

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

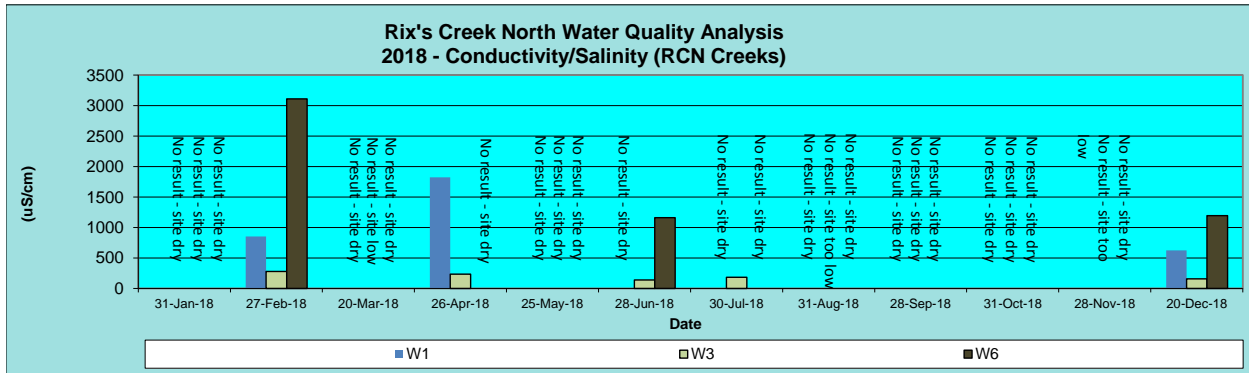
Monitoring Frequency: Once a month
Sampling method: Grab sample
Limits: Nil

				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	<i>no result - site dry</i>	<i>no result - site dry</i>	314 7 246 12	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	
10	Below Operation	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	<i>no result - site dry</i>	483 8.3 349 9	580 7.9 329 3	<i>no result - site dry</i>	524 8.1 284 6	
3	Maison Dieu Bridge	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	<i>no result - site dry</i>	357 7 267 29	755 6.9 492 14	<i>no result - site dry</i>	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 Total suspended solids	uS/cm pH mg/l mg/l	5,960 9.2 3790 4	6,090 9 4140 4	5,750 9.0 3420 3	5,780 8.8 3810 1	5,950 8.7 3950 4	5,890 8.8 3720 0.5	

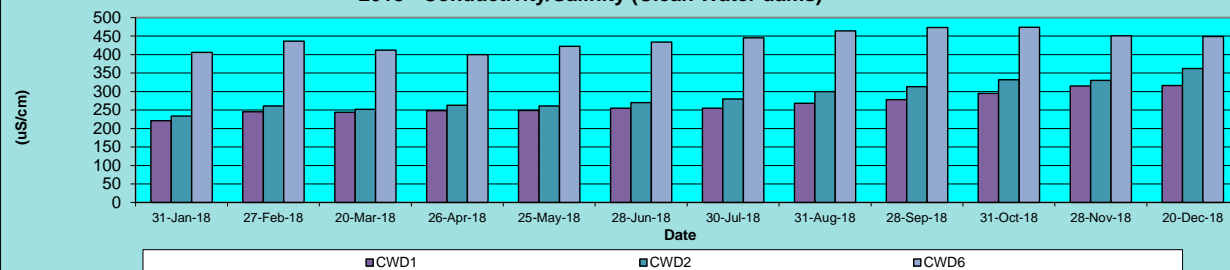
11	W1	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	854 4.7 619 140	<i>no result - site dry</i>	1,821 3.4 1180 33	<i>no result - site dry</i>	<i>no result - site dry</i>
12	W3	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	278 5.9 405 179	<i>no result - too low to sample</i>	236 6.7 692 80	<i>no result - too low to sample</i>	140 6.2 673 144
13	W6	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	3,110 7.0 1940 40	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	1,160 7.3 734 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	19 December 2018 31 October 2018 12 December 2018	19 December 2018 28 November 2018 13 December 2018	8 January 2019 20 December 2018 8 January 2018
Sampling Point	Monitoring Location	Pollutant	Unit	JULY Measurement	AUGUST Measurement	SEPTEMBER Measurement	OCTOBER Measurement	NOVEMBER Measurement	DECEMBER Measurement
1	Railway Underpass	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	1,103 9.0 610 6	1,085 8.5 692 9	1,143 8.1 939 7	1,197 8.3 850 42	1,280 8.8 824 10	1,204 8.4 754 12
2	NEH Bridge	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>
10	Below Operation	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	415 7.4 378 284	600 7.7 373 7
3	Maison Dieu Bridge	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	1,338 7.7 771 3	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	355 6.8 960 19
4	CWD1	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	255 8.1 167 12	268 7.8 201 16	278 6.8 400 27	295 7.3 165 14	315 7.6 258 18	316 7.2 190 13
5	CWD2	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	280 8.2 179 6	300 7.8 219 99	313 8.3 189 3	332 9.6 227 3	330 9.9 274 12	362 9.3 222 14
7	CWD6	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	445 8.3 283 13	464 8.5 322 18	473 8.6 335 4	474 9.3 325 5	451 10.0 285 5	449 9.6 309 9
8	DWD1	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	6,210 8.6 4,240 3	6,340 8.7 4,260 4	6,460 8.6 4,190 2	6,720 8.9 4,400 4	7,220 9.1 4,190 15	6,450 8.8 4,220 6
9	DWD2	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	6,260 8.5 4,280 29	6,390 8.6 4,340 23	6,500 8.3 4,320 6	6,870 8.5 4,580 9	6,830 8.8 4,510 172	6,950 8.6 4,640 8
6	DWD4	Conductivity	uS/cm	6,100	6,290	6,420	6,690	7,440	7,050

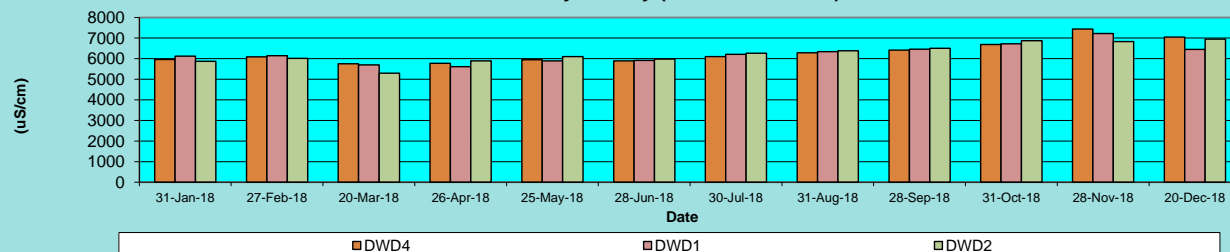
6 cont.		pH Total dissolved solids Total suspended solids	pH mg/l mg/l	8.8 4,000 3	8.5 4,270 23	8.4 4,240 5	8.5 4,590 8	8.8 4,840 8	8.7 4,550 4
11	W1	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site too low to sample</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	623 6.8 523 154
12	W3	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	184 7.3 449 23	<i>no result - site too low to sample</i>	<i>no result - site too low to sample</i>	<i>no result - site dry</i>	<i>no result - site too low to sample</i>	157 6.5 1010 194
13	W6	Conductivity pH Total dissolved solids Total suspended solids	uS/cm pH mg/l mg/l	<i>no result - site dry</i>	<i>no result - site dry</i>	<i>no result - site too low to sample</i>	<i>no result - site dry</i>	<i>no result - site dry</i>	1,194 7.6 689 139



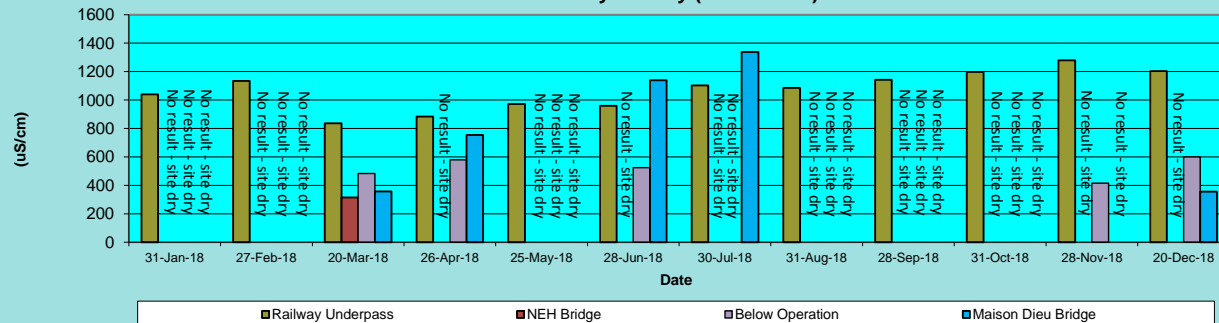
**Rix's Creek South Water Quality Analysis
2018 - Conductivity/Salinity (Clean Water dams)**

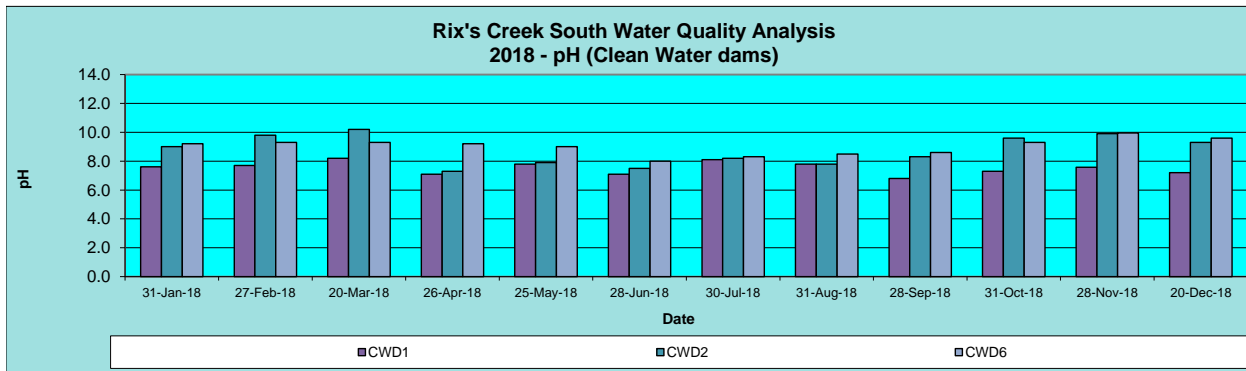
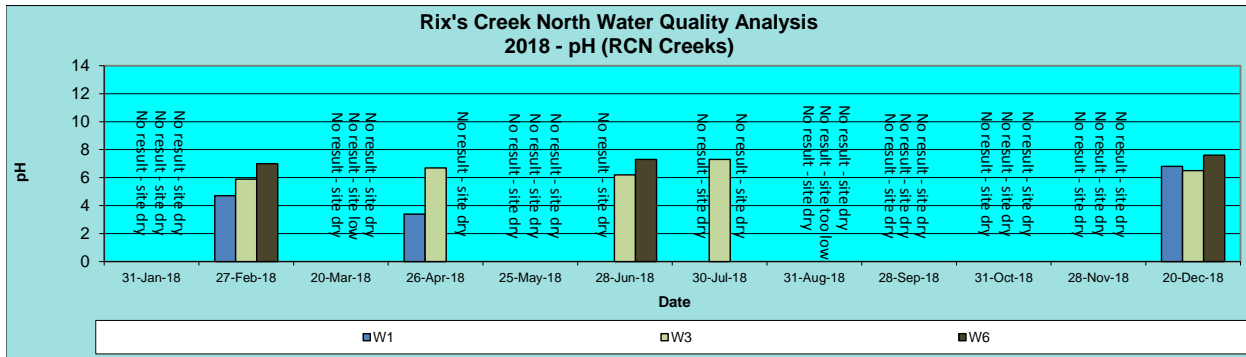
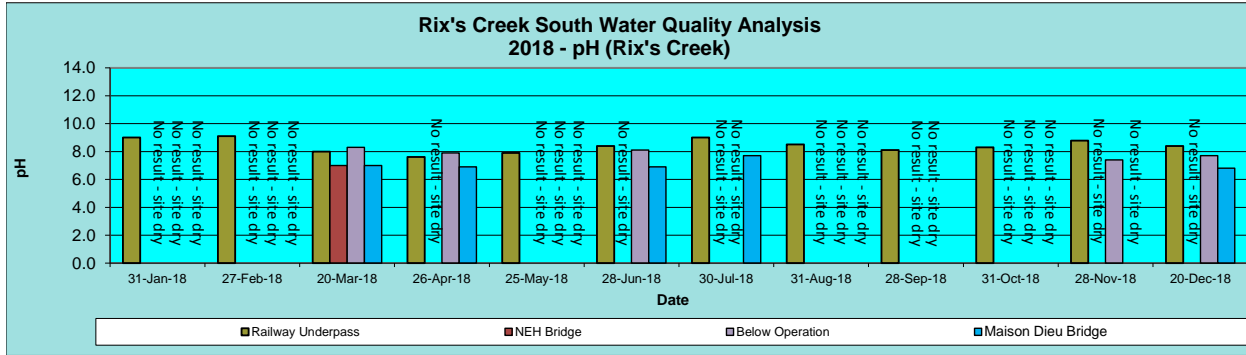


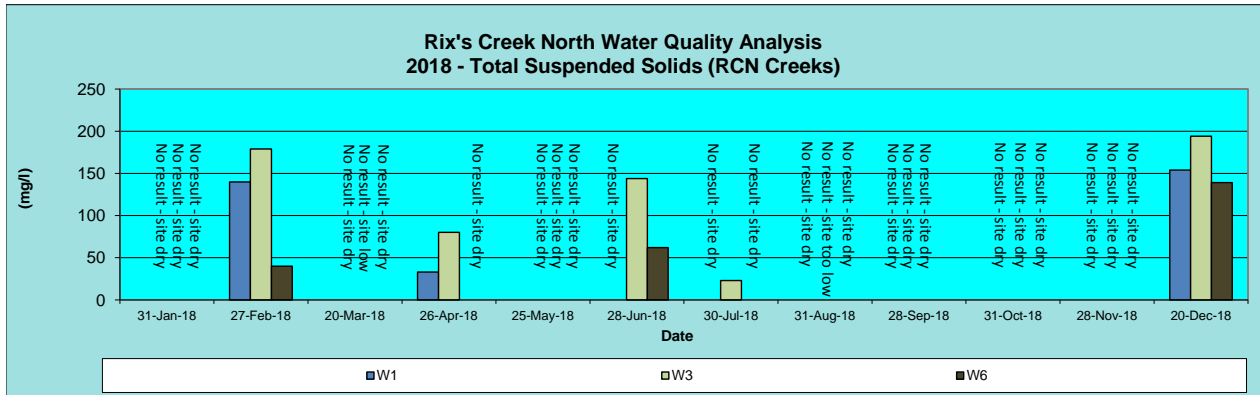
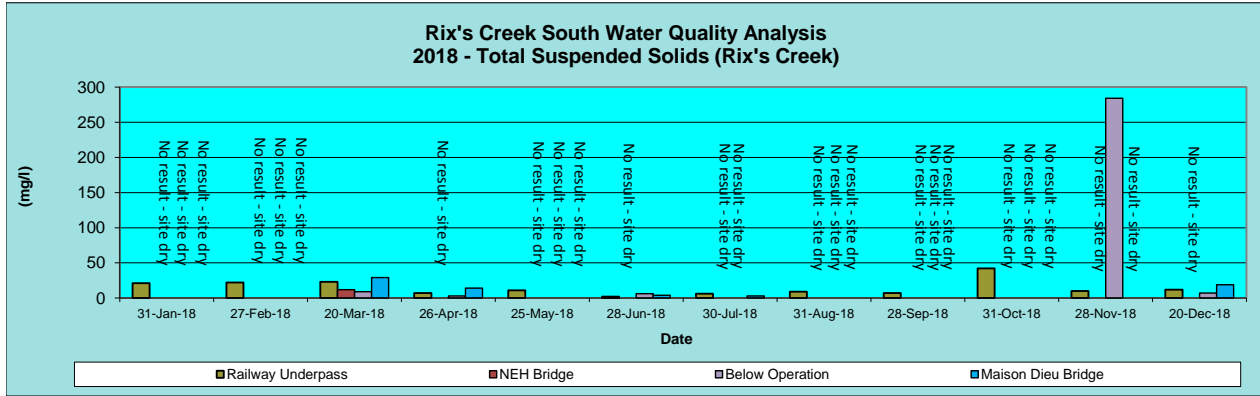
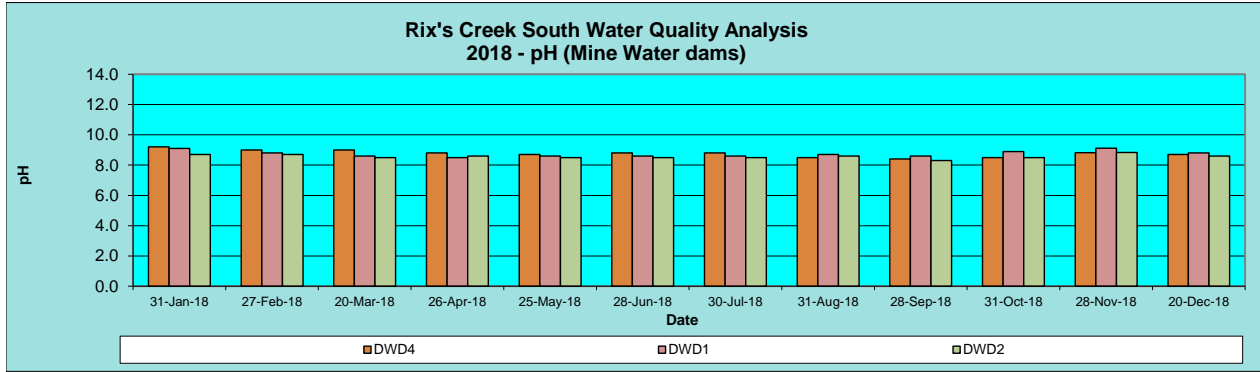
**Rix's Creek South Water Quality Analysis
2018 - Conductivity/Salinity (Mine Water dams)**



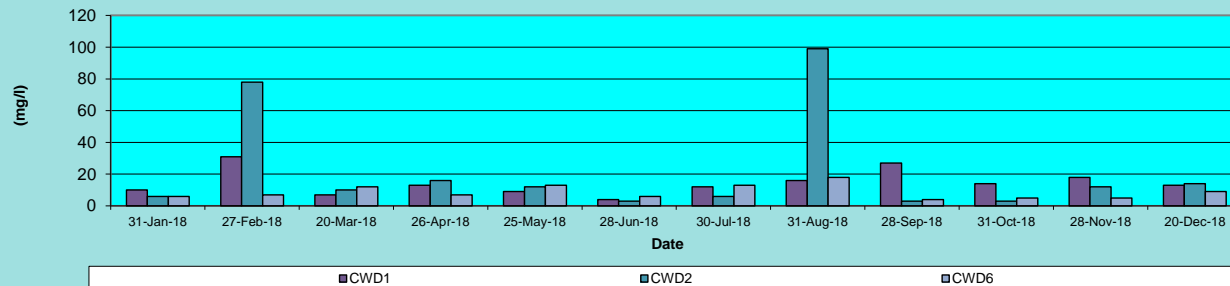
**Rix's Creek South Water Quality Analysis
2018 - Conductivity/Salinity (Rix's Creek)**



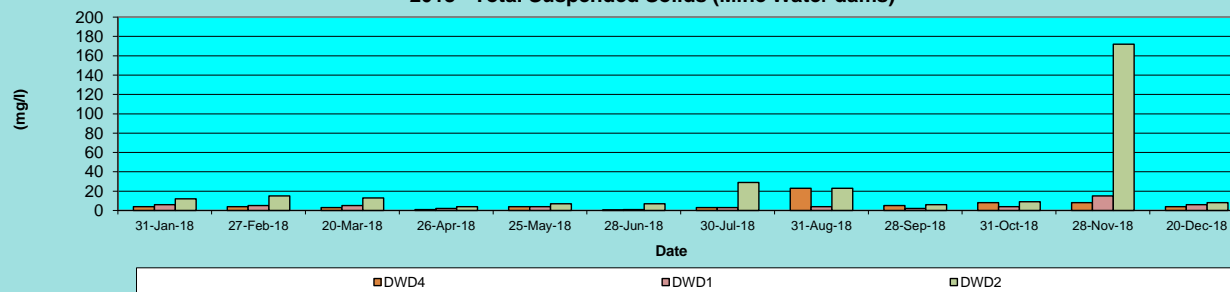




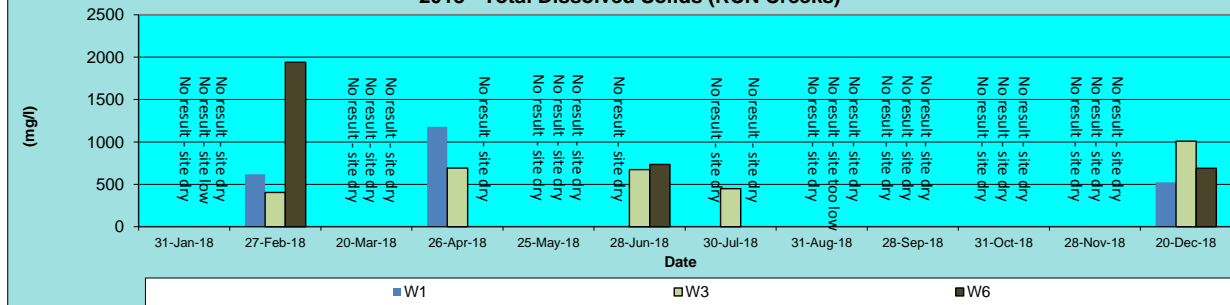
**Rix's Creek South Water Quality Analysis
2018 - Total Suspended Solids (Clean Water dams)**

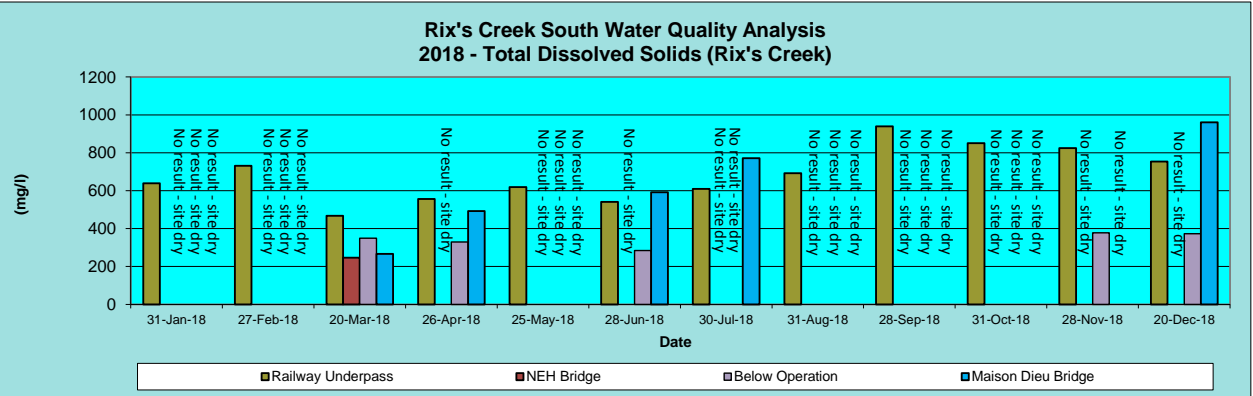
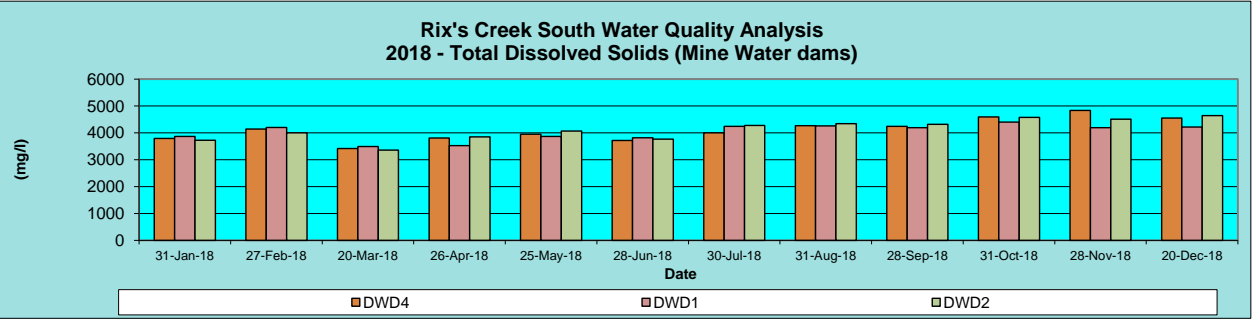
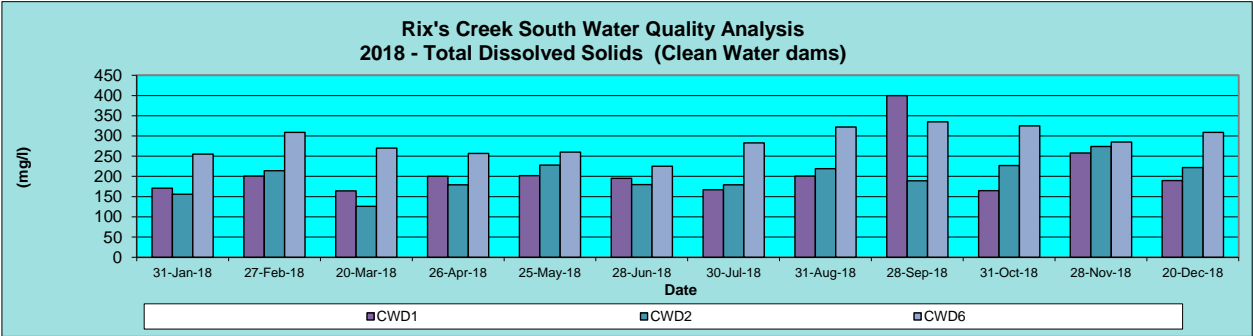


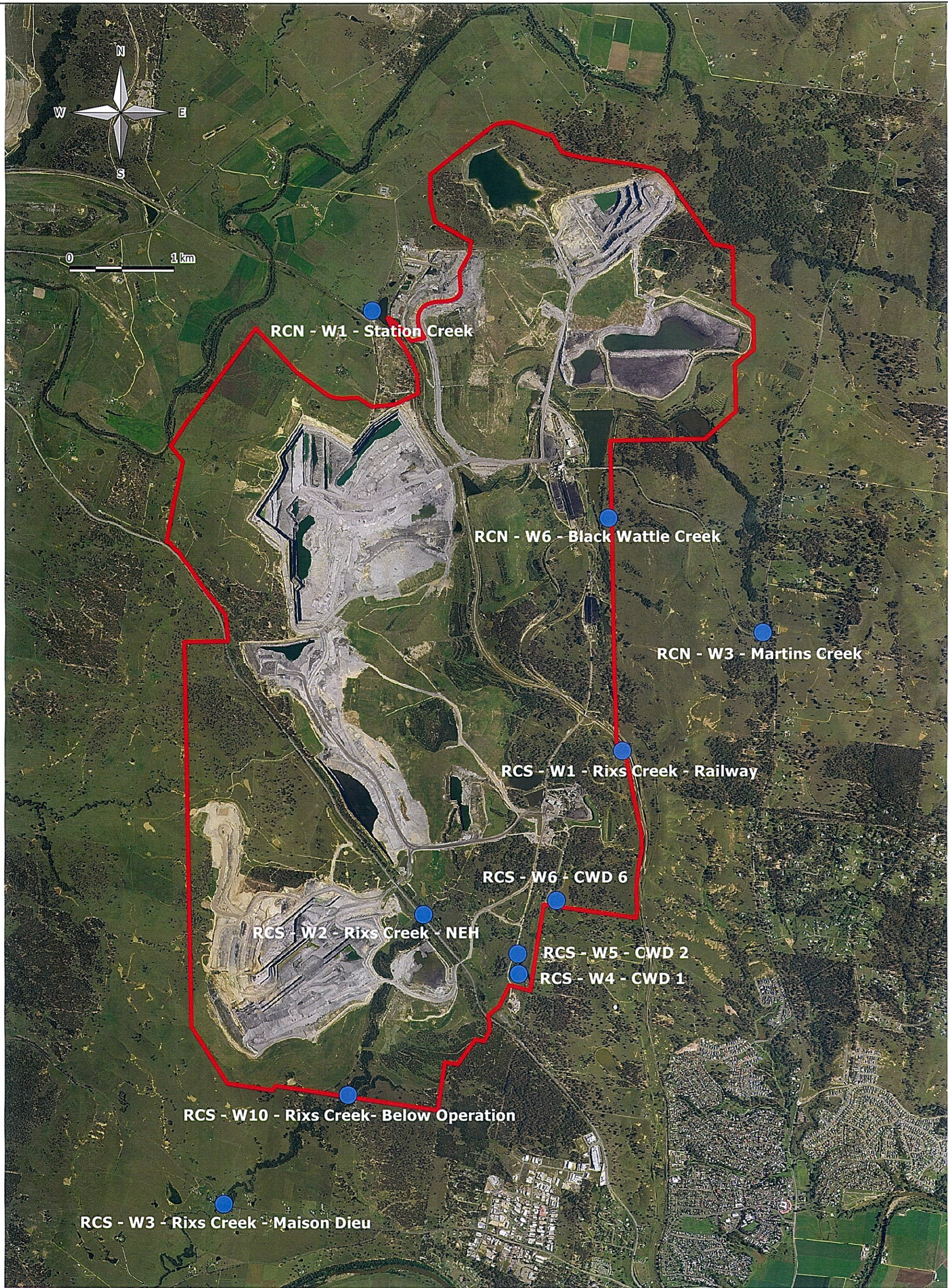
**Rix's Creek South Water Quality Analysis
2018 - Total Suspended Solids (Mine Water dams)**





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







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