Mott MacDonald

Appendix B8

Ambient SS, DO, TIN and UIA Levels at EPD's Water Quality Monitoring Stations

Station	Dry Season		Wet Season	
VM1, 2 and 4	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	3.4	2.7	5.2	3.8
90 percentile (ambient level)	5.2	4.6	7.1	5.6
30% increase above the ambient level	1.5	1.4	2.1	1.7

Station	Dry Season		Wet Season	
JM3, JM4	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	2.9	2.2	4.0	3.3
90 percentile (ambient level)	4.8	3.8	4.9	4.6
30% increase above the ambient level	1.5	1.1	1.5	1.4

Station	Dry Season		Wet Season	
EM2	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	3.0	2.4	4.2	2.7
90 percentile (ambient level)	4.4	3.5	8.1	4.4
30% increase above the ambient level	1.3	1.1	2.4	1.3

Station	Dry Season		Wet Season	
VM8, WM1, WM2	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	5.4	4.4	5.9	3.3
90 percentile (ambient level)	8.0	7.2	9.6	5.4
30% increase above the ambient level	2.4	2.2	2.9	1.6

Station	Dry Season		Wet Season	
WM4	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	6.5	5.4	6.3	3.3
90 percentile (ambient level)	10.6	9.9	8.3	4.3
30% increase above the ambient level	3.2	3.0	2.5	1.3

Station	Dry Season		Wet Season	
VM1	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	3.2	2.5	6.7	3.4
90 percentile (ambient level)	5.2	3.6	7.9	4.8
30% increase above the ambient level	1.5	1.1	2.4	1.4

Station	Dry Season		Wet Season	
VM2	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	3.1	2.5	4.1	3.9
90 percentile (ambient level)	4.5	4.4	4.9	5.3
30% increase above the ambient level	1.3	1.3	1.5	1.6

Station	Dry Season		Wet Season	
VM4	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	3.8	3.0	4.8	4.2
90 percentile (ambient level)	4.8	5.0	6.3	6.6
30% increase above the ambient level	1.5	1.5	1.9	2.0

Station	Dry Season		Wet Season	
JM3	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	2.9	2.3	3.5	3.1
90 percentile (ambient level)	4.7	3.8	4.9	4.6
30% increase above the ambient level	1.4	1.1	1.5	1.4

Station	Dry Season		Wet Season	
JM4	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	2.9	2.0	4.4	3.5
90 percentile (ambient level)	4.9	3.2	5.3	4.6
30% increase above the ambient level	1.5	1.0	1.6	1.4

Station	Dry Season		Wet Season	
VM8	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	6.3	5.7	5.2	3.4
90 percentile (ambient level)	8.6	7.8	9.5	6.8
30% increase above the ambient level	2.6	2.3	2.9	2.0

Station	Dry Season		Wet Season	
WM1	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	5.0	3.7	7.0	3.6
90 percentile (ambient level)	7.3	5.5	9.9	5.5
30% increase above the ambient level	2.2	1.6	3.0	1.7

Station	Dry Season		Wet Season	
WM2	**Depth-averaged**	**Surface**	**Depth-averaged**	**Surface**
Average SS (mg/L)	5.0	3.8	5.4	3.1
90 percentile (ambient level)	6.4	5.0	7.8	4.6
30% increase above the ambient level	1.9	1.5	2.3	1.4

2007-2008	Dry Season		Wet Season	
VM1, 2 and 4	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.3	5.3	3.3	2.7
Total Inorganic Nitrogen (mg/L)	0.22	-	0.32	-
Unionised Ammonia (mg/L)	0.004	-	0.006	-

2007-2008	Dry Season		Wet Season	
JM3, JM4	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.6	5.8	4.4	3.6
Total Inorganic Nitrogen (mg/L)	0.17	-	0.18	-
Unionised Ammonia (mg/L)	0.003	-	0.004	-

2007-2008	Dry Season		Wet Season	
EM2	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.9	6.1	4.5	3.6
Total Inorganic Nitrogen (mg/L)	0.14	-	0.17	-
Unionised Ammonia (mg/L)	0.002	-	0.003	-

2007-2008	Dry Season		Wet Season	
VM8, WM1, WM2	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.6	5.7	4.0	2.5
Total Inorganic Nitrogen (mg/L)	0.25	-	0.35	-
Unionised Ammonia (mg/L)	0.004	-	0.006	-

2007-2008	Dry Season		Wet Season	
VM1	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.7	6.0	3.3	2.9
Total Inorganic Nitrogen (mg/L)	0.19	-	0.24	-
Unionised Ammonia (mg/L)	0.003	-	0.004	-

2007-2008	Dry Season		Wet Season	
VM2	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.5	5.6	3.6	2.7
Total Inorganic Nitrogen (mg/L)	0.22	-	0.34	-
Unionised Ammonia (mg/L)	0.004	-	0.007	-

2007-2008	Dry Season		Wet Season	
VM4	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.2	5.2	3.9	2.3
Total Inorganic Nitrogen (mg/L)	0.25	-	0.38	-
Unionised Ammonia (mg/L)	0.004	-	0.007	-

2007-2008	Dry Season		Wet Season	
JM3	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.8	5.9	4.7	3.9
Total Inorganic Nitrogen (mg/L)	0.17	-	0.20	-
Unionised Ammonia (mg/L)	0.003	-	0.005	-

2007-2008	Dry Season		Wet Season	
JM4	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.5	5.8	4.0	3.6
Total Inorganic Nitrogen (mg/L)	0.17	-	0.17	-
Unionised Ammonia (mg/L)	0.003	-	0.004	-

2007-2008	Dry Season		Wet Season	
VM8	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.5	5.5	4.0	3.3
Total Inorganic Nitrogen (mg/L)	0.30	-	0.43	-
Unionised Ammonia (mg/L)	0.005	-	0.009	-

2007-2008	Dry Season		Wet Season	
WM1	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.9	6.0	3.9	2.5
Total Inorganic Nitrogen (mg/L)	0.17	-	0.22	-
Unionised Ammonia (mg/L)	0.002	-	0.003	-

2007-2008	Dry Season		Wet Season	
WM2	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.6	5.7	4.3	3.2
Total Inorganic Nitrogen (mg/L)	0.27	-	0.41	-
Unionised Ammonia (mg/L)	0.004	-	0.006	-

2007-2008	Dry Season		Wet Season	
WM4	**Depth-averaged**	**Bottom**	**Depth-averaged**	**Bottom**
Dissolved Oxygen (mg/L)	5.5	5.7	3.6	2.7
Total Inorganic Nitrogen (mg/L)	0.29	-	0.37	-
Unionised Ammonia (mg/L)	0.004	-	0.006	-