

# **Appendix J**

# **Water Quality Monitoring Results and their Graphical Presentation**

**Project Name:** Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3  
Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Date of Monitoring: 3/1/2017 Weather : Cloudy

Monitoring Location	Time	Water Depth (m)	Temperature (oC)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:19	<0.5	20.3	20.3	6.5	6.5	8.0	8.3	88.3	91.2	21.5	21.5	<0.1	<0.1	21.0	21.0
			20.3		6.5		8.5		94.0		21.5					
C3b	11:43	<0.5	19.4	19.4	6.9	6.9	8.6	8.6	94.1	93.9	10.1	10.1	<0.1	<0.1	7.7	9.4
			19.4		6.9		8.6		93.7		10.1					
I5	11:59	<0.5	19.9	19.9	7.1	7.1	7.9	8.1	87.3	89.0	15.2	15.2	<0.1	<0.1	8.9	8.6
			19.9		7.1		8.2		90.7		15.2					

Date of Monitoring: 3/3/2017 Weather : Sunny

Monitoring Location	Time	Water Depth (m)	Temperature (oC)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	12:08	<0.5	21.6	21.6	6.7	6.7	7.9	8.2	89.6	92.7	25.5	25.5	<0.1	<0.1	15	17.0
			21.6		6.7		8.4		95.8		25.5					
C3b	12:30	<0.5	19.8	19.8	6.9	6.9	8.2	8.5	90.2	93.0	7.6	7.6	<0.1	<0.1	7.5	7.4
			19.8		6.9		8.7		95.7		7.6					
I5	12:41	<0.5	21.3	21.3	7.1	7.1	7.4	7.8	83.9	88.0	22.5	22.5	<0.1	<0.1	15	15.5
			21.3		7.1		8.1		92.1		22.5					

Date of Monitoring: 3/6/2017 Weather : Sunny

Monitoring Location	Time	Water Depth (m)	Temperature (oC)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	15:11	<0.5	24.4	24.4	6.7	6.7	8.0	8.0	91.1	91.5	20.4	20.4	<0.1	<0.1	7.3	9.7
			24.4		6.7		8.0		91.8		20.4					
C3b	15:32	<0.5	21.9	21.9	6.9	6.9	8.1	8.1	92.6	92.9	9.1	9.1	<0.1	<0.1	4	4.0
			21.9		6.9		8.1		93.1		9.1					
I5	15:45	<0.5	23.3	23.3	7.1	7.1	7.9	7.9	88.6	88.2	16.4	16.4	<0.1	<0.1	11	11.0
			23.3		7.1		7.9		87.8		16.4					

Date of Monitoring: 3/8/2017 Weather : Rainy

Monitoring Location	Time	Water Depth (m)	Temperature (oC)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:34	<0.5	18.2	18.2	6.8	6.8	8.6	9.0	91.1	95.3	43.5	43.5	<0.1	<0.1	29	28.0
			18.2		6.8		9.4		99.5		43.5					
C3b	11:55	<0.5	18.2	18.2	6.9	6.9	9.0	8.8	95.7	93.7	20.4	20.4	<0.1	<0.1	12	12.0
			18.2		6.9		8.6		91.7		20.4					
I5	12:10	<0.5	18.3	18.3	7.1	7.1	8.3	8.3	89.3	89.3	40.9	40.9	<0.1	<0.1	33	33.5
			18.3		7.1		8.3		89.3		40.9					

Date of Monitoring: 3/10/2017 Weather : Cloudy

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:18	<0.5	19.6	19.6	6.4	6.4	8.9	8.8	102.1	100.2	22.1	22.1	<0.1	<0.1	16	16.0
			19.6		6.4		8.6		98.3		22.1					
C3b	11:43	<0.5	19.4	19.4	6.8	6.8	8.5	8.5	96.1	95.9	12.6	12.6	<0.1	<0.1	4.7	5.2
			19.4		6.8		8.5		95.6		12.6					
I5	11:58	<0.5	19.3	19.3	7.1	7.1	8.2	8.2	89.7	89.9	10.3	10.3	<0.1	<0.1	15	15.5
			19.3		7.1		8.2		90.1		10.3					

Date of Monitoring: 3/13/2017 Weather : Sunny

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:08	<0.5	22.7	22.7	6.4	6.4	8.8	8.8	102.3	102.1	30.9	30.9	<0.1	<0.1	19	18.5
			22.7		6.4		8.8		101.9		30.9					
C3b	11:34	<0.5	22.5	22.5	6.8	6.8	8.6	8.6	98.9	98.5	9.0	9.0	<0.1	<0.1	3.6	4.7
			22.5		6.8		8.6		98.1		9.0					
I5	11:47	<0.5	22.2	22.2	6.9	6.9	8.2	8.2	88.4	88.7	11.5	11.5	<0.1	<0.1	16	16.5
			22.2		6.9		8.2		88.9		11.5					

Date of Monitoring: 3/15/2017 Weather : Cloudy

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:56	<0.5	19.0	19.0	7.9	7.9	6.9	6.9	73.9	73.9	38.4	38.4	<0.1	<0.1	5.8	7.3
			19.0		7.9		6.9		73.9		38.4					
C3b	12:17	<0.5	18.4	18.4	7.7	7.7	7.1	7.1	75.8	75.8	8.4	8.4	<0.1	<0.1	4.1	3.9
			18.4		7.7		7.1		75.8		8.4					
I5	12:28	<0.5	19.3	19.3	7.8	7.8	7.1	7.1	77.5	77.5	9.0	9.0	<0.1	<0.1	5.0	5.2
			19.3		7.8		7.1		77.5		9.0					

Date of Monitoring: 3/17/2017 Weather : Cloudy

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:41	<0.5	19.4	19.4	7.0	7.0	8.1	8.0	88.0	87.0	29.5	29.5	<0.1	<0.1	32.0	29.5
			19.4		7.0		7.9		86.0		29.5					
C3b	12:04	<0.5	19.3	19.3	7.3	7.3	8.8	8.8	95.7	95.3	3.6	3.6	<0.1	<0.1	4.9	5.4
			19.3		7.3		8.7		94.8		3.6					
I5	12:15	<0.5	19.4	19.4	7.6	7.6	8.8	8.4	96.2	92.1	2.0	2.0	<0.1	<0.1	3.2	3.1
			19.4		7.6		8.0		87.9		2.0					

Date of Monitoring: 3/20/2017 Weather : Sunny

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	10:49	<0.5	23.7	23.7	7.3	7.3	6.8	6.8	80.8	80.8	27.7	27.7	<0.1	<0.1	20.0	22.0
			23.7		7.3		6.8		80.8		27.7					
C3b	11:15	<0.5	23.0	23.0	7.3	7.3	6.3	6.3	73.8	73.8	5.5	5.5	<0.1	<0.1	5.3	5.0
			23.0		7.3		6.3		73.8		5.5					
I5	11:26	<0.5	24.6	24.6	7.4	7.4	7.9	7.9	95.3	95.3	5.0	5.0	<0.1	<0.1	3.9	3.5
			24.6		7.4		7.9		95.3		5.0					

Date of Monitoring: 3/22/2017 Weather : Rainy

NOTE:  
Data in **Bold** denotes exceedance of respective Action Level  
Data in **Bold Underline** denotes exceedance of respective Limit Level

Project Name: Contract No. CV/2012/09 Liantang / Heung Yuen Wai Boundary Control Point Site Formation and Infrastructure works - Contract 3  
 Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:54	<0.5	19.9	19.9	7.3	7.3	5.5	5.5	60.1	60.1	27.7	27.7	<0.1	<0.1	30.0	34.0
			19.9		7.3		5.5		60.1		27.7		<0.1		38.0	
C3b	12:13	<0.5	19.9	19.9	7.3	7.3	6.5	6.5	71.4	71.4	4.2	4.2	<0.1	<0.1	4.2	4.5
			19.9		7.3		6.5		71.4		4.2		<0.1		4.7	
I5	12:22	<0.5	20.4	20.4	7.6	7.6	6.4	<b>6.4</b>	71.2	71.2	3.8	3.8	<0.1	<0.1	3.2	3.2
			20.4		7.6		6.4		71.2		3.8		<0.1		3.1	

Date of Monitoring: 3/24/2017 Weather: Sunny

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:37	<0.5	26.1	26.1	7.1	7.1	6.6	6.6	81.6	81.6	24.2	24.2	<0.1	<0.1	11.0	15.5
			26.1		7.1		6.6		81.6		24.2		<0.1		20.0	
C3b	12:01	<0.5	23.4	23.4	7.0	7.0	6.5	6.5	76.2	76.2	5.2	5.2	<0.1	<0.1	4.1	4.2
			23.4		7.0		6.5		76.2		5.2		<0.1		4.3	
I5	12:12	<0.5	26.9	26.9	7.3	7.3	10.2	10.2	128.0	128.0	3.9	3.9	<0.1	<0.1	4.2	4.1
			26.9		7.3		10.2		128.0		3.9		<0.1		4.0	

Date of Monitoring: 3/27/2017 Weather: Sunny

Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	13:34	<0.5	23.7	23.7	6.5	6.5	7.2	7.2	84.9	84.9	15.8	15.8	<0.1	<0.1	9.4	11.2
			23.7		6.5		7.2		84.9		15.8		<0.1		13.0	
C3b	13:50	<0.5	20.8	20.8	6.9	6.9	6.8	6.8	76.4	76.4	6.8	6.8	<0.1	<0.1	6.2	6.9
			20.8		6.9		6.8		76.4		6.8		<0.1		7.5	
I5	14:00	<0.5	21.9	21.9	7.2	7.2	7.7	7.7	87.9	87.9	2.2	2.2	<0.1	<0.1	3.3	3.8
			21.9		7.2		7.7		87.9		2.2		<0.1		4.3	

Date of Monitoring: 3/29/2017 Weather: Rainy

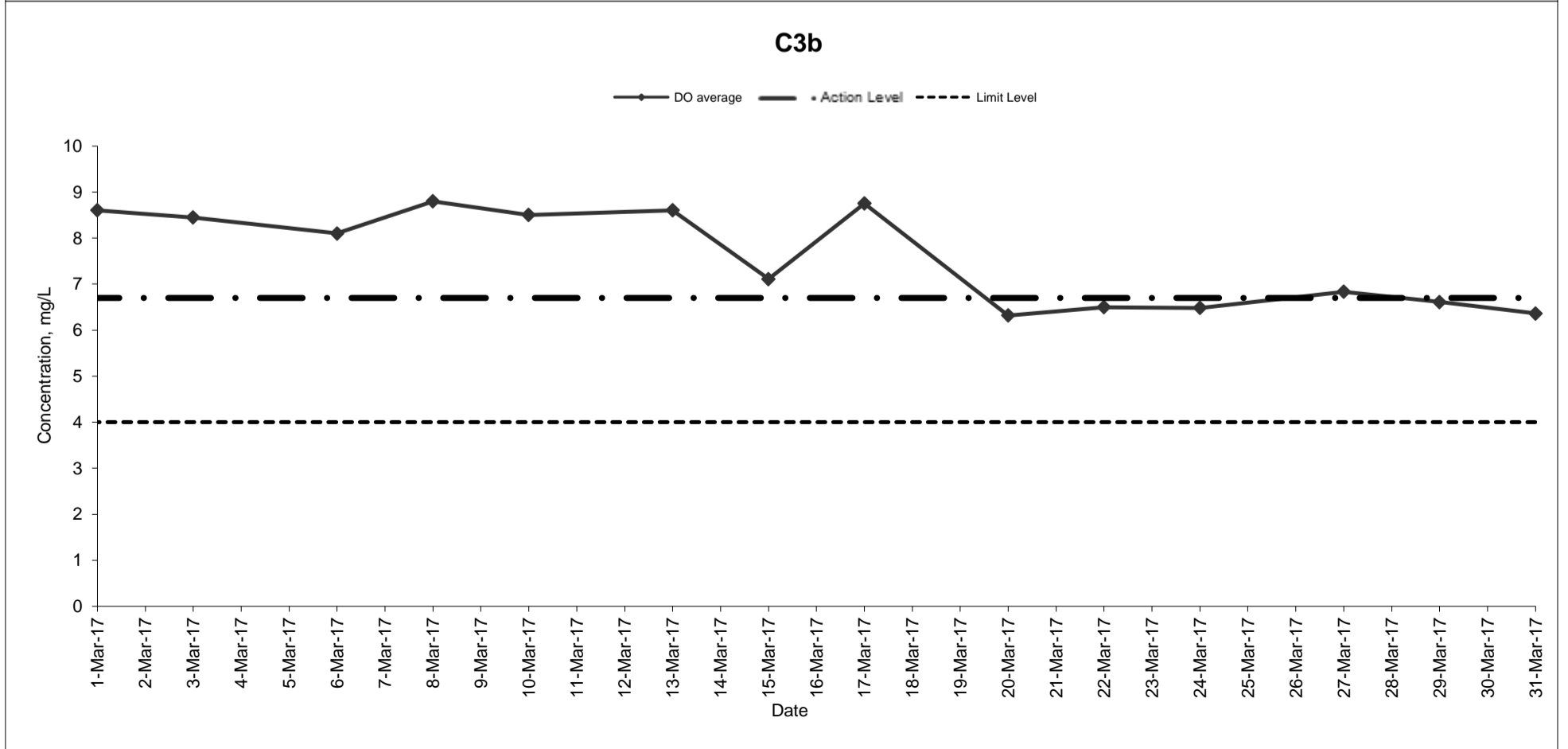
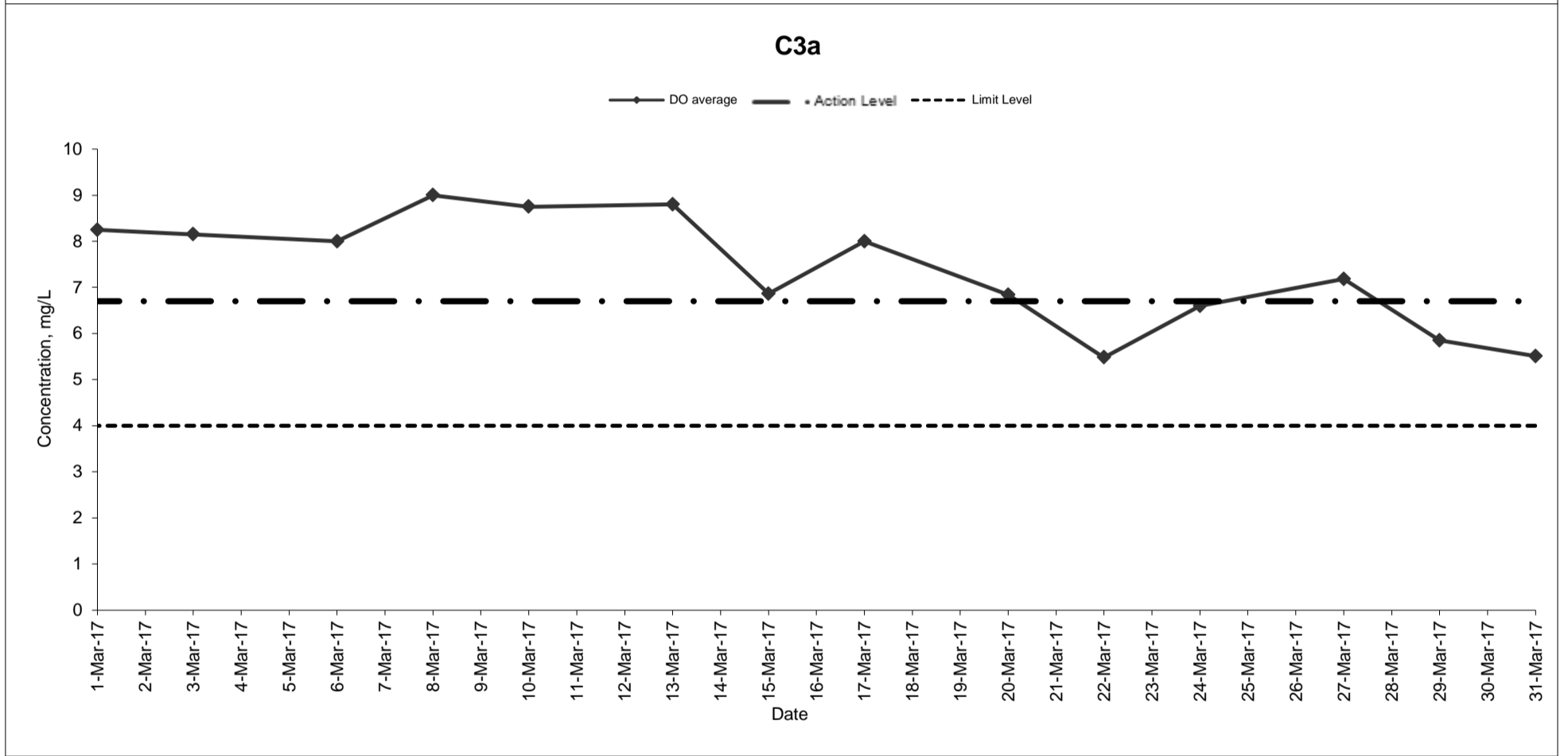
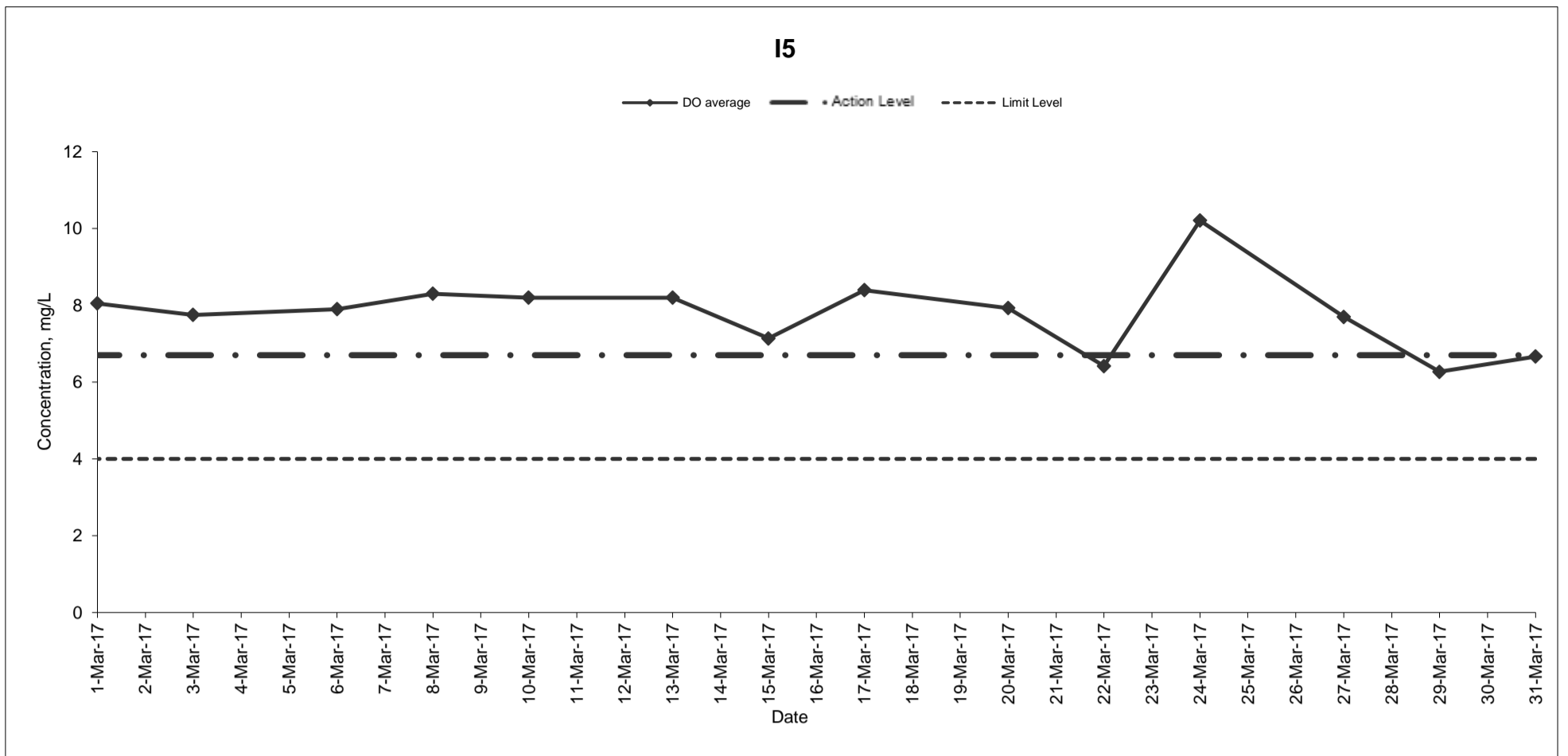
Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	11:16	<0.5	21.9	21.9	6.2	6.2	5.9	5.9	66.8	66.8	28.6	28.6	<0.1	<0.1	24.0	25.5
			21.9		6.2		5.9		66.8		28.6		<0.1		27.0	
C3b	11:28	<0.5	21.4	21.4	6.6	6.6	6.6	6.6	74.8	74.8	19.1	19.1	<0.1	<0.1	9.5	9.2
			21.4		6.6		6.6		74.8		19.1		<0.1		8.8	
I5	11:34	<0.5	21.8	21.8	6.9	6.9	6.3	<b>6.3</b>	71.5	71.5	18.4	18.4	<0.1	<0.1	16.0	15.5
			21.8		6.9		6.3		71.5		18.4		<0.1		15.0	

Date of Monitoring: 3/31/2017 Weather: Rainy

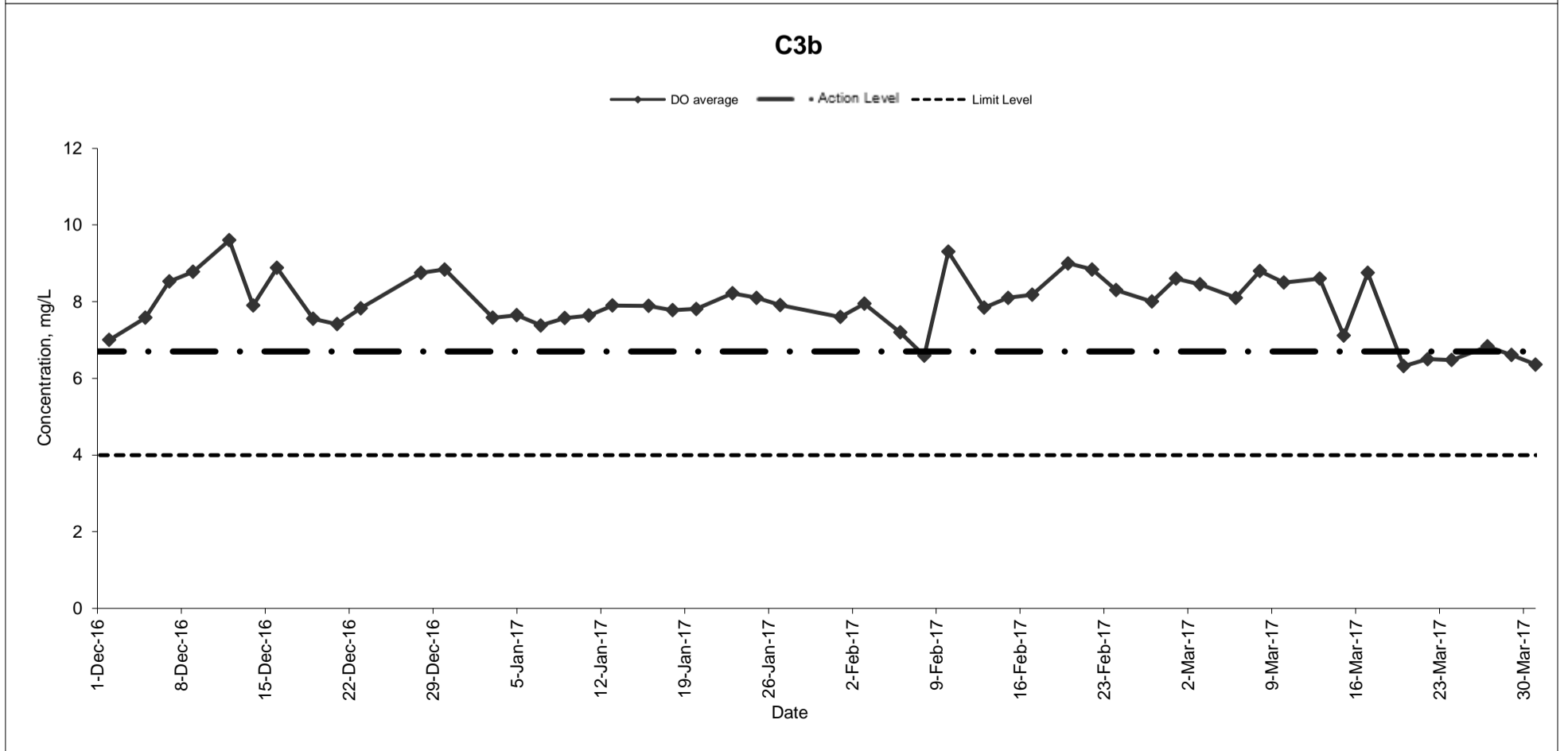
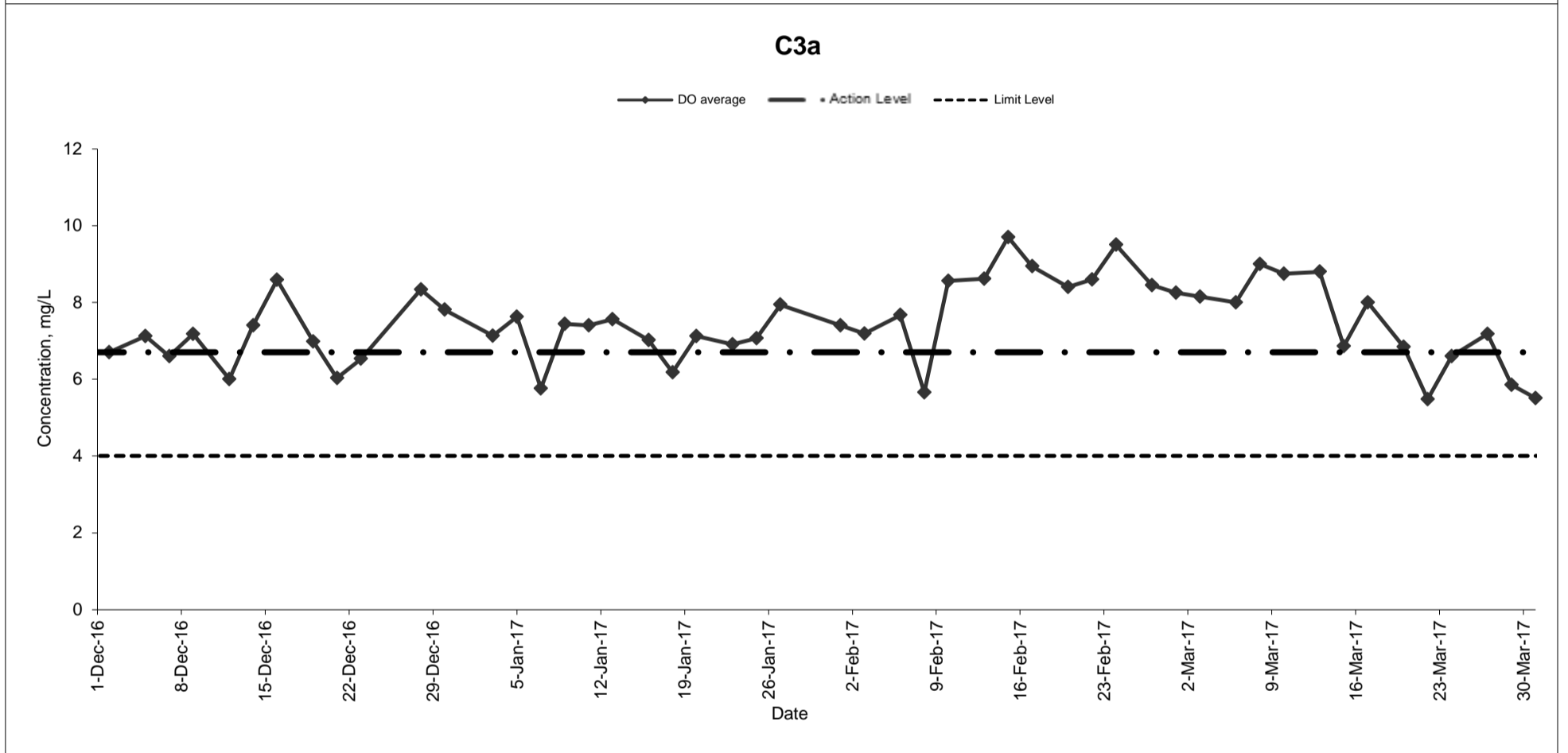
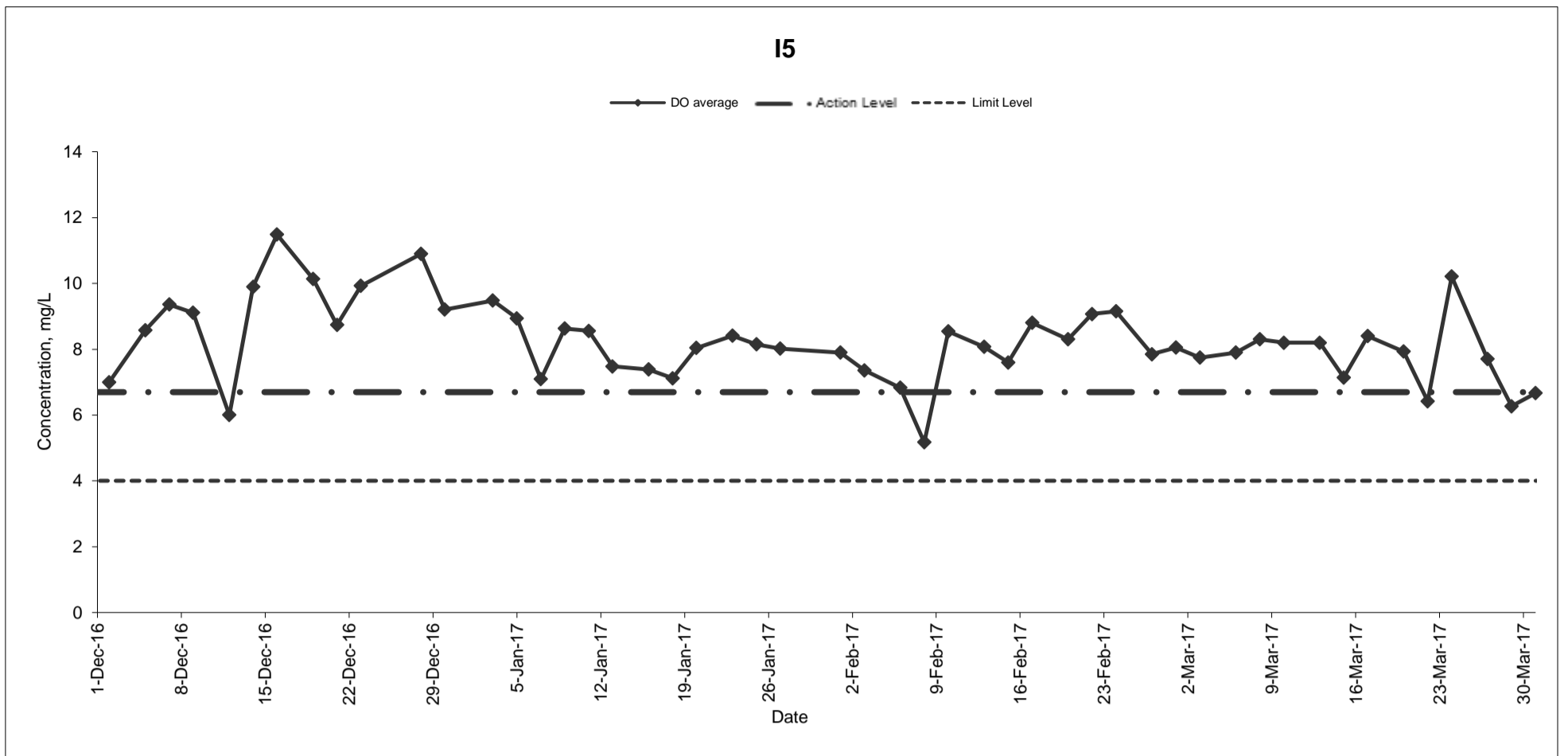
Monitoring Location	Time	Water Depth (m)	Temperature (°C)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	12:06	<0.5	22.2	22.2	6.3	6.3	5.5	5.5	63.4	63.4	78.7	78.7	<0.1	<0.1	20.0	30.0
			22.2		6.3		5.5		63.4		78.7		<0.1		40.0	
C3b	12:32	<0.5	22.2	22.2	6.4	6.4	6.4	6.4	73.1	73.1	34.6	34.6	<0.1	<0.1	13.0	13.5
			22.2		6.4		6.4		73.1		34.6		<0.1		14.0	
I5	12:42	<0.5	22.2	22.2	6.7	6.7	6.7	6.7	76.6	76.6	66.1	66.1	<0.1	<0.1	41.0	<b>40.5</b>
			22.2		6.7		6.7		76.6		66.1		<0.1		40.0	

NOTE:  
 Data in **Bold** denotes exceedance of respective Action Level  
 Data in **Bold Underline** denotes exceedance of respective Limit Level

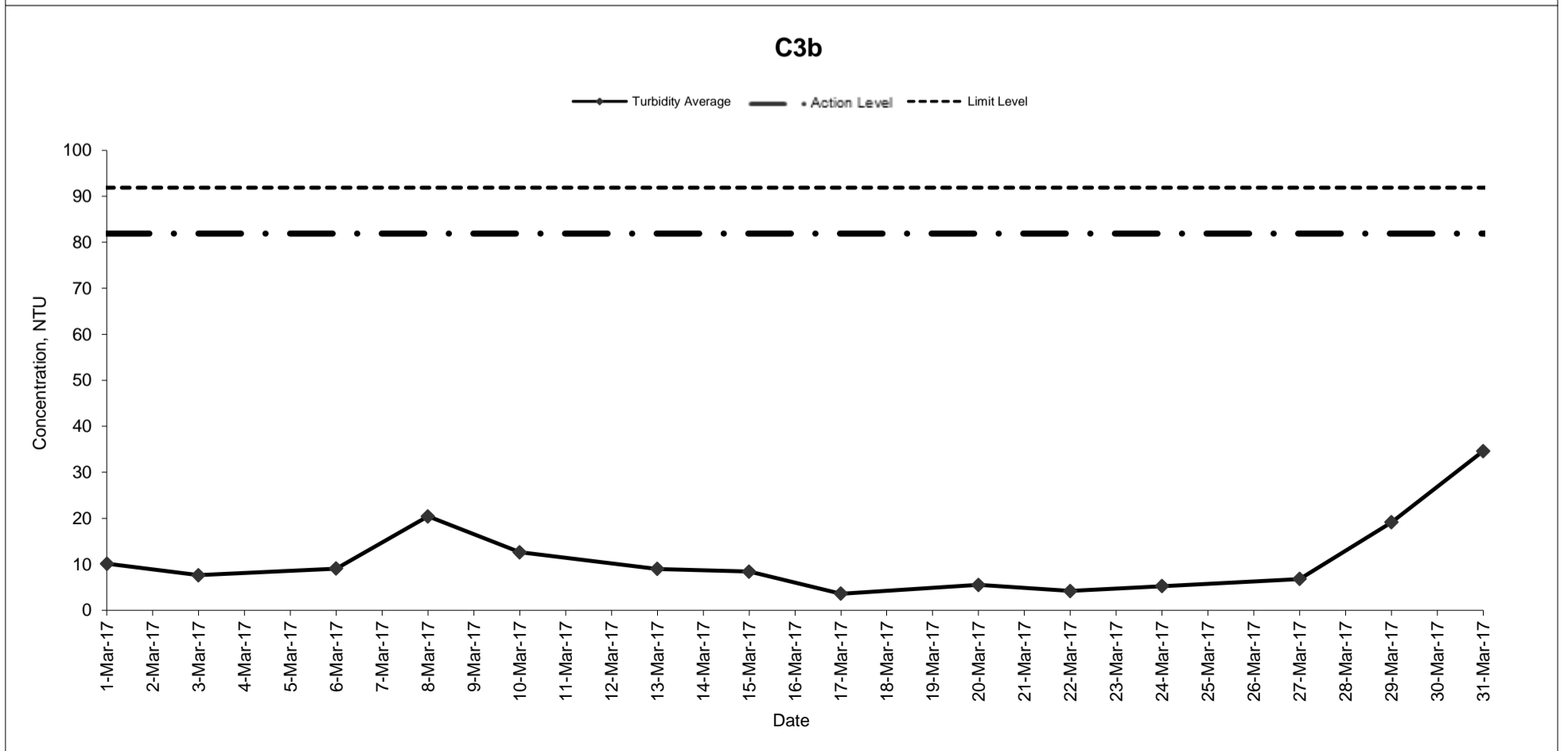
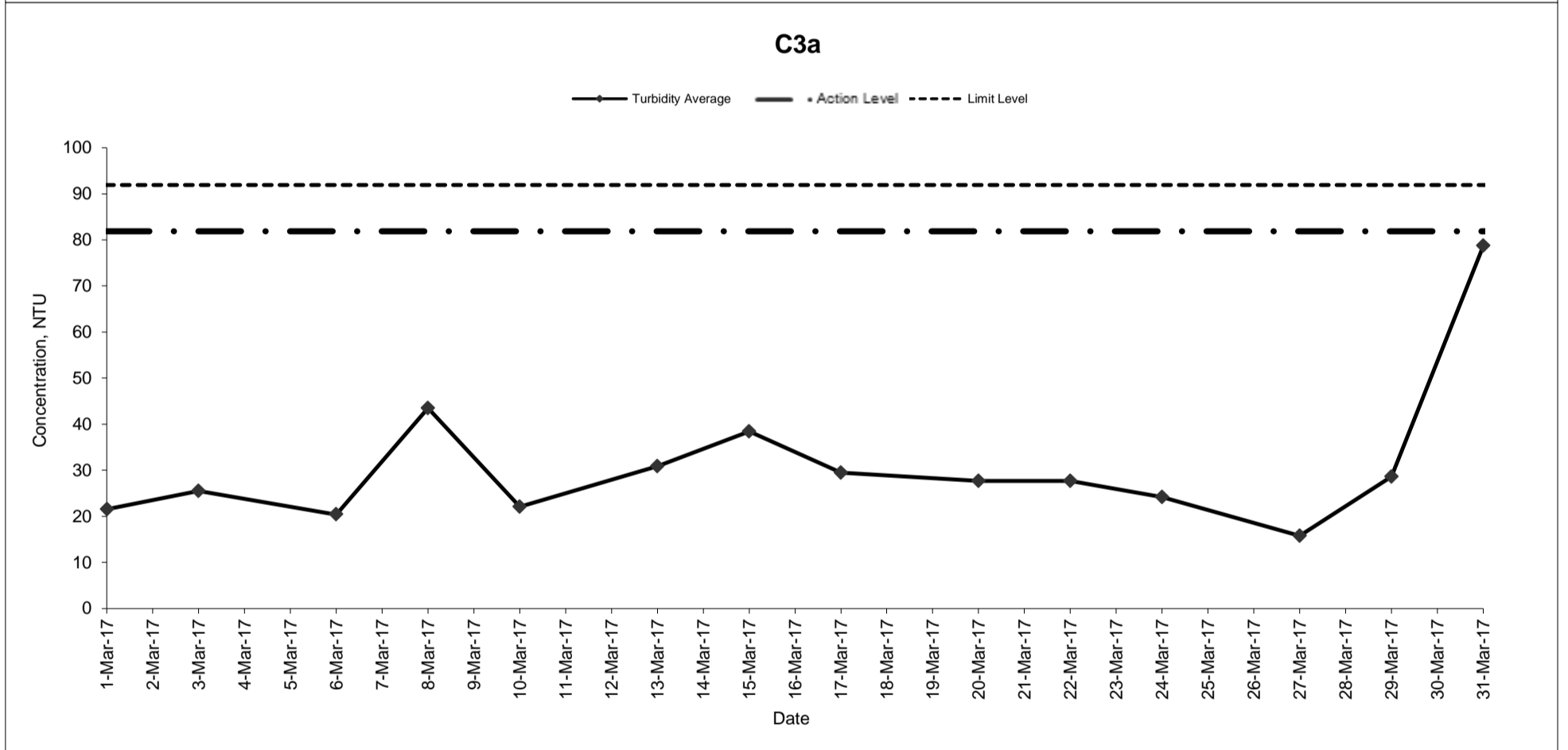
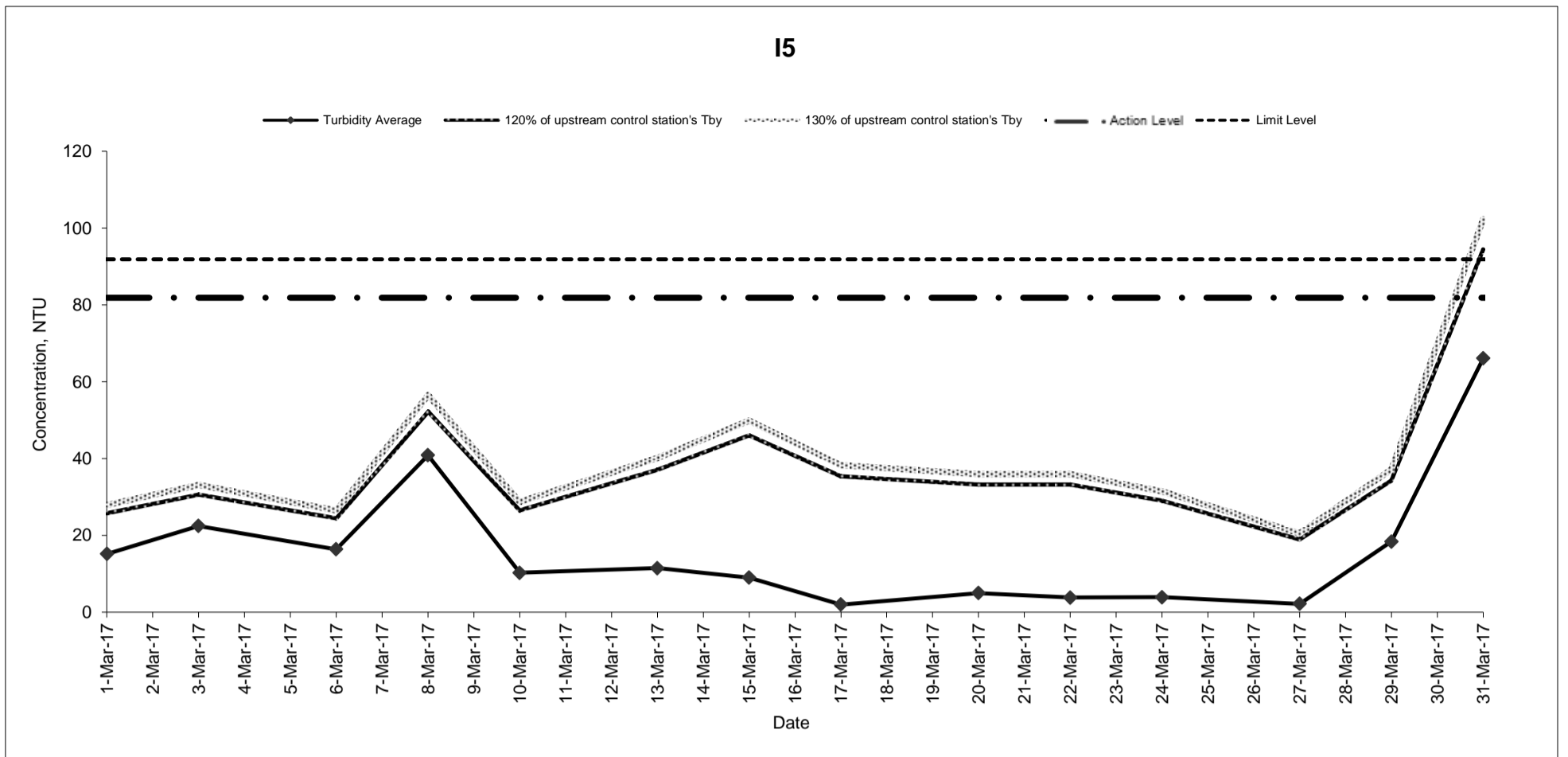
# Dissolved Oxygen



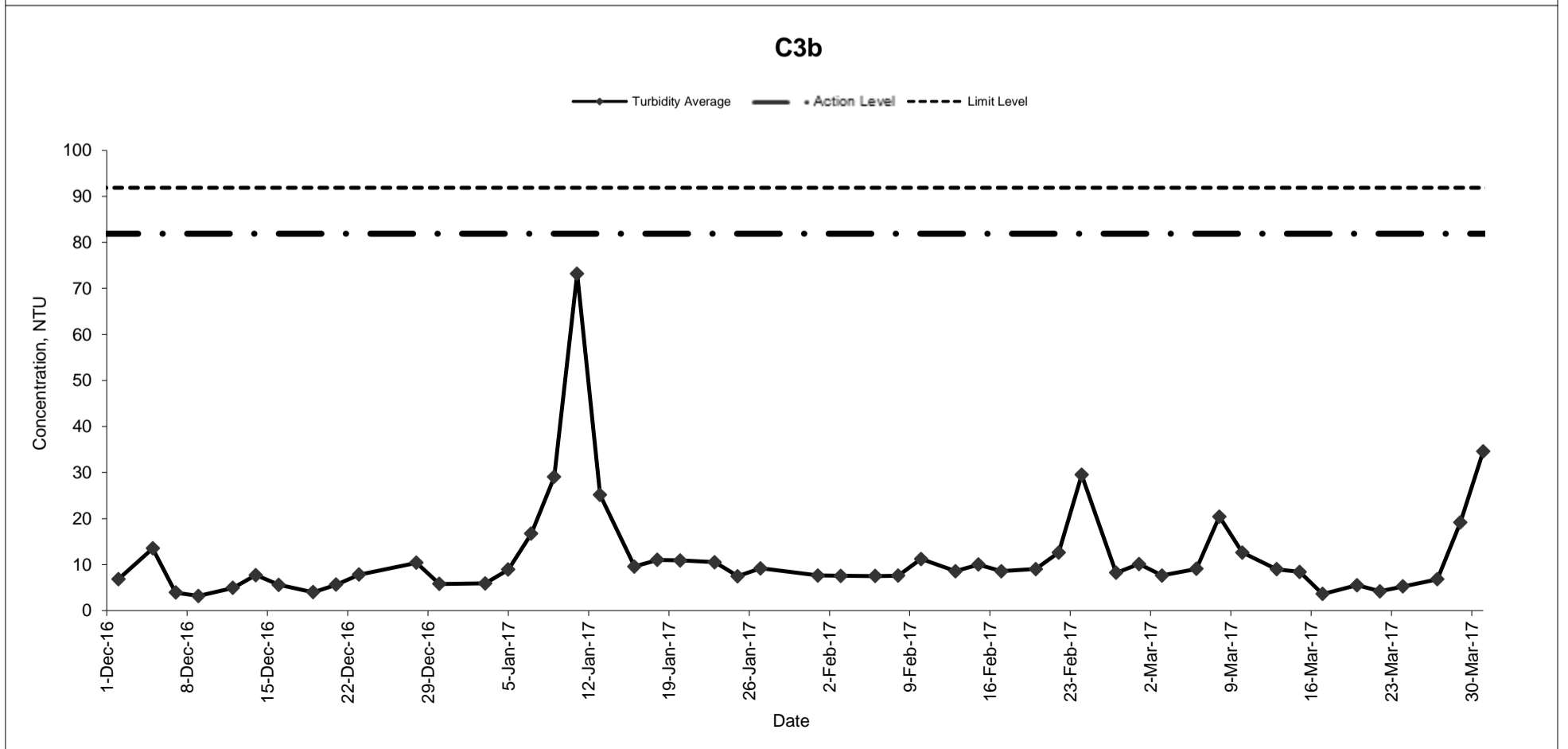
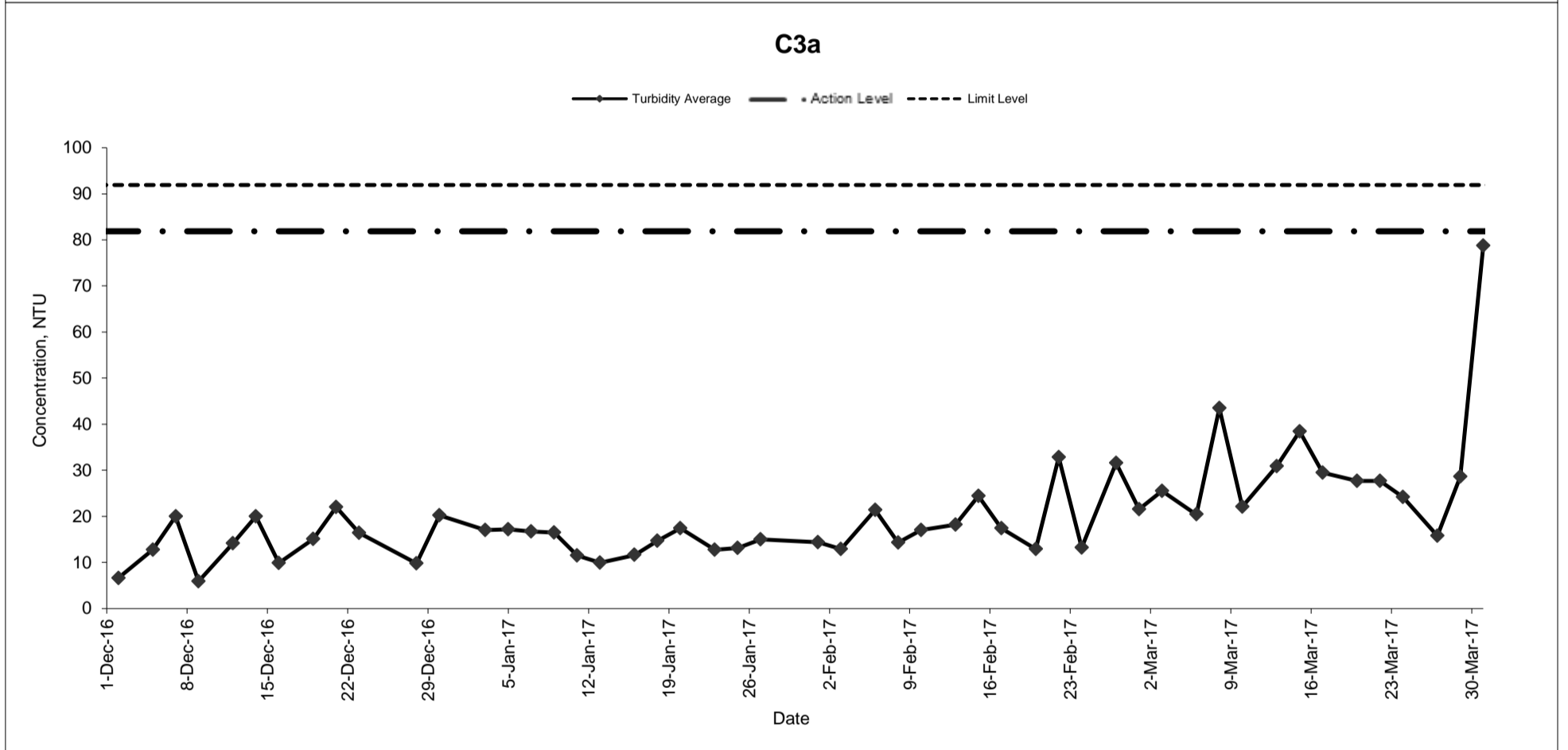
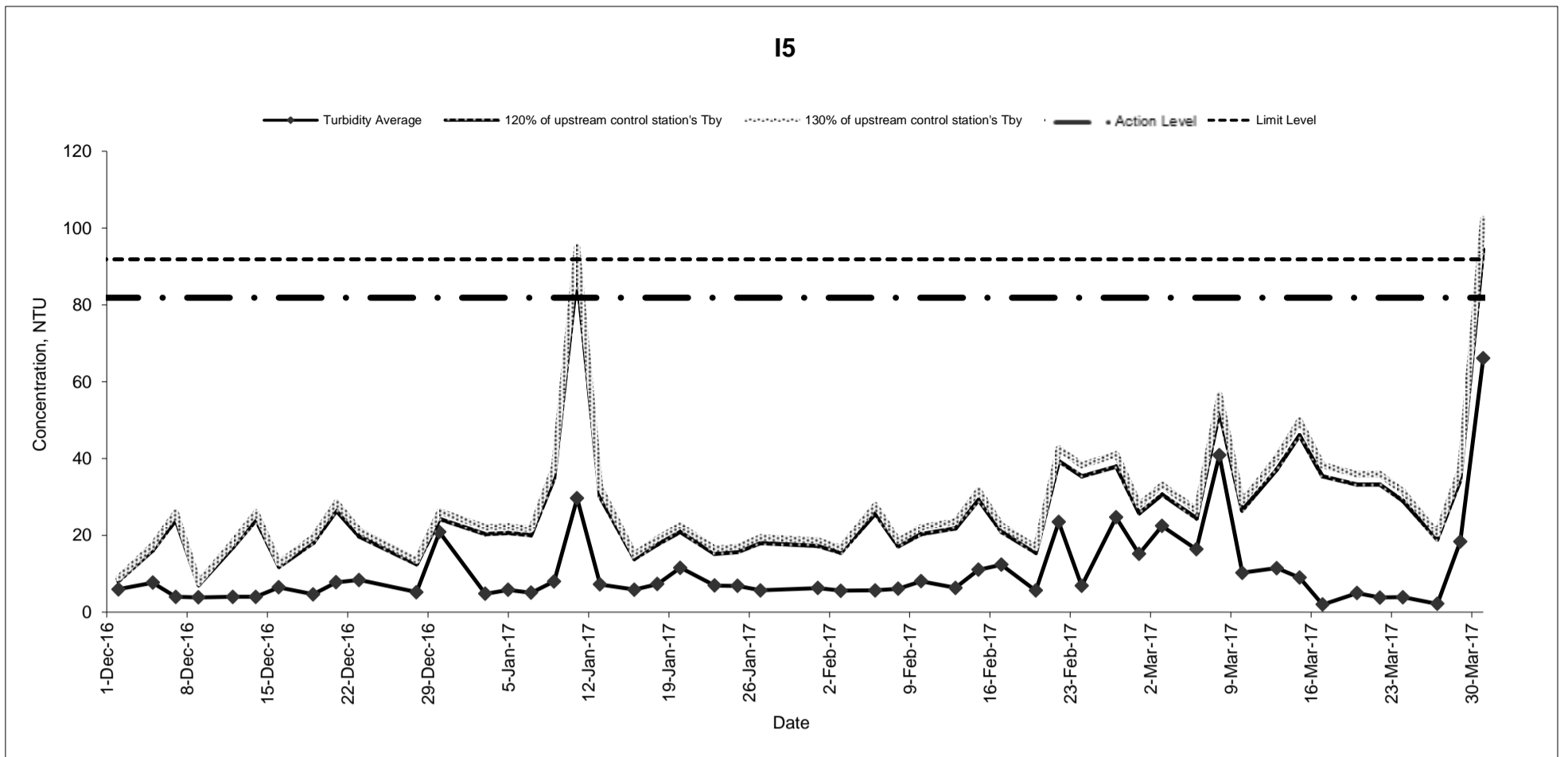
# Dissolved Oxygen (December 2016 - March 2017)



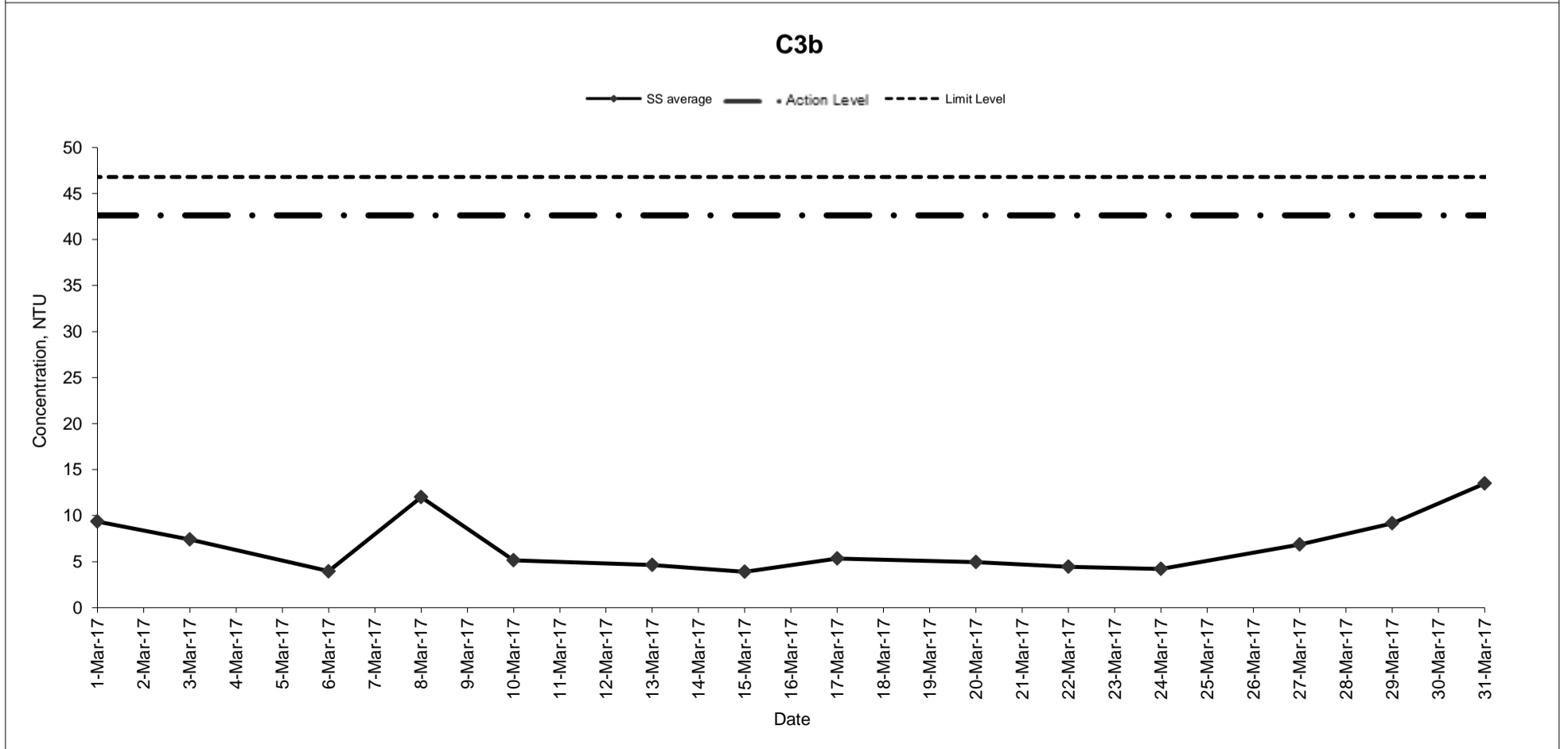
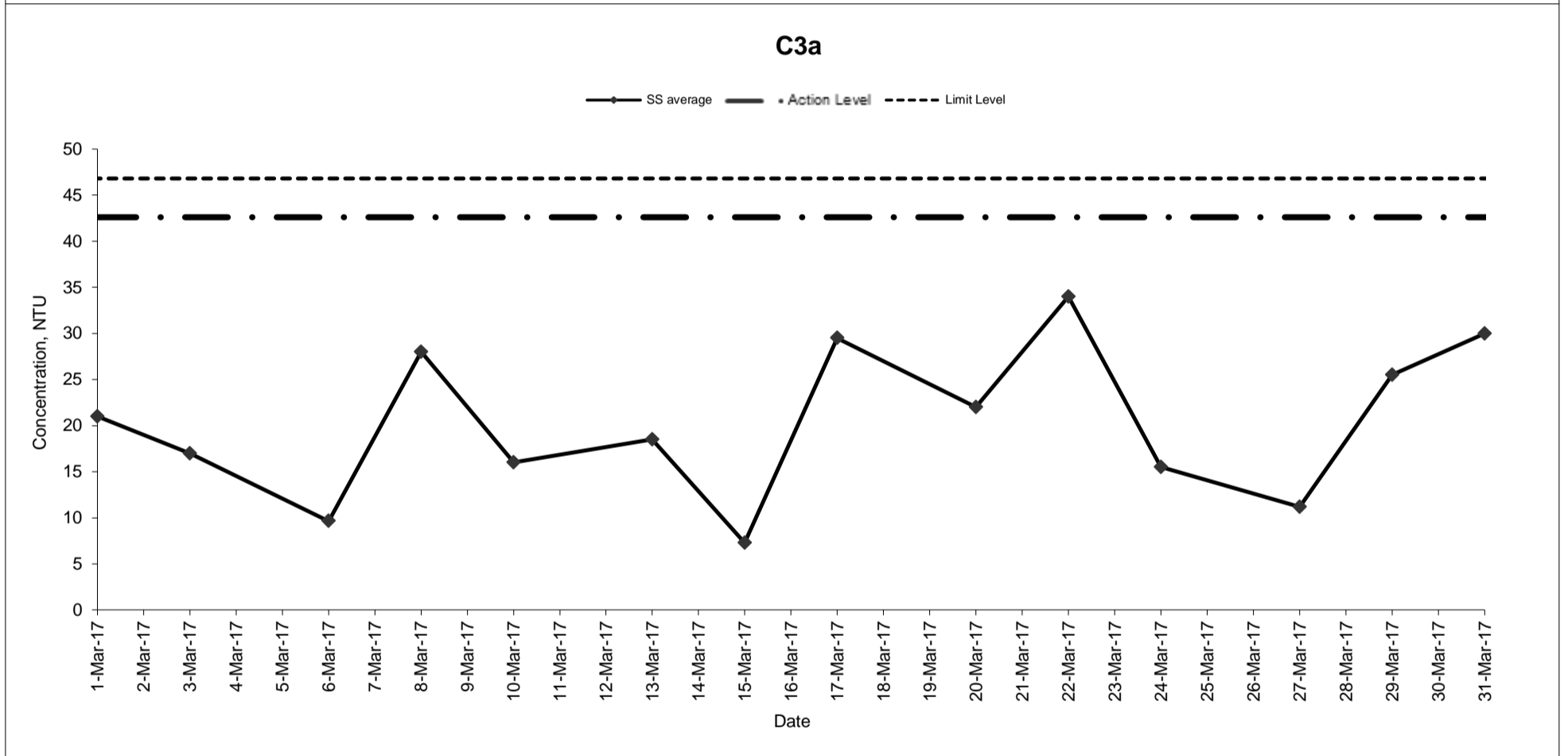
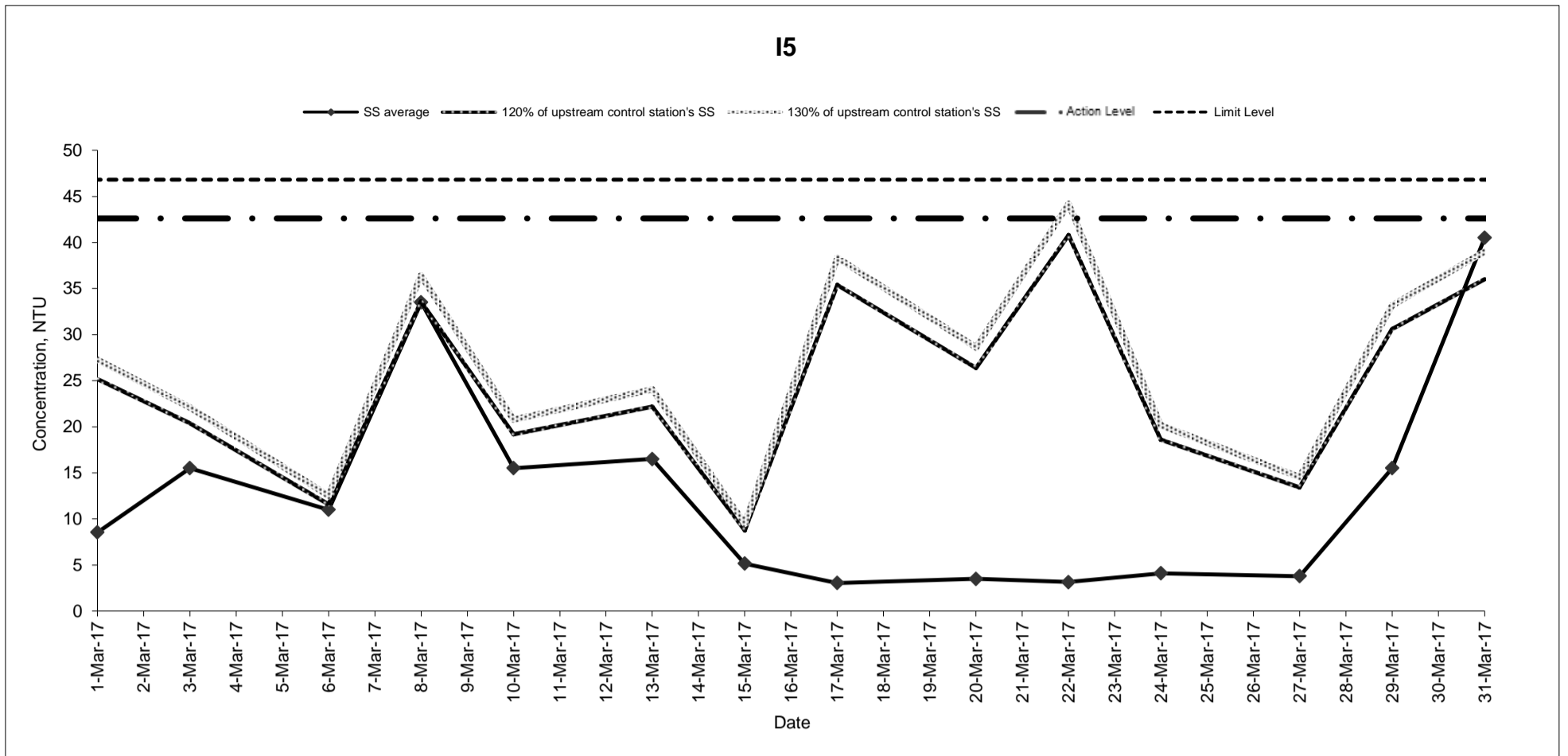
# Turbidity



## Turbidity (December 2016 - March 2017)



## Suspended Solid





## Suspended Solid (December 2016 - March 2017)

