

WATER RESULTS 2018

License Number: 3391
Licensee: RIX'S CREEK PTY. LIMITED
 PO BOX 4
 EAST MAITLAND NSW 2323

Premises: RIX'S CREEK COLLIERY
 RIX'S CREEK LANE
 SINGLETON NSW 2330

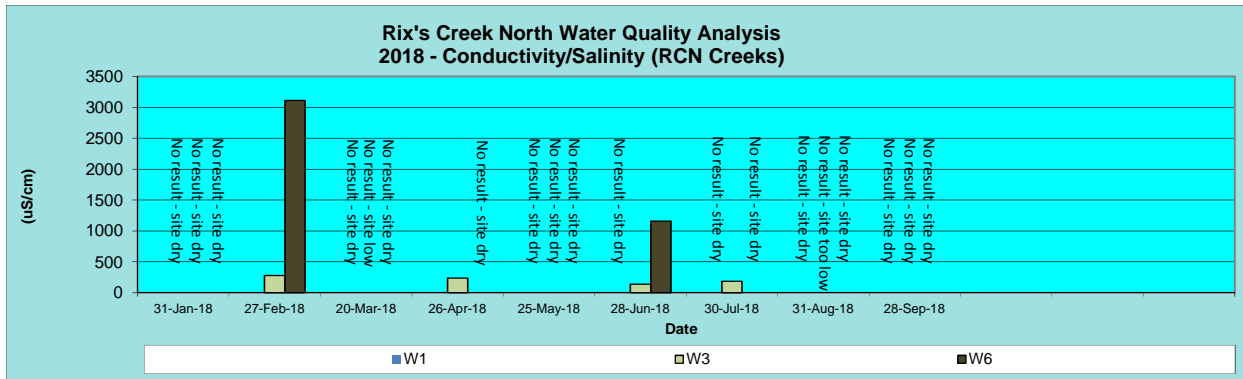
Monitoring Frequency: Once a month
Sampling method: Grab sample
Limits: Nil

Published: Sampled: Obtained:				15 February 2018 31 January 2018 15 February 2018	21 March 2018 27 February 2018 21 March 2018	18 April 2018 20 March 2018 17 April 2018	7 May 2018 26 April 2018 3 May 2018	2 July 2018 25 May 2018 29 June 2018	16 July 2018 28 June 2018 11 July 2018
Sampling Point	Monitoring Location	Pollutant	Unit	JANUARY Measurement	FEBRUARY Measurement	MARCH Measurement	APRIL Measurement	MAY Measurement	JUNE Measurement
1	Railway Underpass	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	1,040 9.0 639.0 21	1,134 9.1 731.0 22	837 8.0 468.0 23	884 7.6 556 7	972 7.9 619 11	959 8.4 541 2
2	NEH Bridge	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	no result - site dry	no result - site dry	314 7 246 12	no result - site dry	no result - site dry	no result - site dry
10	Below Operation	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	no result - site dry	no result - site dry	483 8.3 349 9	580 7.9 329 3	no result - site dry	524 8.1 284 6
3	Maison Dieu Bridge	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	no result - site dry	no result - site dry	357 7 267 29	755 6.9 492 14	no result - site dry	1,139 6.9 592 4
4	CWD1	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	221 7.6 171.0 10	245 7.7 201 31	244 8.2 164 7	248 7.1 200 13	249 7.8 202 9	255 7.1 195 4
5	CWD2	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	234 9.0 156.0 6	261 9.8 214 78	252 10.2 126 10	263 7.3 179 16	261 7.9 228 12	270 7.5 180 3
7	CWD6	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	406 9.2 255.0 6	436 9.3 309 7	412 9.3 270 12	400 9.2 257 7	422 9.0 260 13	434 8.0 225 6
8	DWD1	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	6,120 9.1 3870.0 6	6,140 8.8 4200.0 5	5,700 8.6 3490 5	5,610 8.5 3530 2	5,900 8.6 3870 4	5,920 8.6 3820 1
9	DWD2	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	5,870 8.7 3730.0 12	6,010 8.7 4000 15	5,300 8.5 3360 13	5,900 8.6 3850 4	6,100 8.5 4070 7	5,980 8.5 3770 7
6	DWD4	Conductivity pH Total dissolved solids	uS/cm pH mg/l	5,960 9.2 3790.0	6,090 9	5,750 9.0 3420	5,780 8.8 3810	5,950 8.7 3950	5,890 8.8 3720

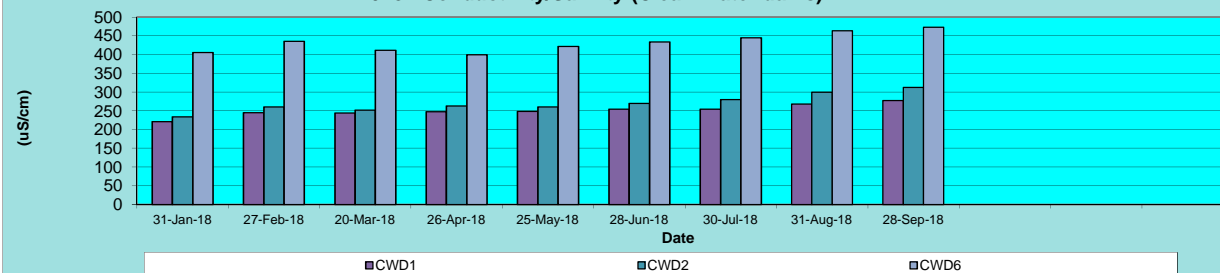
		Total suspended solids	mg/l	4	4	3	1	4	0.5
11	W1	Conductivity	uS/cm		854		1,821		
		pH	pH	no result - site dry	4.7	no result - site dry	3.4	no result - site dry	no result - site dry
		Total dissolved solids	mg/l		619		1180		
		Total suspended solids	mg/l		140		33		
12	W3	Conductivity	uS/cm		278		236		140
		pH	pH	no result - site dry	5.9	no result - too low to sample	6.7	no result - too low to sample	6.2
		Total dissolved solids	mg/l		405		692		673
		Total suspended solids	mg/l		179		80		144
13	W6	Conductivity	uS/cm		3,110				1,160
		pH	pH	no result - site dry	7.0	no result - site dry	no result - site dry	no result - site dry	7.3
		Total dissolved solids	mg/l		1940				734
		Total suspended solids	mg/l		40				62

Published: Sampled: Obtained:				8 August 2018 30 July 2018 8 August 2018	20 September 2018 31 August 2018 14 September 2018	10 October 2019 28 September 2018 8 October 2018			
Sampling Point	Monitoring Location	Pollutant	Unit	JULY Measurement	AUGUST Measurement	SEPTEMBER Measurement	OCTOBER Measurement	NOVEMBER Measurement	DECEMBER Measurement
1	Railway Underpass	Conductivity	uS/cm	1,103	1,085	1,143			
		pH	pH	9.0	8.5	8.1			
		Total dissolved solids	mg/l	610	692	939			
		Total suspended solids	mg/l	6	9	7			
2	NEH Bridge	Conductivity	uS/cm						
		pH	pH	no result - site dry	no result - site dry	no result - site dry			
		Total dissolved solids	mg/l						
		Total suspended solids	mg/l						
10	Below Operation	Conductivity	uS/cm						
		pH	pH	no result - site dry	no result - site dry	no result - site dry			
		Total dissolved solids	mg/l						
		Total suspended solids	mg/l						
3	Maison Dieu Bridge	Conductivity	uS/cm	1,338					
		pH	pH	7.7	no result - site dry	no result - site dry			
		Total dissolved solids	mg/l	771					
		Total suspended solids	mg/l	3					
4	CWD1	Conductivity	uS/cm	255	268	278			
		pH	pH	8.1	7.8	6.8			
		Total dissolved solids	mg/l	167	201	400			
		Total suspended solids	mg/l	12	16	27			
5	CWD2	Conductivity	uS/cm	280	300	313			
		pH	pH	8.2	7.8	8.3			
		Total dissolved solids	mg/l	179	219	189			
		Total suspended solids	mg/l	6	99	3			
7	CWD6	Conductivity	uS/cm	445	464	473			
		pH	pH	8.3	8.5	8.6			
		Total dissolved solids	mg/l	283.0	322.0	335.0			
		Total suspended solids	mg/l	13	18	4			
8	DWD1	Conductivity	uS/cm	6,210	6,340	6,460			
		pH	pH	8.6	8.7	8.6			
		Total dissolved solids	mg/l	4240	4260	4190			
		Total suspended solids	mg/l	3	4	2			
9	DWD2	Conductivity	uS/cm	6,260	6,390	6,500			
		pH	pH	8.5	8.6	8.3			
		Total dissolved solids	mg/l	4280	4340	4320			

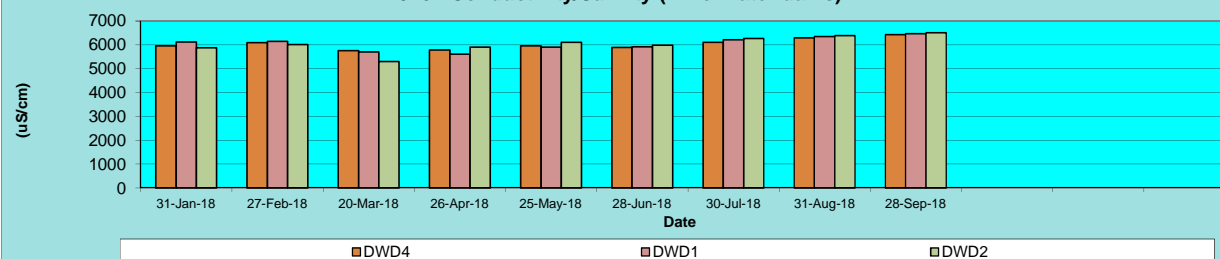
		Total suspended solids	mg/l	29	23	6			
6	DWD4	Conductivity	uS/cm	6,100	6,290	6,420			
		pH	pH	8.8	8.5	8.4			
		Total dissolved solids	mg/l	4000	4270	4240			
6 cont.		Total suspended solids	mg/l	3	23	5			
11	W1	Conductivity	uS/cm						
		pH	pH	no result - site dry	no result - site dry	no result - site too low to sample			
		Total dissolved solids	mg/l						
		Total suspended solids	mg/l						
12	W3	Conductivity	uS/cm	184					
		pH	pH	7.3	no result - site too low to sample	no result - site too low to sample			
		Total dissolved solids	mg/l	449					
		Total suspended solids	mg/l	23					
13	W6	Conductivity	uS/cm						
		pH	pH	no result - site dry	no result - site dry	no result - site too low to sample			
		Total dissolved solids	mg/l						
		Total suspended solids	mg/l						



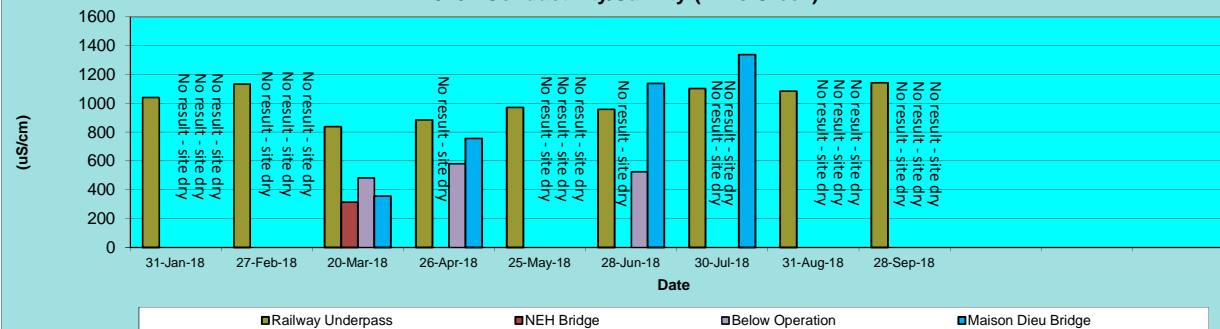
**Rix's Creek South Water Quality Analysis
2018 - Conductivity/Salinity (Clean Water dams)**

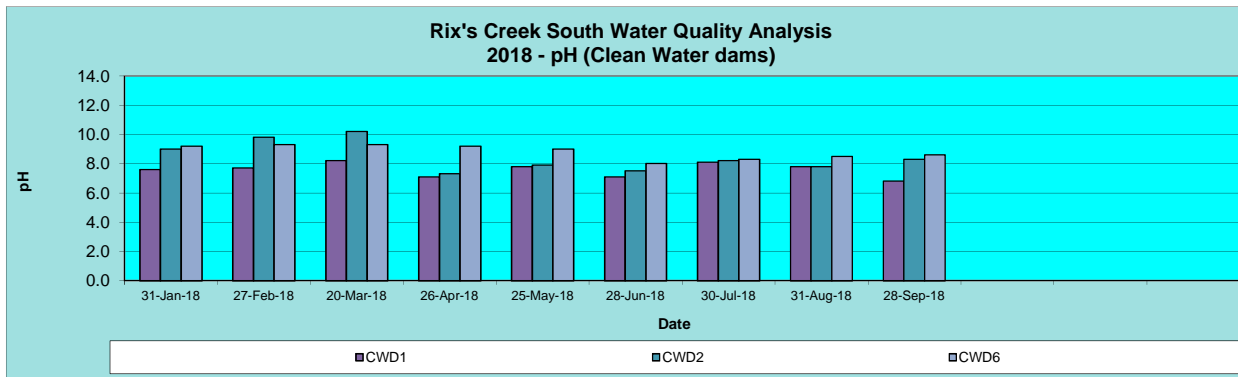
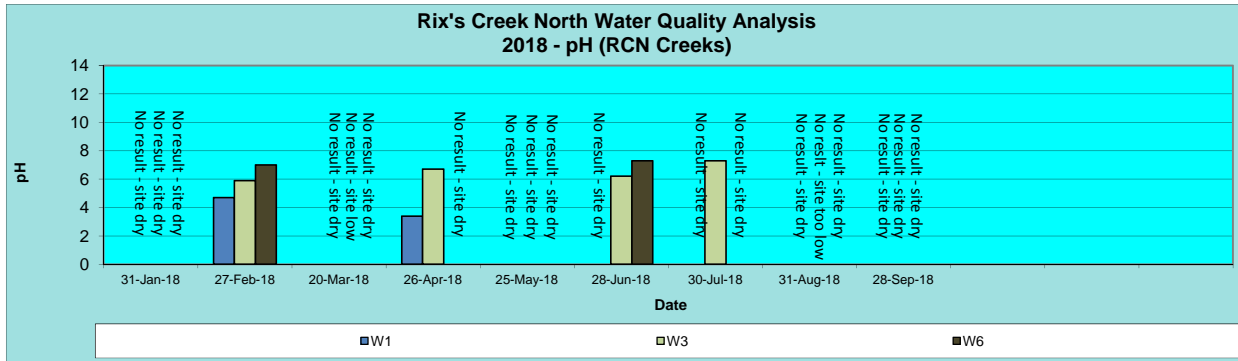
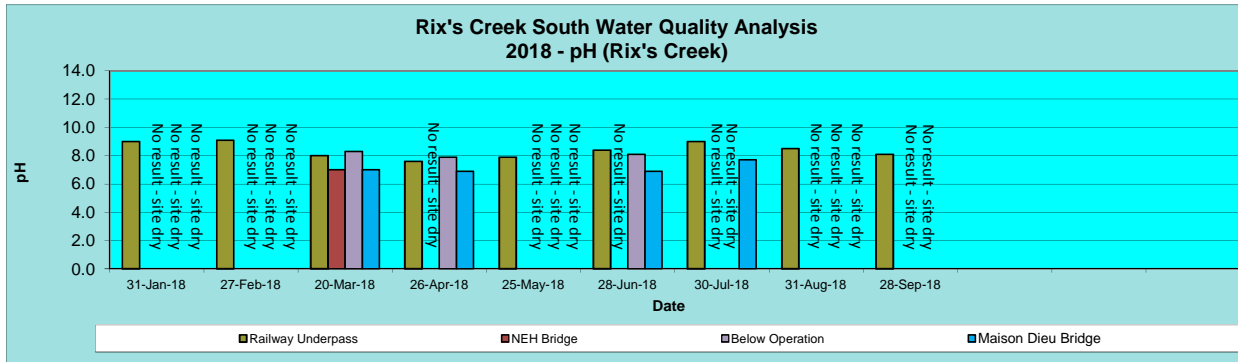


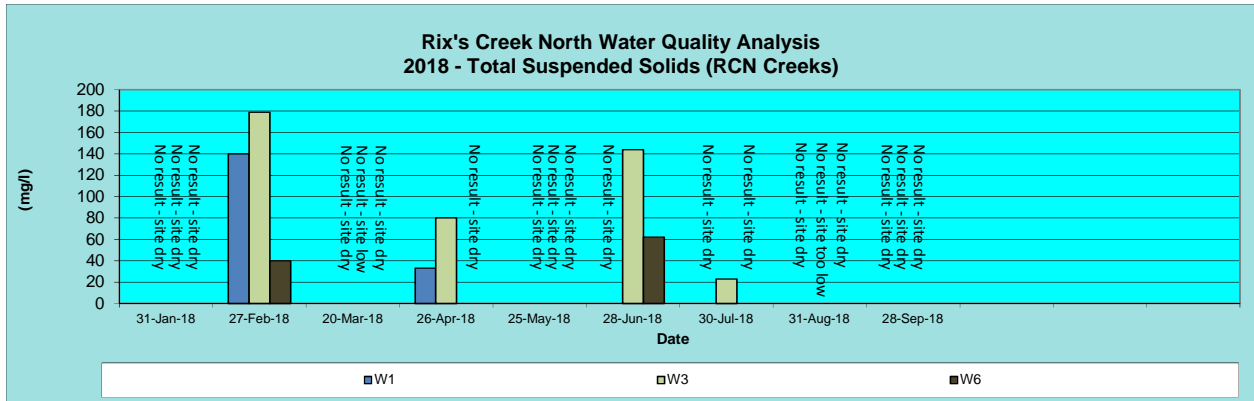
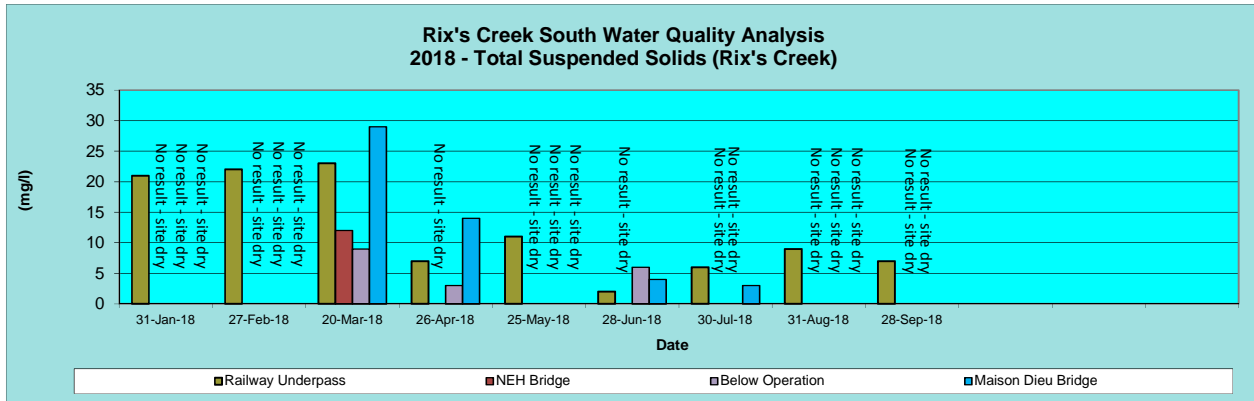
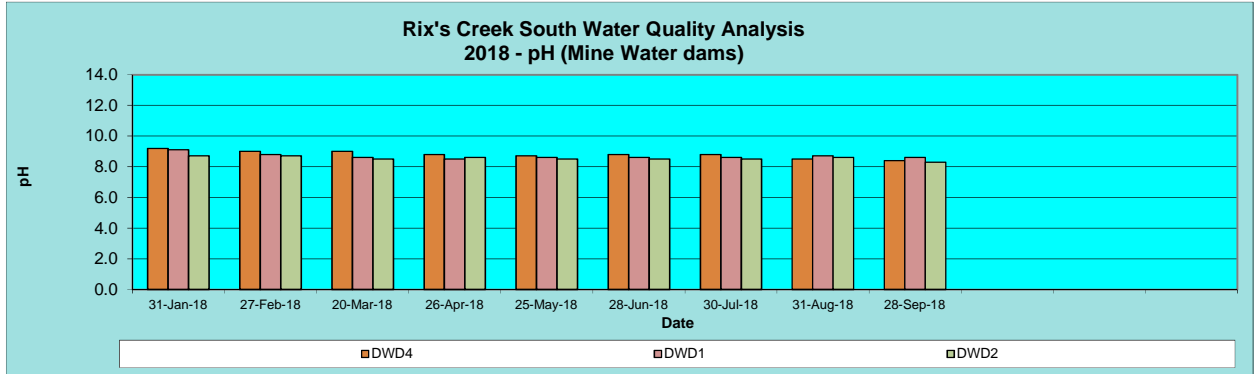
**Rix's Creek South Water Quality Analysis
2018 - Conductivity/Salinity (Mine Water dams)**



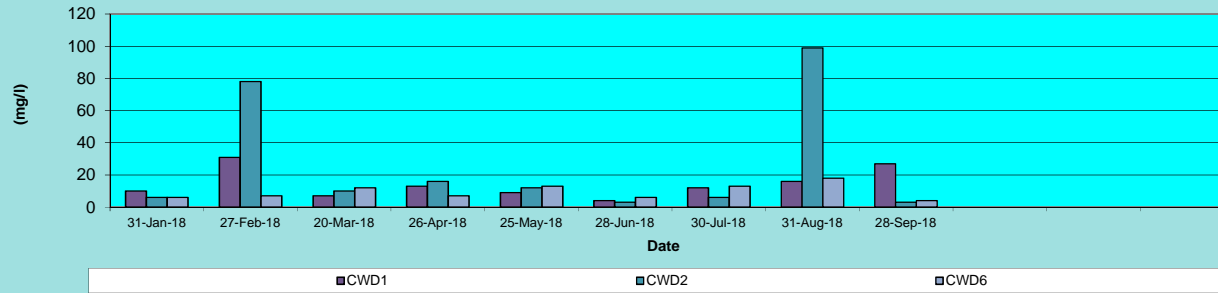
**Rix's Creek South Water Quality Analysis
2018 - Conductivity/Salinity (Rix's Creek)**



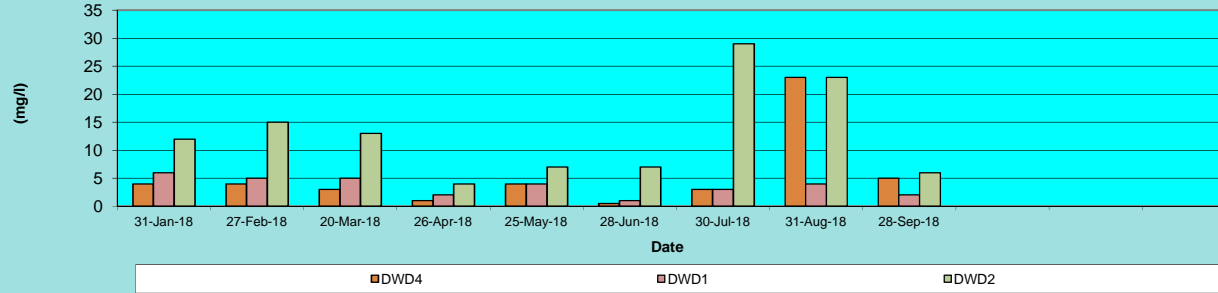




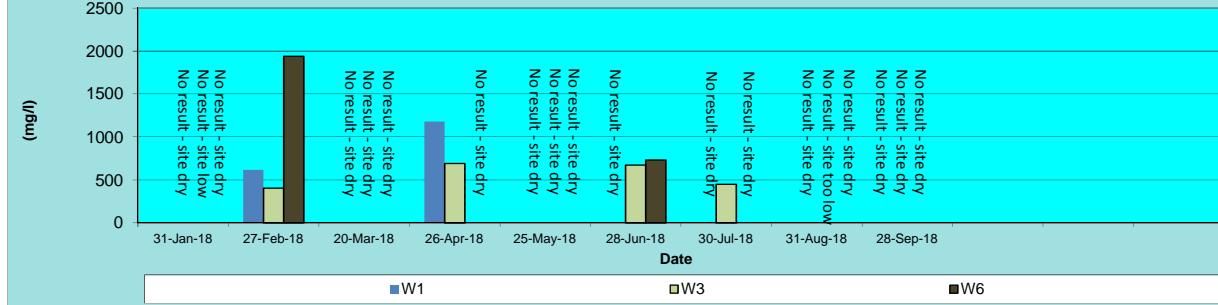
**Rix's Creek South Water Quality Analysis
2018 - Total Suspended Solids (Clean Water dams)**



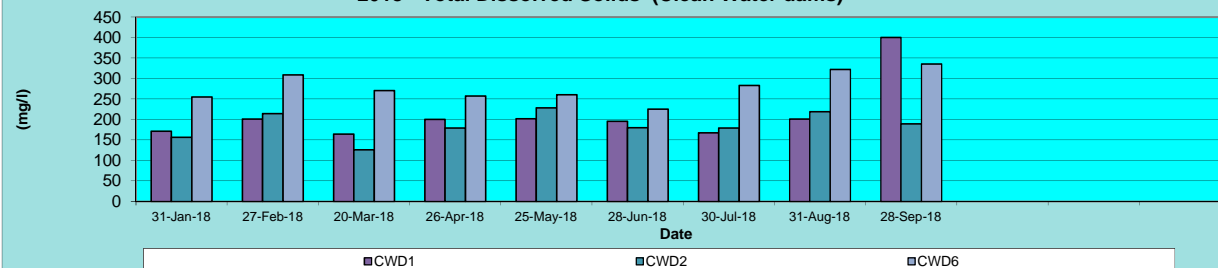
**Rix's Creek South Water Quality Analysis
2018 - Total Suspended Solids (Mine Water dams)**



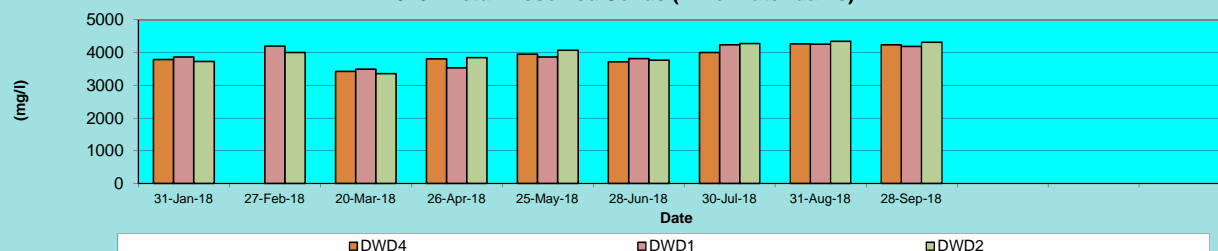
**Rix's Creek North Water Quality Analysis
2018 - Total Dissolved Solids (RCN Creeks)**



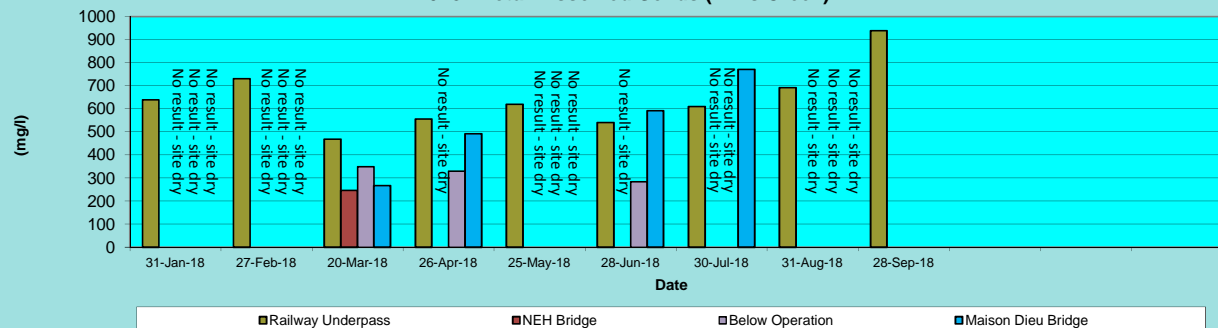
**Rix's Creek South Water Quality Analysis
2018 - Total Dissolved Solids (Clean Water dams)**



**Rix's Creek South Water Quality Analysis
2018 - Total Dissolved Solids (Mine Water dams)**





**Rix's Creek South Water Quality Analysis
2018 - Total Dissolved Solids (Rix's Creek)**





LEGEND

-  Water Monitoring Site
-  EPL 3391 Boundary

Water Monitoring Locations

Site	Easting	Northing
RCN - W1 - Station Creek	324000	6405900
RCN - W6 - Black Wattle Creek	326260	6403920
RCN - W3 - Martins Creek	327730	6402830
RCS - W1 - Rixs Creek - Railway	326390	6401690
RCS - W6 - CWD 6	325760	6400260
RCS - W5 - CWD 2	325390	6399750
RCS - W4 - CWD 1	325400	6399560
RCS - W2 - Rixs Creek - NEH	324500	6400130
RCS - W10 - Rixs Creek- Below Operation	323770	6398410
RCS - W3 - Rixs Creek - Maison Dieu	322590	6397360



Rix's Creek P/L - EPL 3391

Surface Water Monitoring Sites

Scale:- 1:35,000

Date: February 2017
Photo: December 2015

Drawing A3
File:- Integra 4_jhDec16
Water Monitoring Sites EPL Feb17