should be less than ± 10.0 (%)

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Assistant Manager (Chemical Testing)



REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Test Report No. : R-BB120080
Date of Issue : 20 December 2022
Page No. : 2 of 2

(4) Dissolved oxygen

Expected Reading (mg/L)	Display Reading (mg/L)	Tolerance	Result
9.37	9.60	0.23	Satisfactory
7.08	6.64	-0.44	Satisfactory
4.84	4.48	-0.36	Satisfactory
3.10	2.81	-0.29	Satisfactory

Tolerance of Dissolved oxygen should be less than ± 0.5 (mg/L)

(5) Turbidity

Expected Reading (NTU)	Display Reading (NTU)	Tolerance (%)	Result
0	0.10	--	Satisfactory
10	9.85	-1.50	Satisfactory
20	19.77	-1.20	Satisfactory
100	99.16	-0.80	Satisfactory
800	796.62	-0.40	Satisfactory

Tolerance of Turbidity should be less than ± 10.0 (%)

(6) Conductivity

Expected Reading ($\mu\text{S/cm at } 25^\circ\text{C}$)	Display Reading	Tolerance (%)	Result
146.9	151.2	2.93	Satisfactory
1412	1366	-3.26	Satisfactory
12890	13610	5.59	Satisfactory
58670	56516	-3.67	Satisfactory
111900	111612	-0.26	Satisfactory

Tolerance of Conductivity should be less than ± 10.0 (%)

Remark(s)

- The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
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--- END OF REPORT ---

Annex G2

Monitoring Schedule for Water Quality

Tung Chung New Town Extension (East)
Impact Marine Water Quality Monitoring (WQM) Schedule (September 2023)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Sep	2-Sep
					WQM was cancelled due to No. 8 Gale or Storm Signal	
3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep	9-Sep
	ebb tide 14:08 - 17:38 flood tide 8:09 - 11:39		ebb tide 15:33 - 18:30 flood tide 10:21 - 13:51		WQM was cancelled due to Black Rainstorm Signal	
10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep	16-Sep
	ebb tide 9:20 - 12:50 flood tide 16:48 - 20:18		ebb tide 10:37 - 14:07 flood tide 17:26 - 20:56		ebb tide 11:40 - 15:10 flood tide 18:04 - 21:34	
17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep	23-Sep
	ebb tide 13:03 - 16:33 flood tide 6:57 - 10:27		ebb tide 14:10 - 16:30 flood tide 8:27 - 11:57		ebb tide 4:30 - 6:57 flood tide 15:50 - 19:20	
24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep
	ebb tide 7:30 - 11:00 flood tide 15:38 - 19:08		ebb tide 9:34 - 13:04 flood tide 16:43 - 20:13		ebb tide 11:05 - 14:35 flood tide 17:37 - 21:07	

Remark:

Pickup time and place of 1st tide: 15 min before tidal window at Sham Tseng pier

Pickup time and place of 2nd tide: 15 min before tidal window at Tung Chung pier

Annex G3

Monitoring Results for Water Quality

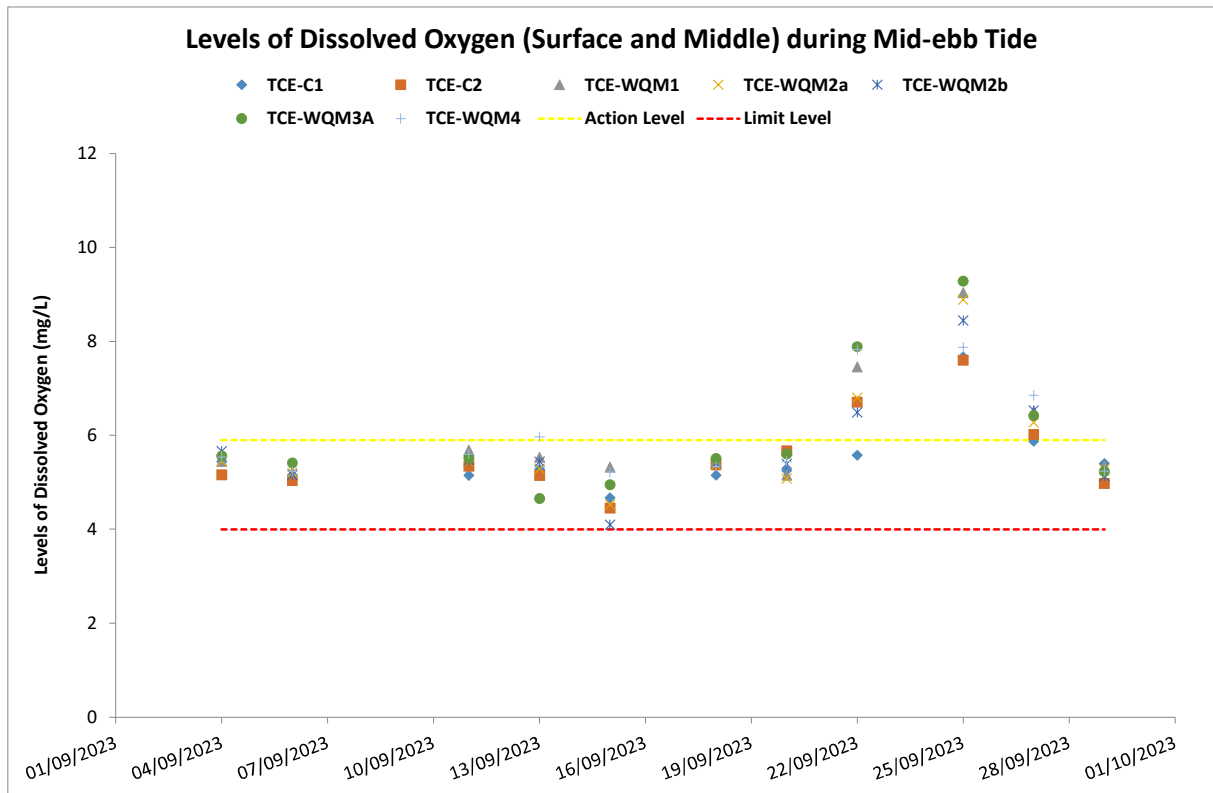


Figure 1: Levels of Dissolved Oxygen (Surface and Middle) (mg/L) recorded at Mid-ebb Tide during the Water Quality Monitoring between 1 to 30 September 2023

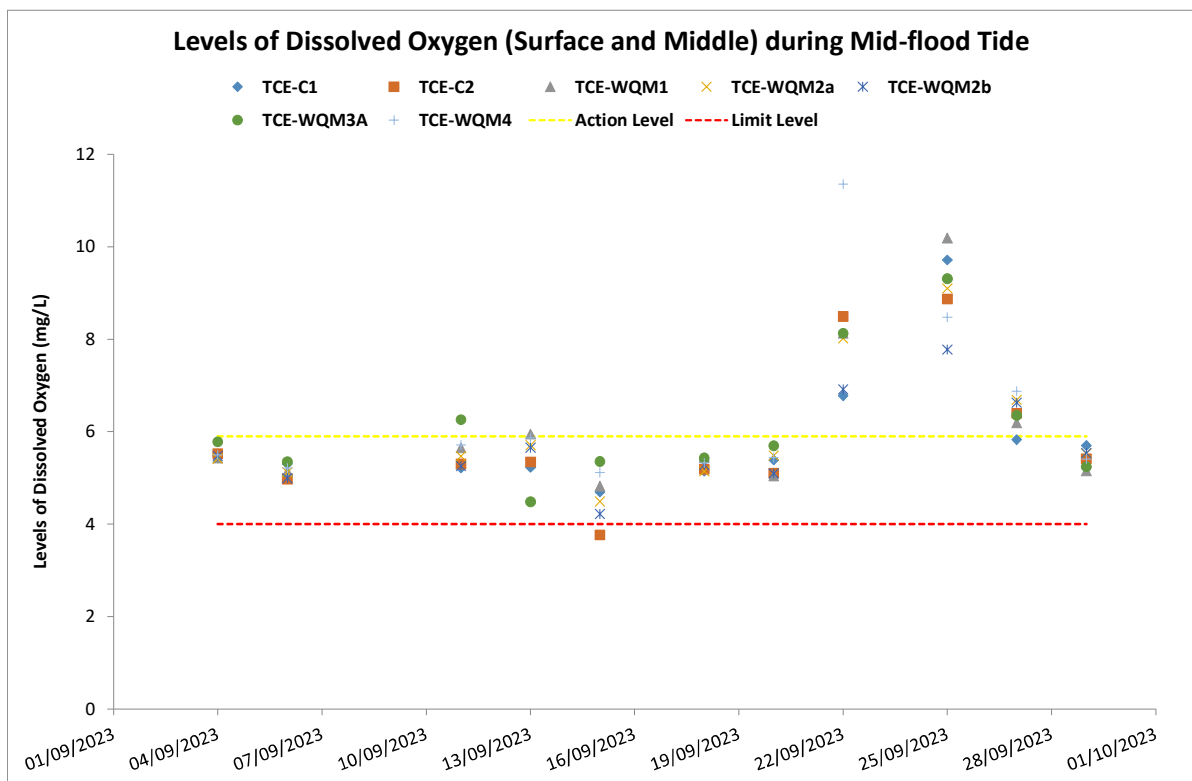


Figure 2: Levels of Dissolved Oxygen (Surface and Middle) (mg/L) recorded at Mid-flood Tide during the Water Quality Monitoring between 1 to 30 September 2023

Source: P:\Projects\0445700 CEDD ET for Tung Chung\JT\02_Deliverable\10 Monthly EM&A Report\
 Date: September 2023

Environmental Resources Management



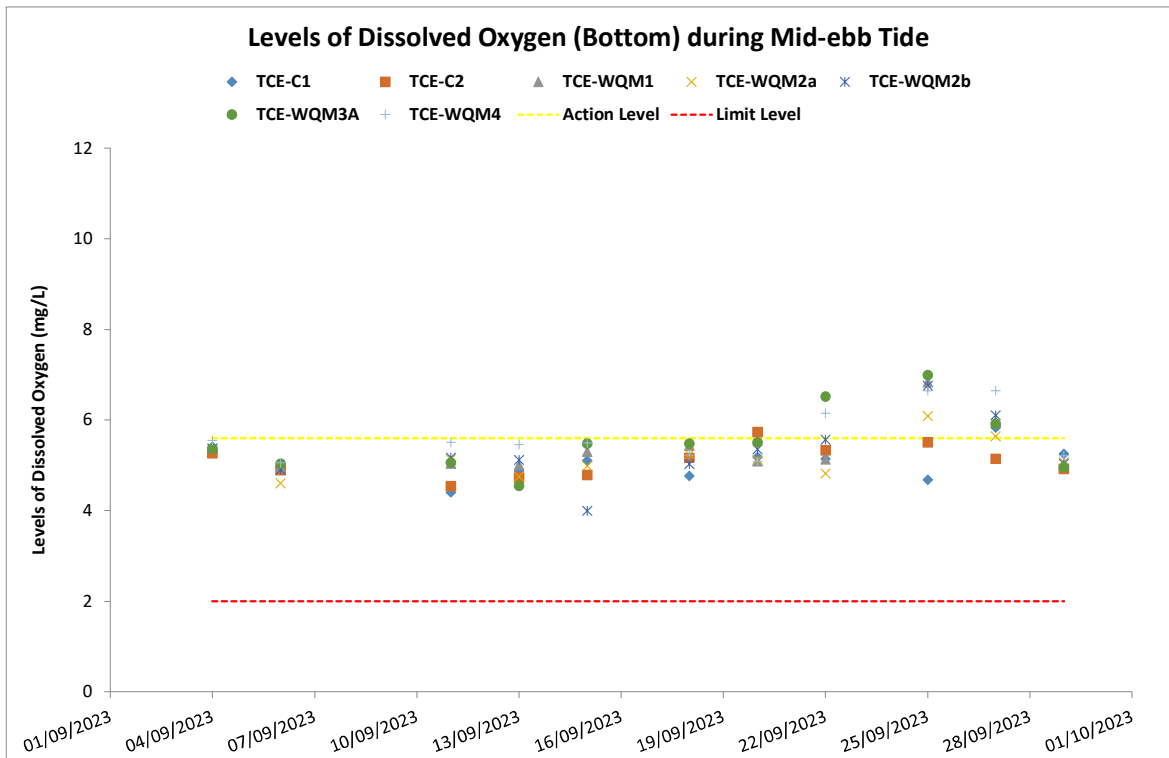


Figure 3: Levels of Dissolved Oxygen (Bottom) (mg/L) recorded at Mid-ebb Tide during the Water Quality Monitoring between 1 to 30 September 2023

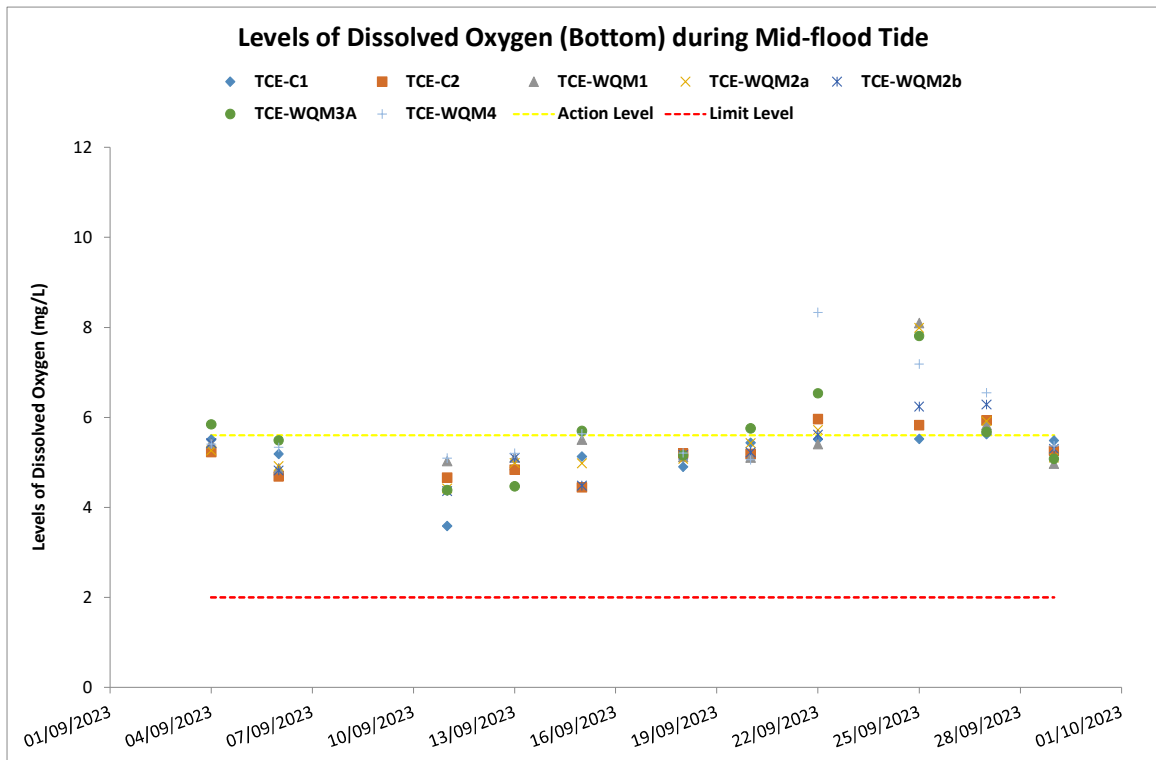


Figure 4: Levels of Dissolved Oxygen (Bottom) (mg/L) recorded at Mid-flood Tide during the Water Quality Monitoring between 1 to 30 September 2023

Source: P:\Projects\0445700 CEDD ET for Tung Chung.JT\02_Deliverable\10 Monthly EM&A Report\
 Date: September 2023

**Environmental
 Resources
 Management**



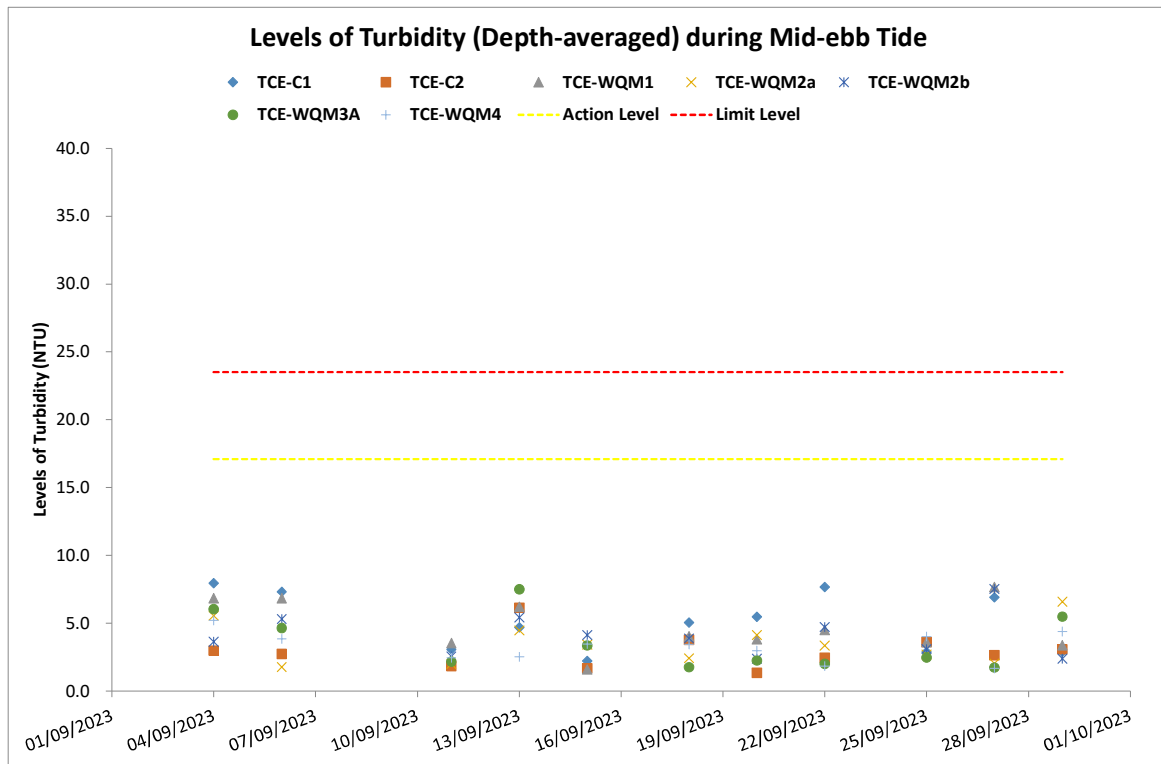


Figure 5: Levels of Turbidity (Depth-averaged) (NTU) recorded at Mid-ebb Tide during the Water Quality Monitoring between 1 to 30 September 2023

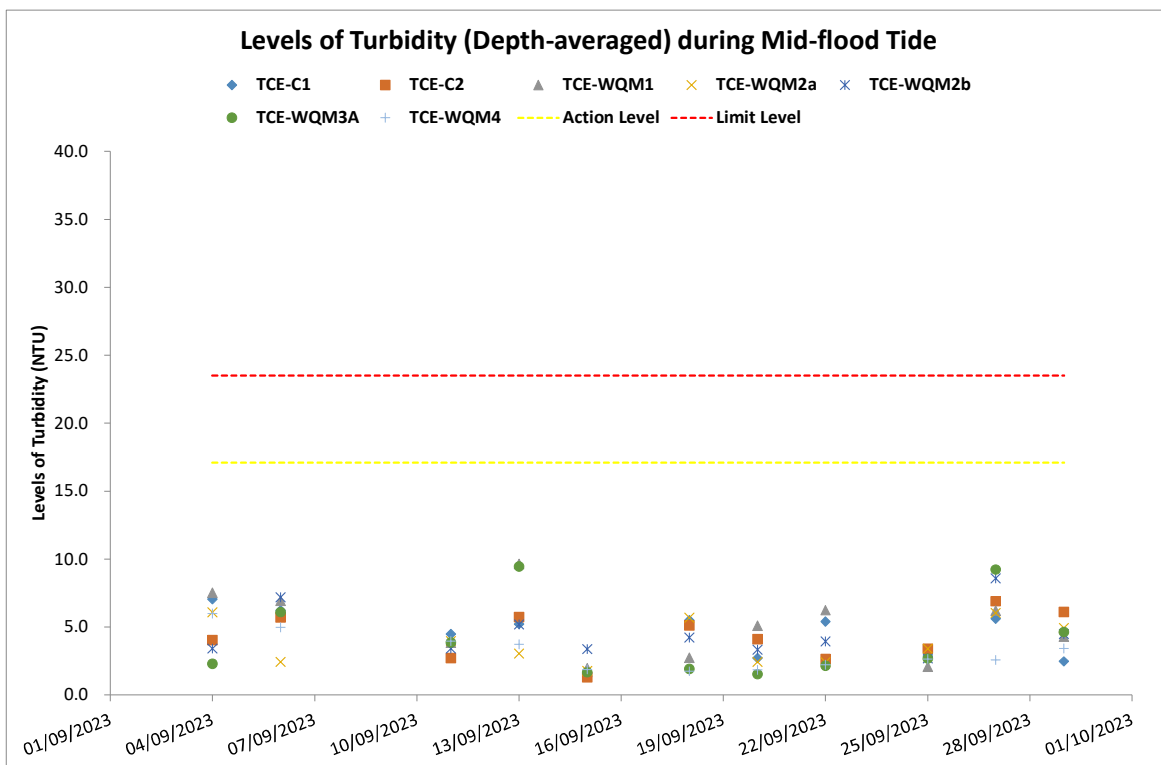


Figure 6: Levels of Turbidity (Depth-averaged) (NTU) recorded at Mid-flood Tide during the Water Quality Monitoring between 1 to 30 September 2023

Source: P:\Projects\0445700 CEDD ET for Tung Chung\JT\02_Deliverable\10 Monthly EM&A Report\
 Date: September 2023

**Environmental
 Resources
 Management**



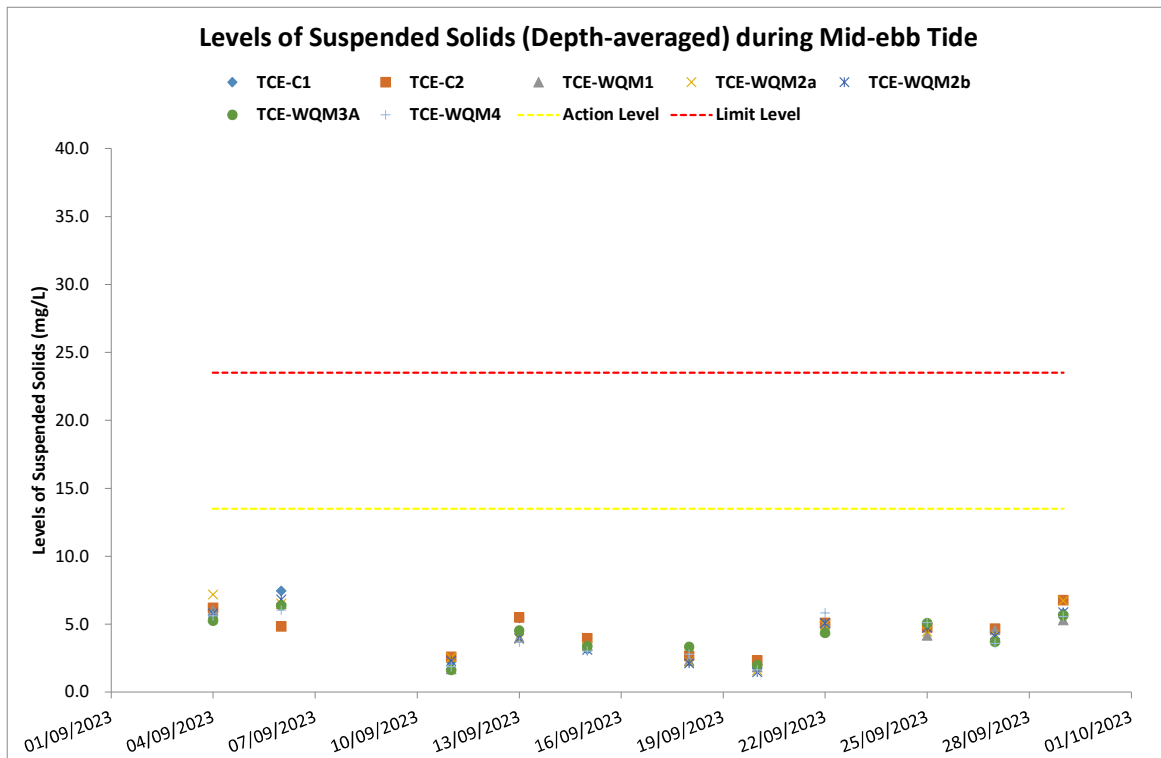


Figure 7: Levels of Suspended Solids (Depth-averaged) (mg/L) recorded at Mid-ebb Tide during the Water Quality Monitoring between 1 to 30 September 2023

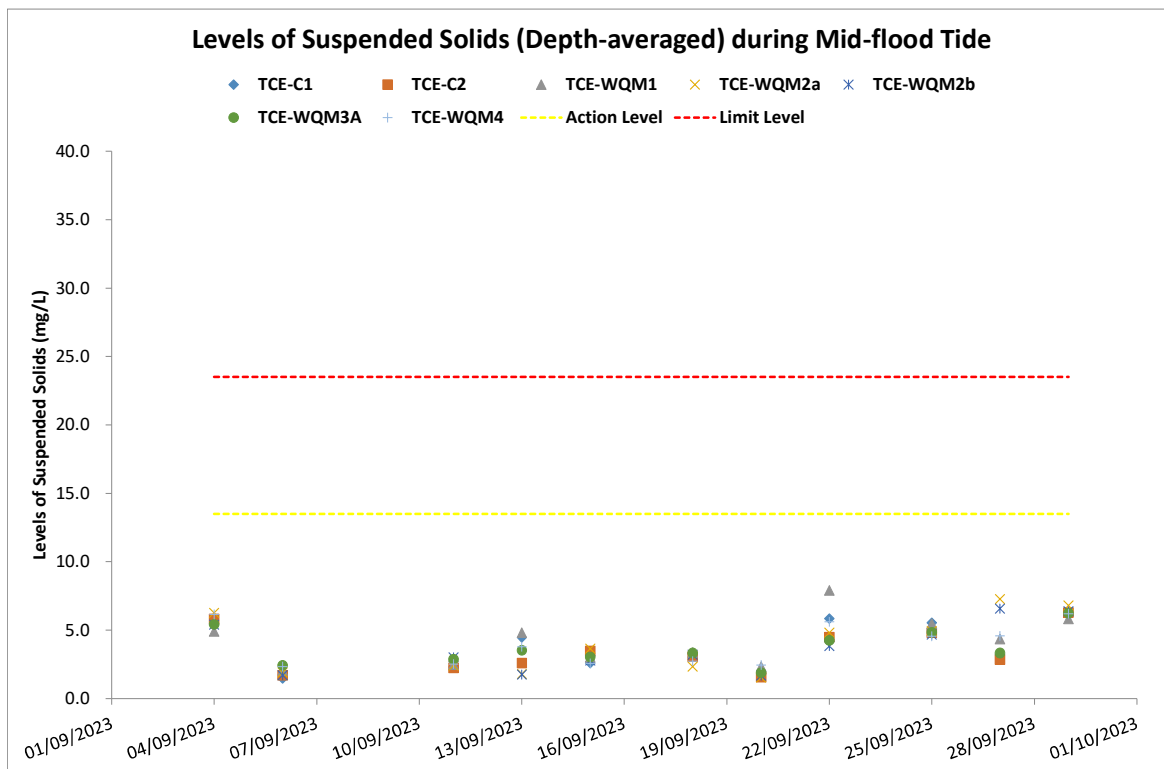


Figure 8: Levels of Suspended Solids (Depth-averaged) (mg/L) recorded at Mid-flood Tide during the Water Quality Monitoring between 1 to 30 September 2023

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged							
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)					
2023-09-04	Mid-Ebb	TCE-C1	Misty	Moderate	14:09	8.2	Surface	1.0	1	26.7	7.9	29.5	5.5	80.5	6.7	6.0	5.4	7.9	5.6					
							Middle	4.1	1	26.6	7.9	29.7	5.4	79.7	8.1	5.5								
							Bottom	7.2	1	26.5	7.9	29.7	5.4	79.5	9.0	5.3								
		TCE-C2	Misty	Moderate	16:01	10.4	Surface	1.0	1	25.5	7.9	32.1	5.1	75.1	1.1	5.6	5.2	3.0	6.2					
							Middle	5.2	1	25.7	7.9	31.8	5.2	76.3	3.2	5.9								
							Bottom	9.4	1	25.5	8.0	32.2	5.3	77.1	4.5	7.4								
		TCE-WQM1	Misty	Moderate	14:52	7.8	Surface	1.0	1	26.5	7.9	29.7	5.5	80.1	5.5	7.2	5.4	6.9	6.0					
							Middle	3.9	1	26.5	7.9	29.7	5.4	80.0	7.0	5.8								
							Bottom	6.8	1	26.5	7.9	29.8	5.4	79.5	8.0	4.8								
		TCE-WQM2a	Misty	Moderate	15:26	7.2	Surface	1.0	1	26.8	7.9	29.0	5.5	81.4	4.2	6.4	5.4	5.6	7.2					
							Middle	3.6	1	26.3	7.9	29.8	5.4	78.4	5.5	7.3								
							Bottom	6.2	1	25.9	7.9	30.9	5.4	78.6	7.0	7.9								
		TCE-WQM2b	Misty	Moderate	15:39	9.6	Surface	1.0	1	27.0	7.9	29.0	5.7	84.6	3.0	5.3	5.7	3.6	5.8					
							Middle	4.8	1	26.5	7.9	30.0	5.6	82.4	3.5	6.0								
							Bottom	8.6	1	26.0	7.9	31.0	5.4	78.8	4.6	6.5								
		TCE-WQM3A	Misty	Moderate	15:16	4.2	Surface	1.0	1	26.9	7.9	27.5	5.6	81.4	5.8	5.0	5.6	6.0	5.3					
							Bottom	3.2	1	26.5	7.9	28.6	5.4	78.4	6.2	5.8								
		TCE-WQM4	Misty	Moderate	15:05	4.0	Surface	1.0	1	26.6	7.9	29.1	5.5	81.2	4.6	5.2	5.5	5.2	5.6					
							Bottom	3.0	1	26.5	7.9	29.1	5.6	81.3	5.6	6.2								
		2023-09-04	Mid-Flood	TCE-C1	Misty	Moderate	11:34	9.0	Surface	1.0	1	26.6	7.9	29.5	5.5	80.6	5.9	5.0	5.5	7.1	5.4			
									Middle	4.5	1	26.6	7.9	29.6	5.5	80.6	7.2	5.5						
									Bottom	8.0	1	26.5	7.9	29.7	5.5	80.8	8.1	6.2						
TCE-C2	Misty			Moderate	10:02	12.4	Surface	1.0	1	26.4	7.9	29.8	5.6	81.7	3.1	6.8	5.5	4.0	5.8					
							Middle	6.2	1	26.2	7.9	30.1	5.5	80.6	3.4	5.7								
							Bottom	11.4	1	25.8	7.9	31.3	5.2	76.6	5.5	5.2								
TCE-WQM1	Misty			Moderate	11:08	8.2	Surface	1.0	1	26.5	7.9	29.7	5.4	79.9	6.0	4.1	5.4	7.5	4.9					
							Middle	4.1	1	26.4	7.9	29.8	5.4	79.6	7.7	4.7								
							Bottom	7.2	1	26.4	7.9	29.8	5.4	79.7	8.9	5.8								
TCE-WQM2a	Misty			Moderate	10:39	8.0	Surface	1.0	1	26.5	7.9	28.7	5.4	79.5	4.7	7.1	5.4	6.1	6.3					
							Middle	4.0	1	26.4	7.9	29.1	5.4	79.0	6.5	6.1								
							Bottom	7.0	1	26.0	7.9	30.5	5.3	77.0	7.0	5.4								
TCE-WQM2b	Misty			Moderate	10:27	11.0	Surface	1.0	1	26.6	7.9	28.5	5.5	81.1	2.7	6.2	5.5	3.4	5.4					
							Middle	5.5	1	26.2	7.9	29.6	5.4	79.2	3.0	5.1								
							Bottom	10.0	1	26.1	7.9	30.3	5.4	79.4	4.6	5.0								
TCE-WQM3A	Misty			Moderate	10:48	3.6	Surface	1.0	1	27.0	7.9	26.7	5.8	84.3	1.9	5.7	5.8	2.3	5.4					
							Bottom	2.6	1	27.1	7.9	26.6	5.8	85.3	2.7	4.7								
TCE-WQM4	Misty			Moderate	10:57	4.6	Surface	1.0	1	26.6	7.9	28.2	5.5	80.4	5.0	5.4	5.5	6.0	6.2					
							Bottom	3.6	1	26.4	7.9	29.4	5.4	79.1	7.0	7.3								

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged			
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)	
2023-09-06	Mid-Ebb	TCE-C1	Cloudy	Moderate	15:34	8.5	Surface	1.0	1	26.6	7.9	25.0	5.3	75.8	5.2	8.2	5.2	7.3	7.5	
									2	26.6	7.9	25.0	5.3	75.6	5.2	7.0				
							Middle	4.3	1	26.3	7.9	26.0	5.1	72.4	5.6	7.0				
									2	26.2	7.9	26.1	5.0	72.2	5.9	7.2				
							Bottom	7.5	1	25.9	7.9	26.9	5.0	71.0	11.1	7.5				
									2	25.9	7.9	26.8	5.0	71.1	10.9	7.8				
		TCE-C2	Cloudy	Moderate	17:32	14.7	Surface	1.0	1	26.4	8.0	26.6	5.3	75.7	1.7	7.9	5.0	2.7	4.8	
									2	26.3	8.0	26.6	5.3	75.7	1.7	7.6				
							Middle	7.4	1	25.2	8.0	29.7	4.8	69.3	2.3	6.3				
									2	25.2	8.0	29.8	4.8	69.2	2.5	1.3				
							Bottom	13.7	1	25.1	8.0	30.1	4.9	70.3	4.2	2.3				
									2	25.1	8.0	30.1	4.9	70.5	4.1	3.6				
	TCE-WQM1	Cloudy	Moderate	16:29	7.4	Surface	1.0	1	27.1	7.9	24.8	5.5	79.3	1.1	6.2	5.2	6.8	6.5		
								2	27.1	7.9	24.8	5.5	79.2	1.2	6.6					
						Middle	3.7	1	26.3	7.9	24.8	5.0	70.8	6.0	5.8					
								2	26.2	7.9	24.8	5.0	70.7	5.3	6.6					
						Bottom	6.4	1	26.2	7.9	26.4	5.0	71.0	13.7	6.8					
								2	26.2	7.9	26.4	5.0	71.2	13.7	7.0					
	TCE-WQM2a	Cloudy	Moderate	16:59	6.2	Surface	1.0	1	26.8	7.9	24.4	5.4	77.3	1.6	6.5	5.2	1.8	6.5		
								2	26.8	7.9	24.4	5.4	77.3	1.6	6.7					
						Middle	3.1	1	26.3	7.9	25.8	5.0	71.7	2.1	6.8					
								2	26.3	7.9	25.7	5.0	71.9	2.1	5.5					
						Bottom	5.2	1	25.7	7.9	27.6	4.6	65.9	1.7	6.9					
								2	25.7	7.9	27.6	4.6	66.1	1.7	6.6					
TCE-WQM2b	Cloudy	Moderate	17:07	10.8	Surface	1.0	1	26.8	7.9	24.4	5.5	78.2	1.3	6.8	5.2	5.3	6.8			
							2	26.8	7.9	24.4	5.5	78.2	1.3	7.2						
					Middle	5.4	1	25.6	7.9	28.0	4.9	69.8	5.2	6.8						
							2	25.6	7.9	28.1	4.9	69.8	5.7	7.0						
					Bottom	9.8	1	25.4	7.9	28.9	4.9	70.3	9.1	6.3						
							2	25.4	7.9	28.9	4.9	70.4	9.3	6.8						
TCE-WQM3A	Cloudy	Moderate	16:48	4.5	Surface	1.0	1	26.8	7.9	24.0	5.4	77.6	3.6	6.6	5.4	4.6	6.4			
							2	26.8	7.9	24.1	5.4	77.5	4.2	7.2						
					Bottom	3.5	1	26.6	7.9	25.0	5.0	72.3	5.5	5.6						
							2	26.6	7.9	25.0	5.0	72.3	5.4	6.1						
					Surface	1.0	1	26.7	7.9	24.8	5.2	75.1	6.3	5.6				5.2	3.9	6.0
							2	26.7	7.9	24.8	5.2	74.8	6.0	4.7						
Bottom	2.5	1	26.4	7.9	25.2	5.1	72.4	1.5	7.1											
		2	26.4	7.9	25.2	5.1	72.5	1.6	6.7											
Surface	1.0	1	26.6	8.0	24.9	5.4	77.4	5.3	1.4	5.3	6.2	1.5								
		2	26.6	8.0	24.8	5.4	77.5	5.2	1.2											
Middle	4.1	1	26.4	7.9	25.9	5.2	74.8	5.8	1.7											
		2	26.4	7.9	25.9	5.2	74.6	6.0	1.5											
Bottom	7.1	1	26.1	7.9	26.6	5.2	74.2	7.9	1.5											
		2	26.0	7.9	26.6	5.2	74.3	7.2	1.5											
TCE-C2	Cloudy	Moderate	10:59	15.2	Surface	1.0	1	26.2	8.0	26.1	5.2	74.0	0.9	2.1	5.0	5.7	1.7			
							2	26.1	8.0	26.2	5.2	74.0	1.0	1.6						
					Middle	7.6	1	25.5	8.0	28.6	4.8	68.6	4.3	1.5						
							2	25.5	8.0	28.6	4.8	68.6	4.4	1.7						
					Bottom	14.2	1	25.1	8.0	30.4	4.7	67.5	11.9	1.6						
							2	25.1	8.0	30.4	4.7	67.6	11.8	1.8						
TCE-WQM1	Cloudy	Moderate	12:06	7.6	Surface	1.0	1	26.9	7.9	24.9	5.4	77.0	1.9	2.3	5.1	6.9	2.1			
							2	26.9	7.9	24.9	5.3	76.9	1.9	1.8						
					Middle	3.8	1	26.6	7.9	25.4	4.9	70.8	8.2	1.8						
							2	26.6	7.9	25.4	4.9	70.8	8.2	1.8						
					Bottom	6.6	1	26.1	7.9	26.8	4.9	69.7	10.7	2.2						
							2	26.1	7.9	26.8	4.9	70.0	10.8	2.5						
TCE-WQM2a	Cloudy	Moderate	11:37	6.8	Surface	1.0	1	26.7	7.9	24.1	5.4	76.6	1.1	2.2	5.1	2.4	1.9			
							2	26.7	7.9	24.1	5.4	76.6	1.1	1.8						
					Middle	3.4	1	26.0	7.9	26.5	4.9	69.8	3.0	2.1						
							2	26.0	7.9	26.5	4.9	69.9	3.0	1.5						
					Bottom	5.8	1	26.0	7.9	26.6	4.9	70.4	3.2	2.5						
							2	26.0	7.9	26.6	4.9	70.5	3.2	1.4						
TCE-WQM2b	Cloudy	Moderate	11:24	10.3	Surface	1.0	1	26.2	7.9	25.7	5.1	73.5	2.2	1.0	5.0	7.2	1.7			
							2	26.2	7.9	25.7	5.1	73.5	2.1	1.3						
					Middle	5.2	1	25.7	7.9	27.4	4.9	69.5	8.9	2.4						
							2	25.7	7.9	27.4	4.9	69.5	9.0	2.0						
					Bottom	9.3	1	25.6	7.9	28.0	4.8	69.0	10.2	1.3						
							2	25.6	7.9	28.0	4.8	69.0	10.9	2.2						
TCE-WQM3A	Cloudy	Moderate	11:47	4.3	Surface	1.0	1	26.3	7.9	25.3	5.3	76.3	5.0	1.8	5.4	6.1	2.4			
							2	26.3	7.9	25.3	5.4	76.6	5.1	1.9						
					Bottom	3.3	1	26.8	7.9	23.8	5.5	78.3	7.0	2.5						
							2	26.8	7.9	23.9	5.5	78.2	7.3	3.5						
					Surface	1.0	1	26.6	7.9	24.4	5.2	74.5	8.4	2.6				5.2	5.0	2.4
							2	26.6	7.9	24.4	5.2	74.5	8.2	2.7						
Bottom	2.9	1	26.7	7.9	24.2	5.4	76.4	1.6	2.3											
		2	26.6	7.9	24.2	5.3	76.0	1.7	1.8											

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
2023-09-11	Mid-Ebb	TCE-C1	Rainy	Rough	11:52	7.9	Surface	1.0	1	26.7	7.8	23.4	5.5	77.5	3.1	1.5	5.2	3.1	2.2
									2	26.7	7.8	23.4	5.5	77.6	3.1	1.7			
							Middle	4.0	1	26.6	7.8	25.3	4.9	69.6	2.6	2.1			
							Bottom	6.9	1	26.6	7.8	25.3	4.9	69.6	2.6	2.4			
				2	26.4	7.8	27.4	4.4	63.7	3.4	2.7	4.4							
				2	26.4	7.8	27.5	4.4	63.9	3.4	3.0								
		Surface	1.0	1	26.5	7.8	24.0	5.7	80.4	1.4	2.3								
				2	26.5	7.8	24.0	5.7	80.4	1.5	2.1								
				1	26.4	7.8	26.5	5.0	72.5	1.8	2.6	5.3	1.8	2.6					
		Middle	6.7	1	26.4	7.8	26.5	5.0	72.6	1.8	2.5								
				2	26.4	7.8	26.5	5.0	72.6	1.8	2.5								
		Bottom	12.4	1	26.1	7.8	30.2	4.5	66.5	2.2	2.9								
			2	26.1	7.8	30.3	4.5	66.5	2.3	3.2	4.5								
			1	26.6	7.9	23.1	6.0	85.2	2.4	1.2									
			2	26.6	7.9	23.1	6.0	85.2	2.3	1.4									
	Middle	4.9	1	26.5	7.8	24.7	5.4	76.5	4.3	1.8				5.7	3.5	1.7			
			2	26.5	7.8	24.7	5.4	76.6	4.3	1.7									
	Bottom	8.7	1	26.5	7.8	25.9	5.0	72.5	3.9	2.0									
			2	26.5	7.8	25.9	5.0	72.5	3.9	2.2									
			1	26.7	7.8	23.0	5.5	78.7	1.7	2.3	5.0								
			2	26.7	7.8	23.0	5.5	78.7	1.7	2.1									
	Middle	3.4	1	26.6	7.8	23.8	5.4	76.2	1.9	2.7									
			2	26.6	7.8	23.7	5.4	76.4	1.9	2.4									
			1	26.5	7.9	24.9	5.1	73.4	2.4	3.0	5.1	2.0	2.6						
Bottom	5.7	1	26.5	7.9	24.9	5.1	73.4	2.4	2.8										
		2	26.5	7.9	24.9	5.1	73.4	2.4	2.8										
Surface	1.0	1	26.6	7.8	23.8	5.7	81.5	1.4	1.8	5.5				2.6	2.3				
		2	26.6	7.8	23.8	5.7	81.4	1.4	1.7										
Middle	5.2	1	26.5	7.8	25.5	5.2	74.8	2.5	2.5										
		2	26.5	7.8	25.5	5.2	74.8	2.5	2.2										
		1	26.4	7.8	26.3	5.2	74.5	3.8	2.9	5.2									
		2	26.4	7.8	26.3	5.2	74.5	3.8	2.6										
Surface	1.0	1	26.7	7.8	23.0	5.5	78.2	1.8	1.9				5.5	2.2	1.6				
		2	26.7	7.8	23.0	5.5	78.2	1.9	1.6										
Bottom	4.5	1	26.5	7.8	24.8	5.1	72.3	2.5	1.4										
		2	26.5	7.8	24.8	5.1	72.4	2.5	1.6										
		1	26.8	7.8	22.9	5.6	79.6	1.7	2.1	5.6	2.5	1.9							
		2	26.8	7.8	22.9	5.6	79.6	1.7	2.3										
Bottom	3.8	1	26.7	7.8	23.0	5.5	78.4	3.2	1.7										
		2	26.7	7.8	23.0	5.5	78.1	3.2	1.4										
		1	26.5	7.9	22.4	6.1	85.7	2.1	1.7	5.5	3.8	2.5							
		2	26.5	7.9	22.4	6.1	85.7	2.1	1.5										
Middle	3.7	1	26.6	7.7	25.0	4.4	62.6	5.2	2.2										
		2	26.6	7.8	25.0	4.4	62.9	5.3	2.6										
		1	26.4	7.8	26.2	3.6	51.4	6.1	3.1	3.6									
		2	26.4	7.8	26.2	3.6	51.4	6.1	2.8										
Surface	1.0	1	26.8	7.8	24.2	5.5	79.1	1.4	1.8				5.3	2.7	2.3				
		2	26.8	7.8	24.2	5.5	79.1	1.4	1.9										
Middle	6.4	1	26.6	7.8	25.5	5.1	73.0	2.5	2.3										
		2	26.6	7.8	25.5	5.1	72.9	2.5	2.1										
		1	26.3	7.8	28.0	4.7	67.6	4.2	2.6	4.7									
Bottom	11.8	1	26.3	7.8	28.0	4.7	67.6	4.3	2.8										
		2	26.3	7.8	28.0	4.7	67.6	4.3	2.8										
Surface	1.0	1	26.8	7.9	22.2	6.2	87.5	3.1	2.6				5.7	3.8	2.5				
		2	26.8	7.9	22.2	6.2	87.6	3.1	3.0										
Middle	4.7	1	26.3	7.9	26.4	5.1	73.6	3.6	2.3										
		2	26.3	7.9	26.3	5.1	73.7	3.6	2.6										
		1	26.2	7.9	29.0	5.0	73.1	4.9	2.0	5.0									
Bottom	8.4	1	26.2	7.9	29.0	5.0	73.2	4.9	2.3										
		2	26.2	7.9	29.0	5.0	73.2	4.9	2.3										
Surface	1.0	1	26.7	7.8	23.9	5.9	83.5	2.1	1.9				5.5	4.0	2.4				
		2	26.7	7.8	23.9	5.9	83.5	2.1	1.7										
Middle	3.4	1	26.5	7.8	25.5	5.1	73.1	2.4	2.2										
		2	26.5	7.8	25.5	5.1	73.1	2.4	2.5										
		1	26.3	7.8	28.2	4.4	64.2	7.4	3.2	4.4									
Bottom	5.7	1	26.3	7.8	28.2	4.4	64.2	7.4	2.9										
		2	26.3	7.8	28.2	4.4	64.2	7.4	2.9										
Surface	1.0	1	26.8	7.8	22.9	5.6	80.1	1.7	2.4				5.3	3.4	3.0				
		2	26.8	7.8	22.9	5.6	80.1	1.7	2.1										
Middle	4.9	1	26.5	7.8	26.2	4.9	70.3	2.2	2.8										
		2	26.5	7.8	26.2	4.9	70.2	2.3	3.1										
		1	26.0	7.8	30.6	4.4	64.0	6.3	3.6	4.4									
Bottom	8.7	1	26.0	7.8	30.6	4.4	64.0	6.3	4.0										
		2	26.0	7.8	30.6	4.4	64.0	6.3	4.0										
Surface	1.0	1	26.5	7.9	22.5	6.3	88.4	2.0	2.4				6.3	3.9	2.9				
		2	26.5	7.9	22.5	6.3	88.3	2.0	2.8										
Bottom	3.2	1	26.6	7.7	25.0	4.4	62.7	5.7	3.3										
		2	26.6	7.7	25.0	4.4	62.8	5.8	3.0										
		1	26.5	7.8	22.3	5.7	80.5	3.4	2.1	5.7	4.0	2.5							
		2	26.5	7.8	22.3	5.7	80.5	3.4	2.4										
Bottom	2.9	1	26.3	7.8	27.3	5.1	73.5	4.5	3.0										
		2	26.3	7.8	27.3	5.1	73.7	4.6	2.6										

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
2023-09-13	Mid-Ebb	TCE-C1	Cloudy	Moderate	13:32	8.3	Surface	1.0	1	27.2	8.0	25.5	5.6	81.4	2.7	4.9	5.3	4.7	5.5
									2	27.2	8.0	25.5	5.6	81.3	2.9	4.3			
							Middle	4.2	1	26.5	8.0	28.6	5.0	72.3	4.7	5.7			
							Bottom	7.3	1	26.5	8.0	28.6	5.0	72.3	4.6	5.4			
				2	26.5	8.0	29.1	4.9	71.3	6.7	6.4								
				2	26.5	8.0	29.2	4.9	71.4	6.7	6.0								
		TCE-C2	Cloudy	Moderate	11:28	14.7	Surface	1.0	1	26.9	7.8	25.5	5.4	77.9	3.8	4.9	5.1	6.1	5.5
									2	26.9	7.8	25.5	5.4	77.9	3.7	4.6			
							Middle	7.4	1	26.3	7.9	30.3	4.9	72.0	1.7	5.4			
							Bottom	13.7	1	26.3	7.8	30.3	4.9	72.0	1.7	5.7			
				2	26.2	7.9	31.4	4.7	69.9	13.0	6.0								
				2	26.2	7.9	31.4	4.7	69.9	13.0	6.4								
	TCE-WQM1	Cloudy	Moderate	12:43	8.4	Surface	1.0	1	27.5	7.9	24.3	5.8	84.5	3.1	3.7	5.5	6.2	4.0	
								2	27.4	7.9	24.3	5.8	84.3	3.1	3.4				
						Middle	4.2	1	26.8	7.9	26.5	5.2	76.0	5.7	4.0				
						Bottom	7.4	1	26.8	7.9	26.5	5.3	76.1	6.1	3.7				
			2	26.7	8.0	27.6	5.0	72.9	9.3	4.5									
			2	26.7	8.0	27.6	5.0	72.9	10.0	4.8									
	TCE-WQM2a	Cloudy	Moderate	12:12	7.6	Surface	1.0	1	27.0	7.9	26.2	5.4	78.2	3.8	2.8	5.3	4.5	3.9	
								2	27.0	7.9	26.2	5.4	78.2	3.8	3.0				
						Middle	3.8	1	26.7	7.9	26.6	5.2	75.4	4.5	3.7				
						Bottom	6.6	1	26.6	7.9	26.6	5.2	75.3	4.7	4.1				
			2	26.3	7.9	30.4	4.8	69.8	5.2	5.2									
			2	26.3	7.9	30.4	4.8	69.9	4.8	4.7									
TCE-WQM2b	Cloudy	Moderate	12:00	11.3	Surface	1.0	1	27.2	7.9	24.4	5.8	83.5	1.2	3.1	5.4	5.4	4.0		
							2	27.1	7.9	24.4	5.8	83.6	1.3	2.8					
					Middle	5.7	1	26.8	7.9	26.4	5.1	73.6	3.8	3.6					
					Bottom	10.3	1	26.8	7.9	26.4	5.1	73.7	3.6	3.2					
		2	26.8	7.9	26.5	5.1	74.3	11.5	5.3										
		2	26.8	7.9	26.5	5.1	74.3	11.1	5.8										
TCE-WQM3A	Cloudy	Moderate	12:23	4.2	Surface	1.0	1	26.8	7.8	26.0	4.7	67.4	6.8	4.3	4.7	7.5	4.5		
							2	26.8	7.9	26.1	4.7	67.3	6.9	3.8					
					Bottom	3.2	1	26.7	7.9	27.1	4.6	66.1	8.1	4.9					
		2	26.7	7.9	27.1	4.6	66.1	8.1	5.1										
TCE-WQM4	Cloudy	Moderate	12:33	3.2	Surface	1.0	1	27.6	7.9	24.4	6.0	86.8	2.3	3.4	6.0	2.5	3.7		
							2	27.6	7.9	24.5	6.0	86.8	2.3	3.1					
					Bottom	2.2	1	27.4	7.9	24.8	5.5	79.2	2.7	3.9					
		2	27.4	7.9	24.8	5.5	79.2	2.7	4.3										
2023-09-13	Mid-Flood	TCE-C1	Cloudy	Moderate	17:40	8.2	Surface	1.0	1	27.1	8.0	25.7	5.6	80.9	3.0	3.9	5.2	5.2	4.5
									2	27.0	8.0	25.7	5.6	80.7	3.1	3.6			
							Middle	4.1	1	26.5	7.9	28.6	4.9	71.5	5.0	4.1			
							Bottom	7.2	1	26.5	7.9	28.6	4.9	71.3	5.2	4.4			
				2	26.5	7.9	29.2	4.8	70.8	7.7	5.6								
				2	26.5	7.9	29.2	4.8	70.9	7.4	5.1								
		TCE-C2	Cloudy	Moderate	19:38	14.4	Surface	1.0	1	27.4	7.9	25.1	5.8	84.5	2.2	3.6	5.3	5.7	2.6
									2	27.4	7.9	25.1	5.8	84.6	2.2	3.2			
							Middle	7.2	1	26.5	7.9	27.9	4.9	70.9	7.1	2.9			
							Bottom	13.4	1	26.4	7.9	27.9	4.9	70.8	7.2	2.5			
				2	26.3	8.0	30.1	4.8	70.9	7.8	1.5								
				2	26.3	8.0	30.0	4.8	71.0	7.9	1.9								
	TCE-WQM1	Cloudy	Moderate	18:26	7.6	Surface	1.0	1	27.7	8.0	24.5	6.1	89.5	5.0	6.6	6.0	9.6	4.8	
								2	27.7	8.0	24.6	6.1	89.5	5.2	6.8				
						Middle	3.8	1	27.1	8.0	25.1	5.8	83.3	12.6	4.4				
						Bottom	6.6	1	27.1	8.0	25.1	5.8	83.2	12.1	4.0				
			2	26.7	7.9	27.4	5.1	74.4	11.9	3.5									
			2	26.7	7.9	27.4	5.1	74.5	11.2	3.6									
	TCE-WQM2a	Cloudy	Moderate	18:56	6.3	Surface	1.0	1	27.5	7.9	25.6	5.7	83.8	2.4	1.3	5.7	3.1	1.8	
								2	27.5	7.9	25.6	5.7	83.8	2.4	1.5				
						Middle	3.2	1	27.2	7.9	26.4	5.7	82.9	3.2	1.9				
						Bottom	5.3	1	27.1	7.9	26.5	5.7	82.7	3.2	1.7				
			2	26.7	7.9	27.6	5.0	72.8	3.6	2.3									
			2	26.7	7.9	27.6	5.0	72.8	3.6	2.1									
TCE-WQM2b	Cloudy	Moderate	19:07	11.0	Surface	1.0	1	27.3	7.9	23.4	6.3	89.9	2.9	2.5	5.7	5.2	1.8		
							2	27.2	7.9	23.4	6.2	89.1	3.5	2.2					
					Middle	5.5	1	26.7	7.9	26.5	5.1	73.5	6.1	1.5					
					Bottom	10.0	1	26.7	7.9	26.6	5.1	73.4	6.2	1.8					
		2	26.7	7.9	26.8	5.1	74.0	6.2	1.1										
		2	26.7	7.9	26.7	5.1	74.1	6.4	1.4										
TCE-WQM3A	Cloudy	Moderate	18:47	4.2	Surface	1.0	1	26.8	7.8	27.1	4.5	65.1	8.7	3.1	4.5	9.5	3.5		
							2	26.8	7.8	27.1	4.5	65.2	8.3	3.3					
					Bottom	3.2	1	26.6	7.8	27.8	4.5	65.2	10.4	4.0					
		2	26.6	7.8	27.9	4.5	65.2	10.4	3.7										
TCE-WQM4	Cloudy	Moderate	18:38	3.4	Surface	1.0	1	27.6	7.9	25.0	5.9	85.6	3.3	3.6	5.9	3.7	3.8		
							2	27.6	7.9	25.0	5.9	85.5	3.3	3.0					
					Bottom	2.4	1	27.2	7.9	25.9	5.2	75.9	4.2	4.4					
		2	27.2	7.9	25.9	5.2	75.8	4.2	4.1										

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged				
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)		
2023-09-15	Mid-Ebb	TCE-C1	Misty	Moderate	14:27	9.0	Surface	1.0	1	27.3	8.0	26.2	4.9	71.3	1.3	3.5	4.7	2.2	3.1		
									2	27.3	8.0	26.3	4.6	67.6	1.3	3.8					
							Middle	4.5	1	27.2	8.0	29.0	4.6	67.8	2.2	3.1					
							Bottom	8.0	1	27.2	8.0	29.0	4.6	68.2	2.2	3.2					
						2	27.2	8.0	29.1	5.0	74.2	3.1	2.7	5.1							
				2	27.2	8.0	29.1	5.2	77.1	3.1	2.5										
		Surface	1.0	1	27.6	7.9	26.0	4.4	65.1	1.0	3.4										
				2	27.6	7.9	26.0	4.4	65.0	1.0	3.0										
				Middle	6.2	1	27.6	7.9	26.1	4.5	65.3	1.3	4.1	4.5	1.7	4.0					
				2	27.6	7.9	26.1	4.5	65.5	1.3	3.7										
		Bottom	11.4	1	27.6	7.9	26.0	4.8	70.0	2.7	4.6										
				2	27.6	7.9	26.0	4.8	70.4	2.7	5.0										
				TCE-WQM1	Misty	Moderate	13:48	8.2	Surface	1.0	1	28.2	8.0	24.4	5.3	77.6	1.1	3.1	5.3	1.6	3.4
				2					28.2	8.0	24.4	5.3	77.7	1.1	2.9						
				Middle					4.1	1	28.2	8.0	24.4	5.3	78.3	1.6	3.2				
				2					28.2	8.0	24.5	5.4	78.8	1.5	3.4						
				Bottom	7.2	1	28.1	8.0	24.8	5.3	78.5	2.1	4.2	5.3							
				2	28.1	8.0	24.7	5.3	78.4	2.1	3.8										
		Surface	1.0	1	27.9	8.0	25.2	4.5	66.2	2.7	3.8										
				2	27.9	8.0	25.2	4.5	66.2	2.7	4.2										
				Middle	4.0	1	27.6	8.0	26.1	4.4	64.8	3.4	3.5	4.5	3.4	3.4					
				2	27.5	8.0	26.1	4.7	68.3	3.4	3.2										
		Bottom	7.0	1	27.4	8.0	26.3	4.9	72.2	4.2	2.9										
				2	27.5	8.0	26.2	5.1	74.0	4.3	2.7										
			TCE-WQM2b	Misty	Moderate	13:08	11.0	Surface	1.0	1	27.5	7.9	26.2	4.2	60.9	3.2	4.1	4.1	4.1	3.1	
			2					27.5	7.9	26.3	4.1	60.6	3.2	3.8							
			Middle					5.5	1	27.1	7.9	27.0	4.1	59.3	4.4	2.8					
			2					27.1	7.9	27.0	4.1	59.3	4.4	3.2							
			Bottom	10.0	1	27.2	7.9	27.3	4.0	58.6	4.8	2.5	4.0								
			2	27.3	7.9	27.2	4.0	58.7	4.8	2.3											
	Surface	1.0	1	28.0	8.0	24.8	5.0	72.5	3.0	4.2											
			2	27.9	8.0	24.9	5.0	72.6	2.9	4.7											
			Bottom	4.6	1	27.9	8.0	25.2	5.5	80.7	3.8	2.1	5.5	3.4	3.4						
			2	27.9	8.0	25.0	5.4	80.4	3.8	2.5											
	Surface	1.0	1	27.9	8.0	24.9	5.2	76.2	3.1	3.2											
			2	27.9	8.0	24.9	5.2	76.6	3.1	3.7											
			Bottom	3.6	1	27.9	8.0	24.9	5.4	79.3	3.8	2.6	5.5	3.5	3.0						
			2	27.9	8.0	24.9	5.6	81.8	3.8	2.6											
	Surface	1.0	1	27.4	8.0	25.3	4.9	72.2	1.1	1.9											
			2	27.3	8.0	25.3	4.7	68.0	1.1	1.6											
			Middle	4.1	1	27.1	8.0	28.9	4.6	68.3	1.1	2.6	4.7	1.3	2.6						
			2	27.1	8.0	29.0	4.6	68.8	1.1	2.3											
	Bottom	7.2	1	27.1	7.9	29.3	5.0	75.1	1.9	3.4											
			2	27.2	7.9	29.2	5.2	77.9	1.8	3.8											
			TCE-C2	Misty	Moderate	19:51	10.4	Surface	1.0	1	26.6	7.9	28.7	3.7	54.8	0.5	2.7	3.8	1.3	3.5	
			2					26.5	7.9	28.9	3.7	54.5	0.6	3.0							
			Middle					5.2	1	26.2	7.9	29.4	3.8	55.5	1.3	3.2					
			2					26.1	7.9	29.5	3.9	56.9	1.3	3.6							
		Bottom	9.4	1	26.1	7.9	29.6	4.4	64.3	2.1	4.0	4.4									
		2	26.1	7.9	29.4	4.5	66.2	2.1	4.4												
Surface	1.0	1	28.4	8.0	24.2	4.7	69.4	1.2	2.5												
		2	28.3	8.0	24.3	4.7	69.8	1.2	2.1												
		Middle	3.9	1	28.3	8.0	24.3	4.8	71.3	1.8	3.2	4.8	2.0	3.0							
		2	28.2	8.0	24.3	5.1	74.9	1.8	2.9												
Bottom	6.8	1	28.1	8.0	24.4	5.4	79.6	3.0	3.9												
		2	28.1	8.0	24.4	5.6	82.9	2.9	3.4												
		TCE-WQM2a	Misty	Moderate	19:17	7.2	Surface	1.0	1	27.9	7.9	25.4	4.5	66.6	1.1	3.2	4.5	1.8	3.7		
		2					27.9	7.9	25.4	4.5	66.6	1.1	3.0								
		Middle					3.6	1	27.7	7.9	25.8	4.5	66.2	1.3	3.8						
		2					27.6	7.9	25.9	4.5	66.3	1.3	3.4								
		Bottom	6.2	1	27.4	7.9	26.8	5.0	73.6	2.9	4.4	5.0									
		2	27.4	7.9	26.8	5.0	73.6	2.9	4.1												
Surface	1.0	1	27.2	7.9	27.1	4.4	65.1	2.8	3.5												
		2	27.1	7.9	27.2	4.3	63.6	2.9	3.2												
		Middle	4.8	1	26.8	7.9	27.8	4.1	59.9	3.2	2.6	4.2	3.4	2.8							
		2	26.8	7.9	28.0	4.1	60.2	3.2	2.9												
Bottom	8.6	1	26.6	7.9	28.6	4.4	64.4	4.1	2.4												
		2	26.8	7.9	28.4	4.6	67.8	4.1	2.1												
		TCE-WQM3A	Misty	Moderate	19:08	4.2	Surface	1.0	1	28.1	7.9	24.8	5.3	78.9	1.2	2.3	5.4	1.7	3.1		
		2					28.1	7.9	24.8	5.4	79.6	1.2	2.5								
		Bottom					3.2	1	27.9	7.9	25.0	5.6	83.2	2.1	3.5						
		2					27.8	7.9	25.0	5.8	84.8	2.1	3.9								
		TCE-WQM4	Misty	Moderate	18:58	4.0	Surface	1.0	1	28.5	7.9	24.8	5.1	75.6	1.5	3.2	5.1	1.9	2.6		
		2					28.5	7.9	24.8	5.2	76.8	1.4	3.6								
		Bottom					3.0	1	28.4	7.9	24.8	5.6	83.0	2.3	1.6						
		2					28.4	7.9	24.8	5.7	84.4	2.3	1.9								

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged										
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)								
2023-09-18	Mid-Ebb	TCE-C1	Sunny	Moderate	13:07	8.1	Surface	1.0	1	28.1	7.8	23.3	5.3	76.5	2.4	1.7	5.2	5.0	2.4								
									2	28.1	7.8	23.3	5.3	76.5	2.4	1.8											
							Middle	4.1	1	27.8	7.8	23.8	5.1	73.4	4.7	2.7											
									2	27.8	7.8	23.8	5.1	73.3	4.7	2.3											
							Bottom	7.1	1	27.8	7.8	24.3	4.8	69.5	8.0	3.1											
									2	27.8	7.8	24.3	4.8	69.6	8.1	2.9											
				1	27.6	7.9	25.2	5.5	80.1	2.1	2.1																
				2	27.5	7.9	25.2	5.5	80.2	2.1	2.4																
		Middle	6.5	1	27.2	7.9	28.8	5.2	77.7	2.7	2.8																
				2	27.2	7.9	28.8	5.2	77.6	2.7	2.6																
		Bottom	11.9	1	27.1	8.0	29.4	5.2	76.3	6.5	3.1																
				2	27.1	8.0	29.4	5.2	76.4	6.5	3.0																
	TCE-C2	Sunny	Calm	15:21	12.9	Surface	1.0	1	27.6	7.9	25.2	5.5	80.1	2.1	2.1	5.4	3.8	2.7									
								2	27.5	7.9	25.2	5.5	80.2	2.1	2.4												
						Middle	6.5	1	27.2	7.9	28.8	5.2	77.7	2.7	2.8												
								2	27.2	7.9	28.8	5.2	77.6	2.7	2.6												
						Bottom	11.9	1	27.1	8.0	29.4	5.2	76.3	6.5	3.1												
								2	27.1	8.0	29.4	5.2	76.4	6.5	3.0												
	TCE-WQM1	Sunny	Calm	14:05	9.2	Surface	1.0	1	28.4	7.9	23.7	5.4	79.3	4.1	3.0	5.4	4.0	2.3									
								2	28.4	7.9	23.7	5.4	79.3	4.2	2.7												
						Middle	4.6	1	28.2	7.9	23.7	5.4	79.3	3.2	2.4												
								2	28.2	7.9	23.7	5.4	79.3	3.2	2.2												
						Bottom	8.2	1	28.1	7.9	23.7	5.4	79.4	4.8	1.9												
								2	28.1	7.9	23.7	5.4	79.4	4.8	1.7												
TCE-WQM2a	Sunny	Calm	14:43	7.1	Surface	1.0	1	28.1	7.9	24.3	5.5	79.9	1.3	2.5	5.4	2.4	2.2										
							2	28.1	7.9	24.3	5.5	79.9	1.3	2.8													
					Middle	3.6	1	27.5	7.9	26.1	5.3	77.6	2.3	2.3													
							2	27.5	7.9	26.1	5.3	77.6	2.3	2.1													
					Bottom	6.1	1	27.2	7.9	28.4	5.2	77.3	3.7	1.7													
							2	27.2	7.9	28.4	5.2	77.3	3.7	1.8													
TCE-WQM2b	Sunny	Calm	14:56	9.6	Surface	1.0	1	27.4	7.9	25.7	5.6	82.6	2.8	2.5	5.4	3.9	2.1										
							2	27.4	7.9	25.7	5.6	82.5	2.9	2.8													
					Middle	4.8	1	27.2	7.9	28.3	5.2	76.3	3.6	2.3													
							2	27.2	7.9	28.3	5.2	76.3	3.6	2.1													
					Bottom	8.6	1	27.1	7.9	29.0	5.0	74.4	5.1	1.7													
							2	27.1	7.9	29.0	5.0	74.4	5.2	1.3													
TCE-WQM3A	Sunny	Calm	14:27	5.1	Surface	1.0	1	28.3	7.9	23.4	5.5	80.5	1.8	5.2	5.5	1.8	3.3										
							2	28.3	7.9	23.4	5.5	80.5	1.8	2.3													
					Bottom	4.1	1	28.1	7.9	23.9	5.5	80.2	1.7	3.0													
							2	28.1	7.9	23.9	5.5	80.2	1.7	2.8													
					TCE-WQM4	Sunny	Calm	14:17	4.3	Surface	1.0	1	28.1	7.9				23.4	5.3	77.9	2.8	3.0	5.3	3.4	2.8		
												2	28.1	7.9				23.4	5.3	77.9	2.8	3.4					
Bottom	3.3	1	27.9	7.9						24.0	5.2	76.2	4.0	2.5													
		2	27.9	7.9						24.0	5.2	76.3	4.1	2.2													
2023-09-18	Mid-Flood	TCE-C1	Sunny	Moderate						9:19	7.7	Surface	1.0	1	27.9	7.8	22.9	5.2	75.6	4.7	2.8	5.1				5.5	3.3
														2	27.9	7.8	22.9	5.2	75.6	4.8	2.5						
					Middle	3.9	1	27.8	7.8			23.4	5.1	73.3	5.2	3.1											
							2	27.8	7.8			23.4	5.1	73.3	5.2	3.4											
					Bottom	6.7	1	27.8	7.8			23.4	4.9	71.0	6.5	4.1											
							2	27.8	7.8			23.4	4.9	71.1	6.6	3.9											
		TCE-C2	Sunny	Moderate	7:27	13.4	Surface	1.0	1	27.2	7.9	29.1	5.2	76.8	3.1	3.9	5.2	5.1	3.1								
									2	27.2	7.9	29.1	5.2	76.8	3.1	3.6											
							Middle	6.7	1	27.0	7.9	29.9	5.2	76.9	4.8	3.2											
									2	27.0	7.9	29.9	5.2	76.9	4.8	2.8											
							Bottom	12.4	1	27.0	7.9	30.7	5.2	77.5	7.6	2.3											
									2	27.0	7.9	30.7	5.2	77.5	7.5	2.6											
	TCE-WQM1	Sunny	Calm	8:39	8.8	Surface	1.0	1	28.2	7.9	23.8	5.5	79.3	1.9	3.7	5.4	2.7	3.4									
								2	28.2	7.9	23.7	5.5	79.3	1.9	4.1												
						Middle	4.4	1	27.4	7.9	26.2	5.4	79.1	2.6	3.2												
								2	27.4	7.9	26.2	5.4	79.1	2.6	3.5												
						Bottom	7.8	1	27.3	7.9	26.7	5.1	75.0	3.7	3.0												
								2	27.3	7.9	26.7	5.1	75.0	3.7	2.7												
	TCE-WQM2a	Sunny	Moderate	8:04	7.2	Surface	1.0	1	27.6	7.9	25.1	5.2	76.3	3.4	2.7	5.1	5.7	2.3									
								2	27.6	7.9	25.1	5.2	76.3	3.4	2.9												
						Middle	3.6	1	27.1	7.9	28.3	5.1	74.5	6.5	2.5												
								2	27.1	7.9	28.3	5.1	74.5	6.5	2.2												
						Bottom	6.2	1	27.1	7.9	28.3	5.1	74.8	7.1	1.8												
								2	27.1	7.9	28.3	5.1	74.8	7.2	1.9												
TCE-WQM2b	Sunny	Moderate	7:51	9.8	Surface	1.0	1	27.5	7.9	26.3	5.3	78.2	3.2	4.2	5.3	4.2	3.2										
							2	27.5	7.9	26.3	5.3	78.2	3.3	3.8													
					Middle	4.9	1	27.1	7.9	29.7	5.3	77.5	4.4	3.0													
							2	27.1	7.9	29.7	5.3	77.5	4.4	3.2													
					Bottom	8.8	1	27.0	7.9	29.8	5.2	76.7	5.0	2.3													
							2	27.0	7.9	29.8	5.2	76.7	5.0	2.7													
TCE-WQM3A	Sunny	Calm	8:15	4.9	Surface	1.0	1	28.1	7.9	23.8	5.4	79.4	1.6	3.0	5.4	1.9	3.3										
							2	28.1	7.9	23.8	5.4	79.3	1.6	2.6													
					Bottom	3.9	1	27.4	7.9	26.4	5.2	75.5	2.2	4.0													
							2	27.4	7.9	26.4	5.2	75.5	2.3	3.7													
					TCE-WQM4	Sunny	Calm	8:27	4.1	Surface	1.0	1	28.1	7.9				23.8	5.3	78.0	1.5	3.2	5.3	1.7	2.7		
												2	28.1	7.9				23.8	5.3	78.1	1.5	2.9					
Bottom	3.1	1	27.6	7.9						25.2	5.2	76.1	2.0	2.2													
		2	27.6	7.9						25.3	5.2	76.1	2.0	2.6													

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
2023-09-20	Mid-Ebb	TCE-C1	Sunny	Moderate	14:13	8.0	Surface	1.0	1	28.1	7.9	20.5	5.3	75.7	4.9	1.6	5.3	5.5	1.8
									2	28.1	7.9	20.5	5.3	75.5	4.9	1.7			
							Middle	4.0	1	28.0	7.9	20.6	5.2	75.0	5.4	2.2			
							Bottom	7.0	1	28.1	7.9	20.5	5.2	74.6	6.1	1.6			
				2	28.1	7.9	20.5	5.2	73.9	6.1	2.0								
		TCE-C2	Cloudy	Moderate	15:55	10.0	Surface	1.0	1	27.7	8.0	21.8	5.7	82.0	1.0	2.8	5.7	1.3	2.4
									2	27.6	8.0	21.9	5.7	81.9	1.0	2.3			
							Middle	5.0	1	27.4	8.0	25.8	5.6	82.0	1.3	2.7			
							Bottom	9.0	1	27.3	8.0	26.0	5.6	82.2	1.3	2.0			
				2	27.3	8.0	26.1	5.7	83.7	1.7	1.7								
		TCE-WQM1	Sunny	Moderate	14:51	8.8	Surface	1.0	1	28.0	7.9	20.7	5.2	75.0	2.0	2.7	5.2	3.8	1.8
									2	28.0	7.9	20.7	5.2	74.7	2.0	1.9			
	Middle						4.4	1	27.8	7.9	21.4	5.1	72.9	3.4	1.8				
	Bottom						7.8	1	27.8	7.9	21.5	5.1	72.9	3.4	1.5				
			2	27.8	7.9	21.8	5.1	73.1	5.9	1.5									
	TCE-WQM2a	Sunny	Moderate	15:22	7.8	Surface	1.0	1	27.5	7.9	21.5	5.1	72.8	2.9	1.8	5.1	4.1	1.6	
								2	27.5	7.9	21.5	5.1	72.8	2.9	1.7				
						Middle	3.9	1	27.1	7.9	24.9	5.1	73.0	4.4	1.6				
						Bottom	6.8	1	27.1	7.9	25.0	5.1	73.2	4.5	1.8				
			2	27.1	7.9	25.2	5.1	74.1	5.0	1.6									
	TCE-WQM2b	Cloudy	Moderate	15:31	9.4	Surface	1.0	1	28.6	7.9	19.2	5.5	79.0	1.3	1.2	5.4	2.4	1.5	
								2	28.6	7.9	19.2	5.5	78.8	1.3	1.8				
						Middle	4.7	1	27.2	7.9	22.6	5.3	75.6	2.4	1.9				
						Bottom	8.4	1	27.2	7.9	24.9	5.3	76.2	2.4	1.3				
		2	27.2	7.9	24.9	5.3	76.5	3.4	1.4										
TCE-WQM3A	Sunny	Moderate	15:12	4.0	Surface	1.0	1	28.2	7.9	19.2	5.6	80.0	1.6	2.4	5.6	2.2	2.0		
							2	28.1	7.9	19.3	5.6	79.8	1.7	1.5					
					Bottom	3.0	1	27.9	7.9	20.1	5.5	78.5	2.8	2.4					
							2	27.9	7.9	20.2	5.5	78.7	2.9	1.7					
TCE-WQM4	Sunny	Moderate	15:03	4.2	Surface	1.0	1	28.3	7.9	20.8	5.5	78.7	2.4	1.8	5.4	3.0	1.7		
							2	28.1	7.9	21.0	5.4	77.9	2.3	1.4					
					Bottom	3.2	1	27.9	7.9	21.2	5.1	72.9	3.5	1.8					
							2	27.9	7.9	21.2	5.1	72.8	3.7	1.6					
2023-09-20	Mid-Flood	TCE-C1	Sunny	Moderate	11:16	9.0	Surface	1.0	1	28.0	7.9	20.5	5.4	77.0	2.0	1.8	5.4	2.7	1.8
									2	28.0	7.9	20.5	5.4	77.0	2.0	2.0			
							Middle	4.5	1	28.0	7.9	20.6	5.4	77.4	2.9	1.5			
							Bottom	8.0	1	28.0	7.9	20.5	5.4	77.8	3.3	1.8			
				2	28.0	7.9	20.5	5.4	78.0	3.3	1.9								
		TCE-C2	Sunny	Moderate	9:36	12.0	Surface	1.0	1	27.3	8.0	23.2	5.2	74.2	2.9	1.5	5.1	4.1	1.6
									2	27.2	8.0	23.2	5.2	74.1	3.0	1.2			
							Middle	6.0	1	26.8	8.0	27.7	5.0	73.5	4.0	2.0			
							Bottom	11.0	1	26.9	8.0	27.8	5.2	75.5	5.4	1.7			
				2	26.9	8.0	27.8	5.2	76.2	5.4	1.8								
		TCE-WQM1	Sunny	Moderate	10:36	8.6	Surface	1.0	1	27.9	7.9	20.9	5.1	73.1	4.1	1.7	5.0	5.1	2.3
									2	27.9	7.9	21.0	5.1	72.8	4.1	1.8			
	Middle						4.3	1	27.8	7.9	21.5	5.0	71.7	5.2	3.0				
	Bottom						7.6	1	27.6	7.9	22.1	5.1	72.9	6.0	2.7				
			2	27.6	7.9	22.1	5.1	73.7	6.0	2.2									
	TCE-WQM2a	Cloudy	Moderate	10:07	7.0	Surface	1.0	1	28.3	7.9	19.2	5.6	80.5	1.2	1.9	5.5	2.4	1.5	
								2	28.3	7.9	19.2	5.6	80.5	1.2	1.6				
						Middle	3.5	1	27.6	7.9	21.5	5.3	76.3	2.6	1.0				
						Bottom	6.0	1	27.7	7.9	21.6	5.3	76.4	2.7	1.6				
			2	28.1	7.9	21.8	5.4	77.9	3.4	1.6									
	TCE-WQM2b	Sunny	Moderate	9:57	11.2	Surface	1.0	1	27.5	7.9	22.1	5.1	73.0	1.3	2.4	5.1	3.3	1.7	
								2	27.5	7.9	22.2	5.1	72.9	1.3	1.7				
						Middle	5.6	1	27.3	7.9	23.5	5.1	73.5	3.2	1.5				
						Bottom	10.2	1	27.3	7.9	23.6	5.1	73.6	3.2	1.4				
		2	27.3	7.9	23.8	5.2	75.1	5.5	1.5										
TCE-WQM3A	Cloudy	Moderate	10:17	4.0	Surface	1.0	1	28.0	7.9	19.4	5.7	81.0	1.0	2.3	5.7	1.5	1.9		
							2	28.0	7.9	19.4	5.7	81.1	1.0	1.6					
					Bottom	3.0	1	28.0	7.9	19.6	5.8	81.9	2.1	2.1					
							2	28.1	7.9	19.6	5.8	82.2	2.1	1.6					
TCE-WQM4	Cloudy	Moderate	10:26	4.4	Surface	1.0	1	28.3	7.9	20.2	5.4	78.2	1.0	2.9	5.4	1.9	2.5		
							2	28.2	7.9	20.3	5.4	78.1	1.0	2.2					
					Bottom	3.4	1	27.8	7.9	21.2	5.1	72.3	2.7	1.9					
							2	27.8	7.9	21.2	5.1	72.6	2.7	2.8					

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged				
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)		
2023-09-22	Mid-Ebb	TCE-C1	Fine	Moderate	6:49	7.8	Surface	1.0	1	27.8	8.1	26.8	5.9	86.5	5.4	5.7	5.6	7.7	4.7		
									2	27.8	8.1	26.7	5.9	86.5	5.4	6.0					
							Middle	3.9	1	27.3	8.1	29.7	5.3	79.0	8.2	5.0					
							Bottom	6.8	1	27.2	8.1	29.7	5.3	78.8	8.2	4.5					
						2	27.2	8.1	31.0	5.1	77.0	9.4	3.4	5.1							
				2	27.2	8.1	31.0	5.2	77.1	9.5	3.8										
		Surface	1.0	1	29.9	8.1	18.3	7.7	111.9	1.9	4.8										
				2	29.9	8.1	18.3	7.7	111.7	1.8	4.4										
				Middle	6.2	1	28.4	7.9	25.2	5.8	85.3	2.3	5.2	6.7	2.4	5.1					
				2	28.4	7.9	25.2	5.8	85.3	2.3	5.0										
		Bottom	11.4	1	28.0	7.9	28.1	5.3	79.7	3.2	5.5										
				2	28.0	7.9	28.1	5.3	79.7	3.2	5.7										
				TCE-WQM1	Fine	Moderate	5:58	8.3	Surface	1.0	1	29.7	8.2	20.2	8.9	130.2	2.6	4.7	7.5	4.5	5.1
										2	29.7	8.2	20.2	8.8	129.6	2.6	4.3				
				Middle					4.2	1	29.0	8.0	22.0	6.1	89.1	3.2	5.4				
				2					29.0	8.0	21.9	6.1	89.2	3.2	5.0						
				Bottom	7.3	1	28.3	8.0	24.9	5.1	75.7	7.7	5.6	5.1							
						2	28.3	8.0	24.9	5.1	75.7	7.7	5.3								
				Surface	1.0	1	29.4	8.1	19.0	7.8	112.8	2.2	4.6				6.8	3.3	5.0		
						2	29.4	8.1	19.0	7.8	112.8	2.2	4.4								
				Middle	3.5	1	28.8	7.9	22.5	5.9	85.8	3.1	4.8								
				2	28.7	7.9	22.5	5.8	85.5	3.1	5.1										
				Bottom	5.9	1	28.3	7.9	26.0	4.8	71.5	4.8	5.4	4.8							
						2	28.3	7.9	26.0	4.8	71.5	4.7	5.4								
			Surface	1.0	1	29.3	8.1	19.5	7.3	106.5	2.0	4.2	6.5				4.7	5.1			
					2	29.2	8.1	19.5	7.3	106.3	2.1	4.6									
			Middle	4.8	1	28.5	8.0	23.8	5.8	84.7	5.9	5.3									
			2	28.5	8.0	24.6	5.6	82.1	5.9	5.0											
			Bottom	8.6	1	28.5	8.0	24.6	5.6	82.2	6.1	5.8	5.6								
					2	28.5	8.0	24.6	5.6	82.3	6.2	5.5									
			Surface	1.0	1	29.5	8.1	18.8	7.9	114.9	2.0	3.6				7.9	2.0	4.4			
					2	29.4	8.1	18.8	7.9	114.3	2.1	3.1									
			Bottom	3.1	1	29.0	8.0	21.8	6.5	95.6	2.0	5.1									
					2	29.0	8.0	21.8	6.5	95.6	1.9	5.6									
			TCE-WQM4	Fine	Moderate	5:46	3.8	Surface	1.0	1	29.5	8.1	21.1	7.8	115.4	1.9	5.4	7.8	1.8	5.8	
									2	29.5	8.1	21.1	7.8	115.2	1.9	5.0					
			Bottom					2.8	1	28.8	8.0	22.7	6.2	90.5	1.8	6.7					
									2	28.8	8.0	22.7	6.2	90.5	1.9	6.2					
	2023-09-22	Mid-Flood	TCE-C1	Fine	Moderate	15:51	8.1	Surface	1.0	1	30.0	8.3	20.6	7.7	113.6	4.3	5.0	6.8	5.4	5.9	
										2	29.9	8.3	20.6	7.7	113.6	4.4	4.6				
								Middle	4.1	1	28.5	8.0	24.0	5.9	86.5	5.1	6.2				
								2	28.5	8.0	24.2	5.9	86.5	5.2	5.9						
					Bottom	7.1	1	28.4	8.0	24.5	5.5	81.3	6.7	6.9	5.5						
							2	28.5	8.0	24.4	5.5	81.4	6.7	6.5							
					Surface	1.0	1	29.8	8.3	20.9	10.0	147.0	2.2	5.2				8.5	2.7	4.5	
							2	29.8	8.3	20.7	10.0	147.4	2.2	4.9							
					Middle	6.7	1	28.7	8.1	25.2	7.0	104.1	2.1	4.3							
					2	28.6	8.1	25.2	7.0	104.2	2.1	4.6									
				Bottom	12.3	1	27.8	8.1	31.2	6.0	90.2	3.7	4.2	6.0							
						2	27.8	8.1	31.2	6.0	90.2	3.7	3.8								
				Surface	1.0	1	30.3	8.4	20.3	10.1	150.7	4.1	8.8				8.1	6.2	7.9		
						2	30.3	8.4	20.3	10.1	150.7	4.1	8.6								
				Middle	4.4	1	28.8	8.0	23.0	6.1	90.0	5.3	7.6								
				2	28.7	8.0	23.2	6.1	89.9	5.5	8.0										
				Bottom	7.7	1	28.4	8.0	24.5	5.4	79.6	9.2	7.0	5.4							
						2	28.4	8.0	24.5	5.4	79.7	9.3	7.4								
				Surface	1.0	1	29.7	8.4	20.7	10.2	150.4	2.2	5.6				8.0	2.4	4.8		
						2	29.7	8.4	20.7	10.2	150.4	2.2	5.3								
				Middle	3.6	1	28.4	8.0	24.8	5.8	86.2	2.0	4.9								
				2	28.4	8.0	24.8	5.9	86.6	2.0	4.6										
				Bottom	6.2	1	28.1	8.0	27.2	5.7	85.2	3.1	4.1	5.7							
						2	28.1	8.0	27.2	5.7	85.2	3.1	4.4								
				Surface	1.0	1	30.1	8.2	16.3	8.3	119.6	3.2	4.6				6.9	3.9	3.8		
						2	30.1	8.2	16.2	8.2	118.7	3.2	4.3								
				Middle	5.4	1	28.3	8.0	26.3	5.6	83.2	3.9	3.6								
				2	28.3	8.0	26.2	5.6	83.3	3.9	4.0										
				Bottom	9.7	1	27.8	8.0	29.8	5.6	84.3	4.7	3.4	5.6							
						2	27.8	8.0	29.8	5.6	84.5	4.7	3.1								
				Surface	1.0	1	29.2	8.2	21.2	8.1	119.3	1.9	4.0				8.1	2.2	4.3		
						2	29.2	8.2	21.3	8.1	119.2	2.0	3.8								
				Bottom	3.9	1	28.9	8.0	22.7	6.5	96.2	2.4	4.4								
						2	28.9	8.1	22.7	6.5	96.1	2.4	4.8								
				TCE-WQM4	Fine	Calm	16:42	4.5	Surface	1.0	1	29.9	8.4	20.2	11.4	167.8	2.1	6.4	11.4	2.2	5.6
										2	29.9	8.4	20.2	11.4	167.5	2.1	6.0				
				Bottom					3.5	1	29.3	8.2	21.3	8.3	122.5	2.3	4.9				
										2	29.3	8.2	21.4	8.3	122.5	2.3	5.2				

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
2023-09-25	Mid-Ebb	TCE-C1	Sunny	Rough	10:04	7.4	Surface	1.0	1	28.2	8.3	23.5	8.0	117.1	2.3	4.2	7.7	2.9	4.8
									2	28.2	8.3	23.5	8.0	117.2	2.3	4.4			
							Middle	3.7	1	28.0	8.3	24.1	7.3	106.9	2.6	4.7			
							Bottom	6.4	1	27.7	8.0	25.3	4.7	68.5	3.7	5.4			
				2	27.7	8.0	25.3	4.7	68.5	3.8	5.1	4.7							
				2	28.2	8.4	23.9	9.1	133.2	2.1	4.2	7.6	3.6	4.8					
		Surface	1.0	1	28.2	8.4	23.9	9.1	133.2	2.1	4.4								
		Middle	6.6	1	27.6	8.1	24.6	6.1	88.8	2.8	5.0								
		Bottom	12.2	1	27.2	8.1	28.4	5.5	81.2	5.9	5.4								
				2	27.2	8.1	28.4	5.5	81.4	5.9	5.0	5.5							
				2	28.1	8.4	23.7	9.4	136.8	2.0	3.5	9.0	3.6	4.2					
		Surface	1.0	1	28.1	8.4	23.8	9.3	136.4	2.0	3.7								
		Middle	4.8	1	27.9	8.4	24.0	8.7	127.3	2.4	4.0								
		Bottom	8.6	1	27.7	8.2	25.1	6.8	100.0	6.4	4.7								
				2	27.7	8.2	25.2	6.8	99.8	6.4	4.9	6.8							
				2	28.3	8.5	23.3	9.5	138.8	1.7	4.9	8.9	2.7	4.5					
		Surface	1.0	1	28.3	8.5	23.3	9.5	138.8	1.7	4.6								
		Middle	3.6	1	28.1	8.4	23.7	8.3	120.9	2.7	4.4								
		Bottom	6.1	1	27.6	8.1	24.7	6.1	88.7	3.6	4.2								
				2	27.6	8.1	24.7	6.1	88.7	3.6	4.1	6.1							
				2	28.5	8.5	22.0	10.0	145.0	2.2	5.3	8.4	3.1	4.7					
		Surface	1.0	1	28.5	8.5	22.0	10.0	145.0	2.2	5.1								
		Middle	4.8	1	27.7	8.2	23.3	6.9	100.4	2.9	4.5								
		Bottom	8.6	1	27.7	8.2	23.3	6.9	100.3	3.0	4.9								
			2	27.7	8.2	23.5	6.8	97.9	4.2	4.5	6.8								
			2	28.3	8.5	23.4	9.3	135.9	1.7	4.8	9.3	2.5	5.1						
	Surface	1.0	1	28.3	8.5	23.4	9.3	135.7	1.7	4.5									
	Bottom	3.9	1	27.7	8.2	24.4	7.0	101.9	3.2	5.8									
			2	27.7	8.2	24.4	7.0	101.8	3.3	5.2									
			2	27.7	8.2	24.4	7.0	101.9	3.2	5.8	7.0								
			2	27.8	8.4	24.7	7.8	114.5	3.6	4.4	7.9	4.0	5.1						
	Surface	1.0	1	27.8	8.4	24.6	7.9	115.5	3.5	4.7									
	Bottom	3.1	1	27.7	8.2	25.0	6.7	97.1	4.5	6.0									
			2	27.7	8.2	25.0	6.7	97.1	4.6	5.4									
			2	28.7	8.5	22.7	10.1	147.2	4.2	5.1	9.7	2.9	5.6						
	Surface	1.0	1	28.7	8.5	22.7	10.1	147.2	4.2	4.8									
	Middle	3.6	1	28.4	8.5	23.0	9.4	137.2	2.3	5.4									
	Bottom	6.1	1	27.9	8.3	23.9	5.5	81.1	2.1	6.2									
			2	27.9	8.3	23.9	5.5	81.1	2.1	6.0	5.5								
			2	28.3	8.5	23.8	10.5	153.9	2.6	4.2	8.9	3.4	4.8						
	Surface	1.0	1	28.3	8.5	23.8	10.5	153.9	2.6	4.5									
	Middle	6.5	1	27.6	8.3	24.8	7.3	105.7	3.4	4.9									
	Bottom	11.9	1	27.3	8.1	27.3	5.8	85.0	4.2	5.4									
			2	27.3	8.1	27.3	5.8	85.1	4.3	5.1	5.8								
			2	28.7	8.5	22.7	10.3	151.2	2.1	4.7	10.2	2.1	5.5						
	Surface	1.0	1	28.7	8.5	22.7	10.3	151.2	2.1	4.4									
	Middle	4.5	1	28.6	8.5	22.8	10.1	147.6	2.1	5.8									
	Bottom	7.9	1	28.2	8.3	23.6	8.1	118.3	2.1	6.0									
		2	28.2	8.3	23.6	8.1	118.4	2.1	6.7	8.1									
		2	28.5	8.5	23.5	10.1	148.5	3.2	5.2	9.1	3.4	4.9							
Surface	1.0	1	28.5	8.5	23.5	10.1	148.5	3.2	5.4										
Middle	3.5	1	27.9	8.3	23.8	8.1	117.7	4.1	4.6										
Bottom	5.9	1	27.8	8.3	23.9	8.0	116.2	2.9	4.8										
		2	27.8	8.3	23.9	8.0	116.2	2.9	4.6	8.0									
		2	27.8	8.3	24.3	7.9	114.9	2.8	4.3	7.8	2.7	4.7							
Surface	1.0	1	27.8	8.3	24.3	7.9	114.9	2.7	4.1										
Middle	4.6	1	27.7	8.3	24.5	7.7	111.8	2.9	4.5										
Bottom	8.2	1	27.5	8.1	25.9	6.2	91.3	2.4	5.2										
		2	27.5	8.1	25.8	6.2	91.3	2.5	5.1	6.2									
		2	28.1	8.5	23.7	9.3	135.9	3.4	4.4	9.3	2.7	4.9							
Surface	1.0	1	28.1	8.5	23.7	9.3	135.9	3.4	4.4										
Bottom	3.1	1	27.8	8.3	23.9	7.8	113.6	1.9	5.2										
		2	27.8	8.3	23.9	7.8	113.7	2.0	5.0										
		2	28.2	8.4	23.5	8.5	124.0	1.9	5.5	8.5	2.6	4.6							
Surface	1.0	1	28.2	8.4	23.5	8.5	123.5	1.9	5.0										
Bottom	2.8	1	27.6	8.1	25.2	7.2	104.9	3.4	3.7										
		2	27.6	8.1	25.2	7.2	104.7	3.5	4.0										

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged		
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)
2023-09-27	Mid-Ebb	TCE-C1	Sunny	Moderate	12:28	8.2	Surface	1.0	1	28.7	8.0	26.9	6.0	90.3	3.8	4.7	5.9	6.9	3.9
									2	28.7	8.0	26.9	6.0	90.1	3.9	4.4			
							Middle	4.1	1	28.3	8.0	27.5	5.7	85.7	8.9	3.7			
							Bottom	7.2	1	28.3	8.0	27.5	5.7	85.7	7.8	4.0			
				2	28.3	8.0	27.5	5.8	87.1	8.6	3.2	5.8							
				2	28.3	8.0	27.5	5.9	87.5	8.4	3.5								
		Surface	1.0	1	28.5	8.0	25.4	6.4	95.0	0.2	4.0								
				2	28.5	8.0	25.4	6.4	94.7	0.2	3.6								
				1	28.1	7.9	26.8	5.6	83.8	3.1	4.9	6.0	2.6	4.7					
		Middle	7.3	1	28.1	7.9	26.8	5.6	83.8	3.1	4.5								
		Bottom	13.6	1	27.8	7.8	28.3	5.1	76.6	4.6	5.8								
				2	27.8	7.8	28.3	5.2	76.8	4.7	5.3								
			1	29.1	8.1	25.0	6.7	100.3	7.5	4.9	6.5	7.7	4.6						
	Surface	1.0	1	29.1	8.1	25.0	6.7	100.1	7.5	5.2									
	Middle	3.9	1	28.7	8.0	25.3	6.3	93.9	4.6	4.3									
	Bottom	6.7	1	28.7	8.0	25.3	6.3	93.7	4.6	4.6									
			2	28.3	8.0	26.1	6.0	88.4	10.9	4.1	6.0								
			2	28.3	8.0	26.1	6.0	88.6	11.0	4.3									
	Surface	1.0	1	28.7	8.0	25.5	6.4	95.7	0.6	3.7									
			2	28.7	8.0	25.5	6.4	95.7	0.6	3.5									
			1	28.4	8.0	25.9	6.1	91.0	0.8	4.1	6.3	2.0	4.2						
	Middle	3.4	1	28.4	8.0	25.9	6.1	90.6	0.8	4.3									
	Bottom	5.8	1	28.1	8.0	27.0	5.7	84.4	4.5	4.9									
			2	28.0	8.0	27.2	5.6	83.4	5.0	4.6									
		1	28.7	8.1	25.1	7.0	103.9	1.5	3.4	6.5	7.5	4.1							
Surface	1.0	1	28.7	8.1	25.1	7.0	103.6	1.5	3.0										
Middle	5.6	1	28.2	8.0	26.2	6.1	90.3	10.6	4.0										
Bottom	10.2	1	28.2	8.0	26.2	6.1	90.2	10.7	4.3										
		2	28.2	8.0	26.2	6.1	90.5	10.9	5.1	6.1									
		2	28.2	8.0	26.2	6.1	90.6	10.1	4.9										
Surface	1.0	1	28.7	8.0	24.5	6.4	95.3	1.3	3.5										
		2	28.7	8.0	24.5	6.4	95.1	1.3	3.1										
		1	28.3	8.0	25.8	5.9	87.8	2.2	3.9	5.9	1.7	3.7							
Bottom	3.0	1	28.3	8.0	25.8	5.9	87.8	2.2	3.9										
		2	28.3	8.0	25.8	5.9	87.8	2.1	4.3										
		2	28.3	8.0	25.8	5.9	87.8	2.1	4.3										
		1	29.0	8.1	24.9	6.9	102.3	1.6	4.1	6.9	1.7	3.6							
Surface	1.0	1	29.0	8.1	24.9	6.9	102.1	1.6	3.8										
		2	29.0	8.1	24.9	6.9	102.1	1.6	3.8										
Bottom	2.5	1	28.9	8.1	24.9	6.7	99.1	1.8	3.1										
		2	28.9	8.1	24.9	6.6	98.8	1.8	3.4	6.7									
		2	28.9	8.1	24.9	6.6	98.8	1.8	3.4										
Surface	1.0	1	28.9	8.0	26.7	6.0	90.8	2.7	2.5										
		2	28.9	8.0	26.7	6.0	90.7	2.9	2.8										
		1	28.3	8.0	27.5	5.6	84.0	6.0	3.1	5.8	5.6	3.2							
Middle	4.2	1	28.3	8.0	27.5	5.6	84.1	6.0	3.1										
Bottom	7.4	1	28.3	8.0	27.4	5.6	84.1	7.8	3.6										
		2	28.3	8.0	27.3	5.6	84.1	8.0	3.8										
		1	28.8	8.1	25.2	6.7	99.5	2.7	2.1	6.4	6.9	2.9							
Surface	1.0	1	28.8	8.1	25.2	6.7	99.3	2.9	2.4										
Middle	7.1	1	28.4	8.0	25.7	6.1	90.8	7.5	2.6										
Bottom	13.2	1	28.4	8.0	25.7	6.1	90.8	7.2	3.0										
		2	28.2	8.0	26.3	5.9	88.0	10.5	3.6	5.9									
		2	28.3	8.0	26.3	5.9	88.2	10.6	3.4										
Surface	1.0	1	29.2	8.1	24.8	6.5	97.9	5.1	4.7										
		2	29.2	8.1	24.8	6.5	97.5	5.3	5.1										
		1	28.5	8.0	25.4	5.9	87.1	3.3	4.2	6.2	6.2	4.4							
Middle	4.2	1	28.5	8.0	25.5	5.9	87.0	2.9	4.4										
Bottom	7.4	1	28.3	8.0	26.0	5.8	86.5	10.1	3.6										
		2	28.3	8.0	26.0	5.8	86.5	10.6	4.0										
		1	29.0	8.1	24.9	6.9	103.1	0.8	5.1	6.7	6.0	7.3							
Surface	1.0	1	29.0	8.1	24.9	6.9	103.1	0.8	5.4										
Middle	3.6	1	28.6	8.1	25.7	6.5	96.3	5.9	6.8										
Bottom	6.2	1	28.5	8.1	25.9	6.4	95.8	6.4	7.2										
		2	28.3	8.0	26.5	5.9	87.9	11.3	9.4	5.9									
		2	28.2	8.0	26.5	5.9	88.0	11.0	9.7										
Surface	1.0	1	28.7	8.1	24.6	6.8	101.4	6.4	5.8										
		2	28.7	8.1	24.6	6.8	101.3	6.7	6.2										
		1	28.6	8.1	25.0	6.4	95.4	8.6	6.8	6.6	8.6	6.6							
Middle	5.8	1	28.6	8.1	24.9	6.4	95.2	8.5	6.5										
Bottom	10.6	1	28.5	8.0	25.2	6.3	93.1	10.4	7.0										
		2	28.5	8.0	25.2	6.3	93.1	10.8	7.2										
		1	28.9	8.1	25.0	6.4	94.7	8.0	3.2	6.4	9.2	3.3							
Surface	1.0	1	28.9	8.1	25.0	6.4	94.5	8.2	2.9										
Bottom	3.2	1	28.5	8.0	25.7	5.7	84.6	10.2	3.4										
		2	28.5	8.0	25.8	5.7	84.4	10.5	3.8										
		1	29.0	8.1	25.0	6.9	102.6	2.0	5.4	6.9	2.6	4.6							
Surface	1.0	1	29.0	8.1	25.0	6.9	102.5	2.1	4.9										
Bottom	2.1	1	28.7	8.1	25.4	6.6	97.5	2.8	4.2										
		2	28.7	8.1	25.4	6.6	97.5	3.4	3.8										

Date	Tide	Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Water Level	Sampling depth (m)	Replicate	Water Temperature (°C)	pH	Salinity (ppt)	Dissolved Oxygen (DO) (mg/L)	DO Saturation (%)	Turbidity (NTU)	Suspended Solids (SS) (mg/L)	Depth-averaged				
																	DO (mg/L)	Turbidity (NTU)	SS (mg/L)		
2023-09-29	Mid-Ebb	TCE-C1	Sunny	Rough	13:42	7.9	Surface	1.0	1	29.0	7.9	25.9	5.5	82.2	0.8	6.1	5.4	2.9	5.8		
									2	29.0	7.9	25.9	5.5	82.1	0.8	6.5					
							Middle	4.0	1	28.7	7.9	26.0	5.3	79.7	2.1	5.5					
									2	28.7	7.9	26.1	5.3	79.6	2.0	5.9					
							Bottom	6.9	1	28.5	7.9	26.7	5.3	78.5	5.7	5.4					
									2	28.5	7.9	26.7	5.3	78.6	5.9	5.4					
		TCE-C2	Sunny	Moderate	11:34	13.1	Surface	1.0	1	28.2	7.9	28.1	5.0	75.1	2.1	7.3	5.0	3.1	6.8		
									2	28.2	7.9	28.1	5.0	75.1	2.1	7.0					
							Middle	6.6	1	28.2	7.9	28.4	4.9	74.3	3.1	6.8					
									2	28.2	7.9	28.4	4.9	74.2	3.2	6.6					
							Bottom	12.1	1	28.2	7.8	28.9	4.9	74.1	3.9	6.5					
									2	28.2	7.8	28.9	4.9	74.1	4.0	6.4					
		TCE-WQM1	Sunny	Moderate	12:49	9.6	Surface	1.0	1	28.8	7.9	26.0	5.4	81.3	1.9	4.5	5.4	3.4	5.3		
									2	28.8	7.9	26.0	5.4	81.2	1.9	4.8					
							Middle	4.8	1	28.7	7.9	26.1	5.3	78.6	2.0	5.1					
									2	28.7	7.9	26.1	5.3	78.6	2.0	5.5					
							Bottom	8.6	1	28.4	7.9	27.3	5.0	75.1	6.2	6.2					
									2	28.4	7.9	27.3	5.0	75.2	6.2	5.8					
		TCE-WQM2a	Sunny	Moderate	12:12	7.1	Surface	1.0	1	28.5	7.9	26.6	5.3	79.5	5.4	6.2	5.3	6.6	6.7		
									2	28.5	7.9	26.6	5.3	79.5	5.4	7.6					
							Middle	3.6	1	28.4	7.9	27.0	5.2	78.2	6.3	6.9					
									2	28.4	7.9	27.0	5.2	78.2	6.4	7.1					
							Bottom	6.1	1	28.4	7.9	27.3	5.1	75.8	7.9	6.2					
									2	28.4	7.9	27.3	5.1	75.9	8.0	6.4					
	TCE-WQM2b	Sunny	Moderate	11:59	10.5	Surface	1.0	1	28.5	7.9	26.7	5.3	78.5	2.0	5.6	5.1	2.4	5.9			
								2	28.6	7.9	26.7	5.2	78.3	2.1	5.3						
						Middle	5.3	1	28.3	7.9	28.0	5.0	75.2	2.3	6.0						
								2	28.3	7.9	28.0	5.0	75.2	2.4	5.7						
						Bottom	9.5	1	28.2	7.9	28.3	5.0	75.6	2.8	6.5						
								2	28.2	7.9	28.3	5.0	75.7	2.8	6.2						
	TCE-WQM3A	Sunny	Calm	12:23	5.2	Surface	1.0	1	28.5	7.9	26.6	5.2	78.2	4.2	5.4	5.2	5.5	5.7			
								2	28.5	7.9	26.6	5.2	78.2	4.2	5.1						
						Bottom	4.2	1	28.4	7.9	26.9	5.0	74.6	6.7	6.2						
								2	28.4	7.9	26.9	5.0	74.6	6.8	5.9						
	TCE-WQM4	Sunny	Calm	12:35	4.8	Surface	1.0	1	28.6	7.9	26.6	5.2	78.5	3.3	5.4	5.2	4.4	5.6			
								2	28.6	7.9	26.6	5.2	78.4	3.3	5.3						
						Bottom	3.8	1	28.5	7.9	26.7	5.2	77.8	5.5	5.9						
								2	28.5	7.9	26.7	5.2	77.8	5.5	5.7						
	2023-09-29	Mid-Flood	TCE-C1	Fine	Rough	17:41	7.3	Surface	1.0	1	29.3	7.9	25.6	5.8	86.8	1.0	7.2	5.7	2.5	6.1	
										2	29.3	7.9	25.6	5.8	86.7	1.0	6.8				
								Middle	3.7	1	29.0	7.9	25.7	5.6	84.6	1.2	5.8				
										2	29.0	7.9	25.7	5.6	84.5	1.2	6.1				
								Bottom	6.3	1	28.6	7.9	25.9	5.5	81.6	5.2	5.4				
										2	28.6	7.9	25.9	5.5	81.8	5.2	5.1				
				TCE-C2	Fine	Moderate	19:57	12.9	Surface	1.0	1	28.9	7.9	26.1	5.5	82.6	3.4	7.0	5.4	6.1	6.3
											2	28.9	7.9	26.1	5.5	82.6	3.4	6.7			
									Middle	6.5	1	28.6	7.9	26.6	5.3	79.7	6.2	6.4			
											2	28.6	7.9	26.6	5.3	79.7	6.3	6.1			
Bottom									11.9	1	28.5	7.9	26.8	5.3	78.5	8.7	5.9				
										2	28.5	7.9	26.8	5.3	78.5	8.8	5.6				
TCE-WQM1			Fine	Moderate	18:35	8.9	Surface	1.0	1	28.8	7.9	25.8	5.2	78.2	3.7	5.4	5.2	4.3	5.8		
									2	28.8	7.9	25.8	5.2	78.2	3.7	5.6					
							Middle	4.5	1	28.8	7.9	25.8	5.1	75.9	4.8	5.9					
									2	28.8	7.9	25.8	5.1	75.7	4.8	5.7					
							Bottom	7.9	1	28.6	7.9	25.9	5.0	74.1	4.3	6.3					
									2	28.6	7.9	25.9	5.0	74.1	4.4	6.1					
TCE-WQM2a			Fine	Moderate	19:19	6.9	Surface	1.0	1	28.5	7.9	26.9	5.8	87.4	3.1	7.3	5.5	4.9	6.8		
									2	28.5	7.9	26.9	5.8	87.4	3.1	7.4					
							Middle	3.5	1	28.4	7.9	27.0	5.3	78.6	5.2	6.6					
									2	28.4	7.9	27.0	5.3	78.7	5.3	7.0					
							Bottom	5.9	1	28.4	7.9	27.2	5.1	76.4	6.4	6.1					
									2	28.4	7.9	27.2	5.1	76.4	6.5	6.4					
TCE-WQM2b			Fine	Moderate	19:34	9.7	Surface	1.0	1	28.5	7.9	26.8	5.7	84.6	3.1	5.6	5.5	4.5	6.4		
									2	28.5	7.9	26.8	5.7	84.6	3.1	6.0					
							Middle	4.9	1	28.4	7.9	26.9	5.4	80.8	4.1	6.3					
									2	28.4	7.9	26.9	5.4	80.9	4.2	6.6					
							Bottom	8.7	1	28.4	7.9	26.9	5.3	79.3	6.2	7.0					
									2	28.4	7.9	26.9	5.3	79.4	6.3	6.8					
TCE-WQM3A			Fine	Moderate	19:03	4.9	Surface	1.0	1	28.4	7.9	27.0	5.2	78.4	3.8	6.0	5.2	4.6	6.3		
									2	28.4	7.9	27.0	5.2	78.4	3.9	5.8					
							Bottom	3.9	1	28.4	7.9	27.2	5.1	75.9	5.4	6.4					
									2	28.4	7.9	27.2	5.1	75.9	5.5	6.8					
TCE-WQM4			Fine	Moderate	18:48	3.7	Surface	1.0	1	29.0	7.9	25.8	5.4	81.1	2.9	6.8	5.4	3.4	6.2		
									2	29.0	7.9	25.8	5.4	81.0	3.0	6.5					
							Bottom	2.7	1	29.0	7.9	25.8	5.4	80.5	3.9	5.6					
									2	29.0	7.9	25.8	5.4	80.4	3.9	5.9					

Annex G4

Event and Action Plan for Water Quality

Annex G4 *Event and Action Plan for Water Quality*

Event	ET	IEC	Action ER	Contractor
Action level exceedance for one sampling day	<ol style="list-style-type: none"> 1. Inform IEC, Contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; and 3. Discuss remedial measures with IEC and Contractor and ER. 	<ol style="list-style-type: none"> 1. Discuss with ET, ER and Contractor on the implemented mitigation measures; 2. Review proposals on remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with IEC, ET and Contractor on the implemented mitigation measures; 2. Make agreement on the remedial measures to be implemented; 3. Supervise the implementation of agreed remedial measures. 	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment; 5. Consider changes of working methods; 6. Discuss with ER, ET and IEC and purpose remedial measures to IEC and ER; and 7. Implement the agreed mitigation measures.
Action level exceedance for more than one consecutive sampling days	<ol style="list-style-type: none"> 1. Repeat in-situ measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss remedial measures with IEC, contractor and ER 5. Ensure remedial measures are implemented 	<ol style="list-style-type: none"> 1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with ET, IEC and Contractor on the proposed mitigation measures; 2. Make agreement on the remedial measures to be implemented ; and 3. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures. 	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of remedial measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed mitigation measures.

Event	Action			
	ET	IEC	ER	Contractor
Limit level exceedance for one sampling day	<ol style="list-style-type: none"> 1. Repeat measurement on next day of exceedance to confirm findings; 2. Inform IEC, contractor and ER; 3. Rectify unacceptable practice; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Consider changes of working methods; 6. Discuss mitigation measures with IEC, ER and Contractor; and 7. Ensure the agreed remedial measures are implemented 	<ol style="list-style-type: none"> 1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; and 4. Discuss with ET, IEC and Contractor on the effectiveness of the implemented remedial measures. 	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures.
Limit level exceedance for more than one consecutive sampling days	<ol style="list-style-type: none"> 1. Inform IEC, contractor and ER; 2. Check monitoring data, all plant, equipment and Contractor's working methods; 3. Discuss mitigation measures with IEC, ER and Contractor; and 4. Ensure mitigation measures are implemented; and 5. Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days 	<ol style="list-style-type: none"> 1. Discuss with ET, Contractor and ER on the implemented mitigation measures; 2. Review the proposed remedial measures submitted by Contractor and advise the ER accordingly; and 3. Review and advise the ET and ER on the effectiveness of the implemented mitigation measures. 	<ol style="list-style-type: none"> 1. Discuss with ET, IEC and Contractor on the implemented remedial measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the remedial measures to be implemented; 4. Discuss with ET and IEC on the effectiveness of the implemented mitigation measures; and 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the dredging activities until no exceedance of Limit level. 	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform the ER and confirm notification of the non-compliance in writing; 3. Rectify unacceptable practice; 4. Check all plant and equipment and consider changes of working methods; 5. Discuss with ET, IEC and ER and submit proposal of additional mitigation measures to ER and IEC within 3 working days of notification; and 6. Implement the agreed remedial measures. 7. As directed by the ER, to slow down or stop all or part of the dredging activities until no exceedance of Limit level.