

# **Appendix I 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 2/1/2014 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	10:59	<0.5	17.2	17.2	7.7	7.7	8.4	8.4	87.7	87.7	18.6	18.9	<0.1	<0.1	17	17.5
			17.2		7.7		8.4		87.7		19.2		<0.1		18	
			15.9		8		8.5		86.4		25.7		<0.1		21	
C3b	10:28	<0.5	15.9	15.9	8	8.0	8.6	8.6	87.2	86.8	25.7	25.9	<0.1	<0.1	22	21.5
			15.9		8		8.6		87.2		26.1		<0.1		22	
			15.9		7.5		8.1		81.8		31.8		<0.1		9	
I5	10:44	<0.5	15.9	15.9	7.5	7.5	8.1	8.1	81.8	81.8	33.1	32.5	<0.1	<0.1	9	9
			15.9		7.5		8.1		81.8		33.1		<0.1		9	
			15.9		7.5		8.1		81.8		33.1		<0.1		9	

Date of Monitoring 4/1/2014 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	10:00	<0.5	16.4	16.4	7.7	7.7	8.5	8.5	86.7	86.7	36.1	36.2	<0.1	<0.1	18	19
			16.4		7.7		8.5		86.7		36.2		<0.1		20	
			16.8		8		8.8		90.4		33.4		<0.1		6	
C3b	10:18	<0.5	16.8	16.8	8	8.0	8.8	8.8	90.4	90.4	33.4	34.8	<0.1	<0.1	6	6
			16.8		8		8.8		90.4		36.1		<0.1		6	
			17.1		7.5		7.9		82.1		29.2		<0.1		5	
I5	10:29	<0.5	17.1	17.1	7.5	7.5	7.9	7.9	82.1	82.1	30.2	29.7	<0.1	<0.1	6	5.5
			17.1		7.5		7.9		82.1		30.2		<0.1		6	
			17.1		7.5		7.9		82.1		30.2		<0.1		6	

Date of Monitoring 6/1/2014 Weather : Fine

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	11:51	<0.5	18.7	18.7	7.6	7.6	7.1	7.1	75.8	75.8	26.1	25.6	<0.1	<0.1	22	21
			18.7		7.6		7.1		75.8		25.1		<0.1		20	
			18.1		8.1		8.2		86.7		15.4		<0.1		9	
C3b	12:19	<0.5	18.1	18.1	8.1	8.1	8.2	8.2	86.7	86.7	15.4	15.7	<0.1	<0.1	9	9
			18.1		8.1		8.2		86.7		15.9		<0.1		9	
			18.6		7.4		8.1		87.1		16.9		<0.1		8	
I5	12:33	<0.5	18.6	18.6	7.4	7.4	8.1	8.1	87.1	87.1	17.1	17.0	<0.1	<0.1	7	7.5
			18.6		7.4		8.1		87.1		17.1		<0.1		7	
			18.6		7.4		8.1		87.1		17.1		<0.1		7	

Date of Monitoring 8/1/2014 Weather : Fine

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	10:31	<0.5	20.2	20.2	7.6	7.6	7.9	7.9	86.8	86.8	41.8	41.5	<0.1	<0.1	36	35.5
			20.2		7.6		7.9		86.8		41.2		<0.1		35	
			20.4		8.1		7.8		86.3		41.6		<0.1		9	
C3b	9:55	<0.5	20.4	20.4	8.1	8.1	7.8	7.8	86.3	86.3	41.1	41.4	<0.1	<0.1	10	9.5
			20.4		8.1		7.8		86.3		41.1		<0.1		10	
			19.5		7.4		8.5		92.5		33.2		<0.1		7	
I5	10:13	<0.5	19.5	19.5	7.4	7.4	8.5	8.5	92.5	92.5	33.7	33.5	<0.1	<0.1	7	7
			19.5		7.4		8.5		92.5		33.7		<0.1		7	
			19.5		7.4		8.5		92.5		33.7		<0.1		7	

Date of Monitoring 10/1/2014 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	10:33	<0.5	17	17.0	7.7	7.7	7.6	7.6	78.4	78.4	25.5	25.5	<0.1	<0.1	14	14.5
			17		7.7		7.6		78.4		25.5		<0.1		15	
			16.6		8		8.6		88.1		16.8		<0.1		4	
C3b	10:05	<0.5	16.6	16.6	8	8.0	8.6	8.6	88.1	88.1	16.8	16.8	<0.1	<0.1	4	4
			16.6		8		8.6		88.1		16.8		<0.1		4	
			17		7.5		8.6		89		15.6		<0.1		7	
I5	10:16	<0.5	17	17.0	7.5	7.5	8.6	8.6	89	89.0	15.6	15.6	<0.1	<0.1	6	6.5
			17		7.5		8.6		89		15.6		<0.1		6	
			17		7.5		8.6		89		15.6		<0.1		6	

Date of Monitoring 13/1/2014 Weather : Fine

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	10:00	<0.5	14	14.0	7.1	7.1	10.3	10.3	99.8	99.8	17	17.5	<0.1	<0.1	4	4.5
			14		7.1		10.3		99.7		18		<0.1		5	
			14		7.8		10.0		97.3		18.1		<0.1		5	
C3b	10:17	<0.5	14	14.0	7.8	7.8	10.1	10.1	97.6	97.5	17.1	17.6	<0.1	<0.1	4	4.5
			14		7.8		10.1		97.6		17.1		<0.1		4	
			14.5		7.4		10.1		98.58		16		<0.1		3	
I5	9:40	<0.5	14.5	14.5	7.4	7.4	10.1	10.1	98.8	98.7	17.3	16.7	<0.1	<0.1	3	3
			14.5		7.4		10.1		98.8		17.3		<0.1		3	
			14.5		7.4		10.1		98.8		17.3		<0.1		3	

Date of Monitoring 15/1/2014 Weather : Fine

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	14:01	<0.5	20.4	20.4	7.1	7.1	7.5	7.6	82.8	84.2	16.9	17.4	<0.1	<0.1	7	7
			20.4		7.1		7.7		85.6		17.8		<0.1		7	
			18.5		7.8		8.5		90.7		20.8		<0.1		5	
C3b	13:46	<0.5	18.5	18.5	7.8	7.8	8.6	8.6	92	91.4	22.9	21.9	<0.1	<0.1	6	5.5
			18.5		7.8		8.6		92		22.9		<0.1		6	
			20		7.4		8.0		87.5		21.7		<0.1		10	
I5	13:30	<0.5	20	20.0	7.4	7.4	7.5	7.8	82.5	85.0	22.5	22.1	<0.1	<0.1	12	11
			20		7.4		7.5		82.5		22.5		<0.1		12	
			20		7.4		7.5		82.5		22.5		<0.1		12	

Date of Monitoring 17/1/2014 Weather : Fine

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	13:03	<0.5	19.5	19.5	7.7	7.7	7.9	7.8	85.6	84.9	25.6	25.4	<0.1	<0.1	9	9.5
			19.5		7.7		7.7		84.1		25.2		<0.1		10	
			19.5		8		8.4		91.1		21.2		<0.1		4	
C3b	13:41	<0.5	19.5	19.5	8	8.0	8.4	8.4	91.1	91.1	20.3	20.8	<0.1	<0.1	3	3.5
			19.5		8		8.4		91.1		20.3		<0.1		3	
			18.8		7.5		7.6		81.9		19		<0.1		7	
I5	13:27	<0.5	18.8	18.8	7.5	7.5	7.6	7.6	81.9	81.9	19.5	19.3	<0.1	<0.1	7	7
			18.8		7.5		7.6		81.9		19.5		<0.1		7	
			18.8		7.5		7.6		81.9		19.5		<0.1		7	

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

Date of Monitoring 20/1/2014 Weather : Fine

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	14:07	<0.5	21	21.0	7.1	7.1	7.5	7.5	84	84.0	22.8	22.7	<0.1	<0.1	9	9
			21		7.1		7.5		84		22.5		<0.1		9	
C3b	13:56	<0.5	19.9	19.9	7.8	7.8	7.3	7.3	80.3	80.3	12.7	12.8	<0.1	<0.1	5	5
			19.9		7.8		7.3		80.3		12.8		<0.1		5	
I5	13:53	<0.5	20.8	20.8	7.4	7.4	7.9	7.9	87.9	87.9	14.1	14.0	<0.1	<0.1	6	6
			20.8		7.4		7.9		87.9		13.8		<0.1		6	

Date of Monitoring 22/1/2014 Weather : Fine

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	14:01	<0.5	19.3	19.3	7.7	7.7	8.7	8.7	94.2	94.2	22.9	22.3	<0.1	<0.1	6	6
			19.3		7.7		8.7		94.2		21.6		<0.1		6	
C3b	13:41	<0.5	18.1	18.1	8	8.0	8.4	8.4	89.4	89.4	23.8	23.5	<0.1	<0.1	6	6.5
			18.1		8		8.4		89.4		23.1		<0.1		7	
I5	13:33	<0.5	19.7	19.7	7.5	7.5	7.9	7.9	86.4	86.4	13.4	13.6	<0.1	<0.1	6	5.5
			19.7		7.5		7.9		86.4		13.7		<0.1		5	

Date of Monitoring 24/1/2014 Weather : Fine

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	14:28	<0.5	21.5	21.5	7.7	7.7	7.2	7.2	81.7	81.7	15.7	15.9	<0.1	<0.1	4	4
			21.5		7.7		7.2		81.7		16		<0.1		4	
C3b	13:49	<0.5	19.8	19.8	8	8.0	8.2	8.2	89.8	89.8	28.8	29.4	<0.1	<0.1	7	6
			19.8		8		8.2		89.8		29.9		<0.1		5	
I5	13:33	<0.5	20.8	20.8	7.5	7.5	8.0	8.0	89	89.0	31	30.4	<0.1	<0.1	10	9.5
			20.8		7.5		8.0		89		29.7		<0.1		9	

Date of Monitoring 27/1/2014 Weather : Fine

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	14:55	<0.5	21.1	21.1	7.7	7.7	7.4	7.4	83.8	83.8	22.1	22.2	<0.1	<0.1	7	6.5
			21.1		7.7		7.4		83.8		22.2		<0.1		6	
C3b	14:31	<0.5	20.9	20.9	8	8.0	7.4	7.4	82.7	82.7	26.1	26.1	<0.1	<0.1	9	9.5
			20.9		8		7.4		82.7		26		<0.1		10	
I5	14:11	<0.5	22.1	22.1	7.5	7.5	7.9	7.9	90.9	90.9	14.2	14.2	<0.1	<0.1	8	8
			22.1		7.5		7.9		90.9		14.1		<0.1		8	

Date of Monitoring 29/1/2014 Weather : Fine

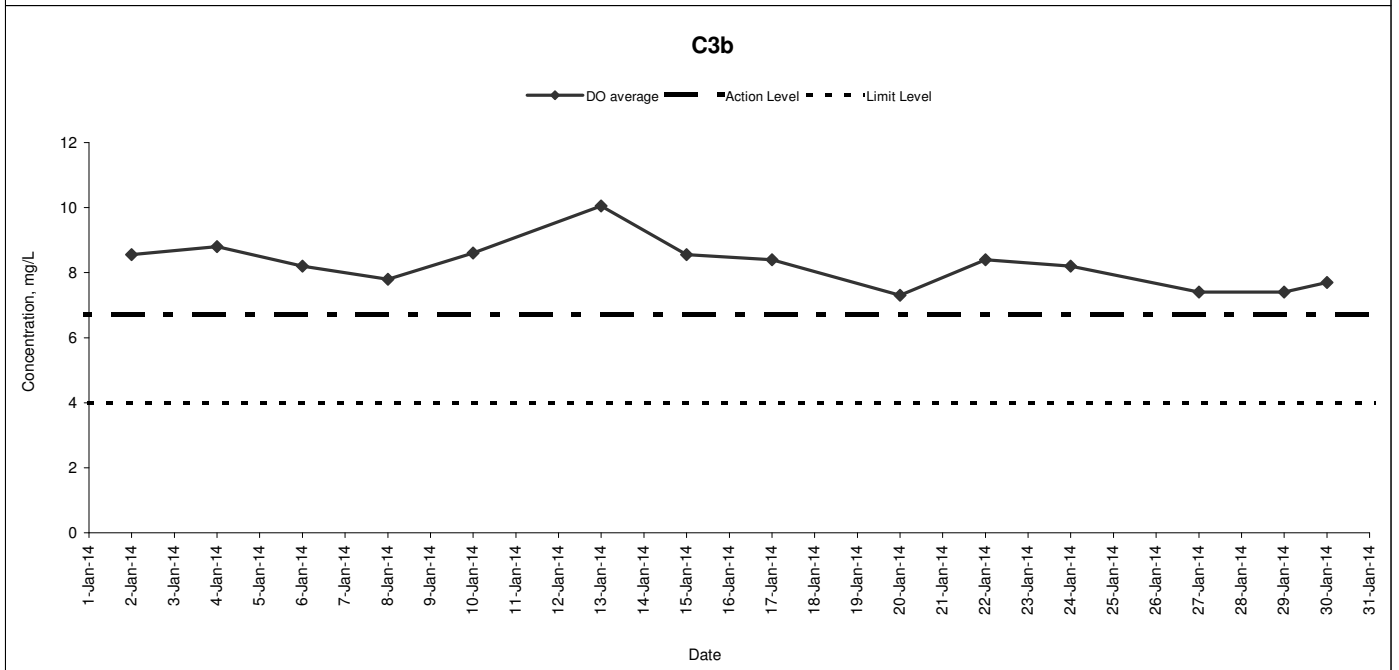
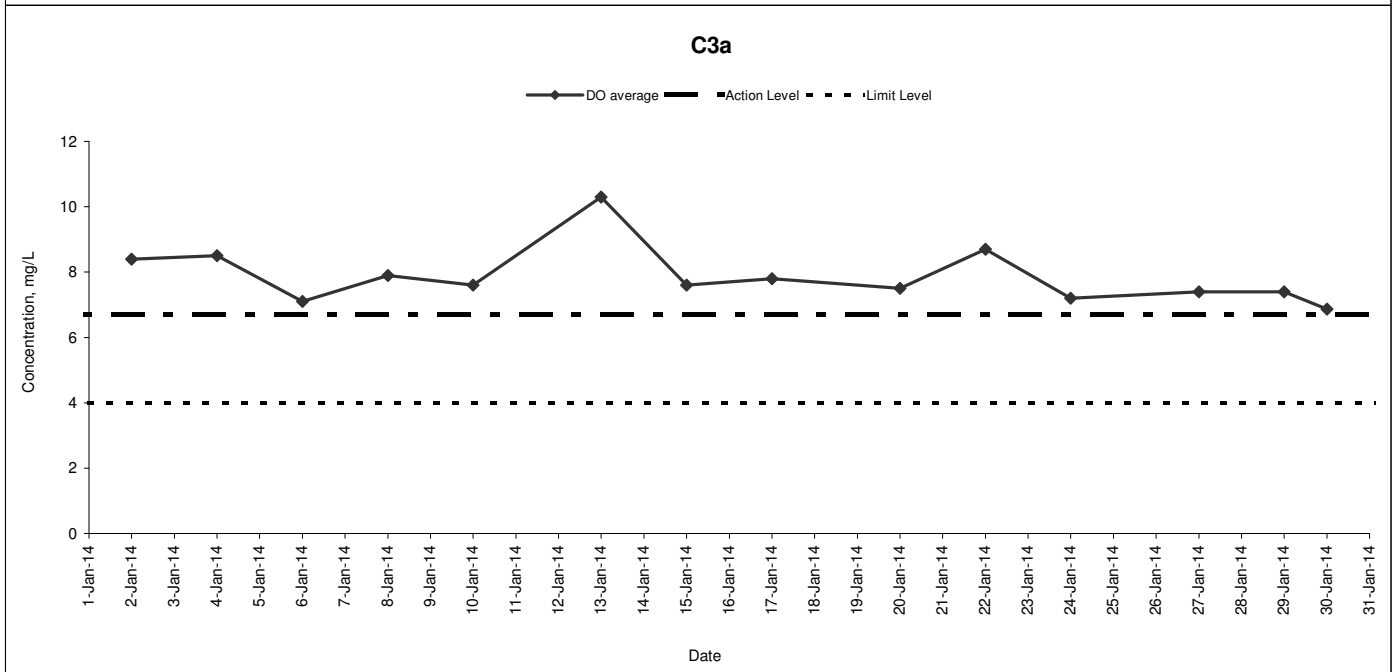
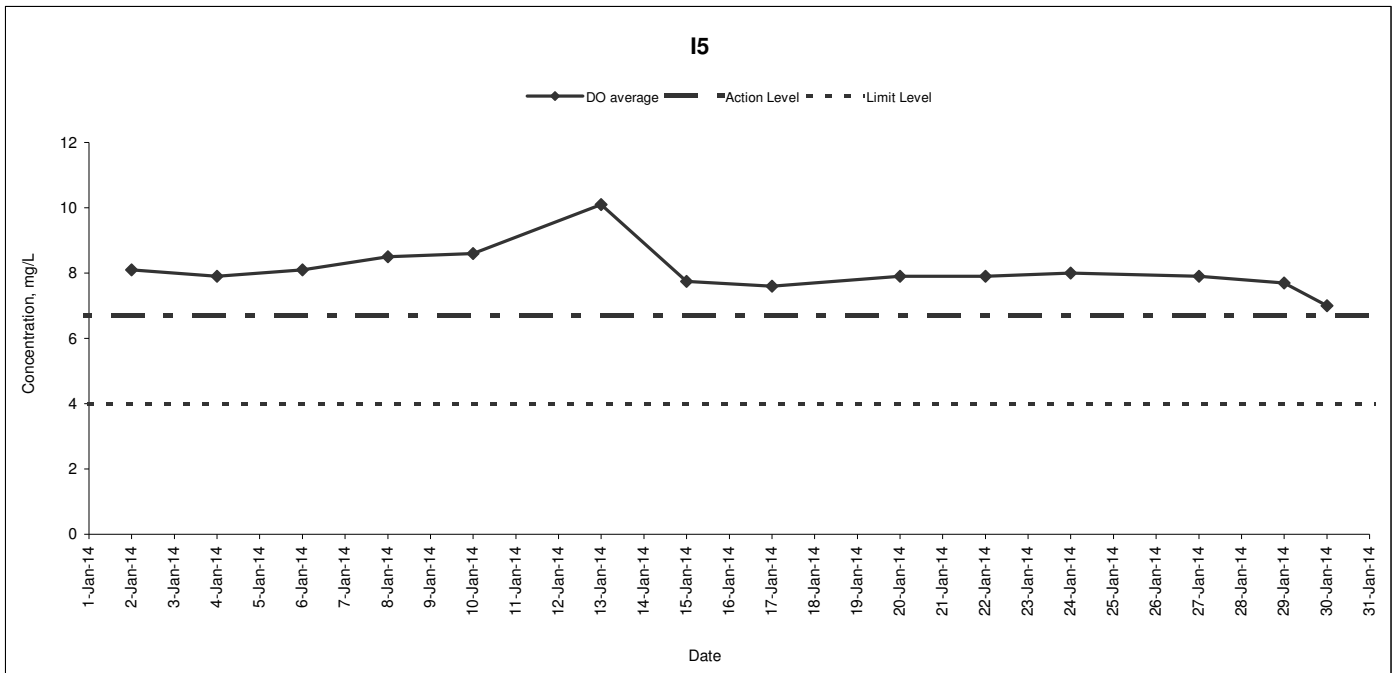
Monitoring Location	Time	Water Depth (m)	Temperature (oC)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	14:40	<0.5	23	23.0	7.7	7.7	7.4	7.4	86.3	86.3	24	23.8	<0.1	<0.1	3	3
			23		7.7		7.4		86.3		23.5		<0.1		3	
C3b	14:19	<0.5	21.9	21.9	8	8.0	7.4	7.4	84.4	84.4	22.7	22.7	<0.1	<0.1	4	4
			21.9		8		7.4		84.4		22.6		<0.1		4	
I5	14:32	<0.5	23.1	23.1	7.5	7.5	7.7	7.7	90.2	90.2	22.3	22.7	<0.1	<0.1	4	4.5
			23		7.5		7.7		90.2		23.1		<0.1		5	

Date of Monitoring 30/1/2014 Weather : Fine

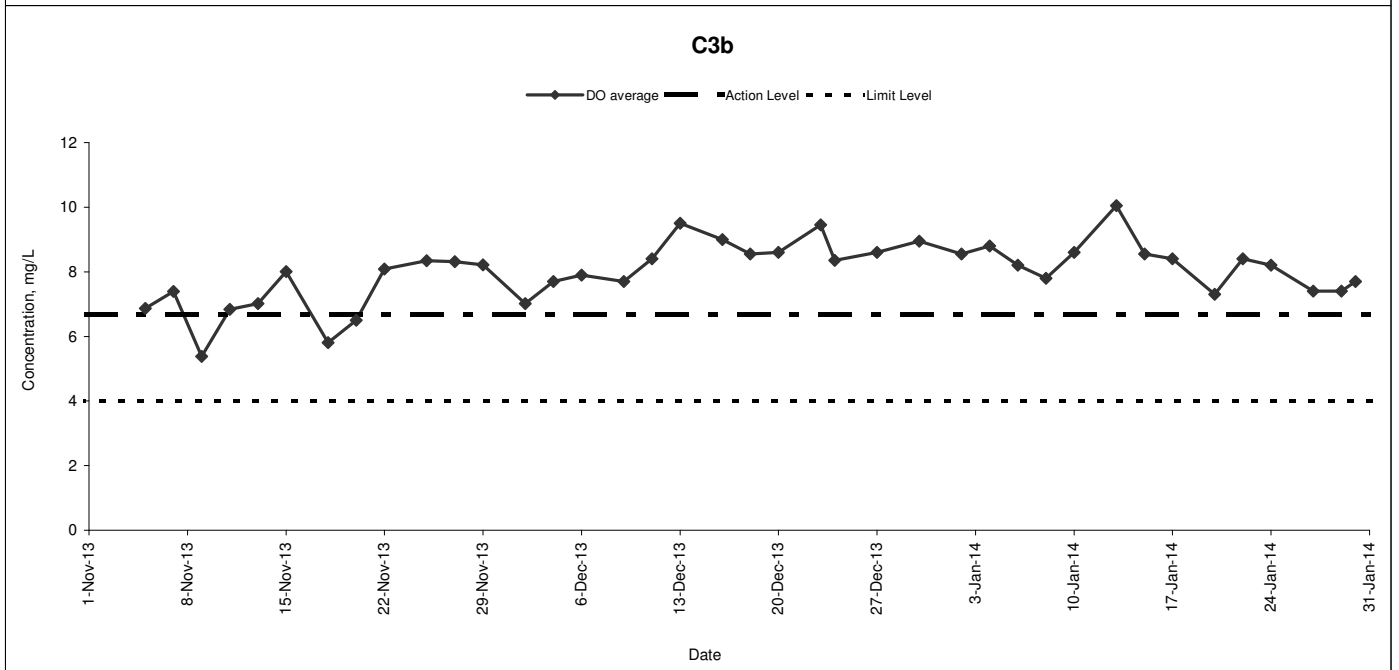
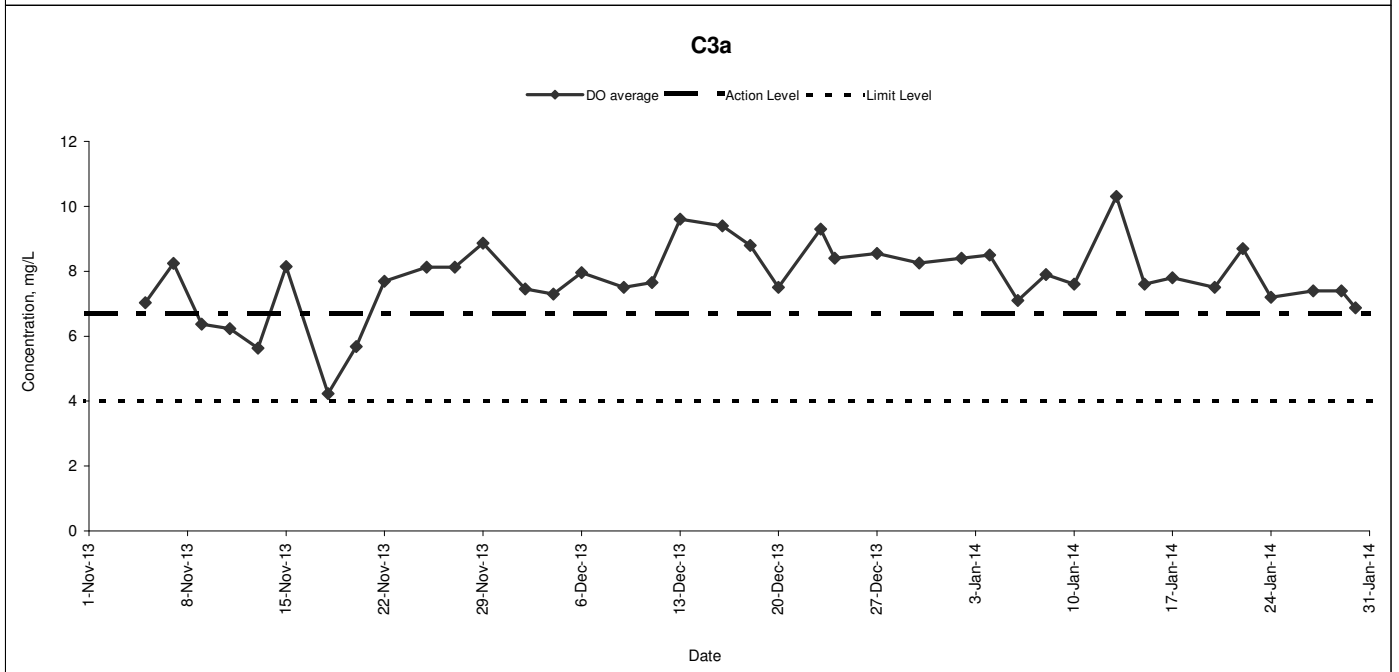
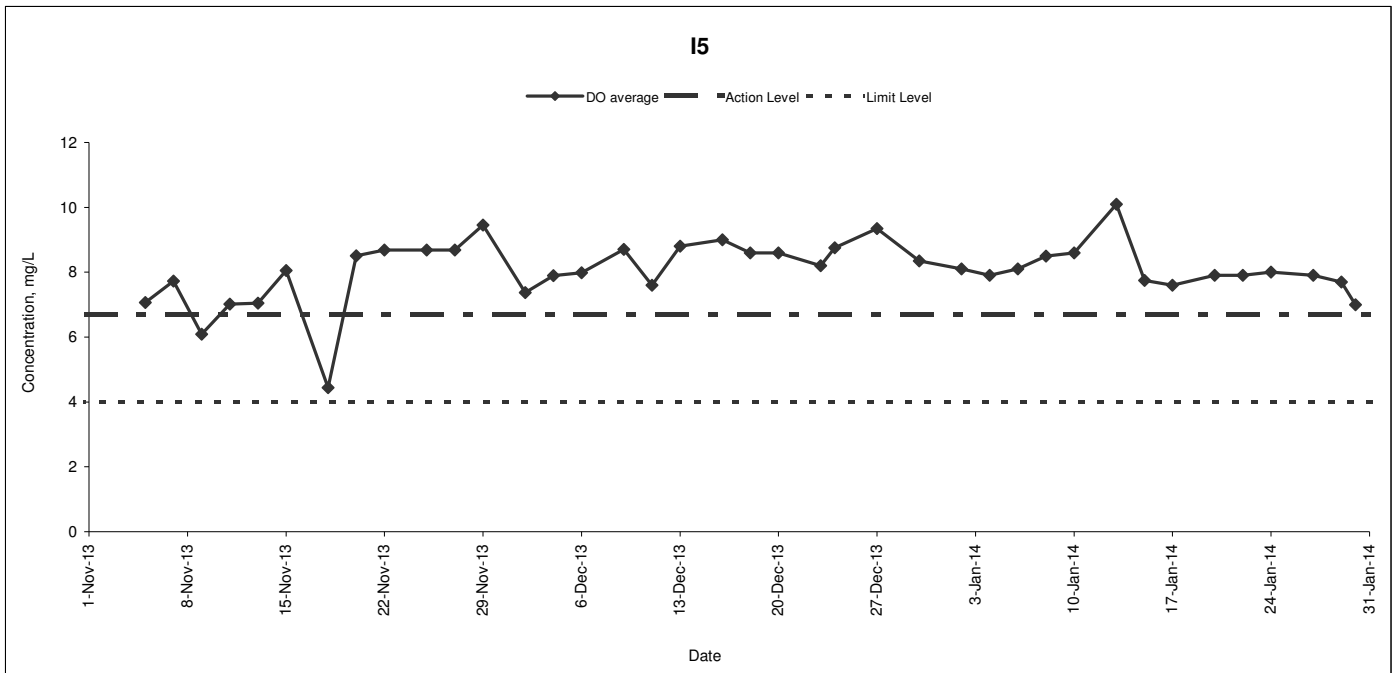
Monitoring Location	Time	Water Depth (m)	Temperature (oC)		pH		DO (mg/L)		DO (% saturation)		Turbidity (NTU)		Salinity (g/L)		SS (mg/L)	
			Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
C3a	14:35	<0.5	23.1	23.1	7.7	7.7	6.9	6.9	81.3	81.3	29.9	29.5	<0.1	<0.1	5	5
			23.1		7.7		6.9		81.3		29		<0.1		5	
C3b	14:03	<0.5	22.9	22.9	8	8.0	7.5	7.7	87.9	89.9	22.7	22.8	<0.1	<0.1	5	4.5
			22.9		8		7.9		87.9		22.9		<0.1		4	
I5	14:17	<0.5	23.9	23.9	7.5	7.5	7.0	7.0	82.8	82.8	24.8	24.9	<0.1	<0.1	6	6
			23.9		7.5		7.0		82.8		24.9		<0.1		6	

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

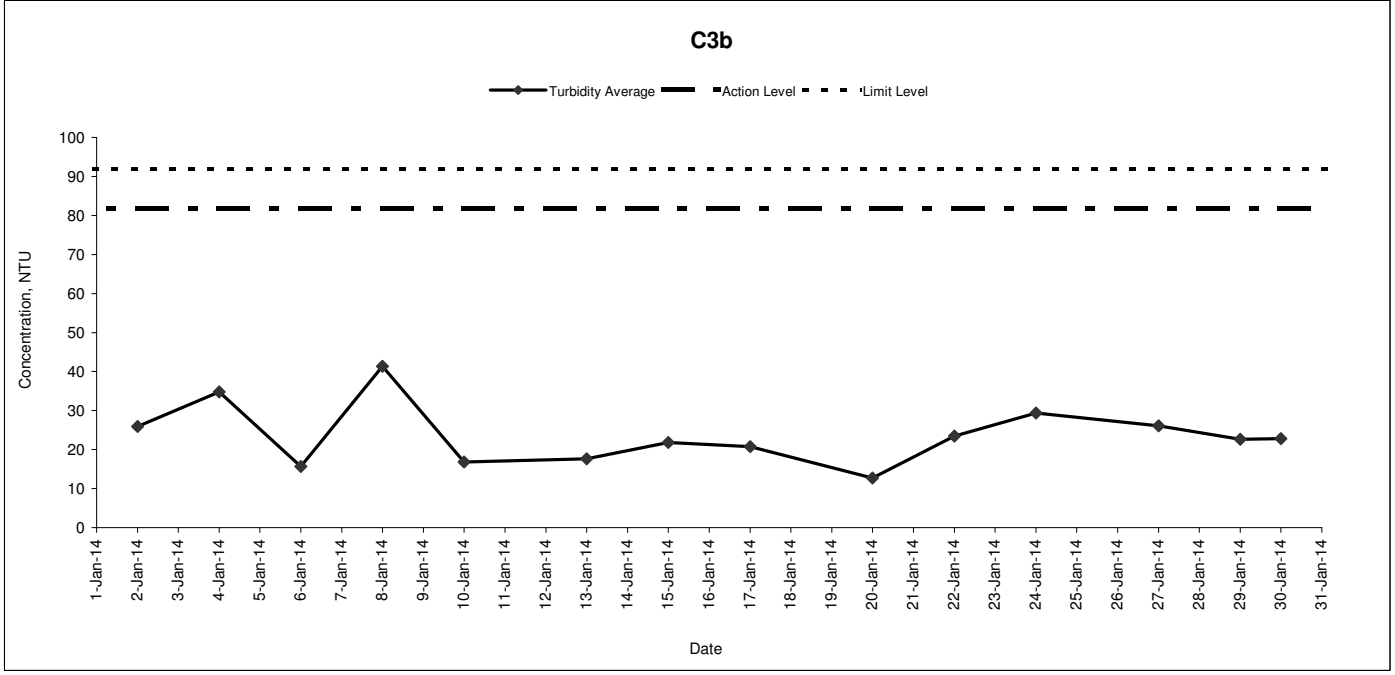
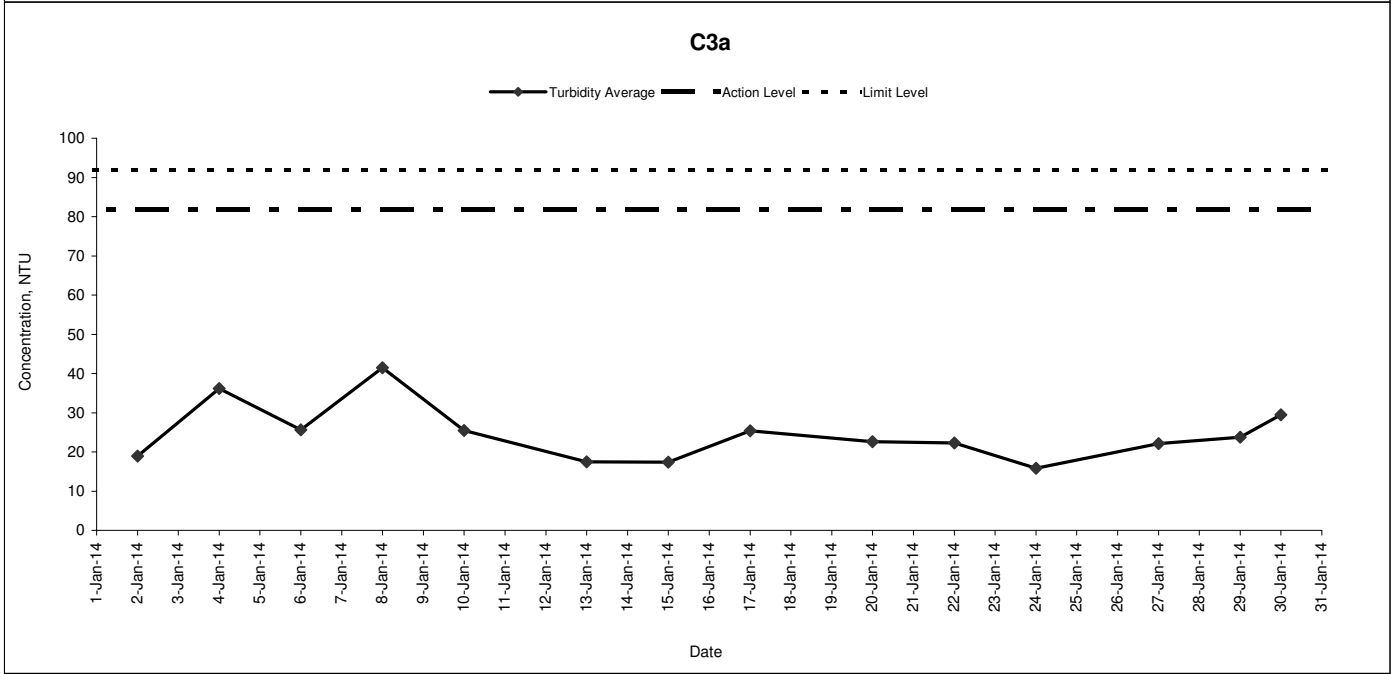
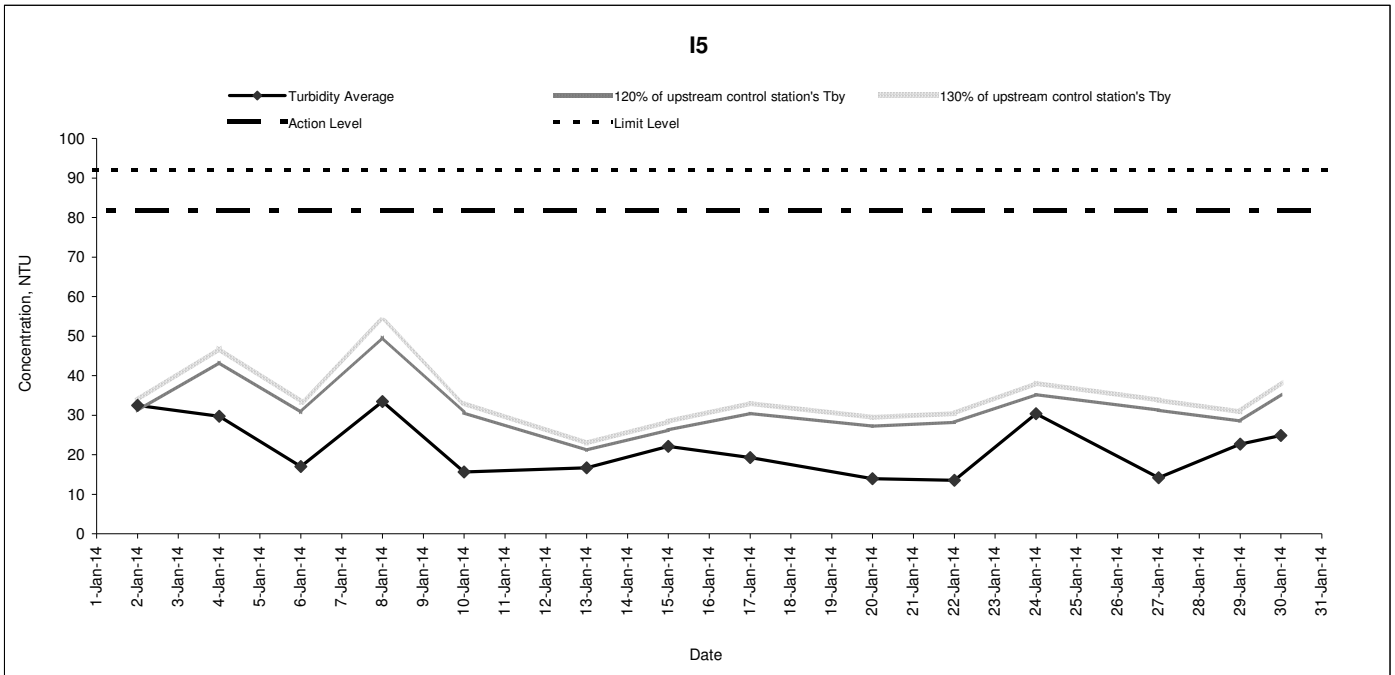
# Dissolved Oxygen



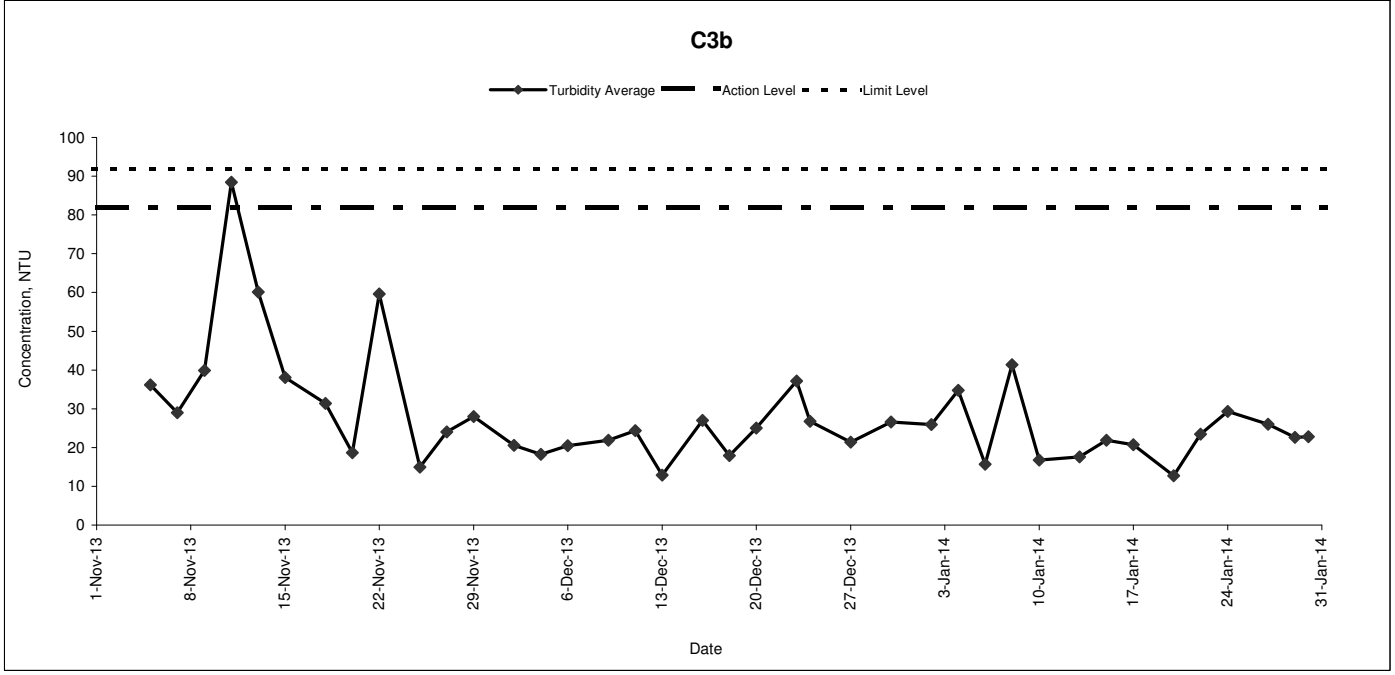
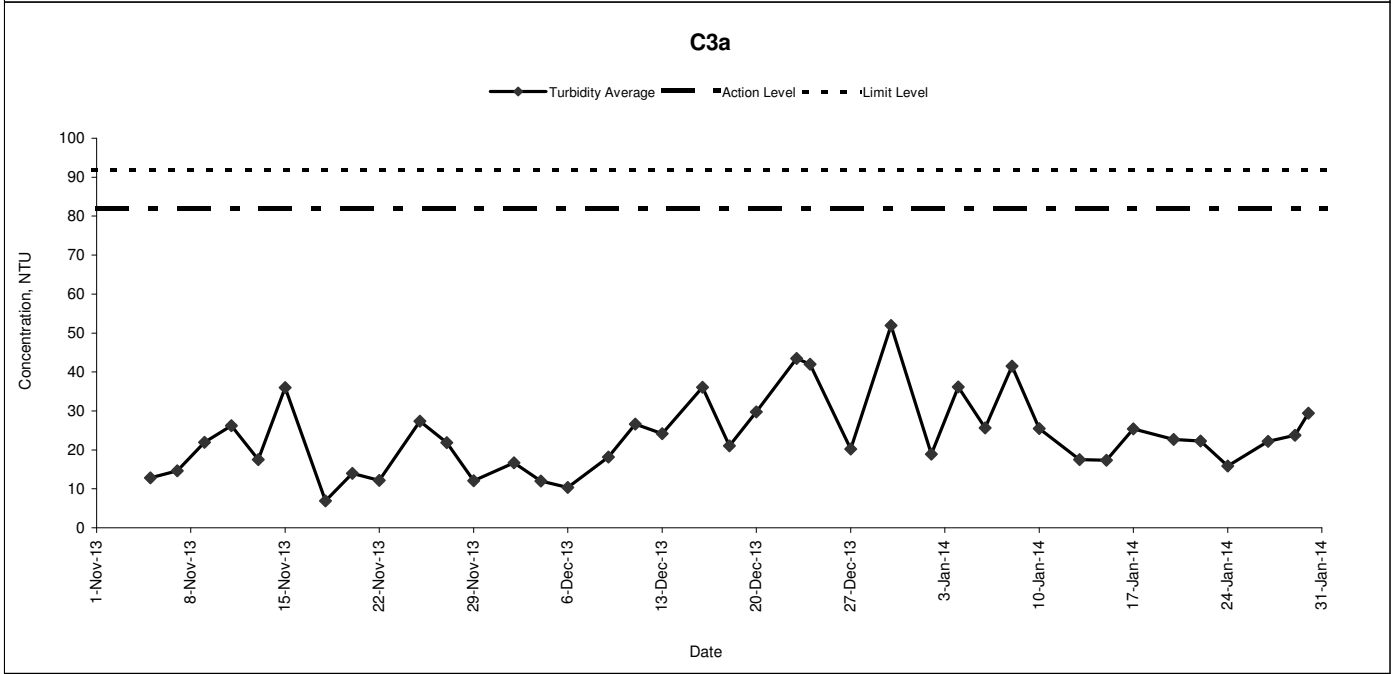
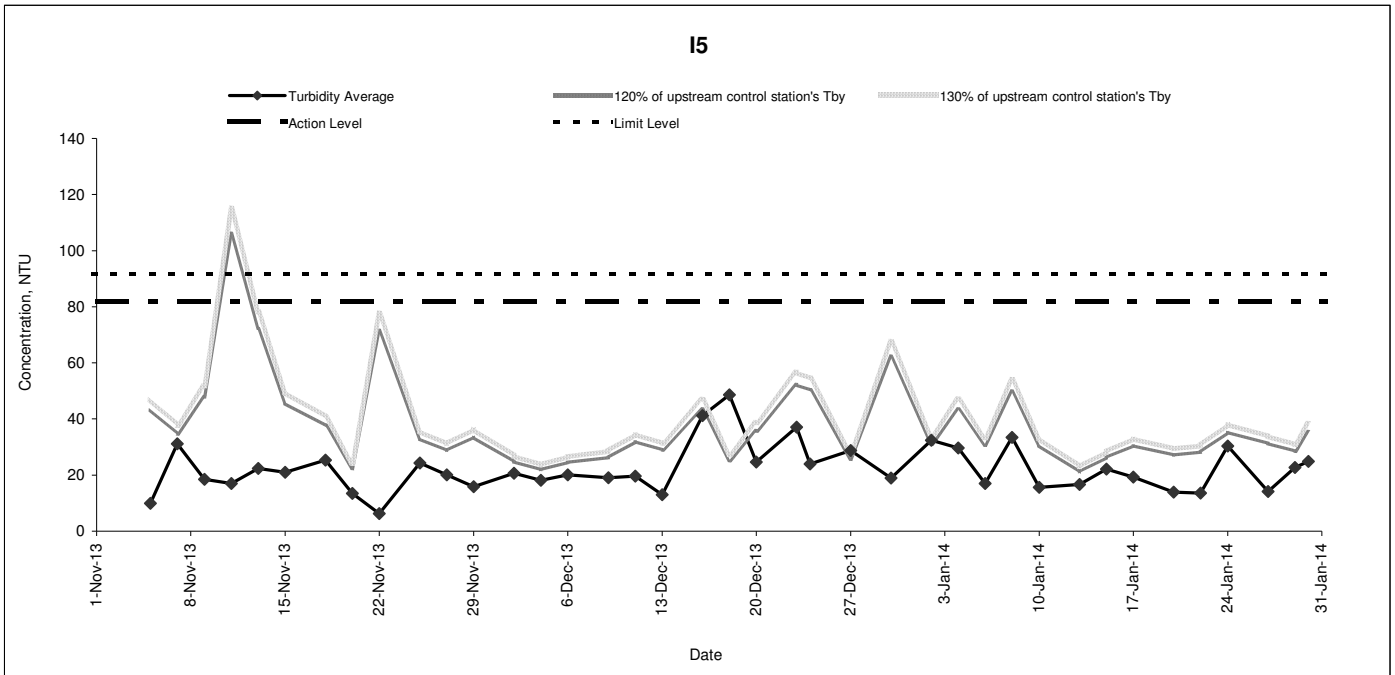
# Dissolved Oxygen (November 2013 - January 2014)



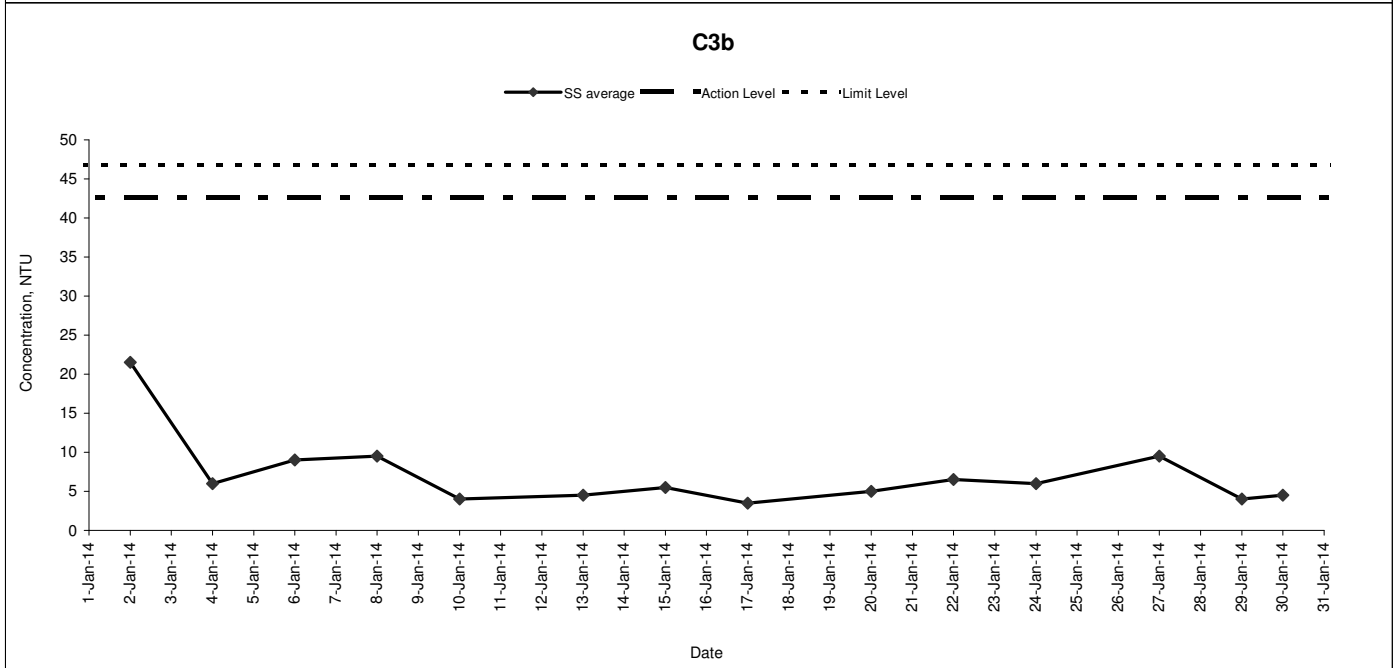
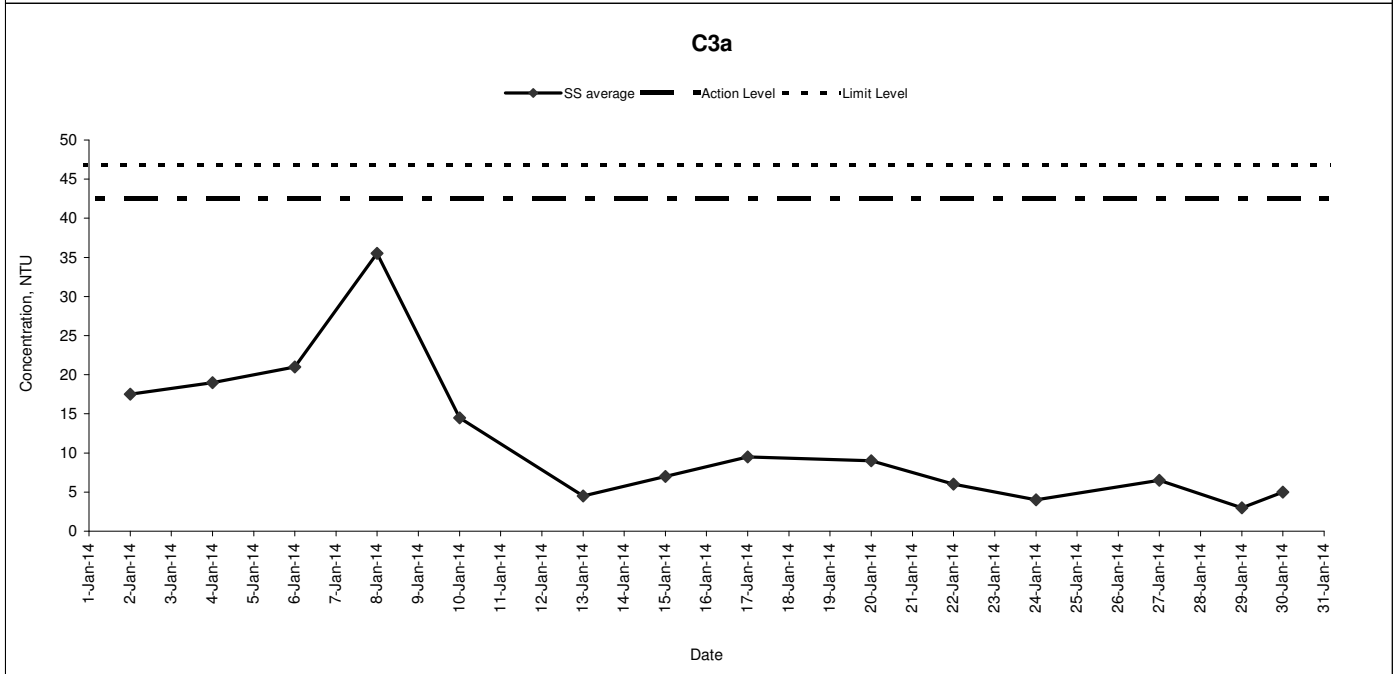
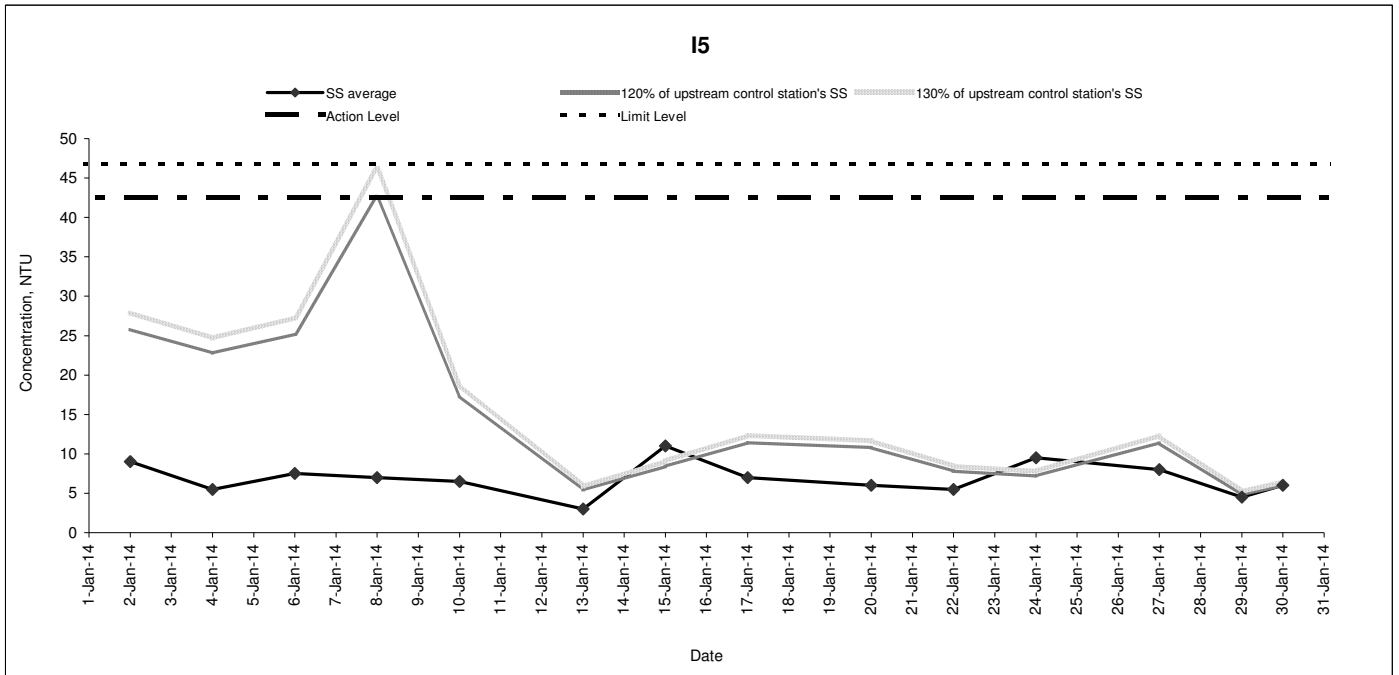
# Turbidity



# Turbidity (November 2013 - January 2014)



# Suspended Solid





## Suspended Solid (November 2013 - January 2014)

