

**RIX'S CREEK MINE  
SURFACE WATER MONITORING  
2020 RESULTS**

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: Monthly  
Sampling method: Grab sample  
Limits: Nil

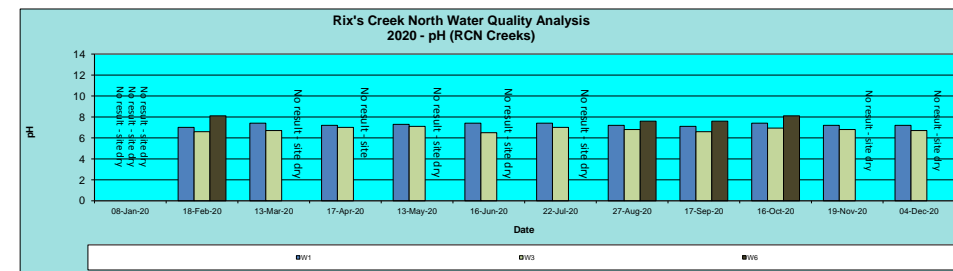
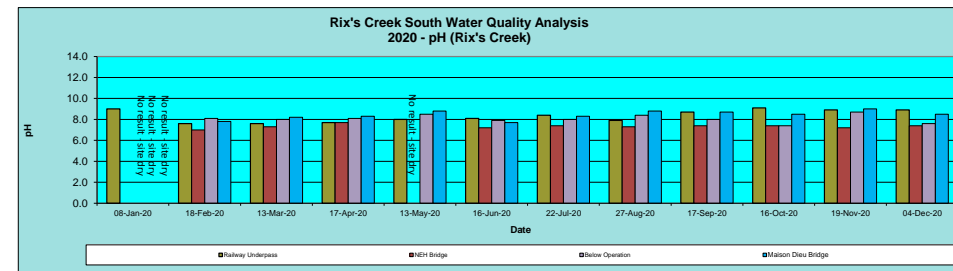
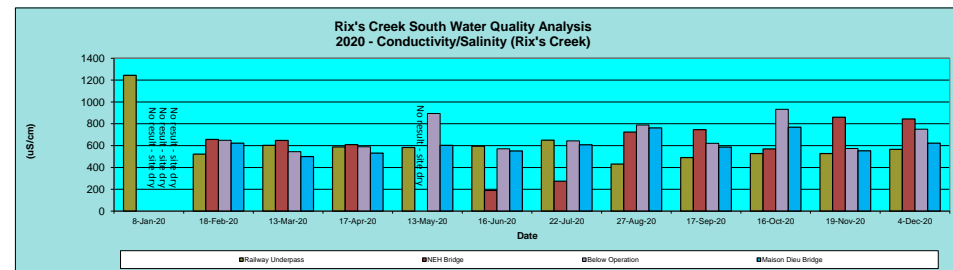
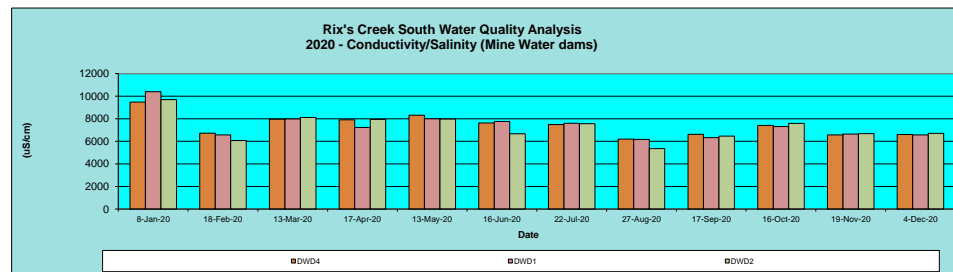
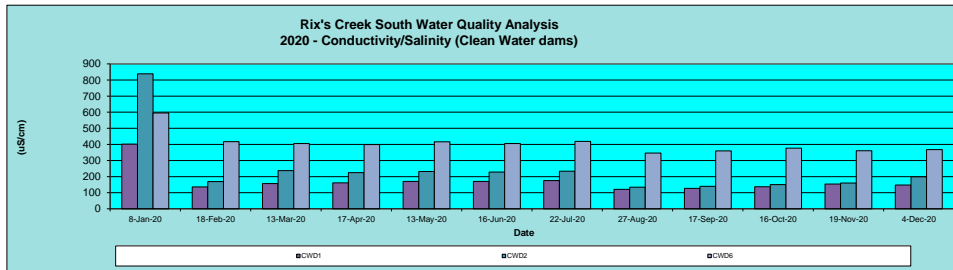
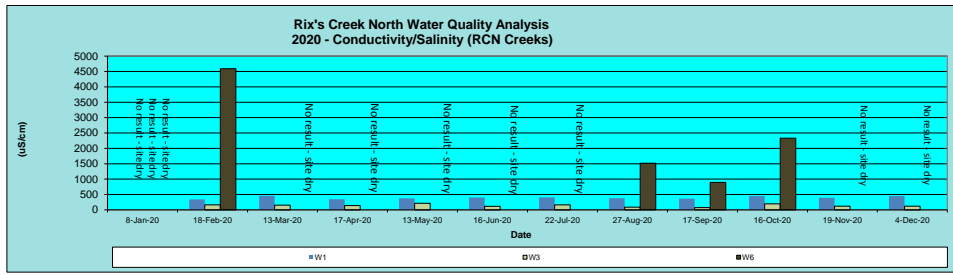


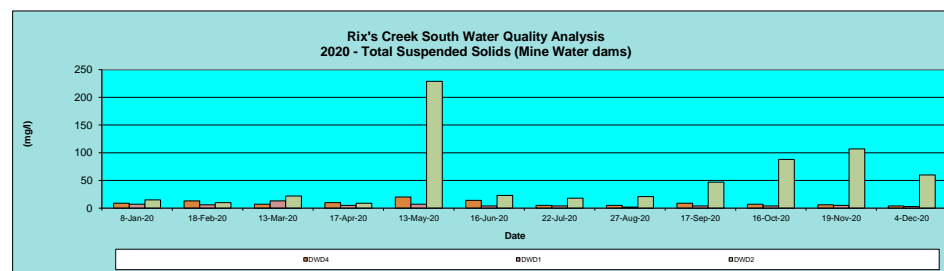
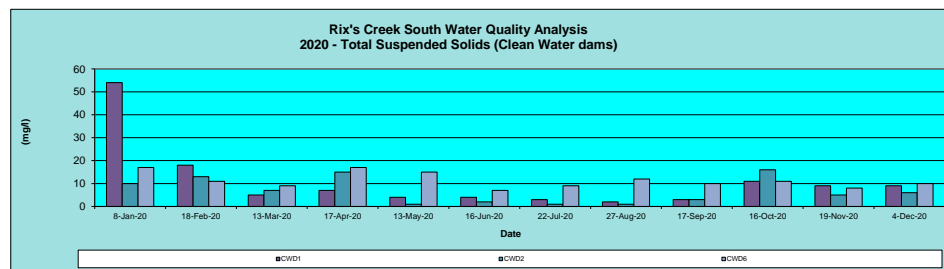
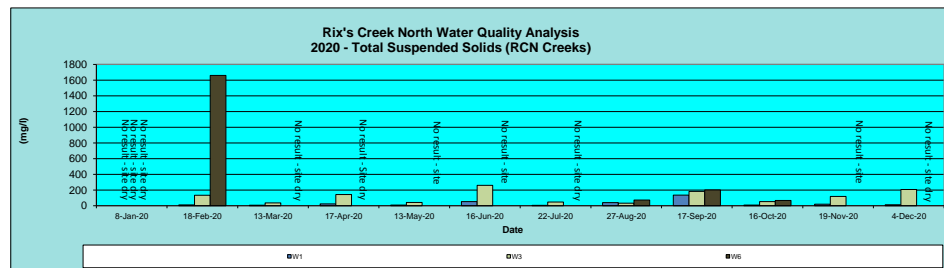
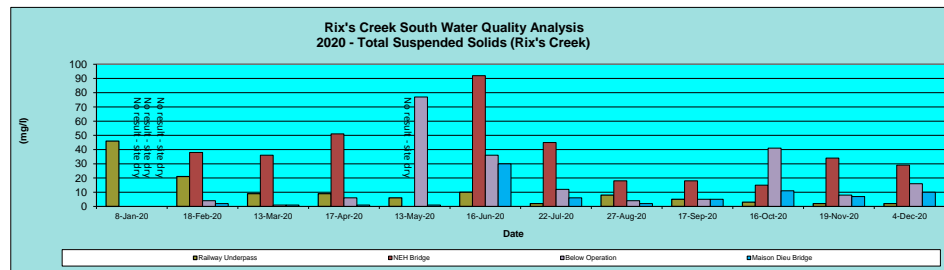
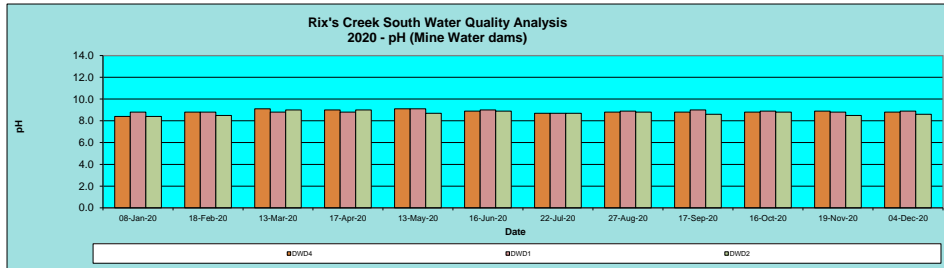
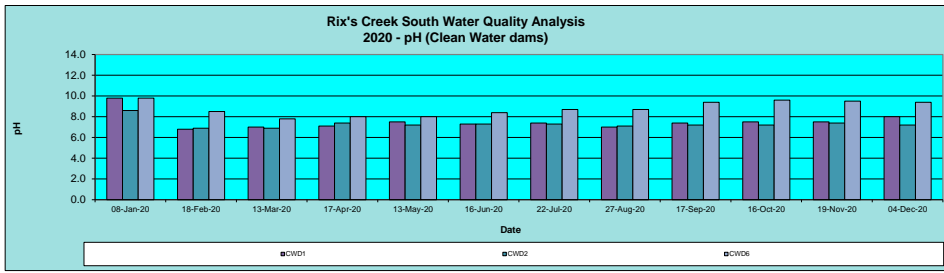
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Sampling Point	Monitoring Location	Pollutant	Unit	JANUARY Measurement	FEBRUARY Measurement	MARCH Measurement	APRIL Measurement	MAY Measurement	JUNE Measurement	
1	Railway Underpass	Conductivity	uS/cm	1,244	522	603	588	583	595	
		pH	pH	9.0	7.6	7.6	7.7	8.0	8.1	
		Total dissolved solids	mg/l	798	316	351	381	443	376	
2	NEH Bridge	Total suspended solids	mg/l	46	21	9	9	6	10	
		Conductivity	uS/cm	0	656	648	609	0	190	
		pH	pH	0.0	7.0	7.3	7.7	0.0	7.2	
10	Below Operation	Total dissolved solids	mg/l	0.0	434.0	633.0	512.0	0.0	244.0	
		Total suspended solids	mg/l	0	38	36	51	0	92	
		Conductivity	uS/cm	0	649	544	590	894	571	
3	Maison Dieu Bridge	pH	pH	0.0	8.1	8.0	8.1	8.5	7.9	
		Total dissolved solids	mg/l	0.0	444.0	388.0	358.0	545.0	406.0	
		Total suspended solids	mg/l	0	4	1	6	77	36	
4	CWD1	Conductivity	uS/cm	0	622	499	531	602	551	
		pH	pH	0.0	7.8	8.2	8.3	8.8	7.7	
		Total dissolved solids	mg/l	0.0	454.0	384.0	346.0	363.0	412.0	
5	CWD2	Total suspended solids	mg/l	0	2	1	1	1	30	
		Conductivity	uS/cm	402	136	157	161	170	170	
		pH	pH	9.8	6.3	7.0	7.1	7.5	7.3	
7	CWD6	Total dissolved solids	mg/l	289	108	93	213	166	147	
		Total suspended solids	mg/l	54	18	5	7	4	4	
		Conductivity	uS/cm	838	169	237	225	232	228	
8	DWD1	pH	pH	8.6	6.9	6.9	7.4	7.2	7.3	
		Total dissolved solids	mg/l	621.0	148.0	189.0	169.0	165.0	162.0	
		Total suspended solids	mg/l	10	13	7	15	1	2	
9	DWD2	Conductivity	uS/cm	595	417	405	399	416	405	
		pH	pH	9.8	8.5	8.0	8.0	8.0	8.4	
		Total dissolved solids	mg/l	399	310	237	247	267	261	
6	DWD4	Total suspended solids	mg/l	17	11	9	17	15	7	
		Conductivity	uS/cm	10,390	6,570	7,980	7,230	7,990	7,750	
		pH	pH	8.8	8.8	8.8	8.8	9.1	9.0	
9	DWD2	Total dissolved solids	mg/l	7,460	4,300	5,820	4,960	5,620	5,320	
		Total suspended solids	mg/l	7	6	13	5	7	4	
		Conductivity	uS/cm	9,690	6,070	8,110	7,950	7,970	6,670	
9	DWD2	pH	pH	8.4	8.5	9.0	9.0	8.7	8.9	
		Total dissolved solids	mg/l	7,350	4,150	5,960	5,330	5,630	4,340	
		Total suspended solids	mg/l	15	10	22	9	229	23	
6	DWD4	Conductivity	uS/cm	9,480	6,720	7,960	7,900	8,320	7,630	
		pH	pH	8.4	8.8	9.1	9.0	9.1	8.9	
		Total dissolved solids	mg/l	7,010	4,490	5,490	5,250	5,850	5,200	
6	DWD4	Total suspended solids	mg/l	9	13	7	10	20	14	

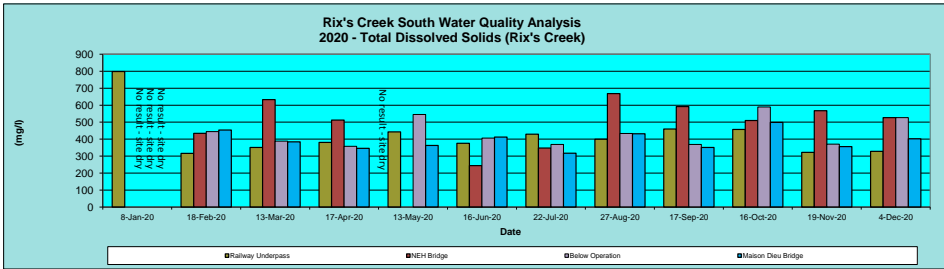
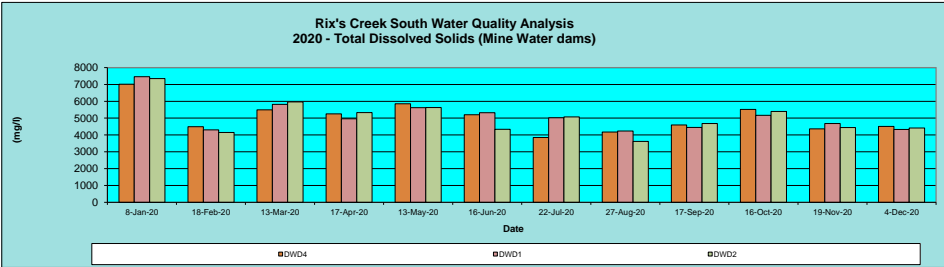
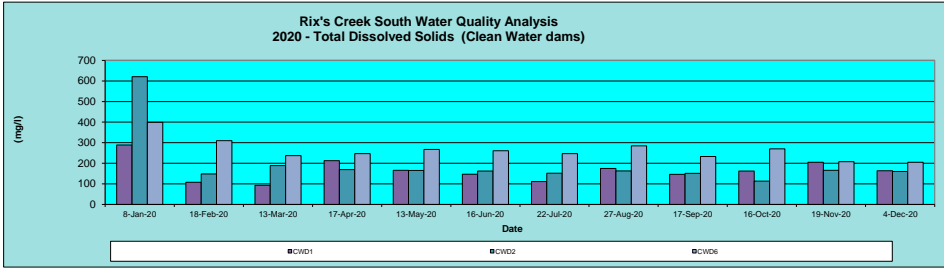
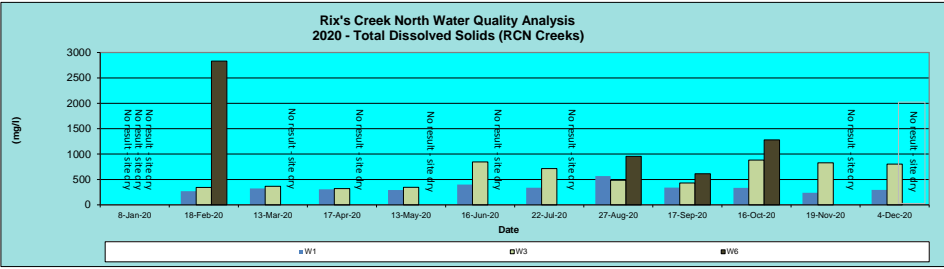
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Sampling Point	Monitoring Location	Pollutant	Unit	JANUARY Measurement	FEBRUARY Measurement	MARCH Measurement	APRIL Measurement	MAY Measurement	JUNE Measurement	
11	W1	Conductivity	uS/cm		341	457	346	375	401	
		pH	pH	No result site dry	7	7.4	7.2	7.3	7.4	
		Total dissolved solids	mg/l		268	323	306	293	399	
12	W3	Total suspended solids	mg/l		11	7	23	8	52	
		Conductivity	uS/cm		163	152	142	215	117	
		pH	pH	No result site dry	6.6	6.7	7.0	7.1	6.5	
13	W6	Total dissolved solids	mg/l		344	365	320	347	844	
		Total suspended solids	mg/l		134	36	142	42	260	
		Conductivity	uS/cm		4590					
13	W6	pH	pH	No result site dry	8.1	No result site dry	No result site dry	No result site dry	No result site dry	
		Total dissolved solids	mg/l		2830					
		Total suspended solids	mg/l		1660					

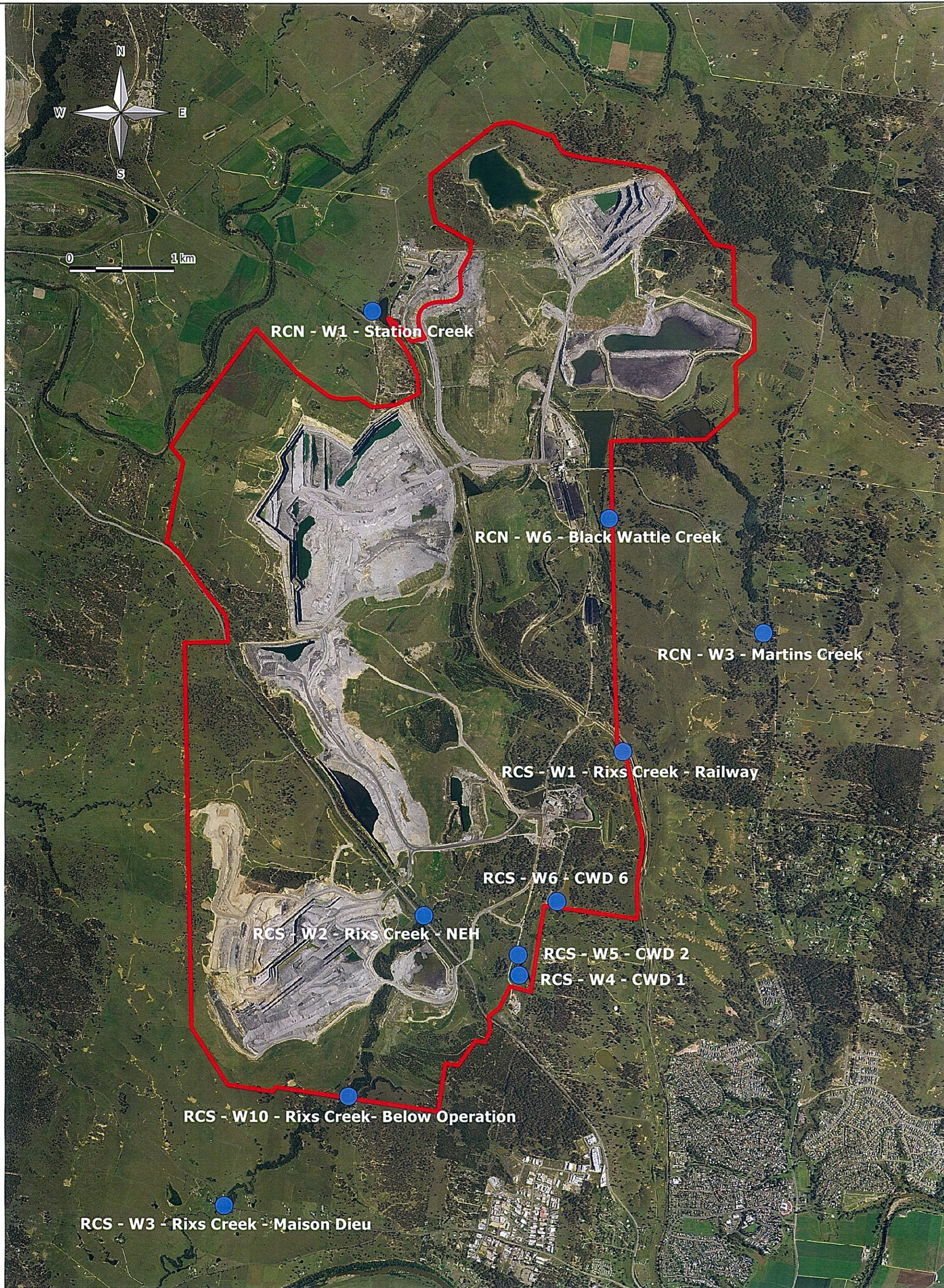
Sampling Point	Monitoring Location	Pollutant	Unit	Published: 31 July 2020	3 September 2020	23 September 2020	6 November 2020	26 November 2020	11 January 2021
				Sampled: 22 July 2020 Obtained: 29 July 2020	Sampled: 27 August 2020 2 September 2020	17 September 2020 23 September 2020	16 October 2020 27 October 2020	19 November 2020 25 November 2020	4 December 2020 11 January 2021
				JULY Measurement	AUGUST Measurement	SEPTEMBER Measurement	OCTOBER Measurement	NOVEMBER Measurement	DECEMBER Measurement
1	Railway Underpass	Conductivity	uS/cm	650	431	490	527	527	555
		pH	pH	8.4	7.9	8.7	9.1	8.9	8.9
		Total dissolved solids	mg/l	429	399	460	457	322	328
		Total suspended solids	mg/l	2	8	5	3	2	2
2	NEH Bridge	Conductivity	uS/cm	274.0	724.0	747.0	569.0	860.0	844.0
		pH	pH	7.4	7.3	7.4	7.4	7.2	7.4
		Total dissolved solids	mg/l	348.0	668.0	592.0	510.0	567.0	527.0
		Total suspended solids	mg/l	45.0	18.0	18.0	15.0	34.0	29.0
10	Below Operation	Conductivity	uS/cm	644	788	621	933	573	750
		pH	pH	8.0	8.4	8.0	7.4	8.7	7.6
		Total dissolved solids	mg/l	369	433	369	589	371	527
		Total suspended solids	mg/l	12	4	5	41	8	16
3	Maison Dieu Bridge	Conductivity	uS/cm	608	762	587	769	552	622
		pH	pH	8.3	8.8	8.7	8.5	9.0	8.5
		Total dissolved solids	mg/l	317	432	351	499	356	402
		Total suspended solids	mg/l	6	2	5	11	7	10
4	CWD1	Conductivity	uS/cm	175	121	127	137	154	148
		pH	pH	7.4	7.0	7.4	7.5	7.5	8.0
		Total dissolved solids	mg/l	111	175	146	162	205	164
		Total suspended solids	mg/l	3	2	3	11	9	9
5	CWD2	Conductivity	uS/cm	234	134	140	150	160	199
		pH	pH	7.3	7.1	7.2	7.2	7.4	7.2
		Total dissolved solids	mg/l	152	163	151	113	166	160
		Total suspended solids	mg/l	1	1	3	16	5	6
7	CWD6	Conductivity	uS/cm	419	346	360	377	361	368
		pH	pH	8.7	8.7	9.4	9.6	9.5	9.4
		Total dissolved solids	mg/l	247	285	233	270	208	205
		Total suspended solids	mg/l	9	12	10	11	8	10
8	DWD1	Conductivity	uS/cm	7,600	6,170	6,320	7,310	6,640	6,560
		pH	pH	8.7	8.9	9.0	8.9	8.8	8.9
		Total dissolved solids	mg/l	5,020	4,230	4,450	5,170	4,680	4,330
		Total suspended solids	mg/l	4	2	4	4	5	3
9	DWD2	Conductivity	uS/cm	7,560	5,350	6,460	7,590	6,680	6,710
		pH	pH	8.7	8.8	8.6	8.8	8.5	8.6
		Total dissolved solids	mg/l	5,070	3,620	4,680	5,400	4,440	4,410
		Total suspended solids	mg/l	18	21	47	88	107	60
6	DWD4	Conductivity	uS/cm	7,480	6,200	6,620	7,410	6,560	6,600
		pH	pH	8.7	8.8	8.8	8.8	8.9	8.8
		Total dissolved solids	mg/l	3,850	4,170	4,590	5,520	4,360	4,510
		Total suspended solids	mg/l	5	5	9	7	6	4

Sampling Point	Monitoring Location	Pollutant	Unit	Published: 2 September 2020	11 September 2020	30 September 2020	9 November 2020	1 December 2020	11 January 2021
				Sampled: 14 July 2020 Obtained: 24 August 2020	18 August 2020 10 September 2020	23 September 2020 30 September 2020	22 October 2020 29 October 2020	25 November 2020 1 December 2020	18 December 2020 29 December 2020
				JULY Measurement	AUGUST Measurement	SEPTEMBER Measurement	OCTOBER Measurement	NOVEMBER Measurement	DECEMBER Measurement
11	W1	Conductivity	uS/cm	407	380	367	449	392	447
		pH	pH	7.4	7.2	7.1	7.4	7.2	7.2
		Total dissolved solids	mg/l	337	566	339	335	238	295
		Total suspended solids	mg/l	5	39	136	9	19	13
12	W3	Conductivity	uS/cm	165	87	73	196	121	122
		pH	pH	7	6.8	6.6	6.9	6.8	6.7
		Total dissolved solids	mg/l	716	494	432	882	628	802
		Total suspended solids	mg/l	47	32	183	52	118	206
13	W6	Conductivity	uS/cm	No result	1516	894	2330	No result	No result
		pH	pH	site dry	7.6	7.6	8.1	site dry	site dry
		Total dissolved solids	mg/l		956	612	1280		
		Total suspended solids	mg/l		72	202	68		










**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

*T. Gentle*  
 Timothy R Gentle  
 Surveyor Registered under the Surveying  
 and Spatial Information Act, 2002